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PJSC MOSENERGO

IFRS CONSOLIDATED FINANCIAL STATEMENTS WITH INDEPENDENT AUDITOR'S REPORT

31 December 2018

Moscow | 2019

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To the Shareholders

of PJCS Mosenergo

Opinion

We have audited the accompanying consolidated financial statements of PJSC Mosenergo and its subsidiaries (hereinafter – the Group), which comprise the consolidated statement of financial position as at 31 December 2018 and the consolidated statements of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the year ended 31 December 2018, and notes to the consolidated financial statements comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2018 and its consolidated financial performance and its consolidated cash flows for the year ended 31 December 2018 in accordance with International Financial Reporting Standards (hereinafter – IFRSs).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (hereinafter – 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 Independence Rules for Auditors and Audit Firms and Code of Professional Ethics of Auditors, that correspond to the International Ethics Standards Board for Accountants’ Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, 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.

Revaluation of property, plant and equipment

This matter is one of most significance in our audit in view of materiality of the balances of property, plant and equipment. The Group performs regular revaluation of property, plant and equipment to ensure that the carrying value does not differ materially from that which would be determined using fair value at the end of the reporting period.

As of 31 December 2018 revaluation of property, plant and equipment was considered unreasonable due to the fact that the carrying value of property, plant and equipment at which they are reflected in the consolidated financial statements as of that date does not differ materially from that which would have been determined using fair value as of that date.

We engaged our valuation experts to make a conclusion on the assumptions applied to test the need of property, plant and equipment revaluation. Our audit procedures in respect of such testing included sample checking of test models and methods for accuracy.

Based on the results of the audit procedures we believe that the significant assumptions applied to test the need of property, plant and equipment revaluation are acceptable and are well in line with current economic environment.

Information about the property, plant and equipment and the conducted revaluations is disclosed in Note 11 Property, plant and equipment to the consolidated financial statements.

Provisions for taxes

Evaluation and recognition of provisions as well as their classification require plenty of professional judgement. We consider this area to be one of most significance in our audit in view of essential difficulties associated with the assessment issue.

Provisions for property tax and income tax, and the respective penalties for the tax periods from 2014 to 2018 were recognised based on the reports issued following an on-site tax inspection and the analysis of legal precedents related to tax disputes, including those involving PJSC Mosenergo.

We assessed assumptions and professional judgements applied by the Group's management, including critical assessment of information by the Group's management, to estimate provisions for taxes and determine their maturity. We engaged our tax experts to make a conclusion on the assumptions applied to evaluate provisions.

Based on the results of the procedures applied, we found the position of the Group's management related to recognition, evaluation and classification of estimated liabilities in respect of taxes to be appropriate.

Information about the provisions for taxes is disclosed in Note 18 Provisions to the consolidated financial statements.

Allowance for expected credit losses

One of high-risk audit areas is the evaluation of sufficiency of allowance for expected credit losses. This matter is one of most significance in our audit in view of the need to apply professional judgements and estimates to assess the allowance for expected credit losses.

We analysed the method applied to assess the allowance for expected credit losses, which included, inter alia, the use of provision matrix. We analysed judgements and estimates applied by the Group's management to assess the allowance, whether on an individual or collective basis. We focused on critical assessment of information by the Group to assess the risk of a default based on input data about defaults and information about current conditions and forecasts of future economic conditions.

Based on the results of the audit procedures we believe that the significant assumptions applied by the management to assess the allowance for expected credit losses are acceptable and are well in line with the current expectations of possible credit losses.

Information about the accounts receivable and the allowance for expected credit losses is disclosed in Note 7 Trade and other receivables and Note 31 Financial risk factors to the consolidated financial statements.

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Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual report of PJSC Mosenergo for 2018 and the Quarterly issuer's report for the first quarter of 2019, which are expected to be made available to us after the date of this auditor's report, 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 will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above 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.

When we read the Annual report of PJSC Mosenergo for 2018 and the Quarterly issuer's report of PJSC Mosenergo for the first quarter of 2019, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the Board of Directors.

Responsibilities of Management and the Board of Directors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, 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.

The Board of Directors is 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.

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As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

a) 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;

b) 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;

c) evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;

d) 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 its ability to continue as a going concern;

e) 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;

f) obtain sufficient appropriate audit evidence regarding the financial information of the entities or 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 the Board of Directors 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 the Board of Directors 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.

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From the matters communicated with the Board of Directors 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.

President of FBK, LLC	S.M. Shapiguzov (acting by virtue of the Articles of Organisation, audit qualification certificate 01-001230)
Engagement partner	P.V. Sungurova, (audit qualification certificate 01-001300)

Date of Independent Auditor's Report
6 March 2019

Audited entity	Auditor
Name:	**Name:**
Public Joint Stock Company Mosenergo (PJSC Mosenergo).	FBK, LLC
Address of the legal entity within its location:	**Address of the legal entity within its location:**
101/3 Vernadskogo Pr., Moscow, 119526, Russian Federation	44/1, 2AB, Myasnitskaya St, Moscow, 101990, Russian Federation.
Official registration:	**Official registration:**
State Registration Certificate No. 012.473, issued by Moscow Registration Chamber on 06 April 1993. The registration entry was made in the Unified State Register of Legal Entities on 11 October 2002 under principal state registration number 1027700302420.	State registration certificate series No. 484.583, issued by Moscow Registration Chamber on 15 November 1993. The registration entry was made in the Unified State Register of Legal Entities on 24 July 2002 under principal state registration number 1027700058286.
	Membership in self-regulatory organization of auditors:
	Member of Self-regulatory organization of auditors Association "Sodruzhestvo". Principal number of registration entry in the register of auditors and audit organizations of the self-regulatory organization of auditors 11506030481.

PJSC MOSENERGO
CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS OF 31 DECEMBER 2018
(in millions of Russian Rubles)

	Notes	31 December 2018	31 December 2017
Assets			
Current assets			
Cash and cash equivalents	5	16 220	20 627
Short-term financial assets	6	10 400	-
Trade and other receivables	7	40 514	51 630
Inventories	8	13 815	13 499
Income tax receivable	17	239	-
Other current assets	9	2 682	1 455
		83 870	87 211
Assets held for sale	10	43	43
Total current assets		**83 913**	**87 254**
Non-current assets			
Property, plant and equipment	11	209 691	215 994
Investment property	12	1 548	2 359
Goodwill	13.1	187	187
Other intangible assets	13.2	509	306
Investments in associates	14	-	314
Long-term financial assets	6	1 490	3 154
Trade and other receivables	7	15 806	12 582
Advances for assets under construction		4 064	3 804
Other non-current assets	9	10 951	8 893
Total non-current assets		**244 246**	**247 593**
Total assets		**328 159**	**334 847**
Equity and liabilities			
Current liabilities			
Short-term borrowings	15	1 295	14 561
Trade and other payables	16	10 223	8 674
Profit tax payable	17	82	64
Other taxes payable	17	2 535	2 775
Provisions	18	3 576	3 078
Total current liabilities		**17 711**	**29 152**
Non-current liabilities			
Long-term borrowings	15	3 886	9 027
Deferred tax liabilities	19	28 951	29 810
Employee benefits	20	298	352
Trade and other payables	16	286	154
Total non-current liabilities		**33 421**	**39 343**
Total liabilities		**51 132**	**68 495**
Equity			
Share capital	21	166 124	166 124
Treasury shares	21	(871)	(871)
Share premium	21	49 213	49 213
Revaluation reserve	21	104 276	107 206
Accumulated loss and other reserves		(41 715)	(55 320)
Total equity		**277 027**	**266 352**
Total equity and liabilities		**328 159**	**334 847**

A.A. Butko
Managing director
« 6 » March 2019

E.Y. Novenkova
Chief Accountant
« 6 » March 2019

The accompanying notes on the pages 12 to 61 are an integral part of these consolidated financial statements.

PJSC MOSENERGO
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2018
(in millions of Russian Rubles)

	Notes	Year ended 31 December 2018	2017
Revenue	22	198 870	196 056
Operating expenses	23	(172 437)	(163 953)
Impairment loss on financial assets	24	(525)	(2 893)
Operating profit		**25 908**	**29 210**
Share of loss of associates	14	(314)	(355)
Profit before finance income (expense) and profit tax		**25 594**	**28 855**
Finance income	25	5 143	5 271
Finance expense	25	(3 475)	(4 014)
Profit before profit tax		**27 262**	**30 112**
Profit tax expense	19	(5 857)	(5 310)
Profit for the period		**21 405**	**24 802**
Other comprehensive income (loss):			
Remeasurement of post-employment benefit obligations	20	13	8
Effect of acquisition under common control	28,29	-	(515)
Loss arsing from change in fair value of financial assets measured at fair value through other comprehensive income		-	(16)
Impairment loss on property, plant and equipment		(2 141)	-
Total items that will not be reclassified subsequently to profit or loss		**(2 128)**	**(523)**
Other comprehensive loss for the period, net of tax		**(2 128)**	**(523)**
Total comprehensive income for the period		**19 277**	**24 279**
Profit attributable to:			
Owners of PJSC Mosenergo		21 405	24 802
		21 405	**24 802**
Total comprehensive income attributable to:			
Owners of PJSC Mosenergo		19 277	24 279
		19 277	**24 279**
Basic and diluted earnings per share for profit attributable to the owners of PJSC Mosenergo (in Russian Rubles)	26	**0,54**	**0,63**

A.A. Butko
Managing director
« 6 » March 2019

E.Y. Novenkova
Chief Accountant
« 6 » March 2019

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PJSC MOSENERGO
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 DECEMBER 2018
(in millions of Russian Rubles)

	Notes	Year ended 31 2018	2017
Cash flow from operating activities			
Profit before finance income (expense) and profit tax		**25 594**	**28 855**
Adjustments to profit before profit tax for:			
Depreciation and amortisation	23	15 177	15 117
Share of loss of associates	14	314	355
Impairment loss on financial assets	24	525	2 893
Impairment loss on non-financial assets	24	1 898	46
Change in provisions	24	274	285
(Gain) loss on disposal of property, plant and equipment	23	(225)	1 644
Total effect of adjustments		**17 963**	**20 340**
Cash flows from operations before working capital changes		**43 557**	**49 195**
Changes in working capital:			
Change in trade and other receivables		(3 064)	7 486
Change in inventories		(1 728)	(3 966)
Change in other current assets		2 119	(566)
Change in trade and other payables		1 607	(776)
Change in other taxes payables (other than profit tax)		(536)	(569)
Change in employee benefit liabilities		(62)	(17)
Total effect of working capital changes		**(1 664)**	**1 592**
Income tax paid		(5 673)	(7 178)
Interest paid		(625)	(1 542)
Net cash from operating activities		**35 595**	**42 067**
Cash flows from investing activities			
Capital expenditures		(16 675)	(15 239)
Net changes in loans issued		8 787	(10 092)
Sale of subsidiaries, net of cash disposed	28	1 214	-
Acquisition of subsidiaries, net of cash acquired		-	(16)
Proceeds from sale of property, plant and equipment		71	452
Interest received		2 897	3 182
Dividend received		-	76
Placement of short-term deposits		(10 400)	-
Repayment of short-term deposits		-	15 057
Net cash used in investing activities		**(14 106)**	**(6 580)**
Cash flow from financing activities			
Proceeds from borrowings		-	54
Repayment of borrowings		(19 384)	(21 629)
Dividend paid		(6 549)	(3 346)
Net cash used in financing activities		**(25 933)**	**(24 921)**
Effect of foreign exchange rate changes on cash and cash equivalents		37	(36)
Increase (decrease) in cash and cash equivalents		**(4 407)**	**10 530**
Cash and cash equivalents at the beginning of the period	5	20 627	10 097
Cash and cash equivalents at the end of the period	5	**16 220**	**20 627**

A.A. Butko
Managing director
« 6 » March 2019

E.Y. Novenkova
Chief Accountant
« 6 » March 2019

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PJSC MOSENERGO
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2018
(in millions of Russian Rubles)

		Equity attributable to owners of the PJSC Mosenergo					
	Notes	Share capital	Treasury shares	Share premium	Revaluation reserve	Accumulated loss and other reserves	Total
Year ended 31 December 2017							
Balance as of 1 January 2017		**166 124**	**(871)**	**49 213**	**107 442**	**(76 475)**	**245 433**
Profit for the period		-	-	-	-	24 802	24 802
Other comprehensive income (loss):							
Remeasurement of post-employment benefit obligations	20	-	-	-	-	8	8
Effect of acquisition under common control	28,29	-	-	-	-	(515)	(515)
Loss arsing from change in fair value of financial assets measured at fair value through other comprehensive income		-	-	-	-	(16)	(16)
Transfers from revaluation surplus on property, plant and equipment to accumulated loss and other reserves		-	-	-	(327)	327	-
Other		-	-	-	91	(91)	-
Total comprehensive income (loss) for the period		-	-	-	**(236)**	**24 515**	**24 279**
Transaction with owners of PJSC Mosenergo							
Dividends declared		-	-	-	-	(3 360)	(3 360)
Balance as of 31 December 2017		**166 124**	**(871)**	**49 213**	**107 206**	**(55 320)**	**266 352**
Year ended 31 December 2018							
Balance as of 1 January 2018		**166 124**	**(871)**	**49 213**	**107 206**	**(55 320)**	**266 352**
Effect of changes in accounting policies	3.21	-	-	-	-	(2 036)	(2 036)
Balance as of 1 January 2018 (restated)		**166 124**	**(871)**	**49 213**	**107 206**	**(57 356)**	**264 316**
Profit for the period		-	-	-	-	21 405	21 405
Other comprehensive income (loss):							
Remeasurement of post-employment benefit obligations	20	-	-	-	-	13	13
Impairment loss on property, plant and equipment		-	-	-	(2 141)	-	(2 141)
Transfers from revaluation surplus of property, plant and equipment to accumulated loss and other reserves		-	-	-	(789)	789	-
Total comprehensive income (loss) for the period		-	-	-	**(2 930)**	**22 207**	**19 277**
Transaction with owners of PJSC Mosenergo							
Dividends declared		-	-	-	-	(6 566)	(6 566)
Balance as of 31 December 2018		**166 124**	**(871)**	**49 213**	**104 276**	**(41 715)**	**277 027**

A.A. Butko
Managing director
« 6 » March 2019

E.Y. Novenkova
Chief Accountant
« 6 » March 2019

The accompanying notes on the pages 12 to 61 are an integral part of these consolidated financial statements.

