



# Bulgarian Energy Holding EAD

*(incorporated with limited liability in the Republic of Bulgaria, with registered number 831373560)*

## EUR 150,000,000 3.500 per cent. Bonds due 2025

*(to be consolidated and form a single series with the EUR 400,000,000 3.500 per cent. Bonds due 2025 issued on 28 June 2018)*

**Issue Price 100 per cent.**

**(plus 33 days' accrued interest in respect of the period from (and including) 28 June 2018 to (but excluding) the Issue Date (as defined below))**

The EUR 150,000,000 3.500 per cent. Bonds due 2025 (the "**Bonds**", which expression, when used in "*Terms and Conditions of the Bonds*" and, where the context so permits, in other sections of this Prospectus (the "**Prospectus**") where the terms and conditions of the Bonds and the Original Bonds (as defined below) are described, includes the Original Bonds and, unless the context otherwise requires, any further bonds issued pursuant to Condition 13 – "*Terms and Conditions of the Bonds – Further Issues*") will be issued by Bulgarian Energy Holding EAD (the "**Issuer**" or "**BEH**") on 31 July 2018 (the "**Issue Date**").

On issue, the Bonds will be consolidated and form a single series with the existing EUR 400,000,000 3.500 per cent. Bonds due 2025 (the "**Original Bonds**") of the Issuer issued on 28 June 2018. Upon such consolidation, the aggregate principal amount of the Original Bonds and the Bonds will be EUR 550,000,000.

Interest on the Bonds is payable annually in arrear on 28 June in each year, commencing on 28 June 2019. Except as described under "*Terms and Conditions of the Bonds – Taxation*", payments in respect of the Bonds will be made without any deduction or withholding for or on account of any taxes of Bulgaria.

Unless previously redeemed or purchased and cancelled, the Bonds will be redeemed at their principal amount on 28 June 2025. The Bonds are subject to redemption, in whole but not in part, at their principal amount (together with interest accrued to the date fixed for redemption), at the option of the Issuer at any time in the event of certain changes affecting taxation in the Republic of Bulgaria. See "*Terms and Conditions of the Bonds*". Upon the occurrence of a Change of Control (as defined in Condition 6(c) of the Terms and Conditions of the Bonds), each Bondholder shall have the option to require that the Issuer redeem (or at the option of the Issuer, purchase (or procure the purchase of)) such Bondholder's Bonds at 101 per cent. of the principal amount thereof plus accrued and unpaid interest, if any, to (but excluding) the Change of Control Put Date (as defined in Condition 6(c) (*Change of Control Put Option*) of the Terms and Conditions of the Bonds). The Bonds will constitute direct, general, unconditional, unsecured and unsubordinated obligations of the Issuer. See "*Terms and Conditions of the Bonds*". Unless a Change of Control Put Notice has been given pursuant to Condition 6(c) (*Change of Control Put Option*) of the Terms and Conditions of the Bonds, the Issuer may, at any time, redeem, in whole or in part, the Bonds at a redemption price per Bond equal to the higher of: (i) the principal amount of the Bond; and (ii) the sum of the then current values of the remaining scheduled payments of principal and interest discounted to the Optional Redemption Date on an annual basis (based on the actual number of days elapsed divided by 365 or (in the case of a leap year) by 366) at the Reference Dealer Rate (as defined herein) plus 0.5 per cent., in each case as determined by the Determination Agent (as specified in Condition 6(d) (*Redemption at the Option of the Issuer*) of the Terms and Conditions of the Bonds).

This Prospectus has been approved by the Central Bank of Ireland (the "**Central Bank**"), as competent authority under Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU) (the "**Prospectus Directive**"). The Central Bank only approves this Prospectus as meeting the requirements imposed under Irish and European Union law pursuant to the Prospectus Directive. Such approval relates only to the Bonds which are to be admitted to trading on a regulated market for the purposes of Directive 2014/65/EU, as amended or which are to be offered to the public in any Member State of the European Economic Area. The Issuer intends to notify this Prospectus in accordance with the Prospectus Directive to the Bulgarian Financial Supervision Commission as the competent authority of the host member state where the Bonds are to be subsequently intended by the Issuer to be admitted to trading on a regulated market. Each of the regulated market of the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") and the regulated market of the Bulgarian Stock Exchange ("**BSE**") is a regulated market for the purposes of Directive 2014/65/EU, as amended. Application has been made to Euronext Dublin for the Bonds to be admitted to the official list of Euronext Dublin (the "**Official List**") and trading on Euronext Dublin. Following the admission to the Official List, the Issuer intends to apply for subsequent admission of the Bonds to the main market of the BSE (the "**Bulgarian List**") and trading on its regulated market.

The Bonds have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**Securities Act**") or any U.S. State securities laws and may not be offered or sold in the United States unless an exemption from the registration requirements of the Securities Act is available and in accordance with all applicable securities laws of any state of the United States and any other jurisdiction.

The Bonds shall be in registered form in denominations of EUR 100,000 and integral multiples of EUR 1,000 in excess thereof. The Bonds will initially be represented by a new global certificate (the "**New Global Certificate**"), without interest coupons, which will be issued and delivered on or prior to the Issue Date to, and registered in the name of, a nominee for a common depository (the "**Common Depository**") for Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking, S.A. ("**Clearstream, Luxembourg**"). The New Global Certificate shall also, from the Issue Date, represent interests in the Original Bonds as initially represented by a global certificate dated 28 June 2018 (the "**Original Global Certificate**"). Interests in the New Global Certificate will be shown on, and transfers thereof will be effected only through, records maintained by Euroclear and Clearstream, Luxembourg and their respective participants. Individual bond certificates in definitive form (the "**Individual Bond Certificates**") evidencing holdings of Bonds will only be available in certain limited circumstances. See "*Summary of Provisions Relating to the Bonds While in Global Form*".

The Original Bonds were assigned a rating of BB by Fitch Ratings Limited ("**Fitch**") and Ba2 by Moody's Investors Service, Ltd. ("**Moody's**"), and it is expected that the ratings of the Bonds will be the same, after the issuance of the Bonds. Both Fitch and Moody's are established in the European Union and registered under Regulation (EC) No 1060/2009 as amended by Regulation (EU) No 513/2011 (the "**CRA Regulation**") and are included in the list of credit rating agencies published by the European Securities and Markets Authority on its website in accordance with the CRA Regulation. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Prospective investors should have regard to the factors described under the section headed "*Risk Factors*" in this Prospectus.

*Sole Bookrunner and Lead Manager*

**Citigroup Global Markets Limited**

*Co-Manager*

**First Financial Brokerage House Ltd.**

The date of this Prospectus is 27 July 2018.

**MiFID II product governance/Professional investors and Eligible Counterparties only target** – Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Bonds has led to the conclusion that: (i) the target market for the Bonds is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "**MiFID II**"); and (ii) all channels for distribution of the Bonds to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Bonds (a "**distributor**") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Bonds (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

**PRIIPs Regulation/Prohibition of sales to EEA retail investors** – The Bonds are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "**Insurance Mediation Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Bonds or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Bonds or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

This Prospectus comprises a prospectus for the purposes of Article 5 of the Prospectus Directive and for the purpose of giving information with regard to the Issuer, the Issuer and its subsidiaries and affiliates taken as a whole (the "**Group**") and the Bonds which, according to the particular nature of the Issuer, the Group and the Bonds, is necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profit and losses and prospects of the Issuer and the Group and of the rights attaching to the Bonds.

The Issuer accepts responsibility for the information contained in this Prospectus. To the best of the knowledge and belief of the Issuer (which has taken all reasonable care to ensure that such is the case), the information contained in this Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

In addition, the Issuer has confirmed to the Managers that: (i) this Prospectus, as at the date hereof, contains all information with respect to the Issuer, the Group and the Bonds that is material in the context of the issue and offering of the Bonds; (ii) the statements contained in this Prospectus, as at the date hereof, relating to the Issuer and the Group are in every material particular true and accurate and not misleading; (iii) the opinions and intentions expressed in this Prospectus, as at the date hereof, with regard to the Issuer and the Group are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions; (iv) there are no other facts in relation to the Issuer, the Group or the Bonds the omission of which would, in the context of the issue and offering of the Bonds, make any statement in this Prospectus misleading in any material respect; and (v) all reasonable enquiries have been made by the Issuer to ascertain such facts and to verify the accuracy of all such information and statements.

This Prospectus does not constitute an offer of, or an invitation by or on behalf of the Issuer or the Managers to subscribe or purchase, any of the Bonds. The distribution of this Prospectus and the offering of the Bonds in certain jurisdictions may be restricted by law. Persons into whose possession this Prospectus comes are required by the Issuer and the Managers to inform themselves about and to observe any such restrictions.

This Prospectus may not be used for, or in connection with, and does not constitute, any offer to, or solicitation by, anyone in any jurisdiction or under any circumstance in which such offer or solicitation is not authorised or is

unlawful. For a description of further restrictions on offers and sales of Bonds and distribution of this Prospectus, see "*Subscription and Sale*" below.

No person is authorised to give any information or to make any representation not contained in this Prospectus and any information or representation not so contained must not be relied upon as having been authorised by or on behalf of the Issuer or the Managers. Neither the delivery of this Prospectus nor any sale made in connection herewith shall, under any circumstances, create any implication that there has been no change in the affairs of the Issuer or the Group since the date hereof or the date upon which this Prospectus has been most recently amended or supplemented or that there has been no adverse change in the financial position of the Issuer or the Group since the date hereof or the date upon which this Prospectus has been most recently amended or supplemented or that the information contained in it or any other information supplied in connection with the Bonds is correct as of any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

To the fullest extent permitted by law, the Managers accept no responsibility whatsoever for the contents of this Prospectus or for any other statement made or purported to be made by a Manager or on its behalf in connection with the Issuer or the issue and offering of the Bonds. Each Manager accordingly disclaims all and any liability whether arising in tort or contract or otherwise (save as referred to above) which it might otherwise have in respect of this Prospectus or any such statement. Without limitation to the generality of the foregoing, the contents of the Group's website, in addition to any other websites referred to in this Prospectus, as at the date hereof or as at any other date, do not form any part of this Prospectus (and, in particular, are not incorporated by reference herein).

The Bonds have not been and will not be registered under the Securities Act. Subject to certain exceptions, Bonds may not be offered or sold within the United States.

This Prospectus has been filed with and approved by the Central Bank as required by the Prospectus (Directive 2003/71/EC) Regulations 2005. Any investment in the Bonds does not have the status of a bank deposit and is not within the scope of the deposit protection scheme operated by the Central Bank. The Issuer is not and will not be regulated by the Central Bank as a result of issuing the Bonds.

The contents of this Prospectus should not be construed as legal, financial, business or tax advice. Each prospective investor should consult his or her own legal adviser, financial adviser or tax adviser for legal, financial or tax advice in relation to any purchase or proposed purchase of Bonds.

The language of this Prospectus is English. Any foreign language text that is included with or within this document has been included for convenience purposes only and does not form part of this Prospectus.

In connection with the issue of the Bonds, Citigroup Global Markets Limited (the "**Stabilising Manager**") (or any persons acting on behalf of any Stabilising Manager) may, to the extent permitted by applicable laws and directives, over-allot Bonds or effect transactions with a view to supporting the market price of the Bonds at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilising Manager (or any persons acting on behalf of the Stabilising Manager) will undertake stabilisation action. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the Bonds is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the Issue Date of the Bonds and 60 days after the date of the allotment of the Bonds. Any stabilisation action or over-allotment must be conducted by the Stabilising Manager (or any persons acting on behalf of the Stabilising Manager) in accordance with all applicable laws and rules.

## PRESENTATION OF FINANCIAL AND OTHER INFORMATION

The Group prepared its audited consolidated financial statements as at and for the year ended 31 December 2017 (the "**2017 Financial Statements**") and as at and for the year ended 31 December 2016 (the "**2016 Financial Statements**") and together with the 2017 Financial Statements, the "**Financial Statements**") in accordance with International Financial Reporting Standards ("**IFRS**"), as adopted by the EU and as issued by the International Accounting Standards Board (the "**IASB**").

### ALTERNATIVE PERFORMANCE MEASURES

To supplement the Group's consolidated financial statements presented in accordance with IFRS, the Group uses certain ratios and measures included in this Prospectus that might be considered to be "alternative performance measures" (each an "**APM**") as described in the ESMA Guidelines on Alternative Performance Measures (the "**ESMA Guidelines**") published by the European Securities and Markets Authority on 5 October 2015. The ESMA Guidelines provide that an APM is understood as "a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework." The ESMA Guidelines also note that they do not apply to APMs "disclosed in accordance with applicable legislation, other than the applicable financial reporting framework, that sets out specific requirements governing the determination of such measures."

The Issuer's management believes that the inclusion of APMs, when considered in conjunction with measures reported under IFRS, is useful to investors because it provides a basis for measuring the organic operating performance of the Group in the periods presented and enhances investors' overall understanding of the Group's financial performance. APMs should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS. For the Group, measures that might be considered to be APMs in this Prospectus (and that are not defined or specified by IFRS or any other legislation applicable to the Group) include (without limitation) the following (such terms being used in this Prospectus as defined below):

*EBITDA*: calculated as EBIT plus depreciation and amortisation expense.

*EBITDA Margin*: calculated as EBITDA as a percentage of total revenue.

*EBIT*: calculated as EBT plus financial costs, minus financial income and minus share of profit from associates and joint ventures.

*EBT*: calculated as revenue minus expenses, before taxation.

Reconciliations of the above APMs to the applicable financial statements is not included as it is not required by the ESMA Guidelines in these circumstances, including as a result of Article 29 thereof where the items described in the APMs are directly identifiable from the financial statements (e.g., where an applicable APM is merely a calculation of one item in the financial statements as a percentage of another item in the financial statements).

### QUALIFICATIONS AND EMPHASES OF MATTER IN 2016 AND 2017 FINANCIAL STATEMENTS

#### *2017 Financial Statements*

HLB Bulgaria OOD. ("**HLB Bulgaria**") has audited the Group's 2017 Financial Statements. HLB Bulgaria's audit opinion, included in the 2017 Financial Statements, contains the following qualifications and emphasis of matter paragraphs:

## "Qualified Opinion"

In our opinion, except for the possible effects of the matters described in the *Basis for Qualified Opinion* section of our report the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2017, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union ("EU").

### *Basis for Qualified Opinion*

1. The Group has concluded an agreement for the construction of a nuclear power plant, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements. The Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant and pursuant to a Decision, dated 27 February 2013, the 41st National Assembly upheld this decision. As at 31 December 2017, the total carrying amount of property, plant and equipment, related to the Project Belene, amounted to BGN 2,238,981 thousand (31 December 2016: BGN 2,186,642 thousand), out of which BGN 2,158,876 thousand are assets under construction (31 December 2016: BGN 2,101,721 thousand). Assets under construction, related to Project Belene, include an asset – equipment with long manufacturing cycle, amounting to BGN 853,215 thousand (31 December 2016: BGN 795,776 thousand). The Group is not able to reliably estimate the recognised assets related to the discontinued Project, because of uncertainty about the feasible alternatives of its realization hence it has not recognised impairment loss of the assets in the consolidated financial statements as at 31 December 2017.

In addition the Group is in a process of legal dispute with the Project architect-engineer, disclosed in Note 40.3 *Contingent Liabilities – Legal lawsuits and disputes*. Because of the inherent uncertainty of the final outcome of the lawsuit, its complexity and existence of significant judgment, the Group management has decided to not recognize provisions.

We were unable to obtain sufficient and appropriate audit evidence regarding the recoverable amount of the above stated assets of the Group and the completeness of the recognized liabilities related to this Project, consequently we were unable to determine whether any adjustments of these amounts are necessary and their effect on the consolidated financial statements as at 31 December 2017.

2. As disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements, for assets under construction with carrying amount of BGN 37,888 thousand as at 31 December 2017 (31 December 2016: BGN 45,794 thousand) whose implementation has been discontinued by the Group and postponed for a period exceeding five years, we were unable to obtain sufficient and appropriate audit evidence, regarding the recoverable value of these assets to become convinced with reasonable assurance about their amount and to determine whether any adjustments of the amount of these assets are necessary and the possible amount of the impairment as at 31 December 2017.
3. As disclosed in Note 40 *Commitments and Contingent Liabilities*, BULGARIAN ENERGY HOLDING EAD and its subsidiaries BULGARGAZ EAD and BULGARTRANGAZ EAD are litigants to Case COMP/B1/AT.39849 – BEH Gas (Case BEH Gas), brought by the European Commission (EC) in relation to the official procedure of investigation about whether BULGARIAN ENERGY HOLDING EAD (BEH EAD) and its subsidiaries BULGARGAZ EAD and BULGARTRANGAZ EAD have violated the competition rules of the EC natural gas market in the country. On 24 November 2017 the Government of the Republic of Bulgaria took a decision for closing of Case BEH Gas according to article 7 of Regulation (E)O №1/2003 without admitting any wrongdoing to the alleged infringements and without accepting any

liability by taking all necessary action to protect the interest of the Republic of Bulgaria and the companies BULGARIAN ENERGY HOLDING EAD, BULGARGAZ EAD and BULGARTRANGAZ EAD including actions for appeal of a possible prohibition decision by the EC in relation to closing of Case COMP/B1/AT.39849 – BEH Gas. The Group management carried out analysis and estimation of available information about the likely outcome of the Case BEH Gas and is not able to reliably estimate the possible value of the liability related to the Group.

Because of the inherent uncertainty about the final outcome of Case BEH Gas and the existence of significant judgment for determination of the potential impact of the liability, we were unable to become convinced with sufficient assurance about the amount of the possible liability related to the Group; consequently we were unable to determine whether any adjustments are necessary and their effect on the Group consolidated financial statements as at 31 December 2017.

4. As is disclosed in Note 4.24 *Provisions - Provision for decommissioning of nuclear facilities* of the consolidated financial statements, as at 31 December 2017, the Group's activity gives rise to the necessity to provide for future expenses for the decommissioning of nuclear facilities. According to the legislation currently in force and other international agreements, a portion of these expenses could be assumed by national and international funds. In accordance with the requirements of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, the Group should recognise provisions for decommissioning of nuclear facilities and a separate asset for its right to receive reimbursements in the event the asset's value can be reliably determined. We were not provided with an assessment of these future expenses and any related reimbursements. Consequently, we were not able to become convinced with reasonable assurance about the assessment of provisions and receivables related to them as at 31 December 2017.

#### *Emphasis of matter*

1. The Group through its subsidiary NATSIONALNA ELEKTRICHESKA KOMPANIA EAD, utilizes property and equipment, disclosed in Note 19 *Property, plant and equipment*, with a carrying amount of BGN 905,054 thousand as at 31 December 2017, which are under the regulation of the Water Act and are public state property. The Act has provisions for separate management of such assets by legal entities with a hundred per cent. public ownership or by legal entities with joint state and municipal participation, where the state has a majority share, or by legal entities whose share capital is owned by other legal entities with state participation.
2. We draw attention to the disclosure in Note 19 *Property, plant and equipment*, about land and buildings with carrying amounts of BGN 25,781 thousand for which as at 31 December 2017 the Group does not have unconditional ownership rights and which are in pending procedure of issuing of titles of ownership.
3. We draw attention to the disclosure in Note 40 *Commitments and Contingent Liabilities*, where information about the Group's commitments under a concession contract for the development and mining of coal, is disclosed. The financial collateral obligation for the decommissioning costs of the concession area is applied by setting aside funds into special security accounts that can be used only for the purpose for which they are intended. As at 31 December 2017 the Group has not set aside funds in a guaranteed bank account and has not issued a bank guarantee in favour of the concession provider to secure contract activities.
4. We draw attention to the disclosure in Note 40.3 *Contingent Liabilities – Legal lawsuits and disputes* referring to legal actions against companies within the Group, to nullify transaction offsetting carried out among these companies and BULGARIAN ENERGY HOLDING EAD, taken by the creditors for

insolvency of CCB AD (in insolvency), the status of these actions and the countermeasures taken by the Group.

Our opinion is not modified in respect of these matters."

### ***2016 Financial Statements***

HLB Bulgaria has audited the Group's 2016 Financial Statements. HLB Bulgaria's audit opinion, included in the 2016 Financial Statements, contains the following qualifications and emphasis of matter paragraphs:

#### ***"Qualified Opinion***

In our opinion, except for the possible effect of the matters described in the *Basis for Qualified Opinion* section of our report the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2016, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU).

#### ***Basis for Qualified Opinion***

1. The Group has concluded an agreement, for the construction of a nuclear power plant, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements. The Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant and pursuant to a Decision, dated 27 February 2013, the 41st National Assembly upheld this decision. As at 31 December 2016, the total carrying amount of property, plant and equipment, related to the Project Belene, amounted to BGN 2,186,642 thousand (31 December 2015: BGN 1,391,177 thousand), out of which BGN 2,101,721 thousand (31 December 2015: BGN 1,305,948 thousand) are assets under construction. Assets under construction value, related to Project Belene, include an asset - right for acquisition of equipment with long manufacturing cycle, amounting to BGN 795,776 thousand, recognised pursuant to a Decision of the Arbitral Tribunal dated 14 June 2016. The Group is not able to reliably estimate the recognised assets related to the discontinued project, because of uncertainty about the feasible alternatives of its realization hence it has not recognised impairment loss of the assets, as well as provisions for possible future liabilities of the Group in the consolidated financial statements as at 31 December 2016, related to the construction of nuclear power plant Belene. We were unable to obtain sufficient and appropriate audit evidence regarding the recoverable amount of the above stated assets of the Group and of the completeness of the recognised liabilities, related to this project, consequently we were unable to determine whether any adjustments of these amounts are necessary and their effect on the consolidated financial statements as at 31 December 2016.
2. No actions have been taken to ensure the funding, which is necessary for the completion of the assets under construction, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements, with carrying amount of BGN 45,794 thousand as at 31 December 2016 (31 December 2015: BGN 37,793 thousand). We were unable to obtain sufficient and appropriate audit evidence, regarding the recoverable amount of these assets to become convinced with reasonable assurance about their amount and to determine whether any adjustments of the amount of these assets are necessary and the possible amount of the impairment as at 31 December 2016.
3. As at 31 December 2016 the Group has recognized trade receivables from electricity supply companies amounting to BGN 57,180 thousand and from other counterparties amounting to BGN 19,270 thousand

(Note 22 *Trade and other receivables*) and trade payables from counterparties amounting to BGN 95,784 thousand (Note 34 *Trade and other payables*), which had not been confirmed by the counterparties and for which we were unable to obtain sufficient and appropriate audit evidence about their carrying amount and whether any adjustments of the stated amounts are necessary as at this date.

4. As is disclosed in Note 4.24 *Provisions – Provision for decommissioning nuclear facilities* of the consolidated financial statements as at 31 December 2016, out of Group activity arises the necessity to provide for future expenses for the decommissioning of nuclear facilities. According to the legislation currently in force and other international agreements, portion of these expenses could be assumed by national and international funds. In accordance with the requirements of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, the Group should recognise provisions for decommissioning of nuclear facilities and a separate asset for its right to receive reimbursements in the event the asset's value can be reliably determined. We were not provided with an assessment of these future expenses and any related reimbursements. Consequently, we were not able to become convinced with reasonable assurance about assessment of provisions and related receivables as at 31 December 2016.

#### *Emphasis of matter*

1. We draw attention to Note 19 *Property, plant and equipment* of the consolidated financial statements, where it is disclosed that as at 30 June 2015 the Group carried out a fair value review of property, plant and equipment according its accounting policy, using independent licensed appraiser. According to the requirements of IAS 36 *Impairment of Assets*, impairment review was carried out as at 31 December 2016 and no material variations were found out. The specifics of the Group's assets and the dynamic economic environment in the energy sector, where it operates, could lead to variations in the assumptions and estimates used in determining the fair value of these property, plant and equipment.
2. As at 31 December 2016 the Group utilizes property and equipment, disclosed in Note 19 *Property, plant and equipment* with a carrying amount of BGN 916,703 thousand, which are under the regulation of the Water Act and are public state property. The Act has provisions for separate management of such assets by entities with a hundred per cent. public ownership or by legal entities with joint state and municipal participation, where the state has a majority share or by legal entities whose share capital is owned by other legal entities with state participation.
3. We draw attention to the disclosure in Note 19 *Property, plant and equipment* about land and buildings with carrying amounts of BGN 25,914 thousand as at 31 December 2016 and for which the Group does not have unconditional ownership rights since they are in pending procedure of issuing acts of ownership.
4. We draw attention to the disclosure in Note 40 *Commitments and contingent liabilities* about Group's commitments under a concession contract for the development and mining of coal. The financial collateral obligation for the costs according to an Order of the Ministry of Economy, Energy and Tourism from 2010 is realized by setting aside funds into special security accounts that can be used only for the purpose for which they are intended. As at 31 December 2016 the Group has not set aside funds in a guarantee bank account.
5. We draw attention to Note 40.1 *Proceedings of the European Commission against Bulgarian Energy Holding FAD and its subsidiaries* to the consolidated financial statements about Case COMP/B1/AT.39849 - BEH Gas regarding possible violation of Art. 102 of the Treaty for Functioning of the European Union (TFEU) disclosing the case development and actions taken by the Group.

Our opinion is not modified in respect of these matters."

See *"Risk Factors — The audit opinions in respect of the Financial Statements have been qualified in a number of significant respects"* for further information on the qualifications in the 2017 and 2016 Financial Statements.

At the request of the Group, Grant Thornton OOD ("**Grant Thornton**") have conducted a series of procedures in accordance with the International Standards on Auditing ("**ISA**") issued by the International Federation of Accountants ("**IFAC**"). They have not carried out an audit examination in accordance with generally accepted auditing standards of financial information relating to the Issuer for any period subsequent to 31 December 2014. For the purpose of conducting these procedures, Grant Thornton have read the financial information included in this Prospectus and have compared it with the audited consolidated financial statements of the Issuer. Grant Thornton confirms that this financial information has been accurately extracted from the audited consolidated financial statements for the relevant years. A limited review and analysis have been conducted on other financial information and changes in the Issuer's financial position. This limited review and analysis also focused on the qualifications and emphases of matter identified by HLB Bulgaria in their auditor's reports on the consolidated financial statements of the Issuer as of and for the years ended 31 December 2017 and 31 December 2016. No significant findings or events came to the attention of Grant Thornton as a result of their review and analysis.

## RESTATEMENTS AND REVALUATIONS

The 2016 Financial Statements restate or revalue certain figures relating to the years ended 31 December 2014 and 31 December 2015. Further details of these restatements and revaluations are contained in Note 5 to the 2016 Financial Statements.

The 2017 Financial Statements restate or revalue certain figures due to exchange rate differences relating to the year ended 31 December 2016. Further details of these restatements and revaluations are contained in Note 16 to the 2017 Financial Statements.

## DEFINITIONS

In this Prospectus, unless otherwise specified or the context otherwise requires, references to:

- "**Bulgaria**" are to the Republic of Bulgaria;
- "**BGN**" and "**lev**" are to the lawful currency for the time being of Bulgaria;
- "**U.S. dollars**" are to the lawful currency for the time being of the United States of America;
- "**€**", "**EUR**" and "**euro**" are to the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the Functioning of the European Union, as amended;
- "**2016**" are to the 12 months ended 31 December 2016;
- "**2017**" are to the 12 months ended 31 December 2017; and
- "**billion**" are to a thousand million.

Certain figures and percentages included in this Prospectus have been subject to rounding adjustments. Accordingly, figures shown in the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

The lev has been pegged to the euro since 1 January 1999 at a rate of BGN 1.95583 to €1.00.

## **FORWARD-LOOKING STATEMENTS**

This Prospectus contains certain "forward-looking statements" which can be identified by the use of forward-looking terminology, such as the terms "believes," "expects," "anticipates," "projects," "estimates," "will," "intends," "seeks," "may," "should" or similar expressions or, in each case, their negative, other variations thereof or comparable terminology. These forward-looking statements include all matters that are not historical facts and they appear in a number of places throughout this Prospectus and include, without limitation, statements with regard to the Group's intentions, beliefs or current expectations relating to, among other things, the Group's future financial position, results, performance, achievements and prospects along with future industry results and performance. By their nature, forward-looking statements involve inherent risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Investors are cautioned that the forward-looking statements contained in this Prospectus are not guarantees of the Group's future financial position, results, performance, achievements or prospects and that the Group's actual future financial position, results, performance, achievements and prospects may differ materially from those suggested or implied by the forward-looking statements contained in this Prospectus.

In addition, these forward-looking statements speak only as at the date of this Prospectus. Except to the extent required by applicable law, the Issuer does not intend to update or revise any of the forward-looking statements contained in this Prospectus, whether as a result of new information, future events or otherwise, and the Issuer hereby expressly disclaims any obligation to do so. Investors should not place undue reliance on any such forward-looking statements.

## TABLE OF CONTENTS

	Page
OVERVIEW OF THE BONDS .....	12
RISK FACTORS .....	17
SUMMARY OF PROVISIONS RELATING TO THE BONDS WHILE IN GLOBAL FORM.....	47
TERMS AND CONDITIONS OF THE BONDS.....	50
USE OF PROCEEDS .....	68
BUSINESS DESCRIPTION.....	69
MANAGEMENT AND EMPLOYEES.....	94
REGULATION, ENVIRONMENT AND HEALTH AND SAFETY .....	96
FINANCIAL REVIEW .....	106
TAXATION.....	129
SUBSCRIPTION AND SALE .....	134
GENERAL INFORMATION.....	136
INDEX TO FINANCIAL INFORMATION OF THE ISSUER .....	139

## OVERVIEW OF THE BONDS

*The overview below describes the principal terms of the Bonds and the Fiscal Agency Agreement (as defined in the Terms and Conditions of the Bonds) and is qualified in its entirety by the more detailed information contained elsewhere in this Prospectus. Capitalised terms used herein and not otherwise defined have the respective meanings given to such terms in the Terms and Conditions of the Bonds.*

<b>Issuer:</b>	Bulgarian Energy Holding EAD
<b>Description of the Bonds:</b>	EUR 150,000,000 3.500 per cent. Bonds due 2025 (to be consolidated and form a single series with the EUR 400,000,000 3.500 per cent. Bonds due 2025 issued on 28 June 2018)
<b>Sole Bookrunner &amp; Lead Manager</b>	Citigroup Global Markets Limited
<b>Co-Manager</b>	First Financial Brokerage House Ltd.
<b>Fiscal, Principal Paying Agent and Transfer Agent:</b>	Citibank N.A., London Branch
<b>Registrar:</b>	Citigroup Global Markets Europe AG
<b>Issue Price:</b>	100 per cent. of the principal amount of the Bonds plus 33 days' accrued interest (in respect of the period from (and including) 28 June 2018 to (but excluding) the Issue Date).
<b>Issue Date:</b>	31 July 2018
<b>Maturity Date:</b>	28 June 2025
<b>Interest:</b>	The Bonds will bear interest from and including 28 June 2018 at a rate of 3.500 per cent. per annum payable annually in arrear on 28 June in each year, commencing on 28 June 2019.
<b>Status:</b>	The Bonds constitute (subject to Condition 4(a) ( <i>Negative Pledge</i> ) of the Terms and Conditions of the Bonds) direct, general, unconditional, unsecured and unsubordinated obligations of the Issuer which shall rank <i>pari passu</i> and without any preference among themselves and shall (save for such exceptions as may be provided by applicable legislation and subject to Condition 4(a) ( <i>Negative Pledge</i> ) of the Terms and Conditions of the Bonds), at all times, rank at least equally, with all other outstanding present and future unsecured and all other present and future unsecured and unsubordinated obligations of the Issuer.
<b>Form and Denomination:</b>	The Bonds will be issued in registered form, in minimum denominations of EUR 100,000 each and integral multiples of EUR 1,000 in excess thereof. The Bonds will initially be represented by the New Global Certificate, without interest coupons, which on or before the Issue Date will be deposited with, and registered in the name of, a nominee of the Common Depositary. The New Global Certificate shall also, from the Issue Date, represent interests in the Original Bonds as initially represented by the Original Global Certificate. The New Global

Certificate will be exchangeable for Individual Bond Certificates in the limited circumstances set out therein. See "*Summary of Provisions Relating to the Bonds While in Global Form*".

**Use of Proceeds:**

The Issuer intends to use the net proceeds from the issue of the Bonds (i) to repay part of the outstanding EUR 500 million 4.250 per cent. Bonds issued in November 2013 (the "**2013 Bonds**") when they become due and (ii) for general corporate purposes. See "*Use of Proceeds*".

**Risk Factors:**

There are certain factors that may affect the Issuer's ability to fulfil its obligations under the Bonds. In addition, there are certain factors which are material for assessing the market risks associated with the Bonds and certain risks relating to the structure of the Bonds. See "*Risk Factors*".

**Negative Pledge:**

So long as any Bond remains outstanding, other than any Permitted Security, the Issuer will not, and will ensure that none of its Material Subsidiaries will, create or have outstanding any security interest upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness or any guarantee or indemnity in respect of any Relevant Indebtedness, without at the same time or prior thereto according to the Bonds the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or such other security or arrangement as shall be approved by an Extraordinary Resolution of the Bondholders. See "*Terms and Conditions of the Bonds—Covenants—Negative Pledge*".

**Financial Covenants**

For so long as any Bond remains outstanding, the Issuer shall not, and shall not permit any of its Material Subsidiaries to, directly or indirectly incur any Financial Indebtedness, provided, however, that the Issuer and any Material Subsidiary may incur Financial Indebtedness, in each case if, after giving effect to the incurrence of such Financial Indebtedness and the receipt and application of the proceeds therefrom: (i) no Event of Default has or would have occurred and is or would be continuing; (ii) the EBITDA Coverage Ratio would be not less than 4.0 to 1.0; and (iii) the Consolidated Leverage Ratio would not be more than 4.5 to 1.0. This covenant may cease to apply in certain circumstances – see "*Terms and Conditions of the Bonds—Covenants—Financial Covenants*".

For so long as any Bond remains outstanding, in the event that NEK (as defined below) is declared by a Bulgarian court to be overindebted (свърхзадължен) within the meaning of the Bulgarian Commerce Act, then the Issuer shall not, and shall not permit (to the extent permitted by law) any of its Material Subsidiaries to, directly or indirectly, incur any Financial Indebtedness. See "*Terms and Conditions of the Bonds—Covenants—Financial Covenants*".

**Redemption at Maturity**

Unless previously redeemed, purchased or cancelled, the Issuer will redeem the Bonds on 28 June 2025.

**Redemption for Taxation Reasons:**

The Bonds may be redeemed at the option of the Issuer in whole, but not

in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Bondholders (which notice shall be irrevocable), at their principal amount, together with interest accrued to the date fixed for redemption, in the event of certain changes affecting taxation in the Republic of Bulgaria. See "*Terms and Conditions of the Bonds—Redemption, Purchase and Cancellation—Redemption for Taxation and other Reasons*".

**Change of Control Put Option:**

Upon the occurrence of a Change of Control, each Bondholder shall have the option to require that the Issuer redeem or, at the option of the Issuer, purchase (or procure the purchase of) such Bondholder's Bonds at 101 per cent. of the principal amount together with interest accrued to (but excluding) the Change of Control Put Date. See "*Terms and Conditions of the Bonds—Redemption, Purchase and Cancellation—Change of Control Put Option*".

**Redemption at the Option of the Issuer:**

Unless a Change of Control Put Notice has been given pursuant to Condition 6(c) (*Change of Control Put Option*) of the Terms and Conditions of the Bonds, the Issuer may, at any time, redeem, in whole or in part, the Bonds at a redemption price per Bond equal to the higher of: (i) the principal amount of the Bond; and (ii) the sum of the then current values of the remaining scheduled payments of principal and interest discounted to the Optional Redemption Date on an annual basis (based on the actual number of days elapsed divided by 365 or (in the case of a leap year) by 366) at the Reference Dealer Rate (as defined herein) plus 0.5 per cent., in each case as determined by the Determination Agent. See "*Terms and Conditions of the Bonds—Redemption, Purchase and Cancellation—Redemption at the Option of the Issuer*".

**Events of Default:**

If any of the events set out in "*Terms and Conditions of the Bonds—Events of Default*" occurs and is continuing, then any Bond may, by notice in writing given to the Issuer and the Fiscal Agent at its specified office by the holder, be declared immediately due and payable whereupon it shall become immediately due and payable at its principal amount together with accrued interest without further formality unless such event of default shall have been remedied prior to the receipt of such notice by the Fiscal Agent. See "*Terms and Conditions of the Bonds—Events of Default*".

**Cross Default/Cross Acceleration:**

Any Bond may, by notice in writing given to the Issuer and the Fiscal Agent at its specified office by the holder, be declared immediately due and payable if:

- (i) any other present or future indebtedness (other than indebtedness owed to another member of the Group) of the Issuer or any of its Material Subsidiaries for or in respect of moneys borrowed or raised becomes (or, other than in the case of Natsionalna Elektricheska Kompania EAD ("**NEK**"), becomes capable of being declared) due and payable prior to its stated maturity by reason of

any actual or potential default, event of default or the like (howsoever described); or

- (ii) any such indebtedness is not paid when due or, as the case may be, within any applicable grace period; or
- (iii) the Issuer or any of its Material Subsidiaries fails to pay when due any amount payable by it under any present or future guarantee for, or indemnity in respect of, any moneys borrowed or raised

provided that the aggregate amount of the relevant indebtedness, guarantees and indemnities in respect of which one or more of the events mentioned above have occurred equals or exceeds EUR 25,000,000 or its equivalent, unless such event of default shall have been remedied prior to the receipt of such notice by the Fiscal Agent. See "*Terms and Conditions of the Bonds—Events of Default—Cross-Default*".

**Withholding Tax:**

All payments of principal and interest by or on behalf of the Issuer in respect of the Bonds shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by the Republic of Bulgaria or any authority therein or thereof having power to tax, unless such withholding or deduction of such taxes, duties, assessments or governmental charges is required by law. In that event, the Issuer shall pay such additional amounts as will result in receipt by the Bondholders of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in the limited circumstances set out in Condition 8 (*Taxation*) of the Terms and Conditions of the Bonds.

**Issuer Substitution**

The Issuer, or any previous substituted company, may at any time, without the consent of the Bondholders, substitute for itself as principal debtor under the Bonds such company as is specified in the Fiscal Agency Agreement, provided that no payment in respect of the Bonds is at the relevant time overdue. The substitution shall be made by a deed poll and may take place only in accordance with Condition 12(c) (*Substitution*) of the Terms and Conditions of the Bonds.

**Rating:**

The Original Bonds were assigned a rating of BB by Fitch and Ba2 by Moody's, and it is expected that the ratings of the Bonds will be the same, after the issuance of the Bonds.

Both Fitch and Moody's are established in the European Union and registered under the CRA Regulation. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency. Neither the assigning rating agency nor the Issuer is obliged to provide the holders of the Bonds with any notice of any suspension, change or withdrawal of any rating.

**Governing Law:**

The Bonds, and any non-contractual obligations arising out of or in

connection with the Bonds, will be governed by, and construed in accordance with, English law.

**Selling Restrictions:**

United States and United Kingdom. See "*Subscription and Sale*" below.

**Listing and Trading:**

Application has been made to Euronext Dublin for the Bonds to be admitted to the Official List and to trading on Euronext Dublin. Following the admission to the Official List, the Issuer intends to apply for the Bonds to be admitted to the Bulgarian List and to trading on the main market of the BSE (the "**Bulgarian Admission**"). The Original Bonds were admitted to the Official List and to trading on Euronext Dublin on 28 June 2018. The Issuer intends to apply for the Original Bonds to be admitted to the Bulgarian List and to trading on the main market of the BSE upon the finalisation of ongoing local registration procedures. Euronext Dublin and the main market of the BSE are regulated markets for the purposes of Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments, as amended.

**Clearing Systems:**

Euroclear and Clearstream, Luxembourg for trading on Euronext Dublin. Following the Bulgarian Admission, Central Depository AD, Sofia ("**Bulgarian CSD**"), as an accountholder with Clearstream, Luxembourg, for trading on the main market of the BSE.

**Security Codes:**

ISIN : XS1839682116

Common Code : 183968211

CFI Code: DBFXFR

FISN: BULGARIAN ENERG/3.5BD 20250628 REST

## RISK FACTORS

*An investment in the Bonds involves a high degree of risk. You should carefully consider the following information about these risks, together with the information contained elsewhere in this Prospectus, before deciding to buy any Bonds. Each of these risks could have a material adverse effect on the Group's business, financial condition, results of operations, prospects or the trading price of the Bonds, and investors could lose all or part of their investment. BEH has described the risks and uncertainties that it believes are material, but these risks and uncertainties may not be the only ones the Group faces. Additional risks and uncertainties relating to the Group that are not currently known to BEH, or that BEH currently deems immaterial, may also have an adverse effect on the Group's business, financial condition, results of operations and future prospects. If this occurs, the trading price of the Bonds may decline, and investors could lose all or part of their investment.*

*The following risks relate to the Group's business and the environment in which the Group operates. The order in which the risks are presented does not necessarily reflect the likelihood of their occurrence or the magnitude of their potential impact on the Group's business, financial condition, results of operations, future prospects or the trading price of the Bonds. Investors should consider carefully whether an investment in the Bonds is suitable for them in light of the information in this Prospectus and their personal circumstances.*

### ***Risks related to the Issuer***

**The Group's operations are focused on Bulgaria and the Balkan region. As a public utility, its results of operations are significantly affected by economic conditions in Bulgaria and the region.**

The Group is a public utility providing electricity generation, gas supply and electricity and gas transmission services primarily to Bulgarian customers, lignite coal to power producers in Bulgaria and exporting electricity to neighbouring countries in the Balkan region. As a result, the Group's results of operations are substantially affected by economic conditions in Bulgaria and the region, which in turn can be affected by developments including, but not limited to:

- macroeconomic events, including external economic shocks;
- economic difficulties among Bulgaria's trading partners;
- a decline in Bulgaria's gross domestic product;
- the imposition of new or additional international sanctions against Russia or other trading partners;
- a decrease in foreign direct investment in Bulgaria, due to a perception of a poor economic, legal or business climate or for any other reason;
- increasing levels of unemployment;
- a governmental budget deficit or other fiscal difficulties;
- unprofitable state energy ventures;
- an inability or difficulty in importing gas;
- changes in commodity prices;

- high or increasing levels of corruption and/or economic crime;
- adverse demographic changes;
- instability in the Bulgarian banking system; and
- social or political instability and other risks associated with a developing country such as Bulgaria.

As a small open economy, Bulgaria faces the risk of external shocks, such as from the global financial and European sovereign debt crises. A decline in the economic growth of Bulgaria's major export partners (such as Germany, Romania, Turkey, Italy and Greece), could in the future have an adverse impact on Bulgaria's external demand and hence affect Bulgaria's economic growth prospects.

As international investors' reactions to events occurring in a single market can result in a "contagion" effect, in which an entire region or class of investment is disfavoured by international investors, Bulgaria could be adversely affected by negative economic or financial developments in other EU Member States or countries with credit ratings similar to those of Bulgaria. The markets in which the Group operates have been adversely affected by "contagion" effects in the past, including macroeconomic events such as the European sovereign debt crisis and the global financial crisis. No assurance can be given that the Group's business, financial condition, cash flows, results of operations or prospects will not be affected by similar events in the future.

In addition, adverse political or economic developments in other countries, and related market volatility and uncertainties, including any developments, volatility and uncertainties that result from the United Kingdom's decision in June 2016 to leave the EU, could have a significant negative impact on GDP, as well as the overall economic, political and social conditions, in Bulgaria and in the Balkan region.

The EU has conveyed concerns in its latest Bulgaria country report on medium-term issues such as corporate governance in state-owned enterprises, vulnerabilities in the financial sector, high corporate debt, and accelerated lending activity, structural challenges in the education system and labour market (including high youth unemployment and lack of job opportunities in certain parts of the country), limited accessibility, low funding and poor health outcomes of the healthcare system, a high proportion of people living at risk of poverty or social exclusion, weaknesses in the judiciary and slow implementation of reforms in the areas of public administration and e-government.

If Bulgaria fails to adequately address these concerns and meet on time its country-specific recommendations, this could lead to a deterioration in its relationships with the EU. This in turn, among other potential issues, could limit the amount of transfers of EU funds to Bulgaria, which could have an adverse effect on the Bulgarian economy.

Furthermore, in February 2018, the EU member states began talks on the 2021-2027 EU budget framework. The increasing constraints on the EU budget, particularly following the withdrawal from the EU of the United Kingdom, the largest net contributor to the EU budget, may reduce various subsidies and transfers of EU funds to CEE countries, including Bulgaria, which could have an adverse effect on the Bulgarian economy. In particular, the 2021-2027 EU budget framework envisions a 5 per cent. cut in funding for cohesion programs, of which Bulgaria is a beneficiary. While the country does not currently utilise 100 per cent. of the funds that it is entitled to, changes may require higher co-financing of projects from the state budget, which could negatively affect public finances and limit usage. In addition, receipt of financing in the 2021-2027 EU budget is expected to be dependent on the rule of law, meaning that the European Commission could cut funds in jurisdictions where unlawful activities are suspected, and this could include Bulgaria. Any limitations or reductions in EU funding could

negatively affect the economy by decreasing growth, and potentially energy consumption, which could in turn have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Ministry of Energy has agreed to provide the Group's subsidiary, Natsionalna Elektricheska Kompania EAD ("NEK") with EUR 602 million of financial assistance following the outcome of the arbitration in connection with the discontinued Belene nuclear power plant project (the "Belene Project"). Any steps taken by the Ministry of Energy to recover the financial assistance following a failure of NEK to repay it could have a significant material adverse impact on the Group's financial position.**

Following the cancellation of the Belene Project by the Bulgarian government in 2012, ZAO Atomstroyexport ("ASE"), which had been contracted for the design and construction of new units of the nuclear power plant, commenced arbitral proceedings against NEK claiming damages and loss of profits in relation to the discontinued project. NEK and ASE reached a settlement in October 2016 which provided that NEK would pay ASE the full amount of the awarded principal and interest of EUR 601,617,133 (BGN 1,176,660,837) on or before 15 December 2016. The final payment was made on 8 December 2016.

In respect of this arbitral award, the Bulgarian government passed a law in September 2016 for the provision of reimbursable financial assistance by the Bulgarian government to NEK. Consequently, in December 2016, NEK and the Ministry of Energy signed a contract for the provision to NEK of EUR 601,617,133 (BGN 1,176,660,837) on an interest-free basis with a bullet repayment due in December 2023 (which is prior to the maturity date of the Bonds).

Unless the Belene Project is restarted by the Ministry of Energy with a strategic investor (in which case the assets and liabilities relating to the Belene Project may be transferred off the Group's balance sheet) or EWRC takes measures to reimburse NEK for the historical tariff deficits (see "*Business Description — Business — NEK*") which provide sufficient funds to repay the financial assistance, it is unlikely the Group will be able to repay the financial assistance in 2023.

BEH believes that it is unlikely that the Ministry of Energy will take any steps to recover the financial assistance when it becomes due in December 2023, including any steps that might affect the ability of the Issuer to repay the Bonds or trigger a cross-default in any of the Group's other financings, and would expect the Ministry of Energy to increase the equity in BEH by the value of the financial assistance. However, if NEK fails to repay the financial assistance on the date upon which it becomes due and the Ministry of Energy takes steps to recover the outstanding amount, then this could have a significant material adverse impact on the Group's business, prospects, financial condition and results of operations.

**The Group has substantial borrowings and its operating cash flows may be insufficient to meet all its payment obligations without the need for additional financing, and there is no certainty that the Group would be able to obtain any such additional financing.**

The Group has current and non-current borrowings amounting to BGN 2,319 million, or 38.0 per cent. of the Group's total liabilities, at 31 December 2017. As a holding company, BEH's principal source of recurring cash flow is dividends from its subsidiaries. According to their articles of incorporation, BEH's subsidiaries are each required to allocate as dividends to BEH a certain percentage of their profit after tax and allocation to reserves. BEH is not taxed on these dividends. The Group may not have sufficient cash flow from its operating activities to generate sufficient dividends to enable BEH to service its debt, meet its other obligations or fund its planned capital expenditures without the need for additional external financing. In particular, the 2013 Bonds are due to be redeemed in November 2018 and the EUR 550 million 4.875 per cent. Bonds issued in August 2016 (the "**2016 Bonds**") are due to be redeemed in August 2021 and part of these amounts may need to be refinanced. BEH's

ability to obtain external financing and the cost of such financing are dependent upon numerous factors, including general economic and market conditions in Bulgaria and internationally, international interest rates, credit availability from banks or other lenders, investor confidence in the Group and the success of the Group's business as well as restrictions contained in its existing debt agreements, see "*Certain of the Group's debt facilities and its existing bonds contain covenants, which could restrict the Group's ability to incur further debt or limit its flexibility in planning for, or reacting to, changes in its business or industry and any breach of these covenants, could materially and adversely affect the Group*".

There can be no assurance that external financing or refinancing, either on a short-term or a long-term basis, will be available or, if available, that such financing will be obtainable on terms that are not onerous to the Group. In addition, the Group's substantial debt and other financial obligations could limit its flexibility in planning for, or reacting to, changes in its business or industry, which could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**Certain of the Group's debt facilities and its existing bonds contain covenants, which could restrict the Group's ability to incur further debt or limit its flexibility in planning for, or reacting to, changes in its business or industry and any breach of these covenants, could materially and adversely affect the Group.**

Certain of the agreements that govern the Group's long-term debt contain restrictive covenants, including negative pledge clauses, material change clauses and change of ownership clauses, and covenants requiring the maintenance of specified financial ratios. These covenants may restrict the Group's ability to incur further debt. Should the Group need, in the future, to renegotiate any restrictive covenants or obtain a waiver in respect of any breach of such a covenant, no assurance can be given that it will be successful. Any failure to renegotiate such covenants could restrict the Group's ability to raise financing in the future which could have a material adverse effect on its business, financial condition, results of operations and cash flows.

In addition, any breach of such covenants which is not waived by the lenders could result in the relevant financing being accelerated and potentially trigger cross default provisions under the Group's other financing arrangements, including the Bonds, which may have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**NEK is in breach of its financial covenants. The Bonds may not be declared immediately due and payable if NEK becomes unable to pay its debts as they fall due, breaches the terms of its third party debt or if its liabilities exceed its assets.**

NEK has a number of loans outstanding and routinely breaches the financial covenants on those loans. To date NEK has been able to obtain waivers (including from third party lenders) in respect of those breaches but this may not continue. NEK has not yet obtained waivers for breaches that occurred in the financial year ended 31 December 2017 and the process of obtaining such waivers is ongoing. NEK expects such waivers to be granted in line with prior years. NEK obtains loans from BEH in order to remain solvent and is not always able to repay those loans on time. To date NEK has not defaulted on payments on its bank loans but there is a risk that this may happen in the future. Provided that third party debt is not accelerated then there will be no event of default under the Bonds and the Bonds may not be declared immediately due and payable if NEK breaches the terms of its third party debt, fails to pay its debts as they fall due or if its liabilities exceed its assets.

The divestiture of energy licence assets, including in insolvency, is subject to the consent of the Bulgarian energy regulator. If NEK breaches the terms of its third party debt, fails to pay its debts as they fall due or if its liabilities exceed its assets at any time or if it is declared to be insolvent, then there could be a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Bulgarian state, which owns all of the share capital of BEH, can control the Group's policies by, amongst other things, electing all of the members of BEH's Board of Directors and may pursue decisions that reflect Bulgarian government policy.**

As BEH's sole shareholder, the Republic of Bulgaria has the power, among other things, to nominate and elect all three members of BEH's Board of Directors (the "**Board**") and, through BEH, the boards of directors of all its subsidiary companies. Board members of BEH are elected for a three-year term and can be replaced by its sole shareholder at any time. See "*Business Description — Shareholder*" for a description of the other powers which the Minister of Energy of Bulgaria has in relation to the Group.

The interests of the Bulgarian government may conflict with the Group's objectives as a commercial enterprise, and there can be no assurance that the government will not take any action to further its own objectives which may be in conflict with the interests of the Group or the Bondholders. For example, the Bulgarian government's key objective is to ensure the stable supply of electricity and gas to the country's residents and businesses at affordable costs rather than the optimisation of the Group's revenue and profits. A change in the Bulgarian government could also adversely impact the strategy or objectives of the Group.

The Bulgarian government through the Council of Ministers determines the dividends that must be paid by BEH and under Bulgarian law, state-owned companies are required to pay dividends of up to 50 per cent. of the profit disclosed in the consolidated financial statements. In addition, the Group may make decisions that are different from those that it would have made without government influence. Such decisions could lead to significant expenditures by the Group, including additional debt, which could have a material adverse effect on the Group's ratings, business, results of operations and financial condition. Changes to the members of BEH's Board may be made for political, rather than business, reasons and such changes could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Bulgarian state may sell part of its shareholding in the Group indicating a change in strategy.**

The Terms and Conditions of the Bonds provide Bondholders with an option to redeem their Bonds if there is a "Change of Control" of the Issuer. "Change of Control" means, in relation to the Issuer, the Bulgarian state ceases to (i) hold, directly or indirectly, at least 75 per cent. of the shares in the Issuer or (ii) hold, directly or indirectly, the right to appoint all of the directors of the Issuer or (iii) otherwise control or have the power to control the affairs and policies of the Issuer. See "*Terms and Conditions of the Bonds*". Accordingly the Bulgarian state could sell up to 25 per cent. of its current shareholding without triggering the Bondholders' option to redeem the Bonds. Such a sale could only be made by a decision of the National Assembly of the Republic of Bulgaria acting on a motion of the Council of Ministers and could indicate a significant change in the Bulgarian government's strategy and approach in relation to the Group, which may have an adverse effect on the Group's business, prospects, financial condition and results of operations.

**Certain of the Group's loans have been advanced to subsidiaries of BEH, certain of its loans are secured and certain of its loans are guaranteed by the Bulgarian government. These factors mean that the Bondholders may be effectively subordinated to other creditors of the Group.**

As at 31 December 2017, BEH's current and non-current borrowings amounted to BGN 2,319 million, or 13.3 per cent. of the Group's total assets. This includes BGN 256 million, or 11.0 per cent. of the Group's total borrowings, which had been advanced as loans mainly to the subsidiaries of BEH. In the event of any insolvency of these subsidiaries, claims of their secured and unsecured creditors, including trade creditors, banks and other lenders, will have priority with respect to the assets of such subsidiaries over any claims that BEH or its creditors may have with respect to such assets. Accordingly, if BEH became insolvent at the same time, claims of the Bondholders

against BEH in respect of any Bonds would be structurally subordinated to the claims of all creditors of BEH's subsidiaries. The Conditions of the Bonds restrict the amount of debt which the Group may incur (*please see Condition 4 in the Terms and Conditions of the Bonds*).

As at 31 December 2017, some of the Group's outstanding loans had been secured on a range of different assets. As a result, in the event of the insolvency of BEH, these assets will not constitute a primary source of repayment to Bondholders.

As at 31 December 2017, outstanding loans of BGN 181 million, or 1.0 per cent. of the Group's total assets, had been guaranteed by the Bulgarian government. A further EUR 110 million has been earmarked by the Bulgarian government to guarantee the IGB Project. The Bonds do not benefit from any similar guarantee, see "*Risk Factors — BEH's obligations under the Bonds do not benefit from any direct or indirect Bulgarian government guarantee or other legally enforceable government backing*".

**BEH's obligations under the Bonds do not benefit from any direct or indirect Bulgarian government guarantee or other legally enforceable government backing.**

Although the Bulgarian state is BEH's sole shareholder and has in the past guaranteed certain of BEH's obligations under financing arrangements entered into by it, the Bonds are not directly or indirectly guaranteed by the Bulgarian government and do not benefit from any legally enforceable government backing. In addition, the Bulgarian government is under no obligation to extend financial support to BEH in the future. Accordingly, the Bonds are not, and should not be regarded as, obligations of the Bulgarian government.

BEH's ability to make payments under the Bonds is solely dependent on its ability to fund such obligations from its operating cash flows and borrowings. Therefore, any decline in such operating cash flows or any difficulty in securing external funding may materially adversely affect BEH's ability to make payments under the Bonds.

**Group companies are subject to extensive regulation and licensing requirements and may be subject to liabilities as a result of any violation of applicable regulations or may be materially adversely affected by any loss of or failure to renew material licences.**

The Group is subject to extensive regulation in conducting its business, see "*Regulation, Environment and Health and Safety*". Any failure by the Group to comply with all applicable regulations could result in a range of civil, administrative and criminal penalties and other liabilities as well as a materially negative impact on the Group's reputation. The relevant authorities in Bulgaria and the EU may also enforce existing regulations more strictly than they have done in the past and may in the future impose stricter standards, or higher levels of fines and penalties for violations, than those which are in effect at present. Accordingly, the Group is unable to estimate the future financial impact of compliance with, or the cost of a violation of, any applicable regulations.

The Group's activities of generation, transmission and trading of electricity and the transmission and storage of gas require a range of administrative permits, authorisations and licences, at both local and national levels, in the countries in which the Group operates. The procedures for obtaining and renewing these permits, authorisations and licences can be protracted and complex and the conditions attached to such licence may be subject to change and are not predictable. As a result, the Group may incur significant expenses in obtaining or renewing its permits, authorisations and licences. Delays, high costs or the suspension of the Group's operating activities due to its inability to obtain, maintain, or renew permits, authorisations and licences may also have a negative impact on its business activities and profitability. In addition, the Group often invests resources prior to obtaining the necessary permits, authorisations and licences, particularly in connection with feasibility studies and environmental studies, but may have to cancel or withdraw from a project if it is unable to obtain such permits, authorisations or licences.

Licences for the generation and transmission of electricity in Bulgaria are granted for a maximum of 35 years. The licence for unit 6 of the Kozloduy nuclear power plant is currently due to expire in 2019, although the Group is in the process of extending the useful life of the reactors by 30 years and plans to operate the unit until 2049 subject to the licence being renewed by the Bulgarian Nuclear Regulatory Agency. TPP Maritsa East 2's licence for the thermal power plant expires in 2021 and will need to be renewed by the Energy and Water Regulatory Commission ("EWRC"). Any failure to obtain, maintain, renew or extend all the necessary administrative permits, authorisations and licences necessary for the operation of the Group's business and execution of its strategy could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**Changes in the Bulgarian energy regulatory regime, and in tariff regulations in particular, could have a material adverse effect on the Group's results of operations and financial condition.**

Despite the progress towards the liberalisation of the energy sector in Bulgaria, the Group is still subject to a substantial degree of regulation, particularly with respect to the tariffs it may charge and obligations to purchase electricity. At the wholesale level, the Group's subsidiary, NEK, currently purchases electricity under quota obligations at regulated prices from independent producers and sells it at regulated prices principally to four end suppliers, and, in its capacity as the supplier of last resort, to around 30 customers who are connected to the high voltage grid. Also, NEK has been obliged to purchase electricity from combined heat and power generators and from renewable energy sources at feed-in tariffs established by EWRC (as of 1 July 2018 only from those of them with installed capacity below 4 MW). Separately, NEK purchases electricity above market price from thermal power generators under long-term contracts.

A significant portion of the Group's revenue from electricity sales to date has been derived from the regulated electricity tariff rates NEK charges its customers (approximately 55 per cent. in 2017). In addition, a significant portion of its cost of electricity sales has been attributable to the regulated electricity prices which it pays to its suppliers. Although the Bulgarian Energy Act was amended from the start of the new regulatory period beginning on 1 July 2018 to reduce the size of the regulated electricity market, the legislation will continue to have a significant impact on the Group's business (see "*Regulation, Environment and Health and Safety — Regulation — Amendments to the legal and regulatory framework*").

On the gas market, Bulgaria is wholly dependent on imports from Russia and the Group's subsidiary, Bulgargaz, is the only licensed public supplier of natural gas. In 2017, 99.5 per cent. of Bulgaria's gas was imported from Russia with the remaining 0.5 per cent. coming from domestic extraction by other companies and from balancing contracts with Bulgartransgaz.<sup>1</sup> Bulgargaz sells the imported gas at regulated prices only, and the Group is also subject to regulated prices in relation to its gas storage business. See "*Regulation, Environment and Health and Safety*" for further details on the tariff system.

As a result, the Group is affected by the pricing decisions of EWRC for electricity and gas prices. The members of EWRC are appointed by the Bulgarian parliament so tariff rates may be vulnerable to political intervention. Regulatory authorities in Bulgaria may decide to limit or even block tariff rate increases, without allowing any offsetting variants in the quality of service provided by the Group or taking into account public service obligations, increased production, sourcing and distribution costs incurred by the Group. If the Group is unable to increase the electricity or gas tariff rates it charges customers in order to cover increases in operating costs or capital investment requirements, this could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

---

<sup>1</sup> Source: Bulgargaz

## **Compliance with United Nations, U.S. and EU sanctions could threaten the Group's economic interests.**

The United Nations, the U.S., the EU and the Member States of the EU impose regulations that restrict the ability of entities or persons to invest in, or otherwise engage in business with, certain countries and specially designated persons. In particular, certain Russian enterprises have been subject to such sanctions following the political crisis in Ukraine, including Crimea, that started in 2014 and remains unresolved. Due to the ongoing conflict between Russia and Ukraine, the EU, the U.S. and other members of the G7 bloc of developed nations (including Canada and Japan) have introduced a variety of sanctions and restrictive measures against certain Russian persons and Russian businesses. Such sanctions and measures have subsequently been extended. One form these sanctions have taken was to designate certain persons as the targets of sanctions, with the practical consequences that U.S. persons cannot do business with targets of U.S. sanctions while EU persons cannot provide funds or other economic resources to targets of EU sanctions. Another form these sanctions have taken, with reportedly greater consequences for the Russian economy, is so-called 'sectoral' sanctions affecting several of Russia's leading oil and gas companies, banking institutions and defence companies. The current sanctions regime is a result of multiple extensions by the U.S. and EU in the term and scope of sanctions.

Nearly all of the gas purchased by Bulgargaz is imported from Russia under long-term take-or-pay contracts with Gazprom Export LLC ("**Gazprom Export**") and Gazprom Export is the only customer of Bulgartransgaz for transit services. Furthermore, in November 2010 BEH and PJSC Gazprom ("**Gazprom**") incorporated a joint venture (the "**South Stream JV**"), in which they each hold 50 per cent. of the shares, in order to develop the Bulgarian section of the South Stream gas pipeline. The project was cancelled in 2014 but the South Stream JV continues to exist for possible future use of its assets or other projects in Bulgaria.

No shareholder, individual or entity within the Group has been designated by either the U.S. or the EU as a specific target of sanctions. However, Gazprom appears on the US Sectorial Sanctions Identification List pursuant to the US Executive Order 13662's Directive 4 (the "**SSI List**", and entities appearing thereon, "**SSIs**") and the South Stream JV, by virtue of being 50 per cent. owned by Gazprom, is itself a SSI. Directive 4 prohibits certain transactions by U.S. persons and from, through or within the United States that relate to oil production in which SSIs have an interest. Neither the South Stream JV nor the Group are involved in any activity specified in Directive 4. Non-U.S. persons may be subject to secondary US sanctions as a result of their dealings with persons targeted by US sanctions (including Gazprom and the South Stream JV as SSIs). In particular, Section 228 of the Countering America's Adversaries through Sanctions Act ("**CAATSA**") requires the imposition of blocking sanctions (i.e., asset-freezing sanctions) on any non-U.S. person determined by the U.S. President to have knowingly facilitated a "significant transaction" for or on behalf of any person subject to U.S. sanctions with respect to Russia. OFAC has issued guidance advising that dealings with persons who are targeted only by sectoral sanctions and no other sanctions, such as Gazprom and the South Stream JV, would not be considered "significant" for the purposes of Section 228 unless such dealings involve deceptive practices. OFAC has clarified that "deceptive practices" include efforts to conceal the parties' identities and to evade sanctions. The participation of BEH in the South Stream JV does not involve any deceptive practices and therefore the risk of being blocked pursuant to Section 228 of CAATSA is low, however, there is a possibility that the scope of these sanctions could be broadened and that the US President could impose blocking sanctions on the Group.

The CEO of Gazprom, Alexey Miller, was listed on OFAC's List of Specially Designated Nationals and Blocked Persons (the "**SDN List**", and persons listed thereon, "**SDNs**") in April 2018. U.S. persons are generally prohibited from engaging in transactions with or for the benefit of SDNs, their property, or their interests in property, and any such property or interests in property in the possession or control of U.S. persons or in the United States must be blocked. Transactions by U.S. persons, and from, through, or within the United States, that involve any SDNs, directly or indirectly, are prohibited. While OFAC has issued guidance that U.S. persons are not prohibited from dealing with a company whose CEO is an SDN ("**SDN CEO**"), OFAC has further advised that such dealings must

not involve the provision of funds, goods, or services to the SDN. Furthermore, OFAC has demonstrated a willingness to initiate enforcement actions against U.S. persons who have entered into agreements with companies, who are not themselves SDNs, but that are nevertheless signed by an SDN CEO. Additionally, as discussed above with respect to CAATSA, non-U.S. persons who enter into “significant” transactions with or for the benefit of SDNs risk exposure to sanctions themselves. There is therefore a risk that, in dealing with Gazprom, the Group could be deemed to have entered into a significant transaction with Gazprom’s SDN CEO and could therefore be at risk of being subject to secondary sanctions under CAATSA.

Although neither Gazprom nor Gazprom Export are currently targeted under EU sanctions, there are two entities in the Gazprom group (Gazprombank and Gazpromneft) that are targeted by these sanctions, and there is therefore a heightened risk that the currently non-targeted entities of the Gazprom group, including those the Group deals with, may be caught by a future expansion of EU sanctions.

The Group also relies on the Russian companies Mayak Production Association for the servicing and waste processing of the NPP and TVEL Fuel Company for the supply of nuclear fuel, as well as certain other Russian companies providing equipment for the Group’s NPP; none of these companies are currently the target of any U.S. or EU sanctions.

While the current sanctions regime directed at Russia has had no material impact on the Group's transactions with Russian persons, the EU and U.S. have signalled their readiness to further extend the scope of sanctions if Russia fails to meet certain political conditions. Tensions between Russia and the EU and the U.S. have further increased recently as a result of (among other matters) the conflict in Syria, and there can be no assurance that the governments of the EU and the U.S. or other countries will not impose further sanctions on Russia. The further extension of sanctions against Russia may preclude the Group conducting business with Russian entities, or create reluctance on the part of certain counterparties to transact with the Group due to the Group’s business with Russian entities. The Group may be forced to cease transactions with Russian entities or to amend existing contractual terms which could have a material adverse effect on the Group's business, prospects, financial condition and results of operations. Additionally, and even if the EU and U.S. sanctions regimes within respect to Russia are not expanded, the Group is exposed to reputational risk as potential counterparties may be hesitant to engage with the Group out of concerns related to the Group’s exposure to Russia and risks associated with related EU and U.S. sanctions. This may be especially true with respect to counterparties located in the United States or which are otherwise seeking to comply with U.S. sanctions.

While the Group currently complies with all relevant sanctions regulations, any violations or perceived violations of existing or future UN, U.S., EU or other international sanctions could subject the Group to penalties that could have a material adverse effect on the Group's ability to obtain goods and services in the international markets, access the U.S. or international capital or bank debt markets and cause reputational damage. Any of these factors could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The audit opinions in respect of the Financial Statements have been qualified in a number of significant respects.**

HLB Bulgaria has audited the 2017 Financial Statements. HLB Bulgaria's audit opinion, included in the 2017 Financial Statements, is subject to certain qualifications in relation to:

- the value of certain assets and liabilities relating to the Belene Project, the construction of which was discontinued in 2012, and regarding which an arbitral award was made against the Group (and has since been paid), see "*Business Description—Litigation*". The uncertainty surrounding this issue gives rise to a potential

impairment of property, plant and equipment of up to BGN 2,239 million which is owned by NEK. The exact amount of any such impairment depends on the recoverable amount of property, plant and equipment, which is currently difficult to assess. The impairment costs of the Group, being BGN 16.1 million for the year ended 31 December 2017, could significantly increase, while the net book value of its assets could significantly decrease. Any impairment of the assets relating to the Belene Project could have a significant material adverse impact on the Group's financial position. In addition, in respect of the litigation with the project architect-engineer related to the Belene Project for a claim of BGN 106 million against the Group (see "*Business Description—Litigation*"), as a result of its complexity and because it was not possible to make an accurate assessment of its outcome at the time that the 2017 Financial Statements were produced, there is currently no provision for the litigation in the 2017 Financial Statements.

- the recoverability of certain assets under construction, the completion of which remains unfunded (and on which construction stopped in 2003), which gives rise to a potential impairment of up to BGN 37.9 million. The assets relate to various projects of NEK including the Gorna Arda hydropower cascade, Mesta project and some other smaller projects which are not included in NEK's capital expenditure plans for the next five years. The impact on the 2017 Financial Statements depends on the recoverable amount of these assets, but if the recoverable amount is less than the assets' carrying value the Group would have to recognise an impairment cost for the difference and decrease its assets;
- the Group is unable to reliably measure the potential or expected effects of the outcome of the European Commissions' case against BEH, Bulgargaz and Bulgartransgaz concerning anti-competitive practices on the gas market, see "*Business Description—Litigation*". There is currently no provision for the litigation in the 2017 Financial Statements. If the outcome of the proceeding is decided against BEH, Bulgargaz and Bulgartransgaz then the Group's liabilities may increase materially; and
- the Group has not recognised any provisions for decommissioning its nuclear facilities, as the Group is not able to assess with a high level of certainty the amount of the provisions and the respective assets which should be recognised. If the Group is required to make provisions in relation to decommissioning its nuclear facilities, the Group's liabilities and expenses may increase materially.

The HLB Bulgaria audit report also emphasises certain other matters stated in it which, while not being the subject of a formal qualification, are important comments for the users of the financial statements. Any of these matters could have a material adverse effect on the business, prospects, financial condition and results of operations of the Group. The HLB Bulgaria audit opinion in respect of the 2017 Financial Statements is set out on pages 4 to 7 of this Prospectus.

HLB Bulgaria has audited the 2016 Financial Statements. HLB Bulgaria's audit opinion, included in the 2016 Financial Statements, is subject to certain qualifications in relation to:

- the value of certain assets and liabilities relating to the Belene Project, the construction of which was discontinued in 2012, and regarding which an arbitral award was made against the Group (and has since been paid), see "*Business Description—Litigation*". The uncertainty surrounding this issue gave rise to a potential impairment of property, plant and equipment of up to BGN 2,187 million which is owned by NEK. The exact amount of any such impairment depends on the recoverable amount of property, plant and equipment, which is currently difficult to assess. The impairment costs of the Group, being BGN 114,458 thousand for the year ended 31 December 2016, could significantly increase, while the net book value of its assets could significantly decrease. Any impairment of the assets relating to the Belene Project could have a further significant material adverse impact on the Group's financial position. In addition, in respect of the litigation with the project architect-engineer related to the Belene Project (see "*Business Description—Litigation*"), as a

result of its complexity and because it was not possible to make an accurate assessment of its outcome at the time that the 2016 Financial Statements were produced, there was no provision for the litigation in the 2016 Financial Statements.

- the recoverability of certain assets under construction, the completion of which remains unfunded (and on which construction stopped in 2003), which gave rise to a potential impairment of up to BGN 45.8 million. The assets relate to various projects of NEK including the Gorna Arda hydropower cascade, Mesta project and some other smaller projects which are not included in NEK's capital expenditure plans for the next five years. The impact on the 2016 Financial Statements depends on the recoverable amount of these assets, but if the recoverable amount is less than the assets' carrying value the Group would have to recognise an impairment cost for the difference and decrease its assets;
- the auditors were unable to obtain sufficient audit evidence for the carrying value of trade receivables and trade payables. The respective counterparties for these trade receivables (in the amount of BGN 95.8 million) and trade payables (in the amount of BGN 57.2 million) did not confirm their existence. If the amount of trade receivables is less than reported then the Group would need to recognise an impairment cost and decrease the net book value of the trade receivables. If the amount of trade payables is greater than reported there would be an increase in trade payables. In each instance the 2016 Financial Statements would be negatively affected; and
- the Group has not recognised any provisions for decommissioning its nuclear facilities, as the Group is not able to assess with a high level of certainty the amount of the provisions and the respective assets which should be recognised. If the Group is required to make provisions in relation to decommissioning its nuclear facilities, the Group's liabilities and expenses may increase materially.

The HLB Bulgaria audit report also emphasises certain other matters stated in it which, while not being the subject of a formal qualification, are important comments for the users of the financial statements. Any of these matters could have a material adverse effect on the business, prospects, financial condition and results of operations of the Group. The HLB Bulgaria audit opinion in respect of the 2016 Financial Statements is set out on pages 7 to 9 of this Prospectus.

The issues that are the subject of the auditors' qualifications and emphases of matter could result in material restatements to the 2016 and 2017 Financial Statements, as well as have a material negative impact on the Group's financial position, including breaches of financial covenants in existing indebtedness and the Bonds. As such, these qualifications and emphases of matter should be taken into account when evaluating an investment in the Bonds. For the reasons set out above, if the subject matter of these qualifications and emphases of matter were accounted in accordance with IFRS, there could be material adverse effects on the Group's operating results and financial condition, and NEK could be rendered insolvent and if NEK is declared to be insolvent by a Bulgarian court, this will result in an event of default under the 2013 Bonds, the 2016 Bonds, the Bonds and other Group financings.

**Electricity and gas consumption, and the Group's hydro generation capacity, revenues, costs and results of operations, are significantly influenced by weather conditions and seasonal variations that are not within its control.**

Electricity and gas consumption is seasonal and is mainly affected by weather conditions. In Europe, electricity consumption is generally higher during the autumn and winter months, and the Group generally experiences higher demand during the colder months of October through March and lower demand during the warmer months of April through September. As a result of these seasonal patterns, the Group's sales and results of operations are higher in the first and fourth quarters and lower in the second and third quarters. Sales and results of operations for all of the

Group's energy operations can be negatively affected by periods of unseasonably warm weather during the autumn and winter months. The Group expects seasonal and weather-related fluctuations in its sales and results of operations to continue in the future.

The Group's hydro power electricity generation is also affected by hydrological conditions which can vary significantly on a year to year basis, and conditions such as droughts or heat waves can also limit the Group's hydro generation capacity. However, hydro generation currently accounts for approximately 8.6 per cent. of the Group's gross generation, so the effects of variable hydrological conditions on the Group are limited.

**Disruptions in the supply of lignite coal, fuel oil, gas or other raw materials, or an unexpected increase in their cost, could materially and adversely affect the Group's results of operations and financial condition.**

In the ordinary course of the Group's business, it is exposed to the risk of disruptions in the supply of fuel oil, lignite coal, nuclear fuel, gas or other raw materials and to increases in their cost. Certain of the Group's generation operations depend upon obtaining deliveries of an adequate supply of raw materials on a timely basis and at adequate prices. In addition, the Group has fixed contracts with single Russian suppliers for the supply and removal of all of its nuclear fuel and for almost all of the gas which it imports (see "*Business Description—Business—Electricity—NPP Kozloduy*" and "*Business Description—Business—Natural Gas—Bulgargaz*"). As a result the Group is materially exposed to the risk of these suppliers not being able to provide the agreed amount of products on a timely basis, or at all, due to contractual defaults or bankruptcies. The political conflict between Russia and the EU has increased the risk of supply interruptions and increasing costs of supply from Russia. Any significant shortage or an interruption in the supply of raw materials or any significant price increases could disrupt the Group's generation operations. The Group may not be able to increase its prices in line with increases in its costs as part of the prices it is able to charge are regulated. This could have a material adverse effect on the Group's business, results of operations and financial condition. Conversely such increased costs, if passed through to the Group's customers (assuming EWRC permits an appropriate increase in tariffs), together with a worsening of the overall economic environment, may make it more difficult for the Group's customers to make their required payments, which may increase the Group's doubtful receivables and damage its financial condition and results of operations.

A portion of the Group's expenses are made up of commodity costs, which are heavily influenced by prices in the world market for gas, oil and CO<sub>2</sub>. The prices for such commodities have historically been volatile and there is no guarantee that prices will remain within projected levels. Although it may do so in the future, the Group does not currently undertake any hedging transactions with regards to the commodities it uses and any significant increases in commodity prices could have an adverse effect on the Group's business, prospects, financial condition and results of operations.

**Changes in the market price of emission allowances could negatively impact the Group's activities.**

The Group's operations are subject to legislation aimed at reducing emissions of carbon dioxide ("**CO<sub>2</sub>**") and other greenhouse gases. Until the end of 2012, CO<sub>2</sub> emissions were allocated for free to the energy sector. However, this changed substantially in 2013. From 2013 onwards, as dictated by the European Union Emissions Trading Scheme ("**EU-ETS**"), emission allowances are to be bought in the market or through auctions. However, as part of the overall compromise on the EU's Climate and Energy Package and in order to help modernise their electricity sectors, ten new Member States, of which Bulgaria is one, were allowed a temporary exemption from the full auctioning rule and permitted to allocate a limited number of emission allowances to power plants for free until 2019. Notwithstanding the free allowances available up to 2019, the Group still needs to purchase a proportion of its allowances. From 2019, the Group will be required to purchase all its allowances. In 2016 and 2017, the free allowances accounted for 24.0 per cent. and 5.7 per cent., respectively, of the allowances that TPP Maritsa East 2

required for its operations. The number of emissions allowances required by the Group in any year can vary depending on several factors including changes in electricity prices and the regulated electricity quota (which determine how much electricity a plant will be able to sell and/or produce and consequently the quantities of CO<sub>2</sub> it will emit) and its plants' participation in tenders for auxiliary services and cold reserve (as these do not generate CO<sub>2</sub> and plants are paid for availability).

In view of new climate and energy targets, the European Commission proposed amendments to the EU-ETS in 2015 and the agreed text of the amendments were submitted to the European Parliament in November 2017. The amendments include an increase in the annual reduction in the number of emission allowances from 1.74 per cent. to 2.2 per cent. after 2020 and until 2030 and provide that the energy sector will have to share part of the free allowances with energy-intensive industries. It is anticipated that these amendments will further increase the prices of emission allowances. If the abovementioned amendments to the EU-ETS were to come into force they may have a significant impact on the Group.

Together with the new climate and energy targets, the European Commission has put forward further amendments to the EU-ETS. The European Union has approved the introduction of the market stability reserve from 2019 with backloaded and unallocated allowances to be transferred into the reserve (to control oversupply of allowances). If some of these allowances are kept off the market in reserve then there is a risk that the market price of emission allowances will increase.

The removal of the free allowances and any increase in the price of emission allowances could make some of the Group's activities less economically viable, which would have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**New European Union environmental regulation may increase the Group's capital expenditure and have a negative effect on its financial performance.**

Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency came into force on 4 December 2012. This Directive establishes a framework of measures for the promotion of energy efficiency within the EU in order to ensure the achievement of the EU's 2020 20 per cent. headline target on energy efficiency and to pave the way for further long-term energy efficiency improvements beyond that date. The Directive also seeks to overcome irregularities in the operation of the market, stipulates the setting of national targets to achieve the EU efficiency targets by 2020 and introduces an obligation for large enterprises to carry out an energy audit at least every four years (with the first energy audit completed in December 2015). The provisions of Directive 2012/27/EU were required to be implemented by Member States by 5 June 2014. Implementation of energy efficiency policies and energy efficiency targets under Directive 2012/27/EC and the Energy Efficiency Act, may ultimately result in the decrease of electricity consumption which in turn may have an adverse impact on the Group's business, prospects, financial condition and results of operations.

Regulatory measures are also being taken at both national and international levels to reduce the quantities of atmospheric pollutants, such as sulphur dioxide, nitrous oxide, aromatic organic compounds and particulate matter from industrial activities, including power generation. For example, the Group is subject to the EU Industrial Emissions Directive ("**IED**"). The IED came into force at the beginning of 2011, bringing together seven different Directives including the EU Large Combustion Plant Directive and Integrated Pollution Prevention and Control Directive. IED imposes limitations on concentration levels of sulphur dioxide ("**SO<sub>2</sub>**"), nitric oxide and nitrogen dioxide ("**NO<sub>x</sub>**") and particulate matter in flue gases from power stations and other large industrial boilers. There is also a risk of further changes to the national and international regulatory framework in relation to CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub> and other emissions that could affect the Group's ability to use its current production methods and limit its generation capacity. For instance, in 2017, the European Commission approved the Best Available Techniques

Reference document for Large Combustion Plants (the "**BAT Document**") which sets stricter limits on emissions of mercury, NO<sub>x</sub> and SO<sub>2</sub> from coal-fired power plants. These new emission limits are expected to be transposed into the IED in 2021. TPP Maritsa East 2 is not able to meet these new limits with its current equipment. In February 2018, TPP Maritsa East 2 submitted a request to the Bulgarian Executive Agency for the Environment for derogations from the desulphurisation limit for SO<sub>2</sub> emissions and the mercury limit. If the derogations are obtained then TPP Maritsa East 2 will receive a temporary exemption from the obligation to comply with the abovementioned limits. It is not certain when or if the derogation will be granted or, if granted, for how long the derogation period would be. In the event that the new limits are implemented in full and apply without derogation, material capital expenditure would be required to bring existing equipment in line with some of the new requirements. Any such work to upgrade the equipment at TPP Maritsa East 2 to meet the new requirements could limit the plant's ability to generate power. Any such consequences could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

Additionally, the Group is affected by the EU National Emissions Ceiling Directive ("**NECD**"), which sets national annual limits on emissions of SO<sub>2</sub>, NO<sub>x</sub>, non-methane volatile compounds and ammonia. The NECD was revised in 2016, which translated into stricter pollution limits. Further revisions to the NECD could introduce additional pollution limits for Bulgaria which could also impact the emission limits applicable to the Group.

Furthermore, the package of energy legislation proposed by the European Commission in November 2016, collectively known as the "Clean Energy for All Europeans" or "Winter Package", by promoting RES, could create difficulties for the Group's subsidiary ESO in balancing the electricity market.

Any new regulations or requirements promulgated by the EU, that require the Group to restructure or otherwise change its business in any way, or that affect electricity generation, transmission, distribution or supply prices or related financial conditions, could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group is vulnerable to any changes in demand for electricity and gas that may occur, and to increases in the levels of doubtful receivables, as a result of poor economic conditions.**

In the ordinary course of business, the Group is exposed to the risk of a reduction in demand for its electricity and gas, in particular by its commercial and industrial customer base. The demand for the Group's electricity and gas is affected by the level of economic activity in Bulgaria and, to a smaller extent, Europe. See "*Risk Factors — Risks related to the Issuer — The Group's operations are focused on Bulgaria and the Balkan region. As a public utility, its results of operations are significantly affected by economic conditions in Bulgaria and the region*". Any decline in the overall economic activity due to economic uncertainty may lead to a drop in demand for the Group's electricity and gas, which could lead to lower sales and erosion of the Group's profit margins, resulting in a material adverse effect on the Group's business and prospects.

As at 31 December 2017, the Group's accumulated impairment charge in respect of doubtful trade receivables amounted to BGN 287 million. A significant proportion of these impaired trade receivables are more than one year overdue.

The Group is able to take legal action against its defaulting customers to seek to recover amounts outstanding, although the timing and amount of such recovery is uncertain. Any material increase in doubtful receivables, increased delays in payment times or write-offs could have a significant effect on the Group's business, prospects, financial condition and results of operations.

**The Group's ability to access credit and bond markets and its ability to raise additional financing are in part dependent on BEH's credit ratings.**

The Group's ability to access the capital markets and other forms of financing (or refinancing), and the costs connected with such activities, depend in part on BEH's credit ratings. As of the date of this Prospectus, BEH has a long-term foreign currency issuer default rating of BB with a stable outlook by Fitch which was issued on 15 February 2018 and Ba1 with stable outlook by Moody's which was affirmed on 8 June 2018. Any evidence of weakening links between the Group and the state, a negative change in Bulgaria's rating, a failure by the Group to maintain sufficient liquidity or other factors could all lead to a negative rating action in the future.

BEH's ability to maintain its current rating is dependent on a number of factors, some of which may be beyond its control. In the event that BEH's credit rating is lowered by Fitch or Moody's the Group may not be able to raise additional finance on terms similar to its existing finance or at all, and its ability to access credit and bond markets and other forms of financing (or refinancing) could be limited. This could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group's capital expenditure programme is subject to various risks and uncertainties.**

The Group undertakes significant capital expenditures related to the modernisation, renewal, construction and maintenance of its assets, in particular in relation to its energy power plants, transmission assets and lignite coal mining operations. Capital expenditures are expected to increase in future years. See "*Financial Review—Liquidity and capital resources—Capital expenditure*". These projects typically require substantial capital expenditure and may take months or years before they become operational, during which time the Group may be subject to a number of construction, operating and other risks beyond its control including:

- an inability to find a suitable contractor or sub-contractor either at the commencement of a project or following a default by an appointed contractor or sub-contractor;
- default or failure by its contractors or sub-contractors to finish projects or parts of projects on time, according to specifications or within budget;
- an inability to finance projects as required;
- disruption in service and limited access to third parties, such as architects, engineers or other service providers;
- cost overruns as a result of defects in design and construction;
- difficulties in connecting new generation plants to existing or new transmission networks;
- shortages or escalating costs of construction materials and increased global commodity prices;
- shortages or increases in the costs of equipment;
- breakdown or failure of equipment, processes or technology;
- the non-availability of key personnel, including qualified engineering personnel;
- delays due to adverse weather or other events beyond the Group's control;

- environmental issues and costs and difficulties in obtaining all required licences and permits;
- start-up and commissioning problems;
- onerous contract terms and/or disputes with contractors or sub-contractors; or
- work stoppages or labour disputes.

In addition, the Group's projects may be adversely affected by changes in Bulgarian government policy, as was the case with the cancellation of the Belene Project which exposed the Group to material litigation. See "*Business Description— Litigation*". Furthermore, certain joint ventures and other projects may not proceed according to plan as was the case with the termination of the South Stream pipeline project.

The occurrence of one or more of these events in relation to current or future projects may negatively affect the Group's ability to complete such projects on schedule or within budget, if at all. This may result in the Group's inability to meet customer demand for electricity or gas and may result in the loss of expenditure incurred on projects and, accordingly, may result in a material adverse effect on the Group's reputation, business, financial condition, results of operations and cash flow.

There can be no assurance that the Group will successfully implement its capital expenditure programme, either on time, within budget or at all. If any or all major projects that constitute the Group's capital expenditure programme are not implemented according to schedule or at all, the existing constraints that limit production volumes or those that may limit future growth will remain, the efficiency gains from modernising the existing production facilities and constructing the new facilities will not be achieved and any growth prospects based on the assumption that these projects will be completed will not materialise or the Group may be unable to continue to operate the relevant asset, any of which may have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

In addition, the performance achieved by a new asset could be below expected levels of output or efficiency due to issues such as those relating to its design or specifications. If a new asset fails to achieve the required levels of performance, this could adversely affect the return on the Group's investment in that asset which, in turn, may have an adverse effect on the Group's business, prospects, financial condition and results of operations.

**A default by any of the Group's counterparties (including its partners, contractors, sub-contractors and suppliers) may affect the Group's financial condition.**

Group companies enter into contracts with a range of counterparties, including contractors, sub-contractors, architects, engineers, operators, other service providers, suppliers and customers and, accordingly, the Group is subject to the risk that a counterparty will be unable or unwilling to honour its contractual obligations and that any guarantee or performance bond in respect of such obligations will also not be honoured. The Group's counterparties may default on their obligations for any number of reasons, including as a result of their bankruptcy, a lack of liquidity or operational failure. Such counterparty risk is more acute in difficult market conditions where there is an enhanced risk of default by counterparties. Any default by the Group's counterparties may affect the cost and completion of its projects, the quality of its work and the supply of certain critical products or services to its customers. It may also expose the Group to reputational risk, business continuity risk and the loss of important contracts. In addition, the Group may be required to pay contractual penalties or find alternative counterparties. Any such setbacks may result in delays in the completion of the Group's projects and other unforeseen costs, which could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group is subject to a variety of litigation and regulatory proceedings, some of which may significantly adversely affect the Group's results of operations.**

The Group is subject to several civil, administrative and arbitration proceedings. For more information on certain significant litigation to which Group companies are party, see "*Business Description— Litigation*". Litigation and other proceedings are unpredictable and such proceedings or any settlement in respect of them could have a material adverse effect on the Group's business, prospects, financial condition and results of operations. Although the Group has recorded provisions against certain proceedings in which it is involved, it has not recorded provisions in respect of all such proceedings. The Group has also not recorded provisions in other cases in which the financial outcome is uncertain or which the Group currently expects to be resolved in its favour. The Group is currently subject to European Competition proceedings in connection with its gas business. While the maximum fine which the European Commission is capable of imposing is 10 per cent. of the Group's consolidated total turnover, based on the development of the proceedings to date, the Group does not expect that the maximum amount will be imposed. The European Commission's decision is expected to be announced in the second half of 2018. The Group's failure to record sufficient provisions or to properly assess the likely outcome of any proceedings against it could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group is subject to environmental, health and safety laws and regulations and must maintain environmental, health and safety regulatory approvals and may be exposed to significant liabilities if it fails to comply with such laws or maintain such approvals.**

The Group is subject to various environmental, health and safety laws and regulations governing, among other things: the generation, storage, handling, release, use, disposal and transportation of waste or hazardous and radioactive materials; the emission and discharge of hazardous materials into the ground, air or water; the decommissioning and decontamination of its facilities; and the health and safety of the Group's employees. The Group is also required to obtain environmental and safety permits from various governmental authorities for its operations. Certain permits require periodic renewal or review of their conditions as well as continuous monitoring and compliance reporting. The Group may not be able to renew such permits or there may be material changes to its permits requiring significant expenditure. Violations of these laws, regulations or permits could result in plant shutdowns, fines or legal proceedings being commenced against the Group or other sanctions, in addition to negative publicity and significant damage to the Group's reputation.

The Group has adopted environmental standards applicable to its operations and, while as at the date of this Prospectus the Group is in compliance with all applicable environmental and safety regulations in force in Bulgaria, there can be no guarantee that it will continue to be in compliance in the future. Should any Group company fail to comply with any such regulations, it may be liable for penalties and/or the consequences of default under any contractual obligations requiring it to comply with applicable regulations.

Any occurrence of environmental damage or loss of life or serious injury to its employees as a result of any breach of applicable safety legislation may result in a disruption of the Group's services or cause reputational harm, and significant liability could be imposed on the Group for damages, clean-up costs and penalties and/or compensation as a result.

The occurrence of any of these events may also cause disruption to the Group's projects and operations and result in additional costs to the Group, which may have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

Although environmental laws and regulations have an increasing impact on the Group's activities, it is impossible to predict accurately the effect of future developments in such laws and regulations on the Group's future earnings and operations. While the Group has budgeted for future capital and operating expenditures to comply with current environmental and health and safety laws, it is possible that any of these laws may change or become more stringent in the future or that new laws may be adopted. Some risk of environmental costs and liabilities is inherent in the Group's particular operations and products, as it is with other companies engaged in similar businesses.

#### **The EU General Data Protection Regulation may have material implications for the Group**

The EU Regulation 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (also known as the EU General Data Protection Regulation; the "GDPR") has directly applied in all EU Member States (including Bulgaria) since 25 May 2018 and will replace the current EU and Bulgarian data privacy laws. Although a number of basic existing principles will remain the same, the GDPR introduces new obligations on data controllers and enhanced rights for data subjects, including, among others:

- accountability and transparency requirements, which require data controllers to demonstrate and record compliance with the GDPR and to provide more detailed information to data subjects regarding processing;
- enhanced data consent requirements, which include "explicit" consent in relation to the processing of sensitive (special categories of) personal data;
- obligations to consider data privacy as any new products or services are developed and limit the amount of information collected, processed, stored and its accessibility, carry out privacy impact assessments with respect to certain high risk processing activities and to introduce adequate security safeguards;
- constraints on using data to profile data subjects;
- providing data subjects with personal data in a useable format on request and erasing personal data in certain circumstances; and
- reporting of breaches without undue delay (within 72 hours where feasible).

The GDPR also introduces new fines and penalties for a breach of obligations thereunder, including fines for serious breaches of up to the higher of 4 per cent. of group annual worldwide turnover or EUR 20,000,000 and fines of up to the higher of 2 per cent. of group annual worldwide turnover or EUR 10,000,000 for other specified infringements. The GDPR identifies a list of points to consider when imposing fines (including the nature, gravity and duration of the infringement).

The implementation of the GDPR has required substantial amendments to the Group's procedures and policies and an external consultant has been hired to guide the Group through the ongoing implementation. The new policies that are required by the GDPR have been developed and implemented by the Group. The changes could also adversely impact the Group's business by increasing its operational and compliance costs. Further, there is a risk that the measures will not be implemented correctly and/or timely or that relevant employees or contractors will not fully comply with the new procedures. If there are breaches of these measures, the Group could face administrative and monetary sanctions, civil claims as well as reputational damage which may have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group's subsidiary, NPP Kozloduy EAD, which operates the Kozloduy nuclear power plant, may not be able to obtain the necessary authorisations to operate the plant over a period at least equal to the current expected life.**

Certain authorisations are required to operate nuclear power plants in Bulgaria and the operation of these plants is subject to overall EU and national regulatory requirements and political policies, which are in turn sensitive to public opinion and EU development risks. The Group may be unable to obtain the necessary authorisations at the appropriate time, or the duration of such authorisations may change, or the Group may be subject to conditions that require it to make significant capital expenditures in order to keep the plant operational. The Group's current licence for unit 6 of the Kozloduy nuclear plant expires in 2019. The Group is in the process of extending the useful life of its reactors for 30 years and applying for an extension of the licence relating to unit 6 but, despite the expenditure the Group will have incurred, there is no certainty that the licence will be extended, and in any event can only be extended ten years per renewal.

Further, in the event of an incident affecting the safety or operation of the plant's facilities, the plant's expected operating life may be reduced or operations may be stopped. The Group's nuclear power plant accounted for approximately 58 per cent. of its total generation in 2017. Accordingly, if the Group's nuclear power plant is closed before the end of its currently expected operating life, the Group may be required to make additional investments to replace the loss of generation capacity or purchase electricity on the wholesale market. The inability of the Group's nuclear power plant to operate as expected (whether as a result of loss of licences or through an incident or some other reason) could have a significant material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group may incur significant liabilities in the event of a nuclear accident.**

In accordance with the Vienna Convention, the Bulgarian Nuclear Act provides that the operator of a nuclear facility is liable for any damage caused by a nuclear accident up to BGN 96 million per accident and is obliged to maintain insurance coverage for potential liabilities for nuclear damage in an amount not less than BGN 96 million. The Group has insurance in place for its nuclear power plant, which provides coverage at this minimum amount. However, notwithstanding any limitation of liability under the Bulgarian Nuclear Act and any additional coverage under the Group's insurance policies, any nuclear accident or failure at the Group's nuclear power plant could result in the Group incurring significant losses in excess of such amounts due to, among other things, a potential shut-down of the nuclear facility and the resulting loss of generation capacity, remedial and replacement expenses, litigation and negative publicity from such an accident. As a result, any nuclear accident suffered by the Group's nuclear power plant could have a material adverse effect on the Group's business, prospects, financial condition and results of operations. See also "*The Group does not insure itself against all potential risks and may become subject to higher insurance premiums*".

**The Group may become liable for increased decommissioning costs or be required to keep additional amounts as restricted funds for the decommissioning of its nuclear power plant.**

The Bulgarian government has assumed responsibility for the decommissioning and disposal of radioactive waste and spent nuclear fuel from units 1 to 4 of the Group's nuclear power plant, all of which are no longer in operation. The government is also responsible for financing the preparation and implementation of the decommissioning of these units.

The Group's subsidiary which operates the nuclear power plant will be principally responsible for the decommissioning costs of the remaining two units at the plant. To finance this future liability, the subsidiary contributes approximately 10.5 per cent. of its revenue from electricity sales, which amounted to BGN 95.5 million

in 2017 and BGN 85.0 million in 2016, to decommissioning and radioactive waste funds. These are state-owned funds which are managed by the Ministry of Energy. The level of contributions is the subject of regular assessments by the Ministry of Energy and it is possible that the amount of the Group's decommissioning provisions may increase in the future and any material increase could have a negative effect on the Group's business, prospects, financial condition and results of operations. See also "*—The audit opinions in respect of the Financial Statements have been qualified in a number of significant respects.*"

**Failures, breakdowns, planned or unplanned outages as well as natural disasters, sabotage or acts of terrorism at the Group's power plants or damage to the distribution infrastructure may harm the Group's business and reputation or could cause significant harm to the environment and local populations.**

The Group's power plants and transmission infrastructure and the information systems controlling these facilities could be subject to failure, breakdowns, unplanned outages, capacity limitations, system loss, breaches of security or physical damage due to natural disasters (such as storms, floods or earthquakes), sabotage, terrorism, computer viruses, fuel interruptions and other causes. The occurrence of any such events could:

- negatively impact generation levels;
- result in higher operating costs or impose limitations on the sale of the Group's products;
- negatively impact the Group's ability to provide service to its customers;
- result in loss of life or injury to the Group's employees or third parties or damage to the Group's facilities;
- lead to disruption or stoppage to operations or otherwise disrupt the business; and
- expose the Group to litigation and potential criminal liability as well as materially adversely affecting the Group's reputation.

The condition of some of the Group's equipment and the components of its power plants may also be affected by their continuous operation, as well as processes such as erosion and corrosion. The impact of such operation and processes tends to increase as the plant, equipment and components grow older. The Group may need to temporarily shut down some of the power plants and may incur expenses in connection with inspections, maintenance or repair activities in addition to the periodic planned inspections, maintenance and repair that the Group currently conducts, including such additional activities that governmental authorities may require it to conduct.

The Group's business and its ability to generate revenue depend on the availability and operating performance of the equipment necessary to operate its power plants and distribution networks. Mechanical failures or other defects in equipment, or accidents that result in non-performance or underperformance of a power plant or transmission network may have a direct impact on the profitability of the Group's operations. The Group generates its electricity from two main assets, its thermal power plant and its nuclear power plant. A failure of one or both of these plants would have a significant adverse effect on the Group's financial position. In addition, if the Group suffers a reduction in electricity generation, it may be required to purchase greater amounts of electricity in the open market, which may be at unfavourable prices. Further, any insurance coverage, warranties or guarantees provided by equipment suppliers in favour of the Group that purport to cover additional expenses incurred by the Group as a result of any failures, may not fully compensate the Group for any increased costs and any resulting decrease in revenue. This could mean that any significant expenses incurred as a result of failures, defects or accidents

involving the Group's operating equipment and infrastructure could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group does not insure itself against all potential risks and may become subject to higher insurance premiums.**

The Group's operations may be affected by a number of risks, including terrorist acts and war-related events, for which full insurance cover is either not available or not available on commercially reasonable terms. For example, the Group has not purchased environmental liability (save for certain nuclear-related coverage), business interruption, sabotage or terrorist insurance cover. In addition, the severity and frequency of various other events, such as accidents and other mishaps, business interruptions or potential damage to its facilities, property and equipment caused by inclement weather, human error, pollution, labour disputes and natural catastrophes, may result in losses or expose the Group to liabilities in excess of its insurance coverage. BEH cannot assure investors that its insurance coverage will be sufficient to cover losses arising from any, or all, of such events, or that it will be able to renew existing insurance cover on commercially reasonable terms, if at all.

In addition, the Group's insurance policies are subject to commercially negotiated deductibles, exclusions and limitations, and the Group will only receive insurance proceeds in respect of a claim made to the extent that its insurers have the funds to make payment. Therefore, insurance may not cover all losses incurred by the Group and no assurance is given that the Group will not suffer losses beyond the limits of, or outside the cover provided by, its insurance policies.

Should an incident occur in relation to which the Group has no insurance coverage or inadequate insurance coverage, the Group could lose the capital invested in, and anticipated future revenue relating to, any property that is damaged or destroyed and, in certain cases, the Group may remain liable for financial obligations related to the impacted property. Similarly, in the event that any assessments are made against the Group in excess of any related insurance coverage that it may maintain, its assets could be subject to attachment, confiscation or restraint under various judicial procedures. Any of these occurrences could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

The Group maintains insurance coverage for the Kozloduy nuclear plant, which is in line with applicable Bulgarian regulations and international conventions. However, the Group cannot be certain that these insurance policies will fully insure it against all risks and losses that may arise in the future. The Group may incur substantial losses as a result of a nuclear accident or failure at the nuclear plant, including loss of generation capacity, repair and clean-up expenses, legal liabilities and reputational losses and consequential legislative and regulatory reforms by Bulgaria or the EU could also substantially adversely affect the Group's operations. See "*Risk Factors—The Group may incur significant liabilities in the event of a nuclear accident*".

**The Group may be exposed to increased competition in the electricity and gas markets in Bulgaria and abroad, including as a result of the planned liberalisation of the Bulgarian electricity sector.**

The Bulgarian Energy Act is the principal legislation regulating the Bulgarian energy market and Bulgarian energy companies. This and other primary and secondary legislation has brought about the liberalisation of the Bulgarian energy market.

The Group currently operates in the electricity generation, supply and transmission and the gas transmission and supply sectors of the Bulgarian energy market. The Group has a leading position in the electricity generation market through its ownership of the Kozloduy nuclear power generator, a major lignite-fired power plant, Maritsa

East II, and the main hydro power generator, NEK, which together accounted for 59 per cent. of total electricity generation in Bulgaria in 2017.

The Bulgarian energy strategy is focused on ensuring a free choice of supplier by consumers, unhindered and equal access to the electricity and gas transmission networks, fair prices and cleaner energy. Currently, the free market is more profitable for Group companies than the regulated market. Increased liberalisation of the energy market in Bulgaria, including the widening of the free market, is expected to incentivise power plants to become more efficient and therefore more profitable. However, Group companies engaged in electricity and gas supply will face increased competition, including from foreign competitors that may not be obliged to sell at regulated prices and may be more exposed to volatile commodity prices in the future, which could adversely impact the Group's results. In addition, increased competition at an international level could lead to a reduction in the wholesale price of electricity which could also adversely affect the Group's business, prospects, financial condition and results of operations.

The liberalisation process in Bulgaria started in July 2012 with the transposing into the Energy Act of the Third Energy Liberalisation Package. In view of the above, in 2015, BEH signed contracts for technical assistance with the World Bank for the purpose of conducting a financial assessment of the energy sector as well as developing a transitional road map for the sector to achieve financial recovery and full market liberalisation. The World Bank has assessed the financial gap in the sector with a focus on NEK and proposed to the Bulgarian government a suitable mechanism in order to implement an adequate framework to financially stabilise NEK's operations and ensure the sector's long-term financial sustainability. Based on the analysis and on international best practices, the World Bank provided a report on applicable models for market liberalisation in line with the EU common rules for the internal market in electricity (2009/72/EC). The World Bank and the Bulgarian government have agreed that liberalisation should be a process which will ultimately lead to BEH subsidiaries transitioning fully to operating on the free market as the hybrid market model is phased out completely. This will, however, be a gradual process spanning three to five years. The NEK as single buyer model is not expected to be applicable in the fully liberalised market. Several steps have been taken in 2018 to implement the World Bank's model for market liberalisation in Bulgaria, including the introduction of requirements that electricity producers with installed capacity over 5 megawatts ("MW") that sell electricity on the free market do so on the organised power exchange. Since 1 July 2018, RES and highly efficient cogeneration electricity producers with installed capacity of 4MW and above have been obliged to sell electricity on the free market, reducing NEK's role as the public buyer. See "*Regulation, Environment and Health and Safety — Regulation - Amendments to the legal and regulatory framework*" below for further details.

The European Commission is currently in the advanced stages of a competition investigation into possible anti-competitive behaviour by the Group in the Bulgarian gas market. The outcome of those proceedings may result in an increase in competition for the Group. See "*Business Description—Litigation*".

**The Group may not be able to keep pace with the technological changes in the energy sector or properly maintain its IT systems.**

The technologies used in the energy sector have changed and may change and evolve rapidly in the future. In order for the Group to maintain its competitiveness and to expand its business, it must effectively adjust to these changes. In particular, technologies related to power generation and electricity transmission are constantly improving and becoming more complex. If the Group is unable to modernise its technologies quickly and regularly and to take advantage of industry trends, it could face increased pressure from competitors and lose customers in the markets in which it operates. The Group could also lose valuable opportunities to expand its operations in existing and new markets due to insufficient integration of new technologies in its operations. As a result, the Group's failure to

respond to current and future technological changes in the energy sector in an effective and timely manner could have a material adverse effect on the Group's business, financial condition, prospects or results of operations.

Information and communication technology plays an important role in the Group's business operations, in particular, innovative and efficient IT systems are a key success factor for the Group. The Group is routinely exposed to IT risks in connection with the development, implementation and application of its IT systems. In addition, there is a risk that there might be unauthorised access to the Group's sensitive data by third parties and improper use of such data, which may lead to the loss of company secrets and may result in a breach of applicable data protection regulations. As a result, any breach or unauthorised use of the Group's IT systems may have material adverse effects on the Group's business, prospects, financial condition and results of operations.

**Privatisation of BEH or any member of the Group may result in a credit downgrade or may affect its ability to repay debt, which could have a material adverse effect on the Group's results of operations and financial condition.**

The Bulgarian state currently owns 100 per cent. of the shares in BEH. BEH is included in the "banned for privatisation" list as per the Appendix 1, under Article 3, para 1 of the Bulgarian Privatisation and Post-Privatisation Control Act, and management does not expect the Bulgarian government to privatise BEH, but it cannot give any assurance that the government will not ultimately seek to undertake a partial or full privatisation of BEH resulting in the sale of some or all of its shareholding. However, BEH's subsidiaries are not included in the "banned for privatisation" list. Therefore, BEH is not prevented by law from selling any portion of its shareholding in any subsidiary, although (i) the sale of any of its shareholding in any subsidiary can generally only be done with the consent of the Bulgarian Privatisation and Post-Privatisation Agency in accordance with procedures set out in the Bulgarian Law on Privatisation and Post-Privatisation Control and (ii) the sale of more than 20 per cent. of the shares of ESO or Bulgartransgaz would require the prior consent of EWRC. BEH's current credit rating from Fitch/Moody's is based in part on the opinion of Fitch/Moody's that the Bulgarian state may potentially provide support to BEH in the event of financial distress. This rating could come under pressure, potentially leading to a downgrade, if BEH, or any of its subsidiaries is fully or partially privatised and the Bulgarian state is no longer the sole or controlling shareholder, which could affect BEH's ability to make repayments on its debt or otherwise have a material adverse effect on the Group's business, prospects, financial condition and results of operations. See also "*The Group's ability to access credit and bond markets and its ability to raise additional financing are in part dependent on BEH's credit ratings*".

**The Bulgarian Privatisation and Post-Privatisation Control Act and/or the requirement to obtain regulatory consents may impose restrictions on creditors seeking to foreclose on BEH's assets.**

Under Bulgarian law, the sale of shares owned by companies in which the Bulgarian state owns more than 50 per cent., including BEH and its subsidiaries, would constitute privatisation and can generally only be done with the consent of the Bulgarian Privatisation and Post-Privatisation Agency in accordance with procedures set out in the Bulgarian Law on Privatisation and Post-Privatisation Control. In the event a creditor of BEH attempts to foreclose on the shares of its subsidiaries in the event of a default (which a creditor generally would be entitled to do under Bulgarian law), it is unclear as a matter of Bulgarian law whether such foreclosure would need to be conducted in accordance with the Bulgarian Law on Privatisation and Post-Privatisation Control, the procedures of which could impose significant restrictions on creditors seeking to make such a foreclosure.

In addition, the sale of more than 20 per cent. of the shares of ESO or Bulgartransgaz would require the prior consent of EWRC. In the event a creditor of BEH attempts to foreclose on the shares of ESO or Bulgartransgaz in the event of a default (which a creditor generally would be entitled to do under Bulgarian law), it is unclear

whether such foreclosure would require the consent of EWRC, and the process of obtaining this consent could impose restrictions on creditors seeking to make such a foreclosure.

**The Group conducts its business in several different currencies and is exposed to foreign currency and interest rate risks.**

The Group is exposed to transactional foreign currency risk through purchases and sales, and borrowing transactions undertaken, in foreign currencies, principally euro, U.S. dollars and Japanese yen. Reflecting the fact that the lev has been pegged to the euro since 1 January 1999 at a rate of BGN 1.95583 to EUR1.00, the Group's exposure to movements in the lev/euro exchange rate (in the absence of an adjustment or abolition of the peg) is limited. The Group is, however, exposed to movements in the exchange rates between the lev and the U.S. dollar and Japanese yen and details of this exposure are set out in Note 37.3 to its 2017 Financial Statements. Even though it may do so in the future, the Group does not currently hedge any of its foreign currency exposure using derivative financial instruments.

The Group is also exposed to the effect of changes in interest rates on its variable currency borrowings and deposits and details of this exposure are also set out in Note 37.3 to its 2017 Financial Statements. The Group does not currently hedge any of its interest rate exposure using derivative financial instruments.

Movements in foreign exchange rates or interest rates could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**A strike or other labour disruption at the Group's facilities could adversely affect its business.**

Most of the Group's employees are covered by collective bargaining agreements which are negotiated on an annual basis. These agreements determine the framework for the Group's dealings with its employees and limit its ability to implement plant closures and perform reductions in its workforce. Management believes that partly as a result of these and similar agreements that the Group has executed in the past, it has experienced only limited strikes, threats of strikes, or other resistance or work stoppages. The Ministry of Energy has ordered BEH to implement measures to reduce administrative expenses and the Group monitors and reports administrative expenses to the Ministry of Energy on a regular basis. Any significant industrial action by the Group's employees in the future could impair the Group's ability to implement further measures to reduce costs and improve production efficiencies in furtherance of its strategy, such as a reduction in personnel, which could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group is reliant upon skilled personnel in the engineering and technical fields and may not be able to recruit and retain qualified personnel.**

The Group's business and operations are dependent upon its ability to recruit and retain skilled engineering personnel and other technical personnel. If the Group is unable to retain experienced, capable and reliable personnel, or fails to recruit skilled professional and technical staff to replace those who leave, the Group's operations may be adversely affected. There is significant demand for experienced and capable personnel in the engineering and technical fields and the Group faces significant competition to recruit such personnel.

**The Group could incur unforeseen taxes, tax penalties and sanctions which could adversely affect its results of operations and financial condition.**

Tax rules, including those relating to the energy industry in Bulgaria, and their interpretation, may change, possibly with retrospective effect. Significant tax disputes with tax authorities, any change in the tax status of any member

of the Group and any change in Bulgarian taxation legislation or its scope or interpretation could affect the Group's business and financial position. Following the economic crisis, a number of EU member states and other countries in the region faced significant budget deficits and, as a result, imposed additional taxes on the utilities sector, such as the nuclear tax in Germany and the power sales tax in Hungary. It is possible that similar taxes could be imposed in Bulgaria in the future, although none are currently anticipated by management. The imposition of any such new taxes in Bulgaria could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group may not successfully implement its key strategies.**

The Group faces many risks that could adversely affect its ability to implement its key strategies (See "*Business Description—Strategy*"), such as changes in electricity demand in Bulgaria, changes in regulatory frameworks, increases in generation costs, future developments affecting the electricity infrastructure within the markets in which the Group operates, competition and political and economic developments affecting Bulgaria. Any failure to implement the Group's key strategies successfully could have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group is required to restore certain land on which it undertakes lignite coal mining when the mine's reserves are exhausted or the mining licence expires in 2043. The Group's provisions in respect of such obligation may be insufficient.**

The Group is required to decommission its lignite coal mines and related infrastructure and restore the surrounding land by the earlier of when a mine's reserves are exhausted (as at 1 January 2018, the Group had proven reserves of 820 million tonnes and expected reserves of 1,110 million tonnes) or the mining licence expires in 2043 and mining activities are terminated. The Group is also required to make financial provision for liabilities relating to such decommissioning and restoration. As at 31 December 2017, the Group's provision in this respect amounted to BGN 100 million. However, there are significant uncertainties in determining the likely costs of restoration and, as a result, there is no assurance that the current or any future provisions are or will be sufficient and additional investments may be required, either as a result of change in applicable law or otherwise. Any significant increase in the actual or estimated decommissioning and restoration costs that the Group incurs may adversely affect the Group's business, prospects, financial condition and results of operations.

**Changes in accounting principles relating to financial instruments may have an impact on the Group's financial statements and results.**

A number of new and/or revised standards and interpretations issued by the International Accounting Standards Board (the "**IASB**") became effective from 1 January 2018. These have not been adopted for early application for the Group but they will be applied for financial statements and results for periods from 1 January 2018.

In July 2014, the IASB published International Financial Reporting Standard 9 "Financial Instruments", which replaced IAS 39 as from 1 January 2018. The standard amends and complements the rules on the classification and measurement of financial instruments. It includes a new impairment model based on expected credit losses, while the current model is based on provisions for incurred losses, and new rules on general hedge accounting.

International Financial Reporting Standard 15 "Revenue from contracts with customers", which replaced IAS 18 and IAS 11 from 1 January 2018, introduces a comprehensive set of principles, rules and approaches for recognising, reporting, and disclosing information about the type, amount, period, and uncertainty associated with income and cash flows arising from contracts with customers.

International Financial Reporting Standard 16 "Leases" was adopted by the EU on 31 October 2017 and will become effective for annual periods beginning on or after 1 January 2018, replacing the current standard IAS 17 Leases, IFRIC 4 Determining whether an arrangement contains a lease, SIC-15 Operating leases - incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. This new standard introduces significant changes in the reporting of leases, especially on the part of lessees. It introduces new principles for the recognition, measurement and presentation of leases in order to better represent these transactions.

The Group is in the process of evaluating the effect of applying the new standards. An external consultant has been hired to guide the Group in the implementation of the changed accounting principles and to develop new accounting policies for the Group. The use of such new and/or revised accounting standards and interpretations may hinder a comparative analysis between the Group's financial statements for periods from 1 January 2018 and the financial statements for the years ended 31 December 2017 and 2016. In addition, these changes could impact the Group's ability to comply with its financial covenants and could have a material adverse effect on its business, prospects, financial condition and results of operations. For further information, see Note 3 in the 2017 Financial Statements.

**Frequent changes to tax regulations may have an adverse effect on BEH's financial condition and results of operations.**

Some provisions of Bulgarian tax law are ambiguous and there is often no unanimous or uniform interpretation or practice of the law by the tax authorities and the courts. In certain cases tax authorities could have a high degree of discretion, for instance in relation to transfer pricing tax legislation, and at times may exercise their powers arbitrarily and selectively enforce tax laws and regulations, which could be in a manner that is contrary to the law. In addition, Bulgaria's relatively ineffective tax collection system and budgetary funding requirements may increase the likelihood that more onerous tax refunding procedures and penalties might be imposed and certain taxes increased. The above conditions may impose additional burdens and costs on BEH's operations, including management resources. BEH cannot provide assurance that the Bulgarian tax authorities will not take a different, unfavourable interpretation of the tax provisions BEH has implemented and that the effective tax burden on BEH's business will not increase. BEH may also be subject to additional tax liabilities. Additional tax liabilities may also arise as a result of an audit by the Bulgarian tax authorities, as the last periods audited by the Bulgarian tax authorities was in 2008 for corporate tax, social security and personal income tax and 2009 for VAT. These uncertainties complicate BEH's tax planning and related business decisions, potentially exposing BEH's business to significant fines, penalties and enforcement measures, which may have a material adverse effect on the Group's business, prospects, financial condition and results of operations.

**The Group has engaged and may continue to engage in transactions with related and other parties that may present conflicts of interest or give rise to additional tax charges.**

The Group has engaged in transactions with related parties, including its directors, management, the Bulgarian state and other companies controlled by the Bulgarian state, companies controlled by the Group or in which it owns an interest and other affiliates, and the Group may continue to do so in the future. Conflicts of interest may arise between the Group and its related parties, resulting in the conclusion of transactions on terms not determined by market forces. See also Note 35 to the 2017 Financial Statements and "*Risk Factors—The Bulgarian state, which owns all of the share capital of BEH, can control the Group's policies by, amongst other things, electing all of the members of BEH's Board of Directors and may pursue decisions that reflect Bulgarian government policy*".

Under Bulgarian anti-avoidance rules, tax authorities may scrutinise related party transactions to determine that they have been entered into on market terms. In cases where the tax authorities determine that related party

transactions have not been entered into on market terms, they may imply arm's length terms to such transaction which could give rise to additional tax charges.

### ***Risks related to Bonds generally***

Set out below is a brief description of certain risks relating to the Bonds generally.

### **Modification, waivers and substitution**

The Terms and Conditions of the Bonds contain provisions for calling meetings of Bondholders to consider matters affecting their interests generally. The quorum at any such meeting for passing an Extraordinary Resolution will generally be two or more persons holding or representing not less than 50 per cent. in principal amount of the Bonds for the time being outstanding, or at any adjourned meeting two or more persons being or representing Bondholders whatever the principal amount of the Bonds held or represented. The quorum at any such meeting for passing an Extraordinary Resolution where the business of the meeting includes the consideration of certain key features of the Bonds (including to reduce the amount of principal or interest which is payable, to amend the dates for payment of principal and interest and to modify the provisions of the Terms and Conditions of the Bonds relating to Extraordinary Resolutions) will be two or more persons holding or representing not less than 75 per cent. in principal amount of the Bonds for the time being outstanding, or at any adjourned meeting two or more persons holding or representing not less than 25 per cent. in principal amount of the Bonds for the time being outstanding. These provisions permit defined majorities to bind all Bondholders including Bondholders who did not attend and vote at the relevant meeting and Bondholders who voted in a manner contrary to the majority.

In certain circumstances, where the Bonds are held in global form in the clearing systems, the Issuer will be entitled to rely upon:

- (i) where the terms of the proposed resolution have been notified through the relevant clearing system(s), approval of a resolution proposed by the Issuer given by way of electronic consents communicated through the electronic communications systems of the relevant clearing systems in accordance with their operating rules and procedures by or on behalf of the holders of not less than 90 per cent. in nominal amount of the Bonds for the time being outstanding; and
- (ii) where electronic consent is not being sought, consent or instructions given in writing directly to the Issuer (a) by accountholders in the clearing systems with entitlements to such New Global Certificate or, (b) where the accountholders hold such entitlement on behalf of another person, on written consent from or written instruction by the person identified by that accountholder as the person for whom such entitlement is held. For the purpose of establishing the entitlement to give any such consent or instruction the Issuer shall be entitled to rely on any certificate or other document issued by, in the case of (a) above, Euroclear and Clearstream, Luxembourg or any other relevant alternative clearing system and in the case of (b) above, the relevant clearing system and the account holder identified by the relevant clearing system (which may include the Bulgarian CSD) for the purposes of (b) above.

**"Extraordinary Resolution"** means a resolution passed (a) at a meeting duly convened and held in accordance with the Fiscal Agency Agreement by a majority of at least 75 per cent. of the votes cast, (b) by a written resolution or (c) by an electronic consent.

A written resolution or an electronic consent as described above may be effected in connection with any matter affecting the interests of Bondholders, including the modification of the Terms and Conditions of the Bonds, that would otherwise be required to be passed at a meeting of Bondholders satisfying the special quorum requirements in accordance with the provisions of the Fiscal Agency Agreement, and shall for all purposes take effect as an Extraordinary Resolution passed at a meeting of Bondholders duly convened and held. These provisions permit

defined majorities to bind all Bondholders including Bondholders who did not vote and Bondholders who voted in a manner contrary to the majority.

The Terms and Conditions of the Bonds also provide that the Fiscal Agent may, without the consent of Bondholders, agree to any modification of the Fiscal Agency Agreement if to do so could not reasonably be expected to be prejudicial to the interests of the Bondholders (see "*Terms and Conditions of the Bonds*").

