Independent auditor's report
on the consolidated financial statements of
PJSC Inter RAO and its subsidiaries
for 2019

February 2020

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PJSC Inter RAO and its subsidiaries

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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 2019, 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 2019 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 (including International Independence Standards) (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
Impairment of trade accounts receivables	
As at 31 December of 2019 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. Therefore, it was one of the matters of the most significance to our audit. The information on trade accounts receivable impairment is disclosed in the Notes 11, 13 and 25 to the consolidated financial statements.	Among other audit procedures, we obtained understanding of the process of impairment assessment of trade receivables and also we analysed information used by the Group for the identification of impaired trade accounts receivable, including information on accounts receivable history of settlements, tested aging structure, subsequent payments and reviewed contracts on a sample basis, analysed applicable levels of accounts receivable impairment allowance. Due to 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.
Analysis of property, plant and equipment impairment indicators	
Analysis of property, plant and equipment impairment indicators was one of the matters of most significance to our audit because the process of assessing of indicators for separate cash-generating unit is complex and is based on assumptions. In assessing the impairment indicators, the Group has applied judgement in selecting the discount rates for calculating individual cash-generating units value in use, economic performance of the assets, changes in the technological, market, economic and legal environment in which assets operate and other indicators of potential impairment. The information on the net book value of property, plant and equipment of the Group is disclosed in Note 6 to the consolidated financial statements.	We analyzed the discount rates used by the Group for individual cash-generating units, analysed economic performance of separate cash-generating units by comparing actual results of cash-generating units for the current period with planned indicators, as well as with budgets for the next reporting period, analysed changes in technological, market, economic and legal environment in the Russian Federation and other countries in which the Group operates, and also examined other information that could provide evidence of potential impairment of property, plant and equipment including information on the market capitalization of the Group and evidence of obsolescence or physical damage of property, plant and equipment.
Recognition and measurement of provisions and contingent liabilities	
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. The information on the Group's provisions and contingent liabilities is disclosed in Notes 20, 21 and 30 to the consolidated financial statements.	Our procedures included analysis of 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 and others and respective disclosures.

Other information included in the Group's 2019 Annual report

Other information consists of the information included in Group's 2019 Annual report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Group's 2019 Annual report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

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

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.

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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

28 February 2020

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-regulatory organization of auditors Association "Sodruzhestvo".
Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 12006020327.

Consolidated statement of financial position

(in millions of RUR)

	Note	31 December 2019	31 December 2018
Assets			
Non-current assets			
Property, plant and equipment	6	327,980	322,976
Intangible assets	7	9,804	13,849
Investments in associates and joint ventures	8	15,779	15,451
Deferred tax assets	9	5,139	5,753
Securities	10	7,797	7,992
Other non-current assets	11	2,273	2,621
Total non-current assets		**368,772**	**368,642**
Current assets			
Inventories	12	19,311	20,267
Accounts receivable and prepayments	13	102,233	107,806
Income tax prepaid		714	1,070
Cash and cash equivalents	14	95,924	153,747
Other current assets	16	164,055	75,318
		382,237	**358,208**
Assets classified as held-for-sale	15	-	1,737
Total current assets		**382,237**	**359,945**
Total assets		**751,009**	**728,587**
Equity and liabilities			
Equity			
Share capital	17	293,340	293,340
Treasury shares	17	(86,708)	(86,210)
Share premium		69,312	69,312
Hedge reserve	17	394	(367)
Actuarial reserve	17	(605)	274
Fair value reserve	17	(5,903)	(5,745)
Foreign currency translation reserve		2,278	4,887
Retained earnings		278,731	207,778
Total equity attributable to shareholders of the Company		**550,839**	**483,269**
Non-controlling interest	32	1,940	2,209
Total equity		**552,779**	**485,478**
Non-current liabilities			
Loans and borrowings	19	474	1,385
Long-term lease liabilities	6	48,934	42,991
Deferred tax liabilities	9	11,208	11,890
Other non-current liabilities	21	9,927	8,588
Total non-current liabilities		**70,543**	**64,854**
Current liabilities			
Loans and borrowings	19	2,842	8,353
Short-term portion of long-term lease liabilities	6	8,361	6,712
Accounts payable and accrued liabilities	20	102,559	149,886
Amounts payable to non-controlling shareholders for shares of subsidiary	5	-	373
Other taxes payable	22	12,137	10,644
Income tax payable		1,788	2,287
Total current liabilities		**127,687**	**178,255**
Total liabilities		**198,230**	**243,109**
Total equity and liabilities		**751,009**	**728,587**

Chief Executive Officer — Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer — Miroshnichenko E.N.

28 February 2020

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)

	Note	For the year 2019	For the year 2018
Revenue	23	1,032,120	962,582
Other operating income	24	12,162	10,492
Operating expenses	25	(945,975)	(885,785)
Operating income		**98,307**	**87,289**
Finance income	26	15,602	15,257
Finance expenses	26	(12,538)	(6,789)
Share of profit/(loss) of associates and joint ventures, net	8	2,410	(3,579)
Income before income tax		**103,781**	**92,178**
Income tax expense	27	(21,851)	(20,503)
Income for the period		**81,930**	**71,675**
Other comprehensive (loss)/income			
Other comprehensive (loss)/income that will be reclassified subsequently to profit or loss when specific conditions are met			
Loss on securities, net of tax	10, 17	(601)	(981)
Net income/(loss) on hedge instruments, net of tax	17	956	(535)
Exchange (loss)/gain on translation to presentation currency		(2,928)	2,997
Other comprehensive income/(loss) not to be reclassified subsequently to profit or loss			
Income/(loss) on securities, net of tax	10, 17	443	(1,114)
Actuarial (loss)/gain, net of tax	17	(883)	267
Other comprehensive (loss)/gain, net of tax		**(3,013)**	**634**
Total comprehensive income for the period		**78,917**	**72,309**
Income attributable to:			
Shareholders of the Company		81,631	70,776
Non-controlling interest	32	299	899
		81,930	**71,675**
Total comprehensive income attributable to:			
Shareholders of the Company		78,746	71,314
Non-controlling interest		171	995
		78,917	**72,309**
		RUR	*RUR*
Basic income per ordinary share for income attributable to the shareholders of the Company	18	**1.109**	**0.894**
Diluted income per ordinary share for income attributable to the shareholders of the Company	18	**1.109**	**0.891**

Chief Executive Officer — Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer — Miroshnichenko E.N.

28 February 2020

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)

	Note	For the year 2019	For the year 2018
Operating activities			
Income before income tax		**103,781**	**92,178**
Adjustments to reconcile income before tax to net cash flows from operating activities			
Depreciation and amortisation	25	28,002	26,601
Provision for impairment of accounts receivable, net	25	7,050	8,358
Discounting of accounts receivable	26	(145)	(225)
Discounting of accounts payable	26	2,038	936
Release of other provisions	25	(1,394)	(1,008)
Impairment of securities and asset classified as held-for-sale	10, 15, 25	2	1,263
Impairment of property, plant and equipment and intangible assets	6, 7, 25	2,649	1,146
Impairment of investments in associate and joint venture	25	2,269	–
Share of (profit)/loss of associates and joint ventures, net	8	(2,410)	3,579
(Income)/loss from electricity derivatives, net	24, 25	(2,082)	49
Foreign exchange loss/(gain), net	26	4,139	(3,649)
Interest income	26	(14,580)	(10,267)
Other finance income	26	(344)	(328)
Interest expense	26	6,195	4,991
Other finance expenses	26	87	449
Dividend income	26	(454)	(375)
Income from sale of securities	10, 24	–	(47)
Loss from sale of asset classified as held-for-sale	15, 25	148	–
Shares option plan gain	31	–	(168)
Gain from disposal of Group entities, net	5, 8, 25	(66)	(187)
Other non-cash operations/items		221	(81)
Operating cash flows before working capital adjustments and income tax paid		**135,106**	**123,215**
Decrease/(increase) in inventories		427	(3,081)
Increase in accounts receivable and prepayments		(424)	(5,635)
Decrease in value added tax recoverable		875	1,273
Decrease/(increase) in other current assets		2,738	(793)
Decrease in accounts payable and accrued liabilities		(9,816)	(1,649)
Decrease/(increase) in taxes other than income tax prepaid/payable, net		(1,204)	216
Other working capital adjustments		64	(492)
		127,766	**113,054**
Income tax paid		(22,419)	(18,021)
Net cash flows from operating activities		**105,347**	**95,033**

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)

	Note	For the year 2019	2018
Investing activities			
Proceeds from disposal of property, plant and equipment		1,373	151
Purchase of property, plant and equipment and intangible assets		(24,466)	(25,770)
Purchase of controlling interest, net of cash acquired	5, 8	–	724
Outflow from disposal of controlling interest, net of cash disposed	5	(2)	–
Purchase of securities	10	(55)	(39)
Proceeds from disposal of joint venture and associate	8	109	–
Proceeds from disposal of securities and asset classified as held-for-sale	10, 15	1,597	6,305
Proceeds from repayment of loans issued		174	115
Loans issued		(148)	(360)
Bank deposits placed		(224,307)	(121,169)
Bank deposits returned and proceeds from promissory notes repayment		135,617	70,660
Interest proceeds for bank deposits placed		11,541	7,704
Purchase of other non-current assets		(528)	(115)
Dividends received		454	3,601
Cash flows (used for) / from other investing activities		(85)	129
Net cash flows used for investing activities		**(98,726)**	**(58,064)**
Financing activities			
Proceeds from loans and borrowings		7,176	20,626
Repayment of loans and borrowings		(13,212)	(28,084)
Repayment of leases		(7,752)	(4,583)
Interest paid		(427)	(907)
Dividends paid		(13,787)	(11,678)
Purchase of non-controlling interest in subsidiaries	5	(451)	–
Proceeds from disposal of non-controlling interest	5	–	244
Acquisition of treasury shares	17	(37,510)	(4,117)
Proceeds from treasury shares sale	17	2,271	2,350
Net cash flows used for financing activities		**(63,692)**	**(26,149)**
Effect of exchange rate fluctuations on cash and cash equivalents		(752)	865
Net (decrease)/increase in cash and cash equivalents		**(57,823)**	**11,685**
Cash and cash equivalents at the beginning of the period		153,747	142,062
Cash and cash equivalents at the end of the period	14	**95,924**	**153,747**

Chief Executive Officer — Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer — Miroshnichenko E.N.