1 The Group and its operations

1.1 Organisation and operations

Public Joint Stock Company Mosenergo (PJSC Mosenergo) and its subsidiaries (together referred to as the “Group” or the “Mosenergo Group”) are primarily involved in the generation of heat and electric power and heat distribution services in Moscow and the Moscow region.

The Group’s electric and heat generation base includes 15 power plants with operational electricity and heat capacity of 12 798 MW and 43 136 GCal/h, respectively.

PJSC Mosenergo was incorporated under the legislation of the Russian Federation on 6 April 1993 in accordance with the State Property Management Committee Decree 169-R dated 26 March 1993 as a result of privatisation of electricity and heat power generation, transmission and distribution assets formerly under control of the Ministry of Energy of the Russian Federation.

PJSC Mosenergo registered office is located at 101/3, Prospekt Vernadskogo, Moscow, 119526, the Russian Federation.

1.2 Group formation

On 1 April 2005 PJSC Mosenergo was reorganised through a spin-off following the reorganisation process within the Russian Federation electric power industry aimed to introduce competition into the electricity market and to enable the companies of the electricity sector to maintain and further expand production capacity. Restructuring of PJSC Mosenergo was approved by General Shareholder’s Meeting on 28 June 2004. Before the restructuring took place PJSC Mosenergo operated an integrated utility model, which included generation, transmission and distribution activities. As a result of the restructuring 13 new entities were separated from PJSC Mosenergo and each shareholder of PJSC Mosenergo received ordinary shares of each of the separated entities pro rata to shares held by them prior to spin-off.

The General Shareholders’ Meeting held on 20 December 2006 approved a closed subscription for the additional shares issued in favour of PJSC Gazprom and its affiliates (together referred to as the “Gazprom Group”). As a result the majority shareholder of PJSC Mosenergo changed from RAO UES of Russia to Gazprom Group holding 53,49% of ordinary shares. Following the reorganisation process, the Extraordinary General Shareholder’s Meeting of RAO UES of Russia on 26 October 2007 approved the spin-off of several holding companies to which shares in electricity generation companies, including PJSC Mosenergo, held by RAO UES of Russia, were transferred. Holdings separated from RAO UES of Russia were merged with generation companies by means of shares conversion, which enabled the shareholders of RAO UES of Russia to receive direct shares in generation companies after reorganisation. Accordingly, upon spin-off from RAO UES of Russia OJSC Mosenergo Holding received the share in PJSC Mosenergo held by RAO UES of Russia. Simultaneously with the spin-off OJSC Mosenergo Holding was merged with PJSC Mosenergo and its shares were converted into the shares of PJSC Mosenergo.

In February 2009 the Board of Directors of PJSC Mosenergo approved the program to improve the organisational structure of PJSC Mosenergo, which was aimed at concentrating production resources and optimising the labour capacity and supply chain. Organisational structure optimisation included the merger of several production branches situated geographically close to each other and reallocation and outsourcing of non-core functions.

In April 2009 PJSC Gazprom transferred its 53,49% share in PJSC Mosenergo to its 100% subsidiary LLC Gazprom energoholding which became the parent company of PJSC Mosenergo.

In May 2015 the General Shareholders Meeting decided to transfer the powers of the sole executive body of PJSC Mosenergo to management organisation LLC Gazprom energoholding.

1.3 Business environment

The economy of the Russian Federation displays certain characteristics of an emerging market. Tax, currency and customs legislation of the Russian Federation continues to develop and are a subject to varying interpretations (Note 30). During the year ended 31 December 2018 the Russian Federation economy was impacted by a fluctuation in oil prices and ongoing political tension in the region and international sanctions against certain Russian companies and individuals.

The financial markets continue to be volatile and are characterized by frequent significant price movements and increased trading spreads.

These and other events may have a significant impact on the Group's operations, its further financial position, operational results and business perspectives. The management believes it takes all the necessary measures to support the sustainability and development of the Group's business.

The consolidated financial statements reflect the management's assessment of the impact of the business environment in the Russian Federation on the operations and financial position of the Group. The future economic situation and regulatory environment may differ from the current expectations of the management.

1.4 Relations with the Government and influence on the Group activities

At the date of consolidated financial statements the Russian Federation owned (both directly and indirectly) over 50% in PJSC Gazprom, which holds 53,49% of PJSC Mosenergo through its 100% subsidiary LLC Gazprom energoholding (immediate parent company). Thus PJSC Gazprom is the parent company of the Group and the Russian Federation is the ultimate controlling party of the Group.

The Government of the Russian Federation directly affects the Group's operations through regulations of wholesale and retail sales of electricity and heat exercised by the Federal Antimonopoly Service (the "FAS") and the Department of economic policy and development of Moscow and the Committee on the prices and tariffs of the Moscow region. JSC SO UPS, which is controlled by the Russian Federation, regulates operations of generating assets of the Group.

The Group's customer base, as well as its supply chain, includes a large number of entities controlled by or related to the Government.

The Government's economic, social and other policies could materially affect operations of the Group.

1.5 Industry restructuring

Following the restructuring of the Russian Federation electric utility sector aimed to introduce competition into the electricity (capacity) market, the New Wholesale Electric Power (capacity) Market Rules of the Transitional period, approved by Resolution of the Government of the Russian Federation № 529 dated 31 August 2006, were adopted. Under these rules, electricity and capacity purchase-sales transactions in the regulated market sector are to be governed by a regulated bilateral contract system. From 1 September 2006 regulated contracts covered all volumes of electricity and capacity produced and consumed.

Starting from 2007 the volumes of electricity and capacity traded in the wholesale market applying regulated prices are to be substantially reduced pursuant to the Russian Federation Government Resolution No. 205 dated 7 April 2007 "On amending certain resolutions of the Russian Federation Government related to the calculation of electricity volumes sold at free (competitive) prices". The Resolution states that electricity and capacity supplied at regulated prices will gradually decrease.

Electricity volumes produced, not covered by the regulated contracts are traded at unregulated prices on the basis of free bilateral contracts or on a day-ahead market.

Under free bilateral contracts market participants have the right to choose contracting parties, prices and volumes. The day-ahead market is based on competitive selection of bids submitted by suppliers and buyers the day before the electricity is supplied.

Starting from 2011 electricity and capacity (except for supplies to the population and equivalent consumer categories under regulated contracts) has been supplied at unregulated prices. Electricity is supplied at free prices on the day-ahead market and balancing market while capacity is supplied based on competitive capacity selection under the contracts for sales of capacity. Furthermore, separate contracts are concluded for capacity, which is generated by assets operating under forced mode and traded at tariffs approved by the

FAS. Non-regulated bilateral contracts for supply of electricity and capacity may be also concluded. Agreements for the provision of facilities provide on the one hand the obligations for suppliers to implement approved investment programs, and on the other hand give a guarantee of payment capacity of the new (upgraded) generating facilities from the Government of the Russian Federation.

2 Basis of preparation

2.1 Statement of compliance

These consolidated financial statements have been prepared in accordance with, and comply with, International Financial Reporting Standards ("IFRS").

2.2 Basis of measurement

The consolidated financial statements are prepared on the historical cost basis except for property, plant and equipment revalued periodically; investment property and assets held for sale are measured at fair value; and the carrying amounts of equity items in existence at 31 December 2002 included adjustments for the effects of hyperinflation, which were calculated using conversion factors derived from the Russian Federation Consumer Price Index published by the Russian Statistics Agency. The economy of the Russian Federation ceased to be hyperinflationary for purposes of preparing the consolidated financial statements at 1 January 2003.

The methods used to measure fair values are described below (Note 2.4).

2.3 Functional and presentation currency

The national currency of the Russian Federation is the Russian Ruble (RUB), which is the Group's functional currency and the presentation currency of these consolidated financial statements. All financial information presented in RUB has been rounded to the nearest million unless otherwise stated.

2.4 Use of estimates and judgment

In the preparation of the consolidated financial statements the management applied a number of judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses, recognised in the consolidated financial statements. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed by the management on an ongoing basis. Changes in accounting estimates are recognised in the period in which the estimates were revised and in each subsequent period such changes have an impact on the consolidated financial statements.

Information about the most significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements is included in the following Notes:

- Note 4 – segment information;
- Note 6 – lack of significant influence on the activities of organisation;
- Note 11 – impairment of property, plant and equipment: key assumptions underlying recoverable amounts;
- Note 20 – measurement of defined benefit obligation: key actuarial assumptions;
- Notes 18, 30 – recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of an outflow.

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly;

Level 3 – unobservable inputs for the asset or liability.

If the inputs used to measure the fair value might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Information about the assumptions made in measuring fair values is disclosed in the following Notes:

- Note 6 – Financial assets;
- Note 10 – Assets held for sale;
- Note 11 – Property, plant and equipment;
- Note 12 – Investment property;
- Note 32 – Fair value of financial instruments.

3 Significant accounting policies

3.1 Basis of consolidation

3.1.1 Subsidiaries

Subsidiaries are those investees that the Group controls because the Group (i) has power to direct relevant activities of the investees that significantly affect their returns, (ii) has exposure, or rights, to variable returns from its involvement with the investees, and (iii) has the ability to use its power over the investees to affect the amount of investor's returns. The existence and effect of substantive rights, including substantive potential voting rights, are considered when assessing whether the Group has power over another entity.

For a right to be substantive, the holder must have practical ability to exercise that right when decisions about the direction of the relevant activities of the investee need to be made. The Group may have power over an investee even when it holds less than majority of voting power in an investee. In such a case, the Group assesses the size of its voting rights relative to the size and dispersion of holdings of the other vote holders to determine if it has de-facto power over the investee. Subsidiaries are consolidated from the date on which control is transferred to the Group and are deconsolidated from the date on which control ceases.

The Group measures non-controlling interest that represents present ownership interest and entitles the holder to a proportionate share of net assets in the event of liquidation, on a transaction by transaction basis at the non-controlling interest's proportionate share of net assets of the acquiree. Non-controlling interests that are not present ownership interests are measured at fair value.

Non-controlling interest is that part of the net results and of the equity of a subsidiary attributable to interests which are not owned, directly or indirectly, by PJSC Mosenergo. Non-controlling interest forms a separate component of the Group's equity.

3.1.2 Acquisition of subsidiaries under common control

Acquisition of subsidiaries between parties under common control is accounted for using the predecessor basis of accounting method. Under this method the assets and liabilities of the subsidiary transferred under common control are recognised at the predecessor entity's carrying amounts. The consolidated financial statements incorporate the acquired entity's results from the acquisition date. The corresponding figures of the previous period are not restated. The predecessor entity is considered to be the highest reporting entity in which the IFRS subsidiary's financial statement was consolidated. Any difference between the carrying amount of net assets, including the predecessor entity's goodwill, and the consideration for the acquisition is accounted for in the consolidated financial statements within other comprehensive income.

3.1.3 Associates

Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Associates are accounted for using the equity method and are recognised initially at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment losses. Other post-acquisition changes in Group's share of net assets of an associate are recognised as follows: the Group's share of profits or losses of associates is recorded in the consolidated profit or loss for the period as share of income (loss) of associates, the Group's share of other comprehensive income is recognised in other comprehensive income and presented separately, all other changes in the Group's share of the carrying value of net assets of associates are recognised in profit or loss within the share of income (loss) of associates. When the Group's share of losses of associates accounted for using the equity method exceeds its interest in an equity accounted investee, the carrying amount of that interest (including any long-term investments) is reduced to nil and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has made payments on behalf of the investee.

3.1.4 Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised gains and losses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with associates are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

3.2 Foreign currency transactions

Transactions in foreign currencies are translated into the functional currency of the Group entities at exchange rates effective at the dates of their commission. Monetary items in foreign currency are translated at the exchange rate at the balance sheet date. Non-monetary items that are measured at historical cost in a foreign currency are translated at the exchange rate at the date of the transaction. Non-monetary items that are measured at fair value in a foreign currency are translated at the exchange rate at the date of the fair value measurement.

Foreign exchange differences arising on translation are recognized in profit or loss, except for exchange differences arising from the translation of the value of financial assets that are subsequently measured at fair value, the changes of which are recognized in other comprehensive income. Such exchange differences are recognized in other comprehensive income.

3.3 Financial instruments

Financial assets and financial liabilities admit when the Group becomes party to the contractual provisions of the instrument.

The Group derecognises a financial asset when, and only when the contractual rights to the cash flows from the financial asset expire, or when the entity transfers substantially all the risks and rewards of ownership of the financial asset.

The Group derecognises a financial liability when and only when, it is extinguished when the obligation specified in the contract is discharged or cancelled or expires.

