CEZ GROUP

CONSOLIDATED FINANCIAL STATEMENTS

PREPARED IN ACCORDANCE WITH
INTERNATIONAL FINANCIAL REPORTING STANDARDS
AS OF DECEMBER 31, 2019

(Translation of Consolidated Financial Statements Originally Issued in Czech)

CEZ GROUP
CONSOLIDATED BALANCE SHEET
AS OF DECEMBER 31, 2019

in CZK Millions

	Note	2019	2018
ASSETS:			
Plant in service		865,106	830,955
Less accumulated depreciation and impairment		(469,476)	(445,926)
Net plant in service		395,630	385,029
Nuclear fuel, at amortized cost		14,250	14,427
Construction work in progress, net		18,208	16,452
Total property, plant and equipment	3	428,088	415,908
Investments in associates and joint-ventures	9	3,283	3,361
Restricted financial assets, net	4	20,732	18,834
Other non-current financial assets, net	5	10,923	9,948
Intangible assets, net	6	37,429	31,127
Deferred tax assets	35	1,481	1,269
Total other non-current assets		73,848	64,539
Total non-current assets		501,936	480,447
Cash and cash equivalents, net	10	9,755	7,278
Trade receivables, net	11	65,030	72,234
Income tax receivable		707	352
Materials and supplies, net	12	8,889	8,737
Fossil fuel stocks		1,764	1,066
Emission rights	13	27,029	16,655
Other current financial assets, net	5	61,114	93,303
Other current assets, net	14	11,070	9,874
Assets classified as held for sale	15	17,280	17,497
Total current assets		202,638	226,996
Total assets		704,574	707,443

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED BALANCE SHEET
AS OF DECEMBER 31, 2019

continued

	Note	2019	2018
EQUITY AND LIABILITIES:			
Stated capital		53,799	53,799
Treasury shares		(2,885)	(3,534)
Retained earnings and other reserves		199,847	184,456
Total equity attributable to equity holders of the parent	16	250,761	234,721
Non-controlling interests	9	4,603	4,560
Total equity		255,364	239,281
Long-term debt, net of current portion	17	142,570	142,440
Provisions	20	89,512	75,798
Other long-term financial liabilities	21	9,700	15,054
Deferred tax liability	35	20,626	16,699
Other long-term liabilities		31	31
Total non-current liabilities		262,439	250,022
Short-term loans	22	4,260	11,783
Current portion of long-term debt	17	25,063	6,743
Trade payables		66,244	63,093
Income tax payable		628	253
Provisions	20	14,253	12,323
Other short-term financial liabilities	21	63,187	110,287
Other short-term liabilities	23	7,544	7,461
Liabilities associated with assets classified as held for sale	15	5,592	6,197
Total current liabilities		186,771	218,140
Total equity and liabilities		704,574	707,443

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF INCOME
FOR THE YEAR ENDED DECEMBER 31, 2019

in CZK Millions

	Note	2019	2018
Sales of electricity, heat, gas and coal		130,418	121,450
Sales of services and other revenues		71,363	59,868
Other operating income		4,411	3,168
Total revenues and other operating income	25	206,192	184,486
Gains and losses from commodity derivative trading	26	7,610	575
Purchase of electricity, gas and other energies	27	(55,545)	(52,168)
Fuel and emission rights	28	(21,357)	(19,064)
Services	29	(31,231)	(26,092)
Salaries and wages	30	(28,820)	(25,620)
Material and supplies		(10,262)	(8,240)
Capitalization of expenses to the cost of assets and change in own inventories		2,986	3,446
Depreciation and amortization	3, 6	(29,016)	(28,139)
Impairment of property, plant and equipment and intangible assets	7	(4,860)	(1,766)
Impairment of trade and other receivables		(386)	(559)
Other operating expenses	31	(8,882)	(7,100)
Income before other income (expenses) and income taxes		26,429	19,759
Interest on debt		(5,473)	(5,177)
Interest on provisions		(1,893)	(1,800)
Interest income	32	403	315
Share of profit (loss) from associates and joint-ventures	9	18	(308)
Impairment of financial assets		(921)	(508)
Other financial expenses	33	(813)	(1,051)
Other financial income	34	661	2,287
Total other income (expenses)		(8,018)	(6,242)
Income before income taxes		18,411	13,517
Income taxes	35	(3,911)	(3,017)
Net income		14,500	10,500
Net income attributable to:			
Equity holders of the parent		14,373	10,327
Non-controlling interests		127	173
Net income per share attributable to equity holders of the parent (CZK per share):	38		
Basic		26.9	19.3
Diluted		26.8	19.3

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2019

in CZK Millions

	Note	2019	2018
Net income		14,500	10,500
Change in fair value of cash flow hedges		10,891	(16,016)
Cash flow hedges reclassified to statement of income		8,253	3,927
Cash flow hedges reclassified to assets		-	(972)
Change in fair value of debt instruments		326	(363)
Disposal of debt instruments		(7)	-
Translation differences – subsidiaries		(1,337)	107
Translation differences – associates and joint-ventures		21	115
Disposal of translation differences		-	1
Share on other equity movements of associates and joint-ventures		(8)	-
Deferred tax related to other comprehensive income	35	(3,696)	2,555
Net other comprehensive income that may be reclassified to statement of income or to assets in subsequent periods		14,443	(10,646)
Change in fair value of equity instruments		(347)	87
Re-measurement gains (losses) on defined benefit plans		(48)	(22)
Deferred tax related to other comprehensive income	35	70	(11)
Net other comprehensive income not to be reclassified from equity in subsequent periods		(325)	54
Total other comprehensive income, net of tax		14,118	(10,592)
Total comprehensive income, net of tax		28,618	(92)
Total comprehensive income attributable to:			
Equity holders of the parent		28,538	(291)
Non-controlling interests		80	199

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2019

in CZK Millions

	Note	Attributable to equity holders of the parent									
		Stated capital	Treasury shares	Translation difference	Cash flow hedge reserve	Debt instruments	Equity instruments and other reserves	Retained earnings	**Total**	Non-controlling interests	**Total equity**
Balance as at December 31, 2017		53,799	(4,077)	(11,906)	(7,757)	678	570	218,711	250,018	4,304	254,322
Adoption of IFRS 9 and IFRS 15		-	-	143	-	-	(493)	2,800	2,450	(26)	2,424
Balance as at January 1, 2018 (restated)		53,799	(4,077)	(11,763)	(7,757)	678	77	221,511	252,468	4,278	256,746
Net income		-	-	-	-	-	-	10,327	10,327	173	10,500
Other comprehensive income		-	-	198	(10,580)	(290)	75	(21)	(10,618)	26	(10,592)
Total comprehensive income		-	-	198	(10,580)	(290)	75	10,306	(291)	199	(92)
Dividends		-	-	-	-	-	-	(17,604)	(17,604)	(17)	(17,621)
Sale of treasury shares		-	543	-	-	-	-	(333)	210	-	210
Share options	30	-	-	-	-	-	33	-	33	-	33
Exercised and forfeited share options		-	-	-	-	-	(45)	45	-	-	-
Transfer of measurement of equity instruments on sale		-	-	-	-	-	(27)	27	-	-	-
Acquisition of subsidiaries	8	-	-	-	-	-	-	-	-	756	756
Acquisition of non-controlling interests		-	-	-	-	-	-	(4)	(4)	(1)	(5)
Sale of non-controlling interests		-	-	-	-	-	-	1	1	4	5
Put options held by non-controlling interests		-	-	-	-	-	-	(92)	(92)	(659)	(751)
Balance as at December 31, 2018		53,799	(3,534)	(11,565)	(18,337)	388	113	213,857	234,721	4,560	239,281

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2019

continued

	Note	Attributable to equity holders of the parent									
		Stated capital	Treasury shares	Transla-tion difference	Cash flow hedge reserve	Debt instru-ments	Equity instruments and other reserves	Retained earnings	**Total**	Non-controlling interests	**Total equity**
Balance as at January 1, 2019		53,799	(3,534)	(11,565)	(18,337)	388	113	213,857	234,721	4,560	239,281
Net income		-	-	-	-	-	-	14,373	14,373	127	14,500
Other comprehensive income		-	-	(1,269)	15,506	260	(280)	(52)	14,165	(47)	14,118
Total comprehensive income		-	-	(1,269)	15,506	260	(280)	14,321	28,538	80	28,618
Dividends		-	-	-	-	-	-	(12,806)	(12,806)	(25)	(12,831)
Sale of treasury shares		-	649	-	-	-	-	(400)	249	-	249
Share options	30	-	-	-	-	-	38	-	38	-	38
Exercised and forfeited share options		-	-	-	-	-	(31)	31	-	-	-
Acquisition of subsidiaries	8	-	-	-	-	-	-	-	-	3	3
Acquisition of non-controlling interests		-	-	(1)	-	-	-	(92)	(93)	29	(64)
Put options held by non-controlling interests		-	-	(2)	-	-	-	116	114	(44)	70
Balance as at December 31, 2019		53,799	(2,885)	(12,837)	(2,831)	648	(160)	215,027	250,761	4,603	255,364

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2019

in CZK Millions

	Note	2019	2018
OPERATING ACTIVITIES:			
Income before income taxes		18,411	13,517
Adjustments of income before income taxes to cash generated from operations:			
Depreciation and amortization	3, 6	29,016	28,139
Amortization of nuclear fuel	3	4,096	4,027
(Gains) and losses on non-current asset retirements		(165)	(312)
Foreign exchange rate loss (gain)		315	776
Interest expense, interest income and dividend income		4,929	4,685
Provisions		2,858	2,780
Impairment of property, plant and equipment and intangible assets	7	4,860	1,766
Valuation allowances and other non-cash expenses and income		8,630	(2,017)
Share of (profit) loss from associates and joint-ventures	9	(18)	308
Changes in assets and liabilities:			
Receivables and contract assets		6,695	(27,469)
Materials, supplies and fossil fuel stocks		(742)	905
Receivables and payables from derivatives		(15,528)	1,527
Other assets		(14,935)	(4,369)
Trade payables		3,570	17,429
Other liabilities		(50)	1,581
Cash generated from operations		51,942	43,273
Income taxes paid		(4,136)	(3,327)
Interest paid, net of capitalized interest		(5,426)	(5,091)
Interest received		403	314
Dividends received		148	182
Net cash provided by operating activities		42,931	35,351
INVESTING ACTIVITIES:			
Acquisition of subsidiaries, associates and joint-ventures, net of cash acquired	8	(3,529)	(2,214)
Disposal of subsidiaries and joint-ventures, net of cash disposed of		187	155
Additions to non-current assets, including capitalized interest		(29,802)	(26,018)
Proceeds from sale of non-current assets		2,550	3,118
Loans made		(264)	(227)
Repayment of loans		41	22
Change in restricted financial assets		(1,546)	(737)
Total cash used in investing activities		(32,363)	(25,901)

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2019

continued

	Note	2019	2018
FINANCING ACTIVITIES:			
Proceeds from borrowings		210,765	125,213
Payments of borrowings		(204,416)	(119,961)
Payments of lease liabilities	24	(787)	(17)
Proceeds from other long-term liabilities		80	51
Payments of other long-term liabilities		(834)	(583)
Dividends paid to Company's shareholders		(12,836)	(17,596)
Dividends paid to non-controlling interests		(25)	(17)
Sale of treasury shares		249	210
(Acquisition) sale of non-controlling interests, net		(15)	5
Total cash used in financing activities		(7,819)	(12,695)
Net effect of currency translation and allowances in cash		(88)	(133)
Net increase (decrease) in cash and cash equivalents		2,661	(3,378)
Cash and cash equivalents at beginning of period		9,245	12,623
Cash and cash equivalents at end of period	10	11,906	9,245

Supplementary cash flow information:

Total cash paid for interest		5,686	5,344

The accompanying notes are an integral part of these consolidated financial statements.