28 February 2020

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 changes in equity

(in millions of RUR)

		Attributable to shareholders of the Company										
	Note	Share capital	Treasury shares	Share premium	Foreign currency translation reserve	Fair value reserve	Hedge reserve	Actuarial reserve	Retained earnings	Total	Non-controlling interest	Total equity
Balance at 31 December 2017		**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	17	–	–	–	–	–	–	–	(11,458)	**(11,458)**	(280)	**(11,738)**
Undrawn dividends returned	17	–	–	–	–	–	–	–	1	**1**	–	**1**
Acquisition of non-controlling interest in subsidiary	5	–	–	–	–	–	–	–	(87)	**(87)**	(286)	**(373)**
Disposal of non-controlling interest in subsidiary		–	–	–	–	–	–	–	51	**51**	193	**244**
Sale of treasury shares	17	–	5,565	–	–	–	–	–	(3,215)	**2,350**	–	**2,350**
Acquisition of treasury shares	17	–	(32,988)	–	–	–	–	–	(5,662)	**(38,650)**	–	**(38,650)**
Share option plan	31	–	–	–	–	–	–	–	(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**
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**
Total comprehensive (loss)/income for the year ended 31 December 2019		–	–	–	(2,609)	(158)	761	(879)	81,631	**78,746**	171	**78,917**
Dividends to shareholders	17	–	–	–	–	–	–	–	(13,411)	**(13,411)**	(410)	**(13,821)**
Undrawn dividends returned	17	–	–	–	–	–	–	–	6	**6**	–	**6**
Acquisition of non-controlling interest in subsidiary	5	–	–	–	–	–	–	–	(42)	**(42)**	(30)	**(72)**
Sale of treasury shares	17	–	1,467	–	–	–	–	–	804	**2,271**	–	**2,271**
Acquisition of treasury shares	17	–	(1,965)	–	–	–	–	–	1,965	**–**	–	**–**
Balance at 31 December 2019		**293,340**	**(86,708)**	**69,312**	**2,278**	**(5,903)**	**394**	**(605)**	**278,731**	**550,839**	**1,940**	**552,779**

Chief Executive Officer — Kovalchuk B.Yu.

Member of the Management Board, Chief Financial Officer — Miroshnichenko E.N.

28 February 2020

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.

(in millions of RUR)

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 2019 are Group ROSNEFTEGAZ (27.63%) and PJSC FGC UES (8.57%).

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 2019 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 Lithuania 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).

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Principles of consolidation (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Principles of consolidation (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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:

Type of facility	*Useful life, years*
Buildings	6-62
Hydro engineering structures	12-50
Transmission facilities and equipment	9-35
Thermal networks	23-43
Power equipment	7-33
Other equipment and fixtures	13-37
Other structures	7-29
Other fixed assets	6-36

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Intangible assets (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Prepayments (continued)

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 in 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 in 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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Compound financial instruments (continued)

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 Notes 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.

(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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Fair value of financial instruments (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Impairment (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

Employee benefits (continued)

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 is 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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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.

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.

(in millions of RUR)

3. Summary of significant accounting policies (continued)

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 2019 are consistent with those followed in the preparation of the Group's annual financial statements for the year ended 31 December 2018.

(a) The following IFRSs and amendments to existing IFRSs that have been published and effective as of 1 January 2019 and did not have any impact on the Group's consolidated financial statements

- IFRIC Interpretation 23 *Uncertainty over Income Tax Treatment*;
- Amendments to IFRS 9 *Prepayment Features with Negative Compensation*;
- Amendments to IAS 19 *Plan Amendment, Curtailment or Settlement*;
- Amendments to IAS 28 *Long-term Interests in Associates and Joint Ventures*;
- Annual improvements 2015-2017 cycle (issued in December 2017) concerning IFRS 3 *Business Combinations*, IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes*, IAS 23 *Borrowing Costs*.

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

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below.

- IFRS 17 *Insurance Contracts*. IFRS 17 is effective for reporting periods beginning on or after 1 January 2021, with comparative figures required. Early application is permitted, provided the entity also applies IFRS 9 and IFRS 15 on or before the date it first applies IFRS 17. This standard is not applicable to the Group.
- Amendments to IFRS 10 and IAS 28 *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*. The IASB has deferred the effective date of these amendments indefinitely, but an entity that early adopts the amendments must apply them prospectively. The Group will apply these amendments when they become effective.
- Amendments to IAS 1 and IAS 8 *Definition of Material*. The amendments are effective for reporting periods beginning on or after 1 January 2020, with comparative figures required. Early application is permitted and must be disclosed. The Group will apply these amendments when they become effective.
- Amendments to IFRS 3 *Definition of a Business*. The IASB issued amendments to the definition of a business to help entities determine whether an acquired set of activities and assets is a business or not. They clarify the minimum requirements for a business, remove the assessment of whether market participants are capable of replacing any missing elements, add guidance to help entities assess whether an acquired process is substantive, narrow the definitions of a business, and introduce an optional fair value concentration test. Since the amendments apply prospectively to transaction or other events that occur on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

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 and amended 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 MosOblEIRTS, 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, JSC 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), LLC ESCB − Development (from December 2018), LLC EIRTS RB (from July 2019), LLC EIRTS TO (from September 2019) and LLC United Processing Centre (from December 2019).
- **Electric Power Generation in the Russian Federation** (represented by Group Inter RAO – Electric Power Plants, including 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, JSC Eastern Energy Company, LLC Payments implementation center (till December 2018), LLC Inter RAO Georgia (equity accounted investee from May 2019).
- **Foreign assets** represented by the following reporting sub-segments:
  - ***Georgia*** (represented by JSC Telasi, JSC Khramhesi I and JSC Khramhesi 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, LLC Gestion de Proyectos, RUS Gas Turbines Holdings B.V. (equity accounted investee, from April 2019), LLC INTER RAO Export – Projects Management (from October 2019).
- **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 2019:

	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	**695,098**	**192,449**	**33,943**	**62,022**	**77,107**	**10,834**	**10,391**	**2,786**	**22,613**	**(75,123)**	**1,032,120**
Revenue from external customers	693,340	141,947	29,944	48,429	75,683	10,834	10,391	2,786	17,968	798	**1,032,120**
Inter-segment revenue	1,758	50,502	3,999	13,593	1,424	–	–	–	4,645	(75,921)	**–**
Operating expenses, including:											
Purchased electricity and capacity	(412,102)	(6,852)	(2,702)	(4,563)	(53,340)	(5,668)	–	–	–	71,011	**(414,216)**
Electricity transmission fees	(233,393)	–	–	(4)	(6,659)	(1,636)	(78)	–	–	–	**(241,770)**
Fuel expenses	–	(77,501)	(12,446)	(31,913)	–	–	(5,688)	(18)	–	3,474	**(124,092)**
Share in profit/(loss) of joint ventures	–	3,125	–	–	(1)	–	–	–	30	–	**3,154**
EBITDA	**25,807**	**79,440**	**7,702**	**11,892**	**17,915**	**1,591**	**3,136**	**2,333**	**(513)**	**(7,756)**	**141,547**
Depreciation and amortisation	(3,012)	(15,705)	(1,776)	(3,982)	(182)	(570)	(333)	(879)	(135)	(1,428)	**(28,002)**
Interest income	2,034	7,095	383	686	14	40	–	29	236	4,063	**14,580**
Interest expense	(416)	(148)	(87)	(1)	(24)	(195)	(30)	(47)	(101)	423	**(626)**
Interest expense on lease liabilities	(409)	(4,723)	(67)	(316)	(4)	(6)	–	–	(7)	(37)	**(5,569)**

(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)**
Electricity 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)

As at 31 December 2019:

	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:	**(568)**	**–**	**(874)**	**(700)**	**(267)**	**(907)**	**–**	**–**	**–**	**–**	**(3,316)**
Share in loans and borrowings of joint ventures	–	–	–	–	–	–	–	–	–	–	**–**
Lease liabilities, including:	**(4,150)**	**(48,634)**	**(582)**	**(3,551)**	**(107)**	**(47)**	**–**	**–**	**(75)**	**(384)**	**(57,530)**
Share in lease liabilities of joint ventures	–	(216)	–	–	–	–	–	–	(19)	–	**(235)**

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)**

(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:

	For the year ended 31 December 2019	*For the year ended 31 December 2018*
EBITDA of the reportable segments	**141,547**	**121,300**
Depreciation and amortisation (Note 25)	(28,002)	(26,601)
Interest income (Note 26)	14,580	10,267
Interest expense (Note 26)	(626)	(1,190)
Interest expense on lease liabilities (Note 26)	(5,569)	(3,801)
Foreign currency exchange (loss)/gain, net (Note 26)	(4,139)	3,649
Other finance expense (Note 26)	(1,182)	(457)
Provisions charge, including: (Note 25)	(10,580)	(9,716)
- impairment of intangible assets	*(2,488)*	–
- impairment of property, plant and equipment	*(161)*	*(1,146)*
- impairment of investments in securities	*(2)*	–
- other provisions release	*1,394*	*1,008*
- impairment of asset classified as held-for-sale	–	*(1,263)*
- impairment of account receivables	*(7,050)*	*(8,358)*
- impairment of investments in associate and joint venture	*(2,269)*	–
- VAT provision (charge)/release	*(4)*	*43*
Gain from disposal of Group entities, net (Note 24)	66	187
Loss from sale of asset classified as held-for-sale (Note 25)	(148)	–
Income from sale of securities (Note 24)	–	47
Other item	(1,422)	(1,129)
Share of loss of associates (Note 8)	(744)	(378)
Income tax expense (Note 27)	(21,851)	(20,503)
Profit for the reporting period in the consolidated statement of comprehensive income	**81,930**	**71,675**

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:

	As at 31 December 2019	*As at 31 December 2018*
Loans and borrowings of the reportable segments	**(3,316)**	**(9,738)**
Less:		
Share in loans and borrowings of joint ventures	–	–
Loans and borrowings in the consolidated statement of financial position	**(3,316)**	**(9,738)**
Lease liabilities of the reportable segments	**(57,530)**	**(50,093)**
Less:		
Share in lease liabilities of joint ventures	235	390
Lease liabilities in the consolidated statement of financial position	**(57,295)**	**(49,703)**

(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 2019			For the year ended 31 December 2018		
	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	937,765	–	**937,765**	868,431	–	**868,431**
Turkey	2,786	–	**2,786**	5,740	–	**5,740**
Georgia	10,834	1,464	**12,298**	12,587	605	**13,192**
Finland	21,647	229	**21,876**	24,478	345	**24,823**
China	–	8,736	**8,736**	–	8,755	**8,755**
Lithuania	20,466	–	**20,466**	18,163	–	**18,163**
Moldavia (incl. Transdniestria Republic)	10,391	–	**10,391**	8,490	–	**8,490**
Kazakhstan	–	3,804	**3,804**	–	3,414	**3,414**
Poland	6,841	–	**6,841**	1,356	–	**1,356**
Estonia	695	376	**1,071**	610	472	**1,082**
Mongolia	–	1,772	**1,772**	–	1,800	**1,800**
Latvia	897	–	**897**	795	–	**795**
Other	–	3,417	**3,417**	–	6,541	**6,541**
Total	**1,012,322**	**19,798**	**1,032,120**	**940,650**	**21,932**	**962,582**

	Total non-current assets based on location of assets[2]	
	As at 31 December 2019	As at 31 December 2018
Russian Federation	339,423	335,807
Georgia	8,440	9,503
Turkey	–	935
Moldavia (incl. Transdniestria Republic)	4,444	4,479
Lithuania	948	1,202
Other	308	350
Total	**353,563**	**352,276**

5. Acquisitions and disposals

Acquisition of non-controlling interest in JSC Tomskenergosbyt

As at 31 December 2017 the Group had 93.58% of the shares of JSC Tomskenergosbyt. In August 2018 JSC Tomskenergosbyt issued 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 JSC Tomskenergosbyt by 1.43% up to 95.01%.