Except for trade receivables do not contain a significant financing component in accordance with IFRS 15 Revenue from Contracts with Customers at initial recognition, an entity shall measure a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability

3.3.1 Classification and measurement of financial assets

The Group classifies financial assets into three measurement categories:

- those measured subsequently at amortised cost,
- those measured subsequently at fair value with changes recognised in other comprehensive income,
- and those measured subsequently at fair value with changes recognised in profit or loss.

Classification of financial assets one or another category takes place on the basis of the business model used by Group for management of the financial assets connected with the cash flows provided by the contract.

Financial assets measured subsequently at amortised cost

Such category of financial assets includes assets held to obtain contractual cash flows and it is expected that they will result in cash flows being payments of principal and interest.

The loans issued, receivables, deposits, cash and cash equivalents belong to this category of financial assets of the Group. The loans issued and receivables include financial assets with the fixed or determinable payments that are not quoted in an active market. After initial recognition the loans issued and receivables are estimated at the amortised cost using the effective interest method.

Cash and cash equivalents include cash on hand, banks accounts and highly liquid financial assets with original maturity no more than three months.

Financial assets measured subsequently at fair value with changes recognised in other comprehensive income

Such category of financial assets includes debt-type assets held within business models whose objective is achieved by both collecting contractual cash flows and selling financial assets and it is expected that they will result in cash flows being payments of principal and interest. Gains and losses associated with this category of financial assets are recognised in other comprehensive income, except for impairment gains or losses, interest income and foreign exchange gains and losses, which are recognised in profit or loss. When a financial asset is disposed of, cumulative previous gain or loss that has been recognised in other comprehensive income is reclassified from equity to profit or loss in the consolidated statement of comprehensive income. Interest income from these financial assets is calculated using the effective interest method and included in financial income.

The Group's management has made a decision to recognise changes in fair value of equity instruments in other comprehensive income as such assets are considered to be long-term strategic investments which are not expected to be sold in the short and medium term. Other comprehensive income (loss) from changes in fair value of such instruments shall not be subsequently reclassified to profit or loss in the consolidated statement of comprehensive income.

Financial assets measured subsequently at fair value with changes recognised through profit or loss

Financial assets that do not meet the criteria of recognition as financial assets measured at amortised cost or measured at fair value through other comprehensive income are measured at fair value through profit or loss.

3.3.2 Impairment of financial assets

The Group applies the expected credit loss model to financial assets measured at amortised cost or at fair value through other comprehensive income, except for investments in equity instruments, and to contract assets.

The allowance for expected credit losses for a financial asset is measured at an amount equal to the lifetime expected credit losses if the credit risk on that financial asset has increased significantly since initial recognition.

If, at the reporting date, the credit risk on a financial asset has not increased significantly since initial recognition, the allowance for expected credit losses for that financial asset is measured at an amount equal to 12-month expected credit losses.

For trade receivables or contract assets, whether they contain a significant financing component or not, measurement based on lifetime expected credit losses are applied.

The applying of the new model resulted in insignificant increase in the amount of the allowance for expected credit losses.

The expected credit losses represent calculation appraisal of the credit losses throughout the expected period of validity of a financial instrument measured on degree of probability of approach of a default. As the expected credit losses consider the amount and date of disbursement, the credit loss also arises if the Group expects to receive all amounts in full, than it is provided by the contract.

The Group estimates the expected credit losses in this way:

- the impartial and measured based on probability amount determined by the analysis of range of possible results,
- time value of money,
- and the proved and confirmed information on previous events, the current conditions and the predicted future business environment available for reporting date without excessive costs.

3.3.3 Classification and measurement of financial liabilities

The Group classifies all financial liabilities as measured subsequently at amortised cost. The Group's financial liabilities include trade and other payables and borrowings.

3.4 Share capital

Ordinary shares. Ordinary shares are classified as equity. Incremental costs directly attributable to issue of ordinary shares and share options are recognised as a deduction from equity, net of any tax effects.

Evaluation of own repurchased shares is made at cost.

Repurchase of share capital (treasury shares). When share capital recognised as equity is repurchased, the amount of the consideration paid which includes directly attributable costs, is net of any tax effects, and is recognised as a deduction from equity. Repurchased shares are disclosed in the consolidated statement of financial position in the line Treasury shares in the amount of the consideration paid, including the costs directly related to this transaction.

When treasury shares are sold or reissued subsequently, the amount received is recognised as an increase in equity, and the resulting surplus or deficit on the transaction is transferred to retained earnings (accumulated loss).

3.5 Property, plant and equipment

3.5.1 Recognition and measurement

Property, plant and equipment are stated at revalued amounts, which are the fair value at the date of revaluation, less any subsequent accumulated depreciation and impairment losses.

Property, plant and equipment are subject to revaluation on a regular basis to ensure that the carrying amount does not differ materially from that, which would be determined using fair value at the reporting date. Increase in the carrying amount of property, plant and equipment as a result of revaluation is credited directly to other comprehensive income under the heading “Asset revaluation surplus”, unless the decrease of the reserve was previously recognised in profit or loss. Decrease in the carrying amount shall be debited to other comprehensive income to the extent of any credit balance existing in the revaluation reserve. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset, and the net amount is restated to the revaluated amount of the asset.

The tax effects from the revaluation of property, plant and equipment are recognised in other comprehensive income and accumulated in equity.

Cost of acquired assets includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials, staff costs and any other expenses directly attributable to bringing the asset to a working condition for its intended use, and the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Borrowing costs that are directly attributable to the acquisition or construction of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset.

The commencement date for capitalisation is when (a) the Group incurs expenditures for the qualifying asset; (b) it incurs borrowing costs, and (c) it undertakes activities that are necessary to prepare the asset for its intended use or sale.

Capitalisation of borrowing costs continues up to the date when the assets are substantially ready for their use or sale.

The Group capitalises borrowing costs that could have been avoided if it had not made capital expenditure on qualifying assets. Borrowing costs capitalised are calculated at the funding cost of PJSC Mosenergo (the weighted average interest cost is applied to the expenditures on the qualifying assets), except to the extent that funds are borrowed specifically for the purpose of obtaining a qualifying asset. Where this occurs, actual borrowing costs incurred less any investment income on the temporary investment of those borrowings are capitalised.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are recognised net in the line “Other operating expenses (income)” in operating expenses. Increase in the carrying amount as a result of revaluation is transferred from the revaluation surplus to retained earnings (accumulated loss) when the assets are disposed.

(in millions of Russian Rubles)

3.5.2 Reclassification to investment property

When the use of property changes from owner-occupied to investment property, the property is remeasured to fair value and reclassified as investment property. Any gain arising on remeasurement is recognised in profit or loss to the extent the gain reverses previous impairment loss on a specific property, with any remaining gain recognised in the revaluation reserve directly in other comprehensive income. Any revaluation loss is recognised in the revaluation reserve directly in other comprehensive income to the extent that an amount of revaluation is included in other comprehensive income relating to a specific property, with any remaining loss recognised immediately in profit or loss.

3.5.3 Subsequent costs

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of ordinary maintenance of property, plant and equipment are recognised in the profit or loss as incurred.

3.5.4 Depreciation

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each item of property, plant and equipment. Leased assets under finance lease are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of lease term. Depreciation of an asset begins when it is available for use.

Depreciation methods, useful lives and residual values are reviewed at each reporting date.

As part of revaluation as of 31 December 2018 useful lives of certain classes of property, plant and equipment were revised and were as follows:

Types of property, plant and equipment	Useful life, years
Buildings and constructions	30 - 70
Plant and equipment	25 - 40
Transmission networks	30
Other	5 - 25

3.6 Intangible assets

3.6.1 Goodwill

Goodwill is measured by deducting the net assets of the acquiree from the aggregate of the consideration transferred for the acquiree, the amount of non-controlling interest in the acquiree and fair value of an interest in the acquiree held immediately before the acquisition date. Any negative amount ("negative goodwill") is recognised in profit or loss, after management reassesses whether it identified all the assets acquired and all liabilities and contingent liabilities assumed and reviews appropriateness of their measurement.

The consideration transferred for the acquiree is measured at the fair value of the assets given up, equity instruments issued and liabilities incurred or assumed, including fair value of assets or liabilities from contingent consideration arrangements but excludes acquisition related costs such as advisory, legal, valuation and similar professional services. Transaction costs related to the acquisition and incurred for issuing equity instruments are deducted from equity; transaction costs incurred for issuing debt as part of the business combination are deducted from the carrying amount of the debt and all other transaction costs associated with the acquisition are expensed.

Goodwill is carried at cost less accumulated impairment losses, if any. The Group tests goodwill for impairment at least annually and whenever there are indications that goodwill may be impaired. Goodwill is allocated to the cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the business combination. Such units or groups of units represent the lowest level at which the Group monitors goodwill and are not larger than an operating segment.

3.6.2 Other intangible assets

Other intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

3.6.3 Subsequent expenditures

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

3.6.4 Amortisation

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use. The estimated useful lives of the software for the current and comparative periods equal to 7 years.

3.7 Investment property

Investment property is property or construction in progress held or constructed either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business, use in the production or supply of goods or services or for administrative purposes. Investment property is initially recognised at cost, including transaction costs, and subsequently remeasured at fair value updated to reflect market conditions at the end of each reporting period. Any change in fair value is recognised in profit or loss.

When the use of a property changes such that it is reclassified as property, plant and equipment, its fair value at the date of reclassification becomes its cost for subsequent accounting.

When the carrying amount of property is to be recovered principally through a sale transaction rather than through continuing use the property is remeasured to fair value and reclassified as assets held for sale. A gain or loss on the remeasurement recognised in profit or loss.

3.8 Leased assets

Leases in terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

3.9 Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the weighted average cost principle, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

3.10 Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets ("cash-generating unit"). To calculate the recoverable amount in respect of a specific group of assets, the Group uses the fair value method, based on the possibility of alternative use. The goodwill acquired in a business combination, for the purpose of impairment testing, is allocated to cash-generating units that are expected to benefit from the synergies of the combination.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognised in other comprehensive income if revaluation reserve existing to such assets, otherwise in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amounts of the other assets in the unit (groups of units) on a pro rata basis.

Assets held for sale

Assets that are expected to be recovered primarily through sale rather than through continuing use are classified as held-for-sale. Before classification as held-for-sale, the assets are remeasured in accordance with the Group's accounting policies. Thereafter generally the assets are measured at the lower of their carrying amount and fair value less cost to sell. Any impairment loss on a disposal group of assets is allocated to remaining assets and liabilities on a pro rata basis, except that no loss is allocated to inventories, financial assets, deferred tax assets, investment property and biological assets, which continue to be measured in accordance with the Group's accounting policies. Impairment losses are recognised in the revaluation reserve directly in other comprehensive income to the extent that an amount of revaluation is included in other comprehensive income relating to a specific property, with any remaining loss recognised immediately in profit or loss. Revaluation gains cannot exceed accumulated impairment loss.

Liabilities directly associated with the disposal group that will be transferred in the disposal transaction are reclassified and presented separately in the line "Liabilities held for sale" of the consolidated statement of financial position.

3.11 Employee benefits

3.11.1 Defined contribution pension plans

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

3.11.2 Defined benefit plans

A defined benefit plan is a pension plan that is not a defined contribution plan. Defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

The net value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited in other comprehensive income in the period in which they arise.

Current service cost, interest on employee benefit obligations, past service cost, effect of curtailment and settlement are recognised in profit or loss.

3.11.3 Other long-term employee benefits

The Group's net obligation in respect of long-term employee benefits other than pension plans is amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any related assets is deducted. The discount rate is the yield at the reporting date on Russian government bonds that have maturity dates approximating the terms of the Group's obligations. The calculation is performed using the projected unit credit method. Any actuarial gains or losses are recognised in profit or loss in the period in which they arise.

3.11.4 Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the Group recognises costs for a restructuring that is within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than twelve months after the end of the reporting period are discounted to their present value.

3.11.5 Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

3.12 Provisions

Provisions are recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

3.13 Segment reporting

Operating segments are reported in the consolidated financial statements in a manner consistent with the internal reporting provided to the Chief operating decision-maker. The Chief operating decision-maker responsible for allocating resources and assessing performance of the operating segments has been identified as the Board of Directors and Managing Director who makes strategic decisions.

3.14 Revenues

Revenue is recognized when the Group fulfils the obligation to perform by transferring the promised product or service to the customer. An asset is transferred when the buyer receives control of such an asset.

Revenues are recognized in the amount of reimbursement that the Group expects to receive in return for the transfer of the promised goods or services to the customer.

Revenue from the sale of electricity and heat is recognized at the time the electricity and heat are supplied to consumers.

Revenue under contracts for the provision of services and performance of work is recognized in profit or loss in the part that relates to the completed stage of services and works under the contract as of the reporting date. The stage of completeness is defined as the share of expenses under the contract incurred in connection with the performance of services and works completed at the reporting date in the total planned amount of the contract costs.

The proceeds from the leasing of property are recognized evenly throughout the term of the lease in profit or loss.
Revenue from the sale of goods other than electrical and heat energy is recognized at the time of delivery. The ordinary conditions for settlements with customers include payment upon delivery.

3.15 Government subsidies

Government subsidies are assistance by the Government in the form of transfers of resources to PJSC Mosenergo in return for past or future compliance with certain conditions relating to the operating activities of PJSC Mosenergo.