CEZ GROUP
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019

CONTENT:

CEZ GROUP
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019

1. The Company

ČEZ, a. s. (ČEZ or the Company), business registration number 45274649, is a Czech Republic joint-stock company, owned 69.8% (70.1% of voting rights) at December 31, 2019 by the Czech Republic represented by the Ministry of Finance. The remaining shares of the Company are publicly held. The address of the Company's registered office is Duhová 2/1444, Praha 4, 140 53, Czech Republic.

The Company is a parent company of the CEZ Group (the Group, see Note 9). Main business of the Group is the production, distribution, trade and sale of electricity and heat, trade and sale of natural gas and coal mining. ČEZ is an electricity generation company, which in 2019 generated approximately 62% of the electricity in the Czech Republic. In the Czech Republic the Company operates eleven fossil fuel plants, sixteen hydroelectric plants, one combined cycle gas turbine plant and two nuclear plants. The Company also operates through its subsidiaries several power plants (fossil fuel, hydro, wind, solar, gas, biogas, biomass) in the Czech Republic, eleven wind power plants in Germany, two fossil fuel plants and one hydroelectric plant in Poland, one solar plant in Bulgaria and a wind farm and a complex of hydroelectric plants in Romania. Further the Group also controls certain electricity distribution companies in the Czech Republic, Bulgaria and Romania. The average number of employees of the Company and its consolidated subsidiaries was 31,572 and 30,545 in 2019 and 2018, respectively.

Responsibility for public administration in the energy sector is exercised by the Ministry of Industry and Trade (the Ministry), the Energy Regulatory Office and the State Energy Inspection Board.

The Ministry, as the central public administration body for the energy sector, issues state approval to construct new energy facilities in accordance with specified conditions, develops the energy policy of the state and ensures fulfillment of obligations resulting from international treaties binding on the Czech Republic or obligations resulting from membership in international organizations.

The Energy Regulatory Office was established as the administrative office to exercise regulation in the energy sector of the Czech Republic, to support economic competition and to protect consumers' interests in sectors where competition is not possible. The Energy Regulatory Office decides on the granting of a license, imposition of the supply obligation beyond the scope of the license, imposition of the obligation to let another license holder use energy facilities in cases of emergency, to exercise the supply obligation beyond the scope of the license and price regulation based on special legal regulations. The State Energy Inspection Board is the inspection body supervising the activities in the energy sector. All customers can select their suppliers of electricity.

2. Summary of Significant Accounting Policies

2.1. Financial Statements

These consolidated financial statements of the Group were prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union (EU).

The financial statements are prepared under the historical cost convention, except when IFRS require other measurement basis as disclosed in the accounting policies below.

<u>Explanation Added for Translation into English</u>

These financial statements represent a translation of financial statements originally issued in Czech.

2.2. Group Accounting

2.2.1. Group Structure

The financial statements of CEZ Group include the accounts of ČEZ, a. s., its subsidiaries, associates and joint-ventures included in consolidation unit (see Note 9).

2.2.2. Subsidiaries

Subsidiaries are those entities which the Group controls. 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
- The ability to use its power over the investee to affect its returns

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and 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

Subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

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 fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are recognized in profit or loss as incurred.

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, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the acquirer is recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability are recognized in accordance with IFRS 9 either in profit or loss or as a change to other comprehensive income. Changes in the fair value of contingent consideration classified as equity are not recognized.

Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired ("negative goodwill"), then the Group first reassesses the identification and measurement of the acquiree's identifiable assets, liabilities and contingent liabilities and the measurement of the cost of the combination. Any excess remaining after the reassessment is recognized immediately in the income statement and is presented in the line Impairment of property, plant and equipment and intangible assets.

A change in the ownership interest of a subsidiary, without loss of control, is accounted as an equity transaction.

Losses within a subsidiary incurred are attributed to the non-controlling interest even if that results in a deficit balance.

Put options held by non-controlling interests are recorded as a derecognition of non-controlling interest and recognition of a liability at the end of the reporting period. The liability is recognized at the present value of the amount payable on exercise, and any difference between the amount of non-controlling interest derecognized and this liability is accounted for within equity. Subsequent changes to the present value of the amount payable on exercise are recorded directly in equity.

Intercompany transactions, balances and unrealized gains on transactions between group companies are eliminated; unrealized losses are also eliminated unless cost cannot be recovered. Accounting policies of subsidiaries have been changed, where necessary, to ensure consistency with the policies adopted by the Group.

2.2.3. Associates

Associates are entities over which the Group generally has between 20% and 50% of the voting rights, or over which the Group has significant influence, but which it does not control. Investments in associates are accounted for by the equity method of accounting. Under this method the Group's share of the post-acquisition profits or losses of associates is recognized in the income statement and its share of other post-acquisition movements in equity of associates is recognized in other comprehensive income. The cumulative post-acquisition movements are adjusted against the cost of the investment. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates; unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. The Group's investment in associates includes goodwill (net of accumulated impairment losses) on acquisition.

When the Group's share of losses in an associate equals or exceeds its interest in the associate, the Group does not recognize further losses. In such a case, the Group recognizes its full share on net loss and its share on other comprehensive income only to the extent to recognize nil interest in an associate. This amount is included in the item Translation differences – associates and joint-ventures in the statement of comprehensive income. Then the Group discontinues of using equity method of accounting. However, additional losses are provided for, and a liability is recognized on the balance sheet in the item Other long-term liabilities, after the Group's interest is reduced to zero, only to the extent that the Group has incurred legal or constructive obligations (e.g. provided guarantees) or made payments on behalf of the associate. If the associate subsequently reports profits, the Group resumes recognizing its share of those profits only after its share of the profits equals the share of losses not recognized.

2.2.4. Joint-ventures

A joint-venture is a type of 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 considerations to determine control over subsidiaries. The Group recognizes its interest in the joint-venture using the equity method of accounting (see Note 2.2.3).

The financial statements of the joint-venture are prepared for the same reporting period as the parent company. Adjustments are made where necessary to bring the accounting policies into line with those of the Group. Adjustments are made in the Group's financial statements to eliminate the Group's share of unrealized gains and losses on transactions between the Group and its jointly controlled entity. Losses on transactions are recognized immediately if the loss provides evidence of a reduction in the net realizable value of current assets or an impairment loss.

2.2.5. Transactions Involving Entities under Common Control

Acquisitions of subsidiaries from entities under common control are recorded using a method similar to pooling of interests.

The assets and liabilities of the acquired subsidiaries are included in the consolidated financial statements at their book values. The difference between the cost of acquisition of subsidiaries from entities under common control and the share of net assets acquired in book values is recorded directly in equity.

2.3. Changes in Accounting Policies

2.3.1. Adoption of New IFRS Standards in 2019

The accounting policies adopted are consistent with those of the previous financial year, except for as follows. The Group has adopted the following new or amended and endorsed by EU IFRS and IFRIC interpretations as of January 1, 2019:

IFRS 16 Leases
This standard supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases-Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard deals with accounting, measurement and presentation of leases and disclosure requirements for the notes of the financial statements for both contract parties, i.e. for customer (lessee) and for supplier (lessor). Lessees will use single accounting model for all leases (with certain exceptions). Accounting by lessor is substantially unchanged from IAS 17, except where the Group leases right-of-use assets in a sublease. Therefore, IFRS 16 does not have a material impact for leases where the Group is the lessor.

The Group applied IFRS 16 using the modified retrospective approach, under which the comparative information presented for 2018 is not restated. The Group elected to use a transition practical expedient and applied the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. The Group also elected to use the recognition exemptions for lease contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option (short-term leases), and lease contracts for which the underlying asset is of low value (low-value assets).

On transition to IFRS 16, the Group recognized right-of-use assets and lease liabilities, restoration provision and derecognized prepayments related to the leased assets. As of the date of application of IFRS 16, the Group also incurred investment in finance lease due to the sublease of right-of-use assets. The impact on transition is summarized below (in CZK million):

Plant in service	5,750
Intangible assets, net	36
Other non-current financial assets, net	2
Other current assets, net	(88)
Assets classified as held for sale	369
Total assets	6,069
Long-term debt including current portion	5,618
Provisions	82
Liabilities associated with assets classified as held for sale	369
Total liability	6,069

The lease liability as at January 1, 2019 can be reconciled to the operating lease commitments as of December 31, 2018 as follows (in CZK millions):

Future minimum rentals payable under non-cancellable operating lease as at December 31, 2018	2,347
Effect of discounting as at January 1, 2019 using weighted average incremental borrowing rate of 3.06% p.a.	(203)
Discounted operating lease commitments as at January 1, 2019	2,144
Commitments relating to leases previously classified as finance lease	245
Lease payments not included in non-cancellable operating lease commitments as at December 2018, 31	3,474
Lease liabilities as at January 1, 2019	5,863

Amendment IAS 19 Plan Amendment, Curtailment or Settlement
The Amendment is effective for annual periods beginning on or after January 1, 2019 with earlier application permitted. The amendment requires Group to use updated actuarial assumptions to determine current service cost and net interest for the remainder of the annual reporting period after a plan amendment, curtailment or settlement has occurred. The amendment also clarifies how the accounting for a plan amendment, curtailment or settlement affects applying the asset ceiling requirements. This Amendment has not yet been endorsed by the EU. The amendment did not have material impact on Group's financial statements.

Amendment IFRS 9 Prepayment Features with Negative Compensation
The Amendment is effective for annual reporting periods beginning on or after January 1, 2019 with earlier application permitted. The Amendment allows financial assets with prepayment features that permit or require a party to a contract either to pay or receive reasonable compensation for the early termination of the contract (so that, from the perspective of the holder of the asset there may be 'negative compensation'), to be measured at amortized cost or at fair value through other comprehensive income. The amendment did not have material impact on Group's financial statements.

Amendment IAS 28 Long-term Interests in Associates and Joint-ventures
The Amendment is effective for annual reporting periods beginning on or after January 1, 2019 with earlier application permitted. The Amendment relates to whether the measurement, in particular impairment requirements, of long-term interests in associates and joint-ventures that, in substance, form part of the 'net investment' in the associate or joint-venture should be governed by IFRS 9, IAS 28 or a combination of both. The Amendment clarifies that an entity applies IFRS 9 Financial Instruments, before it applies IAS 28, to such long-term interests for which the equity method is not applied. In applying IFRS 9, the entity does not take account of any adjustments to the carrying amount of long-term interests that arise from applying IAS 28. The amendment did not have material impact on Group's financial statements.

IFRIC Interpretation 23 Uncertainty over Income Tax Treatments
The Interpretation is effective for annual periods beginning on or after January 1, 2019 with earlier application permitted. The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12. The Interpretation provides guidance on considering uncertain tax treatments separately or together, examination by tax authorities, the appropriate method to reflect uncertainty and accounting for changes in facts and circumstances. This Interpretation did not have material impact on Group's financial statements.

Annual Improvements to IFRSs 2015–2017
In December 2017 the IASB issued a collection of amendments to IAS and IFRS for annual periods beginning on or after January 1, 2019 in which they focused on areas of inconsistency in IFRSs and IASs or where the clarification of wording was required. The following standards were amended:

IFRS 3 Business Combinations and IFRS 11 Joint Arrangements:
The amendments to IFRS 3 clarify that when an entity obtains control of a business that is a joint operation, it remeasures previously held interests in that business. The amendments to IFRS 11 clarify that when an entity obtains joint control of a business that is a joint operation, the entity does not remeasure previously held interests in that business.

IAS 12 Income Taxes:
The amendments clarify that the income tax consequences of payments on financial instruments classified as equity should be recognized according to where the past transactions or events that generated distributable profits has been recognized.

IAS 23 Borrowing Costs:
The amendments clarify paragraph 14 of the standard that, when a qualifying asset is ready for its intended use or sale, and some of the specific borrowing related to that qualifying asset remains outstanding at that point, that borrowing is to be included in the funds that an entity borrows generally.