### **Change of law**

The Conditions of the Bonds are based on English law in effect as at the Issue Date. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the Issue Date.

### ***Risks related to the market generally***

Set out below is a brief description of certain market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk.

### **The secondary market generally**

Any pre-existing trading market for the Bonds may not be maintained. Additionally, any such market may not be very liquid. If the Bonds are traded after their initial issuance, they may trade at a discount to their initial offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions and the financial condition of the Issuer. Although application has been made for the Bonds to be admitted to listing on the Official List and to trading on Euronext Dublin, there is no assurance that such application will be accepted or that an active trading market will be maintained and/or develop on Euronext Dublin. Further, although the Issuer intends to make a subsequent application for the Bonds to be admitted to the Bulgarian List and to trading on the main market of the BSE, there is no assurance that such application will be accepted or that an active trading market will develop on the main market of the BSE. Accordingly, there is no assurance as to the maintenance, development or liquidity of any trading market for the Bonds. Therefore, investors may not be able to sell their Bonds easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market.

### **Exchange rate risks and exchange controls**

The Issuer will pay principal and interest on the Bonds in euro. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than the euro. These include the risk that exchange rates may significantly change (including changes due to devaluation of the euro or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the euro would decrease (i) the Investor's Currency-equivalent yield on the Bonds, (ii) the Investor's Currency-equivalent value of the principal payable on the Bonds and (iii) the Investor's Currency-equivalent market value of the Bonds.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal.

### **Interest rate risks**

The Bonds bear interest at a fixed rate. An investment in the Bonds involves the risk that subsequent changes in market interest rates may adversely affect the value of the Bonds.

**Credit ratings may not reflect all risks**

The Original Bonds were assigned ratings of BB by Fitch and of Ba2 by Moody's, and it is expected that the ratings of the Bonds will be the same, after the issuance of the Bonds. Both Fitch and Moody's are established in the European Union and registered under the CRA Regulation. The rating may not reflect the potential impact of all risks related to structure, market, the additional factors discussed above and other factors that may affect the value of the Bonds. A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the rating agency at any time. Any adverse change in the credit rating could adversely affect the trading price for the Bonds.

**Investors to rely on the procedures of clearing systems for transfer, payment and communication with the Issuer**

The Bonds will initially be represented by the New Global Certificate which will be issued and delivered on or prior to the Issue Date to a nominee for a common depositary for Euroclear and Clearstream, Luxembourg. Except in the circumstances described in the New Global Certificate, investors will not be entitled to receive individual Bond Certificates. Euroclear and Clearstream, Luxembourg will maintain records of the beneficial interests in the New Global Certificate. While the Bonds are represented by the New Global Certificate, investors will be able to trade their beneficial interests only through Euroclear or Clearstream, Luxembourg or, following the Bulgarian Admission, the Bulgarian CSD.

While the Bonds are represented by the New Global Certificate, the Issuer will discharge its payment obligations under the Bonds by making payments to the common depositary for Euroclear and Clearstream, Luxembourg. A holder of a beneficial interest in the New Global Certificate must rely on the procedures of Euroclear and Clearstream, Luxembourg to receive payments under the relevant Bonds. The Issuer does not have any responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the New Global Certificate.

Holders of beneficial interests in the New Global Certificate will not have a direct right to vote in respect of the Bonds. Instead, such holders will be permitted to act only to the extent that they are enabled by Euroclear and Clearstream, Luxembourg and (in the case of any Bonds held in the Bulgarian CSD) the Bulgarian CSD to appoint appropriate proxies.

Following the Bulgarian Admission, holders of beneficial interests in the New Global Certificate, which have acquired them on Bulgarian BSE will hold such interests only through the Bulgarian CSD as an accountholder in the records of Clearstream, Luxembourg. Any registration of the Bonds and trades in the Bonds with the Bulgarian CSD will not result in transfer of the title to the Bonds and will only affect the beneficial ownership recorded with the Bulgarian CSD.

**Legal investment considerations may restrict certain investments**

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each potential investor should consult its legal and tax advisers to determine whether and to what extent (1) the Bonds are legal investments for it, (2) the Bonds can be used as collateral for various types of borrowing and (3) other restrictions apply to its purchase or pledge of any of the Bonds. Financial institutions should consult their legal and tax advisers or the appropriate regulators to determine the appropriate treatment of the Bonds under any applicable risk-based capital or similar rules.

**Capital gains tax may apply upon a disposal of Bonds.**

A capital gain realised from the disposal of Bonds by Non-resident Corporate Bondholders (as defined under "*Taxation*") and individual investors who are not Bulgarian tax residents is subject to Bulgarian tax at the rate of 10 per cent. (unless a reduced treaty rate or treaty exemption is available). See "*Taxation*".

## SUMMARY OF PROVISIONS RELATING TO THE BONDS WHILE IN GLOBAL FORM

### 1 Initial Issue of Certificates

The New Bonds, as defined in the Terms and Conditions, will initially be represented by a New Global Certificate. The New Global Certificate shall, from 31 July 2018 also represent interests in the Original Bonds, as defined in the Terms and Conditions, as initially represented by a global certificate dated 28 June 2018 (the "**Original Global Certificate**"). From 31 July 2018, the Original Global Certificate representing the Original Bonds shall be superseded and replaced in its entirety by the New Global Certificate. The New Global Certificate will only be exchangeable for Individual Bond Certificates as set out in the New Global Certificate.

The New Global Certificate will be registered in the name of a nominee (the "**Registered Holder**") for a common depositary for Euroclear and Clearstream, Luxembourg and may be delivered on or prior to the issue date of the Bonds.

Upon the registration of the New Global Certificate in the name of any nominee for the Common Depositary and delivery of the New Global Certificate to the Common Depositary, Euroclear or Clearstream, Luxembourg will credit each subscriber with an interest in a nominal amount of Bonds equal to the nominal amount thereof for which it has subscribed and paid.

### 2 Relationship of Accountholders with Clearing Systems

Each of the persons shown in the records of Euroclear, Clearstream, Luxembourg or any other clearing system (an "**Alternative Clearing System**") and (in the case of any Bonds held in the Bulgarian CSD) the Bulgarian CSD as the holder of a Bond represented by the New Global Certificate must look solely to Euroclear, Clearstream, Luxembourg or any such Alternative Clearing System or the Bulgarian CSD (as the case may be) for its share of each payment made by the Issuer to the holder of the New Global Certificate and in relation to all other rights arising under the New Global Certificate, subject to and in accordance with the respective rules and procedures of Euroclear, Clearstream, Luxembourg, or such Alternative Clearing System or the Bulgarian CSD (as the case may be). Such persons shall have no claim directly against the Issuer in respect of payments due on the Bonds for so long as the Bonds are represented by the New Global Certificate and such obligations of the Issuer will be discharged by payment to the holder of the New Global Certificate in respect of each amount so paid. In order to ensure payments to the beneficial owners registered with the Bulgarian CSD, the Issuer will enter into an agreement with the Bulgarian CSD.

### 3 Exchange

The following will apply in respect of transfers of Bonds held in Euroclear or Clearstream, Luxembourg or an Alternative Clearing System. These provisions will not prevent the trading of interests in the Bonds within a clearing system whilst they are held on behalf of such clearing system but will limit the circumstances in which the Bonds may be withdrawn from the relevant clearing system.

Transfers of the holding of Bonds represented by the New Global Certificate pursuant to Condition 2(a) (*Transfer*) may only be made in part:

- (i) if the relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so; or
- (ii) upon or following any failure to pay principal in respect of any Bonds when it is due and payable; or

(iii) with the consent of the Issuer,

provided that, in the case of the first transfer of part of a holding pursuant to paragraph (i) or (ii) above, the Registered Holder has given the Registrar not less than 30 days' notice at its specified office of the Registered Holder's intention to effect such transfer.

#### **4 Amendment to Conditions**

The New Global Certificate contains provisions that apply to the Bonds that it represents, some of which modify the effect of the Terms and Conditions of the Bonds set out in this Prospectus. The following is a summary of certain of those provisions:

##### **4.1 Payments**

All payments in respect of Bonds represented by the New Global Certificate will be made to, or to the order of, the person whose name is entered on the Register at the close of business on the record date which shall be the Clearing System Business Day immediately prior to the date for payment, where Clearing System Business Day means Monday to Friday inclusive except 25 December and 1 January.

##### **4.2 Meetings**

For the purposes of any meeting of Bondholders, the holder of the Bonds represented by the New Global Certificate shall (unless the New Global Certificate represents only one Bond) be treated as two persons for the purposes of any quorum requirements of a meeting of Bondholders and as being entitled to one vote in respect of each integral currency unit of the currency of the Bonds.

##### **4.3 Events of Default**

If principal in respect of any Bond is not paid when due, the holder of a Bond represented by the New Global Certificate may elect for direct enforcement rights against the Issuer under the terms of a Supplemental Deed of Covenant dated 31 July 2018, which is supplemental to the Deed of Covenant executed as a deed by the Issuer on 28 June 2018 to come into effect in respect of a principal amount of Bonds up to the aggregate principal amount in respect of which such failure to pay has occurred in favour of the persons entitled to such payment as accountholders with a clearing system. Following any such acquisition of direct rights, the New Global Certificate and the corresponding entry in the register kept by the Registrar will become void as to the specified portion. However, no such election may be made in respect of Bonds represented by the New Global Certificate unless the transfer of the whole or a part of the holding of Bonds represented by the New Global Certificate shall have been improperly withheld or refused.

##### **4.4 Notices**

So long as the Bonds are represented by the New Global Certificate and the New Global Certificate is held on behalf of a clearing system, notices to Bondholders may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for notification as required by the Conditions.

#### **5 Electronic Consent and Written Resolution**

While any New Global Certificate is registered in the name of any nominee for a clearing system, then:

- (i) approval of a resolution proposed by the Issuer given by way of electronic consents communicated through the electronic communications systems of the relevant clearing system(s) in accordance with their operating rules and procedures by or on behalf of the holders of not less than 90 per cent. in nominal amount of the Bonds outstanding (an "**electronic consent**") shall, for all purposes (including

matters that would otherwise require an Extraordinary Resolution to be passed at a meeting for which the special quorum was satisfied), take effect as an Extraordinary Resolution passed at a meeting of Bondholders duly convened and held, and shall be binding on all Bondholders whether or not they participated in such electronic consent; and

- (ii) where electronic consent is not being sought, for the purpose of determining whether a written resolution has been validly passed, the Issuer shall be entitled to rely on consent or instructions given in writing directly to the Issuer by accountholders in the clearing system with entitlements to such New Global Certificate or, where the accountholders hold any such entitlement on behalf of another person, on written consent from or written instruction by the person for whom such entitlement is ultimately beneficially held, whether such beneficiary holds directly with the accountholder or via one or more intermediaries and provided that, in each case, the Issuer has obtained commercially reasonable evidence to ascertain the validity of such holding and have taken reasonable steps to ensure that such holding does not alter following the giving of such consent or instruction and prior to the effecting of such amendment. Any resolution passed in such manner shall be binding on all Bondholders, even if the relevant consent or instruction proves to be defective. As used in this paragraph, "**commercially reasonable evidence**" includes any certificate or other document issued by Euroclear or Clearstream, Luxembourg or any other relevant clearing system, or issued by an accountholder of them (which may include the Bulgarian CSD) or an intermediary in a holding chain, in relation to the holding of interests in the Bonds. Any such certificate or other document shall, in the absence of manifest error, be conclusive and binding for all purposes. Any such certificate or other document may comprise any form of statement or print out of electronic records provided by the relevant clearing system (including Euroclear's EUCLID or Clearstream, Luxembourg's CreationOnline system) in accordance with its usual procedures and in which the accountholder of a particular principal or nominal amount of the Bonds is clearly identified together with the amount of such holding. The Issuer shall be liable to any person by reason of having accepted as valid or not having rejected any certificate or other document to such effect purporting to be issued by any such person and subsequently found to be forged or not authentic.

## TERMS AND CONDITIONS OF THE BONDS

The issue of EUR 150,000,000 3.500 per cent. bonds due 2025 by Bulgarian Energy Holding EAD (the "**Issuer**") (the "**New Bonds**") was authorised by the Issuer through a board resolution passed on 20 July 2018 and by the Minister of Energy (exercising the rights of the Bulgarian state) on 23 July 2018.

With effect from 31 July 2018, the Bonds (as defined below) will be consolidated to form a single series with the Issuer's EUR 400,000,000 3.500 per cent. Bonds due 2025 (the "**Original Bonds**"). The term "**Bonds**" shall include the Original Bonds, the New Bonds and, unless the context otherwise requires, any further securities issued pursuant to Condition 13 and forming a single series with the Bonds.

The Original Bonds were authorised by the Issuer through a board resolution passed on 12 June 2018 and by the Minister of Energy (exercising the rights of the Bulgarian state) on 13 June 2018.

A fiscal agency agreement dated 31 July 2018 (as further amended or supplemented from time to time) (the "**Supplemental Fiscal Agency Agreement**") has been entered into in relation to the New Bonds between the Issuer, Citibank N.A., London Branch as fiscal agent and the agents named in it. The Supplemental Fiscal Agency Agreement is supplemental to an agency agreement dated 28 June 2018 (the "**Original Fiscal Agency Agreement**") between the Issuer, Citibank N.A., London Branch as fiscal agent and the agents named in it. The Supplemental Fiscal Agency Agreement and the Original Fiscal Agency Agreement are together referred to as the "**Fiscal Agency Agreement**". The Bonds have the benefit of a deed of covenant dated 28 June 2018, as supplemented by a supplemental deed of covenant dated 31 July 2018 (together, the "**Deed of Covenant**") executed by the Issuer. The fiscal agent, the registrar and any transfer agent for the time being are referred to below respectively as the "**Fiscal Agent**", the "**Registrar**" and the "**Transfer Agents**". "**Agents**" means the Fiscal Agent, the Registrar, the Transfer Agents and any other agent or agents appointed from time to time with respect to the Bonds. The Fiscal Agency Agreement includes the form of the Bonds. Copies of the Fiscal Agency Agreement and the Deed of Covenant are available for inspection during normal business hours at the specified offices of the Fiscal Agent, the Registrar and any Transfer Agents. The Bondholders (as defined below) are deemed to have notice of all the provisions of the Fiscal Agency Agreement applicable to them. All capitalised terms that are not defined in these terms and conditions (the "**Conditions**") will have the meanings given to them in the Fiscal Agency Agreement.

### 1 Form, Denomination and Title

The Bonds are issued in registered form in denominations of EUR100,000 and integral multiples of EUR1,000 in excess thereof.

The Bonds are represented by registered certificates ("**Certificates**") and, save as provided in Condition 2(a), each Certificate shall represent the entire holding of Bonds by the same holder.

Title to the Bonds shall pass by registration in the register that the Issuer shall procure to be kept by the Registrar in accordance with the provisions of the Fiscal Agency Agreement (the "**Register**"). Except as ordered by a court of competent jurisdiction or as required by law, the holder (as defined below) of any Bond shall be treated as its absolute owner for all purposes whether or not it is overdue and regardless of any notice of ownership, trust or an interest in it, any writing on the Certificate representing it or the theft or loss of such Certificate and no person shall be liable for so treating the holder.

In these Conditions, "**Bondholder**" and "**holder**" means the person in whose name a Bond is registered.

### 2 Transfers of Bonds

- (a) **Transfer:** A holding of Bonds may, subject to the terms of the Fiscal Agency Agreement and to Condition 2(e), be transferred in whole or in part upon the surrender (at the specified office of the Registrar or any Transfer Agent) of the Certificate(s) representing such Bonds to be transferred, together with the form of transfer endorsed on such Certificate(s) (or another form of transfer substantially in the same form and containing the same representations and certifications (if any), unless otherwise agreed by the Issuer) duly completed and executed and any other evidence as the Registrar or Transfer Agent may reasonably require. In the case of a transfer of part only of a holding of Bonds represented by one Certificate, a new Certificate shall be issued to the transferee in respect of the part transferred and a further new Certificate in respect of the balance of the holding not transferred shall be issued to the transferor. In the case of a transfer of Bonds to a person who is already a holder of Bonds, a new Certificate representing the enlarged holding shall only be issued against surrender of the Certificate representing the existing holding. All transfers of Bonds and entries on the Register will be made in accordance with the detailed regulations concerning transfers of Bonds scheduled to the Fiscal Agency Agreement. The regulations may be changed by the Issuer, with the prior written approval of the Registrar and the Fiscal Agent. A copy of the current regulations will be made available by the Registrar to any Bondholder upon request.
- (b) **Partial Redemption in Respect of Bonds:** In the case of a partial redemption of a holding of Bonds represented by a single Certificate, a new Certificate shall be issued to the holder in respect of the balance of the holding not redeemed. New Certificates shall only be issued against surrender of the existing Certificates to the Registrar or any Transfer Agent.
- (c) **Delivery of New Certificates:** Each new Certificate to be issued pursuant to Condition 2(a) or 2(b) shall be available for delivery within five business days of receipt of a duly completed form of transfer and surrender of the existing Certificate(s). Delivery of the new Certificate(s) shall be made at the specified office of the Transfer Agent or of the Registrar (as the case may be) to whom delivery or surrender of such form of transfer, Change of Control Put Notice or Certificate shall have been made or, at the option of the holder making such delivery or surrender as aforesaid and as specified in the relevant form of transfer or Change of Control Put Notice or otherwise in writing, be mailed by uninsured post at the risk and at the expense of the holder entitled to the new Certificate to such address as may be so specified, unless such holder requests otherwise and pays in advance to the relevant Transfer Agent or the Registrar (as the case may be) the costs of such other method of delivery and/or such insurance as it may specify. In this Condition 2(c), "**business day**" means a day, other than a Saturday or Sunday, on which banks are open for general business in both London and the place of the specified office of the relevant Transfer Agent or the Registrar (as the case may be).
- (d) **Transfer or Exercise:** Certificates, on transfer or partial redemption, shall be issued and registered by or on behalf of the Issuer, the Registrar or any Transfer Agent upon payment of any tax or other governmental charges that may be imposed in relation to it (or the giving of such indemnity as the Registrar or the relevant Transfer Agent may require).
- (e) **Closed Periods:** No Bondholder may require the transfer of a Bond to be registered (i) during the period of 15 days ending on (and including) the due date for redemption of that Bond, (ii) after any such Bond has been called for redemption, or (iii) during the period of seven days ending on (and including) any Record Date (as defined in Condition 7(a)(ii)).

### 3 Status

The Bonds constitute (subject to Condition 4(a) (*Negative Pledge*)) direct, general, unconditional, unsecured and unsubordinated obligations of the Issuer and shall at all times rank *pari passu* and without any preference among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as

may be provided by applicable legislation and subject to Condition 4(a) (*Negative Pledge*), at all times rank at least equally with all its other present and future unsecured and unsubordinated obligations.

## 4 Covenants

### (a) *Negative Pledge*

So long as any Bond remains outstanding (as defined in the Fiscal Agency Agreement) other than any Permitted Security, the Issuer will not, and will ensure that none of its Material Subsidiaries will, create or have outstanding any mortgage, charge, lien, pledge or other security interest, upon the whole or any part of its present or future undertaking, assets or revenues (including any uncalled capital) to secure any Relevant Indebtedness or to secure any guarantee or indemnity in respect of any Relevant Indebtedness, without at the same time or prior thereto according to the Bonds the same security as is created or subsisting to secure any such Relevant Indebtedness, guarantee or indemnity or such other security or arrangement as shall be approved by an Extraordinary Resolution (as defined in the Fiscal Agency Agreement) of the Bondholders.

### (b) *Financial Covenants*

- (i) For so long as any Bond remains outstanding, the Issuer shall not, and shall not permit (to the extent permitted by law) any of its Material Subsidiaries to, directly or indirectly incur any Financial Indebtedness, provided, however, that the Issuer and any Material Subsidiary may incur Financial Indebtedness in each case if, after giving effect to the incurrence of such Financial Indebtedness and the receipt and application of the proceeds therefrom, (i) no Event of Default has or would have occurred and is or would be continuing; (ii) the EBITDA Coverage Ratio would be not less than 4.0 to 1.0; and (iii) the Consolidated Leverage Ratio would not be more than 4.5 to 1.0.

The covenant in this Condition 4(b)(i) shall cease to apply if, and for so long as, (i) the Bonds and the Issuer are rated by one or more Rating Agencies and (ii) each Rating Agency assigning a credit rating to the Bonds and the Issuer assigns a rating of BBB-/Baa3 (or equivalent) or better to both the Bonds and the Issuer. The covenant shall cease to apply from the date of the public announcement of such rating(s) by such Rating Agency(ies).

If one or more of the Rating Agencies subsequently assigns a credit rating to the Bonds or the Issuer of BB+/Ba1 (or equivalent) or worse, the covenant in this Condition 4(b)(i) shall apply again from the date of the public announcement of such rating by such Rating Agency.

If the rating designations employed by a Rating Agency are changed from those which are described in this Condition 4(b)(i), the Issuer shall determine in a commercially reasonable manner the rating designations of such Rating Agency as are most equivalent to the prior rating designations of such Rating Agency and this Condition 4(b)(i) shall be read accordingly.

The Issuer will cause the occurrence of an event giving rise to this Condition 4(b)(i) ceasing to apply, or applying again, to be notified to the Fiscal Agent and notice thereof to be given in accordance with Condition 14 as soon as possible after the occurrence of the relevant event but in no event later than the fifth business day in London thereafter.

"**Fitch**" means Fitch Ratings Ltd., or its successor;

"**Moody's**" means Moody's Investors Service Limited, or its successor;

**"Rating Agencies"** means S&P and/or Moody's and/or Fitch and **"Rating Agency"** means any one of them; and

**"S&P"** means S&P Global Ratings, acting through S&P Global Ratings France SAS, or its successor.

- (ii) For so long as any Bond remains outstanding, in the event that NEK (as defined below) is declared by a Bulgarian court to be overindebted (свърхзадължен) within the meaning of the Bulgarian Commerce Act, then the Issuer shall not, and shall not permit (to the extent permitted by law) any of its Material Subsidiaries to, directly or indirectly, incur any Financial Indebtedness.

**(c) Financial Reporting**

For so long as any Bond remains outstanding, the Issuer shall publish on its website:

- (a) as soon as the same become available, but in any event within 130 days after the end of each of its financial years, its audited consolidated financial statements for that financial year; and
- (b) as soon as the same become available, but in any event within 90 days after the end of the first half of each of its financial years, its audited consolidated financial statements for that financial half year.

In these Conditions:

**"Adverse Mandatory Regulatory Measure"** means any Mandatory Regulatory Measure which:

- (a) has or is reasonably likely to have a Material Adverse Effect; or
- (b) is or is reasonably likely to be materially adverse to the interests of Bondholders;

**"Approved Jurisdiction"** means any member state of the European Union as of 1 January 2004, the United States of America, any state thereof, and the District of Columbia;

**"Cash Equivalents"** means:

- (a) euros or U.S. dollars;
- (b) securities or marketable direct obligations issued by or directly and fully guaranteed or insured by the government of an Approved Jurisdiction, or any agency or instrumentality of such government having an equivalent credit rating, having maturities of not more than 12 months from the date of acquisition;
- (c) certificates of deposit and time deposits with maturities of 12 months or less from the date of acquisition, bankers' acceptances with maturities not exceeding 12 months and overnight bank deposits, in each case with any bank or financial institution which has a rating for its long-term unsecured and non-credit-enhanced debt obligations of at least **"A-1"** or the equivalent thereof by Standard & Poor's, at least **"P-1"** or the equivalent thereof by Moody's or at least **"F-1"** or the equivalent thereof by Fitch (or if at the time none of them is issuing comparable ratings, then a comparable rating of another Nationally Recognised Statistical Rating Organisation);
- (d) commercial paper rated at the time of acquisition thereof at least **"A-2"** or the equivalent thereof by Standard & Poor's, **"P-2"** or the equivalent thereof by Moody's or **"F-2"** or the equivalent by Fitch or carrying an equivalent rating by a Nationally Recognised Statistical Rating Organisation if the above named rating agencies cease publishing ratings of investments or, if no rating is available in respect of the commercial paper, the issuer of which has an equivalent rating in respect of its long-term debt, and in any case maturing within one year after the date of acquisition thereof; and/or

- (e) interests in money market funds at least 95 per cent. of the assets of which constitute Cash Equivalents of the type referred to in paragraphs (a) through (d) above;

**"Consolidated EBITDA"** means, at any time and in respect of the Issuer, the aggregate of the amount of:

- (a) profit before tax;
- (b) finance costs; and
- (c) depreciation and amortisation,

each as set forth in the most recent consolidated financial statements of the Issuer at such time;

**"Consolidated Fixed Charge"** means, for any Relevant Period, the aggregate amount of the accrued interest, commission, fees, discounts, prepayment penalties or premiums and other finance payments in respect of Financial Indebtedness whether paid, payable or capitalised by any member of the Group in respect of that Relevant Period:

- (a) excluding any such obligations to any other member of the Group;
- (b) including the interest element of leasing and hiring purchase payments;
- (c) including any accrued commission, fees, discounts and other finance payments payable by any member of the Group under any interest rate hedging arrangement; and
- (d) deducting any accrued commission, fees, discounts and other finance payments owing to any member of the Group under any interest rate hedging instrument,

in each case without double counting so that no amount shall be included or excluded more than once;

**"Consolidated Leverage Ratio"** means, on any Transaction Date, the ratio of (i) the Financial Indebtedness of the Issuer net of the amount of cash and Cash Equivalents on the consolidated balance sheet of the Issuer, in each case as set forth in, and as of the date of, the most recent consolidated financial statements of the Issuer to (ii) the Consolidated EBITDA for the most recent Relevant Period prior to such Transaction Date for which consolidated financial statements of the Issuer are available. In making the foregoing calculation of (x) Consolidated EBITDA for such Relevant Period, Consolidated EBITDA shall be calculated on the same pro forma basis as described in the definition of EBITDA Coverage Ratio below and (y) Financial Indebtedness as of such date, pro forma effect shall be given to the Incurrence of any Financial Indebtedness the permissibility of which is then being measured and the Incurrence, repayment or redemption of any other Financial Indebtedness on or after the first day of the Reference Period (as defined in **"EBITDA Coverage Ratio"** below) and, in each case, the receipt and application of the proceeds therefrom, in each case as if such Financial Indebtedness had been Incurred, repaid and redeemed as of the date of the most recent consolidated financial statements of the Issuer;

**"EBITDA Coverage Ratio"** means, on any Transaction Date, the ratio of (i) Consolidated EBITDA for the then most recent Relevant Period prior to such Transaction Date for which consolidated financial statements of the Issuer are available to (ii) the aggregate Consolidated Fixed Charge of such Relevant Period. In making the foregoing calculation:

- (a) pro forma effect shall be given to any Financial Indebtedness Incurred, repaid or redeemed during the period (the **"Reference Period"**) commencing on and including the first day of such Relevant Period and ending on and including the Transaction Date (other than Financial Indebtedness Incurred or repaid under a revolving credit or similar arrangement in effect on the last day of such Relevant Period), in each case as if such Financial Indebtedness had been Incurred, repaid and redeemed on the first day of such Reference Period; provided that, in the event of any such repayment or

redemption, Consolidated EBITDA for such period shall be calculated as if each member of the Group had not earned any interest income actually earned during such period in respect of the funds used to repay such Financial Indebtedness;

- (b) pro forma effect shall be given to any investments, acquisitions, disposals, mergers, consolidations or discontinued operations (as determined in accordance with International Financial Reporting Standards) that have been made during the Reference Period as if all such investments, acquisitions, disposals, mergers, consolidations or discontinued operations had occurred on the first day of such Reference Period; and
- (c) pro forma effect shall be given to the creation, designation or redesignation of Material Subsidiaries as if such creation, designation or redesignation had occurred on the first date of such Reference Period.

For the purposes of this definition and the definition of "**Consolidated Leverage Ratio**" above, whenever pro forma effect is to be given to an investment, acquisition, disposal, merger, consolidation or discontinued operation and the amount of income or earnings relating thereto, the pro forma calculations shall be determined in good faith by a responsible financial or accounting officer of the Issuer. If any Financial Indebtedness bears a floating rate of interest and is being given pro forma effect, the interest on such Financial Indebtedness shall be calculated as if the rate in effect on the Transaction Date had been the applicable rate for the entire period;

**"Financial Indebtedness"** means, in relation to any entity at any date, without duplication:

- (a) all indebtedness of such entity for borrowed money;
- (b) all obligations of such entity for the purchase price of property or services to the extent the payment of such obligations is deferred for a period in excess of 120 days (other than trade payables) and refundable deposits held as borrowings;
- (c) all obligations of such entity evidenced by notes, bonds, debentures or other similar instruments;
- (d) all indebtedness created or arising under any conditional sale or other title retention agreement with respect to property acquired by such entity (unless the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property);
- (e) all Lease Obligations or Synthetic Lease Obligations of such entity;
- (f) any indebtedness of such entity for or in respect of receivables sold or discounted (other than any receivables to the extent they are sold or discounted on a non-recourse basis or on a basis where recourse is limited solely to warranty claims relating to title or objective characteristics of the relevant receivables);
- (g) any indebtedness of such entity for any amount raised under any other transaction (including any forward sale or purchase agreement) having the commercial effect of a borrowing;
- (h) all indebtedness of such entity, contingent or otherwise, as an account party under acceptance, letter of credit, completion guaranties, performance bonds or similar facilities; and
- (i) all obligations of such entity, contingent or otherwise, to purchase, redeem, retire or otherwise acquire for value any capital stock of such entity prior to the respective maturity dates,

provided that indebtedness owing by one member of the Group to another member of the Group shall not be taken into account;

**"Fitch"** means Fitch Ratings Ltd. and any successor to its rating agency business;

**"Group"** means the Issuer and its Subsidiaries;

**"Incur"** means issue, assume, guarantee, incur or otherwise become liable for; provided, however, that any Financial Indebtedness of an entity existing at the time such entity becomes a Material Subsidiary shall be deemed to be Incurred by such person at the time it becomes a Material Subsidiary;

**"Independent Transmission Operator"** means each of:

- (a) Bulgartransgaz EAD, a sole-proprietorship joint-stock company organised under the laws of the Republic of Bulgaria and registered with the Bulgarian Commercial Registry under the uniform identification code 175203478; and
- (b) Elektroenergien Sistemen Operator EAD, a sole-proprietorship joint-stock company organised under the laws of the Republic of Bulgaria and registered with the Bulgarian Commercial Registry under the uniform identification code 175201304;

**"Lease Obligations"** means, in respect of any entity, the obligations of such entity to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property which are required to be classified and accounted for as a balance sheet liability (other than any liability in respect of a lease or other such arrangement which would, in accordance with International Financial Reporting Standards in force at 26 June 2018, have been treated as an operating lease) and, for the purposes of these Conditions, the amount of such obligations at any time shall be the capitalised amount thereof at such time determined in accordance with International Financial Reporting Standards;

**"Mandatory Regulatory Measure"** means any law, regulation, rule or other obligation:

- (a) falling within the legal or regulatory framework applicable to an Independent Transmission Operator;
- (b) with which an Independent Transmission Operator is required to comply; and
- (c) which results in that Independent Transmission Operator being obliged to:
  - (i) make any investment in or acquisition of any assets from any person; or
  - (ii) incur any Relevant Indebtedness for the purposes of making such investment and/or acquisition;  
or
  - (iii) enter into an agreement regarding either of (i) or (ii) above;

**"Material Adverse Effect"** means a material adverse effect on or material adverse change in:

- (a) the financial condition, assets, prospects or business of the Group taken as a whole;
- (b) the consolidated financial condition, assets, prospects, applicable regulatory conditions or business of the Issuer and its Subsidiaries taken as a whole;
- (c) the ability of the Issuer to perform or comply with its obligations under the Bonds; or
- (d) the validity, legality or enforceability of the Bonds;

**"Material Subsidiary"** means, at any time:

- (a) each of NPP Kozloduy EAD, TPP Maritsa East 2 EAD, Natsionalna Elektricheska Kompania EAD ("**NEK**"), Elektroenergien Sistemen Operator EAD, Bulgargaz EAD, Bulgartransgaz EAD and Mini Maritsa Iztok EAD;

- (b) any Subsidiary whose (A) total assets (consolidated in the case of a Subsidiary which itself has subsidiaries) represent not less than 10 per cent. of the consolidated total assets of the Issuer and its Subsidiaries taken as a whole or (B) nominal revenue (excluding the impact of intragroup sales and consolidated in the case of a Subsidiary which itself has subsidiaries) represent not less than 10 per cent. of the total nominal revenue (excluding the impact of intragroup transactions) of the Issuer and its Subsidiaries taken as a whole, all as calculated respectively by reference to the most recent audited financial statements (consolidated or, as the case may be, unconsolidated) of such Subsidiary and the most recent consolidated audited financial statements of the Issuer and its Subsidiaries; and
- (c) any Subsidiary to which is transferred all or substantially all of the assets and undertaking of a Subsidiary of the Issuer which was a Material Subsidiary immediately prior to such transfer (which Subsidiary shall cease to be a Material Subsidiary upon such transfer becoming unconditional) and so that a Subsidiary of the Issuer which becomes a Material Subsidiary pursuant to this paragraph (c) shall remain a Material Subsidiary only until the publication of the next consolidated audited financial statements of the Issuer, unless on such publication, it remains a Material Subsidiary pursuant to paragraph (a) or (b) above;

**"Moody's"** means Moody's Investors Service, Inc. and any successor to its rating agency business;

**"Nationally Recognised Statistical Rating Organisation"** means a nationally recognised statistical rating organisation within the meaning of Rule 15c3-1(c)(2)(vi)(F) under the U.S. Securities Exchange Act of 1934, as amended;

**"Permitted Security"** means, in respect of a Subsidiary, any mortgage, charge, lien, pledge or other security interest which such Subsidiary creates in its capacity as an Independent Transmission Operator:

- (a) pursuant to a Mandatory Regulatory Measure other than an Adverse Mandatory Regulatory Measure; or
- (b) as a result of a valid decision by the management of that Independent Transmission Operator which, pursuant to Chapter VIII(a), Section II of the Bulgarian Energy Act, falls within its exclusive competence, provided that the granting of such Permitted Security or (or such decision to grant such Permitted Security) was validly approved in writing by the relevant regulator prior to it being granted (where required by law) and does not and is unlikely to cause a Material Adverse Effect;

**"Relevant Indebtedness"** means any indebtedness which is in the form of, or represented or evidenced by, bonds, notes, debentures, loan stock or other securities which for the time being are, or are intended to be or capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market;

**"Relevant Period"** means each period of twelve months ending on the last day of the Issuer's financial year and each period of twelve months ending on the last day of the first half of the Issuer's financial year;

**"Standard & Poor's"** means Standard & Poor's, a division of The McGraw-Hill Companies, Inc., and any successor to its rating agency business;

**"Subsidiary"** means any entity (i) whose financial statements at any time are required by law or in accordance with generally accepted accounting principles to be fully consolidated with those of the Issuer, (ii) more than 50 per cent. of whose voting share capital is owned or controlled, directly or indirectly, by the Issuer or by one or more Subsidiaries of the Issuer or (iii) in respect of which the Issuer (or one or more Subsidiaries of the Issuer) alone is entitled to control the decision making process of its managing or controlling bodies;

**"Synthetic Lease Obligations"** means all monetary obligations of an entity under:

- (a) a so-called synthetic, off-balance sheet or tax retention lease; or
- (b) an agreement for the use or possession of property creating obligations which do not appear on the balance sheet of such entity but which, upon the insolvency or bankruptcy of such entity, would be characterised as the Financial Indebtedness of such entity (without regard to accounting treatment); and

"**Transaction Date**" means, with respect to the incurrence of any Financial Indebtedness, the date on which such Financial Indebtedness is to be incurred.

## 5 Interest

The Bonds bear interest on their outstanding principal amount from and including 28 June 2018 at the rate of 3.500 per cent. per annum, payable annually in arrear on 28 June in each year (each an "**Interest Payment Date**"), subject as provided in Condition 7 (*Payments*).

Each Bond will cease to bear interest from the due date for redemption unless, upon surrender of the corresponding Certificate representing such Bond, payment of principal is improperly withheld or refused. In such event it shall continue to bear interest at such rate (both before and after judgement) until whichever is the earlier of (a) the day on which all sums due in respect of such Bond up to that day are received by or on behalf of the relevant Bondholder, and (b) the day seven days after the Fiscal Agent has notified Bondholders of receipt of all sums due in respect of all the Bonds up to that seventh day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions).

Where interest is to be calculated in respect of a period which is equal to or shorter than an Interest Period (as defined below), the day-count fraction used will be the number of days in the relevant period, from and including the date from which interest begins to accrue to but excluding the date on which it falls due, divided by the number of days in the Interest Period in which the relevant period falls (including the first such day but excluding the last).

In these Conditions, the period beginning on and including 28 June 2018 and ending on but excluding the first Interest Payment Date and each successive period beginning on and including an Interest Payment Date and ending on but excluding the next succeeding Interest Payment Date is called an "**Interest Period**".

Interest in respect of any Bond shall be calculated per EUR1,000 in principal amount of the Bonds (the "**Calculation Amount**"). The amount of interest payable per Calculation Amount for any period shall be equal to the product of the rate of interest specified above, the Calculation Amount and the day-count fraction for the relevant period, rounding the resulting figure to the nearest cent (half a cent being rounded upwards).

## 6 Redemption, Purchase and Cancellation

### (a) *Final Redemption*

Unless previously redeemed, or purchased and cancelled, the Bonds will be redeemed at their principal amount on 28 June 2025.

### (b) *Redemption for Taxation and other Reasons*

The Bonds may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Bondholders (which notice shall be irrevocable), at their principal amount, (together with interest accrued to the date fixed for redemption), if (i) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 8 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of the Republic of

Bulgaria or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after 26 June 2018, and (ii) such obligation cannot be avoided by the Issuer taking reasonable measures available to it, provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Bonds then due. Prior to the publication of any notice of redemption pursuant to this Condition 6(b), the Issuer shall deliver to the Fiscal Agent a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

**(c) Change of Control Put Option**

If, at any time while any of the Bonds remains outstanding, a Change of Control (as defined below) occurs, each Bondholder shall have the option (unless, prior to the giving of the Change of Control Notice (as defined below), the Issuer shall have given notice under Condition 6(b)) to require the Issuer to redeem or, at the option of the Issuer, purchase (or procure the purchase of) that Bondholder's outstanding Bond(s) at 101 per cent. of their principal amount together with (or, where purchased, together with an amount equal to) interest (if any) accrued to (but excluding) the Change of Control Put Date (as defined below). Such option (the "**Change of Control Put Option**") shall operate as follows:

- (i) if a Change of Control occurs the Issuer shall, within 14 days of the occurrence of such Change of Control, give notice (a "**Change of Control Notice**") to the Bondholders in accordance with Condition 14 (*Notices*) specifying the nature of the Change of Control and the procedure for exercising the option contained in this Condition 6(c);
- (ii) to exercise the Change of Control Put Option, the Bondholder must deliver at the specified office of any Agent on any business day (as defined in Condition 7(f)) falling within the period (the "**Change of Control Put Period**") of 45 days after that on which a Change of Control Notice is given, a duly signed and completed notice of exercise in the form (for the time being current and which may, if the Certificate for such Bonds is held in a clearing system, be any form acceptable to the clearing system delivered in any manner acceptable to the clearing system) obtainable from the specified office of any Agent (a "**Change of Control Put Notice**") and in which the holder must specify a bank account complying with the requirements of Condition 7 (*Payments*) to which payment is to be made under this Condition 6(c), accompanied by the Certificate for such Bonds or evidence satisfactory to the Agent concerned that the Certificate for such Bonds will, following the delivery of the Change of Control Put Notice, be held to its order or under its control;
- (iii) the Issuer shall redeem or, at its option, purchase (or procure the purchase of) the relevant Bond on the date (the "**Change of Control Put Date**") being the fifteenth day after the date of expiry of the Change of Control Put Period, unless previously redeemed or purchased and cancelled. Payment in respect of any Bond so delivered shall be made, if the holder duly specifies a bank account in the Change of Control Put Notice to which payment is to be made on the Change of Control Put Date, by transfer to that bank account, subject in any such case as provided in Condition 7 (*Payments*); and
- (iv) a Change of Control Put Notice given by a holder of any Bond shall be irrevocable except where, prior to the due date of redemption, an Event of Default has occurred and is continuing in which event such holder, at its option, may elect by notice to the Issuer to withdraw the Change of

Control Put Notice and instead to give notice that the Bond is immediately due and repayable under Condition 9 (*Events of Default*).

If 80 per cent. or more in principal amount of the Bonds then outstanding have been redeemed or purchased pursuant to the foregoing provisions of this Condition 6(c), the Issuer may, on giving not less than 30 nor more than 60 days' notice to the Bondholders (which notice shall be irrevocable and which shall be given within 30 days after the Change of Control Put Date), redeem or purchase, at its option, all (but not some only) of the remaining Bonds at 101 per cent. of the principal amount of the Bonds then outstanding together with (or, where purchased, together with an amount equal to) interest (if any) accrued to (but excluding) the date of redemption or purchase, as the case may be.

For the purpose of this Condition 6(c), "**Change of Control**" means, in relation to the Issuer, the Bulgarian state ceases to (i) hold, directly or indirectly, at least 75 per cent. of the shares in the Issuer or (ii) hold, directly or indirectly, the right to appoint the majority of the directors of the Issuer or (iii) otherwise control or have the power to control the affairs and policies of the Issuer.

***(d) Redemption at the Option of the Issuer***

Unless a Change of Control Put Notice has been given pursuant to Condition 6(c), the Issuer may, at any time, on giving not less than 30 nor more than 60 days' notice to the Bondholders in accordance with Condition 14 (*Notices*) (which notice shall be irrevocable and shall specify the date fixed for redemption (the "**Optional Redemption Date**")), redeem, in whole or in part, the Bonds at a redemption price per Bond equal to the higher of the following, in each case together with interest accrued to but excluding the Optional Redemption Date:

- (i) the principal amount of the Bond; and
- (ii) the sum of the then current values of the remaining scheduled payments of principal and interest discounted to the Optional Redemption Date on an annual basis (based on the actual number of days elapsed divided by 365 or (in the case of a leap year) by 366) at the Reference Dealer Rate (as defined below) plus 0.5 per cent., in each case as determined by the Determination Agent.

Any notice of redemption given under this Condition 6(d) will override any notice of redemption given (whether previously, on the same date or subsequently) under Condition 6(b).

In this Condition:

"**Determination Agent**" means a recognised credit or financial services institution of international standing as selected by the Issuer;

"**Reference Dealers**" means three (or, in the circumstances set out in the definition of "**Reference Stock**" below, four) credit institutions or financial services institutions that regularly deal in bonds or debt securities as selected by the Determination Agent after consultation with the Issuer;

"**Reference Dealer Rate**" means with respect to the Reference Dealers and the Optional Redemption Date, the average of the three quotations of the mid-market annual yield to maturity of the Reference Stock quoted in writing to the Issuer by the Reference Dealers or, if the Determination Agent is only able to obtain fewer than three such Reference Dealer quotations, the average of all such Reference Dealer quotations, at 11.00 a.m. Central European time on the third business day in London preceding the Optional Redemption Date; and

"**Reference Stock**" means the DBR O ½ 02/15/25, or, if such obligation is no longer outstanding, such other central bank or government security that, in the majority opinion of the Reference Dealers (i) has a maturity comparable to the remaining term of the Bonds and (ii) would be utilised, at the time of selection

and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Bonds. In the event that each such Reference Dealer selects a different central bank or government security, the Determination Agent after consultation with the Issuer shall approach a fourth Reference Dealer and, from the three different central bank or government securities selected by the other Reference Dealers, such fourth Reference Dealer shall select as the Reference Stock the central bank or government security which, in its opinion (i) has a maturity comparable to the remaining term of the Bonds and (ii) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Bonds. The central bank or government security so selected by the fourth Reference Dealer shall then be the Reference Stock.

***(e) Purchase***

The Issuer and its Subsidiaries may at any time purchase Bonds in the open market or otherwise at any price. The Bonds so purchased, while held by or on behalf of the Issuer or any such Subsidiary, shall not entitle the holder to vote at any meetings of the Bondholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Bondholders or for the purposes of Condition 12(a).

***(f) Cancellation***

All Certificates representing Bonds purchased by or on behalf of the Issuer may be held, reissued, resold or surrendered for cancellation to the Registrar and, upon surrender thereof, all such Bonds shall be cancelled forthwith. Any Certificates so surrendered for cancellation may not be reissued or resold and the obligations of the Issuer in respect of any such Bonds shall be discharged.

**7 Payments**

***(a) Method of Payment***

- (i) Payments of principal shall be made (subject to surrender of the relevant Certificates at the specified office of any Transfer Agent or of the Registrar if no further payment falls to be made in respect of the Bonds represented by such Certificates) in the manner provided in paragraph (ii) below.
- (ii) Interest on each Bond shall be paid to the person shown on the Register at the close of business on the business day before the due date for payment thereof (the "**Record Date**"). Payments of interest on each Bond shall be made in the relevant currency by cheque drawn on a bank and mailed to the holder (or to the first named of joint holders) of such Bond at its address appearing in the Register. Upon application by the holder to the specified office of the Registrar or any Transfer Agent before the Record Date, such payment of interest may be made by transfer to an account in the relevant currency maintained by the payee with a bank.
- (iii) If the amount of principal being paid upon surrender of the relevant Certificate is less than the outstanding principal amount of such Certificate, the Registrar will annotate the Register with the amount of principal so paid and will (if so requested by the Issuer or a Bondholder) issue a new Certificate with a principal amount equal to the remaining unpaid outstanding principal amount. If the amount of interest being paid is less than the amount then due, the Registrar will annotate the Register with the amount of interest so paid.

***(b) Payments subject to Fiscal Laws***

All payments are subject in all cases to any applicable fiscal or other laws, regulations and directives in the place of payment, but without prejudice to the provisions of Condition 8 (*Taxation*). No commission or expenses shall be charged to the Bondholders in respect of such payments.

***(c) Payment Initiation***

Where payment is to be made by transfer to an account in the relevant currency, payment instructions (for value the due date, or if that is not a business day, for value the first following day which is a business day) will be initiated, and, where payment is to be made by cheque, the cheque will be mailed on the last day on which the Fiscal Agent is open for business preceding the due date for payment or, in the case of payments of principal where the relevant Certificate has not been surrendered at the specified office of any Transfer Agent or of the Registrar, on a day on which the Fiscal Agent is open for business and on which the relevant Certificate is surrendered.

***(d) Appointment of Agents***

The Fiscal Agent, the Registrar and the Transfer Agents initially appointed by the Issuer and their respective specified offices are listed below. The Fiscal Agent, the Registrar and the Transfer Agents act solely as agents of the Issuer and do not assume any obligation or relationship of agency or trust for or with any Bondholder. The Issuer reserves the right at any time to vary or terminate the appointment of the Fiscal Agent, the Registrar or any Transfer Agent and to appoint additional or other Transfer Agents, provided that the Issuer shall at all times maintain (i) a Fiscal Agent, (ii) a Registrar, (iii) a Transfer Agent and (iv) such other agents as may be required by any stock exchange on which the Bonds may be listed.

Notice of any such change or any change of any specified office shall promptly be given to the Bondholders.

***(e) Delay in Payment***

Bondholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due on a Bond if the due date is not a business day, if the Bondholder is late in surrendering or cannot surrender its Certificate (if required to do so) or if a cheque mailed in accordance with Condition 7(a)(ii) arrives after the due date for payment.

***(f) Non-Business Days***

If any date for payment in respect of any Bond is not a business day, the holder shall not be entitled to payment until the next following business day nor to any interest or other sum in respect of such postponed payment. In this Condition 7, "**business day**" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for business in the place in which the specified office of the Registrar is located and which is a TARGET Business Day.

"**TARGET Business Day**" means a day on which the TARGET System is open for the settlement of payments in euro.

"**TARGET System**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET2) system or any successor thereto.

## 8 Taxation

All payments of principal and interest by or on behalf of the Issuer in respect of the Bonds shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by the Republic of Bulgaria or any authority therein or thereof having power to tax, unless such withholding or deduction of such taxes, duties, assessments or governmental charges is required by law. In that event the Issuer shall pay such additional amounts as will result in receipt by the Bondholders of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in respect of any Bond:

- (a) **Other connection:** held by or on behalf of a holder who is liable to such taxes, duties, assessments or governmental charges in respect of such Bond by reason of his having some connection with the Republic of Bulgaria other than the mere holding of the Bond; or
- (b) **Surrender more than 30 days after the Relevant Date:** in respect of which the Certificate representing it is presented for payment more than 30 days after the Relevant Date except to the extent that the holder of it would have been entitled to such additional amounts on surrendering the Certificate representing such Bond for payment on the last day of such period of 30 days.

"**Relevant Date**" in respect of any Bond means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding is made or (if earlier) the date seven days after that on which notice is duly given to the Bondholders that, upon further surrender of the Certificate representing such Bond being made in accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such surrender.

## 9 Events of Default

If any of the following events ("**Events of Default**") occurs and is continuing:

- (a) **Non-Payment:** the Issuer fails to pay the principal of or any interest on any of the Bonds when due and such failure continues for a period of seven days in the case of principal and 14 days in the case of interest; or
- (b) **Breach of Other Obligations:** the Issuer does not perform or comply with any one or more of its other obligations in respect of the Bonds which default is incapable of remedy or is not remedied within 45 days after notice of such default shall have been given to the Issuer by any Bondholder; or
- (c) **Cross-Default/Cross Acceleration:** (i) any other present or future indebtedness (other than indebtedness owed to another member of the Group) of the Issuer or any of its Material Subsidiaries for or in respect of moneys borrowed or raised becomes (or, other than in the case of NEK, becomes capable of being declared) due and payable prior to its stated maturity by reason of any actual or potential default, event of default or the like (howsoever described), or (ii) any such indebtedness is not paid when due or, as the case may be, within any applicable grace period, or (iii) the Issuer or any of its Material Subsidiaries fails to pay when due any amount payable by it under any present or future guarantee for, or indemnity in respect of, any moneys borrowed or raised (other than a failure to pay when due any amount payable by it under any present or future guarantee for, or indemnity in respect of, any moneys borrowed or raised from another member of the Group), provided that the aggregate amount of the relevant indebtedness, guarantees and indemnities in respect of which one or more of the events mentioned above in this Condition 9(c) have occurred equals or exceeds EUR25,000,000 or its equivalent (on the

basis of the middle spot rate for the relevant currency against the euro as quoted by any leading bank on the day on which this paragraph operates); or

- (d) **Enforcement Proceedings:** a distress, attachment, execution or other similar legal process is levied, enforced or sued out on or against the property, assets or revenues of the Issuer or any of its Material Subsidiaries having an aggregate value of EUR25,000,000 or more and is not discharged or stayed within 45 days; or
- (e) **Security Enforced:** any mortgage, charge, pledge, lien or other encumbrance, present or future, created or assumed by the Issuer or any of its Material Subsidiaries in respect of a material part of the property, assets or revenues of the Issuer or any of its Material Subsidiaries becomes enforceable and any step is taken to enforce it (including the taking of possession or the appointment of a receiver, manager or other similar person); or
- (f) **Insolvency:** (i) the Issuer or any of its Material Subsidiaries (other than in the case of NEK) (A) is (or is, or could be, deemed by law or a court to be) insolvent or bankrupt or unable to pay its debts, (B) stops, suspends or threatens to stop or suspend payment of all or a material part of (or all of a particular type of) its debts, (C) proposes or makes any agreement for the deferral, rescheduling or other readjustment of all of (or all of a particular type of) its debts (or of any part which it will or might otherwise be unable to pay when due) other than any deferral, rescheduling or other adjustment on a solvent basis in respect of debts not exceeding EUR50,000,000 in the aggregate, or (D) proposes or makes a general assignment or an arrangement or composition with or for the benefit of the relevant creditors in respect of any of such debts other than any assignment, arrangement or composition on a solvent basis in respect of debts not exceeding EUR50,000,000 in the aggregate or a moratorium is agreed or declared in respect of or affecting all or any substantial part of (or all of a particular type of) the debts of the Issuer or any of its Material Subsidiaries (other than NEK) and (ii) in the case of NEK, it is declared by a Bulgarian court to be insolvent; or
- (g) **Winding-up:** an order is made or an effective resolution passed for the winding-up or dissolution of the Issuer or any of its Subsidiaries, or the Issuer ceases or threatens to cease to carry on all or substantially all of its business or operations, except for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation (i) on terms approved by an Extraordinary Resolution of the Bondholders, or (ii) in the case of a Subsidiary, on a solvent basis and/or whereby the undertaking and assets of the Subsidiary are transferred to or otherwise vested in the Issuer or another of its Subsidiaries, provided that this paragraph (g) shall not apply to any winding-up petition which is frivolous or vexatious and is discharged, stayed or dismissed within 30 days of commencement; or
- (h) **Illegality:** it is or will become unlawful for the Issuer to perform or comply with any one or more of its obligations under any of the Bonds; or
- (i) **Analogous Events:** any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in any of paragraphs (d) to (h) of this Condition 9,

then any Bond may, by notice in writing given to the Issuer and the Fiscal Agent at their specified offices by the holder, be declared immediately due and payable whereupon it shall become immediately due and payable at its principal amount together with accrued interest without further formality unless such event of default shall have been remedied prior to the receipt of such notice by the Issuer and the Fiscal Agent.

## 10 Prescription

Claims against the Issuer for payment in respect of the Bonds shall be prescribed and become void unless made within 10 years (in the case of principal) or five years (in the case of interest) from the appropriate Relevant Date in respect of them.

## 11 Replacement of Certificates

If any Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations or other relevant regulatory authority regulations, at the specified office of the Registrar or such other Transfer Agent as may from time to time be designated by the Issuer for that purpose and notice of whose designation is given to Bondholders, in each case on payment by the claimant of the fees and costs incurred in connection therewith and on such terms as to evidence, security, indemnity and otherwise as the Issuer may require (provided that the requirement is reasonable in light of prevailing market practice). Mutilated or defaced Certificates must be surrendered before replacements will be issued.

## 12 Meetings of Bondholders, Modification and Substitution

(a) **Meetings of Bondholders:** The Fiscal Agency Agreement contains provisions for convening meetings of Bondholders to consider matters affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of any provision of these Conditions or the provisions of the Fiscal Agency Agreement. Such a meeting may be convened by Bondholders holding not less than 10 per cent. in principal amount of the Bonds for the time being outstanding. The quorum for any meeting convened to consider an Extraordinary Resolution will be two or more persons holding or representing not less than 50 per cent. in principal amount of the Bonds for the time being outstanding, or at any adjourned meeting two or more persons being or representing Bondholders whatever the principal amount of the Bonds held or represented, unless the business of such meeting includes consideration of proposals, *inter alia*, (i) to modify the maturity of the Bonds or the dates on which interest is payable in respect of the Bonds, (ii) to reduce or cancel the principal amount of, or interest on, the Bonds, (iii) to change the currency of payment of the Bonds, or (iv) to modify the provisions concerning the quorum required at any meeting of Bondholders or the majority required to pass an Extraordinary Resolution, in which case the necessary quorum will be two or more persons holding or representing not less than 75 per cent., or at any adjourned meeting not less than 25 per cent., in principal amount of the Bonds for the time being outstanding. Any Extraordinary Resolution duly passed shall be binding on Bondholders (whether or not they were present at the meeting at which such resolution was passed).

The Fiscal Agency Agreement provides that a resolution in writing signed by or on behalf of the holders of not less than 75 per cent. in principal amount of the Bonds outstanding shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of Bondholders duly convened and held. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Bondholders.

(b) **Modification of the Fiscal Agency Agreement:** The Issuer shall only permit any modification of, or any waiver or authorisation of any breach or proposed breach of or any failure to comply with, the Fiscal Agency Agreement, if to do so could not reasonably be expected to be prejudicial to the interests of the Bondholders.

(c) **Substitution:** The Issuer, or any previous substituted company, may at any time, without the consent of the Bondholders, substitute for itself as principal debtor under the Bonds such company (the "**Substitute**") as is specified in the Fiscal Agency Agreement, provided that no payment in respect of the Bonds is at the relevant time overdue. The substitution shall be made by a deed poll (the "**Deed Poll**"),

to be substantially in the form exhibited to the Fiscal Agency Agreement, and may take place only if (i) the Substitute shall, by means of the Deed Poll, agree to indemnify each Bondholder against any tax, duty, assessment or governmental charge which is imposed on it by (or by any authority in or of) the jurisdiction of the country of the Substitute's residence for tax purposes and, if different, of its incorporation with respect to any Bond and which would not have been so imposed had the substitution not been made, as well as against any tax, duty, assessment or governmental charge, and any cost or expense, relating to the substitution, (ii) the obligations of the Substitute under the Deed Poll and the Bonds shall be unconditionally guaranteed by the Issuer by means of the Deed Poll, (iii) all action, conditions and things required to be taken, fulfilled and done (including the obtaining of any necessary consents) to ensure that the Deed Poll and the Bonds represent valid, legally binding and enforceable obligations of the Substitute and in the case of the Deed Poll of the Issuer have been taken, fulfilled and done and are in full force and effect, (iv) the Substitute shall have become party to the Fiscal Agency Agreement, with any appropriate consequential amendments, as if it had been an original party to it, (v) legal opinions addressed to the Bondholders shall have been delivered to them (care of the Fiscal Agent) from a lawyer or firm of lawyers with a leading securities practice in each jurisdiction referred to in (i) above and in England as to the fulfilment of the preceding conditions of this Condition 12(c) and the other matters specified in the Deed Poll and (vi) the Issuer shall have given at least 14 days' prior notice of such substitution to the Bondholders, stating that copies, or pending execution the agreed text, of all documents in relation to the substitution which are referred to above, or which might otherwise reasonably be regarded as material to Bondholders, will be available for inspection at the specified office of each of the Fiscal Agent, the Registrar and the Transfer Agents. References in Condition 9 (*Events of Default*) to obligations under the Bonds shall be deemed to include obligations under the Deed Poll, and, where the Deed Poll contains a guarantee, the events listed in Condition 9 shall be deemed to include that guarantee not being (or being claimed by the guarantor not to be) in full force and effect and the provisions of Conditions 9(c) - 9(h) inclusive shall be deemed to apply in addition to the guarantor.

### **13 Further Issues**

The Issuer may from time to time without the consent of the Bondholders create and issue further securities either having the same terms and conditions as the Bonds in all respects (or in all respects except for the first payment of interest on them) and so that such further issue shall be consolidated and form a single series with the outstanding securities of any series (including the Bonds) or upon such terms as the Issuer may determine at the time of their issue. References in these Conditions to the Bonds include (unless the context requires otherwise) any other securities issued pursuant to this Condition and forming a single series with the Bonds.

### **14 Notices**

Notices to the holders of Bonds shall be mailed to them at their respective addresses in the Register and deemed to have been given on the fourth weekday (being a day other than a Saturday or a Sunday) after the date of mailing. So long as the Bonds are admitted to trading on, and listed on the Official List of Euronext Dublin and/or the main market of the Bulgarian Stock Exchange (the "**BSE**") (as the case may be) and the guidelines of Euronext Dublin or, following the Bulgarian Admission, the BSE (as the case may be) so require, notices to the holders of Bonds shall also be filed with the Companies Announcement Office of Euronext Dublin and, following the Bulgarian Admission, with the BSE. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the first date on which publication is made.

## 15 Contracts (Rights of Third Parties) Act 1999

No person shall have any right to enforce any term or condition of the Bonds under the Contracts (Rights of Third Parties) Act 1999.

## 16 Governing Law and Jurisdiction

- (a) **Governing Law:** The Fiscal Agency Agreement and the Bonds and any non-contractual obligations arising out of or in connection with them are governed by, and shall be construed in accordance with, English law.
- (b) **Jurisdiction:** The courts of England are to have jurisdiction to settle any disputes that may arise out of or in connection with the Bonds (including a dispute relating to any non-contractual obligations arising out of or in connection with the Bonds) and accordingly any legal action or proceedings arising out of or in connection with any Bonds ("**Proceedings**") may be brought in such courts. The Issuer irrevocably submits to the jurisdiction of such courts and unconditionally waives and agrees not to raise any objection to Proceedings in such courts whether on the ground of venue or on the ground that the Proceedings have been brought in an inconvenient forum. This submission is made for the benefit of each of the Bondholders and shall not limit the right of any of them to take Proceedings in any other court of competent jurisdiction nor shall the taking of Proceedings in one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction (whether concurrently or not).
- (c) **Agent for Service of Process:** The Issuer irrevocably appoints Law Debenture Corporate Services Limited of Fifth Floor, 100 Wood Street, London, EC2V 7EX as its agent in England to receive service of process in any Proceedings in England based on any of the Bonds. If for any reason the Issuer does not have such an agent in England, it will promptly appoint a substitute process agent and notify the Bondholders of such appointment. Nothing herein shall affect the right to serve process in any other manner permitted by law.
- (d) **Waiver of Immunity:** The Issuer agrees, to the extent that it may in any jurisdiction claim for itself or its assets immunity from suit, execution, attachment (whether in aid of execution, before judgement or otherwise) or other legal process, and to the extent that in any such jurisdiction there may be attributed to itself or its assets or revenues such immunity (whether or not claimed), not to claim and irrevocably waives such immunity to the full extent permitted by the laws of such jurisdiction.

## **USE OF PROCEEDS**

The proceeds of the issue of the Bonds before deduction of the total fees and other costs and expenses incurred in connection with the issue of the Bonds, will be EUR 150,000,000 and will be used by the Issuer (i) to repay part of the outstanding 2013 Bonds when they become due on 7 November 2018 and (ii) for general corporate purposes.

## BUSINESS DESCRIPTION

### INTRODUCTION

BEH is the holding company for a group of companies which are principally engaged in electricity generation, supply and transmission, natural gas transmission, supply and storage and lignite coal mining and which hold a leading position in the electricity and gas markets in Bulgaria and, through electricity exports, in the Balkans. BEH is wholly-owned by the Bulgarian state and is the largest state-owned company in terms of total assets in Bulgaria.

By virtue of a decree of the Bulgarian Council of Ministers dated 12 May 1993 under the Bulgarian Commercial Act, 1991, as amended, BEH is a sole-owner joint stock company. It is registered in Bulgaria with registration number BG 831373560. Its registered address is 1000 Sofia, Oborishte Municipality, 16 Veslets Str. Bulgaria and its telephone number is +359 2926 3800.

The Group owns the main electricity generation facilities in Bulgaria as well as the electricity transmission grid and the gas transmission and transit networks. The Group is also the public supplier of both electricity and gas in Bulgaria and it is therefore a strategically important state company. For the year ended 31 December 2017 the Group's market share of Bulgaria's electricity generation was 59 per cent.<sup>2</sup> when it had an installed electricity generation capacity of 6.3 gigawatts ("GW") and generated 26.8 terawatt hours of electricity (gross).

BEH's principal subsidiaries are:

- NPP Kozloduy EAD ("**NPP Kozloduy**") which owns the only nuclear generation plant in Bulgaria with installed capacity of 2,000 MW. In 2017, the Kozloduy nuclear power plant ("**NPP**") accounted for 34.1 per cent. of Bulgaria's total electricity generation;<sup>3</sup>
- TPP Maritsa East 2 EAD ("**TPP Maritsa East 2**") which owns the largest lignite-fired thermal power plant ("**TPP**") in Bulgaria with installed capacity of 1,620 MW. In 2017, the Maritsa TPP accounted for 20 per cent. of Bulgaria's total electricity generation;<sup>4</sup>
- Natsionalna Elektricheska Kompania EAD ("**NEK**") which owns 30 hydro power plants ("**HPP**") and pumped-storage power plants ("**PSPPs**") with total installed capacity of 2,713 MW which, in 2017, accounted for 5 per cent. of Bulgaria's total electricity generation.<sup>5</sup> NEK is also the public supplier of electricity and the supplier of last resort of electricity in the country;
- Elektroenergien Sistemen Operator EAD ("**ESO**") which owns and operates the country's high voltage electricity transmission grid. It also provides the centralised dispatching of the national electric power generation system. In 2015, ESO was certified as an Independent Transmission Operator ("**ITO**") of the Bulgarian electricity transmission system;
- Bulgartransgaz EAD ("**Bulgartransgaz**") which is the owner and operator of Bulgaria's gas transmission and gas transit networks and also operates the only gas storage facility in Bulgaria. In 2015, Bulgartransgaz was certified as an ITO of the Bulgarian gas transmission system;

---

<sup>2</sup> Source: ESO 2017 energy balance

<sup>3</sup> Source: ESO 2017 energy balance

<sup>4</sup> Source: ESO 2017 energy balance

<sup>5</sup> Source: ESO 2017 energy balance. Including pumped storage hydro power plant generation

- Bulgargaz EAD ("**Bulgargaz**") which is the public supplier of gas in the country; and
- Mini Maritsa Iztok EAD ("**MMI**") which operates an open pit lignite coal mine which accounted for 92 per cent. of coal extracted for the production of electricity in Bulgaria in 2016.<sup>6</sup> It supplies the Group's TPP as well as other customers.

BEH and its subsidiaries are participating in three gas pipeline projects between Bulgaria and Greece, Serbia and Turkey, respectively, which are at different stages of development. These projects include the Interconnector Greece-Bulgaria, Interconnector Turkey-Bulgaria and Interconnector Bulgaria-Serbia. In November 2016, the gas pipeline project between Bulgaria and Romania, Interconnector Bulgaria-Romania, became operational. There is the potential for future expansion of the transmission capacity of Interconnector Bulgaria-Romania with the construction of a compressor station in Romania.

## HISTORY

BEH is a successor of the state-owned company Neft i Gas (Oil and Gas) which was established in 1973. In 1990, the company was renamed Bulgargaz and, in May 1993, it was restructured as a sole owner joint-stock company in accordance with a Decree of the Council of Ministers dated 12 May 1993 for an indefinite period.

In October 2006, Bulgargaz was transformed into Bulgargaz Holding EAD through the spin-off of two sole-owner joint stock companies, Bulgartransgaz EAD and Bulgargaz EAD. Bulgartransgaz EAD and Bulgargaz EAD became legal successors of the respective parts of the property (rights and obligations) of the former Bulgargaz.

In September 2008, Bulgargaz Holding EAD was renamed Bulgarian Energy Holding EAD and its capital was increased through an in-kind contribution at par value of all the shares in the capital of NEK, NPP Kozloduy, TPP Maritsa East 2 and MMI.

In the beginning of 2014, two new subsidiaries were added to the Group: Independent Bulgarian Energy Exchange EAD ("**IBEX**") and ESO. ESO became a wholly owned subsidiary of BEH having been unbundled from NEK effective on 14 February 2014. IBEX was established in January 2014 with the aim of establishing and operating a power exchange in a day ahead market and a long term bilateral contracts market for the Bulgarian market zone.

In July 2015, IBEX launched the day ahead power exchange and, in October 2016, it launched a bilateral power contracts market. In April 2018, it launched the intraday power market. BEH divested IBEX to the Bulgarian Stock Exchange AD, in February 2018 in accordance with Decision C (2018) 572 of the European Commission (the "**EC**") dated 26 January 2018.

## STRATEGY

As a state-owned energy group, the Group's mid- to long-term strategy is synonymous with the Bulgarian state's energy policy. This policy seeks to guarantee the security of Bulgaria's energy supply, its independence through the diversification of suppliers and supply routes and to preserve and develop the specific advantages of the Bulgarian energy sector and its position in the regional and European markets, while strictly complying with the requirements of European and Bulgarian legislation. Within this context, BEH was established to ensure strategic and efficient management of its constituent business units and to secure the preservation and development of specific advantages of the Bulgarian energy sector and Bulgaria's position in the regional and European markets.

---

<sup>6</sup>Source: 2017 Bulletin on the State and Development of the Energy Sector in the Republic of Bulgaria issued by the Ministry of Energy - [https://me.government.bg/files/useruploads/files/buletin\\_energy\\_2017.pdf](https://me.government.bg/files/useruploads/files/buletin_energy_2017.pdf)

The Group's strategy focuses on completing a range of priority infrastructure projects and achieving goals set by its shareholder to enhance its position in the national and regional energy sector. The capital expenditure associated with the Group's priority infrastructure projects is discussed under "*Financial Review—Liquidity and capital resources—Capital expenditure*". The Group's priority infrastructure projects include:

### ***Electricity***

- guaranteeing the security of Bulgaria's electricity supply;
- the rehabilitation and expansion of the transmission network;
- the extension of the useful lives of its existing nuclear facilities;
- maintaining the electricity generation balance through investments in generation facilities;
- an increase in exports to strengthen the position of Bulgaria as a strategic net exporter in South Eastern Europe; and
- achieving a liberalised, transparent, integrated and competitive electricity market.

### ***Natural gas***

- guaranteeing the security of Bulgaria's gas supply;
- diversification of sources and routes for supply of natural gas through the completion and operation of reversible interconnectors with Greece, Turkey and Serbia;
- expansion of the existing Chiren gas storage facility;
- modernisation and expansion of the existing gas network;
- solidification of its position as a strategic regional gas player through the development of the Balkan Gas Hub; and
- construction of a new gas storage facility.

### ***Lignite Coal mining***

- guaranteeing the security of Bulgaria's lignite coal supply;
- maintaining the production capacity of MMI and improving the efficiency of open pit mining, which includes investment in new heavy mining equipment; and
- continue satisfying the requirements of the thermal power plants in the Maritsa East complex.

### **Other strategic goals**

The Group's other strategic goals include:

- improving the opportunities for capital investment in the Bulgarian energy sector;

- introducing and applying best management practices by attracting the best management in the sector;
- increasing the efficiency and efficacy of its activities by investing in new technology-based solutions for the optimisation of product processes; and
- advancing the quality of its human capital through training and developing its current and new employees.

## COMPETITIVE STRENGTHS

The Group's principal competitive strengths include:

### State ownership and strategic importance

BEH is 100 per cent. owned by the Bulgarian state through the Minister of Energy and there are no plans for the privatisation of the company in the foreseeable future. The government created BEH with the aim of consolidating state-owned assets in the energy sector, including the regulated monopolist gas and electricity network operators, and views the company as instrumental to implementing the government's energy strategy. All important decisions of the Group are subject to approval by the Minister.

The Group's activities make a significant contribution to the national GDP (6.5 per cent. in 2017)<sup>7</sup> and to the energy security and economic growth of Bulgaria. The Bulgarian government views the Group as the state's strategic asset in the electricity and gas markets. The strong links with the state are evidenced by state guarantees for approximately 8 per cent. of the Group's debt accumulated as at 31 December 2017, a cash capital injection by the state of BGN 400 million in 2009, as well as interest-free reimbursable financial aid of EUR 601,617,133 (BGN 1,176,660,837) provided to NEK by the Bulgarian government in 2016 and strong operational ties between the Bulgarian government and the Group. Furthermore, the Bulgarian government has earmarked EUR 110 million for a state guarantee of the Interconnector Greece-Bulgaria project. BEH subsidiaries are identified as entities of the critical energy infrastructure, the impairment or destruction of which would have material consequences for vitally important public functions, the health, safety, security, economic or social welfare of the population of Bulgaria. Moreover, the Issuer (but none of its subsidiaries) is included in the "banned for privatisation" list of companies that may not be subject to privatisation under the Privatisation and Post-privatisation Control Act ("PPCA"), except with the prior consent of the National Assembly of the Republic of Bulgaria. The Group operates as a department of the Ministry of Energy and is its instrument for implementing policy in the energy sector. As such BEH is mandated to manage all important state projects in the energy sector, including the collaboration from 2015 to 2017 with the World Bank on developing policy recommendations and a road map for energy sector reform and the collaboration from 2017 to 2018 with the Bulgarian Academy of Sciences for developing analyses to serve as the basis for the national energy strategy. Legislative and regulatory changes implemented since 2015 have significantly improved NEK's and, accordingly, BEH's financial position. See "*Regulation, Environment and Health and Safety — Regulation*". Government support also helps to ensure favourable positioning for the Group in negotiations with international partners.

Since 2015, the government has successfully implemented amendments to the legal framework aimed at stabilising the sector by eliminating the formation of new tariff deficits as well as the gradual recovery of the accumulated tariff deficit in NEK. This tariff deficit accumulated between 2012 and the first half of 2015 as a result of NEK's role as the single buyer and public supplier of electricity in Bulgaria. For a discussion on how these deficits accumulated, see "*Business Description — Business — NEK*" below. The measures have led to a significant improvement in NEK and BEH's financial position in a short period of time (NEK has not incurred new tariff

---

<sup>7</sup> Source: National Statistics Institute, BEH

deficits from its regulated activities since August 2015) by establishing a legal and regulatory framework which enabled direct cash inflow to NEK. In 2018, the Bulgarian government has taken significant steps on the path to full liberalisation of the Bulgarian energy market, further reducing the role of NEK as the single buyer and public supplier of electricity in Bulgaria and increasing the opportunities for the Group's energy producers to sell electricity at market prices, see "*Regulation, Environment and Health and Safety — Regulation — Amendments to the legal and regulatory framework*" below.

### **Leading position in the Bulgarian electricity and gas markets and diversified business mix**

The Group's activities are broadly diversified within the energy sector and include:

- electricity generation through the only NPP in Bulgaria, through the largest TPP and a number of HPPs, as well as the high voltage electricity transmission and sale (including exports);
- natural gas transmission and transit, natural gas storage and the sale and purchase of natural gas; and
- lignite coal mining and sales.

The Group has a dominant and diversified position in the Bulgarian electricity and gas markets. BEH owns approximately 6.3 GW of power generation assets representing 52 per cent. of the installed capacity in Bulgaria in 2017. Through its ownership of the only nuclear power plant and the largest thermal and hydro power plants in Bulgaria, it generated gross 26.8 TWh of electricity accounting for 59 per cent. of Bulgaria's total electricity generation in 2017.<sup>8</sup> The Group has a regulated monopoly position in electricity and gas transmission as well as in public supply of electricity and natural gas. It is the sole licensed natural gas transit company in Bulgaria. Furthermore, the Group is the sole supplier of lignite coal to the thermal power plants in the Maritsa East basin.

Bulgaria has a competitively priced generation mix. Bulgaria is a net electricity exporter with net exports in the range of 5.5-10.5 TWh per year for the last five years (around 5.5 TWh in 2017) depending on demand. Interconnector capacity with traditional export destinations (Greece, Turkey, Serbia and Macedonia) is 2,000 MW and is extensively utilised. Demand from export markets is expected to remain high in the near term. The Group's operations are based in a single, well developed, strategic geographic hub with significant exports to neighbouring countries.

### **High quality assets with long remaining lives**

The Group owns a significant proportion of Bulgaria's strategic energy assets, including the electricity and gas transmission networks and the two largest power plants in Bulgaria, one of which is nuclear powered and the other is lignite-fired. As at 31 December 2017, the Group had consolidated assets of BGN 17.5 billion, making it the largest state-owned company in Bulgaria. The Group's assets are high quality and either have long remaining lives or are in the process of having their lives extended.

### **Operating in a stable economic environment**

Bulgaria has a track record of GDP growth above the EU average and 3.8 per cent. cumulative real GDP growth is forecasted for the 2018-2020 period by the Bulgarian Ministry of Finance, with forecasted yearly GDP growth of 3.9 per cent. in 2018, 3.8 per cent. in 2019, 3.7 per cent. in 2020 and 3.7 per cent. in 2021.<sup>9</sup> The country has the

---

<sup>8</sup> Source: ESO 2017 energy balance, NEK

<sup>9</sup> Source: Ministry of Finance 2018-2020 budget forecast - <http://www.minfin.bg/bg/1154>

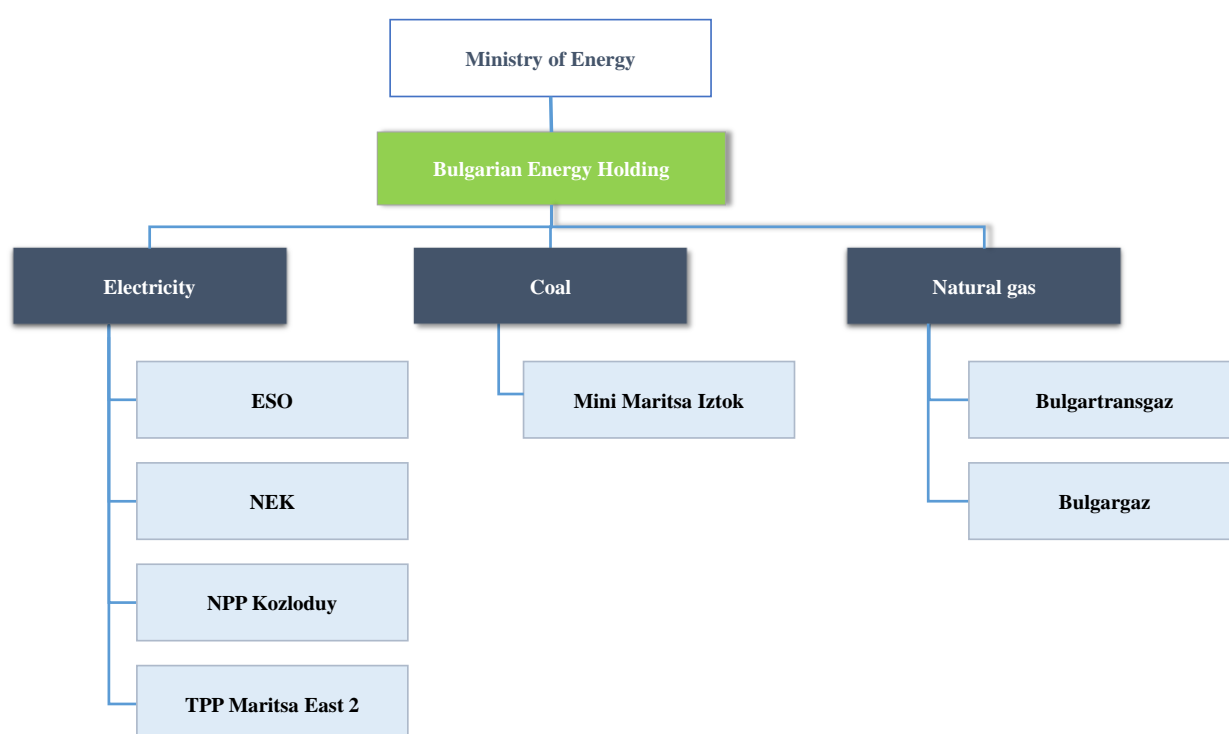
third lowest government debt / GDP ratio among EU members<sup>10</sup> and has a strong track record of government debt consolidation.

Since 2007, Bulgaria has been an EU member which provides financial support and incentives for ongoing reforms, including in the energy sector. It also supports the political and monetary stability of the country. Bulgaria has a stable monetary policy framework, based on a Currency Board Regime, which continues to provide stability and guidance, and helps control inflation. BGN has been pegged to the Euro since 1999, supported by significant international reserves maintained by the Bulgarian National Bank.

## BUSINESS

### Structure

As at the date of this Prospectus, the Group comprises BEH (which is a holding company) and seven wholly-owned subsidiaries as shown in the diagram below:



### Electricity

The Group's electricity business is carried out by four of its subsidiaries: NPP Kozloduy, TPP Maritsa East 2, NEK and ESO. NPP Kozloduy, TPP Maritsa East 2 and NEK generate electricity through a nuclear power plant, a thermal power plant and multiple hydro power plants, respectively and sell their electricity on the regulated and free markets (including the balancing market). NEK also buys electricity on the regulated market. NEK's principal customers are the four end suppliers and, in its capacity as the supplier of last resort, approximately 30 customers who are connected to the high voltage grid. NEK also exports electricity via its joint venture Transbalkan Electric Power Trading Greece Sale of electricity S.A. – NECO S.A. ESO is responsible for electricity transmission and owns and operates Bulgaria's high-voltage electricity grid.

<sup>10</sup> Source: Eurostat

The Electricity segment's revenue was BGN 5,318 million in 2017 compared with BGN 5,095 million in 2016. The table below shows the Group's gross electricity generation mix for each of the two years ended 31 December 2016 and 2017.<sup>11</sup>

	2017	2016
	<b>Gigawatt Hours ("GWh")</b>	
	<i>Thousands</i>	
Nuclear power plant generation	15.6	15.8
Thermal power plant generation	8.9	8.2
Hydro power plant generation	2.3	3.1
<b>Total generation</b>	<b>26.8</b>	<b>27.1</b>

#### ***NPP Kozloduy***

NPP Kozloduy owns and operates the only nuclear power plant in Bulgaria. The NPP is located 200 km north of Sofia on the Danube River and covers a total area of 4,471 hectares. The NPP is Bulgaria's main electricity generation plant, providing more than one third of the country's electricity. It is undergoing a substantial modernisation programme and generates the cheapest electricity in the country.

The NPP was designed to operate with six pressurised water reactor units of Russian VVER design with a total electricity generation capacity of 3,760 MW. However, partly in order to comply with Bulgaria's commitments to the European Union, the operation of four reactors has ceased and the NPP currently comprises only two reactor units with a total capacity of 2,000 MW. NPP Kozloduy is implementing an investment strategy designed to extend the operating lifecycle of the two existing units (unit 5 and unit 6) by 30 years until 2047 and 2051, respectively. The work on unit 5 is complete and assessments on the unit indicate that the work has been successful in ensuring the safe operation of the unit for the period up to 2047. Work on unit 6 is ongoing. The operational licence for unit 5 was renewed for a new ten-year period in 2017 by the Bulgarian Nuclear Regulatory Agency (the "**BNRA**"). The operational licence for unit 6 will expire in 2019 and is expected to also be renewed for a ten-year period. The BNRA can grant licences for a maximum period of ten years.

In parallel, NPP is currently executing an investment project intended to increase the heat capacity of the two units by up to 104 per cent.

The NPP obtains its nuclear fuel under long-term contracts from a Russian supplier, JSC TVEL. The NPP sells electricity to NEK, approximately 20 other customers (industrial companies and energy traders) and on the Bulgarian energy exchange. Prices and volumes under the nuclear fuel supply contract are agreed periodically. In 2017, NPP Kozloduy sold approximately 24.0 per cent. of its electricity to NEK on the regulated market. In 2016, NPP Kozloduy sold approximately 30.3 per cent. of its electricity to NEK on the regulated market. The remaining sales were made on the free market and energy exchange at commercially negotiated prices.

---

<sup>11</sup> Source of indicative figures: ESO energy balance

In 2017, the NPP generated 15,545 GWh of electricity, equal to 34.1 per cent. of Bulgaria's total electricity generation. In 2016, the NPP generated 15,779 GWh of electricity, equal to 34.9 per cent. of Bulgaria's total electricity generation. The slight reduction in electricity generation in 2017 was due to a higher level of planned outages related to the implementation of the project for the extension of the useful life of unit 5 (which involved the replacement of the stator of the generator) and due to the investment project for increasing the heating capacity of the two units by up to 104 per cent.

More than 3,715 people worked at NPP Kozloduy as at 31 December 2017, which makes it a major employer in Bulgaria.

Safety is NPP Kozloduy's main priority and it is subject to independent state surveillance by the Nuclear Regulatory Agency of the Bulgarian Council of Ministers. NPP Kozloduy's safety has been assessed by the International Atomic Energy Agency and other international bodies including the World Association of Nuclear Operators ("WANO"). The most recent corporate peer review carried out by WANO in 2017 which focused on corporate organisational effectiveness showed that NPP Kozloduy is sufficiently funded to maintain the highest safety standards. Environmental protection is also a fundamental issue. The plant monitors the background gamma radiation at its site through an automated information system and the levels of this radiation have remained consistent with those existing prior to the plant's commissioning.

Council Directive 2011/70/Euratom of 19 July 2011 established a community framework for the responsible and safe management of spent fuel and radioactive waste and these provisions were implemented in Bulgaria through the Act on the Safe Use of Nuclear Energy. The Directive requires that Member States present national programmes, indicating when, where and how they will construct and manage final spent fuel repositories guaranteeing the highest safety standards. Bulgaria's National Nuclear Fuel Management Strategy was adopted by the Bulgarian Council of Ministers in 2004 and will remain in force until 2030. In 2015, the strategy was updated. The strategy provides that, if certain favourable financial and economic conditions are met, NPP Kozloduy will cover the annual transportation and associated costs for at least 50 tonnes of spent nuclear fuel ("SNF") from the NPP site under existing transportation, storage and processing contracts with Mayak Production Association. The transportation of this SNF creates capacity in the existing SNF repository for the storage of SNF created by units 5 and 6. NPP Kozloduy recognises provisions for the storage, processing and transportation of SNF based on management's best estimate of the costs of such services that will be incurred in the next reporting period. It last made such a provision in 2015, which was applied to the final transportation of SNF from the decommissioned units at the end of 2017. As at the date of this Prospectus, no further provisions have been made for transportation of SNF in the Financial Statements.

In November 1999, the Bulgarian government and the EC signed a Memorandum of understanding in which the Bulgarian government undertook a firm commitment to close and decommission units 1 to 4 of the NPP as part of its EU accession agreement. The Kozloduy International Decommissioning Support Fund ("KIDSF") was established and is administered by the European Bank for Reconstruction and Development, in order to support the decommissioning activities and to mitigate the negative consequences of the units' early closure. BEH has no obligations towards the KIDSF which is funded by the EU. Part of the purpose of the KIDSF is to assist in the necessary restructuring, upgrading and modernisation of the energy production, transmission and distribution sectors as well as to improve energy efficiency. The KIDSF decommissioning package provides grant financing for facilities designed to provide interim storage of the spent fuel and management of the radioactive wastes generated.

Pursuant to a decommissioning plan approved by the Bulgarian government in 2004, the four closed reactors at the NPP have been transferred to, and are being decommissioned by, a separate state-owned company and accordingly are no longer the responsibility of NPP Kozloduy. In relation to the remaining two units, NPP Kozloduy is required to pay annually an amount equal to 10.5 per cent. of its revenue from electricity sold, which amounted to BGN

95.5 million in 2017 and BGN 85.0 million in 2016, to decommissioning and radioactive waste funds. These are state-owned funds, under the governance of the Ministry of Energy. The level of contributions is the subject of regular assessments by the Ministry of Energy. See *"Risk Factors — The Group may become liable for increased decommissioning costs or be required to keep additional amounts as restricted funds for the decommissioning of its nuclear power plant."*

### ***TPP Maritsa East 2***

TPP Maritsa East 2 owns and operates the largest thermal power plant in Bulgaria. The TPP occupies 512 hectares and is one of the four thermal power plants at the "Maritsa East" complex. The TPP is fuelled by lignite coal obtained locally from the Group's coal extraction company, MMI. The TPP commenced operations in 1966 and currently comprises eight generation units and three flue-gas desulphurisation ("**FGD**") plants covering the output of all the generation units with around 96 per cent. efficiency. The installed generation capacity of the TPP was increased in 2014 from 1,600 MW to 1,620 MW following a rehabilitation process which extended the useful life of the facilities by 20 years. The Group's licence to operate the TPP expires in 2021 and is expected to be renewed. The Group is currently considering the feasibility of further extending the useful life of the plant to take advantage of the fact that MMI's coal reserves are expected to be sufficient to service the current usage for a period of between 60 and 70 years.

The TPP's principal supplier is MMI. The TPP primarily sells electricity on the free market while its principal customer on the regulated market is NEK. Averaged across 2016 and 2017, approximately 6.3 per cent. of the TPP's sales were to NEK and 2.6 per cent. were to ESO (activated cold reserve and balancing market) with the remaining majority of sales being made on the free market to industrial companies and electricity traders at commercially negotiated prices as well as on the Bulgarian energy exchange. The prices for sales to NEK are regulated by EWRC. The price for the availability of cold reserve (i.e. the available capacity of the plant to maintain a secure electricity system) is no longer determined by EWRC, as it was until 2013, and instead the cold reserve is tendered by ESO. The price at which the TPP purchases coal from MMI is set by the Minister of Energy. Volumes of purchased coal are based on the TPP's budget for the production and sale of electricity and are updated on a quarterly basis. The contract does not contain any take-or-pay arrangements.

In 2017, the TPP generated 8,932 GWh of electricity, equal to 19.6 per cent. of Bulgaria's total electricity generation. In 2016, the TPP generated 8,218 GWh of electricity, equal to 18.2 per cent. of Bulgaria's total electricity generation. The TPP's generation increased in 2017, principally as a result of higher domestic demand caused by the unusually cold weather at the beginning of 2017, which led to sales in excess of TPP Maritsa East 2's regulated quota to NEK, as well as activation by ESO of its cold reserve services.

See also *"Regulation, Environment and Health and Safety"* for a discussion of the impact of the EU's emissions trading system on the TPP.

Approximately 2,400 people worked at TPP Maritsa East 2 as at 31 December 2017, which makes it a major employer in Bulgaria.

### ***NEK***

NEK acts as the single buyer, public supplier and provider of last resort of electricity in Bulgaria. It has a central position in the Bulgarian electricity system. It generates power through 30 HPPs and PSPPs owned and operated by it with total installed capacity of 2,713 MW. NEK operates under a number of licenses issued by EWRC which are due to expire between 2027 and 2039. In the regulated market, NEK acts as a single buyer from certain power generators. Pursuant to the Bulgarian Energy Act and the regulatory framework, NEK is currently obliged to

purchase electricity at preferential prices set by EWRC from renewable energy source ("**RES**") producers up to the "net specific generation" determined by the regulator and from cogeneration producers for the quantities produced in compliance with highly efficient cogeneration criteria which are subject to being certified as such by EWRC. As of 1 July 2018, NEK's purchasing obligation relates only to RES and highly-efficient cogeneration producers with installed capacity of less than 4 MW, as the plants with installed capacity greater than 4 MW are obliged to sell their production on the free market. NEK is also obliged to purchase electricity at contractual prices from TPP AES 3C Maritsa East 1 EOOD ("**AES**") and TPP Contour Global Maritsa East 3 AD ("**Contour Global**") under their respective long-term power purchase agreements ("**PPAs**"). The PPAs oblige NEK to purchase a minimum quantity of electricity per year (3.2 million MWh from AES and 3.5 million MWh from Contour Global) as well as purchasing availability from AES and Contour Global, regardless of whether that minimum amount is used. The minimum payments for the remaining terms of the two PPAs amount to BGN 7.8 billion. The PPA with Contour Global expires in 2024 and the PPA with AES expires in 2026, however, the Bulgarian government is currently negotiating an earlier voluntary termination of the PPAs. This is expected to have a positive effect on NEK as it would no longer have to incur costs in purchasing electricity under the PPAs at above-market prices.

The amendments to the Bulgarian Energy Act that have applied from the start of the new regulatory period beginning on 1 July 2018 have reduced NEK's single buyer function and have required certain producers to sell electricity on the free market. Pursuant to the amendments, NEK now acts as a single buyer only in relation to (i) producers with preferential prices (i.e. RES and highly efficient cogeneration producers) with installed capacity of less than 4 MW and (ii) AES (670 MW) and Contour Global (908 MW) under their respective long-term PPAs. RES and highly efficient cogeneration producers with installed capacity of less than 4 MW, the total installed capacity of which is 1,008 MW, sold approximately 1,696 MWh to NEK in 2017 and 1,757 MWh in 2016, comprising approximately 30 per cent. of the total electricity NEK purchased from RES and highly efficient cogeneration producers. The total electricity purchased by NEK from AES and Contour Global under the PPAs was 7.3 million MWh in 2017 and 6.5 million MWh in 2016. All other producers are required to sell electricity on the power exchange. There is a transition period, until 1 January 2019, for the affected market participants to start complying with the new market structure during which time NEK will continue to be obliged to purchase electricity at preferential prices from producers that have not yet switched to the free market. However, during the transition period NEK is eligible to receive compensation from the Security of the Electricity System Fund ("**SESF**") in the form of premiums for the amount representing the difference between the preferential price NEK must pay and the market price, as determined by EWRC. See "*Regulation, Environment and Health and Safety — Regulation — Amendments to the legal and regulatory framework*" below for further information.

As the sole public supplier, NEK resells the purchased energy from the regulated segment to end suppliers at regulated tariffs set by EWRC and on the power exchange the quantities purchased from the affected RES producers during the transition period that runs until 1 January 2019. Between 2011 and 2015, there was an upward trend in generation costs due to the expansion of renewables stimulated by favourable feed-in-tariffs. However, the increased generation costs were not fully compensated by the electricity tariffs set by EWRC which led to the accumulation of tariff deficits in NEK. Since 2015, the Bulgarian government has successfully implemented amendments to the legal framework aimed at stabilising the sector by eliminating the formation of new tariff deficits as well as the gradual recovery of the accumulated tariff deficit in NEK. The measures have led to a significant improvement in NEK and BEH's financial position in a short period of time (NEK has not incurred new tariff deficits from its regulated activities since August 2015) by establishing a legal and regulatory framework which enabled direct cash inflow to NEK as well as a reduction of costs for purchasing electricity under its sole buyer obligation. The regulatory changes implemented in 2018 are expected to further improve the financial position of NEK. See "*Regulation, Environment and Health and Safety — Regulation — Amendments to the legal and regulatory framework*" below for further information.

As the public provider of electricity in Bulgaria, NEK is the single supplier of electricity at regulated prices to the four end suppliers and, in its capacity as the supplier of last resort, to around 30 customers who are connected to the high voltage grid. NEK also has a substantial role in the free market and also sells electricity on the Bulgarian energy exchange. NEK also used to be the sole provider of electricity for technological losses (i.e. electricity lost along the grid) at regulated prices to the four distribution companies and ESO, but as of 1 July 2018, the technological losses are purchased from the free market.

NEK is the owner of 30 HPP and PSPPs, with a total installed capacity of 2,713 MW in generating mode, and 937 MW in pumping mode. Most of the hydro power is generated by the 16 largest HPPs listed below, which have a total installed capacity of 2,673 MW. They are operated within four hydro power cascades: Belmeken - Sestrimo - Chaira; Batak; Vacha; and Dolna Arda. All of these HPPs are used to cover peak loads and to regulate the grid system. In 2017, the total electricity generated by NEK's HPPs and PSPPs amounted to 2,297 GWh, equal to 5 per cent. of Bulgaria's total electricity generation. In 2016, the total electricity generated by NEK's HPPs and PSPPs amounted to 3,089 GWh, equal to 6.8 per cent. of Bulgaria's total electricity generation. The decrease in 2017 was due to lower water levels in the dams and the need to preserve them.

The table below shows the electricity generation capacity of each of NEK's 16 largest HPPs.

Maximum installed capacity in MW			
HPP	Pumping mode	Generating mode	Type of plant
PSHPP Chaira	788	864	Pump storage plant
PSHPP Belmeken	104	375	Pump storage plant
HPP Sestrimo	-	240	Hydro power plant
PSHPP Orpheus	45	160	Pump storage plant
HPP Peshtera	-	136	Hydro power plant
HPP Kardjali	-	124	Hydro power plant
HPP Ivaylovgrad	-	120	Hydro power plant
HPP Momina klisura	-	120	Hydro power plant
HPP Tzankov kamak	-	86.3	Hydro power plant
HPP Studen kladenec	-	81.3	Hydro power plant
HPP Devin	-	88	Hydro power plant
HPP Krichim	-	80	Hydro power plant
HPP Aleko	-	71.4	Hydro power plant
HPP Teshel	-	60	Hydro power plant
HPP Batak	-	46	Hydro power plant
HPP Vucha I&II	-	21	Hydro power plant
<b>Total</b>	<b>937</b>	<b>2,673</b>	

HPPs have a high degree of flexibility in the regulation of their output. The ability to control HPPs centrally permits the Group to commence operation rapidly thereby facilitating the regulation of electricity output. Neither conventional storage nor pumped storage HPPs produce greenhouse gas emissions and HPPs represent an inexpensive source of electricity, particularly in periods of peak demand. In addition, PSPPs allow the productive use of excess electricity generated by base load plants by operating storage pumps in periods of low demand. NEK uses its HPPs and PSPPs to enable it to act as a balancing party. The PSPPs are mainly used to optimise the load of the nuclear and thermal power plants and to provide the necessary reserves for the grid system. The production of renewable energy is intermittent and dependent on the occurrence of the source (whether solar, wind or water), and

it is necessary to accumulate such energy in times of minimum load and utilise it to cover peak hours during the day.

NEK is focused on the rehabilitation and upgrade of its hydro power plants, as well as the construction of new hydro power facilities. NEK also monitors, maintains and repairs dams (with multi-year, yearly, seasonal, weekly and daily activities), as well as more than 500 water intakes and hundreds of kilometres of open-flow and pressurised water conveyance channels within the energy system.

The total capacity of the storage reservoirs operated by NEK represents 55 per cent. of the total controlled water resources of Bulgaria<sup>12</sup> Safety of the dams is ensured by regular technical inspection programmes, and all structures are equipped with control and instrumentation systems.

NEK operates its HPPs and PSPPs under a 35 year licence granted in February 2001. NEK also has a separate public supply licence which expires in 2039. NEK conducts electricity trading under a licence which expires in 2027.

In its capacity as the public provider of electricity, it buys and sells electrical energy in Bulgaria at regulated prices determined by EWRC and also at freely determined prices on the electricity market. Within Bulgaria, NEK concludes contracts with power producers and traders and, pursuant to the Bulgarian Energy Act, sells electricity to certain industrial customers that are directly connected to the transmission network. In 2016 and 2017, approximately 89 per cent. of NEK's sales were made on the regulated market.

NEK seeks to maintain and increase its market presence in the Balkan region. NEK also sells electricity on the Bulgarian energy exchange.

The table below shows NEK's purchases and sales of electricity in each of 2016 and 2017. The figures in the table include intra-Group transactions.

	2017	2016
	GWh	
<b>Electricity purchased</b>	<b>17,719</b>	<b>18,366</b>
Regulated market	17,665	18,002
Free market	54	364
<b>Electricity sold</b>	<b>19,355</b>	<b>20,780</b>
Regulated market	17,388	18,059
Balancing market	323	305
Free market and exports	1,644	2,415

### **ESO**

ESO owns, maintains and operates Bulgaria's 15,236 km national high voltage electricity transmission grid under a 35-year licence granted in December 2013. It also administers the balancing market for electricity, holds tenders for transmission capacity and provides the centralised dispatching of the national electric power generation system. It also cooperates with the power systems of other countries to ensure effective transmission.

All electricity generators and their customers in Bulgaria must use the Group's transmission system. All network users connected directly to the grid pay an initial connection fee, as well as access and transmission tariffs, which

<sup>12</sup> Source: NEK Annual Report 2017.

are determined by EWRC. The Bulgarian transmission network is also connected to the neighbouring systems of Greece, Romania, Turkey, Serbia and Macedonia. Turkey and Greece are the main export destinations for Bulgarian electricity. The transmission system operators of neighbouring countries coordinate the allocation and use of available transmission capacities through periodic auctions of capacity.

ESO is responsible for the maintenance, development and construction of the Bulgarian electricity transmission grid. It aims to provide high quality electricity service, while minimising transmission costs and guaranteeing reliability and security. In order to satisfy the transmission requirements of the network users and to achieve a high quality reliable transmission service, the network needs to be continuously maintained in accordance with prescribed standards and developed, built and expanded to meet increasing electricity demand. This maintenance includes the repair and replacement of overhead lines and underground cables, primary and secondary equipment, auxiliary plants, telecommunications equipment and building structures in sub-stations and switchyards.

In 2017, the volumes transmitted amounted to 39.2 TWh, which was the same volume as in 2016.

The National Dispatching Centre of ESO acts as an operator of the national power transmission system and performs centralised real time dispatching, control and supervision of the electrical power system ("EPS"). Its main assignment is to guarantee the reliable and efficient operation of the Bulgarian EPS and its synchronised operation with the partners in the European Network of Transmission Systems Operators for Electricity, known as the UCTE. There are four Regional Dispatching Centres covering the territory of Bulgaria.

The unbundling process was completed in 2015 when ESO was certified as an ITO confirming its independence in conformity with the Bulgarian Energy Act and Directive 2009/72/EC of the European Parliament and the Council of 13 July 2009, referring to the common rules for the internal electricity market and repealing Directive 2003/54/EC and Regulation (EC) № 714/2009 of the European Parliament and the Council of 13 July 2009, referring to the conditions for access to the network for cross-border electrical power exchange and repealing Regulation (EC) № 1228/2003.

## **Natural Gas**

The Group's natural gas business is carried out by Bulgargaz and Bulgartransgaz. Bulgargaz is the public supplier of natural gas, while Bulgartransgaz is responsible for the transmission and transit of natural gas through Bulgaria's gas transmission and transit networks and also operates a gas storage facility. The gas segment's revenue was BGN 1,490 million in 2017 compared with BGN 1,345 million in 2016.

### ***Bulgargaz***

Bulgargaz is principally engaged in the purchase and public supply of natural gas under a 35-year licence granted in November 2006. The public supply of natural gas is performed in accordance with the licences issued to Bulgargaz, the Bulgarian Energy Act and other secondary regulatory acts, which are in compliance with European legislation and the requirements of EWRC.

Substantially all of the gas purchased by Bulgargaz is imported from Russia under long-term take-or-pay contracts with Gazprom Export. In November 2012, Bulgargaz and Gazprom Export entered a new 10-year gas supply contract with an option, at the discretion of each party, for renegotiation after the sixth year. No renegotiation of the contract is expected in 2018. The contract covers gas volumes of 2.8 billion cubic metres per year and the price formula is linked to the prices of oil derivative products. The contract has resulted in an approximate 20 per cent. reduction in the prices previously paid by Bulgargaz. The contract contains an 80:20 take-or-pay provision, which is more favourable than the previous 90:10 provision. In addition, approximately 0.15 per cent. of the gas

purchased by Bulgargaz in 2016 and 2017 was purchased from a local producer under a purchase agreement with prices and volumes being agreed on a periodic basis.

Bulgargaz supplies gas to approximately 200 customers including end suppliers, district heating and industrial customers directly connected to the transmission network. All of Bulgargaz's current gas supply agreements with customers in Bulgaria terminate on 31 December 2018 and are expected to be renewed. The customers request the quantities of gas they require on a daily, weekly, monthly and quarterly basis and pay on a monthly basis for the gas supplied. The standard customer contract provides for two payment methods: (i) if the customer provides a bank guarantee then payments can be made in arrears; (ii) otherwise payments are made in two monthly instalments in advance with credit or debit notes issued by Bulgargaz after the month of delivery to reflect the difference between the invoiced quantities and the quantity of gas actually received by the customer.

If a particular customer requests a certain quantity of gas which is more than 5 per cent. over the agreed daily quantity specified in the agreement, for each day of the month that a quantity above the agreed daily quantity is provided the customer must pay a 10 per cent. premium on the additional quantity of gas requested above the permitted 5 per cent. threshold.

Where deliveries are evenly spread, if a customer requests a quantity which is more than 20 per cent. below the agreed daily quantity specified in the agreement, the customer must pay an additional 10 per cent. on the gas price for the unused quantities which exceed the allowed 20 per cent. limit on the days on which the deliveries were below the agreed daily quantity. Where deliveries are unevenly spread, if a customer requests a quantity which is more than 10 per cent. below the agreed daily quantity specified in the agreement, the customer must pay an additional 10 per cent. on the gas price for the unused quantities which exceed the allowed 10 per cent. limit on the days on which the deliveries were below the agreed daily quantity.

All customers are required to provide, by 31 August each year, an annual forecast of the natural gas that they require for the next calendar year. At the end of the year, if a customer has taken less than 80 per cent. of the agreed annual quantity, Bulgargaz will charge the customer for 50 per cent. of the amount due for the quantities which were not accepted by the customer at a weighted average price for the relevant year. The customer is given the option to accept the unused quantities in the following two years as per a schedule proposed by the customer in which case the customer pays the remaining 50 per cent. of the quantities at the price for the relevant month of delivery.

The prices at which Bulgargaz sells gas are regulated by EWRC. The selling price is determined on a quarterly basis based on the expected cost paid and the expected quantities of natural gas to be purchased by the public supplier for the forthcoming quarter.

The table below shows the volumes of natural gas purchased and sold by Bulgargaz in each of 2017 and 2016. The increase in natural gas sales in 2017 compared to 2016 was caused by the higher consumption of gas by customers in all major segments, including chemicals, energy, distribution companies, glass production, metallurgy and construction materials.

	2017	2016
	<b>MWh</b>	
Natural gas purchases	33,421	32,103
<i>of which, imports</i>	33,260	32,059

Natural gas sales

33,581

32,359

### ***Bulgartransgaz***

Bulgartransgaz owns, operates and maintains the 1,835 km Bulgarian gas transmission grid and is engaged in the storage, transit and transmission of natural gas and the maintenance, operation, management and development of an underground gas storage facility. It also operates the 930 km gas transit network that enables it to transit Russian gas from Romania to Greece, Macedonia and Turkey under ship-or-pay contracts, solely with Gazprom Export. There is a separate contract between Gazprom Export and Bulgartransgaz EAD as a transiter. This transit contract was signed in 1998 with Gazprom Export. In 2006 the contract was extended to 2030. The transit price is calculated in USD per 1,000 m<sup>3</sup> of transited gas over 100 km and is indexed annually with inflation for the previous year. The licences in respect of each of these activities were granted for a period of 35 years in November 2006.

The activities for transmission, transit and storage of natural gas are performed in accordance with the licences issued to Bulgartransgaz, the Bulgarian Energy Act and other secondary regulatory acts, which are in compliance with European legislation and the requirements of EWRC. The transmission and gas storage markets are regulated.

The table below shows information relating to the Bulgarian gas transmission and transit networks in each of 2017 and 2016. The increase in natural gas transmitted in 2017 compared to 2016 was caused by the higher consumption of gas by customers.

	2017	2016
	Mlnm <sup>3</sup>	
Natural gas transmission grid capacity	7,400	7,400
Natural gas transit grid capacity	17,800	17,800
Natural gas transmitted	3,541	3,414
Natural gas transited	16,387	14,620

Bulgartransgaz also owns Chiren Under Ground Storage Facility ("**Chiren UGS**"), which is the only underground gas storage facility in Bulgaria. Chiren UGS has 23 exploitation wells, a compressor station with total installed power of 10 MW and other technological installations necessary for ensuring the injection, withdrawal and quality of the stored natural gas. The seasonal swings in the supply and consumption in the country are covered by the natural gas quantities stored in Chiren UGS.

The capacity of Chiren UGS is currently 550 million m<sup>3</sup> of gas storage. In addition, there is 750 million m<sup>3</sup> of buffer gas which cannot be exploited because it serves to maintain storage pressures. The maximum daily flow is 4.2 million m<sup>3</sup> for extraction and 3.2 million m<sup>3</sup> for compression. Bulgartransgaz's investment programme includes a project to expand the capacity of Chiren UGS which is due to be completed by 2022. The project aims to achieve a larger storage capacity (up to 1 billion m<sup>3</sup>) and higher average daily flow rates for extraction and compression (to 8 million and 10 million m<sup>3</sup>, respectively).

In 2015 Bulgartransgaz was certified as independent transmission operator of the Bulgarian gas transmission system with EWRC's Decision No. C-4 of 22 June 2015 in line with the requirements of Directive 2009/73/EC of

the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, Regulation (EC) No.715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and Chapter Eight "a" of the Energy Law. The Decision was approved in line with the opinion of the EC of 22 April 2015.

As of 2017, the "entry-exit" model was introduced as part of the methodology for determining the prices for access to and transmission through the gas transmission network. The methodology is approved by EWRC and incorporates different price zones depending on the entry-exit points, in compliance with transparent pricing principles. The transparent pricing principles require prices to be applied in a non-discriminatory manner to users of the respective networks, taking into account the need for integrity of the networks, the reflection of actual costs required for the provision of natural gas transmission services and the inclusion of economically justified returns on existing assets and new investments. Price formation is based on the "revenue cap" approach, where the regulatory period can be between two and five years. This is currently set to three years for 2017-2019. After a regulatory review, EWRC approves the required revenues for the first year of the regulatory period and may amend them at the end of each price year or at the end of the regulatory period.

In December 2014, the Bulgarian government proposed to the European Commission to build an EU-funded regional gas distribution centre (the "**Balkan Gas Hub**") near the Black Sea port of Varna to dispatch gas deliveries to Greece, Romania, Hungary, Croatia, Slovenia and, via those countries, to EU member states in central and western Europe, as well as to non-EU states including Serbia, Macedonia, and Bosnia and Herzegovina. The intention is that natural gas can be fed into the Balkan Gas Hub from a variety of sources including from Russia, from Bulgaria's potential gas deposits in the Black Sea or, via interconnectors with Greece and Turkey, from the Caspian region or the Eastern Mediterranean, or from the Greek and Turkish LNG terminals. The goal of the Balkan Gas Hub is to connect the natural gas markets of the region and ensure energy security in South-Eastern Europe.

The Balkan Gas Hub is being developed by Bulgartransgaz and is currently at the feasibility study phase. The outcome of the feasibility study, which is due in July 2018, will determine the further development of the project.

### ***Gas pipeline projects***

Directly or through its subsidiaries, BEH is currently participating in three gas interconnection pipeline projects between Bulgaria and Greece, Serbia and Turkey, respectively, which are at different stages of development. The Group also participated in the completed gas interconnection pipeline project connecting Bulgaria and Romania.

For the development of the gas pipeline connecting Bulgaria to Greece ("**IGB**"), the Group is involved via an equally held joint venture with IGI Poseidon S.A. (which itself is an equally held joint venture between DEPA S.A. and Edison S.p.A). IGB will connect South-eastern Europe with natural gas supplies from the Caspian region, the Middle East and East Mediterranean. Imported gas through IGB can be transited to neighbouring countries and beyond via other interconnectors. IGB is intended to have an annual capacity of 3 billion cubic metres. BEH's projected share of the capital expenditure for the project is estimated to be EUR 110 million. IGB has been included in the EU list for Projects of Common Interest and is the beneficiary of a EUR 45 million grant and the project is applying for additional grant funding in the amount of up to EUR 40 million. It is a project of national importance and has a committed state guarantee from the Bulgarian government of up to EUR 110 million and will reduce Bulgaria's dependence on Russian gas transported through Ukraine. IGB is expected to become operational in the second half of 2020.

The Group is involved in the development of a gas pipeline connecting Bulgaria to Serbia known as Interconnector Bulgaria-Serbia ("**IBS**") which will connect the national transmission networks of Bulgaria and Serbia and aims to

ensure diversification of routes, interconnection and natural gas transmission to Serbia using the planned new entry points with Turkey and Greece and the significant available capacity of the Bulgarian gas transmission system. In times of crises it could be used for natural gas supply to Bulgaria from Serbia. IBS has been included in the EU list for Projects of Common Interest. IBS is intended to have an annual capacity of 3 billion cubic metres. IBS has not yet reached its construction phase.

Bulgartransgaz is participating in the development of the gas pipeline connecting the gas networks of Bulgartransgaz and Botas (Turkey) known as Interconnector Turkey-Bulgaria ("**ITB**"). It is undertaking this project to aid the diversification of gas supply sources, gas supply partners and routes, thus increasing the security of supply in the Balkan region and the development of competition. The project is crucial for the security and diversification of the sources and routes of natural gas supply to/through Bulgaria and the region. When complete, ITB is expected to have access to all existing and future entry points and sources of natural gas from Turkey and Azerbaijan and LNG supplies from the existing terminals in Turkey. ITB is intended to have an annual capacity of 3 billion cubic metres. The ITB project has not yet reached its construction phase.

The gas pipeline connecting Bulgaria and Romania ("**IBR**"), in which Bulgartransgaz co-operated with its Romanian counterpart Transgaz S.A. to connect the transmission systems of the two countries, went into commercial operation in November 2016. IBR has a maximum capacity of 1.5 billion cubic metres per year and the current volumes in the direction of Romania are 0.3 billion cubic metres per year. Further construction of a compressor station in Podishor in Romania by Transgaz S.A., to equalize the pressures of the gas transmission networks of the two countries, will allow for transportation of volumes in the direction of Bulgaria.

### **Lignite Coal**

MMI is engaged in open pit mining of lignite coal and operates the largest lignite coal mine in Bulgaria under a 35-year concession granted by the Bulgarian government in July 2008. The coal produced is sold to four thermal power plants including the Group's TPP, all of them located in the Maritsa East complex. MMI produces all of the coal briquettes and over 90 per cent. of the lignite coal required for thermal power plant energy production in Bulgaria. The electric power generated within the Maritsa East complex accounted for 38 per cent. of the total electricity power generation in Bulgaria in 2017.

The production area of the coal mine is approximately 240 square kilometres and it has reserves of approximately 2 billion tonnes (of which 820 million tonnes are proven reserves and 1,110 million tonnes are expected reserves). The maximum extraction capacity of the mine is 35 million tonnes annually. The total lignite coal extracted by MMI in 2017 amounted to 30.3 million tonnes compared to 27.8 million tonnes in 2016. The increase in 2017 was mainly due to increases in the TPP's coal consumption because of higher electricity demand during the unusually cold weather at the beginning of 2017 compared to 2016. The coal segment's revenue was BGN 566 million in 2017 compared with BGN 508 million in 2016.

### **IBEX**

BEH divested IBEX to the Bulgarian Stock Exchange AD in February 2018, as per Decision C(2018) 572 of the EC dated 26 January 2018 and the change of the ownership of IBEX was registered in the Commercial Register on 15 February 2018.

IBEX was originally set up after the EC commenced an investigation into potential market abuse by BEH in 2012 and in response to the EC's concerns, BEH established a new subsidiary company, IBEX, which was to have the task of establishing an efficient day-ahead market for commercial trades on the Bulgarian wholesale electricity market in a consistent, impartial, independent, transparent and non-discriminatory manner through establishing the

day-ahead market platform. The EC issued a decision on the case in December 2015 accepting the proposed commitments and effectively terminating the proceedings against BEH.

As at 31 December 2017, IBEX accounted for 0.5 per cent. of the Group's consolidated total assets (compared to 0.1 per cent. as at 31 December 2016) and its revenues from intermediation fees generated 0.06 per cent. of the Group's consolidated revenue in 2017 (compared to 0.04 per cent. in 2016).

## SHAREHOLDER

The Republic of Bulgaria, through the Minister of Energy, is the sole owner of BEH. BEH has strong operational ties with the Bulgarian state. It operates as a department of the Ministry of Energy and is its instrument for implementing policy in the energy sector. The Bulgarian government is directly involved in the management of the Group which is mandated to manage all important Bulgarian government projects in the energy sector, including the completed collaboration with the World Bank for developing policy recommendations and a road map for energy sector reform and the completed collaboration with the Bulgarian Academy of Sciences for developing analyses to serve as the basis for the national energy strategy. The Bulgarian government has also guaranteed approximately 8 per cent. of the Group's debt accumulated as at 31 December 2017 and has earmarked EUR 110 million to guarantee the IGB project. The Group was the biggest state-owned company in Bulgaria in terms of assets as at 31 December 2017. BEH is included in the "banned for privatisation" list as per Appendix 1, Article 3, para 1 of Bulgarian Privatisation and Post-Privatisation Control Act, which means that it cannot be privatised without a change in law.

The Minister of Energy (the "**Minister**") acts as, and is entitled to all the rights of, the General Assembly of BEH. The powers of the Minister are regulated by the Commerce Act, the rules of procedure for exercising the rights of the Bulgarian state in companies with a Bulgarian state shareholding and the Articles of Association of BEH (the "**Framework**").

The Framework does not provide the Minister with direct powers regarding BEH's subsidiaries, and the governance and administration of the subsidiaries remains the responsibility of BEH's management.

The Framework provides the Minister with a wide range of powers, including the power to:

- amend BEH's Articles of Association;
- increase or decrease BEH's share capital;
- transform or dissolve BEH;
- appoint and dismiss BEH's directors and determine their remuneration; and
- approve BEH's business plan.

In addition, certain significant transactions can only be executed by BEH with the approval of the Minister. This includes the execution of loan agreements, disposals of fixed assets, the purchase and sale of shares in other companies, joint ventures, the settlement of litigation and the provision of security over Group assets.

Bulgarian legislation does not differentiate between the ordinary customers of the Group and the Bulgarian government as a customer. As a result, the Bulgarian government does not benefit from any favourable commercial treatment, although the Bulgarian government is also not a major commercial client of the Group.

As of 31 December 2017 the share capital of BEH was BGN 3,397,756,827, divided into 3,397,756,827 shares of par value of BGN 1 each. The entire share capital has been subscribed and fully paid up. BEH's shares are ordinary, registered, non-preferential voting shares.

According to their articles of incorporation, BEH's subsidiaries are each required to allocate as dividends to BEH a certain percentage of their profit after tax and allocation to reserves. BEH is not taxed on these dividends.

As a state-owned company, BEH's own dividend payments are determined annually by the Minister of Energy in accordance with the Decision of the Council of Ministers. The Bulgarian government has a strong interest in maintaining BEH's balance sheet but under Bulgarian law state owned companies are required to distribute to the Bulgarian state dividends of up to 50 per cent. of the profits disclosed in their consolidated financial statements. On 29 June 2018, the Ministry of Energy determined that a dividend of 25 per cent. of the net consolidated profit for 2017, amounting to BGN 29.7 million, would be paid out in 2018, and the funds were transferred from BEH to the State budget on 12 July 2018. In addition, the sole owner decided that the remaining individual profit of BEH for 2017, totalling BGN 65 million, would be allocated to share capital increase.

## COMPETITION

The Group is the leading electricity generator in Bulgaria and has an approximate 59 per cent. share of the electricity generation market.<sup>13</sup> It is also the sole operator of the electricity and gas transmission networks. As a result, the Group principally competes with other generation companies in Bulgaria, although the Group is the only generator with a mixture of nuclear, thermal and hydro generation plants.

### Electricity Generation

The Group's nuclear power plant is the only such plant in Bulgaria and is also the generator which supplies the cheapest electricity in Bulgaria. As a result, the NPP does not currently experience any serious competition, though this could arise as the market develops to permit the import of other cheap sources of electricity.

The Group's TPP is the largest facility of its kind in Bulgaria. A number of other TPPs operate in the Maritsa East complex and their production capacities are listed below:

TPP Maritsa East 2	(Group owned)	1,620 MW
TPP Contour Global Maritsa Iztok 3		908 MW
TPP AES Galabovo		670 MW
TPP Brikel		200 MW
TPP Maritsa 3		120 MW

The main competitors for TPP Maritsa East 2 on the regulated market are Contour Global and AES (although Contour Global is 27 per cent. owned by NEK). Both companies are project funded and have long-term PPAs with NEK.

Through NEK, the Group owns and operates 30 HPPs and PSPPs in Bulgaria, which together generated 5 per cent. of Bulgaria's gross electricity generation in 2017. The overall share of HPPs and PSPPs generation in the country

---

<sup>13</sup> Source: ESO 2017 energy balance

was 7.6 per cent. of Bulgaria's total electricity generation in 2017. NEK is the sole licensed public supplier of electricity.

### **Natural Gas**

The prices at which Bulgargaz sells gas are regulated by EWRC. The selling price is determined on a quarterly basis based on the expected cost paid and the expected quantities of natural gas to be purchased by the public supplier for the forthcoming quarter.

Bulgargaz is the sole licensed public supplier of natural gas in Bulgaria. It purchases natural gas at market prices and is obliged to sell those quantities at regulated prices.

In relation to the Group's gas storage business, it is possible that other companies could construct gas storage facilities in the future, although the construction of such facilities would be a time consuming and capital intensive project. EU energy legislation and the construction of the planned interconnections could also increase competition in the future through the facilitation of cheaper gas imports.

Bulgartransgaz is the sole licensed gas transmission company in Bulgaria and, as such, is not subject to competition.

### **Lignite Coal**

MMI currently has no significant competition in the supply of lignite coal to thermal power plants in Bulgaria.