Government subsidies are recognised initially as deferred income when there is reasonable assurance that they will be received and that the Group will comply with the conditions associated with the subsidy. Subsidies that compensate the Group for expenses incurred are recognised in consolidated statement of comprehensive income on a systematic basis in the same periods in which the expenses are recognised. Government subsidies that compensate for the Group’s cost of an asset are the recognised in the profit or loss on a systematic basis over the useful life of the asset. Unconditional government subsidies are recognised in profit or loss when subsidy becomes receivable. Government subsidies for the compensation of the difference between tariffs set to the urban population and the tariffs of PJSC Mosenergo are recognised as income in other operating income under the line “Operating expense”.

3.16 Lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received reduce the total lease expense, over the term of the lease.

Minimum lease payments made under finance leases are apportioned between the financial expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

3.17 Finance income and expense

Finance income comprises interest income on funds invested, dividend income, unwinding of the discount on financial. Interest income is recognised as it accrues in profit or loss, using the effective interest method. Dividend income is recognised in profit or loss on the date that the Group’s right to receive payment is established.

Finance expense comprises interest expense on borrowings, unwinding of the discount on financial obligations. All borrowing costs are recognised in profit or loss using the effective interest method except for those which are capitalised.

Gains and losses on exchange differences on operating items are reflected in the operating expenses on net basis, and others – are separately in financial income and expenses.

3.18 Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in profit or loss except to the extent that it relates to items recognised in other comprehensive income, in which case it is recognised in other comprehensive income.

Current tax is the expected tax payable on the taxable profit for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous periods.

Deferred tax is recognised using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and associates to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognised for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(in millions of Russian Rubles)

3.19 Uncertain tax positions

The Group's uncertain tax positions are reassessed by the Management of the Group at the end of each reporting period. Liabilities are recorded for income tax positions that are determined by the Management as more likely than not to result in additional taxes being levied if the positions were to be challenged by the tax authorities. The assessment is based on the interpretation of tax laws that have been enacted or substantively enacted by the end of the reporting period, and any known court or other rulings on such issues. Liabilities for penalties, interest and taxes other than on income are recognised based on the Management's best estimate of the expenditure required to settle the obligations at the end of the reporting period.

3.20 Earnings per share

The Group presents basic and diluted earnings (loss) per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit (loss) attributable to ordinary shareholders of PJSC Mosenergo by the weighted average number of ordinary shares outstanding during the period. Diluted EPS is determined by adjusting profit (loss) attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all dilutive potential ordinary shares, which comprise convertible notes and share options granted to employees. There are no dilutive potential ordinary shares in the Group as of 31 December 2018 and 31 December 2017.

3.21 Adoption of new or revised standards and interpretations

3.21.1 Application of new IFRSs

IFRS 9 Financial Instruments

Application of this standard resulted in an increase in the allowance for impairment loss on financial assets (see Note 7), as well as a decrease in the fair value of the investment in equity instruments (see Note 6), so the opening balance of the accumulated loss and other reserves as of 1 January 2018 was restated.

	Balance as of 1 January 2018	Effect of application of IFRS 9	Adjusted balance as of 1 January 2018
Accumulated loss and other reserves	(55 320)	(2 036)	(57 356)
Total equity	**266 352**	**(2 036)**	**264 316**

IFRS 15 Revenue from Contracts with Customers

Application of this standard has not had a significant impact on the Group's consolidated financial statements. Accordingly, the comparative data and the opening balance of the accumulated loss and other reserves as of 1 January 2018 have not been restated.

3.21.2 Application of Interpretations and Amendments to existing Standards

A number of interpretations and amendments to current IFRSs became effective for the periods beginning on or after 1 January 2018:

- IFRIC 22 Foreign Currency Transactions and Advance Consideration (issued in December 2016) provides requirements for recognising a non-monetary asset or a non-monetary obligation arising from a result of committing or receiving prepayment until the recognition of the related asset, income or expense.
- The amendments to IFRS 2 Share-based Payment (issued in June 2016). These amendments clarify accounting for a modification to the terms and conditions of a share-based payment and for withholding tax obligations on share-based payment transactions.
- The amendments to IAS 40 Investment Property (issued in December 2016). These amendments clarify the criteria for the transfer of objects in the category or from the category of investment property.

The Group has reviewed these interpretations and amendments to standards while preparing consolidated financial statements. The interpretations and amendments to standards have no significant impact on the Group’s consolidated financial statements.

3.21.3 Standards, Interpretations and Amendments to existing Standards that are not yet effective and have not been early adopted by the Group

Certain new standards, interpretations and amendments have been issued that are mandatory for the annual periods beginning on or after 1 January 2019. In particular, the Group has not early adopted the standards and amendments:

- IFRS 16 Leases (issued in January 2016 and effective for annual periods beginning on or after 1 January 2019). The new standard replaces the previous IAS 17 Leases and establishes a general accounting model for all types of lease agreements in financial statements. All leases should be accounted in accordance with applicable principles of the financial lease accounting. Lessees are required to recognise assets and liabilities under lease agreements except cases specifically mentioned. Insignificant changes in the applicable accounting required IAS 17 Leases are implemented for lessors.
  According to initially estimates of the Group as of 1 January 2019 non-recurrent increase in non-current assets and financial liabilities will be within 1,50% of assets of the Group.
- IFRIC 23 Uncertainty over Income Tax Treatments (issued in June 2017 and effective for annual periods beginning on or after 1 January 2019) provides requirements in respect of recognising and measuring of a tax liability or a tax asset when there is uncertainty over income tax treatments.
- The amendments to IAS 28 Investments in Associates and Joint Ventures (issued in October 2017 and effective for annual periods beginning on or after 1 January 2019). These amendments clarify that long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture should be accounted in accordance with IFRS 9 Financial Instruments.
- The amendments to IAS 23 Borrowing Costs (issued in December 2017 and effective for annual periods beginning on or after 1 January 2019). These amendments clarify which borrowing costs are eligible for capitalisation in particular circumstances.
- Amendments to IFRS 3 Business Combinations and IFRS 11 Joint Arrangements (issued in December 2017 and effective for annual periods beginning on or after 1 January 2019). The changes specify how control (or joint control) should be taken into account for a business that is a joint operation if the organization already participates in this business.
- The amendments to IFRS 9 Financial Instruments (issued in October 2017 and effective for annual periods beginning on or after 1 January 2019). These amendments enable to measure at amortised cost some prepayable financial assets with negative compensation.
- The amendments to IAS 12 Income taxes (issued in December 2017 and effective for annual periods beginning on or after 1 January 2019). These amendments clarify income tax consequences of payments on instruments classified as equity.

- The amendments to IAS 19 Employee Benefits (issued in February 2018 and effective for annual periods beginning on or after 1 January 2019). The amendments clarify the accounting when a plan amendment, curtailment or settlement occurs.
- The amendments to IFRS 3 Business Combinations (issued in October 2018 and effective for annual periods beginning on or after 1 January 2020). These amendments clarify the definition of a business and simplify assessment of whether an acquired set of activities and assets is a group of assets rather than a business.

The Group is currently assessing the impact of the amendments on its financial position and results of operations.

4 Segment information

The Board of Directors and Managing Director is the Chief operating decision-maker. The decision-maker reviews the Group’s internal management report in order to assess performance of the Group and allocate resources.

The operating segments are aggregated into two primary reportable segments - electric and heat energy, that generate revenue from manufacturing and sale of electric and heat energy respectively. The other segments consist of services and products sold by the Group such as rental services, feed water sales and maintenance services. All reportable segments are located in the Russian Federation.

The segment information is prepared in accordance with IFRS. Differences in items between those reported in the segment information and those reported in the Group`s consolidated financial statements are due to the unallocated items of income and expense (such as financial income and expense, share of income (loss) of associates, income tax) that cannot be directly allocated to identifiable reportable segments as these are managed on an overall group basis.

Considering that the management responsible for decision-making does not review assets and liabilities by each reportable segment not least because of the lack of technical capabilities to present such information, the Group does not disclose assets and liabilities by segments.

(in millions of Russian Rubles)

4.1 Financial results of segments

The segment information for the year ended 31 December 2018 and 31 December 2017 is as follows:

	Notes	Electric energy	Heat energy	All other segments	Total	Intra-group transactions	Total
Year ended 31 December 2018							
Segment revenue		**116 444**	**79 972**	**3 286**	**199 702**	**(832)**	**198 870**
Revenue from external customers	22	116 444	79 954	2 472	198 870	-	**198 870**
Intra-group revenue		-	18	814	832	(832)	-
Segment result		**29 054**	**(1 171)**	**(495)**	**27 388**	-	**27 388**
Depreciation and amortisation	23	(7 520)	(6 332)	(1 325)	(15 177)	-	**(15 177)**
Impairment gain (loss) on financial assets	24	(1 296)	412	359	(525)	-	**(525)**
Year ended 31 December 2017							
Segment revenue		**118 914**	**75 215**	**2 495**	**196 624**	**(568)**	**196 056**
Revenue from external customers	22	118 914	75 200	1 942	196 056	-	**196 056**
Intra-group revenue		-	15	553	568	(568)	-
Segment result		**34 516**	**(3 390)**	**(1 564)**	**29 562**	-	**29 562**
Depreciation and amortisation	23	(7 491)	(6 345)	(1 281)	(15 117)	-	**(15 117)**
Impairment loss on financial assets	24	(1 565)	(952)	(376)	(2 893)	-	**(2 893)**

Reconciliation of the segment result to the profit before profit tax in the consolidated statement of comprehensive income for the year ended 31 December 2018 and 31 December 2017 is provided as follows:

	Notes	Year ended 31 December 2018	2017
Segment result for reportable segments		27 883	31 126
Segment result for other segments		(495)	(1 564)
Segment result		**27 388**	**29 562**
Impairment loss on property, plant and equipment	24	(1 933)	-
Change in provisions	24	(274)	(285)
Allowance for inventory obsolescence	24	(15)	(46)
Net financial income	25	1 668	1 257
Share of loss of associates	14	(314)	(355)
Other items		742	(21)
Profit before profit tax		**27 262**	**30 112**

4.2 Core customers

The revenue presented within the heat energy segment includes the customer with the revenue exceeding 10% of the Group`s revenue for year ended 31 December 2018 and amounting to RUB 74 891 million (for year ended 31 December 2017: the revenue of the same customer exceeded 10% of the Group`s revenue and amounted to RUB 67 350 million).

The revenue presented within the electric energy segment includes two customers with the total revenue exceeding 10% of the Group`s revenue for year ended 31 December 2018 and amounting to RUB 76 017 million (for year ended 31 December 2017: the total revenue of the same two customers exceeded 10% of the Group`s revenue and amounted to RUB 79 605 million).

5 Cash and cash equivalents

	31 December 2018	31 December 2017
Cash on hand and bank balances payable on demand	186	391
Deposits with original maturity of three months or less	16 034	20 236
Total cash and cash equivalents	**16 220**	**20 627**

(in millions of Russian Rubles)

6 Financial assets

	31 December 2018	31 December 2017
Financial assets measured subsequently at amortised cost		
Deposits	10 400	-
Total short-term financial assets	**10 400**	**-**
Financial assets at fair value through other comprehensive income:		
Equity securities	1 490	3 154
Total long-term financial assets	**1 490**	**3 154**

The Group's exposure to credit, currency and interest risks is disclosed in Note 31.

As of 31 December 2018 financial assets measured at fair value through other comprehensive income include investment in LLC GAZEKS-Management in the amount of RUB 1 485 million that was received in settlement for accounts receivable in October 2013 (as of 31 December 2017: RUB 3 149 million).

In connection with the entry into force of the new IFRS 9, fair value of the investment in LLC GAZEKS-Management was defined in the amount of RUB 1 485 million based on an analysis of net assets and the present value of future cash flows (as of 31 December 2017: RUB 3 149 million).

The management assessed the level of the Group's influence on LLC GAZEKS-Management, and concluded that despite holding 33,3% of shares the Group has no significant influence due to the following factors:

- The Group does not have any representative in the LLC GAZEKS-Management Board of Directors and does not have a right to appoint them;
- The Group does not participate in LLC GAZEKS-Management policy-making decisions including participate in managerial decisions;
- The Group does not enter into significant transactions with LLC GAZEKS-Management, there is no interchange of managing personnel between the PJSC Mosenergo and LLC GAZEKS-Management and there is no sharing of technical information between the companies.

(in millions of Russian Rubles)

7 Trade and other receivables

	31 December 2018	31 December 2017
Current assets		
Trade receivables	45 836	41 413
Loans issued	2 167	11 358
Advances to suppliers and prepaid expenses	1 757	2 324
VAT recoverable	284	61
Tax prepayments other than income tax	237	164
Accounts receivable on investments	2 816	6 965
Accounts receivable on disposal of property, plant and equipment	2 210	2 078
Other receivables	1 583	2 411
	56 890	**66 774**
Allowance for impairment loss on financial and non-financial assets	(16 376)	(15 144)
Total	**40 514**	**51 630**
Non-current assets		
Trade receivables	33	-
Loans issued	10 489	10 494
Advances to suppliers and prepaid expenses	-	139
Accounts receivable from sale of property, plant and equipment	1 465	1 781
Accounts receivable on investments	2 784	-
Other receivables	1 035	168
Total	**15 806**	**12 582**

Allowance for impairment loss on financial and non-financial assets includes allowance for impairment loss on trade receivables (as of 31 December 2018: RUB 15 245 million, as of 31 December 2017: RUB 13 936 million), other receivables (as of 31 December 2018: RUB 276 million; as of 31 December 2017: RUB 330 million) and advances paid to suppliers (as of 31 December 2018: RUB 855 million; as of 31 December 2017: RUB 878 million).