These improvements did not have material impact on Group's financial statements.

2.3.2. Adoption of New IFRS Standards in 2018

In 2018, The Group has adopted the new accounting standards IFRS 9 Financial Instruments and IFRS 15 Revenue from Contracts with Customers. Other changes in accounting policies in 2018, which are described in more details in the consolidated financial statements as at December 31, 2018, did not have material impact on the Group's financial statements.

The Group has adopted the new accounting standard IFRS 9 retrospectively, with the initial application date of January 1, 2018. Due to the application of IFRS 9, some assets were reclassified from category Available-for-sale to category Fair value through profit or loss and accumulated reserve from revaluation of Available-for-sale financial assets amounting to CZK 350 million was transferred to retained earnings. In addition, in applying of IFRS 9, the Group reassessed the amount of allowance provision for doubtful receivables and other assets in accordance with IFRS 9 impairment requirements, which are described in Note 2.14.4. The application of IFRS 9 standard as of January 1, 2018 reduced equity by CZK 82 million.

The Group adopted IFRS 15 using the modified retrospective method of adoption. The effect as of the date of application, resulting from recognition of deferred connection fees received from customers prior 2009 in retained earnings, increased equity by CZK 2,506 million.

2.3.3. New IFRS Standards and IFRIC Interpretations either not yet Effective or not yet Adopted by EU

The Group is currently assessing the potential impacts of the new and revised standards and interpretations that will be effective or adopted by the EU from January 1, 2020 or later. Standards and interpretations most relevant to the Group's activities are detailed below:

Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint-venture
The amendments address an acknowledged inconsistency between IFRS 10 and IAS 28, in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary. In December 2015 the IASB postponed the effective date of this amendment indefinitely pending the outcome of its research project on the equity method of accounting. The amendments have not yet been endorsed by the EU. These amendments are not expected to have significant impact to the Group's financial statements.

IFRS 17 Insurance Contracts

The standard is effective for annual periods beginning on or after January 1, 2021 with earlier application permitted if both IFRS 15 Revenue from Contracts with Customers and IFRS 9 Financial Instruments have also been applied. IFRS 17 Insurance Contracts establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts issued. It also requires similar principles to be applied to reinsurance contracts held and investment contracts with discretionary participation features issued. The objective is to ensure that entities provide relevant information in a way that faithfully represents those contracts. This information gives a basis for users of financial statements to assess the effect that contracts within the scope of IFRS 17 have on the financial position, financial performance and cash flows of an entity. The standard has not been yet endorsed by the EU. This standard is not expected to have significant impact to the Group's financial statements.

Conceptual Framework in IFRS Standards

The IASB issued the revised Conceptual Framework for Financial Reporting on March 29, 2018. The Conceptual Framework sets out a comprehensive set of concepts for financial reporting, standard setting, guidance for preparers in developing consistent accounting policies and assistance to others in their efforts to understand and interpret the standards. IASB also issued a separate accompanying document, Amendments to References to the Conceptual Framework in IFRS Standards, which sets out the amendments to affected standards in order to update references to the revised Conceptual Framework. Its objective is to support transition to the revised Conceptual Framework for companies that develop accounting policies using the Conceptual Framework when no IFRS Standard applies to a particular transaction. For preparers who develop accounting policies based on the Conceptual Framework, it is effective for annual periods beginning on or after January 1, 2020. This amendment is not expected to have significant impact to the Group's financial statements.

Amendment IFRS 3: Business Combinations

The IASB issued Amendment in Definition of a Business (Amendments to IFRS 3) aimed at resolving the difficulties that arise when an entity determines whether it has acquired a business or a group of assets. The Amendment is effective for business combinations for which the acquisition date is in the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period, with earlier application permitted. This Amendment have not yet been endorsed by the EU. This amendment is not expected to have significant impact to the Group's financial statements.

Amendments IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of 'material'

The Amendments are effective for annual periods beginning on or after January 1,2020 with earlier application permitted. The Amendments clarify the definition of material and how it should be applied. The new definition states that, 'Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity'. In addition, the explanations accompanying the definition have been improved. The Amendments also ensure that the definition of material is consistent across all IFRS Standards. These amendments are not expected to have significant impact to the Group's financial statements.

Amendments IFRS 9, IAS 39 and IFRS 7 – Interest Rate Benchmark Reform

The amendments are effective for annual periods beginning on or after January 1, 2020 and must be applied retrospectively. Earlier application is permitted. In September 2019, the IASB issued amendments to IFRS 9, IAS 39 and IFRS 7, which concludes phase one of its work to respond to the effects of Interbank Offered Rates (IBOR) reform on financial reporting. Phase two will focus on issues that could affect financial reporting when an existing interest rate benchmark is replaced with a risk-free interest rate (an RFR). The amendments published, deal with issues affecting financial reporting in the period before the replacement of an existing interest rate benchmark with an alternative interest rate and address the implications for specific hedge accounting requirements in IFRS 9 Financial Instruments and IAS 39 Financial Instruments: Recognition and Measurement, which require forward-looking analysis. The amendments provided temporary reliefs, applicable to all hedging relationships that are directly affected by the interest rate benchmark reform, which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark with an alternative nearly risk-free interest rate. There are also amendments to IFRS 7 Financial Instruments: Disclosures regarding additional disclosures around uncertainty arising from the interest rate benchmark reform. These amendments are not expected to have significant impact to the Group's financial statements.

Amendments IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current

The amendments are effective for annual reporting periods beginning on or after January 1, 2022 with earlier application permitted. The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of financial position, debt and other liabilities with an uncertain settlement date should be classified as current or non-current. The amendments affect the presentation of liabilities in the statement of financial position and do not change existing requirements around measurement or timing of recognition of any asset, liability, income or expenses, nor the information that entities disclose about those items. Also, the amendments clarify the classification requirements for debt which may be settled by the company issuing own equity instruments. These Amendments have not yet been endorsed by the EU. These amendments are not expected to have significant impact to the Group's financial statements.

The Group does not expect early adoption of any of the above-mentioned standards, improvements or amendments.

2.4. Estimates

The preparation of financial statements in conformity with International Financial Reporting Standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the reporting period. Actual results could differ from those estimates. Explanation of key assumptions is included in relevant sections of notes where significant estimates are being described. Significant estimates are made by the Group while determining recoverable amounts for property, plant and equipment and intangible assets (see Note 7), accounting for the nuclear provisions (see Note 20.1), provisions for reclamation of mines, mining damages and waste storage reclamation (see Note 20.2), unbilled electricity and gas (see Note 2.6), fair value of commodity contracts (see Notes 2.16 and 18), financial derivatives (see Notes 2.15 and 18) and incremental borrowing rate and lease term to measure lease liability (see Notes 2.27 and 24).

2.5. Revenues

The Group recognizes revenue from supplies of electricity, heat, gas and coal based on contract terms. Differences between contracted amounts and actual supplies for electricity and gas are settled through the market operator.

Revenues are recognized, when the Group has satisfied a performance obligation and the amount of revenue can be reliably measured. The Group will recognize revenue at an amount that reflects the consideration to which the entity expects to be entitled (after reduction for expected discounts) in exchange for transferring goods or services to a customer.

Sales are recognized net of value added tax.

Revenue from sale of assets is recognized when they are delivered and related significant risks and rewards of ownership have passed to the buyer.

Contract revenue and contract costs associated with the construction contracts is recognized as revenue and expenses respectively by reference to the stage of completion of the contract activity. The stage of completion is determined by reference to the share of incurred contract cots to total expected full contract costs. However, an expected loss on the construction contract is recognized as an expense immediately regardless the stage of completion of such a construction contract.

Connection fees received from customers are recognized in income in the period when this performance obligation is satisfied.

Government and similar grants related to income are recognized in the income statement in the period in which the Group recognizes related expenses to be offset by the grant and is presented in the line Other operating income.

2.6. Unbilled Electricity and Gas

Electricity and gas supplied to customers, which is not yet billed, is recognized in revenues at estimated amounts. The estimate of monthly change in unbilled electricity and gas is derived from the measured quantity after deduction of invoiced amounts and estimated grid losses. The estimate of total unbilled balance is also supported by extrapolation of consumption in the last measured period for individual locations. The ending balance of contract assets and liabilities is disclosed net in the balance sheet after deduction of advances received from customers and is included in the line item of Other current assets, net or Other short-term liabilities, net.

2.7. Fuel Costs

Fuel costs are expensed as fuel is consumed. Fuel expense includes the amortization of the cost of nuclear fuel (see Note 2.10).

2.8. Interest

The Group capitalizes all interest incurred in connection with its construction program that theoretically could have been avoided if expenditures for the qualifying assets had not been made. The qualifying assets include assets, for which the construction represents a substantial period of time.

2.9. Property, Plant and Equipment

Property, plant and equipment are recorded at cost, net of accumulated depreciation and impairment in value. Cost of plant in service includes purchase price, materials, labor, payroll-related costs and the cost of debt financing used during construction. The cost also includes the estimated cost of dismantling and removing the asset and restoring the site, to the extent that is recognized as a provision under IAS 37, Provisions, Contingent Liabilities and Contingent Assets. Government and similar grants received for construction of certain items of property, plant and equipment decrease the acquisition cost of the respective items.

Internally developed property, plant and equipment are recorded at their accumulated cost. The cost of maintenance, repairs, and replacement of minor items of property is charged to maintenance expense when incurred. Renewals and improvements are capitalized. Upon sale, retirement or replacement of part of an item of property, plant and equipment, the cost, related accumulated depreciation and eventual impairment of the disposed item or its replaced part are derecognized from the balance sheet. Any resulting gains or losses are included in profit or loss.

At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Group reviews the recoverable amounts of its property, plant and equipment to determine whether such amounts continue to exceed the assets’ carrying values. The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use. Identified impairment of property, plant and equipment is recognized directly in profit or loss in the line item Impairment of property, plant and equipment and intangible assets including goodwill.

At each reporting date, an assessment is made whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Group makes an estimate of recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset’s recoverable amount since the last impairment loss was recognized. If that is the case the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profit or loss in the line item Impairment of property, plant and equipment and intangible assets including goodwill.

The Group depreciates the original cost of property, plant and equipment less its residual value by using the straight-line method over the estimated economic lives. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately. The depreciable useful lives used for property, plant and equipment are as follows:

	Useful lives (years)
Buildings and structures	20–50
Machinery and equipment	4–35
Vehicles	8–25
Furniture and fixtures	4–15

The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year end.

2.10. Nuclear Fuel

The Group presents nuclear fuel as part of property, plant and equipment, because its useful life exceeds 1 year. Nuclear fuel is recorded at cost, net of accumulated amortization and possible impairment in value. Nuclear fuel includes the capitalized portion of the provision for interim storage of nuclear fuel. Amortization of fuel in the reactor is based on the amount of power generated and is recognized in the income statement in the line item Fuel and Emission rights. The amortization of nuclear fuel includes charges in respect of additions to the accumulated provision for interim storage of spent nuclear fuel.

2.11. Intangible Assets

Intangible assets are valued at their acquisition costs and related expenses. Intangible assets are amortized over their useful lives using the straight-line method. The estimated useful life of intangible assets ranges from 3 to 25 years. The assets' residual values, useful lives and amortization methods are reviewed, and adjusted if appropriate, at each financial year end. Improvements are capitalized.

Intangible assets are tested for impairment (for goodwill see Note 2.12) whenever facts or changes in circumstances indicate that the carrying amount could be impaired. The recoverable amount of an intangible asset not yet available for use is tested for impairment annually, irrespective of whether there is any indication that it may be impaired. Identified impairment of intangible assets is recognized directly in profit or loss in the line item Impairment of property, plant and equipment and intangible assets including goodwill.