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

[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 JSC Tomskenergosbyt (continued)

On 12 November 2018 the Group announced a voluntary public offer to acquire the ordinary shares of JSC Tomskenergosbyt held by non-controlling shareholders. The offer price was set at RUB 0.44 per one share. 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.

In February 2019 the Group bought 11.53% of ordinary shares and 4.71% of preferred shares of JSC Tomskenergosbyt from non-controlling shareholders (10.83% of the total voting shares of the company) under the voluntary public offer on 12 November 2018 for RUR 270 million. As a result, the Group has increased its participation in JSC Tomskenergosbyt to 95.84%.

On 24 May 2019 the Group acquired 2.85% of ordinary shares and 15.67% of preferred shares for the total cash consideration of RUR 104 million and increased its participation in JSC Tomskenergosbyt from 95.84% to 100.00%.

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

In August 2019 the Group bought 20.25% of ordinary shares and 0.13% of preferred shares of PJSC Tambov Energy Retailing Company from non-controlling shareholders (17.74% of the total voting shares of the company) for RUR 77 million. As a result, the Group has increased its participation in PJSC Tambov Energy Retailing Company to 84.98%.

In December 2019 the Group bought 0.06% of ordinary shares and 0.01% of preferred shares of PJSC Tambov Energy Retailing Company from non-controlling shareholders (0.06% of the total voting shares of the company) under the voluntary public offer for RUR 0.3 million. As a result, the Group has increased its participation in PJSC Tambov Energy Retailing Company to 85.04%.

Other acquisitions and disposals

During the year ended 31 December 2019 the Group liquidated a number of individually insignificant subsidiaries. The loss of RUR 3 million from the liquidation was recognised in the consolidated statement of comprehensive income (during the year ended 31 December 2018: loss of RUR 30 million).

During the year ended 31 December 2019 the Group established a number of individually insignificant subsidiaries. The non-controlling interest of RUR 5 million due to the establishment was recognised in the consolidated statement of changes in equity (during the year ended 31 December 2018: nil).

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, recognised in the consolidated statement of cash flows in investing activities.

(in millions of RUR)

6. Property, plant and equipment

	Land and buildings	***Infrastruc-ture assets***	***Plant and equipment***	***Other***	***Construction in progress***	***Total***
Cost						
Balance at 31 December 2017	**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**
Including right-of-use assets	*11,456*	*1,439*	*37,095*	*1,642*	*–*	***51,632***
Balance at 31 December 2018	**133,762**	**103,121**	**343,082**	**10,236**	**12,029**	**602,230**
Reclassification	(1)	149	(123)	(25)	–	**–**
Additions	864	725	11,670	5,535	17,569	**36,363**
Disposals	(3,312)	(587)	(3,100)	(1,385)	(441)	**(8,825)**
Transfers	1,857	3,863	6,042	834	(12,596)	**–**
Transfer from/(to) other balance accounts	1	(1)	(2)	–	(22)	**(24)**
Disposal of controlling interest	–	(7)	–	–	–	**(7)**
Translation difference	(1,055)	(2,211)	(2,117)	(221)	(197)	**(5,801)**
Balance at 31 December 2019	**132,116**	**105,052**	**355,452**	**14,974**	**16,342**	**623,936**
Including right-of-use assets	*9,277*	*1,530*	*48,755*	*679*	*–*	***60,241***
Depreciation and impairment						
Balance at 31 December 2017	**(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)**
Including right-of-use assets	*(1,517)*	*(36)*	*(1,697)*	*(822)*	*–*	***(4,072)***
Balance at 31 December 2018	**(49,834)**	**(51,811)**	**(169,219)**	**(6,554)**	**(1,836)**	**(279,254)**
Reclassification	(11)	(22)	20	13	–	**–**
Depreciation charge	(3,917)	(3,595)	(16,712)	(1,118)	–	**(25,342)**
Impairment loss charge	–	–	–	(162)	–	**(162)**
Impairment loss release	–	–	–	–	1	**1**
Disposals	608	509	3,037	1,021	64	**5,239**
Transfers	(1)	(403)	(113)	(16)	533	**–**
Transfer (from)/to other balance accounts	–	(3)	(1)	(1)	5	**–**
Disposal of controlling interest	–	4	–	–	–	**4**
Translation difference	807	1,049	1,516	150	36	**3,558**
Balance at 31 December 2018	**(52,348)**	**(54,272)**	**(181,472)**	**(6,667)**	**(1,197)**	**(295,956)**
Including right-of-use assets	*(2,536)*	*(816)*	*(4,829)*	*(228)*	*–*	***(8,409)***
Net book value						
Balance at 31 December 2017	**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**
Balance at 31 December 2019	**79,768**	**50,780**	**173,980**	**8,307**	**15,145**	**327,980**

(in millions of RUR)

6. Property, plant and equipment (continued)

The category land and buildings includes land in the amount of RUR 556 million (31 December 2018: RUR 572 million).

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 3,865 million as at 31 December 2019 (as at 31 December 2018: RUR 1,174 million).

Additions of right-of-use assets for the year ended 31 December 2019 amounted to RUR 10,404 million (for the year ended 31 December 2018: RUR 39,492 million).

Depreciation of right-of-use assets for the year ended 31 December 2019 amounted to RUR 4,265 million (for the year ended 31 December 2018: RUR 2,905 million).

As at 31 December 2019 net book value of right-of-use assets amounted to RUR 51,832 million (as at 31 December 2018: RUR 47,560 million), including the net book value of right-of-use assets of Kaliningrad Generation LLC in the amount of RUR 43,647 million (as at 31 December 2018: RUR 34,920 million).

The long-term lease liabilities as at 31 December 2019 amounted to RUR 48,934 million (as at 31 December 2018: RUR 42,991 million). The short-term portion of long-term lease liabilities as at 31 December 2019 amounted to RUR 8,361 million (as at 31 December 2018: RUR 6,712 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.

Various other minor charges and reversals in the net amount of RUR 161 million loss were recognised during the year ended 31 December 2019 (during the year ended 31 December 2018: RUR 1 million).

(in millions of RUR)

7. Intangible assets

	Goodwill	*Software*	*Other*	*Total*
Cost				
Balance at 31 December 2017	**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**
Balance at 31 December 2018	**4,362**	**9,028**	**24,654**	**38,044**
Reclassification	–	(94)	94	**–**
Additions	–	919	548	**1,467**
Disposals	–	(95)	(10,386)	**(10,481)**
Transfer (to)/from other balance accounts	–	(6)	17	**11**
Disposal of controlling interest	–	–	(2)	**(2)**
Translation difference	(344)	(47)	(869)	**(1,260)**
Balance at 31 December 2019	**4,018**	**9,705**	**14,056**	**27,779**
Amortisation and impairment				
Balance at 31 December 2017	**(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)**
Balance at 31 December 2018	**(1,798)**	**(3,996)**	**(18,401)**	**(24,195)**
Reclassification	–	13	(13)	**–**
Amortisation charge	–	(693)	(1,967)	**(2,660)**
Disposals	–	86	10,386	**10,472**
Impairment loss	–	(2,488)	–	**(2,488)**
Transfer from other balance accounts	–	(2)	–	**(2)**
Disposal of controlling interest	–	–	2	**2**
Translation difference	65	40	791	**896**
Balance at 31 December 2019	**(1,733)**	**(7,040)**	**(9,202)**	**(17,975)**
Net book value				
At 31 December 2017	**2,273**	**4,430**	**6,480**	**13,183**
At 31 December 2018	**2,564**	**5,032**	**6,253**	**13,849**
At 31 December 2019	**2,285**	**2,665**	**4,854**	**9,804**

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

Impairment of goodwill

AB INTER RAO Lietuva

As at 31 December 2019 the Group carried out an impairment test for goodwill related to acquisition of AB INTER RAO Lietuva. The recoverable amount was measured as value in use. The discount factor used for the impairment test performed by management was 7.4% for cash-flows estimations in presentation currency as at 31 December 2019. Based on the discounted cash flow model, management concluded that goodwill for AB INTER RAO Lietuva is not impaired as of 31 December 2019.

(in millions of RUR)

7. Intangible assets (continued)

Impairment of goodwill (continued)

Other

Included in other intangible assets RUR 856 million represents capitalised cost to obtain status of “guarantee supplier” acquired in November 2018 (as at 31 December 2018: RUR 1,100 million). This intangible asset represents 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 2019 the remaining intangible assets’ useful life was 3.5 years. Included in other intangible assets RUR 344 million represents capitalised cost to obtain status of “guarantee supplier” acquired in March 2018 (as at 31 December 2018: RUR 451 million). This intangible asset represents the right of LLC Energosbyt Volga to perform functions of guaranteed supplier on the territory of Vladimir region of the Russian Federation. As at 31 December 2019 the remaining intangible assets’ useful life was 3.75 years. Included in other intangible assets RUR 156 million represents capitalised cost to obtain status of “guarantee supplier” acquired in December 2013 (as at 31 December 2018: RUR 249 million). This intangible asset represents 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 Saint Petersburg city and also Orel, Omsk and Leningrad regions of the Russian Federation. As at 31 December 2019 the remaining intangible assets’ useful life was 1 year.

Included in other intangible assets RUR 2,543 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 31 December 2018: RUR 2,868 million). As at 31 December 2019 the remaining intangible assets’ useful life was 7.8 years.

As at 31 December 2018 other intangible assets included identifiable intangible assets of Trakya Elektrik Uretim ve Ticaret A.S (“Operator”) in amount RUR 932 million (USD 13 million), as at 31 December 2019 this intangible asset was fully amortized. In June 2019 the Group’s right to operate the electricity power plant facilities as Operator has expired in accordance with the Buy-Operate-Transfer (“BOT”) agreement between the Operator and the Ministry of Energy and Natural Resources of the Republic of Turkey (“MENR”). Under the concession the power plant was transferred to an enterprise nominated by MENR.