The Group's exposure to credit and currency risks and impairment losses related to trade and other receivables is disclosed in Note 31.

8 Inventories

	31 December 2018	31 December 2017
Materials and supplies	13 928	13 995
Other inventories	121	59
	14 049	**14 054**
Allowance for inventory obsolescence	(234)	(555)
Total	**13 815**	**13 499**

The Group does not have pledged inventories.

(in millions of Russian Rubles)

9 Other current and non-current assets

	31 December 2018	31 December 2017
Other current assets		
Service contracts and other assets	2 049	822
Grid connection	633	633
Total	**2 682**	**1 455**
Other non-current assets		
Grid connection	6 649	7 276
Service contracts and other assets	4 302	1 617
Total	**10 951**	**8 893**

10 Assets held for sale

	2018	2017
Balance as of 1 January	**43**	**445**
Transfer to (from) assets classified as held for sale	26	(56)
Impairment loss	(26)	(170)
Other disposals	-	(176)
Balance as of 31 December	**43**	**43**

As of 31 December 2018 and as of 31 December 2017 the Group was in the process of disposing of non-core assets, comprising property, plant and equipment and investment property classified as held for sale. The Group expects to sale these items until the end of 2019.

The fair value measurement for assets held for sale is categorised as a Level 3 fair value (Note 2).

The following table shows the valuation technique used in measuring the fair value, as well as the significant unobservable inputs used.

Valuation method	Observable indicators
Cost approach	Replacement cost and index method
Income approach	Forecast profit and loss, and cash flows
Market approach	Market prices for identical assets

(in millions of Russian Rubles)

11 Property, plant and equipment

	Buildings and construc-tions	Machinery and equipment	Transmis-sion networks	Other	Construc-tion in progress	Total
Revalued amount						
Balance as of 1 January 2017	**123 548**	**129 718**	**1 234**	**16 823**	**27 853**	**299 176**
Additions	10	70	3	181	8 522	8 786
Disposals and other	(58)	(70)	(82)	(159)	(1 444)	(1 813)
Transfers	2 276	8 806	3 835	4 168	(19 085)	-
Transfer from (to) other accounts	258	88	(4)	499	4	845
Acquisition of subsidiaries	451	9	-	19	-	479
Balance as of 31 December 2017	**126 485**	**138 621**	**4 986**	**21 531**	**15 850**	**307 473**
Balance as of 1 January 2018	**126 485**	**138 621**	**4 986**	**21 531**	**15 850**	**307 473**
Additions	155	1 145	-	146	12 073	13 519
Disposals and other	(29)	(694)	(7)	(69)	(1 470)	(2 269)
Transfers	1 946	4 029	91	2 095	(8 161)	-
Transfer from (to) other accounts	(10)	(213)	827	80	-	684
Balance as of 31 December 2018	**128 547**	**142 888**	**5 897**	**23 783**	**18 292**	**319 407**
Depreciation and impairment						
Balance as of 1 January 2017	**(27 202)**	**(38 895)**	**(322)**	**(6 425)**	**(3 673)**	**(76 517)**
Depreciation charge	(4 838)	(8 259)	(61)	(1 763)	-	(14 921)
Transfers	(278)	(795)	(682)	(627)	2 382	-
Disposals and other	13	25	17	46	44	145
Transfer from (to) other accounts	(30)	(49)	4	(102)	(1)	(178)
Acquisition of subsidiaries	(4)	(2)	-	(2)	-	(8)
Balance as of 31 December 2017	**(32 339)**	**(47 975)**	**(1 044)**	**(8 873)**	**(1 248)**	**(91 479)**
Balance as of 1 January 2018	**(32 339)**	**(47 975)**	**(1 044)**	**(8 873)**	**(1 248)**	**(91 479)**
Depreciation charge	(4 725)	(7 955)	(624)	(1 639)	-	(14 943)
Transfers	(49)	(53)	(5)	(13)	120	-
Disposals and other	21	245	3	20	867	1 156
Transfer from (to) other accounts	14	125	(9)	29	-	159
Charge for impairment allowance	(2 042)	(1 539)	(352)	(225)	(451)	(4 609)
Balance as of 31 December 2018	**(39 120)**	**(57 152)**	**(2 031)**	**(10 701)**	**(712)**	**(109 716)**
Net book value						
Balance as of 1 January 2017	**96 346**	**90 823**	**912**	**10 398**	**24 180**	**222 659**
Balance as of 31 December 2017	**94 146**	**90 646**	**3 942**	**12 658**	**14 602**	**215 994**
Balance as of 1 January 2018	**94 146**	**90 646**	**3 942**	**12 658**	**14 602**	**215 994**
Balance as of 31 December 2018	**89 427**	**85 736**	**3 866**	**13 082**	**17 580**	**209 691**
Net book value of property, plant and equipment had no revaluation taken place						
Balance as of 1 January 2017	**52 835**	**64 578**	**610**	**8 319**	**23 517**	**149 859**
Balance as of 31 December 2017	**52 685**	**66 322**	**3 625**	**10 928**	**13 773**	**147 333**
Balance as of 1 January 2018	**52 685**	**66 322**	**3 625**	**10 928**	**13 773**	**147 333**
Balance as of 31 December 2018	**51 700**	**66 106**	**3 640**	**11 663**	**17 763**	**150 872**

Other property, plant and equipment include motor vehicles, land, office furniture and other equipment.

There were no properties pledged as security for the Group's bank borrowings as of 31 December 2018 and of 31 December 2017.

11.1 Revaluation

The Group changed its accounting policy in respect of property, plant and equipment measurement from a cost model to a revaluation model starting from 1 January 2007 in order to provide users of the consolidated financial statements with more reliable information about the value of the Group's property, plant and equipment.

In 2013 the Group contracted an independent appraiser to estimate the fair value of the Group's property, plant and equipment and investment property as of 31 December 2013. The fair value of property, plant and equipment was determined to be RUB 273 766 million.

As a result of revaluation, the Group's equity increased by RUB 46 771 million, comprising net increase in the carrying value of property, plant and equipment of RUB 58 464 million net of respective deferred tax of RUB 11 693 million.

Net increase in the carrying value of property, plant and equipment amounted to RUB 57 562 million consisting of increase in the amount of RUB 67 597 million related to revaluation recognised within the equity and decrease of RUB 10 035 million related to impairment charge out of which RUB 9 133 million were recognised within the equity and RUB 902 million were recognised in the consolidated statement of comprehensive income.

No revaluations were performed as of 31 December 2018 as the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period. The fair value of property, plant and equipment was categorised as a Level 3 of fair value (Note 2).

11.2 Impairment

As of 31 December 2018, the Group performed a test for impairment of property, plant and equipment at the cash-generating unit level of individual power plants. As a result of the impairment test, in 2018 impairment loss in the amount of RUB 1 933 million was recognised within profit or loss and in the amount of RUB 2 676 million within other comprehensive income.

The recoverable amount of each cash-generating unit was determined on the basis of the value in use indicator. The value in use was determined by discounting future cash flows that would result from the continued use of the unit. In determining the recoverable amount of future cash flows the following key assumptions were used:

- These calculations used cash flow projections based on the organisation's budgets for a three-year period. Cash flows beyond the three-year period have been extrapolated using projected growth rates. The growth rate does not exceed the long-term average growth rates projected for the energy sector.
- The forecast of gas prices was based on the approved tariffs by the Federal Tariff Service and the growth rate forecasted by the parent company LLC Gazprom energoholding. Power generation of PJSC Mosenergo is carried out at generating facilities, the main type of fuel is gas, in connection with which the increase in gas prices affects the growth of electricity prices.
- The forecast of generation volumes was based on forecast calculations in industry reports.
- A post-tax discount rate of 10,9% was applied for the purpose of determining the value in use. The discount rate was calculated on the basis of the industry average weighted average cost of capital.

11.3 Leased assets

The Group leases operating buildings and equipment under a number of finance lease agreements. All leases provide the Group with the option to purchase the buildings and equipment at a beneficial price at the end of lease term (Note 15).

As of 31 December 2018 the net carrying amount of leased buildings and equipment was RUB 44 million (as of 31 December 2017: RUB 53 million).

(in millions of Russian Rubles)

12 Investment property

	2018	2017
Balance as of 1 January	**2 359**	**3 180**
Transfer to (from) property, plant and equipment	(869)	(612)
Disposals and other movements	58	(209)
Balance as of 31 December	**1 548**	**2 359**

The fair value of investment property as of 31 December 2018 amounted to RUB 1 548 million (as of 31 December 2017: RUB 2 359 million). The calculation of the fair value was based on the trends in the commercial real estate market in 2018. The fair value measurement for investment property was categorised as a Level 3 fair value (Note 2).

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Method of evaluation	Observable indicators
Income approach	The forecast of income and expenses and cash flows
Market approach	Market prices for identical assets

Rental income for the year ended 31 December 2018 amounted to RUB 262 million (for the year ended 31 December 2017 amounted to RUB 417 million), was recognised in other revenue in the consolidated statement of comprehensive income.

Where the Group is the lessor, the future minimum lease payments receivable under non-cancellable operating leases are as follows:

	2018	2017
As of 31 December		
Less than one year	11	17
Later than one year but not later than 5 years	16	14
Later than 5 years	137	374
Total	**164**	**405**

(in millions of Russian Rubles)

13 Intangible assets

13.1 Goodwill

Goodwill relates to the acquisition of LLC Mosenergoproject (Note 28).

	2018	2017
Balance as of 1 January	**187**	-
Acquisition of Mosenergoproject LLC	-	187
Balance as of 31 December	**187**	**187**

Impairment testing of goodwill of LLC Mosenergoproject.

The recoverable amount of LLC Mosenergoproject was calculated on the basis of the value in use. The value in use was determined by discounting future cash flows that would result from the continued use of the organization. In determining the recoverable amount of future cash flows for the company, the following key assumptions were used:

- Cash flows were determined on the basis of actual operating results for the reporting year by applying consumer price indices.

- To determine cash flows beyond the forecasting period, the Gordon model was used, applying the growth rate of 4,1%, equal to the long-term forecast of the inflation rate.

- A post-tax discount rate of 18,7% was applied for the purpose of determining the value in use. The discount rate was calculated on the basis of the industry average weighted average cost of capital.

As of 31 December 2018 no impairment of goodwill from the acquisition of LLC Mosenergoproject was detected.

13.2 Other intangible assets

	Software	Other intangible assets	Total
Cost			
Balance as of 1 January 2017	-	-	-
Reclassification from other non-current assets	807	3	810
Additions	166	63	229
Balance as of 31 December 2017	**973**	**66**	**1 039**
Balance as of 1 January 2018	**973**	**66**	**1 039**
Additions	357	84	441
Disposals	-	(4)	(4)
Balance as of 31 December 2018	**1 330**	**146**	**1 476**
Amortisation			
Balance as of 1 January 2017	-	-	-
Reclassification from other non-current assets	(535)	(2)	(537)
Amortisation charge	(196)	-	(196)
Balance as of 31 December 2017	**(731)**	**(2)**	**(733)**
Balance as of 1 January 2018	**(731)**	**(2)**	**(733)**
Amortisation charge	(220)	(14)	(234)
Balance as of 31 December 2018	**(951)**	**(16)**	**(967)**
Net book value			
Balance as of 1 January 2017	-	-	-
Balance as of 31 December 2017	**242**	**64**	**306**
Balance as of 1 January 2018	**242**	**64**	**306**
Balance as of 31 December 2018	**379**	**130**	**509**

(in millions of Russian Rubles)

14 Investments in associates

	2018	2017
Balance as of 1 January	**314**	**669**
Share of loss of associates	(314)	(355)
Balance as of 31 December	**-**	**314**

As of 31 December 2018 the unrecognised share of loss of LLC TSC Mosenergo was in the amount of RUB 227 million.

The Group`s investments in associates are as follows:

	LLC TSK Mosenergo	
	2018	**2017**
Ownership interest	22,51%	22,51%
Balance as of 31 December		
Current assets	8 914	8 352
Non-current assets	7 091	8 282
Current liabilities	9 747	11 859
Non-current liabilities	1 928	1 079
For year ended 31 December		
Revenue	11 949	10 539
Loss for the period	(1 608)	(1 576)
Total comprehensive loss for the period	(1 608)	(1 576)

The table below summarises information about country of incorporation and place of business and nature of business of the Group`s investments in associates:

Name of organisation	Country of incorporation	Nature of business
LLC TSC Mosenergo	Russia	Production, transmission and distribution of heat and hot water (heat energy)

(in millions of Russian Rubles)

15 Borrowings

The note provides information about the contractual terms of the Group`s borrowings, which are measured at amortised cost.