## **RESEARCH AND DEVELOPMENT**

Research and development ("**R&D**") activities are carried out either by specialised units within each Group company or are sub-contracted to companies which specialise in R&D.

### **MMI**

MMI's R&D projects cover a wide range of areas including technological mining processes, electricity and automation projects, various construction-related projects and ecological projects.

### **NPP**

NPP Kozloduy has a specialised development and modernisation division responsible for the management of investment processes, activities related to international projects, international missions and inspections, planning and construction of new units and activities related to the projects on the closure and decommissioning of units.

## **INFORMATION TECHNOLOGY**

The Group's information systems are managed by BEH's information technology ("**IT**") department. The development and implementation of applications is aimed at providing support to the business processes and providing an integrated and centralised system. Business data is backed up on a daily basis.

BEH's subsidiaries each have IT departments which are independent of BEH's IT department and which seek to maintain high quality security standards in their operations.

## INSURANCE

The Group's total insurance premium expense for 2017 was BGN 56.6 million, compared to BGN 57.0 million for 2016. Over 50 per cent. of the insurance expense is paid to ZAD Energia in which the Group holds 48 per cent. of the shares.

BEH and its principal subsidiaries maintain comprehensive insurance cover in respect of loss or damage to property (including their respective power plants, transmission networks and sub-stations). This cover includes, but is not limited to, fire, explosion, lightning, windstorms, hurricanes, vandalism, malicious damage, riots, strikes, locked out workmen, labour disturbances, civil unrest, electrical damage, environmental liability and theft. Group companies also maintain comprehensive general liability policies which provide cover against legal liability for causing any accidental bodily injury or death to third parties or damage to their property.

The Group's exposures are monitored through periodic risk surveys by its underwriters and reinsurers in conjunction with BEH's management and engineers.

Group companies do not carry any insurance cover for business interruption, sabotage and terrorism as the costs of obtaining and maintaining such insurance cover are very high and BEH believes that it is more economical for it to retain this exposure and to manage the risk itself.

In accordance with the Vienna Convention, the Bulgarian Nuclear Act provides that the operator of a nuclear facility is liable for any damage caused by a nuclear accident up to BGN 96 million per accident and is obliged to maintain insurance coverage for potential liabilities for nuclear damage in an amount not less than BGN 96 million. The Group has insurance in place for its NPP, which provides coverage at this amount. However, notwithstanding any limitation of liability under the Bulgarian Nuclear Act and any additional coverage under the Group's insurance policies, any nuclear accident or failure at the Group's NPP could result in the Group incurring significant losses in excess of such amounts due to, among other things, a potential shut-down of the nuclear facility and the resulting loss of generation capacity, remedial and replacement expenses and negative publicity from such an accident. See *"Risk Factors—The Group may incur significant liabilities in the event of a nuclear accident"* and *"Risk Factors—The Group does not insure itself against all potential risks and may become subject to higher insurance premiums"*.

## LITIGATION

The Group is involved in a number of legal proceedings.

### ***ZAO Atomstroyexport ("ASE")***

The Group was involved in litigation with ASE in respect of the discontinued Belene project in which the Group retained legal counsel to defend it.

ASE, who had been contracted for the design and construction of new units of the nuclear power plant at Belene, commenced proceedings before an arbitral tribunal constituted under the Rules of the ICC against the Group's subsidiary, NEK, claiming damages and loss of profits in the amount of EUR 1.124 billion (inclusive of interest until 1 May 2015 and claiming further interest as from that date) in relation to the discontinued Belene Project. The Group's subsidiary NEK counterclaimed for an amount of EUR 120 million. On 14 June 2016, the tribunal awarded ASE EUR 554 million, with further interest running from 2 May 2015. NEK's counterclaim was rejected, except for EUR 878,746 conceded by ASE and which is reflected in the award.

On 28 September 2016, the National Assembly of the Republic of Bulgaria adopted the Act on Granting Assistance for the Repayment of Liabilities of Natsionalna Elektricheska Kompania EAD (the "**Act**") in respect to the arbitral award. The Act stipulated that pursuant to Article I09(4)(2) of the Public Finance Act, the Council of Ministers would provide financial assistance to NEK, through the Ministry of Energy's budget, in connection with the payment of the amounts awarded to ASE.

The Act specified that the grant would be provided pursuant to an agreement between the Ministry of Energy and NEK based on the agreement for final settlement of the dispute between NEK and ASE, which would be approved by the Council of Ministers.

Pursuant to Article 3 of the Act, a notification was sent on 29 September 2016 to the EC pursuant to Article 108(3) of the Treaty on the Functioning of the European Union. The decision of the EC states that in this particular case there is no state aid, and therefore, there are no grounds for Article 108 of the Treaty on the Functioning of the European Union applying to this payment.

On 26 October 2016, NEK and ASE signed an agreement for final settlement of the dispute which provided that NEK would pay ASE the full amount of the awarded principal and interest of EUR 601,617,133 (BGN 1,176,660,837) on or before 15 December 2016 and ASE would not claim interest on the obligation after 14 June 2016. The agreement also provided that if NEK paid the entire liability determined under the award of the Arbitration Court, NEK would acquire the right to receive the equipment in respect of the Belene Project produced by ASE.

On 26 October 2016, NEK voluntarily paid EUR 5 million of the awarded amount to ASE.

On 5 December 2016, an agreement for the provision of financial assistance was signed by the Ministry of Energy and NEK, according to which:

- the Ministry of Energy agreed to provide NEK with financial assistance in the amount of EUR 601,617,133 (BGN 1,176,660,837);
- NEK undertook to pay the amounts awarded to ASE by 14 December 2016 under the terms of the agreement for the final settlement of the dispute with ASE;
- NEK undertook to reimburse the received financial assistance to the budget of the Ministry of Energy within seven years. The repayment is to be made in one payment at the maturity date of the loan in December 2023; and
- the financial support received from NEK is interest-free and unsecured.

On 8 December 2016, NEK paid EUR 596,617,113 (BGN 1,166,881,427) to ASE.

On 16 January 2017, a contract was signed by NEK and ASE for the delivery of the equipment in respect of the Belene Project and its acceptance by NEK at the site of NPP Belene, which brought the matter to a close. Since the delivery, the equipment has been stored by NEK at the site of NPP Belene. The Bulgarian Academy of Sciences has been contracted to conduct an analysis of the technical and economic feasibility of restarting NPP Belene which is under consideration by the Ministry of Energy.

## **EC competition proceedings**

### ***Electricity market***

On 12 August 2014 the EC issued a Statement of Objections accusing BEH of abusing its alleged dominant position on the free market to the detriment of non-end users and market competition. In parallel, BEH entered into talks with the EC with a view to settling the case via commitments under Art.9 of Regulation (EC) No. 1/2003. In response to the Commission's concerns, and as part of these commitments, BEH established IBEX which was tasked with establishing an efficient day-ahead market for commercial trades on the Bulgarian wholesale electricity market in a consistent, impartial, independent, transparent and non-discriminatory manner.

The EC issued a decision on the case on 10 December 2015 pursuant to Art.9 of Regulation (EC) No 1/2003 accepting the commitments proposed by BEH and effectively terminating the proceedings against BEH. The EC approved a monitoring trustee, Advolis, to control the day-to-day management of IBEX.

The EC stipulated that IBEX must be divested from the Group and the initial deadline for this was 14 June 2016. However, due to a variety of developments the deadline was extended and BEH divested IBEX to the Bulgarian Stock Exchange AD on 31 January 2018 as per Decision C(2018) 572 of the European Commission dated 26 January 2018.

### ***Gas market***

On 5 July 2013, the EC announced that it had opened formal proceedings to investigate whether BEH, Bulgargaz and Bulgartransgaz were abusing their dominant market position in the downstream gas market in Bulgaria. The EC was concerned that BEH, Bulgargaz and Bulgartransgaz may have been hindering competitors that were attempting to access Bulgaria's gas transmission network and gas storage facility by reserving capacity that was not used.

On 23 March 2015, the EC issued a statement of objections against BEH, Bulgargaz, and Bulgartransgaz setting out preliminary conclusions that the companies had abused their dominant position, in breach of Article 102 of the Treaty on the Functioning of the European Union. The relevant behaviours ceased in 2015 so the statement of objections is related to past activity of BEH, Bulgargaz and Bulgartransgaz and not to any current activity.

On 24 November 2017, the National Assembly of the Republic of Bulgaria took a decision which prevents BEH, Bulgargaz and Bulgartransgaz from admitting the alleged infringement and from admitting any liability for it. It also obliges BEH, Bulgargaz and Bulgartransgaz to take all procedural measures to defend the interests of the Republic of Bulgaria and of themselves, including to contest the eventual decision under Article 7 of Regulation 1/2003. Pursuant to the above decision of the National Assembly, if the EC issues a decision under Article 7 of Regulation 1/2003, it will be appealed in the Court of Justice of the European Union, although BEH would be obliged to pay any fine imposed in the interim, even if it appeals this decision.

While the maximum fine which the EC is capable of imposing is 10 per cent. of the Group's consolidated total turnover, based on the development of the proceedings to date the Group does not expect that the maximum amount will be imposed.

At present, the EC has not made a decision regarding the conclusion of this case, including whether a financial sanction will be imposed.

### **Worley Parsons Nuclear Services JSC**

An arbitration proceeding has been initiated by Worley Parsons Nuclear Services JSC ("**Worley**") against NEK before the Arbitration Court in the International Chamber of Commerce, Paris, in which Worley claim EUR 54,372,482 (BGN 106,343 thousand) for compensation and penalties under a contract with Worley as Architect-Engineer of the Belene Project. An open arbitration session was held in June 2017 and the term for passing a ruling has been extended until 31 July 2018.

## MANAGEMENT AND EMPLOYEES

### General overview

BEH has a single tier management system, consisting of a General Assembly of Shareholders (which comprises its sole owner – the Republic of Bulgaria) and a Board of Directors. The General Assembly appoints and oversees the Board of Directors and exercises other powers pursuant to the Articles of Association. NPP Kozloduy, TPP Maritsa East 2, NEK and Bulgargaz also have single tier management systems with their own Boards of Directors. ESO and Bulgartransgaz each has a two-tier management system, consisting of both a Supervisory Board and a Management Board.

### BEH Board of Directors

Members of the Board of Directors are appointed and replaced by the General Assembly. The Board of Directors comprises three members.

The Board of Directors makes decisions in accordance with domestic and international regulations, the Articles of Association, the internal Rules of Procedure for the Board of Directors and company by-laws.

The members of the Board of Directors as of the date of this Prospectus are set out below:

Name	Position
Petar Iliev	Chairman of the Board of Directors
Petyo Ivanov	Member of the Board of Directors and Executive Director
Zhivko Dinchev	Member of the Board of Directors

The current term of appointment expires on 30 June 2019. The business address of each member of the Board is 1000 Sofia, Oborishte Municipality, 16 Veslets Str. Bulgaria. No member of the Board has any actual or potential conflict of interest between his duties to BEH and his private interests and/or other duties.

**Petar Iliev, Chairman of the Board** – Mr. Iliev has been working in the energy sector for over 35 years. He has been engaged in the management of several companies operating in the field of district heating, natural gas and electricity generation. Mr Iliev is the Chief Executive Officer of NEK.

Mr. Iliev graduated from the Higher Institute of Mechanical and Electrical Engineering (Technical University) in Sofia, where he obtained an MA in Mechanical Engineering, Thermal and Nuclear Energy. He is also trained in Business Management at the Institute for State and Business Administration (Council of Ministers of the Republic of Bulgaria - Higher School of Management) and Japan International Cooperation Agency. Fluent in Russian.

**Petyo Ivanov, Executive Director (BEH CEO)** – Mr. Ivanov has been with BEH Group for six years. Prior to becoming CEO of BEH he was CEO and member of the boards of directors of Bulgargaz and Contour Global. Before that he held positions as a Head of Financial Controlling and Chief Accountant at NEK. He has been a member of the Audit Committees of Bulgartransgaz and NPP Kozloduy.

Mr. Ivanov has extensive experience in accounting, financial control and management in the gas distribution, cogeneration and finance sectors.

Mr. Ivanov has a Master Degree in Accounting and Control from St. Cyril and St. Methodius University. Fluent in English, German and Russian.

**Zhivko Dinchev, Non-Executive Director** – Mr. Dinchev has extensive experience in the Bulgarian energy sector. He has been with TPP Maritsa East 2 for over 20 years. Starting as an operator of a steam generator in 1995, then as regime technologist in the boiler compartment and gradually rising to Deputy Director of the plant's operations division and to the position of CEO and member of the Board.

Mr Dinchev holds a master's degree in thermal engineering from the Technical University of Sofia and a master's degree in personnel management. Fluent in English and Russian.

## Employees

The table below sets out certain information on the Group's employees as at 31 December in each of 2016 and 2017.

	<b>2017</b>	<b>2016</b>	<b>% change 2017/2016</b>
Number of staff	21,128	21,112	0.1
Labour productivity - revenue/ number of personnel (BGN'000)	304.3	287.6	5.8

Employee relations in NPP Kozloduy, TPP Maritsa East 2, NEK, ESO, Bulgartransgaz and MMI are governed by collective labour agreements. Over 86 per cent. of Group employees are unionised.

## Internal Audit

The Internal Audit Department acts on behalf of the Board of Directors, to monitor decision making processes and the implementation of decisions at all levels of management. It reports any irregularities to the Board.

## REGULATION, ENVIRONMENT AND HEALTH AND SAFETY

### REGULATION

#### European legislative framework in relation to the energy sector

On 19 September 2007, the European Commission (the "EC") adopted the Third Energy Liberalisation Package. The Third Energy Liberalisation Package was designed to complete the liberalisation of the electricity and gas markets within the EU. Its aim is the creation of a market with high standards of public service and customer protection that allows consumers to freely choose their suppliers, a structural separation of transmission activities and generation/supply activities ("**unbundling**") and the establishment of independent national energy regulators. The Third Energy Liberalisation Package contemplates a further separation of supply and generation activities from transmission network operations.

The Third Energy Liberalisation Package principally comprises Directive 2009/72/EC concerning Common Rules for an International Market in Electricity, Directive 2009/73/EC concerning Common Rules for the International Market in Natural Gas, Regulation (EC) No. 714/2009 on Conditions for Access to the Network for Cross-Border Exchanges in Electricity, and Regulation (EC) No. 715/2009 on Conditions for Access to Natural Gas Transmission Networks.

#### Implementation of the European legislative framework in Bulgaria

The Third Energy Liberalisation Package was introduced in the Republic of Bulgaria through amendments to the Bulgarian Energy Act on 17 July 2012 as well as subsequent amendments. The most significant changes are as follows:

- The unbundling process was completed in relation to both the gas and electricity sectors. Although the transmission system operators have remained within the Group, they have to meet additional requirements to guarantee the independence of their management and decision making powers. Bulgartransgaz was certified as an independent transmission operator ("**ITO**") under EWRC decision No. C-4 dated 22 June 2015. The decision was approved in line with the opinion of the EC dated 22 April 2015. ESO was certified as an ITO under EWRC decision No. C-5 dated 30 July 2015. The decision was approved in line with the opinion of the EC dated 3 June 2015. ESO started the balancing market for electricity on 1 June 2014.
- Additional requirements were introduced for transparency and for creating a free market approach in the management of transmission networks, including further guarantees for equal access to the transmission network.
- The independence of EWRC was enhanced through changes in the legislative framework and its members are now appointed and dismissed by the Bulgarian parliament and not by the Bulgarian government. EWRC's powers, especially with regard to the monitoring of the liberalisation process, consumer protection and cooperation with regulatory authorities from other EU countries, were extended.
- New measures aimed at household consumers of gas and electricity were introduced. These are expected to allow households to benefit from the advantages of the liberalised market by enabling them to switch suppliers easily.

## **Bulgarian legislative framework in relation to the energy sector**

The Bulgarian energy sector is governed by a wide range of regulations. The key law governing the energy sector is the Bulgarian Energy Act, which regulates electricity generation, electricity and gas imports, exports and transmission, the distribution of electricity, heat and natural gas, oil and oil product transmission through pipelines, trade in electricity, heat and natural gas, and the powers of state bodies in formulating energy policy, regulation and control. It lays down regulations upon which energy policies and strategies are undertaken and allows energy activities to be undertaken both on the free market and as a public service. The Bulgarian Energy Act is currently compliant with the requirements of European legislation.

In addition, a significant part of secondary energy legislation in Bulgaria is also compliant with European requirements. This legislation relates to licensing, price regulation, electricity metering, electricity trading and transmission.

### **Regulation of activities in the energy sector**

EWRC, which is the national regulatory authority for energy, was established by the Bulgarian Energy Act as a specialised state body to regulate activities in the energy, water supply and sewerage sectors. EWRC's main responsibilities are:

- the issue, revision, amendment, termination and withdrawal of licences;
- the adoption of secondary legislation;
- the approval of general terms of contracts in the energy sector;
- control over issued licences;
- the regulation of prices, including preferential prices;
- approval of forecast and market prices;
- determination and approval of feed-in premiums;
- the adoption and supervision of rules for trade and technical rules for networks in the energy sector;
- the adoption, and control over the implementation of, price-setting methodologies; and
- the investigation of infringements and supervision over compliance by energy undertakings with Regulation No 1227/ 2011/ EU on wholesale market integrity and transparency (the "**REMIT Regulation**").

### ***Electricity prices***

In accordance with the Bulgarian Energy Act, the following prices in the energy sector are subject to regulation by EWRC:

- The prices of the electricity generators within quotas set by EWRC aimed at securing supplies to protected consumers (households and small and medium-sized enterprises interconnected at low-voltage).

- The prices of the electricity generators from RES and cogeneration at preferential tariffs (in respect of power plants with installed capacity under 4 MW – see "*Amendments to the legal and regulatory framework*" below).
- The prices of the public supplier (NEK) for electricity sold to end suppliers within the quotas set by EWRC.
- The prices of end suppliers of electricity sold to household consumers and industrial consumers connected to the distribution network at low and medium voltage level.
- The prices for transmission of electricity by transmission and distribution grids.
- The prices for connection to the transmission and distribution grids.
- The prices for access to the transmission and distribution grids.
- The prices for certain services related to licensed activities.
- The prices or price components for compensation for public service obligations (i.e. renewable energy) and stranded costs.

The prices for transmission through and access to the transmission network are regulated under the "capital return rate" method whereby EWRC approves the prices and annual revenue requirements of the energy company for a regulatory period of 12 months starting on 1 July of the current year. For the current regulatory period from 1 July 2018 to 30 June 2019, EWRC has approved prices for transmission and access of 9.84 BGN/MWh (compared to 9.24 BGN/MWh for the previous regulatory period).

Costs for purchasing electricity and availability from producers with long-term PPAs, renewable energy sources and highly efficient cogeneration of heat and power and annual quotas for production from local fuel sources, as well as eventual stranded costs (collectively, the "**Costs**"), are classified as expenditures resulting from public service obligations and are compensated through the prices paid by all consumers and the grid operators in a transparent and non-discriminatory way. Under this mechanism the Costs are grouped together into a common "obligation to society" ("**OBS**") fee, which until 30 June 2018, was paid by consumers and grid operators directly to NEK. From 1 July 2018 the OBS fee is collected by the SESF and transferred on to NEK and other beneficiaries. To secure the OBS fee payments, traders and producers are now required to provide bank guarantees or deposits in favour of the SESF. With respect to sourcing, NEK acts as a public provider and bears the obligation to purchase electricity from RES and highly efficient cogeneration plants with installed capacity of up to 4MW, under long-term PPAs, and annual quotas for production from local fuel sources from power plants connected to the transmission grid. To help NEK manage the funding towards the Costs (including for past periods), in 2015 the Bulgarian Energy Act established SESF, a separate legal entity under the governance of the Ministry of Energy, whose management board consists of representatives of various ministries (the Ministry of Energy, the Ministry of Finance and the Ministry of Environment and Water), to which each month (i) electricity generators and electricity traders that import electricity pay 5 per cent. of their electricity sales revenues (excluding Value Added Tax ("**VAT**")) and electricity and (ii) gas transmission system operators pay 5 per cent. of their access and transmission revenues (excluding VAT). The SESF is also funded by revenues generated by the Bulgarian government from auctioning allowances to emit greenhouse gases, overdue interest, donations and statistical transfers of renewable sources of energy (which are statistical transfers between countries, so if one country is not fulfilling the requirements and another is exceeding them the first can pay the second for a statistical transfer) and, as of 1 July 2018, the funds from the OBS fee. Until 30 June 2018, NEK, as public supplier of electricity, was the sole beneficiary of the funds from the SESF and the direct collector and beneficiary of the OBS revenue fee. As of 1

July 2018, part of the collected funds by SESF from the OBS fee is allocated to electricity producers with installed capacity of 4 MW or greater that previously benefitted from preferential prices and long-term contracts such as RES and highly efficient cogeneration plants (excluding AES and Contour Global) and which are already obliged to sell electricity on the free market via "contracts for compensation with a premium". SESF pays premiums to such producers which represent the difference between the former preferential price and the forecasted market price. By decision C-11, dated 1 July 2018, for the regulatory period starting on 1 July 2018, the EWRC has determined both the premium payments (calculated as the difference between the former feed-in tariff and the EWRC-forecasted market prices) and the forecast market price, varied for the different types of power generation technologies. The long-term contracts between NEK and such producers will be terminated once such producers have transferred to the free market. There is a transition period until 1 January 2019 for the affected market participants to start complying with the new market structure. During this period NEK continues to be obliged to purchase electricity at preferential prices from producers that have not yet switched to the free market. However, NEK is eligible to receive compensation from the SESF for the premiums determined by the EWRC for the respective producers. The change in the mechanism for collecting and utilising the OBS fee since 1 July 2018 is in line with the transition of the producers with preferential prices who have an installed capacity of 4 MW and above from NEK to the power exchange, i.e., the implemented model equally reduced NEK's costs to purchase electricity from producers with preferential prices and NEK's compensation for the incurred costs. As such, the net impact on NEK's financials is null. The SESF makes regular monthly transfers of collected OBS funds to NEK to compensate the company for its current and past obligations to purchase electricity from producers under PPAs and from RES and highly-efficient cogeneration producers.

Since 2015, the introduction of a mechanism for certification of high-efficiency cogeneration has limited NEK's obligation to purchase electricity from co-generation producers at preferential prices only to the quantities produced in compliance with highly efficient cogeneration criteria. EWRC is responsible for issuing the high-efficiency cogeneration certificates.

In addition, the concept of "net specific generation" ("NSG"), introduced in 2015, ensures that generated revenues by RES producers from their feed-in tariffs are commensurate with their approved rates of return, as per EWRC's decisions (the preferential prices are set as per EWRC's decisions which were in force at the time of the commissioning of each RES producer). As a result, NEK is only obliged to purchase quantities produced up to the defined NSGs of RES producers at preferential prices. Electricity produced above the NSG can be purchased by NEK at a reference surplus price which was approximately 13.56 BGN/megawatt-hours ("MWh") in 2017 or RES producers can sell it themselves on the free market.

### **Electricity balancing market**

In 2014, EWRC amended the Electricity Market Rules by introducing a new market model and paving the way for the establishment of an organised power exchange in Bulgaria, as well as providing the necessary conditions to ensure the proper functioning of a balancing market.

The electricity balancing market in Bulgaria was launched on 1 June 2014 and includes all commercial participants in the electricity supply chain including generation, transmission, distribution and end customers. It is administered by ESO and is a prerequisite for the establishment and proper functioning of a power exchange.

Given the successful operation of the day ahead power exchange since January 2016 and to ensure correct price signalling to the market as a whole, EWRC has amended the cap and floor prices for balancing energy as follows:

- capping the balancing energy price for "upward" regulation at 2.5 times the average day ahead market price for the day. For example, if the average price on the day ahead market is 80 BGN/MWh, the cap would be 200 BGN/MWh; and
- setting the balancing energy floor price for "downward" regulation at 0.00 BGN/MWh.

NEK plays a central role in the balancing market as the coordinator of five balancing groups (one standard balancing group and four special balancing groups including the last resort supply, producer, virtual balancing group and RES and cogeneration) and as owner and operator of the biggest pumped-storage hydro power plant in South-eastern Europe (PSPP Chaira). NEK operates most of the balancing capacity in Bulgaria.

### **Amendments to the legal and regulatory framework**

As of 1 January 2018, electricity producers with installed capacity over 5 MW and who do not benefit from preferential prices and long-term PPAs (i.e. electricity producers who were already selling electricity on the free market) are obliged to sell their electricity via the power exchange platforms operated by IBEX. This change was designed to support transparency and non-discrimination in electricity trading in Bulgaria.

On 8 May 2018, further changes to the Bulgarian Energy Act were published in the Bulgarian state gazette. These changes, which are effective as of 1 July 2018, provide that:

- the electricity system operator and the distribution companies are obliged to purchase their grid losses from the power exchange platforms operated by IBEX instead of purchasing at regulated prices from the public supplier;
- NEK remains as the single buyer only in relation to (i) producers with preferential prices with installed capacity of less than 4 MW and (ii) AES and Contour Global under their respective long-term PPAs;
- Electricity producers with installed capacity of 4 MW or greater who previously benefitted from preferential prices and long-term contracts such as RES and highly efficient cogeneration plants (excluding AES and Contour Global), are obliged to sell electricity on the free market rather than to NEK (See "*Electricity Prices*" above);
- the OBS fee proceeds are no longer directly collected by NEK. The SESF is entitled to collect them from the participants on the free market and compensates NEK and other market participants with contracts for compensation with a premium. To secure such fee payments, traders and producers are required to provide bank guarantees or deposits; and
- EWRC has been given additional powers to collect data that allows it to effectively carry out its monitoring and investigation duties under the REMIT Regulation.

The transition to the free market of the two large TPPs with PPAs (AES and Contour Global) is dependent on the state aid process of the EU, so they will be treated separately. However, the Bulgarian government has publicly stated its commitment to accelerating the process.

### ***Gas prices***

In accordance with the Bulgarian Energy Act, the following gas prices are subject to regulation by EWRC:

- the prices of the public supplier (Bulgargaz) for natural gas to be sold to end suppliers and to consumers directly connected to the transmission network;
- the prices of the end suppliers for natural gas to be sold to household consumers and industrial consumers connected to the gas distribution networks;
- the total revenues for access and transmission;
- the price of distribution;
- the prices for inter-connection to the gas network and access and to the storage of natural gas in gas storage facilities; and
- the prices for services related to certain licensed activities.

The final price of natural gas for customers is approved by EWRC and it includes the total price of natural gas at the gas transmission system entry point and the price for transmission through the respective gas transmission networks (gas transmission or gas distribution). For customers connected to the distribution networks a price for the supply of natural gas by an end supplier is also included.

The price of natural gas at the gas transmission system entry point is calculated (and proposed for approval) on a quarterly basis by Bulgargaz representing the weighted average value of the latest forecast gas quantities from imports for the domestic market, from local gas sources and from storage for the purpose of sale during the next pricing period, the terms and conditions under natural gas transportation contracts to the Bulgarian border and the exchange rate of the Bulgarian National Bank for the currency in which the imported gas is paid (BGN against the U.S. dollar). EWRC tops up this price with the price for public supply. An additional charge (correction) can be added to the price of the public supplier (Bulgargaz) if there is a difference between the forecasted and reported costs for the supply of natural gas at the entry point to the gas transmission network for a previous pricing period.

The prices for access and transmission to the gas transmission network are calculated on the basis of a methodology for access and transmission approved by EWRC. The methodology rests on the "entry-exit" model with different price zones, in compliance with transparent pricing principles. The transparent pricing principles include price application in a non-discriminatory manner to users of the respective networks, taking into account the need for the integrity of the networks, the reflection of actual costs required for the provision of natural gas transmission services and the inclusion of economically justified returns on existing assets and new investments. Price formation is based on the "revenue cap" approach, where the regulatory period can be two and five years (it is currently set to three years for 2017-2019). After a regulatory review, the EWRC approves the revenue cap for the first year of the regulatory period and for the remaining years of the regulatory period the revenue cap is updated automatically as per the methodology.

A special regulatory account mechanism was introduced and approved by EWRC on 19 September 2016 in accordance with the EU practice of transmission operators' price regulation. The implementation of this mechanism is also in accordance with the requirements of the Framework Guidelines on rules regarding harmonised transmission tariff structures for gas adopted by Decision No 01/2013 of 29 November 2013 by the Agency for the Cooperation of Energy Regulators, as well the network code on harmonised transmission tariff structures for gas. The regulatory account records the difference between the revenue a transmission system operator is entitled to receive on the basis of the applied regulatory regime and the revenue actually received during the same period, thus aiming to minimise the differences between the allowed revenue requirements and the actual revenue for the same period.

## **Gas balancing market**

In March 2016, Bulgartransgaz published draft gas market balancing rules (the "**Rules**") and a draft daily imbalance charge calculation methodology (the "**Methodology**"). Following public consultations with interested parties, the Rules and the Methodology were submitted to EWRC for approval. The Rules were approved by EWRC on 13 December 2016. They guarantee that network users will be responsible for the balancing of their portfolios in order to minimise the need for the operator to undertake balancing activities.

The Methodology was also approved on 13 December 2016 and determines how to calculate the amount of daily imbalances and positive and negative price imbalances. This ensures the formation of non-discriminatory charges for imbalances and the creation of incentives for the transmission system users to efficiently balance their portfolios.

Both the Rules and the Methodology came into force on 1 January 2017 and constitute important steps in the introduction of a gas balancing market in Bulgaria.

## ***Lignite Coal Prices***

The price of coal is set by the Minister of Energy. This principally impacts MMI which sells lignite coal as well as TPP Maritsa East 2 and NEK, for whom coal is a significant operating expenditure.

## **ENVIRONMENT**

The Group is currently in compliance with all material environmental regulations applicable to it. The principal environmental issues faced by the Group relate to pollution caused by its TPP and mining operations and the risk of contamination from its NPP (which is discussed under "*Business Description—Business—Electricity*").

## **Greenhouse effect**

The EU has made a unilateral commitment to reduce overall greenhouse gas emissions from its 27 Member States by 20 per cent. by 2020 compared to 1990 levels. The EU emissions trading system, EU-ETS, is a cornerstone of the EU's policy to combat climate change and is based on a "cap and trade" principle.

Since the start of the third phase of the EU-ETS (which runs from 2013 to 2020), all allowances for power plants have been required to be purchased through auctions or on the secondary market. However, as part of the overall compromise on the EU's Climate and Energy Package, and in order to help modernise their electricity sectors, ten new Member States, of which Bulgaria is one, were allowed a temporary exemption from the full auctioning rule and permitted to allocate a limited number of emissions allowances to power plants for free until 2019.

Temporary free allocation was and remains subject to a number of conditions, including:

- a requirement to finish in 2019 at the latest;
- a limit of no more than 70 per cent. of emissions for domestic electricity supply in 2013, declining annually thereafter;
- a requirement for the value of the free allowances to be channelled into investments in retrofitting and upgrading the country's energy infrastructure, including new power plants and diversification of the energy mix and sources of supply, and into clean technologies. These investments have to be set out in a national plan; and

- confirmation from the EU Commission that the application is consistent with the rules of the EU Emissions Trading System Directive. Pursuant to Bulgaria's approved application, the number of allowances allocated/to be allocated for free to power plants by the Republic of Bulgaria is:<sup>14</sup>

2013	2014	2015	2016	2017	2018	2019	Total
Tonnes of CO <sub>2</sub>							
13,542,000	11,607,428	9,672,857	7,738,286	5,803,714	3,869,143	1,934,571	54,167,999

As at 31 December 2017, TPP Maritsa East 2 included a provision for greenhouse gas emission quotas of 9,929,618 tonnes of CO<sub>2</sub>, which represents the difference between, on the one hand, the quantities actually emitted by it less the quantities received for free under the temporary exemption and, on the other hand, the quantities purchased during 2016 which remain on TPP Maritsa East 2's account with the national register as at March 2018. On 26 April 2018, TPP Maritsa East 2 transferred the necessary greenhouse gas emission quotas to the national register, thus fulfilling its obligations under the EU-ETS for 2017.

### **TPP Maritsa East**

In addition to managing its greenhouse gas emissions, the TPP seeks to minimise air, dust, water, soil and noise pollution and to minimise and manage efficiently its waste production.

#### ***Air pollution***

The Group's TPP is the first power plant in Bulgaria to be equipped with operating Flue-Gas Desulphurisation ("FGD") plants. The first FGDs, being those at Units 7 and 8, were commissioned in September 2002. At the same time, a continuous emission monitoring system was introduced to read the harmful substance quantities in the flue gases being emitted into the atmosphere. Currently, all eight units at the TPP have FGD plants.

The government has initiated measures aimed at reducing the NO<sub>x</sub> emissions. TPP Maritsa East 2 is in compliance with the current regulatory limits. TPP Maritsa East 2 is in the process of implementing a project to replace fuel oil with natural gas (methane) as the igniting fuel as well as the reconstruction of the fuel-feed installation system with the aim of reducing NO<sub>x</sub> emissions to below 200 milligrams per cubic metre. The project is financed under the National Plan for Investments.

In respect of the emissions limits set out in the BAT Document that are expected to come into force in 2021, TPP Maritsa East 2 requires various upgrades to its equipment in order to meet the new limits including upgrading the existing FGD plants. TPP Maritsa East 2 submitted a request in February 2018 to the Bulgarian Executive Agency for the Environment for derogations from the desulphurisation limit for SO<sub>2</sub> emissions and the mercury limit. If the derogations are obtained then TPP Maritsa East 2 will receive a temporary exemption from the obligation to comply with the abovementioned limits. See "*Risk Factors — New European Union environmental regulation may increase the Group's capital expenditure and have a negative effect on its financial performance.*".

#### ***Dust removal***

Dust removal from the flue gases in the plant is performed by type YT electrostatic precipitators which, as modified by the Group, are around 96 per cent. efficient.

---

<sup>14</sup> Source: Ministry of Energy

A system has been established to provide early warning for the ground layer pollution by SO<sub>2</sub>, NO<sub>x</sub> and dust, due to unfavourable meteorological conditions. The system was jointly funded by three of the TPPs in the Maritsa East complex (TPP Maritsa East 2, Brikel EAD and Contour Global Maritsa East 3 AD).

#### ***Water monitoring***

Periodic monitoring of waste and surface water is undertaken on a monthly basis. Sampling and analysis is carried out by an authorised laboratory. Underground water monitoring is organised every six months through samples taken from 11 key points and tested by an accredited laboratory.

#### ***Soil monitoring***

Soil condition analysis is arranged every three years.

#### ***Noise monitoring***

Noise emissions in the environment result from the operation of both the main and auxiliary equipment on the TPP site. The TPP is required by law to monitor both the total acoustic capacity and the levels of acoustic pressure on the site every two years.

#### ***Waste management***

Four types of waste are generated by the TPP: industrial, construction, domestic and hazardous. A system for the separation of waste on temporary sites in accordance with all applicable environmental requirements is fully operational.

#### **NPP Kozloduy**

Environmental protection control at the NPP is managed by monitoring the NPP's releases into the atmosphere and the hydrosphere and through the processing and storage of radioactive and conventional waste. The continuous radiation monitoring in the three kilometre zone is performed by the plant's Automated Information System which is integrated with the national system. Samples from air, soil, vegetation, the Danube river and drinking water sources are taken in the 100 km control area around the NPP and analysed. The background gamma radiation is also measured.

The NPP strictly follows all safety standards concerning radioactive waste and SNF management. SNF is stored in special spent fuel pools and in wet and dry spent fuel storage facilities. There is a division operating on the NPP site for the treatment, conditioning, and storage of low- and medium-level radioactive waste. The construction of an interim SNF storage facility at the NPP, financed by the KIDSF, was completed in 2012 and the operating license was granted in 2016. Under Bulgaria's National Nuclear Fuel Management Strategy, adopted by the Bulgarian Council of Ministers in 2004 and updated in 2015, NPP Kozloduy also has a legal obligation to incur costs for the transportation, processing and storage of SNF. This includes covering the annual transportation and associated costs for at least 50 tonnes of SNF per year, provided certain favourable financial and economic conditions are met, from the decommissioned units on the NPP site, based on existing transportation, storage and processing contracts. NPP Kozloduy recognises provisions for the storage and transportation of SNF based on management's best estimate of the costs of such services that will be incurred in the next reporting period. It last made such a provision in 2015, which was applied to the final transportation of SNF from the decommissioned units at the end of 2017. As at the date of this Prospectus, no further provisions have been made for the transportation of SNF in the 2017 Financial Statements.

As of 31 December 2017, the Group fulfilled its obligation to transport, process and store spent nuclear fuel in accordance with the National Nuclear Fuel Management Strategy.

In relation to the two functioning units, NPP Kozloduy is required to pay annually an amount equal to 10.5 per cent. of its revenue from electricity sold, which amounted to BGN 95.5 million in 2017 and BGN 85.0 million in 2016, to decommissioning and radioactive waste funds. These are state-owned funds, under the governance of the Ministry of Energy. The level of contributions is the subject of regular assessments by the Ministry of Energy.

## **MMI**

MMI is required by law to restore the soil quality on completion of its mining operations. Provisions for this future restoration expense are accrued on an annual basis and the total amount of accrued provisions as at 31 December 2017 was BGN 100 million. The provisioning methodology assumes that mining activity will continue until 2043, which is when MMI's licence expires.

## **HEALTH AND SAFETY**

BEH is in compliance with all material health and safety regulations. BEH has adopted a security policy which sets out the main security management principles and practices, including the processes, roles and responsibilities of each Group company. It covers the following areas:

- physical protection;
- protection of classified information;
- crisis management;
- protection of the European and national critical infrastructure of the Group;
- planning, programming and funding of the security activities;
- electrical power supply security;
- provision of health and safety;
- fire safety; and
- admission regime and archive.

Each Group company is required to establish and/or update the procedures for all processes described in the policy on a regular basis. The procedures must include a detailed description and guidelines on how the processes in the policy are to be applied. The procedures are drawn up by the responsible security officer in each subsidiary, coordinated with BEH's security office and approved by the respective subsidiary's Executive Director.

Each Group company also defines a three-year security management strategy with a view to providing continuous, effective and efficient security management in support of its business strategy. The strategy indicates the main lines of development and priorities with respect to security and it is developed in coordination with each company's business plan.

## FINANCIAL REVIEW

*The following discussion and analysis should be read in conjunction with the information set out in "Business Description" and the Financial Statements.*

*The discussion of the Group's financial condition and results of operations is based upon the Financial Statements which have been prepared in accordance with IFRS. This discussion contains forward-looking statements that involve risks and uncertainties. The Group's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Prospectus, particularly under the headings "Presentation of Financial and Other Information—Forward-Looking Statements" and "Risk Factors".*

### OVERVIEW

BEH is the holding company for a group of companies which are principally engaged in the generation, supply and transmission of electricity, the transmission, supply and storage of natural gas, and lignite coal mining. The revenue of the Group is principally derived from (i) the sale and transmission of electricity in Bulgaria; and (ii) the transmission, storage and sale of natural gas in Bulgaria. More limited amounts of revenue are also generated from other sources, including the extraction and sale of lignite coal. In 2017, the Group generated 26.8 terawatt hours of electricity (gross) and had an installed capacity of 6.3 GW. In the same year, the Group's nuclear power plant, its lignite-fired power plant and its hydro power plants generated 34.0 per cent., 19.6 per cent. and 5.0 per cent., respectively, of the total power generated in Bulgaria, giving it a total market share of 58.7 per cent. in the Bulgarian electricity generation market in 2017<sup>15</sup>.

A significant portion of the Group's activities are regulated, including the tariffs which the Group is required to pay and permitted to charge for these activities, and this has had a direct impact on the financial results of the Group in 2016 and 2017 as discussed below under "*Principal factors affecting results of operations—Regulated prices*". In each of 2016 and 2017, 76 per cent. of the Group's total revenue was derived from sales at regulated and long term contracted prices compared to 24 per cent. derived from sales at free market prices.

As a public utility, the Group's results of operations are also affected by prevailing economic conditions, including changes in business and household disposable income, GDP growth, consumption and investments. According to the Bulgarian Ministry of Finance, in real terms, Bulgarian GDP grew by 3.9 per cent. in 2016 and 3.6 per cent. in 2017<sup>16</sup>. The Group's management is currently participating in the on-going liberalisation of the energy market in Bulgaria through dialogue with both the Bulgarian government and EWRC and in the development by the Ministry of Energy of a new sustainable energy strategy for the period beyond 2020.

The following table shows the revenue and EBITDA figures for each of BEH's reporting segments, before adjustments for intra-group eliminations:

<b>Revenue (thousands BGN)</b>	<b>Electricity</b>	<b>Natural gas</b>	<b>Mining</b>	<b>Administrative activities</b>
2017	5,317,744	1,489,517	565,959	166,999

<sup>15</sup> Source: ESO 2017 energy balance

<sup>16</sup> Ministry of Finance of the Republic of Bulgaria, Macroeconomic Forecast – Spring 2018

2016	5,095,123	1,344,917	507,767	120,047
------	-----------	-----------	---------	---------

<b>EBITDA (thousands BGN)</b>	<b>Electricity</b>	<b>Natural gas</b>	<b>Mining</b>	<b>Administrative activities</b>
2017	532,488	202,894	94,375	57,842
2016	369,619	201,795	78,666	97,124

## **RESTATEMENTS AND REVALUATIONS**

The 2017 Financial Statements restate or revalue certain figures relating to the year ended 31 December 2016. Adjustments of the Group's 2016 Financial Statements in the 2017 Financial Statements arose from the substantial negative net exchange rate differences for the current and prior reporting periods. They are reclassified from financial income in the 2016 Financial Statements to financial expenses in the 2017 Financial Statements (Note 16 of the 2017 Financial Statements).

## **PRINCIPAL FACTORS AFFECTING RESULTS OF OPERATIONS**

### ***Regulated prices***

Most of the Group's revenues are derived from the sale of electricity and natural gas at regulated prices.

The Group's businesses which are subject to regulated tariffs and/or regulated revenue caps include:

- its public supply business activity which is fully regulated in terms of the tariff at which electricity is sold to the end suppliers to secure supply for protected consumers, households and small and medium-sized enterprises connected to the low voltage grid;
- the relevant parts of its nuclear, thermal power and hydro power generation businesses which are required to sell a quota of their generation output, as determined by EWRC, at regulated prices;
- its electricity transmission business which is regulated in terms of transmission through, and access to, the transmission grid;
- its gas transmission and storage businesses, as well as the public supply of gas activity; and
- its electricity balancing market activity which is regulated in terms of the cap and floor prices for balancing energy set by EWRC.

The quantity of electricity sold at regulated prices, including for the electricity balancing market, constituted 52 per cent. of the Group's total electricity sold in 2017 (comprising 8 per cent. for NPP, 2 per cent. for TPP 2 and 42 per cent. for NEK).

Key regulated price changes related to Group's results of operations are:

- the regulated price of the electricity produced by NPP Kozloduy for the regulatory period from 1 July 2018 to 30 June 2019 was set by EWRC at BGN/MWh 54.00, a decrease of 1.7 per cent. compared to the previous regulatory period where the price was BGN/MWh 54.92 and an increase of 80.00 per cent as compared to the regulatory period from 1 July 2016 to 30 June 2017, when the price was BGN/MWh 30.00;
- the regulated price of the electricity produced by TPP Maritsa East 2 for the regulatory period from 1 July 2018 to 30 June 2019 was set by EWRC at BGN/MWh 76.99, an increase of 2.5 per cent. compared to the previous regulatory period where the price was BGN/MWh 75.08 and of 11.4 per cent. as compared to the regulatory period from 1 July 2016 to 30 June 2017, when the price was BGN/MWh 69.11;
- the regulated price of the electricity produced by NEK's HPPs for the regulatory period from 1 July 2018 to 30 June 2019 was set by EWRC at BGN/MWh 70.05, compared to the previous regulatory period when the price was BGN/MWh 70.03 and an increase of 16.8 per cent. compared to the regulatory period from 1 July 2016 to 30 June 2017, where the price was BGN/MWh 59.98;
- the regulated price for electricity supplied by NEK as the public supplier of electricity for the regulatory period from 1 July 2018 to 30 June 2019 was set by EWRC at BGN/MWh 71.71, an increase of 1.8 per cent. compared to the previous regulatory period where the price was BGN/MWh 70.46 (adjusted to reflect the OBS fee component that is currently collected by the SESF) and an increase of 1.2 per cent. as compared to the regulatory period from 1 July 2016 to 30 June 2017;
- the OBS fee was charged by NEK until 30 June 2018 and for the regulatory period from 1 July 2017 to 30 June 2018 was set by EWRC at BGN/MWh 37.25, an increase of 4.1 per cent. compared to the previous regulatory period where the price was BGN/MWh 35.77. As of 1 July 2018, it is collected by the SESF and amounts to BGN/MWh 36.75, which is 1.3 per cent lower than in the prior regulatory period;
- the electricity transmission charge of ESO for the regulatory period from 1 July 2018 to 30 June 2019 was set by EWRC at BGN/MWh 8.45, an increase of 3.7 per cent. as compared to the previous regulatory period where the price was BGN/MWh 8.15 and an increase of 15.4 per cent as compared to the regulatory period from 1 July 2016 to 30 June 2017, when the price was BGN/MWh 7.32. The access fee to the transmission grid was increased from BGN/MWh 1.09 to BGN/MWh 1.39 or by 27.5 per cent. for the regulatory period, beginning on 1 July 2018 as compared to the previous one;
- as of 1 July 2018, technological losses are purchased from the free market. Previously the technological losses were purchased by the distribution companies and ESO from NEK at a regulated price. As per the legislative framework prior to 1 July 2018, NEK purchased the electricity for technological losses from NPP Kozloduy. NEK's purchase price for the previous regulatory period from 1 July 2017 to 30 June 2018 was BGN/MWh 54.92, an increase of 83.1 per cent. as compared to the regulatory period ending 30 June 2017 (BGN/MWh 30.00). The selling price of the technological losses to the grid operators in the previous regulatory period was BGN/MWh 70.46, an increase of 76.2 per cent. as compared to the regulatory period ending June 2017, where the price was BGN/MWh 39.99;
- the average regulated price set by EWRC for gas supplied by Bulgargaz as the public supplier of natural gas for the period 1 January 2018 to 30 September 2018 is BGN/ nm<sup>3</sup> 371.81, which is an increase of 9.6 per cent. as compared to the average price for 2017, which was BGN/ nm<sup>3</sup> 339.23, and an increase of 15.7 per cent. as compared to the price for 2016, which was BGN/ nm<sup>3</sup> 321.36; and
- a regulated revenue cap for Bulgartransgaz for the first year of the current regulatory period (2017-2019) was approved by EWRC as per the new Methodology as set out in the "Regulation" section of the Prospectus.

Prior to the introduction of the Methodology in 2017, EWRC used to set the prices for access and transmission. The new approach means that the new prices are dependent on the entry-exit points and are not directly comparable to prior years.

### ***Financial impact of the regulatory and legislative changes implemented in 2015 and 2016***

Historically, the Group's results of operations have been negatively affected by NEK's tariff deficit which reached BGN 1.6 billion in aggregate as at 31 December 2015. The combination of legal obligations imposed on NEK to purchase electricity from RES and highly efficient cogeneration producers at preferential prices together with contractual obligations under long-term PPAs meant that NEK's regulated revenue did not cover its costs.

The Bulgarian government passed a package of legislative and regulatory measures in 2015 and 2016 to prevent any further increase of the tariff deficit and this significantly improved the Group's financial position and results of operations in 2016 and 2017.

The implementation of these legislative and regulatory measures increased the Group's regulated revenue streams in 2016 and 2017 as follows:

- the revenue received from SESF in 2017 amounted to BGN 474 million, an increase of 58 per cent. compared to BGN 300 million in 2016 and an increase of 159 per cent. compared to BGN 183 million in 2015 when the SESF was established for the specific purpose of compensating the Group for its current and past obligations to purchase electricity from producers under PPAs and RES and highly-efficient cogeneration producers; and
- the OBS fee is 96.8 per cent. higher than the fee charged before July 2015 and, from July 2015, is paid not just on the quantities of electricity traded on the free market but also by the transmission system operator and the distribution operators on the quantity of electricity they purchase for covering their technological losses on the grids. As a result, the Group's revenue from the OBS fee amounted to BGN 621 million in 2017 (an increase of 52.6 per cent. compared to 2015 before the increase in the OBS fee) and BGN 658 million in 2016 (an increase of 61.8 per cent. compared to 2015 before the increase in the OBS fee).

The implementation of these legislative and regulatory measures also reduced the Group's costs for the electricity it purchased as follows:

- NEK was previously obliged to purchase the total quantity of electricity produced from generators benefiting from individual preferential prices for highly efficient combined heat and power generation, regardless of whether their generation met the criteria for highly efficient or not. Following the introduction of the requirement for such producers to obtain certification from EWRC for the quantities which comply with the highly efficient cogeneration criteria, the volume purchased by NEK from such producers for the last reported regulatory period, from 1 July 2016 to 30 June 2017, was GWh 2,389 compared to GWh 3,153 (a decrease of 24.2 per cent.) in the regulatory period from 1 July 2014 to 30 June 2015, the last regulatory period before this requirement was introduced. This constituted a saving of BGN 201 million in respect of the above mentioned regulatory periods.
- From July 2015, NEK's obligation to purchase electricity from RES producers at preferential prices was limited to the "net specific generation" of each producer set by EWRC; any quantities above the "net specific generation" could either be sold by the RES producers on the free market or to NEK at a surplus price that is significantly below the market price. As a result, the quantity of electricity purchased from such producers for the last reported regulatory period from 1 July 2016 to 30 June 2017 decreased by 22 per cent. compared to

the regulatory period from 1 July 2014 to 30 June 2015 which was immediately prior to the legislative change. This constituted a saving of BGN 174 million in respect of the above mentioned regulatory periods.

In addition, NEK's cost for purchased availability under the two PPAs was reduced following amendments to the two PPAs in April 2016. The availability price for Contour Global was reduced by 14 per cent. and the availability price for AES was reduced by 15 per cent. which resulted in a saving for NEK of BGN 84 million in the 12 month period immediately after to the amendments compared to the 12-month period immediately prior to them.

As a result of the legislative and regulatory measures described above as well as the amendments to the two PPAs, NEK's revenue increased by BGN 904 million and its cost of electricity purchased decreased by BGN 459 million on a cumulative basis between 2014 (before the introduction of the regulatory measures) and 2017 and the accumulation of the tariff deficit has ceased.

The legislative and regulatory measures implemented in 2015 and 2016 are a direct consequence of BEH's positioning as a strategically important state asset benefiting from the support of the state. Both the Bulgarian government and EWRC have clearly indicated that they will continue their strategy of preventing the formation of new deficits in the system and gradual compensation of the historical deficits.

### ***Electricity liberalisation process***

The requirements of the EU's Third Energy Package and Bulgarian legislation stipulate that the electricity market is to be liberalised and gradually integrated with the markets of other EU member states. The Bulgarian government plans to achieve full liberalisation of the electricity market gradually over the next five years in conjunction with the introduction of effective compensatory mechanisms such as contracts for premium (as explained below).

In 2017, as a part of its strategy for opening up the Bulgarian electricity market, the Bulgarian government worked on developing and implementing a plan for market liberalisation. The first step was taken pursuant to an amendment to the Energy Act that, from 1 January 2018, obliged electricity producers with installed capacity over 5 MW who sell electricity on the free market do so on the organised power exchange for electricity. This was intended to (i) secure greater equality of market participants and (ii) increase the liquidity on the power exchange, both of which are prerequisites for full electricity market liberalisation in Bulgaria.

As a subsequent step in the transition towards full electricity market liberalisation in Bulgaria, a new package of legislative amendments came into effect from 1 July 2018, many of which are based on the World Bank's model for the full liberalisation of the electricity market in the Bulgaria. The package of legislative changes is expected to have a beneficial effect on the financial position of the Group as set out below.

A number of these measures affect the prices at which the Group purchases electricity. In particular:

- RES and highly efficient cogeneration electricity producers with installed capacity of 4MW and above are now obliged to sell electricity (up to a set amount) on the free market via a power exchange or through the balancing group co-ordinator and are compensated with a premium paid by SESF (and determined by EWRC) representing the difference between such producer's prior preferential price and a forecast market price set by EWRC. When the contract for premium between the SESF and the relevant producer is signed, the pre-existing long-term purchase contract between NEK and such producer will be terminated. There is a transition period running from 1 July 2018 until 1 January 2019 whereby such producers can still oblige NEK to purchase electricity at preferential prices under the prior model but NEK is eligible to receive compensation from SESF for the amount of the premium. By no longer being obligated to

purchase electricity from such producers at preferential prices, these changes are expected to further improve the financial position of NEK by reducing its costs.

- Grid losses for transmission and distribution are to be purchased from the power exchange. By transferring the trade of grid losses onto the power exchange, NPP Kozloduy is absolved from its obligations to supply this quantity at a regulated price (BGN/MWh 54.00 for the current regulatory period, starting on 1 July 2018) and is able to realise it at market prices.

In addition, SESF now collects the OBS fee directly from participants on the free market and, to secure such fee payments, traders and producers are required to provide bank guarantees or deposits. These measures are expected to improve the OBS fee collection process and the full and timely compensation of NEK from SESF for the amounts it is owed from OBS revenues.

Pursuant to the legislative changes, the share of the free market is estimated to increase to more than 65 per cent. of the Bulgarian electricity market by 2019. Under the new market model implemented on 1 July 2018, NEK is absolved from a substantial part of its single buyer/public supplier obligations (including the obligation to purchase electricity at preferential prices from RES and highly-efficient cogeneration plants with installed capacity above 4 MW) which caused the formation of tariff deficits in the past. Together with the regulatory measures implemented in 2015 and 2016 (as described above), this is expected to further improve the financial position of NEK.

Despite a number of challenges for the Group arising from opening the market, the Group expects market liberalisation to positively affect the financial results and the stability of the Group. In particular, the Group's generation assets benefit from numerous market advantages, including the variety of products that can be provided, the ability to set prices competitively and flexibility in response to changing demand. In particular:

- electricity generated by the NPP has a low production price and market liberalisation will contribute to increasing the revenues of NPP Kozloduy because market prices are typically higher than regulated prices. As of 1 July 2018, NPP is no longer obliged to supply electricity for technological losses at regulated prices and its regulated quota for the current regulatory period has been decreased by 38 per cent. as compared to the previous one by EWRC;
- NEK, as an operator of 30 HPPs and PSPPs, is expected to be a key player on the platforms for short-term trading on the power exchange with attractive products and competitive prices; and
- technical features of the generation units of TPP Maritsa East 2 enable the plant to offer, in addition to baseload electricity, modulated peak electricity which is traditionally traded at a higher price.

However, the overall impact of market liberalisation on the Group is uncertain as set out in “*Risk Factors— The Group may be exposed to increased competition in the electricity and gas markets in Bulgaria and abroad, including as a result of the planned liberalisation of the Bulgarian electricity sector.*”

## **SIGNIFICANT ACCOUNTING POLICIES**

The consolidated financial statements of the Group have been prepared in accordance with IFRS as issued by the IASB and adopted by the EU. For a discussion of the accounting policies applied by the Group generally see Note 4 to the 2016 and 2017 Financial Statements, respectively.

## CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In preparing the Group's financial statements, management is required to make certain estimates, judgements and assumptions. These affect the reported amounts of the Group's assets and liabilities, including disclosure of contingent assets and liabilities, at the date of the financial statements as well as the reported amounts of its revenues and expenses during the periods presented. Management bases its estimates and assumptions on historical experience and other factors that it believes to be reasonable at the time the estimates and assumptions are made and evaluates the estimates and assumptions on an on-going basis. However, future events and their effects cannot be predicted with certainty and the determination of appropriate estimates and assumptions requires the use of judgement. Actual outcomes may differ from any estimates or assumptions made and such differences may be material to the financial statements.

The Group considers that the assumptions and estimations made by it as to the fair values and useful lives of property, plant and equipment, the impairment of financial assets, its provisions (or lack of them) for environmental protection, the transport, processing and storage of consumed nuclear fuel and the decommissioning of nuclear facilities, its provisions for litigation and its liability for employee retirement benefits are its most critical accounting judgements. Further details on these accounting judgements can be found in Note 4.26 to the 2016 Financial Statements and Note 4.27 to the 2017 Financial Statements.

## QUALIFICATIONS AND EMPHASES OF MATTER

There are a number of qualifications and emphases of matter in the audit opinions relating to the 2016 and 2017 Financial Statements. For further information, see "*Presentation of Financial and Other Information—Qualifications and Emphases of Matter in 2016 and 2017 Financial Statements*" and "*Risk Factors—The audit opinions in respect of the Financial Statements have been qualified in a number of significant respects*".

## RESULTS OF OPERATIONS

### Comparison of 2017 and 2016

#### *Revenue*

The table below shows the breakdown of the Group's total revenue from sales for each of 2017 and 2016.

Revenue from Sales	Year ended 31 December 2017	Year ended 31 December 2016
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
Revenue from sales of electricity	3,183,359	3,100,689
Revenue from sales of natural gas	1,099,972	997,084
Revenue from sales of lignite coal	283,637	249,437
Income from other sales, including:	1,296,326	1,332,221
<i>Related to sales of electricity</i>	<i>1,062,963</i>	<i>1,107,543</i>

Income, generated from the “obligation to society” fee	620,708	657,916
Income, associated with the transmission through the electrical supply network	346,154	327,408
Income, generated under access fees	63,379	64,377
Income, associated with reactive electricity	14,566	18,313
Income, generated under connection fees	18,156	39,529
<i>Related to sales of natural gas</i>	<i>210,725</i>	<i>204,965</i>
Income, generated from the transmission of natural gas	210,725	204,965
<i>Income, generated from “water supply” services</i>	<i>4,086</i>	<i>4,859</i>
<i>Income from sales of thermal power</i>	<i>2,138</i>	<i>2,010</i>
<i>Income from rendered transport services</i>	<i>5,802</i>	<i>4,632</i>
<i>Income from rendered communication services</i>	<i>2,689</i>	<i>2,861</i>
<i>Income from other sales</i>	<i>7,923</i>	<i>5,351</i>
	<b>5,863,294</b>	<b>5,679,431</b>
<b>Other operating income</b>	<b>566,267</b>	<b>392,726</b>
<i>Revenue from SESF</i>	<i>473,908</i>	<i>300,154</i>
	<b>6,429,561</b>	<b>6,072,157</b>

The Group’s total revenue in 2017 was BGN 6.4 billion compared to BGN 6.1 billion in 2016, an increase of BGN 357 million, or 5.9 per cent. The revenue from sales comprised 91.2 per cent. of the Group’s revenue in 2017 and 93.5 per cent. in 2016. Other operating income increased from BGN 393 million in 2016 to BGN 566 million in 2017, an increase of BGN 173 million or 44 per cent. This increase was primarily driven by the higher income generated by SESF, which is described in more detail in Note 7 of the 2017 Financial Statements.

#### *Sales of electricity*

The Group’s revenue from sales of electricity is derived from the electricity generated by its power plants which is sold at regulated and unregulated prices to end suppliers, electricity distribution companies in Bulgaria and large industrial clients and exported to foreign customers. The Group’s revenue from sales of electricity during 2017 was BGN 3.2 billion compared to BGN 3.1 billion for 2016, an increase of BGN 83 million, or 2.7 per cent. This increase principally reflected the higher prices of electricity achieved by the Group in 2017 compared to 2016 despite the slightly lower volumes of electricity sold.

#### *Sales of natural gas*

The Group’s revenue from sales of natural gas is derived from sales of natural gas at regulated prices to customers in Bulgaria. Approximately 99 per cent. of the natural gas sold is purchased by the Group under long-term take or pay supply agreements with Gazprom Export, with the balance being extracted from UGS Chiren or purchased from a local supplier. The Group’s revenue from sales of natural gas during 2017 amounted to BGN 1.1 billion compared to BGN 1.0 billion for 2016, an increase of BGN 103 million, or 10.3 per cent. This increase was driven

by both a higher volume of natural gas sold and higher prices in 2017. In 2017, the quantities of natural gas sold were 33,581 GWh, an increase of 3.8 per cent. compared to 2016.

#### *Electricity and Gas Transmission fees*

The Group derives electricity and gas transmission fees in respect of electricity and natural gas transmitted through its transmission systems and, in the case of natural gas, transited through its pipelines from Russia to Greece, Macedonia and Turkey. In the case of electricity, these fees comprise a basic tariff which is regulated. In the case of natural gas, prior 1 November 2017, the transmission fee was also regulated as a basic tariff while the transit fee, which comprised approximately 98.2 per cent. of total gas transmission fee revenues, was paid under a long-term ship or pay contract with Gazprom Export. Since 1 November 2017, the prices for access and transmission to the gas transmission network have been calculated based on the Methodology set out in the “*Regulation*” section of the Prospectus.

The Group’s revenue from electricity and gas transmission fees was BGN 557 million in 2017 compared to BGN 532 million in 2016, an increase of BGN 25 million, or 4.7 per cent.

#### *Obligation to society fee*

In 2017, the Group’s revenue from the OBS amounted to BGN 621 million compared to BGN 658 million in 2016, a decrease of BGN 37 million or 5.6 per cent. This was primarily driven by discounts on the OBS fee permitted to some energy intensive industrial consumers under Ordinance № E-ПД-04-06 of 28 September 2016 of the Minister of Energy to reduce the burden on energy intensive industrial consumers related to the cost of electricity from renewable energy sources. The ordinance gives such consumers the right to a discount from the OBS fee. The ordinance came into force as of 4 October 2016 and applies for the period 1 August 2015 to 31 December 2020, and both the number of such consumers and the electricity consumed by such consumers increased in 2017. As NEK is compensated for this reduction by SESF, there is no overall negative impact for the Group.

#### *Electricity access fees*

End consumers must pay the Group a fee to access the electricity transmission system. These fees comprise a basic tariff which is regulated and remunerates the Group for the management and administration of the electricity system. The access fee is payable by all end consumers connected to the electricity grid. The amount payable by each consumer is based on the amount of consumed electricity. The Group’s revenue from access fees was BGN 63 million in 2017 compared to BGN 64 million in 2016, a decrease of BGN 1 million, or 1.6 per cent. This decrease principally reflected the slightly lower access fee set by EWRC for the current regulatory period in comparison to the 2016/2017 regulatory period.

#### *Sales of lignite coal*

The Group’s revenue from the sale of lignite coal is derived from the lignite coal produced at its Maritsa mine and sold to customers in Bulgaria. The Group’s revenue from sales of lignite coal during 2017 amounted to BGN 284 million compared to BGN 249 million for 2016, an increase of BGN 35 million, or 14 per cent. This increase principally reflected higher demand and higher volumes of lignite coal sold in 2017 compared to 2016. In 2017, the Group reported production of over 30.3 million tonnes of lignite coal compared to 27.8 million tonnes in 2016. 48 per cent. of the lignite coal was purchased by TPP Maritsa East 2 in 2017, compared to 51 per cent. in 2016, with the balance sold to customers in Bulgaria in each case. In January and February 2017, due to the extremely low temperatures and critically high levels of the electricity load in the system, the TPPs in the country were operating

at their maximum available capacity so the consumption of energy fuel was increased. There was no change in lignite coal price per ton in 2017 as compared to 2016.

### **Costs**

The table below shows the breakdown of the Group's costs for each of the years ended 2017 and 2016:

<b>Costs</b>	<b>2017</b>	<b>2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
Cost of natural gas, electricity and other current assets sold	(3,568,766)	(3,407,913)
Change in finished goods and work in progress	9,158	16,069
Cost of acquisition of property, plant and equipment in a commercial manner	18,496	22,832
Cost of materials	(345,111)	(293,478)
Hired services	(282,130)	(355,486)
Depreciation cost	(637,538)	(600,405)
Employee benefits expense	(833,500)	(778,974)
Reintegration of impairment/(Net impairment)	(16,143)	(114,458)
Cost of greenhouse gas emissions and supplies	(238,473)	(74,966)
Costs related to the arbitration award on the Belene Project, net	-	(159,270)
Other operating costs	(329,875)	(318,430)
<b>Total Costs</b>	<b>(6,223,882)</b>	<b>(6,064,479)</b>

The Group's costs principally comprise the cost of natural gas, electricity and other current assets sold, employee benefits, depreciation cost, cost of materials, hired services, cost of greenhouse gas emissions and supplies and other operating costs (including, in particular, green energy costs, contributions to the funds for retirements of nuclear facilities and radioactive waste and fines, penalties and charges).

The Group's costs were BGN 6.2 billion in 2017 compared to BGN 6.1 billion in 2016, an increase of BGN 159 million, or 2.6 per cent. This principally reflected increases in the cost of natural gas, electricity and other current assets sold, cost of greenhouse gas emissions and supplies and depreciation cost, as described further below.

The Group's cost of natural gas, electricity and other current assets sold was BGN 3.6 billion in 2017 compared to BGN 3.4 billion in 2016, an increase of BGN 161 million, or 4.7 per cent. This principally reflected:

- a minor increase of BGN 20 million, or less than 1 per cent., in the cost of electricity purchased in 2017 (BGN 2.6 billion) compared to 2016. The Group's cost of electricity comprises the costs of purchasing electricity incurred by its subsidiary, NEK in relation to its role of a single buyer and public supplier of electricity in Bulgaria;

- a BGN 143 million, or 16.5 per cent., increase in the cost of natural gas from BGN 0.9 billion in 2016 to BGN 1.1 billion in 2017. The Group's cost of natural gas principally comprises the price it pays to Gazprom Export for imported gas. The growth is a result of the 17.4 per cent. higher average annual import price reported for 2017 compared to 2016, as well as the increased purchases related to higher consumption. In 2017 the purchased volumes were 33,421 GWh compared to 32,103 GWh in 2016;
- a BGN 52 million, or 17.8 per cent., increase in the Group's cost of materials for 2017 compared to 2016 which resulted mainly from the higher reported costs for energy consumed by MMI due to the greater extraction of lignite coal;
- a BGN 55 million, or 7.0 per cent., increase in the Group's employee benefits expense for 2017 compared to 2016 as a result of amendments to the collective labour agreements of some subsidiaries in the Group which increased both benefits and salaries of employees; and
- A BGN 163 million, or 217 per cent., increase in the cost of greenhouse gas emissions and supplies for 2017 compared to 2016. The reported growth in the cost of CO<sub>2</sub> emissions is a result of the following reasons:
  - an increase of 103.8 per cent. in the average purchase price of CO<sub>2</sub> emissions from EUR/tonne 5.15 in 2016 to EUR/tonne 10.5 in 2017 in respect of TPP Maritsa East 2;
  - a lower quota of free allocated greenhouse gas emissions for 2017 (601,175 tonnes) under the national investment plan compared to 2016 (2,311,560 tonnes); and
  - a higher quantity of greenhouse gas emissions emitted by TPP Maritsa East 2 due to the increased generation in 2017 compared to 2016.

On the other hand, the cost for hired services and impairments decreased in 2017 compared to 2016 and the 2017 cost position relative to 2016 was improved as the BGN 159 million cost related to the arbitration award in respect of the Belene Project in the 2016 Financial Statements was not relevant in 2017. Details of the reported reintegration of impairment (BGN 16,143,000) and the cost related to the arbitration award (BGN 1,176,660,837) in respect of the Belene Project are set out in Note 11 and Note 14 to the 2017 Financial Statements, respectively.

### ***Operating profit***

Reflecting the above factors and, in particular, the greater increase in the Group's revenues than in its costs, the Group's operating profit was BGN 206 million in 2017 which represents a significant increase of BGN 198 million compared to the operating profit of BGN 8 million reported in 2016. The Group's operating margin was 3.2 per cent. in 2017 compared to 0.1 per cent. in 2016.

### ***Share of profit from equity accounted investments***

Details of the proportion of the profit from equity accounted investments are set out in Note 21 to the 2017 Financial Statements. The Group's share of the profit from equity accounted investments was BGN 42 million in 2017 and BGN 36 million in 2016.

### ***Net finance costs***

The table below shows the breakdown of the Group's financial income and financial cost for each of the years ended 31 December 2017 and 2016:

**Financial Income**

	<b>Year ended 31 December 2017</b>	<b>Year ended 31 December 2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
Interest income, generated under receivables from Toplofikatsia Sofia EAD	16,265	16,265
Interest income, generated under bank deposits	3,382	3,763
Interest income, generated under current accounts	1,282	1,205
Other interest income, generated under financial instruments, carried at amortised cost	1,206	-
Total interest income, generated under financial instruments that are not carried at fair value in profit or loss	22,135	21,233
Income from dividends and liquidation share	246	68
<b>Other</b>	-	53
	<b>22,381</b>	<b>21,354</b>

**Financial costs**

	<b>2017</b>	<b>2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
Interest expense on loans, carried at amortised cost	(114,187)	(115,646)
<i>Total Interest Expense from Financial Instruments</i>	<i>(114,187)</i>	<i>(115,646)</i>
Interest expense on retirement employee benefits	(4,701)	(5,207)
Interest expense on liabilities for taxes, fees and public receivables	(85)	(1,757)
Exchange rate differences, net	(30,791)	(9,620)
Bank fees	(428)	(493)
Result from operations with financial instruments	-	(399)
	<b>(150,192)</b>	<b>(133,122)</b>

The Group's financial costs principally comprise interest expense on its borrowings. The major part of the expenses on the Group's borrowings in 2017, amounting to BGN 100 million, was the cost of interest on the 2013 Bonds and the 2016 Bonds. The Group's net finance costs were BGN 128 million in 2017 and BGN 112 million in 2016, an increase of BGN 16 million. This was mainly a result of the increase in financial cost in 2017 driven by the significant negative BGN/USD exchange rate differences in that year.

**Profit before taxes**

The Group's profit before taxes for 2017 was BGN 120 million, a significant increase of BGN 188 million, or 275.5 per cent., compared to the loss of BGN 68 million in 2016.

### ***Income tax***

The Group's income tax expense was BGN 3 million in 2017 and BGN 10 million in 2016. Bulgaria had a statutory tax rate of 10 per cent. in each of 2017 and 2016. The Group's tax charge in each year represents the effect of that rate applied to its taxable profit and the impact of deferred tax income in each year. Note 17 to the 2017 Financial Statements sets out further information on the Group's tax charge.

### ***Profit/loss from continuing operations***

Reflecting the above factors, the Group's profit from continuing operations was BGN 117 million in 2017 compared to a loss from continuing operations of BGN 78 million in 2016, an increase of BGN 195 million.

### ***Profit/Loss from discontinued operations***

The Group reported profit from discontinued operations for 2017 of BGN 1.8 million, an increase of 140.5 per cent. compared to 2016. In the profit from discontinued operations the Group reports the following two activities:

#### ***Decommissioning of radioactive waste management facilities***

In December 2012, the Bulgarian Council of Ministers approved the transfer of Unit 3 and Unit 4 at the Group's nuclear power plant to a separate state-owned company. Neither unit is operational and the transfer is intended to facilitate the decommissioning of the units. The income and expense associated with Unit 3 and Unit 4 are eliminated from the profit from continuing activities of the Group and are presented as profit/loss for the year from discontinued operations being a profit of BGN 0.2 million in 2017 compared to BGN 0 in 2016.

#### ***Non-current assets and decommissioning assets and liabilities classified as held for sale***

BEH divested IBEX to the Bulgarian Stock Exchange AD in February 2018, as per Decision C(2018) 572 of the EC dated 26 January 2018.

The purchase price as determined by a licensed appraiser amounted to BGN 5,200,000, payable in the following manner:

- an initial payment of BGN 3,952,000 was paid on 5 February 2018;
- The remaining amount of BGN 1,248,000 is due in three equal instalments on the sixth, twelfth and eighteenth months from the effective date of the contract; and
- the Bulgarian Stock Exchange AD has provided an unconditional and irrevocable bank guarantee for the outstanding amount of the purchase price of the shares.

More detailed information of the Group profit for the year from discontinued operations is published in Note 27 of the 2017 Financial Statements.

Based on the irrevocability of the commitment, the assets and liabilities of IBEX are reclassified as a disposal group held for sale. The income and expense associated with IBEX's business activities are eliminated from the profit from continuing activities of the Group and are presented as profit for the year from discontinued operations, being a profit of BGN 1.6 million in 2017 compared to BGN 0.7 million reported for 2016.

*(Loss)/profit for the year*

Reflecting the above factors, the Group generated profit of BGN 119 million in 2017 compared to a loss of BGN 78 million in 2016.

The results of the Group's operations in 2017 compared to those in 2016 are as follows:

BGN '000 (except where otherwise indicated)	2017	2016	Change 2017/2016	
<b>Total revenue</b>	6,429,561	6,072,157	357,404	5.9%
<b>Total expenses</b>	(6,223,882)	(6,064,479)	(159,403)	(2.6%)
<b>EBITDA</b>	843,217	608,083	235,134	38.7%
<b>EBIT</b>	205,679	7,678	198,001	2578.8%
<b>EBT</b>	119,633	(68,162)	187,795	275.5%
<b>EBITDA margin</b>	13.1%	10.0%	3.1%	31.0%

*Total comprehensive income for the year, net of tax*

In 2017, the Group's total comprehensive income for the year, net of tax, was BGN 137 million compared to a loss of BGN 73 million in 2016.

## LIQUIDITY AND CAPITAL RESOURCES

### Overview

The Group's principal cash requirements are to fund its capital expenditure programme and to repay outstanding borrowings. The Group's principal source of funds is cash from operations and proceeds from new borrowings.

### Cash Flows

The table below summarises the Group's cash flows from operating activities, investment activities and financing activities for each of the years ended 31 December 2017 and 2016:

Cash flows	Year ended 31 December 2017	Year ended 31 December 2016
	Thousands of BGN	Thousands of BGN
Net cash flows from operating activities	568,727	(1,402,673)
Net cash flows from investing activities	(210,543)	(381,762)
Net cash flows from financing activities	(112,618)	1,967,922
<b>Net change in cash and cash equivalents</b>	<b>245,566</b>	<b>183,487</b>
Reclassified cash		(611)
<b>Cash and cash equivalents at 1 January</b>	<b>1,015,987</b>	<b>833,111</b>

**Cash and cash equivalents at 31 December****1,261,553****1,015,987**

The Group's net cash inflows from operating activities in 2017 were BGN 569 million compared to a net cash outflow of BGN 1.4 billion in 2016. The Group's operating cash flows principally represent its revenue from sales less its payments to suppliers and personnel, interest payments related to its financial obligations and tax payments.

In 2016, the net operating cash outflow of the Group reflected the following two payments by NEK:

- the payment to ASE of EUR 601,617,133 (BGN 1,176,660,837) for the settlement of the arbitration award in respect of the Belene Project. The Ministry of Energy provided NEK with an interest-free unsecured loan in the amount of EUR 601,617,133 (BGN 1,176,660,837) with a bullet repayment due in December 2023; and
- the full repayment of the arrears due to AES and Contour Global in connection with the amendments of the long-term power purchase agreements. The funds for the repayment were provided by BEH on 21 April 2016, through a bridge financing loan of EUR 535 million with a 12 month term (the "**Bridge Loan**") from a consortium of banks including Banca IMI S.P.A., London Branch, as the initial creditor and the chief arranger, Bank of China (Luxembourg) S.A., as the initial creditor and chief arranger, J.P. Morgan Securities plc, as the chief arranger and J.P. Morgan Europe Limited as an agent. The loan was refinanced by the issue of the 2016 Bonds and was fully repaid.

Net cash outflows from investing activities in 2017 were BGN 211 million compared to BGN 382 million in 2016. In each year the principal investments made were in the purchases of property, plant and equipment as part of the Group's capital expenditure programme described under "*Capital expenditure*" below.

Net cash outflows from financing activities in 2017 were BGN 113 million compared to net cash inflows of BGN 2 billion in 2016. The Group's financing activities principally comprise new financing raised in the form of borrowings together with the repayment of outstanding borrowings and payment of dividends. In 2017, the Group made net repayments of borrowings totalling BGN 173 million but paid no dividends due to the net loss for 2016. The net cash inflow from financing activities for 2016 reflects the proceeds from the issue of the 2016 Bonds with a nominal value of EUR 550 million as well as the proceeds from the financial assistance from the Ministry of Energy to NEK in connection with the arbitration award in respect of the Belene Project. In 2016, the net repayments of borrowings totalled BGN 1.5 billion, including the repayment of the Bridge Loan and other loan instalments of the Group. A dividend payment of BGN 15 million to the state budget was also made in 2016.

**Capital expenditure**

The Group's cash outflows related to capital expenditure amounted to BGN 281 million in 2017 and BGN 429 million in 2016. This expenditure was principally incurred in relation to the execution of the main investment projects in the Group including the extension of the useful life of the NPP units 5 and 6, modernisation of the gas and electricity transmission networks, as well as work on expanding the capacity of the Chiren underground gas storage facility and rehabilitation of mining equipment. Capital expenditure is expected to average approximately BGN 740 million per year for the 2018-2022 period, of which approximately BGN 200 million is expected to relate to maintenance capital expenditure. The Group has significant flexibility with regards to its discretionary capital expenditure. However, no assurance can be given as to the actual amounts of capital expenditure that may be incurred in future periods. The timing and amount of capital expenditure is highly dependent on market conditions, the progress of projects, new opportunities that may arise and a range of other factors outside the Group's control. See "*Risk Factors — The Group's capital expenditure programme is subject to various risks and uncertainties*".

The Group's priority infrastructure projects which are included in its capital expenditure programme over the coming years are as follows:

#### ***Electricity***

- Extending the useful life of unit 6 at NPP Kozloduy
- Increase the heat generation capacity of units 5 and 6 at NPP Kozloduy
- Rehabilitation and expansion of the electricity transmission network (which is part of the EU Projects of Common Interest programme ("PCI"))
- Yadenitsa HPP Project (PCI)

#### ***Gas***

- The IGB project (PCI)
- Expansion of Chiren underground gas storage facility (PCI)
- The IBS project (PCI)
- The ITB project (PCI)

#### ***Mining***

- Rehabilitation of land and purchase of new mining equipment

The Group expects to finance its capital expenditure primarily through cash flows from operations. Projects designated as PCI by the EU are eligible for up to 50 per cent. EU grant funding. Aside from own funds and grants, projects can be financed through intragroup loans. External loan funding will be used for the IGB project, for which BEH has an approved EUR 110 million state guarantee. Under the EU's Third Energy Package, transmission network operators must finance and execute their capital expenditure programmes independently. Both ESO and Bulgartransgaz are expected to generate sufficient cash to fund their investment programmes.

#### ***Borrowings***

Approximately 90 per cent. of the Group's borrowings as at 31 December 2017 were in the form of tradable bonds issued by BEH as parent company, while the remainder of the Group's debt was in the form of bilateral loans from national and international banks borrowed through subsidiaries. The loan facilities include bonds, syndicated loans, export credit facilities, investment loans, overdraft facilities and financial leases.

The Group's funding strategy involves:

- consolidating debt at holding company level and facilitating the settlement of intra-group financial obligations;
- obtaining strategic funding from reputable banks;
- utilising dividend income from subsidiary companies to support intra-Group operating activities and to secure short-term financing for the subsidiary companies;
- participating in joint ventures where the majority of the funding is provided by the joint venture partners;
- obtaining grants from EU funds or from international organisations which support regional sustainable energy development where available;

- apportioning overheads into project budgets so that each project has a determined overhead and capital expenditure budget matched to a reliable project funding source; and
- improving operating efficiency and cost reduction and optimisation.

Management is not currently aware of any plans by its shareholder to increase the capital of the Group.

### **Loans**

As at 31 December 2017 the Group's outstanding bonds, loans and finance leases together totalled BGN 2.3 billion. The table below shows each of these loans and the amount outstanding as at 31 December in each of 2017 and 2016. Note that the table does not include the loan from the Bulgarian government to NEK in respect of the arbitration award for the Belene Project (EUR 601,617,133, BGN 1,176,660,837) as it is classified as a trade payable to related parties.

	Interest rate	Maturity	As at 31 December	
			2017	2016
			<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
(1) 2013 Bonds	4.25%	2018	982,855	981,527
(2) 2016 Bonds	4.88%	2021	1,080,023	1,075,702
(3) Investment non-bank loan from EURATOM denominated in euro	EURIBOR + 0.079% to 0.13%	2018/ 2021	106,188	149,272
(4) Investment loan, denominated in Japanese yen	1.49% plus risk premium of 0.94%	2018	36,324	79,370
(5) Investment loan, denominated in Euro	3m OeKB and 4.10%	2019	37,709	56,575
(6) Investment loan, denominated in Euro	6m EURIBOR + 2.95% and 6.3% and 4.75%	2016 - 2021	23,490	31,317
(7) Investment loan, denominated in Euro	from 4.026% to 4.844%	2022	38,142	46,596
(8) Long-term Investment loan	6m Sofibor +3.49%	2018	3,278	6,538
(9) Investment loan	BIR+1,89%	2023	671	-
(10) Investment loan	BIR+1,89%	2023	497	-
(11) Investment loan	1 year EURIBOR + 5.10%	2024	-	2,280
(12) Financing under buyback contract for natural gas	2.79%	2018	9,956	-
(13) Finance lease, denominated in BGN		2018	6	13
			<b>2,319,139</b>	<b>2,429,190</b>

Certain of the Group's debt contains financial covenants, including debt coverage ratios, EBITDA to financial borrowings ratios and current assets to current liabilities ratios. The Group is currently in breach of some ratios and in the process of obtaining waivers, see "*Risk Factors—NEK is in breach of its financial covenants. The Bonds may not be declared immediately due and payable if NEK becomes unable to pay its debts as they fall due, breaches the terms of its third party debt or if its liabilities exceed its assets*".

In addition, certain of the loans are:

- guaranteed by the Bulgarian government (8 per cent. of the total loans); and/or
- secured by mortgages and/or pledges of other assets (3 per cent. of the total loans).

For a full description of each of these loans, see Note 29 to the 2017 Financial Statements. As at 31 December 2017, the Group, via its subsidiaries, had unutilised short term loans totalling BGN 65 million. These loans comprised of a BGN 25 million unsecured overdraft facility of TPP Maritsa East 2, two BGN 10 million unsecured overdraft facilities of Bulgargaz and two unsecured credit line facilities of BGN 12 million and BGN 8 million of MMI.

### ***Maturity profile***

The table below shows the profile of the Group's outstanding bonds, loans and finance leases at 31 December 2017 (totalling BGN 2.3 billion) and at 31 December 2016 (totalling to BGN 2.4 billion).

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
<b>Non-current portion</b>		
Bond issues	1,058,173	2,029,260
Bank loans (i.e. credits)	64,523	143,005
Credit, obtained from EURATOM	66,132	105,004
Finance lease	-	6
	<u>1,188,828</u>	<u>2,277,275</u>
<b>Current portion</b>		-
Bank loans (i.e. credits)	85,544	79,671
Credit, obtained from EURATOM	40,056	44,268
Bond issues	1,004,705	27,969
Finance lease	6	7
	<u>1,130,311</u>	<u>151,915</u>
	<b><u>2,319,139</u></b>	<b><u>2,429,190</u></b>

### **ANALYSIS OF CERTAIN BALANCE SHEET ITEMS**

#### **Assets**

The Group's most significant assets are its property, plant and equipment, its trade and other receivables and cash and cash equivalents, which together comprised 93 per cent. of its assets at 31 December 2017 and at 31 December 2016.

**As at 31 December    As at 31 December**

	<b>2017</b>	<b>2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
<b>Total assets</b>	<b>17,459,621</b>	<b>17,217,819</b>
PPE	13,481,125	13,705,798
Trade and other receivables, incl.:	1,424,671	1,290,670
<i>long term receivables</i>	479,085	487,586
<i>short-term receivables</i>	945,586	803,084
Cash and cash equivalents	1,261,553	1,015,987

The Group's property, plant and equipment principally comprise its power generation plants and its electricity and gas transmission and gas transit and storage infrastructure and related equipment, which are further described under "*Business Description*". According to the accounting policy of the Group, property, plant and equipment are subject to revaluation at least every 3 years. The last revaluation of property, plant and equipment was performed as at 30 June 2015 and the next revaluation is due in the second half of 2018. As at 31 December 2017 and 2016, the Group performed a review to detect indications of revaluation or impairment by classes of property, plant and equipment. No indications of significant changes were identified when compared with the prior period with respect to the market and economic environment in which the Group operates. The carrying amount of property, plant and equipment is not judged by the Group to exceed its recoverable amount.

The table below shows details of the Group's trade receivables, net of accrued impairments at 31 December 2017 and 2016.

<b>Trade receivables</b>	<b>As at 31 December 2017</b>	<b>As at 31 December 2016</b>
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
<b>Non-current portion</b>		
Trade receivables, net	478,984	487,567
Advanced payments made to suppliers	97	17
Prepaid services	4	2
	<b><u>479,085</u></b>	<b><u>487,586</u></b>
<b>Current portion</b>		
Trade receivables, net	600,026	653,930
Litigations and claims, net	66,816	32,155
Receivables from Security of the Electricity System Fund, net	126,149	37,247
Other receivables, net	15,224	5,694
Advances to suppliers	73,197	50,924
Prepaid services	22,317	20,490
Recoverable taxes	41,857	2,644
	<b><u>945,586</u></b>	<b><u>803,084</u></b>

**Total trade and other receivables****1,424,671****1,290,670**

The principal contributor to the non-current outstanding trade receivables is Toplofikatsia Sofia EAD, which owed the Group outstanding trade receivables, net of impairment, of BGN 474 million at 31 December 2017. These receivables are in respect of natural gas supplied and, in December 2015, an agreement was reached for the rescheduling of these receivables over a 20-year period, with a five-year grace period. The interest on the principal is 3.25 per cent. As at 31 December 2017, the total amount of the non-current impairment incurred by the Group in relation to Toplofikatsia Sofia EAD was BGN 64 million.

The table below shows an ageing analysis in respect of the Group's trade and other receivables at 31 December in each of 2017 and 2016.

	Undue <i>Thousands of BGN</i>	Over due			Total <i>Thousands of BGN</i>
		0-180 days <i>Thousands of BGN</i>	180-360 days <i>Thousands of BGN</i>	>360 days <i>Thousands of BGN</i>	
<b>31 December 2017</b>					
Trade receivables, gross	1,089,212	178,300	70,469	570,717	<b>1,908,698</b>
Impairment	(64,403)	-	-	(557,096)	<b>(621,499)</b>
<b>Net</b>	<b>1,024,809</b>	<b>178,300</b>	<b>70,469</b>	<b>13,621</b>	<b>1,287,199</b>
<b>31 December 2016</b>					
Trade receivables, gross	1,006,410	110,558	26,699	690,249	<b>1,833,916</b>
Impairment	(382,893)	-	-	(234,430)	<b>(617,323)</b>
<b>Net</b>	<b>623,517</b>	<b>110,558</b>	<b>26,699</b>	<b>455,819</b>	<b>1,216,593</b>

The rise in overdue receivables (greater than 360 days) as at 31 December 2016 was due to an increase in MMI receivables from AES and Contour Global. With the utilisation of the Bridge Loan used to repay the amounts owed by the Group to the two TPPs, these overdue receivables were collected and MMI's liquidity position significantly improved.

**Liabilities**

The Group's most significant liabilities are its borrowings and its trade and other payables (including payables to related parties). Together these liabilities accounted for BGN 4,240,675 thousand or 69.5 per cent. of its total liabilities at 31 December 2017 compared to BGN 4,344,360 thousand or 72.5 per cent. at 31 December 2016.

Information on the Group's borrowings is set out under "*Liquidity and capital resources—Borrowings*".

As at 31 December 2017, the Group's trade and other payables principally comprise short-term trade payables incurred in the ordinary course of its business. The Group's long-term related party payables principally comprise the outstanding amount of the financial assistance from the Ministry of Energy to NEK in connection with the arbitration award in respect of the Belene Project (EUR 601,617,133, BGN 1,176,660,837). The current portion of the related party payables were amounts owed to an associated company.

**Equity**

The table below shows the Group's equity at 31 December in each of 2017 and 2016:

Equity	As at 31 December 2017	As at 31 December 2016
	<i>Thousands of BGN</i>	<i>Thousands of BGN</i>
Share capital	3,397,757	3,285,614
Other reserves	2,552,272	2,540,531
Reserve from revaluation to fair value	2,111	1,865
Revaluation reserve of non-financial assets	6,670,649	6,687,767
Reserve from translation of foreign operations	(7)	(7)
Reserve from remeasurement of defined benefit plans	(112,705)	(93,465)
Hedge reserve	(16,859)	(19,983)
(Accumulated loss)/Retained earnings	(1,131,870)	(1,177,273)
<b>Equity, attributable to the shareholder of the parent entity</b>	<b>11,361,348</b>	<b>11,225,049</b>
Non-controlling participation	446	428
<b>Total Equity</b>	<b>11,361,794</b>	<b>11,225,477</b>

The Group's share capital is divided into 3,397,756,827 fully paid ordinary shares with a par value of BGN 1 each as of 31 December 2017. All of the Group's share capital is held by the Minister of Energy on behalf of the Republic of Bulgaria. On 8 August 2017, pursuant to a Protocol of the Minister of Energy, an increase of the capital of the Group was registered in the Commercial Registry after issuing 112,142,370 new ordinary registered shares by utilising retained earnings from 2016. The previous increase of the share capital of the Group with retained earnings from 2015 was registered on 8 July 2016 after issuing 97,446,330 new ordinary registered shares. On 29 June 2018, the sole owner decided to increase BEH's share capital by utilising retained earnings from 2017 amounting to BGN 65,184,917, by issuing 65,184,917 new ordinary registered shares.

The Group's other reserves include statutory and general reserves. At least 10 per cent. of the Group's net profit and certain other amounts in each year is contributed to the statutory reserve until it equals 10 per cent. of the Group's capital. The statutory reserve can only be used to cover losses in the current and prior periods. General reserves are formed by the Board and can be used both to cover losses and for any other purpose for which they were established.

The reserve from revaluation to fair value is used to recognise the revaluation of available-for-sale financial assets (see Note 28 to the 2017 Financial Statements), as well as the Group's share in the operating result and the revaluation of financial assets and liabilities recognised directly in the equity of associates or jointly-controlled entities.

The revaluation reserve of non-financial assets is used to reflect increases in the fair value of property, plant and equipment. Decreases in the fair value of property, plant and equipment are also recognised in this reserve but only to the extent that they relate to revaluation increases for the same asset previously recognised in other comprehensive income. The reserve may be used to cover losses and pay dividends only in limited circumstances.

Profits are distributed by a decision of the general meeting of the sole shareholder based on the individual financial statements of the parent company BEH. The amount of the dividend is determined annually by the Minister of Energy in accordance with the Decision of the Council of Ministers.

The Bulgarian government has a strong interest in maintaining the Group's balance sheet. In 2016, BEH distributed dividends of BGN 15 million to the state budget. Pursuant to Order No. 2 dated 8 March 2018, state-owned companies are required to distribute dividends of up to 50 per cent. of the net profit after tax disclosed in the consolidated financial statements for 2017. On 29 June 2018 the Ministry of Energy determined that a dividend of 25 per cent. of the net consolidated profit for 2017, amounting to BGN 29.7 million, would be paid out in 2018, and the funds were transferred from BEH to the State budget on 12 July 2018.

## **RELATED PARTY TRANSACTIONS**

The related parties of the Group include its shareholder, its associates and joint ventures, its management personnel and all other public sector entities controlled by the Republic of Bulgaria. The Group's related party transactions include the financial assistance that NEK received from the Ministry of Energy in connection with the arbitration award in respect of the Belene Project. Details of the Group's related party transactions in the years ended 31 December 2017 and 2016 are set out in Note 35 to the 2017 and 2016 Financial Statements, respectively.

## **CONTINGENT LIABILITIES**

The Group's contingent liabilities for the years ended 31 December 2017 and 31 December 2016 are disclosed in Note 40 to each of the 2017 and 2016 Financial Statements. The Group's principal contingent liabilities as at 31 December 2017 comprise:

- two proceedings which have been initiated by the European Commission against Bulgarian Energy Holding EAD and its subsidiaries for the possible abuse of a dominant position – Case AT.39767 - BEH Electricity and Case AT.39849 - BEH Gas; and
- a dispute with Worley Parsons Nuclear Services JSC, which is claiming BGN 106 million from the Group's subsidiary. The case is in its final stage and a decision is not expected until 31 July 2018.

## **DISCLOSURES ABOUT RISK**

The Group's financial risk management policies are set out in Note 37 to the 2017 Financial Statements. The Group believes that its principal risk exposures are liquidity risk, interest rate risk, currency risk and credit risk, although it also recognises and seeks to manage market risk, regulatory risk and cash flow risk.

Liquidity risk is the risk that the Group will not meet its obligations as they fall due. The Group manages its liquidity risk primarily through financing provided by its parent which finances the operations of the subsidiaries within the Group. Where there is a shortage of cash within the Group, external financing is obtained. A maturity analysis of the Group's financial liabilities based on contractual undiscounted payments is set out in Note 37 to the 2017 Financial Statements.

The Group's principal exposure to interest rate risk relates to its variable rate borrowings. Within the Group's asset structure, the interest-bearing assets comprise cash, bank deposits and loans, the majority of which carry a fixed rate of interest. The Group's borrowed funds (both long- and short-term loans) also mainly carry a fixed rate of interest which helps to minimise the likelihood of unpredictable fluctuations and unfavourable changes in cash flows. A sensitivity analysis in this regard is set out in Note 37 to the 2017 Financial Statements. None of the Group's interest rate risk is currently hedged through derivative instruments.

The Group's currency rate risk arises from its dealings in different currencies, with the major foreign currencies being euro, U.S. dollars and Japanese yen. As the lev is pegged to the euro at a fixed rate the Group considers that

currency risk in relation to its euro exposure is minimal. The Group's exposure to Japanese yen arises from payments for building and construction works and supplies for assets under construction as well as repayments on a state-guaranteed loan agreement denominated in yen which is currently unhedged. A sensitivity analysis in relation to the Group's U.S. dollar and Japanese yen exposure is set out in Note 37 to the 2017 Financial Statements.

Credit risk is associated with the risk that some of the Group's counterparties may not be able to comply fully and in time with their obligations. The Group seeks to manage its credit risk through due diligence in relation to the solvency of its counterparties and by controlling the terms and quality of the collateral provided by those counterparties. The Group's principal credit exposure is to Toplofikatsia Sofia EAD, see "*—Analysis of certain balance sheet items—Assets*". The Group also has significant cash and short-term deposits held with banks and is exposed to credit risk on these banks. The Group seeks to manage this credit risk by closely monitoring the credit quality of its counterparties, particularly its banks and insurers.

## TAXATION

### Republic of Bulgaria Taxation

The information provided below regarding certain tax considerations under Bulgarian law is based on the laws in force in the Republic of Bulgaria as of the date of this Prospectus and is subject to any changes in law that may take effect after such date. It does not purport to be a comprehensive description of all the considerations that may be relevant to an investment decision and does not purport to deal with the tax consequences applicable to all categories of investors. Investors should consult their professional advisers on the tax consequences of their acquiring, holding and disposing of the Bonds under the laws of their country of citizenship, residence, domicile or incorporation.

### Bulgarian Tax Residence of the Bondholders

From a Bulgarian tax perspective the mere acquisition, holding or disposal of the Bonds would not qualify a foreign corporate or individual Bondholder as a Bulgarian tax resident.

In order to qualify for tax purposes under Bulgarian law as a Bulgarian tax resident a corporate investor should either (i) be registered in the Republic of Bulgaria or (ii) be an entity established under Council Regulation (EC) №2157/2001 or (iii) be a cooperative society established under Council Regulation (EC) 1435/2003, in case its registered office is within Bulgaria and it is entered in a Bulgarian register.

An individual investor will qualify as a Bulgarian tax resident, without regard to its citizenship, in the event that he or she (i) has a permanent address in the Republic of Bulgaria; (ii) resides in the Republic of Bulgaria for more than 183 days during each twelve month period, (iii) has been sent abroad by the Bulgarian state, its authorities or organisations or by Bulgarian enterprises, or (iv) has a centre of vital interest in the Republic of Bulgaria.

### Tax Treatment of Interest Income

#### *Non-resident Corporate Bondholders*

Corporate Bondholders that are not Bulgarian tax residents and do not have a permanent establishment in Bulgaria ("**Non-resident Corporate Bondholders**") are liable for withholding tax on certain types of income originating from Bulgaria, including interest income.

Pursuant to the provisions of the Bulgarian Law on Corporate Income Taxation where the Bonds are admitted to trading on a regulated market in financial instruments (as defined in Directive 2004/39/EC) in Bulgaria or in an EU/the European Economic Area ("EEA") state, such as the Market ("**Regulated Market**"), no withholding tax would apply on the interest income, derived by Non-resident Corporate Bondholders. Alternatively, where the Bonds are not traded on a Regulated Market the interest income paid to a Non-resident Corporate Bondholder, irrespective of the place where it is established for tax purposes, is subject to withholding tax in Bulgaria at the rate of 10 per cent, unless treaty relief applies.

Where the interest income stemming from a Bulgarian entity, such as the Issuer is paid to a non-resident corporate entity acting through a permanent establishment in Bulgaria, irrespective of whether or not the Bonds are traded on a Regulated Market, the said interest income will be included in the corporate income taxable base of such entity's permanent establishment in Bulgaria and is subject to corporate income tax in Bulgaria at the rate of 10 per cent.

### ***Non-resident Individual Investors outside EU/ EEA***

The interest income from Bonds, irrespective of whether or not the Bonds are traded on a Regulated Market, received by individual investors who are not tax resident of an EU Member State or an EEA state is subject to withholding tax in Bulgaria at the rate of 10 per cent, provided that such individual investors do not have a fixed base in Bulgaria and unless treaty relief applies.

Where no treaty relief or exemption on the interest income is available or no tax clearance is obtained, or where a tax clearance leading to application of a lower tax rate (not full exemption) is effected, the Issuer should withhold the tax on interest income and remit it to the Bulgarian tax authorities. The statutory term for payment of the tax is until the end of the month following the quarter in which the interest income is accrued. In case the withholding tax is not paid within such deadline an obligation for payment of statutory default interest is triggered. The default interest rate is equal to the aggregate of the base interest rate announced by the Bulgarian National Bank twice a year and 10 per cent. per annum. Default interest accrues and is due even where a tax clearance is obtained but following the expiry of the deadline for the payment of the tax under Bulgarian law. The default interest is due on the amount of the withholding tax that would have been due if no tax clearance was made (i.e. default interest on the Bulgarian tax amount until the date on which tax clearance is granted for application of the respective double tax treaty). Failure of the Issuer to withhold and pay the due withholding tax on time would trigger joint liability of the respective Bondholder and the Issuer for any uncollected liabilities.

### ***Bulgarian resident Corporate Bondholders***

Irrespective of whether the Bonds are traded on a Regulated Market, the interest income received by a Bulgarian tax resident corporate Bondholder will be treated as a form of business income, and would therefore be included in its financial result. After netting off with business expenses, any resulting profit is subject to general corporate tax at 10 per cent. The Bulgarian Bondholder would be liable for payment of the corporate income tax (provided its annual financial result is a positive figure), as well as for complying with certain reporting obligations under Bulgarian law. The annual corporate income tax, if any, should be paid by 31 March of the following year, otherwise interest for the delay shall accrue thereon.

### ***Individual Investors from Bulgaria and other EU/EEA states***

The interest income derived from Bonds, irrespective of whether the Bonds are traded on a Regulated Market or not, received by a Bulgarian tax resident is tax exempt in Bulgaria. The interest income derived from the Bonds by a tax resident of another EU Member State or another EEA state, or who is a non-Bulgarian tax resident acting through a fixed base in Bulgaria is tax exempt in Bulgaria provided that the Bonds are traded on a Regulated Market. In order to avail of this relief, tax resident EU/EEA individuals should present before the Issuer an official document, issued by the relevant foreign tax administration, evidencing the tax resident status, as well as an affidavit stating that the circumstances qualifying the interest income as tax exempt are met (in the particular case the affidavit should state that the interest income originates from corporate bonds).

If such EU/EEA tax resident individual fails to evidence its tax residency status by submitting relevant documentation to the Issuer, the Issuer should withhold the tax on interest income and remit the tax to the Bulgarian tax authorities.

### ***Special Treatment of Sole Proprietors ("ednolicen targovetz")***

An individual who is a Bulgarian tax resident and with regards to the Bonds is acting as sole proprietor ("*ednolicen targovetz*") within the meaning of the Bulgarian Commerce Act, whether registered or not, is subject to taxation for any interest as a legal entity at the rate of 15 per cent.

### **Tax Treatment of Capital Gains**

#### ***Non-resident Corporate Bondholders***

The capital gains from disposal of the Bonds realised by Non-resident Corporate Bondholders would be subject to Bulgarian tax at the rate of 10 per cent. (unless a reduced treaty rate or treaty exemption is available), levied on the positive difference between the sale price and the documented acquisition price. "Sale price" is defined in the law as the consideration under the transaction, including any in-kind consideration, assessed at market prices as of the date of accrual of the income.

The tax on capital gains realised from disposal of the Bonds is due by the Non-resident Corporate Bondholder, which should remit it to the Bulgarian tax authorities. The term for payment of the tax is until the end of the month following the quarter of actual receipt of the capital gains. In case the capital gains tax is not paid within such deadline an obligation for payment of statutory default interest is triggered. Technically, the non-resident shall apply (either directly or through a resident representative) for registration with the NRA, file a declaration under Art. 201 CITA electronically and then pay tax.

The capital gains realised through disposal of the Bonds by a Non-resident Corporate Bondholder acting through a permanent establishment in Bulgaria would be included in the corporate income taxable base of the latter and are subject to corporate income tax in Bulgaria at the rate of 10 per cent.

#### ***Non-resident Individual Bondholders***

The income of individual investors who are not Bulgarian tax residents realised from transactions with the Bonds is subject to Bulgarian tax, at a rate of 10 per cent. (unless a reduced treaty rate or treaty exemption is available), levied on the positive difference between the sale price and the documented acquisition price of the Bonds. In cases when the sale price is paid partially, the tax is levied on the positive difference between the received part of the sale price and the documented acquisition price of the bonds corresponding to such received selling price. The tax is to be paid by the individual investor until the end of the month following the quarter in which the capital gains are actually received. In case the capital gains tax is not paid within such deadline an obligation for payment of statutory default interest is triggered. Technically, the non-resident shall apply (either directly or through a resident representative) for registration with the NRA, file a declaration under Art. 201 CITA electronically and then pay tax.

#### ***Bulgarian Corporate Bondholders***

The tax treatment of capital gains from the disposal of the Bonds, realised by a Bulgarian tax resident corporate Bondholder, will be the same as the tax treatment of the interest income from the Bonds described above. The capital gains will be treated as a form of business income of the Bulgarian tax-resident corporate Bondholder and will be included in its financial result. Should the financial result be a positive figure, the Bulgarian investor would be liable for a payment of 10 per cent. corporate tax thereon.

### ***Bulgarian Individual Investors***

The income of Bulgarian individuals derived from transfer of the Bonds shall be subject to personal income tax at 10 per cent, as part of the overall annual income.

### ***Special Treatment of Sole Proprietors ("ednolichen targovetz")***

An individual who is a Bulgarian tax resident and with regards to the Bonds is acting as sole proprietor ("*ednolichen targovetz*") within the meaning of the Bulgarian Commerce Act, whether registered or not, is subject to taxation for any capital gains as a legal entity at the rate of 15 per cent.

### **Other Taxes**

There is no Bulgarian value added tax, registration tax, stamp duty or any other similar duty payable in Bulgaria as a consequence of the receipt of interest income from the Bonds or the holding or disposal of the Bonds.

Under Bulgarian law, the transfer of the Bonds by way of succession (through corporate reorganisation or inheritance) does not trigger separate transfer tax, except for inheritance taxes that may be due in the case of succession by individual Bondholders who are Bulgarian residents.

### **Application of Double Tax Treaties**

Under Bulgarian law reduced treaty rates/exemptions provided by double tax treaties are not directly applicable. In order to avail itself to such reduced rates/exemptions the non-resident Bondholder has to either (i) for interest income exceeding BGN 500,000 - obtain advance approval (clearance) from the Bulgarian revenue authorities, or (ii) for interest income under BGN 500,000 - verify the conditions for application of the double tax treaty before the Issuer(in case of withholding tax on interest income). The conditions for application of a double tax treaty as well as the available relief/exemption may vary from treaty to treaty. However, the general rule under the Bulgarian Code on Tax and Social Procedure is that double tax treaties may only be applied in respect of Bondholders that are beneficial owners of the realised income. Double tax treaties do not apply to nominal recipients and conduit vehicles. Clearance for the application of a double tax treaty has to be obtained prior to the expiry of the period for payment of the respective tax otherwise, even if obtained, default interest will be charged.

### **The Proposed Financial Transactions Tax ("FTT")**

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**Participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in Bonds (including secondary market transactions) in certain circumstances. The issuance and subscription of Bonds should, however, be exempt.

Under the Commission's Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in Bonds where at least one party is a financial institution and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the Commission's Proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of Bonds are advised to seek their own professional advice in relation to the FTT.

## SUBSCRIPTION AND SALE

Citigroup Global Markets Limited (the "**Sole Bookrunner & Lead Manager**") and First Financial Brokerage House Ltd. (the "**Co-Manager**" and together with the Sole Bookrunner & Lead Manager, the "**Managers**") have, pursuant to a Subscription Agreement dated 27 July 2018 (the "**Subscription Agreement**"), jointly and severally agreed with the Issuer, subject to the satisfaction of certain conditions, to subscribe the Bonds at 100 per cent. of their principal amount less commissions (plus 33 days' accrued interest in respect of the period from (and including) 28 June 2018 to (but excluding) the Issue Date). The Issuer has agreed to pay to the Managers commissions and certain costs and expenses incurred by the Managers in connection with the issue of the Bonds. The Subscription Agreement entitles the Managers to terminate it in certain circumstances prior to payment being made to the Issuer. The yield of the Bonds is 3.499 per cent. on an annual basis. The yield is calculated as at 31 July 2018 on the basis of the issue price. It is not an indication of future yield.

The Managers and their respective affiliates have engaged in transactions with and performed various investment banking, financial advisory and other services for BEH and its affiliates, for which they received customary fees, and they and their respective affiliates may provide such services for BEH and its respective affiliates in the future. Moreover, in the ordinary course of their business activities, the Managers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments, any of which may relate to the Group.

### **Anchor Investor**

An international development institution has obtained a board approval to purchase from the Issuer up to 20 per cent. of the aggregate principal amount of the Bonds, subject to certain conditions, including obtaining internal credit approval for the purchase. The terms of the investor's investment are not expected to restrict its ability to buy or sell Bonds in the future and, as a result, the investor may buy or sell Bonds in open market transactions at any time following the consummation of the offering of the Bonds.

### **Selling Restrictions**

#### **General**

Neither the Issuer nor any Manager has made any representation that any action will be taken in any jurisdiction by the Managers or the Issuer that would permit a public offering of the Bonds, or possession or distribution of this Prospectus (in preliminary, proof or final form) or any other offering or publicity material relating to the Bonds (including roadshow materials and investor presentations), in any country or jurisdiction where action for that purpose is required. Each Manager has agreed that it will comply to the best of its knowledge and belief in all material respects with all applicable laws and regulations in each jurisdiction in which it acquires, offers, sells or delivers Bonds or has in its possession or distributes this Prospectus (in preliminary, proof or final form) or any such other material, in all cases at its own expense. It will also ensure that no obligations are imposed on the Issuer or any other Manager in any such jurisdiction as a result of any of the foregoing actions.

#### **United States**

The Bonds have not been and will not be registered under the Securities Act. Subject to certain exceptions, Bonds may not be offered or sold within the United States.

The Bonds are being offered and sold outside the United States in reliance on Regulation S under the Securities Act ("**Regulation S**").

In addition, until 40 days after the commencement of the offering of the Bonds, an offer or sale of Bonds within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

The Original Bonds may not be offered or sold within the United States or to, or for the account or benefit of U.S. persons (as defined in Regulation S) until 8 August 2018.

### **United Kingdom**

Each Manager has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the "**FSMA**")) received by it in connection with the issue or sale of the Bonds in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Bonds in, from or otherwise involving the United Kingdom.

### **Prohibition of Sales to EEA Retail Investors**

Each Manager has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Bonds to any retail investor in the European Economic Area. For the purposes of this provision the expression "retail investor" means a person who is one (or more) of the following:

- (a) a retail client as defined in point (11) or Article 4(1) of MiFID II; or
- (b) a customer within the meaning of the Insurance Mediation Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

## GENERAL INFORMATION

- 1 An application has been made to list the Bonds on Euronext Dublin by the Issuer, through the Listing Agent, Arthur Cox Listing Services Limited ("**Arthur Cox**"). Arthur Cox is acting solely in its capacity as listing agent for the Issuer in relation to the Bonds and is not itself seeking admission to the Official List or to trading on Euronext Dublin. It is expected that listing of the Bonds on the Official List and admission of the Bonds to trading on Euronext Dublin will be granted around 31 July 2018, subject only to the issue of the New Global Certificate. Transactions will normally be effected for delivery on the third working day after the day of the transaction.

The Issuer estimates that the expenses associated with the listing of the Bonds on the Official List and admission of the Bonds to trading on Euronext Dublin are expected to amount to approximately EUR5,000.

Following the admission to the Official List and to trading on Euronext Dublin, the Issuer intends to apply for the Bonds to be admitted to the Bulgarian List and to trading on the main market of the BSE.

The Original Bonds have been admitted to the Official List and were admitted to trading on Euronext Dublin, in each case on 28 June 2018. The Issuer intends to apply for the Original Bonds to be admitted to the Bulgarian List and to trading on the main market of the BSE (the "**Bulgarian Admission**") upon finalisation of ongoing local registration procedures.

- 2 The Issuer has obtained all necessary consents, approvals and authorisations in the Republic of Bulgaria in connection with the issue and performance of the Bonds. The issue of the Bonds was authorised by the Issuer on 20 July 2018 and by the Minister of Energy (exercising the rights of the Bulgarian state as sole shareholder of the Issuer) on 23 July 2018.
- 3 There has been no significant change in the financial or trading position of the Issuer or of the Group since 31 December 2017 and no material adverse change in the financial position or prospects of the Issuer or of the Group since 31 December 2017.
- 4 Except as disclosed in "Business Description—Litigation" on pages 90 to 93 of this Prospectus, neither the Issuer nor any of its subsidiaries is nor has been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) during the 12 months preceding the date of this Prospectus which may have or have had in the recent past significant effects on the financial position or profitability of the Issuer or the Group.
- 5 The Bonds will be accepted for clearance through the Euroclear and Clearstream, Luxembourg systems (which are the entities in charge of keeping the records) with a Common Code of 183968211 and an International Securities Identification Number (ISIN) for the Bonds of XS1839682116, each being the same as for the Original Bonds. The Classification of Financial Instruments (CFI) code for the Bonds is DBFXFR. The Financial Instrument Short Name (FISN) for the Bonds is BULGARIAN ENERG/3.5BD 20250628 REST.
- 6 For the purpose of trading of the Bonds on the BSE only, following the Bulgarian Admission, the Bulgarian CSD will hold beneficial interests in the Bonds as an accountholder of Clearstream, Luxembourg. Clearance of the Bonds traded on BSE's regulated market will be made through the Bulgarian CSD and in accordance with its rules and procedures. Transactions between members of BSE requiring transactions only between

accounts with Bulgarian CSD and not affecting accounts held with Euroclear or Clearstream, Luxembourg will normally be effected for delivery on the second working day after the day of the transaction. Transactions executed on BSE requiring transfers between the account of Bulgarian CSD with Clearstream, Luxembourg and any other account held with Euroclear or Clearstream, Luxembourg will normally be effected for delivery on the third business day after the day of the transaction. Prior to admission of the Bonds to the Bulgarian List and to trading on the BSE's regulated market, the Issuer will enter into a separate agreement with the Bulgarian CSD for servicing payments of interest and principal in respect of the Bonds traded on the BSE's regulated market.

- 7 The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy L-1855 Luxembourg. The address of Bulgarian CSD is 6 Tri Ushi Str., Sofia 1000, Bulgaria.
- 8 The Issuer's legal entity identifier is 635400E1RWKJXPSBCV07.
- 9 Other than the contract for financial assistance between the Ministry of Energy and NEK as described in *"Risk Factors - The Ministry of Energy has agreed to provide the Group's subsidiary, Natsionalna Elektricheska Kompania EAD ("NEK") with EUR 602 million of financial assistance following the outcome of the arbitration in connection with the discontinued Belene nuclear power plant project (the "Belene Project"). Any steps taken by the Ministry of Energy to recover the financial assistance following a failure of NEK to repay it could have a significant material adverse impact on the Group's financial position."*, there are no material contracts entered into other than in the ordinary course of the Issuer's business, which could result in any member of the Issuer's group being under an obligation or entitlement that is material to the Issuer's ability to meet its obligations holders in respect of the Bonds.
- 10 This Prospectus contains information taken or derived from Eurostat, the Bulgarian National Bank and the Bulgarian National Statistical Institute (the **"External Data"**). The External Data have not been independently verified by the Issuer. The External Data has been accurately reproduced and, as far as the Issuer is aware and is able to ascertain from the information published by such third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. The source of the External Data is identified in the relevant section of the Prospectus.
- 11 Physical copies (and English translations where the documents in question are not in English) of the following documents will be available until the Bonds are redeemed, during usual business hours on any weekday (Saturdays and public holidays excepted), for inspection at the office of the Issuer at 16, Veslets Street, Sofia 1000, Republic of Bulgaria:
  - (a) the Fiscal Agency Agreement (which includes the form of the New Global Certificate, the Original Global Certificate and the Individual Bond Certificate);
  - (b) the Deed of Covenant;
  - (c) the Memorandum and Articles of Association of the Issuer;
  - (d) the published consolidated financial statements of the Issuer for the financial years ended 31 December 2016 and 31 December 2017; and
  - (e) a copy of this Prospectus together with any Supplement to this Prospectus or further Prospectus.

This Prospectus will be published on the website of the Central Bank at <https://www.centralbank.ie/regulation/industry-market-sectors/securities-markets/prospectus-regulation/prospectuses>

The Prospectus will be published on the website of the Issuer at <http://www.bgenh.com/en/page/53/Financial-instruments.html>

- 12 HLB Bulgaria OOD of 149 – 151, Konstantin Velichkov blvd., 1309 Sofia, Republic of Bulgaria (Certified Public Accountants and a member of the Bulgarian Institute of Certified Public Accountants) have audited, and rendered audit reports on, the consolidated financial statements of the Issuer for the years ended 31 December 2016 and 31 December 2017. Each of the audit reports contain certain qualifications and emphases of matters as described in "*Presentation of Financial and Other Information*" on pages 4 to 9.
- 13 Grant Thornton OOD of 26, Cherni Vrah Blvd, Sofia 1421, Republic of Bulgaria (Certified Public Accountants and a member of the Bulgarian Institute of Certified Public Accountants) have made the statement contained on page 9 and below. This statement is included in this Prospectus at the request of the Issuer with the consent of Grant Thornton and Grant Thornton has authorised the contents of this statement. Grant Thornton does not have a material interest in the Issuer.
- 14 At the request of the Group, Grant Thornton have conducted a series of procedures in accordance with the International Standards on Auditing ("ISA") issued by the International Federation of Accountants ("IFAC"). They have not carried out an audit examination in accordance with generally accepted auditing standards of financial information relating to the Issuer for any period subsequent to 31 December 2014. For the purpose of conducting these procedures, Grant Thornton have read the financial information included in this Prospectus and have compared it with the audited consolidated financial statements of the Issuer. Grant Thornton confirms that this financial information has been accurately extracted from the audited consolidated financial statements for the relevant years. A limited review and analysis have been conducted on other financial information and changes in the Issuer's financial position. This limited review and analysis also focused on the qualifications and emphases of matter identified by HLB Bulgaria in their auditor's reports on the consolidated financial statements of the Issuer as of and for the years ended 31 December 2017 and 31 December 2016. No significant findings or events came to the attention of Grant Thornton as a result of their review and analysis.

## INDEX TO FINANCIAL INFORMATION OF THE ISSUER

	<u>Page</u>
Audited Consolidated Financial Statements of the Issuer for the Financial Year ended 31 December 2017 .....	F-1
Independent auditor's report .....	F-2
Consolidated statement of profit or loss .....	F-11
Consolidated statement of comprehensive income .....	F-12
Consolidated statement of financial position .....	F-13
Consolidated statement of changes in equity .....	F-15
Consolidated statement of cash flows .....	F-17
Notes to the consolidated financial statements.....	F-18
 Audited Consolidated Financial Statements of the Issuer for the Financial Year ended 31 December 2016.....	 F-105
Independent auditor's report .....	F-106
Consolidated statement of profit or loss .....	F-114
Consolidated statement of comprehensive income .....	F-115
Consolidated statement of financial position .....	F-116
Consolidated statement of changes in equity .....	F-118
Consolidated statement of cash flows .....	F-120
Notes to the consolidated financial statements.....	F-121

Independent Auditor's Report  
Consolidated Financial Statements  
Bulgarian Energy Holding EAD  
31 December 2017



**INDEPENDENT AUDITOR'S REPORT  
TO THE SOLE SHAREHOLDER OF  
BULGARIAN ENERGY HOLDING EAD**

**Report on the Audit of the Consolidated Financial Statements**

**Qualified opinion**

We have audited the consolidated financial statements of BULGARIAN ENERGY HOLDING EAD and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2017, the consolidated statement of profit or loss and consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, except for the possible effects of the matters described in the *Basis for Qualified Opinion* section of our report the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2017, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU).

**Basis for Qualified Opinion**

1. The Group has concluded an agreement for the construction of a nuclear power plant, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements. The Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant and pursuant to a Decision, dated 27 February 2013, the 41<sup>st</sup> National Assembly upheld this decision. As at 31 December 2017, the total carrying amount of property, plant and equipment, related to the Project Belene, amounted to BGN 2,238,981 thousand (31 December 2016: BGN 2,186,642 thousand), out of which BGN 2,158,876 thousand are assets under construction (31 December 2016: BGN 2,101,721 thousand). Assets under construction, related to Project Belene, include an asset – equipment with long manufacturing cycle, amounting to BGN 853,215 thousand (31 December 2016: BGN 795,776 thousand). The Group is not able to reliably estimate the recognised assets related to the discontinued Project, because of uncertainty about the feasible alternatives of its realization hence it has not recognised impairment loss of the assets in the consolidated financial statements as at 31 December 2017.

In addition the Group is in a process of legal dispute with the Project architect-engineer, disclosed in Note 40.3 *Contingent Liabilities – Legal lawsuits and disputes*. Because of the inherent uncertainty of the final outcome of the lawsuit, its complexity and existence of significant judgment, the Group management has decided to not recognize provisions.

We were unable to obtain sufficient and appropriate audit evidence regarding the recoverable amount of the above stated assets of the Group and the completeness of the recognized liabilities related to this Project, consequently we were unable to determine whether any adjustments of these amounts are necessary and their effect on the consolidated financial statements as at 31 December 2017.

2. As disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements, for assets under construction with carrying amount of BGN 37,888 thousand as at 31 December 2017 (31 December 2016: BGN 45,794 thousand) whose implementation has been discontinued by the Group and postponed for a period exceeding five years. We were unable to obtain sufficient and appropriate audit evidence, regarding the recoverable value of these assets to become convinced with reasonable assurance about their amount and to determine whether any adjustments of the amount of these assets are necessary and the possible amount of the impairment as at 31 December 2017.