Impairment loss

As at 31 December 2019 computer software licenses was impaired in the amount of RUR 2,488 million by the reason of the evidence of inability to use the assets. 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:

			Voting share		
	Status	***Country***	***31 December 2019***	***31 December 2018***	***31 December 2017***
JSC Nizhnevartovskaya GRES	Joint venture	The Russian Federation	75.00%	75.00%	75.00%
LLC Power Efficiency Centre INTER RAO UES	Joint venture	The Russian Federation	50.00%	50.00%	50.00%
LLC RT – Energy Trading	Joint venture	The Russian Federation	50.00%	50.00%	50.00%
LLC Cosy house	Joint venture	The Russian Federation	–	–	50.00%
JSC Information system operator	Joint venture	The Russian Federation	49.99%	49.99%	–
LLC ENOD	Joint venture	The Russian Federation	50.00%	–	–
RUS Gas Turbines Holdings B.V.	Joint venture	The Netherlands	50.00%	25.00%	25.00%
LLC Inter RAO Georgia	Joint venture	Georgia	50.01%	–	–
UAB ALPROKA	Associate	Lithuania	–	49.99%	49.99%
JSC KASKAD	Associate	The Russian Federation	–	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%

(in millions of RUR)

8. Investments in associates and joint ventures (continued)

	Joint ventures			*Associates*		
	JSC Nizhne-vartovskaya GRES	***RUS Gas Turbines Holdings B.V.***	***Other joint ventures***	***LLC INVENT***	***Other associates***	***Total***
Carrying value at 31 December 2017	**16,691**	**–**	**788**	**3,099**	**2,192**	**22,770**
Disposals	–	–	(505)	–	–	**(505)**
Share of (loss)/profit after tax	(3,057)	–	(144)	(639)	261	**(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**	**2,460**	**2,451**	**15,451**
Carrying value at 31 December 2018	**10,401**	**–**	**139**	**2,460**	**2,451**	**15,451**
Additions	–	755	2	–	–	**757**
Disposals	–	–	–	–	(312)	**(312)**
Share of profit/(loss) after tax	3,125	133	(104)	(222)	(522)	**2,410**
Recognised actuarial loss and past service cost	(12)	–	–	–	–	**(12)**
Impairment of investments	–	–	(31)	(2,238)	–	**(2,269)**
Reclassification	–	755	–	–	(755)	**–**
Forex loss	–	–	–	–	(246)	**(246)**
Carrying value at 31 December 2019	**13,514**	**1,643**	**6**	**–**	**616**	**15,779**

(in millions of RUR)

8. Investments in associates and joint ventures (continued)

Joint ventures

JSC Nizhnevartovskaya GRES

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 recognised its share in impairment loss in amount of RUR 5,100 million within Share of profit/(loss) 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 2019	***31 December 2018***
Non-current assets	11,391	11,203
Current assets (including cash and cash equivalents as at 31 December 2019: RUR 564 million, 31 December 2018: RUR 1,623 million)	8,912	4,634
Non-current liabilities, including:	(796)	(711)
Non-current financial liabilities (excluding trade and other payables and provisions)	*(278)*	*(500)*
Current liabilities, including:	(1,488)	(1,258)
Current financial liabilities (excluding trade and other payables and provisions)	*(10)*	*(19)*
Equity	**18,019**	**13,868**
Proportion of the Group's ownership	75.00%	75.00%
Carrying value of the investment	**13,514**	**10,401**

	Year ended 31 December 2019	***Year ended 31 December 2018***
Revenue	19,883	18,650
Depreciation and amortisation	(593)	(1,134)
Interest income	250	125
Interest expense	(10)	(12)
Income tax (expense)/benefit	(966)	1,082
Profit/(loss) from continuing operations	4,167	(4,076)
Other comprehensive loss	(16)	(11)
Total comprehensive income/(loss) for the period	**4,151**	**(4,087)**
Proportion of the Group's ownership	75.00%	75.00%
Group's share of total comprehensive income/(loss)	**3,113**	**(3,065)**

RUS Gas Turbines Holdings B.V.

In April 2019 the Group increased its share in RUS Gas Turbines Holdings B.V. by 25% to 50%. As a result, RUS Gas Turbines Holdings B.V. became a joint venture.

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

	31 December 2019
Non-current assets	2,075
Current assets (including cash and cash equivalents as at 31 December 2019: RUR 1,322 million)	1,511
Non-current liabilities, including:	(28)
Non-current financial liabilities (excluding trade and other payables and provisions)	*(28)*
Current liabilities, including:	(273)
Current financial liabilities (excluding trade and other payables and provisions)	*(9)*
Equity	**3,285**
Proportion of the Group's ownership	50.00%
Carrying value of the investment	**1,643**

(in millions of RUR)

8. Investments in associates and joint ventures (continued)

Joint ventures (continued)

	April-December 2019
Revenue	210
Depreciation and amortisation	(182)
Interest income	25
Interest expense	–
Income tax benefit	24
Profit from continuing operations	*157*
Other comprehensive income/(loss)	–
Total comprehensive income for the period	**157**
Share premium contribution from joint partner	**109**
Proportion of the Group's ownership	50.00%
Group's share of total comprehensive income	**133**

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.

JSC Kaskad

In January 2019 the Group sold 25% of shares of JSC Kaskad to third parties. As a result, the Group recognised gain from disposal in the amount of RUR 63 million in the consolidated statement of comprehensive income (Note 24), cash inflow due to sale of JSC Kaskad amounted to RUR 103 million was recognised in the consolidated statement of cash flows in investing activities.

UAB Alproka

As at 31 December 2019 the Group has written off UAB Alproka due to the process of liquidation of the company (the company was liquidated on 17th February 2020). As a result, the Group recognised gain from disposal in the amount of RUR 6 million in the consolidated statement of comprehensive income (Note 24), cash inflow due to disposal of UAB Alproka amounted to RUR 6 million was recognised in the consolidated statement of cash flows in investing activities.

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 2019	*31 December 2018*	*31 December 2019*	*31 December 2018*
Property, plant and equipment	129	268	(25,315)	(23,326)
Investments in associates and joint ventures	–	–	(8)	(83)
Trade and other receivables	2,299	1,404	–	–
Tax loss carry-forwards	699	1,301	–	–
Investments in securities and assets classified as held-for-sale	2,960	2,964	(540)	(764)
Accounts payable and long-term loans and borrowings	14,259	13,336	(273)	(944)
Other items	1,438	801	(1,717)	(1,094)
Tax assets/(liabilities)	**21,784**	**20,074**	**(27,853)**	**(26,211)**
Set off of tax	(16,645)	(14,321)	16,645	14,321
	5,139	**5,753**	**(11,208)**	**(11,890)**

(in millions of RUR)

9. Deferred tax assets and liabilities (continued)

(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 2019	*31 December 2018*
Securities	1,984	2,145
Other	1,071	1,064
	3,055	**3,209**

Deductible temporary differences as at 31 December 2019 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.

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

Deferred tax assets

	31 December 2017	*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
Investments in securities and assets classified as held-for-sale	1,885	(120)	(71)	245	1,939
Accounts payable and long-term loans and borrowings	2,777	16	(136)	117	2,774
Other items	196	(17)	(7)	–	172
Tax loss carry-forwards	2,928	(1,630)	(1)	–	1,297
	7,174	**(1,727)**	**(56)**	**362**	**5,753**

	31 December 2018	*Recognised in profit and loss*	*Recognised in OCI (FCTR)*	*Recognised in OCI (reserves)*	*31 December 2019*
Property, plant and equipment	(1,111)	(67)	(9)	–	(1,187)
Trade and other receivables	682	(361)	(437)	–	(116)
Investments in securities and assets classified as held-for-sale	1,939	41	(1)	103	2,082
Accounts payable and long-term loans and borrowings	2,774	(377)	170	(118)	2,449
Other items	172	769	276	(8)	1,209
Tax loss carry-forwards	1,297	(634)	39	–	702
	5,753	**(629)**	**38**	**(23)**	**5,139**

Deferred tax liabilities

	31 December 2017	*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	(393)	315	67	277	266
Accounts payable and long-term loans and borrowings	2,851	6,816	(42)	(7)	9,618
Other items	(1)	283	8	(35)	255
	(10,957)	**(1,210)**	**42**	**235**	**(11,890)**

(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)

	31 December 2018	*Recognised in profit and loss*	*Recognised in OCI (FCTR)*	*Recognised in OCI (reserves)*	*31 December 2019*
Property, plant and equipment	(21,948)	(2,067)	17	–	(23,998)
Investments in associates and joint ventures	(81)	76	–	–	(5)
Investments in securities and assets classified as held-for-sale	266	170	1	(94)	343
Accounts payable and long-term loans and borrowings	9,618	1,956	(15)	(20)	11,539
Other items	255	677	(19)	–	913
	(11,890)	**812**	**(16)**	**(114)**	**(11,208)**

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.

Deferred tax assets in the amount of RUR 103 million was recognised as income and RUR 8 million was recognised as loss through other comprehensive income in relation to change of fair value of debt instruments for the year ended 31 December 2019 (for the year ended 31 December 2018 income: RUR 245 million).

Deferred tax liability in the amount of 28 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 2019 (for the year ended 31 December 2018: nil) and RUR 122 million was recognised as loss through other comprehensive income in relation to revaluation of Equity instruments at FVOCI for the year ended 31 December 2019 (for the year ended 31 December 2018 income: RUR 277 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 192,910 million (31 December 2018: RUR 188,176 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 2019	*As at 31 December 2018*
Equity instruments	**5,573**	**4,962**
FVOCI	4,008	3,450
FVPL	1,565	1,512
Debt instruments	**2,224**	**3,030**
FVOCI	2,224	3,030
Total	**7,797**	**7,992**

For the year ended 31 December 2019 impairment loss on securities recognised through profit and loss in the amount of RUR 2 million was recognised through profit and loss in the consolidated statement of comprehensive income (for the year ended 31 December 2018: nil).

For the year ended 31 December 2019 the Group has purchased the equity securities at Fair value through profit and loss in the amount of RUR 55 million.

For the year ended 31 December 2019 the Group has sold debt instruments at FVOCI in the amount of RUR 51 million and equity instruments at FVOCI in the amount of RUR 7 million.

(in millions of RUR)

10. Securities (continued)

For the year ended 31 December 2019 the amount of RUR 507 million, net of tax RUR 122 million, was recognised as a gain from revaluation of securities through other comprehensive income in the consolidated statement of comprehensive income (for the year ended 31 December 2018: loss from revaluation in the amount of RUR 1,114 million, net of tax RUR 277 million). During the reporting period the accumulated OCI in the amount of RUR 64 million was disposed due to sale of the securities at FVOCI.

Debt instruments at fair value through OCI represent quoted bonds of Peresvet Bank. During the reporting period the change of bonds fair value in the amount of RUR 624 million, net of tax RUR 131 million was recognised as a loss through other comprehensive income in the consolidated statement of comprehensive income (for the year ended 31 December 2018 loss: RUR 981 million, net of tax RUR 245 million). As at 31 December 2019 the bonds issued by Peresvet Bank amounted to RUR 2,224 million (as at 31 December 2018: RUR 2,979 million).

11. Other non-current assets

		31 December 2019	***31 December 2018***
Financial non-current assets		***1,179***	***1,546***
Non-current trade receivables		838	1,267
	Less impairment provision	*(94)*	*(180)*
Non-current trade receivables − net		**744**	**1,087**
Other non-current receivables		425	476
	Less impairment provision	*(54)*	*(54)*
Other non-current receivables − net		**371**	**422**
Long-term bank deposits		64	37
Non-financial non-current assets		***1,094***	***1,075***
Non-current advances to suppliers and prepayments		127	174
	Less impairment provision	*(4)*	*(11)*
Non-current advances to suppliers and prepayments − net		**123**	**163**
VAT recoverable		534	84
Other taxes recoverable		116	−
Other		321	828
		2,273	**2,621**

(in millions of RUR)

11. Other non-current assets (continued)

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

	Non-current trade receivables	*Non-current advances to suppliers and prepayments*	*Other non-current receivables*	*Total provision*
At 31 December 2018	**(180)**	**(11)**	**(54)**	**(245)**
Release of provision for receivables impairment	9	–	1	**10**
Receivables written off during the year as uncollectible	(14)	–	(1)	**(15)**
Accrual of discount effect	(53)	(3)	(18)	**(74)**
Unwinding of discount	74	9	18	**101**
Reclassification of short-term portion	64	1	–	**65**
Translation difference	6	–	1	**6**
At 31 December 2019	**(94)**	**(4)**	**(54)**	**(152)**

	Non-current trade receivables	*Non-current advances to suppliers and prepayments*	*Other non-current receivables*	*Total provision*
At 31 December 2017	**(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)**

12. Inventories

	31 December 2019	*31 December 2018*
Fuel	9,396	10,018
Spare parts	4,256	2,916
Materials and consumables	4,097	5,533
Other	1,562	1,800
	19,311	**20,267**

As at 31 December 2019 provision for inventory obsolescence amounted to RUR 657 million (as at 31 December 2018: RUR 760 million). The release of provision for the year ended 31 December 2019 in the amount of RUR 26 million (for the year ended 31 December 2018 charge of provision: RUR 294 million) was recognised in Other provisions within Operating expenses in consolidated statement of comprehensive income.

