

Independent auditor's report
on the consolidated financial statements of
PJSC Inter RAO and its subsidiaries
for 2018

March 2019

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Independent auditor's report

To the Shareholders and Board of Directors of
PJSC Inter RAO

Opinion

We have audited the consolidated financial statements of PJSC Inter RAO and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, 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 then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. 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 judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
<i>Impairment of trade accounts receivables</i>	
As at 31 December of 2018 the Group has a significant balance of trade accounts receivables. The assessment of recoverability of trade accounts receivables from the third parties is complex, largely subjective and based on assumptions, in particular, on forecasted ability of the customer to pay.	Among other audit procedures, we obtained understanding of the process of impairment assessment of trade receivables and also we analyzed information used by the Group for the identification of impaired trade accounts receivable, including information on
Therefore, it was one of the matters of the most significance to our audit.	accounts receivable history of settlements, aging structure and applicable levels of accounts receivable impairment allowance. Due to
The information on trade accounts receivable impairment is disclosed in the Notes 11, 13 and 25 to the consolidated financial statements.	pervasiveness of this matter across the Group, we involved component auditors and directed their work based on the significance of the matter to a component.

Impairment of property, plant and equipment impairment

Impairment test of property, plant and equipment was one of the matters of most significance in our audit because the recoverable amount assessment process is complex and involves estimates. During impairment testing the Group used various assumptions in respect of future capacity prices, volume and price of electricity and heat power sales, fuel cost and cost of repair of production facilities that all depend on expected future market and economic environment in the Russian Federation and other countries where the Group operates.

The information on impairment test in respect of property, plant and equipment is disclosed in Note 6 and Note 8 to the consolidated financial statements.

We assessed the assumptions and methods used by the Group, in particular those related to forecasted capacity, heat power and electricity sales in the Russian Federation and other countries where the Group operates, fuel cost, long-term growth rates and discount rates. We analyzed mathematical accuracy of the models, their sensitivity to changes in primary inputs and the Group's disclosure in respect of the assumptions that mostly affect the results of the impairment test.

Key audit matter	How our audit addressed the key audit matter
<i>Recognition and measurement of provisions and contingent liabilities</i>	
Recognition and measurement of provisions and contingent liabilities in respect of litigation, regulatory bodies' actions and customers' claims involve a significant degree of judgement. Due to the significance of amounts under litigation and claims and estimation uncertainty, it was one of the matters of most significance in our audit.	Our procedures included analyzing the court decisions in different jurisdictions, discussing these matters with employees of the Group's Legal department, assessing the effect of possible claims from regulatory bodies, including those relating to antitrust legislation.
The information on the Group's provisions and contingent liabilities is disclosed in Notes 20, 21 and 30 to the consolidated financial statements.	

Other information included in Group's 2018 Annual Report

Other information consists of the information included in the Annual report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual report is expected to be made available to us after the date of auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do 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 and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and the Audit Committee of 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 Audit Committee of 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.

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


- ▶ Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- ▶ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- ▶ Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- ▶ Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- ▶ Obtain sufficient appropriate audit evidence regarding the financial information of the entities 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 Audit Committee of 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 Audit Committee of 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.

From the matters communicated with the Audit Committee of 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.

The partner in charge of the audit resulting in this independent auditor's report is I.A. Buyan.



I.A. Buyan
Partner
Ernst & Young LLC

1 March 2019

Details of the audited entity

Name: PJSC Inter RAO
Record made in the State Register of Legal Entities on 1 November 2002, State Registration Number 1022302933630.
Address: Russia 119435, Moscow, Bolshaya Pirogovskaya street, building 27-2.

Details of the auditor

Name: Ernst & Young LLC
Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203.
Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.
Ernst & Young LLC is a member of Self-regulated organization of auditors "Russian Union of auditors" (Association) ("SRO RUA"). Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 11603050648.

Consolidated statement of financial position*(in millions of RUR)*

	Note	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Assets				
Non-current assets				
Property, plant and equipment	6	322,976	286,714	291,854
Intangible assets	7	13,849	13,183	9,908
Investments in associates and joint ventures	8	15,451	22,770	28,886
Deferred tax assets	9	5,753	7,174	6,057
Securities	10	7,992	10,324	7,810
Other non-current assets	11	2,621	2,986	15,430
Total non-current assets		368,642	343,151	359,945
Current assets				
Inventories	12	20,267	16,927	14,104
Accounts receivable and prepayments	13	107,806	108,936	106,421
Income tax prepaid		1,070	873	625
Cash and cash equivalents	14	153,747	142,062	95,988
Other current assets	16	75,318	24,127	4,712
		358,208	292,925	221,850
Assets classified as held-for-sale	15	1,737	3,000	3,000
Total current assets		359,945	295,925	224,850
Total assets		728,587	639,076	584,795
Equity and liabilities				
Equity				
Share capital	17	293,340	293,340	293,340
Treasury shares	17	(86,210)	(58,787)	(58,787)
Share premium		69,312	69,312	69,312
Hedge reserve	17	(367)	2	16
Actuarial reserve	17	274	7	(182)
Fair value reserve	17	(5,745)	(3,650)	2,485
Foreign currency translation reserve		4,887	2,152	2,972
Retained earnings		207,778	157,540	109,872
Total equity attributable to shareholders of the Company		483,269	459,916	419,028
Non-controlling interest	32	2,209	1,587	2,078
Total equity		485,478	461,503	421,106
Non-current liabilities				
Loans and borrowings	19	1,385	4,675	8,604
Long-term lease liabilities	6	42,991	10,888	10,499
Deferred tax liabilities	9	11,890	10,957	10,678
Other non-current liabilities	21	8,588	8,152	7,260
Total non-current liabilities		64,854	34,672	37,041
Current liabilities				
Loans and borrowings	19	8,353	11,479	8,108
Short-term portion of long-term lease liabilities	6	6,712	1,435	1,726
Accounts payable and accrued liabilities	20	149,886	118,314	105,476
Amounts payable to non-controlling shareholders for shares of subsidiary	5	373	-	-
Other taxes payable	22	10,644	9,117	9,005
Income tax payable		2,287	2,556	2,333
Total current liabilities		178,255	142,901	126,648
Total liabilities		243,109	177,573	163,689
Total equity and liabilities		728,587	639,076	584,795

Chairman of the Management Board

Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer

Miroshnichenko E.N.

1 March 2019

The consolidated statement of financial position is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out in Notes 1-33.

Consolidated statement of comprehensive income*(in millions of RUR)*

	<i>Note</i>	<i>For the year</i>	
		2018	2017 (restated)
Revenue	23	962,582	869,204
Other operating income	24	10,492	8,817
Operating expenses	25	(885,785)	(821,779)
Operating income		87,289	56,242
Finance income	26	15,257	11,671
Finance expenses	26	(6,789)	(5,258)
Share of (loss)/profit of associates and joint ventures, net	8	(3,579)	2,600
Income before income tax		92,178	65,255
Income tax expense	27	(20,503)	(10,593)
Income for the period		71,675	54,662
Other comprehensive income/(loss)			
<i>Other comprehensive income/(loss) that will be reclassified subsequently to profit or loss when specific conditions are met</i>			
Loss on securities, net of tax	10, 17	(981)	(660)
Net loss on hedge instruments, net of tax	17	(535)	(27)
Exchange gain/(loss) on translation to presentation currency		2,997	(784)
<i>Other comprehensive income/(loss) not to be reclassified subsequently to profit or loss</i>			
Loss on securities, net of tax	10, 17	(1,114)	–
Actuarial gain, net of tax	17	267	189
Other comprehensive gain/(loss), net of tax		634	(1,282)
Total comprehensive income for the period		72,309	53,380
Income attributable to:			
Shareholders of the Company		70,776	53,974
Non-controlling interest	32	899	688
		71,675	54,662
Total comprehensive income attributable to:			
Shareholders of the Company		71,314	52,669
Non-controlling interest		995	711
		72,309	53,380
		RUR	RUR
Basic income per ordinary share for income attributable to the shareholders of the Company	18	0.894	0.647
Diluted income per ordinary share for income attributable to the shareholders of the Company	18	0.891	0.636

Chairman of the Management Board

Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer

Miroshnichenko E.N.

1 March 2019

The consolidated statement of comprehensive income is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out in Notes 1-33.

Consolidated statement of cash flows*(in millions of RUR)*

	<i>Note</i>	<i>For the year</i>	
		<i>2018</i>	<i>2017 (restated)</i>
Operating activities			
Income before income tax		92,178	65,255
<i>Adjustments to reconcile income before tax to net cash flows from operating activities</i>			
Depreciation and amortisation	25	26,601	22,132
Provision for impairment of accounts receivable, net	25	8,358	5,206
Discounting of accounts receivable	26	(225)	(1,604)
Discounting of accounts payable	26	936	284
Release of other provisions	25	(1,008)	(1,667)
Impairment of securities and assets classified as held-for-sale	10, 15, 25	1,263	225
Impairment of property, plant and equipment and intangible assets	6, 7, 25	1,146	11,780
Share of loss/(profit) of associates and joint ventures, net	8	3,579	(2,600)
Loss/(income) from electricity derivatives, net	24, 25	49	(134)
Foreign exchange (gain)/loss, net	26	(3,649)	1,001
Interest income	26	(10,267)	(8,777)
Other finance income	26	(328)	(692)
Interest expense	26	4,991	3,742
Other finance expenses	26	449	90
Dividend income	26	(375)	(457)
Income from sale of securities	10, 24	(47)	–
Shares option plan, (gain)/loss	31	(168)	919
Gain from disposal of Group entities, net	5, 8, 25	(187)	(10)
Other non-cash operations/items		(81)	(108)
Operating cash flows before working capital adjustments and income tax paid		123,215	94,585
Increase in inventories		(3,081)	(2,960)
Increase in accounts receivable and prepayments		(5,635)	(12,993)
Decrease in value added tax recoverable		1,273	5,188
(Increase)/decrease in other current assets		(793)	3,043
(Decrease)/increase in accounts payable and accrued liabilities		(1,649)	12,065
(Decrease)/increase in taxes other than income tax prepaid/payable, net		(361)	1,108
Other working capital adjustments		(492)	53
		112,477	100,089
Income tax paid		(18,021)	(11,330)
Net cash flows from operating activities		94,456	88,759

The consolidated statement of cash flows is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out in Notes 1-33.

Consolidated statement of cash flows (continued)*(in millions of RUR)*

	<i>Note</i>	<i>For the year</i>	
		2018	2017 (restated)
Investing activities			
Proceeds from disposal of property, plant and equipment		151	151
Purchase of property, plant and equipment and intangible assets		(25,770)	(31,508)
Purchase of controlling interest, net of cash acquired	5, 8	724	(500)
Outflow from disposal of controlling interest, net of cash disposed	5	–	(10)
Purchase of securities	10	(39)	–
Proceeds from disposal of joint venture	8	–	54
Proceeds from disposal of securities and assets classified as held-for-sale	10, 15	6,305	12,500
Proceeds from repayment of loans issued		115	12,639
Loans issued		(360)	(216)
Bank deposits placed		(121,169)	(45,747)
Bank deposits returned and proceeds from promissory notes repayment		70,660	23,455
Interest proceeds for bank deposits placed		7,704	4,358
Purchase of other non-current assets		(115)	(285)
Dividends received		3,601	467
Cash flows from / (used for) other investing activities		129	(156)
Net cash flows used for investing activities		(58,064)	(24,798)
Financing activities			
Proceeds from loans and borrowings		20,626	45,354
Repayment of loans and borrowings		(28,084)	(45,851)
Repayment of leases		(4,583)	(2,062)
Interest paid		(907)	(2,255)
Dividends paid		(11,101)	(12,185)
Purchase of non-controlling interest in subsidiary		–	(787)
Proceeds from disposal of non-controlling interest	5	244	–
Acquisition of treasury shares	17	(4,117)	–
Proceeds from treasury shares sale	17	2,350	–
Net cash flows used for financing activities		(25,572)	(17,786)
Effect of exchange rate fluctuations on cash and cash equivalents		865	(101)
Net increase in cash and cash equivalents		11,685	46,074
Cash and cash equivalents at the beginning of the period		142,062	95,988
Cash and cash equivalents at the end of the period	14	153,747	142,062

Chairman of the Management Board

Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer

Miroshnichenko E.N.

1 March 2019

Consolidated statement of changes in equity*(in millions of RUR)*

Attributable to shareholders of the Company													
	Foreign												
Note	Share capital	Treasury shares	Share premium	currency translation reserve	Fair value reserve	Hedge reserve	Actuarial reserve	Retained earnings	Total	Non-controlling interest	Total equity		
2	293,340	(58,787)	69,312	2,972	2,485	16	(182)	107,879	417,035	2,191	419,226		
Effect of adoption of new standards	-	-	-	-	-	-	-	1,993	1,993	(113)	1,880		
Balance at 1 January 2017 (restated)	293,340	(58,787)	69,312	2,972	2,485	16	(182)	109,872	419,028	2,078	421,106		
Total comprehensive (loss)/income for the year ended 31 December 2017	-	-	-	(820)	(660)	(14)	189	53,974	52,669	711	53,380		
Dividends to shareholders	-	-	-	-	-	-	-	(12,656)	(12,656)	(461)	(13,117)		
Undrawn dividends returned	-	-	-	-	-	-	-	2	2	-	2		
Acquisition of non-controlling interest in subsidiary	-	-	-	-	-	-	-	(46)	(46)	(741)	(787)		
Share option plan	-	-	-	-	-	-	-	919	919	-	919		
Balance at 31 December 2017 (restated)	293,340	(58,787)	69,312	2,152	1,825	2	7	152,065	459,916	1,587	461,503		
2	293,340	(58,787)	69,312	2,152	1,825	2	7	149,968	457,819	1,590	459,409		
Effect of adoption of new standards	-	-	-	-	(5,475)	-	-	7,572	2,097	(3)	2,094		
Balance at 1 January 2018 (restated)	293,340	(58,787)	69,312	2,152	(3,650)	2	7	157,540	459,916	1,587	461,503		
Total comprehensive income/(loss) for the year ended 31 December 2018	-	-	-	2,735	(2,095)	(369)	267	70,776	71,314	995	72,309		
Dividends to shareholders	-	-	-	-	-	-	-	(11,458)	(11,458)	(280)	(11,738)		
Undrawn dividends returned	-	-	-	-	-	-	-	1	1	-	1		
Acquisition of non-controlling interest in subsidiary	-	-	-	-	-	-	-	(87)	(87)	(286)	(373)		
Disposal of non-controlling interest in subsidiary	-	-	-	-	-	-	-	51	51	193	244		
Sale of treasury shares	-	5,565	-	-	-	-	-	(3,215)	2,350	-	2,350		
Acquisition of treasury shares	-	(32,988)	-	-	-	-	-	(5,662)	(38,650)	-	(38,650)		
Share option plan	-	-	-	-	-	-	-	(168)	(168)	-	(168)		
Balance at 31 December 2018	293,340	(86,210)	69,312	4,887	(5,745)	(367)	274	207,778	483,269	2,209	485,478		

Chairman of the Management Board

Member of the Management Board, Chief Financial Officer

1 March 2019

Kovalchuk B. Yu.

Miroshnichenko E.N.

The consolidated statement of changes in equity is to be read in conjunction with the notes to, and forming part of, the consolidated financial statements set out in Notes 1-33.

1. The Group and its operations

Establishment of the Group

Public Joint Stock Company "Inter RAO UES" (the "Parent Company" or the "Company" or PJSC "Inter RAO") is incorporated and domiciled in the Russian Federation and whose shares are publicly traded.

The Russian Federation is the ultimate controlling party of PJSC Inter RAO. The main state shareholders of the Parent Company as at 31 December 2018 are Group ROSNEFTEGAZ (27.63%) and PJSC FGC UES (9.24%).

The Company has controlling interests in a number of subsidiaries operating in different regions of the Russian Federation and abroad (the Company and its subsidiaries collectively are designated as the "Group"). The Group's principal subsidiaries as at 31 December 2018 are presented in Note 32.

The Group is engaged in the following business activities:

- ▶ Electricity production, supply and distribution;
- ▶ Export and import of electricity;
- ▶ Sales of electricity purchased abroad and on the domestic market;
- ▶ Engineering services;
- ▶ Energy effectiveness research and development.

The Company's registered address is Bolshaya Pirogovskaya street, building 27-2, 119435, Moscow, the Russian Federation.

The Group's business environment

The governments of the countries where the Group entities operate directly affect the Group's operations through regulation with respect to energy generation, purchases and sales. Governmental economic, social and other policies in these countries could have a material effect on the operations of the Group.

The Russian Federation, Georgia, Moldavia (including Transdniestria Republic), Turkey, Lithuania, Latvia and Estonia have been experiencing significant (albeit different) political and economic changes that have affected, and may continue to affect, the activities of the Group entities operating in this environment. Consequently, operations in these jurisdictions involve risks that typically do not exist in other mature markets. These risks include matters arising from the policies of the government, economic conditions, the imposition of or changes to taxes and regulations, foreign exchange fluctuations and the enforceability of contract rights.

The accompanying consolidated financial statements reflect management's assessment of the impact of the business environment on the operating results and the financial position of the Group in the countries where the Group entities operate. Management is unable to predict all developments which could have an impact on the utilities sector and the wider economy in these countries and consequently, what effect, if any, they could have on the financial position of the Group. Therefore, future business environment may differ from management's assessment.

2. Basis of preparation

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the International Accounting Standards Board (the IASB).

Each entity of the Group individually maintains its own books of accounts and prepares its statutory financial statements in accordance with the relevant statutory accounting requirements. These financial statements are based on the statutory records and adjusted and reclassified for the purpose of fair presentation in accordance with IFRS.

The consolidated financial statements are prepared on the historical cost basis except for certain financial instruments, which are measured at fair value, as discussed in Note 3.

(in millions of RUR)

2. Basis of preparation (continued)

(b) Functional and presentation currency

The national currencies of the countries where the Group entities operate are usually the individual company's functional currencies, because they generally reflect the economic substance of the underlying transactions and circumstances of those companies.

The Group applies judgment in determination of the functional currencies of certain Group entities. The functional currency determination influences foreign exchange gain/losses recognised in profit and loss and translation differences recognised in other comprehensive income.

The consolidated financial statements are presented in millions of the Russian roubles ("RUR"). The main part of the Group is represented by entities operating in the Russian Federation having RUR as their functional currency. All values are rounded to the nearest million, except when otherwise indicated.

(c) Seasonality

Demand for electricity is to some extent influenced by the season of the year. Revenue is usually higher in the period from October to March than in other months of the year. This seasonality does not impact revenue or cost recognition policies of the Group.

(d) Going concern

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realisation of assets and the satisfaction of liabilities in the normal course of business. These financial statements do not include any adjustments that might be necessary should the Group be unable to continue as a going concern.

(e) Critical accounting estimates and judgments

The Group makes estimates and judgments that affect the reported amounts of assets and liabilities within the next reporting period. Estimates and judgments are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgments, apart from those involving estimations, in the process of applying the accounting policies. The judgments that have the most significant effect on the amounts recognised in the consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next reporting period include:

Provision for impairment of accounts receivable

The provision for impairment of accounts receivable is based on the Group's assessment of the collectability of specific customer accounts. If there is deterioration in a major customer's creditworthiness or actual defaults are higher than the estimates, the actual results could differ from these estimates.

If the Group determines that no objective evidence exists that impairment has occurred for an individually assessed accounts receivable, whether significant or not, it includes the accounts receivable in a group of accounts receivable with similar credit risk characteristics and collectively assesses them for impairment. Those characteristics are relevant to the estimation of future cash flows for groups of such assets by being indicative of the debtors' ability to pay all amounts due according to the contractual terms of the assets being evaluated.

Future cash flows in a group of accounts receivable that are collectively evaluated for impairment are estimated on the basis of the contractual cash flows of the assets and the experience of management to the extent of which amounts will become overdue as a result of past loss events and the success of recovery of overdue amounts. The Group adjusts the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions are expected to deteriorate over the next year, which can lead to an increased number of defaults in the specific sector, the historical default rates are adjusted. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed (see Note 13).

Useful lives of property, plant and equipment

The estimation of useful life of an item of property, plant and equipment is a matter of management judgment based upon experience with similar assets. In determining the useful life of an asset, management considers the expected usage, estimated technical obsolescence, physical wear and tear and physical environment in which the asset operates. Changes in any of these conditions or estimates may result in adjustments in depreciation rates. Land has an unlimited useful life and therefore is not depreciated.

(in millions of RUR)

2. Basis of preparation (continued)

(e) Critical accounting estimates and judgments (continued)

Estimation of fair value

The Group estimates the fair value of an asset or liability, using assumptions that market participants would use when pricing the asset or liability, assuming that market participants are acting in their own economic interests. In developing those assumptions the Group identifies the common characteristics that distinguish the market participants, having considered the factors specific to the following: (a) an asset or liability; (b) the principal (or most advantageous) market for the asset or liability; and (c) market participants with whom the entity would enter into a transaction in that market. The estimation of the fair value of the acquired businesses and financial instruments where there is not the principal (or most advantageous) market for assets or liabilities is a matter of management judgment based on the application of relevant valuation models. In determining the fair value the valuation models that are based on management best estimates of future cash flows, current market conditions and the choice of analogue the judgment areas (include considerations of inputs such as liquidity risk, credit risk and volatility) are frequently used. Changes in any of these conditions may result in significant adjustment to the fair value of financial instruments and acquired businesses.

Restoration provision

Changes in the measurement of an existing restoration provision that result from changes in the estimated timing or amount of the outflows of economic benefits, or from changes in the discount rate adjust the cost of the related asset and liability. Estimating the amounts and timing of those obligations settlement requires management judgment. This judgment is based on cost and engineering studies using currently available technology and on current environmental regulations. The restoration provision is also subject to change because of updates in laws and regulations, and their interpretation by management.

Impairment of non-financial assets

An impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell calculation is based on available data from binding sales transactions, conducted as arm's length transaction, for similar assets or at observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the management forecast for the next twenty years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes.

Tax contingencies

The Group entities operate in a number of tax jurisdictions across Europe and the CIS. Where management believes it is probable that their interpretation of the relevant legislation and the Group's tax positions cannot be sustained, an appropriate amount is provided for in the consolidated financial statements. Tax contingencies are disclosed in Note 30.

Deferred income tax asset recognition

The Group does not recognise certain deferred income tax assets in respect of certain Group entities located in the Russian Federation, Netherlands and Kazakhstan as management believes that it is not probable that the future taxable profit will be available in the respective Group entities against which the Group can utilise the benefits. Unrecognised deferred income tax assets are disclosed in Note 9 (b).

2. Basis of preparation (continued)

(f) Restatement

The Group retrospectively restated comparative information due to implementation of IFRS 15 *Revenue from Contracts with Customers* and IFRS 16 *Leases*:

Impact on consolidated statement of comprehensive income:

For the year ended 31 December 2017	As previously reported	Impact of adoption of IFRS 15	Impact of adoption of IFRS 16	As restated
Revenue	917,049	(47,845)	–	869,204
Other operating income	8,533	–	–	8,533
Operating expenses	(869,462)	47,059	624	(821,779)
Operating income	56,120	(786)	624	55,958
Finance income	9,885	1,786	–	11,671
Finance expenses	(3,638)	(141)	(1,195)	(4,974)
Share of profit/(loss) of associates and joint ventures, net	2,615	–	(15)	2,600
Income before income tax	64,982	859	(586)	65,255
Income tax expense	(10,534)	(172)	113	(10,593)
Income for the period	54,448	687	(473)	54,662
Other comprehensive (loss)/income				
<i>Other comprehensive (loss)/income that will be reclassified subsequently to profit or loss when specific conditions are met</i>				
Loss on securities, net of tax	(660)	–	–	(660)
Net loss on hedge instruments, net of tax	(27)	–	–	(27)
Exchange loss on translation to presentation currency	(784)	–	–	(784)
<i>Other comprehensive gain not to be reclassified subsequently to profit or loss</i>				
Actuarial gain, net of tax	189	–	–	189
Other comprehensive loss, net of tax	(1,282)	–	–	(1,282)
Total comprehensive income for the period	53,166	687	(473)	53,380
Income attributable to:				
Shareholders of the Company	53,851	596	(473)	53,974
Non-controlling interest	597	91	–	688
	54,448	687	(473)	54,662
Total comprehensive income attributable to:				
Shareholders of the Company	52,546	596	(473)	52,669
Non-controlling interest	620	91	–	711
	53,166	687	(473)	53,380

*(in millions of RUR)***2. Basis of preparation (continued)****(f) Restatement (continued)**

Impact on consolidated statement of financial position:

<i>1 January 2018</i>	<i>As previously reported</i>	<i>Impact of adoption of IFRS 15</i>	<i>Impact of adoption of IFRS 16</i>	<i>As restated</i>
Assets				
Non-current assets				
Property, plant and equipment	275,261	–	11,453	286,714
Intangible assets	13,183	–	–	13,183
Investments in associates and joint ventures	22,785	–	(15)	22,770
Deferred tax assets	7,762	(641)	53	7,174
Securities	10,324	–	–	10,324
Other non-current assets	2,986	–	–	2,986
Total non-current assets	332,301	(641)	11,491	343,151
Current assets				
Inventories	16,927	–	–	16,927
Accounts receivable and prepayments	105,766	3,206	(36)	108,936
Income tax prepaid	873	–	–	873
Cash and cash equivalents	142,062	–	–	142,062
Other current assets	24,127	–	–	24,127
	289,755	3,206	(36)	292,925
Assets classified as held-for-sale	3,000	–	–	3,000
Total current assets	292,755	3,206	(36)	295,925
Total assets	625,056	2,565	11,455	639,076
Equity and liabilities				
Equity				
Share capital	293,340	–	–	293,340
Treasury shares	(58,787)	–	–	(58,787)
Share premium	69,312	–	–	69,312
Hedge reserve	2	–	–	2
Actuarial reserve	7	–	–	7
Fair value reserve	1,825	–	–	1,825
Foreign currency translation reserve	2,152	–	–	2,152
Retained earnings	149,968	2,568	(471)	152,065
Total equity attributable to shareholders of the Company	457,819	2,568	(471)	459,916
Non-controlling interest	1,590	(3)	–	1,587
Total equity	459,409	2,565	(471)	461,503
Non-current liabilities				
Long-term loans and borrowings	4,721	–	10,842	15,563
Deferred tax liabilities	11,016	–	(59)	10,957
Other non-current liabilities	8,152	–	–	8,152
Total non-current liabilities	23,889	–	10,783	34,672
Current liabilities				
Short-term loans and borrowings	11,707	–	1,207	12,914
Accounts payable and accrued liabilities	118,378	–	(64)	118,314
Other taxes payable	9,117	–	–	9,117
Income tax payable	2,556	–	–	2,556
Total current liabilities	141,758	–	1,143	142,901
Total liabilities	165,647	–	11,926	177,573
Total equity and liabilities	625,056	2,565	11,455	639,076

*(in millions of RUR)***2. Basis of preparation (continued)****(f) Restatement (continued)**

Impact on consolidated statement of financial position:

1 January 2017	As previously reported	Impact of adoption of IFRS 15	Impact of adoption of IFRS 16	As restated
Assets				
Non-current assets				
Property, plant and equipment	280,499	–	11,355	291,854
Intangible assets	9,908	–	–	9,908
Investments in associates and joint ventures	28,886	–	–	28,886
Deferred tax assets	6,527	(470)	–	6,057
Securities	7,810	–	–	7,810
Other non-current assets	15,430	–	–	15,430
Total non-current assets	349,060	(470)	11,355	359,945
Current assets				
Inventories	14,104	–	–	14,104
Accounts receivable and prepayments	104,105	2,348	(32)	106,421
Income tax prepaid	625	–	–	625
Cash and cash equivalents	95,988	–	–	95,988
Other current assets	4,712	–	–	4,712
	219,534	2,348	(32)	221,850
Assets classified as held-for-sale	3,000	–	–	3,000
Total current assets	222,534	2,348	(32)	224,850
Total assets	571,594	1,878	11,323	584,795
Equity and liabilities				
Equity				
Share capital	293,340	–	–	293,340
Treasury shares	(58,787)	–	–	(58,787)
Share premium	69,312	–	–	69,312
Hedge reserve	16	–	–	16
Actuarial reserve	(182)	–	–	(182)
Fair value reserve	2,485	–	–	2,485
Foreign currency translation reserve	2,972	–	–	2,972
Retained earnings	107,879	1,991	2	109,872
Total equity attributable to shareholders of the Company	417,035	1,991	2	419,028
Non-controlling interest	2,191	(113)	–	2,078
Total equity	419,226	1,878	2	421,106
Non-current liabilities				
Long-term loans and borrowings	8,886	–	10,217	19,103
Deferred tax liabilities	10,678	–	–	10,678
Other non-current liabilities	7,260	–	–	7,260
Total non-current liabilities	26,824	–	10,217	37,041
Current liabilities				
Short-term loans and borrowings	8,738	–	1,096	9,834
Accounts payable and accrued liabilities	105,468	–	8	105,476
Other taxes payable	9,005	–	–	9,005
Income tax payable	2,333	–	–	2,333
Total current liabilities	125,544	–	1,104	126,648
Total liabilities	152,368	–	11,321	163,689
Total equity and liabilities	571,594	1,878	11,323	584,795

2. Basis of preparation (continued)

(f) Restatement (continued)

The Group restated comparative information due to application of IFRS 9 *Financial Instruments* (IFRS 9). As at 1 January 2018 due to implementation of IFRS 9 the Group reclassified the available-for-sale investments in quoted shares to Equity instruments at fair value through other comprehensive income (FVOCI). The accumulated impairment loss of these investments recognised in previous periods through profit and loss in the amount of RUR 5,475 million, net of tax RUR 1,369 million, was reclassified from retained earnings to fair value reserve.