3. As disclosed in Note 40 *Commitments and Contingent Liabilities*, BULGARIAN ENERGY HOLDING EAD and its subsidiaries BULGARGAZ EAD and BULGARTRANGAZ EAD are litigants to Case COMP/B1/AT.39849 – BEH Gas (Case BEH Gas), brought by the European Commission (EC) in relation to the official procedure of investigation about whether BULGARIAN ENERGY HOLDING EAD (BEH EAD) and its subsidiaries BULGARGAZ EAD and BULGARTRANGAZ EAD have violated the competition rules of the EC natural gas market in the country. On 24 November 2017 the Government of the Republic of Bulgaria took a decision for closing of Case BEH Gas according to article 7 of Regulation (E)O №1/2003 without admitting any wrongdoing to the alleged infringements and without accepting any liability by taking all necessary action to protect the interest of the Republic of Bulgaria and the companies BULGARIAN ENERGY HOLDING EAD, BULGARGAZ EAD and BULGARTRANGAZ EAD, including actions for appeal of a possible prohibition decision by the EC in relation to closing of Case COMP/B1/AT.39849 – BEH Gas. The Group management carried out analysis and estimation of available information about the likely outcome of the Case BEH Gas and is not able to reliably estimate the possible value of the liability related to the Group.

Because of the inherent uncertainty about the final outcome of Case BEH Gas and the existence of significant judgment for determination of the potential impact of the liability, we were unable to become convinced with sufficient assurance about the amount of the possible liability related to the Group; consequently we were unable to determine whether any adjustments are necessary and their effect on the Group consolidated financial statements as at 31 December 2017.

4. As is disclosed in Note 4.24 *Provisions - Provision for decommissioning of nuclear facilities* of the consolidated financial statements, as at 31 December 2017, the Group's activity gives rise to the necessity to provide for future expenses for the decommissioning of nuclear facilities. According to the legislation currently in force and other international agreements, a portion of these expenses could be assumed by national and international funds. In accordance with the requirements of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, the Group should recognise provisions for decommissioning of nuclear facilities and a separate asset for its right to receive reimbursements in the event the asset's value can be reliably determined. We were not provided with an assessment of these future expenses

and any related reimbursements. Consequently, we were not able to become convinced with reasonable assurance about the assessment of provisions and receivables related to them as at 31 December 2017.

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)* together with the ethical requirements of the Independent Financial Audit Act (IFAA) that are relevant to our audit of the consolidated financial statements in Bulgaria, and we have fulfilled our other ethical responsibilities in accordance with the requirements of the IFAA and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

### **Emphasis of matter**

1. The Group through its subsidiary NATSIONALNA ELEKTRICHESKA KOMPANIA EAD, utilizes property and equipment, disclosed in Note 19 *Property, plant and equipment*, with a carrying amount of BGN 905,054 thousand as at 31 December 2017, which are under the regulation of the Water Act and are public state property. The Act has provisions for separate management of such assets by legal entities with a hundred per cent public ownership or by legal entities with joint state and municipal participation, where the state has a majority share, or by legal entities whose share capital is owned by other legal entities with state participation.
2. We draw attention to the disclosure in Note 19 *Property, plant and equipment*, about land and buildings with carrying amounts of BGN 25,781 thousand for which as at 31 December 2017 the Group does not have unconditional ownership rights and which are in pending procedure of issuing of titles of ownership.
3. We draw attention to the disclosure in Note 40 *Commitments and Contingent Liabilities*, where information about the Group's commitments under a concession contract for the development and mining of coal is disclosed. The financial collateral obligation for the decommissioning costs of the concession area is applied by setting aside funds into special security accounts that can be used only for the purpose for which they are intended. As at 31 December 2017 the Group has not set aside funds in a guaranteed bank account and has not issued a bank guarantee in favor of the concession provider to secure contract activities.
4. We draw attention to the disclosure in Note 40.3 *Contingent Liabilities – Legal lawsuits and disputes* referring to legal actions against companies within the Group, to nullify transaction offsetting carried out among these companies and BULGARIAN ENERGY HOLDING EAD, taken by the creditors for insolvency of CCB AD (in insolvency), the status of these actions and the countermeasures taken by the Group.

Our opinion is not modified in respect of these matters.

## Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In addition to the matters described in the *Basis for Qualified Opinion* section above, we have determined the matter described below to be the key audit matter to be communicated in our report.

Key audit matter	How this key audit matter was addressed in our audit
<p><b><i>Loans and liabilities under issued bonds – presentation and disclosure; requirements for adherence with debt financial covenants</i></b></p> <p><b>Issued bonds as at 31 December 2017: BGN 2,062,878 thousand</b> (31 December 2016: BGN 2,057,229 thousand)</p> <p><b>Liabilities to Banks as at 31 December 2017: BGN 256,255 thousand</b> (31 December 2016: BGN 371,948 thousand)</p> <p><b>Loan to Government as at 31 December 2017: BGN 849,737 thousand</b> (31 December 2016: BGN 804,866 thousand)</p> <p>Disclosed in Note 4.17.2 Financial liabilities, Note 16. Financial costs, Note 29 Loans and Finance lease, Note 35 Related parties' disclosure</p>	
<p>Based on our understanding of the Group's business activity, we have identified the debt securities issued (bonds) and loans from financial and non-financial institutions, and the adherence to debt financial covenants related to them as key audit matter.</p> <p>The loans and issued bonds are considered a key matter for our audit since they form 52% of the total value of the Group's liabilities as at 31 December 2017 (31 December 2016: 54%).</p> <p>In addition, according to the contractual commitments to Investors and Banks, the Group is obligated to maintain certain financial ratios for debt servicing and for current assets versus current liabilities, and in the event of breach (default) of the covenants under the two bond</p>	<p>In this area, our audit procedures along with others similar, include:</p> <ul style="list-style-type: none"> <li>• We reviewed internal rules and supporting documents related to the assumption of the liabilities;</li> <li>• Recalculation of the initial recognition and the subsequent measurement of debt at amortized cost, using the effective interest rate;</li> <li>• We reviewed the prospectuses and loan agreements and paid particular attention to the conditions of the covenants and the cases of default;</li> <li>• Assessment of accounting policy and accounting treatment in the definition of financial expenses and adequate calculation of</li> </ul>

Key audit matter	How this key audit matter was addressed in our audit
<p>issues, BULGARIAN ENERGY HOLDING EAD and its subsidiaries will not be able to attract external financing unless these covenants are restored, namely:</p> <p>(1) EBITDA Coverage Ratio, calculated as - consolidated EBITDA for the last period for which the Issuer's consolidated financial statements had been issued, divided by the financial expenses for the same period, is less than the minimum required covenant level of 4:1;</p> <p>(2) Consolidated Leverage Ratio, calculated as - consolidated debt of the Issuer for the last period for which consolidated financial statements had been issued less the carrying value of the Issuer's cash for the same period, divided by the consolidated EBITDA for the same period, is more than the maximum allowed covenant level of 4.5:1.</p>	<p>the covenants in accordance with the terms of the prospectuses;</p> <ul style="list-style-type: none"> <li>Given the significance of the earnings before interest, taxes and depreciation (EBITDA), in our calculations of the covenants, we paid particular attention to the correct classification of the items of earnings before interest, taxes and depreciation, as well as to specific and extraordinary items included in the adjusted earnings before interest, taxes and depreciation (EBITDA);</li> <li>We reviewed for completeness and adequacy of disclosures in the consolidated financial statements regarding the presentation of the loans and debt.</li> </ul>

#### **Information Other than the Consolidated Financial Statements and Auditor's Report Thereon**

Management is responsible for the other information. The other information, which we have obtained prior the date of our auditor's report, comprises the consolidated management report, including the corporate governance statement, consolidated non-financial statement and the consolidated report on payments to governments, prepared by management in accordance with Chapter Seven of the Accountancy Act, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon, unless and to the extent explicitly specified in our report.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

As described in the *Basis for Qualified Opinion* section, matters from 1 to 4 above, we were unable to obtain sufficient and appropriate audit evidence about the valuation of assets and liabilities, related to

terminated Project NPP Belene, the valuation of other assets under construction, the assessment of provision for decommissioning of nuclear facilities and the related receivables, as well as to the amount of potential liability related to Case COMP/B1/AT.39849 – BEH Gas as at 31 December 2017. Accordingly, we were unable to conclude whether or not the other information is materially misstated with regard to financial indexes and respective disclosures referring to these matters.

### **Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, as adopted by the EU, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## **Report on Other Legal and Regulatory Requirements**

### ***Additional Matters to be Reported under the Accountancy Act and the Public Offering of Securities Act***

In addition to our responsibilities and reporting in accordance with ISAs, described above in the *Information Other than the Consolidated Financial Statements and Auditor's Report Thereon* section, in relation to the consolidated management report, the Group corporate governance statement, the non-financial statement and the consolidated report on payments to governments, we have also performed the procedures added to those required under ISAs in accordance with "*Guidelines about new and expanded auditor's reports and communications from the auditor's side*" of the professional organisation of certified public accountants and registered auditors in Bulgaria, i.e. the Institute of Certified Public

*Accountants (ICPA).* These procedures refer to testing the existence, form and content of this other information to assist us in forming opinions about whether the other information includes the disclosures and reporting provided for in Chapter Seven of the Accountancy Act and in the Public Offering of Securities Act (Art. 100m, paragraph 10 of the POSA in conjunction with Art. 100m, paragraph 8(3) and (4) of the POSA) applicable in Bulgaria.

*Opinion in connection with Art. 37, paragraph 6 of the Accountancy Act*

Based on the procedures performed, our opinion is that:

- a) The information included in the consolidated management report referring to the financial year for which the consolidated financial statements have been prepared is consistent with those consolidated financial statements on which we have expressed a qualified opinion in *Report on the Audit of the Consolidated Financial Statements* section above.
- b) The consolidated management report has been prepared in accordance with the requirements of Chapter Seven of the Accountancy Act.
- c) The Group corporate governance statement referring to the financial year for which the consolidated financial statements have been prepared presents the information required under Chapter Seven of the Accountancy Act and Art. 100(m), paragraph 8 of the Public Offering of Securities Act.
- d) The consolidated non-financial statement referring to the financial year for which the consolidated financial statements have been prepared is provided and prepared in accordance with the requirements of Chapter Seven of the Accountancy Act.
- d) The consolidated report on payments to governments referring to the financial year for which the consolidated financial statements have been prepared is provided and prepared in accordance with the requirements of Chapter Seven of the Accountancy Act.

*Opinion in connection with Art. 100(m), paragraph 10 in conjunction with Art. 100(m), paragraph 8 (3) and (4) of the Public Offering of Securities Act*

Based on the procedures performed and the knowledge and understanding obtained about Group's activities and the environment in which it operates, in our opinion, the description of the main characteristics of Group's internal control and risk management systems relevant to the financial reporting process, which is part of the consolidated management report (as a component of the corporate governance statement) and the information under Art. 10 paragraph 1(c), (d), (f), (h) and (i) of Directive 2004/25/EC of the European Parliament and of the Council of 21 April 2004 on Takeover Bids, do not contain any material misrepresentations.

***Reporting in accordance with Art. 10 of Regulation (EU) No 537/2014 in connection with the requirements of Art. 59 of the Independent Financial Audit Act***

In accordance with the requirements of the Independent Financial Audit Act in connection with Art. 10 of Regulation (EU) No 537/2014, we hereby additionally report the information stated below.

- Audit firm HLB Bulgaria OOD was appointed as a statutory auditor of the consolidated financial statements of BULGARIAN ENERGY HOLDING EAD for the year ended 31 December 2017 by the Minutes № E-PД-21-41 of the Minister of Energy dated from 10 July 2015 for a period of three years.
- The audit of the consolidated financial statements of the Group for the year ended 31 December 2017 represents third total uninterrupted statutory audit engagement for that group carried out by us.
- We hereby confirm that the audit opinion expressed by us is consistent with the additional report, provided to the audit committee of BULGARIAN ENERGY HOLDING EAD, in compliance with the requirements of Art. 60 of the Independent Financial Audit Act.
- We hereby confirm that we have not provided the prohibited non-audit services referred to in Art. 64 of the Independent Financial Audit Act.
- We hereby confirm that in conducting the audit we have remained independent of the Group.

**Audit firm**

**HLB BULGARIA OOD**

**Manager:**

**Vaska Gelina**

**Registered auditor, responsible for the audit:**

**Milena Hristova**

**18 May 2018**

**CONSOLIDATED STATEMENT OF PROFIT OR LOSS**

for the year ended 31 December 2017

	Notes	2017 <i>BGN '000</i>	2016 <i>BGN '000</i>
Revenue from sales	6	5,863,294	5,679,431
Other operating income	7	566,267	392,726
		<b>6,429,561</b>	<b>6,072,157</b>
Cost of natural gas, electricity and other current assets sold	8	(3,568,766)	(3,407,913)
Change in finished goods and work in progress		9,158	16,069
Cost of acquisition of property, plant and equipment in a commercial manner		18,496	22,832
Cost of materials	9	(345,111)	(293,478)
Hired services expenses	10	(282,130)	(355,486)
Depreciation and amortisation expenses	18,19	(637,538)	(600,405)
Employee benefits expenses	12	(833,500)	(778,974)
(Expenses for)/reintegration of impairment, net	11	(16,143)	(114,458)
Cost for purchase of greenhouse gas emissions and other provisions	32	(238,473)	(74,966)
Expenses related to the Arbitration award on the NPP Belene Project, net	14	-	(159,270)
Other operating expenses	13	(329,875)	(318,430)
<b>Operating profit</b>		<b>205,679</b>	<b>7,678</b>
Share of profit from associates and joint ventures	21	41,765	35,928
Financial income	15	22,381	21,354
Financial costs	16	(150,192)	(133,122)
<b>Profit/ (Loss) before tax</b>		<b>119,633</b>	<b>(68,162)</b>
Income tax expense	17	(2,567)	(10,126)
<b>Profit/(Loss) for the year from continuing operations</b>		<b>117,066</b>	<b>(78,288)</b>
Profit for the year from discontinued operations	27	1,792	745
<b>Profit/(Loss) for the year</b>		<b>118,858</b>	<b>(77,543)</b>
Profit/(loss) for the year attributable to:			
Sole-shareholder of the parent company		118,808	(77,623)
Non-controlling interest		50	80
		<b>118,858</b>	<b>(77,543)</b>
<b>Earnings/(Loss) per share</b>	18	<b>BGN</b>	<b>BGN</b>
Earnings/(Loss) from continuing operations		0.035	(0.024)
Earnings/(Loss) from discontinued operations		0.001	0.000
Total		0.036	(0.024)

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**

for the year ended 31 December 2017

	Notes	2017 <i>BGN '000</i>	2016 <i>BGN '000</i>
<b>Profit (Loss) for the year</b>		<b>118,858</b>	<b>(77,543)</b>
<b>Other comprehensive income</b>			
<i>Items that are not reclassified to profit or loss:</i>			
Revaluation of property, plant and equipment	19	37,893	16,743
Remeasurement of defined benefits liability	31	(21,074)	(17,851)
Income tax, relating to items that are not reclassified in profit or loss	23	(1,682)	110
		<b>15,137</b>	<b>(998)</b>
<i>Items that are reclassified to profit or loss:</i>			
Exchange differences on the translation of foreign operations		-	1
Gain on available-for-sale financial assets	25	210	35
Income tax related to items that are reclassified in profit or loss	23	(21)	(3)
		<b>189</b>	<b>33</b>
<b>Share of the other comprehensive income of associates</b>			
<i>Items that are reclassified to profit or loss:</i>			
Cash flow hedges, net of tax		3,471	5,731
Gain/(loss) on available-for-sale financial assets		63	(45)
Income tax related to items that are reclassified in profit or loss	23	(353)	(573)
		<b>3,181</b>	<b>5,113</b>
<i>Items that are not reclassified to profit or loss:</i>			
Remeasurement of defined benefits liability		(302)	(32)
Income tax, related to items that are not reclassified in profit or loss	23	29	3
		<b>(273)</b>	<b>(29)</b>
<b>Other comprehensive income for the year, net of tax</b>		<b>18,234</b>	<b>4,119</b>
<b>Total comprehensive income for the year</b>		<b>137,092</b>	<b>(73,424)</b>
Total comprehensive income for the year, attributable to:			
Sole-shareholder of the parent company		137,042	(73,504)
Non-controlling interest		50	80
		<b>137,092</b>	<b>(73,424)</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

As at 31 December 2017

	Notes	31 December 2017 <i>BGN '000</i>	31 December 2016 <i>BGN '000</i>
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	19	13,481,125	13,705,798
Intangible assets	20	32,907	25,314
Investment properties		-	520
Investments in associates, joint ventures and other entities	21	346,010	357,206
Trade and other receivables	22	479,085	487,586
Deferred tax assets	23	116,055	102,424
<b>Total non-current assets</b>		<b>14,455,182</b>	<b>14,678,848</b>
<b>Current assets</b>			
Inventories	24	682,205	675,937
Trade and other receivables	22	945,586	803,084
Related party receivables	35	23,180	20,434
Overpaid income tax		6,518	5,480
Available-for-sale financial assets	25	976	765
Cash and cash equivalents, deposits	26	1,261,553	1,015,987
Assets of a group classified as held for sale	27.2	84,421	17,284
<b>Total current assets</b>		<b>3,004,439</b>	<b>2,538,971</b>
<b>TOTAL ASSETS</b>		<b>17,459,621</b>	<b>17,217,819</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
(CONTINUED)**

for the year ended 31 December 2017

	Notes	31 December 2017 BGN '000	31 December 2016 BGN '000
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital	28.1	3,397,757	3,285,614
Other reserves	28.2	2,552,272	2,540,531
Reserves from revaluation to fair value	28.3	2,111	1,865
Revaluation reserve of non-financial assets	28.4	6,670,649	6,687,767
Reserve from translation of foreign operations	28.5	(7)	(7)
Reserve from remeasurement of defined benefit plans	28.6	(112,705)	(93,465)
Hedge reserve		(16,859)	(19,983)
(Accumulated loss)/Retained earnings		(1,131,870)	(1,177,273)
<b>Equity, attributable to the sole-shareholder of the parent company</b>		<b>11,361,348</b>	<b>11,225,049</b>
Non-controlling interest		446	428
<b>Total equity</b>		<b>11,361,794</b>	<b>11,225,477</b>
<b>Non-current liabilities</b>			
Loans and finance lease liabilities	29	1,188,828	2,277,275
Deferred tax liabilities	23	677,688	703,002
Deferred financing	30	417,005	380,439
Liabilities for retirement employee benefits	31	188,632	165,796
Provisions	32	104,436	99,962
Deferred income	33	128,519	125,049
Trade and other payables	34	207,465	222,517
Related party payables	35	855,019	815,569
<b>Total non-current liabilities</b>		<b>3,767,592</b>	<b>4,789,609</b>
<b>Current liabilities</b>			
Trade and other payables	34	707,472	813,161
Related party payables	35	151,580	63,923
Loans and finance lease liabilities	29	1,130,311	151,915
Liabilities for retirement employee benefits	31	21,633	15,090
Provisions	32	235,686	123,330
Deferred income	33	5,441	4,959
Deferred financing	30	16,707	16,294
Income tax payables		2,902	3,186
Liabilities of group classified as held for sale	27.2	58,503	10,875
<b>Total current liabilities</b>		<b>2,330,235</b>	<b>1,202,733</b>
<b>Total liabilities</b>		<b>6,097,827</b>	<b>5,992,342</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>17,459,621</b>	<b>17,217,819</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

for the year ended 31 December 2017

	Share capital	Other reserves	Reserves from revaluation to fair value	Revaluation reserve of non-financial assets	Reserve from translation of foreign operations	Reserve from remeasurement of defined benefit plans	Hedge reserve	(Accumulated loss)/Retained earnings	Total equity of the shareholder of the parent company	Non-controlling interest	Total equity
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>In BGN '000</b>											
<b>Balance as at 1 January 2017</b>	<b>3,285,614</b>	<b>2,540,531</b>	<b>1,865</b>	<b>6,687,767</b>	<b>(7)</b>	<b>(93,465)</b>	<b>(19,983)</b>	<b>(1,177,273)</b>	<b>11,225,049</b>	<b>428</b>	<b>11,225,477</b>
Dividend distribution	-	-	-	-	-	-	-	-	-	(32)	(32)
<b>Transactions with the sole shareholder</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(32)</b>	<b>(32)</b>
Profit for the year	-	-	-	-	-	-	-	118,808	118,808	50	118,858
Other comprehensive income	-	-	246	34,104	-	(19,240)	3,124	-	18,234	-	18,234
<b>Total comprehensive income for the year</b>	<b>-</b>	<b>-</b>	<b>246</b>	<b>34,104</b>	<b>-</b>	<b>(19,240)</b>	<b>3,124</b>	<b>118,808</b>	<b>137,042</b>	<b>50</b>	<b>137,092</b>
Increase in the share capital and decrease in the retained earnings	112,143	-	-	-	-	-	-	(112,143)	-	-	-
Written-off revaluation reserve	-	-	-	(51,222)	-	-	-	51,222	-	-	-
Transfer of profits to reserves	-	12,461	-	-	-	-	-	(12,461)	-	-	-
Other changes in equity	-	(720)	-	-	-	-	-	(23)	(743)	-	(743)
<b>Balance as at 31 December 2017</b>	<b>3,397,757</b>	<b>2,552,272</b>	<b>2,111</b>	<b>6,670,649</b>	<b>(7)</b>	<b>(112,705)</b>	<b>(16,859)</b>	<b>(1,131,870)</b>	<b>11,361,348</b>	<b>446</b>	<b>11,361,794</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY  
(CONTINUED)**

for the year ended 31 December 2017

	Share capital	Other reserves	Reserves from revaluation to fair value	Revaluation reserve of non-financial assets	Reserve from translation of foreign operations	Reserve from remeasurement of defined benefit plans	Hedge reserve	(Accumulated loss)/Retained earnings	Total equity of the shareholder of the parent company	Non-controlling interest	Total equity
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>In BGN '000</b>											
<b>Balance as at 1 January 2016</b>	<b>3,188,168</b>	<b>2,528,065</b>	<b>1,878</b>	<b>6,691,367</b>	<b>(8)</b>	<b>(77,370)</b>	<b>(25,141)</b>	<b>(993,618)</b>	<b>11,313,341</b>	<b>348</b>	<b>11,313,689</b>
Dividend distribution	-	-	-	-	-	-	-	(14,752)	(14,752)	-	(14,752)
<b>Transactions with the sole shareholder</b>											
Loss for the year	-	-	-	-	-	-	-	(77,623)	(77,623)	80	(77,543)
Other comprehensive income	-	-	(13)	15,068	1	(16,095)	5,158	-	4,119	-	4,119
<b>Total comprehensive income for the year</b>	<b>-</b>	<b>-</b>	<b>(13)</b>	<b>15,068</b>	<b>1</b>	<b>(16,095)</b>	<b>5,158</b>	<b>(77,623)</b>	<b>(73,504)</b>	<b>80</b>	<b>(73,424)</b>
Increase in the share capital and decrease in the retained earnings	97,446	-	-	-	-	-	-	(97,446)	-	-	-
Written-off revaluation reserve	-	-	-	(18,668)	-	-	-	18,668	-	-	-
Transfer of profits to reserves	-	12,466	-	-	-	-	-	(12,466)	-	-	-
Other changes in equity	-	-	-	-	-	-	-	(36)	(36)	-	(36)
<b>Balance as at 31 December 2016</b>	<b>3,285,614</b>	<b>2,540,531</b>	<b>1,865</b>	<b>6,687,767</b>	<b>(7)</b>	<b>(93,465)</b>	<b>(19,983)</b>	<b>(1,177,273)</b>	<b>11,225,049</b>	<b>428</b>	<b>11,225,477</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CASH FLOWS**

for the year ended 31 December 2017

	Notes	<b>2017</b>	<b>2016</b>
		<i>BGN '000</i>	<i>BGN '000</i>
<b>Cash flows from operating activities</b>			
Proceeds from sales, including:		5,602,064	5,867,535
<i>Proceeds from sale of electricity</i>		3,804,783	3,728,853
<i>Proceeds from sale of natural gas and auxiliary services</i>		1,398,152	1,431,033
<i>Proceeds from sale of lignite coal</i>		333,759	630,505
<i>Proceeds from other sales</i>		65,370	77,144
Proceeds from the Security of the Electricity System Fund		504,830	290,714
Payments to suppliers		(3,779,865)	(4,770,702)
Payments to the personnel and social insurance institutions		(823,976)	(798,957)
Payments to State funds		(139,178)	(125,084)
Interest paid		(104,325)	(65,382)
Payments of fees, commissions and others		(20,014)	(63,873)
Other payments, net, including:		(661,292)	(1,736,924)
<i>Income tax paid</i>		(45,146)	(45,488)
<i>Payments to the State budget</i>		(298,649)	(440,171)
<i>Other payments for operating activities</i>		(317,497)	(1,251,265)
Net cash flows from continuing operations		578,244	(1,402,673)
Net cash flows from discontinued operations	27	(9,517)	
<b>Net cash flows from operating activities</b>		<b>568,727</b>	<b>(1,402,673)</b>
<b>Cash flows from investing activities</b>			
Payments for property, plant, equipment and intangible assets		(281,316)	(429,399)
Acquisition of subsidiaries, net of cash received		-	8
Proceeds from sale of property, plant and equipment		713	526
Interest received		3,947	3,880
Dividends received and other proceeds from equity accounted investments		11,761	16,873
Financing of non-current assets		54,352	26,350
<b>Net cash flows from investing activities</b>		<b>(210,543)</b>	<b>(381,762)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issuance of corporate bond by the parent company	29	-	1,055,494
Proceeds from loans	29.1	59,902	1,285,993
Proceeds from Government loan		-	1,176,661
Repaid loans	29.1	(172,520)	(1,523,420)
Dividends paid	18	-	(14,752)
Payments for transactions with financial instruments		-	(12,054)
<b>Net cash flows from financing activities</b>		<b>(112,618)</b>	<b>1,967,922</b>
<b>Reclassified cash and cash equivalents</b>		<b>-</b>	<b>(611)</b>
<b>Net change in the cash and cash equivalents</b>		<b>245,566</b>	<b>182,876</b>
<b>Cash and cash equivalents as at 1 January</b>		<b>1,015,987</b>	<b>833,111</b>
<b>Cash and cash equivalents as at 31 December</b>	26	<b>1,261,553</b>	<b>1,015,987</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2018

The Financial Statements were authorized for issue by a Decision of the Board of Directors, dated 17 May 2018.

The accompanying notes from page 8 to page 94 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**1. Corporate information**

The Consolidated Financial Statements of Bulgarian Energy Holding EAD and its subsidiaries ("the Group") for the year ended 31 December 2017 were approved for issuance by a decision of the Board of Directors under Protocol No.27-2018/17.05.2018.

The Group's main activity comprises:

- The production, extraction, transportation, storing, management, distribution, sale and/or purchase of natural gas, electricity, heating energy, coals, as well as any other types of energy and raw materials, used in production;
- The organization of power exchange market for trading in the fields of energy and electrical supply;
- Investment activities in the fields of energy.

The number of personnel in the system of Bulgarian Energy Holding EAD as at 31 December 2017 is 21,128 employees (31 December 2016: 21,112 employees).

The parent company Bulgarian Energy Holding EAD is a sole-owner joint stock company, registered in the Republic of Bulgaria. The entity is registered in the Commercial Register under vol. 147, page 21, and Record No.10295. The entity is the successor of the state enterprise Oil and Gas (Neft i Gas), incorporated in 1973, and renamed in December 1975 to Gas Supply (Gazosnabdyavane). In accordance with the Decree on Business Activities, at the beginning of 1990, the entity was renamed to Bulgargaz. Pursuant to a decision of the Council of Ministers, dated 12 May 1993, Bulgargaz was transformed into a sole-owner joint stock company. Based on a transformation plan, dated 27 October 2006, and the appendices thereto, Bulgargaz EAD was transformed into Bulgargaz Holding EAD through the split of two sole-owner joint stock companies – Bulgartransgaz EAD and Bulgargaz EAD. The split was executed under the provisions of Art. 262 (d) of the Commercial Act. Bulgartransgaz EAD and Bulgargaz EAD are legal successors of the respective portion of the property (rights and obligations) of Bulgargaz Holding EAD. By virtue of Decision No.45 dated 15 January 2007 the transformation was registered in the Sofia City Court.

By virtue of Protocol No.RD-21-305 dated 18 September 2008 of the Minister of Economy and Energy, the company name of Bulgargaz Holding EAD was changed to Bulgarian Energy Holding EAD, with capital raise through an in-kind contribution of the par value of all shares of the capital of National Electricity Company EAD, NPP Kozloduy EAD, TPP Maritsa East 2 EAD and Mini Maritsa Iztok EAD.

The registered address and headquarters of Bulgarian Energy Holding EAD are as follows: Sofia - 1000, Oborishte area, 16 Veslets Str.

The principal activities of Bulgarian Energy Holding EAD are as follows: acquisition, valuation and sale of shares in trading companies, that operate in the fields of generation, production, transmission, transit, storage, management, distribution, sale and/or purchase of natural gas, electricity, thermal power, coals, as well as any other type of energy and raw materials for production, participation in the management of such companies, their financing, acquisition, valuation, issue and sale of bonds, acquisition, valuation and sale of patents, concessions of licenses for use of patents of the abovementioned companies, as well as performance of own production or trade activity.

As at 31 December 2017 and as at the date of preparation of the consolidated financial statements, 25 April 2018, Bulgarian Energy Holding EAD is managed by a Board of Directors consisting of the following members: Petar Asenov Iliev - Chairman of the Board of Directors, Petyo Angelov Ivanov - Member of the Board of Directors and Executive Director and Zhivko Dimitrov Dinchev - Member of the Board of Directors. The company is represented by the Executive Director Petyo Angelov Ivanov.

Sole and ultimate owner of Bulgarian Energy Holding EAD is the Bulgarian State through the Minister of Energy.

As at 31 December 2017 the subsidiaries, joint ventures and associates included in the consolidated financial statements are as follows:

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

Company	State of incorporation	Core Business	2017 %	2016 %
<b>Subsidiaries</b>				
National Electricity Company EAD	Bulgaria	Electricity generation and public supplier of electrical energy	100%	100%
Bulgargaz EAD	Bulgaria	Public supplier of natural gas	100%	100%
Bulgartransgaz EAD	Bulgaria	Storage and transmission of natural gas	100%	100%
Bulgartel EAD	Bulgaria	Telecommunications services	100%	100%
NPP Kozloduy EAD	Bulgaria	Generation of electricity and thermal power	100%	100%
TPP Maritsa East 2 EAD	Bulgaria	Generation of electricity and thermal power	100%	100%
Mini Maritsa Iztok EAD	Bulgaria	Mining and selling of coal	100%	100%
Electricity System Operator EAD	Bulgaria	Transmission of electricity	100%	100%
Bulgartel Skopje DOOEL	Macedonia	Telecommunication operator	100%	100%
HPP Kozloduy EAD	Bulgaria	Hydroelectric power generation and electric power distribution	100%	100%
Interpriborservice OOD	Bulgaria	Installation and maintenance of automated systems	63.96%	63.96%
PFC Beroe Stara Zagora EAD	Bulgaria	Professional football club	100%	100%
NPP Kozloduy - New Builds EAD	Bulgaria	Operation of nuclear power plant facilities with the purpose of generating electricity	100%	100%
TPP Maritsa East 2 (9 and 10) EAD	Bulgaria	Generation and trade of electricity	100%	100%
Gauging and Information Technologies Energy Operator EAD (in liquidation)	Bulgaria	Commercial and technical measurement of the quality and quantity of electricity		100%
Independent Bulgarian Energy Exchange EAD	Bulgaria	Organisation of an energy exchange for trade in energy and energy consumption	100%	100%
Energy Investment Company EAD	Bulgaria	Investment activities	100%	100%
Nabucco Gas Pipeline Bulgaria EOOD	Bulgaria	Investment activities		100%
<b>Joint Ventures</b>				
ICGB AD	Bulgaria	Construction and operation of a gas transmission system	50%	50%
Nabucco Gas Pipeline International OOD (in liquidation)	Austria	Construction and operation of a gas transmission system		17.93%
South Stream Bulgaria AD	Bulgaria	Construction and operation of a gas transmission system	50%	50%
Transbalkan Electric Power Trading S.A. – NECO S.A.	Greece	Sales of electricity	50%	50%
<b>Associates</b>				
ContourGlobal Maritsa East 3 AD	Bulgaria	Generation of electricity		
ContourGlobal Operations Bulgaria AD	Bulgaria	Operation and maintenance of a thermal power plant	27%	27%
ZAD Energy	Bulgaria	Insurance and reinsurance	27%	27%
POD Allianz Bulgaria AD	Bulgaria	Pension insurance	48.08%	48.08%
Hydro Power Company Gorna Arda AD	Bulgaria	Construction of hydroelectric power plants	34%	34%
			30%	30%
<b>Other investments</b>				
Ecological Operation of Fuels and Energy Oils OOD	Bulgaria	Research and investigation of natural energy resources and their environmental exploitation		69.90%
Bultehash AD	Bulgaria	No operations		67%

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### 2. Basis for the preparation of the consolidated financial statements

The consolidated financial statements of the Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) as developed and issued by the International Accounting Standards Board (IASB) and approved by the European Union (EU).

The consolidated financial statements are presented in Bulgarian Leva (BGN) which is the functional currency of the parent company. All amounts are reported in BGN '000 (including the comparative information for 2016), unless otherwise stated.

The parent company - Bulgarian Energy Holding EAD - prepared and issued Separate Financial Statements for the year ended as at 31 December 2017, where the investments in subsidiaries, associates and joint ventures are presented at the relevant acquisition cost. The Separate Financial Statements of BEH EAD were approved for issuance by a decision of the Board of Directors dated 30 March 2018.

The Consolidated Financial Statements have been prepared on the going concern basis. The operations and future development of the Group are based on implementation of the State energy strategy whose aim is to increase and ensure the security of energy supplies, to implement priority energy projects and to support the financial participation of the state in these projects. The Management has analyzed the validity of the going concern basis, considering the plans, the estimates and the business programs of the Group companies. As a result, it has concluded that the use of the going concern assumption is appropriate.

### 3. Changes in accounting policy

#### 3.1 General

The Group has adopted all new and/or revised standards and interpretations issued by the International Accounting Standards Board (IASB) and adopted by the European Commission and relevant to its operations. The Group does not need to make any changes in its accounting policy to adapt the application of any new and/or revised IFRSs that are effective for the current accounting year beginning on 1 January 2017, as they either do not relate to its business activity and the usual composition and characteristics of its assets and liabilities, or during the period there were no entities or operations affected by the changes in the amended IFRSs. The effect of changes to the IFRSs for the Group is solely in introducing new and expanding the existing disclosures and changes in the presentation of the financial statements without affecting the amounts reported therein.

#### 3.2 Standards and interpretations that have entered into force on the 01 January 2017

The Group applies the following new standards, amendments and interpretations to IFRSs developed and published by the International Accounting Standards Board, which are mandatory for the annual period beginning on 1 January 2017:

Amendments to IAS 12 "Income taxes" - Recognition of deferred tax assets for unrealized losses - Adopted by the EU on 6 November 2017.

This amendment clarifies the accounting for deferred tax assets on unrealized losses on debt instruments measured at fair value.

Amendments to IAS 7 "Cash Flows Statement" - Disclosure Initiative - Adopted by the EU on 6 November 2017.

This change is related to information provided to the financial statements users which can improve their understanding of the liquidity and financial operations of the Group. The amendment requires additional disclosures and clarifications to be made regarding changes in the Group's liabilities in relation to:

- (a) changes in financing activities as a result of operations that result in changes in cash flows; or
- (b) changes resulting from non-cash transactions such as acquisitions and disposals, interest accruals, exchange rate effects, changes in fair values, etc.

The management has conducted a study and made the relevant additional disclosure (Note 29).

#### 3.3 Standards and interpretations issued by the IASB and adopted by the European Commission that are not effective as at year end and have not been adopted early by the Group

As at the date of issuance of these Consolidated Financial Statements, new standards and interpretations, as well as revised standards and interpretations that have not been adopted for early application by the Group, have been issued, but not yet in force for annual periods beginning on 1 January 2017. The Management has determined that

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

the following would have a potential effect in the future for changes in the accounting policy, the classification and the amounts of reportable items in the financial statements for subsequent periods, namely:

**IFRS 9 “Financial Instruments”** - adopted by the EU on 22 November 2016 (effective for annual periods beginning on or after 1 January 2018)

In July 2014, the IASB published the final version of IFRS 9 *Financial Instruments*, which replaced IAS 39 *Financial Instruments: Recognition and Measurement*, as well as all previous versions of IFRS 9. IFRS 9 combines all three aspects of the Financial Instruments Accounting Project: classification and measurement, impairment and hedge accounting. It establishes new principles, rules and criteria for the classification, measurement and derecognition of financial assets and liabilities, incl. hybrid contracts. IFRS 9 introduces a requirement that the classification of financial assets should be made on the entity's business model for its management and the characteristics of the contracted cash flows of the respective assets.

IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with earlier application permitted. Except for the hedge accounting, retrospective application is required, but comparative information is not obligatory. With regard to hedge accounting, the requirements are generally applied for future periods, with some limited exceptions.

The Group plans to introduce the new standard at its effective date and will not restate the comparative information. The Group is in the process of determining the effect of the three aspects of IFRS 9. The measurement is performed on the basis of currently available information and which may change if, in 2018 when IFRS 9 will be introduced, the Group receives additional, reasonable and supportive information. The Group does not expect a material effect on its consolidated statement of financial position and equity, except the effect of applying the requirements of IFRS 9 for impairments.

*(a) Classification and measurement*

The Group does not expect a material effect on its balance sheet or equity due to the application of the IFRS 9 classification and measurement requirements. It expects to continue to measure at fair value all financial assets that are currently measured at fair value.

The Group's equity instruments, which are currently classified as available-for-sale and have a carrying amount of BGN 976 thousand as at 31 December 2017, qualify for “fair value through other comprehensive income”. Therefore, the assessment is that there will be no change in the accounting for these assets. However, gains or losses on the sale of equity financial instruments that have been selected at fair value through other comprehensive income will not be transferred to current earnings or losses as “gains or losses on disposal” but will be reclassified directly from “available-for-sale financial assets available-for-sale” to “retained earnings”.

Other financial assets held by the Group that are also not expected to have significant effects include: trade and other receivables and cash and cash equivalents currently classified as “loans and receivables” and are measured at amortized cost. They are held by the Group in order to receive the agreed cash flows and are expected to result in cash flows representing only principal and interest payments. The Group has analyzed the characteristics of the contracted cash flows from these instruments and has come to the conclusion that they all meet the depreciation criteria under amortized cost under IFRS 9. Consequently, reclassification of these instruments is not necessary.

The Group does not expect changes and effects for the accounting of its financial liabilities because the new requirements only concern the accounting for financial liabilities designated at fair value through profit or loss and it does not have such liabilities. Liabilities write-off rules are transferred from IAS 39 *Financial Instruments: Recognition and Measurement* and are unchanged.

*(b) Impairment*

IFRS 9 requires the Group to account for the expected credit losses on all its debt securities, loans and trade and other receivables either on a 12-month basis or over their lifetime. The Group is in the process of analyzing and evaluating the effect of applying the new impairment model and therefore cannot provide quantitative information.

*(c) Hedge Accounting*

The Group does not report hedging with the exception of its share of other comprehensive income from the associate company “ContourGlobal Maritsa East 3” AD, accounted for using the equity method.

**IFRS 15 “Revenue from contracts with customers”** - adopted by the EU on 22 September 2016 (effective for annual periods beginning on or after 1 January 2018)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

IFRS 15 replaces IAS 18 *Revenue*, IAS 11 *Construction Contracts* and related interpretations and introduces a new revenue recognition model based on control. The Standard introduces a comprehensive set of principles, rules and approaches for recognizing, reporting, and disclosing information about the type, amount, period, and uncertainty associated with income and cash flows arising from contracts with customers. The guiding principle of the standard is to create a five-step model to be applied in terms of revenue arising from contracts with customers, through which the setting of parameters and timing of revenue commensurate to the obligation of each party to the transaction.

The introduction of this standard may result in the following changes:

- (a) for complex contracts with bound sales of goods and services, a clear distinction shall be needed between the goods and services of each component and the terms of the contract;
- (b) the probability of change of the timing of sale recognition;
- (c) increasing disclosures; and
- (d) introduction of additional rules for the recognition of revenue from certain type of contract - licenses; consignments; one-off pre-tax charges; guarantees.

The management is currently in the process of analysis and has now concluded that changes in the new standard would not have a material impact on the values and classification of the Group's assets and liabilities, operations and results from business activity of the Group in relation to its revenue and / or receivables, insofar as no material change in the business model is expected, nor a change in the time horizon of transferring control to customers from the services provided by the Group or the reporting of the sales of goods.

The Group plans to adopt IFRS 15 using the revised retrospective application for annual periods beginning on or after 1 January 2018. As a result, the Group will not apply the requirements of IFRS 15 to present a comparative period.

### *(a) Sales of electricity, natural gas and coal*

The new standard is based on the principle that revenue is recognized when the control of the goods or service is transferred to the customer.

Revenues that have a significant effect on the Group include revenues from the sale of electricity, natural gas and coal. Sales are made in accordance with contracts with clients. Sales contracts with customers meet the criteria for reporting a client contract.

Typically, under these contracts, the sale of electricity, natural gas and coal is the only performance obligation to satisfy. The Group expects revenue recognition to occur at the time the control is transferred to the client, namely:

- at the moment when the electricity is delivered to the customer through the electricity and distribution networks;
- when natural gas is delivered through the gas transmission network;
- at the moment the control is transferred to the customer upon delivery of the coal to the customers.

Under these contracts, the adoption of IFRS 15 is not expected to have a material impact on the Group's income, receivables and profit or loss.

### *(b) Provision of services*

The group provides various services to its clients. Under IFRS 15, revenue will be recognized when the Group meets its obligation and satisfies the requirement to transfer the service to the customer. In addition, revenue will be recognized for those contracts to the extent that it is probable that there will not be a significant deviation in the amount of cumulative revenue. Based on the valuation carried out by the Group, the time and amount of revenues that will be recognized are broadly similar. Therefore, the Group does not expect the application of IFRS 15 to result in material differences in the period for recognition of service revenues.

A special analysis was carried out on the contract for the transit of natural gas through the territory of the Republic of Bulgaria for neighboring countries - Turkey, Greece and Macedonia, whose term is until 2030. The analysis focuses on the performance obligations of Bulgartransgaz EAD, time for performance, the formation of the agreed remuneration, which is calculated on the basis of quantities booked and actually transited, the conditions for obtaining the remuneration. It is possible that the application of IFRS 15 to this contract will lead to changes in the way in which gas transit revenue and related receivables are presented.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### (c) Presentation and disclosure requirements

The presentation and disclosures under IFRS 15 are to some extent different and more detailed compared with the current IFRS. Presentation requirements represent a significant change from current practice and significantly increase the volume of disclosures required in the consolidated financial statements of the Group. Many of the disclosure requirements in IFRS 15 are new and the Group expects that the effect of some of these disclosure requirements will not be material. The Group is still continuing to test the relevant systems, internal controls, policies and procedures necessary for the collection and maintenance of the required disclosure information under IFRS 15.

### (d) Other

The recognition and measurement requirements in IFRS 15 also apply to the recognition and measurement of gains or losses on the sale of non-financial assets (such as property and equipment) when that sale is not carried out in the ordinary course of business. However, the effects of these changes at transition are not expected to be significant to the Group.

**Interpretation of IFRS 15 “Revenue from contracts with customers”** - adopted by the EU on 31 October 2017 (effective for annual periods beginning on or after 1 January 2018).

These explanations are related to (a) identification of performance obligations based on specific promises for the supply of goods or services, (b) identifying whether the Group is a principal or agent in the provision of goods or services, and (c) license transfer. This change also provides reliefs for the transition to the new standard.

**IFRS 16 “Leases”** - adopted by the EU on 31 October 2017 (effective for annual periods beginning on or after 1 January 2019).

This standard has a completely changed concept and introduces significant changes in the reporting of leases, especially on the part of lessees. It introduces new principles for the recognition, measurement and presentation of leases in order to better represent these transactions. The Standard will replace the current IAS 17 *Leases*, IFRIC 4 *Determining whether an arrangement contains a lease*, SIC-15 *Operating leases - incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a lease*. The guiding principle of the new standard is the introduction of a uniform model of the accounting treatment of leases with lessees for all lease contracts with a duration of more than 12 months, recognizing a “right of use” asset that will be amortized over the term of the contract, and respectively, the obligation under these contracts will be taken into account. Under IFRS 16 a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. IASB has included an optional exemption for certain short-term leases and leases of low-value assets; however, this exemption can only be applied by lessees.

In addition, IFRS 16 requires lessees and lessors to make more detailed disclosures than those in IAS 17. The Management is in the process of evaluating the effect of applying the Standard.

The Management is in the process of assessing the effect of applying the standard and cannot yet provide quantitative information.

**Amendments to Different Standards Improvements to IFRS (2014-2016 cycle)** - Adopted by the EU on 7 February 2018 - Improvements to IFRS 12 (effective for annual periods beginning on or after 1 January 2017), IFRS 1 and IAS 28 (effective for annual periods from 1 January 2018).

**Amendments to IAS 40 “Investment Property”** - Transfers of Investment Property - Adopted by the EU on 14 March 2018 (effective for annual periods beginning on or after 1 January 2018).

This change is related to providing further clarification on the conditions and criteria that allow a transfer to and from the investment property category.

**Amendment to IFRS 9 “Financial Instruments”** - Prepayments with Negative Compensation - Adopted by the EU on 22 March 2018 (effective for annual periods beginning on or after 1 January 2019).

The existing IFRS 9 requirements on termination rights are amended to allow valuation at amortized cost (or, depending on the business model, at fair value in AFS) even in the case of negative compensation payments.

**IFRIC Interpretation 22 “Transactions in Foreign Currency and Advance Payments”** - adopted by the EU on 28 March 2018 (in force for annual periods beginning on or after 1 January 2018).

This Interpretation relates to the reporting of transactions or parts of foreign currency transactions upon receipt of advance payments prior to the recognition of the asset, expense or income. In such cases, undertakings report a

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

prepayable asset (prepayments of assets or services) or a deferred income liability (sales receivables from customers) and are treated as non-monetary. When receiving such foreign currency prepayments, the date of the transaction is used to determine the exchange rate, and if there are multiple payments, the transaction date is determined for each individual payment.

Undertakings may apply the amendments on an entirely retrospective basis. As an alternative, the Group may apply the translation for future periods in respect of all assets, expenses and income that are recognized initially at or after:

- (i) the beginning of the reporting period in which an entity applies the clarification for the first time, or
- (ii) the beginning of the previous reporting period presented as comparative information in the consolidated financial statements for the reporting period in which the Group applies the clarification for the first time.

The Interpretation is effective for annual periods beginning on or after 1 January 2018. Earlier application of the Interpretation is admissible and should be disclosed.

**Changes to IFRS 2 “Share-based Payment”** - adopted by the EU on 26 February 2018 (effective for annual periods beginning on or after 1 January 2018).

The draft amendment to the standard brings together three non-market-driven changes to share-based payment changes and reporting a change in an agreement that converts it from settled into equity-settled.

**Changes to IFRS 4: Application of IFRS 9 “Financial Instruments” to IFRS 4 “Insurance Contracts”** - Adopted by the EU on 3 November 2017 (effective for annual periods beginning on or after 1 January 2018).

The amendments cover concerns arising from the introduction of the new IFRS 9 before the adoption of IFRS 17 Insurance Contracts, which replaces IFRS 4.

### 3.4 Standards and interpretations issued by the IASB, which have not yet been adopted by the EU

The Management considers it appropriate to disclose that the following new or revised standards, new interpretations and amendments to existing standards that have already been issued by the International Accounting Standards Board (IASB) at the reporting date but have not yet been approved by the EU and accordingly, are not taken into account in the preparation of these consolidated financial statements. The dates of entry into force will depend on EU approval decisions. The Group does not expect these standards and interpretations to have a significant impact on the financial positions, results from operations and / or disclosures of the Group.

**IFRIC 23, “Uncertainty over Income Tax Treatments”** - (effective for annual periods beginning on or after 1 January 2019).

It gives guidance for application of the recognition and measurement requirements of IAS 12 Income Taxes when there is uncertainty about income tax treatment (i.e. uncertainty whether the tax treatment chosen by the entity will be accepted by the tax authorities under the tax legislation).

**Amendment to IAS 28 “Investments in Associates and Joint Ventures”** - Long-term Investments in Associates or Joint Ventures - (effective for annual periods beginning on or after 1 January 2019).

It is specified that an entity applies IFRS 9 when accounting for a long-term investment in an associate or joint venture that is part of the net investment in that associate or joint venture and to which, however, the equity method does not apply.

**Amendments to different standards “Improvements to IFRS (Cycle 2015-2017)”** - (effective for annual periods beginning on or after 1 January 2019).

**IFRS 17 “Insurance Contracts”** - (effective for annual periods beginning on or after 1 January 2021).

In May 2017, the IASB published IFRS 17 *Insurance Contracts* (IFRS 17), a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. When effective, IFRS 17 will replace IFRS 4 *Insurance Contracts* (IFRS 4), published in 2005. IFRS 17 applies to all types of insurance contracts (i.e. life insurance, non-life insurance, direct insurance and reinsurance), irrespective of the type of entities which issue them, as well as certain guarantees and financial instruments with additional, unguaranteed income (discretionary participation). There will be few exceptions to the scope. The overall objective of IFRS 17 is to provide an accounting model of insurance contracts that is more useful and consistent to insurers.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**4. Accounting policy****4.1 General**

The most significant accounting policies applied in the preparation of these consolidated financial statements are presented below.

The consolidated financial statements are prepared in accordance with the principles for valuing all types of assets, liabilities, income and expenses under IFRS. The valuation bases are disclosed in detail in the accounting policies of the consolidated financial statements.

It should be noted that accounting estimates and assumptions were used to prepare the presented consolidated financial statements. Although they are based on information provided to the management at the date of preparation of the consolidated financial statements, the actual results may differ from the estimates and assumptions made.

**4.2 Presentation of the consolidated financial statements**

The consolidated financial statements are presented in accordance with IAS 1 “Presentation of Financial Statements”.

Two comparative periods are presented in the consolidated statement of financial position when the Group applies accounting policies retrospectively, restates retrospectively positions in the consolidated financial statements or reclassifies positions in the consolidated financial statements.

**4.3 Basis of consolidation**

The Financial Statements of the Group consolidate the financial statements of the parent company and of all subsidiaries as at 31 December 2017. Subsidiaries are all entities under the control of the parent company. It is considered that there is control when the parent company is exposed to, or has rights to, the variable return on its interest in the investee and has the potential to influence that return by its powers over the investee. All subsidiaries prepare their financial statements for the reporting period ending on 31 December.

All intragroup transactions and balances are eliminated, including the unrealized gains and losses from transactions between the companies belonging to the Group. Where the unrealized losses on intragroup sales of assets are eliminated on consolidation, the respective assets are reviewed for impairment from the Group's point of view. The amounts reported in the financial statements of the subsidiaries have been adjusted, where necessary, to ensure their compliance with the accounting policies applied by the Group.

Profit or loss and other comprehensive income of subsidiaries acquired or sold during the reporting year are recognized as from the acquisition date or the effective date of disposal, as applicable.

The non-controlling interest, presented as part of the equity, represents the proportion of the profit or loss and the net assets of the subsidiary that are not held by the Group. The total comprehensive income or loss on a subsidiary is attributed to the owners of the parent company and to the non-controlling interest based on their relative share in the equity of the subsidiary.

If the Group loses control of a subsidiary, the Group recognizes any investment retained in the former subsidiary at its fair value as at the date when control is lost and the change in carrying amount is recognized in profit or loss. The fair value of each investment, retained in the entity as at the date when control is lost, is regarded as the financial asset's fair value on initial recognition, in accordance with IAS 39 Financial Instruments: Recognition and Measurement, or when appropriate, the cost on initial recognition of an investment in an associate or joint venture. Furthermore, all amounts recognized in other comprehensive income with respect to that subsidiary are accounted for at the same basis as they would be if the Group had directly disposed of the respective assets or liabilities (e.g. – reclassified in profit or loss, or carried directly to the retained earnings, in accordance with the requirements of the respective IFRS).

The profit or loss from derecognition of an investment in a subsidiary represents the difference between the fair value of the consideration received and the fair value or all investments retained in the former subsidiary and the carrying amount of the assets (including goodwill) and the liabilities of the subsidiary and any non-controlling interest.

**4.4 Business combinations**

All business combinations are accounted for by the acquisition method. The consideration transferred in a business combination is measured at fair value calculated as the sum of the acquisition-date fair values of the assets, transferred by the acquirer, the liabilities to former owners of the acquiree assumed by the acquirer and the equity

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

interests issued by the Group. The transferred consideration includes the fair value of assets and liabilities, arising as a result of the contingent considerations. The acquisition-related costs are accounted for in profit or loss, in the period in which the costs are incurred.

The purchase method includes recognizing the identifiable assets and liabilities of the acquiree including contingent liabilities, regardless of whether they were recognized in the acquiree's financial statements prior to the business combination. Upon the initial recognition, the acquirer's assets and liabilities are included in the consolidated statement of financial position at their fair value used in accordance with the Group's accounting policy as a basis for subsequent measurement.

For each business combination, the Group measures all non-controlling interests in the acquiree that represent a share of its equity and entitle the holders to a share in the event of liquidation either at fair value or at the proportionate share of the non-controlling interest in the acquiree's identifiable net assets. All other components of non-controlling interest are measured at fair value or, if applicable, at a basis defined by another IFRS.

Goodwill is recognized after determining all identifiable intangible assets. Goodwill represents the excess of the acquisition-date fair value of the transferred consideration and the amount of any non-controlling interest in the acquiree, and in a business combination, achieved in stages, the acquisition-date fair value of the Group's previously held equity interest in the acquiree, over the acquisition-date fair value of the identifiable net assets of the acquiree. Any excess of the identifiable assets' fair value over the above-calculated amount is recognized in profit or loss immediately after the acquisition.

In a business combination achieved in stages, the Group revalues its previously held equity interest in the acquiree at its acquisition-date fair value (i.e. as at the date of obtaining control) and recognizes the resulting gain or loss, if any, in profit or loss. The amounts recognized in other comprehensive income from equity interest in the acquiree prior to the date of obtaining control, are recognized on the same basis as would be required if the Group had directly disposed the previously held equity interest.

If the initial accounting treatment of a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting treatment has not been completed. During the measurement period, which may not be more than one year as of the acquisition date, the Group adjusts retrospectively the provisional amounts or recognizes additional assets or liabilities to reflect new information obtained about facts and circumstances that existed as at the acquisition date and, if known, would have affected the measurement of the amounts, recognized as at that date.

All the contingent considerations owed by the acquirer are recognized at fair value as at the acquisition date and are included as part of the consideration, transferred in exchange of the acquired entity. Subsequent changes in the fair value of the contingent considerations which are classified as assets or liabilities are recognized in compliance with the requirements of IAS 39 Financial Instruments: Recognition and Measurement, either in profit or loss, or as a change in other comprehensive income. If the contingent consideration is classified as equity, it is not revalued until its final settlement within the equity. Changes in the fair value of contingent considerations, representing provisional amounts during the measurement period, are presented retrospectively with corresponding adjustments against goodwill.

In the case of a commitment to a sales plan involving loss of control over a subsidiary, the Group classifies all of the consolidated assets and liabilities of that subsidiary as held for sale regardless of whether or not it will retain a non-controlling interest in its former subsidiary after the sale. Any assets (and decommissioning groups) classified as held for sale are separately presented in the consolidated statement of financial position and are measured at their carrying amount (initially at their acquisition cost) or their fair value less the estimated direct sales costs (net sales price), whichever is less. Any impairment loss is allocated among those assets of the particular decommissioning group.

**4.5 Transactions with non-controlling interests**

Changes in the Group's share in the capital of a subsidiary that do not result in a loss of control are treated as transactions with the Group's owners. The carrying amounts of the Group's share and of the non-controlling interests are adjusted to reflect the changes in their relative share in the equity of the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and is attributed to the owners of the parent company.

**4.6 Segment reporting**

The Management determines the operating segments based on the main products and services offered by the Group:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

- Electricity Segment
- Natural Gas Segment
- Coal Segment
- Administration Segment

Administration Segment comprises the segments (Administrative and Telecommunications) which meet the aggregation criteria of IFRS 8 Operating Segments and do not exceed the quantitative thresholds for separate reporting.

Due to the fact that different technologies, resources and distribution approaches are used for each separate product or service, each of these operating segments is managed separately. All transactions between segments are conducted at prices, corresponding to the transactions between independent parties, where appropriate, while the transactions in Electricity Segment and Natural Gas Segment are mainly transactions at prices set by the regulatory authority – Energy and Water Regulatory Commission (EWRC). In segment reporting, the Group applies measurement policies corresponding to the policies used in the consolidated financial statements.

Financial revenue and finance expenses are not included in the operating segment's results which are regularly reviewed by the persons responsible for operational decision-making.

**4.7 Investments in joint ventures and associates**

A joint venture is a contractual agreement under which the Group and other independent parties engage in a business that is subject to joint control and the parties, having joint control on the entity, are entitled to the entity's net assets. The investments in joint ventures are carried using the equity method.

Associates are those entities over which the Group is able to exercise significant influence but which are neither subsidiaries, nor joint ventures. Investments in associates are initially recognized at cost and subsequently carried using the equity method. The cost of the investment includes the cost incurred at its acquisition.

Goodwill or fair value adjustments of the Group's share in the associate are included in the cost of the investment.

Any subsequent changes in the amount of the Group's interest in the equity of the associate are recognized in the carrying amount of the investment. Any changes, arising from profit or loss realized by the associate, are reported in the Consolidated Statement of Profit or Loss, under "Share of the profit in associated and joint-venture companies". These changes include subsequent depreciation or impairment of the fair value of the associate's assets and liabilities determined at acquisition.

Changes in an associate's other comprehensive income, as well as in items recognized directly in the associate's equity are recognized respectively in the Group's other comprehensive income or equity. In cases where the Group's share in the losses realized by the associate exceeds the amount of its interest in the associate, including the unsecured receivables, the Group does not recognize its share in the associate's future losses, unless the Group has assumed contractual or actual obligations, or it has conducted payments on behalf of the associate. If, subsequently, the associate realizes profits, the Group recognizes its share of those profits only after its share of the profits exceeds the accumulated share of losses that has previously not been recognized.

Unrealized gains and losses on transactions between the Group and its associates and joint ventures are reversed to the extent of the Group's interest in those entities. Where unrealized losses from sales of assets are reversed on consolidation, the related assets are tested for impairment from a Group perspective.

The amounts recognized in the financial statements of the associates and joint ventures are restated, where necessary, to ensure their compliance with the Group's accounting policy.

In case of a loss of significant influence over the associate, the Group measures and recognizes any retained investment at its fair value. In case of a loss of significant influence over the associate, the difference between the carrying value of the investment and the sum of the fair value of the retained interest and the proceeds from the derecognition is recognized in profit or loss.

If the Group's share interest in an associate is reduced, but the Group has still significant influence over the associate, the Group reclassifies, in profit or loss, only the proportionate part of the amounts, recognized in other comprehensive income.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### 4.8 Foreign currency transactions

Foreign currency transactions are reported in the functional currency of the respective Group's company at the official exchange rate as at the date of the transaction (at the announced exchange rate of the Bulgarian National Bank). The foreign exchange gains and losses arising from the settlement of these transactions and the revaluation of foreign currency monetary items at the end of the reporting period are recognized in profit or loss.

The non-monetary items measured at historical cost in a foreign currency are translated by using the exchange rate as at the date of the transaction. The non-monetary items measured at fair value in a foreign currency are translated by using the exchange rate as at the date on which the fair value has been determined.

The functional currency of the separate entities within the Group was not altered within the reporting period.

When consolidated, all assets and liabilities are translated in BGN at the closing exchange rate as at the date of the Consolidated Financial Statements. Income and expense are translated in the Group's presentation currency, at the average exchange rate for the reporting period. Foreign exchange gains and losses result in an increase or decrease in other comprehensive income and are recognized in translation reserves in the equity. On disposal of a net investment denominated in a foreign currency, the accumulated foreign exchange gains and losses from revaluations, recognized in equity, are reclassified in profit or loss, and are recognized as part of the gain or loss from the sale. Goodwill and adjustments related with determining the acquisition-date fair value are treated as assets and liabilities of the foreign entity and are translated in BGN at the closing exchange rate.

### 4.9 Revenue recognition

Revenue is recognized to the extent that it is probable that economic benefits will be received by the Group and the amount of revenue can be reliably measured. Revenue is measured at the fair value of the consideration received, excluding discounts, rebates and other taxes on sales or duties. The Group analyses its sales agreements based on specific criteria, in order to determine whether to act as a principal or as an agent. The Group has concluded that it should act as a principal in all such agreements. Prior to recognizing revenue, the following specific recognition criteria must also be met:

#### *Sale of electricity*

Revenue generated from electricity supplies to customers is recognized in the Statement of Profit or Loss, when electricity is supplied by the electricity transmission and distribution networks to end suppliers, to electrical distribution companies, to the supplier of last resort, to customers of the supplier of last resort and to the free market. Sales revenues are recognized based on the readings of the electricity meters for the electricity consumed or based on the registered schedules.

#### *Sales of electricity on the balancing market*

Revenue from sales of electricity in the balancing market arises as from the moment when the market participants, including National electricity company EAD, confirm to the operator, in its capacity of a public supplier, the aggregated settlement statements for the respective reporting period (month).

#### *Revenue from "Obligation to society" fee*

In accordance with Decision No.C-27 dated 31 July 2015 of the Energy and Water Regulatory Commission (EWRC), the revenue generated from the "Obligation to society" fee is accrued and paid by end-customers in the free market connected to the electricity grid, by the customers of the supplier of last resort, the electricity transmission and distribution companies for the purchased electricity to cover their technological losses. This decision increased the volume for costumers required to pay for the "Obligation to society" fee. With Decision No.C-19 dated 30 June 2016 and Decision No.C-29 dated 1 July 2017 EWRC reconfirmed this methodology for determining and payment of the "Obligation to society" fee.

#### *Revenues related with electricity sales*

##### *Revenues from access to the electricity transmission grid*

Revenues from access to the electricity transmission system are recognized when the operator receives the actual measured and validated data sent by the owners of the commercial metering devices.

Revenues from access of producers and proprietors engaged in transactions related to the export of electricity are recognized after validating the intersystem volume schedules of ESO EAD.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

*Revenues from the provision of commercial transmission rights*

Revenues generated from the provision of commercial transmission rights are recognized as “Deferred Revenue” when they result from annual and monthly auctions. These revenues are recognized when the operator announces the result of the auction on the website of ESO EAD in compliance with the auction rules for separating and providing transmission capacities along the interconnections between the control zone of ESO EAD and its neighboring control zones.

The annual auction is held in December in the year prior to the calendar year for which it refers. The commercial transmission rights are used and paid during each month of the following year. The proceeds from the annual auction are recognized as current revenue in the month in which the commercial transmission right is actually used. The monthly auction is held in the month prior to the month when the actual commercial transmission right is exercised. The revenues generated during the monthly auctions from the commercial transmission rights granted are recognized as current revenue in the period in which the commercial transmission right is actually used.

*Revenue generated from connecting consumers and producers of electricity to the electricity transmission grid*

In accordance with IAS 18 Revenue and in compliance with Interpretation 18 Transfers of Assets from Customers of the IFRS Interpretations Committee (IFRIC), the revenues generated from the provision of the services relating to connection to the electricity transmission grid provided to customers in exchange of transfers of the sites constructed by the latter and recognized as assets in the transmission grid are recognized in the current financial result for the year in which the connection fee is invoiced.

*Specific proceeds (revenues) received from the distribution of the interconnector power lines*

The target proceeds (amounts) received from the distribution of the interconnector power lines are not recognized as (current) revenues in the Statement of Profit or Loss at the moment of their receipt. These amounts are allocated (reserved) in the account “Special Reserve as per Regulation 714/2009” and are presented as Deferred Revenue. The allocated (reserved) amounts are recognized as (current) revenues in the Statement of Profit or Loss when the expenses intended to cover (secure) the recognized target expenses as per Art. 16(6) of the Regulation (EC) 714/2009 are incurred (accrued). The allocated (reserved) amounts are recognized in the amount of the recognized target expenses.

*Sales of natural gas*

Revenues generated from sales of natural gas are recognized at the end of each month after accounting for the monthly consumption of natural gas by the Group's customers. Revenue is accrued based on a bilateral protocol for gas supplies signed for a period of 1 month. The validity of the protocols is established by the signatures of the signatories authorized by the Group and by the respective customer.

In compliance with the Bulgarian legislation, the Group is not allowed to apply its own pricing strategy in respect of the natural gas that it sells. The selling prices of natural gas to all consumers connected to the transmission and distribution network are uniform throughout the country and are set by the Energy and Water Regulatory Commission. The prices are set on a quarterly basis.

*Revenue from transmission and storage of natural gas*

The revenues are formed from licensed operations of the Group in respect of the provided services for natural gas transmission on the territory of the country, natural gas transmission from the borders of the Republic of Bulgaria with Romania to the borders with Greece, Turkey and Macedonia, as well as for storage of natural gas. The services are recognized at fair value of the consideration received or to be received or the consideration reduced by discounts and rebates.

*Sales of coal*

The Group carries out operations of coal mining and sale. The revenues generated from the sales of coal are recognized when the material risks and benefits of their ownership are transferred to the buyer. Material risks and benefits of ownership are considered transferred to the buyer when the delivered coal is accepted without objections.

*Sale of other products and goods*

The revenue from the sales of products and goods is recognized when the material risks and benefits of the ownership of the goods are transferred to the buyer, which usually occurs at the time of their dispatch.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### *Provision of services*

The revenue from the provision of services is recognized proportionally to the level of completion of the transaction as at the reporting date. The level of completion of the transaction is determined in proportion to the term of the contract for which the services are agreed. When the outcome of the transaction (the contract) cannot be reliably measured, the revenue is recognized only to the extent that the expenses incurred are recoverable.

### *Revenue from interest*

The revenue from interest is recognized on a time basis for the periods to which it relates by using the effective interest method, i.e. the interest rate that accurately discounts the expected future cash flows over the expected life of the financial instrument to the carrying value of the financial asset.

### *Dividend revenue*

The revenue from dividends is recognized with the establishment of the right to their receipt.

### **4.10 Operating expenses**

The expenses are recognized at the time they arise and based on the accrual and comparability principles and to the extent that it would not result in the recognition of assets/liabilities that do not qualify as such under the IFRSs.

The prepaid deferred expenses are deferred for recognition as current expenses for the period to which they relate.

### **4.11 Expenses on interests and borrowing costs**

Interest expense is recognized on an accrual basis for the periods to which they relate using the effective interest rate method.

Borrowing costs mainly comprise interest on bank loans and bonds obtained by the Group. All borrowing costs directly attributable to the purchase, construction or production of a qualifying asset are capitalized in the period in which the asset is expected to be completed and get ready for use, or sold, by applying a capitalization ratio to the expenses on that asset. The capitalization ratio is the weighted average of the borrowing costs attributable to the borrowings of the Group that are outstanding during the period, except for the borrowings specifically made for the acquisition of a qualifying asset.

Other borrowing costs are recognized as expenses in the period in which they are incurred in the Consolidated Statement of Profit or Loss under section Finance Expenses.

### **4.12 Profit or loss from discontinued operations**

Discontinued operations are components of the Group that either have been disposed or were classified as "held-for-sale", or as held for distribution to the sole-shareholder, and:

- Represent a separate major line of business or cover operations in a particular geographical area;
- are part of a separate coordinated plan to sell a particular major line of business or operations in a particular geographical area; or
- are a subsidiary acquired exclusively with a view to resale.

Profit or loss from discontinued operations and the components of profit or loss from previous periods are presented as a single amount in the consolidated statement of profit or loss.

The disclosure of discontinued operations from the previous year is related to all operations that were discontinued as at the reporting date for the latest period presented in the Consolidated financial statements. If operations that were presented as discontinued in the previous period are renewed during the current year, the relevant disclosures for the previous period should be changed.

### **4.13 Property, plant and equipment**

Property, plant and equipment are initially measured at cost, including their cost of acquisition and all direct costs of bringing the asset into working condition. Their subsequent measurement after the initial recognition applies to a full class of identical assets as follows:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

No.	Property, plant and equipment	Model of subsequent measurement
1	Land	Revaluation model
2	Improvements on land and plots	Revaluation model
3	Buildings and constructions	
	• massive	Revaluation model
	• non-massive	Cost model
4	Machinery, plant and equipment	Revaluation model
5	Computer systems	Cost model
6	Transport vehicles	
	• Freight vehicles	Revaluation model
	• Automobiles	Cost model
	• Specialized motor vehicles	Revaluation model
7	Furniture, Fixtures and fittings	Cost model
8	Spare parts accounted as property, plant and equipment	Revaluation model
9	Other property, plant and equipment	Cost model

Property, plant and equipment accounted for using the revaluation model are subsequently measured at revalued amount that is equal to the fair value at the measurement date less any subsequent accumulated depreciation and impairment losses. The revaluations are presented in the consolidated statement of comprehensive income and are accounted for in the equity (revaluation reserve) if they are not preceded by previously accrued expenses. Upon sale or disposal of the revalued asset, the remaining revaluation reserve is transferred to retained earnings.

Revaluations are carried out subject to the following frequency of revaluation:

- when the fair value of the assets undergoes minor changes only, the revaluation is carried out every three years;
- when the fair value of property, plant and equipment changes substantially in shorter time intervals, the revaluation is carried out at shorter intervals so that the carrying amount of the asset does not differ materially from its fair value.

When applying the revaluation model, the frequency of subsequent revaluations of property, plant and equipment depends on whether the carrying amount materially differs from the fair value of the revalued asset as at end of the reporting period.

In this regard, during the annual stock take at the end of the reporting period (end of the fiscal year), the Group analyses the items of property, plant and equipment for indications whether their carrying value materially differs from their fair value.

A “material deviation” is a deviation of the carrying amount from the fair value of the asset as at the date of the financial statement by more than 5%. The deviation is also considered material if it is below 5%, but the difference between the carrying amount and the fair value as a cumulative amount of property, plant and equipment is material for the purpose of the preparation of the Consolidated financial statements.

Property, plant and equipment that are accounted for using the cost model are subsequently measured at their acquisition price less the accumulated depreciation and impairment losses. The impairments are recorded as an expense and are recognized in the consolidated statement of profit or loss for the respective period.

The subsequent expenses related to a certain asset, consisting of property, plant and equipment, are added to the carrying amount of the asset if the Group is likely to have economic benefits which exceed the originally estimated efficiency of the existing asset. All other subsequent expenses are recognized as cost for the period in which they are incurred.

The remaining value and the useful life of property, plant and equipment are reviewed by the management at each reporting date.

Depreciation of property, plant and equipment is calculated using the straight-line method over the estimated useful lives of the individual asset groups as follows:

Buildings	5 to 80 years
Property, plant and equipment	2 to 50 years
Transport means	2 to 30 years
Furniture	2 to 30 years
Other property, plant and equipment	3 to 30 years
Depreciable buffer gas	60 years

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

The annual depreciation rate for the depreciable lands for coal mining is calculated as a coefficient and can be presented as follows:

$$K = \frac{CP}{SCR + BR + CRIP}$$

where:

CP Coal Production, in tones  
 SCR Stripped Coal Reserves  
 BR Blocked Reserves  
 CRIP Coal Reserves in Progress

The depreciation expenses are included in the consolidated statement of profit or loss, under “Depreciation and amortisation expenses” and as part of “Profit /( Loss) for the year from discontinued operations”.

### *Buffer gas*

The natural gas stored in Chiren Underground Gas Storage (Chiren UGS) includes working gas and buffer gas. The natural gas stored in Chiren UGS is measured through reservoir simulation using special software - ECLIPSE. Changes in pressure during different drillings during reservoir simulation of operation of the underground section are analyzed and compared with the actually measured pressure levels.

Buffer gas maintains the stratum pressure required for the successful extraction of working gas. The buffer gas stored in the underground gas storage is accounted for as a non-current asset.

The amount of buffer gas has been estimated by technical experts of the Group based on the stratum pressure during drilling and the pressure at the exit of Chiren UGS, i.e. the point where the natural gas is fed into the gas pipeline.

Buffer gas includes physically extractable and non-extractable natural gas. The quantity of physically extractable natural gas has been estimated. The extractable buffer gas is the natural gas which could be extracted from Chiren Underground Gas Storage if the gas is fed into the gas pipeline under specific pressure. The extractable buffer gas is non-depreciable. The non-extractable buffer gas is depreciable.

### *Minimum quantities of natural gas required for the functioning of the transmission and transit gas pipelines*

The minimum quantities of natural gas required for the normal functioning of the gas main and transit gas pipelines have been estimated applying the quantity method and a specific methodology. These quantities are reported as fixed assets.

The Group's technical experts have estimated the unrecoverable quantity of natural gas which would be irretrievably lost in case of dismantling the transmission and transit gas pipelines. This quantity is considered as depreciable gas. The rest of the estimated minimum quantity of natural gas required for the normal functioning of the gas transmission network is non-depreciable. This natural gas could be extracted in case of dismantling.

The gain or loss from sale of property, plant and equipment is determined as the difference between the sale proceeds and the carrying value of the asset.

## **4.14 Intangible assets**

The intangible assets acquired separately are measured initially at their cost, including import duties, non-refundable taxes and any directly attributable costs of preparing the asset for its intended use, where the capitalized expenses are then amortized using the straight-line method over the estimated period of the asset's useful life as it is considered to be limited.

The subsequent measurement is based on the cost of acquisition less the accumulated depreciation and impairment losses. The impairments are reported as an expense and are recognized in the consolidated statement of profit or loss for the respective period.

Intangible assets with a limited useful life are depreciated over their useful lives and tested for impairment when there are indications that their value is impaired. The depreciation period and the depreciation method for intangible assets with a limited useful life are reviewed at least at the end of each financial year. The changes in the expected useful life or pattern of consumption of the future economic benefits of the intangible asset are accounted for by a change in the depreciation period or method and treated as a change in the accounting estimates.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

The subsequent expenses arising in respect of intangible assets after their initial recognition are recognized in the Consolidated Statement of Profit or Loss for the period when such are incurred, excluding the cases where because of these subsequently incurred expenses, the intangible asset can generate more than the initially estimated future economic benefits and where such expenses can be reliably measured and attributed to the asset. If these conditions are satisfied, the incurred expenses are added to the cost of the asset.

The remaining value and the useful life of the intangible assets are reviewed by the management at each reporting date.

Intangible assets are amortized on the straight-line basis over the assets' useful life. The useful life of the intangible assets is defined as limited as follows:

Software	2 to 10 years
Licenses	Term of license
Products from development	5 to 20 years
Other intangible assets	3 to 10 years

The depreciation expenses are included in the Consolidated Statement of Profit or Loss, under "Depreciation and amortisation expenses" and as part of "Profit/(Loss) for the year from discontinued operations".

The profits or losses arising from the disposal of the intangible asset, representing the difference between the net proceeds from the sale and the carrying value of the asset, are included in the consolidated statement of profit or loss when the asset is disposed.

The intangible assets created under the development activities of the Group in order to serve the purpose of intergroup activities are recognized as assets by a committee of experts appointed by the Group's Management depending on the intangible assets' completion stage, provided that the conditions below are met:

- The Group has the technical ability to complete the asset;
- The Group intends to complete the asset;
- The asset can be used or sold and there is a market for the asset or the asset is useful for intergroup use;
- The expenses incurred in the development of the asset are measurable.

### *Research activities*

Research expenses incurred for gaining new scientific or technical knowledge are recognized in profit or loss when incurred.

Research and development expenses incurred in respect of external orders under signed contracts with customers are recognized as assets for sale.

Indirect technological and generation expenses are allocated based on labor and together with the direct expenses form the cost of the created asset.

### *Development activities*

Development activities include a production plan or project for the development of new or significantly improved products and processes. Development expenses are capitalized only if these expenses can be reliably measured, the product or the process is technically and commercially possible, future economic benefits are probable and the Group intends to and has sufficient resources to complete the development and to use or sell the asset. The capitalized expenses include materials, labor, generation overheads directly attributable to the asset's preparation for its intended future use and capitalized interest expense. Other development expenses are recognized in profit or loss when incurred. The capitalized development expenses are measured at cost of acquisition less any accumulated amortization and accumulated impairment losses.

The expenses incurred in the development of intangible assets that do not satisfy the criteria for capitalization are recognized when occurred

## **4.15 Leases**

Determining whether an arrangement is or contains a lease depends on the substance of the arrangement as at its commencement date and requires an assessment of whether fulfilling the arrangement depends on the use of a specific asset or assets, and whether the arrangement transfers the right to use the asset.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### *The Group as a Lessee*

In accordance with IAS 17 Leases, the asset control rights are transferred from the lessor to the lessee when the lessee bears substantially all the risks and benefits related to the ownership of the leased asset.

Upon signing a finance lease agreement, the Group recognizes the asset in the consolidated statement of the lessee's financial position at the lower of the two values – the fair value of the leased asset and the present value of the minimum lease payments plus incidental payments, if any. The corresponding amount is recognized in the consolidated statement of the financial position as a finance leasing liability, irrespective of whether or not some of these lease payments are payable up-front at the date of the conclusion of the financial lease agreement.

The finance lease payments are subsequently allocated in the financial expenses and the reduction of the outstanding liability under the financial lease agreement.

The assets acquired under finance leases are depreciated in compliance with the requirements of IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets.

The interest element of lease payments represents a constant proportion of the outstanding liability and is recognized in profit or loss over the period of the lease agreement.

All other lease agreements are treated as operating lease agreements. The payments under the operating lease agreements are recognized as expenses on the straight-line basis over the lease term. The expenses incurred in respect to operating leases, such as insurance and maintenance costs, are recognized in profit or loss when incurred.

### *The Group as a Lessor*

Leases, where the Group retains substantially all the risks and benefits of the ownership of the leased asset, are classified as operating leases. The initial direct costs incurred by the Group in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and are recognized as an expense over the lease term on the same basis as the lease income. The contingent rents are recognized as revenue in the period in which they are earned.

The assets leased under operating lease agreements are presented in the Consolidated Statement of Financial Position of the Group and are depreciated in compliance with the depreciation policy adopted in respect of similar assets of the Group and the requirements of IAS 16 Property, Plant and Equipment, or of IAS 38 Intangible Assets. The income earned under operating lease agreements is recognized as revenue in the Consolidated Statement of Profit or Loss for the reporting period.

### **4.16 Impairment testing of non-financial assets**

When calculating the amount of impairment, the Group defines the smallest identifiable group of assets for which independent cash flows can be determined (cash-generating unit). As a result, some of the assets are subject to testing for impairment on an individual basis, while others as the cash-generating units.

The Group assesses at each reporting date whether there is an indication that an asset or cash-generating unit may be impaired. In the case of such indications or where an annual impairment test of an asset is required, the Group determines the recoverable amount of that asset. The recoverable amount of the asset is the higher of the fair value less the costs to sell the asset or the cash-generating unit and its value in use. The recoverable amount is determined for an individual asset, unless in its use the asset does not generate cash flows that are largely independent of those generated from other assets or groups of assets. Where the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount, the asset or the cash-generating unit is considered impaired and its carrying amount is reduced to its recoverable amount.

In determining the value in use of an asset, the estimated future cash flows are discounted to their present value using a pre-tax discounted rate that reflects the current market assessments of the time value of money and the risks specific to the asset. The fair value less the costs to sell is determined using the appropriate measurement model. The calculations made are confirmed using other measurement models or other available sources of information about the fair value of the asset or the cash-generating unit.

Impairment losses are recognized as an expense in the consolidated statement of profit or loss, except for non-current assets that were revalued in prior periods and the revaluation surplus is recognized in the other comprehensive income. In this case, the impairment loss is also recognized in the other comprehensive income to the amount of the previously recognized revaluation of the relevant asset.

As at each reporting date, the Group assesses whether there are indications that the impairment loss on an asset recognized in prior periods may no longer exist or may have decreased. If such indications exist, the Group

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

determines the recoverable amount of the asset or the cash-generating unit. The impairment loss is reversed only when there has been a change in the estimates used to determine the recoverable amount of the asset after the recognition of the last impairment loss. The reversal of an impairment loss is limited so that the carrying amount of the asset may not exceed its recoverable amount, nor exceed the carrying amount (after the deduction of the depreciation) that would have been determined if no impairment loss had been recognized for the asset in the previous years. The reversal of an impairment loss is recognized in the consolidated statement of profit or loss unless the asset is recognized at revalued amount, in which case the reversal is treated as a revaluation surplus.

**4.17 Financial instruments**

Financial assets and liabilities are recognized when the Group becomes a party to contractual arrangements involving financial instruments.

**4.17.1 Financial assets***Classification*

Financial assets within the scope of IAS 39 Financial Instruments: Recognition and Measurement are classified as financial assets at fair value through profit or loss, or as loans and receivables, or as held-to-maturity investments, or as available-for-sale financial assets, or as derivatives designated as hedging instruments in effective hedging, as appropriate. The Group classifies its financial assets at their initial recognition.

The Group's financial assets comprise cash and deposits, trade and other receivables, loans granted, unquoted investments, available-for-sale investments.

*Initial recognition*

Financial assets are initially recognized at their fair value, plus, in the case of investments not reported at fair value through profit or loss, the transaction costs that are directly attributable to the acquisition of the financial asset.

Purchases or sales of financial assets the terms of which require the transfer of the asset over a period of time usually established by a statutory provision or according to the practice effective in the relevant market (regular purchases) are recognized as at the trade date (transaction), i.e. the date the Group committed to buy or sell the asset.

*Available-for-sale financial assets*

The available-for-sale financial assets include equity instruments, designated as available-for-sale and not classified under any other category. Usually such instruments are shares or interests in other entities, acquired with investment purposes (available investments and available-for-sale investments) and are included in the non-current assets, unless they are intended to be sold within the next 12 months and the entity actively seeks a buyer.

After their initial recognition, the available-for-sale financial assets are measured at fair value, except for the investments in equity instruments that have no quoted market price in an active market and whose fair value cannot be measured reliably. The effects of the revaluation to the fair value and the unrealized gains or losses on the available-for-sale investments are recognized in the consolidated statement of comprehensive income and are accumulated as separate components of equity – "Reserves from revaluation to fair value". In the event of a subsequent impairment loss or disposal of an available-for-sale investment, the cumulative impairment loss and any previously accumulated (net) losses in the revaluation reserve are recognized in the consolidated statement of profit or loss. Similarly, upon any sale of such investments, the accumulated unrealized profits in the reserve will be recognized in the consolidated statement of profit or loss.

*Loans and Receivables*

The loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After their initial recognition, the loans and receivables are measured at amortized cost, using the effective interest rate method (EIR), less the accumulated impairment expenses. The amortized cost is calculated by taking into account any discounts or premiums on the acquisition and charges or expenses that are an integral part of the EIR. EIR depreciation is included in the financial revenue in the consolidated statement of profit or loss. Impairment losses are recognized in the consolidated statement of profit or loss as Other Expenses.

This group of financial assets includes: loans provided, trade receivables, other receivables from counterparts and third parties and cash and cash equivalents. These assets are included in the group of current assets when their maturity is within 12 months, otherwise they are recognized as non-current assets.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### *Derecognition*

A financial asset (or, where applicable, part of a financial asset or part of a group of similar financial assets) is derecognized when:

- the contractual rights over the cash flows from that financial asset have expired;
- the contractual rights to receive cash flows from that financial asset are transferred, or the Group has assumed a contractual obligation to fully pay the received cash flows, without material delays, to a third party, under a transfer agreement; whereby (a) all risks and rewards of the financial asset's ownership are substantially transferred; or (b) all risks and rewards of ownership of a financial assets are neither transferred, nor retained, but the Group has not retained control over the financial asset.

When the Group has transferred its contractual rights to receive cash flows from the financial asset or has entered into a transfer agreement and has neither transferred, nor retained substantially all the risks and rewards of the financial asset's ownership, but has retained control of it, it continues to recognize the transferred financial asset to the extent of its continued involvement in it. In this case, the Group also recognizes the related liability. The transferred asset and the related liability are measured on a basis that reflects the rights and obligations retained by the Group.

The extent of the continuing involvement in the form of a guarantee for the transferred asset is measured at the lower of the initial carrying amount of the asset and the maximum amount of consideration that may be required to be recovered by the Group.

### *Financial assets gain and losses*

Gains and losses arising from the change in the fair value of financial assets are recognized as follows:

- Gains or losses arising from a financial asset measured at fair value through profit or loss are recognized in the consolidated statement of profit or loss.
- Gains or losses arising from available-for-sale financial assets are recognized in other comprehensive income with the exception of impairment losses and exchange rate gains and losses, accumulated until the financial asset is derecognized. At that point the accumulated gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment.
- Dividends from own equity instruments, which are available for sale, are recognized in the consolidated statement of profit or loss, when the entity's right to receive payment is established.
- For financial assets that are measured at amortized cost, the gain or loss on the asset is recognized in the consolidated statement of profit or loss when the financial asset or financial liability is derecognized or impaired through the depreciation process.

### **Impairment of financial assets**

At each reporting date, the Group assesses whether or not there is objective evidence of impairment of a financial asset or a group of financial assets. A financial asset or a group of financial assets are considered impaired and impairment losses as incurred when there is objective evidence of impairment, as a result of one or more events that occurred after the initial recognition of the asset ("loss event") and when that loss event has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably measured. Evidence of impairment may include indications that debtors, or a group of debtors, experience serious financial difficulties or fail to, or have delayed to pay interests or principals, or are likely to report insolvency/over-indebtedness, or to undertake a financial reorganization, or when the observable data indicate a measurable decrease in the estimated future cash flows, such as changes in the arrears or in the economic conditions associated with defaults by debtors.

### *Financial assets carried at amortized cost*

When financial assets are carried at amortized cost, the Group first assesses whether or not objective evidence of impairment exists individually for financial assets that are individually or collectively significant for financial assets that are not individually significant. If it is determined that there is no objective evidence of impairment of an individually assessed financial asset, regardless of whether it is material or not, the asset is included in a group of financial assets with similar credit risk characteristics and that group of financial assets is collectively assessed for impairment. Assets that are individually assessed for impairment and for which the impairment loss is and continues to be recognized are not included in the cumulative impairment measurement.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

If there is objective evidence that an impairment loss has occurred, the amount of the loss is measured as the difference between the carrying amount of the asset and the present value of the estimated future cash flows (excluding future estimated loss on loans that have not yet been incurred). The present value of the estimated future cash flows is discounted at the original effective interest rate of the financial assets. If a loan has a floating interest rate, the discount rate for measuring the impairment loss is the current effective interest rate.

The carrying amount of the asset is reduced by using an adjustment account and the amount of the loss is recognized in the consolidated statement of profit or loss. The revenue from interests continues to be accrued on the reduced carrying amount using the interest rate that is used to discount future cash flows for the purposes of impairment loss measurement. The revenue from interests is accounted for as part of the financial revenue in the consolidated statement of profit or loss. Loans and the associated provisions are derecognized when there is no realistic possibility that they may be recovered in the future and all collateral is realized or transferred to the Group. If, in a subsequent year, the amount of the expected impairment loss increases or decreases due to an event occurring after the impairment is recognized, the previously recognized impairment loss is increased or decreased by adjusting the corrective account. If a future derecognition is restored at a later stage, the reversal is recognized in the consolidated statement of profit or loss.

### *Available-for-sale investments*

For available-for-sale financial investments at each reporting date, the Group assesses whether there is objective evidence that the investment or group of investments is impaired.

For equity investments classified as available-for-sale, the objective evidence includes a significant or prolonged decline in the fair value of the investment below its cost of acquisition. A "significant decline" should be measured against the initial cost of acquisition of the investment and "prolonged decline" over the period in which the fair value is below the initial cost of acquisition. When there is evidence of impairment, the cumulative loss, measured as the difference between the acquisition cost and the current fair value less any impairment loss on that investment previously recognized in the consolidated statement of profit or loss, is deducted from the other comprehensive income and recognized in the statement of profit or loss. Impairment losses on equity investments are not reversed through the consolidated statement of profit or loss and the increases in their fair value are recognized directly in other comprehensive income.

### **4.17.2 Financial liabilities**

The Group classifies debt and equity instruments either as financial liabilities or as equity, depending on the nature and terms of the contracts relating to those instruments.

#### *Initial recognition and measurement*

Financial liabilities within the scope of IAS 39 are classified as financial liabilities at fair value through profit or loss or financial liabilities at amortized cost. The Group determines the classification of its financial liabilities upon initial recognition.

Upon initial recognition, financial liabilities are measured at their fair value plus, in the case of financial liabilities not reported at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial liability.

The financial liabilities of the Group include loans, trade and other payables and deposits.

#### **Subsequent measurement**

##### *Loans, trade and other liabilities*

After initial recognition, loans and borrowings are measured at amortized cost using the EIR method. Gains and losses on loans and borrowings are recognized in the consolidated statement of profit or loss when the liability is derecognized and through the amortization process.

Amortized cost is calculated by taking into account any discounted or acquired premiums and charges or costs that are an integral part of the EIR. EIR amortization is included in the finance cost in the Consolidated financial statements of profit or loss.

After initial recognition, trade and other payables that are unsettled are stated at their estimated cost.

##### *Gains and losses on financial liabilities*

Gains and losses on financial liabilities classified as at fair value through profit or loss are recognized in the consolidated statement of profit or loss.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

The gain or loss on financial liabilities that is measured at amortized cost is recognized in the consolidated statement of profit or loss when the financial liability is derecognized also through the amortization process.

### *Derecognition*

A financial liability is derecognized when it is extinguished, i.e. when the obligation defined in the contract has expired, canceled or its term has expired.

When an existing financial liability is replaced by another by the same creditor under substantially different conditions or the terms of the existing liability are substantially modified, such replacement or modification is treated as a write-off of the original liability and recognition of a new liability and the difference in the relevant carrying amounts is recognized in the consolidated statement of profit or loss.

### **Compensation of financial instruments**

Financial assets and financial liabilities are offset and the net amount is presented in the Consolidated statement of financial position when there is a legally enforceable right to offset the amounts recognized and the Group intends to settle a net basis or to simultaneously realize the assets and settle the liabilities.

### **Fair value of financial instruments**

At each reporting date, the fair value of financial instruments that are actively traded on the markets is determined on the basis of quoted market prices or dealer quotations ("buy" for long positions and "sell" prices for short positions) without deduct transaction costs.

The fair value of financial instruments for which there is no active market is determined using valuation techniques. These techniques include the use of recent direct market transactions; references to the current fair value of another instrument that is substantially the same; discounted cash flow analysis and other valuation models.

#### **4.17.3 Derivatives**

The Group uses derivative financial instruments such as foreign currency and interest swaps for hedging the risks associated with changes in foreign currency and interest rates. These derivative financial instruments are initially recognized at their fair value as at the date on which the derivative agreement is concluded. After their initial recognition, derivatives are measured at fair value. They are accounted for as assets when their fair value is positive and as financial liabilities when their fair value is negative.

For the purpose of hedge accounting, hedges are classified as follows:

- cash flow hedges, when they hedge the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability or a highly probable projected transaction or a currency risk associated with an unrecognized non-cancellable commitment;
- fair value hedges, when they hedge the exposure to changes in fair value of a recognized asset or liability or an unrecognized irrevocable commitment (except for foreign currency risk);
- hedges of a net investment in foreign operations.

Upon commencement of the hedge, a formal determination and documentation of the hedging relationship for which the Group wishes to apply the hedge accounting and of the risk management objective and strategy to undertake a hedge is performed. This documentation includes the determination of the hedging instrument, the hedged item or transaction, the nature of the hedged risk, and the ways the Group will use to measure the effectiveness of changes in the fair value of the hedging instrument when offsetting the exposure to changes in the fair value of the hedged item flows due to the hedged risk. Hedging is expected to be highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk and is assessed on a continuous basis to determine whether it was highly effective within the reporting financial periods for which hedging was determined.

Hedging relationships that meet the strict hedge accounting conditions are reported as follows:

#### *Fair value hedging*

The Group has set a forward contract for the purchase of EUA greenhouse gas emission allowances as a financial instrument for hedging its exposures to fair value risk. This agreement has been concluded in order to reduce the risk of changes in quota prices. For the reporting periods presented, this led to the recognition of financial liabilities that are stated in the consolidated statement of financial position as non-current financial liabilities.

Derivative financial instruments used for fair value hedges are initially recognized at fair value and subsequently measured at fair value in the consolidated statement of financial position. The fair value is determined on the basis

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

of quoted market prices or, in the absence of such, is calculated by other techniques for reliably determining the fair value. Derivatives are accounted for as an asset at fair value increase and as a liability for the decrease in fair value.

### 4.18 Inventories

Inventories comprise raw materials, finished products, work in progress and goods. Cost of inventories includes all expenses directly attributable to the purchase or manufacturing process, recycling and other direct expenses connected to their delivery, as well as suitable portions of the related common production overheads, based on normal operating capacity. The financing expenses are not included in the cost of the inventories. At the end of every accounting period, the inventories are measured at the lower of their cost and their net realizable value. The amount of any impairment of inventories to their net realizable value is recognized as an expense in the period of the impairment.

The net realizable value is the estimated selling price of the inventories less the estimated expenses on the completion of the production cycle and the selling costs. In case the inventories have already been impaired to their net realizable value and it is found in the subsequent accounting period that the impairment conditions are no longer present, then their new net realizable value is assigned. Their amount may only be restored to the amount of the carrying value of the inventories before the impairment. The reversal in the value of the inventories is recorded as a reduction of expenses on materials for the period in which it has occurred.

The Group determines the expenses on inventories using the weighted average method.

Upon the sale of inventories, their carrying value is recognized as an expense in the period in which the related revenue is recognized.

#### *Nuclear fuel*

The fuel loaded in the reactors is the outstanding value (remaining resource) of nuclear fuel contained in the reactors as at the reporting date. The calculations are based on the established "Methodology for Reporting Supply, Feed and Depletion of Fresh Nuclear Fuel at NPP Kozloduy EAD", taking into account the value of fresh nuclear fuel fed in the respective fuel cycle and the estimated fuel component that is determined by dividing the value of nuclear fuel fed into the reactor by the estimates of electricity production for the period in kWh. The product of the gross energy produced by the respective unit for the fuel cycle and the fuel component represents the cost of nuclear fuel during that period.

#### *Working gas*

Working natural gas volumes are reported as inventories. Natural gas is initially measured at cost of acquisition (its purchase price) plus the relevant transportation costs. When consumed, the working natural gas is accounted for at its average weighted price. The working gas is measured at the lower of its acquisition price and its net realizable value. The net realizable value is the price determined by the Energy and Water Regulatory Commission applicable for each quarter after the balance sheet date.

#### *Stripping expenses*

These expenses represent stripping costs of coal deposits. Such costs include expenses on geodesic research, surveys, development of the mines and other direct costs associated with the preparation for coal mining. The costs are deferred based on the coal quantities, prepared for extraction at year-end and are presented as part of the work-in-progress of inventory.

### 4.19 Income taxes

#### *Current income tax*

Current tax assets and liabilities of the current and past periods shall be recognized on the amount expected to be refunded by or paid to the tax authorities. While calculating the current taxes tax rates and tax laws shall apply, which are in force or are to a large extent adopted as at the reporting date. The Management analyses the separate items in the tax return when the applicable tax provisions are subject to interpretation and recognizes provisions where appropriate.

Current taxes are recognized directly in equity (not in the statement of profit or loss) provided that the tax relates to items which have been recognized directly in equity.

#### *Deferred income tax*

The deferred taxes are recognized using the balance sheet method for all temporary differences as at the reporting date, which arise between the tax base of the assets and liabilities and their carrying amounts.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Deferred tax liabilities are recognized for all taxable temporary differences.

- except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither the accounting profit, nor the tax profit or loss at the time of the transaction; and
- for taxable temporary differences relating to investments in subsidiaries, associates and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, unused tax credits and unused tax loss carry forwards, to the extent that a taxable profit is likely to become available against which the deductible temporary differences, unused tax credits and unused tax loss carry forwards may be used:

- unless the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither the accounting profit, nor the tax profit or loss at the time of the transaction; and
- for deductible temporary differences relating to investments in subsidiaries, associates and interests in joint ventures, the deferred tax asset is only recognized to the extent that the temporary difference is likely to reverse in the foreseeable future and taxable profit may be realized against which the temporary difference may be used.

The Group reviews the carrying amount of the deferred tax assets as at each reporting date and reduces it to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered. The unrecognized deferred tax assets are reviewed as at each reporting date and recognized to the extent that future taxable profit is likely to be realized to enable the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at tax rates, which are expected to be in force for the period in which the asset is realized or the liability is settled, on the basis of tax rates (and tax laws) effective or entered into force, to a considerable extent, as of the reporting date.

The deferred taxes related to items recognized outside the profit or loss are recognized outside the profit or loss. The deferred taxes are recognized depending on the related transaction either in the other comprehensive income, or directly in equity.

The Group compensates for deferred tax assets and liabilities only if there is a legal ground to deduct current tax assets against current tax liabilities, and deferred tax assets and liabilities relate to income taxes imposed by the same tax authority for the same taxable entity.

**4.20 Cash and cash equivalents**

Cash and short-term deposits recognized in the consolidated statement of financial position include cash in bank accounts, cash in hand and short-term deposits with an initial maturity of three months or less.

**4.21 Non-current assets and liabilities classified as held for distribution to the sole equity holder**

When the Group is committed to distribute assets (or decommissioning group) to the owner, the assets or decommissioning group are classified as held for distribution to the sole equity holder and are presented separately in the consolidated statement of financial position. For this purpose, the assets must be available for immediate distribution in their present condition and the distribution must be highly probable. For distribution to be highly probable, actions should have been initiated to complete the distribution and should be expected to be completed within one year from the date of classification. The actions required to complete the distribution should indicate that it is unlikely that significant changes may occur in the distribution or it may be withdrawn.

The liabilities are classified as held for distribution to the sole equity holder and are presented as such in the consolidated statement of financial position, only if they are directly related to the decommissioning group.

The assets classified as held for distribution to the sole equity holder are measured at the lower of their carrying value immediately after their designation as held for distribution to the sole equity holder and their fair value less the costs of their distribution. The assets classified as held for distribution to the sole equity holder are not subject to depreciation after their classification as held for distribution to the sole equity holder.

**4.22 Equity, reserves and dividend payments**

The equity of the parent company reflects the par value of the issued shares.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

Other reserves include total reserves and additional reserves.

The reserve from revaluation to fair value includes the effects of the revaluation of the financial assets available for sale, as well as the Group's share of the performance and the revaluation of financial assets/liabilities of associates or joint ventures, which are recognized directly in equity.

The revaluation reserve of non-financial assets is formed by the difference between the carrying amount and the fair value of items of property, plant and equipment as at the date of revaluation, less its corresponding deferred tax liability.

The reserve from translation of foreign operations includes foreign exchange differences on translating the financial statements of subsidiaries when their functioning currency is different from the functional currency of the Group.

The reserve from revaluation of defined benefit plans involves the revaluation of defined employee benefits plans, defined by reports of independent actuarial appraisers.

The retained earnings/(accumulated loss) include the current financial result and the accumulated earnings and uncovered losses from past years.

The dividend payables to the sole shareholder are included in line "Related Party Payables" in the Consolidated Statement of Financial Position when the dividends are approved for distribution by the sole equity holder before the end of the reporting period.

All transactions with the sole equity holder have been presented separately in the Consolidated Statement of Changes in Equity.

### 4.23 Retirement employee benefits and short-term employee benefits

#### *Short-term earnings*

The short-term employee earnings in the form of salaries, bonuses and social payments and benefits (payable within 12 months after the period in which the respective employee has rendered the service or has met the necessary conditions) are recognized as an expense in the consolidated statement of profit or loss, unless a specific IFRS requires this amount to be capitalized in the cost of a particular asset for the period in which the respective employee has rendered the services and/or has met the respective requirements as a current liability (after deducting any amounts already paid and deductions due).

The Group recognizes the short-term payables on compensable paid leaves of staff that have arisen on the basis of unused paid annual leave in cases where leaves are expected to occur within 12 months following the date of the reporting period in which the staff performed its work duties related to these leaves. As at the date of each financial statement, the Group measures the amount of the estimated costs of the accumulating compensated leave which is expected to be paid as a result of the unused entitlement of such compensated leave. The measurement includes the estimated cost of the employee's remuneration and the expenses on the compulsory social security and health insurance contributions payable by the employer on these amounts.

#### *Long-term retirement benefits*

The Group is required to pay employees' retirement benefits under defined benefit plans and defined contribution plans.

#### *Defined contribution plans*

Defined contribution plans are pension plans under which the Group makes fixed contributions to state funds.

The employer is mainly responsible to pay the compulsory contributions of the employed staff payable to Pensions Fund, Supplementary Compulsory Pension Insurance (SCPI), General Sickness and Maternity Fund (GSMF), Unemployment Fund, Occupational Accident and Occupational Disease Fund (OAOBF), and health insurance.

The amounts of the contributions are specifically determined by the State Social Security Budget Act and the National Health Insurance Fund Budget Act for the relevant year. The payment of the contributions is borne by the employer and the employee in accordance with the rules of the Social Security Code (SSC).

These social security and pension plans, administered by the Group in its capacity of employer, are defined contributions plans. Under these plans, the employer pays monthly fixed contributions to the state funds, as well as to universal and professional pension funds – based on rates fixed by law and has no legal or constructive obligation to pay future contributions into the funds when there are no sufficient funds to pay to the relevant employees the

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

amounts earned during the period of their service. Similar are the obligations of the employer in terms of health insurance.

The contributions payable by the Group under the defined contribution plans for social security and health insurance are recognized as current expense in the statement of profit or loss unless a specific IFRS requires this amount to be capitalized in the cost of a particular asset and as a current liability.

### *Defined benefit plans*

According to the Bulgarian labor legislation, the Group – in its capacity of employer – is required to pay two or six gross monthly salaries to its employees upon retirement depending on their length of service. If an employee has worked for the same employer for the last 10 years of his/her service, the retirement benefit should amount to six gross monthly salaries upon retirement, otherwise – two gross monthly salaries. According to the collective employment agreements, some of the Group companies pay larger amounts of retirements benefits compared to those provided for by the law. The retirement benefit plan is not funded.

The liabilities for retirement employee benefits are determined by the Group using the actuarial valuation method. The Group's Management assesses the obligation under the defined benefit plans annually by an independent actuary. The estimate of the obligations is based on the standard rates of inflation, the medical cost trends and mortality. Future salary increases are also taken into account. Discount factors are determined close to each year-end by reference to the yield of high-quality corporate bonds that are denominated in the currency in which the earnings are to be paid and that have terms to maturity approximating to the terms of the related pension liabilities.

The expenses on the employees' retirement benefits associated with their length of services are included in "Expenses on Personnel" and the amount of the discounted liabilities is included as interest expense in "Financial Expenses". The actuarial gains/losses are recognized in the other comprehensive income and are transferred to Group's reserves.

The retirement benefit obligations presented in the consolidated statement of financial position consist of the present value of the liabilities with respect to the payment of these benefits.

## **4.24 Provisions**

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of past events, when it is probable that an outflow of resources embodying economic benefits would be required to settle the obligation, and when a reliable estimate of the amount of the obligation can be made. When the Group estimates that some or all of the expenses required to settle the provision will be recovered, for example under an insurance contract, the reimbursement is recognized as a separate asset, but only when it is practically certain that such expenses will be recovered. The expenses on provisions are presented in the consolidated statement of profit or loss, net of the amount of the reimbursement. Where the effect of the time value of money is material, the provisions are discounted using the current before-tax discount rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as finance costs.

### *Provision for environmental protection expenses*

A provision for environmental protection costs is recognized when it is probable that expenses would be incurred or restoration works would be carried out and the Group has a legal or contractual obligation to undertake such actions. When it is expected that the expenses would be incurred over a long period of time, the present value of the expected future expenses is recognized as a provision and the effects of discounting are recognized as financial revenues and expenses. As at the reporting date of these consolidated financial statements, a provision for environmental protection expenses is recognized related to the safeguarding of the luminescent and other types of lamps containing mercury, safeguarding and recycling of storage batteries, deactivation, recycling and replacement of capacitor batteries containing PHB with new ones and utilization of bleaching soil used in the base for oil regeneration.

### *Provisions for reclamation*

Provisions related to the estimated expenses on reclamation of the land plots damaged from the coal mining by Mini Maritsa Iztok EAD are calculated by taking into account the requirements of the current environmental law, the forthcoming seizures of lands, the seized unrecultivated land, the value of reclamation of 1 daa (decare) of land, as well as the estimated quantities of coal stocks until the year 2043. Due to the fact that there is significant uncertainty on the volume of the reclamation activities, which are to be performed over time, the provisions are not discounted and are not presented in the current Consolidated Financial Statements at their present value.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### *Provision for recultivation of plots damaged for landfilling of gypsum from desulphurization facilities*

In accordance with Ordinance 26 on recultivation of damaged plots and improvement of low-fertility lands, removal and utilization of the humus layer, the Group is required to engage in technological and biological recultivation of a landfill, following its filling with gypsum from desulphurization facilities. Based on the capacity of the landfill and the disposed amount of gypsum, it is expected that the landfill will be filled in within 5 years. The value of the technological and biological recultivation under the project amounts to BGN 5,488 thousand. In accordance with para. 17(c) of IAS 16 Property, Plant and Equipment, the asset's value includes the initial estimate of the expected cost to recover the site (land recultivation) where the asset was located after its decommissioning.

### *Provision for decommissioning of nuclear facilities*

In accordance with the requirements of IAS 37 Provisions, Contingent Liabilities and Contingent Assets liabilities with uncertain value and time occurrence are provisions. Provisions are recognised only if the following criteria are met:

- the enterprise has a present obligation arising from a past event;
- an outflow of resources of the enterprise containing economic benefits may be required to repay the obligation ; and
- a reliable estimate of the value of the obligation can be made.

Based on the requirements of the Standard for Reliable Estimates, the Group has not charged any expense for provisions for “decommissioning” and “safe storage of spent nuclear fuel” for the following reasons:

- The Group is subject to special regulations - the Law on the Safe Use of Nuclear Energy, Pricing Ordinances and adopted by the Council of Ministers, Regulations for Raising Funds to the RAW Fund and the DNF Fund. In accordance with the requirements of these statutory instruments, current expenses for contributions due to these funds are charged to the consolidated profit or loss account and other comprehensive income and are translated into budget accounts. By observing the principle of “comparability of revenues and expenditures” of the Accountancy Act in the price of the electricity for a regulated market determined by the EWRC, the expenditure is recognized up to the amount of the contributions due to the DNF (Decommissioning of nuclear facilities) and the RAW funds;
- Concerning the agreements with the European Commission for Early Closure of Units 1 to 4, the State has contracted from external sources to build a dry spent nuclear fuel storage (SNF) repository to cover wage and social security costs. third and fourth unit staff and other funding;
- The first and second unit assets were transferred free of charge in December 2008 pursuant to Decision No 839 of the Council of Ministers of NPP Kozloduy to SE RAW with the subject of “decommissioning” activity. By decision of the Council of Ministers No.1038 of 19 December 2012 Units 3 and 4 of NPP Kozloduy were announced as radioactive waste management facilities and their allocation for management of SE RAW was determined. On 1 March 2013 the property belonging to Units 3 and 4, together with the respective staff, were transferred to SE RAW.

According to the legal requirements, when the realization of the decommissioning project proves to be more expensive than the estimates, approved by the Management Board of the DNF Fund, the necessary additional costs are at the expense of the person who last operated the nuclear facility (in this case the NPP Kozloduy). As there is no clear national strategy for the decommissioning of nuclear facilities at the date of approval of the consolidated financial statements and no estimate of the projected cost of the project by the IFRS Fund has been made, the Group cannot reliably estimate the obligation and has not recognized provision for the decommissioning of nuclear installations on 31 December 2017 and 31 December 2016.

### *Provision for transport, processing and storage of spent nuclear fuel*

Under the current Strategy for Management of Spent Fuel and Radioactive Waste by 2030, adopted by decision of the Council of Ministers on 2 September 2015, NPP Kozloduy has a statutory obligation to transport at least 50 tons of heavy metal spent on nuclear fuel (NPF) for processing and storage in Russia, in the presence of favorable financial and economic conditions.

In the year 2017, one shipment to Russia of 8 containers containing 232 WWR-440 SNF assemblies was carried out. On 8 February 2018 a Technical Expert Council meeting was held examining the technical, economic and legal aspects of the possibility of the Kozloduy NPP to carry out discharges of spent nuclear fuel from WWR-440 and WWR-1000 into Russia in 2018 and the following years. According to the decision taken in 2018 no transfer of SNF from WWR-440 and WWR-1000 from NPP Kozloduy to Russia is envisaged. At the meeting, a decision was taken to launch a study on the possibility of transporting spent nuclear fuel from WWR-1000.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### *Greenhouse gas emissions allowances*

The allowances for greenhouse gas emissions (tonne of carbon dioxide equivalent) are reported in “net liability method” under which the Group recognizes a liability for carbon dioxide emissions when the emissions are emitted and are in excess of the distributed (according to the National Plan for Allocation of Greenhouse Gas Emissions Allowances) and additionally purchased allowances. The emissions which exceed the allocated annual allowances for the Company are purchased from the open market. The Group currently recognizes an expense and a corresponding liability for the emissions in excess of the allocations. The estimation of such allowances is the best possible estimate of the prospective resources needed to purchase, i.e. their market price at the end of the reporting period.

### **4.25 Government grants and deferred funding**

Government grants and deferred funding are recognized when there is reasonable assurance that the grant/funding will be received and that all conditions attached to it will be met. When the grant/funding relates to an expense item, it is recognized as revenue for the periods necessary to match the grant/funding on a systematic basis with the expenses it is intended to compensate. When the grant/funding relates to the acquisition of a non-current asset, it is presented as revenue for a future period and is recognized in the income or loss in equal amounts over the estimated useful life of the related asset.

When the Group receives non-cash government grants, the grant and the asset are reported at their par value and the grant/funding is recognized as revenue in the profit or loss in equal amounts over the useful life of the asset.

### **4.26 Significant Management's judgements when applying accounting policy**

The preparation of the consolidated financial statements requires the Management to make best estimates, accruals and assumptions that affect the value of the recognized assets and liabilities and the disclosure of contingent liabilities as at the reporting date and the reported revenue and expenses for the relevant period. The uncertainty associated with the assumptions and estimates made could result in actual results that require material adjustments to the carrying amounts of the assets or liabilities in subsequent reporting periods. The main sources of uncertainty in the use of approximate accounting estimates are described in Note 4.27.

### *Long-term power purchase agreements— the Group acting as a Lessee*

The Group has entered into long-term power purchase agreements with the following contractors which operate thermal power plants in Maritsa Basin – AES-3C Maritsa East 1 EOOD (contracted term – 15 years) and ContourGlobal Maritsa East 3 AD (contracted term – 15 years). Based on the long-term contracts, the Group is entitled to set the quantities of electricity that each of the two thermal power plants is to generate over a certain period of time based on the installed capacity, and over the term of the agreement the Group is required to purchase through its subsidiary – NEK EAD – the minimum quantities of generated electricity agreed and the corresponding availability. The Group may set bigger quantities than the minimum agreed, if necessary, by purchasing the corresponding availability as well.

The Group has analyzed the above- mentioned long-term contracts, comparing them to specific criteria, and it has made the conclusion that in terms of the provided commitment to purchase the availability, the agreements contain lease arrangements.

The Management believes that since all significant risks and benefits of the ownership of the above-mentioned thermal power plants are not taken over by the Group, the long-term contracts for purchase of electricity are to be treated as operating leases. Additional information on the long-term contracts is presented in Note 40.

### *Deferred tax assets*

Deferred tax assets are recognized for all unused taxable losses inasmuch as it is probable that taxable profits will be recognized, against which these losses can be utilized. In determining the amount of deferred tax assets, the Management is required to make assumptions on the length of the period and the approximate amount of the future taxable profits, including assessment of the future strategy for tax planning. The Group has not recognized deferred tax assets for all taxable losses. Further information is presented in Note 23.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

### 4.27 Uncertainty of accounting estimates

In the preparation of the consolidated financial statements, the Management makes a number of assumptions, estimates and indications about the recognition and measurement of assets, liabilities, revenue and expenses. The actual results may differ from the assumptions, estimates and indications made by the management and will seldom fully correspond to the preliminary estimated results. Information on the material assumptions, estimates and indications that have the most significant impact on the recognition and measurement of assets, liabilities, revenue and expenses is presented below.

#### *Fair value of property, plant and equipment*

The Group subsequently recognizes major groups of property, plant and equipment at their remeasured value by using reports made by independent external appraisers to determine their fair value. Detailed information on the revaluation, valuation methods used, assumptions and judgement when determining fair value is given in Note 19.

#### *Impairment of financial assets*

The Management assesses whether or not impairment of the financial assets in the group of loans and receivables is required based on the age analysis of the receivables, the available historical data on the derecognition level of the uncollectible receivables, as well as the analysis of the solvency of the respective customer, changes in the agreed payment conditions, etc. If the financial position and performance of the customers deteriorate above the estimates, the value of the receivables to be derecognized in subsequent reporting periods may be higher than the expected value at the reporting date. As at 31 December 2017, the best judgement of the Management for the required impairment of the Group's trade and other receivables is presented in Note 22.

#### *Group's provisions*

The Group recognizes provisions for environmental protection, for recultivation, for exceeding the greenhouse gas emissions allowances, etc. In determining the amount of these provisions, the Management is required to estimate the expected costs needed to cover the respective liabilities of the Group, as well as their time frame. As at 31 December 2017, the Management's best estimate of the provisions is presented in Note 32.

#### *Provisions for environmental protection and other provisions*

The Group recognizes provisions for environmental protection, provisions for legal claims and other provisions. Determination of provisions requires the management to make an estimate of the expected costs necessary to cover the Group's respective obligations and the time period. As at 31 December 2017, the best estimate of these provisions is presented in note 32.

#### *Provision for transporting, processing and storage of spent nuclear fuel*

The provision for spent nuclear fuel liabilities is based on management's best estimate of the costs that will be incurred in the next reporting period for the transport, processing and storage of spent nuclear fuel.

Under the current Strategy for management of spent nuclear fuel and radioactive waste by 2030, adopted by decision a of the Council of Ministers on 2 September 2015, NPP Kozloduy has a statutory obligation to transport at least 50 tons of heavy metal spent on nuclear fuel (NPF) for processing and storage in Russia, in the presence of favorable financial and economic conditions.

In the year 2017, one shipment to Russia of 8 containers containing 232 WWR-440 SNF cartridges was carried out. On 8 February 2018 a Technical Expert Council meeting was held examining the technical, economic and legal aspects of the possibility of the NPP Kozloduy to carry out discharges of spent nuclear fuel from WWR-440 and WWR-1000 into Russia in 2018 and the following years. According to the decision taken in 2018 no transfer of SNF from WWR-440 and WWR-1000 from NPP Kozloduy to Russia is envisaged. At the meeting, a decision was taken to launch a study on the possibility of transporting spent nuclear fuel from WWR-1000.

#### *Provision for decommissioning of nuclear facilities*

In compliance with the requirements of IAS 37 Provisions, Contingent Liabilities and Contingent Assets, provisions must be recognized in respect of future amounts with uncertain timing and amount. Provisions are recognized only if the following criteria are satisfied:

- The entity has a present obligation, arising from a past event;
- an outflow of the entity's resources, embodying economic benefits, may be required to settle the liability; and
- The liability can be reliably estimated.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

In compliance with the requirements under the standard for “reliable estimates”, the Group has not accrued any provisions for “decommissioning of nuclear facilities” and for “safe storage of spent nuclear fuel”, due to the following reasons:

- The Group is subject to specific regulations – Safe Use of Nuclear Energy Act, pricing regulations and decrees adopted by the Council of Ministers to raise funds in the Radioactive Waste (RAW) Fund and the Decommissioning of Nuclear Facilities (DNF) Fund. In accordance with these regulations, current expenses are accrued in the consolidated statement of profit or loss related to the contributions due to the above- stated funds and paid into government accounts. Pursuant to the principle of “comparability of revenues and expenses” as per the Accounting Act, the price of electricity in a regulated market, as determined by EWRC, includes an expense recognized up to the amount of the contributions due to the RAW Fund and the DNF Fund;
- In compliance with the agreements with the European Commission for early closure of Units 1 to 4, the State has contracted external funding for the construction of Dry Spent Nuclear Fuel (SNF) Storage Facility in order to cover wage and social security costs for the staff of Units 3 and 4 and other funding;
- The assets of Units 1 and 2 were transferred free of charge in December 2008 under Decision No.839 of the Council of Ministers from NPP Kozloduy EAD to State Enterprise RAW, Sofia, concerning the decommissioning activity. By decision of the Council of Ministers No.1038 dated 19 December 2012, Units 3 and 4 of NPP Kozloduy EAD were announced as radioactive waste management facilities and they are allocated to be managed by SE RAW. On 1 March 2013, the property of Units 3 and 4, together with the respective staff, were transferred to SE RAW.

According to the regulatory requirements, when the implementation of the decommissioning project proves to be more expensive than the estimates approved by the Management Board of the DNF Fund, the necessary additional costs are borne by the person who last operated the nuclear facility (in this case it is NPP Kozloduy). As at the date of the approval of the consolidated financial statements, there is no clear national strategy for decommissioning of nuclear facilities and no estimation of the estimated costs of the project by the DNF Fund, the Group may not reliably assess the liability and has not recognized a provision for decommissioning of nuclear facilities as at 31 December 2017 and 31 December 2016.

*Retirement benefits*

The retirement benefit obligation is determined by actuarial valuation. This valuation requires that estimates be made for the discount rate, future wage growth, staff turnover and mortality rates. Due to the long-term nature of the retirement benefits, these estimates are subject to considerable uncertainty. As at 31 December 2017 the Group's liabilities for retirement benefits amount to BGN 210,265 thousand (31 December 2016: BGN 180,886 thousand). Additional information on the Group's liabilities for retirement benefits is presented in Note 31.

*Useful life of property, plant, equipment and intangible assets*

At the end of each reporting period, the Management reviews the useful life of the depreciable assets. As at 31 December 2017, the Management determines the useful life of assets as the expected period of use of the assets by the Group. Information on the useful life of property, plant and equipment is presented in Note 4.13, and of intangible assets – in note 4.14. The carrying amounts of the assets are analyzed in Note 19 and Note 20. The actual useful life of an asset may differ from its estimated useful life as a result of technical or moral obsolescence.

*Inventory impairment*

The Group recognizes impairment on slow-moving and obsolete inventories to their net realizable value. The Management assesses on an annual basis the adequacy of this impairment and the cost of the inventories is reduced to their estimated net realizable value. As at 31 December 2017, the best estimate of the impairment of inventories amounts to BGN 9,973 thousand (31 December 2016: BGN 10,688 thousand). Further information is presented in Note 24.

**5. Segment Reporting**

The management currently defines the following Group products and services as operating segments as described in Note 4.6 “Electricity”, “Natural Gas”, “Coal” and “Administration”. These operating segments are monitored by the management, which takes strategic decisions based on the adjusted operating results of the segments.