For assets excluding goodwill an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Group makes an estimate of recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If that is the case the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profit or loss in the line item Impairment of property, plant and equipment and intangible assets including goodwill.

2.12. Goodwill

Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed (see Note 2.2). Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associates and joint-ventures is included in investments in associates and joint-ventures. Following initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired.

As at the acquisition date, any goodwill acquired is allocated to each of the cash-generating units expected to benefit from the combination's synergies. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets. Impairment is determined by assessing the recoverable amount of the cash-generating unit, to which the goodwill relates. Where recoverable amount of the cash-generating unit is lower than the carrying amount, an impairment loss is recognized. Impairment losses of goodwill cannot be reversed in subsequent periods. Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in these circumstances is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

2.13. Emission Rights

Emission right represents the right of the operator of a facility, which in the course of its operation emits greenhouse gases, to emit during the calendar year equivalent of one ton of carbon dioxide. Based on the National Allocation Plans certain companies of the Group have been granted emission rights. These companies are responsible for determining and reporting the amount of greenhouse gases produced by its facilities in the calendar year and this amount has to be audited by an accredited person.

On April, 30 of the following year, at the latest, these companies are required to remit a number of allowances representing the number of tones of CO_2 actually emitted in previous year.

The emission rights which were granted free of charge are stated at their nominal value, i.e. at zero. Purchased emission rights are carried at cost (except for emission rights for trading). Emission rights acquired in a business combination are initially recognized at their fair value at the date of acquisition and subsequently treated similarly to purchased emission rights. The Group recognizes a provision to cover emissions made, which corresponds to the difference between emissions made and amount of the emission rights which were granted free. This provision is measured firstly with regard to the cost of emission rights and credits purchased with the intention of covering the greenhouse gases emissions of the reporting period. The provision for emissions made above the amount of these emissions rights and credits is measured at the market price ruling at the balance sheet date. The emission rights purchased for own use purpose in the next year are presented within current assets in the line Emission rights. The emission rights with an expected later use are presented as part of the intangible assets.

The Group also holds emission rights and credits for trading purposes. The portfolio of emission rights and credits held for trading is measured at fair value. The changes in fair value of the emission rights held for trading are recognized directly in profit or loss in the line Gains and losses from commodity derivative trading. The emission rights and credits for the trading purposes are presented within current assets in the line Emission rights.

At each reporting date, the Group assesses whether there is any indication that emission rights may be impaired. Where an indicator of impairment exists, the Group reviews the recoverable amounts of the cash-generating units, to which the emission rights were allocated, to determine whether such amounts continue to exceed the assets' carrying values. Any identified impairment of emission rights is recognized directly in profit or loss in the line item of Other operating expenses.

Sale and repurchase agreements with emission rights are accounted for as collateralized borrowing.

Green and similar certificates which were granted free are initially recognized at fair value and subsequently treated similarly to purchased emission rights.

2.14. Classification of Financial Instruments

A financial asset is mainly cash, an equity instrument of another entity or a contractual right to receive cash or another financial asset.

A financial liability is mainly a contractual obligation to deliver cash or another financial asset.

Financial liabilities and assets are presented as current (short-term) or non-current (long-term). Financial assets are presented as current when the Group expects to realize them within 12 months of the balance sheet date or if there is no reasonable certainty that the Group will hold the financial assets for more than 12 months of the balance sheet date.
Financial liabilities are presented as current when they are due within 12 months of the balance sheet date. The financial assets and liabilities for trading are presented as current.

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

2.14.1. Financial Assets

Financial assets are classified into two main categories (a) at amortized cost and (b) at fair value depending on whether the financial asset is held for trading or is held within a business model whose objective is to hold assets to collect contractual cash flows.

The Group defines financial assets to the following categories:

a) financial assets at amortized cost
This category includes the financial assets held with strategy to collect contractual cash flows, which consists of both principal and interest payments. Examples for such financial assets are loans, securities held to maturity, trade receivables.
Expected credit losses, foreign exchange rate differences and interest revenues are recognized in the income statement.

b) financial assets at fair value through other comprehensive income
This category includes the financial assets held with strategy to collect contractual cash flows or to sell financial assets. This model distinguishes two types of accounting treatment:

- no recycling to the income statement – used for equity financial assets
Expected credit loss is not calculated and recognized. Changes in the fair value are recognized in other comprehensive income. When the financial asset is derecognized no profit or loss is recognized in the income statement – it never affects profit or loss. In case that equity instrument was sold, an accumulated revaluation reserve is reclassified to retained earnings. Foreign exchange rate differences are recognized in other comprehensive income (part of revaluation reserve). Dividends from these financial assets are recognized in the income statement providing it does not result in an impairment loss of investment at the same time.

- recycling to the income statement – used for debt financial assets
Expected credit loss is recognized in the income statement. Changes in the fair value are recognized in other comprehensive income. When the financial asset is derecognized, profit or loss is recognized in the income statement (profit or loss is reclassified from other comprehensive income to the income statement). Foreign exchange rate differences in relation to revaluation reserve are recognized in other comprehensive income. Foreign exchange rate differences in relation to impairment are recognized in the income statement. Interest revenues are recognized in the income statement.

c) financial assets at fair value through profit or loss
This category includes the financial assets held with strategy of active trading with financial assets. Contractual cash flow collection is not the primary objective of business model.
Examples for such financial assets are securities for trading, derivatives not used for hedging.
Expected credit losses are not calculated and recognized. Changes in the fair value and foreign exchange rate differences are recognized in the income statement.
Changes in the fair values are included in lines Other financial expenses or Other financial income.

2.14.2. Financial Liabilities

Financial liabilities are classified into two main categories (a) at amortized cost and (b) at fair value through profit or loss. Classification into these categories is similar to the financial assets above. For “Fair Value Option” liabilities, the amount of change in the fair value of a liability that is attributable to changes in credit risk must be recognized in other comprehensive income. The remainder of the change in fair value is recognized in profit or loss. However, when recognition of the fair value change in respect of the liability’s credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, all changes in fair value are then recognized in profit or loss.

2.14.3. Derivatives

Specific category of the financial assets and liabilities are derivatives. The method of recognizing 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 presentation of derivatives is described in the Note 2.15.

2.14.4. Impairment of Financial Assets

Impairment of financial assets by applying the IFRS 9 requirements is based on expected credit loss (ECL) model which applies to the following financial assets:

a) debt assets at amortized cost (trade receivables, loans, debt securities),
b) debt assets at fair value through other comprehensive income,
c) lease receivables,
d) contract assets and financial guarantee contracts,
e) bank accounts and term deposits.

An impairment analysis of receivables is performed by the Group at each reporting date on an individual basis for significant specific receivables. In addition, a large number of minor receivables are grouped into homogenous groups and assessed for impairment collectively where the individual approach is not applicable.

The Group recognizes either 12-months or lifetime ECL, depending on whether there has been a significant increase in credit risk since initial recognition (or when the commitment or guarantee was entered into). For some trade receivables, the simplified approach is applied whereby the lifetime expected credit losses are always recognized.

For the purposes of ECL model calculation, the portfolio of financial assets is split into 3 stages. At the date of the first recognition, the financial assets are included in stage 1, with the lowest allowance which is determined using percentage of unpaid receivables in the past. Subsequent reclassification to the stages 2 and 3 is carried out according to the definition of significant increase in credit risk of a debtor. The interest revenue from receivables in the stage 3 is based on the net carrying amount.

2.15. Derivative Financial Instruments

The Group uses derivative financial instruments such as foreign currency contracts and interest rate swaps to hedge its risks associated with interest rate and foreign currency fluctuations. Such derivative financial instruments are stated at fair value. In the balance sheet such derivatives are presented as part of other current and non-current financial assets or as part of other long-term and short-term financial liabilities.

The method of recognizing 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.

For the purpose of hedge accounting, hedges are classified as either fair value hedges when they hedge the exposure to changes in the fair value of a recognized asset or liability; or cash flow hedges when they hedge exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction.

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

2.15.1. Fair Value Hedge

Gain or loss from re-measuring the hedging instrument at fair value is recognized immediately in the income statement. Any gain or loss on the hedged item attributable to the hedged risk is adjusted against the carrying amount of the hedged item and recognized in the income statement. Where the adjustment is to the carrying amount of a hedged interest-bearing financial instrument, the adjustment is amortized to profit or loss over the remaining term to maturity.

2.15.2. Cash Flow Hedge

Changes in the fair value of derivatives that are designated and qualify as cash flow hedges are initially recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized in the income statement in the line item Other financial expenses or Other financial income.

Amounts accumulated in equity are transferred to the income statement in the periods when the hedged item affects profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recorded to the income statement when the forecast transaction is ultimately recognized. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the income statement.

2.15.3. Other Derivatives

Certain derivative instruments are not designated for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognized immediately in the income statement.

2.16. Commodity Contracts

According to IFRS 9, certain commodity contracts are treated as financial instruments and fall into the scope of the standard. Most commodity purchase and sales contracts entered into by the Group provide for physical delivery of quantities intended to be consumed or sold as part of its ordinary business; such contracts are thus excluded from the scope of IFRS 9.

In particular, forward purchases and sales for physical delivery of energy are considered to fall outside the scope of application of IFRS 9, when the contract concerned is considered to have been entered into as part of the Group's normal business activity. This is demonstrated to be the case when all the following conditions are fulfilled:

- A physical delivery takes place under such contracts;
- The volumes purchased or sold under the contracts correspond to the Group's operating requirements;
- The contract cannot be considered as a written option as defined by the standard IFRS 9. In the specific case of electricity sales contracts, the contract is substantially equivalent to a firm forward sale or can be considered as a capacity sale.

The Group thus considers that transactions negotiated with a view to balancing the volumes between electricity purchases and sale commitments are part of its ordinary business as an integrated electric utility company and do not therefore come under the scope of IFRS 9.

Commodity contracts which fall under the scope of IFRS 9 are carried at fair value with changes in the fair value recognized in the income statement. The Group presents revenues and expenses related to commodity trading net in the line Gains and losses from commodity derivative trading.

2.17. Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, current accounts with banks and short-term bank notes with a maturity of 6 months or less.

2.18. Financial Assets Restricted in Use

Restricted balances of cash and other financial assets, which are shown as restricted funds (see Note 4), relate to funding of nuclear decommissioning liabilities, mining reclamation and damages, deposits for waste storage reclamation and cash guarantees given to transaction partners. The non-current classification is based on the expected timing of the release of the funds to the Group.

2.19. Contract Assets and Liabilities

Contract asset is the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the Group's future performance).

Contract liability is the Group's obligation to transfer goods or provide services to a customer for which the Group has received consideration from the customer.

Contract assets where work is in progress (consisting of cost incurred plus recognized profits) are presented on the balance sheet net of received billings and advances as a net asset or a net liability.

Contract assets and liabilities are presented in the line Other current assets, net and Other short-term liabilities.

2.20. Materials and Supplies

Purchased inventories are valued at actual cost, using the weighted average method. Costs of purchased inventories comprise expenses which have been incurred in respect of the acquisition of materials and supplies including transportation costs. When consumed, inventories are charged to income or capitalized as part of property, plant and equipment. Work-in-progress is valued at actual cost. Costs of inventories produced internally include direct material and labor costs. Obsolete inventories are reduced to their realizable value by a provision charged to the income statement.

2.21. Fossil Fuel Stocks

Fossil fuel stocks are stated at actual cost using weighted average cost method.

2.22. Income Taxes

The provision for corporate tax is calculated in accordance with the tax regulations of the states of residence of the Group companies and is based on the income or loss reported under local accounting regulations, adjusted for appropriate permanent and temporary differences from taxable income. Income taxes are calculated on an individual company basis as the Czech tax laws do not permit consolidated tax returns. For companies located in the Czech Republic income taxes are provided at a rate of 19% for the years ended December 31, 2019 and 2018, respectively, from income before income taxes after adjustments for certain items which are not deductible, or taxable, for taxation purposes. The Czech corporate income tax rate enacted for 2020 and on is 19%.