3. Summary of significant accounting policies

Significant accounting policies applied in the preparation of the consolidated statements are described below. These accounting policies have been consistently applied. In order to enhance the relevance of the financial statements to users, management has changed the presentation and aggregation of certain disclosures, including comparative information.

Basis of consolidation

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- ▶ Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- ▶ Exposure, or rights, to variable returns from its involvement with the investee, and;
- ▶ The ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- ▶ The contractual arrangement with the other vote holders of the investee;
- ▶ Rights arising from other contractual arrangements;
- ▶ The Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to non-controlling interest, even if this results in non-controlling interest having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- ▶ Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- ▶ Derecognises the carrying amount of any non-controlling interests;
- ▶ Derecognises the cumulative translation differences recorded in equity;
- ▶ Recognises the fair value of the consideration received;
- ▶ Recognises the fair value of any investment retained;
- ▶ Recognises any surplus or deficit in profit or loss;
- ▶ Reclassifies the parent's share of components previously recognised in other comprehensive income (OCI) to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

3. Summary of significant accounting policies (continued)

Principles of consolidation

Subsidiaries

Subsidiaries are entities controlled by the Company. Control is presumed to exist when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. An investor has power over an investee when the investor has existing rights that give it the current ability to direct the relevant activities. Relevant activities are activities of the investee that significantly affect the investee's return. In assessing control, potential voting rights that are presently exercisable are taken into account. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Non-controlling interest

Non-controlling interest represents the non-controlling shareholders' proportionate share of the equity and results of operations of the Group's subsidiaries. This has been calculated based upon the non-controlling interests' ownership percentage of these subsidiaries. The non-controlling interest has been disclosed as a part of equity.

The Group applies a policy of treating transactions with non-controlling shareholders as transactions with equity owners of the Group. For purchases of non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of a subsidiary is recorded in equity. Differences between consideration received and carrying value of non-controlling interests sold are also recorded in equity.

The Group derecognises non-controlling interest if non-controlling shareholders have received a mandatory offer to purchase their shares. The difference between the amount of the liability recognised in the consolidated statement of financial position over the carrying value of the derecognised non-controlling interests is charged to retained earnings.

Associates entities and joint ventures

Associates are those entities over which the Group has significant influence, the power to participate in the financial and operating policy decisions of the investee but not control or joint control of those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Equity method

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment.

The Consolidated statement of comprehensive income reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture. The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown in the Consolidated statement of comprehensive income separately from operating profit and represents profit or loss after tax of the associate or joint venture (including their subsidiaries) to the extent of Group's share in the associate or joint venture for the reporting period. The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, then recognises the loss as 'Share of profit of an associate and a joint venture' in Consolidated statement of comprehensive income.

3. Summary of significant accounting policies (continued)

Principles of consolidation (continued)

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

Joint operations

Joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint operator shall account for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with IFRSs applicable to the particular assets, liabilities, revenues and expenses.

Transactions eliminated on consolidation

Intercompany transactions, balances and unrealised gains in transactions among the Group entities are eliminated; unrealised losses are also eliminated unless the cost cannot be recovered. The Company and all of its subsidiaries use uniform accounting policies consistent with the Group's policies.

Unrealised gains on transactions between the Group and its equity accounted investees are eliminated to the extent of the Group's interest in the investees; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at acquisition date on fair value and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in operating expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date at fair value and any resulting gain or loss is recognised in profit or loss. It is then considered in the determination of goodwill.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 *Financial Instruments*, is measured at fair value with changes in fair value recognised either in either profit or loss or as a change to OCI. If the contingent consideration is not within the scope of IFRS 9, it is measured in accordance with the appropriate IFRS. Contingent consideration that is classified as equity is not re-measured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the re-assessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

*(in millions of RUR)***3. Summary of significant accounting policies (continued)****Business combinations and goodwill (continued)**

The acquisitions of entities under common control are accounted for using the predecessor accounting method. In accordance with this method, the consolidated financial statements of the Group are prepared to reflect the combination as if it had occurred from the beginning of the earliest period presented in the consolidated financial statements, or, if occurred later, from the date when the entities had been under common control. Under the predecessor accounting method the assets and liabilities of the combining entities are accounted for at the carrying values determined by the Group in its consolidated financial statements. Comparative information is presented as if the entities had always been consolidated, but not earlier than the common control over these entities was established.

All other acquisitions are accounted for by applying the acquisition method.

Foreign currency***Foreign currency transactions and translation***

Transactions in foreign currencies are measured in the respective functional currencies of the Group entities at exchange rates effective at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the end of the reporting period are remeasured to the entities' functional currencies at the exchange rate at that date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are remeasured to the functional currency at the exchange rate at the date that the fair value was determined. Other non-monetary assets and liabilities measured in a foreign currency are remeasured to the functional currency at the exchange rate at the date of operation. Foreign currency differences arising on remeasurement are recognised in profit and loss.

The effect of exchange rate changes on fair value of securities is included in the consolidated statement of other comprehensive income.

Assets and liabilities of the Company and its subsidiaries are translated into the Group's presentation currency at the exchange rate prevailing at the end of the reporting period. Profit and loss items of the Company and its subsidiaries are translated at the average exchange rate for the period (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates; in this case income and expenses are translated at the rate on the dates of the transactions). Components of equity and other comprehensive income are translated at the historical rate with the exception of equity opening balances at the date of transition to IFRS which were translated at the exchange rate at the date of transition. Exchange differences arising on the translation of the net assets of the Company and its subsidiaries are recognised as translation differences in other comprehensive income and included in the foreign currency translation reserve (FCTR) in equity.

Property, plant and equipment

Property, plant and equipment are carried at historical cost of acquisition or construction after deduction of accumulated depreciation and accumulated impairment. The cost of self-constructed assets includes cost of materials, direct labour and a proportion of production overheads. Where an item of property, plant and equipment comprises major components having different useful lives, the components are accounted for as separate items of property, plant and equipment.

Renewals and improvements are capitalised. The costs of regular repair and maintenance are expensed as incurred. Gains and losses arising from the disposal of property, plant and equipment are included in profit and loss as incurred.

Expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately, is capitalised to the carrying amount of the component being written off. Other subsequent expenditure is capitalised only when it increases future economic benefits embodied in the item of property, plant and equipment. All other expenditures are recognised in profit and loss as incurred.

Social assets are not capitalised as they are not expected to result in future economic benefits to the Group. Costs associated with fulfilling of the Group's social responsibilities are expensed as incurred.

Prepayments for capital construction and acquisition of property, plant and equipment are included into construction in progress.

3. Summary of significant accounting policies (continued)

Property, plant and equipment (continued)

Depreciation of property, plant and equipment is calculated on a straight-line basis over the estimated useful life of the asset. Depreciation commences from the time an asset is completed and ready for use. The useful lives are reviewed at each financial year-end and, if expectations differ from previous estimates, changes are recognised prospectively. The useful lives, in years, of assets by type of facility are as follows:

<i>Type of facility</i>	<i>Useful life, years</i>
Buildings	7-71
Hydro engineering structures	12-53
Transmission facilities and equipment	9-35
Thermal networks	18-48
Power equipment	8-41
Other equipment and fixtures	15-40
Other structures	6-34
Other fixed assets	4-23

Intangible assets

The Group classifies its intangible assets in the following categories:

- ▶ Goodwill;
- ▶ Software;
- ▶ Other intangible assets (which include: capitalised cost to obtain status of “guarantee supplier”, costs of projects in the development stage and others).

Goodwill

Goodwill arises on the acquisition of subsidiaries, associates and joint ventures.

Goodwill represents the excess of the cost of investment over the Group's interest in the net fair value of the identifiable assets and liabilities of the acquiree. Goodwill in respect of subsidiaries is recognised as a separate asset within intangible assets in the consolidated statement of financial position. Goodwill in respect of associates and joint ventures is included in the carrying amount of the investees.

The excess of the Group's interest in the net fair value of the identifiable assets and liabilities of the acquiree over the cost of investment is recognised in profit and loss. For associates and joint ventures such excess is recognised in profit and loss as a part of the share of profit/loss of an associates and joint ventures.

Goodwill is measured at cost less accumulated impairment losses and is the subject for impairment test at each reporting period or when an indication of impairment loss exists.

Concession arrangements

Concession arrangements are the contracts when the Group constructs and upgrades infrastructure used to provide services, which it operates and maintains for a specified period of time. These arrangements include operating of a power plant and infrastructure under service concession arrangement for their entire useful life.

The Group applies the financial asset model when the amount due from the grantor meets the definition of a receivable which is measured at fair value. It is subsequently measured at amortised cost. The amount initially recognised plus the cumulative interest on that amount is calculated using the effective interest method.

Any asset carried under concession arrangements is derecognised on disposal or when no future economic benefits are expected from its future use or disposal or when the contractual rights to the financial asset expire.

The Group manages concession arrangements which include the construction of power plant, infrastructure and other facilities followed by a period in which the Group maintains and services the infrastructure. This may also include, in a secondary period, asset replacement or refurbishment. These concession arrangements set out rights and obligations relative the infrastructure and the service to be provided.

3. Summary of significant accounting policies (continued)

Intangible assets (continued)

For fulfilling those obligations, the Group is entitled to receive consideration from the grantor. The consideration received or receivable is allocated by reference to the relative fair values of the services provided; typically:

- ▶ A construction component;
- ▶ A service element for operating and maintenance services performed.

The right to consideration gives rise to a financial asset.

Revenue from the concession arrangements earned under the financial asset model consists of the (i) fair value of the amount due from the grantor; and (ii) interest income related to the capital investment in the project.

Software and other intangible assets

Other intangible assets that are acquired or internally created (as part of the cost of development projects) by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and impairment losses.

The estimated useful lives of intangible assets are in the range of 2-10 years for software and other intangibles assets.

Amortisation

Amortisation is recognised in profit and 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.

Internally generated intangible assets

Costs of projects on development stage are recognised as intangible assets to the extent that such expenditure is expected to generate future economic benefits and demonstrated all of the following: (a) the technical feasibility of completing the intangible asset so that it can be available for use or sale; (b) the Group's intention to complete intangible asset and use or sell it; (c) the Group's ability to use or sell the intangible asset; (d) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; (e) the Group's ability to measure the expenditure attributable to the intangible asset during its development reliably.

Leases

Right-of-use assets and Lease liabilities are capitalised at the commencement of the lease at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability. Finance charges are recognised in finance costs in the Consolidated statement of comprehensive income. Right-of-use asset is depreciated over the lease term.

Assets classified as held for sale (HFS)

Non-current assets and disposal groups are classified as HFS if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is met only when the sale is highly probable within a year from the date of classification, the asset or disposal group is available for immediate sale in its present condition and management has committed to the sale. The extension of the period required to complete a sale does not preclude an asset (or disposal group) from being classified as HFS if the delay is caused by events or circumstances beyond the Group's control and there is sufficient evidence that the Group remains committed to its plan to sell the asset (or disposal group). Non-current assets and disposal groups classified as HFS are measured at the lower of their carrying amount and fair value less costs to sell.

Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is determined on the weighted average basis, 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. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Provision is made for obsolete or slow-moving inventories, taking into account their expected use and future net realisable value.

*(in millions of RUR)***3. Summary of significant accounting policies (continued)****Cash and cash equivalents**

Cash comprises cash in hand and cash deposited on demand at banks. Cash equivalents comprise short-term, highly liquid investments that are readily convertible into cash and have an original maturity of three months or less from the date of acquisition and are subject to insignificant changes in value.

Prepayments

Prepayments made by the Group are carried at cost less provision for impairment. Prepayments to acquire assets are transferred to the carrying amount of the asset once the Group has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Group. Other prepayments are recognised in profit or loss when the goods or services relating to the prepayments are received. If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of prepayment is written down as impairment loss in profit and loss.

Prepayments made by the Group are classified as non-current assets when the goods or services relating to the prepayment are to be delivered beyond one year period or when they relate to acquisition of property, plant and equipment. Where such prepayments relate to construction contracts, revenue is recognised when the outcome of the contract can be estimated reliably, by reference to the stage of completion of the contract activity.

Value added tax on purchases and sales

Value added tax (VAT) related to sales is payable to tax authorities either upon revenue recognition or at the time of collection of receivables from customers, depending on local statutory regulations in respective jurisdictions in which the Group entities operate. Tax authorities permit settlement of VAT on a net basis. VAT related to sales and purchases which has not been settled at the end of the reporting period (deferred VAT) is recognised in the consolidated statement of financial position on a gross basis and disclosed separately as current asset and liability. Where provision has been made for impairment of receivables, the impairment loss is recorded for the gross amount of the debtor's balance, including VAT. Related deferred VAT liability is maintained on the consolidated statement of financial position until the debt is recognised for tax purposes. Changes of VAT recoverable related to the purchases of property, plant and equipment and investment property is recognised in the consolidated statement of cash flows in operating activities.

Financial instruments

Financial instruments include cash and cash equivalents, securities, derivatives, hedges, accounts receivable, accounts payable and loans and borrowings. Particular recognition and measurement methods are disclosed in the individual policy statements associated with each item. Financial instruments are represented by derivatives and non-derivative financial instruments.

Sale and repurchase agreements

Equity instruments sold under sale and repurchase agreements ("repos") are retained in the consolidated statement of financial position. The difference between sale and repurchase price is treated as other operating income/(expenses) through profit and loss in the consolidated statement of comprehensive income.

Derivative financial instruments

Derivative financial instruments are means to transfer risk inherent in the basic instruments, between the parties of the contract, without transfer of the underlying instruments.

As a part of trading activities, the Group has the following derivative financial instruments:

- (a) Foreign currency forward and option contract: foreign currency forwards and options are initially recognised at fair value on the date a forward/option contract is entered into and are subsequently remeasured at their fair value. Fair value gains and losses on those derivatives are presented as part of other comprehensive income to the extent of effective cash flow hedges and as a part of profit or loss to the extent of ineffective cash flow hedges;
- (b) Electricity futures and forward contracts: electricity derivatives are initially recognised at fair value on the date a contract is entered into and are subsequently remeasured at their fair value. Fair value gains and losses on those derivatives are presented as part of other comprehensive income to the extent of effective cash flow hedges and as a part of profit or loss to the extent of ineffective cash flow hedges or speculative transactions.

3. Summary of significant accounting policies (continued)

Compound financial instruments

Compound (hybrid) financial instrument is divided in accordance with the terms of the contract in the following parts: financial liability/financial asset and equity component. When initial carrying amount of a compound financial instrument is allocated to its equity and asset/liability components, the equity component is assigned to the residual amount after deducting from the fair value of the instrument as a whole the amount separately determined for the asset/liability component. The sum of the carrying amounts assigned to the asset/liability and equity components at initial recognition equals to the fair value that would be ascribed to the instrument as a whole. The Group presents the asset/liability and equity components separately in its consolidated statement of financial position. On initial recognition, the fair value of the asset/liability component is the present value of the contractually determined stream of future cash flows discounted at the rate of interest applied at that time by the market to instruments of comparable credit status which provide for substantially the same cash flows, on the same terms, but without the conversion option. Changes in the fair value of an equity instrument are not recognised in the consolidated financial statements. On conversion of a convertible instrument at maturity, the Group derecognises the asset/liability component and recognises it in equity. The original equity component remains as equity (although it may be transferred from one line item within equity to another). There is no gain or loss on conversion at maturity.

The method of recognising of the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either:

- (a) Hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);
- (b) Hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge);
- (c) Hedges of a net investment in a foreign operation (net investment hedge).

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions.

The Group also documents its assessment, both at the time of the hedges' inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. The fair values of various derivative instruments are disclosed in Note 13, 16, 20 и 21. The fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months, and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

Non derivative financial assets

The Group classifies its financial assets in the following categories:

- (a) Financial assets at fair value through profit or loss;
- (b) Securities;
- (c) Financial assets at amortised cost.

Management determines the classification of its financial assets at initial recognition and re-assesses this designation thereafter.

(a) Financial assets at fair value through profit or loss

A financial asset is classified in this category if acquired principally for the purpose of selling in the short term period or if so designated by management. Assets in this category are classified as current assets if they are expected to be realised within 12 months from the end of the reporting period. Gains and losses arising from changes in the fair value of the "financial assets at fair value through profit or loss" category are included within the profit and loss in the consolidated statement of comprehensive income in the period in which they arise.

(b) Securities

Investments in quoted instruments previously classified as AFS financial assets are now classified and measured as Equity instruments designated at fair value through OCI. Unquoted equity investments previously classified as AFS financial assets are now classified and measured as Financial assets at fair value through profit or loss. Debt instruments (represented by the bonds) previously classified as AFS financial assets are now classified and measured as Debt instruments at fair value through OCI.

3. Summary of significant accounting policies (continued)

Non derivative financial assets (continued)

(c) *Financial assets at amortised cost*

Financial assets with fixed terms and cash flows are classified as financial assets at amortised cost, provided management intends to keep them for their full terms and is in a position to do so. Management determines the appropriate classification for its investments on their acquisition dates. These assets are carried at amortised cost based on the effective interest method, net of provision for impairment losses. Interest earned on financial assets at amortised cost is recognised as interest income. All purchases and sales made in accordance with standard market conditions for financial assets at amortised cost are recognised at the date of settlement.

Loans and accounts receivable

Accounts receivable are recorded inclusive of value added taxes (VAT) and are initially recorded at the amount receivable from the debtor. Trade and other receivables are adjusted for provision made for impairment of these receivables. Such provision for doubtful debtors is established if there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the contract. The amount of the provision is the difference between the carrying amount and the recoverable amount, being the present value of expected future cash flows, discounted at the market rate of interest adjusted for the credit risk of debtors at the date of origination of the receivables.

Debt is recognised initially at its fair value net of transaction costs incurred. Fair value is determined using the prevailing market rate of interest for a similar instrument, if significantly different from the transaction price. In subsequent periods, debt is stated at amortised cost using the effective yield method; any difference between the amount at initial recognition and the redemption amount is recognised in profit and loss as interest adjustment over the period of the debt obligation existence.

Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Financial guarantee contracts are initially recognised at fair value and are subsequently measured at the higher of (i) the remaining unamortised balance of the amount at initial recognition and (ii) the best estimate of expenditure required to settle the obligation at the reporting date.

Fair value of financial instruments

The Group measures financial instruments, such as derivatives, at fair value at each reporting date. Also, fair values of financial instruments, which are measured at amortised cost, are disclosed in Note 19 and Note 28 (e).

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique. The principal market (or the most advantageous market in the absence of principle market) must be accessible to by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

To achieve greater consistency and comparability of fair value measurements and related disclosures the fair value hierarchy is followed up to define fair value estimation methods and apply relevant observable inputs and minimise the use of unobservable inputs.

Observable inputs are inputs that are developed using market data, such as publicly available information about actual events or transactions, and that reflect the assumptions that market participants would use when pricing the asset or liability. The unobservable inputs are inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.

3. Summary of significant accounting policies (continued)

Fair value of financial instruments (continued)

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- ▶ Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- ▶ Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- ▶ Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

Fair value of financial instruments that are actively traded in organised financial markets is determined by reference to quoted market bid prices for assets and offer prices for liabilities in the principal market for the asset or liability, at the close of business on the reporting date, with no adjustment made for the transaction costs.

For assets and liabilities where there is no principal (or most advantageous) market, respective fair value is determined using appropriate valuation techniques. Valuation techniques include discounted cash flow method, comparison to similar instruments for which market observable prices exist, options pricing models, credit models and other relevant valuation models. If an asset or a liability measured at fair value has a bid price and an ask price, the price within the bid-ask spread that is most representative of fair value in the circumstances can be used to measure at fair value. It is possible to use mid-market pricing conventions that are used by market participants as an expedient for fair value measurement within a bid-ask spread. Certain financial instruments are recorded at fair value using valuation techniques because current market transactions or observable market data are not available. Their fair value is determined using a valuation model that is tested against prices or inputs to actual market transactions and using the Group's best estimate of the most appropriate internal model assumptions. Models are adjusted to reflect the spread for bid and ask prices to reflect costs to close out positions, counterparty credit and liquidity spread and limitations in the models. Also, profit or loss calculated when such financial instruments are first recorded (Day 1 profit or loss) is deferred and recognised only when the inputs become observable or on derecognition of the instrument.

For discounted cash flow techniques, estimated future cash flows and discount rates are based on management's best estimates of assumptions that market participants would use when pricing the asset or liability. Cash flows and discount rates used take into account only the factors attributable to the asset or liability being measured. The use of different pricing models and assumptions could produce materially different estimates of fair values.

Fair value of floating rate and overnight deposits with credit institutions is their carrying value. The carrying value is the cost of the deposit plus interest accrued. Fair value of fixed interest-bearing deposits is estimated using discounted cash flow techniques. Expected cash flows are discounted at prevailing market rates for similar instruments at the recognition date.

If fair value cannot be measured reliably, assets and liabilities are measured at cost. An analysis of fair values of financial instruments and further details as of how they are measured are provided in Note 28 (e).

Where fair values of financial assets and financial liabilities recorded on the consolidated statement of financial position cannot be derived from the principal (or most advantageous) markets, they are determined using a variety of valuation techniques that include the use of discounted cash flows model and/or mathematical models. The inputs to these models are derived from observable market data where possible, but where observable market data are not available, judgment is required to establish fair values. The judgments include considerations of liquidity risk, credit risk, and model inputs such as volatility and discount rates, prepayment rates and default rate assumptions for asset backed securities.

For discounted cash flows analysis, estimated future cash flows and discount rates are based on current market information and rates applicable to financial instruments with similar yields, credit quality and maturity characteristics. Estimated future cash flows are influenced by factors such as economic conditions (including country specific risks), concentrations in specific industries, types of instruments or currencies, market liquidity and financial conditions of counterparties. Discount rates are influenced by risk free interest rates and credit risk.

Changes in these assumptions affect fair value of financial instruments.

*(in millions of RUR)***3. Summary of significant accounting policies (continued)****Impairment*****Financial assets at amortised cost***

A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount, and the present value of the estimated future cash flows discounted at the current effective interest rate.

Individually significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics.

All impairment losses are recognised in profit and loss.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost the reversal is recognised in profit and loss.

Securities

Impairment losses are recognised when incurred as a result of one or more events ("loss events") that occurred after the initial recognition of Securities. A significant or prolonged decline in the fair value of an equity security below its cost is an indicator that it is impaired. The cumulative impairment loss is measured as the difference between the acquisition cost and current fair value, less any impairment loss on that asset previously recognised. Investments in quoted equity instruments are measured at fair value through OCI. Unquoted equity investments are measured at fair value through profit and loss and debt instruments are measured at fair value through OCI.

Non-financial assets

Carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at the end of each reporting period to determine whether there is any indication of impairment. If 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, estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of time value of money and the risks specific to the asset.

An impairment loss is recognised if the carrying amount of an asset or cash-generating unit exceeds its recoverable amount. A cash-generating unit is the smallest identifiable asset group that generates cash flows that are largely independent from those of other assets and groups. Impairment losses are recognised in the consolidated statement of comprehensive income. 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 amount of the other assets in the unit (group of units) on a pro rata basis.

An impairment loss previously recognised in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at the end of each reporting period for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a substantial positive change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Derecognition of financial assets

The Group derecognises financial assets when (a) the assets are redeemed or rights to cash flows from the assets otherwise expired or (b) the Group has transferred rights to cash flows from financial assets or entered into a qualifying pass-through arrangement while (i) also transferring substantially all the risks and rewards of ownership of the assets or (ii) neither transferring nor retaining substantially all risks and rewards of ownership but does not retain a control. Control is retained if the counterparty does not have practical ability to sell the asset in its entirety to an unrelated third party without imposition of additional restrictions on sale.