In addition, smaller operating segments that do not exceed the quantitative thresholds are pooled in the segment of “Administration” whose activity and main source of revenue is the provision of services to companies in other segments of the Group. Segment information can be analyzed for the reporting periods presented as follows:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

**As at 31.12.2017**

Sales revenue and other operating income from:

- external customers

- other segments

**Segment revenue**

Change in production and WIP balances

Cost of acquisition of PPE

Cost of sales of natural gas, electric energy and other assets

Material costs

Hired services expenses

Depreciation

Personnel expenses

Reintegration of impairment/(net impairment) on receivables from sales

Net impairment of PPE

Costs for greenhouse gas emissions and provisions

Other operating costs

Technological consumption of natural gas

**Operating profit of segment from continuing operations**

**Operating profit of the segment from discontinued operations**

**Segment Assets**

**Segment Liabilities**

	Electrical energy	Natural gas	Coal	Administration	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
Sales revenue and other operating income from:					
- external customers	4,788,029	1,340,354	298,440	2,738	6,429,561
- other segments	529,715	149,163	267,519	164,261	1,110,658
<b>Segment revenue</b>	<b>5,317,744</b>	<b>1,489,517</b>	<b>565,959</b>	<b>166,999</b>	<b>7,540,219</b>
Change in production and WIP balances	3,454	177	5,527	-	9,158
Cost of acquisition of PPE	14,449	-	4,047	-	18,496
Cost of sales of natural gas, electric energy and other assets	(3,068,847)	(1,095,741)	-	(73,999)	(4,238,587)
Material costs	(458,165)	(6,442)	(144,478)	(197)	(609,282)
Hired services expenses	(227,961)	(14,306)	(52,029)	(6,951)	(301,247)
Depreciation	(456,624)	(90,499)	(84,567)	(1,247)	(632,937)
Personnel expenses	(512,390)	(62,419)	(254,132)	(4,586)	(833,527)
Reintegration of impairment/(net impairment) on receivables from sales	(12,518)	(16,423)	-	(22,233)	(51,174)
Net impairment of PPE	-	-	(5,013)	-	(5,013)
Costs for greenhouse gas emissions and provisions	(234,262)	-	(4,211)	-	(238,473)
Other operating costs	(289,016)	(23,056)	(21,295)	(1,191)	(334,558)
Technological consumption of natural gas		(68,413)	-	-	(68,413)
<b>Operating profit of segment from continuing operations</b>	<b>75,864</b>	<b>112,395</b>	<b>9,808</b>	<b>56,595</b>	<b>254,662</b>
<b>Operating profit of the segment from discontinued operations</b>	<b>1,767</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,767</b>
<b>Segment Assets</b>	<b>13,228,366</b>	<b>2,675,751</b>	<b>1,181,546</b>	<b>6,112,615</b>	<b>23,198,278</b>
<b>Segment Liabilities</b>	<b>6,361,411</b>	<b>319,134</b>	<b>345,078</b>	<b>2,263,945</b>	<b>9,289,568</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

As at 31.12.2016

Sales revenue and other operating income from:

- external customers

- other segments

**Segment revenue**

Change in production and WIP balances

Cost of acquisition of PPE

Cost of sales of natural gas, electric energy and other assets

Material costs

Hired services expenses

Depreciation

Personnel expenses

Reintegration of impairment / (net impairment) on receivables from sales

Net impairment of PPE

Provision expenses

Other operating costs

Technological consumption of natural gas

**Operating profit/(loss) of segment from continuing operations****Operating profit of the segment from discontinued operations****Segment Assets****Segment Liabilities**

	Electrical energy	Natural gas	Coal	Administration	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
	4,584,085	1,221,587	263,481	3,004	6,072,157
	511,038	123,330	244,286	117,043	995,697
<b>Segment revenue</b>	<b>5,095,123</b>	<b>1,344,917</b>	<b>507,767</b>	<b>120,047</b>	<b>7,067,854</b>
Change in production and WIP balances	(10,016)	315	25,770	-	16,069
Cost of acquisition of PPE	17,088	-	5,744	-	22,832
Cost of sales of natural gas, electric energy and other assets	(2,973,494)	(934,133)	(176)	-	(3,907,803)
Material costs	(512,271)	(5,987)	(144,978)	(161)	(663,397)
Hired services expenses	(289,845)	(17,620)	(51,421)	(6,905)	(365,791)
Depreciation	(442,972)	(85,615)	(70,987)	(1,196)	(600,770)
Personnel expenses	(478,640)	(59,964)	(235,762)	(4,650)	(779,016)
Reintegration of impairment / (net impairment) on receivables from sales	(22,033)	(45,996)	(12,523)	(10,095)	(90,647)
Net impairment of PPE	-	-	-	-	-
Provision expenses	(8,192)	-	5,320	-	(2,872)
Other operating costs	(448,101)	(18,783)	(21,075)	(1,112)	(489,071)
Technological consumption of natural gas	-	(60,954)	-	-	(60,954)
<b>Operating profit/(loss) of segment from continuing operations</b>	<b>(73,353)</b>	<b>116,180</b>	<b>7,679</b>	<b>95,928</b>	<b>146,434</b>
<b>Operating profit of the segment from discontinued operations</b>	<b>801</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>801</b>
<b>Segment Assets</b>	<b>13,011,538</b>	<b>2,551,724</b>	<b>1,208,871</b>	<b>5,998,653</b>	<b>22,770,786</b>
<b>Segment Liabilities</b>	<b>6,089,029</b>	<b>257,003</b>	<b>371,072</b>	<b>2,255,110</b>	<b>8,972,214</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

The total amount of revenue, operating profit, segment assets and liabilities is compared to the corresponding items in the consolidated financial statements of the Group as follows:

	<b>31.12.2017</b>	<b>31.12.2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Revenue</b>		
Total segments revenue	7,540,219	7,067,854
Elimination of intra-segment revenue	(1,110,658)	(995,697)
<b>Group's revenue</b>	<b>6,429,561</b>	<b>6,072,157</b>
<b>Profit</b>		
Operating profit/(loss) of segments	254,662	146,434
Elimination of profits from transactions between segments	(48,983)	(138,756)
<b>Operating profit of the Group</b>	<b>205,679</b>	<b>7,678</b>
Share of the financial result of investments accounted for using the equity method	41,765	35,928
Finance costs	(150,192)	(133,122)
Finance income	22,381	21,354
Group Profit / (Loss) before Taxes from continuing operations	<b>119,633</b>	<b>(68,162)</b>
Group Profit before Taxes from discontinued operations	<b>1,969</b>	<b>794</b>
<b>Assets</b>		
Total segments' assets	23,198,278	22,770,786
Consolidation	(5,738,657)	(5,552,967)
<b>Group's assets</b>	<b>17,459,621</b>	<b>17,217,819</b>
<b>Liabilities</b>		
Total segments' liabilities	9,289,568	8,972,214
Consolidation	(3,191,741)	(2,979,872)
<b>Group's liabilities</b>	<b>6,097,827</b>	<b>5,992,342</b>

**6. Sales revenue**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Revenue from sales of electricity</b>	<b>3,183,359</b>	<b>3,100,689</b>
<b>Revenue from sales of natural gas</b>	<b>1,099,972</b>	<b>997,084</b>
<b>Revenue from sales of coals</b>	<b>283,637</b>	<b>249,437</b>
<b>Revenue from other sales, including:</b>	<b>1,296,326</b>	<b>1,332,221</b>
<i>Related with sales of electricity</i>	<b>1,062,963</b>	<b>1,107,543</b>
Revenue generated from the "Obligation to society" fee	620,708	657,916
Revenues associated with the transmission through the electricity grid	346,154	327,408
Revenue generated under access fee	63,379	64,377
Revenue associated with reactive electric power	14,566	18,313
Revenue generated under connection fees	18,156	39,529
<i>Related with sales of natural gas</i>	<b>210,725</b>	<b>204,965</b>
Revenue generated from transmission of natural gas	210,725	204,965
<i>Revenue generated from "water supply" services</i>	<b>4,086</b>	<b>4,859</b>
<i>Revenue from sales of thermal energy</i>	<b>2,138</b>	<b>2,010</b>
<i>Revenue from rendered transport services</i>	<b>5,802</b>	<b>4,632</b>
<i>Revenue from rendered telecommunications services</i>	<b>2,689</b>	<b>2,861</b>
<i>Revenue from other sales</i>	<b>7,923</b>	<b>5,351</b>
	<b>5,863,294</b>	<b>5,679,431</b>

**7. Other operating income**

<b>2017</b>	<b>2016</b>
<i>BGN '000</i>	<i>BGN '000</i>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Revenue from the Security of the Electricity System Fund	473,908	300,154
Income from penalties	38,580	27,163
Revenue from financing (Note 30)	26,373	20,530
Rental income	6,080	2,043
Revenue from the sale of current assets	2,345	3,578
Income from insurance benefits	1,879	1,888
Revenue from surplus assets	618	1,062
Profit from the sale of property, plant and equipment	472	226
Asset Liquidation Income	446	189
Other incomes	15,566	35,893
	<b>566,267</b>	<b>392,726</b>

With the amendments to the Energy Act (Energy Act), promulgated in SG No.56/2015, Security of the Electricity System Fund (SESF/Fund) was established as a legal entity based in Sofia. The provisions which regulate the operations of the Fund are laid down in Article 36(b) to Article 36(g) of the Energy Act.

The purpose of the Fund is to manage the funds to cover the expenses incurred by National Electricity Company EAD, acting as Public Supplier, arising from its obligations to purchase electricity from producers connected to the transmission grid under long-term power purchase agreements, as well as electricity generated from renewable sources, from highly-efficient cogeneration of electricity and thermal energy and the amount of electricity produced by producers using local primary energy sources (fuel), up to 15 percent of all primary energy necessary to produce electricity.

The other costs of the Public Supplier that can be covered by the Fund are those determined by a decision of the commission, including compensation for previous regulatory periods. The payments from the Fund to the public supplier are scheduled on a monthly basis.

For the price period from 1 July 2016 to 30 June 2017, the expenses of the public supplier to be covered by the Fund pursuant to Decision of EWRC No.C-19 dated 30 June 2016 are estimated to total BGN 479,206 thousand and include compensation of the expenses of the public supplier under the Methodology 2012 for the period from 1 July 2012 to 31 July 2013 amounting to BGN 79,500 thousand; compensation of the public supplier in connection with the Ordinance to reduce the burden on Bulgarian business related to the cost of renewable energy amounting to BGN 103,085 thousand; compensation of the Public supplier for the contribution due under Article 36(f) of the Energy Act by the producers with concluded long-term power purchase agreements amounting to BGN 51,386 thousand; amounts from the Fund for reducing the price of the "Obligation to society" fee amounting to BGN 245,235 thousand.

For the price period from 1 July 2017 to 30 June 2018, the expenses of the Public supplier to be covered by the Fund pursuant to Decision of EWRC No.C-19 dated 1 July 2017 are estimated to total BGN 478,647 thousand and include compensation of the expenses of the public supplier under the Methodology 2012 for the period from 1 July 2012 to 31 July 2013 amounting to BGN 79,530 thousand; compensation of the public supplier in connection with the Ordinance to reduce the burden on Bulgarian business related to the cost of renewable energy amounting to BGN 108,426 thousand; compensation of the Public supplier for the contribution due under Article 36(f) of the Energy Act by the producers with concluded long-term power purchase agreements amounting to BGN 51,663 thousand; amounts from the Fund for reducing the price of the "Obligation to society" fee amounting to BGN 239,028 thousand.

Funding provided by the Fund is in essence a government grant that falls under the scope of IAS 20 Accounting for Government Grants and Disclosure of Government Assistance. SESF funds are recognized on a systematic basis (monthly) over the periods in which the Group, through NEK EAD, recognizes as an expense the related costs that the grant is intended to offset. The amount of the monthly allowance is calculated according to the decisions of the EWRC for the respective price period and the internal rules of NEK EAD. When performing control and confirmation by the Fund, the difference is recognized as a decrease of the recognized receivables, respectively a decrease of the recognized revenues.

For the period from 1 January 2017 to 31 December 31 2017, revenues for compensating the costs of the Public supplier amounting to BGN 473,908 thousand are recognized. (2016: BGN 300,154 thousand) disclosed in Note 22 Trade and other receivables.

The Group has long-term contracts for the sale of coal with its main clients. Contracts include provisions for the purchase of minimum monthly and total annual quantities of coal as well as penalties for delayed current payments

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

by customers. In 2017, the commitments for the purchase of minimum monthly and total annual quantities of coal are met.

**8. Cost of natural gas, electricity and other current assets sold**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Electricity	(2,555,603)	(2,535,933)
Natural gas	(1,012,275)	(869,262)
Other current assets	(888)	(2,718)
	<b>(3,568,766)</b>	<b>(3,407,913)</b>

**9. Cost of materials**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Fuel	(155,203)	(157,100)
Electricity	(77,847)	(27,928)
Spare parts	(64,598)	(58,016)
Reagents, limestone and other materials	(22,728)	(18,720)
Repair and maintenance materials	(11,647)	(6,484)
Other raw materials and consumables	(13,088)	(25,230)
	<b>(345,111)</b>	<b>(293,478)</b>

**10. Hired services expenses**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Repairs	(76,593)	(148,471)
Insurance services	(56,643)	(56,999)
Security services	(40,325)	(37,447)
Consultancy services	(34,720)	(13,353)
Concession fees and licenses	(20,910)	(31,586)
Transport services	(14,706)	(16,217)
Other charges and fees	(11,683)	(11,253)
Communication services	(3,029)	(2,889)
Rent	(890)	(1,643)
Others	(22,631)	(35,628)
	<b>(282,130)</b>	<b>(355,486)</b>

*Audit services*

These consolidated financial statements have been audited by the audit company HLB Bulgaria OOD on the basis of a contract concluded between Bulgarian Energy Holding EAD and HLB Bulgaria OOD and includes an independent financial audit of the individual financial statements of BEH EAD, NEK EAD, NPP Kozloduy, Maritsa 2 TPP EAD, Mini Maritsa Iztok EAD, Bulgargaz EAD, Bulgartel EAD, Independent Bulgarian Energy Exchange EAD and Energy Investment Company EAD in liquidation and the consolidated financial statements of BEH EAD, NPP Kozloduy EAD, TPP Maritsa East 2 EAD and Bulgartel EAD.

The remuneration of the registered auditors for the independent financial audit conducted for 2017 amounts to BGN 733 thousand, excluding VAT. The remuneration includes independent financial audit of the annual consolidated and individual financial statements for 2017 amounting to BGN 500 thousand and audit of the interim consolidated and individual financial statements as at 30 June 2017 amounting to BGN 233 thousand.

During the period the registered auditors did not provide other services.

**11. Accrued/reversed impairment**

<b>2017</b>	<b>2016</b>
<i>BGN '000</i>	<i>BGN '000</i>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

	<i>BGN '000</i>	<i>BGN '000</i>
Impairment of trade and other receivables	(4,364)	(114,458)
Impairment of investments accounted for using the equity method	(11,779)	
	<b>(16,143)</b>	<b>(114,458)</b>

**12. Personnel Expenses**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Remuneration	(552,553)	(509,339)
Social Security	(146,290)	(136,291)
Social costs	(103,427)	(113,376)
Accrued expenses for long-term retirement employee benefits (Note 31)	(20,290)	(12,070)
Expenditure on unused annual leave and social security contributions on it	(5,635)	(4,663)
Other benefits and allowances	(5,305)	(3,235)
	<b>(833,500)</b>	<b>(778,974)</b>

**13. Other operating expenses**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Contributions to the Security of the electricity system Fund	(115,371)	(92,147)
Contributions to the Fund "Decommissioning of Nuclear Facilities" and the Radioactive Waste Fund	(95,519)	(85,015)
Food and workwear	(51,011)	(46,519)
Fines and penalties	(17,431)	(44,233)
Costs for green energy	(12,236)	-
Expenditure on local taxes and fees	(10,861)	(9,224)
Technological consumption of natural gas	(7,565)	(5,520)
Excise and other taxes	(6 150)	(5,810)
Business trips	(3,592)	(4,040)
Written-off inventories and property, plant and equipment	(2,138)	(4,622)
Training and qualification	(1,371)	(3,009)
Expenses for tax on costs	(1,148)	(1,855)
Impairment of inventories	(650)	(3,984)
Recovered impairment of inventories	27	13
Others	(4,859)	(12,465)
	<b>(329,875)</b>	<b>(318,430)</b>

*Contributions to the "Security of the Electricity System" Fund*

Pursuant to the provisions of Article 36(f) of the Energy Act, contributions to the "Security of the Electricity System" Fund should be deducted and paid by the electricity producers and importers from the proceeds of the sales of electricity, excluding VAT; the operators of the electricity and gas transmission networks from the proceeds for access and transmission of electricity and natural gas, excluding VAT. In order to implement this requirement, the companies – National Electricity Company EAD, TPP Maritsa East 2 EAD, NPP Kozloduy EAD, Bulgartransgaz EAD and Electricity System Operator EAD charge and contribute their 5% deductions to the Fund.

*Contributions to the Decommission of Nuclear Facilities Fund and to the Radioactive Waste Fund*

According to the ordinances adopted by the Council of Ministers for the establishment, collection, utilization and control of the funds and the amount of the contributions due to the Decommission of Nuclear Facilities Fund and the Radioactive Waste Fund, the subsidiary NPP Kozloduy EAD makes its contributions to the funds. The contributions due are determined in accordance with the rules laid down in the regulations. The contributions are reported as current expenses and are used as a pricing element in determining the price of electricity produced by NPP Kozloduy EAD.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**14. Net costs related to an arbitration award under the NPP Belene project**

On 14 June 2016, the Arbitration Tribunal issued an award on ICC Case 18086/GZ/MHM concerning NPP Belene, ruling that NEK EAD must pay ZAO Atomstroyexport (ASE) the amounts claimed by ASE in connection with commitments under the contract for the construction of NPP Belene.

According to the arbitration award (adjusted) the following amounts are paid to ASE:

	<i>EUR '000.</i>	<i>BGN '000.</i>
Awarded principal	417,228	816,027
Awarded interest until 1 May 2015	131,199	256,604
<b>Total awarded amount until 1 May 2015</b>	<b>548,427</b>	<b>1,072,631</b>
Interest from 2 May 2015 to 14 June 2016 (Award date)	53,190	104,030
<b>Total awarded amount as at 14 June 2016</b>	<b>601,617</b>	<b>1,176,661</b>

On 28 September 2016, the National Assembly of the Republic of Bulgaria adopted the Act on Granting Assistance for the Repayment of Liabilities of National Electricity Company EAD following the award on arbitration case No. ICC Case 18086/GZ/MHM. The law was promulgated in State Gazette on 30 September 2016 and stipulates that pursuant to Article 109(4)(2) of the Public Finance Act the Council of Ministers should provide financial assistance to NEK EAD through the budget of the Ministry of Energy aimed at the payment of the amounts awarded to ASE. The grant should be provided based on an agreement entered by and between the Minister of Energy and NEK EAD, approved by the Council of Ministers, based on the agreement for final settlement of the relations between NEK EAD and ASE.

Pursuant to Article 3 of the Act on Granting Assistance for the Repayment of Liabilities of National Electricity Company EAD, a notification to the European Commission was sent on 29 September 2016 pursuant to Article 108(3) of the Treaty on the Functioning of the European Union. The decision of the European Commission states that in this particular case there is no state aid, and therefore the grounds pursuant to Article 108 of the Treaty on the Functioning of the European Union do not exist.

On 26 October 2016 NEK EAD and ASE signed an agreement for final settlement of the relations of the parties under arbitration case ICC Case 18086/GZ/MHM. Under the terms of the Agreement, if NEK EAD pays to ASE the full amount of the awarded principal and interest of EUR 601,617,133 (BGN 1,176,660,837) on or before 15 December 2016, ASE will not claim interest on the obligation after 14 June 2016.

If NEK EAD pays the entire liability determined under the award of the Arbitration Court, the Company will acquire the right to receive the long-term manufacturing equipment /LTME/produced by ASE and the acquisition itself is the moment when the equipment is delivered to Belene Port and the handover protocol is signed by the parties.

On 26 October 2016, NEK EAD voluntarily paid to ASE EUR 5 million of the awarded amount.

On 5 December 2016, an agreement for the provision of financial assistance was signed by and between the Ministry of Energy and NEK EAD, according to which:

- The Ministry of Energy will provide NEK EAD with financial assistance in the amount of EUR 601,617,133 (BGN 1,176,660,837);
- NEK EAD undertakes to pay by 14 December 2016 the amounts awarded under the Arbitration Case No. ICC Case 18086/GZ/MHM under the terms and conditions of the agreement for the final settlement of the relations with ASE;
- NEK EAD undertakes to reimburse the received financial assistance to the budget of the Ministry of Energy within 7 (seven) years. The repayment is made once at the maturity date of the loan (December 2023);
- The financial support received from NEK EAD is interest-free and unsecured.

On 8 December 2016, an amount of EUR 596,617 thousand was paid by NEK EAD to ASE.

On 16 January 2017, a contract was signed by and between NEK EAD and ASE for the delivery of the completed long-term manufacturing equipment and its acceptance by NEK EAD at the site of NPP Belene.

On 13 October 2017 Annex 1 was signed for the delivery of the rest of the completed LTME under Annex 2 to a contract for the delivery of the completed LTME between NEK EAD and ASE.

**Initial and subsequent measurement and presentation in the consolidated financial statements of the Group of the interest-free financial assistance provided for consideration**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

The interest-free financial assistance provided for consideration and intended to be used for the payment of the liability of NEK EAD for the awarded amounts under arbitration case No. ICC Case 18086/GZ/MHM for NPP Belene Project is in essence a financial liability (credit) and when recognized, it should be subject to the provisions of the IAS 39 Financial Instruments: Recognition and Measurement.

The Group has initially recognized the received interest-free financial assistance provided for consideration, measured at the present value of all future cash payments discounted at the prevailing market interest rate (or rates) for a similar instrument (similar with respect to currency, term, interest rate, and other factors) with a similar credit rating.

In addition, in accordance with the provisions of IAS 20 Accounting for Government Grants and Disclosure of Government Assistance, the benefit of the interest-free financing is measured as the difference between the fair value of the loan (the present value of all future cash payments, discounted with the prevailing market interest rate) determined in accordance with IAS 39 and the cash receipts received.

The Group has analyzed and taken into account the conditions for granting the preferential loan, considering that it can be regarded as a compensation provided by the Bulgarian State to NEK EAD for the commercial damages suffered by the company as a result of the implementation of the state policy in connection to NPP Belene Project. The purpose of the preferential loan is to provide immediate financial support to NEK EAD for the payment of the amounts awarded under arbitration case No. ICC Case 18086/GZ/MHM under the terms and conditions of the agreement for the final settlement of the relations with ASE. The compensation is intended to cover costs and losses already suffered by NEK EAD as it represents the difference between the fair value and the cash proceeds from the received interest-free financing provided for consideration and is recognized in the profit or loss for the period in accordance with IAS 20.

The subsequent measurement of the interest-free financial assistance provided for consideration is carried out at the amortized cost using the effective interest rate method, and the difference to the present value is recognized as a financial expense that is capitalized in the value of the assets under construction over the period of the loan so as at the maturity date the carrying amount of the loan should be equal to the received cash.

The table below provides information about NEK EAD liability under the arbitration case No. ICC 18086/GZ/MHM and its disclosure in the consolidated financial statements of the Group for 2016.

	<b>2016</b> <i>BGN '000</i>
<b>Amount of the claim of ASE for the equipment, including principal and interest expenses, gross, including:</b>	<b>1,178,380</b>
Total current expenses	474,785
Total liability for long-term manufacturing equipment	703,595
Reduced by counterclaim	(1,719)
<b>Liability to AO Atomstroyexport under the award, net</b>	<b>1,176,661</b>
<b>Assets and Liabilities Recognized in the consolidated statement of financial position for 2016</b>	
Liability to ASE to be written off	(98,413)
Recognized advances	190,594
Liability for long-term manufacturing equipment	703,595
<b>Right to receive long-term manufacturing equipment</b>	<b>795,776</b>
<b>Amounts recognized in the consolidated statement of profit or loss for 2016</b>	
Total amount of running costs	(474,784)
Costs of procedural representation and legal costs and expenses	(50,116)
Unrecognized receivables written off	(6,165)
<b>Total costs</b>	<b>(531,065)</b>
Recognized funding revenue (compensation) to cover damages from the Arbitration Award	<b>371,795</b>
<b>Net loss under Arbitration Case No. ICC Case 18086/GZ/MHM, reported in 2016</b>	<b>(159,270)</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

The total amount of the current expenses of BGN 474,784 thousand includes the portion of the amount awarded under the arbitration award that constitutes penalties (for losses, damages, lost profits, etc.) in connection with the termination of the contract, the portion of the final arbitration award that constitutes litigation expenses (arbitration fees and costs and attorney's fees) and any interests that have been determined and which constitute default for late payments (until 1 May 2015 and from 2 May 2015 to 14 June 2016) in line with the agreement concluded with AO Atomstroyexport.

**15. Financial income**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Interest Income, generated from Toplofikatsia Sofia EAD receivables	16,265	16,265
Interest income on bank deposits	3,382	3,763
Interest income on bank current accounts	1,282	1,205
Other interest income on financial instruments, carried at amortized cost	1,206	
<i>Total interest income</i>	<u>22,135</u>	<u>21,233</u>
Income from dividends and liquidation share	246	68
Other	-	53
	<b><u>22,381</u></b>	<b><u>21,354</u></b>

**16. Financial costs**

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Interests expense on loans, carried at amortized cost	(114,187)	(115,646)
<i>Total Interest Expenses from Financial Instruments</i>	<u>(114,187)</u>	<u>(115,646)</u>
Interest expense on retirement employee benefits (Note 31)	(4,701)	(5,207)
Interest expense on liabilities for taxes, fees and public receivables	(85)	(1,757)
Exchange rate differences, net	(30,791)	(9,620)
Bank fees	(428)	(493)
Result from operations with financial instruments	-	(399)
	<b><u>(150,192)</u></b>	<b><u>(133,122)</u></b>

Due to the significant negative net exchange rate differences for the current and prior reporting periods, they are reclassified from financial income into financial expenses.

**17. Income tax expense**

The estimated income tax expense based on the applicable tax rate for Bulgaria at the rate of 10% (2016: 10%) and the actually recognized tax expense in the profit or loss can be reconciled as follows:

	<b>2017</b>	<b>2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Accounting profit/(loss) from continuing operations	119,633	(68,162)
Accounting profit from discontinued operations	1,969	794
Accounting profit / (loss) before tax	121,602	(67,368)
Tax rate	10%	10%
Expected income tax expense	(12,160)	-
Tax effect of:		
Increases for tax purposes	(101,849)	(73,152)
Reductions for tax purposes	70,794	34,316
<b>Current income tax expense</b>	<b><u>(31,055)</u></b>	<b><u>(38,836)</u></b>
Deferred Tax (Expense)/Revenue:		
The occurrence and reversal of temporary differences	40,648	28,710
Income tax expense	<b><u>(2,567)</u></b>	<b><u>(10,126)</u></b>
Deferred tax (expense)/income recognized in other comprehensive income	(1,703)	107

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Note 23 provides information on the amounts of deferred tax assets and liabilities recognized through profit or loss and recognized directly in other comprehensive income.

**18. Earnings/(loss) per share and dividends****18.1 Earnings/(loss) per share**

The earnings/(loss) per share is calculated using as the numerator the net profit/(loss) attributable to the shareholder of the parent company. The weighted average number of shares used for the calculation of the earnings/(loss) per share and the net profit/(loss) attributable to distribution for the shareholder of the parent company are presented as follows:

	<u>2017</u>	<u>2016</u>
Profit/(Loss) for the Group attributable to shareholders (BGN '000)	118,808	(77,623)
Weighted average number of shares	<u>3,321,371,756</u>	<u>3,235,293,811</u>
<b>Earnings/(Loss) per share (in BGN per share)</b>	<b><u>0.036</u></b>	<b><u>(0.024)</u></b>

**18.2 Dividends paid**

The distribution of the profit of the parent company – Bulgarian Energy Holding EAD – is performed pursuant to a decision of the sole-shareholder, as follows:

- at least 10% of the profit must be transferred to the Statutory Reserves;
- upon a proposal of the Board of Directors, portion of the attributable profit may be allocated to particular funds of the company;
- dividends are paid out from the remaining portion.

The amount of dividends payable to the State is determined annually by the State Budget Act.

By Order No.2 dated 9 March 2018 of the Council of Ministers a dividend is set for joint-stock companies, which draw up annual consolidated financial statements according to art. 31, para. 1 of the Accountancy Act no more than an amount equal to 50 per cent of the profit in the consolidated financial statements for 2017.

By Order No.2 dated 23 February 2017, the Council of Ministers determined a dividend for shareholding companies that are required to prepare annual financial statements in compliance with Art. 31(1) of the Accounting Act, not exceeding an amount equal to 50 per cent of the profit in the Consolidated Financial Statements for 2016. Considering the reported net financial loss on a consolidated basis, in 2017 Bulgarian Energy Holding EAD is not obliged to pay a dividend to the republican budget for 2016.

By Order No.2 dated 18 February 2016, the Council of Ministers determined a dividend for shareholding companies that are required to prepare annual financial statements in compliance with Art. 37(2) of the Accounting Act, (repealed, SG, No.95 of 2015) not exceeding an amount equal to 50 per cent of the profit in the Consolidated Financial Statements for 2015. By virtue of Protocol No.E-RD-31-34 dated 27 June 2016, the Minister of Energy determined an obligation for a dividend of Bulgarian Energy Holding EAD from the consolidated financial performance for 2015 in the amount of BGN 14,752 thousand. The dividend was paid to the republican budget on 8 July 2016.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

## 19. Property, plant and equipment

As at 31 December 2017	Land and buildings	Plant and equipment	Transport vehicles	Fixtures and fittings and other assets	Acquisition costs	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value</b>						
<b>Balance as at 1 January 2017</b>	<b>1,224,612</b>	<b>10,878,257</b>	<b>93,407</b>	<b>99,697</b>	<b>2,578,995</b>	<b>14,874,968</b>
Additions	2,978	129,935	4,583	1,984	510,957	650,437
Disposals	(861)	(40,190)	(1,063)	(1,043)	(269,447)	(312,604)
Transfer from acquisition costs	4,355	151,562	4,454	2,875	(163,246)	-
Transfer from/to intangible assets	3	(4)	-	250	-	249
Transfer from investment property	520	-	-	-	-	520
Revaluation	(169)	35,178	-	-	-	35,009
Impairment accrued (recovered)	-	-	-	-	(5,013)	(5,013)
						-
<b>Balance as at 31 December 2017</b>	<b>1,231,438</b>	<b>11,154,738</b>	<b>101,381</b>	<b>103,763</b>	<b>2,652,246</b>	<b>15,243,566</b>
<b>Depreciation:</b>						
<b>Balance as at 1 January 2017</b>	<b>(60,002)</b>	<b>(1,005,463)</b>	<b>(40,415)</b>	<b>(63,290)</b>	<b>-</b>	<b>(1,169,170)</b>
Depreciation	(29,652)	(580,657)	(8,962)	(5,649)	-	(624,920)
Disposals	328	26,446	986	1,005	-	28,765
Revaluation	-	2,884	-	-	-	2,884
Other reclassifications and transfers	(3)	50	(47)	-	-	-
<b>Balance as at 31 December 2017</b>	<b>(89,329)</b>	<b>(1,556,740)</b>	<b>(48,438)</b>	<b>(67,934)</b>	<b>-</b>	<b>(1,762,441)</b>
<b>Carrying amount as at 31 December 2017</b>	<b>1,142,109</b>	<b>9,597,998</b>	<b>52,943</b>	<b>35,829</b>	<b>2,652,246</b>	<b>13,481,125</b>

As at 31 December 2016	Land and buildings	Plant and equipment	Transport vehicles	Fixtures and fittings and other assets	Acquisition costs	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value</b>						
<b>Balance as at 1 January 2016</b>	<b>1,145,394</b>	<b>10,292,371</b>	<b>78,431</b>	<b>98,401</b>	<b>2,066,732</b>	<b>13,681,329</b>
Additions	47,685	281,200	6,505	1,181	1,374,242	1,710,813
Disposals	(766)	(39,395)	(963)	(869)	(490,180)	(532,173)
Transfer from acquisition costs	32,897	328,745	9,481	987	(371,799)	311
Transfer from intangible assets	-	358	-	-	-	358
Transfer to investment property	(265)	-	-	-	-	(265)
Transfer to assets of a group classified as held for sale	-	(39)	(47)	(3)	-	(89)
Revaluation compensated by the accumulated depreciation	-	(2,059)	-	-	-	(2,059)
Revaluation	(311)	41,576	-	-	-	41,265
Impairment accrued (recovered)	(22)	(24,500)	-	-	-	(24,522)
<b>Balance as at 31 December 2016</b>	<b>1,224,612</b>	<b>10,878,257</b>	<b>93,407</b>	<b>99,697</b>	<b>2,578,995</b>	<b>14,874,968</b>
<b>Depreciation:</b>						
<b>Balance as at 1 January 2016</b>	<b>(30,964)</b>	<b>(466,920)</b>	<b>(33,099)</b>	<b>(58,842)</b>	<b>-</b>	<b>(589,825)</b>
Depreciation	(28,959)	(551,849)	(8,107)	(5,286)	-	(594,201)
Disposals	18	11,479	843	838	-	13,178
Depreciation written-off upon revaluation	-	2,059	-	-	-	2,059
Transfer to assets of a group classified as held for sale	-	5	-	-	-	5
Other reclassifications and transfers	(97)	(237)	(52)	-	-	(386)
<b>Balance as at 31 December 2016</b>	<b>(60,002)</b>	<b>(1,005,463)</b>	<b>(40,415)</b>	<b>(63,290)</b>	<b>-</b>	<b>(1,169,170)</b>
<b>Carrying amount as at 31 December 2016</b>	<b>1,164,610</b>	<b>9,872,794</b>	<b>52,992</b>	<b>36,407</b>	<b>2,578,995</b>	<b>13,705,798</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Property, plant and equipment include Nuclear Power Plant (NPP) Kozloduy EAD, Thermal Power Plant (TPP) Maritsa Iztok 2 EAD, coal mining facilities Mini Maritsa Iztok EAD, gas transmission and transit pipelines and underground gas storage (UGS) facility Chiren, owned by Bulgartransgaz EAD, as well as the electricity transmission network at ESO, HPP and PSHP owned by NEK EAD, etc.

*Acquisition costs*

The cost of acquiring property, plant and equipment as at 31 December 2017 relates mainly to:

- Project for construction of NPP Belene, Yadenitsa Project, Gorna Arda Cascade at NEK EAD;
- Optical highway Nikolaevo - Polski Senovets and a transit gas pipeline for Turkey (looping) in the Lozenets-Nedyalsko section of Bulgartransgaz EAD;
- Extension of the useful life of NPP Kozloduy 5th and 6th Power Units;
- Design, manufacture, supply, construction and commissioning of a SRs 2000 rotary excavator and a SRS 200 rotary excavator in Mini Maritsa Iztok EAD;
- Design, supply and installation of equipment and equipment for compensating the reactive power of heavy industrial mining equipment of Mini Maritsa Iztok EAD
- Rehabilitation (design, delivery and installation) of industrial lighting by replacement with LED lights in Mini Maritsa Iztok EAD;
- Measures related to the implementation of the projects included in the National Investment Plan of the Republic of Bulgaria in connection with a request for derogation under Article 10 of Directive 2003/87/EC of the European Parliament and of the Council as amended by Directive 2009/29/EC in TPP Maritsa Iztok 2 EAD

**Projects with temporarily suspended implementation**

Assets under construction amount to BGN 37,888 thousand, for which due to the deteriorated financial situation of NEK EAD in recent years, the management of the company does not envisage financing (Gorna Arda Cascade, Mesta and other small projects). These are not included in the investment program of the company for the next five-year period.

*NPP Belene project*

The construction of NPP Belene Project started in 1981. The project funding was suspended in 1991.

In May 2004 the Government of the Republic of Bulgaria decided to continue the construction of a second nuclear power plant - NPP Belene - and on 7 April 2005, in compliance with Article 45 of the Safe Use of Nuclear Energy Act, a final decision was taken to build NPP Belene.

On 30 October 2006, NEK EAD officially announced ZAO Atomstroyexport as the contractor of the project with option A92 for the construction of two units of 1,000 MW of light-water reactors at the Belene site.

On 29 November 2006 in the city of Sofia, ZAO Atomstroyexport and NEK EAD signed an agreement for the construction of NPP Belene.

On 29 March 2012 the Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant on the Belene site. By decision dated 27 February 2013, the 41st National Assembly approved the Government's decision to suspend the construction of a new nuclear power plant at the Belene site and insisted on its final termination.

On 14 June 2016, the Arbitration Tribunal of the International Chamber of Commerce, Paris, made a decision by which NEK is to pay to AO Atomstroyexport (ASE) BGN 1,176,661 thousand under the amended arbitration award (Note 14).

In accordance with the Decree, the applicable IFRSs and the accounting policy of NEK EAD, as an item of property, plant and equipment (acquisition cost) in 2016, are recognized in the portion of the principal amount of the claim representing the value of the long-term manufacturing equipment), the portion of the claim principal amounting to additional costs directly related to project implementation (design, storage, customs duties, etc.) totaling BGN 795,776 thousand (Note 14).

In 2017, the change in the capitalized costs of the project is BGN 57,155 thousand, representing customs and other costs related to delivered equipment, storage costs, capitalized financial expenses and capitalized expenses written off.

As at 31 December 2017, the cost of the NPP Belene project, included in the balance of assets under construction, amounts to BGN 2,158,876 thousand (31 December 2016: BGN 2,101,721 thousand) related to the Belene project

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

and property, plant and equipment with a carrying amount of BGN 80,105 thousand (31 December 2016: BGN 84,941 thousand).

As of 31 December 2017, the Group is not in a position to make a reliable estimate of the recoverable amount of the project costs included in the value of property, plant and equipment under construction because of the specific nature and lack of clarity about the future realization of the project which is not entirely under the control of the management.

On the basis of the above facts, the management of the Group considers that as at 31 December 2017 there is considerable uncertainty about the future realization of the project, the recoverable value of the assets related to the NPP Belene construction project.

*Revaluation of property, plant and equipment*

According to the accounting policy, property, plant and equipment are subject to revaluation every 3 years or within a shorter period. The latest revaluation of property, plant and equipment was performed as at 30 June 2015 in compliance with IAS 16 Property, Plant and Equipment and IFRS 13 Fair Value Measurement. The revaluation was carried out based on their fair values by an independent licensed appraiser – Engineering Service Sofia OOD.

Under IFRS 13 Fair Value Measurement, the fair value of non-financial assets is measured by the ability of a market participant to generate economic benefits by using the asset in order to maximize its value or by selling it to another market participant that will use it in such a way. The Group's assets included in the revaluation review are specific, strictly related to the operations and any alternative use of the majority of them is impossible or difficult, i.e. other use by market participants would be unlikely to maximize the value of the assets, which is the reason why their current use in the operations maximizes the value.

As of 31 December 2017 the Group reviewed property, plant and equipment for indications whether their carrying amount is significantly different from their fair value. The terms and manner of using the assets in the Group as of 31 December 2017 were reviewed. As a result of this review, there were no indications that the carrying amount of property, plant and equipment is significantly different from its fair value as at 31 December 2017, therefore no revaluation of property, plant and equipment is required at that date.

*Impairment review*

As at 31 December 2017, the Group reviewed the existence of impairment indications by classes of property, plant and equipment that were estimated that there were no material changes in the previous period related to the market and economic environment in which the Group operates and the carrying amount of property, plant and equipment does not exceed their recoverable amount.

In 2017 in the subsidiary Mini Maritsa Iztok EAD a review was carried out on the expected implementation of some of the projects under construction and an impairment loss of BGN 5,013 thousand was reported.

The review has taken into account the following internal and external factors:

- identifying and reviewing projects for the construction of fixed assets for which no investments have been made for a period longer than 60 months from the asset review date;
- the economic feasibility of the projects, the justification and the effects in their implementation according to the investment program of the subsidiary company for the next 5 years and the expected regulatory requirements;
- external and internal factors that may have an impact on the ability to reimburse acquisition costs - lack of funding, terminated contracts, specificity and expected lead time.

*Public state property assets*

As of 31 December 2017, assets with a carrying amount of BGN 905,054 thousand (As at 31 December 2016: BGN 916,703 thousand) are included in property, plant and equipment and are declared as public state property under the Water Act. The Act provides for the separate management of these assets by legal entities with one hundred percent state participation or by legal entities with mixed state and municipal participation, in which the state has a majority share, or by commercial companies whose capital is owned by other state owned companies. NEK EAD, through the "Dams and Cascades" Enterprise, carries out all activities related to the management and maintenance of the Complex and Significant Dams, in accordance with Article 31 of the Transitional and Final Provisions of the Water Act (State Gazette 58/2015). According to the requirements of the same law, the functions of management and maintenance of these sites should be performed by a "dam operator", which at the date of preparation of these consolidated financial statements has not yet been assigned to the company by the competent authorities. At the date

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

of these consolidated financial statements, there is no change in the legal framework regarding the ownership and operation of those assets.

Until future changes are made to the above-mentioned water sites, they are managed by NEK EAD for which the company generates revenues.

*Assets with unauthorized property**NEK EAD*

As of 31 December 2017 for land and buildings with carrying amount of BGN 17,168 thousand (31 December 2016: BGN 17,424 thousand) a procedure for issuance of state property acts was underway.

*ESO EAD*

As of 31 December 2017, the real estate without documents for ownership had a book value of BGN 8,613 thousand (31 December 2016: BGN 8,490 thousand).

*Collaterals under loans by NEK EAD*

To secure the export and commercial loans from ING Bank NV - The Netherlands a mortgage has been registered on the lands and buildings of the Studen Kladenets hydroelectric power station, Ivaylovgrad HPP and Kardzhali hydroelectric power plant (Dolna Arda cascade) with a carrying value of BGN 17,418 thousand (As at 31 December 2016: BGN 17,923 thousand). All current and future assets, including machines and equipment, part of the Dolna Arda Cascade, are pledged in favor of ING Bank NV. Promissory notes were issued in favor of the Bank.

Secured assets related to Tsankov Kamak Hydro Power Plant with a carrying amount of BGN 99,804 thousand (As at 31 December 2016: BGN 101,807 thousand) are mortgaged to secure the commercial loans from Bank Austria Creditanstalt. All current and future facilities, acquired by NEK EAD in connection with the construction and operation of HPP, drainage channel, pressure pipeline, groundwater facility, lower water and all other facilities constituting the Tsankov Kamak HPP are pledged in favor of the project creditor banks. A pledge of the Tsankov kamak hydroelectric plant was registered, a promissory note was issued in favor of the Bank.

*Collaterals under loans by Mini Maritsa Iztok EAD*

As collateral for the loan agreements for commercial loans from Societe Generale Expressbank AD assets (rotary excavators) are mortgaged with a carrying amount of BGN 24,508 thousand.

*Other disclosures*

Due to the specificity of the accounting records of property, plant and equipment and changes in prior periods, the disclosure of the carrying amount of assets if they would have been recognized after their recognition at cost requires significant resources and time that outweigh the benefits to users of the consolidated financial statements. Therefore, the management of the Group has determined that these disclosures should not be made.

The specificity of the Group's assets and the dynamic economic environment in the energy sector in which it operates may lead to variations in the assumptions used and estimates in determining the fair values of those assets, plant and equipment.

All depreciation and amortisation costs are included in the consolidated statement of profit or loss and on the line "Depreciation and amortisation expenses".

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

**20. Intangible assets**

The carrying amounts of intangible assets for the reporting periods presented can be analyzed as follows:

As at 31 December 2017	Software	Patents and licenses	Other intangible assets	Development costs	Concessions	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value</b>						
<b>Balance as at 1 January 2017</b>	<b>66,388</b>	<b>19,142</b>	<b>95,070</b>	<b>47,578</b>	<b>2,863</b>	<b>231,041</b>
Additions	6,005	371	3,530	5,646	296	15,848
Disposals	(2,209)	(793)	(453)	-	(600)	(4,055)
Transfer to/from PPE	(249)	-	-	-	-	(249)
Transfer	239	2,646	(2,885)	-	-	-
<b>Balance as at 31 December 2017</b>	<b>70,174</b>	<b>21 366</b>	<b>95 262</b>	<b>53 224</b>	<b>2 559</b>	<b>242 585</b>
<b>Amortization</b>						
<b>Balance as at 1 January 2017</b>	<b>(57,291)</b>	<b>(12,389)</b>	<b>(87,553)</b>	<b>(45,822)</b>	<b>(2,672)</b>	<b>(205,727)</b>
Amortization	(3,225)	(2,689)	(1,084)	(540)	(67)	(7,605)
Disposals	2,209	793	52	-	600	3,654
<b>Balance as at 31 December 2017</b>	<b>(58,307)</b>	<b>(14,285)</b>	<b>(88,585)</b>	<b>(46,362)</b>	<b>(2,139)</b>	<b>(209,678)</b>
<b>Carrying amount as at 31 December 2017</b>	<b>11,867</b>	<b>7,081</b>	<b>6,677</b>	<b>6,862</b>	<b>420</b>	<b>32,907</b>

As at 31 December 2016	Software	Patents and licenses	Other intangible assets	Development costs	Concessions	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value</b>						
<b>Balance as at 1 January 2016</b>	<b>62,712</b>	<b>16,047</b>	<b>95,785</b>	<b>47,578</b>	<b>2,962</b>	<b>225,084</b>
Additions	3,631	1,454	3,742	-	-	8,827
Disposals	(1,237)	(226)	(294)	-	(79)	(1,836)
Transfer to assets of a group classified as held for sale	(3)	(15)	(675)	-	-	(693)
Transfers and reclassifications	1,285	1,882	(3,488)	-	(20)	(341)
<b>Balance as at 31 December 2016</b>	<b>66,388</b>	<b>19,142</b>	<b>95,070</b>	<b>47,578</b>	<b>2,863</b>	<b>231,041</b>
<b>Amortization</b>						
<b>Balance as at 1 January 2016</b>	<b>(55,755)</b>	<b>(10,622)</b>	<b>(87,149)</b>	<b>(45,284)</b>	<b>(2,787)</b>	<b>(201,597)</b>
Amortization	(2,665)	(1,778)	(1,164)	(538)	(59)	(6,204)
Disposals	1,233	225	148	-	78	1,684
Transfer to assets of a group classified as held for sale	-	2	1	-	-	3
Transfers	(104)	(216)	611	-	96	387
<b>Balance as at 31 December 2016</b>	<b>(57,291)</b>	<b>(12,389)</b>	<b>(87,553)</b>	<b>(45,822)</b>	<b>(2,672)</b>	<b>(205,727)</b>
<b>Carrying amount as at 31 December 2016</b>	<b>9,097</b>	<b>6,753</b>	<b>7,517</b>	<b>1,756</b>	<b>191</b>	<b>25,314</b>

*Impairment of intangible assets*

The Group has carried out an impairment review of intangible assets as at 31 December 2017. There are no indicators that the carrying amount of assets exceeds their recoverable amount and, as a result, no impairment loss is recognized in the consolidated financial statements.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

**21. Investments in joint, associate and other enterprises**

			<b>31 December 2017</b>		<b>31 December 2016</b>
			<b>BGN '000</b>		<b>BGN '000</b>
	State of incorporation	Share	Investments	Share	Investments
<b>Joint ventures</b>					
ICGB AD	Bulgaria	50%	15,055	50%	15,589
South Stream Bulgaria AD	Bulgaria	50%	200,888	50%	212,855
Transbalkan Electric Power Trading S.A. – NECO S.A.	Greece	50%	1,468	50%	2,063
			<u>217,411</u>		<u>230,507</u>
<b>Associates</b>					
ContourGlobal Maritsa East 3 AD	Bulgaria	27%	92,032	27%	87,776
ContourGlobal Operations Bulgaria AD	Bulgaria	27%	1,325	27%	1,335
ZAD Energy	Bulgaria	48,08%	17,485	48,08%	20,721
POD Allianz Bulgaria AD	Bulgaria	34%	17,757	34%	16,388
Hydro Power Company Gorna Arda AD	Bulgaria	30%	-	30%	474
			<u>128,599</u>		<u>126,694</u>
<b>Total joint ventures and associates</b>			<b><u>346,010</u></b>		<b><u>357,201</u></b>
<b>Other investments</b>					
Ecological Operation of Fuels and Energy Oils OOD	Bulgaria			70%	3
Bultehash OOD	Bulgaria			67%	-
Zeus Holding	Bulgaria			4%	2
			<u>346,010</u>		<u>357,206</u>

The change in the carrying amount of investments for the reporting periods presented may be analyzed as follows:

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
<b>Carrying amount of the investment on 1 January</b>	<b><u>357,206</u></b>	<b><u>370,492</u></b>
Share of profits/(losses)	41,765	35,928
Share of other comprehensive income	2,908	5,084
Dividends received	(44,085)	(54,298)
Impairment	(11,779)	-
Disposals	(5)	-
<b>Carrying amount of the investment at 31 December</b>	<b><u>346,010</u></b>	<b><u>357,206</u></b>

**ICGB AD**

BEH EAD is a partner in ICGB AD. The project company will build a gas interconnector between Greece and Bulgaria, with capacity up to 3 billion m<sup>3</sup>/y., from Komotini to Stara Zagora, with a length of 182 km. The joint venture is planned to construct, hold the title over the gas pipeline and receive the revenues from the transmission of natural gas.

**Nabucco Gas Pipeline International OOD (deleted)**

On 22 September 2017, the Commercial Court of Vienna terminated the liquidation and entered the deletion of the company. The distributed liquidation share to Bulgarian Energy Holding EAD amounts to BGN 126 thousand.

**South Stream Bulgaria AD**

In June 2014, with the permission of the Minister of Economy and Energy, an agreement was signed for the receipt of funds from Gazprom EP International BV, which will be used to finance the participation of BEH EAD in the project company South Stream Bulgaria AD. Refunds will only be made from BEH EAD's dividends from the project company's dividends. On 11 August 2014, a tranche of BGN 191,009 thousand, representing the contribution

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

from BEH EAD, was received, with which on 18 August 2014 the capital of the project company was increased by BGN 382,018 thousand by the two shareholders BEH EAD and PAO Gazprom. By a decision in 2014, the Minister of Economy and Energy instructed BEH EAD to take the necessary steps to suspend the award of all tenders related to the South Stream project as well as the conclusion of contracts related to its implementation until the final closure of the proceedings of the European Commission on infringement № 2014/2176 against the Republic of Bulgaria.

In December 2014, representatives of the Russian shareholder in South Stream Bulgaria AD, PAO Gazprom, publicly announced their intentions to end the project.

In September 2015, the shareholder PAO Gazprom informed BEH EAD that it considers the South Stream project to be terminated, in which case the shareholders have begun to settle their relationship under the project. Steps have been taken to reduce the project company's costs and to reduce the organizational and management structure, as well as to act on the relations of current contracts with a view to stopping the activities on them.

In 2017, the project company incurred costs of termination of three of the key contracts under the project - an EIA contract, a Detailed Development Plan and a Technical Design, a contract for the acquisition of property rights and a contract with the consultant in compliance with the Territorial Planning Act.

South Stream Bulgaria AD will continue to exist so that its assets to be able to be used for other projects useful for the Bulgarian side.

In relation to the above, for the period, an impairment of the investment in the joint venture South Stream AD was charged to the amount of BGN 11,779 thousand.

*Transbalkan Electric Power Trading SA - NECO S.A.*

The Group owns 50% of the capital of NECO S.A., a jointly controlled company, whose main business includes trading in electricity, as well as the construction and reconstruction of thermal power plants.

*ContourGlobal Maritsa East 3 AD*

The Group, through NEK EAD, owns 27% of the capital of the thermal power plant ContourGlobal Maritsa East 3 EAD, whose main activity is the production, distribution and sale of electric and thermal energy.

*ContourGlobal Operations Bulgaria AD*

The Group, through NEK AD, owns 27% of the capital of ContourGlobal Operations Bulgaria AD, whose main activity includes the operation and maintenance of ContourGlobal TPP Maritsa East 3.

*ZAD Energy*

The Group owns 48.08% of the capital of ZAD Energia, which carries out insurance business.

*POD Allianz Bulgaria AD*

The Group holds 34% of the equity of POD Allianz Bulgaria AD, an entity engaged in pension-insurance activities.

*Hydro Power Company Gorna Arda AD*

The Group holds 30% of the equity of HPC Gorna Arda AD – an entity registered to perform valuation, structuring and planning of the construction of Gorna Arda Cascade, as well as construction of hydro power plants with total capacity of approx. 160 MW, ensuring the financing and the construction of Gorna Arda Cascade and managing the rights to operate the facilities (after obtaining the respective licenses and authorizations).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

*Summary financial information for joint ventures and associates*

The table presents summarized financial information based on the financial statements of the joint and associate companies of the Group as at 31 December of the respective year:

<b>Joint ventures and associates</b>	<b>ICGB AD</b>	<b>South Stream Bulgaria AD</b>	<b>Transbalkan Electric Power Trading S.A. – NECO S. A</b>	<b>ContourGlobal Maritsa Iztok 3 AD</b>	<b>ContourGlobal Operations Bulgaria AD</b>	<b>ZAD Energy</b>	<b>POD Allianz Bulgaria AD</b>	<b>Hydro Power Company Gorna Arda AD</b>	<b>Total</b>
<b>As at 31 December 2017</b>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Non-current assets	12,922	56,332	56	585,329	4,620	-	-	-	659,259
Current assets (a)	17,880	369,157	14,132	284,158	11,383	80,795	55,740	68	833,313
<b>Total assets</b>	<b>30,802</b>	<b>425,489</b>	<b>14,188</b>	<b>869,487</b>	<b>16,003</b>	<b>80,795</b>	<b>55,740</b>	<b>68</b>	<b>1,492,572</b>
Non-current liabilities (b)	-	23	-	350,223	4,537	-	-	-	354,783
Current liabilities (c)	693	132	11,253	178,405	6,558	44,428	3,513	495	245,477
<b>Total liabilities</b>	<b>693</b>	<b>155</b>	<b>11,253</b>	<b>528,628</b>	<b>11,095</b>	<b>44,428</b>	<b>3,513</b>	<b>495</b>	<b>600,260</b>
a) including cash and cash equivalent	17,720	369,137	1,620	21,719	161	10,468	11,438	67	432,330
b) including non-current loans	-	-	-	274,407	-	-	-	-	274,407
c) including current loans	-	-	-	48,450	-	-	-	-	48,450
<b>Revenues</b>	<b>3</b>	<b>3</b>	<b>-</b>	<b>516,711</b>	<b>29,856</b>	<b>22,244</b>	<b>35,288</b>	<b>-</b>	<b>604,102</b>
Depreciation expenses	(16)	(19)	-	-	-	(58)	(95)	-	(188)
Income tax expense	-	-	-	(11,585)	(537)	(1,685)	(1,740)	-	(15,547)
Profit (Loss) for the year	(1,069)	(955)	(368)	104,172	4,764	15,171	19,500	(64)	141,151
Other comprehensive income for the year	-	-	-	10,590	-	108	(10)	-	10,688
<b>Total comprehensive income/(loss) for the year</b>	<b>(1,069)</b>	<b>(955)</b>	<b>(368)</b>	<b>114,762</b>	<b>4,764</b>	<b>15,279</b>	<b>19,490</b>	<b>(64)</b>	<b>151,839</b>
<b>Group's share of the profit/(loss) for the year</b>	<b>(535)</b>	<b>(478)</b>	<b>(184)</b>	<b>28,126</b>	<b>1,286</b>	<b>7,294</b>	<b>6,630</b>	<b>(374)</b>	<b>41,765</b>
<b>Group's share of the OCI of associates for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,859</b>	<b>-</b>	<b>52</b>	<b>(3)</b>	<b>-</b>	<b>2,908</b>
<b>Total net assets</b>	<b>30,109</b>	<b>425,334</b>	<b>2,935</b>	<b>340,859</b>	<b>4,908</b>	<b>36,367</b>	<b>52,227</b>	<b>(427)</b>	<b>892,312</b>
<b>Group's share</b>	<b>50%</b>	<b>50%</b>	<b>50%</b>	<b>27%</b>	<b>27%</b>	<b>48,08%</b>	<b>34%</b>	<b>30%</b>	
Impairment	-	(11,779)	-	-	-	-	-	-	(11,779)
<b>Carrying amount of investment</b>	<b>15,055</b>	<b>200,888</b>	<b>1,468</b>	<b>92,032</b>	<b>1,325</b>	<b>17,485</b>	<b>17,757</b>	<b>=</b>	<b>346,010</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

Joint ventures and associates	ICGB AD	Nabucco Gas Pipeline International	South Stream Bulgaria AD	Transbalkan Electric Power Trading S.A. – NECO S.A.	ContourGlobal Maritsa Iztok 3 AD	ContourGlobal Operations Bulgaria AD	ZAD Energy	POD Allianz Bulgaria AD	Hydro Power Company Gorna Arda AD	Total
As at 31 December 2016	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
Non-current assets	12,218	-	44,045	-	650,914	3,482	-	497	1,943	713,099
Current assets (a)	19,347	-	388,725	14,338	218,153	11,180	82,062	50,310	195	784,310
<b>Total assets</b>	<b>31,565</b>	<b>-</b>	<b>432,770</b>	<b>14,338</b>	<b>869,067</b>	<b>14,662</b>	<b>82,062</b>	<b>50,807</b>	<b>2,138</b>	<b>1,497,409</b>
Non-current liabilities (b)	-	-	183	-	413,731	3,388	-	186	-	417,488
Current liabilities (c)	387	-	6,877	10,211	130,239	6,330	38,965	2,422	558	195,989
<b>Total liabilities</b>	<b>387</b>	<b>-</b>	<b>7,060</b>	<b>10,211</b>	<b>543,970</b>	<b>9,718</b>	<b>38,965</b>	<b>2,608</b>	<b>558</b>	<b>613,477</b>
a) including cash and cash equivalent	19,185	-	383,925	2,451	55,481	402	6,076	13,573	188	481,281
b) including non-current loans	-	-	-	-	321,249	-	-	-	-	321,249
c) including current loans	-	-	-	-	46,275	-	-	-	-	46,275
<b>Revenues</b>	<b>90</b>	<b>-</b>	<b>266</b>	<b>10,139</b>	<b>432,416</b>	<b>28,629</b>	<b>52,067</b>	<b>33,633</b>	<b>-</b>	<b>557,240</b>
Depreciation expenses	(2)	-	(196)	-	(74,733)	-	(1,933)	(93)	-	(76,957)
Income tax expense	-	-	-	-	(9,095)	(538)	-	(1,789)	-	(11,422)
Profit (Loss) for the year	(545)	-	(1,203)	(1,160)	79,811	4,806	17,372	18,564	(426)	117,219
Other comprehensive income for the year	-	-	-	-	18,995	-	(93)	-	-	18,902
<b>Total comprehensive income/(loss) for the year</b>	<b>(545)</b>	<b>-</b>	<b>(1,203)</b>	<b>(1,160)</b>	<b>98,806</b>	<b>4,806</b>	<b>17,279</b>	<b>18,564</b>	<b>(426)</b>	<b>136,121</b>
<b>Group's share of the profit/(loss) for the year</b>	<b>(273)</b>	<b>-</b>	<b>(602)</b>	<b>(580)</b>	<b>21,549</b>	<b>1,298</b>	<b>8,352</b>	<b>6,312</b>	<b>(128)</b>	<b>35,928</b>
<b>Group's share of the OCI from associated for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,129</b>	<b>-</b>	<b>(45)</b>	<b>-</b>	<b>-</b>	<b>5,084</b>
<b>Total net assets</b>	<b>31,178</b>	<b>-</b>	<b>425,710</b>	<b>4,127</b>	<b>325,097</b>	<b>4,944</b>	<b>43,097</b>	<b>48,199</b>	<b>1,580</b>	<b>883,932</b>
<b>Group's share</b>	<b>50%</b>	<b>17.93%</b>	<b>50%</b>	<b>50%</b>	<b>27%</b>	<b>27%</b>	<b>48.08%</b>	<b>34%</b>	<b>30%</b>	
Impairment	15,589	-	212,855	2,063	87,776	1,335	20,721	16,388	474	357,201

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Investments in associates and joint ventures are accounted for using the equity method. The date of the financial statements of associates and joint ventures is 31 December. All transfers of funds to the Group, such as dividend payments, are subject to the approval of at least 51% of all shareholders in associates.

The financial information presented by 31 December 2017 of South Stream Bulgaria AD is based on unaudited financial statements.

The presented financial information for Transbalkan Electric Power Trading SA - NECO S.A. is for the period ending on 30 June 2017.

**22. Trade and other receivables**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Trade receivables, gross	742,980	870,460
Accumulated impairment of trade receivables	(263,996)	(382,893)
<b>Trade receivables, net</b>	<b>478,984</b>	<b>487,567</b>
<b>Financial assets</b>	<b>478,984</b>	<b>487,567</b>
Advanced payments made to suppliers	97	17
Prepaid services	4	2
<b>Non-financial assets</b>	<b>101</b>	<b>19</b>
<b>Trade and other receivables – non-current portion</b>	<b>479,085</b>	<b>487,586</b>
Trade receivables, gross	622,536	669,658
Accumulated impairment of trade receivables	(22,510)	(15,728)
<b>Trade receivables, net</b>	<b>600,026</b>	<b>653,930</b>
Gross court and adjudicated receivables	282,516	250,638
Accrued impairment of litigations and claims	(215,700)	(218,483)
<b>Litigations and claims, net</b>	<b>66,816</b>	<b>32,155</b>
Receivables from Security of the Electricity System Fund	126,521	37,247
Accumulated impairment	(372)	
<b>Receivables from Security of the Electricity System Fund, net</b>	<b>126,149</b>	<b>37,247</b>
Receivables from interests on bank deposits	-	17
Other receivables, gross	134,145	5,896
Accumulated impairment of other receivables	(118,921)	(219)
Other receivables, net	15,224	5,677
<b>Financial assets</b>	<b>808,215</b>	<b>729,026</b>
Advances to suppliers	73,197	50,924
Prepaid services	22,317	20,490
Recoverable taxes	41,857	2,644
<b>Non-financial assets</b>	<b>137,371</b>	<b>74,058</b>
<b>Trade and other receivables – current portion</b>	<b>945,586</b>	<b>803,084</b>
<b>Trade and other receivables</b>	<b>1,424,671</b>	<b>1,290,670</b>

Trade receivables are not interest-bearing and usually have a payment period of 1 to 30 days.

The following receivables are pledged to counterparties:

(1) A special pledge on a set of claims arising from contracts concluded between TPP Maritsa East 2 EAD and third parties, with the exception of National Electricity Company EAD, for the purchase and sale of electricity on a free market. The collateral was established in connection with Loan Agreement No.13503/22 December 2014 between Societe Generale Expressbank AD and TPP Maritsa East 2 EAD for the provision of a bank loan amounting to the BGN equivalence of 797 461 750 yen and 736 900 euro. The pledged receivables are specified, namely receivables of TPP Maritsa East 2 EAD from CEZ Trade Bulgaria EAD resulting from contract No.14776/21 October 2016 and additional long-term supply agreement No.3 of 2 October 2017 to contract No.14915/16 from December 2016 (any

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

additional agreement to the framework contract is in fact a new contract), the claims of TPP Maritsa East 2 EAD from GEN-I, trade and sale of electric energy D.O.O., arising from Contract No.14946/29 from December 2016.

The movement in the cumulative impairment of doubtful and bad debt trade and other receivables is as follows:

<b>Impairment of trade and other receivables</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>On 1 January</b>	<b>617,323</b>	<b>503,139</b>
Accrued during the year	35,553	120,213
Restored	(31,189)	(5,755)
Written-off amount	(188)	(274)
<b>On 31 December</b>	<b>621,499</b>	<b>617,323</b>

As at 31 December, the age analysis of trade and other receivables is presented in the table below:

	<u>Not overdue</u>	<u>Overdue</u>			<u>Total</u>
		<u>0 to 180 days</u>	<u>180 to 360 days</u>	<u>&gt;360 days</u>	
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
<b>31 December 2017</b>					
Gross amount of trade and other receivables	1,089,212	178,300	70,469	570,717	<b>1,908,698</b>
Impairment	(64,403)	-	-	(557,096)	<b>(621,499)</b>
<b>Net</b>	<b>1,024,809</b>	<b>178,300</b>	<b>70,469</b>	<b>13,621</b>	<b>1,287,199</b>
<b>31 December 2016</b>					
Gross amount of trade and other receivables	1,006,410	110,558	26,699	690,249	<b>1,833,916</b>
Impairment	(382,893)	-	-	(234,430)	<b>(617,323)</b>
<b>Net</b>	<b>623,517</b>	<b>110,558</b>	<b>26,699</b>	<b>455,819</b>	<b>1,216,593</b>

**22.1 Receivables from Toplofikatsia Sofia EAD**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Non-current receivables from Toplofikatsia Sofia EAD, gross amount	538,128	538,128
Impairment	(64,403)	(64,403)
<b>Non-current receivables from Toplofikatsia Sofia EAD, net amount</b>	<b>473,725</b>	<b>473,725</b>
Current receivables from Toplofikatsia Sofia EAD, gross amount	109,705	83,529
Impairment	(3,575)	(2,098)
Current receivables from Toplofikatsia Sofia EAD, net amount	106,130	81,431
	<b>579,855</b>	<b>555,156</b>

On 11 December 2015 an agreement was concluded between Bulgarian Energy Holding EAD and Toplofikatsia Sofia EAD, according to which the obligations of the district heating plant to Bulgarian Energy Holding EAD are merged and novated. The debtor fully and unconditionally recognizes liabilities amounting to BGN 500,465 thousand, which are to be repaid for a period of twenty years, with a five-year grace period and an interest on the principal amounting to 3.25%. Liabilities amounting to BGN 52,311 thousand representing the difference between the debt recognized by the debtor and the full amount claimed by the creditor are controversial and will be subject to an additional agreement between the parties. The agreement provides that upon concluding a concession agreement between Sofia Municipality and a third party, the latter undertakes to pay to Bulgarian Energy Holding EAD an

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

initial installment of not less than BGN 200,000 thousand within 120 days from the date of the entry into force of the concession contract, and the remainder will be paid in a way agreed by the parties. Claims included in the agreement are classified as non-current.

The current receivables are realized by sales of the enterprises in the group to Toplofikatsia Sofia EAD.

**22.2 Receivables from Security of the electricity system Fund**

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
<b>Receivables as at 1 January</b>	<b>37,247</b>	<b>-</b>
Revenue recognized to offset the costs of NEK EAD	473,908	300,154
Recognized amounts for beneficiary reimbursement in connection with Ordinance № E-RD-04-06 of 28 September 2016 on reducing the burden related to the costs of energy from renewable sources.	96,726	27,806
Cash received	(504,830)	(290,713)
Impairment of uncompensated costs from the Fund due to exceeding the limit set in the pricing decision 2016/2017	(372)	-
Cost of recovery of NEK EAD	23,470	-
<b>Receivables as at 31 December</b>	<b>126,149</b>	<b>37,247</b>

**22.3 Receivables from CCB AD - in bankruptcy**

As at 31 December 2017, the Group has receivables from Corporate Commercial Bank AD in bankruptcy amounting to BGN 137,472 thousand. By Decision No.664 dated 22 April 2015 of the Sofia City Court, Corporate Commercial Bank AD (CCB AD) was announced in insolvency.

In February 2017, a reference to a partial account is published in the Commercial Register for the allocation of the available amounts among the creditors of the bank by the receivers of CCB. According to the distribution of the receivers of the Group, an amount of BGN 13,722 thousand should be recovered. On the basis of this information and decisions of the Board of Directors of Bulgarian Energy Holding EAD under Protocol No.18-2017/20.02.2017 and Protocol No.21-2017/07.03.2017 as at 31 December 2016, an impairment of the receivables from the CCB (i) was made up to the amount of the reimbursement amount determined by the assignees. The receivable is included in the article other receivables.

**23. Deferred tax assets and liabilities**

<b>Deferred tax assets/(liabilities)</b>	<b>Balance as at 1 January 2017</b>	<b>Recognized in profit or loss</b>	<b>Recognized in other comprehensive income</b>	<b>Balance as at 31 December 2017</b>
	<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>
Property, plant and equipment and intangible assets	(702,992)	29,124	(3,789)	(677,657)
Financing	8,068	312	-	8,380
Excess annual leave	2,886	833	-	3,719
Provisions	22,296	11,713	-	34,009
Retirement benefits (liabilities related to post-employment benefits)	18,081	831	2,107	21,019
Outstanding liabilities, related to personnel remuneration	1,344	238	-	1,582
Available-for-sale financial assets	(10)	-	(21)	(31)
Impairment of investments	4,631	(3,382)	-	1,249
Impairment of inventories	1,800	(204)	-	1,596
Impairment of trade and other receivables	43,318	372	-	43,690
Tax losses	-	811	-	811
	<b>(600,578)</b>	<b>40,648</b>	<b>(1,703)</b>	<b>(561,633)</b>
Recognized as:				
Deferred tax assets	<b>102,424</b>	-	-	<b>116,055</b>
Deferred tax liabilities	<b>(703,002)</b>	-	-	<b>(677,688)</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

Deferred tax assets / (liabilities)	Balance as at 1 January 2016	Recognized in profit or loss	Recognized in other comprehensive income	Transfer to assets of a group classified as held for sale	Balance as at 31 December 2016
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Property, plant and equipment and intangible assets	(727,758)	26,441	(1,675)	-	(702,992)
Financing	7,326	742	-	-	8,068
Unused annual leaves	2,433	455	-	(2)	2,886
Provisions	24,803	(2,507)	-	-	22,296
Retirement benefits (liabilities related to post-employment benefits)	16,377	(81)	1,785	-	18,081
Outstanding liabilities, related to personnel remuneration	1,445	(98)	-	(3)	1,344
Available-for-sale financial assets	(7)	-	(3)	-	(10)
Impairment of investments in joint ventures	4,631	-	-	-	4,631
Impairment of inventories	2,828	(1,028)	-	-	1,800
Impairment of trade and other receivables	32,379	10,939	-	-	43,318
Tax losses	6,153	(6,153)	-	-	-
	<b>(629,390)</b>	<b>28,710</b>	<b>107</b>	<b>(5)</b>	<b>(600,578)</b>
Recognized as:					
<b>Deferred tax assets</b>	<b>98,375</b>				<b>102,424</b>
<b>Deferred tax liabilities</b>	<b>(727,765)</b>				<b>(703,002)</b>

The amount of income tax, related with each of the elements of other comprehensive income, may be presented as follows:

	2017		
	Before taxes	Tax (expense)/income	Net of taxes
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Revaluation of property, plant and equipment	37,893	(3,789)	34,104
Revaluation of defined benefit obligations	(21,074)	2,107	(18,967)
Profit/(loss) on financial assets available for sale	210	(21)	189
Share of other comprehensive income of associates	3,232	(324)	2,908
<b>Other comprehensive income</b>	<b>20,261</b>	<b>(2,027)</b>	<b>18,234</b>

	2016		
	Before taxes	Tax (expense)/income	Net of taxes
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Revaluation of property, plant and equipment	16,743	(1,675)	15,068
Revaluation of defined benefit obligations	17,851	1,785	19,636
Profit/(Loss) on available-for-sale financial assets	35	(3)	32
Share of other comprehensive income of associates	5,654	(570)	5,084
Exchange rate differences from foreign operations recalculation	1	-	1
<b>Other comprehensive income</b>	<b>40,284</b>	<b>(463)</b>	<b>39,821</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

**24. Inventories**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Natural gas	158,872	140,387
Fuel	178,973	154,996
Spare parts	166,105	201,822
Other materials and consumables	81,813	64,911
Goods	224	391
Unfinished production, including:	-	-
- unused fresh fuel loaded	75,437	72,260
- coal	30,547	51,407
- others	207	451
Inventories, Gross Amount	692,178	686,625
Impairment to net realizable value	(9,973)	(10,688)
<b>Inventories, net of impairment</b>	<b>682,205</b>	<b>675,937</b>

The natural gas available at the reporting date includes mainly the natural gas stored at Chiren UGS.

The fuel includes mainly uncharged fresh nuclear fuel, diesel fuel and fuel oil.

*Impairment to net realizable value of inventories*

The movement in the accumulated depreciation of inventories is as follows:

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Balance on 1 January	(10,688)	(19,847)
Accrued impairment for the period	(650)	(3,984)
Reversal on impairment	27	13
Written-off inventories	1,338	13,130
<b>Total impairment</b>	<b>(9,973)</b>	<b>(10,688)</b>

The cost of accrued impairment of inventories of the Group is included in the line "Other operating expenses" in the consolidated profit or loss statement and is recovered as a decrease in "Other operating expenses".

**25. Available-for-sale financial assets**

On 17 December 2007, Bulgarian Energy Holding EAD participated in the initial public offering of securities of TRANSGAZ S.A., Romania from an increase in the company's capital by acquiring 6,041 shares. As at 31 December 2017 and 31 December 2016 respectively, a revaluation of the stock exchange price was made at that date, taking into account the effects of a change in the BGN / RON exchange rate. The fair value of this investment as at 31 December 2017 was BGN 976 thousand (31 December 2016: BGN 765 thousand) and was determined on the basis of published quotes on prices in an active market. All revaluation effects on the investment at 31 December 2017 are accounted for as an increase in the revaluation reserve of available-for-sale financial assets and are presented in the Consolidated Statement of Changes in Equity in the item "Reserves from revaluation to fair value".

**26. Cash and short-term deposits**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Cash in bank accounts	1,070,276	539,378
Cash in hand	435	567
Short-term deposits	183,380	469,290
Restricted cash	7,462	6,752
<b>Total</b>	<b>1,261,553</b>	<b>1,015,987</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Cash in bank accounts is accrued at floating interest rates based on daily interest rates on bank deposits. Short-term deposits are of different duration depending on the liquidity needs. The Group has one-month and three-month and one-year bank deposits as at 31 December 2017

The amount of cash and cash equivalents that is restricted for the Group as at 31 December 2017 is BGN 7,462 thousand and is due to the following reasons:

- BGN 7,142 thousand in connection with actions brought against the Group as at 31 December 2017;
- BGN 170 thousand on a current account with special purpose in Allianz Bank Bulgaria AD in connection with a contract with EWRC;
- BGN 150,000 in a special payment account which serve as collateral within the meaning of Art. 8a of the Rules on the terms and conditions for granting access to the electricity transmission and distribution networks.

**27. Profit for the year from discontinued operations**

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Net sales revenue	3,828	2130
Expenditure on materials, external services	(897)	(616)
Staff costs	(721)	(562)
Depreciation costs	(179)	(108)
Other expenses	(49)	(43)
Financial revenue costs net	(13)	(7)
Income/Income tax expense	(177)	(49)
<b>Profit for the year from discontinued operations</b>	<b>1,792</b>	<b>745</b>

**27.1 Decommissioning of radioactive waste management facilities**

On 19 December 2012, the Council of Ministers issued Decision No.1138, declaring Units 3 and 4 of NPP Kozloduy as radioactive waste management facilities subject to decommissioning. According to the decision, the property and staff related with the above units were declared private state property to be transferred to State Enterprise Radioactive Waste (SE RAW) by simultaneously reducing and increasing the share capital of NPP Kozloduy EAD by the amount of BGN 25,411 thousand.

In 2013 the assets and staff of Units 3 and 4 were transferred to SE RAW upon signing bilateral handover protocols. Income and expenses relating to Units 3 and 4 are eliminated from the Group's continuing operating profit for the years 2017 and 2016 and are presented in a separate line "Profit for the year of discontinued operations" in the Consolidated statement of profit or loss and other comprehensive income.

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Profit from discontinued operations	202	-
<b>Profit for the year from discontinued operations</b>	<b>202</b>	<b>-</b>

Under the current Strategy for Management of Spent Fuel and Radioactive Waste by 2030, adopted by decision of the Council of Ministers dated 2 September 2015, NPP Kozloduy EAD has a statutory obligation to transport at least 50 tons of heavy metal spent on nuclear fuel (NPF) for processing and storage in Russia, in the presence of favorable financial and economic conditions.

In the year 2017, one shipment to Russia of 8 containers containing 232 WWR-440 SNF assemblies was carried out. On 8 February 2018 a Technical Expert Council meeting was held examining the technical, economic and legal aspects of the possibility of the NPP Kozloduy EAD to carry out discharges of spent nuclear fuel from WWR-440 and WWR-1000 into Russia in 2018 and the following years. According to the decision taken in 2018 no transfer of SNF from WWR-440 and WWR-1000 from NPP Kozloduy EAD to Russia is envisaged. At the meeting, a decision was taken to launch a study on the possibility of transporting spent nuclear fuel from WWR-1000.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

The cash flows generated by the disposal group can be presented as follows:

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
<b>Operations</b>		
Payments to suppliers	(9,517)	-
<b>Net cash flow from discontinued operations</b>	<b>(9,517)</b>	<b>-</b>

**27.2 Non-current assets and assets and liabilities of a disposal group classified as held for sale**

By Decision C(2015) 8860 dated 10 December 2015 on Case AT.39767 BEH-Electricity, the EC considered Commitments proposed by Bulgarian Energy Holding EAD, National Electricity Company EAD, TPP Maritsa East 2 EAD, NPP Kozloduy EAD and Independent Bulgarian Energy Exchange EAD as legally binding for a period of five years from the start date of the day-ahead market operations and decided to terminate the proceedings.

Pursuant to the Commitments, Bulgarian Energy Holding EAD undertakes to separate Independent Bulgarian Energy Exchange EAD from its structure and to divest Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by 14 June 2016 through the execution of a final divestiture agreement. On 13 May 2016, Bulgarian Energy Holding EAD formally requested the European Commission to extend the deadline for divestiture of Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by at least 6 (six) months.

From 31 October 2017 to 9 January 2018, the European Commission repeatedly extended the deadline for the transfer of the capital of Independent Bulgarian Energy Exchange EAD due to the resolution of various procedural issues that are not entirely under the control of Bulgarian Energy Holding EAD.

On 26 January 2018 Commission Decision C (2018) 572 was issued, with which the European Commission finally approved the acquisition of 100% of the capital of Independent Bulgarian Energy Exchange EAD by Bulgarian Stock Exchange - Sofia. The Commission's conclusion is that the sale is carried out in a way that satisfies the commitments made by Bulgarian Energy Holding EAD to the European Commission.

On the basis of the irrevocable commitment assumed, the assets and liabilities of IBEX EAD, which as at 31 December 2015 are included in the "electricity" segment, are reclassified as a disposal group held for sale. The change of ownership of IBEX EAD was registered in the Commercial Register on 15 February 2018.

The table provides an overview of all assets and liabilities of the disposal group classified as held for sale:

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Non-current assets and disposal group assets classified as held for sale		
Cash and cash equivalents	57,152	14,223
Tax recovery	-	1,697
Trade and other receivables	26,675	676
Intangible assets	528	597
Property, plant and equipment	52	69
Inventories	7	17
Deferred tax assets	7	5
	<b>84,421</b>	<b>17,284</b>
<i>Detachment group obligations classified as held for sale</i>		
Trade and other obligations	58,352	10,819
Tax obligations	43	53
Employee obligations	108	3
	<b>58,503</b>	<b>10,875</b>

As of 31 December 2017 and 31 December 2016, the cumulative profit of IBEX EAD presented in the consolidated statement of profit or loss may be analyzed as follows:

<b>2017</b>	<b>2016</b>
-------------	-------------

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

	<i>BGN '000</i>	<i>BGN '000</i>
Revenue from sale, net	3,626	2,130
Cost of materials and hired services	(897)	(616)
Employee benefit expenses	(721)	(562)
Depreciation costs	(179)	(108)
Other expenses	(49)	(43)
Financial revenue/ (costs), net	(13)	(7)
Income tax expense	(177)	(49)
<b>Profit for the period of discontinued operations</b>	<b>1,590</b>	<b>745</b>

As at 31 December, the net cash flows of IBEX EAD by activity are as follows:

	<i>2017</i>	<i>2016</i>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Net cash flows from:</b>		
Operations	42,855	13,554
Investment activity	(25)	(402)
Financial activity	99	460
Net cash flow from discontinued operations	42,929	13,612

## **28. Share capital and reserves**

### **28.1 Share capital**

The registered capital of Bulgarian Energy Holding EAD consists of 3,397,756,827 ordinary shares with a nominal value of BGN 1 lev each at 31 December 2017 (31 December 2016: 3,285,614,475 shares). The company's shares are ordinary, registered, non-privileged, with voting rights. All ordinary shares are fully paid. Each share entitles one vote, the right to a dividend and a liquidation stake in the company's property. A sole shareholder in the capital of Bulgarian Energy Holding EAD is the Bulgarian State through the Minister of Energy.

Shares issued and authorized for the reporting periods can be presented as follows:

	<i>2017</i>	<i>2016</i>
	Number of shares	Number of shares
Number of issued and fully paid shares:		
At the beginning of the year	3,285,614,457	3,188,168,127
Increase in capital during the year	112,142,370	97,446,330
Total number of shares authorized at the end of the year	<b>3,397,756,827</b>	<b>3,285,614,457</b>

By Protocol No.E-RD-21-16 dated 29 June 2017 of the Ministry of Energy, it was decided to increase the capital of Bulgarian Energy Holding EAD by issuing new 112,142,370 ordinary registered shares, each with voting rights and nominal value of BGN 1 at the expense of retained profit of 2016. The increase was registered in the Commercial Register on 8 August 2017.

In 2016, by Protocol No.RD-21-34 dated 27 June 2016 the Ministry of Energy decided to increase the capital of Bulgarian Energy Holding EAD by issuing new 97,446,330 ordinary registered shares, each with voting rights and nominal value of BGN 1 at the expense of retained earnings from 2015. The increase was registered in the Commercial Register on 8 July 2016.

### **28.2 Other reserves**

Other reserves are formed by distribution of profits in accordance with the Commercial Law and the Articles of Association of the Group or from other sources by decision of the sole shareholder. These include statutory reserves and other general reserves. The statutory reserves are set aside until they reach one tenth or more of the capital. Sources for the formation of statutory reserves are at least one tenth of the net profit, share premiums and the funds provided in the statutes or decision of the sole shareholder. Statutory reserves can only be used to cover losses from current and prior reporting periods. General reserves are formed on the proposal of the board of directors and may be used to cover losses from past years and for other purposes.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**28.3 Reserve from revaluation to fair value**

Revaluation reserves to fair value include the revaluation of shares of Transgaz SA Romania classified as available-for-sale financial assets (Note 25).

**28.4 Revaluation reserve of non-financial assets**

Revaluation reserve is used to reflect increases in the fair value of property, plant and equipment, and reductions to the extent that those reductions are related to an increase in the same asset previously recognized in other comprehensive income. The reserve can be used to cover losses and dividends only in limited circumstances.

**28.5 Reserve from recalculation of foreign operations**

The Group has a subsidiary in Macedonia whose functional currency is Macedonian Denars. The restatement reserve is formed as a result of currency exchange differences at 31 December 2017.

**28.6 Defined benefit plans revaluation reserve**

The revaluation reserve of defined benefit plans includes actuarial gains and losses as a result of the revaluation of defined benefit plans.

**29. Loans and finance lease**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
<b>Non-current amount</b>		
Issued bonds	1,058,173	2,029,260
Bank Loans	64,523	143,005
Credit from EURATOM	66,132	105,004
Financial leasing	-	6
	<b>1,188,828</b>	<b>2,277,275</b>
<b>Current amount</b>		
Bank Loans	85,544	79,671
Credit from EURATOM	40,056	44,268
Issued bonds	1,004,705	27,969
Financial leasing	6	7
	<b>1,130,311</b>	<b>151,915</b>
	<b>2,319,139</b>	<b>2,429,190</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

Information on the most important terms and conditions of the borrowings and finance lease contracts is presented as follows:

	<u>Borrower/Issuer</u>	<u>Interest rate</u>	<u>Maturity</u>	<u>31 December 2017</u>	<u>31 December 2016</u>
				<i>BGN '000</i>	<i>BGN '000</i>
(1) Bond issue, 2013	BEH EAD	4.25%	2018	982,855	981,527
(2) Bond issue, 2016	BEH EAD	4.875%	2021	1,080,023	1,075,702
(3) Investment commercial credit from EURATOM in EUR	NPP Kozloduy EAD	EURIBOR + 0.079% to 0.13%	2018/ 2021	106,188	149,272
(4) Investment loan in Japanese Yen	TPP Maritsa East 2 EAD	1.49% plus risk premium of 0.94%	2018	36,324	79,370
(5) Investment loan in EUR	NEK EAD	3m OekV and 4.10%	2019	37,709	56,575
(6) Investment loan in EUR	NEK EAD	6m EURIBOR + 2.95% and 6.3% and 4.75%	2016 - 2021	23,490	31,317
(7) Investment loan in EUR	NEK EAD	from 4.026% to 4.844%	2022	38,142	46,596
(8) Long-term investment loan	TPP Maritsa East 2 EAD	6m Sofibor +3.49%	2018	3,278	6,538
(9) Investment loan	Mini Maritsa Iztok EAD	BIR+1,89%	2023	671	-
(10) Investment loan	Mini Maritsa Iztok EAD	BIR+1,89%	2023	497	-
(11) Investment loan	Mini Maritsa Iztok EAD	1y. EURIBOR + 5.10%	2024	-	2,280
(12) Contract for sale of natural gas	Bulgargaz EAD	2.79%	2018	9,956	-
(13) Financial lease in BGN	TPP Maritsa East 2 EAD		2018	6	13
				<b>2,319,139</b>	<b>2,429,190</b>

*(1) Bond Issue 2013*

On 7 November 2013, the company placed a bond issue at the amount of EUR 500 million with the following parameters:

- bond issue amount 500 million euro;
- maturing 7 November 2018;
- the interest is payable once a year on 7 November, with a first payment due on 7 November 2014 at an annual interest rate of 4.25%;
- ISIN code XS0989152573 of the bond issue quoted on the Irish Stock Exchange's Stock Market;
- BEH EAD should comply with a certain financial statement, calculated on the basis of the consolidated financial statement: the EBITDA / financial borrowing ratio should not be less than 4: 1.

On 7 November 2014, the company made a first interest payment of BGN 41,561 thousand within the agreed term of the bond issue, on 5 November 2015, the second interest payment of BGN 41,561 thousand, on 3 November 2016, the third payment of interest at the amount of BGN 41,561 thousand and on 3 November 2017 fourth interest payment amounting to BGN 41,561 thousand.

*(2) Bond Issue 2016*

On 2 August 2016, Bulgarian Energy Holding EAD successfully placed its second issue of Eurobonds worth EUR 550 million. With increased investor interest, the issue was over-subscribed to over EUR 2 billion. The parameters of the second bond issue of Bulgarian Energy Holding EAD are as follows:

- bond issue amount (nominal value) EUR 550 million;
- issue value - 98.921%;
- fixed interest rate 4.875% per annum;
- the interest is payable once a year on 2 August, with a first payment due on 2 August 2017;
- maturity 2 August 2021;
- ISIN code XS1405778041 of the bond issue quoted on the Irish Stock Exchange's Main Market;
- BEH EAD should observe certain covenants as follows:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

- The Issuer undertakes not to accept or prevent its subsidiaries from assuming, directly or indirectly, financial obligations if, after an assessment of the effects of the assumption of such obligations and their proceeds (1), there are, or arise, grounds for the occurrence of (2) the EBITDA Coverage Ratio calculated as the consolidated EBITDA for the last period prior to the date of the transactions for which the Issuer's Consolidated Financial Statements are prepared, divided by the financial expenses of the (3) the consolidated Consolidated Leverage Ratio, calculated as the Issuer's consolidated debt for the last period prior to the date of the transactions for which consolidated financial statements have been prepared, reduced by the Consolidated Leverage Ratio the carrying amount of the cash holdings of the Issuer for the same period, divided by the consolidated EBITDA for the same period, is more than 4.5: 1.
- In the event that NEK EAD has been declared by a Bulgarian court to be over- indebted, the Issuer undertakes not to assume or to allow (to the extent permitted by law) its subsidiaries to assume, directly or indirectly, financial obligations.

The proceeds from the bond issue were used to repay the bridge loan of EUR 535 million provided by Banca IMI S.p.A., London Branch, Bank of China (Luxembourg) S.A. and J.P. Morgan Limited. under a signed agreement on 21 April 2016.

On 1 August 2017, a first interest payment of BGN 52,441 thousand was made.

*(3) Long-term investment loan with an agreed amount of EUR 212,500 thousand (BGN 415,614 thousand)*

The loan is secured with a state guarantee and is aimed at financing the modernization of Units 5 and 6 in NPP Kozloduy EAD. The repayment deadline is May 2021. The loan agreement contains special clauses with restrictive conditions regarding changes in the end-owners of NPP Kozloduy, as well as financial indicators requiring the achievement of certain levels of indebtedness and coverage of debt servicing.

*(4) Long-term investment loan with an agreed amount of 25,106,617 thousand Japanese yen (BGN 338,603 thousand)*

The loan is covered by a state guarantee. It is due in September 2018 and is repaid in two equal installments of 1,255,331 thousand yen a year.

*(5) Contract for export credit for financing the construction of the Tsankov Kamak Hydro plant*

The loan is disbursed in two tranches, divided into a ratio of Tranche A to Tranche B at 10:90. Each draw is divided into that ratio and redistributed in both tranches. The total amount of the export credit is EUR 100,000 thousand (BGN 195,583 thousand).

- Tranche A amounts to EUR 10,000 thousand (BGN 19,558 thousand) at a variable three-month Oekv interest rate on export credits. This tranche by 31 December 2017 is fully repaid;
- Tranche B amounts to EUR 90,000 thousand (BGN 176,025 thousand). The interest rate on this tranche is fixed at 4.10%. The nominal outstanding portion of this tranche as at 31 December 2017 amounts to BGN 37,709 thousand. (EUR 19,280 thousand).

The repayment term of the loan is December 2019.

The loan is secured by a mortgage on the property and a pledge on assets related to the Tsankov Kamak Hydro Power Plant with a carrying amount of BGN 99,804 thousand. As collateral, a pledge is entered on the Tsankov Kamak Hydro Power Plant. A promissory note was issued. According to the credit agreement NEK EAD must observe certain financial covenants related to Leverage ratios and Interest coverage ratio.

*(6) Export loan agreement for financing the modernization and rehabilitation of the Cascade Dolna Arda*

In October 2006 NEK EAD concluded an agreement for an export loan to finance the modernization and rehabilitation of the Cascade Dolna Arda. The loan is spread in two tranches, divided into a ratio of Tranche A to Tranche B at 10:90. The maximum approved export credit limit is EUR 42,075 thousand (BGN 82,292 thousand).

- Tranche A amounts to EUR 4,208 thousand (BGN 8,230 thousand) at a three-month volatile interest rate of OECD on export credits with a surplus of 0.45%. As at 31 December 2017 the tranche is fully paid off.
- Tranche B amounts to EUR 37,867 thousand (BGN 74,062 thousand) at a fixed annual interest rate of 4.75%. The nominal utilized and outstanding part of this loan as at 31 December 2017 amounts to BGN 23,490 thousand (EUR 12,010 thousand).

The loan is repaid in 20 equal six-month repayments until November 2020.

To secure the export and trade credits from ING Bank NV - The Netherlands, a mortgage on the lands and buildings of the Studen Kladenets hydroelectric power station, Ivaylovgrad HPP and the Kardzhali hydroelectric power station (Dolna Arda cascade) with a carrying amount of BGN 17,418 thousand has been registered. Loans are secured by pledge on all current and future assets including machines and facilities, part of the Cascade Dolna Arda.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

Promissory notes were issued. According to the credit agreement, NEK EAD must adhere to certain financial covenants related to debt servicing ratios and current assets to current liabilities ratio.

*(7) Investment loan with an agreed amount of EUR 60,000 thousand (BGN 117,345 thousand)*

The purpose of the loan is to finance the project "Energy 2". The nominal outstanding amount as at 31 December 2017 amounts to BGN 38,142 thousand. (EUR 19,502 thousand). The loan was granted to the Republic of Bulgaria with the Final Beneficiary - NEK EAD. The loan is granted in six installments, each tranche having a fixed interest rate, as follows: 1 tranche – EUR 10 million on 7 June 2004 - 4.69%, 2 tranche – EUR 7 million on 19 May 2006 - 4.285%, 3 tranche - EUR 6 million on 13 November 2006 - 4.026%, 4 tranche - EUR 13 million on 03 July 2007 - 4.844%, 5 tranche - EUR 18 million on 12 March 2008 - 4.341%, 6 tranche - EUR 6 million on 28 October 2008 - 4.555%.

Principals and interest are paid on 15 June and 15 December, with a final repayment on 15 June 2022.

*(8) Long-term investment loan from Societe Generale Expressbank AD*

Long-term investment loan from Societe Generale Expressbank AD with an agreed amount of BGN equivalent of 797,461,750 Japanese yen and EUR 736,900 at the date of each drawdown, with collateral. The loan was fully disbursed with BGN 13,206 thousand. The loan matures on 20 December 2018 and is repaid in 8 equal repayments due on 20 June and 20 December of each calendar year for the period 20 June 2015 to 20 December 2018. Payments are made in BGN. The principal amount of the loan as at 31 December 2017 is BGN 3,278,000.

*(9) Investment loan from Societe Generale Expressbank AD with a limit up to BGN 19,100 thousand*

Investment loan from Société Générale Expressbank AD with a limit up to BGN 19,100 thousand for financing the implementation of Contract No.MME/BWE and concerning: "Design, production, supply, construction and commissioning of SRS 2000 rotary excavators". The utilisation of the loan is foreseen for the period 2016 - 2018. Contracted interest rate: Annual interest rate on the actually used loan amounts at BIR + margin of 1.89% per annum. Collateral: Registered pledges on assets, the value of which covers the amount of the loan. The duration of the loan is 81 months, with a 21-month grace period and a 60-month repayment period. During the grace period, an interest is owed each month, accrued on the factually utilised part of the investment loan. As of 31 December 2017 the utilized amount of the loan amounted to BGN 719 thousand, prepaid fees of BGN 48 thousand, the carrying amount of the liability is BGN 671 thousand.

*(10) Investment Loan from Societe Generale Expressbank AD with a limit of BGN 5,200 thousand*

Investment Loan from Societe Generale Expressbank AD with a limit of BGN 5,200 thousand to finance the implementation of Contract No.MME/BWE relating to: "Design, production, supply, construction and commissioning of SRs 200 rotary excavators". The loan is foreseen for the period 2016 - 2018. Contracted interest rate: Annual interest rate on the actually used loan amounts at BIR + margin of 1.89% per annum. Collateral: Registered pledges on assets, the value of which covers the amount of the loan. The duration of the loan is 81 months, with a 21-month grace period and a 60-month repayment period. During the grace period, interest is owed each month, accrued on the factually absorbed part of the investment loan. As of 31.12.2017 the utilized amount of the loan amounted to BGN 510 thousand and the prepayments are BGN 13 thousand, the book value of the obligation is BGN 497 thousand.

*(11) Investment loan from "D Commerce Bank" AD*

Investment loan from "D Commerce Bank" AD - Sofia for the financing of sites constructed under the International Fund Kozloduy. Contracted interest rate - annual interest rate on actual utilized loan amounts 1-year EURIBOR + 5.10% per annum. Collateral - machines and equipment with a carrying amount of BGN 7,404 thousand. On 20 January 2017, an Additional Agreement on the change of the limit and the repayment schedule of the loan was concluded.

By 31.12.2017 the loan is repaid in full - principal and interest payables are not available. The pledge to secure the loan at the CPRA was deleted in January 2018.

*(12) Contract for purchase and sale of natural gas with redemption by D Commerce Bank AD*

Contract for purchase and sale of natural gas with redemption by D Commerce Bank AD with an agreed amount of BGN 10,017 thousand. The redemption date is 6 March 2018. Quantities of natural gas are stored in the gas storage facility in the village of Chiren and are provided under the conditions of responsible keeping of the company.

*Loans guaranteed by the State*

The loan granted to NPP Kozloduy (2) is guaranteed by the Government of the Republic of Bulgaria. The loan was granted under a project for the modernization of Units 5 and 6 of NPP Kozloduy and a project related to the Radiation Control System of NPP Kozloduy EAD, as well as the computer information systems of the plant.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

The loan granted to NEK EAD as a final beneficiary (6), amounting to EUR 60 million, with a repayment term in 15 June 2022 for financing the Rehabilitation in Electricity - Energy 2 project, is state-guaranteed.

For loans received as of 31 December 2017, which are covered by a State guarantee, the Group is not in a position to determine the effect of the State guarantee granted on the agreed interest rate and whether that guarantee would have a material effect on its fair value at that date.

*Unutilized loans*

As at 31 December 2017, the Group has the following unutilized investment loans and overdrafts:

**TPP Maritsa East 2 EAD**

Credit line for working capital in the form of overdraft from Société Générale Expressbank AD with a credit limit of up to BGN 25,000 thousand, without collateral. The applied interest rate is the BNB based interest rate plus a surplus of 2.49% per annum.

**Bulgargaz AD**

Credit lines for working capital in the form of an overdraft facility, as follows: overdraft with a limit in the amount of BGN 10,000 thousand from CCB AD and an overdraft with a limit of BGN 10,000 thousand from Citibank Europe AD - Bulgaria Branch.

**Mini Maritsa Iztok EAD**

A credit line for working capital in the form of overdraft, by Societe Generale Expressbank AD, with a limit of BGN 12 million from October 2017. The period of full utilisation and repayment of the overdraft is 12 months from the date of the conclusion of the contract until 18 October 2018. Contracted interest rate BIR + 1.44%, no collateral.

Credit line for working capital in the form of overdraft from Société Générale Expressbank AD, with a limit of BGN 8 million concluded in October 2017. The period of full absorption and repayment of the overdraft is 12 months from the date of the conclusion of the contract until 18 October 2018. Contracted interest rate BIR + 1.44%, no collateral.

**29.1 Reconciliation between the opening and closing balances in the consolidated statement of financial position as at 31 December 2017 of the liabilities arising from financial activities.**

Liabilities arising from financial activities	Carrying amount on 1 January	Cash flows from financial activities		Changes of a non-monetary nature - dematerialized		Carrying amount at 31 December
		Proceeds	Payments	Reductions / (Increases)	Effect of exchange rate changes	
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
Bond Issue 2013	975,408	-	-	1,328	-	976,736
Bond issue 2016	1,053,852	-	-	4,321	-	1,058,173
Government loan	804,866	-	-	44,871	-	849,737
Investment non-bank credit from EURATOM	147,787	-	(42,783)	-	-	105,004
Investment loan in Japanese yen	79,370	-	(39,287)	-	(3,759)	36,324
Investment loans NEK EAD	134,273	-	(35,811)	705	-	99,167
Other bank loans TPP Maritsa East 2 EAD	6,538	35,801	(39,401)	340	-	3,278
Other bank loans Mini Maritsa Iztok EAD	2,280	14,177	(15,229)	(60)	-	1,168
Purchase and Sale Agreement of natural gas with redemption		9,924	(2)	34	-	9,956
Financial leasing	13	-	(7)	-	-	6
Interest liabilities	29,669	-	-	-	-	29,327
<b>Total liabilities of financial activities:</b>	<b>3,234,056</b>	<b>59,902</b>	<b>(172,520)</b>	<b>51,539</b>	<b>(3,759)</b>	<b>3,168,876</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

**30. Deferred financing**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Non-current part	417,005	380,439
Current part	16,707	16,294
	<b>433,712</b>	<b>396,733</b>
	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
<b>On 1 January</b>	396,733	370,022
Received during the year	67,117	47,551
Recognized in profit or loss:		
- as a result of continuing operations (Note 9)	(30,138)	(20,530)
Deducted advances	-	(310)
<b>On 31 December</b>	<b>433,712</b>	<b>396,733</b>

Funding is mainly related to the following major projects:

ISPA Funding for the Construction of Flue Gas Installations for Unit 5 and Unit 6. Assets are built and commissioned. The balance of financing at 31 December 2017 includes the carrying amount of assets at the amount of BGN 11,509 thousand (31 December 2016: BGN 12,952 thousand);

Funding from the International Kozloduy Fund to build a gypsum and CPS dewatering plant. Assets are built and commissioned. The balance of financing at 31 December 2017 includes the carrying amount of assets at the amount of BGN 21,984 thousand (31 December 2016: BGN 24,436 thousand);

Funding from the Energy Resources Fund for the construction of a dredger. Assets are built and commissioned. The balance of financing at 31 December 2017 includes the carrying amount of assets at the amount of BGN 2,693 thousand (31 December 2016: BGN 2,886 thousand).

Financing for fixed assets in the amount of BGN 25,176 thousand is related to the Kozloduy International Fund. The Fund Manager is the European Bank for Reconstruction and Development, and the Bulgarian Ministry of Energy implements the management of their absorption by the Bulgarian side. Financing is related to energy efficiency through rehabilitation of heavy industrial mining equipment and replacement of rotary multi-digger excavators of Mini Maritsa East EAD and other activities. The financing amounts to EUR 30,196 thousand.

Financing for current and scientific activities of NPP Kozloduy, received by the European Bank for Reconstruction and Development (EBRD) and financing under a consultancy contract with the consortium EDF / BNFL, totaling BGN 186,004 thousand (As at 31 December 2016: BGN 191,545 thousand);

Funding under Energy Resources Fund programs, Swiss Government, Connecting Europe Facility granted to NEK EAD for the rehabilitation of hydroelectric power plants and other assets in the amount of BGN 10,737 thousand (As at 31 December 2016: BGN 10,797 thousand).

**31. Retirement employee benefit obligation**

According to the Bulgarian labor legislation and the collective agreements of the companies of the Group, the Group is obliged to pay to its employees upon retirement a certain number of gross monthly salaries depending on the length of service in the company of the Group. The defined benefit plan for retirement personnel is not funded.

**31 December**
**31 December**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Non-current part	188,632	165,796
Current part	21,633	15,090
<b>Present value of the retirement employee benefit obligation:</b>	<b>210,265</b>	<b>180,886</b>

Changes in provisions for retirement employee benefits under the Labor Code during the year are presented as follows:

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Retirement employee benefit obligations at the beginning of the year	180,886	163,762
Expenditure on current internship	17,288	12,998
Expenditure on past work experience	2,909	(979)
Interest expenses	4,701	5,207
Payments made for the period	(16,686)	(18,004)
Actuarial (gains) / losses	21,167	17,902
<b>Retirement employee benefit obligations at the end of the year</b>	<b>210,265</b>	<b>180,886</b>

The main assumptions used to determine the retirement benefit obligations are set out below:

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Discount rate	1.4% - 2%	2.5% - 3%
Future pay rises	0% - 6%	0% - 10%
Staff turnover: 18-30	4% - 36%	3% - 16%
31-40	3% - 26%	3% - 9%
41-50	1% - 15%	1% - 5%
51-60	1% - 6%	1% - 2%
Over 60	0% - 1%	0% - 1%

The management of the Group has made these assumptions with the help of independent valuers actuaries. These assumptions are used to determine the amount of employee benefit obligations at retirement for the reporting periods and are considered to be the best estimate of management.

The total expense of defined benefit plans of the Group recognized in profit or loss may be presented as follows:

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Expenditure on current work experience	(17,288)	(12,998)
Expenditure on past work experience	(2,909)	979
Interest expenses	(4,701)	(5,207)
Actuarial gains /(losses) recognized in profit or loss	(93)	(51)
<b>Total costs recognized in profit or loss</b>	<b>(24,991)</b>	<b>(17,277)</b>

The total expense of defined benefit plans of the Group recognized in other comprehensive income can be presented as follows:

<b>2017</b>	<b>2016</b>
<b>BGN '000</b>	<b>BGN '000</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

Revaluation of defined benefit obligations - actuarial loss, including:

- <i>Loss as a result of changes in demographic assumptions</i>	3,904	92
- <i>Loss as a result of changes in financial assumptions</i>	(16,669)	(1,436)
- <i>Loss of actual experience</i>	(8,309)	(16,507)
<b>Total costs recognized in other comprehensive income</b>	<b>(21,074)</b>	<b>(17,851)</b>

Significant actuarial assumptions in the definition of defined benefit obligation are related to the discount rate and the expected wage growth rate. The following table presents a sensitivity analysis and summarizes the effects of changes in these actuarial assumptions on defined benefit obligation liabilities as at 31 December 2017:

	<b>2017</b>	
	Increase by 1%	Decrease by 1%
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Change in interest rate</b>	<b>(22,866)</b>	<b>23,910</b>
<b>Remuneration growth</b>	<b>23,827</b>	<b>(22,918)</b>

The sensitivity analysis is based on a change in only two of the assumptions. It may differ from the actual change in defined benefit obligations, as changes in assumptions are often interrelated.

The plan exposes the Group to actuarial risks such as interest rate risk, life risk and inflation risk:

- Interest rate risk - the present value of the defined benefit obligation is calculated at a discount rate determined on the basis of government bond yields. A decline in the market yield of government securities will lead to an increase in liabilities under defined benefit plans of the Group;
- Risk of change in life expectancy - an increase in the expected life expectancy of employees would lead to an increase in defined benefit obligations;
- Inflationary risk - an increase in inflation would lead to an increase in the defined benefit obligations.

**32. Provisions**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current part</b>		
Provisions for recultivation	104,350	99,882
Provision for environmental protection	86	80
	<b>104,436</b>	<b>99,962</b>
<b>Current part</b>		
Provisions for exceeding the greenhouse gas emissions allowances	233,117	91,125
Provisions for environmental protection	323	326
Provisions for recultivation	1,027	1,101
Provision for spent nuclear fuel	-	29,942
Other provisions	1,219	836
	<b>235,686</b>	<b>123,330</b>
	<b>340,122</b>	<b>223,292</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

	Provision for environmental protection	Provision for reclamation	Provision for greenhouse gas emissions allowances	Provision for spent nuclear fuel	Provisions for litigation and other provisions	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Balance as at 1 January</b>						
<b>2016</b>	289	106,228	111,176	29,942	17,166	264,801
Accrued	121	(5,245)	7,894	-	102	2,872
Utilized	(4)	-	(27,945)	-	(16,432)	(44,381)
<b>Balance as at 31 December</b>						
<b>2016</b>	<b>406</b>	<b>100,983</b>	<b>91,125</b>	<b>29,942</b>	<b>836</b>	<b>223,292</b>
Accrued	261	4,394	159,151	-	668	164,474
Utilized	(258)	-	-17159	(29,942)	(285)	(47,644)
<b>Carrying amount as at 31</b>						
<b>December 2017</b>	<b>409</b>	<b>105,377</b>	<b>233,117</b>	<b>-</b>	<b>1,219</b>	<b>340,122</b>

**Expenses on provisions**

	2017	2016
	BGN '000	BGN '000
Cost for purchase of greenhouse gas emissions	(73,999)	(72,094)
Recognized provisions	(164,474)	(2,872)
	<b>(238,473)</b>	<b>(74,966)</b>

*Provision for environmental protection*

As at the reporting date a provision for environmental protection expenses is recognized related to estimated expenses incurred for safeguarding of the luminescent and other types of lamps containing mercury, safeguarding and recycling of batteries, deactivation, recycling and replacement of capacitor batteries containing PCB with new ones and utilization of bleaching earth used in the oil regeneration facility.

*Provision for reclamation of terrains affected by mining operations*

When determining the provision for reclamation of Mini Maritsa Iztok EAD, the current environmental legislation, the land to be seized, the unrecultivated seized land, the value of the reclamation of 1 decare of land and the expected quantities of coal reserves up to 2043, when the coal mining concession granted to Mini Maritsa Iztok EAD expires, have been taken into account.

The amount of accrued allowance as at 31 December 2017 is BGN 100,050 thousand (31 December 2016: BGN 95,839 thousand), calculated on the basis of the following data:

	2017	2016
Coal extracted (thousands of tonne)	30,337	27,762
Reclamation expense (BGN/ton of production)	0.14	0.14

As there is considerable uncertainty about the timing of future land reclamation activities to be performed by the Group, the management is not in a position to determine the present value of reclamation costs, so the provision is presented at its undiscounted value.

*Provision for rehabilitation of damaged terrains - gypsum (depot) for landfilling of gypsum from FGD facilities*

According to Ordinance 26 on the reclamation of disturbed terrains, improvement of low-productive lands, removal and utilization of the humus layer, the Group has the obligation to carry out technological and biological reclamation of the landfill after it is filled with gypsum from FGD facilities. Depending on the capacity of the landfill and the amount of landfilled gypsum, the landfill is expected to be filled for 5 years. The value of the technological and biological reclamation under the project amounts to BGN 5,488 thousand. According to IAS 16 Property, Plant and Equipment, item 17 (c), the cost of a property, plant and equipment includes the initial estimate

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

of expected land recovery costs (land reclamation) where the asset was located after it was taken out of use. The liability for these expenses is treated as a provision and is accounted for under the provisions of IAS 37 Provisions, Contingent Liabilities and Contingent Assets. The present discounted value of the provision is capitalized at the cost of the facility (gypsum disposal facility) and will be recognized each year as amortization expense. As at 31 December 2013, the present value of the provision was calculated at the amount of BGN 4,607 thousand when using a discount factor of 3.56%. Discount factors are determined at the end of each year against interest rates on long-term government securities. For the purpose of discounting, an effective annual interest rate of 3.56% was used. It is based on the yield on long-term government securities (10-year maturity). The rest of the value of the recultivation amounting to BGN 881 thousand will be shown each year as interest expense, which will increase the provisioning obligation.

As of 31 December 2017 the discount factor is lower. Due to impropriety, no adjustment was made to the present value of the provision as at 31 December 2017. The interest expense for the provision as at 31 December 2017 amounted to BGN 183 thousand (as at 31 December 2016: BGN 177 thousand).

As of 31 December 2017, the best estimate of the required provision for landfill reclamation amounts to BGN 5,327 thousand (as of 31 December 2016: BGN 5,144 thousand).

### *Provisions for exceeding the greenhouse gas emissions allowances*

Directive 2009/29/EC, amending Directive 2003/87/EC (also known as the Directive establishing the European Union Emissions Trading Scheme) introduces the concept of a Community harmonized allocation of allowances in the third phase of the European Union Emissions Trading Scheme (EU ETS), starting from 2013 and continuing until 2020. During this period, as a general rule, full auctioning of the allowances for electricity generation and a transitional system for free allocation of allowances to other industries is envisaged. The Directive also sets out the exceptions in the Member-States where some of the conditions for temporary derogations under Article 10c – transitional allocation of free allowances in connection with the modernization of electricity generation approaches are met. The total quantity of transitionally allocated free allowances in 2013 will account for a maximum of 70% of the average annual quantity of established emissions in the period 2005-2007. Furthermore, this overall quantity will gradually decrease so that no free allowances will be allocated in 2020.

The Republic of Bulgaria has made use of its right and has filed an application under Article 10c of the Directive, which was determined as consistent with Article 10c of the Directive by means of Decision C (2012)4560 dated 6 July 2012 of the European Commission, the European Parliament and the Council for transitional free allocation of allowances.

TPP Maritsa East 2 EAD is included in the draft National Investment Plan and is to receive for free part of greenhouse gas emission allowances – a total of 15,727,524 tonnes for the period 2013 - 2020, which represents about 30% of the quantities emitted by the power plant.

As of 31 December 2017, the Group reported provisions for a shortage of greenhouse gas emission allowances of 9,929,618 t/CO<sub>2</sub>, amounting to BGN 196,440 thousand. The shortage represents the difference between the quantities actually emitted and verified and the quantity granted under the NIP and the remaining available in the Group's account in the National Register, after the fulfillment of the 2016 obligation. According to a decision taken by the Sole Owner of the Group's capital, during the first quarter of 2018 BEH EAD purchased and subsequently transferred the necessary quantity of greenhouse gas allowances to TPP Maritsa East 2 EAD for covering the obligation to the National Register for 2017. The value of the provisions is calculated in accordance with the purchased prices of the CO<sub>2</sub> allowances achieved by BEH EAD.

As at 31 December 2016, the Group reported provisions for a shortage of greenhouse gas emission allowances amounting to BGN 7,331,766 t/CO<sub>2</sub>, amounting to BGN 73,966 thousand. The shortfall represents the difference between the quantities actually emitted and verified and the quantity granted under the NIP and the remaining quantities purchased for 2016 available in the Group's account in the National register as at 13 March 2017. According to a decision taken by the Sole Owner of the Group's capital, BEH EAD acquired and subsequently sold the necessary CO<sub>2</sub> allowances for TPP Maritsa East 2 EAD for covering the obligation to the National Register for 2016. The value of the provisions is calculated in accordance with the purchased CO<sub>2</sub> allowances prices achieved by BEH EAD. In 2016 the provision for greenhouse gas emissions at the amount of BGN 3,634 thousand recognized in 2015 was re-integrated.

### *Provision for CO<sub>2</sub> emissions*

The Group recognizes a provision for the cost of greenhouse gas emissions under the terms of the long-term power purchase agreements with the AES 3C Maritsa East 1 EOOD and ContourGlobal Maritsa East 3 AD. At the date of

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

the consolidated statement, a provision for greenhouse gas emissions of BGN 36,677 thousand was recognized for 2017 (31 December 2016: BGN 17,159 thousand).

*Other provisions*

As of 31 December 2017 in the subsidiary ESO EAD, a provision for legal claims amounting to BGN 449 thousand was recognized.

As at 31 December 2017 in the subsidiary Mini Maritsa Iztok EAD, a provision for legal claims amounting to BGN 102 thousand is recognized.

**33. Deferred income**

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Deferred income, non-current portion	128,519	125,049
Deferred income, current portion	5,441	4,959
	<b>133,960</b>	<b>130,008</b>

Deferred revenue as 31 December, comprises:

	<b>31 December 2017</b>	<b>31 December 2016</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Deferred income – long-term, under Regulation 714/2009	124,888	123,203
Deferred income – short-term, under Regulation 714/2009	3,869	3,920
Deferred income – long-term, other	3,631	1,846
Deferred income – short-term, other	1,572	1,039
	<b>133,960</b>	<b>130,008</b>

Owning the electricity transmission license and the electricity system assets, ESO EAD is obliged to apply the requirements of Regulation (EC) No 714/2009 to the European Parliament and the Council of 13 July 2009. According to item 6, Art. 16 of the latter, all revenue from the distribution of interconnectors shall be used for the following purposes:

- a) to ensure the actual availability of the allocated capacity; and/or
- b) to maintain or increase interconnection capacities through network investments, in particular in new interconnector power lines.

In line with the requirements of the Regulation, the Regional Investment Plan 2015 is part of ENTSO's new ten-year plan, which was published at the end of 2016. In this regard, the following projects related to the increase of the interconnection capacity were accounted for under separate financial accounts:

- VL 400 kV Vezhen from substation Plovdiv to substation Zlatitsa
- Reconstruction open switchboard 400 kV substation Varna 400/220 kV
- Reconstruction open switchboard 400 kV substation Dobrudzha 400/220/110 kV
- Reconstruction open switchboard 400 kV substation Sofia west 400/110 kV
- Reconstruction open switchboard 400 kV substation Chervena mogila 400/110 kV
- Reconstruction open switchboard 400 kV substation Blagoevgrad 400/110 kV
- overhead powerline Maritsa Iztok BG and Nea Santa EL
- overhead powerline Dobrudzha – Burgas
- overhead powerline Burgas - Maritsa Iztok
- overhead powerline Maritsa Iztok - Maritsa Iztok 3
- overhead powerline Plovdiv – Maritsa Iztok

**34. Trade and other payables**

<b>31 December 2017</b>	<b>31 December 2016</b>
-----------------------------	-----------------------------

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

	<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current portion</b>		
Trade payables	15,476	30,918
Retained guarantees	980	1,521
Amounts received in connection with project activity	191,009	190,078
<b>Financial liabilities</b>	<b>207,465</b>	<b>222,517</b>
<b>Current portion</b>		
Trade payables	371,740	531,831
Deposits obtained	20,895	23,802
Retained guarantees	25,495	16,766
Insurance liabilities	596	118
Other payables	6,299	27,597
<b>Financial liabilities</b>	<b>425,025</b>	<b>600,114</b>
Advance payables	49,347	18,601
Liabilities to the Security of the Electricity System Fund	14,317	15,856
Payables to staff	75,365	62,034
Social security payables	23,971	22,629
Payables to the budget	76,124	73,055
Payables for contributions to Decommissioning of Nuclear Facilities Fund and Radioactive Waste Fund	9,864	8,480
Obligation to Beneficiaries, in connection with Ordinance № E-RD- 04-06	26,687	-
Other payables	6,772	12,392
<b>Non-financial liabilities</b>	<b>282,447</b>	<b>213,047</b>
	<b>707,472</b>	<b>813,161</b>

The terms and conditions of the above trade and other payables are as follows:

- Trade payables are not interest-bearing and are usually settled within a ten- to thirty-day period;
- Tax liabilities are not interest-bearing and are settled within the statutory time limits;
- Other payables are not interest-bearing and are usually settled within a ten-day period;
- In accordance with contracts with subcontractors, related to investment projects, the Group retains certain amounts as guarantees for the quality execution of the construction and installation works. The retained amounts are determined as a percentage of the invoiced construction and installation works. The retained amounts are interest-free. The retained amounts should be paid in accordance with the contractual relations with the subcontractors.

The non-current trade payables include liabilities amounting to BGN 3,757 thousand to thermal power plants related to payments for CO<sub>2</sub> emissions under the Derogation for 2013 in relation with the long-term power purchase agreement of the subsidiary NEK EAD. Non-current trade payables include the amount of BGN 190,009 thousand related to the increase of the capital of the joint venture South Stream Bulgaria AD in 2014 as part of the Group's project activity.

### 35. Related parties' disclosures

The Group's related parties include the sole shareholder represented by the Ministry of Energy, associates and joint ventures, key management personnel, as well as all public-sector entities under the common control of the Ministries to the Council of Ministers in the Republic of Bulgaria. Information on the name, country of incorporation, shareholding and voting rights of each subsidiary included in the consolidation is presented in Note 1. Information on the name, country of incorporation, shareholding and voting rights of each associate and joint venture is presented in Note 21. Other related parties of the Group with which significant transactions were made as a total amount during the period are state- controlled enterprises BDZ, National Railway Infrastructure Company, Terem - Dockyard Fleet Arsenal EOOD, Minproekt EAD, Water Supply and Sewerage, Police, Bulgarian Posts EAD, VMZ EAD - Sopot.

The total amount of related party transactions and outstanding balances for the current and prior reporting periods are presented as follows:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

		<b>Sales to related parties, including dividends</b>	<b>Purchases from related parties, including dividends</b>	<b>Trade receivables from related parties</b>	<b>Trade liabilities to related parties</b>
		<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>
<i>Sole Shareholder</i>					
Ministry of Energy	2017	-	16,259	-	858,212
Ministry of Energy	2016	3	16,080	-	813,660
<i>Joint ventures</i>					
Transbalkan Electric Power Trading S.A. – NECO S.A.	2017	-	-	-	-
Transbalkan Electric Power Trading S.A. – NECO S.A.	2016	18,983	482	1,298	-
South Stream Bulgaria AD	2017	1	-	-	-
South Stream Bulgaria AD	2016	1	119	1	-
<i>Associates</i>					
ContourGlobal Maritsa East 3 AD	2017	167,619	511,580	20,966	128,608
ContourGlobal Maritsa East 3 AD	2016	118,350	485,950	17,213	49,007
ContourGlobal Operations Bulgaria AD	2017	1,358	-	6	-
ContourGlobal Operations Bulgaria AD	2016	62	-	6	-
POD Allianz Bulgaria AD	2017	5,270	826	-	82
POD Allianz Bulgaria AD	2016	4,557	1,003	-	81
ZAD Energy	2017	16,016	32,998	727	16,628
ZAD Energy	2016	2,954	54,096	572	16,041
Hydropower Company Gorna Arda AD	2017	-	-	350	-
Hydropower Company Gorna Arda AD	2016	115	-	350	-
<i>Other related parties under common control</i>					
State- owned companies under the control of the Council of Ministers of Republic of Bulgaria	2017	9,933	1,114	1,131	3,069
State owned companies under the control of the Council of Ministers of Republic of Bulgaria	2016	14,020	2,266	994	703
<b>Related party receivables/payables</b>	2017			<b>23,180</b>	<b>1,006,599</b>
<b>Related party receivables/payables</b>	2016			<b>20,434</b>	<b>879,492</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**Related party transaction terms and conditions**

Sales and purchases from related parties are made under conditions regulated by the sole owner. Unsettled balances at the end of the year are interest-free and settled with cash. Receivables from or liabilities to related parties have not been provided or received guarantees and collaterals. An impairment review is carried out every financial year based on an analysis of the financial condition of the related party and the market in which it operates.