As at 31 December 2019 the Group has a technological inventory in the amount RUR 6,576 million, mostly represented by fuel and spare parts (as at 31 December 2018: RUR 5,362 million).

(in millions of RUR)

13. Accounts receivable and prepayments

		31 December 2019	31 December 2018
Financial assets		***89,312***	***93,304***
Trade receivables		92,072	95,511
	Less impairment provision	*(20,513)*	*(18,202)*
Trade receivables − net		**71,559**	**77,309**
Other receivables		13,380	14,444
	Less impairment provision	*(4,951)*	*(3,191)*
Other receivables − net		**8,429**	**11,253**
Short-term loans issued (including interest)		724	724
	Less impairment provision	*(250)*	*(250)*
Short-term loans issued (including interest)		**474**	**474**
Short-term outstanding interest on bank deposits		3,020	1,357
Short-term receivables on construction contracts		5,830	2,911
Non-financial assets		***12,921***	***14,502***
Advances to suppliers and prepayments		6,759	10,938
	Less impairment provision	*(1,543)*	*(1,416)*
Advances to suppliers and prepayments − net		**5,216**	**9,522**
Short-term VAT recoverable		1,256	1,483
Taxes prepaid		6,449	3,497
		102,233	**107,806**

As at 31 December 2019 current advances to suppliers and prepayments included RUR 2,841 million of advances given to subcontractors within the construction of Primorskaya TPP and Pregolskaya TPP (as at 31 December 2018: RUR 6,308 million).

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.

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 31 December 2018	**(18,202)**	**(1,416)**	**(250)**	**–**	**(3,191)**	**(23,059)**
Accrual of provision	(4,609)	(137)	–	–	(2,314)	**(7,060)**
Accrual of discount effect	(1)	–	–	–	–	**(1)**
Unwinding of discount	119	–	–	–	–	**119**
Receivables written off as uncollectible (provided for at the beginning of the year)	2,025	10	–	–	610	**2,645**
Transfer to/(from) other balance accounts	37	–	–	–	(97)	**(60)**
Reclassification, other	(3)	–	–	–	3	**–**
Reclassification of long-term portion	(64)	(1)	–	–	–	**(65)**
Translation difference	185	1	–	–	38	**224**
At 31 December 2019	**(20,513)**	**(1,543)**	**(250)**	**–**	**(4,951)**	**(27,257)**

(in millions of RUR)

13. Accounts receivable and prepayments (continued)

	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 31 December 2017	**(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	**(18,202)**	**(1,416)**	**(250)**	**–**	**(3,191)**	**(23,059)**

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

At 31 December 2019	*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	42,493	469	6,816	3,020	5,830	**58,628**
Past due but not impaired	13,669	–	843	–	–	**14,512**
Past due and impaired	35,910	255	5,721	–	–	**41,886**
Total	**92,072**	**724**	**13,380**	**3,020**	**5,830**	**115,026**

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	44,056	459	8,953	1,357	2,911	**57,736**
Past due but not impaired	18,726	15	1,539	–	–	**20,280**
Past due and impaired	32,729	250	3,952	–	–	**36,931**
Total	**95,511**	**724**	**14,444**	**1,357**	**2,911**	**114,947**

As at 31 December 2019 accounts receivable in the amount of RUR 14,512 million (as at 31 December 2018: RUR 20,280 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:

Past due but not impaired	*31 December 2019*	*31 December 2018*
Up to 3 months	11,105	14,518
3 to 6 months	1,418	2,424
6 to 12 months	1,201	1,627
Over 12 months	788	1,711
Total	**14,512**	**20,280**

(in millions of RUR)

13. Accounts receivable and prepayments (continued)

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:

Past due and impaired	***31 December 2019***	***31 December 2018***
Up to 3 months	13,710	12,539
3 to 6 months	2,915	4,347
6 to 12 months	5,936	5,653
Over 12 months	19,325	14,392
Total	**41,886**	**36,931**

The Group does not hold any collateral as a security.

14. Cash and cash equivalents

	31 December 2019	***31 December 2018***
Cash at bank and in hand, national currency	31,555	42,291
Cash at bank and in hand, foreign currency	21,520	11,700
Bank deposits with maturity of three months or less	42,849	99,756
Total	**95,924**	**153,747**

As at 31 December 2019 bank deposits with maturity of three months or less in the amount of RUR 23,497 million are denominated in RUR (as at 31 December 2018: RUR 91,988 million), in US dollars – RUR 10,962 million (as at 31 December 2018: RUR 6,099 million) and in euro – RUR 8,390 million (as at 31 December 2018: RUR 1,669 million).

15. Assets classified as held-for-sale

	31 December 2018	***Impairment***	***Disposal***	***Reclas-sification***	***31 December 2019***
JSC Stantsiya Ekibastuzskaya GRES-2	1,737	–	(1,737)	–	–
Total	**1,737**	**–**	**(1,737)**	**–**	**–**

	31 December 2017	***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**

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 December 2019 the Group has sold 50.00% of ordinary shares of JSC Stantsiya Ekibastuzskaya GRES-2 to JSC Sovereign Wealth Fund “Samruk-Kazyna” for the cash consideration of RUR 1,589 million. As a result the loss in the amount of RUR 148 million was recognised in the consolidated statement of comprehensive income (Note 25).

(in millions of RUR)

16. Other current assets

	31 December 2019	31 December 2018
Bank deposits with maturity of 3-12 months	161,447	72,790
Restricted cash	727	1,338
Short-term derivative financial instruments	242	14
Other	1,639	1,176
Total	**164,055**	**75,318**

As at 31 December 2019 restricted cash balances included cash deposited in Nordea (held as collateral in favour of NASDAQ OMX AB), in the aggregate amount of RUR 15 million held by RAO Nordic Oy (as at 31 December 2018: RUR 126 million), cash deposited in the total amount of RUR 712 million held by RAO Nordic Oy, Trakya Group, JSC Telasi, AB Inter RAO Lietuva, SIA Inter RAO Latvia, JSC Tomskenergosbyt and other companies (as at 31 December 2018: RUR 1,212 million).

As at 31 December 2019 short-term derivative financial instruments included fair value of electricity derivatives in the amount of RUR 176 million (as at 31 December 2018: RUR 14 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 66 million (as at 31 December 2018: nil) which are held for the purposes of hedging future cash flow.

As at 31 December 2019 other current assets included bonds issued by financial institutions with total carrying value of RUR 1,232 million (as at 31 December 2018: RUR 616 million). During the reporting period the change of bonds fair value in the amount of RUR 31 million, net of tax RUR 8 million was recognised as a gain through other comprehensive income in the consolidated statement of comprehensive income (for the year ended 31 December 2018: nil).

17. Equity

Share capital

	31 December 2019	31 December 2018
Number of ordinary shares issued and fully paid (in units)	104,400,000,000	104,400,000,000
Par value (in RUR)	2.809767	2.809767
Share capital (in million RUR)	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
31 December 2018	**104,400,000**	**293,340**	**(30,682,013)**	**(86,210)**	**73,717,987**	**207,130**
Acquisition of treasury shares	–	–	(699,357)	(1,965)	**(699,357)**	**(1,965)**
Sale of treasury shares	–	–	522,000	1,467	**522,000**	**1,467**
31 December 2019	**104,400,000**	**293,340**	**(30,859,370)**	**(86,708)**	**73,540,630**	**206,632**

	Issued shares		Treasury shares		Total	
	thousand units	million RUR	thousand units	million RUR	thousand units	million RUR
31 December 2017	**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**

(in millions of RUR)

17. Equity (continued)

Movements in outstanding and treasury shares (continued)

In May 2019 the Group sold 522,000 thousand shares of the Parent company (0.50% of its share capital) to the third party.

On 3 June 2019 the Group acquired 699,357 thousand shares of the Parent company (0.67% of its share capital) from the PJSC FGC UES for the price of RUR 3.3463 per share.

During the year ended 31 December 2018 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; 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; 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 20 May 2019 the Parent Company declared dividends for the year 2018 of RUR 0.171635536398468 per share in the amount of RUR 17,919 million (including dividends to related and third parties in the amount of RUR 13,411 million). Dividends paid including tax payable by the company's shareholders are shown in the financing activities of the consolidated statement of cash flows in the amount of RUR 13,787 million.

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). Dividends paid including tax payable by the company's shareholders are shown in the financing activities of the consolidated statement of cash flows in the amount of RUR 11,678 million.

Cash flow hedge reserve

For the year ended 31 December 2019 gain on hedge transactions was recognised in other comprehensive income in the amount of RUR 761 million net of tax RUR 175 million related to shareholders of the Company and net gain related to non-controlling interest in the amount of RUR 195 million net of tax RUR 34 million.

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 166 million net of tax RUR 34 million.

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

	Foreign currency forward and option contacts	*Electricity forward and futures contracts*	*Total*
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)**
Gain arising on change in fair value of hedge instruments, net	2	934	**936**
Deferred income tax related to gains recognised in other comprehensive income	–	(175)	**(175)**
31 December 2019	**5**	**389**	**394**

(in millions of RUR)

17. Equity (continued)

Fair value reserve

	Fair value reserve
31 December 2017	**(3,650)**
Loss arising on change in fair value of equity instruments (Note 10)	(1,391)
Loss arising on change in fair value of debt instruments (Note 10)	(1,226)
Deferred income tax related to losses recognised in other comprehensive income	522
31 December 2018	**(5,745)**
31 December 2018	**(5,745)**
Gain arising on change in fair value of equity instruments (Note 10)	596
Loss arising on change in fair value of debt instruments (Note 10)	(755)
Deferred income tax related to losses recognised in other comprehensive income	1
31 December 2019	**(5,903)**

Actuarial reserve

	Related to shareholders of the Company	*Related to non-controlling shareholders*	*Total*
31 December 2017	**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**
31 December 2018	**274**	**3**	**277**
Loss arising on change in pension liabilities	(916)	(4)	**(920)**
Deferred income tax related to gains recognised in other comprehensive income	37	–	**37**
31 December 2019	**(605)**	**(1)**	**(606)**

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.