*(in millions of RUR)***3. Summary of significant accounting policies (continued)****Loans and borrowings**

Loans and borrowings are recognised initially at their fair value which is determined using prevailing market rate of interest for a similar instrument, if significantly different from the transaction price, net of transaction costs incurred. In subsequent periods, loans and borrowings are recognised at amortised cost, using effective interest method; any difference between the amount at initial recognition and the redemption amount is recognised in profit and loss as an interest adjustment over the period of the instrument.

Employee benefits***Pension and post-employment benefits***

In the normal course of business the Group contributes to various governmental pension schemes on behalf of its employees. Mandatory contributions to governmental pension schemes are expensed in profit and loss when incurred. Costs associated with discretionary pensions and other post-employment benefits are included in wages, benefits and payroll taxes in profit and loss.

Short-term benefits

Short-term employee benefits are measured on an undiscounted basis and are expensed in profit and loss as related service is provided.

An expense is recognised in 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 employees, and the obligation can be estimated reliably.

Defined benefit plans

The Company operates defined benefit plans that cover the majority of its employees. Benefit plans define the amount of pension benefit that an employee will receive on or after retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognised in the consolidated statement of financial position in respect of defined benefit plans is the present value of defined benefit obligation at the end of the reporting period less the fair value of plan assets. Defined benefit obligations are calculated using the projected unit credit method.

Present value of defined benefit obligations are determined by discounting the estimated future cash outflows using interest rate of government bonds that are denominated in the currency of benefits payment and associated with the operation of the plans, and that have maturity terms approximating the terms of the related pension liabilities.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions of post-employment benefits are recognised in other comprehensive income at the date of occurrence. Other amounts, such as current service cost, any past service cost and gain or loss on settlement, and net interest on net defined benefit liability (asset) are recognised in profit or loss. Remeasurements of other long term benefits are also recognised in profit or loss.

Share-based payment transactions

The share option programme allows the Group's employees to acquire shares of the Company. The fair value of the options is measured at grant date and spread over the period during which the employees become unconditionally entitled to the options. The fair value of the American type options is measured based on the binomial model while fair value of European type options is measured based on the Black-Scholes model taking into account terms and conditions in the options were granted.

Government grants

Grants from government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants relating to costs are deferred and recognised in profit and loss over the period necessary to match them with the costs that they are intended to compensate. Government grants relating to property, plant and equipment are included in non-current liabilities as deferred government grants and are credited to profit and loss on a straight-line basis over the expected lives of the related assets.

Provisions

A provision is recognised if, as a result of 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 expected future cash flows at a pre-tax rate that reflects current market assessments of time value of money and risks specific to liability.

3. Summary of significant accounting policies (continued)

Provisions (continued)

Environmental liabilities

Liabilities for environmental remediation are recorded where there is a present obligation (legal or constructive), payment is probable and reliable estimates can be made.

Restoration provision

Restoration provision is recognised if it presents a legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made. The corresponding asset is depreciated through profit and loss in the consolidated statement of comprehensive income on a straight-line basis during the asset's useful life. Restoration provision is calculated based on expected costs and time required to restore land occupied by ash dumps and mines at the end of their useful life to avoid their damaging effect on the environment. Change in provision related to revision of costs, discount rate or other assumptions is accounted for prospectively starting from the date of revision of these estimates.

Shareholder's equity

Dividends

Dividends declared are recognised as a liability and deducted from equity if they are approved by shareholders. Dividends are disclosed when they are declared after the end of the reporting period, but before the consolidated financial statements are authorised for issue.

Earnings per share

Earnings per share is determined by dividing profit/(loss) attributable to holders of ordinary shares by weighted average number of ordinary shares outstanding during the reporting period, excluding the effect of average number of ordinary shares purchased by the Group (treasury shares).

Diluted earnings per share are calculated by adjusting weighted average number of ordinary shares outstanding assuming conversion of all dilutive potential ordinary shares.

Share premium

Share premium is determined as a difference between the issue cost of shares and their nominal value at the moment of issue of shares. Share premium is translated into reporting currency using the historical rate as at the date of the transaction and recognised in the consolidated statement of changes in equity.

Treasury shares

The cost of acquisition of the Company's equity instruments by the Company or its subsidiaries, including any directly attributable incremental costs, net of income taxes, is deducted from equity attributable to the Company's owners until the equity instruments are cancelled, reissued or disposed of.

Treasury shares are recognised at their nominal value, and any differences between nominal value and consideration transferred, including any directly attributable incremental costs, net of income taxes, are recognised within retained earnings.

Where such shares are subsequently sold or reissued, any consideration received, net of any directly attributable incremental transaction costs and related income tax effects is included in equity attributable to the Company's shareholders. Disposal of treasury shares is recognised at nominal value, and any difference between nominal value and consideration received, net of any directly attributable incremental transaction costs and related income tax effects, is recognised in retained earnings. No gain or loss is recognised in the consolidated statement of comprehensive income on the purchase, sale, issue or cancellation of the Company's own equity instruments.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Revenue

Revenue is recognised to the extent that it is probable that economic benefits will flow to the Group and revenue can be reliably measured, regardless of when the payment is made. Revenue is recognised in the amount of the consideration to which the Group will be entitled in exchange for the goods or services that will be transferred to the customer. The consideration set in the contract with the customer may contain fixed and variable amounts as a result of price concession. The Group recognises revenue using the expected value method. Revenue from sale of electricity, capacity and heat is recognised in profit and loss on delivery of electricity, capacity and heat. Where applicable, revenue is based on rates and related restrictions established by law and regulating authorities. The regulatory mechanisms differ from country to country.

Revenue from rendering of construction contracts services is recognised in proportion to the stage of completion of the services. Costs incurred in connection with future activity for a contract are excluded from contract costs in determining the stage of completion. They are presented as a part of amounts due to or due from customers for contract work. Revenue amounts are presented exclusive of VAT.

The Group presents electricity purchases entered into to support delivery of non-regulated bilateral contracts net of revenue.

After adoption of IFRS 15 the Group presents compensation for electricity lost during transmission as reduction of operating expenses.

Social expenditure

To the extent that the Group's contributions to social programmes benefit the community at large and are not restricted to the Group's employees, they are recognised in profit and loss as incurred.

Research expenditure

Research expenditure is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period, even if the asset recognition criteria are subsequently met.

Finance income

Finance income comprises interest income on funds invested, accretion income, dividend income and foreign currency gains, net. Interest income is recognised as it accrues, using the effective interest method. Dividend income is recognised when the dividends are declared and an inflow of economic benefits is probable.

Finance expenses

Finance expenses primarily include interest expense on borrowings, unwinding of discount on provisions and foreign currency losses, net. All borrowing costs are recognised in the consolidated statement of comprehensive income using the effective interest method unless directly attributable to acquisition of a qualifying asset. Commission fee for opening of credit lines is included into interest expense.

Income tax expense

Income tax expense comprises current and deferred tax. Income tax expense is recognised in profit and loss except it relates to items recognised in other comprehensive income or directly in equity.

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

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: initial recognition of goodwill, initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit, and differences relating to investments in subsidiaries to the extent that the Parent Company is able to control the timing of their reversal and it is probable that they will not reverse in the foreseeable future.

A deferred tax asset for deductible temporary differences and tax losses carry forward is recognised to the extent that it is probable that future taxable profits will be available against which temporary difference can be utilised.

3. Summary of significant accounting policies (continued)

Income tax expense (continued)

Deferred tax assets are reviewed at the end of each reporting period and are reduced to the extent that it is no longer probable that related tax benefit will be realised.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on laws that have been enacted or substantively enacted by the end of the reporting period.

New accounting pronouncements and revised standards

The accounting policies adopted in the preparation of the Group's annual financial statements for the year ended 31 December 2018 are consistent with those followed in the preparation of the Group's annual financial statements for the year ended 31 December 2017, except for the adoption by the Group of new standards, interpretations and amendments that became effective as of 1 January 2018, listed below:

(a) The amendments of the following standards became effective for the Group's consolidated financial statements as of 1 January 2018

- ▶ *IFRS 16 Leases* was issued in January 2016 and it replaces IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement Contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Early application is permitted, but not before an entity applies IFRS 15. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transition provisions permit certain reliefs. The Group used the option of early adoption and applied IFRS 16 from 1 January 2018 using full retrospective approach. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). The Group applied both exemptions. At the commencement date of a lease, a lessee recognises a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The Group recognises separately the interest expense on the lease liability and the depreciation expense on the right-of-use asset.
- ▶ *IFRS 15 Revenue from Contracts with Customers* was issued in May 2014 and establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The new revenue standard supersedes all current revenue recognition requirements under IFRS. Either a full retrospective application or a modified retrospective application is required for annual periods beginning on or after 1 January 2018. The Group applied IFRS 15 from 1 January 2018 using full retrospective approach.

In accordance with IFRS 15 the Group need to determine whether significant financing components exist in the contracts. As a practical expedient, an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the Group expects, at contract inception, that the period between when the Group transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Therefore, for short-term advances, trade and other receivables the Group does not account for a financing component.

Previously the Group recognised revenue from sale of electricity, capacity and heat that was measured at the fair value of the consideration receivable. Revenue from sale of electricity, capacity and heat was recognised in profit and loss on delivery of electricity, capacity and heat. If objective evidence existed that the Group would not be able to collect all amounts receivable according to the initial contractual terms, the Group created a provision within the provision for impairment of account receivable. In accordance with IFRS 15 revenue is recognised in the amount of the consideration to which the Group will be entitled in exchange for the goods or services that will be transferred to the customer. The consideration set in the contract with the customer may contain fixed and variable amounts as a result of price concession. The Group recognises revenue using the expected value method.

Previously the Group presented compensation for electricity lost during transmission as revenue. After adoption of IFRS 15 the Group presents such compensation as reduction of operating expenses.

3. Summary of significant accounting policies (continued)

New accounting pronouncements and revised standards (continued)

- ▶ *IFRS 9 Financial Instruments.* In July 2014, the IASB issued the final version of IFRS 9 *Financial Instruments* that replaces IAS 39 *Financial Instruments: Recognition and Measurement* and all previous versions of IFRS 9. IFRS 9 brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018.

Under IFRS 9, debt financial instruments are subsequently measured at fair value through profit or loss (FVPL), amortised cost, or fair value through other comprehensive income (FVOCI). The classification is based on two criteria: the Group's business model for managing the assets; and whether the instruments' contractual cash flows represent 'solely payments of principal and interest' on the principal amount outstanding (the 'SPPI criterion').

The new classification and measurement of the Group's debt financial assets are, as follows:

- ▶ Debt instruments at amortised cost for financial assets that are held within a business model with the objective to hold the financial assets in order to collect contractual cash flows that meet the SPPI criterion. This category includes the Group's Trade and other receivables, and Loans included under Other non-current financial assets.
- ▶ Debt instruments at FVOCI, with gains or losses recycled to profit or loss on derecognition. Financial assets in this category are the Group's quoted and unquoted debt instruments that meet the SPPI criterion and are held within a business model both to collect cash flows and to sell. Under IAS 39, the Group's quoted and unquoted debt instruments were classified as available-for-sale (AFS) financial assets.

Other financial assets are classified and subsequently measured, as follows:

- ▶ Equity instruments at FVOCI, with no recycling of gains or losses to profit or loss on derecognition. This category only includes equity instruments, which the Group intends to hold for the foreseeable future and which the Group has irrevocably elected to so classify upon initial recognition or transition. The Group classified its quoted equity instruments as equity instruments at FVOCI and unquoted equity instruments as equity instruments at FVPL. Equity instruments at FVOCI are not subject to an impairment assessment under IFRS 9. Under IAS 39, the Group's quoted and unquoted equity instruments were classified as AFS financial assets.
- ▶ Financial assets at FVPL comprise derivative instruments and quoted equity instruments which the Group had not irrevocably elected, at initial recognition or transition, to classify at FVOCI. This category would also include debt instruments whose cash flow characteristics fail the SPPI criterion or are not held within a business model whose objective is either to collect contractual cash flows, or to both collect contractual cash flows and sell. Under IAS 39, the Group's quoted equity securities were classified as AFS financial assets. Upon transition the AFS reserve relating to quoted equity securities, which had been previously recognised through profit and loss, was reclassified from retained earnings to fair value reserve.

The assessment of the Group's business models was made as of the date of initial application, 1 January 2018, and then applied retrospectively to those financial assets that were not derecognised before 1 January 2018. The assessment of whether contractual cash flows on debt instruments are solely comprised of principal and interest was made based on the facts and circumstances as at the initial recognition of the assets.

Under IFRS 9 the Group initially measures a financial asset at its fair value. The Group has reclassified AFS financial assets to Securities.

- ▶ *IFRS 2 Classification and Measurement of Share-based Payment Transactions – Amendments to IFRS 2.* The IASB issued amendments to IFRS 2 *Share-based Payment* that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled. On adoption, entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. The amendments are effective for annual periods beginning on or after 1 January 2018. These amendments did not have any effect on the consolidated financial statements.
- ▶ *IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration.* The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine the transaction date for each payment or receipt of advance consideration. Entities may apply the amendments on a fully retrospective basis.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

New accounting pronouncements and revised standards (continued)

Alternatively, an entity may apply the Interpretation prospectively to all assets, expenses and income in its scope that are initially recognised on or after:

- (i) The beginning of the reporting period in which the entity first applies the interpretation; or
- (ii) The beginning of a prior reporting period presented as comparative information in the financial statements of the reporting period in which the entity first applies the interpretation.

The Interpretation is effective for annual periods beginning on or after 1 January 2018. However, since the Group's current practice is in line with the Interpretation, the Group does not expect any effect on its consolidated financial statements.

(b) *The following IFRSs and amendments to existing IFRSs that have been published are not yet effective*

- ▶ *IFRIC Interpretation 23 Uncertainty over Income Tax Treatment.* The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 and does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- ▶ Whether an entity considers uncertain tax treatments separately;
- ▶ The assumptions an entity makes about the examination of tax treatments by taxation authorities;
- ▶ How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates;
- ▶ How an entity considers changes in facts and circumstances.

An entity must determine whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty should be followed. The interpretation is effective for annual reporting periods beginning on or after 1 January 2019, but certain transition reliefs are available. The Group will apply interpretation from its effective date. Since the Group operates in a complex multinational tax environment, applying the Interpretation may affect its consolidated financial statements and the required disclosures. In addition, the Group may need to establish processes and procedures to obtain information that is necessary to apply the Interpretation on a timely basis. The Group is in the process of analysis of impact on the financial statements.

The Group has not adopted earlier any other standard, interpretation and amendment that has been issued but is not yet effective.

The Group is considering the implication of the new standards and the impact on the Group's consolidated financial statements and plans to adopt new standards when they become effective.

4. Segment information

Operating segments are components of an enterprise about which separate financial information is available and is evaluated regularly by the Chief Operating Decision Maker ('CODM') in deciding how to allocate resources and in assessing performance. The Management Board of the Parent Company has been determined as the CODM; the operating segment has been defined as a legal entity or a particular business activity of a legal entity. The Management Board analyses the effectiveness of the operating segments based on IFRS financial reporting.

The Management Board considers the Group activities from both geographical (by countries of the Group entities' jurisdiction) and business perspective (generation, trading, supply, distribution, engineering and other) meaning that each operating segment represents a certain type of business activities or legal entities in a certain country.

*(in millions of RUR)***4. Segment information (continued)**

The following reporting segments have been identified based on the requirements of IFRS 8 *Operating Segments* (taking into consideration aggregation criteria as well as quantitative thresholds on revenue and EBITDA):

- ▶ **Supply in the Russian Federation** (represented by JSC Mosenergosbyt, LLC MosObIEIRTS, JSC Saint Petersburg Power Supply Company (Group of entities), PJSC Tambov power supply company, PJSC Saratovenergo, JSC Altayenergosbyt, LLC INTER RAO Orlovskii Energosbyt, JSC Industrial Energetics, LLC RN-Energo, PJSC Tomskenergosbyt, LLC Omsk Energy Retailing Company, JSC EIRTS LO, LLC ESC Bashkortostan, LLC Inter RAO – EIRTS, LLC Energosbyt Volga (from March 2018), LLC RT – Energy Trading (equity accounted investee), LLC North Supply Company (from July 2018).
- ▶ **Electric Power Generation in the Russian Federation** (represented by Group Inter RAO – Electric Power Plants, including NVGRES Holding Limited (till 31 March 2017 – Note 8) and JSC Nizhnevartovskaya GRES (equity accounted investees).
- ▶ **Thermal Power Generation in the Russian Federation** represented by:
 - ▶ **TGC-11** (represented by JSC TGC-11, JSC Tomsk generation, JSC TomskRTS and JSC OmskRTS);
 - ▶ **Bashkir Generation** (represented by Group Bashkir Generation Company).
- ▶ **Trading in the Russian Federation and Europe** (represented by the trading activities of the Parent Company, RAO Nordic Oy, AB INTER RAO Lietuva and its subsidiaries, Inter Green Renewables and Trading AB (till 16 December 2017 – Note 5), JSC Eastern Energy Company, LLC Payments implementation center).
- ▶ **Foreign assets** represented by the following reporting sub-segments:
 - ▶ **Georgia** (represented by JSC Telasi, JSC Khamhesi I and JSC Khamhesi II);
 - ▶ **Moldavia** (represented by CJSC Moldavskaya GRES);
 - ▶ **Turkey** (represented by Trakya Elektrik Uterim Ve Ticaret A.S.).
- ▶ **Engineering in the Russian Federation** (represented by LLC INTER RAO Engineering, LLC Quartz Group, LLC Power Efficiency Centre INTER RAO UES (equity accounted investee), LLC INTER RAO – Export, Energy beyond borders Non-for-profit Fund and LLC TCC Energy beyond borders).
- ▶ **Corporate centre** includes elimination of transactions among the reporting segments and management expenses, interest income and interest expense of the Parent Company and other subsidiaries, as well as loans and borrowings, obtained by the Parent Company and other subsidiaries, which cannot be allocated to a specific reporting segment on a reasonable basis.

The CODM evaluates performance of the operating segments based on EBITDA, which is calculated as profit/(loss) for the period before finance income and finance expenses; income tax expense; depreciation and amortisation of property, plant and equipment, intangible assets; impairment charge/(release) of property, plant and equipment; impairment of goodwill and other intangible assets; impairment of securities, investments in associates and joint ventures and assets classified as held-for-sale; provisions for doubtful debts and for inventory obsolescence; other provisions; share in profit/(loss) of associates and effects from acquisition and disposal of Group entities; income/(loss) from purchase and sale of securities and assets classified as held-for-sale; and charity expenses, income/(loss) from disposal of non-financial assets and some other included in Other item within the reconciliation between EBITDA of the reporting segments and net income/(loss) for the reporting period. The Group's definition of EBITDA may differ from that of other companies. Information about depreciation and amortisation of property, plant and equipment and intangible assets, interest income and interest expenses is disclosed in segment information as it is regularly reviewed by the CODM.

Revenue of each segment is mainly represented by sales of electricity and capacity and heat-power allocated to the reporting segments.

The CODM analyses leverage of the Group's subsidiaries, joint ventures (equity accounted investees) on a regular basis; loans and borrowings are allocated to the reporting segments excluding inter-segment balances.

Joint ventures (equity accounted investees) are reviewed by the CODM in terms of the Group's share in their profit/(loss) and loan and borrowings.

(in millions of RUR)

4. Segment information (continued)

Below is the performance of the operating segments for the year ended 31 December 2018:

	Supply	Electric Power Generation in the Russian Federation	Thermal Power Generation in the Russian Federation	Trading	Foreign assets			Engineering			
	The Russian Federation	Inter RAO – Electricity Generation Group	TGC-11	Bashkir Generation	The Russian Federation and Europe	Georgia	Moldavia	Turkey	The Russian Federation	Corporate centre	Total
Total revenue	632,368	177,358	33,036	57,217	73,495	12,587	8,490	5,740	30,674	(68,383)	962,582
Revenue from external customers	630,694	131,321	29,136	45,729	71,442	12,587	8,490	5,740	26,881	562	962,582
Inter-segment revenue	1,674	46,037	3,900	11,488	2,053	–	–	–	3,793	(68,945)	–
Operating expenses, including:											
Purchased electricity and capacity	(368,026)	(6,999)	(2,664)	(3,942)	(48,496)	(6,607)	–	–	–	64,938	(371,796)
Transmission fees	(218,047)	–	–	(5)	(7,402)	(1,715)	(64)	–	–	(1)	(227,234)
Fuel expenses	–	(76,490)	(13,191)	(28,777)	–	–	(4,283)	(2,173)	–	2,923	(121,991)
Share in loss of joint ventures	(89)	(3,057)	–	–	–	–	–	–	(55)	–	(3,201)
EBITDA	24,960	59,998	6,469	11,201	16,309	2,221	2,804	2,466	263	(5,391)	121,300
Depreciation and amortisation	(2,721)	(14,106)	(1,660)	(4,160)	(177)	(595)	(284)	(1,683)	(161)	(1,054)	(26,601)
Interest income	1,607	3,374	65	225	22	59	–	30	311	4,574	10,267
Interest expense	(540)	(155)	(160)	(6)	(22)	(239)	(34)	(192)	(96)	254	(1,190)
Interest expense on lease liabilities	(372)	(2,792)	(73)	(505)	(5)	(7)	–	–	(8)	(39)	(3,801)

(in millions of RUR)

4. Segment information (continued)

Below is the performance of the operating segments for the year ended 31 December 2017 (restated):

	Supply	Electric Power Generation in the Russian Federation	Thermal Power Generation in the Russian Federation	Trading	Foreign assets			Engineering			
	The Russian Federation	Inter RAO – Electricity Generation Group	TGC-11	Bashkir Generation	The Russian Federation and Europe	Georgia	Moldavia	Turkey	The Russian Federation	Corporate centre	Total
Total revenue	580,846	165,690	31,525	53,322	58,618	10,092	6,129	10,541	15,100	(62,659)	869,204
Revenue from external customers	579,313	123,779	27,889	43,265	56,350	10,092	6,129	10,541	11,744	102	869,204
Inter-segment revenue	1,533	41,911	3,636	10,057	2,268	–	–	–	3,356	(62,761)	–
Operating expenses, including:											
Purchased electricity and capacity	(340,249)	(7,006)	(2,603)	(4,040)	(44,890)	(5,448)	–	–	–	59,218	(345,018)
Transmission fees	(201,689)	–	–	(5)	(5,537)	(1,022)	(38)	–	–	–	(208,291)
Fuel expenses	–	(76,559)	(12,604)	(28,064)	–	–	(1,942)	(7,987)	–	2,596	(124,560)
Share in (loss)/profit of joint ventures	(42)	2,704	–	–	–	–	–	–	(28)	74	2,708
EBITDA	19,086	57,058	5,489	8,400	7,445	1,813	2,711	1,558	(143)	(5,772)	97,645
Depreciation and amortisation	(2,557)	(11,011)	(1,922)	(3,272)	(184)	(530)	(307)	(1,217)	(233)	(899)	(22,132)
Interest income	3,509	1,924	7	254	65	23	–	32	344	2,619	8,777
Interest expense	(1,377)	(145)	(414)	(7)	(56)	(190)	(104)	(292)	(129)	218	(2,496)
Interest expense on lease liabilities	(413)	(122)	(75)	(547)	(5)	(7)	–	–	(10)	(67)	(1,246)

(in millions of RUR)

4. Segment information (continued)

As at 31 December 2018:

	Supply	Electric Power Generation in the Russian Federation	Thermal Power Generation in the Russian Federation	Trading	Foreign assets			Engineering			
	The Russian Federation	Inter RAO – Electricity Generation Group	TGC-11	Bashkir Generation	The Russian Federation and Europe	Georgia	Moldavia	Turkey	The Russian Federation	Corporate centre	Total
Loans and borrowings, including:	(2,973)	(60)	(1,997)	(327)	(568)	(1,493)	–	(2,320)	–	–	(9,738)
Share in loans and borrowings of joint ventures	–	–	–	–	–	–	–	–	–	–	–
Lease liabilities, including:	(4,267)	(38,703)	(628)	(5,872)	(105)	(61)	–	–	(69)	(388)	(50,093)
Share in lease liabilities of joint ventures	–	(390)	–	–	–	–	–	–	–	–	(390)

As at 1 January 2018 (restated):

	Supply	Electric Power Generation in the Russian Federation	Thermal Power Generation in the Russian Federation	Trading	Foreign assets			Engineering			
	The Russian Federation	Inter RAO – Electricity Generation Group	TGC-11	Bashkir Generation	The Russian Federation and Europe	Georgia	Moldavia	Turkey	The Russian Federation	Corporate centre	Total
Loans and borrowings, including:	(5,776)	–	(3,634)	(423)	(884)	(1,612)	–	(3,825)	–	–	(16,154)
Share in loans and borrowings of joint ventures	–	–	–	–	–	–	–	–	–	–	–
Lease liabilities, including:	(3,479)	(1,833)	(593)	(5,999)	(102)	(46)	–	–	(85)	(561)	(12,698)
Share in lease liabilities of joint ventures	–	(375)	–	–	–	–	–	–	–	–	(375)

As at 1 January 2017 (restated):

	Supply	Electric Power Generation in the Russian Federation	Thermal Power Generation in the Russian Federation	Trading	Foreign assets			Engineering			
	The Russian Federation	Inter RAO – Electricity Generation Group	TGC-11	Bashkir Generation	The Russian Federation and Europe	Georgia	Moldavia	Turkey	The Russian Federation	Corporate centre	Total
Loans and borrowings, including:	(2,036)	–	(5,238)	–	(1,732)	(1,005)	–	(6,701)	–	(151)	(16,863)
Share in loans and borrowings of joint ventures	–	–	–	–	–	–	–	–	–	(151)	(151)
Lease liabilities, including:	(3,780)	(1,655)	(659)	(5,373)	(100)	(61)	–	–	(29)	(1,004)	(12,661)
Share in lease liabilities of joint ventures	–	(436)	–	–	–	–	–	–	–	–	(436)

(in millions of RUR)

4. Segment information (continued)

The reconciliation between EBITDA of the reporting segments and net profit for the reporting period in the consolidated statement of comprehensive income is presented below:

	<i>For the year ended</i>	
	<i>31 December 2018</i>	<i>31 December 2017 (restated)</i>
EBITDA of the reportable segments	121,300	97,645
Depreciation and amortisation (Note 25)	(26,601)	(22,132)
Interest income (Note 26)	10,267	8,777
Interest expense (Note 26)	(1,190)	(2,496)
Interest expense on lease liabilities (Note 26)	(3,801)	(1,246)
Foreign currency exchange gain/(loss), net (Note 26)	3,649	(1,001)
Other finance (expense)/income (Note 26)	(457)	2,379
Provisions charge, including: (Note 25)	(9,716)	(15,496)
- impairment of intangible assets	-	(751)
- impairment of property, plant and equipment	(1,146)	(10,992)
- impairment of securities	-	(225)
- other provisions release	1,008	1,667
- impairment of assets classified as held-for-sale	(1,263)	-
- impairment of account receivables	(8,358)	(5,206)
- VAT provision release	43	48
- impairment of goodwill	-	(37)
Gain from disposal of Group entities, net (Note 24)	187	10
Income from sale of securities (Note 24)	47	-
Other item	(1,129)	(1,077)
Share of loss of associates (Note 8)	(378)	(108)
Income tax expense (Note 27)	(20,503)	(10,593)
Profit for the reporting period in the consolidated statement of comprehensive income	71,675	54,662

The reconciliation between loans and borrowings of the reportable segments and loans and borrowings for the reporting period in the consolidated statement of financial position is presented below:

	<i>As at 31 December 2018</i>	<i>As at 1 January 2018 (restated)</i>	<i>As at 1 January 2017 (restated)</i>
Loans and borrowings of the reportable segments	(9,738)	(16,154)	(16,863)
Less:			
Share in loans and borrowings of joint ventures	-	-	151
Loans and borrowings in the consolidated statement of financial position	(9,738)	(16,154)	(16,712)
Lease liabilities of the reportable segments	(50,093)	(12,698)	(12,661)
Less:			
Share in lease liabilities of joint ventures	390	375	436
Lease liabilities in the consolidated statement of financial position	(49,703)	(12,323)	(12,225)

(in millions of RUR)

4. Segment information (continued)

Information about geographical areas

The Management Board also considers revenue of the Group entities generated in their countries of jurisdiction and abroad as well as non-current assets (property, plant and equipment, investment property, investments in associates and jointly controlled entities and intangible assets, including goodwill) based on location of assets.