Deferred income tax is provided, using the liability method, on all temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. Deferred income tax is determined using tax rates (and laws) that have been enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets and liabilities are recognized regardless of when the temporary difference is likely to reverse. Deferred tax assets and liabilities are not discounted. A deferred tax liability is recognized for all taxable temporary differences, except:

- where the deferred tax liability arises from initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the reported net income nor taxable profit or loss
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint-ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred income tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Deferred tax assets and liabilities of Group companies are not offset in the balance sheet.

Current tax and deferred tax are charged or credited directly to equity if the tax relates to items that are credited or charged, in the same or a different period, directly to equity.

Change in the carrying amount of deferred tax assets and liabilities due to change in tax rate is recognized in the income statement, except to the extent that it relates to items previously charged or credited to equity.

2.23. Long-term Debt

Borrowings are initially recognized at the amount of the proceeds received, net of transaction costs. They are subsequently carried at amortized cost using the effective interest rate method, the difference between net proceeds and redemption value is being recognized in the net income over the life of the borrowings as interest expense.

Transaction costs include fees and commissions paid to agents, advisers, brokers and dealers, levies by regulatory agencies and securities exchanges.

The carrying amount of long-term debt, which is hedged against the changes in its fair value, is adjusted by the changes in the fair value attributable to the hedged risk. The changes in the fair value of the hedged long-term debt are recognized in profit or loss and are included in the income statement line Other financial expenses or Other financial income. The adjustment to the carrying amount of the hedged long-term debt in a fair value hedge is subsequently amortized to profit or loss using the effective interest rate method.

2.24. Nuclear Provisions

The Group has recognized provisions for its obligations to decommission its nuclear power plants at the end of their operating lives, to store the related spent nuclear fuel and other radioactive waste initially on an interim basis and provision for its obligation to provide financing for subsequent permanent storage of spent fuel and irradiated parts of reactors (see Note 20.1).

The provisions recognized represent the best estimate of the expenditures required to settle the present obligation at the current balance sheet date. Such cost estimates, expressed at current price levels at the date of the estimate, are discounted at December 31, 2019 and 2018 using a long-term real rate of interest to take into account the timing of payments in amount of 0.70% and 1.25% per annum, respectively. The initial discounted cost amounts are capitalized as part of property, plant and equipment and are depreciated over the period when the nuclear power plants generate electricity. Each year, the provisions are increased to reflect the accretion of discount and to accrue an estimate for the effects of inflation, with the charges being presented in the income statement on the line Interest on provisions. At December 31, 2019 and 2018 the estimate for the effect of expected inflation rate is 1.50% and 1.25%, respectively.

The decommissioning process is expected to continue for approximately a fifty-year period subsequent to the final operation of the plants. It is currently anticipated that the permanent storage facility for spent nuclear fuel will become available in 2065 and the process of final disposal of the spent nuclear fuel will then continue until approximately 2090. While the Group has made its best estimate in establishing its nuclear provisions, because of potential changes in technology as well as safety and environmental requirements, plus the actual time scale to complete decommissioning and fuel storage activities, the ultimate provision requirements could vary significantly from the Group’s current estimates.

Changes in a decommissioning liability and in liability for final storage of spent nuclear fuel that result from a change in the current best estimate of timing and/or amount of cash flows required to settle the obligation or from a change in the discount rate are added to (or deducted from) the amount recognized as the related asset. However, to the extent that such a treatment would result in a negative asset, the effect of the change is recognized in the income for the current period.

2.25. Provisions for Decommissioning and Reclamation of Mines and Mining Damages

The Group has recognized provisions for obligations to decommission and reclaim mines at the end of their operating lives (see Note 20.2). The provisions recognized represent the best estimate of the expenditures required to settle the present obligation at the current balance sheet date. Such cost estimates, expressed at current price levels, are discounted at December 31, 2019 and 2018 using a long-term real rate of interest to take into account the timing of payments in amount of 0.70% and 1.25% per annum, respectively. The initial discounted cost amounts are capitalized as part of property, plant and equipment and are depreciated over the lives of the mines. Each year, the provisions are increased to reflect the accretion of discount and to accrue an estimate for the effects of inflation, with the charges being presented in the income statement on the line Interest on provisions. At December 31, 2019 and 2018 the estimate for the effect of expected inflation rate is 1.50% and 1.25%, respectively.

Changes in a decommissioning liability that result from a change in the current best estimate of timing and/or amount of cash flows required to settle the obligation or from a change in the discount rate are added to (or deducted from) the amount recognized as the related asset. However, to the extent that such a treatment would result in a negative asset, the effect of the change is recognized in the income for the current period.

2.26. Exploration for and Evaluation of Mineral Resources

Expenditures on exploration for and evaluation of mineral resources are charged to expense when incurred.

2.27. Leases

The determination of whether an arrangement is, or contains a lease, is based on the substance of the arrangement at inception date and requires evaluation of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys the right to use the asset.

The Group doesn't apply the standard IFRS 16 to leases of intangible assets, but the Group has identified contracts for which an intangible asset from a right-of-use have been recognized. These are the cases where the Group acquires the right to place advertising on a building or other tangible asset.

2.27.1. Group as a Lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

a) Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g. changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The Group estimates the incremental borrowing rate using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

For contracts that are concluded for an indefinite period, the Group applies judgement for determination of the expected lease period.

b) Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term or the estimated useful lives of the assets, as follows:

	Depreciation period (years)
Lands	4-34
Buildings	1-37
Vehicles, machinery and equipment	1-12
Inventory and other tangible assets	8-10

2.27.2. Group as a Lessor

The Group leases out its tangible assets including own tangibles and right-of-use assets. The Group has classified the leases as financial or operating leases. Operating leases are the leases, in which the Group does not transfer substantially all the risk and rewards incidental to ownership of an assets.

Rental income arising from operating lease is accounted for on a straight-line basis over the lease terms and included in revenue in the income statement due to its operating nature.

For the leases classified as financial leases the Group recognizes net investment in the lease measured at the present value of lease payments to be made over the lease term. In calculating the present value of net investment in the lease, the Group uses the interest rate implicit in the lease. In the case of a sublease, if the interest rate implicit in the sublease is not readily determined, the Group uses the discount rate used for the head lease.

2.28. Treasury Shares

Treasury shares are presented in the balance sheet as a deduction from equity. The acquisition of treasury shares is presented in the statement of equity as a reduction in equity. No gain or loss is recognized in the income statement on the sale, issuance, or cancellation of treasury shares. Consideration received is presented in the financial statements as an addition to equity.

2.29. Share Options

Members of Board of Directors and selected managers have been granted options to purchase common shares of the Company. Expense related to the share option plan was measured on the date of the grant by reference to the fair value of the share options granted. The expense is accrued over the vesting period of the equity instruments granted. The expense recognized reflects the best estimate of the number of share options, which will ultimately vest.

2.30. Translation of Foreign Currencies

The consolidated financial statements are presented in Czech crowns (CZK), which is the Company's functional and presentation currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement, except when deferred in equity for qualifying cash flow hedges.

Translation differences on debt securities and other monetary financial assets measured at fair value are included in foreign exchange gains and losses. Translation differences on non-monetary items such as equity instruments held for trading are reported as part of the fair value gain or loss. Translation differences on equity securities available-for-sale are included in equity.

The assets and liabilities of foreign subsidiaries are translated at the rate of exchange ruling at the balance sheet date. The income statements items of foreign subsidiaries are translated at average exchange rates for the year. The exchange differences arising on the retranslation are taken directly to other comprehensive income. On disposal of a foreign entity, accumulated exchange differences are recognized in the income statement as a component of the gain or loss on disposal.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign operation and are translated at the closing exchange rate.

Exchange rates used as at December 31, 2019 and 2018 for the translation of assets and liabilities denominated in foreign currencies were as follows:

	2019	2018
CZK per 1 EUR	25.410	25.725
CZK per 1 USD	22.621	22.466
CZK per 1 PLN	5.970	5.980
CZK per 1 BGN	12.992	13.153
CZK per 1 RON	5.313	5.516
CZK per 100 JPY	20.844	20.447
CZK per 1 TRY	3.805	4.247

2.31. Non-current Assets Held for Sale

Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortized.

3. Property, Plant and Equipment

Property, plant and equipment at December 31, 2019 is as follows (in CZK millions):

	Buildings	Plant and equipment	Land and other	Total plant in service	Nuclear fuel	Construction work in progress	Total
Cost at December 31, 2018	292,301	530,045	8,609	830,955	23,121	18,121	872,197
Recognition of right-of-use asset on application of IFRS 16	3,700	759	1,291	5,750	-	-	5,750
Cost at January 1, 2019	296,001	530,804	9,900	836,705	23,121	18,121	877,947
Additions	813	798	29	1,640	-	26,366	28,006
Disposals	(584)	(3,330)	(35)	(3,949)	(3,141)	(456)	(7,546)
Bring into use	10,550	9,584	60	20,194	3,626	(23,820)	-
Acquisition of subsidiaries	102	246	2	350	-	280	630
Change in capitalized part of provisions	187	11,363	749	12,299	-	-	12,299
Reclassification and other	54	(37)	(3)	14	-	(5)	9
Currency translation differences	(833)	(1,291)	(23)	(2,147)	-	(17)	(2,164)
Cost at December 31, 2019	306,290	548,137	10,679	865,106	23,606	20,469	909,181
Accumulated depreciation and impairment at January 1, 2019	(129,180)	(315,590)	(1,156)	(445,926)	(8,694)	(1,669)	(456,289)
Depreciation and amortization of nuclear fuel [1)]	(8,151)	(18,983)	(176)	(27,310)	(3,803)	-	(31,113)
Net book value of assets disposed	10	(75)	(3)	(68)	-	-	(68)
Disposals	584	3,330	4	3,918	3,141	-	7,059
Reclassification and other	(49)	57	4	12	-	-	12
Impairment losses recognized	(1,389)	(890)	(12)	(2,291)	-	(593)	(2,884)
Impairment losses reversed	565	486	5	1,056	-	-	1,056
Currency translation differences	349	783	1	1,133	-	1	1,134
Accumulated depreciation and impairment at December 31, 2019	(137,261)	(330,882)	(1,333)	(469,476)	(9,356)	(2,261)	(481,093)
Total property, plant and equipment at December 31, 2019	169,029	217,255	9,346	395,630	14,250	18,208	428,088

[1)] The amortization of nuclear fuel also includes charges in respect of additions to the accumulated provision for interim storage of spent nuclear fuel in the amount of CZK 293 million.

Property, plant and equipment at December 31, 2018 is as follows (in CZK millions):

	Buildings	Plant and equipment	Land and other	Total plant in service	Nuclear fuel	Construction work in progress	Total
Cost at January 1, 2018	297,677	527,125	8,557	833,359	23,436	18,248	875,043
Additions	17	215	14	246	-	24,026	24,272
Disposals	(568)	(2,718)	(31)	(3,317)	(3,171)	(453)	(6,941)
Bring into use	8,768	10,805	68	19,641	2,856	(22,496)	1
Transfer to assets held for sale	(14,210)	(9,314)	(280)	(23,804)	-	(1,253)	(25,057)
Acquisition of subsidiaries	698	1,797	43	2,538	-	67	2,605
Change in capitalized part of provisions	(107)	2,184	240	2,317	-	-	2,317
Reclassification and other	58	(79)	-	(21)	-	(3)	(24)
Currency translation differences	(32)	30	(2)	(4)	-	(15)	(19)
Cost at December 31, 2018	292,301	530,045	8,609	830,955	23,121	18,121	872,197
Accumulated depreciation and impairment at January 1, 2018	(130,883)	(305,191)	(1,136)	(437,210)	(8,218)	(1,596)	(447,024)
Depreciation and amortization of nuclear fuel [1)]	(7,579)	(19,041)	(81)	(26,701)	(3,647)	-	(30,348)
Net book value of assets disposed	45	(96)	-	(51)	-	-	(51)
Disposals	568	2,718	-	3,286	3,171	-	6,457
Transfer to assets held for sale	8,570	6,504	153	15,227	-	6	15,233
Reclassification and other	(42)	52	-	10	-	-	10
Impairment losses recognized	(131)	(595)	(94)	(820)	-	(92)	(912)
Impairment losses reversed	247	62	1	310	-	4	314
Currency translation differences	25	(3)	1	23	-	9	32
Accumulated depreciation and impairment at December 31, 2018	(129,180)	(315,590)	(1,156)	(445,926)	(8,694)	(1,669)	(456,289)
Total property, plant and equipment at December 31, 2018	163,121	214,455	7,453	385,029	14,427	16,452	415,908

1) The amortization of nuclear fuel also includes charges in respect of additions to the accumulated provision for interim storage of spent nuclear fuel in the amount of CZK 380 million.