Long-term liabilities to related parties include a liability to ContourGlobal Maritsa East 3 AD up to 2019 amounting to BGN 5,282 thousand (31 December 2016: BGN 10,703 thousand) related to payments for greenhouse gas emissions under the 2013 Derogation according to the long-term power purchase agreement.

As at 31 December 2017, the Group, through its subsidiary National Electricity Company EAD, had undertaken an irrevocable commitment to reimburse the costs of a capital investment made to ContourGlobal Maritsa East 3 AD under the terms of the Agreement dated 7 March 2016 for the purchase of electricity. Under the terms of the Agreement, National Electricity Company EAD has the obligation to fully reimburse the investment costs plus a certain return on investment that is related to the requirements of EU environmental legislation to reduce SO<sub>2</sub> emissions and nitrogen oxides (NO<sub>x</sub>) in the plant.

As of 31 December 2017, no agreement was reached between National Electricity Company EAD and ContourGlobal Maritsa East 3 AD on the way of recognizing and paying the matured installment under the Agreement at the amount of BGN 23,470 thousand due to the lack of a regulatory mechanism to compensate the public supplier NEK EAD. In this regard, a number of actions have been taken to inform EWRC and the Ministry of Energy, as well as a number of meetings with representatives of the above institutions, including ContourGlobal Maritsa East 3 AD.

National Electricity Company EAD has included this compensation cost in its application for the approval of electricity prices for the regulatory period starting on 01.07.2018 to the EWRC. As at the time of the preparation of the consolidated financial statement no official interpretation by EWRC was available. It is expected that a compensation mechanism for NEK EAD as per its application will be included in the price decision for subsequent regulatory periods, which will give NEK the power to take action to make payments to the plant.

***Obligation to the Ministry of Energy for financial assistance granted***

	<b>Nominal value</b>	<b>Carrying amount</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Long-term obligations to ME		
31 December 2016	1,176,661	804,866
31 December 2017	1,176,661	849,737

On 28 September 2016, the Bulgarian Parliament adopted a Law on Assistance for Payment of the Obligations of NEK EAD, following the arbitration case No. ICC Case 18086/GZ/MHM. The law was promulgated in the State Gazette on 30 September 2016 and provided for the Council of Ministers to ensure, pursuant to the procedure of Art. 109, para. 4, item 2 of the Public Finance Act, through the budget of the Ministry of Energy, financial assistance to NEK EAD for the payment of the assigned amounts of ASE. Assistance should be provided on the basis of an Agreement between the Minister of Energy and NEK EAD, approved by the Council of Ministers, on the basis of an Agreement for the final settlement of the relations between NEK EAD and ASE.

Pursuant to Art. 3 of the Law on Assistance for the Payment of the Obligations of NEK EAD, on 29 September 2016 a notification was sent to the European Commission pursuant to Article 108, Para. (3) of the Treaty on the Functioning of the European Union. The European Commission's decision is that in the present case there is no state aid, the grounds under Art. 108 of the Treaty on the Functioning of the European Union. Detailed information on the Agreement entered into is presented in note 14.

**Key management remuneration**

	<b>2017</b>	<b>2016</b>
	<b>BGN '000</b>	<b>BGN '000</b>
Remuneration	1,952	1,747
Social Security	161	137
Social costs	389	298
Termination benefits	13	-
	<b>2,515</b>	<b>2,182</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**36. Categories of financial assets and liabilities**

The carrying amounts of the financial assets and liabilities of the Group may be presented in the following categories:

<b>Financial assets</b>	<b>Note</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
		<b><i>BGN '000</i></b>	<b><i>BGN '000</i></b>
<b>Non-current financial assets</b>			
Loans and receivables			
Trade and other receivables	22	478,984	487,567
		<b>478,984</b>	<b>487,567</b>
<b>Current financial assets</b>			
Available-for-sale financial assets - shares	25	976	765
Loans and receivables			
Trade and other receivables	22	808,215	729,026
Related party receivables	35	23,180	20,434
Cash and cash equivalents	26	1,261,553	1,015,987
		<b>2,093,924</b>	<b>1,766,212</b>
		<b>2,572,908</b>	<b>2,253,779</b>
<b>Financial liabilities</b>			
<b>Non-current financial liabilities</b>			
Financial liabilities measured at amortized cost			
Loans and finance lease liabilities	29	1,188,828	2,277,275
Trade and other payables	34	207,465	222,517
Related party payables	35	855,019	815,569
		<b>2,251,312</b>	<b>3,315,361</b>
<b>Current financial liabilities</b>			
Financial liabilities measured at amortized cost			
Loans and finance lease liabilities	29	1,130,311	151,915
Trade and other payables	34	425,025	600,114
Payables to related parties	35	151,580	63,923
		<b>1,706,916</b>	<b>815,952</b>
		<b>3,958,228</b>	<b>4,131,313</b>

Note 4.17 provides information on the accounting policy for each class of financial instruments. A description of the Group's policy and risk management objectives for financial instruments is presented in Note 37. The methods used to measure the fair values of financial assets and liabilities at fair value are disclosed in Note 38.

**37. Financial Risk Management Objectives and Policy**

The Group has financial assets consisting of trade receivables, cash and short-term deposits that arise directly from the operations.

The financial liabilities of the Group include bond issue, loans and trade payables. The main purpose of the loans is to secure the financing of the Group's activities.

As of 31 December 2017 and 31 December 2016, the Group does not own or trade with derivative financial instruments.

The main risks arising from the financial instruments of the Group are liquid, currency, credit and regulatory risk. Current risks are identified, measured and monitored with the help of various control mechanisms introduced to determine adequate prices for the services offered by the Group, as well as to adequately assess the market circumstances of the investments made and the forms of maintenance of the free liquid assets, to allow undue concentration of risk and others. Risk management in the Group is currently conducted by the management and the relevant structural units, depending on the type and specificity of the different types of risk to which the Group is exposed in its activities. The policy that the Group's management applies to managing these risks is summarized below.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**37.1 Liquidity risk**

Liquidity risk arises if the Group fails to meet its obligations when they become due. The Group applies an approach that provides the necessary liquidity to meet the liabilities under normal or stressful conditions without incurring unacceptable losses.

One of the goals of the parent company is to provide, if necessary, cash resources to subsidiaries to maintain operating activities, as well as to implement strategic projects.

The parent company finances the operating activities of the companies in the group in two ways:

- Internal financing, within the economic group, by redistribution of the free cash resource. Bulgarian Energy Holding EAD acts as an intermediary between the companies, by coordinating the conditions between them and monitors that transactions are carried out at market levels.
- The interest rates on money loans and deposits are based on market levels. The interest rate conditions of cash and currency deposits are tied to a percentage that is the market rate for similar transactions in the transaction period (floating or fixed).
- External financing - in case of shortage of funds in the economic group, Bulgarian Energy Holding EAD may undertake external financing actions. This is a preferred way to raise funds for the implementation of investment projects. On 7 November 2013, the company successfully placed a bond issue of EUR 500,000,000 with a five-year maturity (November 2018), an annual coupon of 4.250% and a yield of 4.287%. On 21 April 2016, a loan agreement (bridge financing) was signed between Bulgarian Energy Holding EAD, on the one hand, as a borrower, and Banca IMI SPA, London Branch, as initial lender and Chief Arranger, Bank of China (Luxembourg), as initial creditor and chief arranger, JP Morgan Securities plc, as chief arranger and J.P. Morgan Europe Limited as an agent of EUR 535 million. The loan was fully refinanced by the second bond issue on 2 August 2016. The bond issue is 550 million with a five-year maturity (until 2 August 2021) and an annual coupon of 4.875%. The issue was placed on the Irish Stock Exchange again.

As at 31 December, the maturity structure of the Group's financial liabilities based on the agreed undiscounted payments including trade payables, retained guarantees, liabilities to the Decommissioning Fund for nuclear facilities and the Radioactive Waste Fund and other liabilities is presented as follows:

<b>As at 31 December 2017</b>	<b>Carrying amount</b>	<b>Contracted cash flows</b>	<b>6 months or less</b>	<b>6 to 12 months</b>	<b>1 to 5 years</b>	<b>Over 5 years</b>
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Borrowings	2,319,139	2,576,583	63,423	1,140,332	1,372,828	-
Trade and other payables	632,490	619,311	588,789	15,118	15,404	-
Related party payables	1,006,599	1,378,394	192,817	2,970	5,946	1,176,661
	<b>3,958,228</b>	<b>4,574,288</b>	<b>845,029</b>	<b>1,158,420</b>	<b>1,394,178</b>	<b>1,176,661</b>

<b>31 December 2016</b>	<b>Carrying amount</b>	<b>Contracted cash flows</b>	<b>6 months or less</b>	<b>6 to 12 months</b>	<b>1 to 5 years</b>	<b>Over 5 years</b>
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Borrowings	2,429,190	2,783,665	53,378	168,650	2,560,773	864
Trade and other payables	822,631	824,673	772,111	19,586	32,093	883
Related party payables	879,492	1,252,848	61,329	2,972	11,886	1,176,661
	<b>4,131,313</b>	<b>4,861,186</b>	<b>886,818</b>	<b>191,208</b>	<b>2,604,752</b>	<b>1,178,408</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**37.2 Interest rate risk**

The Group is exposed to risk of change in the market interest rates primarily in terms of its financial assets and liabilities with variable (floating) interest rates.

Within the Group's asset structure, the interest-bearing assets are represented by cash, bank deposits and loans, the majority of which are at fixed rates. The Group also has loans granted with a combined structure of the borrowing rates, which contains two components – fixed and variable. The borrowed funds of the Group are in the form of long-term and short-term loans and predominantly have a fixed interest rate. This approach minimizes the likelihood of unfavorable changes in the cash flows.

The table below presents the sensitivity of the annual net financial result after tax and equity to the probable change in interest rates on floating rate loans based on EURIBOR of +/-0.1% (for 2016: +/-0.01%) and based on BIR in Bulgaria, at the rate of +/-0.01% (for 2016: +/-0.01%). These changes are considered probable based on observations of current market conditions. The calculations are based on the change in the average market interest rate and the financial instruments held by the Group at the end of the reporting period that are sensitive to interest rate changes. All other parameters are taken as constant. There is no effect on the other components of the Group's equity.

<b>AS at 31 December 2017</b>	<b>Increase/decrease of the interest rate</b>	<b>Effect on the net financial result</b>	<b>Effect on the equity</b>
	<b>%</b>	<b>BGN '000</b>	<b>BGN '000</b>
Loans, denominated in Euro (EURIBOR)	+0.1%	-90	-90
Loans, denominated in Euro (EURIBOR)	-0.1%	90	90
Loans, denominated in BGN (BIR)	+0.1%	-23	-23
Loans, denominated in BGN (BIR)	-0.1%	23	23

<b>31 December 2016</b>	<b>Increase/decrease of the interest rate</b>	<b>Effect on the net financial result</b>	<b>Effect on the equity</b>
	<b>%</b>	<b>BGN '000</b>	<b>BGN '000</b>
Loans, denominated in Euro (EURIBOR)	+0.1%	(126)	(126)
Loans, denominated in Euro (EURIBOR)	-0.1%	126	126
Loans, denominated in BGN (BIR)	+0.1%	(19)	(19)
Loans, denominated in BGN (BIR)	-0.1%	19	19

**37.3 Currency risk**

The Group carries out purchases, sales, lending and borrowing operations in foreign currencies – Euro, US Dollars, Japanese Yens, British Pounds, Swiss Francs and Macedonian Denars. The majority of these operations are performed in Euro, US Dollars and Japanese Yen. Since the exchange rate of BGN/EUR is fixed at 1.95583, the currency risk arising from the Group's Euro exposures is minimal. The Group makes payments for construction and installation works and deliveries for assets under construction in US Dollars, as well as disburses and repays an investment loan granted by the Japan Bank for International Cooperation (JBIC) in Japanese Yen. In this regard, there is a risk of a change in the exchange rate ratios. Therefore, the Group's exposure is exposed to the risk of changes in the US Dollar and Japanese Yen exchange rate. However, in the event of material fluctuations in the future, the Group may hedge its exposure through derivative instruments, such as foreign exchange swaps.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2017

As at 31 December 2017	Increase in the exchange rate of BGN		Decrease in the exchange rate of BGN	
	Net financial result	Equity	Net financial result	Equity
	BGN '000	BGN '000	BGN '000	BGN '000
USD (+/-4%)	6,099	6,099	(6,099)	(6,099)
JPY (+/-1%)	(344)	(344)	344	344
<b>31 December 2016</b>				
	Increase in the exchange rate of BGN		Decrease in the exchange rate of BGN	
	Net financial result	Equity	Net financial result	Equity
	BGN '000	BGN '000	BGN '000	BGN '000
USD (+/-2.1%)	1,933	1,933	(1,933)	(1,933)
JPY (+/-1%)	(1,194)	(1,194)	1,194	1,194

### 37.4 Credit risk

In carrying out its activities, the Group is exposed to credit risk, which is related to the risk that some of the counterparties will not be able to fully meet their obligations in the usual timeframe. The Group's receivables are presented in the consolidated statement of financial position in net amount after deduction of accrued impairment. Such write-downs are made for receivables where and when events have been identified that identify loss of uncollectability under previous experience. The age structure of unrecovered overdue trade and other receivables is presented in note 22.

In relation to the credit risk of uncollectability of receivables from counterparties, the Group takes the following precautionary measures:

- for commercial and other receivables that are overdue and were not secured upon their origination, deferred payment arrangements are concluded and a collateral of not less than the initially recognized amount of the claim is negotiated;
- for other contracts that are not previously secured, the following ordinary actions are taken in the event of default by the debtor company - offsetting liabilities to the Group against overdue receivables from the debtor, or if the amount of the liabilities is not large enough to cover the claim, then other out-of-court settlement options are sought.

The Group is currently monitoring and analyzing the servicing of the receivables, the reasons for the defaults and the changes in the financial capacity of the debtor companies and the status and quality of the collaterals received.

The Group has a significant concentration of credit risk in respect of the receivables of Toplofikatsia Sofia EAD, which accounted for over 41% of the total net non-current and current receivables. As at 31 December 2017, the carrying amount of receivables from Toplofikatsia Sofia EAD is BGN 579,885 thousand (Note 22.1).

Credit risk arising from other financial assets of the Group, such as cash and other financial assets, is the Group's exposure to credit arising from the possibility of its counterparties not to meet their obligations.

The Group's maximum credit exposure for recognized financial assets amounts to their respective carrying amount in the consolidated statement of financial position at 31 December 2017 (Note 36).

### 37.5 Market risk

Market risk is related to the fact that a change in market prices, such as foreign currency, interest rates or equity instruments, will affect the Group's income from financial instruments. The objective of market risk management is to control market exposure with acceptable parameters in optimizing returns.

The Group undertakes periodic analyses on the macroeconomic environment in the country and an in-depth analysis of specific macro indicators, including information on interest rates to be presented to the Board of Directors. It is

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

responsible for assessing the future risks faced by the Group. In the event of a deterioration in market conditions, hedging instruments may be used.

### 37.6 Regulatory risk

Regulatory risk is determined by the specificity of the activity. According to Art. 30, para. 1 of the Energy Act, the following prices are subject to regulation by the Energy and Water Regulatory Commission (EWRC) :

- at which the producers, within the limits of the availability set by the Commission under Art. 21, para. 1, item 21 sell electricity to the public supplier;
- at which producers sell heat to the heat transmission plant and to directly connected customers;
- at which the heat transfer company sells heat to customers;
- at which the public utility sells electricity to the transmission and distribution system operators to cover transmission technology costs;
- at which the public supplier sells to the end suppliers the energy purchased on the grounds of Art. 21, para. 1, item 21 of the Energy Act;
- at which the public supplier sells natural gas to end suppliers of natural gas and customers connected to a gas transmission network;
- at which end suppliers sell natural gas to customers connected to the respective gas distribution networks;
- at which end suppliers sell electricity to residential and non-residential end customers for sites connected to a power distribution network at a low voltage level;
- for access and / or transmission through the transmission grid;
- to connect to the grids;
- for access and transmission of natural gas through transmission and / or distribution networks, except when the Commission, at its discretion, approves a methodology for setting the price for access and transmission over a transmission network;
- for access and / or transmission through electricity distribution networks;
- for access and storage of natural gas in a storage facility;
- for the distribution of traction electric energy on the distribution networks of the railway transport;
- the services provided to the clients, determined by the Commission, related to the licensing activity.
- including the price or price component through which all end customers connected to the electricity system, including the transmission system operator and the electricity distribution system operators, participate in the compensation of the costs under Art. 34 and Art. 35.

Price regulation has a significant impact on revenue, expense, and hence on the overall economic and financial position of the Group.

### 37.7 Cash flow risk

The cash flow risk depends on fluctuations in the amount of future cash flows associated with a monetary financial instrument. The Group carries out its cash flow planning, and floating rate financial instruments are short-lived in less than one year.

### 37.8 Credit rating

- *Rating agency Moody`s*

On 24 August 2017, the international rating agency Moody`s confirmed the long-term credit rating of Ba1 with a stable outlook for Bulgarian Energy Holding EAD and Ba2 of the unsecured bonds of the company maturing in 2021.

On 14 December 2017, Moody`s published a commentary on the amendments to the Energy Act, namely the January 2018 mandatory supply of electricity from producers with more than 5 MW of installed capacity on the platforms of the power exchange, in terms of the quantities they realize on the free market. The rating agency notes this as a positive development for the country's energy market.

- *Rating agency Fitch Ratings*

On 27 November 2017, Fitch Ratings, the international rating agency, published a draft revised Government Rating Criteria rating. On 1 December 2017, Fitch Ratings raised Bulgaria's credit from 'BBB-' with a positive outlook to 'BBB' with a stable outlook.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

As a result of the above events, on 13 December 2017, Fitch Ratings upgraded the outlook for the rating of Bulgarian Energy Holding EAD from “stable” to “positive”. Following the approval and publication of the revised criteria on 7 February 2018, the rating agency upgraded the rating of Bulgarian Energy Holding EAD from BB- to BB on 14 February and set a stable outlook based on both the new methodology and the improvement in the company's standalone credit profile as a result of financial recovery and a higher predictability of results, and the publication of new rating criteria for state-owned companies.

In determining the ratings, both rating agencies take into account the important position of the Group of Electricity and Natural Gas Markets in Bulgaria and the fact that Bulgarian Energy Holding EAD is 100% state-owned. Fitch Ratings and Moody's expect the state to support Bulgarian Energy Holding EAD in case of potential liquidity difficulties.

As of 31 December 2017, the Group fulfills the requirements of the bond issue the EBITDA/financial expense coverage to be more than 4:1, as well as the requirements for the net Debt/EBITDA ratio to be less than 4.5:1

**38. Fair value measurement**

The management of the Group considers that the fair values of financial instruments that include cash and short-term deposits, trade and other receivables, loans and borrowings, trade and other payables do not differ materially from their carrying amounts due to their maturity structure and interest rates.

The Group classifies assets and liabilities at fair value into three levels based on the significance of the inputs used in determining the fair value of financial assets and liabilities. The hierarchy of fair value includes the following levels:

- Level 1: quoted prices (unadjusted) on active markets for identical assets or liabilities;
- Level 2: Input other than quoted prices included in Level 1 that can be monitored in respect of an asset or liability either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: Input for an asset or liability that is not based on observable market data.

An asset or liability is classified to the lowest level of significant input used to determine its fair value.

**38.1 Fair value measurement of financial instruments**

Financial assets and liabilities measured at fair value in the consolidated statement of financial position are grouped into the following categories according to the fair value hierarchy. For more information on exchange traded shares, see note 25.

	Level 1	
	2017	2016
	BGN '000	BGN '000
<b>Assets</b>		
Exchange traded shares	976	765

The valuation techniques and techniques used in determining fair value have not changed compared to the previous reporting period. The Group owns 6,041 shares of Transgaz SA, Romania, which are traded on the Romanian Stock Exchange. The investment is classified as a financial asset available for sale and is presented in BGN. The fair values at 31 December 2017 and 31 December 2016 were determined on the basis of published quotes on active market prices.

**38.2 Fair value measurement of non-financial assets**

The following table presents the levels of the non-financial asset hierarchy at 31 December that are periodically measured at fair value:

	2017	2016
	BGN '000	BGN '000
Property, Plant and Equipment (Level 3)	9,780,123	10,315,794
Investment properties (level 2)	-	520
	<b>9,780,123</b>	<b>10,316,314</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

The fair value of the Group's main property, plant and equipment is determined on the basis of reports from independent licensed valuers (see note 19). The table presents the carrying amount of the assets for which the fair value model was selected.

### 39. Capital management policies and procedures

The policy of the Board of Directors is to maintain a strong capital base so as to maintain the trust of clients, creditors and the market as a whole, and to provide the conditions for business development in the future. The objective of the management is to maintain a balance between the higher returns that may be possible with levels of indebtedness and the benefits and security of a strong capital position. The Group's objective is to achieve a return on equity of more than 5%. As of 31 December 2017, the return on equity is 1.05%, (As at 31 December 2016: (0.69%)). There were no changes in the management of the Group's capital during the year.

### 40. Commitments and contingent liabilities

#### 40.1 Proceedings of the European Commission against Bulgarian Energy Holding EAD and its subsidiaries

Against Bulgarian Energy Holding EAD and its subsidiaries two proceedings were initiated by the European Commission for possible abuse of a dominant position - Case AT.39767 - BEH electricity and Case AT.39849 - BEH gas.

##### *Case COMP/B1/AT.39767 BEH Electricity*

The case concerns a possible infringement of Art. 102 of the Treaty on the Functioning of the European Union (TFEU) in connection with the inclusion of territorial restrictions in the supply contracts concluded by subsidiaries of Bulgarian Energy Holding EAD - National Electricity Company EAD, NPP Kozloduy EAD and TPP Maritsa East 2 EAD, on the market for the wholesale supply of electricity in Bulgaria during the period from September 2008 to March 2013.

The proceedings were initiated in 2012 with a view to the adoption of a decision under Chapter 3 (Articles 7 to 10) of Council Regulation (EC) No.1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty Establishing the European Community (Articles 101 and 102 of TFEU). On 12 August 2014, the EC issued a Statement of Objections setting out its concerns about the breach of competition rules within the EU internal market by the BEH Group.

By Decision C (2015) 8860 of 10 December 2015 on Case AT.39767 BEH-Electricity, the EC established as legally binding the Commitments for a period of five years in which (1) the companies of BEH Group - NEK EAD, TPP Maritsa East 2 EAD and NPP Kozloduy EAD are obliged to offer certain quantities of electricity at a certain price to IBEX EAD from the start date of Day-ahead market operations (2) a Monitoring Trustee is appointed to monitor the compliance with the Commitments related to the liquidity and functionality of the Exchange and to monitor the separation of IBEX EAD from the structure of BEH EAD.

By Decision C (2016) 2246 of the European Commission dated 12 April 2016, the EC approved a Monitoring Trustee - ADVOLIS, to supervise the current management of Independent Bulgarian Energy Exchange EAD and the operation of the day-ahead market platform under the terms and conditions attached to the EC Decision. On 22 April 2016, a Monitoring Trustee Mandate was entered into by and between Bulgarian Energy Holding EAD and ADVOLIS.

Pursuant to the Commitments, Bulgarian Energy Holding EAD undertakes to separate the Independent Bulgarian Energy Exchange EAD from its structure and to transfer ownership of the company's capital to the Ministry of Finance. The deadline for the transfer of the ownership of Independent Bulgarian Energy Exchange EAD was extended several times by the EC until 31 January 2018.

By Decision C (2018) 572 of 26.01.2018 the EC approved Bulgarian Stock Exchange-Sofia AD as a suitable buyer of IBEX EAD. Bulgarian Stock Exchange-Sofia AD is a public company in which the state owns 50.05% of the capital through the Ministry of Finance. The change of ownership of the capital of Independent Bulgarian Energy Exchange EAD was registered in the Commercial Register on 15 February 2018.

In the period from the establishment of Independent Bulgarian Energy Exchange EAD until the moment of transfer of its ownership to the Bulgarian Stock Exchange - Sofia EAD, BEH EAD invested significant efforts and resources for the start-up and efficient operation of power exchange in the country.

At the beginning of 2016, Independent Bulgarian Energy Exchange EAD launched the day-ahead market. The day-ahead market liquidity has been progressively increasing as a result of the Commitments of the Group to the EC, and on the other hand, the interest of other market participants.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

At the end of October 2016, Independent Bulgarian Energy Exchange EAD launched a platform for concluding transactions for the purchase and sale of electricity through bilateral contracts via the Auction screen and thus expanded the opportunities for trading on the energy exchange, as well as the traded products offered.

In 2017 Independent Bulgarian Energy Exchange EAD worked hard to launch a new market segment - the intraday market. The real intraday trading started in April 2018. It is expected that trading on this market segment will significantly reduce the costs for balancing of the market participants.

The aim is to integrate the Bulgarian day-ahead market with the European one as per the Price Coupling of the Regions mechanism, adopted at European level.

*Case COMP/B1/AT.39849 - BEH gas*

The case concerns a possible infringement of Art. 102 of the Treaty on the Functioning of the European Union (TFEU) in relation to alleged actions of BEH EAD and its subsidiaries – Bulgargaz EAD and Bulgartransgaz EAD – aimed at:

- preventing their competitors from gaining access to key gas infrastructure (gas transmission network and natural gas storage facility) in Bulgaria, explicitly or implicitly denying access to third parties or causing delays;
- preventing competitors from gaining access to an import main pipeline by reserving capacity which remains unused.

The proceedings were initiated in 2013 with a view to the adoption of a decision under Chapter 3 (Articles 7 to 10) of Regulation 1/2003.

On 23 March 2015, the EC issued a Statement of Objections. Bulgarian Energy Holding EAD and its gas subsidiaries submitted their respective responses to the European Commission on 9 July 2015 (Bulgargaz EAD), 10 July 2015 (Bulgarian Energy Holding EAD) and 17 July 2015 (Bulgartransgaz EAD).

With a view to avoiding a fine and/or coercive and/or structural measures, as well as the risk of claiming damages, in the event of a finding of infringement by the EC, Bulgarian Energy Holding EAD submitted to the EC proposals for commitments equivalent to the measures, which the EC plans to impose on Bulgarian Energy Holding EAD in a prohibition decision.

On 24 November 2017, the National Assembly of the Republic of Bulgaria decided to take the necessary actions for the termination of Case COMP/B1/AT.39849 - BEH Gas, and supports the termination of the case under Art. (7) of Regulation (EC) No 1/2003 without acknowledging the alleged violations and without assuming responsibility for them, by fulfilling the obligations arising from a possible prohibition decision, the National Assembly decided to take all necessary action to protect the interests of the Republic Bulgaria and the companies: Bulgarian Energy Holding EAD, Bulgargaz EAD and Bulgartransgaz EAD, including actions for appeal against a possible prohibition by the EC in connection with the termination of Case COMP/B1/AT.39849 - BEH Gas.

As of the date of preparation of these consolidated financial statements, the EC has not taken a formal decision to terminate the BEH Gas case and a decision on the possible amount of a financial sanction for Bulgarian Energy Holding EAD and its subsidiaries Bulgargaz EAD and Bulgartransgaz EAD. The management of the Group has analyzed and evaluated the available information on the possible outcome of the BEH Gas Case and is unable to reliably measure the potential or expected effects on the outcome of the case.

**40.2 Capital commitments***NPP Kozloduy EAD and its subsidiaries*

As at 31 December 2017, the Group has capital commitments for BGN 64,184 thousand (31 December 2016: BGN 74,196 thousand), which are related to the acquisition of property, plant and equipment.

The amount of the nuclear fuel acquisition commitments as at 31 December 2017 is BGN 140,522 thousand (31 December 2016: BGN 133,467 thousand).

*TPP Maritsa East 2 EAD and its subsidiaries*

According to the requirements of the European directives, the national norms and the Complex permit, as well as in connection with the implementation of the projects included in the National Investment Plan for the period 2013 - 2020, the Group is obliged to build and put into operation ecological assets.

As at 31 December 2017, the Group has capital commitments amounting to BGN 106 197 thousand related to the full engineering of low emission burners of KA9 to 12; complete engineering of a gas-fired installation of KA-1 to

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

10; increasing the level of desulphurization of FGD 7 and 8 under the Best Available Techniques Directive; supply of spare parts for the CA-9 to CA-12; delivery, disassembly, installation and commissioning of a transformer; extension and processing of existing fire alarm and fire extinguishing installations; replacement of operator stations, servers, controllers and software for management of fire protection systems 7/8, replacement of LPG and conveyor reducers; reconstruction and modernization of pumps; rehabilitation and extension of submarine channels of 2CF-1, 2 and 3; average repairs of blocks 1 to 6; major overhaul of block 8.

*Electricity System Operator EAD*

In 2017, ESO EAD entered into contracts under the Public Procurement Act and the Ordinance on small public procurement for asset repairs and ongoing maintenance of the assets of the company, under which contractual obligations for 2018 arose amounted to BGN 72,679 thousand.

*Bulgartransgaz EAD*

In accordance with the requirements of Directive 2009/29/EC and Commission Communication (2011/C99/03) on the feasibility of applying Article 10c of Directive 2003/87/EC, the Ministry of Energy has prepared a National Investment Plan with investment projects included.

Taking into account the requirements, Bulgartransgaz EAD has applied for and is included in the NIP. The projects for modernization of 4 compressor stations KS Ihtiman, KS Lozenets, KS Petrich and KS Strandzha are approved for financing by the National Investment Plan Account, given the fact that the implementation of these projects is expected to reduce CO<sub>2</sub> emissions, released into the atmospheric air by the above-mentioned compressor stations by about 15%.

Up to now, with orders No.E-RD-16-600 dated 09 December 2016, No.E-RD-16-599 dated 09 December 2016 and No.E-RD-16-885 dated 15 December 2017 of the Minister of Energy Bulgartransgaz EAD has reimbursed expenses from the National Investment Plan account for Ihtiman, amounting to BGN 12,792 thousand, for Petrich in the amount of BGN 12,792 thousand and for Lozenets at the amount of BGN 25,583 thousand, representing the full amount of the funds provided from the NIP, determined in accordance with the adjusted value of the investment due to a change in the greenhouse gas reference value under Order No.RD -16-1101 dated 23 August 2012 of the Minister of Economy and Energy.

By Order No.E-RD-16-886/15.12.2017 of the Minister of Energy the costs of the implementation of the project "Strandzha" are partially reimbursed, amounting to BGN 22,241 thousand. The funds up to the full amount of the financial grant amounting to BGN 30,700 thousand are expected to be reimbursed.

*Mini Maritsa Iztok EAD*

Regarding the implementation of the investment program, as at 31 December 2017, the company signed contracts for the construction, supply and installation of machines and equipment in the amount of BGN 23,403 thousand.

*NEK EAD***Project NPP Belene**

In connection with the NPP Belene project, on 29 November 2006 the company signed an agreement for the construction of the NPP Belene with ZAO Atomstroyexport as a project contractor and on 31 January 2005 with WorlayParsons as an architect engineer for the project. On 29 March 2012, the Government of the Republic of Bulgaria decided to terminate the construction of the Nuclear Power Station on the Belene site. By decision of 27 February 2013, the 41st National Assembly supported the Government's decision to suspend the construction of a new nuclear power plant at the Belene site and insisted on its final winding-up. By decision of the Board of Directors of BEH EAD dated 03.10.2013 it was found that the contract with WorlayParsons was rightfully terminated due to termination of the project in 2012 and impossibility for execution had been established.

The company has accepted to account for all amounts (paid and accounted for) directly related to the discontinued NPP Belene project in accordance with the criteria for recognition of IAS 16, consistent with a consistent policy, such as property and equipment under construction until the final decision on the future of the project. At present there is uncertainty about possible alternatives for the implementation of the project or the equipment, a considerable amount of time is needed to agree, negotiate and approve possible options that is not entirely under the control of the management of the company and it is not in a position to make an assessment on possible reclassification of reported amounts under IFRSs and on their valuation.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**Investment projects of NEK EAD**

NEK EAD's investment activity plan is mainly focused on rehabilitation, reconstruction and new construction of hydropower projects and includes the following major directions and capital objects:

*1. Project "Yadenitsa"*

The project is included in the National Investment Plan (NIP) for the period 2013-2020 by a decision of the Council of Ministers of the Republic of Bulgaria dated 28.09.2011, in connection with the application of the Republic of Bulgaria for a derogation under Article 10c of Directive 2003/87/European Commission (EC). With Decision № 707 dated 30 August 2012 of the Council of Ministers of the Republic of Bulgaria, Yadenitsa Dam, which is the main facility of the Yadenitsa Project, was declared a "national site" within the meaning of the State Property Act, as well as "a site with national significance" within the meaning of the Spatial Development Act.

The Yadenitsa Project has funding provided for preparatory work (procedures to obtain Building Permit) from the European Union Connecting Europe Facility.

On 24 April 2015, the grant agreement signed between NEK EAD and the Executive Agency "Innovations and Networks" to the European Commission entered into force, according to which the funds allocated to NEK EAD are in the amount of EUR 3,213 thousand. These funds will cover 50% of the costs of renewal of the environmental impact assessment (EIA), design and obtaining a construction permit of Yadenitsa dam. The remaining 50% of the funding are the company's own funds.

All necessary preliminary activities needed to obtain a construction permit are awarded under the agreement. As at the date of preparation of the consolidated financial statements, NEK EAD has an EIA decision, an updated detailed design - agreed with the competent authorities, a positive compliance report on construction, financial analysis and risk assessment, technical specifications for the construction contract, DSP developed - in process of approval, complex report for compliance assessment of the detailed design - in preparation.

*2. Rehabilitation of the Belmeken - Sestrimo - Chaira Hydroelectric Complex and rehabilitation of the 110 kv CHP of Vacha - 1 HPP and part of the HPP systems under common control*

For the rehabilitation of the Belmeken-Sestrimo-Chaira Hydroelectric Complex on 6 December 2013, Grant Agreement No. 049 was signed between the European Bank for Reconstruction and Development (EBRD or the Bank) as Administrator of the International Decommissioning Assistance Fund for NPP Kozloduy (IFC / KIDSF) and National Electricity Company EAD. On 28 May 2014 Grant Agreement No 049A (GA049A) was amended due to the unbundling of NEK EAD and Electricity System Operator EAD.

The total expected value of the project is EUR 37 million, with 70% financed by KIDSF and 30% own funds.

**Obligations of NEK EAD in connection with the development of the energy sector**

In connection with the modernization of Unit V and VI of NPP Kozloduy EAD, on 29 May 2000, a loan agreement was signed between NPP Kozloduy EAD as the Borrower, the National Electricity Company EAD as Guarantor and the European Atomic Energy Community (EURATOM) as Lender for a loan amounting to EUR 212.5 million to finance the Program for the Modernization of Energy Units. Pursuant to clause 15.2 of this contract, NEK EAD together with NPP Kozloduy EAD is responsible as the sole principal debtor. On the same date, a Guarantee Agreement between the Republic of Bulgaria as Guarantor and the European Atomic Energy Community as a Lessor (EURATOM) was signed, whereby the state also guaranteed repayment of the loan. Both Agreements were ratified by a law of the 38th National Assembly of the Republic of Bulgaria on 29 November 2000. The loan was granted in 8 tranches with variable interest rate of six-month EURIBOR with a surcharge of up to 0.13% and one of the tranches has a fixed interest rate of 5.76%. The repayment period of the principal on the loan in each tranche is different. The repayment deadline is 10 May 2021. The loan is fully utilized and is settled in accordance with the arrangements reached. The repayable portion of the EURATOM loan at 31 December 2017 amounted to BGN 105,004 thousand (principal).

**Long-term Power Purchase Agreements (PPAs)**

- *PPA with AES - 3C Maritsa East 1 EOOD (AES)*

On 13 June 2001, NEK EAD concluded a long-term contract with Consolidated Continental Commerce Limited, currently A&S-3C Maritsa East 1 EOOD (AES) for construction and operation of 670 MW of replacement capacity at the TPP Maritsa East 1 site of locally extracted lignite. NEK EAD concluded a long-term 15-year power purchase agreement that was phased in on the commissioning of the new power plant on June 2, 2011 and on AES Galabovo reaching a total net capacity of 600 MW as of 28 December 2011. On 14 August 2015 an agreement was concluded

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

for the reduction of the availability price by 14%, which came into force on 26 April 2016, after the repayment of NEK's obligations to the plant.

Pursuant to a special pledge contract dated 30 November 2005 and an amendment to the special pledge contract dated 26 April 2016, NEK EAD pledged its receivables from EVN Bulgaria EAD and Energo-Pro Sales AD for sold electricity as a guarantee against the future obligations for the purchase of electricity. The amount of pledged claims is equal to the expected maximum total payment for electricity purchased for any month of the calendar year.

Pursuant to the PPA NEK EAD is obliged to buy a minimum quantity of 3,156,500 MWh of electricity per calendar year (or a proportional quantity for an incomplete calendar year) and the commercially agreed availability.

- *PPA with ContourGlobal Maritsa East 3 EAD*

On 13 June 2001, a long-term 15-year power purchase agreement between NEK EAD and Maritsa East 3 Power Company AD, now ContourGlobal Maritsa East 3 EAD, was concluded. The PPA entered into force in February 2009 upon completion of the agreed rehabilitation activities for the modernization of the existing TPP Maritsa East 3, after which the installed capacity is 808 MW.

On 07 March 2016 an agreement for reduction of the availability price by 15% was concluded which came in force on 26 April 2016, after the repayment of NEK's obligations to the plant.

Pursuant to the special pledge contract dated 1 February 2002 and the last agreement for amendment of the special pledge contract dated 26 April 2016, NEK EAD pledged its receivables from CEZ Electro Bulgaria AD and Energo-Pro Sales AD for electricity sold as a guarantee against future obligations to purchase electricity. The amount of pledged claims is equal to 1.25 times the expected maximum total payment for the purchased electricity for any month during the calendar year.

In compliance with the PPA, NEK EAD issues annually promissory notes in favor of ContourGlobal Maritsa East 3 AD. Pursuant to the PPA NEK EAD is obliged to buy a minimum quantity of 3,489,000 MWh of electricity per calendar year (or a proportional quantity in an incomplete calendar year) and the basic availability.

The table below shows the obligations of NEK EAD regarding the minimum payments for purchased electricity and availability for the remaining term of the two PPAs with the thermal power plants.

	<b>Total minimum amount due</b>
	<b>BGN '000</b>
Minimum payments due for purchased availability *	4,277,329
Minimum payments for purchased electricity **	3,490,710
<b>Total</b>	<b>7,768,039</b>

\* The amount stated is the minimum due under the long-term power purchase contracts and is formed on the basis of fixed pricing elements and fixed escalation items.

\*\* The amount is calculated based on the price per unit of electricity for the month December 2017.

The minimum payments for purchased availability from the thermal power plants under the two long-term power purchase agreements are as follows:

	<b>Up to 1 year</b>	<b>From 1 to 5 years</b>	<b>Over 5 years</b>	<b>Total</b>
	<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>	<b>BGN '000</b>
Minimum payments due for purchased availability	550,644	2,204,408	1,522,277	4,277,329

In 2017, NEK EAD purchased a net electricity of 4,158 GWh from ContourGlobal Maritsa East 3 AD, which is greater than the minimum take-or-pay quantity of 3,489 GWh under the PPAs.

From AES Maritsa East 1 3,100 GWh of net electricity was purchased, which is below the minimum take-or-pay quantity of 3,156 GWh.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2017

- *PPA with producers of electricity from renewable energy sources*

As required by the Renewable Energy Act, NEK EAD in its capacity of public supplier, was required until 24 July 2015 to purchase the entire quantity of electricity produced from renewable or alternative energy sources, with the exception of electricity produced from hydro power plants with an installed capacity of over 10 MW. With the amendment of Art. 31(5) of the same act, the public supplier and the end suppliers, respectively, shall purchase the electricity generation from renewable sources at a preferential price for amounts of electricity up to the amount of the net specific generation of electricity which is taken into account when calculating the preferential prices in the relevant decisions of EWRC. The amounts of electricity in excess of the net specific generation are purchased at a price of surplus on the balancing market or as stipulated in Art. 31(12) and may be sold on the free market. The mandatory purchase of electricity is carried out under electricity purchase contracts. In compliance with the Renewable Energy Act, as amended on 3 May 2011, the duration of the contracts shall be 20 years for electricity produced from geothermal and solar energy and for electricity produced from biomass, 12 years for electricity produced from wind energy and 15 years for electricity produced from hydro power plants with an installed capacity of up to 10 MW and for electricity produced from other types of renewable energy sources. The time limits for mandatory purchase shall commence on the date of commissioning of the respective power facility and for power facilities commissioned after 31 December 2015 – the time limits shall be reduced by the time between that date and the date of commissioning of the respective power facility.

As of 31 December 2017 the company concluded the following long-term power purchase agreement with RES producers commissioned and connected to the grid:

- Wind power plants: total installed capacity 357,50 MW. The contracts are concluded in the period 2008 - 2013 and have a term of 12 or 15 years, according to the Law On Renewable Energy;
- Photovoltaic power plants: total installed capacity of 259.44 MW. (as of 1 January 2017 the contract with Lukoil Energy and Gas EOOD with capacity 1,25 MW has been terminated by mutual agreement).

The PPAs are concluded in the period 2011-2012 with a term of 20 years.

- Biomass power plants: a total installed capacity of 20.4 MW. The PPAs were concluded in 2009-2012 for a period of 20 years;
- Hydroelectric power plants: a total installed capacity of 49.84 MW. The PPAs were concluded in 2009-2013 for a period of 15 years.

Due to the nature of electricity generation from renewable sources and the uncertainty of total generation, NEK EAD cannot make a reliable estimate of future minimum payments in respect of the PPAs with RES producers.

As of 1 July 2018, in connection with the forthcoming liberalization of the electricity market in Bulgaria, a package of amendments to the Energy Act, promulgated in State Gazette issue 38 dated 8 May 2018, will gradually release NEK EAD from its obligation to buy electricity from RES generators with a total installed capacity of 4 MW and over 4 MW.

According to the amendment to the Energy Act, the producers from renewable sources and from highly-efficient cogeneration of electricity and heat with a total installed capacity of 4 MW and over 4 MW are obliged to sell the electricity produced by them on the power exchange market:

- For the quantities of electricity produced from renewable sources up to the net specific electricity production on the basis of which the preferential price was determined; from plants with a total installed capacity of 4 MW and above 4 MW, producers will be compensated by a premium as the difference between their preferential price and the estimated market price determined by the regulatory authority;
- For the quantities of electricity produced in a highly efficient way by plants with a total installed capacity of 4 MW and above 4 MW up to the amount determined by a decision of the EWRC for approving preferential prices, the producers will be compensated with a premium as the difference between the determined preferential prices for electricity from high-efficiency combined generation of the producer and the estimated by EWRC market price of electricity;
- An opportunity is provided for these producers to sell their electricity on the power exchange market through the balancing group coordinator;
- The premiums will be determined annually by the EWRC by 30 June;
- The premium is paid by the Security of the electricity system fund on the basis of a contract, from which moment the PPA concluded between the respective producer and the public supplier NEK EAD, respectively the end supplier, is considered terminated;
- A transition period is foreseen to conclude a contract for compensation with the Fund from 1 July 2018 to 31 December 2018. During this period, electricity is purchased under the current model by the end

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

suppliers and the public supplier. For the electricity purchased by each generator, the public supplier will receive compensation from the Security of the electricity system Fund at the amount of the premium for that producer.

- If necessary, the regulator may modify the defined premiums but not more frequently than once every 6 months, provided that there is a material change between the estimated baseline market price for that period compared to the price achieved and the estimated one for the remaining period on the power exchange market.

**40.3 Contingent liabilities**

***Material Lawsuits and Claims***

***National Electricity Company EAD***

**WorlayParsons Nuclear Services (WPNS)**

An arbitration case was filed against NEK EAD at the Arbitration Court at the International Chamber of Commerce, Paris, on an application filed by WorlayParsons Nuclear Services EAD which claims a total of EUR 54,372 thousand (BGN 106,342 thousand) - remunerations and penalties under a contract. In response to the request for arbitration, NEK EAD challenged all claims. On 31 August 2016, the plaintiff filed his full application, containing his extensive observations on the claims, together with the supporting evidence and the requests for evidence from NEK EAD.

Within the deadline of 31 October 2016, NEK EAD filed a full response, together with evidence and requests for evidence from the claimant. On 2 December, the plaintiff filed a reply to the respondent's reply and on 6 January 2017 NEK EAD filed a reply to the plaintiff's reply.

The first meeting of the arbitration tribunal was held on 7/8 and 9 June 2017. After the hearing of the witnesses on the facts as well as the legal and accounting experts, the case was proceeded on the merits. Arbitration court ruling could be expected by the end of the first half of 2018. Due to the complexity of arbitration proceedings, the outcome cannot be reliably estimated.

**OET United Energy Traders**

OET United Energy Traders filed a claim in the amount of BGN 10,853 thousand related to Art. 55, para 1 of CPA - repayment of sums not paid by OET, which are a surcharge for green energy and a surcharge for highly- efficient cogeneration. By Decision No.1413 of 19 June 2017 under No.2776/2016 the National Electricity Company EAD and the Electricity System Operator EAD were ordered to pay in the conditions of solidarity to OET-United energy traders Ltd. the total amount of BGN 10,097 thousand, without VAT, which is the sum of the undue paid "surcharges" to the transmission price - for green energy and for energy from highly- efficient cogeneration, along with the legal interest for delay on the principal from the date of the application - 18 July 2013 until the final payment, as well as the amount of BGN 276 thousand constituent a delay compensation for the period 10 April 2013 until 18 July 2013.

The decision of the Sofia Court of Appeal was appealed to the Supreme Court of Cassation (SCC) by NEK EAD and ESO EAD. A writ of execution was issued against NEK EAD and ESO EAD, with order No.321 of 27 June 2017 under tariff code 1503/2017 according to the inventory of the Supreme Court of Cassation, Commercial College, I Trade Chamber was ordered to suspend the execution of the Appellate Decision No.1413 of 19 June 2017 under commercial case No.2776/2016 of the Sofia Court of Appeal pursuant to Article 282, paragraph 2 of the CCP. The cessation of proceedings is the result of a guarantee provided by ESO EAD to an account of the SCC (sum equal to the principal amount of the conviction).

A security was granted in the case and a deposit was imposed on a bank account of NEK EAD at CCB for the amount of BGN 7,142 thousand and a deposit was transferred to a bank account of the private enforcement agent Miladin Miladinov in the amount of BGN 7,873 thousand. The outcome of the case is not expected to have a significant effect on the Group cash outflows and financial results because a substantial portion of the claim is blocked cash.

The management of the company has decided not to recognize provisions for litigation until a final decision on the case.

***Toplofikatsia Sofia EAD***

Toplofikatsia Sofia EAD filed four claims with a total amount of BGN 40,626 thousand. The claims claim an unpaid share of principals, interest on invoices for supplied electricity, compensation for the use of facilities.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

NEK EAD filed a counter claim with a claim price of BGN 13,864 thousand on invoices issued between February 2014 and November 2014 for the quantities of electricity generated by turbine generator No 9 (TG 9), which was unlawfully invoiced to NEK EAD. On the basis of the counter-claim, a separate case was initiated - No. 5152/2016 of the Sofia City Court, where a decision has been issued, and NEK EAD's claim is granted. The decision is subject to appeal.

In connection with the court actions, NEK EAD has a disagreement on the commercial obligations amounting to BGN 22,129 thousand.

The outcome of these claims is not expected to have a significant effect on cash outflows and financial results as a significant portion of the claims are included in the financial statements.

As of 31.12.2017 other legal claims were filed with the company on different legal grounds: for balancing energy, for delayed payments, for offset amounts and for compensatory payments. These claims are either pending or in the process of being appealed. Due to this circumstance, with the exception of the amounts accrued for deferred and overdue payments, the management of the company has decided not to charge additional provisions for litigation.

*NPP Kozloduy EAD and its subsidiaries*

A writ of execution № 41 dated 29 March 2016 was issued against a subsidiary Interpriborservice OOD. No.39/2013 on the inventory of the Vratsa District Court for the amount of BGN 25,050 - a partial principal representing the share of the applicant's share of the assets of the defendant company, together with the statutory interest on the sum as of the lodging of the claim until the final payment, amounting to BGN 119,767.26 - interest on principal delays of BGN 864,714.25 and BGN 11,833 - awarded business expenses. The total amount due is BGN 156,650.26. On the basis of a petition filed with Invoice No.4265 dated 28 May 2015 of Energoservice AD, proceedings were filed under Commercial Case No 43/2015 on the inventory of the Regional Court - Vratsa. The amount of the claim is BGN 839,664.25 and represents the remainder of the value of the share of Energoservice AD in the capital of Interpriborservice OOD, according to a balance sheet as of 30 June 2010.

The District Court of Vratsa by Decision No.19 dated 8 March 2016 ordered Interpriservice Ltd to pay to Energoservice AD BGN 839,664.25 together with the legal interest on this amount from 28 May 2015 to the final payment and the amount of BGN 64,626.57 for that court.

The decision of Vratsa District Court was fully appealed within the statutory time limit, by way of an appeal to the Sofia Court of Appeal, in which Interpriborservice OOD requested that the contested decision be invalidated as inadmissible and ordered by an irrevocable application. A proceeding was opened under case No.1978/2016 on the inventory of the Sofia Court of Appeal and Decision No.940 dated 24 April 2017 was issued which ordered Interpriborservice OOD to pay the amount of BGN 30,876. The decision was appealed before the Supreme Court of Cassation by the Cassation Court with a cassation appeal file No.11022 dated 20 June 2017. On the occasion of the cassation complaint of Interpriborservice OOD against the decision of Sofia Court of Appeal in the case with Energoservice, the tender procedure No.2454/2017 was initiated on the inventory of the Supreme Court of Cassation, TK, i. By order of 14 March 2018 the Supreme Court of Cassation suspended the proceedings in pending case No.2454/2017, filed in the cassation appeal of Interpriborservice OOD against the decision of the Sofia Court of Appeal until the termination of Interpretative Case No.2/2016 of the Supreme Court of Cassation, in which issues of major importance for the case are concerned.

There are other legal claims against NPP Kozloduy and its subsidiaries amounting to BGN 1,676 thousand (31 December 2016: BGN 239 thousand).

*TPP Maritsa East 2 EAD and its subsidiaries*

As of 31 December 2017 against TPP Maritsa East 2 EAD and its subsidiaries, no significant legal claims were filed, with the exception of an action before an Arbitration Court by a contractor in connection with a contract concluded by TPP Maritsa East 2 EAD. The value of the claim amounts to BGN 3,092 thousand. In 2017, TPP Maritsa East 2 EAD was convicted and paid an amount of BGN 3,482 thousand. The management of the Group, based on the available facts and information and a legal analysis, considers that there are sufficient legal grounds for the annulment of this decision, as a result of which the decision of the Arbitration Court was appealed to the Supreme Court of Cassation.

**Corporate Commercial Bank AD (i)**

By Decision № 2310 dated 6 December 2017 of Sofia City Court (SCC), VI-5 panel ,commercial division declared void in relation to the bankruptcy creditors of CCB (i) a statement for deduction ent. No.10330 dated 31 October

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

2014 between the amount of EUR 4,256,244, 59 from Mini Maritsa Iztok EAD resulting from the Framework Agreement between CCB AD and Bulgarian Energy Holding EAD and the receivables of CCB AD to Mini Maritsa Iztok EAD under Investment Loan Agreement No.318/29 September 2010. The receivable of Mini Maritsa Iztok EAD was acquired in accordance with a cession contract dated 30 October 2014 between Bulgarian Energy Holding EAD and Mini Maritsa Iztok EAD.

The decision was appealed within the statutory term before the Sofia Court of Appeal, and on the appeal commercial case No.606/2018 was filed. On the inventory of the AC. For the appeal to the AC - Sofia, on the grounds of Art. 59, para 7 of the LBN, the company is exempted from payment of a state fee and at the date of compilation of the annual report it is not required.

By Decision No.407 of 23 February 2018 in case No.1505/2017, Sofia City Court rejected the claims brought by Corporate Commercial Bank (in insolvency) against TPP Maritsa East 2 under Art. 26, para. 2, Art. 59, para. 2 of the Bank Insolvency Act, Article 59, para. 5 and para. 3 of the Bank Insolvency Act for the invalidation of offsetting requests with reg No. 10058 / 29 October 2014 and reg. No.10400/31 October 2014 due to non-compliance with the form and eventually for their being declared invalid against creditors of the insolvent debtor on relative grounds due to the insolvency date and the knowledge of insolvency at the time of acquisition of the receivable and the obligation subject to the set-off.

The Group has conducted an analysis of the facts and circumstances available to both parties and the case law of similar cases and concluded that the case law at this stage is arbitrary and inconsistent. Therefore, no reclassification of the creditor was made and no potential losses that could arise in case of unfavorable development of the Group case were recognized.

***Other******Balances with Irrigation Systems EAD***

NEK EAD and Irrigation Systems EAD carry out activities for maintenance and exploitation of dams, dam walls, hydrotechnical and hydro-meliorative facilities, fulfilling the obligations imposed by the Ministry of Environment and Waters for the provision of water. NEK EAD, through the Dams and Cascades Company, has provided the "water supply" service to Irrigation Systems EAD, and similar kind of service has been provided by Irrigation Systems EAD of NEK EAD.

No agreement has been reached between the company and Irrigation Systems EAD, and no water supply protocols were signed for the period from May 2003 to the date of issuance of these financial statements, which is why additional liabilities may arise to "Irrigation Systems" EAD, which at this time cannot be reliably determined.

**Concession contract engagements**

Under a concession agreement for the development and extraction of coal, the subsidiary Mini Maritsa Iztok EAD is obliged to allocate funds in favor of the Ministry of Energy which can be used only for the purpose for which they are intended (the types of works for the final leaving the concession area) and after explicit permission from the Ministry of Energy. By letter out. E-26-M-155 / 09 July 2014 an updated project for leaving the concession area with a total final departure value of BGN 134,378,000 was approved. As of 31 December 2017 no funds are available to secure the obligation to leave. The company is in the process of renegotiating the periods and the amounts that they have to deposit into the trust account.

**40.4 Insurances*****NPP Kozloduy EAD and its subsidiaries***

The Law on the Safe Use of Nuclear Energy sets a limit for the operator's liability for damage caused by nuclear accidents. The law limits the operator's liability to BGN 96,000 thousand for each accident. Under the Vienna Convention on Civil Liability for Nuclear Damage, the operator is required to maintain insurance or other financial guarantee for nuclear damage during the lifetime of the nuclear installation. The Group has concluded an insurance policy covering the limits stipulated by law. The insurance contract with the Bulgarian National Insurance Pool was concluded on 31 May 2016 and has a one-year coverage period from 1 June 2016 until 30 May 2017. The sum insured amounts to BGN 785 thousand, of which BGN 770 thousand is an insurance premium and BGN 15 thousand is a premium tax. On 27 July 2017, a new one-year contract was concluded with a one-year coverage period from 1 August 2017 to 1 August 2018. The sum insured amounts to BGN 794 thousand, of which BGN 779 thousand is the insurance premium and BGN 15 thousand on the premium. The Group has a property insurance "Industrial Fire" with a coverage period from 1 January 2016 until 31 December 2020. For the period 1 January 2017 to 31 December 2017 the sum insured amounts to BGN 14,768 thousand. (EUR 7,551 thousand).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

**40.5 Warranties**

*NPP Kozloduy EAD and its subsidiaries*

Bank guarantees and cash collaterals amounting to BGN 53,428 thousand were opened in favor of the Group as at 31 December 2017 (31 December 2016: BGN 153,156 thousand).

*Bulgartransgaz EAD*

To the benefit of the company, bank guarantees from third parties were issued in 2017 amounting to BGN 14,361 thousand.

**40.6 Promissory notes**

*National Electricity Company EAD*

As at 31 December 2017, NEK EAD issued promissory notes on investment projects in favor of the banks providing loans under the contracts for the construction of these sites and other projects in the total amount of BGN 352,055 thousand, including ContourGlobal Maritsa East 3 (associated company) amounting to BGN 74,015 thousand.

**41. Events after the end of the reporting period**

***Bulgarian Energy Holding EAD***

*Sale of the shares of Independent Bulgarian Energy Exchange EAD*

On 31 January 2018, the agreement between Bulgarian Energy Holding EAD and Bulgarian Stock Exchange - Sofia AD for the transfer of 217,664 ordinary registered voting shares of the Independent Bulgarian Energy Exchange EAD took effect. The purchase price determined by a licensed appraiser amounts to BGN 5,200,000, payable in the following manner:

- Initial payment of 3,952,000 BGN paid on 5 February 2018;
- The remaining amount of BGN 1,248,000 is due in three equal installments on the respective date of the sixth, twelfth and eighteenth months from the date of entry into force of the contract.

The buyer provides an unconditional and irrevocable bank guarantee for the outstanding amount of the purchase price of the shares. The buyer undertakes to ensure compliance with the commitments submitted to the European Commission in Case AT.39767-BEH Electricity, which are under its control over the term of the commitments.

The change of ownership of Independent Bulgarian Energy Exchange EAD was registered in the Commercial Register on 15 February 2018.

***National Electricity Company EAD***

After the end of the reporting period agreements with customers for deferred payment of overdue liabilities for the price "Obligations to society" have been concluded with a total value of BGN 18,548 thousand.

On 3 January 2018, a commercial case was concluded, according to which NEK EAD was sentenced to pay to Toplofikatsia Sofia EAD an amount of BGN 953 thousand including interest and expenses. The amount is recognized in the financial statement as an adjusting event. The adjudicated amount was paid on 14 February 2018.

On 15 January 2018, a commercial case was concluded, according to which NEK EAD was sentenced to pay to TPP Varna EAD an amount of BGN 831 thousand including interest and expenses. The amount is recognized in the financial statement as an adjusting event. The adjudicated amount was paid on 9 March 2018.

On 13 February 2018, a commercial case was concluded, according to which NEK EAD was sentenced to pay to TPP Varna EAD an amount of BGN 344 thousand including interest. The amount is recognized in the financial statement as an adjusting event. The adjudicated amount was paid on 28 February 2018.

***Bulgargaz EAD***

By a decision of the Energy and Water Regulatory Commission, the limit prices of natural gas for sale by the public supplier to end suppliers and customers connected to the gas transmission network for the first quarter of 2018 are approved - BGN 33.39 / MWh or BGN 352.65 / 1000 cubic meters, excluding excise duty and VAT.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2017

***Mini Maritsa Iztok EAD***

On 1 February 2018 the company concluded amendment 4 to a Repayment Contract with Ref. No.MME/D (Lot A): “Design, supply and installation of plant and equipment for the compensation of the reactive power of the heavy industrial mining equipment of Mini Maritsa Iztok EAD”, with contractor “SIEMENS” LTD within the warranty period. The Amendment 4 was concluded for additional work, bringing the total contract price up by EUR 61,471.32.

***Bulgartransgaz EAD***

By decision of the Supervisory Board of Bulgartransgaz EAD on 13 February 2018 Vladimir Malinov was elected member of the Management Board. By decision of the EWRC of 22 February 2018 the decision of the Supervisory Board was confirmed. The changes in the Board of Directors were entered in the Commercial Register on 1 March 2018.

By decision of the Management Board dated 1 March 2018 and approved by the Supervisory Board on 2 March 2018, the acquisition of the assets and part of the lands of South Stream Bulgaria AD was approved. The forthcoming acquisition is planned to preserve the assets within BEH Group and with a view to their possible use in the implementation of future infrastructure projects of Bulgartransgaz EAD. At the date of preparation of these consolidated financial statements, the estimated value of the assets subject to acquisition is estimated at BGN 13,188 thousand.

***Bulgartel EAD and its subsidiary***

At the end of the reporting period, the Group obtained from the Ministry of Transport of the Republic of Macedonia an agreement for the legalization of an underground linear infrastructure facility on the territory of the Republic of Macedonia, including an optical route from the Bulgarian-Macedonian border.

**42. Approval of the Consolidated Financial Statements**

The Consolidated Financial Statements as at 31 December 2017 (including comparative information) were approved and adopted by the Board of Directors on 17 May 2018.

Independent Auditor's Report  
Consolidated Financial Statements

**Bulgarian Energy Holding EAD**

31 December 2016



**INDEPENDENT AUDITOR'S REPORT  
TO THE SOLE SHAREHOLDER OF  
BULGARIAN ENERGY HOLDING EAD**

**Report on the Audit of the Consolidated Financial Statements**

**Qualified Opinion**

We have audited the consolidated financial statements of BULGARIAN ENERGY HOLDING EAD (*the Parent Company*) and its subsidiaries (*the Group*), which comprise the consolidated statement of financial position as at 31 December 2016, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, except for the possible effect of the matters described in the *Basis for Qualified Opinion* section of our report the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2016, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU).

**Basis for Qualified Opinion**

1. The Group has concluded an agreement, for the construction of a nuclear power plant, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements. The Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant and pursuant to a Decision, dated 27 February 2013, the 41st National Assembly upheld this decision. As at 31 December 2016, the total carrying amount of property, plant and equipment, related to the Project Belene, amounted to BGN 2,186,642 thousand (31 December 2015: BGN 1,391,177 thousand), out of which BGN 2,101,721 thousand (31 December 2015: BGN 1,305,948 thousand) are assets under construction. Assets under construction value, related to Project Belene, include and an asset – right for acquisition of equipment with long manufacturing cycle, amounting to BGN 795,776 thousand, recognised pursuant to a Decision of the Arbitral Tribunal dated 14 June 2016. The Group is not able to reliably estimate the recognised assets related to the discontinued project, because of uncertainty about the feasible alternatives of its realization hence it has not recognised impairment loss of the assets, as well as provisions for possible future liabilities of the Group in the consolidated financial statements as at 31 December 2016, related to the construction of nuclear power plant Belene. We were unable to obtain sufficient and appropriate audit evidence regarding the recoverable amount of the above stated assets of the Group and of the completeness of the recognised liabilities, related to this project, consequently we were unable to determine whether any adjustments of these amounts are necessary and their effect on the consolidated financial statements as at 31 December 2016.

2. No actions have been taken to ensure the funding, which is necessary for the completion of the assets under construction, disclosed in Note 19 *Property, plant and equipment* of the consolidated financial statements, with carrying amount of BGN 45,794 thousand as at 31 December 2016 (31 December 2015: BGN 37,793 thousand). We were unable to obtain sufficient and appropriate audit evidence, regarding the recoverable amount of these assets to become convinced with reasonable assurance about their amount and to determine whether any adjustments of the amount of these assets are necessary and the possible amount of the impairment as at 31 December 2016.

3. As at 31 December 2016 the Group has recognized trade receivables from electricity supply companies amounting to BGN 57,180 thousand and from other counterparties amounting to BGN 19,270 thousand (Note 22 *Trade and other receivables*) and trade payables from counterparties amounting to BGN 95,784 thousand (Note 34 *Trade and other payables*), which had not been confirmed by the counterparties and for which we were unable to obtain sufficient and appropriate audit evidence about their carrying amount and whether any adjustments of the stated amounts are necessary as at this date.

4. As is disclosed in Note 4.24 *Provisions - Provision for decommissioning nuclear facilities* of the consolidated financial statements as at 31 December 2016, out of Group activity arises the necessity to provide for future expenses for the decommissioning of nuclear facilities. According to the legislation currently in force and other international agreements, portion of these expenses could be assumed by national and international funds. In accordance with the requirements of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, the Group should recognise provisions for decommissioning of nuclear facilities and a separate asset for its right to receive reimbursements in the event the asset's value can be reliably determined. We were not provided with an assessment of these future expenses and any related reimbursements. Consequently, we were not able to become convinced with reasonable assurance about assessment of provisions and related receivables as at 31 December 2016.

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants (IESBA Code)* together with the ethical requirements of the Independent Financial Audit Act (IFAA) that are relevant to our audit of the consolidated financial statements in Bulgaria, and we have fulfilled our other ethical responsibilities in accordance with the requirements of the IFAA and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In addition to the matters described in the *Basis for Qualified Opinion* section above, we have determined the matters described below to be the key audit matters to be communicated in our report.

Key Audit Matter	How this key audit matter was addressed in our audit
<p><b>1. Debt, presentation and disclosure Issued bonds (BGN 2,057,229 thousand, requirements for adherence with debt covenants</b></p> <p><b>Note 29 to the consolidated financial statements</b></p> <p>Based on our understanding of the Group's business activity, we have identified the debt securities issued (bonds) and the adherence to debt covenants related to them as key audit matter.</p> <p>The issued bonds are considered a key matter for our audit since they form 34% of the total value of the Group's liabilities. In addition, according to the contractual commitments under the two bond issues, in the event of breach (default) of the covenants, Bulgarian Energy Holding EAD and its subsidiaries will not be able to attract external financing unless these covenants are restored, namely:</p> <p>(1) EBITDA Coverage Ratio, calculated as - consolidated EBITDA for the last period for which the Issuer's Consolidated Financial Statements had been issued, divided by the financial expenses for the same period, is less than 4:1</p> <p>(2) Consolidated Leverage Ratio, calculated as - consolidated debt of the Issuer for the last period for which consolidated financial statements had been issued less carrying value of the Issuer's cash for the same period, divided by the consolidated EBITDA for the same period, is more than 4.5:1.</p>	<p>In this field, our audit procedures included:</p> <ul style="list-style-type: none"> <li>• We reviewed internal rules and supporting documents related to the assumption of the liabilities and refinancing of the bank loan through bond issue placed on 2 August 2016;</li> <li>• Recalculation of the initial recognition and the subsequent measurement of debt at amortized cost, using the effective interest rate;</li> <li>• We reviewed the prospectuses and paid particular attention to the conditions of the covenants and the cases of default;</li> <li>• Assessment of accounting policy and accounting treatment in the definition of financial expenses and adequate calculation of the covenants in accordance with the terms of the prospectuses;</li> <li>• Given the significance of the earnings before interest, taxes and depreciation (EBITDA), in our calculations of covenants, we paid particular attention to the correct classification of the items of earnings before interest, taxes and depreciation, as well as to specific and extraordinary items included in the adjusted earnings before interest, taxes and depreciation (EBITDA);</li> <li>• We reviewed for completeness and adequacy of disclosures in the consolidated financial statements regarding the presentation of the debt. The disclosures are included in Note 29 to the consolidated financial statements.</li> </ul>

<p><b>2.Provisions for site recovery and restoration in result of carried out mining activities</b></p> <p><b>Note 4.24, Note 4.27, Note 32 to the consolidated financial statements</b></p> <p>The Group through its subsidiary Mini Maritsa Iztok EAD is obligated by its concession contract and by the legislation currently in force to provide for recovery and restoration of the site damages in result of carried out mining activities.</p> <p>The amount of presumed compulsory costs for restoration activities are material, as well as the estimation of the expected outgoing cash flows is difficult to determine and assess and is related to many uncertainties including the long time period. Because of these reasons the assessment of recognized provisions and liabilities in the Group consolidated financial statements assume many estimates, admissions and specific calculations. Because of that we set this matter as key audit matter.</p>	<p>In this field, our audit procedures included:</p> <ul style="list-style-type: none"> <li>• Review and assessment of the stipulated methods for calculation of provisions and used assumptions on which these calculations are based upon;</li> <li>• Inquiries about the correctness of the data to the external consultants, responsible for the development of plans for mine exploitation,;</li> <li>• Confirmation for data used for calculation by different specialist of the subsidiary;</li> <li>• Tracing the consistency of the applied measurement model for the previous and current periods;</li> <li>• Review of the completeness and adequacy of disclosures in the consolidated financial statements regarding the recognized provision (Notes 4.24, 4.27 and 32 to the consolidated financial statements).</li> </ul>
--	---

### Emphasis of matter

1. We draw attention to Note 19 *Property, plant and equipment* of the consolidated financial statements, where it is disclosed that as at 30 June 2015 the Group carried out a fair value review of property, plant and equipment according its accounting policy, using independent licensed appraiser. According to the requirements of IAS 36 *Impairment of Assets*, impairment review was carried out as at 31 December 2016 and no material variations were found out. The specifics of the Group's assets and the dynamic economic environment in the energy sector, where it operates, could lead to variations in the assumptions and estimates used in determining the fair value of these property, plant and equipment.

2. As at 31 December 2016 the Group utilizes property and equipment, disclosed in Note 19 *Property, plant and equipment* with a carrying amount of BGN 916,703 thousand, which are under the regulation of the Water Act and are public state property. The Act has provisions for separate management of such assets by entities with a hundred per cent public ownership or by legal entities with joint state and municipal participation, where the state has a majority share or by legal entities whose share capital is owned by other legal entities with state participation.

3. We draw attention to the disclosure in Note 19 *Property, plant and equipment* about land and buildings with carrying amounts of BGN 25,914 thousand as at 31 December 2016 and for which the Group does not have unconditional ownership rights since they are in pending procedure of issuing acts of ownership.

4. We draw attention to the disclosure in Note 40 *Commitments and contingent liabilities* about Group's commitments under a concession contract for the development and mining of coal. The financial collateral obligation for the costs according to an Order of the Ministry of Economy, Energy and Tourism from 2010 is realized by setting aside funds into special security accounts that can be used only for the purpose for which they are intended. As at 31 December 2016 the Group has not set aside funds in a guarantee bank account.

5. We draw attention to Note 40.1 *Proceedings of the European Commission against Bulgarian Energy Holding EAD and its subsidiaries* to the consolidated financial statements about Case COMP/B1/AT.39849 – BEH Gas regarding possible violation of Art. 102 of the Treaty for Functioning of the European Union (TFEU) disclosing the case development and actions taken by the Group.

Our opinion is not modified in respect of these matters.

#### **Information Other than the Consolidated Financial Statements and Auditor's Report Thereon**

Management is responsible for the other information. The other information, which we have obtained prior the date of our auditor's report, comprises the consolidated management report, including the corporate governance statement and the consolidated report on payments to governments, prepared by management in accordance with Chapter Seven of the Accountancy Act, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon, unless and to the extent explicitly specified in our report.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

As described in the *Basis for Qualified Opinion* section, matters from 1 to 5 above, we were unable to obtain sufficient and appropriate audit evidence about the valuation of assets and liabilities, related to terminated Project NPP Belene, the valuation of other assets under construction with carrying amount of BGN 45,794 thousand, the assessment of provision for decommissioning of nuclear facilities and the related receivables, the existence of trade receivables amounting to BGN 76,450 thousand and trade payables amounting to BGN 95,784 thousand as at 31 December 2016. Accordingly, we were unable to conclude whether or not the other information is materially misstated with regard to financial indexes and respective disclosures referring to these matters.

## **Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, as adopted by the EU, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

## **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### **Report on Other Legal and Regulatory Requirements**

#### ***Additional Matters to be Reported under the Accountancy Act and the Public Offering of Securities Act***

In addition to our responsibilities and reporting in accordance with ISAs, described above in the *Information Other than the Consolidated Financial Statements and Auditor's Report Thereon* section, in relation to the consolidated management report, the corporate governance statement of the Group and the consolidated report on payments to governments, we have also performed the procedures added to those required under ISAs in accordance with the Guidelines of the professional organisation of certified public accountants and registered auditors in Bulgaria, i.e. the Institute of Certified Public Accountants (ICPA), issued on 29 November 2016/approved by its Management Board on 29 November 2016. These procedures refer to testing the existence, form and content of this other information to assist us in forming opinions about whether the other information includes the disclosures and reporting provided for in Chapter Seven of the Accountancy Act and in the Public Offering of Securities Act (Art. 100m, paragraph 10 of the POSA in conjunction with Art. 100m, paragraph 8 (3) and (4) of the POSA) applicable in Bulgaria.

*Opinion in connection with Art. 37, paragraph 6 of the Accountancy Act*

Based on the procedures performed, our opinion is that:

- a) The information included in the consolidated management report referring to the financial year for which the consolidated financial statements have been prepared is consistent with those consolidated financial statements.
- b) The consolidated management report has been prepared in accordance with the requirements of Chapter Seven of the Accountancy Act and of Art. 100(m), paragraph 7 of the Public Offering of Securities Act.
- c) The corporate governance statement of the Group referring to the financial year for which the consolidated financial statements have been prepared presents the information required under Chapter Seven of the Accountancy Act and Art. 100(m), paragraph 8 of the Public Offering of Securities Act.
- d) The consolidated report on payments to governments referring to the financial year for which the consolidated financial statements have been prepared is provided and prepared in accordance with the requirements of Chapter Seven of the Accountancy Act.

*Opinion in connection with Art. 100(m), paragraph 10 in conjunction with Art. 100(m), paragraph 8 (3) and (4) of the Public Offering of Securities Act*

Based on the procedures performed and the knowledge and understanding obtained about Group's activities and the environment in which it operates, in our opinion, the description of the main characteristics of Group's internal control and risk management systems relevant to the financial reporting process, which is part of the consolidated management report (as a component of the corporate governance statement) and the information under Art. 10 paragraph 1(c), (d), (f), (h) and (i) of Directive 2004/25/EC of the European Parliament and of the Council of 21 April 2004 on Takeover Bids, do not contain any material misrepresentations.

**Audit firm**

**HLB BULGARIA OOD**

**Manager:**

**Vaska Gelina**

**Registered auditor, responsible for the audit:**

**Milena Hristova**

**17 May 2017**

**CONSOLIDATED STATEMENT OF PROFIT OR LOSS**

for the year ended 31 December 2016

	Notes	<b>2016</b> <i>BGN '000</i>	<b>2015</b> <i>BGN '000</i>
Revenue from sales	7	5,679,431	6,382,133
Other operating income	8	392,726	304,380
		<b>6,072,157</b>	<b>6,686,513</b>
Cost of natural gas, electricity and other current assets sold	9	(3,407,913)	(4,019,193)
Change in finished goods and work in progress		16,069	24,274
Cost of acquisition of property, plant and equipment in a commercial manner		22,832	13,776
Cost of materials	10	(293,478)	(319,882)
Hired services expenses	11	(355,486)	(300,456)
Depreciation and amortisation expenses	19,20	(600,405)	(585,626)
Impairment of property, plant and equipment	19,20	-	(5,437)
Employee benefits expenses	12	(778,974)	(783,220)
(Expenses for)/reintegration of impairment	22	(114,458)	(21,822)
Costs for the purchase of greenhouse gas emissions and provisions	32	(74,966)	(184,819)
Expenses related to the Arbitration award on the NPP Belene Project, net	14	(159,270)	-
Other operating expenses	13	(318,430)	(311,542) *
<b>Operating profit/(loss)</b>		<b>7,678</b>	<b>192,566</b>
Share of profit from equity accounted investments	21	35,928	45,920
Financial income	15	11,734	36,574
Financial costs	16	(123,502)	(87,379)
<b>Profit/ (Loss) before tax</b>		<b>(68,162)</b>	<b>187,681</b>
Income tax expense	17	(10,126)	(20,483)
<b>Profit/(Loss) for the year from continuing operations</b>		<b>(78,288)</b>	<b>167,198</b>
Profit/(Loss) for the year from discontinued operations	27	745	(30,171)
<b>Profit/(Loss) for the year</b>		<b>(77,543)</b>	<b>137,027 *</b>
Profit/(loss) for the year attributable to:			
Sole-shareholder of the parent company		(77,623)	136,971 *
Non-controlling interest		80	56
		<b>(77,543)</b>	<b>137,027</b>
<b>Earnings/(Loss) per share</b>	18	<b>BGN</b>	<b>BGN</b>
Earnings/(Loss) from continuing operations		(0.024)	0.055
Earnings/(Loss) from discontinued operations		0.000	(0.010)
Total		(0.024)	0.045

\* restated, reclassified

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**

for the year ended 31 December 2016

	Notes	2016 <i>BGN '000</i>	2015 <i>BGN '000</i>
<b>Profit (Loss) for the period</b>		<b>(77,543)</b>	<b>137,027</b>
<b>Other comprehensive income:</b>			
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Revaluation of property, plant and equipment	19	16,743	1,688,867
Remeasurement of defined benefits liability	31	(17,851)	(30,449)
Income tax, relating to items that will not be reclassified in profit or loss	23	110	(165,840)
		<b>(998)</b>	<b>1,492,578</b>
<i>Items that will be reclassified to profit or loss:</i>			
Exchange differences on the translation of foreign operations		1	-
Gain/(loss) on available-for-sale financial assets	25	35	47
Income tax relating to items that will be reclassified in profit or loss	23	(3)	(5)
		<b>33</b>	<b>42</b>
<b>Share of the other comprehensive income of associates</b>			
<i>Items that will be reclassified to profit or loss:</i>			
Cash flow hedges, net of tax		5,731	5,154
Gain/(loss) on available-for-sale financial assets		(45)	76
Income tax relating to items that will be reclassified in profit or loss		(573)	(523)
		<b>5,113</b>	<b>4,707</b>
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Remeasurement of defined benefits liability		(32)	(320)
Income tax, relating to items that will not be reclassified in profit or loss		3	32
		<b>(29)</b>	<b>(288)</b>
<b>Other comprehensive income for the period, net of tax</b>		<b>4,119</b>	<b>1,497,039</b>
<b>Total comprehensive income for the year</b>		<b>(73,424)</b>	<b>1,634,066</b>
Total comprehensive income for the year, attributable to:			
Sole-shareholder of the parent company		(73,504)	1,634,010
Non-controlling interest		80	56
		<b>(73,424)</b>	<b>1,634,066</b>

\* restated, reclassified

Petyo Ivanov  
Executive DirectorMarieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
ManagerMilena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

As at 31 December 2016

	Notes	31 December 2016 <i>BGN '000</i>	31 December 2015 <i>BGN '000</i>	1 January 2015 <i>BGN '000</i>
<b>ASSETS</b>				
<b>Non-current assets</b>				
Property, plant and equipment	19	13,705,798	13,091,504	11,597,125
Intangible assets	20	25,314	23,487	24,107
Investment properties		520	-	-
Investments in associates, joint ventures and other entities	21	357,206	370,492	357,057
Trade and other receivables	22	487,586	588,524	226,827
Deferred tax assets	23	102,424	98,375	84,267
<b>Total non-current assets</b>		<b>14,678,848</b>	<b>14,172,382</b>	<b>12,289,383</b>
<b>Current assets</b>				
Inventory	24	675,937	685,441	753,882
Trade and other receivables	22	803,084	1,482,782	1,965,062
Related party receivables	35	20,434	264,242	132,589
Overpaid income tax		5,480	1,832	4,106
Available-for-sale financial assets	25	765	730	684
Cash and cash equivalents, deposits	26	1,015,987	833,111	404,305
Assets of a group classified as held for sale	27.2	17,284	-	-
<b>Total current assets</b>		<b>2,538,971</b>	<b>3,268,138</b>	<b>3,260,628</b>
<b>TOTAL ASSETS</b>		<b>17,217,819</b>	<b>17,440,520</b>	<b>15,550,011</b>

\* restated, reclassified

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD

Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
(CONTINUED)**

for the year ended 31 December 2016

	Notes	31 December 2016 <i>BGN '000</i>	31 December 2015 <i>BGN '000</i>	1 January 2015 <i>BGN '000</i>
<b>Equity and liabilities</b>				
<b>Equity</b>				
Share capital	28.1	3,285,614	3,188,168	2,948,723
Other reserves	28.2	2,540,531	2,528,065	2,490,399
Reserves from revaluation to fair value	28.3	1,865	1,878	1,768
Revaluation reserve of non-financial assets	28.4	6,687,767	6,691,367	5,180,121
Reserve from translation of foreign operations	28.5	(7)	(8)	(8)
Reserve from remeasurement of defined benefit plans	28.6	(93,465)	(77,370)	(49,678)
Hedge reserve		(19,983)	(25,141)	(29,779)
(Accumulated loss)/Retained earnings		(1,177,273)	(993,618)	(862,208)
<b>Equity, attributable to the sole-shareholder of the parent company</b>		<b>11,225,049</b>	<b>11,313,341</b>	<b>9,679,338</b>
Non-controlling interest		428	348	292
<b>Total equity</b>		<b>11,225,477</b>	<b>11,313,689</b>	<b>9,679,630</b>
<b>Non-current liabilities</b>				
Loans and finance lease liabilities	29	2,277,275	1,337,797	1,470,260
Deferred tax liabilities	23	703,002	727,765	576,520
Deferred financing	30	380,439	359,734	318,825
Liabilities for retirement employee benefits	31	165,796	137,231	113,712
Provisions	32	99,962	105,116	87,873
Deferred income	33	125,049	131,358	78,828
Trade and other payables	34	222,517	238,543	241,547
Related party payables	35	815,569	16,267	21,976
<b>Total non-current liabilities</b>		<b>4,789,609</b>	<b>3,053,811</b>	<b>2,909,541</b>
<b>Current liabilities</b>				
Trade and other payables	34	813,161	2,046,436	2,201,884
Related party payables	35	63,923	591,902	406,347
Loans and finance lease liabilities	29	151,915	231,143	207,737
Liabilities for retirement employee benefits	31	15,090	26,531	23,976
Provisions	32	123,330	159,685	108,193
Deferred income	33	4,959	1,179	1,587
Deferred financing	30	16,294	10,288	7,953
Income tax payables		3,186	5,856	3,163
Liabilities of group classified as held for sale	27.2	10,875	-	-
<b>Total current liabilities</b>		<b>1,202,733</b>	<b>3,073,020</b>	<b>2,960,840</b>
<b>Total liabilities</b>		<b>5,992,342</b>	<b>6,126,831</b>	<b>5,870,381</b>
<b>Total equity and liabilities</b>		<b>17,217,819</b>	<b>17,440,520</b>	<b>15,550,011</b>

\* restated, reclassified

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.  
The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD

Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

for the year ended 31 December 2016

	Share capital	Other reserves	Reserves from revaluation to fair value	Revaluation reserve of non-financial assets	Reserve from translation of foreign operations	Reserve from remeasurement of defined benefit plans	Hedge reserve	Retained earnings	Total equity of the shareholder of the parent company	Non-controlling interest	Total equity
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>In BGN '000</b>											
<b>Balance as at 1 January 2016</b>	<b>3,188,168</b>	<b>2,528,065</b>	<b>1,878</b>	<b>6,691,367</b>	<b>(8)</b>	<b>(77,370)</b>	<b>(25,141)</b>	<b>(993,618)</b>	<b>11,313,341</b>	<b>348</b>	<b>11,313,689</b>
Dividend distribution	-	-	-	-	-	-	-	(14,752)	(14,752)	-	(14,752)
<b>Transactions with the sole shareholder</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(14,752)</b>	<b>(14,752)</b>	<b>-</b>	<b>(14,752)</b>
Profit/(Loss) for the period	-	-	-	-	-	-	-	(77,623)	(77,623)	80	(77,543)
Other comprehensive income	-	-	(13)	15,068	1	(16,095)	5,158	-	4,119	-	4,119
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>(13)</b>	<b>15,068</b>	<b>1</b>	<b>(16,095)</b>	<b>5,158</b>	<b>(77,623)</b>	<b>(73,504)</b>	<b>80</b>	<b>(73,424)</b>
Increase in the share capital and decrease of retained earnings	97,446	-	-	-	-	-	-	(97,446)	-	-	-
Written-off revaluation reserve	-	-	-	(18,668)	-	-	-	18,668	-	-	-
Transfer of profits to reserves	-	12,466	-	-	-	-	-	(12,466)	-	-	-
Other changes in equity	-	-	-	-	-	-	-	(36)	(36)	-	(36)
<b>Balance as at 31 December 2016</b>	<b>3,285,614</b>	<b>2,540,531</b>	<b>1,865</b>	<b>6,687,767</b>	<b>(7)</b>	<b>(93,465)</b>	<b>(19,983)</b>	<b>(1,177,273)</b>	<b>11,225,049</b>	<b>428</b>	<b>11,225,477</b>

 Petyo Ivanov  
 Executive Director

 Marieta Velikova  
 Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

 Audit firm  
 HLB Bulgaria OOD  
 Vaska Gelina  
 Manager

 Milena Hristova  
 Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY  
(CONTINUED)**

for the year ended 31 December 2016

	Share capital	Other reserves	Reserves from revaluation to fair value	Revaluation reserve of non-financial assets	Reserve from translation of foreign operations	Reserve from remeasurement of defined benefit plans	Hedge reserve	Retained earnings	Total equity of the shareholder of the parent company	Non-controlling interest	Total equity
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>In BGN '000</b>											
<b>Balance as at 1 January 2015</b>	<b>2,948,723</b>	<b>2,490,399</b>	<b>(28,148)</b>	<b>5,180,043</b>	<b>(8)</b>	<b>(49,463)</b>	<b>-</b>	<b>(553,952)</b>	<b>9,987,594</b>	<b>292</b>	<b>9,987,886</b>
Changes in the opening balances due to change in the accounting policy, errors, etc.	-	-	29,916	78	-	(215)	(29,779)	(308,256)	(308,256)	-	(308,256)
<b>Balance as at 1 January 2015 (restated)</b>	<b>2,948,723</b>	<b>2,490,399</b>	<b>1,768</b>	<b>5,180,121</b>	<b>(8)</b>	<b>(49,678)</b>	<b>(29,779)</b>	<b>(862,208)</b>	<b>9,679,338</b>	<b>292</b>	<b>9,679,630</b>
Profit/loss for the period	-	-	-	-	-	-	-	136,971	136,971	56	137,027
Other comprehensive income	-	-	110	1,519,981	-	(27,690)	4,638	-	1,497,039	-	1,497,039
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>110</b>	<b>1,519,981</b>	<b>-</b>	<b>(27,690)</b>	<b>4,638</b>	<b>136,971</b>	<b>1,634,010</b>	<b>56</b>	<b>1,634,066</b>
Increase in the share capital and decrease of retained earnings	239,445	-	-	-	-	-	-	(239,445)	-	-	-
Written-off revaluation reserve	-	-	-	(8,735)	-	-	-	8,735	-	-	-
Transfer of profits to reserves	-	37,669	-	-	-	-	-	(37,669)	-	-	-
Other changes in equity	-	(3)	-	-	-	(2)	-	(2)	(7)	-	(7)
<b>Balance as at 31 December 2015</b>	<b>3,188,168</b>	<b>2,528,065</b>	<b>1,878</b>	<b>6,691,367</b>	<b>(8)</b>	<b>(77,370)</b>	<b>(25,141)</b>	<b>(993,618)</b>	<b>11,313,341</b>	<b>348</b>	<b>11,313,689</b>

 Petyo Ivanov  
Executive Director

 Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

 Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

 Milena Hristova  
Registered auditor, responsible for the audit

**CONSOLIDATED STATEMENT OF CASH FLOWS**  
for the year ended 31 December 2016

	Notes	2016 BGN '000	2015 BGN '000
<b>Cash flows from operating activities</b>			
Proceeds from sales, including:		5,867,535	6,017,618
<i>Proceeds from sale of electricity</i>		3,728,853	3,934,046
<i>Proceeds from sale of natural gas and auxiliary services</i>		1,431,033	1,791,148
<i>Proceeds from sale of lignite coal</i>		630,505	213,060
<i>Proceeds from other sales</i>		77,144	79,364
Proceeds from the Security of the Electricity System Fund		290,714	183,200
Payments to suppliers		(4,770,702)	(3,990,950)
Payments to the personnel and social insurance institutions		(798,957)	(786,488)
Payments to state funds		(125,084)	(100,556)
Interest paid		(65,382)	(61,364)
Payments of fees, commissions, and others		(63,873)	(6,958)
Other payments, net including:		(1,736,924)	(309,150)
<i>Income tax paid</i>		(45,488)	(42,128)
<i>Payments to the State budget</i>		(440,171)	(334,187)
<i>Other payments for operating activities</i>		(1,251,265)	67,165
Net cash flow from continuing operations		(1,402,673)	945,352
Net cash flow from discontinued operations	27	-	(15)
<b>Net cash flows from operating activities</b>		<b>(1,402,673)</b>	<b>945,337</b>
<b>Cash flows from investing activities</b>			
Payments for property, plant, equipment and intangible assets		(429,399)	(404,606)
Purchases of equity accounted investments		-	(10,268)
Acquisition of subsidiaries, net of cash received		8	-
Proceeds from sale of property, plant and equipment		526	5,705
Interest received		3,880	2,369
Dividends received and other proceeds from equity accounted investments		16,873	10,037
Financing of non-current assets		26,350	-
<b>Net cash flows from investing activities</b>		<b>(381,762)</b>	<b>(396,763)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issuance of corporate bond by the parent company	29	1,055,494	-
Proceeds from loans		1,285,993	628,437
Proceeds from loan from the government		1,176,661	-
Repaid loans		(1,523,420)	(753,128)
Dividends paid	18	(14,752)	-
Proceeds from transactions with financial instruments		(12,054)	4,988
<b>Net cash flows from financing activities</b>		<b>1,967,922</b>	<b>(119,703)</b>
<b>Reclassified cash and cash equivalents</b>		<b>(611)</b>	<b>(65)</b>
<b>Net change in the cash and cash equivalents</b>		<b>182,876</b>	<b>428,806</b>
<b>Cash and cash equivalents as at 1 January</b>		<b>833,111</b>	<b>404,305</b>
<b>Cash and cash equivalents as at 31 December</b>	26	<b>1,015,987</b>	<b>833,111</b>

Petyo Ivanov  
Executive Director

Marieta Velikova  
Chief Accountant

Date of preparation: 25 April 2017

The Financial Statements were authorized for issue with Decision of the Board of Directors, dated 16 May 2017.

The accompanying notes from page 8 to page 95 are an integral part of these consolidated financial statements.

Audit firm  
HLB Bulgaria OOD  
Vaska Gelina  
Manager

Milena Hristova  
Registered auditor, responsible for the audit

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**1. Corporate information**

The Consolidated Financial Statements of Bulgarian Energy Holding EAD and its subsidiaries ("the Group") for the year ended 31 December 2016 have been approved for issuance by a decision of the Board of Directors under Protocol No. 39-2017 dated 16 May 2017.

The Group's core business covers:

- Generation, extraction, transmission, storage, management, distribution, sale and/or purchase of natural gas, electricity, heating energy, coals, as well as any other types of energy and raw materials, used in production;
- Organization of an exchange market for trading in the fields of energy and electrical supply;
- Investment activities in the fields of energy.

The average number of personnel in BEH EAD, as at 31 December 2016 is 21,112 employees (in 2015: 21,239 employees).

The parent company "Bulgarian Energy Holding" EAD is a single-shareholder joint stock company, registered in the Republic of Bulgaria. The entity is registered in the Commercial Register under vol. 147, page 21, and Record №10295. The entity is successor of the state enterprise "Oil and Gas" ("Neft i Gas"), incorporated in 1973, and renamed in December 1975 to "Gas Supply" ("Gazosnabdyavane"). In accordance with the Decree on Business Activities, in the beginning of 1990, the entity was renamed to "Bulgargaz". Pursuant to a decision of the Council of Ministers, dated 12 May 1993, "Bulgargaz" was transformed into a single-shareholder joint stock company. Based on a transformation plan, dated 27 October 2006, and the appendices thereto, "Bulgargaz" EAD was transformed into "Bulgargaz Holding" EAD through the split of two single-shareholder joint stock companies – "Bulgartransgaz" EAD and "Bulgargaz" EAD. The split was executed under the provisions of Art. 262 (d) of the Commercial Act. "Bulgartransgaz" EAD and "Bulgargaz" EAD are legal successors of the respective portion of the property (rights and obligations) of "Bulgargaz Holding" EAD. By virtue of Decision № 45 dated 15 January 2007 the transformation was registered in the Sofia City Court.

By virtue of Protocol №RD-21-305 dated 18 September 2008 of the Minister of Economy and Energy, the company name of "Bulgargaz Holding" EAD was changed to "Bulgarian Energy Holding" EAD, with capital raise through in-kind contributing the par value of all shares of the capital of Natsionalna Elektricheska Kompania EAD, NPP Kozloduy EAD, TPP Maritsa East 2 EAD and Mini Maritsa-iztok EAD.

The Company's registered address and headquarters are as follows: Sofia - 1000, Oborishte area, 16 Veslets Str

The principal activities of "Bulgarian Energy Holding" EAD are as follows: acquisition, valuation and sale of shares in trading companies, carrying out business activities in the fields of generation, production, transmission, transit, storage, management, distribution, sale and/or purchase of natural gas, electricity, thermal power, coals, as well as any other type of energy and raw materials for the production, participation in the management of such companies, their financing, acquisition, valuation, issue and sale of bonds, acquisition, valuation and sale of patents, concessions of licenses for use of patents of the abovementioned companies, as well as performance of own production or trade activity.

As at 31 December 2016, Bulgarian Energy Holding EAD is managed by a Board of Directors (BoD) which consists of the following members: Zhecho Donchev Stankov - Chairperson of the BoD, Petyo Angelov Ivanov - Member of the BoD and Executive Director and Zhivko Dimitrov Dinchev - Member of the BoD. The Company is represented by the Executive Director Petyo Angelov Ivanov.

As at the date of the Consolidated Financial Statements, 25 April 2016, Bulgarian Energy Holding EAD is managed by a Board of Directors which consists of the following members: Konstantin Simeonov Delisivkov - Chairperson of the BoD, Petyo Angelov Ivanov - Member of the BoD and Executive Director and Zhivko Dimitrov Dinchev - Member of the BoD. The Company is represented by the Executive Director Petyo Ivanov.

The sole-shareholder and ultimate owner of BEH EAD is the Republic of Bulgaria, represented by the Minister of Energy.

As at 31 December 2016, the subsidiaries, associates and joint ventures, included in the Consolidated Financial Statements, are the following:

# Bulgarian Energy Holding EAD



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2016

Company	State of incorporation	Core Business	2016 %	2015 %
<b>Subsidiaries</b>				
Natsionalna Elektrieska Kompania EAD	Bulgaria	Electricity generation and public supplier of electrical energy	100%	100%
Bulgargaz EAD	Bulgaria	Public supplier of natural gas	100%	100%
Bulgartransgaz EAD	Bulgaria	Storage and transmission of natural gas	100%	100%
Bulgartel EAD	Bulgaria	Telecommunications services	100%	100%
NPP Kozloduy EAD	Bulgaria	Generation of electricity and thermal power	100%	100%
TPP Maritsa East 2 EAD	Bulgaria	Generation of electricity and thermal power	100%	100%
Mini Maritsa Iztok EAD	Bulgaria	Mining and selling of lignite	100%	100%
Electricity System Operator EAD	Bulgaria	Transmission of electricity	100%	100%
Bulgartel Skopje DOOEL	Macedonia	Telecommunication operator	100%	100%
HPP Kozloduy EAD	Bulgaria	Hydroelectric power generation and electric power distribution	100%	100%
Interpriborservice OOD	Bulgaria	Installation and maintenance of automated systems	63.96%	63.96%
PFC Beroe Stara Zagora EAD	Bulgaria	Professional football club	100%	100%
NPP Kozloduy - New Builds EAD	Bulgaria	Operation of nuclear power plant facilities with the purpose of generating electricity	100%	100%
TPP Maritsa East 2 (9 and 10) EAD	Bulgaria	Generation and trade of electricity	100%	100%
Gauging and Information Technologies Energy Operator EAD (in liquidation)	Bulgaria	Commercial and technical measurement of the quality and quantity of electricity	100%	100%
Independent Bulgarian Energy Exchange EAD	Bulgaria	Organisation of an energy exchange for trade in energy and energy consumption	100%	100%
Energy Investment Company EAD	Bulgaria	Investment activities	100%	100%
Nabucco Gas Pipeline Bulgaria EOOD	Bulgaria	Investment activities	100%	100%
<b>Joint Ventures</b>				
ICGB AD	Bulgaria	Construction and operation of a gas transmission system	50%	50%
Nabucco Gas Pipeline International OOD (in liquidation)	Austria	Construction and operation of a gas transmission system	17.93%	17.93%
South Stream Bulgaria AD	Bulgaria	Construction and operation of a gas transmission system	50%	50%
Transbalkan Electric Power Trading S.A. – NECO S.A.	Greece	Sales of electricity	50%	50%
<b>Associates</b>				
ContourGlobal Maritsa East 3 AD	Bulgaria	Generation of electricity	27%	27%
ContourGlobal Operations Bulgaria AD	Bulgaria	Operation and maintenance of a thermal power plant	27%	27%
ZAD Energy/	Bulgaria	Insurance company	48.08%	48.08%
POD Allianz Bulgaria AD	Bulgaria	Pension insurance company	34%	34%
Hydro Power Company Gorna Arda AD	Bulgaria	Construction of hydroelectric power plants	30%	30%
<b>Other investments</b>				
Ecological Operation of Fuels and Energy Oils OOD	Bulgaria	Research and investigation of natural energy resources and their environmental exploitation	69.90%	69.90%
Bultehash AD	Bulgaria	No operations	67%	67%

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**2. Basis of preparation of the consolidated financial statements**

The consolidated financial statements of the Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) as developed and issued by the International Accounting Standards Board (IASB) and approved by the European Union (EU).

The consolidated financial statements are presented in Bulgarian Lev (BGN) which is the functional currency of the parent company. All amounts are reported in BGN '000 (including the comparative information for 2015), unless otherwise stated.

The parent company - Bulgarian Energy Holding EAD - prepared and issued Separate Financial Statements for the year ended as at 31 December 2016, where the investments in subsidiaries, associates and joint ventures are presented at the relevant acquisition cost. The Separate Financial Statements of BEH EAD have been approved for issuance by a decision of the Board of Directors dated 30 March 2017.

The Consolidated Financial Statements have been prepared on the going concern basis. The operations and future development of the Group are based on implementation of the State energy strategy which aim is to increase and ensure the security of energy supplies, to perform priority energy projects and to support the financial participation of the state in these projects. The Management has analysed the validity of the going concern basis, taking into account the plans, the estimates and the business programs of the Group companies. As a result, it has come to the conclusion that the use of the going concern assumption is appropriate.

**3. Changes in the Accounting Policy****3.1 General**

The Group has adopted all new and/or revised standards and interpretations issued by the International Accounting Standards Board (IASB) and adopted by the European Commission and relevant to its operations. The Group does not need to make any changes in its accounting policy to adapt the application of any new and/or revised IFRSs that are effective for the current accounting year beginning on 1 January 2016, as they either do not relate to its business activity and the usual composition and characteristics of its assets and liabilities, or during the period there were no entities or operations affected by the changes in the amended IFRSs. The effect of changes to the IFRSs for the Group is solely in introducing new and expanding the existing disclosures and changes in the presentation of the financial statements without affecting the amounts reported therein. Amendments and improvements to the existing standards have been made as at the date of the approval for issuance of these financial statements.

The Group applies the following new standards, amendments and interpretations to IFRSs that have been developed and published by the International Accounting Standards Board and mandatory for the annual period beginning on 1 January 2016:

**Amendment to IAS 27 Separate Financial Statements – Equity Method in Separate Financial Statements** – adopted by the EU on 18 December 2015 (effective for annual periods beginning on or after 1 January 2016);

This amendment has restored the option in IAS 27 for measuring and reporting investments in subsidiaries, associates and joint ventures in the separate financial statements using the equity method.

**Amendment to IAS 1 Presentation of Financial Statements – Initiative for Disclosure** – adopted by the EU on 18 December 2015 (effective for annual periods beginning on or after 1 January 2016);

This amendment is related to the instruction to the compilers of financial statements when they need to apply their judgement on the materiality of certain information and its presentation in the preparation of the financial statements.

**Amendments to various standards Improvements to IFRSs (2012-2014 cycle)**, resulting from the IFRS draft annual improvement (IFRS 5, IFRS 7, IAS 19 and IAS 34) primarily with a view to remove inconsistencies and to clarify wording – adopted by the EU on 15 December 2015 (the amendments are applicable for annual periods beginning on or after 1 January 2016);

**Amendment to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets** – Clarification of Eligible Depreciation Methods – adopted by the EU on 2 December 2015 (effective for annual periods beginning on or after 1 January 2016);

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

These amendments clarify that the use of revenue-based depreciation methods is inappropriate as the revenue generated by a particular tangible or intangible asset operation does not reflect the use of the economic benefits expected from the assets.

**Amendment to IFRS 11 Joint Arrangements** – Accounting for Acquisitions of Interests in Joint Operations – adopted by the EU on 24 November 2015 (effective for annual periods beginning on or after 1 January 2016);

This amendment provides guidance on the appropriate accounting treatment of the acquisition of interests in joint operations that can be considered business operations.

**Amendment to IAS 16 Property, Plant and Equipment and IAS 41 Agriculture** – Agriculture: Bearer Plants – adopted by the EU on 23 November 2015 (effective for annual periods beginning on or after 1 January 2016);

These changes affect the financial reporting of bearer plants such as vines, rubber trees and oil palms. Bearer plants should be treated as property, plant and equipment as their processes are similar to production. Consequently, according to these amendments they are included in the scope of IAS 16 instead of the scope of IAS 41. The cultivation of bearer plants remains within the scope of IAS 41.

**Amendments to IFRS 10 Consolidated Financial Statements, IFRS 12 Disclosure of Interests in Other Entities and IFRS 28 Investments in Associates and Joint Ventures** – Investment Entities: Applying the Consolidation Exception – adopted by the EU on 22 September 2016 (effective for annual periods beginning on or after 1 January 2016);

This amendment arises in connection with the clarifications regarding the possibility of exemption from consolidation.

### **3.2 Standards and Interpretations not yet entered into force and not adopted for early application by the Group**

As at the date of issuance of these Consolidated Financial Statements, new standards and interpretations, as well as revised standards and interpretations that have not been adopted for early application by the Group, have been issued, but not yet in force for annual periods beginning on 1 January 2016. The Management has determined that the following would have a potential effect in the future for changes in the accounting policy, the classification and the amounts of reportable items in the Group's financial statements for subsequent periods, namely:

**IFRS 15 Revenue from Contracts with Customers** – adopted by the EU on 22 September 2016 (effective for annual periods beginning on or after 1 January 2018);

IFRS 15 replaces IAS 18 Revenue, IAS 11 Construction Contracts, and the related clarifications, and introduces a new control-based revenue recognition model. The new standard changes the rules for determining whether earnings are recognized at a given time or over a given period of time and results in expanding and improving the disclosures about earnings. IFRS 15 is based on a basic principle that requires the Company to recognize revenue in a manner that reflects the transfer of goods or the provision of services to customers and to an amount that reflects the expected consideration that the Company will receive in exchange for those goods or services. Earlier application of the standard is permitted. The companies should apply the standard retrospectively for each prior period presented or retrospectively where the cumulative effect of the initial recognition is accounted for in the current period.

**IFRS 9 Financial Instruments**, adopted by the EU on 22 November 2016 (effective for annual periods beginning on or after 1 January 2018);

The new standard introduces significant changes in the classification and measurement of the financial assets and a new pattern of the expected credit loss for impairment of financial assets. IFRS 9 also includes a new guidance on hedge accounting.

### **3.3 Standards and interpretations issued by IASB that have not yet been adopted by the EU**

The Management considers it appropriate to disclose the following new or revised standards, new clarifications and amendments to existing standards, which as at the reporting date have already been issued by the International Accounting Standards Board (IASB), but have not yet been approved for application by the European Commission. The dates of their entering into force depend on the decision for approval and application of the European Commission.

**IFRS 14 Regulatory Deferral Accounts** – the EC decided not to begin the process of validating this interim standard and to wait for its final version;

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

IFRS 14 permits an entity which is a first-time adopter of IFRSs to continue to recognize amounts related to regulated prices in accordance with its previous GAAP when applying IFRSs. In order to improve the reporting comparability of companies that already apply IFRSs and do not recognize such amounts, the standard requires separate presentation of the effect of the regulated prices.

**IFRS 16 Leasing** – effective for annual periods beginning on or after 1 January 2019.

The concept of this standard is completely changed. New principles of recognition, measurement and presentation of leases are introduced aimed at better representation of these transactions. The standard will replace the current IAS 17. The guiding principle of the new standard is the introduction of a one-size-fits-all model of lease accounting for lessees under all lease contracts with a duration of more than 12 months, recognizing a "right of use" asset to be amortized over the term of the contract and respectively, the liability under these contracts will be taken into account.

**Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures** – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture – postponed for an indefinite period;

This change arises in connection with the inconsistency between the requirements and rules of IFRS 10 and IAS 28 (revised in 2011) in the case of transactions carried out by an investor to its associate or joint venture companies.

**Amendments to IAS 12 Income Taxes** – Recognition of Deferred Tax Assets for Unrealised Losses – effective for annual periods beginning on or after 1 January 2017;

The purpose of the draft amendment is to clarify the accounting of deferred tax assets for unrealized losses on debt instruments measured at fair value.

**Amendments to IAS 7 Statement of Cash Flows** – Disclosure Initiative, effective for annual periods beginning on 1 January 2017;

The draft amendment is part of the disclosure initiative. The amendments require the entities to disclose information that permit the users to assess the changes in the liabilities arising from the financial activities, to improve their understanding of the company's liquidity and financial operations. The amendment requires additional disclosures to be made regarding the changes in the company's liabilities.

**Amendments to IFRS 2 Share-based Payment** – effective for annual periods beginning on or after 1 January 2018;

The draft amendment to the standard brings together three amendment initiatives concerning non-market-driven share-based payments and reporting any changes in the agreement that convert it from payment-settled into equity-settled.

**Amendments to the IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts** – effective for annual periods beginning on or after 1 January 2018;

The purpose of the draft amendment is to address the temporary effects of the different effective dates of the application of IFRS 9 and IFRS 4, providing for exemptions for insurers.

**Amendments to various standards Improvements to IFRSs (Cycle 2014-2016)** – effective for annual periods beginning on or after 1 January 2018 and 1 January 2017;

**IFRIC Interpretation 22 Transactions in Foreign Currency and Advance Payments** – effective for annual periods as from 1 January 2018;

The interpretation defines the requirements for the exchange rate to be used when reporting prepaid foreign currency payments.

**Amendments to IAS 40 Investment Property** – Transfers of Investment Property – effective for annual periods beginning on or after 1 January 2018;

The draft amendment aims to clarify the requirements of the standard on transfers to and from the investment property category.

The Management expects that the adoption of these new standards and interpretations will have no material effect on the Group's consolidated financial statements.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**4. Accounting Policy**

**4.1 General**

The most significant accounting policies used in the preparation of these Consolidated Financial Statements are presented hereinafter.

The Consolidated Financial Statements have been prepared in accordance with the principles for measurement of all types of assets, liabilities, revenue and expenses under the IFRSs. The measurement basis is disclosed in detail further in the accounting policies of the Consolidated Financial Statements.

It should be noted that accounting estimates and assumptions have been used in the preparation of the presented Consolidated Financial Statements. Although they are based on information provided to the Management as at the date of preparation of the Consolidated Financial Statements, therefore the actual results may differ from the estimates and assumptions made.

**4.2 Presentation of the Consolidated Financial Statements**

The Consolidated Financial Statements are presented in accordance with IAS 1 Presentation of Financial Statements.

Two comparative periods are presented for the consolidated statement of financial position, where the Group applies an accounting policy retrospectively, makes a retrospective restatement of items in its Consolidated Financial Statements, or reclassifies items in the Consolidated Financial Statements.

As a result of adjustment of errors and reclassifications of prior periods' amounts, presented under Note 5, the Group has presented two comparative periods in the Consolidated Financial Statements for the year ended 31 December 2016.

**4.3 Basis of consolidation**

The Financial Statements of the Group comprise the Consolidated Financial Statements of the parent company and of all subsidiaries as at 31 December 2016. Subsidiaries are all entities under the control of the parent company. It is considered that there is control when the parent company is exposed to, or has rights to, the variable return on its interest in the investee and has the potential to influence that return by virtue of its powers over the investee. All subsidiaries prepare their financial statements for the reporting period ending on 31 December.

All intragroup transactions and balances are eliminated, including the unrealized gains and losses from transactions between the companies belonging to the Group. Where the unrealized losses on intragroup sales of assets are eliminated on consolidation, the respective assets are reviewed for impairment from the Group's point of view. The amounts reported in the financial statements of the subsidiaries have been adjusted, where necessary, to ensure their compliance with the accounting policies applied by the Group.

Profit or loss and other comprehensive income of subsidiaries acquired or sold during the reporting year are recognized as from the acquisition date or the effective date of disposal, as applicable.

The non-controlling interest, presented as part of the equity, represents the proportion of the profit or loss and the net assets of the subsidiary that are not held by the Group. The total comprehensive income or loss on a subsidiary is attributed to the owners of the parent company and to the non-controlling interest based on their relative share in the equity of the subsidiary.

If the Group loses control of a subsidiary, the Group recognises any investment, retained in the former subsidiary at its fair value as at the date when control is lost and the change in carrying amount is recognized in profit or loss. The fair value of each investment, retained in the entity as at the date when control is lost, is regarded as the financial asset's fair value on initial recognition, in accordance with IAS 39 Financial Instruments: Recognition and Measurement, or when appropriate, the cost on initial recognition of an investment in an associate or joint venture. Furthermore, all amounts recognised in other comprehensive income with respect to that subsidiary are accounted for at the same basis as they would be if the Group had directly disposed of the respective assets or liabilities (e.g. – reclassified in profit or loss, or carried directly to the retained earnings, in accordance with the requirements of the respective IFRS).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The profit or loss from derecognition of an investment in a subsidiary represents the difference between the fair value of the consideration received and the fair value or all investments retained in the former subsidiary and the carrying amount of the assets (including goodwill) and the liabilities of the subsidiary and any non-controlling interest.

**4.4 Business combinations**

All business combinations are accounted for by the acquisition method. The consideration transferred in a business combination is measured at fair value calculated as the sum of the acquisition-date fair values of the assets, transferred by the acquirer, the liabilities to former owners of the acquiree, assumed by the acquirer, and the equity interests, issued by the Group. The transferred consideration includes the fair value of assets and liabilities, arising as a result of the contingent considerations. The acquisition-related costs are accounted for in profit or loss, in the period in which the costs are incurred.

The fair method includes recognising the identifiable assets and liabilities of the acquiree including and the contingent liabilities, regardless of whether or not such are recognised in the acquiree's financial statements prior to the business combination. Upon the initial recognition, the acquiree's assets and liabilities are included in the consolidated statement of financial position at their fair value used in accordance to the Group's accounting policy as a base for subsequent measurement.

For each business combination, the Group measures all non-controlling interests in the acquiree that represent a share of its equity and entitle the holders to share in the event of liquidation at either at fair value or at the proportionate share of the non-controlling interest in the acquiree's identifiable net assets. All other components of non-controlling interest are measured at fair value or, if applicable, at a basis defined by another IFRS.

Goodwill is recognised after determining all identifiable intangible assets. Goodwill represents the excess of the acquisition-date fair value of the transferred consideration and the amount of any non-controlling interest in the acquiree, and in a business combination, achieved in stages, the acquisition-date fair value of the Group's previously held equity interest in the acquiree, over the acquisition-date fair value of the identifiable net assets of the acquiree. Any excess of the identifiable assets' fair value over the above-calculated amount is recognised in profit or loss immediately after the acquisition.

In a business combination achieved in stages, the Group revalues its previously held equity interest in the acquiree at its acquisition-date fair value (i.e. as at the date of obtaining control) and recognises the resulting gain or loss, if any, in profit or loss. The amounts recognised in other comprehensive income from equity interest in the acquiree prior to the date of obtaining control, are recognised on the same basis as would be required if the Group had directly disposed the previously held equity interest.

If the initial accounting treatment of a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting treatment has not been completed. During the measurement period, which may not be more than one year as of the acquisition date, the Group adjusts retrospectively the provisional amounts or recognises additional assets or liabilities to reflect new information obtained about facts and circumstances that existed as at the acquisition date and, if known, would have affected the measurement of the amounts, recognised as at that date.

All the contingent considerations owed by the acquirer are recognised at fair value as at the acquisition date and are included as part of the consideration, transferred in exchange of the acquired entity. Subsequent changes in the fair value of the contingent considerations which are classified as assets or liabilities are recognised in compliance with the requirements of IAS 39 Financial Instruments: Recognition and Measurement, either in profit or loss, or as a change in other comprehensive income. If the contingent consideration is classified as equity, it is not revalued until its final settlement within the equity. Changes in the fair value of contingent considerations, representing provisional amounts during the measurement period, are presented retrospectively with corresponding adjustments against goodwill.

In the case of a commitment to a sales plan involving loss of control over a subsidiary, the Group classifies all of the consolidated assets and liabilities of that subsidiary as held for sale regardless of whether or not it will retain a non-controlling interest in its former subsidiary after the sale. Any assets (and decommissioning groups) classified as held for sale are separately presented in the consolidated statement of financial position and are measured at their carrying amount (initially at their acquisition cost) or their fair value less the estimated direct sales costs (net sales price), whichever is less. Any impairment loss is allocated among those assets of the particular decommissioning group.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**4.5 Transactions with non-controlling interests**

Changes in the Group's share in the capital of a subsidiary that do not result in a loss of control are treated as transactions with the Group's owners. The carrying amounts of the Group's share and of the non-controlling interests are adjusted in order to reflect the changes in their relative share in the equity of the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received, is recognised directly in the equity and is attributed to the owners of the parent company.

**4.6 Reporting by segment**

The Management determines the operating segments, based on the main products and services, offered by the Group:

- Electricity Segment
- Natural Gas Segment
- Mining Segment
- Administrative Activities Segment

Administrative Activities Segment comprises the segments (Administrative and Telecommunications) which meet the aggregation criteria of IFRS 8 "Operating Segments" and do not exceed the quantitative thresholds for separate reporting.

Due to the fact that different technologies, resources and distribution approaches are used for each separate product or service, each of these operating segments is managed separately. All transactions between segments are conducted at prices, corresponding to the transactions between independent parties, where appropriate, while the transactions in Electricity Segment and Natural Gas Segment are mainly transactions at prices set by the regulatory authority –Energy and Water Regulatory Commission (EWRC). In segment reporting, the Group applies measurement policies corresponding to the policies used in the consolidated financial statements.

Financial revenue and finance expenses are not included in the operating segment's results which are regularly reviewed by the persons, responsible for operational decision-making.

**4.7 Investments in joint ventures and associates**

A joint venture is a contractual agreement under which the Group and other independent parties engage in a business that is subject to joint control and the parties, having common control on the entity, are entitled to the entity's net assets. The investments in joint ventures are carried at the equity method.

Associates are those entities over which the Group is able to exercise significant influence, but which are neither subsidiaries, nor joint ventures. Investments in associates are initially recognized at cost and subsequently carried at the equity method. The cost of the investment includes the cost incurred in its acquisition.

Goodwill or fair value adjustments of the Group's share in the associate are included in the cost of the investment.

Any subsequent changes in the amount of the Group's interest in the equity of the associate are recognized in the carrying amount of the investment. Any changes, arising from profit or loss realized by the associate, are reported in the Consolidated Statement of Profit or Loss, under "Share of the financial result of investments carried at the equity method". These changes include subsequent depreciation or impairment of the fair value of the associate's assets and liabilities determined at acquisition.

Changes in an associate's other comprehensive income, as well as in items, recognized directly in the associate's equity, are recognised respectively in the Group's other comprehensive income or equity. In cases where the Group's share in the losses realised by the associate exceeds the amount of its interest in the associate, including the unsecured receivables, the Group does not recognise its share in the associate's future losses, unless the Group has assumed contractual or actual obligations, or it has conducted payments on behalf of the associate. If, subsequently, the associate makes profits, the Group recognizes its interest insofar as the proportion of profit exceeds the accrued share of losses that were not recognized previously.

Unrealized gains and losses on transactions between the Group and its associates and joint ventures are reversed to the extent of the Group's interest in those entities. Where unrealized losses from sales of assets are reversed on consolidation, the related assets are tested for impairment from the Group's point of view.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The amounts recognized in the financial statements of the associates and joint ventures are restated, where necessary, to ensure their compliance with the Group's accounting policy.

In case of a loss of significant influence over the associate, the Group measures and recognizes any retained investment at its fair value. In case of a loss of significant influence over the associate, the difference between the carrying value of the investment and the sum of the fair value of the retained interest and the proceeds from the derecognition is recognized in profit or loss.

If the Group's share interest in an associate is reduced, but the Group has still significant influence over the associate, the Group reclassifies, in profit or loss, only the proportionate part of the amounts, recognised in other comprehensive income.

**4.8 Foreign currency transactions**

Foreign currency transactions are reported in the functional currency of the respective Group company at the official exchange rate as at the date of the transaction (at the announced fixing of the Bulgarian National Bank). The foreign exchange gains and losses arising from the settlement of these transactions and the revaluation of foreign currency monetary items at the end of the reporting period are recognized in profit or loss.

The non-monetary items measured at historical cost in a foreign currency are translated by using the exchange rate as at the date of the transaction. The non-monetary items measured at fair value in a foreign currency are translated by using the exchange rate as at the date on which the fair value has been determined.

The functional currency of the separate entities within the Group has not been altered within the reporting period.

When consolidated, all assets and liabilities are translated in BGN at the closing exchange rate as at the date of the Consolidated Financial Statements. Income and expense are translated in the Group's presentation currency, at the average exchange rate for the reporting period. Foreign exchange gains and losses result to increase or decrease in other comprehensive income and are recognised in translation reserves in the equity. On disposal of a net investment denominated in a foreign currency, the accumulated foreign exchange gains and losses from revaluations, recognized in equity, are reclassified in profit or loss, and are recognized as part of the gain or loss from the sale. Goodwill and adjustments related with determining the acquisition-date fair value are treated as assets and liabilities of the foreign entity and are translated in BGN at the closing exchange rate.

**4.9 Revenue recognition**

The revenue is recognized to the extent that it is probable that economic benefits will be received by the Group and the amount of the revenue can be reliably measured. The revenue is measured at the fair value of the consideration received, excluding discounts, rebates and other taxes on sales or duties. The Group analyses its sales agreements based on specific criteria, in order to determine whether to act as a principal or as an agent. The Group has concluded that it should act as a principal in all such agreements. Prior to recognizing revenue, the following specific recognition criteria must also be met:

***Sales of electricity***

Revenue, generated from electricity supplies to customers, is recognised in the Statement of Profit or Loss, when electricity is supplied by the electricity transmission and distribution networks to end suppliers, to electrical distribution companies, to the supplier of last resort, to customers of the supplier of last resort and to the free market. Sales revenues are recognised based on the readings of the electricity meters for the electricity consumed or based on the registered schedules.

***Sales of electricity in the balancing market***

Revenue from sales of electricity in the balancing market arise as from the moment when the market participants, including NEK EAD, confirm to the operator, in its capacity of a public supplier, the aggregated settlement statements for the respective reporting period (month).

***Revenue from "Obligation to society" fee***

In accordance with Decision No. II-27 dated 31 July 2015 of Energy and Water Regulation Commission (EWRC), the revenue generated from the "Obligation to society" fee is accrued and paid by the end-customers in the free market

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

connected to the electricity grid, by the customers of the supplier of last resort, the electricity transmission and distribution companies for the purchased electricity to cover their technological losses. This decision increased the volume of costumers required to pay for the "Obligation to society" fee. Decision No. II19 dated 30 June 2016 of EWRC reconfirmed this methodology for determining and payment of the "Obligation to society" fee.