	For the year ended 31 December 2018			For the year ended 31 December 2017 (restated)		
	Revenue in the Group entity's jurisdiction ¹	Revenue in countries other than Group entity's jurisdiction	Total revenue based on location of customers	Revenue in the Group entity's jurisdiction	Revenue in countries other than Group entity's jurisdiction	Total revenue based on location of customers
Russian Federation	869,572	–	869,572	796,589	–	796,589
Turkey	5,740	–	5,740	10,541	–	10,541
Georgia	12,587	605	13,192	10,092	885	10,977
Finland	24,478	345	24,823	10,857	277	11,134
China	–	8,755	8,755	–	8,315	8,315
Lithuania	18,163	–	18,163	8,818	–	8,818
Moldavia (incl. Transdniestria Republic)	8,489	–	8,489	6,129	–	6,129
Kazakhstan	–	2,563	2,563	–	2,804	2,804
Estonia	610	472	1,082	467	829	1,296
Mongolia	–	1,800	1,800	–	1,537	1,537
Latvia	795	–	795	861	–	861
Other	1,356	6,252	7,608	793	9,410	10,203
Total	941,790	20,792	962,582	845,147	24,057	869,204

	Total non-current assets based on location of assets ²		
	As at 31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Russian Federation	335,807	307,678	314,240
Georgia	9,503	7,665	7,349
Turkey	935	2,321	3,709
Moldavia (incl. Transdniestria Republic)	4,479	3,453	3,735
Lithuania	1,202	1,172	1,209
Other	350	378	406
Total	352,276	322,667	330,648

5. Acquisitions and disposals

Acquisition of non-controlling interest in PJSC Tambov Energy Retailing Company

In November 2017 the Group has purchased the additional 1.81% of ordinary shares and 6.05% of voting preference shares of PJSC Tambov Energy Retailing Company (calculated from the total number of voting shares) for RUR 14 million. As a result of the acquisition the Group increased its share in subsidiary PJSC Tambov Energy Retailing Company to 67.24%.

¹ Revenues are attributable to countries on the basis of the customer's location.

² Total non-current assets based on location of assets excludes deferred tax assets, securities and other non-current assets.

(in millions of RUR)

5. Acquisitions and disposals (continued)

Acquisition of non-controlling interest in PJSC Saratovenergo

In November 2017 the Group has purchased the additional 2.87% of voting preference shares of PJSC Saratovenergo (calculated from the total number of voting shares) for RUR 12 million. As a result of the acquisition the Group increased its share in subsidiary PJSC Saratovenergo to 59.84%.

Acquisition of non-controlling interest in JSC Mosenergosbyt

As at 31 December 2016 the Group has 93.99% of ordinary shares of JSC Mosenergosbyt. In June 2016 annual shareholders meeting JSC Mosenergosbyt decided to increase the Company's share capital through private subscription placement of the Company's ordinary shares. In February 2017 the Group participated in JSC Mosenergosbyt shares placement in the amount of RUR 3,935 million. The total amount shares placement was RUR 4,020 million.

On 19 June 2017 the Group announced a voluntary public offer to acquire the ordinary shares of JSC Mosenergosbyt held by non-controlling shareholders. The offer price was set at RUB 0.405 per one ordinary share. The offer term expired on 28 August 2017. As a result of the voluntary public offer the Group increased its share in JSC Mosenergosbyt to 100%.

Acquisition of non-controlling interest in PJSC Tomskenergosbyt

As at 31 December 2017 the Group had 93.58% of the shares of PJSC Tomskenergosbyt. In August 2018 PJSC Tomskenergosbyt issued an additional 1,260,000 thousand ordinary shares in favour of one of the Group's companies. As a result of the additional issuance the Group has increased its participation in PJSC Tomskenergosbyt by 1.43% up to 95.01%.

In October 2018 the Group has sold 10% of ordinary shares of PJSC Tomskenergosbyt to the third party for the cash consideration of RUR 244 million. Thus, the Group has decreased its participation in PJSC Tomskenergosbyt to 85.01%.

On 12 November 2018 the Group announced a voluntary public offer to acquire the ordinary shares of PJSC Tomskenergosbyt held by non-controlling shareholders. The offer price was set at RUB 0.44 per one share. The offer term expired on 21 January 2019. As at 31 December 2018, the Group accrued a liability to purchase the shares of non-controlling shareholders in the amount of RUR 373 million, derecognised non-controlling interest in the amount of RUR 313 million and recognised the loss in retained earnings in the amount of RUB 60 million.

Other acquisitions and disposals

In June 2018 the Group purchased from third parties the shares of an individually insignificant subsidiary resulting in net cash inflow of RUR 2 million.

In January 2017 the Group purchased from third parties additional share in Group's subsidiary for RUR 60 million.

In December 2017 the Group liquidated Inter Green Renewables and Trading AB.

During the year ended 31 December 2018 Group liquidated a number of individually insignificant subsidiaries. The loss of RUR 30 million from the liquidation was recognised in the consolidated statement of comprehensive income (during the year ended 31 December 2017 gain of RUR 3 million).

PJSC Inter RAO

(in millions of RUR)

6. Property, plant and equipment

	<i>Land and buildings</i>	<i>Infrastruc- ture assets</i>	<i>Plant and equipment</i>	<i>Other</i>	<i>Construction in progress</i>	<i>Total</i>
Cost						
Balance at 1 January 2017 (restated)	113,439	84,004	246,292	9,004	63,375	516,114
Reclassification	(78)	138	(52)	(8)	–	–
Additions	531	696	38	6	24,390	25,661
Disposals	69	119	(602)	(144)	(137)	(695)
Transfers	10,228	10,050	41,322	530	(62,130)	–
Transfer (to)/from other balance accounts	(2)	5	(10)	11	(4)	–
Translation difference	(322)	(415)	(526)	(40)	(44)	(1,347)
Balance at 31 December 2017 (restated)	123,865	94,597	286,462	9,359	25,450	539,733
<i>Including right-of-use assets</i>	<i>10,941</i>	<i>1,312</i>	<i>5</i>	<i>1,400</i>	<i>–</i>	<i>13,658</i>
Balance at 1 January 2018 (restated)	123,865	94,597	286,462	9,359	25,450	539,733
Reclassification	(16)	22	(9)	3	–	–
Additions	1,426	1,108	38,189	461	19,932	61,116
Disposals	(1,272)	(213)	(3,081)	(430)	(367)	(5,363)
Transfers	8,274	5,566	18,675	645	(33,160)	–
Transfer to other balance accounts	–	–	–	(41)	(15)	(56)
Translation difference	1,485	2,041	2,846	239	189	6,800
Balance at 31 December 2018	133,762	103,121	343,082	10,236	12,029	602,230
<i>Including right-of-use assets</i>	<i>11,456</i>	<i>1,439</i>	<i>37,095</i>	<i>1,642</i>	<i>–</i>	<i>51,632</i>
Depreciation and impairment						
Balance at 1 January 2017 (restated)	(38,820)	(38,312)	(132,712)	(4,845)	(9,571)	(224,260)
Reclassification	(62)	(88)	147	3	–	–
Depreciation charge	(3,465)	(3,484)	(11,777)	(921)	–	(19,647)
Impairment loss charge	(1,971)	(2,003)	(6,285)	(46)	(687)	(10,992)
Additions	–	(1)	(35)	(4)	–	(40)
Disposals	84	186	514	124	6	914
Transfers	(2,150)	(672)	(5,780)	(12)	8,614	–
Transfer (from)/to other balance accounts	(52)	(29)	(6)	–	87	–
Translation difference	281	236	439	34	16	1,006
Balance at 31 December 2017 (restated)	(46,155)	(44,167)	(155,495)	(5,667)	(1,535)	(253,019)
<i>Including right-of-use assets</i>	<i>(887)</i>	<i>(15)</i>	<i>(1)</i>	<i>(722)</i>	<i>–</i>	<i>(1,625)</i>
Balance at 1 January 2018 (restated)	(46,155)	(44,167)	(155,495)	(5,667)	(1,535)	(253,019)
Reclassification	(1)	(3)	9	(5)	–	–
Depreciation charge	(3,669)	(3,807)	(14,987)	(898)	–	(23,361)
Impairment loss charge	(1,280)	(4,200)	(1,439)	(253)	(908)	(8,080)
Impairment loss release	2,053	1,408	3,403	3	67	6,934
Disposals	413	74	1,859	407	99	2,852
Transfers	(5)	(36)	(458)	–	499	–
Transfer to other balance accounts	–	–	–	30	–	30
Translation difference	(1,190)	(1,080)	(2,111)	(171)	(58)	(4,610)
Balance at 31 December 2018	(49,834)	(51,811)	(169,219)	(6,554)	(1,836)	(279,254)
<i>Including right-of-use assets</i>	<i>(1,517)</i>	<i>(36)</i>	<i>(1,697)</i>	<i>(822)</i>	<i>–</i>	<i>(4,072)</i>
Net book value						
Balance at 1 January 2017 (restated)	74,619	45,692	113,580	4,159	53,804	291,854
Balance at 1 January 2018 (restated)	77,710	50,430	130,967	3,692	23,915	286,714
Balance at 31 December 2018	83,928	51,310	173,863	3,682	10,193	322,976

The category land and buildings includes land in the amount of RUR 572 million (1 January 2018: RUR 535 million; 1 January 2017: RUR 576 million).

*(in millions of RUR)***6. Property, plant and equipment (continued)**

Construction in progress is represented by property, plant and equipment that is not yet ready for operation and advances to suppliers of property, plant and equipment. Such advances amounted to RUR 1,174 million as at 31 December 2018 (as at 1 January 2018: RUR 763 million; 1 January 2017: RUR 3,084 million).

Additions of right-of-use assets for the year ended 31 December 2018 amounted to RUR 39,492 million (for the year ended 31 December 2017: RUR 588 million).

Depreciation of right-of-use assets for the year ended 31 December 2018 amounted to RUR 2,905 million (for the year ended 31 December 2017: RUR 1,241 million).

As at 31 December 2018 net book value of right-of-use assets amounted to RUR 47,560 million (as at 1 January 2018: RUR 12,033 million, 1 January 2017: RUR 12,543 million), including the net book value of right-of-use assets of Kaliningrad Generation LLC in the amount of RUR 34,920 million (as at 1 January 2018 and 2017: nil).

The long-term lease liabilities as at 31 December 2018 amounted to RUR 42,991 million (as at 1 January 2018: RUR 10,888 million, 1 January 2017: RUR 10,499 million). The short-term portion of long-term lease liabilities as at 31 December 2018 amounted to RUR 6,712 million (as at 1 January 2018: RUR 1,435 million, 1 January 2017: RUR 1,726 million).

Impairment

The Group performed the impairment tests of property, plant and equipment by the cash generating units and the material impairment charges and reversals included in the Consolidated statement of comprehensive income in the line "Operating expenses" are discussed below:

BashRTS (the company included into the operating segment – "Thermal power generation in the Russian Federation")

The impairment for the year ended 31 December 2018 in the amount of RUR 6,109 million was recognised due to increase of capital expenditure for boiler rooms and heating networks and due to increase of expenses, such as compensation of thermal power losses and repairs caused by significant length of heating networks. The recoverable amount was measured as value in use using the discount rate of 11.6% as at 31 December 2018.

Kashirskaya GRES (separate power plant included into the operating segment – "Generation in the Russian Federation")

The impairment for the year ended 31 December 2018 in the amount of RUR 1,970 million was recognised within the current update of financial model. The estimate of property, plant and equipment fair value assumed the planned retirement of this power plant. The recoverable amount was measured as value in use using the discount rate of 11.0% as at 31 December 2018.

Verkhnetagilskaya GRES and Kostromskaya GRES (separate power plants included into the operating segment – "Generation in the Russian Federation")

During the year ended 31 December 2018 the Group recognised the recovery of impairment of Verkhnetagilskaya GRES and Kostromskaya GRES in amount of RUR 4,471 million and RUR 2,463 million, respectively. The estimates were based both on expected advanced growth of capacity price index for years 2022-2025, and on expected improvement of wholesale electricity market conditions in the long run, which assumes the growth of marginal profit on the day-ahead electricity market. In addition, the recovery of impairment of Verkhnetagilskaya GRES is based on completion of Block No. 12 construction stage and its performance within the specified characteristics.

(in millions of RUR)

6. Property, plant and equipment (continued)

Impairment (continued)

Cherepetskaya GRES (separate power plant included into the operating segment – “Generation in the Russian Federation”)

The impairment for the year ended 31 December 2017 in the amount of RUR 3,294 million was recognised in 4th quarter of 2017 after the impairment test as at 31 December 2017 due to material estimated increase of coal prices compared to expected growth of day-ahead electricity market prices. The recoverable amount was measured as value in use using the discount rate of 10.9% as at 31 December 2017.

Gusinozerskaya GRES and Irikliinskaya GRES (separate power plants included into the operating segment – “Generation in the Russian Federation”)

During the year ended 31 December 2017, due to the negative marginal profit estimates for the electricity market resulting from the expected water usage fee increase, the impairment loss was recognized in respect of Gusinozerskaya GRES and Irikliinskaya GRES in the amount of RUR 1,387 million and RUR 705 million respectively. The impairment of Gusinozerskaya GRES was also driven by a relatively high level of fixed costs compared to the power plant output. The recoverable amount was measured as value in use using the discount rate of 10.9% as at 31 December 2017.

Kashirskaya GRES (separate power plant included into the operating segment – “Generation in the Russian Federation”)

The impairment for the year ended 31 December 2017 in the amount of RUR 662 million was recognised due to failure to comply with the cost reduction programme within the budget process. The recoverable amount was measured as value in use using the discount rate of 10.9% as at 31 December 2017.

Tomsk Generation (the company included into the operating segment – “Thermal power generation in the Russian Federation”)

The impairment for the year ended 31 December 2017 in the amount of RUR 2,577 million was recognised due to unfavourable change in estimates of marginal profit and due to estimates of capacity prices which were insufficient to compensate the fixed costs for the period after the expiry of contract for capacity supply (CCS). The recoverable amount was measured as value in use using the discount rate of 15.0% as at 31 December 2017.

TGC-11 (the company included into the operating segment – “Thermal power generation in the Russian Federation”)

The impairment for the year ended 31 December 2017 in the amount of RUR 2,368 million was recognised in 2nd quarter of 2017 after the impairment test as at 30 June 2017 due to unfavorable rise of maintenance and service cost of generation equipment and insufficient rise of market prices and regulatory tariffs to compensate it. The recoverable amount was measured as value in use using the discount rate of 15.4% as at 30 June 2017.

Various other minor charges and reversals in the net amount of RUR 1 million loss were recognised during the year ended 31 December 2018 (during the year ended 31 December 2017: income RUR 1 million).

(in millions of RUR)

7. Intangible assets

	Goodwill	Software	Other	Total
Cost				
Balance at 1 January 2017	3,830	4,616	17,846	26,292
Reclassification	–	170	(170)	–
Additions	–	3,096	3,558	6,654
Disposals	–	(156)	(110)	(266)
Transfer (to)/from other balance accounts	–	(80)	1	(79)
Translation difference	172	(8)	(427)	(263)
Balance at 31 December 2017	4,002	7,638	20,698	32,338
Balance at 1 January 2018	4,002	7,638	20,698	32,338
Reclassification	–	9	(9)	–
Additions	–	1,410	1,931	3,341
Disposals	–	(107)	(10)	(117)
Transfer from other balance accounts	–	28	40	68
Translation difference	360	50	2,004	2,414
Balance at 31 December 2018	4,362	9,028	24,654	38,044
Amortisation and impairment				
Balance at 1 January 2017	(1,660)	(2,540)	(12,184)	(16,384)
Reclassification	–	(155)	155	–
Amortisation charge	–	(639)	(1,846)	(2,485)
Disposals	–	111	69	180
Impairment loss	(37)	(68)	(683)	(788)
Transfer to other balance accounts	–	77	–	77
Translation difference	(32)	6	271	245
Balance at 31 December 2017	(1,729)	(3,208)	(14,218)	(19,155)
Balance at 1 January 2018	(1,729)	(3,208)	(14,218)	(19,155)
Amortisation charge	–	(777)	(2,463)	(3,240)
Disposals	–	30	7	37
Transfer from other balance accounts	–	(1)	(44)	(45)
Translation difference	(69)	(40)	(1,683)	(1,792)
Balance at 31 December 2018	(1,798)	(3,996)	(18,401)	(24,195)
Net book value				
At 1 January 2017	2,170	2,076	5,662	9,908
At 1 January 2018	2,273	4,430	6,480	13,183
At 31 December 2018	2,564	5,032	6,253	13,849

Amortisation charge is included in operating expenses in the consolidated statement of comprehensive income.

7. Intangible assets (continued)

Impairment of goodwill

31 December 2018

AB INTER RAO Lietuva

As at 31 December 2018 the Group carried out an impairment test for goodwill related to acquisition of AB INTER RAO Lietuva. For the purpose of impairment testing goodwill is allocated to AB INTER RAO Lietuva as an individual cash-generating unit in the amount of RUR 2,189 million. The recoverable amount was measured as value in use. The impairment test was based on the following key assumptions:

- ▶ According to electricity demand long-term projections till the year 2024 expected conservative supply from AB INTER RAO Lietuva will be not less than 2018 year level of 3.7 GWth, starting from the year 2025 till the year 2038 – not less than 1.8 GWth. The terminal value of cash flow was estimated by Gordons approximation.
- ▶ Volume of deliveries is assumed to provide average gross margin of 7.9%, as the above mentioned volume allows AB INTER RAO Lietuva to carry out electricity sales in peak periods, when higher profitability is achieved.
- ▶ The discount factor used for the impairment test performed by management was 9.1% for cash-flows estimations in presentation currency as at 31 December 2018.

Based on the discounted cash flow model, management concluded that goodwill for AB INTER RAO Lietuva is not impaired as of 31 December 2018.

Goodwill which arose on the acquisition of one of Group's subsidiary in the amount of RUR 37 million was fully impaired in the consolidated statement of comprehensive income for the year ended 31 December 2017 within Impairment of goodwill (Note 25). The main reason for impairment was the expected incorporation of subsidiary into JSC Mosenergosbyt.

Other

Included in other intangible assets RUR 1,100 million represents capitalised cost to obtain status of "guarantee supplier" acquired in November 2018. This intangible assets represent the right of LLC North Supply Company to perform functions of guaranteed supplier on the territory of Vologda region of the Russian Federation. As at 31 December 2018 the remaining intangible assets' useful life was 4.5 years.

Included in other intangible assets RUR 451 million represents capitalised cost to obtain status of "guarantee supplier" acquired in March 2018. This intangible assets represent the right of LLC Energobytt Volga to perform functions of guaranteed supplier on the territory of Vladimir region of the Russian Federation. As at 31 December 2018 the remaining intangible assets' useful life was 4.75 years.

Included in other intangible assets RUR 2,868 million represents carrying value of intangible assets of rights on the basis of the contract for capacity supply (CCS) for Verkhnetagilskaya GRES acquired in March 2017 (as at 1 January 2018: RUR 3,193 million). As at 31 December 2018 the remaining intangible assets' useful life was 8.8 years.

Included in other intangible assets RUR 932 million (USD 13 million) represents carrying value of identifiable intangible assets of Trakya Elektrik Uretim ve Ticaret A.S acquired in a business combination in December 2012 (as at 1 January 2018 RUR 2,318 million or USD 40 million; 1 January 2017: RUR 3,704 million or USD 61 million). This intangible asset represents the Group's right to operate the electricity power plant facilities in accordance with the Buy-Operate-Transfer ("BOT") agreement. As at 31 December 2018 the remaining intangible assets' useful life was 5 months.

Included in other intangible assets RUR 249 million represents capitalised cost to obtain status of "guarantee supplier" acquired in December 2013 (as at 1 January 2018: RUR 371 million; 1 January 2017: RUR 498 million). This intangible assets represent the right of LLC INTER RAO Orlovskii energosbyt and JSC Saint Petersburg Power Supply Company to perform functions of guaranteed supplier on the territory of Orel and Omsk regions of the Russian Federation. As at 31 December 2018 the remaining intangible assets' useful life was 2 years.

Included in other intangible assets RUR 72 million (as at 1 January 2018: RUR 144 million; 1 January 2017: RUR 216 million) represents capitalised cost to obtain status of "guarantee supplier" recognised on the acquisition of a subsidiary by one of the Group's entity. As at 31 December 2018 other intangible assets' remaining useful life was 1 year.

7. Intangible assets (continued)

Impairment of goodwill (continued)

31 December 2017

Impairment loss

Based on performed an impairment tests as at 31 December 2017 other intangible assets were impaired in the amount of RUR 683 million, including RUR 638 million of impairment of some research and development projects. The impairment was recognized as the Group reconsidered the current estimates on technical feasibility of the projects. The impairment loss was recognised in the consolidated statement of comprehensive income within Impairment of intangible assets (Note 25).

Based on performed an impairment test as at 31 December 2017 computer software licenses was impaired in the amount of RUR 68 million by the reason of the evidence of inability to use the assets is available from internal reporting. The impairment loss was recognised in the consolidated statement of comprehensive income within Impairment of intangible assets (Note 25).

8. Investments in associates and joint ventures

Details of the associates and joint ventures, together with movements in the carrying values of these investments, are set at below:

	Status	Country	Voting share		
			31 December 2018	1 January 2018	1 January 2017
NVGRES Holding Limited	Joint venture	The Russian Federation	–	–	75.00%
JSC Nizhnevartovskaya GRES	Joint venture	The Russian Federation	75.00%	75.00%	75.00%
JSC Kambarata HPP-1	Joint venture	The Kyrgyz Republic	–	–	50.00%
LLC Power Efficiency Centre INTER RAO UES	Joint venture	The Russian Federation	50.00%	50.00%	50.00%
LLC RT – ET	Joint venture	The Russian Federation	50.00%	50.00%	50.00%
LLC Cosy house	Joint venture	The Russian Federation	–	50.00%	50.00%
JSC Information system operator	Joint venture	The Russian Federation	49.99%	–	–
UAB ALPROKA	Associate	Lithuania	49.99%	49.99%	49.99%
RUS Gas Turbines Holding B.V.	Associate	The Netherlands	25.00%	25.00%	25.00%
JSC KASKAD	Associate	The Russian Federation	25.00%	25.00%	25.00%
LLC IC Gas-Turbine Technologies	Associate	The Russian Federation	52.95%	52.95%	52.95%
LLC INVENT (Group of companies)	Associate	The Russian Federation	33.00%	33.00%	33.00%

(in millions of RUR)

8. Investments in associates and joint ventures (continued)

	Joint ventures			Associates		
	NVGRES Holding Limited including JSC Nizhne- vartovskaya GRES	Other joint ventures	RUS Gas Turbines Holding B.V.	LLC INVENT	Other associates	Total
Carrying value at 1 January 2017	22,643	846	1,522	3,194	681	28,886
Disposals	(3)	(50)	–	–	–	(53)
Unrealised gain	–	–	–	2	–	2
Share of profit/(loss) after tax	2,704	4	(3)	(97)	(8)	2,600
Recognised actuarial loss and past service cost	(3)	–	–	–	–	(3)
Dividends received	–	(10)	–	–	–	(10)
Transfer to other accounts	(8,650)	–	–	–	–	(8,650)
Translation difference	–	(2)	–	–	–	(2)
Carrying value at 31 December 2017 (restated)	16,691	788	1,519	3,099	673	22,770
Carrying value at 1 January 2018 (restated)	16,691	788	1,519	3,099	673	22,770
Disposals	–	(505)	–	–	–	(505)
Share of (loss)/profit after tax	(3,057)	(144)	230	(639)	31	(3,579)
Recognised actuarial loss and past service cost	(8)	–	–	–	–	(8)
Dividends received	(3,225)	–	–	–	(2)	(3,227)
Carrying value at 31 December 2018	10,401	139	1,749	2,460	702	15,451

8. Investments in associates and joint ventures (continued)

Joint ventures

NVGRES Holding Limited including JSC Nizhnevartovskaya GRES

As at 1 January 2017 the Group held 75% interest in NVGRES Holding Limited, including its subsidiary JSC Nizhnevartovskaya GRES accounted for using the equity method. In connection with the liquidation of NVGRES Holding Limited and the liquidator's decision on the distribution of the company's assets the Group accounted for a 75% interest in JSC Nizhnevartovskaya GRES, long-term loan issued to JSC Nizhnevartovskaya GRES in the amount of RUR 150 million and short-term part of long-term loan issued in the amount of RUR 8,483 million and other short-term receivables in the amount of RUR 17 million. As at 1 January 2018 the long-term loan was fully repaid by the JSC Nizhnevartovskaya GRES in cash. In accordance with the term of the Shareholders Agreement between the Group and PJSC Rosneft, JSC Nizhnevartovskaya GRES is jointly controlled.