	31 December 2018	31 December 2017
Short-term borrowings		
Bank borrowings	1 277	13 899
Finance lease liability	2	1
Interest payable	16	277
Other debt financing	-	384
Total short-term borrowings	**1 295**	**14 561**
Long - term borrowings		
Bank borrowings	3 691	8 830
Finance lease liability	195	197
Total long-term borrowings	**3 886**	**9 027**
Total borrowings	**5 181**	**23 588**

The terms and conditions of outstanding liabilities at the reporting date are as follows:

	Currency	Nominal interest rate	Year of maturity	31 December 2018 Face value	31 December 2018 Carrying amount	31 December 2017 Face value	31 December 2017 Carrying amount
Unsecured bank financing							
Credit Agricole Bank CIB	EUR	EURIBOR 6M+1,95%	2024	-	-	5 541	5 395
BNP Paribas S.A.	EUR	EURIBOR 6M+2,00%	2022	5 112	4 968	5 538	5 334
				5 112	**4 968**	**11 079**	**10 729**
PJSC Sberbank	RUB	8,14%	2018	-	-	3 750	3 750
PJSC VTB Bank	RUB	8,14%	2018	-	-	8 250	8 250
				-	**-**	**12 000**	**12 000**
Total unsecured bank financing				**5 112**	**4 968**	**23 079**	**22 729**
Other financing							
LLC TER	RUB	6,53%-12%	2018	-	-	271	271
JSC Gazprom energoremont	RUB	14,00%	2018	-	-	103	103
PJSC TGC-1	RUB	5,82%	2018	-	-	10	10
Total other financing				**-**	**-**	**384**	**384**
Interest payable				**16**	**16**	**277**	**277**
Finance lease liability		8,14%	2048	**197**	**197**	**198**	**198**
Total				**5 325**	**5 181**	**23 938**	**23 588**

(in millions of Russian Rubles)

The lease payments are due as follows:

	Less than one year	Between one and five years	More than five years	Total
31 December 2018				
Future minimum lease payments	18	72	442	**532**
Interests	(16)	(64)	(255)	**(335)**
Present value of minimum lease payments	**2**	**8**	**187**	**197**
31 December 2017				
Future minimum lease payments	17	72	461	**550**
Interests	(16)	(65)	(271)	**(352)**
Present value of minimum lease payments	**1**	**7**	**190**	**198**

Reconciliation of movements of liabilities to cash flows arising from financing activities:

	Borrowings	Dividends payable	Total
As of 31 December 2017	**23 588**	**13**	**23 601**
Cash-flows changes			
Repayment of borrowings	(19 384)	-	(19 384)
Dividend paid	-	(6 549)	(6 549)
Net cash used in financing activities	**(19 384)**	**(6 549)**	**(25 933)**
Interest paid	(625)	-	(625)
Total cash-flows changes	**(20 009)**	**(6 549)**	**(26 558)**
Foreing exchange result	1 637	-	1 637
Interest accrued	485	-	485
Dividends declared	-	6 566	6 566
Other changes	(520)	(24)	(544)
As of 31 December 2018	**5 181**	**6**	**5 187**
As of 31 December 2017	**43 002**	**(1)**	**43 001**
Cash-flows changes			
Proceeds from borrowings	54	-	54
Repayment of borrowings	(21 629)	-	(21 629)
Dividend paid	-	(3 346)	(3 346)
Net cash used in financing activities	**(21 575)**	**(3 346)**	**(24 921)**
Interest paid	(1 542)	-	(1 542)
Total cash-flows changes	**(23 117)**	**(3 346)**	**(26 463)**
Foreing exchange result	876	-	876
Interest accrued	1 808	-	1 808
Acquisition of subsidiaries	445	-	445
Dividends declared	-	3 360	3 360
Other changes	574	-	574
As of 31 December 2017	**23 588**	**13**	**23 601**

(in millions of Russian Rubles)

16 Trade and other payables

	31 December 2018	31 December 2017
Current liabilities		
Trade payables	6 348	4 594
Advances received	756	911
Accounts payable for acquisition of property, plant and equipment	1 656	1 669
Other payables	1 463	1 500
Total	**10 223**	**8 674**
Non-current liabilities		
Advances received	1	1
Accounts payable for acquisition of property, plant and equipment	285	153
Total	**286**	**154**

Information about the Group's exposure to currency and liquidity risks related to trade and other payables is disclosed in Note 31.

17 Taxes receivable and payable

	31 December 2018	31 December 2017
Income tax receivable	**239**	**-**
Income tax payable	**82**	**64**
Other taxes payable		
VAT payable	1 827	2 087
Property tax payable	564	540
Social contributions payable	137	144
Other taxes payable	7	4
Total other taxes payable	**2 535**	**2 775**
Total taxes payable (net)	**2 378**	**2 839**

(in millions of Russian Rubles)

18 Provisions

	Income tax	Property tax	Litigations and claims	Total
Balance as of 1 January 2017	**1 407**	**1 376**	**9**	**2 792**
Accrued during the period	-	288	6	294
Released during the period	-	-	(8)	(8)
Balance as of 31 December 2017	**1 407**	**1 664**	**7**	**3 078**
Balance as of 1 January 2018	**1 407**	**1 664**	**7**	**3 078**
Accrued during the period	224	1 008	1	1 233
Released during the period	-	(728)	(7)	(735)
Balance as of 31 December 2018	**1 631**	**1 944**	**1**	**3 576**

19 Profit tax

19.1 Reconciliation of profit before tax to profit tax

Profit before profit tax for financial reporting purposes is reconciled to profit tax expense as follows:

	2018	2017
Year ended 31 December		
Profit before profit tax	27 262	30 112
Theoretical tax expense calculated at applicable tax rates	(5 452)	(6 022)
Adjustments to current profit tax of previous periods	335	831
Provision on current profit tax	(224)	-
Tax effect on other non-taxable expenses	(516)	(119)
Profit tax expense	**(5 857)**	**(5 310)**
Current profit tax expense	(5 676)	(3 404)
Deffered profit tax expense	(181)	(1 906)

Differences between the recognition criteria in the Russian Federation statutory taxation regulations and IFRS give rise to certain temporary differences between the carrying value of certain assets and liabilities for financial reporting purposes and for profit tax purposes. The tax effect of the movement on these temporary differences is recorded at the applicable statutory rates in the Russian Federation.

(in millions of Russian Rubles)

19.2 Tax effects of taxable and deductible temporary differences

Tax effects of taxable and deductible temporary differences for the year ended 31 December 2018 and 31 December 2017 are as follows:

	Opening balance	Effect of IFRS 9	Recognised in P/L[1)]	Recognised in OCI[2)]	Acquisition of subsidiaries	Closing balance
Year ended 31 December 2018						
Property, plant and equipment	(28 070)	-	292	535	-	(27 243)
Investment property	(257)	-	111	-	-	(146)
Long-term financial assets	20	333	-	-	-	353
Trade and other receivables	(401)	175	(25)	-	-	(251)
Assets held for sale	43	-	(10)	-	-	33
Trade and other payables	119	-	25	-	-	144
Employee benefit liabilities	70	-	(8)	(3)	-	59
Tax losses carried forward	135	-	10	-	-	145
Provisions	631	-	27	-	-	658
Borrowings	(30)	-	41	-	-	11
Other assets	(2 070)	-	(644)	-	-	(2 714)
Total	**(29 810)**	**508**	**(181)**	**532**	**-**	**(28 951)**
Year ended 31 December 2017						
Property, plant and equipment	(29 340)	-	1 270	-	-	(28 070)
Investment property	71	-	(328)	-	-	(257)
Long-term financial assets	17	-	3	-	-	20
Investments in associates	141	-	(141)	-	-	-
Trade and other receivables	2 135	-	(2 531)	3	(8)	(401)
Assets held for sale	(13)	-	56	-	-	43
Trade and other payables	105	-	(33)	47	-	119
Employee benefit liabilities	73	-	(1)	(2)	-	70
Tax losses carried forward	30	-	12	-	93	135
Provisions	598	-	32	-	1	631
Borrowings	(90)	-	60	-	-	(30)
Other assets	(1 765)	-	(305)	-	-	(2 070)
Total	**(28 038)**	**-**	**(1 906)**	**48**	**86**	**(29 810)**

[1)]P/L – profit or loss, [2)]OCI – other comprehensive income.

(in millions of Russian Rubles)

20 Employee benefits

The Group sponsors a post-employment benefit plan and other long-term benefit program that covers the majority of the Group's employees.

The post-employment benefit plan is a defined contribution plan enabling employees to contribute a portion of their salary to the plan and equivalent portion of contribution from the Group. The plan is administrated by non-state pension fund.

To be entitled for participation in this defined contribution pension plan an employee should meet certain age and past service requirements. Maximum possible amount of employer's contribution is limited and depends on employee's position in the Group.

In addition to defined contribution pension plan the Group maintains several plans of a defined benefit nature which are provided in accordance with collective bargaining agreement and other documents. The main benefits provided under this agreement are a lump sum upon retirement and material assistance.

	Post employment benefits	Other long-term benefits	Total
Year ended 31 December 2018			
Balance as of 1 January	**266**	**86**	**352**
Current service cost	9	6	15
Past service cost	(20)	5	(15)
Net interest expense	19	7	26
Actuarial gains arising from changes in financial assumptions	-	(4)	(4)
Actuarial gains arising from changes in demographic assumptions	-	(1)	(1)
Actuarial gains - experience	-	(27)	(27)
Total included in operating and finance expenses	**8**	**(14)**	**(6)**
Remeasurements:			
Actuarial gain arising from changes in financial assumptions	(10)	-	(10)
Actuarial losses arising from changes in demographic assumptions	1	-	1
Actuarial gains - experience	(7)	-	(7)
Total recognised in other comprehensive income	**(16)**	**-**	**(16)**
Benefits paid	(32)	-	(32)
As of 31 December	**226**	**72**	**298**
Year ended 31 December 2017			
Balance as of 1 January	**278**	**90**	**368**
Current service cost	9	6	15
Net interest expense	22	7	29
Actuarial gains arising from changes in financial assumptions	-	(2)	(2)
Actuarial gains - experience	-	(1)	(1)
Total included in operational and financial expenses	**31**	**10**	**41**
Remeasurements:			
Actuarial gains arising from changes in financial assumptions	(2)	-	(2)
Actuarial gains - experience	(6)	-	(6)
Total recognised in other comprehensive income	**(8)**	**-**	**(8)**
Increase in liabilities as a result of acquisition	-	1	1
Benefits paid	(35)	(15)	(50)
As of 31 December	**266**	**86**	**352**

(in millions of Russian Rubles)

	31 December 2018	31 December 2017
Financial assumptions		
Discount rate	8,5%	7,5%
Inflation rate	4,1%	4,0%
Salaries increase	6,1%	6,0%
Duration of liabilities, years	4,8	5,4
Demographic assumptions		
Withdrawal rates for employees with 1 year of past service	24,0%	21,0%
Withdrawal rates for employees who have 20 or more years of service	5,0%	5,0%
Retirement ages for men	64	62
Retirement ages for women	61	59

21 Equity

21.1 Share capital and share premium

As of 31 December 2018 and 31 December 2017 the declared share capital comprised 39 749 359 700 ordinary shares of RUB 1 par value each. All issued ordinary shares are fully paid.

The share capital includes the translation of the consolidated financial statements to bring it equal to the purchasing power of the Russian Ruble as of 31 December 2002 in accordance with IAS 29 Accounting in Hyperinflationary Economies.

The holders of ordinary shares are entitled to receive dividends as declared in due time and are entitled to one vote per share at meetings of Shareholders of the PJSC Mosenergo. In respect of the PJSC Mosenergo's shares that are held by the Group (Note 21.2), all rights are suspended until those shares are reissued.

Share premium amounted to RUB 49 213 million represents excess of the cash proceeds from the issue of share capital over its par value net of the transaction costs amounted to RUB 7 million.

21.2 Treasury shares

Treasury shares as of 31 December 2018 and as of 31 December 2017 amounted to RUB 871 million. No decisions regarding further operations with treasury shares were made by the PJSC Mosenergo's management.

21.3 Dividends

On 31 May 2017 the Annual General Shareholders' Meeting of the PJSC Mosenergo made the decision to pay dividends for the results of Group's activity for 2016. The amount of declared dividends on the issuer shares was RUB 0,08482 per share, total amount of dividends is RUB 3 360 million.

On 31 May 2018 the Annual General Shareholders' Meeting of the PJSC Mosenergo made the decision to pay dividends for the results of Group's activity for 2017. The amount of declared dividends on the issuer shares was RUB 0,16595 per share, total amount of dividends is RUB 6 573 million. The amount of unclaimed dividends for the result of financial years 2012 to 2013 is RUB 7 million.

21.4 Revolution reserve

As of 31 December 2018 in the line "Revaluation reserve'' there were disclosed revaluation reserve for property, plant and equipment in the amount of RUB 104 276 million (as of 31 December 2017: RUB 107 206 million). In 2017 the reserve deficit for remeasurement of post-employment benefit obligations was transferred to accumulated loss.

(in millions of Russian Rubles)

22 Revenue

	Year ended 31 December 2018	2017
Electricity	116 444	118 914
Heat	79 954	75 200
Other revenue	2 472	1 942
Total	**198 870**	**196 056**

Other revenue was primarily received from rent and water usage services.

23 Operating expenses

	Year ended 31 December 2018	2017
Materials		
Fuel	114 406	107 833
Purchased electricity and capacity	10 232	10 029
Other materials	2 165	2 247
	126 803	**120 109**
Services		
Heat transmission	739	1 854
Electricity market administration fees	1 490	1 472
Rent	789	1 028
Security and fire safety	923	895
Grid connection	633	633
Legal, consulting and data processing services	107	212
Transportation services	375	392
Cleaning services	405	350
Agency fee	170	181
Insurance expenses, excluding medical insurance	208	211
Software and maintenance	525	555
Other professional services	1 427	1 442
	7 791	**9 225**
Depreciation and amortisation	15 177	15 117
Staff costs	10 953	10 623
Maintenance and repairs expenses	7 972	6 133
Taxes other than profit tax	2 253	2 368
Other expenses on ordinary activities	(4)	27
Total of production, selling and administration expenses	**170 945**	**163 602**
Impairment loss on non-financial assets	1 898	46
Change in provisions	274	285
Other operating expenses (income)		
(Gain) loss on disposal of property, plant and equipment	(225)	1 644
Income on fines and penalties	(514)	(1 220)
Other operating expense (income)	59	(404)
Total other operating expense (income)	**(680)**	**20**
Total operating expenses	**172 437**	**163 953**

Electricity market administration fees include payments to JSC TSA and JSC FSC for arrangement of settlements between parties on electricity market and payments to JSC SO UES for regulation of generating assets operation of the Group.