***Revenues related with electricity sales******Revenues from access to the electricity transmission grid***

Revenues from access to the electricity transmission system are recognized when the operator receives the actually measured and validated data sent by the owners of the commercial metering devices.

Revenues from access of producers and proprietors engaged in transactions related to the export of electricity are recognised after validating the intersystem volume schedules of ESO EAD.

***Revenues from the provision of commercial transmission rights***

Revenues generated from the provision of commercial transmission rights are recognised as "Deferred Revenue" when they result from annual and monthly auctions. These revenues are recognised when the operator announces the result of the auction on the website of ESO EAD in compliance with the auction rules for separating and providing transmission capacities along the interconnections between the control zone of ESO EAD and its neighbouring control zones.

The annual auction is held in December in the year, prior to the calendar year for which it refers. The commercial transmission rights are used and paid during each month of the following year. The proceeds from the annual auction are recognised as current revenue in the month in which the commercial transmission right is actually used. The monthly auction is held in the month prior to the month when the actual commercial transmission right is exercised. The revenues generated during the monthly auctions from the commercial transmission rights granted are recognised as current revenue in the period in which the commercial transmission right is actually used.

***Revenue generated from connecting consumers and producers of electricity to the electricity transmission grid***

In accordance with IAS 18 "Revenue" and in compliance with Interpretation 18 "Transfers of Assets by Customers" of the IFRS Interpretations Committee (IFRIC), the revenues generated from the provision of the services relating to connection to the electricity transmission grid, provided to customers in exchange of transfers of the sites, constructed by the later and recognised as assets in the transmission grid, are recognised in the current financial result for the year, in which the connection fee is invoiced.

***Specific proceeds (revenues) received from the distribution of the interconnector power lines***

The target proceeds (amounts) received from the distribution of the interconnector power lines are not recognised as (current) revenues in the Statement of Profit or Loss at the moment of their receipt. These amounts are allocated (reserved) in the account "Special Reserve as per Regulation 714/2009" and are presented as Deferred Revenue. The allocated (reserved) amounts are recognised as (current) revenues in the Statement of Profit or Loss when the expenses, intended to cover (secure) the recognized target expenses as per Art. 16(6) of the Regulation (EC) 714/2009 are incurred (accrued). The allocated (reserved) amounts are recognised in the amount of the recognised target expenses.

***Sales of natural gas***

Revenues generated from sales of natural gas are recognised at the end of each month after accounting for the monthly consumption of natural gas by the Group's customers. Revenue is accrued based on a bilateral protocol for gas supplies signed for a period of 1 month. The validity of the protocols is established by the signatures of the signatories authorised by the Group and by the respective customer.

In compliance with the Bulgarian legislation, the Group is not allowed to apply its own pricing strategy in respect of the natural gas that it sells. The selling prices of natural gas to all consumers connected to the transmission and distribution network are uniform throughout the country and are set by the Energy and Water Regulatory Commission. The prices are set on a quarterly basis.

***Revenue from transmission and storage of natural gas***

The revenues are formed from licensed operations of the Group in respect of the provided services for natural gas transmission on the territory of the country, natural gas transmission from the borders of the Republic of Bulgaria with Romania to the borders with Greece, Turkey and Macedonia, as well as for storage of natural gas. The services

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

are recognised at fair value of the consideration received or to be received or the consideration reduced by discounts and rebates.

***Sales of coal***

The Group carries out operations of coal mining and sale. The revenues generated from the sales of coal are recognised when the material risks and benefits of their ownership are transferred to the buyer. Material risks and benefits of ownership are considered transferred to the buyer when the delivered coal is accepted without objections.

***Sale of other products and goods***

The revenue from the sales of products and goods is recognized when the material risks and benefits of the ownership of the goods are transferred to the buyer, which usually occurs at the time of their dispatch.

***Provision of services***

The revenue from the provision of services is recognized proportionally to the level of completion of the transaction as at the reporting date. The level of completion of the transaction is determined in proportion to the term of the contract for which the services are agreed. When the outcome of the transaction (the contract) cannot be reliably measured, the revenue is recognized only to the extent that the expenses incurred are recoverable.

***Revenue from interest***

The revenue from interest is recognized on a time basis for the periods to which it relates by using the effective interest method, i.e. the interest rate that accurately discounts the expected future cash flows over the expected life of the financial instrument to the carrying value of the financial asset.

***Dividend revenue***

The revenue from dividends is recognized with the establishment of the right to their receipt.

**4.10 Operating expenses**

The expenses are recognized at the time they arise and based on the accrual and comparability principles and to the extent that it would not result in the recognition of assets/liabilities that do not qualify as such under the IFRSs.

The prepaid deferred expenses are deferred for recognition as current expenses for the period to which they relate.

**4.11 Expenses on interests and borrowing costs**

Interest expense is recognised on an accrual basis for the periods to which they relate, using the effective interest rate method.

Borrowing costs mainly comprise interest on bank loans obtained by the Group. All borrowing costs, directly attributable to the purchase, construction or production of a qualifying asset are capitalised in the period in which the asset is expected to be completed and get ready for use, or sold, by applying a capitalization ratio to the expenses on that asset. The capitalization ratio is the weighted average of the borrowing costs attributable to the borrowings of the Group that are outstanding during the period, except for the borrowings specifically made for the acquisition of a qualifying asset.

Other borrowing costs are recognized as expenses in the period in which they are incurred in the Consolidated Statement of Profit or Loss under section Finance Expenses.

**4.12 Profit or loss from discontinued operations**

Discontinued operations are components of the Group that either have been disposed or were classified as "held-for-sale", or as held for distribution to the sole-shareholder, and:

- Represents a separate major line of business or covers operations in a particular geographical area;
- Is part of a separate coordinated plan to sell a particular major line of business or operations in a particular geographical area; or
- Is a subsidiary, acquired exclusively with a view to resale.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Profit or loss from discontinued operations and the components of profit or loss from previous periods are presented as a single amount in the consolidated statement of profit or loss.

The disclosure of discontinued operations from the previous year is related to all operations that were discontinued as at the reporting date for the latest period presented. If operations that have been presented as discontinued in the previous period are renewed during the current year, the relevant disclosures for the previous period should be changed.

**4.13 Property, plant and equipment**

Property, plant and equipment are initially measured at cost, including their cost of acquisition and all direct costs of bringing the asset into working condition. Their subsequent measurement after the initial recognition applies to a full class of identical assets as follows:

No.	Property, plant and equipment	Model of subsequent measurement
1	Land	Revaluation model
2	Improvements on land and plots	Revaluation model
3	Buildings and constructions	
	• massive	Revaluation model
	• non-massive	Cost model
4	Machinery, plant and equipment	Revaluation model
5	Computer systems	Cost model
6	Transport vehicles	
	• Freight vehicles	Revaluation model
	• Automobiles	Cost model
	• Specialised motor vehicles	Revaluation model
7	Furniture, Fixtures and fittings	Cost model
8	Spare parts accounted as property, plant and equipment	Revaluation model
9	Other property, plant and equipment	Cost model

Property, plant and equipment accounted for using the revaluation model are subsequently measured at a re-measured value that is equal to the fair value at the measurement date less any subsequent accumulated depreciation and impairment losses. The revaluations are presented in the statement of comprehensive income and are accounted for in the equity (revaluation reserve) if they are not preceded by previously accrued expenses. Upon sale or disposal of the revalued asset, the remaining revaluation reserve is transferred to retained earnings.

Revaluations are carried out subject to the following frequency of revaluation:

- when the fair value of the assets undergoes minor changes only, the revaluation is carried out every three years;
- when the fair value of property, plant and equipment changes substantially in shorter time intervals, the revaluation is carried out at shorter intervals so that the carrying amount of the asset does not differ materially from its fair value.

When applying the revaluation model, the frequency of subsequent revaluations of property, plant and equipment, depends on whether the carrying amount materially differs from the fair value of the revalued asset as at end of the reporting period.

In this regard, during the annual stock take at the end of the reporting period (end of the fiscal year), the Group analyses the items of property, plant and equipment for indications whether their carrying value materially differs from their fair value.

A "material deviation" is a deviation of the carrying value from the fair value of the asset as at the date of the financial statement by more than 5%. The deviation is also considered material if it is below 5%, but the difference between the carrying value and the fair value as a cumulative amount of property, plant and equipment is material for the purpose of the preparation of the financial statements.

Property, plant and equipment that are accounted for using the cost model are subsequently measured at their acquisition price less the accumulated depreciation and impairment losses. The impairments are recorded as an expense and are recognized in the statement of profit or loss for the respective period.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The subsequent expenses related to certain asset, consisting of property, plant and equipment, are added to the carrying value of the asset if the Group is likely to have economic benefits which exceed the originally estimated efficiency of the existing asset. All other subsequent expenses are recognised as cost for the period in which they are incurred.

The remaining value and the useful life of property, plant and equipment are reviewed by the management at each reporting date.

Depreciation of property, plant and equipment is calculated using the straight-line method over the estimated useful lives of the individual asset groups as follows:

Buildings	5 to 80 years
Property, plant and equipment	2 to 50 years
Transport means	2 to 30 years
Furniture	2 to 30 years
Other property, plant and equipment	3 to 30 years
Depreciable buffer gas	60 years.

The annual depreciation rate for the depreciable lands for coal mining is calculated as a coefficient and can be presented as follows:

$$K = \frac{CP}{SCR + BR + CRIP}$$

where:

CP	Coal Production, in tonnes
SCR	Stripped Coal Reserves
BR	Blocked Reserves
CRIP	Coal Reserves In Progress

The depreciation expenses are included in the consolidated statement of profit or loss, under "Depreciation Expenses" and as part of "Loss for the year from discontinued operations".

*Buffer gas*

The natural gas stored in Chiren Underground Gas Storage (Chiren UGS) includes working gas and buffer gas. The natural gas stored in Chiren UGS is measured through reservoir simulation using special software - ECLIPSE. Changes in pressure during different drillings during reservoir simulation of operation of the underground section are analysed and compared with the actually measured pressure levels.

Buffer gas maintains the stratum pressure required for the successful extraction of working gas. The buffer gas stored in the underground gas storage is accounted for as a non-current asset.

The amount of buffer gas has been estimated by technical experts of the Group based on the stratum pressure during drilling and the pressure at the exit of Chiren UGS, i.e. the point where the natural gas is fed into the gas pipeline.

Buffer gas includes physically extractable and non-extractable natural gas. The quantity of physically extractable natural gas has been estimated. The extractable buffer gas is the natural gas which could be extracted from Chiren Underground Gas Storage if the gas is fed into the gas pipeline under specific pressure. The extractable buffer gas is non-depreciable. The non-extractable buffer gas is depreciable.

*Minimum quantities of natural gas required for the functioning of the transmission and transit gas pipelines*

The minimum quantities of natural gas required for the normal functioning of the gas main and transit gas pipelines have been estimated applying the quantity method and a specific methodology. These quantities are reported as fixed assets.

The Group's technical experts have estimated the unrecoverable quantity of natural gas which would be irretrievably lost in case of dismantling the transmission and transit gas pipelines. This quantity is considered as depreciable gas.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The rest of the estimated minimum quantity of natural gas required for the normal functioning of the gas transmission network is non-depreciable. This natural gas could be extracted in case of dismantling.

The gain or loss from sale of property, plant and equipment is determined as the difference between the sale proceeds and the carrying value of the asset.

**4.14 Intangible assets**

The intangible assets acquired separately are measured initially at their cost, including import duties, non-refundable taxes and any directly attributable costs of preparing the asset for its intended use, where the capitalized expenses are then amortized using the straight-line method over the estimated period of the asset's useful life as it is considered to be limited.

The subsequent measurement is based on the cost of acquisition less the accumulated depreciation and impairment losses. The impairments are reported as an expense and are recognized in the consolidated statement of profit or loss for the respective period.

Intangible assets with a limited useful life are depreciated over their useful lives and tested for impairment when there are indications that their value is impaired. The depreciation period and the depreciation method for intangible assets with a limited useful life are reviewed at least at the end of each financial year. The changes in the expected useful life or pattern of consumption of the future economic benefits of the intangible asset are accounted for by a change in the depreciation period or method and treated as a change in the accounting estimates.

The subsequent expenses arising in respect of intangible assets after their initial recognition are recognised in the Consolidated Statement of Profit or Loss for the period when such are incurred, excluding the cases where because of these subsequently incurred expenses, the intangible asset can generate more than the initially estimated future economic benefits and where such expenses can be reliably measured and attributed to the asset. If these conditions are satisfied, the incurred expenses are added to the cost of the asset.

The remaining value and the useful life of the intangible assets are reviewed by the management at each reporting date.

Intangible assets are amortized on the straight-line basis over the assets' useful life. The useful life of the intangible assets is defined as limited as follows:

Software	2 to 10 years
Licences	Term of license
Products from development	5 to 20 years
Other intangible assets	3 to 10 years

The depreciation expenses are included in the Consolidated Statement of Profit or Loss, under "Depreciation Expenses" and as part of "Loss for the year from discontinued operations".

The profits or losses arising from the disposal of the intangible asset, representing the difference between the net proceeds from the sale and the carrying value of the asset, are included in the consolidated statement of profit or loss when the asset is disposed.

The intangible assets created under the development activities of the Group in order to serve the purpose of intergroup activities are recognised as assets by a committee of experts appointed by the Group's Management depending on the intangible assets' completion stage, provided that the conditions below are met:

- The Group has the technical ability to finish the asset;
- The Group intends to finish the asset;
- The asset can be used or sold and there is a market for the asset or the asset is useful for intergroup use;
- The expenses incurred in the development of the asset are measurable.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Research activities*

Research expenses incurred for gaining new scientific or technical knowledge are recognised in profit or loss when incurred.

Research and development expenses incurred in respect of external orders under signed contracts with customers are recognised as assets for sale.

Indirect technological and generation expenses are allocated based on labour and together with the direct expenses form the cost of the created asset.

*Development activities*

Development activities include a production plan or project for the development of new or significantly improved products and processes. Development expenses are capitalised only if these expenses can be reliably measured, the product or the process is technically and commercially possible, future economic benefits are probable and the Group intends to and has sufficient resources to complete the development and to use or sell the asset. The capitalised expenses include materials, labour, generation overheads directly attributable to the asset's preparation for its intended future use and capitalised interest expense. Other development expenses are recognised in profit or loss when incurred. The capitalised development expenses are measured at cost of acquisition less any accumulated amortization and accumulated impairment losses.

The expenses incurred in the development of intangible assets that do not satisfy the criteria for capitalization are recognised when occurred

**4.15 Leases**

Determining whether an arrangement is or contains a lease, depends on the substance of the arrangement as at its commencement date and requires an assessment of whether fulfilling the arrangement depends on the use of a specific asset or assets, and whether the arrangement transfers the right to use the asset.

*The Group as a Lessee*

In accordance with IAS 17 Leases, the asset control rights are transferred from the lessor to the lessee when the lessee bears substantially all the risks and benefits related to the ownership of the leased asset.

Upon signing a finance lease agreement, the Group recognizes the asset in the consolidated statement of the lessee's financial position at the lower of the two values – the fair value of the leased asset and the present value of the minimum lease payments plus incidental payments, if any. The corresponding amount is recognised in the consolidated statement of the financial position as a finance leasing liability, irrespective of whether or not some of these lease payments are payable up-front at the date of the conclusion of the financial lease agreement.

The finance lease payments are subsequently allocated in the financial expenses and the reduction of the outstanding liability under the financial lease agreement.

The assets acquired under finance leases are depreciated in compliance with the requirements of IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets.

The interest element of lease payments represents a constant proportion of the outstanding liability and is recognized in profit or loss over the period of the lease agreement.

All other lease agreements are treated as operating lease agreements. The payments under the operating lease agreements are recognised as expenses on the straight-line basis over the lease term. The expenses incurred in respect to operating leases, such as insurance and maintenance costs, are recognised in profit or loss when incurred.

*The Group as a Lessor*

Leases, where the Group retains substantially all the risks and benefits of the ownership of the leased asset, are classified as operating leases. The initial direct costs incurred by the Group in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and are recognized as an expense over the lease term on the same basis as the lease income. The contingent rents are recognised as revenue in the period in which they are earned.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The assets leased under operating lease agreements are presented in the Consolidated Statement of Financial Position of the Group, and are depreciated in compliance with the depreciation policy adopted in respect of similar assets of the Group and the requirements of IAS 16 Property, Plant and Equipment, or of IAS 38 Intangible Assets. The income earned under operating lease agreements is recognised as revenue in the Consolidated Statement of Profit or Loss for the reporting period.

**4.16 Impairment testing of non-financial assets**

When calculating the amount of impairment, the Group defines the smallest identifiable group of assets for which independent cash flows can be determined (cash-generating unit). As a result, some of the assets are subject to testing for impairment on an individual basis, while others as the cash-generating units.

The Group assesses at each reporting date whether there is an indication that an asset or cash-generating unit may be impaired. In the case of such indications or where an annual impairment test of an asset is required, the Group determines the recoverable amount of that asset. The recoverable amount of the asset is the higher of the fair value less the costs to sell the asset or the cash-generating unit and its value in use. The recoverable amount is determined for an individual asset, unless in its use the asset does not generate cash flows that are largely independent of those generated from other assets or groups of assets. Where the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount, the asset or the cash-generating unit is considered impaired and its carrying amount is reduced to its recoverable amount.

In determining the value in use of an asset, the estimated future cash flows are discounted to their present value using a pre-tax discounted rate that reflects the current market assessments of the time value of money and the risks specific to the asset. The fair value less the costs to sell is determined using the appropriate measurement model. The calculations made are confirmed using other measurement models or other available sources of information about the fair value of the asset or the cash-generating unit.

Impairment losses are recognized as an expense in the consolidated statement of profit or loss, except for non-current assets that were revalued in prior periods and the revaluation surplus is recognized in the other comprehensive income. In this case, the impairment loss is also recognized in the other comprehensive income to the amount of the previously recognized revaluation of the relevant asset.

As at each reporting date, the Group assesses whether there are indications that the impairment loss on an asset recognized in prior periods may no longer exist or may have decreased. If such indications exist, the Group determines the recoverable amount of the asset or the cash-generating unit. The impairment loss is reversed only when there has been a change in the estimates used to determine the recoverable amount of the asset after the recognition of the last impairment loss. The reversal of an impairment loss is limited so that the carrying amount of the asset may not exceed its recoverable amount, nor exceed the carrying amount (after the deduction of the depreciation) that would have been determined if no impairment loss had been recognized for the asset in the previous years. The reversal of an impairment loss is recognized in the consolidated statement of profit or loss unless the asset is recognized at revalued amount, in which case the reversal is treated as a revaluation surplus.

**4.17 Financial instruments**

Financial assets and liabilities are recognized when the Group becomes a party to contractual arrangements involving financial instruments.

**4.17.1 Financial assets***Classification*

Financial assets within the scope of IAS 39 Financial Instruments: Recognition and Measurement are classified as financial assets at fair value through profit or loss, or as loans and receivables, or as held-to-maturity investments, or as available-for-sale financial assets, or as derivatives designated as hedging instruments in effective hedging, as appropriate. The Group classifies its financial assets at their initial recognition.

The Group's financial assets comprise cash and deposits, trade and other receivables, loans granted, unquoted investments, available-for-sale investments.

*Initial recognition*

Financial assets are initially recognized at their fair value, plus, in the case of investments not reported at fair value through profit or loss, the transaction costs that are directly attributable to the acquisition of the financial asset.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Purchases or sales of financial assets the terms of which require the transfer of the asset over a period of time usually established by a statutory provision or according to the practice effective in the relevant market (regular purchases) are recognized as at the trade date (transaction), i.e. the date the Group has committed to buy or sell the asset.

*Available-for-sale financial assets*

The available-for-sale financial assets include equity instruments, designated as available-for-sale and not classified under any other category. Usually such instruments are shares or interests in other entities, acquired with investment purposes (available investments and available-for-sale investments) and are included in the non-current assets, unless they are intended to be sold within the next 12 months and the entity actively seeks a buyer

After their initial recognition, the available-for-sale financial assets are measured at fair value, except for the investments in equity instruments that have no quoted market price in an active market and whose fair value cannot be measured reliably. The effects of the revaluation to the fair value and the unrealized gains or losses on the available-for-sale investments are recognized in the Statement of Comprehensive Income and are accumulated as separate components of equity – "Reserves from revaluation to fair value". In the event of a subsequent impairment loss or disposal of an available-for-sale investment, the cumulative impairment loss and any previously accumulated (net) losses in the revaluation reserve are recognized in the statement of profit or loss. Similarly, upon any sale of such investments, the accumulated unrealised profits in the reserve will be recognized in the statement of profit or loss.

*Loans and Receivables*

The loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After their initial recognition, the loans and receivables are measured at amortized cost, using the effective interest rate method (EIR), less the accumulated impairment expenses. The amortized cost is calculated by taking into account any discounts or premiums on the acquisition and charges or expenses that are an integral part of the EIR. EIR depreciation is included in the financial revenue in the statement of profit or loss. Impairment losses are recognized in the statement of profit or loss as Other Expenses.

This group of financial assets includes: loans provided, trade receivables, other receivables from counterparts and third parties and cash and cash equivalents. These assets are included in the group of current assets when their maturity is within 12 months, otherwise they are recognized as non-current assets.

*Derecognition*

A financial asset (or, where applicable, part of a financial asset or part of a group of similar financial assets) is derecognized when:

- the contractual rights over the cash flows from that financial asset have expired;
- the contractual rights to receive cash flows from that financial asset are transferred, or the Company has assumed a contractual obligation to fully pay the received cash flows, without material delays, to a third party, under a transfer agreement; whereby (a) all risks and rewards of the financial asset's ownership are substantially transferred; or (b) all risks and rewards of ownership of a financial assets are neither transferred, nor retained, but the Company has not retained control over the financial asset.

When the Group has transferred its contractual rights to receive cash flows from the financial asset or has entered into a transfer agreement and has neither transferred, nor retained substantially all the risks and rewards of the financial asset's ownership, but has retained control of it, it continues to recognize the transferred financial asset to the extent of its continued involvement in it. In this case, the Group also recognizes the related liability. The transferred asset and the related liability are measured on a basis that reflects the rights and obligations retained by the Group.

The extent of the continuing involvement in the form of a guarantee for the transferred asset is measured at the lower of the initial carrying amount of the asset and the maximum amount of consideration that may be required to be recovered by the Group.

*Financial assets gains and losses*

Gains and losses arising from the change in the fair value of financial assets are recognized as follows:

- Gains or losses arising from a financial asset measured at fair value through profit or loss are recognized in the statement of profit or loss.
- Gains or losses arising from available-for-sale financial assets are recognized in other comprehensive income with the exception of impairment losses and exchange rate gains and losses, accumulated until the financial asset is derecognized. At that point the accumulated gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment.
- Dividends from own equity instruments, which are available for sale, are recognized in the statement of profit or loss, when the entity's right to receive payment is established.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

- For financial assets that are measured at amortized cost, the gain or loss on the asset is recognized in the statement of profit or loss when the financial asset or financial liability is derecognized or impaired through the depreciation process.

***Impairment of financial assets***

At each reporting date, the Group assesses whether or not there is objective evidence of impairment of a financial asset or a group of financial assets. A financial asset or a group of financial assets are considered impaired and impairment losses as incurred when there is objective evidence of impairment, as a result of one or more events that occurred after the initial recognition of the asset ("loss event") and when that loss event has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably measured. Evidence of impairment may include indications that debtors, or a group of debtors, experience serious financial difficulties or fail to, or have delayed to pay interests or principals, or are likely to report insolvency/over-indebtedness, or to undertake a financial reorganization, or when the observable data indicate a measurable decrease in the estimated future cash flows, such as changes in the arrears or in the economic conditions associated with defaults by debtors.

***Financial assets, carried at amortised cost***

When financial assets are carried at amortised cost, the Group first assesses whether or not objective evidence of impairment exists individually for financial assets that are individually or collectively significant for financial assets that are not individually significant. If it is determined that there is no objective evidence of impairment of an individually assessed financial asset, regardless of whether it is material or not, the asset is included in a group of financial assets with similar credit risk characteristics and that group of financial assets is collectively assessed for impairment. Assets that are individually assessed for impairment and for which the impairment loss is and continues to be recognized are not included in the cumulative impairment measurement.

If there is objective evidence that an impairment loss has occurred, the amount of the loss is measured as the difference between the carrying amount of the asset and the present value of the estimated future cash flows (excluding future estimated loss on loans that have not yet been incurred). The present value of the estimated future cash flows is discounted at the original effective interest rate of the financial assets. If a loan has a floating interest rate, the discount rate for measuring the impairment loss is the current effective interest rate.

The carrying amount of the asset is reduced by using an adjustment account and the amount of the loss is recognized in the statement of profit or loss. The revenue from interests continues to be accrued on the reduced carrying amount using the interest rate that is used to discount future cash flows for the purposes of impairment loss measurement. The revenue from interests is accounted for as part of the financial revenue in the statement of profit or loss. Loans and the associated provisions are derecognized when there is no realistic possibility that they may be recovered in the future and all collateral is realized or transferred to the Group. If, in a subsequent year, the amount of the expected impairment loss increases or decreases due to an event occurring after the impairment is recognized, the previously recognized impairment loss is increased or decreased by adjusting the corrective account. If a future derecognition is restored at a later stage, the reversal is recognized in the statement of profit or loss.

***Available-for-sale investments***

For available-for-sale financial investments at each reporting date, the Group assesses whether there is objective evidence that the investment or group of investments is impaired.

For equity investments classified as available-for-sale, the objective evidence includes a significant or prolonged decline in the fair value of the investment below its cost of acquisition. A "significant decline" should be measured against the initial cost of acquisition of the investment and "prolonged decline" over the period in which the fair value is below the initial cost of acquisition. When there is evidence of impairment, the cumulative loss, measured as the difference between the acquisition cost and the current fair value less any impairment loss on that investment previously recognized in the statement of profit or loss, is deducted from the other comprehensive income and recognized in the statement of profit or loss. Impairment losses on equity investments are not reversed through the Statement of Profit or Loss and the increases in their fair value are recognized directly in other comprehensive income.

**4.17.2 Financial liabilities**

The Group classifies debt and equity instruments either as financial liabilities, or as equity according to the nature and terms of the contracts relating to those instruments.

***Initial recognition and measurement***

Financial liabilities within the scope of IAS 39 are classified as financial liabilities recognized at fair value through profit or loss or as financial liabilities recognized at amortised cost.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Initially the financial liabilities are recognised at their fair value plus, in the case of financial liabilities not recognised at fair value through profit or loss, the transaction costs that are directly attributable to the acquisition or issue of the financial liability.

The Group's financial liabilities comprise loans, trade and other payables and deposits.

**Subsequent measurement***Loans, trade and other payables*

After initial recognition, loans and borrowings are measured at amortized cost using the EIR method. Gains and losses on loans and borrowings are recognized in the statement of profit or loss when the liability is derecognised, as well as through the depreciation process.

The amortized cost is calculated by taking into account any discounts or premiums on the acquisition and charges or expenses that are an integral part of the EIR. The EIR depreciation is included in the financial expenses in the statement of profit or loss.

After the initial recognition, the trade and other payables that have no fixed maturity are measured at their estimated acquisition cost.

*Financial liabilities gains and losses*

Gains or losses, arising from financial liabilities classified as measured at fair value through profit or loss, are recognized in the statement of profit or loss.

The gain or loss, arising from financial liabilities measured at amortized cost, is recognized in the statement of profit or loss when the financial liability is derecognized or impaired through the depreciation process.

*Derecognition*

Financial liabilities are derecognised when they are settled, i.e. when the liability defined in the contract has been discharged, cancelled or expired.

When an existing financial liability is replaced by another by the same creditor under substantially different terms and conditions or the terms and conditions of the existing liability are substantially modified, such replacement or modification is treated as derecognition of the original liability and recognition of a new liability; whereby the difference in the relevant carrying amounts is recognized in the statement of profit or loss.

**Compensation of financial instruments**

Financial assets and financial liabilities are compensated and the net amount is presented in the statement of financial position when there is a legally enforceable right to compensate the amounts recognized and the Company intends to settle on a net basis or to simultaneously realize the assets and settle the liabilities.

**Fair value of financial instruments**

As at each reporting date the fair value of the financial instruments actively traded on the markets is estimated based on quoted market rates or quotes by dealers ("buying" prices for long positions and "selling" prices for short positions) without discounting transaction costs.

The fair value of the financial instruments for which there is no active market is determined using measurement techniques. These techniques include the use of recent direct market transactions; references to the current fair value of another instrument that is substantially the same; discounted cash flow analysis and other measurement models.

**4.17.3 Derivatives**

The Group uses derivative financial instruments such as foreign currency and interest swaps for hedging the risks associated with changes in foreign currency and interest rates. These derivative financial instruments are initially recognised at their fair value as at the date on which the derivative agreement is concluded. After their initial recognition, derivatives are measured at fair value. They are accounted for as assets when their fair value is positive and as financial liabilities when their fair value is negative.

For the purpose of hedge accounting, hedges are classified as follows:

- cash flow hedges, when they hedge the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable projected transaction or a currency risk associated with an unrecognised uncancellable commitment;
- fair value hedges, when they hedge the exposure to changes in fair value of a recognised asset or liability or an unrecognised irrevocable commitment (except for foreign currency risk);
- hedges of a net investment in foreign operations.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Upon commencing hedging, the Group carries out official designation and documentation of the hedging relation to which the Group has decided to use hedge accounting and the risk management goal and strategy of the hedging. This documentation includes designation of the hedging instrument, the hedged item or transaction, the nature of hedged risk and the methods to be used by the Group to measure the effectiveness of the movements in the fair values of the hedged instrument upon offsetting the exposure to changes in the fair value of the hedged item or cash flows which are due to the hedged risks. Hedging is expected to be highly effective to offset the changes in the fair values or cash flows that could arise from the hedged risk, and regular assessments are made to determine whether hedging has been highly effective within the reporting financial periods in which hedging is designated.

Hedging relationships, conforming to the strict accounting-reporting hedging terms, are carried as follows:

*Fair value hedges*

The Group has set a forward agreement for the purchase of EUA greenhouse gas emission allowances as a financial instrument for hedging its exposures to fair value risk. This agreement has been concluded in order to reduce the risk of changes in the price of the allowances. For the presented reporting periods, this has led to the recognition of financial liabilities reported in the statement of financial position as non-current financial liabilities.

The derivative financial instruments used for fair value hedge are initially recognized at fair value and are subsequently measured at fair value in the consolidated statement of financial position. Their fair value is determined based on quoted market prices or, in their absence, calculated by other techniques for reliably determining the fair value. The derivatives are accounted for as assets when the fair value increases and as liabilities when their fair value decreases.

**4.18 Inventories**

Inventories comprise raw materials, finished products, work in progress and goods. Cost of inventories includes all expenses directly attributable to the purchase or manufacturing process, recycling and other direct expenses connected to their delivery, as well as suitable portions of the related common production overheads, based on normal operating capacity. The financing expenses are not included in the cost of the inventories. At the end of every accounting period, the inventories are measured at the lower of their cost and their net realizable value. The amount of any impairment of inventories to their net realizable value is recognised as an expense in the period the impairment.

The net realizable value is the estimated selling price of the inventories less the estimated expenses on the completion of the production cycle and the selling costs. In case the inventories have already been impaired to their net realizable value and it is found in the subsequent accounting period that the impairment conditions are no longer present, than their new net realizable value is assigned. Their amount may only be restored to the amount of the carrying value of the inventories before the impairment. The reversal in the value of the inventories is recorded as a reduction of expenses on materials for the period in which it has occurred.

The Group determines the expenses on inventories using the weighted average method.

Upon the sale of inventories, their carrying value is recognized as an expense in the period in which the related revenue is recognized.

*Nuclear fuel*

The fuel loaded in the reactors, is the outstanding value (remaining resource) of nuclear fuel contained in the reactors as at the reporting date. The calculations are based on the established "Methodology for Reporting Supply, Feed and Depletion of Fresh Nuclear Fuel at NPP Kozloduy EAD", taking into account the value of fresh nuclear fuel fed in the respective fuel cycle and the estimated fuel component that is determined by dividing the value of nuclear fuel fed into the reactor by the estimates of electricity production for the period in kWh. The product of the gross energy produced by the respective unit for the fuel cycle and the fuel component represents the cost of nuclear fuel during that period.

*Working gas*

Working natural volumes are reported as inventories. Natural gas is initially measured at cost of acquisition (its purchase price) plus the relevant transportation costs. When consumed, the working natural gas is accounted for at its average weighted price. The working gas is measured at the lower of its acquisition price and its net realisable value. The net realisable value is the price determined by the Energy and Water Regulatory Commission applicable for each quarter after the balance sheet date.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Stripping expenses*

These expenses represent stripping costs of coal deposits. Such costs include expenses on geodesic research, surveys, development of the mines and other direct costs associated with the preparation for coal mining. The costs are deferred based on the coal quantities, prepared for extraction at year-end and are presented as part of the work-in-progress of coal inventory.

**4.19 Income taxes***Current income tax*

Current tax assets and liabilities of the current and past periods shall be recognised on the amount expected to be refunded by or paid to the tax authorities. While calculating the current taxes tax rates and tax laws shall apply, which are in force or are largely adopted as at the reporting date. The Management analyses the separate items in the tax return when the applicable tax provisions are subject to interpretation and recognizes provisions where appropriate.

Current taxes are recognized directly in equity (not in the statement of profit or loss) provided that the tax relates to items which have been recognized directly in equity.

*Deferred income tax*

The deferred taxes are recognized using the balance sheet method for all temporary differences as at the reporting date, which arise between the tax base of the assets and liabilities and their carrying amounts.

The deferred tax liabilities are recognized for all taxable temporary differences.

- except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither the accounting profit, nor the tax profit or loss at the time of the transaction; and
- for taxable temporary differences relating to investments in subsidiaries, associates and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The deferred tax assets are recognized for all deductible temporary differences, unused tax credits and unused tax loss carry forwards, to the extent that a taxable profit is likely to become available against which the deductible temporary differences, unused tax credits and unused tax loss carry forwards may be used:

- unless the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither the accounting profit, nor the tax profit or loss at the time of the transaction; and
- for deductible temporary differences relating to investments in subsidiaries, associates and interests in joint ventures, the deferred tax asset is only recognized to the extent that the temporary difference is likely to reverse in the foreseeable future and taxable profit may be realized against which the temporary difference may be used.

The Group reviews the carrying amount of the deferred tax assets as at each reporting date and reduces it to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered. The unrecognized deferred tax assets are reviewed as at each reporting date and recognized to the extent that future taxable profit is likely to be realized to enable the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at tax rates, which are expected to be in force for the period in which the asset is realized or the liability is settled, on the basis of tax rates (and tax laws) effective or entered into force, to a considerable extent, as of the reporting date.

The deferred taxes related to items recognised outside the profit or loss are recognised outside the profit or loss. The deferred taxes are recognised depending on the related transaction either in the other comprehensive income, or directly in equity.

The Group compensates for deferred tax assets and liabilities only if there is a legal ground to deduct current tax assets against current tax liabilities, and deferred tax assets and liabilities relate to income taxes imposed by the same tax authority for the same taxable entity.

**4.20 Cash and cash equivalents**

Cash and short-term deposits recognised in the consolidated statement of financial position include cash in bank accounts, cash in hand and short-term deposits with an initial maturity of three months or less.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**4.21 Non-current assets and liabilities classified as held for distribution to the sole equity holder**

When the Group is committed to distribute assets (or decommissioning group) to the owner, the assets or decommissioning group are classified as held for distribution to the sole equity holder and are presented separately in the consolidated statement of financial position. For this purpose, the assets must be available for immediate distribution in their present condition and the distribution must be highly probable. For distribution to be highly probable, actions should have been initiated to complete the distribution and should be expected to be completed within one year from the date of classification. The actions required to complete the distribution should indicate that it is unlikely that significant changes may occur in the distribution or it may be withdrawn.

The liabilities are classified as held for distribution to the sole equity holder and are presented as such in the consolidated statement of financial position, only if they are directly related to the decommissioning group.

The assets classified as held for distribution to the sole equity holder are measured at the lower of their carrying value immediately after their designation as held for distribution to the sole equity holder and their fair value less the costs of their distribution. The assets classified as held for distribution to the sole equity holder are not subject to depreciation after their classification as held for distribution to the sole equity holder.

**4.22 Equity, reserves and dividend payments**

The equity of the parent company reflects the par value of the issued shares.

Other reserves include total reserves and additional reserves.

The reserve from revaluation to fair value includes the effects of the revaluation of the financial assets available for sale, as well as the Group's share of the performance and the revaluation of financial assets/liabilities of associates or joint ventures, which are recognised directly in equity.

The revaluation reserve of non-financial assets is formed by the difference between the carrying amount and the fair value of items of property, plant and equipment as at the date of revaluation, less its corresponding deferred tax liability.

The reserve from translation of foreign operations includes foreign exchange differences on translating the financial statements of subsidiaries when their functioning currency is different from the functional currency of the Group.

The reserve from revaluation of defined benefit plans involves the revaluation of defined employee benefits plans, defined by reports of independent actuarial appraisers.

The retained earnings/(accumulated loss) include the current financial result and the accumulated earnings and uncovered losses from past years.

The dividend payables to the sole shareholder are included in line "Payables to Related Parties" in the Consolidated Statement of Financial Position when the dividends are approved for distribution by the sole equity holder before the end of the reporting period.

All transactions with the sole equity holder have been presented separately in the Consolidated Statement of Changes in Equity.

**4.23 Retirement employee benefits and short-term employee benefits***Short-term earnings*

The short-term employee earnings in the form of salaries, bonuses and social payments and benefits (payable within 12 months after the period in which the respective employee has rendered the service or has met the necessary conditions) are recognized as an expense in the statement of profit or loss, unless a specific IFRS requires this amount to be capitalized in the cost of a particular asset for the period in which the respective employee has rendered the services and/or has met the respective requirements as a current liability (after deducting any amounts already paid and deductions due).

The Group recognizes the short-term payables on compensable paid leaves of staff arisen on the basis of unused paid annual leave in cases where leaves are expected to occur within 12 months following the date of the reporting period in which the staff performed its work duties related to these leaves. As at the date of each financial statement, the Group measures the amount of the estimated costs of the accumulating compensated absences which is expected to

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

be paid as a result of the unused entitlement of such compensated absences. The measurement includes the estimated cost of the employee's remuneration and the expenses on the compulsory social security and health insurance contributions payable by the employer on these amounts.

*Long-term retirement benefits*

The Group is required to pay employees' retirement benefits under defined benefit plans and defined contribution plans.

*Defined contribution plans*

Defined contribution plans are pension plans under which the Group makes fixed contributions to state funds.

The employer is mainly responsible to pay the compulsory contributions of the employed staff payable to Pensions Fund, Supplementary Compulsory Pension Insurance (SCPI), General Sickness and Maternity Fund (GSMF), Unemployment Fund, Occupational Accident and Occupational Disease Fund (OAODF), and health insurance.

The amounts of the contributions are specifically determined by the State Social Security Budget Act and the National Health Insurance Fund Budget Act for the relevant year. The payment of the contributions is borne by the employer and the employee in accordance with the rules of the Social Security Code (SSC).

These social security and pension plans, administered by the Group in its capacity of the employer, are defined contributions plans. Under these plans, the employer pays monthly fixed contributions to the state funds, as well as to universal and professional pension funds – based on rates fixed by law and has no legal or constructive obligation to pay future contributions into the funds when there are no sufficient funds to pay to the relevant employees the amounts earned during the period of their service. Similar are the obligations of the employer in terms of the health insurance.

The contributions payable by the Group under the defined contribution plans for social security and health insurance are recognized as current expense in the statement of profit or loss unless a specific IFRS requires this amount to be capitalized in the cost of a particular asset and as a current liability.

*Defined benefit plans*

According to the Bulgarian labour legislation, the Group – in its capacity of the employer – is required to pay two or six gross monthly salaries to its employees upon retirement depending on their length of service. If an employee has worked for the same employer for the last 10 years of his/her service, the retirement benefit should amount to six gross monthly salaries upon retirement, otherwise – two gross monthly salaries. According to the collective employment agreements, some of the Group companies pay larger amounts of retirements benefits compared to those provided for by the law. The retirement benefit plan is not funded.

The liabilities for retirement employee benefits are determined by the Group using the actuarial valuation method. The Group's Management assesses the obligation under the defined benefit plans annually by an independent actuary. The estimate of the obligations is based on the standard rates of inflation, the medical cost trends and mortality. Future salary increases are also taken into account. Discount factors are determined close to each year-end by reference to the yield of high-quality corporate bonds that are denominated in the currency in which the earnings are to be paid and that have terms to maturity approximating to the terms of the related pension liabilities.

The expenses on the employees' retirement benefits associated with their length of services are included in "Expenses on Personnel" and the amount of the discounted liabilities is included as interest expense in "Financial Expenses". The actuarial gains/losses are recognised in the other comprehensive income and are transferred to Group's reserves.

The retirement benefit obligations presented in the consolidated statement of financial position consists of the present value of the liabilities with respect to the payment of these benefits.

**4.24 Provisions**

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of past events, when it is probable that an outflow of resources embodying economic benefits would be required to settle the obligation, and when a reliable estimate of the amount of the obligation can be made. When the Group estimates that some or all of the expenses required to settle the provision will be recovered, for example under an insurance contract, the reimbursement is recognized as a separate asset, but only when it is practically certain that such expenses will be recovered. The expenses on provisions are presented in the consolidated statement of profit or loss, net of the amount of the reimbursement. Where the effect of the time value of money is material, the provisions are discounted using the current before-tax discount rate that reflects, where appropriate, the risks specific to the liability. Where

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

discounting is used, the increase in the provision due to the passage of time is recognised as finance costs.

*Provision for environmental protection expenses*

A provision for environmental protection costs is recognised when it is probable that expenses would be incurred or restoration works would be carried out and the Group has a legal or contractual obligation to undertake such actions. When it is expected that the expenses would be incurred over a long period of time, the present value of the expected future expenses is recognised as a provision and the effects of discounting are recognised as financial revenues and expenses. As at the reporting date of these consolidated financial statements, a provision for environmental protection expenses is recognised related to the safeguarding of the luminescent and other types of lamps containing mercury, safeguarding and recycling of storage batteries, deactivation, recycling and replacement of capacitor batteries containing PHB with new ones and utilisation of bleaching soil used in the base for oil regeneration.

*Provisions for reclamation*

Provisions, related to the estimated expenses on of reclamation of the land plots damaged from the coal mining by Mini Maritza - Iztok EAD are calculated by taking into account the requirements of the current environmental law, the forthcoming lands' seizures, the seized unrecultivated land, the value of reclamation of 1 daa (decare) of land, as well as the estimated quantities of coal stocks until the year 2043. Due to the fact that there is significant uncertainty on the volume of the reclamation activities, which are to be performed over time, the provisions are not discounted and are not presented in the current Consolidated Financial Statements at their present value.

*Provision for reclamation of plots damaged for landfilling of gypsum from desulphurization facilities*

In accordance with Ordinance 26 on reclamation of damaged plots and improvement of low-fertility lands, removal and utilization of the humus layer, the Group is required to engage in technological and biological reclamation of a landfill, following its filling with gypsum from desulphurization facilities. Based on the capacity of the landfill and the disposed amount of gypsum, it is expected that the landfill will be filled in up to 5 years. The value of the technological and biological reclamation under the project amounts to BGN 5,488 thousand. In accordance with para. 17(c) of IAS 16 Property, Plant and Equipment, the asset's value includes the initial estimate of the expected cost to recover the site (land reclamation) where the asset was located after its decommissioning.

*Provision for decommissioning of nuclear facilities*

The required financial resources for the decommissioning of nuclear facilities were not assessed based on a detailed plan for the decommissioning activities and no provision was made.

In accordance with the requirements of IAS 37 Provisions, Contingent Liabilities and Contingent Assets for determining the best "reliable estimate", the Group has not accrued any provisions for "decommissioning of nuclear facilities", due to the following reasons:

- NPP Kozloduy is subject to specific regulations – Safe Use of Nuclear Energy Act, pricing regulations and decrees adopted by the Council of Ministers to raise funds in the Radioactive Waste (RAW) Fund and the Decommissioning of Nuclear Facilities (DNF) Fund. In accordance with these regulations, current expenses are accrued in the statement of profit or loss and other comprehensive income related to the contributions due to the above stated funds and paid into government accounts. Pursuant to the principle of "comparability of revenues and expenses" as per the Accounting Act, the price of electricity in a regulated market, as determined by EWRC, includes an expense recognized up to the amount of the contributions due to the RAW Fund and the DNF Fund;

- In compliance with the agreements with the European Commission for early closure of Units 1 to 4, the State has contracted external funding for the construction of Dry Spent Nuclear Fuel (SNF) Storage Facility in order to cover wage and social security costs for the staff of Units 3 and 4 and other funding;

- The assets of Units 1 and 2 were transferred free of charge in December 2008 under Decision No.839 of the Council of Ministers from NPP Kozloduy EAD to State Enterprise RAW, Sofia, concerning the decommissioning activity. By decision of the Council of Ministers No.1038 dated 19 December 2012, Units 3 and 4 of NPP Kozloduy EAD were announced as radioactive waste management facilities and they are allocated to be managed by SE RAW. On 1 March 2013, the property of Units 3 and 4, together with the respective staff, were transferred to SE RAW.

According to the regulatory requirements, when the implementation of the decommissioning project proves to be more expensive than the estimates approved by the Management Board of the DNF Fund, the necessary additional costs are borne by the person who last operated the nuclear facility (in this case it is NPP Kozloduy). As at the date of the approval of the consolidated financial statements, there is no clear national strategy for decommissioning of nuclear facilities and no estimation of the estimated costs of the project by the DNF Fund, the Company may not reliably assess the liability and has not recognized a provision for decommissioning of nuclear facilities as at 31 December 2016 and 31 December 2015.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Provision for spent nuclear fuel*

Under the current Strategy for Management of Spent Nuclear Fuel and Radioactive Waste by 2030, adopted by decision of the Council of Ministers on 5 January 2011, the Group has a regulatory obligation to make expenses for transporting, processing and storing spent nuclear fuel in Russia in a minimum of 50 tonnes of heavy metal per year. The provision for spent nuclear fuel obligations is based on the best estimate of the Management of the costs that will be incurred in the next reporting period for transporting, processing and storing spent nuclear fuel.

*Greenhouse gas emissions allowances*

The allowances for greenhouse gas emissions (tonne of carbon dioxide equivalent) are reported in "net liability method" under which the Group recognizes a liability for carbon dioxide emissions when the emissions are emitted and are in excess of the distributed (according to the National Plan for Allocation of Greenhouse Gas Emissions Allowances) and additionally purchased allowances. The emissions which exceed the allocated annual allowances for the Company are purchased from the open market. The Group currently recognizes an expense and a corresponding liability for the emissions in excess of the allocations. The estimation of such allowances is the best possible estimate of the prospective resources needed to purchase, i.e. their market price at the end of the reporting period.

**4.25 Government grants and deferred funding**

Government grants and deferred funding are recognized when there is reasonable assurance that the grant/funding will be received and that all conditions attached to it will be met. When the grant/funding relates to an expense item, it is recognized as revenue for the periods necessary to match the grant/funding on a systematic basis with the expenses it is intended to compensate. When the grant/funding relates to the acquisition of a non-current asset, it is presented as revenue for a future period and is recognized in the income or loss in equal amounts over the estimated useful life of the related asset.

When the Group receives non-cash government grants, the grant and the asset are reported at their par value and the grant/funding is recognized as revenue in the profit or loss in equal amounts over the useful life of the asset.

**4.26 Significant Management's judgements when applying accounting policy**

The preparation of the consolidated financial statements requires the Management to make best estimates, accruals and assumptions that affect the value of the recognized assets and liabilities and the disclosure of contingent liabilities as at the reporting date and the reported revenue and expenses for the relevant period. The uncertainty associated with the assumptions and estimates made could result in actual results that require material adjustments to the carrying amounts of the assets or liabilities in subsequent reporting periods. The main sources of uncertainty in the use of approximate accounting estimates are described in Note 4.27.

*Long-term power purchase agreements— the Group acting as a Lessee*

The Group has entered into long-term power purchase agreements with the following contractors who operate thermal power plants in Maritsa Basin – AES-3C Maritsa East 1 EOOD (contracted term – 15 years) and ContourGlobal Maritsa East 3 AD (contracted term – 15 years). Based on the long-term contracts, the Group is entitled to set the quantities of electricity that each of the two thermal power plants is to generate over a certain period of time based on the installed capacity, and over the term of the agreement the Group is required to purchase through its subsidiary – NEK EAD – the minimum quantities of generated electricity agreed and the corresponding availability. The Group may set bigger quantities than the minimum agreed, if necessary, by purchasing the corresponding availability as well. The Group has analysed the above mentioned long-term contracts, comparing them to specific criteria, and it has made the conclusion that in terms of the provided commitment to purchase the availability, the agreements contain lease arrangements.

The Management believes that since all significant risks and benefits of the ownership of the above-mentioned thermal power plants are not taken over by the Group, the long-term contracts for purchase of electricity are to be treated as operating leases. Additional information on the long-term contracts is presented in Note 40.

*Deferred tax assets*

Deferred tax assets are recognised for all unused taxable losses inasmuch as it is probable that taxable profits will be recognised, against which these losses can be utilized. In determining the amount of deferred tax assets, the Management is required to make assumptions on the length of the period and the approximate amount of the future taxable profits, including assessment of the future strategy for tax planning. The Group has not recognised deferred tax assets for all taxable losses. Further information is presented in Note 23.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**4.27 Uncertainty of accounting estimates**

In the preparation of the consolidated financial statements, the Management makes a number of assumptions, estimates and indications about the recognition and measurement of assets, liabilities, revenue and expenses. The actual results may differ from the assumptions, estimates and indications made by the management and will seldom fully correspond to the preliminary estimated results. Information on the material assumptions, estimates and indications that have the most significant impact on the recognition and measurement of assets, liabilities, revenue and expenses is presented below.

*Fair value of property, plant and equipment*

The Group subsequently recognizes major groups of property, plant and equipment at their remeasured value by using reports made by independent external appraisers to determine their fair value. Detailed information on the revaluation, valuation methods used, assumptions and judgement when determining fair value is given in Note 19.

*Impairment of financial assets*

The Management assesses whether or not impairment of the financial assets in the group of loans and receivables is required based on the age analysis of the receivables, the available historical data on the derecognition level of the uncollectible receivables, as well as the analysis of the solvency of the respective customer, changes in the agreed payment conditions, etc. If the financial position and performance of the customers deteriorate above the estimates, the value of the receivables to be derecognised in subsequent reporting periods may be higher than the expected value at the reporting date. As at 31 December 2016, the best judgement of the Management for the required impairment of the Group's trade and other receivables is presented in Note 22.

*Group's provisions*

The Group recognises provisions for environmental protection, for recultivation, for exceeding the greenhouse gas emissions allowances, etc. In determining the amount of these provisions, the Management is required to estimate the expected costs needed to cover the respective liabilities of the Group, as well as their time frame. As at 31 December 2016, the Management's best estimate of the provisions is presented in Note 32.

*Provisions for environmental protection and other provisions*

The Group recognizes the provision for environmental protection, provisions for legal claims and allocated resources for access to Renewable Energy Sources under challenged price decision II-33 dated 14 September 2012 of EWRC on setting temporary prices for access to the transmission and distribution networks for producers of electricity from renewable energy sources at preferential rates. In determining the amount of these provisions, the Management is required to estimate the expected costs needed to cover the respective liabilities of the Group, as well as their time frame. As at 31 December 2016, the Management's best estimate of these provisions amounts to BGN 1,242 thousand (in 2015: BGN 17,455 thousand). Further information is presented in Note 32.

*Provision for transporting, processing and storing spent nuclear fuel*

The provision for spent nuclear fuel obligations is based on the best estimate of the Management of the costs that will be incurred in the next reporting period for transporting, processing and storing spent nuclear fuel. Under the current Strategy for Management of Spent Nuclear Fuel and Radioactive Waste by 2030, adopted by decision of the Council of Ministers on 5 January 2011, the Company has a regulatory obligation to perform 10 cycles of transporting, processing and storing spent nuclear fuel in Russia in a minimum of 50 tonnes of heavy metal per year. As at 31 December 2016, NPP Kozloduy EAD is required to carry out another 2 cycles of spent nuclear fuel transport of at least 50 tonnes of heavy metal per year. The provision for spent nuclear fuel obligations is based on the best estimate of the Management of the costs that will be incurred in the next reporting period for transporting, processing and storing spent nuclear fuel.

As at 31 December 2016, a provision for spent nuclear fuel of BGN 29,942 thousand is recognized in the financial statements, which is the calculated liability for the expected one shipment in 2016 in view of the fact that part of the spent nuclear fuel can be stored in the storages owned by NPP Kozloduy EAD used for storing spent nuclear fuel.

In 2016, following a decision from a workshop in Ministry of Energy (MoE), consultations were commenced with the contractor for the processing of the SNF of the closed units on the possibility of transporting and processing of spent fuel with physical defects in the construction. The necessary analysis activities to justify the safety of transport packaging have been discussed and agreed upon. The clarification of these issues, the need to involve organizations on the part of the contractor to produce these analyses requires a longer period of time, and the adverse weather conditions have led to the failure to carry out the planned transport in 2016. An agreement was reached on 16 December 2016 and an additional agreement No. 5 to the agreement was signed in which the deadline for the transfer of spent nuclear fuel was set by 30 July 2017.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Provision for decommissioning of nuclear facilities*

In compliance with the requirements of IAS 37 Provisions, Contingent Liabilities and Contingent Assets, provisions must be recognised in respect of future amounts with uncertain timing and amount. Provisions are recognised only if the following criteria is satisfied:

- The entity has a present obligation, arising from a past event;
- It is possible that an outflow of the entity's cash resources, embodying economic benefits, may be required to settle the liability; and
- The liability can be reliably estimated.

In compliance with the requirements under the standard for "reliable estimates", the Group has not accrued any provisions for "decommissioning of nuclear facilities" and for "safe storage of spent nuclear fuel", due to the following reasons:

- The Group is subject to specific regulations – Safe Use of Nuclear Energy Act, pricing regulations and decrees adopted by the Council of Ministers to raise funds in the Radioactive Waste (RAW) Fund and the Decommissioning of Nuclear Facilities (DNF) Fund. In accordance with these regulations, current expenses are accrued in the consolidated statement of profit or loss and other comprehensive income related to the contributions due to the above stated funds and paid into government accounts. Pursuant to the principle of "comparability of revenues and expenses" as per the Accounting Act, the price of electricity in a regulated market, as determined by EWRC, includes an expense recognized up to the amount of the contributions due to the RAW Fund and the DNF Fund;
- In compliance with the agreements with the European Commission for early closure of Units 1 to 4, the State has contracted external funding for the construction of Dry Spent Nuclear Fuel (SNF) Storage Facility in order to cover wage and social security costs for the staff of Units 3 and 4 and other funding;
- The assets of Units 1 and 2 were transferred free of charge in December 2008 under Decision No.839 of the Council of Ministers from NPP Kozloduy EAD to State Enterprise RAW, Sofia, concerning the decommissioning activity. By decision of the Council of Ministers No.1038 dated 19 December 2012, Units 3 and 4 of NPP Kozloduy EAD were announced as radioactive waste management facilities and they are allocated to be managed by SE RAW;
- On 1 March 2013, the property of Units 3 and 4, together with the respective staff, were transferred to SE RAW.

According to the regulatory requirements, when the implementation of the decommissioning project proves to be more expensive than the estimates approved by the Management Board of the DNF Fund, the necessary additional costs are borne by the person who last operated the nuclear facility (in this case it is NPP Kozloduy). As at the date of the approval of the consolidated financial statements, there is no clear national strategy for decommissioning of nuclear facilities and no estimation of the estimated costs of the project by the DNF Fund, the Group may not reliably assess the liability and has not recognized a provision for decommissioning of nuclear facilities as at 31 December 2016 and 31 December 2015.

*Retirement benefits*

The retirement benefit obligation is determined by actuarial valuation. This valuation requires that estimates be made for the discount rate, future wage growth, staff turnover and mortality rates. Due to the long-term nature of the retirement benefits, these estimates are subject to considerable uncertainty. As at 31 December 2016 the Group's liabilities for retirement benefits amounts to BGN 180,886 thousand (in 2015: BGN 163,762 thousand). Additional information on retirement benefits of the Group is presented in Note 31.

*Useful life of property, plant, equipment and intangible assets*

At the end of each reporting period, the Management reviews the useful life of the depreciable assets. As at 31 December 2016, the Management determines the useful life of assets as the expected period of use of the assets by the Group. Information on the useful life of property, plant and equipment is presented in Note 4.13, and of intangible assets – in note 4.14. The carrying amounts of the assets are analysed in Note 19 and Note 20. The actual useful life of an asset may differ from its estimated useful life as a result of technical or moral obsolescence.

*Inventory impairment*

The Group recognises impairment on slow-moving and obsolete inventories to their net realizable value. The Management assesses on an annual basis the adequacy of this impairment and the cost of the inventories is reduced to their estimated net realizable value. As at 31 December 2016, the best estimate of the impairment of inventories amounts to BGN 10,688 thousand (in 2015: BGN 19,847 thousand). Further information is presented in Note 24.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**5. Effect of adjustments of prior period errors**

In the consolidated statement of financial position as at 31 December 2016, the Group reports an adjustment of prior period errors occurred before 1 January 2014, which resulted in a decrease in the net financial result as at 1 January 2014 by BGN 308,256 thousand respectively.

The error adjustments are due to the recognition of green energy expenses and liabilities to the end suppliers related to 2013 on the basis of Art. 94 of the Energy Act for electricity purchased from renewable energy sources and high-efficiency cogeneration for past periods, as well as due to the abrogation of the methodology for compensation of the costs of the public supplier and the end suppliers arising from their obligations to the public to buy electricity at preferential prices from renewable energy sources and high-efficiency cogeneration of heat and electricity.

The Group's consolidated statement as at 31 December 2016 includes an adjustment of prior period errors as follows:

	As at 31 December 2014	Adjustment	As at 1 January 2015, restated	As at 31 December 2015	Adjustment	As at 1 January 2016, restated
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Equity and reserves</b>						
<b>Equity</b>						
(Accumulated loss)/Retained earnings including the effect on current profit/loss	(553,952)	(308,256)	(862,208)	(792,886)	(200,732)	(993,618)
	-	-	-	29,503	107,524	137,027
<b>Total equity</b>	<b>(553,952)</b>	<b>(308,256)</b>	<b>(862,208)</b>	<b>(792, 886)</b>	<b>(200,732)</b>	<b>(993,618)</b>
<b>Current liabilities</b>						
Trade and other liabilities	1,893,628	308,256	2,201,884	1,845,704	200,732	2,046,436
<b>Total liabilities</b>	<b>1,893,628</b>	<b>308,256</b>	<b>2,201,884</b>	<b>1,845,704</b>	<b>200,732</b>	<b>2,046,436</b>
<b>Total equity and liabilities</b>	<b>1,339,676</b>	<b>-</b>	<b>1,339,676</b>	<b>1,052,818</b>	<b>-</b>	<b>1,052, 818</b>

**5.1 Reclassification**

These consolidated financial statements reclassify amounts in comparative data in order to improve the presentation of the information.

Comparative information in the Consolidated Statement of Comprehensive Income and the Consolidated Statement of Equity is reclassified to detail the share of other comprehensive income of associates and joint ventures by the components of the other comprehensive income in accordance with IAS 1.

In relation to the firm commitment of the Group to remove the subsidiary company IBEX EAD, comparative information is reclassified in the Consolidated Statement of Profit or Loss and the subsidiary's financial performance after tax is presented on the face of the statement in item "Profit/(loss) for the year from discontinued operations" (Note 27.2).

**6. Reporting by segment**

Currently, the Management determines the following products and services of the Group as operating segments, as described in Note 4.6 – Electricity, Natural Gas, Mining and Administrative Services. These operating segments are monitored by the Management that takes strategic decisions based on the adjusted operating results of the different segments.

Moreover, smaller operating segments that do not exceed the quantitative thresholds, are united in the Administrative activities segment. The activities and the main source of income of the Administrative Services segment relate to the provision of services to entities from the other segments of the Group. Information on the separate segments, for the presented reporting periods, may be analysed as follows:

# Bulgarian Energy Holding EAD



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS for the year ended 31 December 2016

As at 31 December 2016

	Electricity	Natural gas	Mining	Administrative activities	Total
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Revenues from sales and other operating revenue from:					
- external customers	4,584,085	1,221,587	263,481	3,004	6,072,157
- other segments	511,038	123,330	244,286	117,043	995,697
<b>Revenues from the segment</b>	<b>5,095,123</b>	<b>1,344,917</b>	<b>507,767</b>	<b>120,047</b>	<b>7,067,854</b>
Change in finished goods and work in progress	(10,016)	315	25,770	-	16,069
Cost of acquisition of property, plant and equipment in a commercial manner	17,088	-	5,744	-	22,832
Cost of natural gas, electricity and other current assets sold	(2,973,494)	(934,133)	(176)	-	(3,907,803)
Costs of materials	(512,271)	(5,987)	(144,978)	(161)	(663,397)
Hired services expenses	(289,845)	(17,620)	(51,421)	(6,905)	(365,791)
Depreciation and amortisation expenses	(442,972)	(85,615)	(70,987)	(1,196)	(600,770)
Employee benefit expenses	(478,640)	(59,964)	(235,762)	(4,650)	(779,016)
Impairment of receivables, net	(22,033)	(45,996)	(12,523)	(10,095)	(90,647)
Impairment of property, plant and equipment, net	-	-	-	-	-
Provisions	(8,192)	-	5,320	-	(2,872)
Other operating expenses	(448,101)	(18,783)	(21,075)	(1,112)	(489,071)
Technological costs of natural gas	-	(60,954)	-	-	(60,954)
<b>Operating profit (loss) for the segment from continuing operations</b>	<b>(73,353)</b>	<b>116,180</b>	<b>7,679</b>	<b>95,928</b>	<b>146,434</b>
<b>Operating profit for the segment from discontinued operations</b>	<b>801</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>801</b>
<b>Total segment assets</b>	<b>13,011,538</b>	<b>2,551,724</b>	<b>1,208,871</b>	<b>5,998,653</b>	<b>22,770,786</b>
<b>Total segment liabilities</b>	<b>6,089,029</b>	<b>257,003</b>	<b>371,072</b>	<b>2,255,110</b>	<b>8,972,214</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2016

**As at 31 December 2015**

Revenues from sales and other operating revenue from:

- external customers

- other segments

**Revenues from the segment**

Change in finished goods and work in progress

Cost of acquisition of property, plant and equipment in a commercial manner

Cost of natural gas, electricity and other current assets sold

Costs of materials

Hired services expenses

Depreciation and amortisation expenses

Employee benefit expenses

Impairment of receivables, net

Impairment of property, plant and equipment, net

Provisions

Other operating expenses

Technological costs of natural gas

**Operating profit (loss) for the segment from continuing operations**

**Operating loss for the segment from discontinued operations**

**Total segment assets**

**Total segment liabilities**

Electricity	Natural gas	Mining	Administrative activities	Total (restated)
<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
4,760,584	1,610,736	312,192	3,001	6,686,513
557,285	152,439	270,468	92,938	1,073,130
<b>5,317,869</b>	<b>1,763,175</b>	<b>582,660</b>	<b>95,939</b>	<b>7,759,643</b>
9,229	448	14,597	-	24,274
9,710	-	4,066	-	13,776
(3,212,349)	(1,340,667)	-	-	(4,553,016)
(492,031)	(6,923)	(145,416)	(148)	(644,518)
(232,438)	(21,302)	(51,252)	(5,797)	(310,789)
(423,386)	(72,319)	(89,143)	(1,168)	(586,016)
(478,375)	(56,111)	(244,253)	(4,688)	(783,427)
(8,769)	(5,932)	(4,199)	(9,333)	(28,233)
(1,012)	(1,279)	(3,140)	(6)	(5,437)
(167,359)	-	(17,460)	-	(184,819)
(252,795)	(31,883)	(29,298)	(846)	(314,822)
-	(106,867)	-	-	(106,867)
<b>68,294</b>	<b>120,340</b>	<b>17,162</b>	<b>73,953</b>	<b>279,749</b>
<b>(30,171)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(30,171)</b>
<b>12,809,954</b>	<b>2,635,779</b>	<b>1,476,731</b>	<b>4,813,351</b>	<b>21,735,815</b>
<b>5,707,784</b>	<b>408,485</b>	<b>640,145</b>	<b>1,177,982</b>	<b>7,934,396</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2016

The total amount of revenues, operating profit, assets and liabilities of the separate segments is compared to the corresponding items in the Consolidated Financial Statements of the Group as follows:

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Revenues</b>		
Total segment revenue	7,067,854	7,759,643
Elimination of inter-segment revenues	(995,697)	(1,073,130)
<b>Revenues for the Group</b>	<b>6,072,157</b>	<b>6,686,513</b>
<b>Segment operating Profit/(Loss)</b>		
Operating profit/(loss) from the segments	146,434	279,749
Elimination of profit/(loss) from transactions between segments	(138,756)	(87,183)
<b>Operating profit/(loss) for the Group</b>	<b>7,678</b>	<b>192,566</b>
Share of profit from equity accounted investments	35,928	45,920
Financial expenses	(123,502)	(87,379)
Financial income	11,734	36,574
<b>Profit/(loss) for the Group before tax from continuing operations</b>	<b>(68,162)</b>	<b>187,681</b>
<b>Profit/(loss) for the Group before tax from discontinued operations</b>	<b>794</b>	<b>(30,171)</b>
<b>Assets</b>		
Total segment assets	22,770,786	21,735,815
Consolidation adjustments	(5,552,967)	(4,295,295)
<b>Group assets</b>	<b>17,217,819</b>	<b>17,440,520</b>
<b>Liabilities</b>		
Total segment liabilities	8,972,214	7,934,396
Consolidation adjustments	(2,979,872)	(1,807,565)
<b>Group Liabilities</b>	<b>5,992,342</b>	<b>6,126,831</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**7. Revenue from sales**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Revenue from sales of electricity</b>	<b>3,100,689</b>	<b>3,671,480</b>
<b>Revenue from sales of natural gas</b>	<b>997,084</b>	<b>1,356,556</b>
<b>Revenue from sales of coals</b>	<b>249,437</b>	<b>296,418</b>
<b>Revenue from other sales, including:</b>	<b>1,332,221</b>	<b>1,057,679</b>
<i>Related with sales of electricity</i>	<i>1,107,543</i>	<i>832,950</i>
Revenue, generated from the "Obligation to society" fee	657,916	406,727
Revenue, generated under access fee	64,377	66,640
Revenue, associated with reactive electric power	18,313	21,724
Revenue, generated under connection fees	39,529	4,375
Revenues, associated with the transmission through the electricity grid	327,408	333,484
<i>Related with sales of natural gas</i>	<i>204,965</i>	<i>209,454</i>
Revenue, generated from transmission of natural gas	204,965	209,454
<i>Revenue, generated from "water supply" services</i>	<i>4,859</i>	<i>4,593</i>
<i>Revenue from sales of thermal energy</i>	<i>2,010</i>	<i>2,026</i>
<i>Revenue from rendered transport services</i>	<i>4,632</i>	<i>4,332</i>
<i>Revenue from rendered telecommunications services</i>	<i>2,861</i>	<i>2,899</i>
<i>Revenue from other sales</i>	<i>5,351</i>	<i>1,425</i>
	<b>5,679,431</b>	<b>6,382,133</b>

**8. Other operating income**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Income, generated from the "Security of the Electricity System" Fund (Note 30)	300,154	183,200
Income from penalties and fees	27,163	65,009
Income from financing activities (Note 30)	20,530	18,763
Rental income	2,043	2,130
Income from sale of current assets	3,578	6,237
Income, generated under insurance compensation	1,888	4,566
Income from liquidation of assets	189	1,505
Income from surplus of assets	1,062	16
Income from sale of property, plant and equipment	226	3,104
Other income	35,893	19,850
	<b>392,726</b>	<b>304,380</b>

With the amendments to the Energy Act (Energy Act), promulgated in SG No. 56/2015, Security of the Electricity System Fund was established as a legal entity based in Sofia. The provisions which regulate the operations of the Fund are laid down in Article 36(b) to Article 36(g) of the Energy Act.

The purpose of the Fund is to manage the funds to cover the expenses incurred by Natsionalna Elektricheska Kompania EAD, acting as Public Supplier, arising from its obligations to purchase electricity from producers connected to the transmission grid under long-term power purchase agreements, as well as electricity generated from renewable sources, from high-efficiency cogeneration of electricity and thermal energy and the amount of electricity produced by producers using local primary energy sources (fuel), up to 15 percent of all primary energy necessary to produce electricity.

The other costs of the Public Supplier that can be covered by the Fund are those determined by a decision of the commission, including compensation for previous regulatory periods. The payments from the Fund to the public supplier are scheduled on a monthly basis.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

For the price period from 1 July 2016 to 31 July 2017, the expenses of the public supplier to be covered by the Fund pursuant to Decision of EWRC No. IQ-19 dated 30 June 2016 are estimated to total BGN 479,206 thousand and include compensation of the expenses of the public supplier under the Methodology 2012 for the period from 1 July 2012 to 31 July 2013 amounting to BGN 79,500 thousand; compensation of the public supplier in connection with the Ordinance to reduce the burden on Bulgarian business related to the cost of renewable energy amounting to BGN 103,085 thousand; compensation of the public supplier for the contribution due under Article 36(f) of the Energy Act by the producers with concluded long-term power purchase agreements amounting to BGN 51,386 thousand; amounts from the fund for reducing the price of the "Obligation to society" fee amounting to BGN 245,235 thousand.

The Group has concluded long-term contracts for sale of coal with its main clients. Contracts include clauses for the purchase of minimum monthly and total annual quantities of coal, as well as clauses for penalties for delayed current payments by customers. The commitments for the purchase of minimum monthly and total annual quantities of coal are met in 2016.

**9. Cost of natural gas, electricity and other current assets sold**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Electricity	(2,535,933)	(2,734,714)
Natural gas	(869,262)	(1,283,511)
Other current assets	(2,718)	(968)
	<b><u>(3,407,913)</u></b>	<b><u>(4,019,193)</u></b>

**10. Cost of materials**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Fuel	(157,100)	(181,185)
Spare parts	(58,016)	(69,687)
Electricity	(27,928)	(22,575)
Limestone	(18,720)	(20,774)
Costs of materials for the acquisition of plant and equipment in a commercial manner	(6,484)	-
Other raw materials and consumables	(25,230)	(25,661)
	<b><u>(293,478)</u></b>	<b><u>(319,882)</u></b>

**11. Hired services expenses**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Repairs	(148,471)	(69,655)
Insurance services	(56,999)	(60,233)
Security services	(37,447)	(35,436)
Concession fees and licenses	(31,586)	(21,807)
Other charges and fees	(11,253)	(46,395)
Transport services	(16,217)	(15,942)
Consultancy services	(13,353)	(12,865)
Communication services	(2,889)	(1,711)
Rent	(1,643)	(1,515)
Others	(35,628)	(34,897)
	<b><u>(355,486)</u></b>	<b><u>(300,456)</u></b>

*Audit services*

These consolidated financial statements have been audited by a specialised Audit firm HLB Bulgaria Ltd. and the registered auditor and manager Milena Hristova. The fees of the registered auditor's services cover the independent

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

financial audit of the consolidated financial statements. The registered auditor did not provide any other services during the year. This disclosure is made in compliance with the requirements of Art. 30(1) of the Accounting Act.

**12. Employee benefits expenses**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Remuneration	(509,339)	(523,700)
Social security	(136,291)	(145,499)
Social costs	(113,376)	(89,025)
Accrued expenses on long-term employee benefits upon retirement (Note 31)	(12,070)	(13,933)
Expenses for unused annual leave and social security contributions on it	(4,663)	(3,019)
Other benefits and allowances	(3,235)	(8,044)
	<b>(778,974)</b>	<b>(783,220)</b>

**13. Other operating expenses**

	<b>2016</b>	<b>2015</b> restated
	<i>BGN '000</i>	<i>BGN '000</i>
Contributions to the “Security of the Electricity System Fund	(92,147)	(36,647)
Contributions to the “Decommission of Nuclear Facilities” Fund and “Radioactive Waste” Fund	(85,015)	(86,644)
Green energy costs	-	(7,593)
Fines and penalties	(44,233)	(57,460)
Food and uniforms	(46,519)	(31,995)
Local taxes and charges	(9,224)	(6,041)
Technological costs of natural gas	(5,520)	(12,735)
Written-off inventories and property, plant and equipment	(4,622)	(4,224)
Business trips	(4,040)	(4,562)
Reversal of inventory of impairment	13	656
Impairment of inventory	(3,984)	(17,990)
Income tax expenses	(1,855)	(1,567)
Expenses on excise duties and other taxes	(5,810)	(6,224)
Training and qualification	(3,009)	(1,415)
Other	(12,465)	(37,101)
	<b>(318,430)</b>	<b>(311,542)</b>

*Contributions to the “Security of the Electricity System” Fund*

Pursuant to the provisions of Article 36(f) of the Energy Act, contributions to the “*Security of the Electricity System*” Fund should be deducted and paid by the electricity producers and importers from the proceeds of the sales of electricity, excluding VAT; the operators of the electricity and gas transmission networks from the proceeds for access and transmission of electricity and natural gas, excluding VAT. In order to implement this requirement, the companies – Natsionalna Elektricheska Kompania EAD, TPP Maritza East 2 EAD, NPP Kozloduy EAD, Bulgartransgaz EAD and Electricity System Operator EAD charge and contribute their 5% deductions to the Fund.

*Contributions to the Decommission of Nuclear Facilities Fund and to the Radioactive Waste Fund*

According to the ordinances adopted by the Council of Ministers for the establishment, collection, utilisation and control of the funds and the amount of the contributions due to the Decommission of Nuclear Facilities Fund and the Radioactive Waste Fund, the subsidiary NPP Kozloduy EAD makes its contributions to the funds. The contributions

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

due are determined in accordance with the rules laid down in the regulations. The contributions are reported as current expenses and are used as a pricing element in determining the price of electricity produced by NPP Kozloduy EAD.

**14. Expenses related to the Arbitration award on the NPP Belene Project, net**

On 14 June 2016, the Arbitration Tribunal issued an award on ICC Case 18086/GZ/MHM concerning NPP Belene, ruling that NEK EAD must pay ZAO Atomstroyexport (ASE) the amounts claimed by ASE in connection with commitments under the contract for the construction of NPP Belene.

According to the arbitration award (adjusted) NEK EAD should pay the following amounts to ASE:

	<i>EUR '000</i>	<i>BGN '000</i>
Awarded principal	417,228	816,027
Awarded interest until 1 May 2015	131,199	256,604
<b>Total awarded amount until 1 May 2015</b>	<b>548,427</b>	<b>1,072,631</b>
Interest from 2 May 2015 to 14 June 2016 (Award date)	53,190	104,030
<b>Total awarded amount as at 14 June 2016</b>	<b>601,617</b>	<b>1,176,661</b>

On 28 September 2016, the National Assembly of the Republic of Bulgaria adopted the Act on Granting Assistance for the Repayment of Liabilities of Natsionalna Elektricheska Kompania EAD following the award on arbitration case No. ICC Case 18086/GZ/MHM. The law is promulgated in State Gazette on 30 September 2016 and stipulates that pursuant to Article 109(4)(2) of the Public Finance Act the Council of Ministers should provide financial assistance to NEK EAD through the budget of the Ministry of Energy aimed at the payment of the amounts awarded to ASE. The grant should be provided based on an agreement entered by and between the Minister of Energy and NEK EAD, approved by the Council of Ministers, based on the agreement for final settlement of the relations between NEK EAD and ASE.

Pursuant to Article 3 of the Act on Granting Assistance for the Repayment of Liabilities of Natsionalna Elektricheska Kompania EAD, a notification to the European Commission was sent on 29 September 2016 pursuant to Article 108(3) of the Treaty on the Functioning of the European Union. The decision of the European Commission states that in this particular case there is no state aid, and therefore there are no grounds for Article 108 of the Treaty on the Functioning of the European Union.

On 26 October 2016 NEK EAD and ASE signed an agreement for final settlement of the relations of the parties under arbitration case ICC Case 18086/GZ/MHM. Under the terms of the Agreement, if NEK EAD pays to ASE the full amount of the awarded principal and interest of EUR 601,617,133 (BGN 1,176,660,837) on or before 15 December 2016, ASE will not claim interest on the obligation after 14 June 2016.

If NEK pays the entire liability determined under the award of the Arbitration Court, the Company will acquire the right to receive the equipment with long manufacturing cycle produced by ASE and the acquisition itself is the moment when the equipment is delivered to Belene Port and the handover protocol is signed by the parties.

On 26 October 2016, NEK EAD voluntarily paid to ASE EUR 5 million of the awarded amount.

On 5 December 2016, an agreement for the provision of financial assistance was signed by and between the Ministry of Energy and NEK EAD, according to which:

- The Ministry of Energy will provide NEK EAD with financial assistance in the amount of EUR 601,617,133 (BGN 1,176,660,837);
- NEK EAD undertakes to pay by 14 December 2016 the amounts awarded under the Arbitration Case No. ICB Case 18086/GZ/MHM under the terms and conditions of the agreement for the final settlement of the relations with ASE;
- NEK EAD undertakes to reimburse the received financial assistance to the budget of the Ministry of Energy within 7 (seven) years. The repayment is made once at the maturity date of the loan (December 2023);
- The financial support received from NEK EAD is interest-free and unsecured;

On 8 December 2016, an amount of EUR 596,617 thousand was paid by NEK EAD to ASE.

On 16 January 2017, a contract was signed by and between NEK EAD and ASE for the delivery of the completed equipment with long manufacturing cycle and its acceptance by NEK EAD at the site of NPP Belene.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**Initial and subsequent measurement and presentation in the financial statements of the Company of the interest-free financial assistance provided for consideration**

The interest-free financial assistance provided for consideration and intended to be used for the payment of the liability of NEK EAD for the awarded amounts under arbitration case No. ICC Case 18086/GZ/MHM for NPP Belene Project is in essence a financial liability (credit) and when recognized it should be subject to the provisions of the IAS 39 Financial Instruments: Recognition and Measurement.

The Group has initially recognized the received interest-free financial assistance provided for consideration, measured at the present value of all future cash payments discounted at the prevailing market interest rate (or rates) for a similar instrument (similar with respect to currency, term, interest rate, and other factors) with a similar credit rating.

In addition, in accordance with the provisions of IAS 20 Accounting for Government Grants and Disclosure of Government Assistance, the benefit of the interest-free financing is measured as the difference between the fair value of the loan (the present value of all future cash payments, discounted with the prevailing market interest rate) determined in accordance with IAS 39 and the cash receipts received.

The Group has analysed and taken into account the conditions for granting the preferential loan, considering that it can be regarded as a compensation provided by the Bulgarian State to NEK EAD for the commercial damages suffered by the company as a result of the implementation of the state policy in connection to NPP Belene Project. The purpose of the preferential loan is to provide immediate financial support to NEK EAD for the payment of the amounts awarded under arbitration case No. ICC Case 18086/GZ/MHM under the terms and conditions of the agreement for the final settlement of the relations with ASE. The compensation is intended to cover costs and losses already suffered by NEK EAD as it represents the difference between the fair value and the cash proceeds from the received interest-free financing provided for consideration and is recognised in the profit or loss for the period in accordance with IAS 20.

The subsequent measurement of the interest-free financial assistance provided for consideration is carried out at the amortized cost using the effective interest rate method, and the difference to the present value is recognized as a financial expense that is capitalized in the value of the assets under construction over the period of the loan so as at the maturity date the carrying amount of the loan should be equal to the received cash.

The table below presents the initially measured amount of the interest-free financial assistance provided for consideration at fair value, the discount factor used and the amount recognized during the reporting period as revenue in accordance with IAS 20 relating to losses incurred by the Group in 2016.

	<b>2016</b>
	<i>BGN '000</i>
<b>Loan amount</b>	<b>1,176,661</b>
Period in years	7
Interest rate of similar instruments	5.575%
Discount factor	0.684
<b>Current (fair value of the loan)</b>	<b>804,866</b>
<b>Revenue from discount to fair value recognized in 2016 (compensation)</b>	<b>371,795</b>

Information about the liability of NEK EAD under arbitration case No. ICC Case 18086/GZ/MHM and its presentation in the financial statements of the Group for 2016 is presented in the following table:

	<b>2016</b>
	<i>BGN '000</i>
<b>Amount of the claim of ASE for the equipment, including principal and interest expenses, gross, including:</b>	<b>1,178,380</b>
Total current expenses	474,785
Total liability for equipment with long manufacturing cycle	703,595
Reduced by counterclaim	(1,719)
<b>Liability to ZAO Atomstroyexport under the award, net</b>	<b>1,176,661</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2016

**Assets and liabilities recognised in the Statement of Financial Position for 2016**

	<b>2016</b>
	<i>BGN '000</i>
Liability to ASE to be written off	(98,413)
Recognized advances	190,594
Liability for equipment with long manufacturing cycle	703,595
<b>Right to receive equipment with long-term manufacturing cycle</b>	<b>795,776</b>

**Amounts recognised in the Statement of Profit or Loss for 2016**

	<b>2016</b>
	<i>BGN '000</i>
Total current expenses	(474,784)
Expenses on the procedural representation and legal costs and expenses	(50,116)
Unrecognised receivables written off	(6,165)
<b>Total expenses</b>	<b>(531,065)</b>
Recognised revenue from financing (compensation) to cover damages from the Arbitration award	<b>371,795</b>
<b>Net loss under Arbitration Case No. ICC Case 18086/GZ/MHM, reported in 2016</b>	<b>(159,270)</b>

The total amount of the current expenses of BGN 474,784 thousand includes the portion of the amount awarded under the arbitration award that constitutes penalties (for losses, damages, lost profits, etc.) in connection with the termination of the contract, the portion of the final arbitration award that constitutes litigation expenses (arbitration fees and costs and attorney's fees) and any interests that have been determined and which constitute default for late payments (until 1 May 2015 and from 2 May 2015 to 14 June 2016) in line with the agreement concluded with ZAO Atomstroyexport.

**15. Financial income**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Interest Income, generated under receivables from Toplofikatsia Sofia EAD	16,265	23,600
Interest income on bank deposits	3,763	5,085
Interest income on bank current accounts	1,205	452
Other interest income on financial instruments, carried at amortized cost	-	1,577
<i>Total Interest income, generated under financial instruments that are not carried at fair value in profit or loss</i>	<i>21,233</i>	<i>30,714</i>
Gain/(Loss) on foreign currency exchange, net	(9,620)	5,772
Dividend income from available-for-sale financial assets	68	88
Other	53	-
	<b>11,734</b>	<b>36,574</b>

**16. Financial costs**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Interests expense on loans, carried at amortised cost	(115,646)	(58,767)
Interest expense on finance lease		
<i>Total interests expense on financial instruments that are not carried at fair value in profit or loss</i>	<i>(115,646)</i>	<i>(58,767)</i>
Interest expense on actuarial valuations (Note <b>Error! Reference source not found.</b> )	(5,207)	(5,576)
Interest expense on liabilities for taxes, fees and public receivables	(1,757)	(10,840)
Bank fees	(493)	(829)
Result from operations with financial instruments	(399)	(11,367)
	<b>(123,502)</b>	<b>(87,379)</b>

**17. Income tax expense**

The estimated income tax expense based on the applicable tax rate for Bulgaria at the rate of 10% (2015: 10%) and the actually recognized tax expense in the profit or loss can be reconciled as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Accounting (loss)/profit from continuing operations	(68,162)	187,681
Accounting (loss)/profit from discontinued operations	794	(29,957)
Accounting loss/profit before tax	(67,368)	157,724
Tax rate	10%	10%
Estimated income tax expense	-	(15,772)
Tax effect from:		
Increased financial result for tax purposes	(73,152)	(61,852)
Decreased financial result tax purposes	34,316	28,433
Current Income tax expense	(38,836)	(33,419)
Deferred tax (expense)/income:		
Origination and reversal of temporary differences	28,710	28,708
<b>Income tax expense</b>	<b>(10,126)</b>	<b>(20,483)</b>
Deferred tax (expenses)/income recognised in the other comprehensive income	107	(165,845)

Note 23 provides information on the amounts of deferred tax assets and liabilities recognised through profit or loss and recognised directly in other comprehensive income.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**18. Earnings/(loss) per share and dividends**
**18.1 Earnings/(loss) per share**

The earnings/(loss) per share is calculated using as the numerator the net profit/(loss) attributable to the shareholder of the parent company. The weighted average number of shares used for the calculation of the earnings/(loss) per share and the net profit/(loss) attributable to distribution for the shareholder of the parent company are presented as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Profit/(Loss) for the Group attributable to shareholders (BGN '000)	(77,623)	136,971
Weighted average number of shares	3,235,293,811	3,030,724,635
<b>Earnings/(Loss) per share (in BGN per share)</b>	<b>(0,024)</b>	<b>0.045</b>

**18.2 Dividends paid**

The distribution of the profit of the parent company – Bulgarian Energy Holding EAD – is performed pursuant to a decision of the sole-shareholder, as follows:

- at least 10% of the profit must be transferred to the Statutory Reserves;
- upon a proposal of the Board of Directors, portion of the attributable profit may be allocated to particular funds of the company;
- dividends are paid out from the remaining portion.

The amount of dividends payable to the State are determined annually by the State Budget Act.

By Order No. 2 dated 23 February 2017, the Council of Ministers determined a dividend for shareholding companies that are required to prepare annual financial statements in compliance with Art. 31(1) of the Accounting Act, not exceeding an amount equal to 50 per cent of the profit in the Consolidated Financial Statements for 2016. Considering the reported net financial performance on a consolidated basis, in 2017 Bulgarian Energy Holding EAD is not expected to pay a dividend to the republican budget for 2016.

By Order No. 2 dated 18 February 2016, the Council of Ministers determined a dividend for shareholding companies that are required to prepare annual financial statements in compliance with Art. 37(2) of the Accounting Act, (repealed, SG, No.95 of 2015) not exceeding an amount equal to 50 per cent of the profit in the Consolidated Financial Statements for 2015. By virtue of Protocol No. E-PД-31-34 dated 27 June 2016, the Minister of Energy determined an obligation for a dividend of Bulgarian Energy Holding EAD from the consolidated financial performance for 2015 in the amount of BGN 14,752 thousand. The dividend was paid to the republican budget on 8 July 2016.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**19. Property, plant and equipment**

For 2016

	Land and buildings	Plant and equipment	Transport vehicles	Fixtures and fittings and other assets	Acquisition costs	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value</b>						
<b>Balance as at 1 January 2016</b>	<b>1,145,394</b>	<b>10,292,371</b>	<b>78,431</b>	<b>98,401</b>	<b>2,066,732</b>	<b>13,681,329</b>
Additions	47,685	281,200	6,505	1,181	1,374,242	1,710,813
Disposals	(766)	(39,395)	(963)	(869)	(490,180)	(532,173)
Transfer from acquisition costs	32,897	328,745	9,481	987	(371,799)	311
Transfer from intangible assets	-	358	-	-	-	358
Transfer to investment property	(265)	-	-	-	-	(265)
Transfer to assets of a group classified as held for sale	-	(39)	(47)	(3)	-	(89)
Revaluation compensated by the accumulated depreciation	-	(2,059)	-	-	-	(2,059)
Revaluation	(311)	41,576	-	-	-	41,265
Impairment accrued (recovered)	(22)	(24,500)	-	-	-	(24,522)
<b>Balance as at 31 December 2016</b>	<b>1,224,612</b>	<b>10,878,257</b>	<b>93,407</b>	<b>99,697</b>	<b>2,578,995</b>	<b>14,874,968</b>
<b>Depreciation:</b>						
<b>Balance as at 1 January 2016</b>	<b>(30,964)</b>	<b>(466,920)</b>	<b>(33,099)</b>	<b>(58,842)</b>	-	<b>(589,825)</b>
Depreciation	(28,959)	(551,849)	(8,107)	(5,286)	-	(594,201)
Disposals	18	11,479	843	838	-	13,178
Depreciation written-off upon revaluation	-	2,059	-	-	-	2,059
Transfer to assets of a group classified as held for sale	-	5	-	-	-	5
Other reclassifications and transfers	(97)	(237)	(52)	-	-	(386)
<b>Balance as at 31 December 2016</b>	<b>(60,002)</b>	<b>(1,005,463)</b>	<b>(40,415)</b>	<b>(63,290)</b>	-	<b>(1,169,170)</b>
<b>Carrying value as at 31 December 2016</b>	<b>1,164,610</b>	<b>9,872,794</b>	<b>52,992</b>	<b>36,407</b>	<b>2,578,995</b>	<b>13,705,798</b>

	Land and buildings	Plant and equipment	Transport vehicles	Fixtures and fittings and other assets	Acquisition costs	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Book value:</b>						
<b>Balance as at 1 January 2015</b>	<b>933,265</b>	<b>9,288,134</b>	<b>69,639</b>	<b>97,768</b>	<b>2,043,727</b>	<b>12,432,533</b>
Additions	358	161,918	3,533	718	433,822	600,349
Disposals	(1,199)	(23,567)	(1,083)	(530)	(192,968)	(219,347)
Transfer from acquisition costs	10,806	201,334	5,264	445	(217,849)	-
Written-off carrying value upon revaluation	(66,753)	(744,402)	(4,481)	-	-	(815,636)
Revaluation	306,012	1,479,116	5,840	-	-	1,790,968
Impairment accrued (recovered)	(37,095)	(70,162)	(281)	-	-	(107,538)
<b>Balance as at 31 December 2015</b>	<b>1,145,394</b>	<b>10,292,371</b>	<b>78,431</b>	<b>98,401</b>	<b>2,066,732</b>	<b>13,681,329</b>
<b>Depreciation:</b>						
<b>Balance as at 1 January 2015</b>	<b>(69,040)</b>	<b>(681,908)</b>	<b>(30,573)</b>	<b>(53,887)</b>	-	<b>(835,408)</b>
Depreciation	(29,152)	(536,585)	(7,722)	(5,457)	-	(578,916)
Disposals	475	7,171	715	502	-	8,863
Depreciation written-off upon revaluation	66,753	744,402	4,481	-	-	815,636
<b>Balance as at 31 December 2015</b>	<b>(30,964)</b>	<b>(466,920)</b>	<b>(33,099)</b>	<b>(58,842)</b>	-	<b>(589,825)</b>
<b>Carrying value as at 31 December 2015</b>	<b>1,114,430</b>	<b>9,825,451</b>	<b>45,332</b>	<b>39,559</b>	<b>2,066,732</b>	<b>13,091,504</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Property, plant and equipment include Nuclear Power Plant (NPP) Kozloduy EAD, Thermal Power Plant (TPP) Maritsa East 2 EAD, coal mining facilities Mini Maritza Iztok EAD, gas transmission and transit pipelines and underground gas storage (UGS) facility Chiren, owned by Bulgartransgaz EAD, as well as the electricity transmission network at ESO, HPP and PSHPP owned by NEK EAD, etc.

*Acquisition costs*

The acquisition costs of property, plant and equipment as at 31 December 2016 are mainly related to:

- Project for the construction of NPP Belene, Gorna Arda Cascade at NEK EAD;
- Design and commissioning of E-73 exploitation drilling at Chiren, optical mains Nikolaevo - Polski Senovets, transit gas pipeline for Turkey (looping) in the section Lozenets-Nedyalsko at Bulgartransgaz EAD;
- Measures for extending the useful life of Units 5 and 6 of NPP Kozloduy EAD;
- Design, manufacturing, delivery, construction and commissioning of a SRs 2000 coal mining rotary excavator and a SRs 200 rotary excavator at Mini Maritza Iztok EAD;
- Design, supply and installation of systems and equipment for compensating the reactive power of the heavy industrial mining equipment of Mini Maritza Iztok EAD;
- Rehabilitation (design, supply and installation) of industrial lighting by replacement with LED lights at Mini Maritsa Iztok EAD;
- Rehabilitation of the main transformer stations and construction of new mobile ones together with the adjoining distribution devices and connecting equipment for increasing power supply from 6 kV to 20 kV for section 2 and section 3.

Assets under construction with a carrying amount of BGN 45,794 thousand include capitalized project costs, the realization of which has been discontinued and deferred for a period exceeding five years, for which no financing is foreseen and are not included in the investment program of the subsidiaries Natsionalna Elektricheska Kompania EAD and Mini Maritsa Iztok EAD for the next five-year period.

*NPP Belene Project*

The construction of NPP Belene Project started in 1981. The project funding was suspended in 1991.

In May 2004 the Government of the Republic of Bulgaria decided to continue the construction of a second nuclear power plant - NPP Belene - and on 7 April 2005, in compliance with Article 45 of the Safe Use of Nuclear Energy Act, a final decision was taken to build NPP Belene.

On 30 October 2006, NEK EAD officially announced ZAO Atomstroyexport as the contractor of the project with option A92 for the construction of two units of 1,000 MW of light-water reactors at the Belene site.

On 29 November 2006 in the city of Sofia, ZAO Atomstroyexport and NEK EAD signed an agreement for the construction of NPP Belene.

On 29 March 2012 the Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant on the Belene site. By decision dated 27 February 2013, the 41st National Assembly approved the Government's decision to suspend the construction of a new nuclear power plant at the Belene site and insisted on its final termination.

As at 31 December 2016, the cost of NPP Belene Project, included in the assets under construction, amounted to BGN 2,101,721 thousand (31 December 2015: BGN 1,305,948 thousand). Related to the Belene Project are also property, plant and equipment with a carrying amount of BGN 82,552 thousand at (31 December 2015: BGN 85,229 thousand).

On 14 June 2016, the Arbitration Tribunal of the International Chamber of Commerce in Paris issued an award ordering NEK EAD to pay the following amounts to ZAO Atomstroyexport (ASE) according to the adjusted arbitration award:

	<b>31 December 2016</b>	
	<i>EUR '000</i>	<i>BGN '000</i>
Principle awarded as per the award	417,228	816,027
Interests awarded until 1 May 2015, as laid down in the award	131,199	256,604
<b>Total awarded amount until 1 May 2015, as laid down in the award</b>	<b>548,427</b>	<b>1,072,631</b>
Interest from 2 May 2015 to 14 June 2016 (Award date)	53,190	104,030
<b>Total amount as per the Award, as at 14 June 2016</b>	<b>601,617</b>	<b>1,176,661</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

In accordance with the Award, the applicable IFRSs and the Group's accounting policy, the assets in the item Property, Plant and Equipment (acquisition costs) include the portion of the claim principal that represents the value of the equipment with long manufacturing cycle produced, the portion of the claim principal that represents the amount of the additional costs directly related to the execution of the project (design, storage, customs duties, etc.), with a total value of BGN 795,776 thousand (Note 4).

The portion of the principal awarded under the arbitration award that represents penalties (for losses, damages, lost profits, etc.) in connection with the termination of the contract, the portion of the final arbitration award that represents litigation expenses (arbitration fees and costs and attorney's fees) was recognized as a current expense for the period, and any interests that have been determined and constitute default for late payments (until 1 May 2015 and from 2 May 2015 to 14 June 2016) and in line with the agreement concluded with ZAO Atomstroyexport are recognized as current expenses for the period (Note 14).

As at 31 December 2016, the Group is unable to make a reliable estimate of the recoverable amount of the project costs included in the value of property, plant and equipment under construction due to the specific nature and lack of clarity about the future realization of the project, which is not fully under the control of the Group's management.

Based on the above facts, the management of the Group considers that as at 31 December 2016 there is considerable uncertainty about the future realization of the project, the recoverable amount of the assets related to the NPP Belene construction project.

*Revaluation of property, plant and equipment*

According to the accounting policy, property, plant and equipment are subject to revaluation in every 3 years or within a shorter period. The latest revaluation of property, plant and equipment was performed as at 30 June 2015 in compliance with IAS 16 Property, Plant and Equipment and IFRS 13 Fair Value Measurement. The revaluation was carried out based on their fair values by an independent licensed appraiser – Engineeringservice Sofia OOD.

Under IFRS 13 Fair Value Measurement, the fair value of non-financial assets is measured by the ability of a market participant to generate economic benefits by using the asset in order to maximize its value or by selling it to another market participant that will use it in such a way. The Group's assets included in the revaluation review are specific, strictly related to the operations and any alternative use of the majority of them is impossible or difficult, i.e. other use by market participants would be unlikely to maximize the value of the assets, which is the reason why their current use in the operations maximizes the value.

For this revaluation, the following main approaches and methods of measurement are used to measure the fair value of the individual categories of property, plant and equipment:

- Market Approach through Market Analogue Method – for land and buildings for which there is a real market and observable data on prices for recent market transactions with similar properties, adjusted for specific factors such as area, location and current use. Their market price, as determined by the comparative method, was accepted as fair value.
- Cost Approach through the Depreciable Replacement Cost Method – for buildings and structures of a specialized nature
- Cost Approach through the Depreciable Replacement Cost Method – for machinery, plant and equipment. Due to the specialized nature, configuration and uniqueness of the machinery, plant and equipment owned by the Group and the absence of market evidence and analogies, the depreciated Recovery Value Method was applied. The value of the asset is measured by measuring its new value as at the measurement date, reflecting the expenses incurred on its acquisition, reduced by its physical deterioration, functional and economic depreciation as a result of its operation.

- Valuation of specialised transport vehicles – the Cost Approach and the Market Analogue Method applies. The measurement at fair value as at 30 June 2015 is based on observable and unobservable data adjusted for specific factors such as area, location and current use. The direct or indirect observable input data used in the assessment are subject to adjustments. Therefore, the hypotheses used are categorized at level 3.

Significant unobservable data is related to the adjustment for the Group's specific assets. The extent and direction of this adjustment depends on the number and characteristics of the observed market transactions with similar assets that are used for the purpose of the measurement. Although these data are subjective, the management believes that the final assessment would not be significantly influenced by other possible assumptions.

*Impairment review*

As at 31 December 2016, the Group has performed a review for detecting indications of impairment by classes of property, plant and equipment. As a result, no indications of significant changes were identified when compared with

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

the prior period with respect to the market and economic environment where the Group operates and the carrying amount of property, plant and equipment does not exceed their recoverable amount.

As at 31 December 2015, the Group has performed a review for impairment of property, plant and equipment jointly with the licensed appraiser – Engineering Service Sofia OOD – subject to the requirements of IAS 36 Impairment of Assets for the same assets.

Based on the review, no indications were identified that the carrying amount of the non-current assets exceeds their recoverable amount, except for the assets related to NPP Belene Project and some of the assets under other projects under construction.

*Assets declared public state property*

As at 31 December 2016, assets declared as public state property in compliance with the Water Act, with a carrying amount of BGN 916,703 thousand (in 2015: BGN 923,624 thousand) are included in property, plant and equipment. According to the law, legal entities with 100 % state ownership or legal entities with combined state and municipal participation, where the majority stake belongs to the State, should manage separately this type of assets. As at the date of these financial statements, no specific actions were taken by the Bulgarian authorities with regard to the future ownership and use of these assets.

Until the future changes on the aforementioned aquaculture facilities are specified, they are managed by NEK EAD, for which the Group generates revenue.

*Assets with disputable ownership**NEK EAD*

As at 31 December 2016, a procedure for issuing title deeds is ongoing in respect to land and buildings with a carrying amount of BGN 17,424 thousand (31.12.2015: BGN 17,877 thousand).

*ESO EAD*

As of 31 December 2016, the carrying amount of the real properties without title documents is BGN 8,490 thousand (as at 31 December 2015: BGN 6,939 thousand).

*Collateral for loans granted to NEK EAD*

The lands and buildings of HPP Studen Kladenets, HPP Ivaylovgrad and HPP Kardzhali (Dolna Arda Cascade) with a carrying amount of BGN 17,923 thousand (in 2015: BGN 17,245 thousand) were mortgaged to secure the export and commercial loans provided by ING Bank NV – Netherlands. All current and future assets, including machinery and equipment, part of Dolna Arda Cascade, are pledged in favour of ING Bank NV. Promissory notes were issued in favour of the Bank.

Assets related to Water Power Plant Tsankov Kamak with a carrying amount of BGN 101,807 (in 2015: BGN 103,922 thousand) were mortgaged to secure the commercial loan agreements concluded with Bank Austria Creditanstalt. All existing and future facilities acquired by NEK EAD in connection with the construction and operation of HPP, diversion channel, headrace pipeline, groundwater facility, lower water well and all other facilities constituting HPP Tsankov Kamak are pledged in favour of the lending banks of the project. A pledge of the enterprise of HPP Tsankov Kamak was registered and a promissory note was issued in favour of the Bank.

*Collateral for loans granted to Mini Maritsa Iztok EAD*

A pledge collateral of machines and equipment with a carrying amount of BGN 7,404 thousand was registered as collateral of the investment credit granted by D Commerce Bank AD.

*Other disclosures*

Due to the specificity of the accounting records of property, plant and equipment and the changes therein during prior periods, the disclosure of the carrying amount of the assets if they would have been measured after their recognition at acquisition price requires significant resources and time that outweigh the benefits to the users of the consolidated financial statements. Therefore, the Group's management has decided that these disclosures should not be made.

All depreciation expenses are included in the statement of profit or loss and other comprehensive income under "Depreciation Expenses". The impairment revenues and expenses are included on line "Revenues/expenses from measurement of property, plant and equipment".

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
for the year ended 31 December 2016

**20. Intangible assets**

For 2016	Software	Patents and licences	Other intangible assets	Development costs	Concessions	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Carrying value</b>						
<b>Balance as at 1 January 2016</b>	<b>62,712</b>	<b>16,047</b>	<b>95,785</b>	<b>47,578</b>	<b>2,962</b>	<b>225,084</b>
Additions	3,631	1,454	3,742	-	-	8,827
Disposals	(1,237)	(226)	(294)	-	(79)	(1,836)
Transfer to assets of a group classified as held for sale	(3)	(15)	(675)	-	-	(693)
Transfers and reclassifications	1,285	1,882	(3,488)	-	(20)	(341)
<b>Balance as at 31 December 2016</b>	<b>66,388</b>	<b>19,142</b>	<b>95,070</b>	<b>47,578</b>	<b>2,863</b>	<b>231,041</b>
<b>Depreciation</b>						
<b>Balance as at 1 January 2016</b>	<b>(55,755)</b>	<b>(10,622)</b>	<b>(87,149)</b>	<b>(45,284)</b>	<b>(2,787)</b>	<b>(201,597)</b>
Depreciation	(2,665)	(1,778)	(1,164)	(538)	(59)	(6,204)
Disposals	1,233	225	148	-	78	1,684
Transfer to assets of a group classified as held for sale	-	2	1	-	-	3
Transfers	(104)	(216)	611	-	96	387
<b>Balance as at 31 December 2016</b>	<b>(57,291)</b>	<b>(12,389)</b>	<b>(87,553)</b>	<b>(45,822)</b>	<b>(2,672)</b>	<b>(205,727)</b>
<b>Carrying amount as at 31 December 2016</b>	<b>9,097</b>	<b>6,753</b>	<b>7,517</b>	<b>1,756</b>	<b>191</b>	<b>25,314</b>

*Depreciation of intangible assets*

The Group has performed an impairment review of intangible assets as at 31 December 2016. No indicators were identified that the carrying amount of intangible assets exceeds their recoverable amount at that date. As a result, no impairment losses are recognised in the consolidated financial statements.

For 2015	Software	Patents and licences	Other intangible assets	Development costs	Concession	Total
	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
<b>Gross carrying amount</b>						
<b>Balance as at 1 January 2015</b>	<b>60,780</b>	<b>14,704</b>	<b>93,880</b>	<b>47,597</b>	<b>3,056</b>	<b>220,017</b>
Additions	922	77	1,547	-	-	2,546
Disposals	(576)	(393)	(64)	(19)	-	(1,052)
Transfer of property, machinery and equipment	1,586	1,659	422	-	(94)	3,573
<b>Balance as at 31 December 2015</b>	<b>62,712</b>	<b>16,047</b>	<b>95,785</b>	<b>47,578</b>	<b>2,962</b>	<b>225,084</b>
<b>Depreciation</b>						
<b>Balance as at 1 January 2015</b>	<b>(52,978)</b>	<b>(10,030)</b>	<b>(85,965)</b>	<b>(44,139)</b>	<b>(2,798)</b>	<b>(195,910)</b>
Depreciation	(3,281)	(1,057)	(1,127)	(1,164)	(81)	(6,710)
Disposals	576	393	37	19	-	1,025
Transfers	(72)	72	(94)	-	92	(2)
<b>Balance as at 31 December 2015</b>	<b>(55,755)</b>	<b>(10,622)</b>	<b>(87,149)</b>	<b>(45,284)</b>	<b>(2,787)</b>	<b>(201,597)</b>
<b>Carrying amount as at 31 December 2015</b>	<b>6,957</b>	<b>5,425</b>	<b>8,636</b>	<b>2,294</b>	<b>175</b>	<b>23,487</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**21. Investments in associates, joint ventures and other entities**

			<b>31 December 2016</b>		<b>31 December 2015</b>
			<i>BGN '000</i>		<i>BGN '000</i>
	State of incorporation	Share	Investments	Share	Investments
<b>Joint ventures</b>					
ICGB AD	Bulgaria	50%	15,589	50%	15,862
Nabucco Gas Pipeline International	Austria	17.93%	-	17.93%	-
South Stream Bulgaria AD (in liquidation)	Bulgaria	50%	212,855	50%	213,457
Transbalkan Electric Power Trading S.A. – NECO S.A.	Greece	50%	2,063	50%	2,643
			<u>230,507</u>		<u>231,962</u>
<b>Associates</b>					
ContourGlobal Maritsa East 3 AD	Bulgaria	27%	87,776	27%	95,659
ContourGlobal Operations Bulgaria AD	Bulgaria	27%	1,335	27%	1,388
ZAD Energy	Bulgaria	48.08%	20,721	48.08%	25,395
POD Allianz Bulgaria AD	Bulgaria	34%	16,388	34%	15,481
Hydro Power Cascade Gorna Arda AD	Bulgaria	30%	474	30%	602
			<u>126,694</u>		<u>138,525</u>
<b>Total joint ventures and associates</b>			<u><b>357,201</b></u>		<u><b>370,487</b></u>
<b>Other investments</b>					
Ecological Operation of Fuels and Energy					
Oils OOD	Bulgaria	70%	3	70%	3
Bultehash OOD	Bulgaria	67%	-	67%	-
Zeus Holding	Bulgaria	4%	2	4%	2
			<u>5</u>		<u>5</u>
			<u><b>357,206</b></u>		<u><b>370,492</b></u>

**ICGB AD**

BEH EAD is a partner in ICGB AD. The project company will build a gas interconnector between Greece and Bulgaria, with capacity up to 3 billion m<sup>3</sup>/y., from Komotini to Stara Zagora, with length of 182 km. The joint venture is planned to construct, hold the title over the gas pipeline and receive the revenues from the transmission of natural gas.

**Nabucco Gas Pipeline International OOD (in liquidation)**

BEH EAD has been a partner in Nabucco Gas Pipeline International OOD (in liquidation), Austria, as of the entity's establishment in 2005. The company was established for the implementation of the Nabucco Project, namely for constructing a gas pipeline for transmission of natural gas from the Caspian region to Europe. In July 2013, the partners decided to suspend the project. As a result, the investment in the project company was fully impaired by 31 December 2013, and the reported impairment expenses amounted to BGN 52,070 thousand. In 2015, BGN 1,719 thousand of the investment was recovered by the project company. The recovered amounts are presented under "Share of profits in associates and jointly controlled entities". The project company does not prepare and it does not present any financial statements and therefore these financial statements do not include any financial information on the assets and liabilities of this entity.

**South Stream Bulgaria AD**

In 2016, only the most urgent current activities were carried out under the South Stream Project. Steps have been taken to decrease the company's expenses and reduce the organizational structure. In addition, steps have also been taken to settle the relationship under the existing contracts with a view to the suspension of their works until the future of the project is resolved.

Negotiations are taking place between the shareholders concerning the continuation in 2017 of the suspension of the company's business activity that started in 2016. The company will continue to exist in order to be available for any

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

possible future use of its assets for other projects useful for Bulgaria. In 2016 no new investment activities were carried out, and the organizational structure of the company was reduced to three persons.

*Transbalkan Electric Power Trading S.A. – NECO S.A.*

The Group holds 50% of the equity of NECO S.A., a jointly controlled entity with core business activities – trade of electricity, as well as construction and reconstruction of thermal power plants.

*ContourGlobal Maritsa East 3 AD*

Through NEK EAD, the Group holds 27% of the equity of the thermal power plant (TPP) of ContourGlobal Maritsa East 3 AD. The entity's core business activities include generation, distribution and sale of electricity and thermal power.

*ContourGlobal Operations Bulgaria AD*

Through NEK EAD, the Group holds 27% of the equity of ContourGlobal Operations Bulgaria AD. The entity's core business activities include operation and maintenance of TPP ContourGlobal Maritsa East 3 AD.

*ZAD Energy*

The Group holds 48.08% of the equity of ZAD Energy, an entity engaged in insurance activities.

*POD Allianz Bulgaria AD*

The Group holds 34% of the equity of POD Allianz Bulgaria AD, an entity engaged in pension-insurance activities.

*Hydro Power Cascade Gorna Arda AD*

The Group holds 30% of the equity of HPC Gorna Arda AD – an entity registered to perform valuation, structuring and planning of the construction of Gorna Arda Cascade, as well as construction of water power plants with total capacity of approx. 160 MW, ensuring the financing and the construction of Gorna Arda Cascade and managing the rights to operate the facilities (after obtaining the respective licences and authorizations).

The General Meeting of Shareholders of HPC Gorna Arda AD, held on 11 June 2012, decided to increase the Company's equity from BGN 2,330 thousand to BGN 21,888 thousand, by issuing 195,580 ordinary registered voting shares with a par value of BGN 100 each. The extraordinary session of the General Meeting of Shareholders, held on 14 December 2015, decided to decrease the Company's equity by BGN 19,558 thousand (from BGN 21,888 thousand to BGN 2,330 thousand) by revocation of 195,580 ordinary registered voting shares with a par value of BGN 100 each, registered by the shareholders during the last capital increase, dated 11 June 2012. The decision to decrease the equity was registered with the Commercial Register on 29 December 2015.

The extraordinary session of the General Meeting of Shareholders also decided to transfer the shareholders' contribution at the amount of BGN 4,889,500 from the revoked shares to capital reserves to cover losses incurred, without any payments from the shareholders.

*Ecological Operation of Fuels and Energy Oils OOD*

The Group holds 69.90% of the equity of Ecological Operation of Fuels and Energy Oils OOD, which is mainly engaged in exploration of natural energy resources: gas, coal, petroleum derivatives, their input and operational control, as well as their ecological exploitation. The carrying value of the investment as at 31 December 2016 is BGN 3 thousand (in 2015: BGN 3 thousand). Ecological Operation of Fuels and Energy Oils OOD is not active and negotiations are held between the partners for the winding up of the company.

*Bultehash OOD*

Bultehash OOD is in liquidation and the investment is impaired.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Summarized financial information on joint ventures and associates*

The following tables present summarized financial information based on the financial statements of the Group's joint ventures and associates as at 31 December of the respective year.

Joint ventures and associates	<div> <div>Transbalkan</div> <div>Electric Power</div> <div>Trading S.A. –</div> <div>NECO S.A.</div> </div>									Total
	ICGB AD	Nabucco Gas Pipeline International	South Stream Bulgaria AD	ContourGlobal Maritsa East 3 AD	ContourGlobal Operations Bulgaria AD	ZAD Energy	POD Bulgaria AD	Allianz Arda AD	Hydro Power Cascade Gorna Arda AD	
31 December 2016	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
Non-current assets	12,218	-	44,045	-	650,914	3,482	-	497	1,943	713,099
Current assets (a)	19,347	-	388,725	14,338	218,153	11,180	82,062	50,310	195	784,310
<b>Total assets</b>	<b>31,565</b>	<b>-</b>	<b>432,770</b>	<b>14,338</b>	<b>869,067</b>	<b>14,662</b>	<b>82,062</b>	<b>50,807</b>	<b>2,138</b>	<b>1,497,409</b>
Non-current liabilities (b)	-	-	183	-	413,731	3,388	-	186	-	417,488
Current liabilities (c)	387	-	6,877	10,211	130,239	6,330	38,965	2,422	558	195,989
<b>Total liabilities</b>	<b>387</b>	<b>-</b>	<b>7,060</b>	<b>10,211</b>	<b>543,970</b>	<b>9,718</b>	<b>38,965</b>	<b>2,608</b>	<b>558</b>	<b>613,477</b>
a) including cash and cash equivalent	19,185	-	383,925	2,451	55,481	402	6,076	13,573	188	481,281
b) including non-current loans	-	-	-	-	321,249	-	-	-	-	321,249
c) including current loans	-	-	-	-	46,275	-	-	-	-	46,275
Revenues	90	-	266	10,139	432,416	28,629	52,067	33,633	-	557,240
Depreciation expenses	(2)	-	(196)	-	(74,733)	-	(1,933)	(93)	-	(76,957)
Income tax expense	-	-	-	-	(9,095)	(538)	-	(1,789)	-	(11,422)
Profit (Loss) for the year	(545)	-	(1,203)	(1,160)	79,811	4,806	17,372	18,564	(426)	117,219
Other comprehensive income for the year	-	-	-	-	18,995	-	(93)	-	-	18,902
<b>Total comprehensive income/(loss) for the year</b>	<b>(545)</b>	<b>-</b>	<b>(1,203)</b>	<b>(1,160)</b>	<b>98,806</b>	<b>4,806</b>	<b>17,279</b>	<b>18,564</b>	<b>(426)</b>	<b>136,121</b>
<b>Portion of the profit/(loss) for the year applicable to the Group</b>	<b>(273)</b>	<b>-</b>	<b>(602)</b>	<b>(580)</b>	<b>21,549</b>	<b>1,298</b>	<b>8,352</b>	<b>6,312</b>	<b>(128)</b>	<b>35,928</b>
<b>Share in the profit / (loss) for the year, attributable to the Group</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,129</b>	<b>-</b>	<b>(45)</b>	<b>-</b>	<b>-</b>	<b>5,084</b>
Total net assets	31,178	-	425,710	4,127	325,097	4,944	43,097	48,199	1,580	883,932
Share interest of the Group	50%	17.93%	50%	50%	27%	27%	48.08%	34%	30%	
<b>Carrying amount of the investment</b>	<b>15,589</b>	<b>-</b>	<b>212,855</b>	<b>2,063</b>	<b>87,776</b>	<b>1,335</b>	<b>20,721</b>	<b>16,388</b>	<b>474</b>	<b>357,201</b>

## Bulgarian Energy Holding EAD

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2016



Joint ventures and associates		Nabucco Gas Pipeline Internationa	South Stream Bulgaria AD	Transbalkan Electric Power Trading S.A. – NECO S.A.	ContourGloba l Maritsa East 3 AD	ContourGloba l Operations Bulgaria AD	ZAD Energy	POD Allianz Bulgaria AD	Hydro Power Company Gorna Arda AD	
	31 December 2015	ICGB AD	l	AD						Total
		BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000	BGN '000
Non-current assets	7,544	-	37,147	66	726,471	3,731	-	510	1,943	777,412
Current assets (a)	24,916	-	391,531	13,732	676,642	11,282	116,128	47,525	489	1,282,245
<b>Total assets</b>	<b>32,460</b>	<b>-</b>	<b>428,678</b>	<b>13,798</b>	<b>1,403,113</b>	<b>15,013</b>	<b>116,128</b>	<b>48,035</b>	<b>2,432</b>	<b>2,059,657</b>
Non-current liabilities (b)	-	-	97	-	565,234	3,633	-	-	-	568,964
Current liabilities (c)	737	-	1,667	8,512	483,588	6,241	63,309	2,393	427	556,874
<b>Total liabilities</b>	<b>737</b>	<b>-</b>	<b>1,764</b>	<b>8,512</b>	<b>1,048,822</b>	<b>9,874</b>	<b>63,309</b>	<b>2,393</b>	<b>427</b>	<b>1,135,838</b>
a) including cash and cash equivalent	24,751	-	386,856	2,926	69,886	170	7,596	2,557	461	495,203
b) including non-current loans	-	-	-	-	451,262	-	-	-	-	451,262
c) including current loans	-	-	-	-	55,442	-	-	-	-	55,442
Revenue	24	-	-	23,142	559,663	28,970	66,867	31,132	-	709,798
Depreciation expenses	-	-	(209)	-	(79,541)	-	136	(107)	-	(79,721)
Income tax expense	-	-	-	(159)	(12,627)	(583)	(1,783)	(1,834)	-	(16,986)
Profit (Loss) for the year	(418)	-	(4,307)	364	112,605	4,999	17,503	18,261	(755)	148,252
Other comprehensive loss for the year	-	-	-	-	16,119	-	139	-	-	16,258
<b>Total comprehensive income/(loss) for the year</b>	<b>(418)</b>	<b>-</b>	<b>(4,307)</b>	<b>364</b>	<b>128,724</b>	<b>4,999</b>	<b>17,642</b>	<b>18,261</b>	<b>(755)</b>	<b>164,510</b>
<b>Portion of the other comprehensive income for the year applicable to the Group</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,352</b>	<b>-</b>	<b>67</b>	<b>-</b>	<b>-</b>	<b>4,419</b>
<b>Share in the profit / (loss) for the year, attributable to the Group</b>	<b>(209)</b>	<b>1,719</b>	<b>(2,154)</b>	<b>186</b>	<b>30,404</b>	<b>1,350</b>	<b>8,639</b>	<b>6,211</b>	<b>(226)</b>	<b>45,920</b>
Total net assets	31,723	-	426,914	5,286	354,291	5,139	52,819	45,533	2,005	923,819
Share interest of the Group	50%	17.93%	50%	50%	27%	27%	48.08%	34%	30%	-
<b>Carrying amount of the investment</b>	<b>15,862</b>	<b>-</b>	<b>213,457</b>	<b>2,643</b>	<b>95,659</b>	<b>1,388</b>	<b>25,395</b>	<b>15,481</b>	<b>602</b>	<b>370,487</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Investments in associates and joint ventures are accounted for using the equity method. The date of the Financial Statements of the associates and the joint ventures is 31 December. All transfers of cash to the Group, such as payment of dividends, are performed after the approval of at least 51% of all shareholders in the associates.

The financial information presented as at 31 December 2016 concerning POD Allianz Bulgaria AD, ZAD Energy AD, South Stream Bulgaria AD is in conformity with the unaudited financial statements.

The information presented on Transbalkan Electric Power Trading S.A. – NECO S.A. covers the period ended 30 June 2016.

**22. Trade and other receivables**

	Note	31 December 2016	31 December 2015
		BGN '000	BGN '000
Trade receivables, gross		732,988	732,868
Accumulated impairment of trade receivables		(259,143)	(259,143)
<b>Trade receivables, net</b>		<b>473,845</b>	<b>473,725</b>
Receivables from CCB AD (in bankruptcy), gross		137,472	137,541
Accrued impairment		(123,750)	(22,762)
<b>Receivables from CCB AD (in bankruptcy), net</b>	<b>22.3</b>	<b>13,722</b>	<b>114,779</b>
<b>Financial assets</b>		<b>487,567</b>	<b>588,504</b>
Advanced payments made to suppliers		17	-
Prepaid services		2	20
<b>Non-financial assets</b>		<b>19</b>	<b>20</b>
<b>Trade and other receivables – non-current portion</b>		<b>487,586</b>	<b>588,524</b>
Trade receivables, gross		669,658	1,103,711
Accumulated impairment of trade receivables		(15,728)	(8,031)
Trade receivables, net		653,930	1,095,680
Gross court and adjudicated receivables		250,638	301,455
Accrued impairment of litigations and claims		(218,483)	(212,931)
Litigations and claims, net		32,155	88,524
Receivables from ZAO Atomstroyexport		-	7,883
Receivables from Security of the Electricity System Fund		37,247	-
Receivables from interests on bank deposits		17	-
Other receivables, gross		5,896	2,311
Accumulated impairment of other receivables		(219)	(272)
Other receivables, net		5,677	2,039
<b>Financial assets</b>		<b>729,026</b>	<b>1,194,126</b>
Advances to suppliers		50,924	249,193
Prepaid services		20,490	30,501
Recoverable taxes		2,644	8,962
<b>Non-financial assets</b>		<b>74,058</b>	<b>288,656</b>
<b>Trade and other receivables – current portion</b>		<b>803,084</b>	<b>1,482,782</b>
<b>Trade and other receivables</b>		<b>1,290,670</b>	<b>2,071,306</b>

The trade receivables are not interest-bearing and usually have a payment period of 1 to 30 days.