As at 31 December 2018 the Group performed the impairment test of property, plant and equipment of JSC Nizhnevartovskaya GRES. As a result, the Group recognized its share in impairment loss in amount of RUR 5,100 million within Share of (loss)/profit of associates and joint ventures, net. The main driver for impairment was the price for natural gas, which did not include any discounts over the price established by Federal Antimonopoly Service of the Russian Federation, while the profit margins at Urals segment of wholesale electricity market decrease. The recoverable amount was measured as value in use using the discount rate of 11.0% as at 31 December 2018.

The following is the summarised financial information in respect of JSC Nizhnevartovskaya GRES:

	31 December 2018	1 January 2018 (restated)
Non-current assets	11,203	20,477
Current assets (including cash and cash equivalents as at 31 December 2018: RUR 1,623 million, 1 January 2018: RUR 3,126 million)	4,634	6,262
Non-current liabilities, including: <i>Non-current financial liabilities (excluding trade and other payables and provisions)</i>	(711)	(2,344)
	(500)	(477)
Current liabilities, including: <i>Current financial liabilities (excluding trade and other payables and provisions)</i>	(1,258)	(2,140)
	(19)	(20)
Equity	13,868	22,255
Proportion of the Group's ownership	75.00%	75.00%
Carrying value of the investment	10,401	16,691
	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Revenue	18,650	19,429
Depreciation and amortisation	(1,134)	(1,152)
Interest income	125	411
Interest expense	(12)	(112)
Income tax benefit/(expense)	1,082	(778)
(Loss)/profit from continuing operations	(4,076)	3,606
Other comprehensive loss	(11)	(5)
Total comprehensive (loss)/income for the period	(4,087)	3,601
Proportion of the Group's ownership	75.00%	75.00%
Group's share of total comprehensive (loss)/income	(3,065)	2,701

JSC Kambarata HPP-1

In December 2017 the Group sold 50% of shares of JSC Kambarata HPP-1 to third parties for the cash consideration of RUR 54 million. Income from sale of shares in the amount of RUR 10 million was recognised in the consolidated statement of comprehensive income within Gain from disposal of Group entities, net (Note 24).

8. Investments in associates and joint ventures (continued)

Joint ventures (continued)

LLC Cosy House

In January 2018 the 50% joint venture LLC Cosy House was reorganised into a 100% subsidiary LLC Uyut. As a result of the reorganisation the Group recognised income in the amount of RUR 217 million in the consolidated statement of comprehensive income (Note 24). Cash inflow from the reorganisation of LLC Cosy House in the amount of RUR 722 million was recognised in the consolidation statement of cash flows in investing activities.

Associates

RUS Gas Turbines Holding B.V.

The Group's share in the entity is 25%. The ownership in the entity's equity allows the Group to participate in construction of production facilities, production and sales of high-performance industrial gas turbines in the Russian Federation.

The following is the summarised financial information in respect of RUS Gas Turbines Holding B.V.

	31 December 2018	1 January 2018
Non-current assets	3,729	3,718
Current assets	4,178	3,873
Current liabilities	(912)	(1,515)
Equity	6,995	6,076
Proportion of the Group's ownership	25.00%	25.00%
Carrying value of the investment	1,749	1,519
	Year ended 31 December 2018	Year ended 31 December 2017
Revenue	1,077	5,886
Profit/(loss) from continuing operations	920	(12)
Total comprehensive income/(loss) for the period	920	(12)
Proportion of the Group's ownership	25.00%	25.00%
Group's share of total comprehensive income/(loss)	230	(3)

LLC INVENT (Group of companies)

In November 2016 the Group has entered into the share capital of the Russian industrial holding company LLC INVENT (Group of companies) by investing in it RUR 3,000 million. As a result the Group's share in the Group's share capital amounts to 33.00%. LLC INVENT it is one of the major manufacturers in the Russian market of power cable and transformer substations, as well as pre-insulated pipes and fittings for heat generation and heat supply organizations. The company runs the only plant in Russia, located in Kazan, which produces cables for extra-high voltage of 330 kV and cables with large cross-sections. The excess of the cost of the investment over the fair value of assets and liabilities was recognised as goodwill within the investment in associates and joint ventures in the consolidated statement of financial position – in amount of RUR 2,214 million.

The following is the summarised financial information in respect of LLC INVENT:

	31 December 2018	1 January 2018
Non-current assets	2,623	3,771
Current assets	5,110	6,763
Non-current liabilities	(4,132)	(206)
Current liabilities	(2,856)	(7,645)
Equity	745	2,683
Proportion of the Group's ownership	33.00%	33.00%
Goodwill	2,214	2,214
Carrying value of the investment	2,460	3,099

(in millions of RUR)

8. Investments in associates and joint ventures (continued)**Associates (continued)**

	Year ended 31 December 2018	Year ended 31 December 2017
Revenue	4,405	7,532
Loss from continuing operations	(1,935)	(295)
Total comprehensive loss for the period	(1,935)	(295)
Proportion of the Group's ownership	33.00%	33.00%
Group's share of total comprehensive loss	(639)	(97)

9. Deferred tax assets and liabilities**(a) Recognised deferred tax assets and liabilities**

Differences between IFRS base and relevant tax bases give rise to temporary differences between carrying value of certain assets and liabilities for financial reporting purposes and for income tax purposes. Deferred tax assets and liabilities are measured at the rate expected to be applicable when the temporary differences will reverse, based on rates and legislation enacted or substantively enacted by end of the reporting period.

Deferred tax assets and liabilities are attributable to the following:

	Deferred tax assets			Deferred tax liabilities		
	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Property, plant and equipment	268	635	806	(23,326)	(14,897)	(14,125)
Investments in associates and joint ventures	–	–	–	(83)	(182)	(203)
Trade and other receivables	1,404	1,104	1,644	–	–	–
Tax loss carry-forwards	1,301	2,957	1,775	–	–	–
Investments in securities and assets classified as held-for-sale	–	–	–	(760)	(1,050)	(1,303)
Accounts payable and long-term loans and borrowings	13,336	6,170	5,296	(944)	(545)	(94)
Other items	3,765	3,096	2,945	(1,098)	(1,071)	(1,362)
Tax assets/(liabilities)	20,074	13,962	12,466	(26,211)	(17,745)	(17,087)
Set off of tax	(14,321)	(6,788)	(6,409)	14,321	6,788	6,409
	5,753	7,174	6,057	(11,890)	(10,957)	(10,678)

(b) Unrecognised deferred tax assets

Deferred tax assets have not been recognised in respect of some of the Group entities located in the Russian Federation and abroad and relate to the following deductible temporary differences:

	31 December 2018	1 January 2018
Securities	2,145	2,478
Other	1,064	9,602
	3,209	12,080

Deductible temporary differences as at 31 December 2018 mainly relate to securities. Deferred tax assets have not been recognised in respect of these items because in management's opinion it is not probable that future taxable profit will be available in the respective Group's entities against which the Group can utilise respective tax loss.

(in millions of RUR)

9. Deferred tax assets and liabilities (continued)**(c) Movement in tax effects of temporary differences, after offsetting, during the period****Deferred tax assets**

	1 January 2017 (restated)	Recognised in profit and loss	Recognised in OCI (FCTR)	Recognised in OCI (reserves)	31 December 2017 (restated)
Property, plant and equipment	(1,104)	72	(1)	–	(1,033)
Trade and other receivables	866	(587)	142	–	421
Accounts payable and long-term loans and borrowings	2,852	(17)	(58)	–	2,777
Other items	1,908	180	56	(63)	2,081
Tax loss carry-forwards	1,535	1,532	(139)	–	2,928
	6,057	1,180	–	(63)	7,174

	1 January 2018 (restated)	Recognised in profit and loss	Recognised in OCI (FCTR)	Recognised in OCI (reserves)	31 December 2018
Property, plant and equipment	(1,033)	(238)	160	–	(1,111)
Trade and other receivables	421	262	(1)	–	682
Accounts payable and long-term loans and borrowings	2,777	16	(136)	117	2,774
Other items	2,081	(137)	(78)	245	2,111
Tax loss carry-forwards	2,928	(1,630)	(1)	–	1,297
	7,174	(1,727)	(56)	362	5,753

Deferred tax liabilities

	1 January 2017 (restated)	Recognised in profit and loss	Recognised in OCI (FCTR)	Recognised in OCI (reserves)	31 December 2017 (restated)
Property, plant and equipment	(12,214)	(987)	(29)	–	(13,230)
Investments in associates and joint ventures	(203)	20	(1)	–	(184)
Investments in securities and assets classified as held-for-sale	(1,303)	(1)	–	252	(1,052)
Accounts payable and long-term loans and borrowings	2,360	490	10	(9)	2,851
Other items	682	(25)	26	(25)	658
	(10,678)	(503)	6	218	(10,957)

	1 January 2018 (restated)	Recognised in profit and loss	Recognised in OCI (FCTR)	Recognised in OCI (reserves)	31 December 2018
Property, plant and equipment	(13,230)	(8,727)	9	–	(21,948)
Investments in associates and joint ventures	(184)	103	–	–	(81)
Investments in securities and assets classified as held-for-sale	(1,052)	253	–	277	(522)
Accounts payable and long-term loans and borrowings	2,851	6,816	(42)	(7)	9,618
Other items	658	345	75	(35)	1,043
	(10,957)	(1,210)	42	235	(11,890)

Temporary differences on property, plant and equipment relate to differences between the accounting and tax depreciation rates and carrying values and tax base of property, plant and equipment.

(in millions of RUR)

9. Deferred tax assets and liabilities (continued)

(c) Movement in tax effects of temporary differences, after offsetting, during the period (continued)

Deferred tax assets in the amount of RUR 245 million was recognised as income through other comprehensive income in relation to change of fair value of debt instruments for the year ended 31 December 2018 (for the year ended 31 December 2017 loss: RUR 88 million).

Deferred tax liability in the amount of RUR 277 million was recognised as income through other comprehensive income in relation to revaluation of Equity instruments at FVOCI for the year ended 31 December 2018 (for the year ended 31 December 2017: RUR 252 million).

The Group has not recognised deferred tax liabilities in respect of temporary differences associated with investments in subsidiaries, associates and joint ventures in the amount of RUR 188,176 million (1 January 2018: RUR 151,322 million) because the Group is able to control timing of the reversal of temporary differences and does not intend to realise them in the foreseeable future.

10. Securities

As at 1 January 2018 due to implementation of IFRS 9 the Group has reclassified the available-for-sale financial assets represented by the investments in quoted instruments to Equity instruments at FVOCI in the amount of RUR 4,841 million and unquoted instruments to Equity instruments at Fair value through profit and loss in the amount of RUR 1,481 million. The available-for-sale financial assets represented by the bonds were reclassified to Debt instruments at fair value through OCI in the amount of RUR 4,002 million.

	As at 31 December 2018	As at 1 January 2018
Equity instruments	4,962	6,322
FVOCI	3,450	4,841
FVPL	1,512	1,481
Debt instruments	3,030	4,002
FVOCI	3,030	4,002
Total	7,992	10,324

For the year ended 31 December 2018 and 31 December 2017 there was no impairment loss on securities recognised through profit and loss in the consolidated statement of comprehensive income.

For the year ended 31 December 2018 the amount of RUR 1,114 million, net of tax RUR 277 million, was recognised as a loss from revaluation of securities through other comprehensive income in the consolidated statement of comprehensive income (for the year ended 31 December 2017: loss from revaluation in the amount of RUR 1,011 million, net of tax RUR 252 million).

In April 2017 the deposits placed at Peresvet Bank were converted into the bonds with the option to convert it into the shares of Peresvet Bank at Bank's discretion and reclassified to the Debt instruments at fair value through OCI at the fair value of RUR 3,523 million (Note 11). During the reporting period the change of bonds fair value in the amount of RUR 981 million, net of tax RUR 245 million was recognised as a loss through other comprehensive income in the consolidated statement of comprehensive income (for the year ended 31 December 2017 income: RUR 351 million, net of tax RUR 88 million). During the reporting period the coupon yield in the amount of RUR 80 million was recognised as other financial income in the consolidated statement of comprehensive income (for the year ended 31 December 2017: RUR 40 million). As at 31 December 2018 the bonds issued by Peresvet Bank amounted to RUR 2,979 million (as at 31 December 2017: RUR 4,002 million).

In May-December 2018, the Group has increased its investments in Equity instruments at Fair value through profit and loss by RUR 39 million.

In October 2018, the Group has sold the investments in Equity instruments at Fair value through profit and loss for the cash consideration of RUR 55 million. The income from sale of RUR 47 million was recognized in the consolidated statement of comprehensive income.

11. Other non-current assets

		31 December 2018	As at 1 January 2018	As at 1 January 2017
Financial non-current assets		1,546	2,140	11,223
Non-current trade receivables		1,267	1,669	1,925
	<i>Less impairment provision</i>	<i>(180)</i>	<i>(178)</i>	<i>(309)</i>
Non-current trade receivables – net		1,087	1,491	1,616
Other non-current receivables		476	693	7,545
	<i>Less impairment provision</i>	<i>(54)</i>	<i>(76)</i>	<i>(951)</i>
Other non-current receivables – net		422	617	6,594
Non-current loans issued (including interest)		–	–	3,269
	<i>Less impairment provision</i>	<i>–</i>	<i>–</i>	<i>(256)</i>
Non-current loans issued (including interest) – net		–	–	3,013
Long-term derivative financial instruments		–	2	–
Long-term bank deposits		37	30	–
Non-financial non-current assets		1,075	846	4,207
Non-current advances to suppliers and prepayments		174	19	60
	<i>Less impairment provision</i>	<i>(11)</i>	<i>(4)</i>	<i>(19)</i>
Non-current advances to suppliers and prepayments – net		163	15	41
VAT recoverable		84	30	4
Other		828	801	4,162
		2,621	2,986	15,430

As at 1 January 2017 Other non-current loans issued included cash and deposits placed at Peresvet Bank in the amount of RUR 3,260 million, net of discount effect recognised within Other finance expenses of RUR 12,643 million. In April 2017 the debt was converted into the bonds with the option to convert it into the shares of Peresvet Bank at Bank's discretion and was reclassified to the securities at the fair value of RUR 3,523 million (Note 10).

As at 1 January 2018 Other non-current receivables included RUR 176 million represents a financial asset recognised by the Group in relation to the concession arrangement by one of the Group's subsidiary (Note 13).

As at 1 January 2018 long-term derivative financial instruments included fair value of electricity derivatives in the amount of RUR 2 million (as at 1 January 2017: nil) at AB INTER RAO Lietuva which were held for the purposes of hedging future sales (Note 16, 20, 21).

*(in millions of RUR)***11. Other non-current assets (continued)**

Movements in the provision for impairment of other non-current assets are as follows:

	<i>Non-current trade receivables</i>	<i>Non-current advances to suppliers and prepayments</i>	<i>Other non-current receivables</i>	<i>Non-current loans issued (including interest)</i>	<i>Total provision</i>
At 1 January 2018	(178)	(4)	(76)	–	(258)
(Accrual)/release of provision for receivables impairment	(3)	–	3	–	–
Accrual of discount effect	(206)	(11)	(4)	–	(221)
Unwinding of discount	104	4	23	–	131
Reclassification	77	–	–	–	77
Reclassification of short-term portion	35	–	–	–	35
Translation difference	(9)	–	–	–	(9)
At 31 December 2018	(180)	(11)	(54)	–	(245)

	<i>Non-current trade receivables</i>	<i>Non-current advances to suppliers and prepayments</i>	<i>Other non-current receivables</i>	<i>Non-current loans issued (including interest)</i>	<i>Total provision</i>
At 1 January 2017	(309)	(19)	(951)	(256)	(1,535)
Release of provision for receivables impairment	4	6	7	–	17
Receivables written off during the year as uncollectible	–	1	–	–	1
Accrual of discount effect	(135)	(4)	–	–	(139)
Unwinding of discount	114	10	25	–	149
Reclassification	106	2	–	–	108
Reclassification of short-term portion	41	–	842	–	883
Transfer to other balance accounts	–	–	–	255	255
Translation difference	1	–	1	1	3
At 31 December 2017	(178)	(4)	(76)	–	(258)

12. Inventories

	<i>As at 31 December 2018</i>	<i>As at 1 January 2018</i>	<i>As at 1 January 2017</i>
Fuel	10,018	7,714	7,143
Materials and consumables	5,533	4,381	3,518
Spare parts	2,916	2,533	2,457
Other	1,800	2,299	986
	20,267	16,927	14,104

As at 31 December 2018 provision for inventory obsolescence amounted to RUR 760 million (as at 1 January 2018: RUR 516 million, 1 January 2017: RUR 557 million). The charge of provision for the year ended 31 December 2018 in the amount of RUR 294 million (for the year ended 31 December 2017: RUR 25 million) was recognised in Other provisions within Operating expenses in consolidated statement of comprehensive income.

As at 31 December 2018 the Group has a technological inventory in the amount RUR 5,362 million, mostly represented by fuel and spare parts (as at 1 January 2018: RUR 4,406 million, 1 January 2017: RUR 4,807 million).

13. Accounts receivable and prepayments

		31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Financial assets		93,304	90,153	91,058
Trade receivables		94,763	84,154	79,308
	Less impairment provision	(18,202)	(11,495)	(8,405)
Trade receivables – net		76,561	72,659	70,903
Other receivables		14,444	18,563	21,600
	Less impairment provision	(3,191)	(2,896)	(2,841)
Other receivables – net		11,253	15,667	18,759
Short-term loans issued (including interest)		724	438	557
	Less impairment provision	(250)	(250)	(505)
Short-term loans issued (including interest)		474	188	52
Short-term outstanding interest on bank deposits		1,357	675	47
	Less impairment provision	–	(10)	(10)
Short-term outstanding interest on bank deposits – net		1,357	665	37
Short-term receivables on construction contracts		3,659	974	1,307
Non-financial assets		14,502	18,783	15,363
Advances to suppliers and prepayments		10,938	16,159	9,041
	Less impairment provision	(1,416)	(1,419)	(1,500)
Advances to suppliers and prepayments – net		9,522	14,740	7,541
Short-term VAT recoverable		1,483	1,819	3,872
Taxes prepaid		3,497	2,224	3,950
		107,806	108,936	106,421

As at 31 December 2018 current advances to suppliers and prepayments included RUR 6,308million of advances given to subcontractors within the construction of Primorskaya TPP and Pregolskaya TPP (as at 1 January 2018: RUR 6,917 million; 1 January 2017: nil). As at 1 January 2018 current advances to suppliers and prepayments included the advance to JSC Enx in the amount of RUR 2,262 million for construction of Termogas Machala gas-fired power plant in Ecuador (as at 1 January 2017: 2,261 RUR million).

As at 1 January 2018 other receivables included accounts receivable from LLC Eurosibenergo – Gidrogeneratsia (LLC Telmamskaya HEP) in the amount of RUR 6,052 million, net of discount effect recognised within the line “Provision for impairment of accounts receivable, net” of RUR 198 million under the terms of sale-purchase agreement of PJSC Irkutskenergo shares (as at 1 January 2017: RUR 11,711 million, net of discount effect of RUR 729 million).

(in millions of RUR)

13. Accounts receivable and prepayments (continued)

As at 31 December 2018 Trade receivables included RUR 210 million represents a financial asset recognised by the Group in relation to the concession arrangement by one of the Group's subsidiary, Trakya Elektrik Uretim ve Ticaret A.S. ("Operator"). As at 1 January 2018 and 1 January 2017 financial asset was recognised in Other non-current receivables in the amount of RUR 176 million and RUR 777 million respectively. In accordance with the arrangement, the Operator constructs, commissions and operates a natural gas-fired combined cycle power station on a BOT basis under the terms of Implementation Contract between the Operator and the Ministry of Energy and Natural Resources of the Republic of Turkey ("MENR"). The concession arrangement period includes initial period of up to 2019 with an option of the MENR to extend the operating period up to 2046. At the end of the concession arrangement period, the power plant shall be transferred to an enterprise nominated by MENR. Certain state owned domiciled entities in Turkey are currently obliged to purchase on a "take-or-pay" basis minimum quantities of electricity made available by Trakya Elektrik Uretim ve Ticaret A.S. for initial period. The electricity selling price is calculated as the sum of fixed capacity price, variable capacity price and also depends on natural gas price.

As at 31 December 2018 short-term VAT recoverable included RUR 142 million of VAT mainly for construction of Verkhnetagil'skaya GRES, Permskaya GRES, Kostromskaya GRES, and Cherepetskaya GRES (1 January 2018: RUR 218 million; 1 January 2017: RUR 711 million).

Movements in the provision for impairment of receivables are as follows:

	Trade receivables	Advances to suppliers and prepayments	Short-term loans issued (incl. interest)	Short-term outstanding interest on bank deposits	Other receivables	Total provision
At 1 January 2018 (restated)	(11,495)	(1,419)	(250)	(10)	(2,896)	(16,070)
(Accrual)/release of provision	(7,418)	(20)	–	10	(930)	(8,358)
Accrual of discount effect	(10)	–	–	–	–	(10)
Unwinding of discount	125	2	–	–	198	325
Receivables written off as uncollectible (provided for at the beginning of the year)	1,472	7	–	–	501	1,980
Transfer from other balance accounts	(594)	–	–	–	(12)	(606)
Reclassification, other	(76)	14	–	–	(15)	(77)
Reclassification of long-term portion	(35)	–	–	–	–	(35)
Foreign exchange gain	–	–	–	–	4	4
Translation difference	(171)	–	–	–	(41)	(212)
At 31 December 2018	<u>(18,202)</u>	<u>(1,416)</u>	<u>(250)</u>	<u>–</u>	<u>(3,191)</u>	<u>(23,059)</u>
	Trade receivables	Advances to suppliers and prepayments	Short-term loans issued (incl. interest)	Short-term outstanding interest on bank deposits	Other receivables	Total provision
At 1 January 2017 (restated)	(8,405)	(1,500)	(505)	(10)	(2,841)	(13,261)
(Accrual)/release of provision	(4,338)	45	510	–	(1,440)	(5,223)
Accrual of discount effect	(2)	–	–	–	–	(2)
Unwinding of discount	223	–	–	–	1,373	1,596
Receivables written off as uncollectible (provided for at the beginning of the year)	1,123	31	–	–	807	1,961
Transfer (from)/to other balance accounts	(16)	–	(255)	–	15	(256)
Reclassification, other	(106)	(2)	–	–	–	(108)
Reclassification of long-term portion	(41)	–	–	–	(842)	(883)
Foreign exchange gain	37	6	–	–	24	67
Translation difference	30	1	–	–	8	39
At 31 December 2017 (restated)	<u>(11,495)</u>	<u>(1,419)</u>	<u>(250)</u>	<u>(10)</u>	<u>(2,896)</u>	<u>(16,070)</u>

(in millions of RUR)

13. Accounts receivable and prepayments (continued)

Nominal value of financial assets included in accounts receivable are presented as follows:

At 31 December 2018	Trade receivables	Short-term loans issued (including interest)	Other receivables	Short-term outstanding interest on bank deposits	Short-term receivables on construction contracts	Total
Not past due not impaired	43,622	459	7,782	1,357	3,659	56,879
Past due but not impaired	18,726	15	1,539	-	-	20,280
Past due and impaired	32,415	250	5,123	-	-	37,788
Total	94,763	724	14,444	1,357	3,659	114,947

At 1 January 2018 (restated)	Trade receivables	Short-term loans issued (including interest)	Other receivables	Short-term outstanding interest on bank deposits	Short-term receivables on construction contracts	Total
Not past due not impaired	40,879	188	12,696	665	974	55,402
Past due but not impaired	17,259	-	1,229	-	-	18,488
Past due and impaired	26,016	250	4,638	10	-	30,914
Total	84,154	438	18,563	675	974	104,804

At 1 January 2017 (restated)	Trade receivables	Short-term loans issued (including interest)	Other receivables	Short-term outstanding interest on bank deposits	Short-term receivables on construction contracts	Total
Not past due not impaired	43,939	22	16,947	37	1,307	62,252
Past due but not impaired	16,075	-	940	-	-	17,015
Past due and impaired	19,294	535	3,713	10	-	23,552
Total	79,308	557	21,600	47	1,307	102,819

As at 31 December 2018 accounts receivable in the amount of RUR 20,280 million (as at 1 January 2018: RUR 18,488 million; 1 January 2017: RUR 17,015 million) were past due but not impaired. These relate to a number of independent counterparties without past instances of default as well as none expected. The ageing analysis of these receivables is as follows:

	31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Past due but not impaired			
Up to 3 months	14,518	10,949	12,066
3 to 6 months	2,424	2,586	1,796
6 to 12 months	1,627	2,163	2,307
Over 12 months	1,711	2,790	846
Total	20,280	18,488	17,015

The past due and impaired accounts receivable mainly comprise amounts due from wholesalers, population and other retail customers. The ageing of these receivables is as follows:

	31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Past due and impaired			
Up to 3 months	12,540	9,463	6,876
3 to 6 months	4,347	3,380	3,191
6 to 12 months	5,653	5,364	2,455
Over 12 months	15,248	12,707	11,030
Total	37,788	30,914	23,552

The Group does not hold any collateral as a security.

(in millions of RUR)

14. Cash and cash equivalents

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Cash at bank and in hand, national currency	42,291	54,527	53,985
Cash at bank and in hand, foreign currency	11,700	15,340	7,526
Bank deposits with maturity of three months or less	99,756	72,195	34,477
Total	153,747	142,062	95,988

As at 31 December 2018 bank deposits with maturity of three months or less in the amount of RUR 91,988 million are denominated in RUR (as at 1 January 2018: RUR 68,098 million, 1 January 2017: RUR 29,086 million), in US dollars – RUR 6,099 million (as at 1 January 2018: RUR 4,028 million, 1 January 2017: RUR 5,241 million), in euro – RUR 1,669 million (as at 1 January 2018: RUR 69 million, 1 January 2017: RUR 64 million) and in Turkish lira – RUR nil (as at 1 January 2018: RUR nil, 1 January 2017: RUR 86 million).