For the year ended 31 December 2018 the average number of employees of the Group was 8 390 (for the year ended 31 December 2017: 8 474).

(in millions of Russian Rubles)

24 Charge for impairments and other provisions

	Year ended 31 December 2018	2017
Impairment loss on financial assets		
Charge for allowance for accounts receivable	(525)	(2 893)
	(525)	**(2 893)**
Impairment loss on non-financial assets		
Charge for allowance for inventory obsolescence	(15)	(46)
Charge for allowance for other receivables	50	-
Impairment of property, plant and equipment	(1 933)	-
	(1 898)	**(46)**
Change in provisions		
Change in tax provision	(279)	(288)
Change in provisions on claims	5	-
Change in other provisions	-	3
	(274)	**(285)**
Charge for impairment and other provisions, net	**(2 697)**	**(3 224)**

25 Finance income and expense

	Year ended 31 December 2018	2017
Finance income		
Interest income on bank deposits	1 845	1 915
Interest income on loans issued	1 482	1 644
Foreign exchange gain	1 383	1 341
Other interest income	433	371
Total finance income	**5 143**	**5 271**
Finance expense		
Foreign exchange loss	(2 759)	(2 177)
Interest expense on borrowings	(469)	(1 667)
Lease expense	(16)	(17)
Other interest expense	(231)	(153)
Total finance expense	**(3 475)**	**(4 014)**
Total net finance income (expense)	**1 668**	**1 257**

(in millions of Russian Rubles)

26 Basic and diluted earnings per share, attributable to PJSC Mosenergo

Earnings per share attributable to owners of PJSC Mosenergo have been calculated by dividing the profit for the period, attributable to the owners of PJSC Mosenergo by the weighted average number of shares outstanding during the period, excluding the weighted average number of ordinary shares purchased by the Group and held as treasury shares (Note 21.2). The calculation of basic and dilution earnings per share is presented in the table below.

	2018	2017
Year ended 31 December		
Issued shares (thousand of pieces)	39 749 360	39 749 360
Effect of treasury shares (thousand of pieces)	(140 229)	(140 229)
Weighted average number of ordinary shares (thousand of pieces)	**39 609 131**	**39 609 131**
Profit attributable to the owners of PJSC Mosenergo (in RUB mln)	21 405	24 802
Profit per ordinary share (basic and diluted) (in Russian Roubles)	**0,54**	**0,63**

There are no dilutive financial instruments outstanding in the Group.

27 Subsidiaries

PJSC Mosenergo and its following subsidiaries form the Mosenergo Group:

	Nature of business	Percentage of ownership	
		31 December 2018	31 December 2017
LLC Centralny remontno-mekhanicheskiy zavod	Repair and reconstruction services	100,00%	100,00%
LLC Mosenergoproject	Design	100,00%	100,00%
LLC Remontproject	Design	99,00%	99,00%

No preference shares are held by the Group.

28 Acquisition and sale of subsidiaries

28.1 Acquisition of subsidiaries

Acquisition of LLC Mosenergoproject

In January 2017 the Group acquired 100% of share capital of LLC Mosenergoproject for cash consideration of RUB 650 million.

According to IFRS 3 Business combinations the Group recognized the acquired assets and liabilities assumed based upon their provisional fair values that equal their carrying amounts as of the date of acquisition.

The goodwill of RUB 187 million represents the fair value of the expected synergies from the acquisition.

The gross contractual amount for trade and other receivables due is RUB 20 million. The trade and other receivables were not impaired and are expected to be collectible in full amounts.

Acquisition of LLC Remontproject

On 28 September 2017 the Group acquired 80% of share capital of LLC Remontproject for cash consideration of RUB 15 million, and then in 4 October 2017 the additional 19% of share capital was acquired for cash consideration of RUB 4 million. Therefore the total share in LLC Remontproject amounted to 99%. The Group accounted for the acquisition as a transfer of subsidiary between entities under common control. According to the accounting policy of the Group, the assets and liabilities of LLC Remontproject transferred between entities under common control were recognised at the predecessor entity`s carrying amounts. The difference between the considerations for acquisition and the carrying amounts of assets and liabilities was accounted for as an adjustment within consolidated states of changes in equity in the line "Accumulated loss and other reserves" in the amount of RUB 328 million. Financial result of the acquired entity was included from the date of acquisition in the consolidated financial statement for the year ended 31 December 2017.

(in millions of Russian Rubles)

The information about the assets and liabilities of acquired entities is presented below:

	LLC Mosenergo-project	**LLC Remont-project**
Current assets		
Cash and cash equivalents	1	2
Trade and other receivables	20	243
Other current assets	-	5
Total current assets	**21**	**250**
Non-current assets		
Property, plant and equipment	470	1
Deferred tax assets	19	67
Total non-current assets	**489**	**68**
Total assets	**510**	**318**
Current liabilities		
Short-term borrowings	8	437
Trade and other payables	23	187
Other taxes payables (other than profit tax)	16	2
Total current liabilities	**47**	**626**
Total liabilities	**47**	**626**
Net assets at the acquisition date	463	(308)
Share of net assets at the acquisition date	463	(308)
Consideration paid	650	19
Goodwill	**187**	**-**
Effect of acquisition under common control	**-**	**327**

28.2 Sale of subsidiaries

In October 2014 PJSC Mosenergo sold the TER Group to JSC Gazprom energoremont. In 2018 accounts receivables from the sale of financial investments have been repaid in the amount of RUB 1 214 million.

(in millions of Russian Rubles)

29 Related parties

Parties are generally considered to be related if the parties are under common control or if one party has the ability to control the other party or can exercise significant influence or joint control over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

PJSC Gazprom is an ultimate parent company of PJSC Mosenergo. The Russian Federation is the ultimate controlling party of the Group.

The nature of the related party relationships for those related parties with whom the Group entered into significant transactions during the year ended 31 December 2018 and 31 December 2017, or had significant balances outstanding as of 31 December 2018 and as of 31 December 2017 are detailed below.

29.1 Transactions with Gazprom Group and its associates

The Group's transactions and balances outstanding with Gazprom Group and its associates are detailed below:

	Year ended 31 December 2018	Year ended 31 December 2017
Revenue	**82 605**	**74 988**
Heat	75 553	67 911
Electricity	5 196	5 845
Other revenue	1 856	1 232
Operating expenses	**(79 723)**	**(74 545)**
Fuel	(72 196)	(65 971)
Maintenance and repair expenses	(3 761)	(3 913)
Heat transmission	(698)	(1 837)
Purchased electricity and capacity	(768)	(778)
Rent	(327)	(312)
Transportation services	(301)	(307)
Cleaning services	(280)	(260)
Insurance expenses, excluding medical insurance	(208)	(211)
Medical insurance including in staff costs	(202)	(197)
Agency fee	(170)	(181)
Security and fire safety	(111)	(103)
Other professional services	(736)	(870)
Other operating income	35	395
Impairment gain on financial assets	**311**	**-**
Finance income and expense	**1 852**	**1 426**
Finance income	1 901	1 449
Finance expense	(49)	(23)
Purchase of assets	**8 284**	**5 202**
Purchase of property, plant and equipment	4 366	2 654
Purchase of other assets	3 918	2 548

	31 December 2018	31 December 2017
Outstanding balance		
Cash and cash equivalents	21	303
Trade and other receivables	43 296	51 753
Allowance for impairment of receivables	(568)	-
Advances for assets under construction	3 743	3 433
Total assets	**46 492**	**55 489**
Short-term borrowings	(2)	(464)
Long-term borrowings	(195)	(197)
Trade and other payables	(4 625)	(3 006)
Total liabilities	**(4 822)**	**(3 667)**

(in millions of Russian Rubles)

As of 31 December 2018, Gazprom Group and its associated companies entered into contracts for the construction and acquisition of property, plant and equipment in the amount of RUB 4 316 million (31 December 2017: RUB 6 484 million).

In 2017 there was a recalculation of payments under the lease agreement with the right to repurchase between PJSC MIPC and PJSC Mosenergo: payments from the date of contracting that were not accounted for at the time of redemption. The result of the restatement was recorded in the consolidated statement of changes in equity under line “Effect of acquisition under common control” in amount of RUB 188 million according to the method of the predecessor (net of deferred tax).

For the year ended 31 December 2018 dividends declared to the parent company amounted to RUB 3 529 million (for the year ended 31 December 2017: RUB 1 804 million).

29.2 Transactions with associates

The Group’s transactions and balances outstanding with associates are detailed below:

	Year ended 31 December	
	2018	**2017**
Revenue	**1 842**	**1 851**
Heat	1 730	1 740
Other revenue	112	111
Operating expenses	**(26)**	**-**
Heat transmission	(26)	-
Impairment loss on financial assets	**(255)**	**(395)**
Finance income and expense	**37**	**19**
Finance income	37	19

	31 December 2018	**31 December 2017**
Outstanding balance		
Trade and other receivables	3 503	2 202
Allowance for impairment of receivables	(650)	(395)
Total assets	**2 853**	**1 807**

(in millions of Russian Rubles)

29.3 Transactions with key management and management organisation

Key management personnel (the members of the Board of Directors and Management Committee) received the following remuneration, which is included in staff costs:

	Year ended 31 December	
	2018	**2017**
Wages and salaries	(64)	(59)
Social taxes and contributions	(11)	(10)
Total	**(75)**	**(69)**

There are no outstanding balances as of 31 December 2018 and as of 31 December 2017 as for transactions with key management.

Remuneration to management organisation LLC Gazprom energoholding for year ended 31 December 2018 was in the amount of RUB 131 million (for the year ended 31 December 2017: RUB 146 million).

29.4 Transactions with other state-controlled entities

Information below excludes transactions and outstanding balances with Gazprom Group and its associates as disclosed in Note 29.1.

The Group's transactions and balances outstanding with other state-controlled entities are detailed below:

	Year ended 31 December	
	2018	**2017**
Revenue	**24 974**	**29 460**
Electricity	23 298	26 944
Heat	1 360	2 134
Other revenue	316	382
Operating expenses	**(2 826)**	**(3 251)**
Electricity market administration fees	(1 484)	(1 467)
Other materials	(1 162)	(1 106)
Rent	(411)	(675)
Security and fire safety	(472)	(462)
Fuel	(112)	(111)
Purchased electricity and capacity	(88)	(57)
Other professional services	(213)	(196)
Other operating income	1 116	823
Impairment loss on financial assets	**(984)**	**(1 869)**
Finance income and expense	**1 400**	**(273)**
Finance income	1 644	1 176
Finance expense	(244)	(1 449)

	31 December 2018	**31 December 2017**
Outstanding balance		
Cash and equiavelents	7 412	14 394
Trade and other receivables	12 195	14 947
Allowance for impairment of receivables	(9 993)	(10 011)
Advances for assets under construction	5	9
Total assets	**9 619**	**19 339**
Short-term borrowings	-	(12 180)
Trade and other payables	(920)	(1 429)
Total liabilities	**(920)**	**(13 610)**

29.5 Transactions with JSC FSC

Some of the transactions on the wholesale electricity and capacity market OREM are conducted through commission agreements with JSC Financial Settling Centre (JSC FSC). Current financial system of JSC FSC does not provide the final counterparty with automated information about transactions and outstanding balances with the ultimate consumers. State-controlled entities and Gazprom Group and its associates may also act as counterparties.

(in millions of Russian Rubles)

The Group's transactions and balances outstanding with JSC FSC are detailed below:

	Year ended 31 December	
	2018	**2017**
Revenue	**64 645**	**62 334**
Electricity	64 645	62 334
Expenses	**(9 315)**	**(9 144)**
Purchased electricity and capacity	(9 315)	(9 144)

	31 December 2018	31 December 2017
Outstanding balance		
Trade and other receivables	3 063	2 579
Total assets	**3 063**	**2 579**
Trade and other payables	(451)	(470)
Total liabilities	**(451)**	**(470)**

30 Commitments and contingencies

30.1 Operating leases

Operating leases refer mainly to long-term rental agreements for land rent where generation facilities of the Group are located. The leases typically run for periods from 5 to 45 years with an option to prolong the lease. For the year ended 31 December 2018, operating lease expenses in amounts of RUB 789 million, were recognised in profit or loss (for the year ended 31 December 2017: RUB 1 028 million) (Note 23).

Non-cancellable operating lease liabilities are presented in the table below:

	31 December 2018	31 December 2017
Less than one year	700	637
Between one and five years	2 387	2 372
More than five years	23 678	21 753
Total	**26 765**	**24 762**

30.2 Capital commitments

As of 31 December 2018 the Group was involved in a number of contracts for construction and purchase of property, plant and equipment for RUB 6 125 million excluding VAT (31 December 2017: RUB 8 031 million).