As at December 31, 2019 and 2018 a composite depreciation rate of Plant in service was 3.2%.

As at December 31, 2019 and 2018 capitalized interest costs amounted to CZK 261 million and CZK 260 million, respectively, and the interest capitalization rate was 3.9% and 4.3%, respectively.

Group's plant in service pledged as security for liabilities at December 31, 2019 and 2018 is CZK 14,045 million and CZK 14,827 million, respectively.

Construction work in progress contains mainly refurbishments performed on nuclear plants, including the acquisition of nuclear fuel, and investment in the electricity distribution network of subsidiary ČEZ Distribuce, a. s. As of December 31, 2019, the construction work in progress includes the preparation of new nuclear power sources of CZK 2,640 million.

The Group drew in 2019 and 2018 grants related to the property, plant and equipment in amount CZK 204 million and CZK 171 million, respectively.

Group as a Lessee

The net book value of assets leased under finance leases included in property, plant and equipment at December 31, 2018 amounted to CZK 65 million. Financial lease contracts were acquired to the Group mainly through acquisitions of subsidiaries during 2018.

Set out below are the carrying amounts and other information at December 31, 2019 and for the year ended 2019, respectively, about right-of-use assets recognized in total property, plant and equipment (in CZK millions):

	2019			
	Buildings	Plant and equipment	Land and other	Total plant in service
Additions of right-of-use assets	136	158	78	372
Depreciation charge for right-of-use assets	(456)	(240)	(82)	(778)
Carrying amount as at December 31	3,581	728	1,243	5,552

Group as a Lessor

The carrying amounts of property, plant and equipment that are subject to an operating lease (in CZK millions):

	2019			
	Buildings	Plant and equipment	Land and other	Total plant in service
Carrying amount as at December 31	716	54	646	1,416

4. Restricted Financial Assets, Net

Restricted financial assets at December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019	2018
Czech government bonds	16,119	15,205
Cash in banks, net	4,613	3,629
Total restricted financial assets, net	20,732	18,834

The Czech government bonds are measured at fair value through other comprehensive income. The restricted financial assets contain in particular restricted financial assets to cover the costs of nuclear decommissioning, to cover the costs for mine reclamation and mining damages and for waste storage reclamation.

5. Other Financial Assets, Net

Other financial assets, net at December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019			2018		
	Non-current assets	Current assets	Total	Non-current assets	Current assets	Total
Term deposits	-	3	3	-	505	505
Other financial receivables	688	56	744	505	35	540
Investment in finance lease	305	48	353	302	51	353
Debt financial assets	10	-	10	10	-	10
Total financial assets at amortized cost	1,003	107	1,110	817	591	1,408
Equity financial assets – investments in Inven Capital, SICAV, a.s.	1,468	-	1,468	2,139	-	2,139
Commodity and other derivatives	908	59,540	60,448	1,249	91,299	92,548
Total financial assets at fair value through profit or loss	2,376	59,540	61,916	3,388	91,299	94,687
Veolia Energie ČR, a.s.	2,444	-	2,444	2,790	-	2,790
Other financial assets	267	-	267	265	-	265
Total equity financial assets	2,711	-	2,711	3,055	-	3,055
Fair value of cash flow hedge derivatives	4,732	1,064	5,796	2,185	126	2,311
Debt financial assets	101	403	504	503	1,287	1,790
Total financial assets at fair value through other comprehensive income	7,544	1,467	9,011	5,743	1,413	7,156
Total	10,923	61,114	72,037	9,948	93,303	103,251

Derivatives balance comprises mainly the positive fair values of commodity trading contracts.

ČEZ, a. s. concluded two put option agreements with Vršanská uhelná a.s. in March 2013. Under these contracts the Company has the right to transfer 100% of the shares of its subsidiary Elektrárna Počerady, a.s. to Vršanská uhelná a.s. First option for the year 2016 was not exercised, second option can be exercised in 2024 for cash consideration of CZK 2 billion. The option agreement could be inactivated until December 31, 2019, which the Group did not apply, which results in the sale in 2024. The contracts represent derivatives that will be settled by the delivery of unquoted equity instrument. Elektrárna Počerady, a.s. is not quoted on any market. There is significant variability in the range of reasonable fair values for this equity instrument (there is no similar power plant in the Czech Republic for sale and also no similar transaction took place) and thus it is difficult to reasonably assess the probabilities of various estimates. As a result, the fair value cannot be reliably measured. Consequently, the put option is measured at cost. There was no option premium paid on the options and therefore the cost of these instruments is zero.

Movements in impairment provisions of other financial assets (in CZK millions):

	2019	2018
Balance as at January 1	(196)	-
Additions	(1)	(196)
Reversals	1	-
Derecognition of impaired assets	188	-
Creation	6	-
Balance as at December 31	(2)	(196)

Creation of the impairment provisions in 2018 represents in particular the value of 100% impairment provision to the loan provided to the company Akcez Enerji A.S. This loan was derecognized during the year 2019.

Debt financial assets at December 31, 2019 are contracted to mature in the following periods after the balance sheet date (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
Due in 2020	403	-	48	56
Due in 2021	101	-	49	263
Due in 2022	-	-	44	67
Due in 2023	-	10	82	60
Thereafter	-	-	130	298
Total	504	10	353	744

Debt financial assets at December 31, 2018 are contracted to mature in the following periods after the balance sheet date (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
Due in 2019	1,287	-	51	35
Due in 2020	402	-	49	186
Due in 2021	101	-	46	61
Due in 2022	-	10	41	53
Thereafter	-	-	166	205
Total	1,790	10	353	540

Debt financial assets at December 31, 2019 have following effective interest rate structure (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
Less than 2.00% p. a.	504	10	1	470
2.00% to 2.99% p. a.	-	-	7	103
3.00% to 3.99% p. a.	-	-	266	6
4.00% to 4.99% p. a.	-	-	10	9
5% p. a. and more	-	-	69	156
Total	504	10	353	744

Debt financial assets at December 31, 2018 have following effective interest rate structure (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
Less than 2.00% p. a.	1,790	10	1	532
2.00% to 2.99% p. a.	-	-	3	-
3.00% to 3.99% p. a.	-	-	269	-
4.00% to 4.99% p. a.	-	-	8	8
5% p. a. and more	-	-	72	-
Total	1,790	10	353	540

The following table analyses the debt financial assets at December 31, 2019 by currency (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
CZK	504	10	93	434
EUR	-	-	260	310
Total	504	10	353	744

The following table analyses the debt financial assets at December 31, 2018 by currency (in CZK millions):

	Debt financial assets at fair value through other comprehensive income	Debt financial assets at amortized cost	Investment in finance lease	Other financial receivables
CZK	503	10	84	398
EUR	1,287	-	269	104
Other	-	-	-	38
Total	1,790	10	353	540

6. Intangible Assets, Net

Intangible assets, net at December 31, 2019 are as follows (in CZK millions):

	Software	Rights and other	Emission rights, green and similar certificates	Goodwill	Intangibles in progress	Total
Cost at December 31, 2018	14,319	11,889	7,164	13,815	733	47,920
Recognition of right-of-use asset on application of IFRS 16	-	36	-	-	-	36
Cost at January 1, 2019	14,319	11,925	7,164	13,815	733	47,956
Additions	32	80	10,224	-	1,138	11,474
Disposals	(291)	(70)	(5,214)	-	(2)	(5,577)
Bring to use	855	105	-	-	(960)	-
Acquisition of subsidiaries	328	680	-	2,450	1	3,459
Impairment of goodwill	-	-	-	(1,544)	-	(1,544)
Reclassification and other	5	-	-	-	(3)	2
Currency translation differences	(29)	(50)	(95)	(155)	(2)	(331)
Cost at December 31, 2019	15,219	12,670	12,079	14,566	905	55,439
Accumulated amortization and impairment at January 1, 2019	(11,863)	(4,930)	-	-	-	(16,793)
Amortization	(1,047)	(659)	-	-	-	(1,706)
Net book value of assets disposed	(4)	(5)	-	-	-	(9)
Disposals	291	70	-	-	-	361
Reclassification and other	(3)	-	-	-	-	(3)
Impairment losses recognized	-	(19)	-	-	-	(19)
Impairment losses reversed	2	118	-	-	-	120
Currency translation differences	23	16	-	-	-	39
Accumulated amortization and impairment at December 31, 2019	(12,601)	(5,409)	-	-	-	(18,010)
Net intangible assets at December 31, 2019	2,618	7,261	12,079	14,566	905	37,429

Intangible assets, net at December 31, 2018 are as follows (in CZK millions):

	Software	Rights and other	Emission rights, green and similar certificates	Goodwill	Intangibles in progress	Total
Cost at January 1, 2018	13,943	13,039	3,517	12,940	662	44,101
Additions	31	10	2,759	-	1,483	4,283
Disposals	(342)	(43)	-	-	(181)	(566)
Bring to use	1,166	24	-	-	(1,190)	-
Acquisition of subsidiaries	-	222	-	1,598	-	1,820
Disposal of subsidiaries	-	(4)	-	(7)	-	(11)
Impairment of goodwill	-	-	-	(727)	-	(727)
Transfer to assets held for sale	(497)	(1,310)	-	-	(42)	(1,849)
Reclassification and other	7	3	866	-	(3)	873
Currency translation differences	11	(52)	22	11	4	(4)
Cost at December 31, 2018	14,319	11,889	7,164	13,815	733	47,920
Accumulated amortization and impairment at January 1, 2018	(11,748)	(5,530)	-	-	(19)	(17,297)
Amortization	(865)	(573)	-	-	-	(1,438)
Net book value of assets disposed	(1)	-	-	-	-	(1)
Disposals	342	43	-	-	-	385
Disposal of subsidiaries	-	4	-	-	-	4
Transfer to assets held for sale	444	857	-	-	19	1,320
Reclassification and other	(9)	-	-	-	-	(9)
Impairment losses recognized	(26)	(53)	-	-	-	(79)
Impairment losses reversed	-	291	-	-	-	291
Currency translation differences	-	31	-	-	-	31
Accumulated amortization and impairment at December 31, 2018	(11,863)	(4,930)	-	-	-	(16,793)
Net intangible assets at December 31, 2018	2,456	6,959	7,164	13,815	733	31,127

Research and development costs, net of grants and subsidies received, that are not eligible for capitalization have been expensed in the period incurred and amounted to CZK 482 million in 2019 and CZK 396 million in 2018.

Group’s intangible assets, net pledged as security for liabilities at December 31, 2019 and 2018 is CZK 261 million and CZK 199 million, respectively.

At December 31, 2019 the net book value of intangible assets under the right-of-use assets is CZK 30 million.