15. Assets classified as held-for-sale

	1 January 2018	Impairment	Disposal	Reclas- sification	31 December 2018
JSC Stantsiya Ekibastuzskaya GRES-2	3,000	(1,263)	–	–	1,737
Total	3,000	(1,263)	–	–	1,737

	1 January 2017	Impairment	Disposal	Reclas- sification	31 December 2017
JSC Stantsiya Ekibastuzskaya GRES-2	3,000	–	–	–	3,000
Total	3,000	–	–	–	3,000

	1 January 2016	Impairment	Disposal	Reclas- sification	31 December 2016
PJSC Irkutskenergo	38,048	–	(38,252)	204	–
JSC Stantsiya Ekibastuzskaya GRES-2	–	(3,020)	–	6,020	3,000
Total	38,048	(3,020)	(38,252)	6,224	3,000

In December 2018 within business negotiations on sale of 50.00% of ordinary shares of JSC Stantsiya Ekibastuzskaya GRES-2, the Group decided to revalue an asset classified as held-for-sale and as a result, its book value was equal USD 25 million or RUR 1,737 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018. The impairment loss for RUR 1,263 million was recognised in the consolidated statement of comprehensive income.

In the 1st half 2011, PJSC Inter RAO acquired 40.00% of ordinary shares of PJSC Irkutskenergo. On the date of acquisition the Group classified the investment as assets held-for-sale in the amount of RUR 38,048 million being the cost of consideration given. As at 31 March 2016 the Group reclassified 0.29% of shares of PJSC Irkutskenergo with carrying value of RUR 204 million from equity instruments at FVOCI, due to management intention to sell the investment.

In June 2016, the Group has sold 40.29% of ordinary shares of PJSC Irkutskenergo to LLC Telmamskaya HEP (currently LLC Eurosibenergo – Gidrogeneratsia), a subsidiary of JSC EuroSibEnergo for cash consideration of RUR 45,000 million paid in June 2016 and cash consideration of RUR 25,000 million paid in 2016-2018, including RUR 6,250 million paid in 2018 (Note 11, 13).

(in millions of RUR)

16. Other current assets

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Bank deposits with maturity of 3-12 months	72,790	22,285	19
Restricted cash	1,338	657	3,727
Short-term derivative financial instruments	14	46	72
Other	1,176	1,139	894
Total	75,318	24,127	4,712

As at 31 December 2018 restricted cash balances included cash deposited in OKO Bank (held as collateral in favour of Fingrid) and Nordea (held as collateral in favour of NASDAQ OMX AB), in the aggregate amount of RUR 126 million held by RAO Nordic Oy (as at 1 January 2018: RUR 85 million, 1 January 2017: RUR 146 million), cash deposited in the total amount of RUR 1,212 million held by Trakya Group, JSC Telasi, AB Inter RAO Lietuva, SIA Inter RAO Latvia, PJSC Tomskenergosbyt and other companies (as at 1 January 2018: RUR 572 million, 1 January 2017: RUR 775 million).

As at 1 January 2017 restricted cash balances included cash deposited in Peresvet Bank in the amount of RUR 2,806 million. In April 2017 this amount was fully repaid by the bank.

As at 31 December 2018 short-term derivative financial instruments included fair value of electricity derivatives in the amount of RUR 14 million (as at 1 January 2018: RUR nil; 1 January 2017: RUR 24 million) at RAO Nordic Oy which are held for the purposes of hedging future sales (Note 11) and AB INTER RAO Lietuva in the amount of RUR nil (as at 1 January 2018: RUR 46 million, 1 January 2017: RUR 48 million) which are held for the purposes of hedging future cash flow.

As at 31 December 2018 other current assets included bonds issued by financial institutions with total carrying value of RUR 616 million (as at 1 January 2018: RUR 664 million, 1 January 2017: RUR 375 million).

17. Equity**Share capital**

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Number of ordinary shares issued and fully paid (in units)	104,400,000,000	104,400,000,000	104,400,000,000
Par value (in RUR)	2.809767	2.809767	2.809767
Share capital (in million RUR)	293,340	293,340	293,340

Movements in outstanding and treasury shares

	Issued shares		Treasury shares		Total	
	thousand units	million RUR	thousand units	million RUR	thousand units	million RUR
1 January 2018	104,400,000	293,340	(20,922,317)	(58,787)	83,477,683	234,553
Acquisition of treasury shares	-	-	(11,740,313)	(32,988)	(11,740,313)	(32,988)
Sale of treasury shares	-	-	1,980,617	5,565	1,980,617	5,565
31 December 2018	104,400,000	293,340	(30,682,013)	(86,210)	73,717,987	207,130
	Issued shares		Treasury shares		Total	
	thousand units	million RUR	thousand units	million RUR	thousand units	million RUR
31 December 2016	104,400,000	293,340	(20,922,317)	(58,787)	83,477,683	234,553
31 December 2017	104,400,000	293,340	(20,922,317)	(58,787)	83,477,683	234,553

*(in millions of RUR)***17. Equity (continued)****Movements in outstanding and treasury shares**

During the reporting period 1,980,615 thousand of treasury shares (1.90% of its share capital) were purchased by the management of the Group under share option programme (Note 31 (b)).

In June 2018 the Group has acquired 6,608,643 thousand shares of the Parent company (6.33% of its share capital) from the PJSC FGC UES for the price of RUR 3.3463 per share (Note 20, 21).

In July 2018 the Group has acquired 5,131,669 thousand shares of the Parent company (4.92% of its share capital) from the RusHydro Group for the price of RUR 3.3463 per share (Note 20, 21).

In 2018 the Group has acquired 1 thousand shares of the Parent company (0.000000958% of its share capital) from the JSC Russian Regional Development Bank (RRDB) for the price of RUR 3.6970 per share.

In 2018 the Group has sold 2 thousand shares of the Parent company (0.0000024% of its share capital) to the third parties.

Dividends

On 21 May 2018 the Parent Company declared dividends for the year 2017 of RUR 0.130383141762452 per share in the amount of RUR 13,612 million (including dividends to related and third parties in the amount of RUR 11,458 million).

On 9 June 2017 the Parent Company declared dividends for the year 2016 of RUR 0.14681992337 per share in the amount of RUR 15,328 million (including dividends to related and third parties in the amount of RUR 12,656 million).

Cash flow hedge reserve

For the year ended 31 December 2018 loss on hedge transactions was recognised in other comprehensive income in the amount of RUR 369 million net of tax RUR 90 million related to shareholders of the Company and net loss related to non-controlling interest in the amount of RUR 166million net of tax RUR 34 million.

For the year ended 31 December 2017 net loss on hedge transactions was recognised in other comprehensive income in the amount of RUR 14 million related to shareholders of the Company and net loss related to non-controlling interest in the amount of RUR 13 million.

The overall effect of above agreements are provided in the table below:

	<i>Foreign currency forward and option contracts</i>	<i>Electricity forward and futures contracts</i>	<i>Total</i>
1 January 2017	(3)	19	16
Gain/(loss) arising on change in fair value of hedge instruments, net	3	(17)	(14)
31 December 2017	–	2	2
Gain/(loss) arising on change in fair value of hedge instruments, net	4	(463)	(459)
Deferred income tax related to gains recognised in other comprehensive income	(1)	91	90
31 December 2018	3	(370)	(367)

*(in millions of RUR)***17. Equity (continued)****Fair value reserve**

	<i>Fair value reserve</i>
1 January 2017	2,485
Loss arising on change in fair value of securities (Note 10, 15)	(824)
Deferred income tax related to gains recognised in other comprehensive income	164
31 December 2017	1,825
1 January 2018	1,825
Effect of adoption of new standards	(5,475)
1 January 2018 (restated)	(3,650)
Loss arising on change in fair value of securities (Note 10)	(2,617)
Deferred income tax related to losses recognised in other comprehensive income	522
31 December 2018	(5,745)

Actuarial reserve

	<i>Related to shareholders of the Company</i>	<i>Related to non-controlling shareholders</i>	<i>Total</i>
1 January 2017	(182)	5	(177)
Gain arising on change in pension liabilities	198	–	198
Deferred income tax related to gains recognised in other comprehensive income	(9)	–	(9)
31 December 2017	7	5	12
1 January 2018	7	5	12
Gain/(loss) arising on change in pension liabilities	282	(2)	280
Deferred income tax related to gains recognised in other comprehensive income	(15)	–	(15)
31 December 2018	274	3	277

18. Earnings per share

The calculation of earnings per share is based on profit or loss for the period and weighted average number of ordinary shares outstanding during the period, calculated as shown below.

The dilutive effect for the year ended 31 December 2018 of the recognition of share-based option programme (see Note 31 (b)) is included in calculation of diluted earnings per share.

	<i>Year ended 31 December 2018</i>
Weighted average number of shares (thousand units) – basic	79,125,328
Weighted average number of shares (thousand units) – diluted	79,451,247
Income attributable to the shareholders of the Company	70,776
Income per ordinary share (RUR) – basic	0.894
Income per ordinary share (RUR) – diluted	0.891

*(in millions of RUR)***18. Earnings per share (continued)**

	Year ended 31 December 2017 (restated)
Weighted average number of shares (thousand units) – basic	83,477,683
Weighted average number of shares (thousand units) – diluted	84,923,691
Income attributable to the shareholders of the Company	53,974
Income per ordinary share (RUR) – basic	0.647
Income per ordinary share (RUR) – diluted	0.636

19. Loans and borrowings

This note provides information about the Group's loans and borrowings. Certain loan agreements include financial and non-financial covenants.

Loans and borrowings	Currency	As at 31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Otkritie PJSC (v)	RUR	915	420	–
Gazprombank JSC	RUR	626	729	3,696
Sberbank PJSC (iv)	RUR	155	2,853	–
Total in RUR	RUR	1,696	4,002	3,696
ING Bank NV (ii)	USD	2,279	3,416	4,750
Vakifbank (iii)	USD	–	401	1,921
EBRD (i)	USD	–	335	469
Other	USD	–	3	8
Total in USD	USD	2,279	4,155	7,148
SWEDBANK AB	EUR	568	720	877
Total in EUR	EUR	568	720	877
Government of Georgia	JPY	446	405	447
Total in JPY	JPY	446	405	447
Total in GEL	GEL	1,043	866	77
Total long-term loans and borrowings		6,032	10,148	12,245
Less: current portion of long-term loans and borrowings		(4,647)	(5,473)	(3,641)
		1,385	4,675	8,604

Effective interest rates

	As at 31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Loans and borrowings at fixed interest rate			
RUR	7.50-8.40%	7.65-11.50%	10.15-14.95%
USD	–	15.40%	15.40%
EUR	–	1.30%	–
JPY	18.00%	19.00%	18.00%
GEL	13.00-18.00%	12.75-19.00%	18.00%
Loans and borrowings at variable interest rate			
GEL	13.00%	–	–
USD	7.07%	3.83-5.92%	4.04-5.09%
EUR	2.18%	2.23%	2.27%

(in millions of RUR)

19. Loans and borrowings (continued)

As at 31 December 2018 fair value of loans and borrowings is RUR 6,239 million (1 January 2018: RUR 10,343 million, 1 January 2017: RUR 12,505 million), which is estimated by discounting of contractual future cash flows at the prevailing current market interest rates available to the Group for similar financial instruments.

31 December 2018	Fair value	Method of valuation	Ranges
Financial liabilities at amortised cost			
Total loans and borrowings		Discounted cash flows	
Loans denominated in USD	2,279	Discounted cash flows	7.50-8.40%
Loans denominated in RUR	1,720	Discounted cash flows	7.07%
Loans denominated in GEL	1,075	Discounted cash flows	2.21%
Loans denominated in JPY	597	Discounted cash flows	7.81%
Loans denominated in EUR	568	Discounted cash flows	10.92%

- (i) In February 2011 JSC Telasi obtained a loan from European Bank of Reconstruction and Development (EBRD) amounting to USD 25 million at floating interest rate Libor + Margin. The Margin varied from 3.5% to 5.0%, the loan was obtained for financing of the investment programme to rehabilitate electricity distribution low-voltage network system in Georgia. The Parent Company acted as a guarantor under this agreement. The loan was repaid in November 2018.
- (ii) On 10 December 2012 the Group obtained a loan from ING Bank N.V. in the amount of USD 89 million with variable interest rate Libor + 3.75%, with the purposes of financing acquisition of Trakya Elektrik Uretim ve Ticaret A.S. The loan is payable in May 2019. Parent Company and JSC INTER RAO – Electric Power Plants act as guarantors under this agreement.
- (iii) With the acquisition of controlling interest in Trakya Elektrik Uretim ve Ticaret A.S., the Group assumed liability under two loans from Vakifbank with variable interest rate Libor + 4.15%, in the amount of USD 75 million as at 31 December 2015. The loans were repaid in January 2018.
- (iv) In November-December 2017 JSC OmskRTS, LLC ESC Bashkortostan and JSC TGC-11 signed long-term credit line agreements in total amount RUR 7,000 million with Sberbank PJSC for maintenance of operating activities and purposes of refinancing of existing loans and borrowings.
- (v) In June 2017 JSC TomskRTS signed a long-term credit line agreement in amount RUR 1,000 million with Otkritie PJSC for maintenance of operating activities and purposes of refinancing of existing loans and borrowings.

In June 2010 JSC Stantsiya Ekibastuzskaya GRES-2, joint venture till the December 2016, recognised liability under two credit lines in the amount of USD 385 million and RUR 12,000 million from Eurasian Development Bank and SC Vnesheconombank, accordingly, maturing in 2025. Shareholders of JSC Stantsiya Ekibastuzskaya GRES-2 issued guarantees to the banks in the amount equal to 50% of the loans carrying value and pledged shares of JSC Stantsiya Ekibastuzskaya GRES-2 as a collateral. The Parent Company's liability under the guarantee and collateral is limited by 50% of the two loans in the amount of RUR 9,178 million as at 31 December 2018 (as at 1 January 2018: RUR 8,133 million, 1 January 2017: RUR 8,427 million); another 50% of the loans were guaranteed and collateralised by JSC "Samruk-Energo".

Changes in interest rates impact loans and borrowings by changing either their fair value (fixed rate debt) or their future cash flows (variable rate debt). The Parent Company has a formal policy of determining how much of the Company's exposure should be to fixed or variable rates. At the time of raising new loans or borrowings management applies the policy to determine whether a fixed or variable rate would be more favourable to the Company over the expected period until maturity. As for other entities of the Group, following the corporate regulative documents, the decisions on raising new loans and borrowings on the subsidiaries level are subject for approval by the Parent Company. Management applies the same policy in making decisions in respect of the conditions of raising loans and borrowings on the subsidiary level.

*(in millions of RUR)***19. Loans and borrowings (continued)**

Current loans and borrowings and current portion of non-current loans and borrowings:

	As at 31 December 2018	As at 1 January 2018 (restated)	As at 1 January 2017 (restated)
Current loans and borrowings	3,659	5,981	4,415
Current portion of non-current loans and borrowings	4,647	5,473	3,641
Interest payable	47	25	52
Total	8,353	11,479	8,108

The Group has the following undrawn borrowing facilities:

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Floating rate			
Expiring within one year	–	13,250	8,722
Expiring beyond one year	119	8,000	24,500
	119	21,250	33,222
Fixed rate			
Expiring within one year	30,655	70,956	33,603
Expiring beyond one year	81,156	47,033	61,699
	111,811	117,989	95,302
Total	111,930	139,239	128,524

20. Accounts payable and accrued liabilities

	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Financial liabilities			
Trade payables	46,482	46,547	47,832
Short-term derivative financial instruments	494	40	17
Dividends payable	102	61	9
Call option	763	763	–
Other payables and accrued expenses	44,030	8,838	4,836
Total	91,871	56,249	52,694
Non-financial liabilities			
Advances received	43,012	45,760	35,694
Staff payables	10,713	10,179	9,333
Provisions, short-term	4,290	6,126	7,755
Total	58,015	62,065	52,782
	149,886	118,314	105,476

As at 31 December 2018 other payables and accrued expenses included payables to PJSC FGC UES and RusHydro Group in the total amount of RUR 35,530 million under the terms of treasury shares purchase agreement (as at 1 January 2018 and 2017: RUR nil), RUR nil payable for rights on the basis of contract for capacity supply (CCS) by JSC INTER RAO – Electric Power Plants (as at 1 January 2018: 2,352 million, 1 January 2017: RUR nil), RUR 851 million of VAT on advances given by LLC INTER RAO Engineering (as at 1 January 2018: 939 million, 1 January 2017: RUR 121 million), RUR 334 million of VAT on advances given by JSC INTER RAO – Electric Power Plants (as at 1 January 2018: 397 million, 1 January 2017: RUR 728 million).

(in millions of RUR)

20. Accounts payable and accrued liabilities (continued)

As at 31 December 2018 advances received included RUR 18,297 million of payments for electricity sales from customers of JSC Mosenergosbyt, JSC Saint Petersburg Power Supply Company, LLC RN-Energo and Group Bashkir Generation Company (as at 1 January 2018: RUR 19,665 million, 31 December 2016: RUR 18,949 million), RUR 18,050 million of advances received for construction from customers of LLC INTER RAO Engineering (as at 1 January 2018: RUR 17,310, 1 January 2017: RUR 7,817 million).

As at 31 December 2018 the call option of RUR 763 million was accrued by the Group (as at 1 January 2018: RUR 763 million, 1 January 2017: RUR nil) due to option agreement signed between the Group and the non-controlling shareholder to purchase its non-controlling share in one of the newly established subsidiary. The option will expire in 2042.

As at 31 December 2018 short-term provisions included RUR 1,138 million related to disputes of JSC Mosenergosbyt including proceedings for non-compliance with the Russian legislation on competition and for volumes of electricity supply (as at 1 January 2018: RUR 2,449 million, 1 January 2017: RUR 2,342 million).

Movements in short-term provisions are as follows:

	<i>Provision for legal claims</i>	<i>Provision for taxes</i>	<i>Provision for income tax</i>	<i>Other provisions</i>	<i>Total</i>
Balance at 1 January 2017	3,071	44	150	4,490	7,755
Additions	2,096	220	15	1,756	4,087
Provision used during the period	–	–	(149)	–	(149)
Release of provision	(1,972)	(165)	–	(3,470)	(5,607)
Reclassification	(62)	–	–	110	48
Transfer to Other Balance Accounts	(2)	–	–	–	(2)
Translation difference	(6)	–	–	–	(6)
Balance at 31 December 2017	3,125	99	16	2,886	6,126
Balance at 1 January 2018	3,125	99	16	2,886	6,126
Additions	1,148	286	123	637	2,194
Provision used during the period	–	–	(15)	–	(15)
Release of provision	(1,834)	(101)	–	(1,467)	(3,402)
Reclassification	103	3	–	(135)	(29)
Transfer to Other Balance Accounts	(607)	–	–	–	(607)
Translation difference	23	–	–	–	23
Balance at 31 December 2018	1,958	287	124	1,921	4,290

Release of provision (net of additional provision) for the year ended 31 December 2018 in the amount of RUR 1,331 million (for the year ended 31 December 2017: RUR 1,535 million) was recognised in Other provisions within Operating expenses in the consolidated statement of comprehensive income.

Additional provision for income tax, net of release for the year ended 31 December 2018 in the amount of RUR 123 million (for the year ended 31 December 2017: RUR 15 million) was recognised within Income tax expense in the consolidated statement of comprehensive income.

21. Other non-current liabilities

	31 December 2018	1 January 2018	1 January 2017
Financial liabilities			
Long-term derivative financial instruments	1	5	14
Other long-term liabilities	1,233	602	451
Total financial liabilities	1,234	607	465
Non-financial liabilities			
Pensions liabilities	3,158	3,927	4,081
Restoration provision	3,611	2,620	1,946
Government grants	26	36	42
Other long-term liabilities	559	962	726
Total non-financial liabilities	7,354	7,545	6,795
Total	8,588	8,152	7,260

Long-term derivative financial instruments as at 31 December 2018 in the total amount of RUR 1 million (as at 1 January 2018: RUR 5 million, 1 January 2017: RUR 14 million) are represented by long-term portion of interest rate swap of Vydmantai Wind Park UAB.

As at 31 December 2018 other long-term financial liabilities included payables for rights according to gas supply contract in the amount of RUR 563 million (as at 1 January 2018 and 2017: RUR nil).

Restoration provision relates to rehabilitation of land plots used for ash dumps by coal powered plants of the Group. The Group has recognised an obligation to restore the disturbed plots occupied by ash dumps on expiration of their useful lives.

Restoration provision at 1 January 2017	1,946
Reclass of short-term portion	(110)
Unwinding of discount	198
Changes in estimates of existing obligations	586
Restoration provision at 31 December 2017	2,620
Restoration provision at 1 January 2018	2,620
Reclass of short-term portion	(10)
Unwinding of discount	197
Changes in estimates of existing obligations	804
Restoration provision at 31 December 2018	3,611

Discount rate used to calculate net present value of future cash outflows for land rehabilitation was in the range from 7.85% to 8.79% per annum in 2018 (in 2017 – 6.97% to 8.64%).

Post-employment benefits

The Group provides certain post-employment benefits to their employees in accordance with labour agreements. Post-employment benefits consist of pension benefits via non state fund, lump sum payments at retirement and towards, employees' jubilees, pension benefits to non-working pensioners-veterans and funeral compensation.

These benefits generally depend on the years of service, terminal salary and amount of benefits provided under labour agreements. The Group pays post-employment benefits when they fall due.

The tables below provide information about liabilities related to pension and other post-employment benefits, plan assets and actuarial assumptions used for current and previous reporting periods.

21. Other non-current liabilities (continued)

Post-employment benefits (continued)

Amounts recognised in the consolidated statement of financial position:

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Present value of defined benefit obligations	3,158	3,927	4,081
Less: fair value of plan assets	–	–	–
Deficit in plan	3,158	3,927	4,081
Pension liabilities in the consolidated statement of financial position	3,158	3,927	4,081

Amounts recognised in the consolidated statement of comprehensive income:

	Year ended 31 December 2018	Year ended 31 December 2017
Current service cost	118	172
Interest cost	282	300
Recognised actuarial gain	(430)	(221)
Recognised past service cost	(337)	(13)
Total	(367)	238
Curtailment and settlement gain	(160)	(43)
Other	(3)	(103)
Total	(530)	92

Changes in the present value of the Group's defined benefit obligation and plan assets are as follows:

	31 December 2018	1 January 2018
Present value of defined benefit obligations as at the beginning of the period	3,927	4,081
Current service cost	118	172
Interest cost	282	300
Actuarial gain	(430)	(221)
Past service cost	(337)	(13)
Benefits paid	(237)	(241)
Curtailment and settlement gain	(160)	(43)
Other	(5)	(108)
Present value of defined benefit obligations as at the end of the period	3,158	3,927

Plan assets:

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Employer contributions	237	241	266
Benefits paid	(237)	(241)	(266)

21. Other non-current liabilities (continued)

Post-employment benefits (continued)

Changes in the pension liabilities are as follows:

	31 December 2018	1 January 2018
Pension liabilities at the beginning of the year	3,927	4,081
Net (expense)/income recognised in the consolidated statement of comprehensive income	(530)	92
Benefits paid	(237)	(241)
Other expense	(2)	(5)
Pension liabilities at the end of the period	3,158	3,927

Principal actuarial assumptions are as follows:

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Discount rate	9.00%	8.76%	9.51%
Salary increase	6.00%	6.00%	7.00%
Inflation	4.10%	4.00%	6.50%
Mortality	RUS 2014 mortality reduced by 20%	RUS 2014 mortality reduced by 20%	RUS 2014 mortality reduced by 20%

Staff turnover was assessed using an experience-based model.

The Group's best estimate of contributions to be paid in next year-long period is RUR 353 million (as at 1 January 2018: RUR 244 million).

Sensitivity analysis as of 31 December 2018 on principal actuarial assumptions is presented below:

	Change in assumption	Effect on defined benefit obligation
Discount rate	+/-0.75% p.a.	200
Salary increase	+/-0.75% p.a.	67
Inflation	+/-0.75% p.a.	100
Staff turnover	+/-1.5% p.a.	105

Funded status of the pension and other post-employment and long-term obligations as well as gains arising from experience adjustments is as follows:

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Defined benefit obligation	3,158	3,927	4,081
Deficit in plan	3,158	3,927	4,081
Experience adjustments on plan liabilities, loss	36	66	23

(in millions of RUR)

22. Other taxes payable

	As at 31 December 2018	As at 1 January 2018	As at 1 January 2017
Value added tax (VAT)	9,067	7,528	7,450
Social tax	774	725	634
Property tax	374	574	648
Personal income tax	353	233	217
Other taxes	76	57	56
	10,644	9,117	9,005

23. Revenue

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Electricity and capacity	877,136	801,569
Thermal energy sales	46,563	44,152
Other revenue	38,883	23,483
	962,582	869,204

Other revenue for the year ended 31 December 2018 included construction contract revenue of RUR 19,615 million (for the year ended 31 December 2017: RUR 8,581 million.) received by LLC INTER RAO Engineering for construction of Pregolskaya TPP and Primorskaya TPP.

24. Other operating income

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Penalties and fines receivable	5,669	5,933
Income from sale of securities (Note 10)	47	–
Electricity derivatives	49	134
Rental income	584	308
Gain from disposal of Group entities, net (Note 5, 8)	187	10
Other	3,956	2,442
	10,492	8,827

Other operating income for the year ended 31 December 2018 included: income from various compensation payments received by JSC Inter RAO – Electric Power Plants in the amount of RUR 1,106 million (for the year ended 31 December 2017: RUR 567 million), income from bank warranty related to the project in South America received by LLC INTER RAO – Export in the amount of RUR 353 million (for the year ended 31 December 2017: RUR nil), income from discount for the payables received by Group Bashkir Generation Company in the amount of RUR 261 million (for the year ended 31 December 2017: RUR nil), income from insurance payments received by JSC TGC-11 in the amount of RUR 191 million (for the year ended 31 December 2017: RUR nil), income from fines and penalties received by LLC RN-Energo in the amount of RUR 115 million (for the year ended 31 December 2017: RUR 108 million), income from the previous periods property tax recalculation received by Group Bashkir Generation Company in the amount of RUR 114 million (for the year ended 31 December 2017: RUR 76 million), income from subsidies received from the state budget by JSC Inter RAO – Electric Power Plants in the amount of RUR 74 million (for the year ended 31 December 2017: RUR 75 million), income from surplus identified as a result of inventory count by JSC Inter RAO – Electric Power Plants in the amount of RUR 52 million (for the year ended 31 December 2017: RUR 73 million).