	Year ended 31 December 2019
Weighted average number of shares (thousand units) – basic	**73,629,762**
Weighted average number of shares (thousand units) – diluted	**73,629,762**
Income attributable to the shareholders of the Company	81,631
Income per ordinary share (RUR) – basic	1.109
Income per ordinary share (RUR) – diluted	1.109

	Year ended 31 December 2018
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)

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***	***31 December 2019***	***31 December 2018***
Gazprombank JSC	RUR	800	626
Otkritie PJSC (iii)	RUR	–	915
Sberbank PJSC (ii)	RUR	–	155
Total in RUR	RUR	**800**	**1,696**
ING Bank NV (i)	USD	–	2,279
Total in USD	USD	**–**	**2,279**
SWEDBANK AB	EUR	267	568
Total in EUR	EUR	**267**	**568**
Government of Georgia	JPY	350	446
Total in JPY	JPY	**350**	**446**
Total in GEL	GEL	**554**	**1,043**
Total long-term loans and borrowings		**1,971**	**6,032**
Less: current portion of long-term loans and borrowings		(1,497)	(4,647)
		474	**1,385**

Effective interest rates

	31 December 2019	***31 December 2018***
Loans and borrowings at fixed interest rate		
RUR	6.75-12.00%	7.50-8.40%
JPY	18.00%	18.00%
GEL	12.50-18.00%	13.00-18.00%
Loans and borrowings at variable interest rate		
GEL	12.50-15.00%	13.00%
RUR	6.90-7.60%	–
EUR	2.10-2.13%	2.18%
USD	–	7.07%

As at 31 December 2019 fair value of loans and borrowings is RUR 2,130 million (31 December 2018: RUR 6,239 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 2019	***Fair value***	***Method of valuation***	***Ranges***
Financial liabilities at amortised cost			
Total loans and borrowings		**Discounted cash flows**	
Loans denominated in RUR	787	Discounted cash flows	10.00%
Loans denominated in GEL	574	Discounted cash flows	11.50%
Loans denominated in JPY	502	Discounted cash flows	6.80%
Loans denominated in EUR	267	Discounted cash flows	2.13%

(i) 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. Parent Company and JSC INTER RAO – Electric Power Plants acted as guarantors under this agreement. The loan was repaid in August 2019.

(ii) 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. The loans were repaid in January 2019.

(iii) 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. The loan was repaid in May 2019.

(in millions of RUR)

19. Loans and borrowings (continued)

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. In December 2019, the Group sold the shares in JSC Stantsiya Ekibastuzskaya GRES-2 to JSC Sovereign Wealth Fund "Samruk-Kazyna" (Note 15). In accordance with the collateral agreement, the sale of shares of JSC Stantsiya Ekibastuzskaya GRES-2 must be agreed with creditors. The creditors approved the deal, provided that the existing encumbrances on the shares of JSC Stantsiya Ekibastuzskaya GRES-2, as well as the guarantees given by the shareholders of JSC Stantsiya Ekibastuzskaya GRES-2 to the creditors, are preserved. As at 31 December 2019 the Parent Company's contingent liability under the guarantee amounted to RUR 7,781 million (as at 31 December 2018: RUR 9,178 million). The Parent Company's guarantee will expire until 30 June 2021 after JSC "Samruk-Energo" (subsidiary of JSC Sovereign Wealth Fund "Samruk-Kazyna") redeems the debt of JSC Stantsiya Ekibastuzskaya GRES-2 to SC Vnesheconombank. The obligation of JSC "Samruk-Energo" to redeem the debt to SC Vnesheconombank was secured by the additional guarantee signed between the Parent Company and SC Vnesheconombank in December 2019. As of 31 December 2019, the guarantee amounted to RUR 4,803 million. To eliminate the risks the corresponding counter-guarantees between of JSC Sovereign Wealth Fund "Samruk-Kazyna" and the Parent Company for equivalent amounts were issued. As of 31 December 2019, the maximum possible amount of the Group's obligations under the above guarantees as well as reimbursement amount of corresponding counter-guarantees is limited by RUR 10,182 million. The likelihood of negative outcome for the Group regarding guarantees mentioned above is low as of 31 December 2019.

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.

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

	31 December 2019	***31 December 2018***
Current loans and borrowings	1,343	3,659
Current portion of non-current loans and borrowings	1,497	4,647
Interest payable	2	47
Total	**2,842**	**8,353**

The Group has the following undrawn borrowing facilities:

	31 December 2019	***31 December 2018***
Floating rate		
Expiring within one year	–	–
Expiring beyond one year	104	119
	104	**119**
Fixed rate		
Expiring within one year	55,595	30,655
Expiring beyond one year	58,250	81,156
	113,845	**111,811**
Total	**113,949**	**111,930**

(in millions of RUR)

20. Accounts payable and accrued liabilities

	31 December 2019	31 December 2018
Financial liabilities		
Trade payables	47,983	48,959
Short-term derivative financial instruments	1	494
Dividends payable	140	102
Obligation to repurchase own equity instruments	763	763
Other payables and accrued expenses	6,039	41,553
Total	**54,926**	**91,871**
Non-financial liabilities		
Advances received	33,874	43,012
Staff payables	11,259	10,713
Provisions, short-term	2,500	4,290
Total	**47,633**	**58,015**
	102,559	**149,886**

As at 31 December 2019 other payables and accrued expenses included RUR 1,839 million payable to the various management companies by LLC MosOblIERC in accordance with the agency contracts (as at 31 December 2018: RUR 1,007 million), RUR 627 million of VAT on advances given by JSC INTER RAO – Electric Power Plants (as at 31 December 2018: RUR 334 million), RUR 514 million of VAT on advances given by LLC INTER RAO Engineering (as at 31 December 2018: 851 million).

As at 31 December 2019 advances received included RUR 20,099 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 31 December 2018: RUR 18,297 million), RUR 6,320 million of advances received for construction from customers of LLC INTER RAO Engineering (as at 31 December 2018: RUR 18,050 million).

As at 31 December 2019 the amount of obligation to repurchase own equity instruments equaled to RUR 763 million (as at 31 December 2018: RUR 763 million) 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.

Movements in short-term provisions are as follows:

	Provision for legal claims	Provision for taxes	Provision for income tax	Other provisions	Total
Balance at 31 December 2017	**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**
Balance at 31 December 2018	**1,958**	**287**	**124**	**1,921**	**4,290**
Additions	1,331	76	62	600	**2,069**
Provision used during the period	–	–	–	–	**–**
Release of provision	(1,971)	(211)	(62)	(1,187)	**(3,431)**
Reclassification	38	–	–	(259)	**(221)**
Transfer from/(to) other balance accounts	5	(42)	(124)	(19)	**(180)**
Translation difference	(27)	–	–	–	**(27)**
Balance at 31 December 2019	**1,334**	**110**	**–**	**1,056**	**2,500**

Release of provision (net of additional provision) for the year ended 31 December 2019 in the amount of RUR 1,362 million (for the year ended 31 December 2018: RUR 1,331 million) was recognised in Other provisions within Operating expenses in the consolidated statement of comprehensive income.

(in millions of RUR)

21. Other non-current liabilities

	31 December 2019	31 December 2018
Financial liabilities		
Long-term derivative financial instruments	–	1
Other long-term liabilities	675	1,233
Total financial liabilities	**675**	**1,234**
Non-financial liabilities		
Pensions liabilities	4,152	3,158
Restoration provision	4,409	3,611
Government grants	12	26
Other long-term liabilities	679	559
Total non-financial liabilities	**9,252**	**7,354**
Total	**9,927**	**8,588**

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 31 December 2017	**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**
Restoration provision at 31 December 2018	**3,611**
Reclass of short-term portion	(22)
Unwinding of discount	187
Changes in estimates of existing obligations	633
Restoration provision at 31 December 2019	**4,409**

Discount rate used to calculate net present value of future cash outflows for land rehabilitation was in the range from 6.21% to 7.35% per annum in 2019 (in 2018 – 7.85% to 8.79%).

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.

Amounts recognised in the consolidated statement of financial position:

	31 December 2019	31 December 2018
Present value of defined benefit obligations	4,152	3,158
Less: fair value of plan assets	–	–
Deficit in plan	**4,152**	**3,158**
Pension liabilities in the consolidated statement of financial position	**4,152**	**3,158**

(in millions of RUR)

21. Other non-current liabilities (continued)

Post-employment benefits (continued)

Amounts recognised in the consolidated statement of comprehensive income:

	Year ended 31 December 2019	*Year ended 31 December 2018*
Current service cost	133	118
Interest cost	256	282
Recognised actuarial gain/(loss)	973	(430)
Recognised past service cost	27	(337)
Total	**1,389**	**(367)**
Curtailment and settlement gain	(162)	(160)
Other	10	(3)
Total	**1,237**	**(530)**

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

	31 December 2019	*31 December 2018*
Present value of defined benefit obligations as at the beginning of the period	**3,158**	**3,927**
Current service cost	133	118
Interest cost	256	282
Actuarial gain/(loss)	973	(430)
Past service cost	27	(337)
Benefits paid	(233)	(237)
Curtailment and settlement gain	(162)	(160)
Other	–	(5)
Present value of defined benefit obligations as at the end of the period	**4,152**	**3,158**

Plan assets:

	31 December 2019	*31 December 2018*
Employer contributions	233	237
Benefits paid	(233)	(237)

Changes in the pension liabilities are as follows:

	31 December 2019	*31 December 2018*
Pension liabilities at the beginning of the year	**3,158**	**3,927**
Net income/(expense) recognised in the consolidated statement of comprehensive income	1,237	(530)
Benefits paid	(233)	(237)
Other expense	(10)	(2)
Pension liabilities at the end of the period	**4,152**	**3,158**

Principal actuarial assumptions are as follows:

	31 December 2019	*31 December 2018*
Discount rate	6.40%	9.00%
Salary increase	6.00%	6.00%
Inflation	4.10%	4.10%
Mortality	RUS 2016 mortality reduced by 20%	RUS 2014 mortality reduced by 20%

(in millions of RUR)

21. Other non-current liabilities (continued)

Post-employment benefits (continued)

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 364 million (as at 31 December 2018: RUR 353 million).

Sensitivity analysis as of 31 December 2019 on principal actuarial assumptions is presented below:

	Change in assumption	***Effect on defined benefit obligation***
Discount rate	+/-0.75% p.a.	312
Salary increase	+/-0.75% p.a.	87
Inflation	+/-0.75% p.a.	151
Staff turnover	+/-1.5% p.a.	161

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

	31 December 2019	***31 December 2018***
Defined benefit obligation	4,152	3,158
Deficit in plan	4,152	3,158
Experience adjustments on plan liabilities, loss	(9)	36

22. Other taxes payable

	31 December 2019	***31 December 2018***
Value added tax (VAT)	10,607	9,067
Social tax	896	774
Property tax	329	374
Personal income tax	255	353
Other taxes	50	76
	12,137	**10,644**

23. Revenue

	Year ended 31 December 2019	***Year ended 31 December 2018***
Electricity and capacity	954,188	877,136
Thermal energy sales	46,846	46,563
Other revenue	31,086	38,883
	1,032,120	**962,582**

Other revenue for the year ended 31 December 2019 included construction contract revenue of RUR 11,265 million (for the year ended 31 December 2018: RUR 19,615 million.) received by LLC INTER RAO Engineering for construction of Pregolskaya TPP and Primorskaya TPP.