At December 31, 2019 and 2018 goodwill allocated to cash-generating units is as follows (in CZK millions):

	2019	2018
Companies of Elevion Group excluding Hermos	3,800	3,535
Czech distribution	2,200	2,200
Energotrans	1,675	1,675
Companies of ČEZ ESCO Group	1,143	1,040
Hermos	1,084	-
Polish power plants (Chorzów, Skawina)	949	1,173
Euroklimat	832	-
Romanian distribution	781	1,824
Companies of Kofler Energies Group	673	621
Romanian sale	495	513
Severočeské doly	292	292
TMK Hydroenergy Power	260	270
Metrolog	118	118
Energetické centrum	-	261
Other	264	293
Total	14,566	13,815

7. Impairment of Property, Plant and Equipment and Intangible Assets

The following table summarizes the impairments of property, plant and equipment and intangible assets by cash-generating units in 2019 (in CZK millions):

	Impairment losses					Impairment reversals			
	Goodwill	Intangible assets other than goodwill	Property, plant and equipment	Property, plant and equipment held for sale	Total	Intangible assets other than goodwill	Property, plant and equipment	Total	Total
Bulgarian distribution	-	-	-	(1,589)	(1,589)	-	-	-	(1,589)
Polish power plants (Chorzów, Skawina)	(222)	-	(1,159)	-	(1,381)	-	-	-	(1,381)
Romanian distribution	(995)	-	(172)	-	(1,167)	-	4	4	(1,163)
Romanian wind power farms	-	-	(53)	-	(53)	120	993	1,113	1,060
Elektrárna Dětmarovice	-	-	(708)	-	(708)	-	-	-	(708)
ČEZ Teplárenská	(66)	(15)	(606)	-	(687)	-	-	-	(687)
Energetické centrum	(261)	(4)	(35)	-	(300)	-	-	-	(300)
ČEZ	-	-	(114)	-	(114)	-	-	-	(114)
Other	-	-	(37)	-	(37)	-	59	59	22
Total	(1,544)	(19)	(2,884)	(1,589)	(6,036)	120	1,056	1,176	(4,860)

The following table summarizes the impairments of property, plant and equipment and intangible assets by cash-generating units in 2018 (in CZK millions):

	Impairment losses					Impairment reversals			
	Goodwill	Intangible assets other than goodwill	Property, plant and equipment	Property, plant and equipment held for sale	Total	Intangible assets other than goodwill	Property, plant and equipment	Total	Total
ČEZ Teplárenská	(727)	(53)	(2)	-	(782)	-	-	-	(782)
Bulgarian distribution	-	-	-	(621)	(621)	-	-	-	(621)
Romanian wind power farms	-	(1)	(109)	-	(110)	291	219	510	400
Polish power plants (Chorzów, Skawina)	-	-	(279)	-	(279)	-	-	-	(279)
ČEZ OZ uzavřený investiční fond	-	-	(222)	-	(222)	-	30	30	(192)
ČEZ	-	-	(188)	-	(188)	-	-	-	(188)
Romanian distribution	-	-	(71)	-	(71)	-	23	23	(48)
Other	-	(26)	(52)	(22)	(100)	-	44	44	(56)
Total	(727)	(80)	(923)	(643)	(2,373)	291	316	607	(1,766)

In 2019 and 2018 the Group performed impairment tests of goodwill and tests of other non-current assets where there was an indication that the carrying amounts could be impaired.

The impairment loss of property, plant and equipment of cash-generating unit Bulgarian distribution in 2019 was recognized with regard to the fact that the assets are classified as held for sale (Note 15) and the contracted sale price is fixed and denominated in EUR (so-called “locked box”) and the carrying amount of assets as of the December 31, 2019 exceeded the contracted amount. Recognized impairment of goodwill and property, plant and equipment of cash-generating unit Polish power plants (Chorzów, Skawina) in 2019 was caused mainly by decrease in planned profitability of CEZ Skawina S.A. especially due to increase of market prices of emission rights and due to increase of the rate for discounting of the cash flows from 5.2% in 2018 to 5.8% in 2019. Recognized impairment of goodwill and property, plant and equipment of cash-generating unit Romanian distribution in 2019 was caused mainly by the increase of the rate for discounting of the cash flows from 6.2% in 2018 to 6.4% in 2019, by increased amounts for expected renewal investments and by overall decrease in expected cash flows. The Group reversed impairment of the property, plant and equipment and intangible assets of the cash-generating unit Romanian wind power farms in 2019 mainly due to increase in market prices of electricity and due to positive effect of the development of RON/EUR exchange rate to the green certificates classified as intangible assets. Recognized impairment of property, plant and equipment of cash-generating unit Elektrárna Dětmarovice in 2019 was caused mainly by the decrease in the outlook for the expected profitability of the generation source over its useful life in the region especially due to the increase in market prices of emission rights. Recognized impairment of goodwill and property, plant and equipment of cash-generating unit ČEZ Teplárenská in 2019 was caused mainly by the decrease in the expected profitability from the sale of heat as the cost of heat production increased. Recognized impairment of goodwill and property, plant and equipment of cash-generating unit Energetické centrum in 2019 was caused mainly by the decrease in the expected profitability from the sale of heat.

Recognized impairment of non-current assets of cash-generating unit ČEZ Teplárenská in 2018 was caused mainly due to increase of the rate used for discounting of cash flows from 3.2% in 2017 to 4.0% in 2018. The impairment loss of property, plant and equipment of cash-generating unit Bulgarian distribution in 2018 was recognized with regard to the fact that the assets are classified as held for sale (Note 15) and the contracted sale price is fixed and denominated in EUR (so-called “locked box”) and the carrying amount of assets as of the December 31, 2018 exceeded the contracted amount. The Group reversed impairment of the property, plant and equipment and intangible assets of the cash-generating unit Romanian wind power farms in 2018 mainly due to increase in market prices of electricity and due to positive effect of the development of RON/EUR exchange rate to the green certificates classified as intangible assets. Recognized impairment of property, plant and equipment of cash-generating unit Polish power plants in 2018 was caused mainly by decrease in expected profitability of CEZ Skawina S.A. and increased amount of capital expenditures for refurbishments. Recognized impairment of cash-generating unit ČEZ OZ uzavřený investiční fond in 2018 was caused mainly in relation to the expected decrease in future regulated revenues.

Description of selected parameters related to testing and determination of recoverable amounts

The impairment test involves determining the recoverable amount of the cash-generating unit, which corresponds to the value in use except for Bulgarian distribution and Bulgarian sale as at December 31, 2019 and 2018 when fair value less costs of disposal was used. Value in use is the present value of the future cash flows expected to be derived from a cash-generating unit and is assessed from a company internal perspective.

Values in use are determined based on a complex projection of cash flows or on the medium-term budget for a period of 5 years and on the anticipated development of the expected cash flows in the long-term, which is valid when the impairment test is performed. These budgets are based on the past experience, as well as on the anticipated future market trends and on the macroeconomic development of the respective region.

a. The value in use based on complex projection of cash flows of respective companies for the period covering remaining useful life of tested assets was used for determination of the recoverable amounts of the following cash-generating units:

ČEZ, a. s. generation assets are tested for any possible impairment as a single cash-generating unit with the exception of specific assets, e.g. the gas fired power plant in Počerady. Company's cash-generating unit of generation assets is characterized by portfolio management in the deployment and maintenance of various power plants and the cash flows generated from these activities.

As part of testing the recoverable value of fixed assets of the cash-generating unit of ČEZ, a. s. (hereinafter the ČEZ Value), we performed a sensitivity analysis of the test results to changes in certain key parameters of the used model – changes in wholesale power prices (hereinafter the EE Prices), changes in the discount rate used in the calculation of the present value of future cash flows and changes in CZK/EUR exchange rate.

The development of commodity prices and, in particular, the development of wholesale power prices in Germany (as German power prices have a major impact on the development of wholesale power prices in the Czech Republic) are the key assumptions used for the ČEZ Value model. The developments of wholesale prices are primarily determined by the EU political decisions, the development of global demand and supply of commodities and the technological progress.

The development of EE price is influenced by a number of external factors, including, in particular, changes in the structure and availability of generation capacity in the Czech Republic and neighboring countries, the macroeconomic development of the Central European region and the regulation of the energy sector in the EU and Germany (fundamental impacts of premature decommissioning of German nuclear power plants in 2020–2022 and impacts of the EU approved climate and energy targets for 2030) and also by targets of the Czech Republic State Energy Concept. The model was constructed for a period adequate to the useful life of the power plants, i.e. for a period that significantly exceeds the period for which commodities, including wholesale power price contracts, are traded on public liquid markets. In addition, the power market is subject to structural changes (the Market Design) and major industry regulation; consequently, complete abandonment of market-based power pricing mechanisms and implementation of alternative, centrally regulated payments for the availability and supply of power plants within the period of useful life of the power plants is actually possible.

With respect to the fact that we are using a long-term model, there are certain internal factors and assumptions that affect the ČEZ Value sensitivity to the development of power prices, such as varying deployment of the generation portfolio depending on the development of power prices, emission allowances and variable generation costs and, in a longer perspective, also the development of fixed costs reflecting the development of the power plants gross margin.

The sensitivity test results reflect expert estimates of the status and development of the above factors in the period of the model and the status of commercial securing of the generation portfolio as at December 31, 2019.

The test considers long-term EE prices at the level used to prepare Company's business plan for 2020–2024. The plan was prepared in the fourth quarter 2019 whereas the plan was based on the active market parameters observed in August and September 2019 (power prices on EEX energy exchange in Germany, prices on PXE energy exchange in the Czech Republic, price of CO_2 emission rights, FX rate CZK/EUR, interest rates etc.). There is a liquidity for power contracts traded on EEX for the period covering the horizon of the business plan and with regard to links between German and Czech power transmission network, the EEX prices are basic market price indicator for EE prices in the Czech Republic. For the purposes of the sensitivity analysis, the input EE prices, emission rights prices and foreign exchange rates were applied to the relevant opened positions of the Company.

A change of the assumed EE prices as per the models by 1%, with other parameters remaining unchanged, would have an impact of approximately CZK 7.8 billion on the ČEZ Value test results. Future cash flows of the model were discounted using a 4.1% rate. A change of 0.1 percentage point in the discount rate, with other parameters remaining unchanged, would change the ČEZ Value by approximately CZK 5.1 billion. A change of 1% in the CZK/EUR exchange rate, with other parameters remaining unchanged, would result in a change of approximately CZK 6.7 billion in the ČEZ Value.

The cash flow projections of Romanian wind power farms are based on approved renewable energy support in the form of granted green certificates and a discount rate of 6.6%. The projection of the cash flows includes assumption of receiving one green certificate as approved by Romanian Energy Regulatory Authority ANRE. The recovery of deferred green certificates and other green certificates classified as intangible assets is expected till 2028. One of the main factors influencing the value of future cash flows is the price of green certificates. Current value of the green certificate in the model is EUR 29.4, which is the floor price set by regulation. Change of the discount rate by 1 percentage point, all other variables held constant, would result in change of value in use by approximately CZK 0.8 billion.

The generation sources in Poland (power plants Chorzów and Skawina) also belong among tested non-current assets where cash flow projections covering remaining useful life were used and the future cash flows were discounted using rate of 5.8%.

b. The value in use derived from the projection of cash flows based on financial budget for a period of 5 years and on the expected future development of cash flows generated from the respective assets was applied when determining the recoverable amount of the following cash-generating units:

The discount rate of 3.3% was used for Czech distribution. Cash flows beyond the five-year period for Czech distribution were based on the terminal value of regulatory asset base.

The discount rate of 3.7% was used for Energotrans and ČEZ Teplárenská. Cash flows beyond the five-year period are extrapolated using 2.0% growth rate for Energotrans and using 2.5% growth rate ČEZ Teplárenská.

The discount rate of 3.7% was used for Energetické centrum. Cash flows beyond the five-year period are extrapolated using 2.0% growth rate.