*(in millions of RUR)***25. Operating expenses**

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Purchased electricity and capacity	371,796	345,018
Electricity transmission fees	227,234	208,291
Fuel expense	121,991	124,560
Employee benefit expenses and payroll taxes	51,935	49,468
Depreciation and amortisation (Note 6, 7)	26,601	22,132
Repairs and maintenance	11,518	9,214
Provision for impairment of account receivables, net	8,358	5,206
Agency fees	5,301	4,913
Cost of equipment for resale	4,415	638
Water supply expenses	3,556	3,345
Taxes other than income tax	3,449	3,643
Other materials for production purposes	3,401	3,180
Transportation expenses	3,092	2,082
Thermal power transmission expenses	2,103	1,851
Impairment of assets classified as held-for-sale (Note 15)	1,263	–
Consulting, legal and auditing services	1,214	1,082
Impairment of property, plant and equipment (Note 6)	1,146	10,992
Short-term lease	189	362
Loss on sale or write-off of inventory	141	57
Expenses from derivatives trading operations on the electricity market	98	–
Lease of low value assets	31	40
Impairment of intangible assets (Note 7)	–	751
Impairment of securities (Note 10)	–	225
Impairment of goodwill (Note 7)	–	37
VAT provision	(43)	(48)
Other provisions release	(1,008)	(1,667)
Other	38,004	26,417
	885,785	821,789

26. Finance income and expense

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Finance income		
Interest income	10,267	8,777
Income on discount of accounts payable	182	–
Unwind of discount of accounts receivable	456	1,745
Dividend income	375	457
Foreign currency exchange gain, net	3,649	–
Other finance income	328	692
	15,257	11,671

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Finance expenses		
Interest expense on lease liabilities	3,801	1,246
Interest expense	1,190	2,496
Loss on discount of accounts receivable	231	141
Unwind of discount of accounts payable	1,118	284
Foreign currency exchange loss, net	–	1,001
Other finance expenses	449	90
	6,789	5,258

*(in millions of RUR)***27. Income tax expense**

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Current tax expense	17,748	11,693
Deferred tax expense/(benefit)	2,937	(677)
Amended tax declaration	(305)	(438)
Provision for income tax	123	15
Income tax expense	20,503	10,593

The Parent Company's applicable tax rate is the corporate income tax rate of 20% (1 January 2018: 20%). The corporate income tax rate in Finland is 20% (1 January 2018: 20%), in Georgia is 15% (1 January 2018: 15%), in Lithuania is 15% (1 January 2018: 15%). The tax system in Transdnistria Republic, Moldavia, where Moldavskaya GRES operates, is based on revenue at a rate of 7% (1 January 2018: 7%).

In accordance with tax legislation, tax losses in various Group entities in the countries where they operate may not be offset against taxable profit of other Group entities. Accordingly, profit tax may be accrued even where there is a net consolidated tax loss.

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

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Profit before tax	(92,178)	(65,255)
Theoretical profit tax charge at 20% – expense	18,436	13,051
Effect of different tax rates	(307)	(326)
Effect of different tax base	506	262
Effect from disposal of controlling interest	–	7
Utilisation of previously unrecognised tax losses	–	(1)
Tax effect of items which are not deductible or assessable for taxation purposes, net	1,235	(102)
Recognition of previously unrecognised temporary differences	(32)	(2,168)
Provision for income tax	123	15
Other	542	(145)
Income tax expense	20,503	10,593

28. Financial instruments and financial risk factors**Financial risk factors**

The Group's activities expose it to a variety of financial risks: market risk (including foreign currency exchange risk, interest rates risk), credit risk and liquidity risk. Risk management is carried out in accordance with risk policy approved by the Management Board.

This risk policy provides principles of overall risk management and policies for specific areas, such as foreign exchange risk, and credit risk. Management considers these measures to be sufficient to control the risks within the Group's business activities.

*(in millions of RUR)***28. Financial instruments and financial risk factors (continued)****Financial risk factors (continued)**

Information on financial instruments in terms of categories is presented below:

<i>As at 31 December 2018</i>	<i>Note</i>	<i>Financial assets at amortised cost</i>	<i>Derivatives used for hedging</i>	<i>Securities</i>	<i>Total</i>
Assets as per consolidated statement of financial position					
Equity instruments	10	–	–	4,962	4,962
Debt instruments	10	–	–	3,030	3,030
Derivative financial instruments	11, 16	–	14	–	14
Trade and other receivables excluding prepayments	11, 13	94,813	–	–	94,813
Restricted cash	16	1,338	–	–	1,338
Bank deposits with maturity exceeding 3 months	11, 16	72,827	–	–	72,827
Bonds	16	616	–	–	616
Cash and cash equivalents	14	153,747	–	–	153,747
Total assets		323,341	14	7,992	331,347

<i>As at 31 December 2018</i>	<i>Note</i>	<i>Liabilities at fair value through profit and loss</i>	<i>Other financial liabilities at amortised cost</i>	<i>Lease liabilities</i>	<i>Total</i>
Liabilities as per consolidated statement of financial position					
Loans and borrowings (excluding lease liabilities)	19	–	9,738	–	9,738
Lease liabilities	19	–	–	49,703	49,703
Derivative financial instruments	20, 21	495	–	–	495
Trade and other payables excluding taxes	20, 21	–	91,847	–	91,847
Call option	20	763	–	–	763
Total liabilities		1,258	101,585	49,703	152,546

<i>As at 1 January 2018 (restated)</i>	<i>Note</i>	<i>Financial assets at amortised cost</i>	<i>Derivatives used for hedging</i>	<i>Securities</i>	<i>Total</i>
Assets as per consolidated statement of financial position					
Equity instruments	10	–	–	6,322	6,322
Debt instruments	10	–	–	4,002	4,002
Derivative financial instruments	11, 16	–	48	–	48
Trade and other receivables excluding prepayments	11, 13	92,261	–	–	92,261
Restricted cash	16	657	–	–	657
Bank deposits with maturity exceeding 3 months	11, 16	22,315	–	–	22,315
Bonds	16	664	–	–	664
Cash and cash equivalents	14	142,062	–	–	142,062
Total assets		257,959	48	10 324	268,331

*(in millions of RUR)***28. Financial instruments and financial risk factors (continued)****Financial risk factors (continued)**

<i>As at 1 January 2018 (restated)</i>	<i>Note</i>	<i>Liabilities at fair value through profit and loss</i>	<i>Other financial liabilities at amortised cost</i>	<i>Lease liabilities</i>	<i>Total</i>
Liabilities as per consolidated statement of financial position					
Loans and borrowings (excluding lease liabilities)	19	–	16,154	–	16,154
Lease liabilities	19	–	–	12,323	12,323
Derivative financial instruments	20, 21	45	–	–	45
Trade and other payables excluding taxes	20, 21	–	56,048	–	56,048
Call option	20	763	–	–	763
Total liabilities		808	72,202	12,323	85,333

<i>As at 1 January 2017 (restated)</i>	<i>Note</i>	<i>Financial assets at amortised cost</i>	<i>Derivatives used for hedging</i>	<i>Securities</i>	<i>Total</i>
Assets as per consolidated statement of financial position					
Securities	10	–	–	7,810	7,810
Derivative financial instruments	11, 16	–	72	–	72
Trade and other receivables excluding prepayments	11, 13	102,281	–	–	102,281
Other non-current assets	11	3,260	–	–	3,260
Restricted cash	16	3,727	–	–	3,727
Bank deposits with maturity exceeding 3 months	11, 16	19	–	–	19
Bonds	16	375	–	–	375
Cash and cash equivalents	14	95,988	–	–	95,988
Total assets		205,650	72	7,810	213,532

<i>As at 1 January 2017 (restated)</i>	<i>Note</i>	<i>Liabilities at fair value through profit and loss</i>	<i>Other financial liabilities at amortised cost</i>	<i>Lease liabilities</i>	<i>Total</i>
Liabilities as per consolidated statement of financial position					
Loans and borrowings (excluding lease liabilities)	19	–	16,712	–	16,712
Lease liabilities	19	–	–	12,225	12,225
Derivative financial instruments	20, 21	31	–	–	31
Trade and other payables excluding taxes	20, 21	–	53,128	–	53,128
Total liabilities		31	69,840	12,225	82,096

(a) Credit risk

The Group is exposed to credit risk, which is the risk that a counterparty will not be able to pay amounts in full when due. Credit risk is managed on the Group basis, as well as at the level of a particular Group entity. Financial assets which are potentially subject to credit risk are presented in the tables below net of provision for impairment and consist principally of trade and other receivables.

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. The Group's current arrangements include assessing customers' financial position, past experience and other relevant factors. Carrying amount of trade and other receivables, net of provision for impairment, represents the maximum amount exposed to credit risk. Although collection of receivables could be influenced by economic and other factors, management believes that there is no significant risk of loss to the Group beyond the provision for impairment already recorded.

Cash is placed in financial institutions, which are considered to have minimal risk of default. Despite the fact that certain banks do not have international credit ratings they are considered as reliable counterparties that have stable positions in the financial market of the Russian Federation or other countries in which the Group entities operate. In 2016, the Group has tightened the procedure for consideration and approval of the credit institutions, in which the Group can place free funds. On the basis of the analysis the list of credit institutions includes banks with a reliable credit rating. The Group believes that greater control over the placement of funds will reduce the exposure to credit risk.

As at 31 December 2018 receivables potentially involving credit risks for the Group consisted mainly of trade receivables in the amount of RUR 77,648 million (as at 1 January 2018: RUR 74,150 million; 1 January 2017: RUR 72,519 million), and other receivables in the amount of RUR 17,165 million (as at 1 January 2018: RUR 18,111 million; 1 January 2017: RUR 29,762 million). Total carrying value of receivables as at 31 December 2018 was RUR 94,813 million (as at 1 January 2018: RUR 92,261 million; 1 January 2017: RUR 102,281 million).

The Group's general objective in managing credit risk is to ensure continuous revenue collection and stable cash inflow as well as efficient financial assets utilisation.

Being mainly linked to trade receivables, the Group's exposure to credit risk is generally affected by quality of debtors. It is considered, that business activities among the diverse entities within the Group differ. Consequently, credit risks are specific for different types of trade receivables (residential sector, wholesale trading, etc.).

Due to impracticability of determining independent credit ratings for each customer and trade partner, as well as taking into account dissimilarity among different groups of them, the Group assesses credit risks allied with trade receivables based upon particular precedent experience and business relationship supported by other factors.

In order to obtain better credit risk monitoring the Group classifies receivables according to understanding of their credit risk rate. The Group makes sure that provision for impairment of accounts receivable reflects the credit risk classification in order to consistently grade and treat different groups of receivables in a similar manner.

As at 31 December 2018	Nominal value	Provision for impairment	Carrying amount	Share in total, %
A	78,541	–	78,541	67%
B'	7,634	(821)	6,813	7%
B''	7,707	(2,194)	5,513	7%
B'''	8,214	(4,631)	3,583	7%
C	14,594	(14,231)	363	13%
Total	116,690	(21,877)	94,813	100%

As at 1 January 2018 (restated)	Nominal value	Provision for impairment	Carrying amount	Share in total, %
A	75,424	–	75,424	70%
B'	12,929	(1,081)	11,848	12%
B''	4,493	(1,202)	3,291	4%
B'''	2,837	(1,475)	1,362	3%
C	11,483	(11,147)	336	11%
Total	107,166	(14,905)	92,261	100%

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

<i>As at 1 January 2017 (restated)</i>	<i>Nominal value</i>	<i>Provision for impairment</i>	<i>Carrying amount</i>	<i>Share in total, %</i>
A	85,556	–	85,556	74%
B'	15,421	(2,519)	12,902	13%
B''	2,787	(918)	1,869	2%
B'''	2,396	(1,487)	909	2%
C	9,398	(8,353)	1,045	9%
Total	115,558	(13,277)	102,281	100%

The Group applies three main Credit risk Classes – A (premium), B (medium), C (low-grade).

Class A – parties with stable financial performance who have rarely allowed delayed settlement or defaulted on their financial obligations towards the Group. The credit risk related to those entities and individuals is considered minimal. No provision is applied for such receivables.

Class B – parties, whose capacity to clear their financial obligations towards the Group is to some extent affected by credit risk. This group is sequentially divided into three sub-classes:

- ▶ Class B' – parties with satisfactory creditworthiness, where any delaying of payments has been only short-term and temporary in character, related agreements are put in place accordingly, credit risk related to those entities and individuals is considered low.
- ▶ Class B'' – parties with poor creditworthiness, reasonably frequent delays in payments happen from time to time, there is reasonable uncertainty regarding their capacity to clear their financial obligations towards the Group. The credit risk related to those entities and individuals is considered acceptable.
- ▶ Class B''' – parties with unsatisfactory creditworthiness, frequent delay in payments happen or/and have systematic grounds (reasons), there is significant uncertainty regarding their capacity to clear their financial obligations towards the Group. The credit risk related to those entities and individuals is considered moderate.

The main reason behind dividing Class B into the three sub-classes is to develop a tool for more precise monitoring of the status of receivables and the outcome of credit risk-management measures employed.

Class C – parties with uncertain capacity to meet their financial obligations towards the Group. The credit risk related to those entities and individuals, mainly residential subscribers in the Russian Federation and Georgia, is considered high. The Group cannot switch off the debtors from electricity supply or reject potential debtors of this class due to social and political reasons.

Policies and procedures to address credit risk-management include participation in financial claims and court proceedings. Group entities also use a wide range of proactive credit risk-management procedures where they consider the rules of national energy markets. Such procedures include preliminary credit risk-assessment before setting up a contract or a deal.

(b) Market risk

(i) Foreign exchange risk

Individual subsidiaries and the Group as a whole are exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than their functional currency. The currencies giving rise to this risk are primarily USD and EUR.

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

The Group has the following foreign-currency denominated financial assets and liabilities (these are disclosed on stand-alone basis inclusive of intercompany balances and exclusive receivables considered as net investments and liabilities related to those assets):

At 31 December 2018	EUR	USD	Other	Total
Trade and other receivables (excluding prepayments)	4,393	6,584	34	11,011
Bank deposits with maturity of 3-12 months	–	–	3	3
Cash and cash equivalents	11,744	5,265	1,320	18,329
Restricted cash	–	–	72	72
Loans and borrowings (excluding lease liabilities)	–	–	(446)	(446)
Lease liabilities	(16)	(560)	–	(576)
Trade and other payables (excluding taxes)	(955)	(835)	(387)	(2,177)
Net foreign currency position	15,166	10,454	596	26,216

As at 1 January 2018 (restated)	EUR	USD	Other	Total
Trade and other receivables (excluding prepayments)	1,441	8,163	145	9,749
Bank deposits with maturity of 3-12 months	–	870	1	871
Cash and cash equivalents	11,170	7,310	486	18,966
Restricted cash	–	57	33	90
Loans and borrowings (excluding lease liabilities)	–	(454)	(423)	(877)
Lease liabilities	(16)	(393)	–	(409)
Trade and other payables (excluding taxes)	(721)	(591)	(180)	(1,492)
Net foreign currency position	11,874	14,962	62	26,898

As at 1 January 2017 (restated)	EUR	USD	Other	Total
Trade and other receivables (excluding prepayments)	3,767	5,567	222	9,556
Cash and cash equivalents	3,759	7,559	561	11,879
Restricted cash	–	526	12	538
Loans and borrowings (excluding lease liabilities)	–	(913)	(531)	(1,444)
Lease liabilities	(2)	(746)	–	(748)
Trade and other payables (excluding taxes)	(1,127)	(1,720)	(358)	(3,205)
Net foreign currency position	6,397	10,273	(94)	16,576

For sensitivity analysis, management estimated the reasonably possible changes in currency exchange rates based on expectations on their volatility. If currency exchange rates had weakened/strengthened within the estimated levels (see table below), with all other variables held constant, the hypothetical effect on income/(loss) and equity for the year ended 31 December 2018 would have been increase of income by RUR 2,802 million or decrease of income by RUR 2,802 million (for the year ended 31 December 2017: increase of income by RUR 2,967 million or decrease of income by RUR 2,945 million, for the year ended 31 December 2016: increase of income by RUR 1,901 million or decrease of income by RUR 1,833 million) in accordance with positive and negative scenario, respectively.

At 31 December 2018	USD/EUR	RUR/USD	RUR/EUR	GEL/USD	GEL/EUR
Upper level	3.38%	12.88%	13.77%	(4.22)%	(0.98)%
Lower level	(3.38)%	(12.88)%	(13.77)%	4.22%	0.69%

As at 1 January 2018	USD/EUR	RUR/USD	RUR/EUR	GEL/USD	GEL/EUR
Upper level	4.14%	(12.88)%	(13.77)%	(5.39)%	(1.48)%
Lower level	(4.14)%	12.88%	13.77%	5.39%	1.03%

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

<i>As at 1 January 2017</i>	<i>USD/EUR</i>	<i>RUR/USD</i>	<i>RUR/EUR</i>	<i>GEL/USD</i>	<i>GEL/EUR</i>
Upper level	4.99%	(12.88)%	(13.77)%	(5.63)%	(0.92)%
Lower level	(4.99)%	12.88%	13.77%	5.63%	0.35%

Expected deviations are based on possible changes in exchange rates based on an analysis of recent trends.

(ii) Interest rate risk

The Group's income/(loss) and operating cash flows are substantially independent of changes in market interest rates. 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 Group has formal policy to determine how much of the Group's exposure is attributable to fixed or variable rates.

<i>Variable rate debt</i>	<i>As at 31 December 2018</i>	<i>As at 1 January 2018</i>	<i>As at 1 January 2017</i>
Libor	2,279	4,152	7,140
EURIBOR	568	720	877

The hypothetical effect on income/(loss) for the period due to change in basic points (bp) in the floating interest rates, with all other variables held constant:

	<i>Deviation of LIBOR</i>		<i>Deviation of EURIBOR</i>	
Hypothetical effect on income/(loss) for the year ended 31 December 2018	9 bp decrease 2	10 bp increase (2)	1bp decrease –	1 bp increase –
Hypothetical effect on income/(loss) for the year ended 31 December 2017	9 bp decrease 3	10 bp increase (3)	5 bp decrease –	5 bp increase –
Hypothetical effect on income/(loss) for the year ended 31 December 2016	9 bp decrease 5	10 bp increase (6)	20 bp decrease 1	10 bp increase (1)

(c) Liquidity risk

The Group's approach to manage liquidity is to ensure, as far as possible, that it has sufficient liquidity to satisfy its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking to damage the Group's reputation. The Group adopts prudent approach to liquidity risk management which implies holding a reasonable level of cash and maintaining funding available through an adequate amount of committed borrowing facilities (Note 19).

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

The table below analyses the Group's financial liabilities allocated to relevant maturity groupings based on remaining contractual maturity date. The amounts disclosed in the table are contractual undiscounted cash flows:

At 31 December 2018	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Between 5 and 20 years	Over 20 years	Total
Loans and borrowings	8,353	866	725	76	3,416	13,436
Trade and other payables	90,617	662	457	268	–	92,004
Lease liabilities	7,492	6,782	18,886	277,866	67,362	378,388
Derivative financial liabilities	494	1	–	–	–	495
Call option	763	–	–	–	–	763
Total	107,719	8,311	20,068	278,210	70,778	485,086

As at 1 January 2018 (restated)	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Between 5 and 20 years	Over 20 years	Total
Loans and borrowings	11,491	3,669	1,138	165	2,928	19,391
Trade and other payables	55,446	605	43	–	–	56,094
Lease liabilities	1,861	1,550	3,916	299,944	71,855	379,126
Derivative financial liabilities	40	4	1	–	–	45
Call option	763	–	–	–	–	763
Total	69,601	5,828	5,098	300,109	74,783	455,419

As at 1 January 2017 (restated)	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Between 5 and 20 years	Over 20 years	Total
Loans and borrowings	8,299	6,381	2,384	286	3,015	20,365
Trade and other payables	52,677	284	163	30	27	53,181
Lease liabilities	2,253	1,466	2,862	302,129	66,031	374,741
Derivative financial liabilities	17	9	5	–	–	31
Total	63,246	8,140	5,414	302,445	69,073	448,318

(d) Capital management

The Group's objective in managing capital is to safeguard the Group's ability to continue operations on a going concern basis and to provide returns to shareholders as well as to maintain a strong capital base to provide creditors and the market with confidence in operating with the Group.

The Company monitors capital based on ratios calculated based on the statutory financial statements of PJSC Inter RAO and management accounts of its subsidiaries prepared according to local statutory requirements. The Group analyses equity and debt financing (see Notes 17 and 19 respectively). As at 31 December 2018, 1 January 2018 and 1 January 2017 the Group was in compliance with the gearing ratios imposed by loan agreements held with certain banks.

Group entities registered in the Russian Federation are individually subject to the following externally imposed capital requirements that are relevant for joint stock companies only:

- ▶ Share capital cannot be lower than 1,000 minimum wages at the date of the company registration;
- ▶ If share capital is greater than its net assets, then share capital must be reduced to a value not exceeding net assets;
- ▶ If minimum allowed share capital is greater than net assets, then a liquidation procedure shall follow.

As at 31 December 2018 the Group entities registered in the Russian Federation were in compliance with the above capital requirements.

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

(e) Fair values

Fair value is determined either by reference to market or by discounting relevant cash flows using market interest rates for similar instruments. As a result of this exercise management believes that fair value of its financial assets and liabilities approximates their carrying amounts except for loans and borrowings. Fair value of loans and borrowings is disclosed in Note 19.

Financial assets and liabilities measured using a valuation technique based on assumptions that are supported by observable current market transactions and assets and liabilities for which pricing is obtained via pricing services. In case prices have not been determined in an active market, financial assets with fair values based on broker quotes, investments in private equity funds with fair values obtained via fund managers and assets that are valued using the Group's own models whereby the majority of assumptions are market observable. Non market observable inputs mean that fair values are determined in whole or partly using a valuation technique (model) based on assumptions that are neither supported by prices from observable current market transactions with the same instrument nor they are based on available market data. Main asset classes in this category are unlisted equity investments and debt instruments. Valuation techniques are used to the extent that observable inputs are not available, whereby allow situations in which there is little, if any, market activity for the financial instrument at the measurement date. Therefore, unobservable inputs reflect the Group's own assumptions about the assumptions that market participants would use in pricing of the financial instrument (including risk assumptions). These inputs are developed based on the best information available, which might include the Group's own data.

Determination of fair value and fair values hierarchy

The Group uses the following hierarchy to determine and disclose fair value of financial instruments:

- ▶ Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- ▶ Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- ▶ Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

The following table shows an analysis of financial instruments by level of the fair value hierarchy:

At 31 December 2018	Note	Total fair value	Fair value hierarchy		
			Level 1	Level 2	Level 3
Financial assets					
Derivative financial instruments					
Electricity derivatives	16	14	14	–	–
Securities					
Equity instruments at FVOCI	10	3,450	3,450	–	–
Equity instruments at FVPL	10	1,512	–	–	1,512
Debt instruments at FVOCI	10	3,030	–	3,030	–
Debt instruments at amortised cost					
Long-term bank deposits	11	37	–	–	37
Bonds issued by financial institutions	16	616	616	–	–
Total financial assets		8,659	4,080	3,030	1,549
Financial liabilities					
Derivative financial instruments					
Electricity derivatives	20	487	487	–	–
Interest rate SWAP	20, 21	8	–	8	–
Financial liabilities designated at fair value through profit or loss					
Call option	20	763	–	763	–
Financial liabilities at amortised cost					
Loans and borrowings	19	6,239	–	6,239	–
Total financial liabilities		7,497	487	7,010	–

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)**Financial risk factors (continued)**

At 1 January 2018 (restated)		Total fair value	Fair value hierarchy		
	Note		Level 1	Level 2	Level 3
Financial assets					
Derivative financial instruments					
Electricity derivatives	11, 16	48	48	–	–
Securities					
Equity instruments at FVOCI	10	4,841	4,841	–	–
Equity instruments at FVPL	10	1,481	–	–	1,481
Debt instruments at FVOCI	10	4,002	–	4,002	–
Debt instruments at amortised cost					
Long-term bank deposits	11	30	–	–	30
Bonds issued by financial institutions	16	664	664	–	–
Total financial assets		11,066	5,553	4,002	1,511
Financial liabilities					
Derivative financial instruments					
Electricity derivatives	20	27	27	–	–
Interest rate SWAP	20, 21	18	–	18	–
Financial liabilities designated at fair value through profit or loss					
Call option	20	763	–	763	–
Financial liabilities at amortised cost					
Loans and borrowings	19	10,343	–	10,343	–
Total financial liabilities		11,151	27	11,124	–
At 1 January 2017 (restated)					
	Note	Total fair value	Fair value hierarchy		
			Level 1	Level 2	Level 3
Financial assets					
Derivative financial instruments					
Electricity derivatives	11, 16	72	72	–	–
Securities					
Equity instruments at FVOCI	10	6,104	6,104	–	–
Equity instruments at FVPL	10	1,706	–	–	1,706
Debt instruments at amortised cost					
Bonds issued by financial institutions	16	375	375	–	–
Total financial assets		8,257	6,551	–	1,706
Financial liabilities					
Derivative financial instruments					
Electricity derivatives	20, 21	3	3	–	–
Interest rate SWAP	20, 21	28	–	28	–
Financial liabilities at amortised cost					
Loans and borrowings	19	12,505	–	12,505	–
Total financial liabilities		12,536	3	12,533	–

29. Commitments

Investment and capital commitments

In accordance with the memorandum signed between the Group and the Government of Georgia in March 2013, the Group has to invest in projects aimed to improve the electricity network which belongs to the Group entity JSC Telasi. In accordance with memorandum the investment commitments as at 31 December 2018 are as follows:

Year	Investments, GEL, million
2019	19
2020-2021	39
2022-2023	44
2024-2025	49

As at 31 December 2018 realisation of investment commitments was in line with schedule for the year 2018. Exchange rate for Georgian lari to Russian rouble as at 31 December 2018 is set by National Bank of Georgia at GEL 3.86 for RUR 100.

As at 31 December 2018 capital commitments of subsidiaries of the Company, are as follows:

Subsidiary	RUR, million
LLC Bashkir Generation Company	2,155
JSC Inter RAO – Electric Power Plants	613
Other	527
Total	3,295

Capital commitments of LLC Bashkir Generation Company are mainly include contractual obligations for the construction of Zatonskaya TEC and construction of a boiler room in Agidel city.

Capital commitments of JSC Inter RAO Electric Power Plants as at 31 December 2018 are mainly for modernization of generator (block No. 8) of the Kostromskaya GRES and for works on completion of the Permskaya GRES (road construction, the delivery of other equipments, other improvements).