(in millions of RUR)

24. Other operating income

	Year ended 31 December 2019	*Year ended 31 December 2018*
Penalties and fines receivable	6,189	5,669
Income from sale of securities (Note 10)	–	47
Electricity derivatives	2,082	49
Gain from disposal of Group entities, net (Note 5, 8)	66	187
Other	3,825	4,540
	12,162	**10,492**

25. Operating expenses

	Year ended 31 December 2019	*Year ended 31 December 2018*
Purchased electricity and capacity	414,216	371,796
Electricity transmission fees	241,770	227,234
Fuel expense	124,092	121,991
Employee benefit expenses and payroll taxes	55,666	51,935
Depreciation and amortisation (Notes 6, 7)	28,002	26,601
Repairs and maintenance	10,929	11,518
Provision for impairment of account receivables, net	7,050	8,358
Agency fees	5,481	5,301
Other materials for production purposes	3,975	3,401
Water supply expenses	3,560	3,556
Transportation expenses	3,336	3,092
Taxes other than income tax	2,498	3,449
Impairment of intangible assets (Note 7)	2,488	–
Impairment of investments in associate and joint venture (Note 8)	2,269	–
Thermal power transmission expenses	1,947	2,103
Consulting, legal and auditing services	1,454	1,214
Loss on sale or write-off of inventory	803	141
Short-term lease	523	189
Impairment of property, plant and equipment (Note 6)	161	1,146
Loss from sale of asset classified as held-for-sale (Note 15)	148	–
Lease of low value assets	21	31
VAT provision	4	(43)
Cost of equipment for resale	4	4,415
Impairment of investments in securities (Note 10)	2	–
Expenses from derivatives trading operations on the electricity market	–	98
Impairment of asset classified as held-for-sale (Note 15)	–	1,263
Other provisions release	(1,394)	(1,008)
Other	36,970	38,004
	945,975	**885,785**

26. Finance income and expense

	Year ended 31 December 2019	*Year ended 31 December 2018*
Finance income		
Interest income	14,580	10,267
Dividend income	454	375
Unwind of discount of accounts receivable	221	456
Income on discount of accounts payable	3	182
Foreign currency exchange gain, net	–	3,649
Other finance income	344	328
	15,602	**15,257**

(in millions of RUR)

26. Finance income and expense (continued)

	Year ended 31 December 2019	Year ended 31 December 2018
Finance expenses		
Interest expense on lease liabilities	5,569	3,801
Foreign currency exchange loss, net	4,139	–
Unwind of discount of accounts payable	2,041	1,118
Interest expense	626	1,190
Loss on discount of accounts receivable	76	231
Other finance expenses	87	449
	12,538	**6,789**

27. Income tax expense

	Year ended 31 December 2019	Year ended 31 December 2018
Current tax expense	22,702	17,748
Deferred tax (benefit)/expense	(183)	2,937
Amended tax declaration	(668)	(305)
Provision for income tax	–	123
Income tax expense	**21,851**	**20,503**

The Parent Company's applicable tax rate is the corporate income tax rate of 20% (31 December 2018: 20%). The corporate income tax rate in Finland is 20% (31 December 2018: 20%), in Georgia is 15% (31 December 2018: 15%), in Lithuania is 15% (31 December 2018: 15%). The tax system in Transdniestria Republic, Moldavia, where Moldavskaya GRES operates, is based on revenue at a rate of 7% (31 December 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 2019	Year ended 31 December 2018
Profit before tax	**(103,781)**	**(92,178)**
Theoretical profit tax charge at 20% – expense	**20,756**	**18,436**
Effect of different tax rates	(1,002)	(307)
Effect of different tax base	507	506
Utilisation of previously unrecognised tax losses	(7)	–
Tax effect of items which are not deductible or assessable for taxation purposes, net	1,706	1,235
Recognition of previously unrecognised temporary differences	(3)	(32)
Provision for income tax	–	123
Other	(106)	542
Income tax expense	**21,851**	**20,503**

(in millions of RUR)

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.

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

As at 31 December 2019	*Note*	*Financial assets at amortised cost*	*Derivatives used for hedging*	*Securities*	*Total*
Assets as per consolidated statement of financial position					
Equity instruments	10	–	–	5,573	**5,573**
Debt instruments	10, 16	–	–	3,456	**3,456**
Derivative financial instruments	16	–	242	–	**242**
Trade and other receivables excluding prepayments	11, 13	90,427	–	–	**90,427**
Restricted cash	16	727	–	–	**727**
Bank deposits with maturity exceeding 3 months	11, 16	161,511	–	–	**161,511**
Cash and cash equivalents	14	95,924	–	–	**95,924**
Total assets		**348,589**	**242**	**9,029**	**357,860**

As at 31 December 2019	*Note*	*Liabilities at fair value through profit and loss*	*Other financial liabilities at amortised cost*	*Lease liabilities*	*Total*
Liabilities as per consolidated statement of financial position					
Loans and borrowings (excluding lease liabilities)	19	–	3,316	–	**3,316**
Lease liabilities		–	–	57,295	**57,295**
Derivative financial instruments	20	1	–	–	**1**
Trade and other payables excluding taxes	20, 21	–	54,837	–	**54,837**
Obligation to repurchase own equity instruments	20	763	–	–	**763**
Total liabilities		**764**	**58,153**	**57,295**	**116,212**

As at 31 December 2018	*Note*	*Financial assets at amortised cost*	*Derivatives used for hedging*	*Securities*	*Total*
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**

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

As at 31 December 2018	*Note*	*Liabilities at fair value through profit and loss*	*Other financial liabilities at amortised cost*	*Lease liabilities*	*Total*
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**
Obligation to repurchase own equity instruments	20	763	–	–	**763**
Total liabilities		**1,258**	**101,585**	**49,703**	**152,546**

(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.

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 2019 receivables potentially involving credit risks for the Group consisted mainly of trade receivables in the amount of RUR 72,303 million (as at 31 December 2018: RUR 78,396 million), and other receivables in the amount of RUR 18,124 million (as at 31 December 2018: RUR 16,417 million). Total carrying value of receivables as at 31 December 2019 was RUR 90,427 million (as at 31 December 2018: RUR 94,813 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 millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

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 2019	*Nominal value*	*Provision for impairment*	*Carrying amount*	*Share in total, %*
A	73,834	–	73,834	63%
B’	7,964	(647)	7,317	7%
B’’	7,017	(2,191)	4,826	6%
B’’’	10,792	(7,027)	3,765	9%
C	16,682	(15,997)	685	14%
Total	**116,289**	**(25,862)**	**90,427**	**100%**

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%**

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.

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

(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.

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 2019	*USD*	*EUR*	*Other*	*Total*
Trade and other receivables (excluding prepayments)	2,845	2,530	367	**5,742**
Bank deposits with maturity of 3-12 months	1,638	–	3	**1,641**
Cash and cash equivalents	19,531	20,031	947	**40,509**
Restricted cash	–	–	75	**75**
Loans and borrowings (excluding lease liabilities)	–	–	(350)	**(350)**
Lease liabilities	(544)	(12)	–	**(556)**
Trade and other payables (excluding taxes)	(838)	(580)	(206)	**(1,624)**
Net foreign currency position	**22,632**	**21,969**	**836**	**45,437**

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

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 2019 would have been increase of income by RUR 4,768 million or decrease of income by RUR 4,768 million (for the year ended 31 December 2018: increase of income by RUR 2,802 million or decrease of income by RUR 2,802 million) in accordance with positive and negative scenario, respectively.

At 31 December 2019	*USD/EUR*	*RUR/USD*	*RUR/EUR*	RUR/CNY	*GEL/JPY*
Upper level	2.91%	12.88%	13.77%	5.22%	(0.61)%
Lower level	(2.91)%	(12.88)%	(13.77)%	(5.22)%	0.58%

At 31 December 2018	*USD/EUR*	*RUR/USD*	*RUR/EUR*	RUR/CNY	*GEL/JPY*
Upper level	3.38%	12.88%	13.77%	5.75%	(0.63)%
Lower level	(3.38)%	(12.88)%	(13.77)%	(5.75)%	0.58%

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

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

(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.

Variable rate debt	*As at 31 December 2019*	*As at 1 January 2018*
Libor	–	2,279
EURIBOR	267	568
Bank of Georgia key rate	114	274

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:

	Deviation of LIBOR		*Deviation of EURIBOR*		*Deviation of Bank of Georgia key rate*	
Hypothetical effect on income/(loss) for the year ended 31 December 2019	9 bp decrease –	10 bp increase –	3 bp decrease 0.1	2 bp increase (0.1)	55 bp decrease 0.5	60 bp increase (0.5)
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 –	20 bp decrease 0.4	20 bp increase (0.4)

(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).

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 2019	*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	2,855	261	428	–	2,852	**6,396**
Trade and other payables	54,164	170	479	110	–	**54,923**
Lease liabilities	9,158	8,200	23,176	203,084	2,299	**245,917**
Derivative financial liabilities	1	–	–	–	–	**1**
Obligation to repurchase own equity instruments	763	–	–	–	–	**763**
Total	**66,941**	**8,631**	**24,083**	**203,194**	**5,151**	**308,000**

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**
Obligation to repurchase own equity instruments	763	–	–	–	–	**763**
Total	**107,719**	**8,311**	**20,068**	**278,210**	**70,778**	**485,086**

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

(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 2019 and 31 December 2018 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 2019 the Group entities registered in the Russian Federation were in compliance with the above capital requirements.

(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.

(in millions of RUR)

28. Financial instruments and financial risk factors (continued)

Financial risk factors (continued)

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

At 31 December 2019	*Note*	*Total fair value*	*Fair value hierarchy*		
			Level 1	*Level 2*	*Level 3*
Financial assets					
Derivative financial instruments					
Electricity derivatives	16	**242**	242	–	–
Securities					
Equity instruments at FVOCI	10	**4,008**	4,008	–	–
Equity instruments at FVPL	10	**1,565**	–	–	1,565
Debt instruments at FVOCI	10,16	**3,456**	3,456	–	–
Debt instruments at amortised cost					
Long-term bank deposits	11	**64**	–	–	64
Total financial assets		**9,335**	**7,706**	**–**	**1,629**
Financial liabilities					
Derivative financial instruments					
Interest rate SWAP	20	**1**	–	1	–
Financial liabilities designated at fair value through profit or loss					
Obligation to repurchase own equity instruments	20	**763**	–	763	–
Financial liabilities at amortised cost					
Loans and borrowings	19	**2,130**	–	2,130	–
Total financial liabilities		**2,894**	**–**	**2,894**	**–**

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					
Obligation to repurchase own equity instruments	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)

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 2019 are as follows:

Year	*Investments, GEL, million*
2020	23
2021-2022	41
2023-2024	46
2025	25

As at 31 December 2019 realisation of investment commitments was in line with schedule for the year 2019. Exchange rate for Georgian lari to Russian rouble as at 31 December 2019 is set by National Bank of Georgia at GEL 4.64 for RUR 100.