The following receivables are pledged in favour of contractors:

(1) Special pledge on multiple claims arising from agreements concluded by and between TPP Maritsa East 2 EAD and third parties, except for Natsionalna Elektricheska Kompania EAD, UIC 000649348, for the purchase and sale of electricity on a free market. The collateral was established in connection with Loan Agreement No.13503 dated 22 December 2014, executed by and between Société Générale Expressbank AD and TPP Maritsa East 2 EAD for the provision of a bank loan amounting to the BGN equivalence of JPY 797,461,750 and EUR 736,900. The

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

pledged receivables are specified, namely: receivables of TPP Maritza East 2 EAD from CEZ Trade Bulgaria EAD, UIC 113570147, arising from Agreement No.14088 dated 30 October 2015, additional agreement No.1 dated 3 December 2015 and Agreement No.14776 dated 21 October 2016.

(2) Special pledge on multiple claims arising from Agreement No.140087 dated 30 October 2015, executed for the purchase and sale of electricity on a free market by and between TPP Maritza East 2 EAD and Energy MT EAD, Sofia, UIC 201149482. The collateral was established in connection with the receivables of D Commerce Bank AD, representing transferred receivables from Mini Maritza Iztok EAD under the Contract for Cession of Monetary Claim No.1985.01415 for the Bank.

The movement in the cumulative impairment of doubtful and uncollectable trade and other receivables is as follows:

Impairment of trade and other receivables	31 December 2016	31 December 2015
	BGN '000	BGN '000
<b>As at 1 January</b>	<b>503,139</b>	<b>496,357</b>
Accrued within the year	120,213	35,702
Recovered	(5,755)	(13,880)
Written-off	(274)	(15,040)
<b>Total impairment of trade and other receivables</b>	<b>617,323</b>	<b>503,139</b>

As at 31 December, the age analysis of trade and other receivables is presented in the table below:

	Not overdue BGN '000	Overdue			Total BGN '000
		0 to 180 days BGN '000	180 to 360 days BGN '000	>360 days BGN '000	
<b>31 December 2016</b>					
Trade receivables, gross	1,006,410	110,558	26,699	690,249	<b>1,833,916</b>
Impairment	(382,893)	-	-	(234,430)	<b>(617,323)</b>
<b>Net</b>	<b>623,517</b>	<b>110,558</b>	<b>26,699</b>	<b>455,819</b>	<b>1,216,593</b>
<b>31 December 2015</b>					
Trade receivables, gross	1,043,257	147,546	130,176	964,790	<b>2,285,769</b>
Impairment	(67,348)	-	-	(435,791)	<b>(503,139)</b>
<b>Net</b>	<b>975,909</b>	<b>147,546</b>	<b>130,176</b>	<b>528,999</b>	<b>1,782,630</b>

**22.1 Receivables from Toplofikatsia Sofia EAD**

	31 December 2016	31 December 2015
	BGN '000	BGN '000
Non-current receivables from Toplofikatsia Sofia EAD, gross	538,128	538,128
Impairment	(64,403)	(64,403)
<b>Non-current receivables from Toplofikatsia Sofia EAD, net</b>	<b>473,725</b>	<b>473,725</b>
Current receivables from Toplofikatsia Sofia EAD, gross	83,529	154,442
Impairment	(2,098)	-
Current receivables from Toplofikatsia Sofia EAD, net	81,431	154,442
	<b>555,156</b>	<b>628,167</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

On 11 December 2015 an agreement was concluded by and between Bulgarian Energy Holding EAD and Toplofikatsia Sofia EAD, according to which the liabilities of the district heating company to Bulgarian Energy Holding EAD were merged and novated. The debtor fully and unconditionally recognized liabilities amounting to BGN 500,465 thousand, which are to be repaid for a period of twenty years, with a five-year grace period and at an interest rate on the principal amounting to 3.25%. The liabilities amounting to BGN 52,311 thousand, arising as the difference between the liability recognized by the debtor and the full amount claimed by the creditor, are disputable and subject to an additional agreement between the parties. The agreement provides that upon concluding a concession contract between Sofia Municipality and a third party, the latter should undertake to pay to BEH EAD an initial instalment of not less than BGN 200,000 thousand, within 120 days as from the date of entry into force of the concession contract, and the remainder is to be paid as agreed by the parties. The receivables included in the agreement are classified as non-current.

The current receivables comprise sales by the entities in the Group to Toplofikatsia Sofia EAD.

**22.1 Receivables from electricity distribution companies and other contractors**

The Group, through its subsidiary NEK EAD, as at 31 December 2016 reported unconfirmed receivables from contractors amounting to BGN 76,450 thousand, including BGN 57,180 thousand from an electricity company, which disagreed to confirm these receivables and pay pursuant to Article 94 of the Energy Act for electricity purchased from renewable energy sources and highly efficient cogeneration for the period from 5 July 2013 to 31 July 2013 after the entry into force of amendments to the Energy Act and the extension of the regulatory period until 31 July 2013, as well as due to the abrogation of the methodology for compensation of the costs of the public supplier and the end suppliers arising from their obligations to society to buy electricity at preferential prices from renewable energy sources and highly efficient cogeneration of heat and electricity.

**22.2 Receivables from CCB AD (in bankruptcy)**

As at 31 December 2016, the Group has receivables from Corporate Commercial Bank AD (in bankruptcy) amounting to BGN 137,472 thousand. By decision No. 664 dated 22 April 2015 of Sofia City Court, Corporate Commercial Bank AD (CCB AD) was declared in bankruptcy.

As at the date of the Group's consolidated financial statements, a reference to a partial account is published in the Commercial Register for distribution of the available amounts among the creditors of the bank by the assignees of CCB AD (in bankruptcy). According to the distribution of the assignees, an amount of BGN 13,722 thousand should be reimbursed to the group. Based on this information and the decisions of the Board of Directors of BEH EAD under Protocol No. 18-2017 dated 20 February 2017 and Protocol No. 21-2017 dated 7 March 2017, as at 31 December 2016 the receivables from CCB (in bankruptcy) were impaired to the amount of the reimbursement determined by the assignees.

**23. Deferred tax assets and liabilities**

Deferred tax assets / (liabilities)	Balance as at 1 January 2016	Recognised in profit or loss	Recognised in other comprehensive income	Transfer to assets of a group classified as held for sale	Balance as at 31 December 2016
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Property, plant and equipment and intangible assets	(727,758)	26,441	(1,675)	-	(702,992)
Financing	7,326	742	-	-	8,068
Unused annual leaves	2,433	455	-	(2)	2,886
Provisions	24,803	(2,507)	-	-	22,296
Retirement benefits (liabilities related to post-employment benefits)	16,377	(81)	1,785	-	18,081
Outstanding liabilities, related to personnel remuneration	1,445	(98)	-	(3)	1,344
Available-for-sale financial assets	(7)	-	(3)	-	(10)
Impairment of investments in joint ventures	4,631	-	-	-	4,631
Impairment of inventory	2,828	(1,028)	-	-	1,800
Impairment of trade and other receivables	32,379	10,939	-	-	43,318
Tax losses	6,153	(6,153)	-	-	-
	<u>(629,390)</u>	<u>28,710</u>	<u>107</u>	<u>(5)</u>	<u>(600,578)</u>
Recognized as:					
Deferred tax assets	<u>98,375</u>				<u>102,424</u>
Deferred tax liabilities	<u>(727,765)</u>				<u>(703,002)</u>

Deferred tax assets/(liabilities)	Balance as at 1 January 2015	Recognised in profit or loss	Recognised in other comprehensive income	Recognized directly in equity	Balance as at 31 December 2015
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Property, plant and equipment and intangible assets	(576,518)	17,646	(168,886)	-	(727,758)
Financing	3,435	3,891	-	-	7,326
Unused annual leaves	2,237	196	-	-	2,433
Provisions	17,050	7,753	-	-	24,803
Retirement benefits (liabilities related to post-employment benefits)	13,790	(459)	3,046	-	16,377
Outstanding liabilities, related to personnel remuneration	1,678	(233)	-	-	1,445
Available-for-sale financial assets	(2)	-	(5)	-	(7)
Impairment of investments in joint ventures	4,803	(172)	-	-	4,631
Impairment of inventory	2,358	470	-	-	2,828
Impairment of trade and other receivables	30,882	1,497	-	-	32,379
Tax losses	8,034	(1,881)	-	-	6,153
	<u>(492,253)</u>	<u>28,708</u>	<u>(165,845)</u>	<u>-</u>	<u>(629,390)</u>
Recognized as:					
Deferred tax assets	<u>84,267</u>				<u>98,375</u>
Deferred tax liabilities	<u>(576,520)</u>				<u>(727,765)</u>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The amount of income tax, related with each of the elements of other comprehensive income, may be presented as follows:

	<b>2016</b>		
	Before taxes	Tax (expense)/income	Net of taxes
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Impairment of property, plant and equipment	16,743	(1,675)	15,068
Impairment of liabilities under defined benefit plans	(17,851)	1,785	(16,066)
Gains/(losses) from available-for-sale financial assets	35	(3)	32
Share of the other comprehensive income of associates	5,654	(570)	5,084
Foreign exchange gains/losses from translation of foreign activities	1	-	1
<b>Other comprehensive income</b>	<b>4,582</b>	<b>(463)</b>	<b>4,119</b>

	<b>2015</b>		
	Before taxes	Tax (expense)/income	Net of taxes
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Impairment of property, plant and equipment	1,688,867	(168,886)	1,519,981
Impairment of liabilities under defined benefit plans	(30,449)	3,046	(27,403)
Gains/(losses) from available-for-sale financial assets	47	(5)	42
Share of the other comprehensive income of associates	4,910	(491)	4,419
<b>Other comprehensive income</b>	<b>1,663,375</b>	<b>(166,336)</b>	<b>1,497,039</b>

**24. Inventory**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Natural gas	140,387	196,074
Fuel	154,996	158,858
Spare parts	201,822	163,003
Other raw materials and supplies	64,911	70,973
Goods	391	208
Work in progress, including:	-	-
- loaded, unconsumed, fresh nuclear fuel	72,260	82,478
- lignite coals	51,407	33,426
- other	451	268
Inventories, gross	686,625	705,288
Impairment to net realizable value	(10,688)	(19,847)
<b>Inventories, net of impairment</b>	<b>675,937</b>	<b>685,441</b>

The natural gas available at the reporting date includes mainly the natural gas stored at Chiren UGS. Fuel mainly comprises of unloaded, fresh nuclear fuel, diesel and oil fuel.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Impairment to net realizable value of inventories*

The movement in the accumulated impairment of inventories is as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Balance as at 1 January	(19,847)	(12,106)
Impairment accrued for the period	(3,984)	(17,990)
Reserved impairment	13	656
Written-off inventories	13,130	9,593
<b>Total impairment</b>	<b>(10,688)</b>	<b>(19,847)</b>

The expenses, incurred for impairment of the Group's inventory are included in line "Other operating expenses" in the consolidated statement of profit or loss and the recovered impairment is recognized as a decrease in "Other operating expenses".

**25. Available-for-sale financial assets**

On 17 December 2007, Bulgarian Energy Holding EAD participated in the initial public offering of securities of TRANSGAZ S.A., Romania, from an increase in the company's capital, and acquired 6,041 shares. As at 31 December 2016, respectively 31 December 2015, a revaluation of the exchange rate was made at that date, taking into account the effects of the change in the BGN/RON exchange rate. The fair value of this investment as at 31 December 2016 is 765 thousand (in 2015: BGN 730 thousand), determined based on the published quotes of active market prices. All effects from the revaluation of the investment as at 31 December 2016 are reported as an increase in the revaluation reserve of available-for-sale financial assets and are presented in the Consolidated Statement of Changes in Equity in item "Reserves from revaluation to fair value".

**26. Cash and short-term deposits**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Cash in bank accounts	539,378	731,776
Cash on hand	567	416
Short-term deposits	469,290	100,399
Restricted cash with special purpose	6,752	520
<b>Total</b>	<b>1,015,987</b>	<b>833,111</b>

The cash in bank accounts bears interest at floating interest rates, based on the daily interest rates applicable to bank deposits. The short-term deposits are with different maturity, depending on the liquidity needs. The Group has placed one-month, three-months and one-year bank deposits as at 31 December 2016.

The amount of cash and cash equivalents, which is restricted for the Group as at 31 December 2016 is BGN 6,752 thousand due to the following reasons:

- BGN 6,433 thousand in connection to legal claims, filed against the Group as at 31 December 2016;
- BGN 169 thousand under a current account with special purpose opened with Allianz Bank Bulgaria AD, in respect of a contract with EWRC;
- BGN 150 thousand in a special current account, serving as a collateral, as per the meaning of Art. 8a of the Rules on the terms and conditions for granting access to the electricity transmission and distribution networks.

**27. Profit/(loss) for the year from discontinued operations**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Net revenues from sales	2,130	97
Materials and hired services expenses	(616)	(99)
Employee benefit expenses	(562)	(177)
Depreciation expenses	(108)	(7)
Provisions for transportation of the spent nuclear fuel		(29,942)
Other expenses	(43)	(44)
Net financial revenues/expenses	(7)	(1)
Income tax	(49)	2
Loss for the year from discontinued operations	<b>745</b>	<b>(30,171)</b>

**27.1 Decommissioning of radioactive waste management facilities**

On 19 December 2012, the Council of Ministers issued Decision No.1138, declaring Units 3 and 4 of NPP Kozloduy as radioactive waste management facilities subject to decommissioning. According to the decision, the property and staff related with the above units were declared private state property to be transferred to State Enterprise Radioactive Waste (SE RAW) by simultaneously reducing and increasing the share capital of NPP Kozloduy EAD by the amount of BGN 25,411 thousand. In 2013 the assets and staff of Units 3 and 4 were transferred to SE RAW upon signing bilateral handover protocols.

The revenue and expense, associated with Unit 3 and Unit 4, are eliminated from Group's financial result from continuing operations and presented in a separate line "Loss for the year from discontinued operations" in the consolidated statement of profit or loss.

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Hired services expenses	-	(15)
Employee benefit expenses	-	-
Provisions for transportation of the spent nuclear fuel	-	(29,942)
Loss for the year from discontinued operations	<b>-</b>	<b>(29,957)</b>

The cash flows generated by the decommissioning group may be presented as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Operating activities</b>		
Payables to suppliers	-	(15)
<b>Net cash flows from discontinued operations</b>	<b>-</b>	<b>(15)</b>

**27.2 Non-current assets and decommissioning assets and liabilities classified as held for sale**

By Decision C(2015) 8860 dated 10 December 2015 on Case AT.39767 BEH-Electricity, the EC considers proposed Commitments as legally binding for a period of five years from the start date of the day-ahead market operations proposed by Bulgarian Energy Holding EAD, Natsionalna Elektricheska Kompania EAD, TPP Maritsa East 2 EAD, NPP Kozloduy EAD and Independent Bulgarian Energy Exchange EAD and decides to terminate the proceedings.

Pursuant to the Commitments, Bulgarian Energy Holding EAD undertakes to separate Independent Bulgarian Energy Exchange EAD from its structure and to divest Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by 14 June 2016 through the execution of a final divestiture agreement. On 13 May 2016, Bulgarian Energy Holding EAD formally requested the European Commission to extend the deadline for divestiture of Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by at least 6 (six) months.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

On 8 June 2016, Bulgarian Energy Holding EAD received the formal decision of the European Commission on the extension of the deadline for the divestiture of Independent Bulgarian Energy Exchange EAD to the Ministry of Finance until 31 December 2016.

By Decision C (2016) 9006 dated 22 December 2016 the European Commission authorized the divestiture of IBEX EAD to the Ministry of Finance to be completed by 31 July 2017. The EC refers to the convincing and motivated arguments presented by Bulgarian Energy Holding EAD regarding the extension of the deadline of the divestiture and the need for a longer period of time to meet the necessary technical requirements.

Based on the irrevocable commitment, the assets and liabilities of IBEX EAD, which were included in the Electricity Segment as at 31 December 2015, are reclassified as a disposal group held for sale. The Group expects the divestiture of IBEX EAD to be effected in 2017.

The table provides an overview of all assets and liabilities of the disposal group classified as held for sale during the year ended 31 December 2016.

	<b>31 December 2016 Before reclassification</b>	<b>Cumulative impairment losses recognized until disposal</b>	<b>31 December 2016 After reclassification</b>
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
<i>Non-current assets and disposal group assets classified as held for sale</i>			
Cash and cash equivalents	14,223	-	14,223
Recoverable taxes	1,697	-	1,697
Trade and other receivables	676	-	676
Intangible assets	597	-	597
Property, plant and equipment	69	-	69
Inventories	17	-	17
Deferred tax assets	5	-	5
	<b>17,284</b>	<b>-</b>	<b>17,284</b>
<i>Disposal group liabilities classified as held for sale</i>			
Trade and other payables	10,819	-	10,819
Tax liabilities	53	-	53
Retirement benefits liabilities	3	-	3
	<b>10,875</b>	<b>-</b>	<b>10,875</b>

As at 31 December 2016 and 31 December 2015, the cumulative profit of IBEX EAD presented in the Statement of Profit or Loss can be analysed as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Net revenues from sales	2,130	97
Materials and hired services expenses	(616)	(84)
Employee benefit expenses	(562)	(177)
Depreciation expenses	(108)	(7)
Other expenses	(43)	(42)
Net financial revenues/expenses	(7)	(1)
Income tax expense	(49)	-
Loss for the year from discontinued operations	<b>745</b>	<b>(214)</b>

As at 31 December 2016, the net cash flows of IBEX EAD are as follows:

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Net cash flows from:</b>		
Operating activities	13,554	(177)
Investing activity	(402)	(332)
Financial activity	460	1,117
<b>Net cash flow from discontinued operations</b>	<b>13,612</b>	<b>608</b>

## **28. Share capital and reserves**

### **28.1 Share capital**

As at 31 December 2016 the registered capital of Bulgarian Energy Holding EAD consists of 3,285,614,457 ordinary shares with a par value of BGN 1 each (in 2015: 3,188,168,127 shares). The shares of the parent company are ordinary registered unprivileged shares with voting rights. All ordinary shares are fully paid. Each share entitles its holder to one vote, a right to dividend and a liquidation stake in the Company's assets. The sole shareholder of Bulgarian Energy Holding EAD is the Bulgarian state through the Minister of Energy.

The shares issued and authorized for the reporting periods can be presented as follows:

	<b>31 December 2016</b>	<b>31 December 2015</b>
	Number of shares	Number of shares
Number of issued and fully paid shares		
At the beginning of the year	3,188,168,127	2,948,722,817
Increase of share capital during the year	97,446,330	239,445,310
<b>Total number of shares authorized at the end of the year</b>	<b>3,285,614,457</b>	<b>3,188,168,127</b>

In 2016, by Protocol No. PД-21-34 dated 27 June 2016 of the Ministry of Energy, a decision was taken to increase the capital of Bulgarian Energy Holding EAD by issuing 97,446,330 new ordinary registered voting shares with a par value of BGN 1 each, by utilizing the retained earnings from 2015.

In 2015, by Protocol No. PД-21-44 dated 29 July 2015 of the Ministry of Energy, a decision was taken to increase the capital of Bulgarian Energy Holding EAD by issuing 239,445,310 new ordinary registered voting shares with a par value of BGN 1 each, by utilizing the company's own funds from "Other reserves".

### **28.2 Other reserves**

The other reserves are formed by distribution of profits in accordance with the Commercial Act and the Articles of Association of the Group companies or from other sources by decision of the Sole Shareholder. These include statutory reserves and general reserves. The statutory reserves are set aside until they reach a tenth or a larger portion of the capital. The sources for the formation of statutory reserves are at least one tenth of the net profit, share premiums and funds provided for in the Articles of Association or by decision of the Sole Shareholder. The statutory reserves can only be used to cover losses from the current and prior reporting periods. The general reserves are formed by a proposal of the Board of Directors and may be used to cover losses from past years and for other purposes.

**28.3. Reserves from revaluation to fair value**

The reserves from revaluation to fair value include the revaluation of the shares of Transgaz S.A., Romania, classified as available-for-sale financial assets (Note 25).

**28.4. Revaluation reserve of non-financial assets**

The revaluation reserve is used to record the increases in the fair value of the property, plant and equipment and the decreases to the extent that those decreases are related to increases in the same asset previously recognized in the other comprehensive income. The reserve can be used to cover losses and pay dividends only in limited circumstances.

**28.5. Reserve from translation of foreign operations**

The Group has a subsidiary in Macedonia operating with functional currency - Macedonian Denars. The revaluation reserve was formed as a result of currency exchange differences as at 31 December 2016.

**28.6. Reserve from remeasurement of defined benefit plans**

The revaluation reserve of defined benefit plans includes the actuarial gains and losses as a result of the revaluation of the defined benefit plans.

**29. Loans and finance lease liabilities**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current portion</b>		
Issued bonds	2,029,260	974,137
Bank loans	143,005	215,865
Loan from EURATOM	105,004	147,788
Finance lease	6	7
	<b>2,277,275</b>	<b>1,337,797</b>
<b>Current portion</b>		
Issued bonds	27,969	6,119
Bank loans	79,671	158,953
Loan from EURATOM	44,268	46,058
Bank overdrafts	-	20,000
Financial lease	7	13
	<b>151,915</b>	<b>231,143</b>
	<b>2,429,190</b>	<b>1,568,940</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The information on the major terms and conditions of utilized loans and borrowings under finance lease agreements is presented as follows:

	Borrower/ Issuer	Interest rate	Maturity	31 December 2016 <i>BGN '000</i>	31 December 2015 <i>BGN '000</i>
(1) Bond issue, 2013	BEH EAD	4.25%	2018	981,527	980,256
(2) Bond issue, 2016	BEH EAD	4.875%	2021	1,075,702	-
(3) Investment commercial credit from EURATOM in EUR	NPP Kozloduy EAD	EURIBOR + 0.079% to 0.13%	2017 - 2021	149,272	193,846
(4) Investment loan in Japanese Yen	TPP Maritsa East 2 EAD	1.49% plus risk premium of 0.94%	2018	79,370	111,431
(5) Investment loan in EUR	NEK EAD	3m OeKB and 4.10%	2020	56,575	75,442
(6) Investment loan in EUR	NEK EAD	6m EURIBOR + 2.95% and 6.3% and 4.75%	2016 - 2021	31,317	49,866
(7) Investment loan in EUR	NEK EAD	From 4.026% to 4.844%	2022	46,596	55,061
(8) Long-term investment loan	TPP Maritsa East 2 EAD	6m SOFIBOR+3.49%	2018	6,538	44,167
(9) Working capital loan-overdraft	Mini Maritsa Iztok EAD	Base Interest Rate + 2.40%	2015	-	39,948
(10) Financing under contracts for repurchase of natural gas	Bulgargaz EAD		2015	-	12,054
(11) Investment loan	Mini Maritsa Iztok EAD	1y EURIBOR +5.10%	2024	2,280	2,280
(12) Investment loan in EUR	Mini Maritsa Iztok EAD	1m EURIBOR + 2%	2016	-	3,934
(13) Investment loan in EUR	Mini Maritsa Iztok EAD	1m EURIBOR +1.74%	2015	-	635
(14) Finance lease in BGN	TPP Maritsa East 2 EAD	7.7% - 8.75%		13	20
				<b>2,429,190</b>	<b>1,568,940</b>

**(1) Bond issue, 2013**

On 7 November 2013, the Company placed a bond issue in the amount of EUR 500 million with the following parameters:

- amount of the bond issue of EUR 500 million;
- due date: 7 November 2018;
- the interest is payable once a year on 7 November, with a first payment due on 7 November 2014, at annual interest rate of 4.25%;
- ISIN code XS0989152573 of the bond issue, quoted on the Irish Stock Exchange's Main Bond Market;
- BEH EAD should observe a specific financial indicator calculated on the basis of the consolidated financial statements: EBITDA/financial borrowings ratio should not be less than 4:1.

On 7 November 2014, the Company made the first interest payment of BGN 41,561 thousand within the agreed term of the bond issue, on 5 November 2015 it made the second interest payment of BGN 41,561 thousand and on 3 November 2016 - the third interest payment of BGN 41,561 thousand.

**(2) Bond issue, 2016**

On 2 August 2016, Bulgarian Energy Holding EAD successfully placed its second issue of Eurobonds in the amount of EUR 550 million. Upon increased investor interest, the issue was oversubscribed to over EUR 2 billion. The parameters of the second bond issue of Bulgarian Energy Holding EAD are as follows:

- amount of the bond issue (face value) of EUR 550 million;
- issue value - 98.921%;

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

- fixed interest rate of 4.875% per annum;
- the interest is payable once a year on 2 August, with a first payment due on 2 August 2017;
- due date: 2 August 2021;
- ISIN code XS1405778041 of the bond issue quoted on the Main Bond Market of the Irish Stock Exchange
- BEH EAD should observe certain covenants, such as:
  - The Issuer undertakes not to assume and to prevent its subsidiaries from assuming, directly or indirectly, financial obligations if, after an assessment of the effects of the assumption of such obligations and their proceeds, (1) there is, arises or there are grounds for the occurrence of an event of default; (2) the EBITDA Coverage Ratio calculated as the consolidated EBITDA for the last period prior to the date of the transactions for which the Issuer's consolidated financial statements have been prepared, divided by the financial expenses for the same period is less than 4:1; and (3) the Consolidated Leverage Ratio, calculated as the Issuer's consolidated debt for the last period prior to the date of the transactions for which consolidated financial statements have been prepared, less the balance sheet value of the cash holdings of the Issuer for the same period, divided by the consolidated EBITDA for the same period, is more than 4.5:1.
  - In the event that NEK is declared by a Bulgarian court to be over-indebted, the Issuer undertakes not to assume or to prevent (as far as permitted by law) its subsidiaries from assuming, directly or indirectly, any financial obligations.

Bond yields were used to repay the bridged loan in the amount of EUR 535 million granted by Banca IMI S.p.A., London Branch, Bank of China (Luxembourg) S.A. and J.P. Morgan Limited under an agreement dated 21 April 2016.

As at 31 December 2016, the Group adheres to the conditions of the bond issue to maintain the EBITDA/financial expense ratio more than 4:1.

(3) A long-term investment loan with an agreed amount of EUR 212,500 thousand (BGN 415,614 thousand). The loan is secured with a state guarantee and is intended to finance the modernization of Units 5 and 6 of NPP Kozloduy EAD. The repayment term is May 2021. The loan agreement contains special clauses with restrictive conditions regarding the changes in the ultimate owners of NPP Kozloduy EAD, as well as financial indicators requiring the achievement of certain levels of indebtedness and coverage of the debt servicing.

(4) A long-term investment loan with an agreed amount of JPY 25,106,617 thousand (BGN 338,603 thousand). The loan is secured by a state guarantee. It is due in September 2018 and is repaid in two equal instalments of JPY 1,255,331 thousand per year.

(5) An agreement on export loan for financing the construction of HPP Tsankov Kamak. The loan is granted in two tranches, divided in ratio 10:90 for Tranche A to Tranche B. Each drawdown is divided according to this ratio and is redistributed under the two tranches. The total amount of the export loan is EUR 100,000 thousand (BGN 195,583 thousand).

- Tranche A amounts to EUR 10,000 thousand (BGN 19,558 thousand), at floating quarterly interest rate of OeKB applicable to export loans. As at 31 December 2015, this tranche is fully repaid;
- Tranche B amounts to EUR 90,000 thousand (BGN 176,025 thousand). The interest rate under this tranche is fixed and equal to 4.10%. As at 31 December 2015 the nominal outstanding portion under this tranche amounts to EUR 39,139 thousand (BGN 76,550 thousand). The loan repayment term is December 2019.

The loan is secured by a mortgage on the property and a pledge of assets related to HPP Tsankov Kamak, with carrying amount of BGN 101,807 thousand. A pledge of the enterprise HPP Tsankov Kamak was also registered as a collateral under the loan. A promissory note has been issued. According to the loan agreement, NEK EAD must comply with certain financial conditions relating to the debt performance (leverage) ratios and the interest coverage.

(6) In October 2006, NEK EAD concluded an agreement for three commercial credits to finance the modernization and rehabilitation of Dolna Arda Cascade. The credits are granted at a floating interest rate calculated based on 6-month EURIBOR plus a spread of 2.95%. The maximum approved limit for the three credits is EUR 28,351 thousand (BGN 55,450 thousand).

Credit CCA 1. The approved amount comes to EUR 7,425 thousand (BGN 14,522 thousand). As at 31 December 2016 the loan is repaid in full.

Credit CCA 2. The approved amount comes to EUR 15,900 thousand (BGN 31,098 thousand). As at 31 December 2016 the loan is repaid in full.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Credit CCA 3. The approved amount comes to EUR 5,026 thousand (BGN 9,829 thousand). As at 31 December 2016 the loan is repaid in full.

In October 2006, NEK EAD concluded agreements for an export loan to finance the modernization and rehabilitation of Dolna Arda Cascade. The loan is granted in two tranches, divided in ratio 10:90 for Tranche A to Tranche B. The maximum approved limit of the export loan amounts to EUR 42,075 thousand (BGN 82,292 thousand).

Tranche A amounts to EUR 4,208 thousand (BGN 8,230 thousand), at floating quarterly interest rate of OeKB applicable to export loans with a spread of 0.45%. As at 31 December 2016 the tranche is repaid in full.

Tranche B amounts to EUR 37,867 thousand (BGN 74,062 thousand) at fixed annual interest rate of 4.75%. As at 31 December 2016 the nominal withdrawn and outstanding portion under this loan amounts to EUR 16,012 thousand (BGN 31,317 thousand). The loan is to be repaid in 20 equal six-month repayment instalments until November 2020.

The lands and buildings of HPP Studen Kladenets, HPP Ivaylovgrad and HPP Kardzhali (Dolna Arda Cascade) with a carrying amount of BGN 17,923 thousand were mortgaged to secure the export and commercial loans provided by ING Bank NV – Netherlands. The loans are secured by pledging all current and future assets, including plant and equipment, part of Dolna Arda Cascade. Promissory notes have been issued. According to the loan agreement, NEK EAD must comply with certain financial conditions relating to the debt servicing ratios and the ratio of current assets to current liabilities.

(7) An investment loan with an agreed amount of EUR 60,000 thousand (BGN 117,345 thousand). The loan is provided to finance Energy 2 Project. NEK EAD is the ultimate beneficiary under the loan and the loan is guaranteed by the State. The funds, under the loan, are provided in six tranches, each with a fixed interest rate, as follows: Tranche 1 - EUR 10 million, provided on 7 June 2004, at an interest rate of 4.69%; Tranche 2 - EUR 7 million, provided on 19 May 2006, at an interest rate of 4.285%; Tranche 3 - EUR 6 million, provided on 13 November 2006, at an interest rate of 4.026%; Tranche 4 - EUR 13 million, provided on 3 July 2007, at an interest rate of 4.844%; Tranche 5 - EUR 18 million, provided on 12 March 2008, at an interest rate of 4.341%; Tranche 6 - EUR 6 million, provided on 28 October 2008, at an interest rate of 4.555%. The principal and interests are due on 15 June and 15 December, whereby the final repayment is due on 15 June 2022.

(8) A long-term investment loan from Société Générale Expressbank AD with an agreed amount equal to the BGN equivalent of JPY 797,461,750 and EUR 736,900 as at the date of each drawdown, collateralized. The loan was fully utilized at its BGN equivalent of BGN 13,206 thousand. The loan maturity date is 20 December 2018 and is repayable in 8 equal repayments due on 20 June and 20 December of each calendar year for the period from 20 June 2015 to 20 December 2018. The payments are made in BGN. As at 31 December 2016 the amount of the loan principals comes to BGN 6,538 thousand, including a short-term portion of BGN 3,256 thousand and a long-term portion of BGN 3,282 thousand.

(9) A working capital loan from Société Générale Expressbank AD - Varna dated 18 August 2014. The total credit limit amounts to BGN 20,000 thousand with an agreed interest rate of Base Interest Rate + 2.44%. Repayment term is 12 months as from the date of the conclusion of the agreement. The loan is not collateralized. As at 31 December 2016 the loan is repaid in full.

(10) Financing under repurchase agreements of natural gas amounting to BGN 12,054 thousand as at 31 December 2015 represents amounts received from contractors with which the Group has concluded agreements for sale of natural gas with an option to repurchase the same quantities of natural gas during the following period at a fixed price. The quantities of natural gas are stored in the gas storage facility in the village of Chiren and are provided under the conditions of custody of the subsidiary Bulgargaz EAD.

(11) An investment loan from D Commerce Bank AD - Sofia to finance sites constructed under the Kozloduy International Fund with a limit of up to BGN 3,900 thousand with loan utilization in 2014-2015. Agreed interest rate – annual interest on the actual drawdown under the loan equal to 1y EURIBOR + a spread of 5.10% per annum. Collateral – plant and equipment with a carrying amount of BGN 7,404 thousand. Term of loan utilization and repayment – 120 months as from the date of signing the contract, with a 24-month grace period and repayment in 96 instalments after the grace period. As of 31 December 2016 the amount of the utilized portion is BGN 2,280 thousand. By Annex dated 9 April 2015 the credit limit under the Agreement was reduced to BGN 2,400 thousand. Upon the expiration of the term for loan utilization in December 2016, Mini Maritza Iztok EAD informed the Lender that the amount utilized up to that date in the amount of BGN 2,280 thousand will be final and the two

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

companies will take action to sign a repayment plan for the final amount of the loan. As at 31 December 2016 the total amount of the loan comes to BGN 2,280 thousand, including a long-term portion of BGN 1,995 thousand.

(12) A long-term investment loan to finance the rehabilitation of SchRs 1200 Excavator, dated February 2009. The agreement was concluded for a total amount of EUR 15,339 thousand and the funds are divided into two tranches. As at 31 December 2016 the loan liability is repaid in full.

(13) An investment loan with an agreed amount of EUR 9, 203 thousand (BGN 18,000 thousand). The funds are intended for rehabilitation of plant and facilities in Troyanovo 3 Mine of Mini Maritsa Iztok EAD. The principal is paid in 60 monthly annuity instalments as from the expiration of the 18-month annual grace period. The loan repayment term is July 2015. The agreed interest rate is one-month EURIBOR + 1.74%. The loan is not collateralized. As at 31 December 2016 the loan is repaid in full.

(15) On 21 April 2016, a loan agreement (bridge financing) was entered into by and between Bulgarian Energy Holding EAD, on the one hand, as the borrower, and Banca IMI S.P.A., London Branch, as the initial creditor and the chief arranger, Bank of China (Luxembourg) S.A., as the initial creditor and chief arranger, J.P. Morgan Securities plc, as the chief arranger and J.P. Morgan Europe Limited as an agent in the amount of EUR 535 million. The purpose of the loan is to provide funds to NEK EAD to finance the arrears to AES-3C Maritsa East I EOOD and ContourGlobal Maritsa East 3 AD in connection with the renegotiation of the long-term power purchase agreements, as well as financing the payments to other generators. The contract is concluded for a term of twelve months as from the date of drawdown. The loan interest is determined as the annual interest rate equal to the sum of: (1) the applicable EURIBOR, with a minimum EURIBOR of 0% per annum, for a period equal to the loan interest period, which may be three months or another period set out by Bulgarian Energy Holding EAD under the loan agreement, plus (2) the applicable margin which (a) for the first three-month period starting on and including the date of drawdown is 3% per annum, (b) for the second period of the following three months is 3.5% per annum, (c) for the third period of the following three months is 4% per annum, and (d) after the expiry of the previous three-month period, it is set as 5% per annum, whereby the applicable margin for each of the aforementioned periods increases by up to 0.50% annually in case of decrease or loss of rating in respect of Bulgarian Energy Holding EAD.

The loan was refinanced by the bond issue placed on 2 August 2016 and was fully repaid.

*Loans guaranteed by the State*

The loan, provided to NPP Kozloduy EAD (2) is guaranteed by the Government of the Republic of Bulgaria. The loan is granted under a project for the modernization of Unit 5 and Unit 6 of NPP Kozloduy and under a project related with the radioactive control system of NPP Kozloduy EAD, as well as the computer IT systems of the power plant. The loan (6) granted to NEK EAD, as ultimate beneficiary, amounting to EUR 60 million, with repayment date 15 June 2022, intended for financing project "Rehabilitation in the Electrical Power – Energy 2", is guaranteed by the State.

In respect of the loans with state guarantees as at 31 December 2016, the Group is unable to assess the effect of the provided state guarantee on the contractual interest rates and whether such a guarantee would have material impact on their fair values at that date.

*Unutilized loans*

As at 31 December 2016, the Group has the following unutilized investment loans and overdrafts:

**TPP Maritsa East 2 EAD**

Credit line facility for working capital in the form of an overdraft from Société Générale Expressbank AD with a credit limit of up to BGN 25,000 thousand without collateral. The interest rate applied is the current base interest rate of BNB plus a margin of 1.28% per annum.

**Mini Maritsa Iztok EAD**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

An investment loan with a limit of up to BGN 19,100 thousand to finance the implementation of Contract MME/BWE with the following scope: "Design, production, delivery, construction and commissioning of SRs 2000 rotor excavators at Mini Maritsa Iztok EAD, Bulgaria". The utilization of the loan is to be performed within 2016-2018. Contracted interest rate – annual interest on the actual drawdown under the loan equal to BIR + a margin of 1.89% per annum. One-off management and processing fee amounting to 0.29% on the amount of the loan. The penalty interest for overdue payments is equal to BIR + 6%. The collateral is provided in the form of an Asset Pledge Agreement for an amount covering the amount of the loan. The duration of the loan is 81 months, with a 21-month grace period and a 60-month repayment period. During the grace period the Company will have to pay interest each month, accrued on the actual drawdown portion of the investment loan. As at 31 December 2016 there are no drawdowns of the loan and thus there are no liabilities on it.

An investment loan with a limit of up to BGN 5,200 thousand to finance the implementation of Contract MME/BWE with the following scope: "Design, production, delivery, construction and commissioning of SRs 200 rotor excavators at Mini Maritsa Iztok EAD, Bulgaria". The utilization of the loan is to be performed within 2016-2018. Contracted interest rate – annual interest on the actual drawdown under the loan equal to BIR + a margin of 1.89% per annum. One-off management and processing fee amounting to 0.29% on the amount of the loan. The penalty interest for overdue payments is equal to BIR + 6%. The collateral is provided in the form of an Asset Pledge Agreement for an amount covering the amount of the loan. The duration of the loan is 81 months, with a 21-month grace period and a 60-month repayment period. During the grace period the Company will have to pay interest each month, accrued on the actual drawdown portion of the investment loan. As at 31 December 2016 there are no drawdowns of the loan and thus there are no liabilities on it.

A working capital loan in the form of an overdraft with a limit of up to BGN 20 million concluded in October 2016. The period of full drawdown and repayment of the overdraft is 12 months as from the date of conclusion of the agreement, by 11 October 2017. Contracted interest rate BIR + 1.77%. The loan is without collateral. As at 31 December 2016 there is no liability on this loan.

**30. Deferred financing**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Non-current portion	380,439	359,734
Current portion	16,294	10,288
	<b>396,733</b>	<b>370,022</b>
	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
As at 1 January	370,022	326,778
Granted during the year	47,551	57,712
Granted during the year from Security of the Electricity System Fund	262,907	183,200
Recognized receivable from Security of the Electricity System Fund	37,247	-
Recognised in profit or loss:		
– <i>resulting from continuing operations</i>	(320,684)	(197,668)
Deducted advances	(310)	-
<b>As at 31 December</b>	<b>396,733</b>	<b>370,022</b>

The funding is mainly related to the following projects:

- Funding under the ISPA programme for the construction of gas desulphurisation facilities for Unit 5 and Unit 6. The assets are constructed and commissioned. The balance of the funding, as at 31 December 2016, includes the carrying amount of the assets, amounting to BGN 12,952 thousand (as at 31 December 2015: BGN 14,396 thousand);

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

- Funding by Kozloduy International Decommissioning Support Fund (KIDS Fund) for the construction of gypsum dewatering facility and circulating pumping station. The assets are constructed and commissioned. The balance of the funding, as at 31 December 2016, includes the carrying amount of the assets, amounting to BGN 24,436 thousand (as at 31 December 2015: BGN 26,015 thousand);
- Funding by Energy Resources Fund for the construction of an ash pond. The assets are constructed and commissioned. The balance of the funding, as at 31 December 2016, includes the carrying amount of the assets, amounting to BGN 2,886 thousand (as at 31 December 2015: BGN 3,080 thousand);
- Funding under PHARE programme for the construction of gas desulphurization facilities to Unit 8. The assets are constructed and commissioned. The balance of the funding, as at 31 December 2016, includes the carrying amount of the assets, amounting to BGN 13 thousand (as at 31 December 2015: BGN 37 thousand);
- Funding for fixed assets in the amount of BGN 23,944 thousand (in 2015: BGN 20,000 thousand), related to Kozloduy International Decommissioning Support Fund. The European Bank for Reconstruction and Development is the administrator of the KIDS Fund and the management of their utilization on the Bulgarian part is carried out by the Ministry of Energy. The funding is associated with energy efficiency by rehabilitation of the heavy industrial mining equipment and replacement of the rotor multi-bucket excavators of the Company and other operations. The total funding amounts to EUR 30,150 thousand. So far, six contracts have been concluded with contractors:
- Funding in respect of modernization of Compressor Station (CS) Kardam 1, amounting to BGN 240 thousand (in 2015: BGN 271 thousand) and CS Kardam 2, amounting to BGN 87 thousand (in 2015: BGN 109 thousand), gas pipeline interconnector Ruse-Giurgiu, amounting to BGN 2,567 thousand (in 2015: BGN 2,567 thousand) and gas pipeline interconnector Dobrich -Silistra, amounting to BGN 16,006 thousand (in 2015: BGN 16,320 thousand), modernization of CS Petrich, amounting to BGN 12,174 thousand, modernization of CS Ihtiman, amounting to BGN 11,571, etc.;
- Funding for ongoing research and development carried out in NPP Kozloduy EAD, provided by the European Bank for Reconstruction and Development (EBRD) and funding under a consultancy contract with consortium EDF/BNFL, for a total amount of BGN 191,545 thousand (in 2015: BGN 191,736 thousand);
- Funding under the PHARE programme, Energy Resources Fund, the Swiss Government and an International Decommissioning Support Fund at NEK EAD to rehabilitate hydro-power plants, electricity transmission network and other assets, in the amount of BGN 10,797 thousand (in 2015: BGN 12,268 thousand).

As at the date of the approval of the consolidated financial statements, there are no defaulted conditions, relating to these fundings.

**31. Liabilities for retirement employee benefits**

In accordance with the Bulgarian labour legislation and the collective labour agreements of the Group companies, the Group is required to pay to its personnel a number of monthly gross monthly salaries upon retirement, depending on their years of service in the enterprise. The retirement benefit plan is not funded.

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Non-current portion	165,796	137,231
Current portion	15,090	26,531
Present value of the retirement benefit obligation:	<b>180,886</b>	<b>163,762</b>

The changes in the provisions for impairment on retirement, in compliance with the Labour Code, within the year are presented as follows:

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Liabilities, related to the retirement (post-employment) benefits in the beginning of the year	163,762	137,688
Current service costs	12,998	16,022
Past service costs	(979)	(3,351)
Interests expense	5,207	5,576
Benefits paid	(18,004)	(23,887)
Actuarial gains/losses	17,902	31,714
<b>Liabilities for retirement employee benefits at the end of the year</b>	<b>180,886</b>	<b>163,762</b>

The main assumptions used to determine the liabilities with regards to the retirement (post-employment) benefits, are presented hereafter:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Discount rate	2.5% - 3%	2.8% - 4%
Future increase in remunerations	0% - 10%	0% - 3%
Personnel's turnover: 18-30 years old	3% - 16%	4% - 16%
31-40 years old	3% - 9%	3% - 8%
41-50 years old	1% - 5%	1% - 5%
51-60 years old	1% - 2%	1%
over 60 years old	0% - 1%	0%

The Company's management made these assumptions with the assistance of independent actuary appraisers. These assumptions were used to determine the amount of the employee benefit obligations at retirement for the reporting periods and are considered to be the best estimate of the management.

The total amount of expenses, incurred under defined benefit plants in the Group, recognised in profit or loss, may be presented as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Current service costs	(12,998)	(16,022)
Past service costs	979	3,351
Interests expense	(5,207)	(5,576)
Actuarial gains/losses recognized in profit or loss	(51)	(1,262)
<b>Total expenses recognized in profit or loss</b>	<b>(17,277)</b>	<b>(19,509)</b>

The total expenses, incurred under defined benefit plants in the Group, recognised in other comprehensive income, may be presented as follows:

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Remeasurement of the liabilities under defined benefit plans – actuarial loss, including:		
- Losses incurred as a result of changes in demographical assumptions	92	(5,541)
- Losses incurred as a result of changes in financial assumptions	(1,436)	(24,028)
- Losses incurred in the actual course of activities (actual experience)	(16,507)	(880)
<b>Total expenses recognized in other comprehensive income</b>	<b>(17,851)</b>	<b>(30,449)</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The significant actuarial assumptions in determining the defined benefit obligations are related to the discount rate and the expected rate of increase in salaries. The following table presents the sensitivity analysis and summarizes the effects of the changes in these actuarial assumptions on the defined benefit obligations as at 31 December 2016.

	<b>2016</b>	
	Increase by 1%	Decrease by 1%
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Change in the interest rate</b>	<b>(19,746)</b>	<b>21,224</b>
<b>Increase in the salaries and wages</b>	<b>22,319</b>	<b>(19,530)</b>

The sensitivity analysis is based on a change in two of the assumptions only. It may differ from the actual change in the defined benefit obligations, since the changes in the assumptions are often interrelated.

The plan exposes the Group to actuarial risks such as interest rate risk, risk from change in the average life expectancy and inflation risk:

- Interest rate risk - the present value of the defined benefit obligation is calculated at a discount rate determined on the basis of government bond yields. A decline in the market yield of government bonds would lead to an increase in the liabilities under the defined benefit plans of the Group.
- The risk from change in the average life expectancy - an increase in the expected life expectancy of the employees would lead to an increase in the defined benefit obligations.
- Inflationary risk - an increase in inflation would lead to an increase in the defined benefit obligations.

**32. Provisions**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current portion</b>		
Provisions for reclamation	99,882	105,035
Provision for environmental protection	80	81
	<b>99,962</b>	<b>105,116</b>
<b>Current portion</b>		
Provisions for exceeding the greenhouse gas emissions allowances	91,125	111,176
Provisions for environmental protection	326	208
Provisions for reclamation	1,101	1,193
Provision for spent nuclear fuel	29,942	29,942
Other provisions	836	17,166
	<b>123,330</b>	<b>159,685</b>
	<b>223,292</b>	<b>264,801</b>

	Provision for environmental protection	Provision for reclamation	Provision for greenhouse gas emissions allowances	Provision for spent nuclear fuel	Provisions for litigation and other provisions	Total
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
<b>Balance as at 1 January 2015</b>	<b>181</b>	<b>88,729</b>	<b>85,712</b>	-	<b>21,444</b>	<b>196,066</b>
Accrued	114	17,499	42,742	29,942	(4,348)	85,949
Utilized	(6)	-	(17,278)	-	70	(17,214)
<b>Balance as at 31 December 2015</b>	<b>289</b>	<b>106,228</b>	<b>111,176</b>	<b>29,942</b>	<b>17,166</b>	<b>264,801</b>
Accrued	121	(5,245)	7,894	-	102	2,872
Utilized	(4)	-	(27,945)	-	(16,432)	(44,381)
<b>Carrying amount as at 31 December 2016</b>	<b>406</b>	<b>100,983</b>	<b>91,125</b>	<b>29,942</b>	<b>836</b>	<b>223,292</b>

**Expenses on provisions**

	<b>2016</b>	<b>2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Cost of purchase of greenhouse gas emissions	(72,094)	(128,812)
Recognised provisions	(2,872)	(56,007)
	<b>(74,966)</b>	<b>(184,819)</b>

*Provision for environmental protection*

As at the reporting date a provision for environmental protection expenses is recognised related to estimated expenses incurred for safeguarding of the luminescent and other types of lamps containing mercury, safeguarding and recycling of batteries, deactivation, recycling and replacement of capacitor batteries containing PCB with new ones and utilisation of bleaching earth used in the oil regeneration facility.

*Provision for recultivation of terrains affected by mining operations*

When determining the provision for recultivation of Mini Maritsa Iztok EAD, the current environmental legislation, the land to be seized, the unrecultivated seized land, the value of the recultivation of 1 decares of land and the expected quantities of coal reserves up to 2043, when the coal mining concession granted to Mini Maritsa Iztok EAD expires have been taken into account.

The amount of the recognized provision as at 31 December 2016 is BGN 95.839 thousand (in 2015: BGN 101,261 thousand), calculated based on the following data:

	<b>2016</b>	<b>2015</b>
Lignite extracted (thousands of BGN)	27,762	32,324
Recultivation expense (BGN / ton of production)	0.14	0.15
Recultivated in the period lands (decares)	0	0

*Provisions for recultivation of destructed, from desulphurization installations, terrains for gypsum disposals*

In accordance with Ordinance 26 on recultivation of damaged plots and improvement of low-fertility lands, removal and utilization of the humus layer, the Group is required to engage in technological and biological recultivation of a landfill, following its filling with gypsum from desulphurization facilities. Based on the capacity of the landfill and the disposed amount of gypsum, it is expected that the landfill will be filled in 5 years. The value of technological and biological recultivation under the project amounts to BGN 5,488 thousand. According to para. 17(c), IAS 16: Property, Plant and Equipment, the cost of an item of property, plant and equipment also includes the initial approximation of the expected expenses on the recultivation (land recultivation) of the site where the asset was located after being decommissioned. The liability for such expenses is treated as a provision and is accounted for in accordance with IAS 37: Provisions, Contingent Liabilities and Contingent Assets. The present discounted value of the provision is capitalized to the value of the facility (gypsum pit) and will be recognized each year as depreciation expense. As at 31 December 2013 the present value of the provision is calculated at the amount of BGN 4,607 thousand using a discount factor of 3.56%. Discount factors are determined at the end of each year against the interest rates applicable for long-term government securities. For the purposes of discounting, an effective annual interest rate of 3.56% was used. It is based on the yield on long-term government securities (10-year maturity). The rest of the recultivation value amounting to BGN 881 thousand will be reported each year as interest expense, which is to increase the liability for provisioning.

As at 31 December 2016 the discount factor is lower. Due to lack of materiality, no adjustment was made to the present value of the provision as at 31 December 2016. The interest expense for the provision as at 31.12.2016 amounts to BGN 177 thousand (as at 31 December 2015: BGN 171 thousand).

As at 31 December 2016 the best estimate of the required provision for recultivation of the depot amounts to BGN 5.144 thousand (as at 31 December 2015: BGN 4.967 thousand).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

*Provisions for exceeding the greenhouse gas emissions allowances*

Directive 2009/29/EC, amending Directive 2003/87/EC (also known as the Directive establishing the European Union Emissions Trading Scheme) introduces the concept of a Community harmonized allocation of allowances in the third phase of the European Union Emissions Trading Scheme (EU ETS), starting from 2013 and continuing until 2020. During this period, as a general rule, full auctioning of the allowances for electricity generation and a transitional system for free allocation of allowances to other industries is envisaged. The Directive also sets out the exceptions in the Member-States where some of the conditions for temporary derogations under Article 10c – transitional allocation of free allowances in connection with the modernization of electricity generation approaches are met. The total quantity of transitionally allocated free allowances in 2013 will account for a maximum of 70% of the average annual quantity of established emissions in the period 2005-2007. Furthermore, this overall quantity will gradually decrease so that no free allowances will be allocated in 2020.

The Republic of Bulgaria has made use of its right and has filed an application under Article 10c of the Directive, which was determined as consistent with Article 10c of the Directive by means of Decision C(2012)4560 dated 6 July 2012 of the European Commission, the European Parliament and the Council for transitional free allocation of allowances.

TPP Maritsa East 2 EAD is included in the draft National Investment Plan and is to receive for free part of greenhouse gas emission allowances – a total of 15,727,524 tonnes for the period 2013 - 2020, which represents about 30% of the quantities emitted by the power plant.

According to the allocation, the greenhouse gas emission allowances to be allocated by year is as follows:

Period	2013	2014	2015	2016	2017	2018	2019	total
Quantity of allowances	3,931,881	3,370,184	2,808,486	2,246,789	1,685,092	1,123,395	561,697	<b>15,727,524</b>

As at 31 December 2016, the Group reported provisions for a shortage of greenhouse gas emission allowances of 7,331,766 t/CO<sub>2</sub>, amounting to BGN 73,966 thousand. The amount of the shortage represents the difference between the quantities actually emitted and verified and granted for free under the NIP and the other quantities available to the Group's account in the national register as at 13 March 2017 and purchased for 2016. In connection with the decision of the sole holder of the Group's equity, BEH EAD will purchase and subsequently sell the greenhouse gas allowances required by TPP Maritsa East 2 EAD to cover its liability to the National Register for 2016. The amount of the provisions is calculated in accordance with the purchase prices of the allowances achieved by BEH EAD.

As at 31 December 2015, the Group reported provisions for a shortage of greenhouse gas emission allowances of 5,593,254 t/CO<sub>2</sub>, amounting to BGN 68,433,737.18. The quantity of 650,024 t/CO<sub>2</sub> amounting to BGN 7,543,932.97 represents declared, but undelivered quantities as at 22 March 2016. Their amount is calculated on stock prices of allowances as at the relevant application date, increased by an agreed margin as per the concluded contract for delivery of allowances. The undeclared greenhouse gases in the quantity of 4,943,230 tonnes/CO<sub>2</sub> amounting to BGN 60,889,804.21, calculated on average stock prices of allowances for March 2016 (with a surcharge) at Intercontinental Exchange (ICE) as per the concluded contract for delivery of allowances. The amount of the shortage represents the difference between the quantities actually emitted and verified and granted for free under the NIP and the other quantities available to the Group's account in the national register as at 22 March 2016 and purchased for 2015.

*Provision for CO<sub>2</sub> emissions*

The Group recognizes a provision for the expenses on CO<sub>2</sub> emissions under the long-term power purchase agreements of AES-3C Maritsa East 1 EOOD and ContourGlobal Maritsa East 3 AD. As at the date of the consolidated statements, a provision for CO<sub>2</sub> emissions of BGN 17,159 thousand was recognized for 2016.

*Other provisions*

As at 31 December 2016, ESO EAD recognizes a provision in the amount of BGN 734 thousand that represents allocated resources for access for Renewable Energy Source producers under challenged price decision II-33 dated 14 September 2012 of EWRC on setting temporary prices for access to the transmission and distribution networks for producers of electricity from renewable energy sources at preferential rates.

As at 31 December 2016, the subsidiary Mini Maritsa Iztok EAD recognizes a provision for legal claims amounting to BGN 102 thousand.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the year ended 31 December 2016

**33. Deferred income**

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Non-current portion	125,049	131,358
Current portion	4,959	1,179
	<b>130,008</b>	<b>132,537</b>

Deferred revenue as 31 December, including:

	<b>31 December 2016</b>	<b>31 December 2015</b>
	<i>BGN '000</i>	<i>BGN '000</i>
Deferred revenues – long-term, under Regulation 714/2009	123,203	129,304
Deferred revenues – short-term, under Regulation 714/2009	3,920	-
Deferred revenues – long-term, other	1,846	2,054
Deferred revenues – short-term, other	1,039	1,179
	<b>130,008</b>	<b>132,537</b>

Since ESO EAD holds a license for electricity transmission and the assets of the electric power system, it is required to meet the requirements of Regulation (EC) 714/2009 of the European Parliament and the Council of 13 July 2009. According to Article 16(6) of the Regulation, all the revenues from allocation of the interconnector power lines are used for the following purposes:

- a) to ensure the actual availability of the allocated capacity; and/or
- b) to maintain or increase interconnection capacities through network investments, in particular in new interconnector power lines.

In line with the requirements of the Regulation, the Regional Investment Plan 2015 is part of ENTSO's new ten-year plan, which was published at the end of 2016. In this regard, the following projects related to the increase of the interconnection capacity were accounted for under separate financial accounts:

- OHL 400 kV Vezhen from Plovdiv substation to Zlatitsa substation
- Reconstruction of outdoor switchgear 400 kV Varna substation 400/220 kV
- Reconstruction of outdoor switchgear 400 kV Dobrudzha substation 400/220/110 kV
- Reconstruction of outdoor switchgear 400 kV Sofia Zapad substation 400/110 kV
- Reconstruction of outdoor switchgear 400 kV Sofia Chervena Mogila substation 400/110 kV
- Reconstruction of outdoor switchgear 400 kV Blagoevgrad substation 400/110 kV

The unamortized value of the above-mentioned objects as at 31 December 2016 under account 755 „Regulation 714“ amounts to BGN 79,825 thousand, including: long-term portion of BGN 75,956 thousand and short-term portion of BGN 3,920 thousand.

**34. Trade and other payables**

	<b>31 December 2016</b>	<b>31 December 2015 restated</b>
	<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current portion</b>		
Trade payables	30,918	46,711
Retained guarantees	1,521	1,754
Amounts received in connection with project activity	190,078	190,078
	<b>222,517</b>	<b>238,543</b>
<b>Financial liabilities</b>		
<b>Current portion</b>		
Trade payables	531,831	1,579,750
Deposits obtained	23,802	9,304
Retained guarantees	16,766	45,270
Insurance liabilities	118	599
Other payables	27,597	12,097
	<b>600,114</b>	<b>1,647,020</b>
<b>Financial liabilities</b>		
Advance payables	18,601	63,811
Liabilities to the Security of the Electricity System Fund	15,856	19,567
Payables to staff	62,034	62,366
Social security payables	22,629	23,219
Payables to the budget	73,055	199,839
Payables for contributions to Decommissioning of Nuclear Facilities (DNF) Fund and Radioactive Waste (RAW) Fund	8,480	11,925
Other payables	12,392	18,689
	<b>213,047</b>	<b>399,416</b>
<b>Non-financial liabilities</b>	<b>813,161</b>	<b>2,046,436</b>

The terms and conditions of the above trade and other payables are as follows:

- Trade payables are not interest-bearing and are usually settled within a ten- to thirty-day period;
- Tax liabilities are not interest-bearing and are settled within the statutory time limits;
- Other payables are not interest-bearing and are usually settled within a ten-day period;
- In accordance with contracts with subcontractors, related to investment projects, the Group retains certain amounts as guarantees for the quality execution of the construction and installation works. The retained amounts are determined as a percentage of the invoiced construction and installation works. The retained amounts are interest-free. The retained amounts should be paid in accordance with the contractual relations with the subcontractors.

Non-current trade payables include liabilities amounting to BGN 7,614 thousand as at 31 December 2016 (in 2015: BGN 11,571 thousand) that represent liabilities to thermal power plants related to payments for carbon emissions under the Derogation for 2013 in compliance with the long-term power purchase agreements of subsidiary NEK EAD.

The amounts received with regards to the Group's project activities, amounting to BGN 190,120 thousand, are used in 2014 to increase the capital of the joint venture South Stream Bulgaria AD.

As at 31 December 2016, the Group, through its subsidiary NEK EAD, reported unconfirmed receivables from contractors amounting to BGN 95,784 thousand, including BGN 42,524 thousand from an electricity supply company, which disagreed to confirm these receivables and pay, pursuant to Article 94 of the Energy Act, for electricity purchased from renewable energy sources and high-efficient cogeneration for the period from 5 July 2013 to 31 July 2013 after the entry into force of amendments to the Energy Act and the extension of the regulatory period until 31 July 2013, as well as due to the abrogation of the methodology for compensation of the costs of the public supplier and the end suppliers arising from their obligations to the public to buy electricity at preferential prices from renewable energy sources and high-efficient cogeneration of heat and electricity.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**35. Related party disclosures**

The Group's related parties include the sole shareholder represented by the Ministry of Energy, associates and joint ventures, key management personnel, as well as all public sector entities under the common control of the Ministries to the Council of Ministers in the Republic of Bulgaria. Information on the name, country of incorporation, shareholding and voting rights of each subsidiary included in the consolidation is presented in Note 1. Information on the name, country of incorporation, shareholding and voting rights of each associate and joint venture is presented in Note 21. Other related parties of the Group with which significant transactions were made as a total amount during the period include the state-controlled enterprises, such as BDZ, National Railway Infrastructure Company, Terem - KRZ Flotski Arsenal EOOD, Minproekt EAD, Water Supply and Sewerage, National Police Department, Bulgarian Posts EAD, VMZ EAD - Sopot.

The total amounts of the related party transactions and the balances of those transactions for the current and prior reporting periods are presented as follows:

		Sales to related parties, including dividends	Purchases from related parties, including dividends	Trade receivables from related parties	Trade liabilities to related parties
		<u>BGN '000</u>	<u>BGN '000</u>	<u>BGN '000</u>	<u>BGN '000</u>
<i>Sole Shareholder</i>					
Ministry of Energy	2016	3	16,080	-	813,660
Ministry of Energy	2015	-	22,720	-	53,227
<i>Joint ventures</i>					
Transbalkan Electric Power Trading S.A. – NECO S.A.	2016	18,983	482	1,298	-
Transbalkan Electric Power Trading S.A. – NECO S.A.	2015	14,768	-	-	-
South Stream Bulgaria AD	2016	1	119	1	-
South Stream Bulgaria AD	2015	-	-	1	-
<i>Associates</i>					
ContourGlobal Maritsa East 3 AD	2016	118,350	485,950	17,213	49,007
ContourGlobal Maritsa East 3 AD	2015	176,601	500,680	254,400	527,867
ContourGlobal Operations Bulgaria AD	2016	62	-	6	-
ContourGlobal Operations Bulgaria AD	2015	1,466	-	-	-
POD Allianz Bulgaria AD	2016	1	1,003	-	81
POD Allianz Bulgaria AD	2015	4,557	1,034	-	81
IJSC (ZAD) Energy	2016	2,954	54,096	572	16,041
IJSC (ZAD) Energy	2015	11,426	20,936	2,493	26,177
Hydro Power Company Gorna Arda AD	2016	115	-	350	-
Hydro Power Company Gorna Arda AD	2015	-	-	269	-
<i>Other related parties under common control</i>					
State owned companies under the control of the Council of Ministers of Republic of Bulgaria	2016	14,020	2,266	994	703
State owned companies under the control of the Council of Ministers of Republic of Bulgaria	2015	15,203	1,648	7,079	817
<b>Related party receivables / payables</b>	2016			<b>20,434</b>	<b>879,492</b>
<b>Related party receivables / payables</b>	2015			<b>264,242</b>	<b>608,169</b>

**Disclosure of related party transactions**

The sales to and the purchases from related parties are carried out under conditions regulated by the sole-shareholder. The unsettled balances at the end of the year are interest-free and settled with cash. No guarantees and collateral have been provided or received with respect to the receivables from or liabilities to related parties. An impairment review is carried out every financial year based on an analysis of the financial situation of the related party and the market in which it operates.

***Liability to the Ministry of Energy for financial assistance granted***

Long-term liabilities to the Ministry of Energy	Nominal value	Carrying value
	BGN '000	BGN '000
31 December 2016	1,176,661	804,866

On 28 September 2016, the National Assembly of the Republic of Bulgaria adopted the Act on Granting Assistance for the Repayment of Liabilities of Natsionalna Elektricheska Kompania EAD following the award on arbitration case No. ICC Case 18086/GZ/MHM. The law is promulgated in State Gazette on 30 September 2016 and stipulates that pursuant to Article 109(4)(2) of the Public Finance Act the Council of Ministers should provide financial assistance to NEK EAD through the budget of the Ministry of Energy aimed at the payment of the amounts awarded to ASE. The grant should be provided based on an agreement entered by and between the Minister of Energy and NEK EAD, approved by the Council of Ministers, based on the agreement for final settlement of the relations between NEK EAD and ASE.

Pursuant to Article 3 of the Act on Granting Assistance for the Repayment of Liabilities of Natsionalna Elektricheska Kompania EAD, a notification to the European Commission was sent on 29 September 2016 pursuant to Article 108(3) of the Treaty on the Functioning of the European Union. The decision of the European Commission states that in this particular case there is no state aid, and therefore there are no grounds for Article 108 of the Treaty on the Functioning of the European Union.

On 5 December 2016, an agreement for the provision of financial assistance was signed by and between the Ministry of Energy and NEK EAD, according to which:

- The Ministry of Energy will provide NEK EAD with financial assistance in the amount of EUR 601,617,133 (BGN 1,176,660,837);
- NEK EAD undertakes to pay by 14 December 2016 the amounts awarded under the Arbitration Case No. ICB Case 18086/GZ/MHM under the terms and conditions of the agreement for the final settlement of the relations with ASE;
- NEK EAD undertakes to reimburse the received financial assistance to the budget of the Ministry of Energy within 7 (seven) years. The repayment is made once at the maturity date of the loan (December 2023);
- The financial support received from NEK EAD is interest-free and unsecured;

On 8 December 2016 an amount of EUR 596,617 thousand was paid by NEK EAD to ASE.

***Initial and subsequent assessment and presentation in the financial statements of the Company of the interest-free financial assistance provided for consideration***

The interest-free financial assistance provided for the payment of the liability of NEK EAD for the awarded amounts under arbitration case No. ICC Case 18086/GZ/MHM under NPP Belene Project is in essence a financial liability (credit) and when recognized it should be subject to the provisions of the IAS 39 Financial Instruments: Recognition and Measurement.

The Group has initially recognized the received interest free financial assistance measured at the present value of all future cash payments discounted at the prevailing market interest rate (or rates) for a similar instrument (similar with respect to currency, term, interest rate, and other factors) with a similar credit rating (Note 14).

**Key management remuneration**

	31 December 2016	31 December 2015
	BGN '000	BGN '000
Remuneration	1,747	1,688
Social security	137	171
Social costs	298	50
Severance agreement allowances	-	3
	<b>2,182</b>	<b>1,912</b>

**36. Categories of tax assets and liabilities**

The carrying amounts of the financial assets and liabilities of the Group may be presented in the following categories:

<b>Financial assets</b>	Note	<b>31 December 2016</b>	<b>31 December 2015</b>
		<i>BGN '000</i>	<i>BGN '000</i>
<b>Non-current financial assets</b>			
Loans and receivables			
Trade and other receivables	22	487,567	588,504
		<b>487,567</b>	<b>588,504</b>
<b>Current financial assets</b>			
Available-for-sale financial assets - shares	25	765	730
Loans and receivables			
Trade and other receivables	22	729,026	1,194,126
Related party receivables	35	20,434	264,242
Cash and cash equivalents	26	1,015,987	833,111
		<b>1,766,212</b>	<b>2,292,209</b>
		<b>2,253,779</b>	<b>2,880,713</b>
<b>Financial liabilities</b>			
<b>Non-current financial liabilities</b>			
Financial liabilities measured at amortized cost			
Loans and finance lease liabilities	29	2,277,275	1,337,797
Trade and other payables	34	222,517	238,543
Related party payables	35	815,569	16,267
		<b>3,315,361</b>	<b>1,592,607</b>
<b>Current financial liabilities</b>			
Financial liabilities measured at amortized cost			
Loans and finance lease liabilities	29	151,915	231,143
Trade and other payables	34	600,114	1,647,020
Related party payables	35	63,923	591,902
		<b>815,952</b>	<b>2,470,065</b>
		<b>4,131,313</b>	<b>4,062,672</b>

See note 4.17 for information on the accounting policies for each class of financial instruments. A description of the Group's risk management policy and objectives regarding the financial instruments is presented in Note 37. The methods used to measure the fair values of the financial assets and liabilities at fair value are disclosed in Note 38.

### **37. Objectives and policy on the financial risk management**

The Group holds financial assets consisting of trade receivables, cash and short-term deposits that arise directly from the operations.

The financial liabilities of the Group include bond issues, loans and trade payables. The main objective of the loans is to provide funding for the Group's operations.

As at 31 December 2016 and 31 December 2015 the Group does not hold and trade in derivative financial instruments.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

The main risks arising from financial instruments of the Group include liquidity risk, currency risk, credit risk and regulatory risk. These risks are currently identified, measured and monitored through various control mechanisms implemented to establish adequate prices of the services provided by the Group, and to adequately assess the market circumstances of the investments made by the Company and the methods of maintenance of free liquid funds without allowing undue concentration of a particular risk, etc. The risk management in the Group is carried out on an on-going basis by the management and the relevant structural units, depending on the type and specificity of the different types of risk to which the Group is exposed in the implementation of its operations. The policy that the Group's management applies to manage these risks is summarized below.

**37.1 Liquidity risk**

Liquidity risk arises if the Group fails to service its liabilities when they become due. The Group applies an approach that provides the necessary liquid resources to meet its obligations under both normal and exceptional conditions, without incurring unacceptable losses.

One of the objectives of the parent company is to provide, if necessary, financial resources to its subsidiaries in order to maintain their operations and to implement certain strategic projects.

The parent company finances the operating activities of the Group companies in two ways:

- Internal financing, within the economic group, by redistribution of the free cash resource. Bulgarian Energy Holding EAD acts as an intermediary between the subsidiaries by coordinating the conditions between them and monitoring the transactions at market levels.
- The interest rates under the cash loans and deposits are based on the market levels. The interest rates under the cash loans and deposits in foreign currency are tied to a rate that is equivalent to the market rate for similar transactions in the transaction period (floating or fixed).
- External financing – in case of shortage of funds in the economic group, Bulgarian Energy Holding EAD may take measures to ensure external financing. This is the preferred method to raise funds for the implementation of investment projects. On 7 November 2013, the Company successfully placed a bond issue of EUR 500,000 thousand on the Irish Stock Exchange, with a five-year maturity (November 2018), annual coupon of 4.250% and a yield of 4.287%. On 21 April 2016, a loan agreement (bridge financing) was entered into by and between Bulgarian Energy Holding EAD, on the one hand, as the borrower, and Banca IMI S.P.A., London Branch, as the initial creditor and the chief arranger, Bank of China (Luxembourg) S.A., as the initial creditor and chief arranger, J.P. Morgan Securities Plc, as the chief arranger and J.P. Morgan Europe Limited as an agent in the amount of EUR 535 million. The loan was fully refinanced by the second bond issue placed on 2 August 2016. The bond issue amounts to EUR 550 million, with a five-year maturity (by 2 August 2021) and an annual coupon of 4.875%. The bond issue was placed on the Irish Stock Exchange.

As at 31 December, the maturity structure of the Group's financial liabilities, based on the contracted non-discounted payments, including trade payables, retained guaranteed, liabilities for contributions to Decommissioning of Nuclear Facilities Fund and Radioactive Waste Fund and other liabilities, is presented below:

<b>31 December 2016</b>	Book value	Contracted cash flows	6 months or less	6 to 12 months	1 to 5 years	Over 5 years
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Borrowings	2,429,190	2,783,665	53,378	168,650	2,560,773	864
Trade and other payables	822,631	824,673	772,111	19,586	32,093	883
Related party payables	879,492	1,252,848	61,329	2,972	11,886	1,176,661
	<b>4,131,313</b>	<b>4,861,186</b>	<b>886,818</b>	<b>191,208</b>	<b>2,604,752</b>	<b>1,178,408</b>

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

<b>31 December 2015</b>	Book value	Contracted cash flows	6 months or less	6 to 12 months	1 to 5 years	Over 5 years
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Borrowings	1,568,940	1,728,020	127,093	144,376	1,431,901	24,650
Trade and other payables	1,885,563	1,886,840	1,545,504	136,816	14,442	190,078
Related party payables	608,169	609,964	589,163	2,971	17,830	-
	<b>4,062,672</b>	<b>4,224,824</b>	<b>2,261,760</b>	<b>284,163</b>	<b>1,464,173</b>	<b>214,728</b>

**37.2 Interest rate risk**

The Group is exposed to risk of change in the market interest rates primarily in terms of its financial assets and liabilities with variable (floating) interest rates.

Within the Group's asset structure, the interest-bearing assets are represented by cash, bank deposits and loans, the majority of which are at fixed rates. The Group also has loans granted with a combined structure of the borrowing rates, which contains two components – fixed and variable. The borrowed funds of the Group are in the form of long-term and short-term loans and predominantly have a fixed interest rate. This approach minimizes the likelihood of unfavourable changes in the cash flows.

The table below shows the sensitivity of the annual net financial result after taxes and the equity to probable changes in the interest rates on the floating rate loans based on EURIBOR in the amount of +/-0.1% (for 2015: +/-0.01%) and based on the BIR in Bulgaria in the amount of +/-0.01% (for 2015: +/-0.01%). These changes are considered probable based on observations of the current market conditions. The calculations are based on the change in the average market interest rate and the financial instruments held by the Group at the end of the reporting period which are sensitive to changes in the interest rate. All other parameters are assumed to be constant. There is no effect on the other components of the Group's equity.

<b>31 December 2016</b>	Increase/decrease of the interest rate	Effect on the net financial result	Effect on the equity
	<i>%</i>	<i>BGN '000</i>	<i>BGN '000</i>
Loans, denominated in Euro (EURIBOR)	+0.1%	(126)	(126)
Loans, denominated in Euro (EURIBOR)	-0.1%	126	126
Loans, denominated in BGN (BIR)	+0.1%	(19)	(19)
Loans, denominated in BGN (BIR)	-0.1%	19	19

<b>31 December 2015</b>	Increase/decrease of the interest rate	Effect on the net financial result	Effect on the equity
	<i>%</i>	<i>BGN '000</i>	<i>BGN '000</i>
Loans, denominated in Euro (EURIBOR)	+0.1%	(269)	(269)
Loans, denominated in Euro (EURIBOR)	-0.1%	269	269
Loans, denominated in BGN (BIR)	+0.1%	(25)	(25)
Loans, denominated in BGN (BIR)	-0.1%	25	25

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**37.3 Currency risk**

The Group carries out purchases, sales, lending and borrowing operations in foreign currencies – Euro, US Dollars, Japanese Yens, British Pounds, Swiss Francs and Macedonian Denars. The majority of these operations are performed in Euro, US Dollars and Japanese Yen. Since the exchange rate of BGN/EUR is fixed at 1.95583, the currency risk arising from the Group's Euro exposures is minimal. The Group makes payments for construction and installation works and deliveries for assets under construction, as well as disburses and repays an investment loan granted by the Japan Bank for International Cooperation (JBIC) in Japanese Yen. The loan is state-guaranteed. There is a risk of a change in the exchange rate related to this loan. Therefore, the Group's exposure to the risk of changes in the Japanese Yen exchange rate is possible, however, in the event of material fluctuations in the future, the Group may hedge its exposure through derivative instruments, such as foreign exchange swaps.

<b>31 December 2016</b>	Increase in the exchange rate of BGN		Decrease in the exchange rate of BGN	
	Net financial result	Equity	Net financial result	Equity
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
USD (+/-2.1%)	1,933	1,933	(1,933)	(1,933)
JPY (+/-1%)	(1,194)	(1,194)	1,194	1,194

<b>31 December 2015</b>	Increase in the exchange rate of BGN		Decrease in the exchange rate of BGN	
	Net financial result	Equity	Net financial result	Equity
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
USD (+/-2.2%)	2,459	2,459	(2,459)	(2,459)
JPY (+/-1%)	(1,119)	(1,119)	1,119	1,119

**37.4 Credit risk**

In the course of its business, the Group is exposed to credit risk associated with the risk that some of its contractors may not be able to fully and timely perform their obligations. The receivables of the Group are presented in the consolidated statement of the financial position in net amount after deducting the accrued impairment. Such impairments are made for receivables where and when there were events identifying loss due to uncollectability as per previous experience. The age structure of overdue unimpaired trade and other receivables is presented in Note 22.

In relation to the credit risk of uncollectability of receivables from contractors, the Group takes the following precautionary measures:

- for commercial and other receivables that are overdue and were not secured upon their origination, deferred payment arrangements are concluded and collateral is agreed at an amount not less than the initially recognized amount of the receivable;
- for other contracts not previously secured, the following usual measures are taken in the event of overdue payments – offsetting debts to the Group against overdue receivables of the defaulting debtor, and if the amount of the debts does not cover the claim, other out-of-court options for settling claims are sought.

The Group monitors and analyses the settlement of the receivables, the reasons for the defaults and the changes in the financial capacity of the debtor companies and the status and quality of the collaterals received is controlled on an ongoing basis.

The Group has a significant concentration of credit risk in respect of the receivables from Toplofikatsia Sofia EAD, which make up more than 10% of the total amount of net non-current and current receivables. As at 31

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

December 2016, the carrying amount of the receivables from Toplofikatsia Sofia EAD amounts to BGN 555,156 thousand (Note 22.1).

Credit risk arising from other financial assets of the Group, such as cash and other financial assets, is the credit exposure of the Group arising from the likelihood that its contractors may fail to meet their obligations.

The Group's maximum credit exposure with respect to the recognized financial assets amounts to their respective carrying amount in the consolidated statement of the financial position as at 31 December 2016 (Note 36).

**37.5 Market risk**

Market risk is the risk that a change in the market prices of foreign currency, interest rates or equity instruments will affect the Group's income from financial instruments. The purpose of market risk management is to control market exposure with acceptable parameters while optimizing the returns.

The Group periodically carries out analyses on the macroeconomic environment in the country and in-depth analyses of the specific macro indicators, including information on interest rates to be presented to the Board of Directors. It is responsible for assessing the future risks faced by the Group. In the event of deterioration in market conditions, hedging instruments may be used.

**37.6 Regulatory risk**

The regulatory risk is determined by the specificity of the activity. According to Art. 30(1) of the Energy Act, the following prices are subject to regulation by Energy and Water Regulatory Commission (EWRC):

- prices at which the producers, within the scope of the limits set by the Commission pursuant to Article 21(1)(21), sell electricity to the public supplier;
- prices at which the producers sell thermal energy to the district heating company and to directly connected customers;
- prices at which the district heating company sells thermal energy to customers;
- prices at which the public supplier sells electricity to the electricity transmission and distribution networks operators to cover the technological costs of electricity transmission;
- prices at which the public supplier sells to the end suppliers the electricity purchased under Article 21(1)(21);
- prices at which the public supplier sells natural gas to the end suppliers of natural gas and to customers connected to the gas transmission networks;
- prices at which end suppliers sell natural gas to customers connected to the respective gas distribution networks;
- prices at which end suppliers sell electricity to household and non-household end customers for sites connected to the low voltage electricity distribution network;
- for access and/or transmission through the electricity transmission grid;
- for connection to the grids;
- for access and transmission of natural gas through transmission and/or distribution networks, except in cases where the Commission at its discretion approves a methodology for setting a particular price for access and transmission through the transmission network;
- for access and/or transmission through the electricity distribution networks;
- for access and storage of natural gas in a gas storage facility;
- for distribution of traction electricity on the distribution networks of the railway transport;
- for the provision of services to customers, as determined by the Commission, related to the licensed activity.
- including the price or price component at which all end customers connected to the electric power system contribute for the compensation of the costs under Article 35.

Price regulation has a significant impact on revenues, expenses, and hence on the overall economic and financial position of the Group.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**37.7 Cash flow risk**

The cash flows are dependent on the fluctuations in the amount of the expected future cash flows associated with a particular monetary financial instrument. To reduce this risk, the Group regularly plans its cash flows and the floating rate financial instruments are short-lived in less than 1 year.

**37.8 Credit rating**

- Rating Agency: Moody's

On 27 May 2016, the international rating agency Moody's assigned Bulgarian Energy Holding EAD with "Ba1" preliminary long-term credit rating with a stable outlook.

On 15 July 2016, Moody's confirmed the preliminary long-term credit rating of Bulgarian Energy Holding EAD as "Ba1" with a stable outlook. Moody's also assigned the forthcoming unsecured EUR bond issue of "Bulgarian Energy Holding" EAD with "Ba2" preliminary credit rating. The agency determines the credit rating of the issue at a level lower than that of the company due to fears of subordination of the bondholders to the creditors of the subsidiaries of Bulgarian Energy Holding EAD in a situation of theoretical insolvency of the company.

On 1 August 2016, Moody's assigned the final initial long-term credit rating of Bulgarian Energy Holding EAD as "Ba1" with a stable outlook and the final rating of the bond issue as "Ba2", the placement of which was scheduled for 2 August 2016 in the amount of EUR 550 million.

On 1 December 2016, Moody's published a comment on the approval of the Bulgarian State's support to NEK EAD through the granting of a seven-year interest free unsecured loan for the payment of the liabilities of NEK EAD to Atomstroyexport under the award of the International Arbitration Court at the International Chamber of Commerce in Geneva. The granting of the loan did not affect the credit rating of Bulgarian Energy Holding EAD and the credit rating of the bond issue.

- Rating agency: Fitch Ratings

On 6 July 2016, the international rating agency Fitch Ratings confirmed the long-term credit rating of Bulgarian Energy Holding EAD as "BB-" with a negative outlook and assigned a preliminary rating "BB-" (EXP) of the forthcoming unsecured bond issue of Bulgarian Energy Holding EAD in EUR.

On 12 August 2016, Fitch Ratings confirmed the long-term credit rating of Bulgarian Energy Holding EAD as "BB-" and raised the outlook from negative to stable. The Agency also assigned credit rating "BB-" to the unsecured bond issue of Bulgarian Energy Holding EAD placed on 2 August 2016 and amounting to EUR 550 million. The outlook improved due to the successful transformation of a significant short-term debt into a long-term through the placement of the bond issue, thus improving the liquidity of the Group.

On 30 September 2016, Fitch Ratings published a message stating that the provision of an interest free loan by the Bulgarian state for the payment under the court ruling on Belene arbitration case had a slightly positive impact on the credit rating of the company. In a report dated 6 October 2016, the Agency confirmed the stable outlook of Bulgarian Energy Holding EAD and the credit rating "BB-" assigned to the company and the bond issue.

In determining the ratings, both rating agencies took into account the important position of the Group on the electricity and gas markets in Bulgaria and the fact that Bulgarian Energy Holding EAD is 100% state-owned. Fitch Ratings and Moody's expect the State to support Bulgarian Energy Holding EAD in case of potential liquidity difficulties.

**38. Fair value measurement**

The Group's Management believes that the fair values of its financial instruments, comprising of cash and short-term deposits, trade and other receivables, loans and borrowings, trade and other payables, do not significantly differ from their carrying amounts due to their maturity structure and interest rate terms.

The Group determines its assets and liabilities measured at fair value into three levels based on the significance of the input information used to determine the fair value of the financial assets and liabilities. The hierarchy of the fair value includes the following levels:

- Level 1: market prices (unadjusted) quoted in active markets for similar assets or liabilities;
- Level 2: input information other than market prices included in level 1 that can be observed in respect of an asset or liability either directly (i.e. as prices) or indirectly (i.e. based on the prices); and
- Level 3: input information for an asset or liability that is not based on observed market data.

An asset or liability is classified to the lowest level of the significant input information used to determine its fair value.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**38.1 Fair value measurement of financial instruments**

The financial assets and liabilities measured at fair value in the consolidated statement of the financial position are grouped into the following categories according to the fair value hierarchy. For more information on the shares, traded on the stock exchange, refer to Note 25.

	<b>31 December 2016</b>	<b>31 December 2015</b>
	Level 1	Level 1
	<u>BGN '000</u>	<u>BGN '000</u>
<b>Assets</b>		
Shares, trades on the stock exchange	765	730

The valuation methods and techniques used in the determination of the fair value have not changed compared to the previous reporting period. The Company owns 6,041 shares of Transgaz SA, Romania, which are traded on the Romanian stock exchange. The investment is classified as a financial asset available for sale and is presented in BGN. The fair values as at 31 December 2016 and 31 December 2015 were determined based on the published quoted prices in an active market.

**38.2 Fair value measurement of non-financial assets**

The following table presents the levels in the hierarchy of the non-financial assets as at 31 December, which are periodically measured at fair value:

	Level 3	Level 3
	2016	2015
	<u>BGN '000</u>	<u>BGN '000</u>
Property, plant and equipment	10,315,794	10,985,213
Investment properties	520	-
	<u><b>10,316,314</b></u>	<u><b>10,985,213</b></u>

The fair value of the major portion of the Group's property, plant and equipment is determined on the basis of reports made by independent licensed appraisers (see Note 19).

**39. Capital management policy and procedures**

The policy of the Board of Directors is to maintain a strong capital base so as to maintain the confidence of customers, creditors and the market in general, and to be able to provide conditions for business development in the future. The objective of the Management is to balance the higher returns that may be possible with higher levels of indebtedness and benefits and a strong capital position. The objective of the Group is to achieve a return on equity of more than 5%. As at 31 December 2016, the return on equity was -0.7% (2015: 1.2%). There have not been any changes in the equity management of the Group throughout the year.

**40. Commitments and contingent liabilities**
**40.1 Proceedings of the European Commission against Bulgarian Energy Holding EAD and its subsidiaries**

Two proceedings have been initiated by the European Commission against Bulgarian Energy Holding EAD and its subsidiaries for possible abuse of a dominant position – Case AT.39767 - BEH Electricity and Case AT.39849 – BEH Gas.

*Case COMP/B1/AT.39767 BEH Electricity*

The case concerns a possible violation of Art. 102 of the Treaty on the Functioning of the European Union (TFEU) in connection with the inclusion of territorial restrictions in the supply contracts concluded by subsidiaries of

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Bulgarian Energy Holding EAD - Natsionalna Elektricheska Kompania EAD, NPP Kozloduy EAD and TPP Maritsa East 2 EAD, on the market for the wholesale supply of electricity in Bulgaria during the period from September 2008 to March 2013.

The proceedings were initiated in 2012 with a view to the adoption of a decision under Chapter 3 (Articles 7 to 10) of Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty Establishing the European Community (Articles 101 and 102 of TFEU).

By Decision C(2015) 8860 dated 10 December 2015 on Case AT.39767 BEH-Electricity, the EC made legally binding the Commitments for a period of five years from the start date of the day-ahead market operations proposed by Bulgarian Energy Holding EAD, Natsionalna Elektricheska Kompania EAD, TPP Maritsa East 2 EAD, NPP Kozloduy EAD and Independent Bulgarian Energy Exchange EAD and terminated the proceedings.

By Decision C(2016) 2246 of the European Commission dated 12 April 2016, the EC approved a Monitoring Trustee - ADVOLIS, to supervise the current management of Independent Bulgarian Energy Exchange EAD and the operation of the day-ahead market platform under the terms and conditions attached to the EC Decision. On 22 April 2016, a Monitoring Trustee Mandate was entered into by and between Bulgarian Energy Holding EAD and ADVOLIS.

Pursuant to the Commitments, Bulgarian Energy Holding EAD undertakes to divest Independent Bulgarian Energy Exchange EAD from its structure and to transfer the shareholdings in Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by 14 June 2016 through the execution of a final transfer agreement. On 13 May 2016, Bulgarian Energy Holding EAD formally requested the European Commission to extend the deadline for the transfer of the shareholdings in Independent Bulgarian Energy Exchange EAD to the Ministry of Finance by at least 6 (six) months.

On 8 June 2016, Bulgarian Energy Holding EAD received the formal decision of the European Commission on the extension of the deadline for the transfer of the shareholdings in Independent Bulgarian Energy Exchange EAD to the Ministry of Finance until 31 December 2016.

By Decision C (2016) 9006 dated 22 December 2016 the European Commission authorized the transfer of the shareholdings in IBEEEX EAD to the Ministry of Finance to be completed by 31 July 2017. The EC refers to the convincing and motivated arguments presented by Bulgarian Energy Holding EAD regarding the extension of the deadline of the transfer and the need for a longer period of time to meet the necessary technical requirements.

*Case COMP/B1/AT.39849 – BEH Gas*

The case concerns a possible violation of Art. 102 of the Treaty on the Functioning of the European Union (TFEU) in relation to alleged actions of BEH EAD and its subsidiaries – Bulgargaz EAD and Bulgartransgaz EAD – aimed at:

- preventing their potential competitors from accessing key gas infrastructure (gas transmission network and natural gas storage facility) in Bulgaria, by explicitly or tacitly refusing or delaying access to third parties;
- preventing their competitors from accessing the main gas import pipeline by reserving capacity that is consistently not used, without releasing it on the market.

The proceedings were initiated in 2013 with a view to the adoption of a decision under Chapter 3 (Articles 7 to 10) of Council Regulation (EC) No. 1/2003.

On 23 March 2015, the EC issued a Statement of Objections. Bulgarian Energy Holding EAD and its gas subsidiaries submitted their responses to the European Commission on 9 July 2015 (Bulgargaz EAD), 10 July 2015 (Bulgarian Energy Holding EAD) and 17 July 2015 (Bulgartransgaz EAD), respectively.

With a view to avoiding fines and/or coercive and/or structural remedies, as well as the risk of claiming damages in the event that the EC establishes infringement, Bulgarian Energy Holding EAD submitted to the EC proposals for commitments equivalent to the remedies, which the EC may plan to impose to Bulgarian Energy Holding EAD in case of adopting a prohibition decision.

In the event of adopting a prohibition decision, the EC may impose behavioural and/or structural coercive remedies pertaining to each undertaking involved in the infringement and a fine determined in accordance with the Guidelines on the method of setting fines and Art. 23 of Regulation 1/2003 for each undertaking. The EC may take into account aggravating or attenuating circumstances in the case.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

Bulgarian Energy Holding EAD and its subsidiaries, affected by the case, make all necessary efforts and provide the necessary assistance to achieve consensus between the parties. Regular meetings and conferences are held with the lawsuit team of the EC and representatives of BEH EAD, Bulgargaz EAD and Bulgartransgaz EAD and the legal representatives of the companies. The Bulgarian parties make efforts to complete the lawsuit by accepting Commitments and avoiding a possible fine under Article 23 of Regulation 1/2003 for each enterprise.

It should be borne in mind that the Decision of the EC is not bound by a mandatory deadline and that subsequent procedural steps are expected at the time of the preparation and publication of these consolidated financial statements.

**Capital commitments***NPP Kozloduy EAD and its subsidiaries*

As at 31 December 2016, the Group has capital commitments of BGN 74,126 thousand (in 2015: BGN 128,821 thousand) related with undertaken commitments to acquire property, plant and equipment.

The amount of the contracted commitments for the acquisition of nuclear fuel amount to BGN 125,511 thousand as at 31 December 2016 (in 2015: BGN 125,511 thousand).

*TPP Maritsa East 2 EAD and its subsidiaries*

In compliance with the requirements of the European Directives, the national legislations and the Comprehensive Permit, as well as in relation to the implementation of the projects defined under the National Investment Plan for 2013-2020, the Group of TPP Maritsa East 2 EAD is required to build and commission environmental assets.

As at 31 December 2016, the Group of TPP Maritsa East 2 EAD has capital commitments of BGN 58,521 thousand, relating to full engineering of low-emission burners K-A1 to 12; full engineering of gas ignition installation of K-A1 to 12; construction and installation of gas density screens of boilers; improvement of the degree of desulphurization of a desulphurisation installation 7 and 8, in compliance with Directive 2010/75/EC.

*Electricity System Operator EAD*

In 2016, contracts under the Public Procurement Act and the Ordinance on Small Public Tenders for repairs and current maintenance of the assets of ESO EAD were concluded and gave rise to contractual commitments for 2017 in the amount of BGN 61,314 thousand.

*Bulgartransgaz EAD*

In compliance with Directive 2009/29/EC and Communication (2011/C99/03) of the Commission, Guidance Document on the optional application of Article 10c of Directive 2003/87/EC, the Ministry of Energy prepared National Investment Plan (NIP), including investment projects. Bulgartransgaz EAD applied for inclusion in NIP with a project for the modernization of 4 compressor stations. The implementation of this project is expected to reduce the CO<sub>2</sub> emissions emitted by these compressor stations by 15%.

In 2016, Bulgartransgaz EAD, in accordance with Section V - NIP Account of the Ordinance on the Organization and Control on the Implementation of NIP, submitted Applications for reimbursement of expenses incurred for the implementation of the following projects:

BG-\$-0101 for "Modernization of Ihtiman Compressor Station by Integration of Low-Emission Gas Turbocharger Units", included in NIP 2013.

BG-\$-0102 for "Modernization of Petrich Compressor Station by Integration of Low-Emission Gas Turbocharger Units", included in NIP 2013.

BG-\$-0103 for "Modernization of Lozenets Compressor Station by Integration of Low-Emission Gas Turbocharger Units", included in NIP 2013.

BG-\$-0104 for "Modernization of Strandzha Compressor Station by Integration of Low-Emission Gas Turbocharger Units", included in NIP 2013.

Up to now, under Orders No. E-PД-16-600 dated 9 December 2016 and No. E-PД-16-599 dated 9 December 2016 of the Minister of Energy, Bulgartransgaz EAD received reimbursement of expenses from the account of the National Investment Plan for Ihtiman CS amounting to BGN 12,791,636.51 and for Petrich CS amounting to BGN 12,791,629.63. The reimbursement of the funds for Lozenetz CS and Strandzha CS is forthcoming.

*Mini Maritsa Iztok EAD*

In connection with the implementation of its investment program as at 31 December 2016, the Company has signed contracts for construction, delivery and installation of machinery and equipment ensuring its implementation in the amount of BGN 19,315 thousand.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**NEK EAD*****NPP Belene Project***

In connection with NPP Belene Project, a contract for the construction of NPP Belene was signed on 29 November 2006 with AO Atomstroyexport as the project contractor and on 31 January 2005 with Warley Parsons as the project architect-engineer. On 29 March 2012 the Government of the Republic of Bulgaria decided to discontinue the construction of the nuclear power plant on the Belene site. By decision dated 27 February 2013, the 41st National Assembly approved the Government's decision to suspend the construction of a new nuclear power plant at the Belene site and insisted on its final termination. By decision of the Board of Directors of BEH EAD dated 3 October 2013 it was found that the contract with Warley Parsons was appropriately terminated due to termination of the project in 2012 and the impossibility of its implementation.

The Group has accepted to report all the amounts (paid and accounted for) directly related to the discontinued NPP Belene Project in accordance with the recognition criteria under IAS 16, subject to the adherence to a consistent policy, such as property and equipment under construction until the final decision on the future of the project. At present, there is uncertainty about the possible options for the implementation of the project or the equipment respectively, a considerable amount of time is needed to agree, negotiate and approve possible options, but this is not entirely within the control of the Group's management and it is not in a position to make an assessment on the possible reclassification of the reported amounts under IFRS and on their measurement.

**Investment projects**

NEK EAD's investment plan is mainly focused on rehabilitation, reconstruction and new construction of hydropower projects and includes the following major directions and capital projects.

***Yadenitsa Project***

The project is included in the National Investment Plan (NIP) for the period 2013 - 2020 by a decision of the Council of Ministers of the Republic of Bulgaria dated 28 September 2011, in connection with the Application filed by the Republic of Bulgaria for a derogation under Article 10c of Directive 2003/87/EC of the European Commission (EC). By decision No. 707 dated 30 August 2012 of the Council of Ministers of the Republic of Bulgaria, Yadenitsa Dam, which is the main facility of Yadenitsa Project, was declared a "national site" pursuant to the State Property Act, as well as "a site of national significance" pursuant to the Spatial Development Act.

Yadenitsa Project is provided with funding for the preparatory works (procedures until the issuance of Construction Permit) from the European Commission's Connecting Europe Facility.

On 24 April 2015, the Grant Agreement signed by and between NEK EAD and the Innovation and Networks Executive Agency at the European Commission entered into force. According to this agreement, the funds allocated to NEK EAD amount to EUR 3,213 thousand. They will cover 50% of the costs of the renewal of the EIA, the project and the issuance of a construction permit for Yadenitsa Dam. The remaining 50% is covered by the company's own funds.

***Rehabilitation of Belmeken - Sestrimo - Chaira Hydro Complex and rehabilitation of outdoor switchgear 10 kv of HPP Vacha -1 and part of HPP systems under common control***

Grant Agreement No. 049 on the rehabilitation of Belmeken - Sestrimo - Chaira Hydro Complex was signed on 6 December 2013 by and between the European Bank for Reconstruction and Development (EBRD or the Bank), acting as the Administrator of NPP Kozloduy International Decommissioning Support Fund (KIF/KIDSF) and Natsionalna Elektricheska Kompania EAD. On 28 May 2014 the Grant Agreement No. 049A (GA049A) was amended and supplemented due to the split of NEK EAD and Electricity System Operator EAD.

The total estimated value of the project is EUR 37 million, with 70% funding by KIF and 30% own funds.

***NEK EAD — liabilities related to the development of the energy sector***

In connection with the modernization of Units 5 and 6 of NPP Kozloduy EAD, a loan agreement was signed, on 29 May 2000 by and between NPP Kozloduy EAD, acting as the Borrower, Natsionalna Elektricheska Kompania (NEK) EAD, acting as the Guarantor, and the European Atomic Energy Community (EURATOM), acting as the Lender, granting a loan in the amount of EUR 212.5 million aimed to finance the Programme for the modernization of the power plant units. Pursuant to Clause 15.2 of that agreement, NEK EAD and NPP Kozloduy EAD shall bear liability as a single principal debtor. On the same date, a Guarantee Agreement was signed between the Republic of Bulgaria, acting as the Guarantor, and the European Atomic Energy Community, acting as the Lender (EURATOM), by virtue of which the State guarantees the repayment of the loan. The two agreements are ratified by law by the 38th National Assembly of the Republic of Bulgaria on 29 November 2000. The loan was granted in 8 tranches, with floating interest rate – six-month EURIBOR, plus a margin of 0.13%, and one of the tranches

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

is with a fixed interest rate of 5.76 %. The repayment period of the principals under the loan differ from tranche to tranche. The repayment deadline is 10 May 2021. The loan is fully utilized and is being repaid pursuant to the reached agreements. As at 31 December 2016 the outstanding portions of the loan granted by EURATOM amounts to BGN 147,787 thousand (principal) and BGN 1,485 thousand (interest).

**NEK EAD — long-term power purchase agreements**

On 13 June 2001, NEK EAD concluded a long-term agreement with Consolidated Continental Commerce Limited, now known as AES-3C Maritsa East 1 EOOD (AES) for the construction and operation of a 670 MW replacement capacity on the site of TPP Maritsa East 1, fuelled with locally extracted lignite coal. NEK EAD has entered into a 15-year power purchase agreement which has become effective in stages as from the commissioning date of the new facility on 2 June 2011 and upon the achievement of the full net capacity of 600 MW by TPP AES Galabovo as of 28 December 2011. On 14 August 2015 an agreement was signed for the reduction of the availability price by 14%, which is effective as from 26 April 2016, after the payment of the obligations to the power plant.

Pursuant to a registered pledge agreement dated 30 November 2005 and agreement to amend the registered pledge agreement dated 26 April 2016, NEK EAD pledged its receivables for electricity sold from EVN Bulgaria Elektrosnabdiavane AD and Energo-Pro Sales AD as a guarantee against future obligations for power purchases. The sum of the pledged receivables is equal to the expected maximum total payment for electricity purchased for any month of the calendar year.

In accordance with the concluded long-term power purchase agreement, NEK EAD is required to purchase minimum 3,156,500 MWh electricity per calendar year (or on a pro rata basis in the event of incomplete year) and the respective availability according to the trading schedule.

On 13 June 2001 NEK EAD entered into a fifteen-year power purchase agreement with the former Energiyna Kompania Maritsa East 3 AD, currently ContourGlobal Maritsa East 3 AD. The contract for electricity purchases became effective in February 2009 with the completion of the agreed rehabilitation works on the modernization of the existing facilities of TPP Maritsa East 3, following which the installed capacity is 808 MW

On 7 March 2016 an agreement was signed for the reduction of the availability price by 15%, which is effective as from 26 April 2016, after the payment of the obligations to the power plant.

Pursuant to a registered pledge agreement dated 1 February 2002 and the latest agreement to amend the registered pledge agreement dated 26 April 2016, NEK EAD pledged its receivables for electricity sold from CEZ Electro Bulgaria AD, Energo-Pro Sales AD as a guarantee against future obligations for power purchases. The sum of the pledged receivables is 1.25 times as much as the expected maximum total payment for electricity purchased for any month of the calendar year.

In performance of the contract for electricity purchase and availability, NEK EAD annually issues promissory notes in favour of Contour Global Maritsa East 3 AD. In accordance with the concluded long-term electricity purchase contract, NEK EAD is required to purchase minimum 3,489,000 MWh electricity per calendar year (or on a pro rata basis in the event of incomplete year) and the respective base availability.

The table below shows the liabilities of NEK EAD with regards to the minimum due payments for purchased electricity and availability for the remaining term of the concluded long-term contracts for electricity purchase from thermal power plants.

	<b>Total minimum due amounts</b>
	<i>BGN '000</i>
Minimum due payments for purchased availability *	4,626,640
Minimum due payments for purchased electricity **	3,759,380
<b>Total</b>	<b>8,386,020</b>

*\*The figure represents the minimum obligation under the existing long-term power purchase agreements and is calculated on the basis of fixed pricing components and fixed escalation components.*

*\*\*The figure is calculated on the basis of the price per unit of electricity for December 2016.*

The minimum payments for purchased availability under each of the long-term contracts for electricity purchase from thermal power plants are as follows:

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

	<b>Up to 1 year</b>	<b>From 1 to 5 years</b>	<b>Over 5 years</b>	<b>Total</b>
	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>	<i>BGN '000</i>
Minimum due payments for purchased availability	549,967	2,103,864	1,972,809	4,626,640

In 2016 NEK EAD bought from Contour Global Maritsa East 3 AD net electricity of 3,607 GWh, which is higher than the minimum agreed 3,489 GWh under the electricity purchase contract.

Net electricity of 2,901 GWh was purchased from AES Maritza East 1 which is below the mandatory minimum purchased amount of electricity of 3,156 GWh.

As required by the Renewable Energy Act, NEK EAD in its capacity of public supplier, is required until 24 July 2015 to purchase the entire quantity of electricity produced from renewable or alternative energy sources, with the exception of electricity produced from hydro power plants with an installed capacity of over 10 MW. With the amendment of Art. 31(5) of the same act, the public supplier and the end suppliers, respectively, shall purchase the electricity output from renewable sources at a preferential price for amounts of electricity up to the amount of the net specific output of electricity which is taken into account when calculating the preferential prices in the relevant decisions of EWRC. The amounts of electricity in excess of the net specific output are purchased at a price of surplus on the balancing market or as stipulated in Art. 31(12) and may be sold on the free market. The mandatory purchase of electricity is carried out under electricity purchase contracts. In compliance with the Renewable Energy Act, as amended on 3 May 2011, the duration of the contracts shall be 20 years for electricity produced from geothermal and solar energy and for electricity produced from biomass, 12 years for electricity produced from wind energy and 15 years for electricity produced from hydro power plants with an installed capacity of up to 10 MW and for electricity produced from other types of renewable energy sources. The time limits for mandatory purchase shall commence on the date of commissioning of the respective power facility and for power facilities commissioned after 31 December 2015 – the time limits shall be reduced by the time between that date and the date of commissioning of the respective power facility.

As of 31 December 2015, the Company has concluded the following long-term contracts for purchasing electricity from commissioned RES facilities:

- Wind power plants: with total installed capacity of 357.50 MW. The contracts were concluded in 2008-2013 for a period of 12 years.
- Photovoltaic power plants: with total installed capacity of 260.69 MW. The contracts were concluded in 2011-2012 for a period of 20 years.
- Biomass power plants: with total installed capacity of 20.4 MW. The contracts were concluded in 2009-2012 for a period of 20 years.
- Hydropower plants: with total installed capacity of 49.84 MW. The contracts were concluded in 2009-2013 for a period of 15 years.

Due to the nature of the production of electricity from renewable sources and the uncertainty about the total amount generated, the Company cannot reliably estimate their future obligations with regard to contracts for purchasing electricity from renewable sources.

## 40.2 Contingent liabilities

### *Lawsuits and claims*

*Natsionalna Elektricheska Kompania EAD*

*Worley Parsons Nuclear Services JSC*

An arbitration case has been brought against the company at the Arbitration Court to the International Chamber of Commerce, Paris, on the application filed by Worley Parsons Nuclear Services JSC claiming a total of EUR 54,372 thousand (BGN 106,342 thousand) – remuneration and contract damages. In response to the request for arbitration, NEK EAD disputed all claims. On 31 August 2016, the claimant filed its full application, containing its extensive opinion on the claims, together with attached evidence and requests for evidence to be presented by NEK EAD.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

By the deadline – 31 October 2016 – NEK EAD filed a full response, together with evidence and requests for evidence to be presented by the claimant. On 2 December, the claimant filed a response to the defendant's response and on 6 January 2017 NEK EAD filed a replica of the claimant's response.

The case is expected to be examined at an open session during the period 5 to 9 June 2017, when it is expected to be examined on its merits. With such a development of the case, an award of the arbitration tribunal could be expected in 2018. The case is in the initial preparatory stage. The Management and the legal advisers are not in a position to project the outcome of the case and respectively the amounts (even approximate) that could be awarded to be paid by the parties under the arbitration award.

***OET - United Energy Traders***

OET - United Energy Traders have brought a case in the amount of BGN 10,853 thousand, with regard to Art. 55(1) of the Obligations and Contracts Act – return of amounts unduly paid by OET representing green energy surcharge and high-efficient cogeneration surcharge. Collateral is allowed in the case by imposing attachment on the bank account of NEK EAD held with BNP PARIBAS at the amount of BGN 6,290 thousand.

As of 15 February 2016, by decision of Sofia City Court the claim is rejected. The claimant has filed an appeal at Sofia Court of Appeal. Sofia Court of Appeal has declared the case for deliberation, but has not given a decision yet.

***Toplofikatsia Sofia EAD***

Toplofikatsia Sofia EAD has filed four claims amounting to BGN 34,726 thousand, claiming unpaid portions of principals, interests on invoices for delivered electricity, compensation for the use of equipment.

NEK EAD filed a counter claim in the amount of BGN 13,864 thousand on invoices issued in the period February 2014 to November 2014 for the quantities of electricity generated by turbine generator No. 9 (TG 9), which was unlawfully invoiced to NEK EAD.

The outcome of these lawsuits is not expected to have a significant effect on the cash outflows and financial performance, as a significant portion of the claims are included in the financial statements.

As of 31 December 2016 other legal claims have been filed against the Company on different legal grounds: for balancing energy, for delayed payments, for offset amounts and for compensatory payments. These claims are either pending or in the process of being appealed. Due to this fact, with the exception of the amounts accrued for arrears or outstanding liabilities, the management of the Company has decided not to book additional provisions for litigation.

***NPP Kozloduy EAD and its subsidiaries***

As of 31 December 2016, a claim was brought against Interpriborservice OOD by its court-dismissed partner Energoservice AD - UIC 200334806. The claim was brought under the legal grounds of Article 127 in conjunction with Article 125(3) of the Commerce Act, Article 86 of the Contracts and Obligations Act. Commercial Case 43/2015 was established as per the docket of Vratsa District Court, where three open court hearings were held: on 27 October 2015, on 22 December 2015 and on 23 February 2016. The proceedings on the commercial case were initiated on based on Application Ref. No. 4265 dated 28 May 2015 for the award of a claim amounting to BGN 839,664.25, representing the remainder of the value of the share of Energoservice AD in the equity of Interpriborservice OOD at the date of the entry into force of Decision No. 612 dated 15 June 2009 on civil case 573/2009 as per the docket of Sofia Court of Appeal, civil panel, 3th chamber, revoking the decisions of the general meeting held on 31.05.2007 of the partners of Interpriborservice OOD as unlawful. Vratsa District Court ruled in favour of Energoservice AD by decision No.19 dated 8 March 2016. The decision of Vratsa District Court was fully appealed within the statutory time-limit by filing an appeal to Sofia Court of Appeal. A meeting of Sofia Court of Appeal was held on 20 December 2016, where the case was announced for resolution. As at the date of these statements no decision has been issued yet.

Although the outcome of the foregoing court proceedings cannot be reliably estimated, the Management expects a positive decision for the Group from the foregoing court proceedings.

There are other legal claims filed against NPP Kozloduy EAD Group amounting to BGN 239 thousand (in 2015: BGN 12 thousand).

***TPP Maritsa East 2 EAD and its subsidiaries***

No significant legal claims have been filed against TPP Maritsa East 2 EAD Group, except for a claim filed before the Arbitration Court by Vodstroy 98 AD and BMM AD in connection with a contract terminated by TPP Maritsa East 2 EAD. The value of the claim amounts to BGN 3,092 thousand, including principal of BGN 2,928 thousand

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

and statutory interest calculated as at 31 December 2016 at the amount of BGN 164 thousand. The group disputes the claim and expects the ruling of the arbitration court to be in its favour.

The lawsuits filed against TPP Maritsa East 2 EAD Group are not expected to lead to significant financial revenues since the possible positive outcome for the Group would cover the costs incurred in the court proceedings.

***Other******Natsionalna Elektricheska Kompania EAD******Estimates with respect to Irrigation Systems EAD***

NEK EAD and Irrigation Systems EAD carry out operations related to the maintenance and operation of water reservoirs, dams, hydro engineering, and hydro-meliorative facilities in compliance with their obligations to supply water as determined by the Ministry of Environment and Water. NEK EAD, through its Dams and Cascades Company, has provided water supply services to Irrigation Systems EAD and vice versa – Irrigation Systems EAD has provided a service of similar nature to NEK EAD.

As no agreement was reached between the Company and Irrigation Systems EAD and no protocols were signed for the supplied quantities of water for the period starting May 2003 until the date of these financial statements, additional liabilities to Irrigation Systems EAD may arise which cannot be reliably determined at present.

***Unconfirmed receivables and liabilities***

The Company accounts for receivables of BGN 57,181 thousand and liabilities of BGN 42,524 thousand to an electricity supply company for which there is disagreement about non-confirmation and payment.

As of 31 December 2016, the legal dispute with Energo-Pro Sales AD and EVN Bulgaria Elektrosnabdiavane EAD has been completed and the outstanding balance is offset. As at the date of the financial statements, there are legal disputes between NEC AD and CEZ Electro Bulgaria AD and the part of the decision for payments and obligations to the electricity supply companies is not applied in accordance with the provisions of Decision No.II-12 dated 30 June 2014 of EWRC and therefore it is considered that there is no justification for a net presentation of the respective counterclaims and obligations.

***Concession contract of Mini Maritsa Iztok EAD***

Under the concession contract for the development and extraction of coal, the Company undertakes to allocate cash to the Ministry of Energy that may only be used for the purpose for which it is intended (the types of works for the final exit from the concession area) and upon the explicit authorization given by the Ministry of Energy. By letter Ref. No. E-26-M-155 dated 9 July 2014, an updated conceptual design for exit from the concession area was agreed with a total value of the final exit of BGN 134,378,000. As at 31 December 2016 there are no funds allocated to secure the exit liability. The Company is in the process of renegotiating the periods and amounts that have to be deposited in the trust account.

**40.3 Insurances*****NPP Kozloduy EAD and its subsidiaries***

The Safe Use of Nuclear Energy Act sets a limit on the liability of the operator for damages caused by nuclear accidents. The law limits the operator's liability to BGN 96,000 thousand for each accident. According to Vienna Convention on Civil Liability for Nuclear Damage, the operator is required to maintain insurance or other financial guarantee for nuclear damage for the lifetime of the nuclear facility. The Group has concluded an insurance policy covering the limits stipulated by law. The insurance contract with the Bulgarian National Insurance Pool was concluded on 31 May 2016 and has a one-year coverage period from 1 June 2016 to 30 May 2017. The insurance sum is BGN 785 thousand, of which BGN 770 thousand is insurance premium and BGN 15 thousand is tax on the premium. The Group has concluded a property insurance for Industrial Fire with a coverage period from 1 January 2016 to 31 December 2020. For the period 1 January 2016 to 31 December 2016 the insured amount comes to BGN 10,130 thousand (EUR 5,179 thousand).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

for the year ended 31 December 2016

**40.4 Guarantees***NPP Kozloduy EAD and its subsidiaries*

Guarantees have been established in favour of NPP Kozloduy EAD Group, amounting to BGN 153,166 thousand (as at 31 December 2015: BGN 109,815 thousand).

**40.5 Promissory notes***Natsionalna Elektricheska Kompania EAD*

As of 31 December 2016, NEK EAD has issued promissory notes on investment projects in favour of the banks providing loans under the contracts for the construction of these facilities and other projects amounting to BGN 331,372 thousand, including to ContourGlobal Maritsa East 3 amounting to BGN 53,498 thousand.

**41. Events after the reporting period****BEH EAD***Conversion of Nabucco Gas Pipeline Bulgaria EOOD*

On 31 January 2017, by an official decision of the Board of Directors of Bulgarian Energy Holding EAD, the merger of Nabucco Gas Pipeline Bulgaria EOOD with Bulgarian Energy Holding EAD was approved pursuant to Article 263t(2) of the Commercial Act. The decision on the merger is to be signed after the receipt of the authorization of the Minister for Energy.

*Measures for financial stabilization of TPP Maritsa East 2 EAD*

By decision under Protocol No. 5-2017 dated 18 January 2017, the Board of Directors of Bulgarian Energy Holding EAD adopted a policy for the purchase of greenhouse gas emission allowances. The purpose of the actions foreseen in the Policy is to ensure that Bulgarian Energy Holding EAD should buy the necessary quantities of allowances for the greenhouse gas emissions of TPP Maritsa East 2 EAD. In this way, optimization of the expenses for greenhouse gas emission allowances will be achieved by purchasing the necessary quantities at attractive market prices, on the one hand, and on the other hand, the cash balances of TPP Maritsa East 2 EAD will be partially alleviated by the deferred payment of the transferred allowances.

*Change in the composition of the Board of Directors of BEH EAD*

On 13 April 2017, a change in the composition of the Board of Directors of the company was registered with the Commercial Register. Zhecho Donchev Stankov was dismissed and Konstantin Simeonov Delisivkov, Deputy Minister of Energy, was appointed. The change was approved by a decision of the Minister under Protocol No. E-PД-21-9 dated 6 April 2017.

**NPP Kozloduy and its subsidiaries**

According to Decision I.1.1. under Protocol No. 9-2017 dated 30 January 2017, the BoD of BEH EAD dismissed Zhaklen Koen as a member of the BoD of NPP Kozloduy EAD and under decision I.1.2 the BoD elected Petyo Ivanov as a new member. The new circumstance was registered with the Commercial Register on 6 February 2017.

**Natsionalna Elektricheska Kompania EAD**

On 26 January 2017, a subsidiary of NEK EAD – Ecological Exploitation of Fuels and Energy Oils OOD – was deleted from the Commercial Register following a liquidation procedure implementing a decision taken by the shareholders.

On 10 February 2017 a circumstance was registered with the Commercial Register concerning a change in the Board of Directors of NEK EAD, namely: Hristo Velichkov Georgiev was replaced by Konstantin Simeonov Delisivkov.

A commercial case was completed on 14 February 2017, according to which NEK EAD was ordered to pay to Lukoil Energy and Gas Bulgaria an amount of BGN 4,040 thousand, including interest and expenses. The amount is recognized in the financial statements as a remedial event. The full amount was paid on 20 March 2017.

***Bulgargaz EAD***

By a decision, the Energy and Water Regulatory Commission set the limit prices of natural gas at sale by the public supplier to the end suppliers and to the consumers connected to the gas transmission network for the first quarter of 2017 – BGN 280,21/1000m<sup>3</sup>, excluding excise duty and VAT, and BGN 287.93/1000m<sup>3</sup>, excluding excise duty and VAT (for consumers connected to low pressure networks).

On 26 January 2017 by Decision No 7-2017 dated 26 January 2017, the Board of Directors of Bulgarian Energy Holding EAD appointed Stoyan Yanchev as the Executive Director and member of the Board of Directors of Bulgargaz EAD, replacing Nikolay Pavlov. This circumstance was registered with the Commercial Register on 6 February 2017.

***Mini Maritsa Iztok EAD***

On 20 January 2017, Additional Agreement No.2 was entered into by and between Mini Maritsa Iztok EAD and D Commerce Bank AD under Investment Loan Agreement No. MT-538 dated 8 December 2014, whereby the total limit of the investment loan agreement was reduced to the amount of BGN 2,280 thousand with a new repayment plan, where the utilized amount is distributed to ninety-six monthly repayment instalments, and the payments are scheduled to be made on the 20th of each month, and the first repayment instalment on the principal is to be paid on 20 January 2017.

On 21 March 2017, a change in the composition of the Board of Directors of the company was registered with the Commercial Register, namely: Nikolay Stefanov Dikov was deleted and Georgi Krastev Aydanliyski was registered as a member.

***Independent Bulgarian Energy Exchange EAD***

On 2 February 2017, a change in the composition of the Board of Directors of the company was registered with the Commercial Register, namely: Nina Tomova Chuparova and Vyara Lyudmilova Marinova were replaced by Nikola Veselinov Gabrovski and Deyan Krasimirov Ivanov.

## **ISSUER**

### **Bulgarian Energy Holding EAD**

16, Veslets Street  
Sofia 1000  
Republic of Bulgaria

## **SOLE BOOKRUNNER & LEAD MANAGER**

### **Citigroup Global Markets Limited**

Canada Square  
Canary Wharf  
London E14 5LB  
United Kingdom

## **CO-MANAGER**

### **FIRST FINANCIAL BROKERAGE HOUSE LTD.**

2 Enos Street, Floor 4&5  
1408 Sofia, Bulgaria

## **FISCAL AGENT AND TRANSFER AGENT**

### **Citibank N.A., London Branch**

Canada Square  
Canary Wharf  
London E14 5LB  
United Kingdom

## **REGISTRAR**

### **Citigroup Global Markets Europe AG**

5th Floor Reuterweg 16  
60323 Frankfurt  
Germany

## **LEGAL ADVISERS**

*To the Issuer as to English law*

### **Allen & Overy LLP**

One Bishops Square  
London E1 6AD  
United Kingdom

*To the Issuer as to Bulgarian law*

### **Spasov & Bratanov Lawyers Partnership**

Office Centre "Slavyanska", floor 2  
29A Slavyanska Street  
Sofia 1000  
Republic of Bulgaria

*To the Managers as to English law*

### **Linklaters LLP**

One Silk Street  
London EC2Y 8HQ  
United Kingdom

*To the Managers as to Bulgarian law*

### **Djingov, Gouginski, Kyutchukov & Velichkov**

10 Tsar Osyoboditel Blvd.  
Sofia 1000  
Republic of Bulgaria

**AUDITORS OF THE ISSUER**

**HLB Bulgaria OOD**

149 - 151 Konstantin Velichkov blvd.  
1309 Sofia  
Republic of Bulgaria

**REPORTING ACCOUNTANTS**

*(See “Presentation of Financial and Other Information”)*

**Grant Thornton OOD**

26, Cherni Vrah Blvd  
Sofia 1421  
Republic of Bulgaria

**LISTING AGENT**

**Arthur Cox Listing Services Limited**

Ten Earlsfort Terrace  
Dublin 2  
Ireland