Guarantees

- ▶ In December 2017 and May 2016 the Group entered into the new guarantee agreements with State Corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)” for the purpose of financial support of the agreement between the Group and Empresa Importadora de Objetivos Electroenergeticos for capacity increase of TPP “East Havana” and TPP “Maximo Gomes” (Cuba). As at 31 December 2018 the guarantees amounted to EUR 9.9 million, or RUR 783 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018 (as at 1 January 2018: EUR 11 million, or RUR 757 million at the Central Bank of the Russian Federation exchange rate as of 1 January 2018). The guarantee amounted to 6.7 million will expire in January 2024, the guarantee amounted to 3.2 million will expire in November 2022.
- ▶ In December 2010 the Group together with General Electric and State Corporation Russian Technologies established an associate entity, RUS Gas Turbines Holding B.V. The Group's share in the entity is 25%. The entity was established to participate in production and sales of high-performance industrial gas turbines in the Russian Federation. The Group has certain financial obligations to finance the associate.

In August 2017 the Group entered into the standby letter of credit with BNP Paribas Group in favour of GE ENERGY HOLDINGS VOSTOK B.V. (Beneficiary) with the maximum aggregate amount of EUR 30 million in order to fulfill the Group's investment obligations related to the associate.

As at 31 December 2018 the standby letter of credit outstanding amount was EUR 21 million, or RUR 1,651 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018 (as at 1 January 2018: EUR 21 million, or RUR 1,431 million at the Central Bank of the Russian Federation exchange rate as of 1 January 2018). The standby letter of credit will expire in September 2020.

- ▶ In March 2018 the Group entered into the guarantee agreements with Unicredit Bank for the purpose of financial support of the agreement between the Group and Bangladesh Power Development Board for capital repair works at Ghorasal Thermal Power Station. As at 31 December 2018 the guarantees amounted to USD 1.5 million, or RUR 104 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018 (as at 1 January 2018 the similar guarantee agreements with HSBC Bank amounted to USD 5 million, or RUR 289 million at the Central Bank of the Russian Federation exchange rate as of 1 January 2018). The guarantees will expire in December 2019.

29. Commitments (continued)

Guarantees (continued)

- ▶ In April 2018 the Group entered into the guarantee agreements with Unicredit Bank for the purpose of financial support of the agreement between the Group and Da Afghanistan Breshna Sherkat for capital repair works at Naglu Hydro Power Plant. As at 31 December 2018 the guarantee amounted to USD 1.1 million, or RUR 74 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018. The guarantees will expire in December 2019.
- ▶ In May and in December 2018 the Group issued the letter of guarantees with Gazprom Bank for the purpose of financial support of the agreement between the Group and PJSC Unipro for capital repair of the turbine units at Berezovskaya GRES. As at 31 December 2018 the guarantees amounted to RUR 37.6 million. The guarantee amounted to 9.3 million will expire in January 2019, the guarantee amounted to 28.3 million will expire in September 2019.
- ▶ In June 2018 the Group entered into the guarantee agreements with Gazprom Bank for the purpose of financial support of the agreement between the Group and PJSC MOESK for construction and installation works and supply of the equipment and materials for Volokolamsk branch of PJSC MOESK. As at 31 December 2018, the guarantees amounted to RUR 88 million. The guarantees will expire in March 2020.
- ▶ In September 2018 the Group entered into the guarantee agreements with Gazprom Bank for the purpose of financial support of the agreement between the Group and JSC SIBKO for modernisation works at Novosibirskaya TEC-5. As at 31 December 2018 the guarantees amounted to RUR 134 million. The guarantees will expire in April 2019.

The Group's share in the guarantees issued for the joint ventures which are to be incurred jointly with other investors amounts to RUR 240 million (as at 1 January 2018: RUR 1,063 million).

30. Contingencies

(a) Operating environment

The operations and earnings of Group's entities continue, from time to time and in varying degrees, to be affected by political, legislative, fiscal and regulatory developments, including those related to environmental protection, in Russia, Georgia, Moldavia (including Transnistria Republic) and Lithuania.

A significant drop in crude oil prices and a significant devaluation of the Russian rouble, as well as series of unilateral restrictive political and economic measures imposed on the Russian Federation by several countries occurred in 2014, continued to have a negative impact on the economy of the Russian Federation, primary jurisdiction of the Group, in 2018. The combination of the above resulted in reduced access to capital, a higher cost of capital, increased inflation and uncertainty regarding economic growth in the Russian Federation, which could negatively affect the Group's future financial position, results of operations and business prospects. Management believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances.

(b) Insurance

The unified corporate standards are established in the Group for insurance coverage, for insurance companies reliability requirements and insurance coverage procedures developed by Parent Company.

There are two types of insurance undertaken by the Group: obligatory (as required by the law or by agreement between parties) and voluntary.

Obligatory insurance includes public liability insurance of owners of dangerous facilities and public liability insurance of car owners. The Group is obligated to insure different types of property, plant and equipment under loan agreements provisions.

Voluntary insurance includes property insurance against certain risks and equipment breakdown insurance, vehicles insurance, insurance against construction and assembly risks, voluntary public liability insurance of owners of dangerous facilities against social and environmental harm risks. The Group also undertakes insurance of directors' and officials' of certain Group entities responsibilities to cover financial losses of third parties.

(in millions of RUR)

30. Contingencies (continued)

(b) Insurance (continued)

The Groups' assets are insured for its replacement value which is set by valuation reports for insurance purposes considering technical risks. Obligatory condition of the property insurance of foreign subsidiaries is the availability of reliable reinsurance protection, which is done by transferring part of the risk to the foreign reinsurers with high reliability ratings.

In order to optimise insurance protection management performs regular appraisal of efficiency of Group's insurance terms and rationale for new insurance products acquired.

(c) Litigation

Legal proceedings

In the normal course of business the Group is a party to legal actions and consequently had received a number of legal claims from customers and subcontractors with the likelihood of negative outcome for the Group as not probable, but only possible, and, consequently, no provision has been made in these financial statements:

	<i>As at 31 December 2018</i>	<i>As at 31 December 2017</i>	<i>As at 31 December 2016</i>
Legal claims, including:	3,198	7,390	6,609
Share in legal claims of joint ventures	49	–	–

Other than those litigations which have been accrued in the provisions (Note 25) and disclosed above, management of the Group is unaware of any actual, pending or threatened claims as at the date of approval of these consolidated financial statements, which would have a material impact on the Group.

(d) Tax contingencies

The taxation systems in the Russian Federation and in other countries in which the Group operates are relatively new and characterised by frequent changes in legislation, official pronouncements and court decisions which are often unclear, contradictory and subject to varying interpretation by different tax authorities. Taxes are subject to review and investigation by a number of authorities, which have the authority to impose severe fines, penalties and interest charges.

A tax year remains open for review by the tax authorities during three to five subsequent calendar years; however, under certain circumstances a tax year may remain open longer.

In addition, tax and other legislation do not address specifically all the aspects of the Group's reorganisation related to reforming of the electric utilities industry in the Russian Federation. As such there may be tax and legal challenges to the various interpretations, transactions and resolutions that were a part of the reorganisation and reform process.

These circumstances may create tax risks in the Russian Federation and in the other countries in which the Group operates. Management believes that it has adequately provided for tax liabilities based on its interpretations of applicable relevant tax legislation, official pronouncements and court decisions.

However, the interpretations of the relevant authorities could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

The Parent Company and subsidiaries in the countries where they operate have various transactions with related parties. The pricing policy could give rise to transfer pricing risks. In management's opinion, the Group is in substantial compliance with the tax laws of the countries where Group entities operate. However, relevant authorities could take different positions with regard to interpretive issues or court practice could develop adversely with respect to the positions taken by the Group and the effect could be significant.

The Group includes a number of operating and investment companies located in a number of different tax jurisdictions across Europe and the CIS. Those entities are subject to a complex variety of tax regimes and the nature of current and past trading and investment activities exposes them to areas of tax legislation involving considerable judgement and, consequently, uncertainty. The Group estimates that possible claims in respect of certain open tax positions of Group entities as at 31 December 2018 would be successfully challenged in the amount of RUR 420 million (1 January 2018: RUR 321 million; 1 January 2017: RUR 76 million).

Starting from 1 January 2018, the value added tax rate in Russian Federation has been increased from 18% to 20%.

*(in millions of RUR)***30. Contingencies (continued)****(d) Tax contingencies (continued)**

The new Russian transfer pricing legislation, which came into force on 1 January 2012, allows the tax Russian tax authority to apply transfer pricing adjustments and impose additional profit tax liabilities in respect of all “controlled” transactions if the transaction price differs from the market level of prices. The list of “controlled” transactions includes transactions performed with related parties and certain types of cross-border transactions. For domestic transactions the transfer pricing rules apply only if the amount of all transaction with related party exceeds RUR 1 billion starting 2014 and thereafter. In cases where the domestic transaction resulted in an accrual of additional tax liabilities for one party, another party could correspondingly adjust its profit tax liabilities according to the special notification issued by the authorised body in due course.

The current Russian transfer pricing rules have considerably increased the compliance burden for the taxpayers compared to the transfer pricing rules which were in effect before 2012 due to, inter alia, shifting the burden of proof from the Russian tax authorities to the taxpayers. These rules are applicable not only to the transactions taking place in 2012 but also to the prior transactions with related parties if related income and expenses were recognised in 2012. Special transfer pricing rules apply to transactions with securities and derivatives.

The new legislation concerning preparation of the multinational enterprise group (MNE) documentation applies to financial years starting on or after 1 January 2017, with a voluntary country-by-country report (CbCR) filing for financial years starting in 2016. The new law requires preparation of the three-tier transfer pricing documentation (master file, local file, CbCR) and a notification concerning participation in the MNE. These rules apply to the MNE with a consolidated revenue RUR 50 billion in a preceding financial year if an ultimate parent entity (UPE) is in Russia, or with the applicable CbCR threshold as established by the home country of the UPE if outside Russia.

In 2017 the Group determined its tax liabilities arising from “controlled” transactions using actual transaction prices (or making appropriate transfer pricing adjustments (where applicable)).

Due to the uncertainty and absence of current practice of application of the current Russian transfer pricing legislation the Russian tax authorities may challenge the level of prices applied by the Company under the “controlled” transactions and assess additional tax liabilities unless the Company is able to demonstrate the use of market prices with respect to the “controlled” transactions, and that there has been proper reporting to the Russian tax authorities, supported by appropriate available transfer pricing documentation.

(e) Environmental matters

Group's entities operate in the electric power industry in the Russian Federation, Georgia and Moldavia. The enforcement of environmental regulations in these countries is evolving and position of government authorities is continually being reconsidered. Group's entities periodically evaluate their obligations under environmental regulations.

Potential liabilities might arise as a result of changes in legislation and regulation or civil litigation. The impact of these potential changes cannot be estimated but could be material. In the current enforcement climate under existing legislation, management believes that there are no significant liabilities for environmental damage, except restoration provision.

Restoration provision liabilities relate to reclamation of land plots, used for ash dumps by generating entities, which use coal for production purposes (see Note 21).

(f) Ownership of land

The current legislation in Georgia is unclear in relation to ownership issues with regard to land over which the Company's (JSC Telasi) equipment for the transmission of electricity is located. On further clarification of the law, it is possible that the Company may be required to acquire ownership over certain land plots or to pay rentals to other parties for their use. At the date of approval of these financial statements, management considers that it is not possible to quantify any additional expense, if any, which JSC Telasi might incur and consequently, no provision has been made against such potential liabilities in these financial statements.

31. Related party transactions**(a) Parent Company and control relationships**

The Russian Federation is the ultimate controlling party of PJSC Inter RAO and has a controlling interest in the Company of over 50%. Details of operations with entities controlled by the Russian Federation are provided in Note 32 (d).

(in millions of RUR)

31. Related party transactions (continued)

(b) Transactions with key management personnel

The members of the Management Board and Board of Directors own 0.38432% of ordinary shares of PJSC Inter RAO as at 31 December 2018 (31 December 2017: 0.01356%).

Compensation paid to key management and members of the Board of Directors for their service in that capacity is made up of contractual salary and performance bonuses. Key management and members of the Board of Directors received the following remuneration during the period, which is included in employee benefit expenses and payroll taxes (Note 25):

	Year ended 31 December 2018	Year ended 31 December 2017
Salaries and bonuses	1,169	840

Employee's Share Option Programme

In February 2016 the Company's Board of Directors approved Share Option Programme (hereinafter referred to as "the Programme") in which members of the Management Board and other key employees of the Group were to be participants (hereinafter referred to as "the Programme participants").

In July 2016 the basic conditions of the Programme have been communicated to key managers. The total number of shares participating in the Programme is 2% of the share capital of the Parent company. The Programme participants can exercise the share option at any time from February 2018 to February 2020.

Changes in the amounts of options granted are described in the table below:

	All options granted under the Programme	Attributed to members of the Management Board
Number of options outstanding as at 1 January 2017	2,088,000,000	657,720,000
Options signed during the year ended 31 December 2017	–	–
Number of options outstanding as at 1 January 2018	2,088,000,000	657,720,000
Options disposed during the year ended 31 December 2018	(107,384,897)	–
Options provided during the year ended 31 December 2018	–	196,987,140
Options exercised during the year ended 31 December 2018	(1,980,615,103)	(854,707,140)
Number of options outstanding as at 31 December 2018	–	–

Fair value of services received in return for share options granted to employees is measured by reference to fair value of the share options granted. The estimate of the fair value of the services received is measured based on the Binomial model.

	31 December 2018	1 January 2018
Weighted average price (RUR)	3.9282	3.8589
Expected volatility	42.50%	42.50%
Option life, years	3.6	3.6
Risk-free interest rate	8.60%	8.60%
Fair value of the option at measurement date (in RUR)	1.653330801	1.653330801

To determine volatility the Group used the historical volatility of the market prices of the Company's publicly traded shares. For the year ended 31 December 2018 the Group recognised a gain of RUR 168 million (for the year ended 31 December 2017: loss of RUR 919 million) within employee benefit expenses in the consolidated statement of comprehensive income related to the fair value of the options agreements signed.

(c) Transactions with associates and joint ventures

Detailed list of the Group's joint ventures and associates is disclosed in Note 8. Sales to and purchases from joint ventures and associates are made at terms equivalent to those that prevail in arm's length transactions.

31. Related party transactions (continued)

(c) Transactions with associates and joint ventures (continued)

The Group's transactions with associates and joint ventures are disclosed below.

	Year ended 31 December 2018	Year ended 31 December 2017
Revenue		
Joint ventures	595	771
Associates	19	4
Other operating income		
Joint ventures	9	28
Associates	74	2
Interest income		
Joint ventures	–	77
	697	882
Purchased power		
Joint ventures	216	62
Purchased capacity		
Joint venture	2,469	2,139
Other expenses		
Joint venture	80	56
Associates	2	9
	2,767	2,266
Capital expenditures		
Joint ventures	2	8

	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Accounts receivable			
Joint ventures	96	57	154
Associates	–	2	1
Accounts payable			
Joint ventures	229	221	347
Associates	4	8	–

(in millions of RUR)

31. Related party transactions (continued)

(d) Transactions with entities controlled by the Russian Federation

Sales to and purchases from entities controlled by the Russian Federation are made at terms equivalent to those that prevail in arm's length transactions.

Information on transactions with entities controlled by the Russian Federation is presented below:

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)	
Revenue			
Electricity and capacity	279,111	258,201	
Other revenues	22,685	12,489	
Other operating income	3,823	2,264	
	305,619	272,954	
Operating expenses			
Purchased power and capacity	110,335	102,565	
Transmission fees	213,283	196,643	
Fuel expense (gas)	93,454	98,220	
Fuel expense (coal)	446	845	
Other purchases	147	141	
Other expenses	11,244	12,657	
	428,909	411,071	
Capital expenditures	168	495	
	Year ended 31 December 2018	Year ended 31 December 2017 (restated)	
Finance income/(expenses)			
Interest income	3,174	2,409	
Other finance income	6	9	
Dividend income	119	114	
Interest expenses	(311)	(700)	
Interest expenses on lease liabilities	(3,318)	(711)	
	(330)	1,121	
	31 December 2018	1 January 2018	1 January 2017 (restated)
Securities	6,321	8,662	5,906
Long-term accounts receivable			
Other account receivables	43	35	204
Less impairment provision	(17)	(19)	(23)
Other receivables – net	26	16	181
Short-term accounts receivable			
Trade accounts receivable, gross	30,053	27,022	23,111
Less impairment provision	(6,790)	(3,340)	(1,584)
Trade receivables – net	23,263	23,682	21,527
Advances issued	1,492	2,587	918
Advances issued/(received) for capital construction	126	(38)	52
Other receivables	2,942	1,680	1,575
	27,823	27,911	24,072

*(in millions of RUR)***31. Related party transactions (continued)****(d) Transactions with entities controlled by the Russian Federation (continued)**

	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Accounts payable			
Trade accounts payable	21,915	24,956	21,812
Payables for capital construction	54	51	50
Other accounts payable	35,867	2,852	337
Advances received	24,872	24,260	13,723
	82,708	52,119	35,922
Other long-term liabilities	24	9	4
	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Loans and borrowings			
Short-term loans and borrowings	525	1,534	210
Long-term loans and borrowings	663	2,272	–
Interest on loans and borrowings	4	7	1
	1,192	3,813	211
	31 December 2018	1 January 2018 (restated)	1 January 2017 (restated)
Lease liabilities			
Short-term portion of long term lease liabilities	5,687	439	411
Long-term lease liabilities	38,503	7,461	6,596
	44,190	7,900	7,007
	31 December 2018	1 January 2018	1 January 2017
Cash and cash equivalents	16,612	15,670	6,342
	31 December 2018	1 January 2018	1 January 2017
Other current assets (bank deposits)	60,048	47,548	11,771
		Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Financial transactions			
Loans and borrowings received		8,827	19,052
Loans and borrowings repaid		(11,580)	(15,416)
Repayment of leases		(3,280)	(452)
		(6,033)	3,184

In July 2011 subsidiary of PJSC Inter RAO entered into an agreement with a state-controlled company for sale of electric power under the “take-or-pay” arrangement through 30 June 2026. The sales to and purchases from enterprises controlled by the Russian Federation are made at terms equivalent to those that prevail in arm’s length transactions.

*(in millions of RUR)***31. Related party transactions (continued)****(e) Transactions with other related parties**

Sales to and purchases from other related parties are made at terms equivalent to those that prevail in arm's length transactions. Amounts of transactions with other related parties (except for those controlled by the Russian Federation, associates and joint ventures), for each of the reporting periods are provided below:

	Year ended 31 December 2018	Year ended 31 December 2017 (restated)
Revenue		
Electricity and capacity	35	75
Operating expenses		
Purchased electricity and capacity	3,014	2,899
Other (income)/expenses	(183)	33
	31 December 2018	1 January 2018 (restated)
		1 January 2017 (restated)
Short-term accounts receivable		
Trade and other accounts receivable	637	663
		624
Short-term accounts payable		
Trade and other accounts payable	71	5
		259
	31 December 2018	1 January 2018
		1 January 2017
Loans and borrowings payable		
Short-term loans and borrowings	550	3,400
	550	825
		825
	31 December 2018	1 January 2018 (restated)
		1 January 2017 (restated)
Lease liabilities		
Short-term portion of long term lease liabilities	3	2
Long-term lease liabilities	5	1
	8	6
		7
	31 December 2018	1 January 2018
		1 January 2017
Cash and cash equivalents		
Cash in bank	10,799	32,006
Short-term bank deposits	46,238	28,665
	57,037	6,080
		34,745
	Year ended 31 December 2018	Year ended 31 December 2017
Income and expenses		
Interest income	2,644	2,021
Interest expenses	(60)	(258)

32. Significant subsidiaries

Significant subsidiaries consolidated in the Group's consolidated financial statements are disclosed in the table below:

	Country of incorporation	31 December 2018 ownership/voting	1 January 2018 ownership/voting
Trading entities			
RAO Nordic Oy ¹	Finland	100.00%	100.00%
AB INTER RAO Lietuva ¹	Lithuania	51.00%	51.00%
Distributing entities			
JSC Telasi	Georgia	75.11%	75.11%
Supply entities			
JSC Mosenergosbyt (group of companies) (Note 5)	The Russian Federation	100.00%	100.00%
JSC Saint Petersburg Power Supply Company	The Russian Federation	100.00%	100.00%
PJSC Tambov Energy Retailing Company (Note 5)	The Russian Federation	67.24%	67.24%
PJSC Saratovenergo (Note 5)	The Russian Federation	59.84%	59.84%
JSC Altayenergosbyt	The Russian Federation	100.00%	100.00%
LLC RN – Energo	The Russian Federation	100.00%	100.00%
PJSC Tomskennergosbyt (Note 5)	The Russian Federation	85.01%	93.58%
LLC ESC Bashkortostan (Note 5)	The Russian Federation	100.00%	100.00%
Generating entities			
CJSC Moldavskaya GRES	Moldavia, Transdnistria Republic	100.00%	100.00%
JSC INTER RAO – Electric Power Plants	The Russian Federation	100.00%	100.00%
JSC Khramhesi GES I	Georgia	100.00%	100.00%
JSC Khramhesi GES II	Georgia	100.00%	100.00%
JSC TGC-11 (group of companies)	The Russian Federation	100.00%	100.00%
LLC Bashkir Generation Company	The Russian Federation	100.00%	100.00%
LLC Bashkir Heat Distribution Grid	The Russian Federation	100.00%	100.00%
Trakya Elektrik Uterim Ve Ticaret A.S.	Turkey	100.00%	100.00%
Other entities			
JSC Inter RAO Capital	The Russian Federation	100.00%	100.00%
LLC INTER RAO – Procurement Centre	The Russian Federation	100.00%	100.00%
JSC Eastern energy company	The Russian Federation	100.00%	100.00%
JSC Electrolutch	The Russian Federation	100.00%	100.00%
LLC Kvarz Group	The Russian Federation	100.00%	100.00%
INTER RAO Credit B.V.	Netherlands	100.00%	100.00%

¹ RAO Nordic Oy and AB INTER RAO Lietuva also act as holding companies for certain Group entities.

(in millions of RUR)

32. Significant subsidiaries (continued)**Non-controlling interests in subsidiaries (continued)**

The following table summarises the information relating to each of the Group's subsidiaries that has material non-controlling interests, before any intra-group eliminations for the year ended 31 December 2018, including amounts related to both: shareholders and non-controlling interest:

	AB INTER RAO Lietuva	JSC Telasi	PJSC Tambov Energy Retailing Company	PJSC Saratovenergo	PJSC Tomsk- energobyt	Other individually immaterial subsidiaries	Total
Non-controlling interest (percentage)	49.00%	24.89%	32.76%	40.16%	–	–	–
Non-current assets	1,002	6,864	147	535	370	2,076	10,994
Current assets	2,832	1,948	725	2,383	3,229	2,417	13,534
Non-current liabilities	(2)	(1,076)	(13)	(212)	(31)	(1,174)	(2,508)
Current liabilities	(2,795)	(3,063)	(664)	(3,278)	(1,478)	(2,842)	(14,120)
Net assets	1,037	4,673	195	(572)	2,090	477	7,900
Carrying amount of non-controlling interest at 31 December 2018	(509)	(1,340)	(64)	2	–	(298)	(2,209)
Revenue	18,332	11,754	5,522	21,614	12,286	6,667	76,175
Income for the period	860	685	11	502	701	130	2,889
Total comprehensive income for the year ended 31 December 2018	860	675	15	502	701	130	2,883
Income allocated to non-controlling interest	422	171	4	201	39	62	899
Cash flows from operating activities	1,971	1,525	188	378	555	1,220	5,837
Cash flows used for investing activities	28	(1,001)	(8)	(50)	6	41	(984)
Cash flows used for financing activities before dividends to non-controlling interest	(810)	(746)	(78)	(329)	532	(767)	(2,198)
Net increase/(decrease) in cash and cash equivalents for the year ended 31 December 2018	1,189	(222)	102	(1)	1,093	494	2,655
Cash flows used for financing activities – cash dividends to non-controlling interest	(257)	–	–	–	–	(13)	(270)

(in millions of RUR)

32. Significant subsidiaries (continued)**Non-controlling interests in subsidiaries (continued)**

The following table summarises the information relating to each of the Group's subsidiaries that has material non-controlling interests, before any intra-group eliminations for the year ended 31 December 2017 (restated), including amounts related to both: shareholders and non-controlling interest:

	JSC Mosenergosbyt (group of companies)	AB INTER RAO Lietuva	JSC Telasi	PJSC Tambov Energy Retailing Company	PJSC Saratovenergo	PJSC Tomsk- energosbyt	Other individually immaterial subsidiaries	Total
Non-controlling interest (percentage)	–	49.00%	24.89%	32.76%	40.16%	6.42%	–	–
Non-current assets	9,326	821	5,290	151	101	422	1,229	17,340
Current assets	56,125	1,270	1,823	670	2,278	1,863	783	64,812
Non-current liabilities	(1,791)	(6)	(989)	(21)	(148)	(44)	(647)	(3,646)
Current liabilities	(42,425)	(1,159)	(2,724)	(620)	(3,307)	(1,393)	(698)	(52,326)
Net assets	21,235	926	3,400	180	(1,076)	848	667	26,180
Carrying amount of non-controlling interest at 1 January 2018 (restated)	–	(453)	(1,021)	(59)	204	(54)	(204)	(1,587)
Revenue	307,018	9,313	10,063	5,406	19,154	11,561	3,308	365,823
Income/(loss) for the period	6,509	501	516	1	(103)	42	122	7,588
Total comprehensive income/(loss) for the year ended 31 December 2017 (restated)	6,583	501	513	3	(103)	42	122	7,661
Income/(loss) allocated to non- controlling interest for the year ended 31 December 2017 (restated)	299	245	129	(1)	(47)	3	60	688
Cash flows from operating activities	4,677	334	764	(192)	(512)	59	244	5,374
Cash flows used for investing activities	670	–	(956)	2	(7)	15	(12)	(288)
Cash flows used for financing activities before dividends to non-controlling interest	5,619	(510)	156	55	507	(22)	(252)	5,553
Net increase/(decrease) in cash and cash equivalents for the year ended 31 December 2017 (restated)	10,966	(176)	(36)	(135)	(12)	52	(20)	10,639
Cash flows used for financing activities – cash dividends to non-controlling interest	–	(134)	(115)	–	–	–	–	(249)

(in millions of RUR)

33. Events after the reporting period

In February 2019 the Group bought 11.53% of ordinary shares and 4.71% of preferred shares of PJSC Tomskenergosbyt from non-controlling shareholders (10.83% of the total voting shares of the company) under the voluntary public offer announced on 12 November 2018.