As at 31 December 2019 capital commitments of subsidiaries of the Company, are as follows:

Subsidiary	*RUR, million*
Inter RAO − Electric Power Plants	7,238
LLC Bashkir Generation Company	1,767
Other	778
Total	**9,783**

Capital commitments of JSC Inter RAO − Electric Power Plants as at 31 December 2019 are mainly for modernisation of blocks of Kostromskaya GRES, Gusinoozerskaya GRES and Iriklinskaya GRES, modernisation of powersupply equipment of Cherepetskaya GRES, supply of equipment for Permskaya GRES and development of information system for modernisation and maintenance of power equipment.

Capital commitments of LLC Bashkir Generation Company are mainly for the construction completion of Zatonskaya TEC and reconstruction of heating networks.

Guarantees

As at 31 December 2019 the Group has the following 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 2019 the guarantees amounted to EUR 7.2 million, or RUR 499 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2019 (as at 31 December 2018: EUR 9.9 million, or RUR 783 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018). The guarantee amounted to EUR 4.3 million or RUR 300 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2019 will expire in January 2024, the guarantee amounted to EUR 2.9 million or RUR 199 million, at the Central Bank of the Russian Federation exchange rate as of 31 December 2019, 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 Holdings B.V. The Group’s share in the entity was 25%. Since April 2019 the Group’s share in the company is 50%. 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 entity.

  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 entity.

  As at 31 December 2019 the standby letter of credit outstanding amount was EUR 21 million, or RUR 1,441 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2019 (as at 31 December 2018: EUR 21 million, or RUR 1,651 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2018). The standby letter of credit will expire in September 2020.

(in millions of RUR)

29. Commitments (continued)

Guarantees (continued)

- 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 2019 the guarantee amounted to USD 1.5 million, or RUR 93 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2019 (as at 31 December 2018 the guarantee 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). The guarantees will expire in December 2020.
- 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 2019 the guarantees amounted to RUR 83 million (as at 31 December 2018: RUR 88 million). The guarantees will expire in March 2020.
- In January and August 2019 the Group entered into the guarantee agreements with Raiffeisen Bank for the purpose of financial support of the agreement between the Group and PJSC Wimm-Bill-Dann for construction and installation works. As at 31 December 2019 the guarantees amounted to RUR 94 million. The guarantee in the amount of RUR 32 million will expire in March 2020. The guarantee in the amount of RUR 62 million will expire in December 2020.
- In October 2019 the Group issued the letter of guarantee with Raiffeisen Bank for the purpose of financial support of the agreement between the Group and JSC Electric Power Plants (EPP) for participation in the tender. As at 31 December 2019 the guarantee amounted to USD 2.3 million or RUR 140 million at the Central Bank of the Russian Federation exchange rate as of 31 December 2019. The guarantee will expire in August 2020.
- In December 2019 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 2019 the guarantees amounted to RUR 58 million. The guarantees will expire in December 2020.

The Group’s share in the guarantees issued for the joint ventures which are to be incurred jointly with other investors amounts to RUR nil million (as at 31 December 2018: RUR 240 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 Transdniestria Republic) and Lithuania.

Russia continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the Russian economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

The Russian economy has been negatively impacted by sanctions imposed on Russia by a number of countries. The rouble interest rates remained high. The combination of the above resulted in reduced access to capital, a higher cost of capital and uncertainty regarding economic growth, 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.

(in millions of RUR)

30. Contingencies (continued)

(b) Insurance (continued)

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.

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

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:

	31 December 2019	***31 December 2018***
Legal claims, including:	**2,301**	**3,198**
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 follows 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.

(in millions of RUR)

30. Contingencies (continued)

(d) Tax contingencies (continued)

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 2019 would be successfully challenged in the amount of RUR 72 million (31 December 2018: RUR 420 million).

Starting from 1 January 2019, the value added tax rate in Russian Federation has been increased from 18% to 20%.

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.

(in millions of RUR)

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).

(b) Transactions with key management personnel

The members of the Management Board and Board of Directors own 0.21092% of ordinary shares of PJSC Inter RAO as at 31 December 2019 (31 December 2018: 0.38432%).

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 2019	*Year ended 31 December 2018*
Salaries and bonuses	1,228	1,169

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.

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 31 December 2017	**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
Weighted average price (RUR)	3.9282
Expected volatility	42.50%
Option life, years	3.6
Risk-free interest rate	8.60%
Fair value of the option at measurement date (in RUR)	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 within employee benefit expenses in the consolidated statement of comprehensive income related to the fair value of the options agreements signed.

(in millions of RUR)

31. Related party transactions (continued)

(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.

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

	Year ended 31 December 2019	*Year ended 31 December 2018*
Revenue		
Joint ventures	2,130	595
Associates	13	19
Other operating income		
Joint ventures	4	9
Associates	–	74
	2,147	**697**
Purchased power		
Joint ventures	76	216
Purchased capacity		
Joint venture	2,699	2,469
Other expenses		
Joint venture	287	80
Associates	–	2
	3,062	**2,767**
Capital expenditures		
Joint ventures	2	2

	31 December 2019	*31 December 2018*
Accounts receivable		
Joint ventures	245	96
Associates	–	–
Accounts payable		
Joint ventures	246	229
Associates	–	4

(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 2019	*Year ended 31 December 2018*
Revenue		
Electricity and capacity	281,130	279,111
Other revenues	15,672	22,685
Other operating income	3,143	3,823
	299,945	**305,619**
Operating expenses		
Purchased power and capacity	137,589	110,335
Transmission fees	227,251	213,283
Fuel expense (gas)	97,736	93,454
Fuel expense (coal)	644	446
Other purchases	157	147
Other expenses	13,492	11,244
	476,869	**428,909**
Capital expenditures	**5,563**	**168**
Finance income/(expenses)		
Interest income	5,452	3,174
Other finance income	–	6
Dividend income	121	119
Interest expenses	(131)	(311)
Interest expenses on lease liabilities	(5,057)	(3,318)
	385	**(330)**
Financial transactions		
Loans and borrowings received	1,818	8,827
Loans and borrowings repaid	(2,362)	(11,580)
Repayment of leases	(6,555)	(3,280)
	(7,099)	**(6,033)**

	31 December 2019	*31 December 2018*
Securities	**6,067**	**6,321**
Long-term accounts receivable		
Other account receivables	90	43
Less impairment provision	*(28)*	(17)
Other receivables – net	**62**	**26**
Short-term accounts receivable		
Trade accounts receivable, gross	25,604	30,801
Less impairment provision	*(7,455)*	(6,790)
Trade receivables – net	**18,149**	**24,011**
Advances issued	66	1,492
Advances issued for capital construction	31	126
Accounts receivable on construction contracts	5,826	2,903
Other receivables	816	2,942
	24,888	**31,474**
Other current assets	**647**	**496**

(in millions of RUR)

31. Related party transactions (continued)

(d) Transactions with entities controlled by the Russian Federation (continued)

	31 December 2019	*31 December 2018*
Accounts payable		
Trade accounts payable	22,851	21,915
Payables for capital construction	36	54
Long-term accounts payable	511	577
Other accounts payable	491	35,867
Advances received	13,187	24,872
	37,076	**83,285**
Other long-term liabilities	**18**	**24**
Loans and borrowings		
Short-term loans and borrowings	309	525
Long-term loans and borrowings	194	663
Interest on loans and borrowings	2	4
	505	**1,192**
Lease liabilities		
Short-term portion of long-term lease liabilities	7,296	5,687
Long-term lease liabilities	44,832	38,503
	52,128	**44,190**
Cash and cash equivalents	23,985	19,119
Other current assets (bank deposits)	50,517	63,099

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.

(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 2019	*Year ended 31 December 2018*
Revenue		
Electricity and capacity	27	27
Operating expenses		
Other expenses	4	6
Financial income and expenses		
Interest income	3,289	2,644
Interest expenses	(52)	(60)

	31 December 2019	*31 December 2018*
Short-term accounts receivable		
Trade and other accounts receivable	86	533
Short-term accounts payable		
Trade and other accounts payable	4	2
Loans and borrowings payable		
Short-term loans and borrowings	–	550
Cash and cash equivalents		
Cash in bank	12,183	10,799
Short-term bank deposits	36,011	46,238
	48,194	**57,037**

(in millions of RUR)

32. Significant subsidiaries

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

	Country of incorporation	*31 December 2019 ownership/voting*	*31 December 2018 ownership/voting*
Trading entities			
RAO Nordic Oy[1]	Finland	100.00%	100.00%
AB INTER RAO Lietuva1	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	85.04%	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%
JSC Tomskenergosbyt (Note 5)	The Russian Federation	100.00%	85.01%
LLC ESC Bashkortostan (Note 5)	The Russian Federation	100.00%	100.00%
Generating entities			
CJSC Moldavskaya GRES	Moldavia, Transdniestria 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 2019, including amounts related to both: shareholders and non-controlling interest:

	AB INTER RAO Lietuva	*JSC Telasi*	*PJSC Tambov Energy Retailing Company*	*PJSC Saratov-energo*	*LLC MosOblIERC*	*JSC Tomsk-energosbyt*	*Other individually immaterial subsidiaries*	*Total*
Non-controlling interest (percentage)	**49.00%**	**24.89%**	**14.96%**	**40.16%**	**49.90%**	**–**	**–**	**–**
Non-current assets	837	6,294	138	457	734	361	1,011	**9,832**
Current assets	2,609	1,554	960	2,072	2,852	3,197	2,387	**15,631**
Non-current liabilities	(27)	(574)	(24)	(180)	(666)	(27)	(120)	**(1,618)**
Current liabilities	(1,984)	(3,055)	(873)	(2,970)	(2,878)	(1,500)	(829)	**(14,089)**
Net assets	**1,435**	**4,219**	**201**	**(621)**	**42**	**2,031**	**2,449**	**9,756**
Carrying amount of non-controlling interest at 31 December 2019	**(704)**	**(1,226)**	**(28)**	**21**	**(201)**	**92**	**106**	**(1,940)**
Revenue	20,456	10,834	5,992	19,845	3,837	12,877	9,300	**83,141**
Income/(loss) for the period	988	333	16	(45)	318	(59)	(2,231)	**(680)**
Total comprehensive income/(loss) for the year ended 31 December 2019	**988**	**338**	**6**	**(48)**	**318**	**(59)**	**(2,231)**	**(688)**
Income/(loss) allocated to non-controlling interest	**484**	**83**	**3**	**(18)**	**159**	**(92)**	**(320)**	**299**
Cash flows from operating activities	1,093	1,615	134	535	1,393	1	467	**5,238**
Cash flows from / (used for) investing activities	17	(967)	(61)	(32)	(32)	69	(35)	**(1,041)**
Cash flows used for financing activities before dividends to non-controlling interest	(859)	(705)	(1)	(513)	(159)	(42)	(293)	**(2,572)**
Net increase/(decrease) in cash and cash equivalents for the year ended 31 December 2019	**251**	**(57)**	**72**	**(10)**	**1,202**	**28**	**139**	**1,625**
Cash flows used for financing activities – cash dividends to non-controlling interest	(420)	–	–	–	–	–	–	**(420)**

(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 Saratov-energo*	*JSC Tomsk-energosbyt*	*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)

33. Events after the reporting period

There were no significant events after the reporting period.