30.3 Taxation

The Russian Federation tax legislation is subject to varying interpretation and changes, which can occur frequently. The management's interpretation of legislation as applied to the transactions and activities of the Group may be challenged by the relevant regional and federal authorities, in particular, the way of accounting for tax purposes of some income and expenses of the Group as well as deductibility VAT from suppliers and contractors. Tax authorities may be taking a more assertive position in their interpretation of the legislation and assessments. As a result, significant additional taxes, penalties and interest may arise.

In the Russian Federation fiscal periods remain open to review by the authorities in respect of taxes for three calendar years succeeding the year of review. Under certain circumstances review may cover longer periods.

Management believes that as of 31 December 2018 its interpretation of the relevant legislation was appropriate and the Group's tax position would be sustained.

The transfer pricing rules that became effective from 1 January 2012 appear to be more technically elaborate and, better aligned with the international transfer pricing principles developed by the Organisation for Economic Cooperation and Development. This new legislation provides the possibility for tax authorities to make transfer pricing adjustments and impose additional tax liabilities in respect of controlled transactions (transactions with related parties and some types of transactions with unrelated parties), provided that the transaction price is not on an arm's length basis. The management has implemented internal controls to be in compliance with the new transfer pricing legislation.

30.4 Environmental liabilities

Environmental regulations are currently in the process of development in the Russian Federation. The Group evaluates on a regular basis its obligations due to new and amended legislation. As liabilities in respect of environmental obligations can be measured, they are immediately recognised in profit or loss. Currently the likelihood and amount of potential environmental liabilities cannot be estimated reliably but could be significant. However, the management believes that under existing legislation there are no significant unrecorded liabilities or contingencies, which could have a significant adverse effect on the operating results or financial position of the Group.

30.5 Insurance

The insurance industry in the Russian Federation is in the process of development and many forms of insurance protection common in other countries are not generally available. The management believes that the Group has adequate property damage coverage for its main production assets. The Group does not have full coverage for business interruption and third party liability. Until the Group obtains adequate insurance coverage, there is a risk that the loss from business interruption and third party liability could have a significant adverse effect on the Group's operations and financial position.

30.6 Guarantees

The Group has issued direct guarantees to third parties which require the Group to make contingent payments based on the occurrence of certain events consisting primarily of guarantees for mortgages of the Group employees amounting to RUB 2 million as of 31 December 2018 (31 December 2017: RUB 3 million).

31 Financial risk factors

The use of financial instruments exposes the Group to the following types of risk: market risk relating to foreign currency exchange rates and interest rates, credit risk and liquidity risk.

The Group's overall risk management focuses on the unpredictability of financial markets and seeks to reduce potential adverse effects on the financial performance of the Group.

The Managing Director has overall responsibility for proper functioning of the Group's internal controls system. The Board of Directors establishes and oversights of the Group's risk management system. The Audit Committee as part of the Board of Directors evaluates the internal controls system effectiveness. The Group's Audit Committee is assisted in its oversight role by the Department of Internal Audit, who oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management system in relation to the risks faced by the Group. The Department of Internal Audit undertakes both regular and unscheduled reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

The risk management functions are performed by the department of the Group and managing company LLC Gazprom energoholding. Credit risk of investment securities is considered by the managing company. Credit risk in respect of receivables from customers is assessed by the Group. Liquidity risk is considered by the Efficiency and Control department.

The Group's risk management policies are summarised in the Group's Regulations on Risk Management which are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and control mechanisms to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The procedures carried out in relation to the Group's risk analysis include examination of the customers reliability, analysis of bank guarantees for prepayments given to suppliers, bank currency position analysis, sensitivity analysis of exchange and interest rates for borrowings, budget implementation analysis and others.

The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive internal control system where all employees understand their roles and obligations.

(in millions of Russian Rubles)

31.1 Market risk

31.1.1 Foreign exchange risk

The Group is exposed to foreign currency exchange risk in the event of transactions and the existence of debt in a currency other than its functional currency. Part of the Group's assets and liabilities are denominated in foreign currency. Currency risk arises when the value of assets actually available or planned to receive assets expressed in foreign currency is higher or lower than the amount of liabilities in that currency. The currency in which these transactions are predominantly denominated is Euro.

		Euro	
	Note	31 December 2018	31 December 2017
Financial assets			
Current assets			
Cash and cash equivalents	5	-	1
Total financial assets		**-**	**1**
Financial liabilities			
Current liabilities			
Borrowings	15	(1 293)	(1 916)
Trade and other payables	16	(415)	(234)
Non-current liabilities			
Borrowings	15	(3 691)	(8 830)
Total financial liablities		**(5 399)**	**(10 980)**
Net financial liabilities		**(5 399)**	**(10 979)**

The table below provides information on the Group's sensitivity to strengthening the Euro against the Russian Ruble by 20%. This analysis is based on changes in the foreign exchange rate that the Group applies at the end of the reporting period. For this purpose, the monetary items available at the balance sheet date, expressed in the respective currencies, were analysed.

	31 December 2018	31 December 2017
Decrease in profit	**(1 080)**	**(2 196)**

The weakening of the currencies considered above by 20% relative to the functional currency as of 31 December 2018 would have the same effect, but with the opposite sign, on the basis that all other variables remain constant.

(in millions of Russian Rubles)

31.1.2 Interest risk

Changes in interest rates impact primarily loans and borrowings by changing either their fair value (fixed rate debt) or their future cash flows (variable rate debt). The management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of raising new borrowings the management uses its judgment to decide that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

The Group constantly analyses dynamics of variable interest rates. To minimise interest rate risk the Group prepares budgets taking into account possible changes of interest rates and creates special reserves to cover contingent expenses and losses.

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

	31 December 2018	31 December 2017
Fixed rate instruments		
Financial assets	82 933	86 136
Financial liabilities	(8 486)	(19 379)
Total	**74 447**	**66 757**
Variable rate instruments		-
Financial liabilities	(4 984)	(10 746)
Total	**(4 984)**	**(10 746)**

Fair value sensitivity analysis for fixed rate instruments

The Group does not account for any fixed rate financial assets and liabilities at fair value through profit or loss, and the Group does not designate derivatives (interest rate swaps) as hedging instruments under a fair value hedge accounting model. Therefore any change in interest rates at the reporting date would not affect profit or loss.

Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The analysis is performed on the same basis for 31 December 2018 and 31 December 2017.

	31 December 2018	31 December 2017
Decrease in profit	**(50)**	**(107)**

(in millions of Russian Rubles)

31.2 Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables.

31.2.1 Loans and receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. Geographically credit risk is concentrated in the city of Moscow and Moscow Region as most of sales are made in this area. Creditworthiness of existing customers is periodically evaluated based on internal and external information regarding history of settlements with these customers. The Group constantly analyses accounts receivable turnover ratios, maturity dates and takes appropriate measures on collection of debts due. Approximately 90-95% of the customers are the clients of the Group for a period longer than 2-3 years.

There are standard contract terms for any customer purchasing energy under regulated contracts, the day-ahead market or the balancing market. Special conditions are envisaged by the Russian Federation legislation on Power industry for some heat consumers such as state companies, housing organisations and entities, which may not be limited or refused energy supply because it can lead to casualties or other harmful aftermath (hospitals, schools etc.). Currently no upper limits for debt due from each customer are established.

The Group is working on minimising the number of contracts with advance payment conditions, if advance payment is necessary, requests bank guarantees from counterparties to return advances.

The credit risk for loans and receivables based on the information provided to key management is as follows:

	31 December 2018	31 December 2017
Trade and other receivables	42 167	40 501
Loans issued	12 656	21 852
Total	**54 823**	**62 353**

Debtors within two main classes of accounts receivable electricity and heat energy are quite homogenous regarding their credit quality and concentration of credit risk.

The account receivables are primarily comprised of a few large reputed customers who purchase electric and heat energy. Historical data, including payment history during the recent credit crisis, would suggest that the risk of default of such customers is very low.

Loans issued and accounts receivables as of reporting date fall due as follows:

	31 December 2018		31 December 2017			
	Carrying amount	Impair-ment	Carrying amount	Impairment (restated)	Effect of IFRS 9	Impair-ment
Not past due	51 019	578	49 284	614	614	-
Past due 0-30 days	434	103	8 267	256	256	-
Past due 31-120 days	1 100	316	1 487	546	(50)	596
Past due 121-365 days	4 236	1 749	3 572	1 667	(148)	1 815
More than one year	13 279	12 499	13 681	11 733	208	11 525
Total	**70 068**	**15 245**	**76 291**	**14 816**	**880**	**13 936**

(in millions of Russian Rubles)

The movement in the allowance for impairment on financial assets in respect of loans given and receivables during the reporting period was as follows:

	2018	2017
Balance as of 1 January	**13 936**	**12 176**
Effect of application of IFRS 9	880	-
Balance as of 1 January (restated)	**14 816**	**12 176**
Allowance for impairment loss recognised during the period	973	1 889
Unwinding of the discount on long-term accounts receivable	(448)	-
Total recognised in profit or loss	**525**	**1 889**
Amounts written-off against previously recognised allowance	(96)	(129)
Balance as of 31 December	**15 245**	**13 936**

31.2.2 Cash in banks and on-demand deposits

All bank balances and on-demand deposits are neither past due nor impaired. The Group pursues the policy of cooperation with banks that have a high rating, which is approved by the Board of Directors of PJSC Mosenergo.

31.3 Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The liquidity risk management is performed on three different levels. Long-term risk management is incorporated in the overall financial model of the Group. Middle-term monitoring is fulfilled during the quarterly and monthly planning of the Group's budgets. Short-term actions include planning and control of daily cash receipts and payments of PJSC Mosenergo.

Liquidity management system includes also drawing up monthly, quarterly and yearly cash budgets, comparing actual amounts to planned and explaining any discrepancies found.

In the table below, the Group's financial liabilities are grouped by maturity based on the period at the reporting date remaining until the maturity date, in accordance with the terms of the contract.

	Carrying amount	Contrac-tual cash flow	Less than 6 months	Between 6 and 12 months	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
As of 31 December 2018							
Borrowings	5 181	5 848	693	687	1 358	2 666	444
Trade and other payables	8 289	8 289	8 004	-	285	-	-
Total	**13 470**	**14 137**	**8 697**	**687**	**1 643**	**2 666**	**444**
Balance as of 31 December 2017							
Borrowings	23 588	25 698	2 001	13 539	2 068	6 011	2 079
Trade and other payables	6 537	6 537	6 384	-	153	-	-
Total	**30 125**	**32 235**	**8 385**	**13 539**	**2 221**	**6 011**	**2 079**

(in millions of Russian Rubles)

31.4 Capital risk management

The following capital requirements for joint stock companies established by the legislation of the Russian Federation:

- share capital cannot be lower than 1,000 minimum monthly wage at the date of the joint stock company registration;
- if the share capital of the entity is greater than net assets of the entity in accordance with Russian Accounting Standards, such entity must decrease its share capital to the value not exceeding its net assets;
- if the minimum allowed share capital is greater than net assets of the entity in accordance with Russian Accounting Standards, such entity is subject to liquidation.

As of 31 December 2018 and 31 December 2017 PJSC Mosenergo was in compliance with the above share capital requirements.

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors the return on capital, which the Group defines as net operating profit divided by total shareholders' equity. The Board of Directors also controls the level of dividends attributable to ordinary shareholders.

On the Group level capital is monitored on the basis of the net debt to adjusted EBITDA ratio. This ratio is calculated as net debt divided by adjusted EBITDA. Net debt is calculated as total debt (borrowings, finance lease liabilities) less cash and cash equivalents and balances of restricted cash and cash equivalents under the terms of certain borrowings and other contractual obligations.

Adjusted EBITDA is calculated as operating profit adjusted for depreciation and amortization, impairment losses on non-financial assets and change in provisions.

The net debt to adjusted EBITDA ratios as of 31 December 2018 and 31 December 2017 were as follows:

	31 December 2018	**31 December 2017 года**
Total debt	5 181	23 588
Less: cash and cash equivalents	(16 220)	(20 627)
Net (cash) debt	(11 039)	2 961
Adjusted EBITDA	43 257	44 658
Net debt / Adjusted EBITDA ratio	**(0,26)**	**0,07**

(in millions of Russian Rubles)

32 Fair value of financial instruments

The fair value of financial assets and liabilities is determined as follows:

Financial instruments in Level 1

The fair value of financial instruments traded in active markets is based on quoted market closing prices at the reporting date.

Financial instruments in Level 2

The fair value of financial instruments that are not traded in an active market is determined by using various valuation techniques, primarily based on market or income approach, such as discounted cash flows valuation method. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on Group specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

Financial instruments in Level 3

If one or more of the significant inputs in the valuation model used to fair value an instrument is not based on observable market data, the instrument is included in Level 3. The fair value of financial instruments, such as short-term trade and other receivables and trade and other payables are classified as Level 3 and are not disclosed, because their fair value is slightly different from their present value.

There was no change in the fair value measurement methods attributed to Level 2 and Level 3 for the year ended 31 December 2018 (31 December 2017: there was no change). There were no transfers between levels for the year ended 31 December 2018 (31 December 2017: there were no transfers).

As of 31 December 2018 and 31 December 2017 the Group had the following assets and liabilities that are measured at fair value:

	Level 1	Level 2	Level 3	Total
Balance as of 31 December 2018				
Financial assets at fair value through other comprehensive income (Note 6)	-	-	1 490	1 490
Balance as of 31 December 2017				
Financial assets at fair value through other comprehensive income (Note 6)	-	-	3 154	3 154

33 Events after the reporting period

On February 2019 the Group’s share in charter capital in LLC TSC Mosenergo increased from 22,51% to 25,36% because of paying up an additional contribution.