The discount rate of 4.1% was used for companies of Elevion Group and Kofler Energies Group. There is no growth rate considered for cash flows beyond five-year period.

The discount rate of 6.4% was used for Romanian distribution. Cash flows beyond the five-year period for Romanian distribution were based on the terminal value of regulatory asset base. Change of the discount rate by 1 percentage point, all other variables held constant, would result in change of value in use by approximately CZK 1.6 billion.

c. The calculations of value in use for all cash-generating units are most sensitive to the following assumptions:

Gross margins – Gross margins are based on experience from historical trends in the preceding periods, current outlook of market and non-market parameters, eventually with regard to operational efficiency improvements. Gross margins are affected especially by wholesale electricity prices, prices of emission rights and prices of green and similar certificates.

Raw materials price inflation – Estimates are obtained from published indices for the countries from which materials are sourced, as well as data relating to specific commodities. Forecast figures are used if data is available, otherwise past actual raw material price movements have been used as an indicator of future price movements.

Discount rate – Discount rates reflect management’s estimate of the risk specific to each unit. The basis used to determine the value assigned is weighted average cost of capital (WACC) of the related subsidiaries.

Estimated growth rate – The basis used to determine the value assigned to estimated growth rate is the anticipated future development of the market, gross domestic product, nominal wages and interest rates and the forecast of regulatory environment, where subsidiaries conduct the business.

8. Changes in the Group Structure

8.1. Changes in the Group Structure in 2019

Acquisitions of Subsidiaries in 2019

Throught new acquisitions, the Group is following strategic plan for developing of energy services in the Czech Republic and Slovakia and in foreign markets close to the Czech Republic, primarily in Germany, northern Italy and Poland.

On January 1, 2019 the Group acquired a 100% interest in the company ITX MEDIA, a.s., which owned and operated 22 heat pumps in two Teplice areas.

On January 7, 2019 the Group acquired a 100% interest (effective interest 95%) in German company H & R Elektromontagen GmbH.

On January 9, 2019 the Group acquired a 100% interest (effective interest 95%) in German company GBM Gesellschaft für Büromanagement mbH.

On January 25, 2019 the Group acquired a 100% interest (effective interest 95%) in German company En.plus GmbH, which deals with designing and installation of air-conditioning and cooling equipment.

On May 13, 2019 the Group acquired a 51% interest in Slovak company e-Dome a. s., which provides energy services.

On May 15, 2019 the Group acquired a 100% interest (effective interest 95%) in German companies Hermos AG and Hermos Schaltanlagen GmbH (further also as “Hermos”), that deliver solutions consisting of engineering, manufacturing of switchgears, software for automation systems and IT systems and from after-sale services.

On May 16, 2019 the Group acquired a 100% interest (effective interest 95%) in German company FEA Automation GmbH, which deals with buildings automation systems.

On June 21, 2019 the Group acquired a 100% interest (effective interest 95%) in German company Detlef Walther GmbH.

On June 24, 2019 the Group acquired a 100% interest (effective interest 95%) in German company Kälteanlagenbau Schröder GmbH.

On June 28, 2019 the Group acquired a 100% interest in the company HA.EM OSTRAVA, s.r.o., which supplies and installs technological equipment.

On July 11, 2019 the Group acquired a 70% interest in Italian company BUDRIO GFE 312 SOCIETA' AGRICOLA S.R.L.

On July 11, 2019 and July 12, 2019 the Group acquired a 100% interests in companies SYNECO ENERGY SERVICE S.R.L., SYNECO GROUP S.R.L., SYNECO PROJECT S.R.L. and SYNECO tec GmbH, that provide energy consulting and services, planning and development.

On August 30, 2019 the Group acquired a 76% interest in Polish company Euroklimat sp. z o.o., which is a contractor for sanitary installations and provides fitting, maintenance and design services. The part of the transaction is call option of CEZ Group and the symmetrical put option of sellers for the remaining 24%. With regard to the fact, that the contractual terms of these options effectively transfer economic benefits of the ownership to CEZ Group as at the acquisition date, the transaction is accounted for as the acquisition of 100% with the contingent consideration which will be paid after the option is exercised.

On September 6, 2019 the Group acquired a 100% interest (effective interest 95 %) in German company Elektro-Technik-Pfisterer-GmbH.

On December 17, 2019 the Group acquired a 100% interest in German company GWE Verwaltungs GmbH. On December 19, 2019 the Group acquired a 100% interest in German company GWE Wärmeund Energietechnik GmbH & Co. KG. These companies offer services in area of planning, construction and optimization of cogeneration units.

The fair values of acquired identifiable assets and liabilities and the purchase considerations have been stated provisionally and could be adjusted in the subsequent period. The following table presents the current best estimate of fair values of acquired identifiable assets and liabilities as of the date of acquisitions (in CZK millions):

	Hermos	Euroklimat	En.plus	Other	Total
Share of the Group being acquired	100%	100%	100%		
Property, plant and equipment, net	452	68	18	92	630
Intangible assets, net	652	235	92	30	1,009
Other non-current assets	21	16	-	7	44
Cash and cash equivalents	201	10	-	70	281
Trade receivables, net	195	278	195	161	829
Contract assets	380	7	29	19	435
Another current assets	39	126	3	32	200
Long-term debt, net of current portion	(67)	(42)	-	(5)	(114)
Long-term provisions	(45)	(24)	-	(2)	(71)
Deferred tax liability	(198)	(44)	(28)	(1)	(271)
Short-term loans	(25)	-	(103)	(28)	(156)
Current portion of long-term debt	(12)	(4)	-	-	(16)
Trade payables	(163)	(191)	(47)	(194)	(595)
Short-term provisions	(90)	(7)	(14)	(21)	(132)
Another current liabilities	(205)	(94)	(15)	(20)	(334)
Total net assets	1,135	334	130	140	1,739
Share of net assets acquired	1,135	334	130	135	1,734
Goodwill	1,101	824	222	303	2,450
Total purchase consideration	2,236	1,158	352	438	4,184
Liabilities from acquisition of the subsidiary	-	(317)	(66)	(66)	(449)
Cash outflow on acquisition in 2019	2,236	841	286	372	3,735
Less: Cash and cash equivalents in the subsidiary acquired	(201)	(10)	-	(70)	(281)
Cash outflow on acquisition in 2019, net	2,035	831	286	302	3,454

If the acquisitions had taken place at the beginning of the year 2019, net income for CEZ Group as of December 31, 2019 would have been CZK 14,551 million and the revenues and other operating income from continuing operations would have been CZK 208,124 million. The amounts of goodwill recognized as a result of the business combinations comprise the value of expected synergies arising from the acquisitions.

From the acquisition date, the newly acquired subsidiaries have contributed the following balances to the Group's statement of income (in CZK millions):

	Hermos	Euroklimat	En.plus	Other	Total
Revenues and other operating income	1,119	449	958	532	3,058
Income before other income (expense) and income taxes	129	16	41	40	226
Net income	116	11	28	32	187
Net income attributable:					
Equity holders of the parent	111	11	26	34	182
Non-controlling interests	5	-	2	(2)	5

The following table summarizes the cash flows related to acquisitions in 2019 (in CZK millions):

Cash outflow on acquisitions of the subsidiaries	3,735
Cash outflow on investments in joint-ventures	2
Payments of payables from acquisitions in previous periods	73
Less: Cash and cash equivalents acquired	(281)
Total cash outflows on acquisitions	3,529

Acquisitions of Non-controlling Interests in 2019

On July 23, 2019 the Group acquired remaining non-controlling 49% share in the company ČEZ LDS s.r.o.

8.2. Changes in the Group Structure in 2018

Acquisitions of Subsidiaries in 2018

The fair values of acquired identifiable assets and liabilities as of the date of acquisitions were as follows (in CZK millions):

	Kofler Energies	ČEZ Energo	HS Prešov	Metrolog	Other	Total
Share of the Group being acquired	100%	-	55%	100%		
Property, plant and equipment, net	20	2,035	364	83	103	2,605
Intangible assets, net	131	1	1	51	38	222
Investment in financial lease, net of current portion	236	-	-	-	-	236
Deferred tax assets	44	-	2	3	2	51
Other non-current assets	8	3	-	-	11	22
Cash and cash equivalents	37	131	58	99	165	490
Trade receivables, net	140	31	27	44	215	457
Other financial assets, net	44	-	-	-	18	62
Another current assets	69	103	13	46	128	359
Long-term debt, net of current portion	(239)	(733)	(74)	-	(42)	(1,088)
Deferred tax liability	(62)	(135)	(1)	(13)	(15)	(226)
Other long-term liabilities	(2)	-	(1)	-	(11)	(14)
Trade payables	(130)	(49)	(17)	(45)	(135)	(376)
Another current liabilities	(151)	(83)	(123)	(20)	(194)	(571)
Total net assets	145	1,304	249	248	283	2,229
Share of net assets acquired	145	653	144	248	283	1,473
Goodwill	618	49	372	120	439	1,598
Negative goodwill	-	-	-	-	(1)	(1)
Total purchase consideration	763	702	516	368	721	3,070
Liabilities from acquisition of the subsidiary	-	-	-	(40)	(110)	(150)
Book value of previously held investment in joint-venture	-	(601)	-	-	-	(601)
Gain from remeasurement of previously held investment to fair value 1)	-	(101)	-	-	-	(101)
Cash outflow on acquisition in 2018	763	-	516	328	611	2,218
Less: Cash and cash equivalents in the subsidiary acquired	(37)	(131)	(58)	(99)	(165)	(490)
Cash outflow on acquisition in 2018, net	726	(131)	458	229	446	1,728

1) Gain from remeasurement of previously held investment in ČEZ Energo, s.r.o. to fair value was included in statement of income in the line Share of profit (loss) from associates and joint-ventures.

If the combinations had taken place at the beginning of the year 2018, net income for CEZ Group as of December 31, 2018 would have been CZK 10,539 million and the revenues and other operating income from continuing operations would have been CZK 186,689 million. The amounts of goodwill recognized as a result of the business combinations comprise the value of expected synergies arising from the acquisitions.

From the acquisition date, the newly acquired subsidiaries have contributed the following balances to the Group's statement of income (in CZK millions):

	Kofler Energies	ČEZ Energo	HS Prešov	Metrolog	Other	Total
Revenues and other operating income	491	430	68	579	234	1,802
Income (loss) before other income (expense) and income taxes	36	10	8	39	36	129
Net income (loss)	29	(23)	(3)	32	31	66
Net income (loss) attributable:						
Equity holders of the parent	29	(12)	(2)	32	28	75
Non-controlling interests	-	(11)	(1)	-	3	(9)

New Investments in Associates and Joint-ventures in 2018

Overview about these transactions provides the following table (in CZK millions):

	Bytkomfort	Other	Total
Share acquired in 2018	49%	50%	
Total net assets	208	91	299
Share of net assets acquired	102	45	147
Goodwill	136	179	315
Total purchase consideration	238	224	462
Related outstanding payables	-	(8)	(8)
Cash outflow on investment	238	216	454

The following table summarizes the cash flows related to acquisitions in 2018 (in CZK millions):

Cash outflow on acquisitions of the subsidiaries	2,218
Cash outflow on investments in joint-ventures	454
Advanced payments for investments in joint-ventures	14
Payments of payables from acquisitions in previous periods	18
Less: Cash and cash equivalents acquired	(490)
Total cash outflows on acquisitions	2,214

Acquisitions and Sale of Non-controlling Interests in 2018

On January 2, 2018 the Group acquired remaining non-controlling 25% share in the company ENESA a.s. On December 10, 2018 the Group acquired remaining non-controlling 49% share in the company ČEZ Bytové domy, s.r.o.

On January 2, 2018 the Group sold 0.04% share in the company ČEZ OZ uzavřený investiční fond a.s.

Loss of Control in the Company Eco-Wind Construction S.A.

On September 13, 2018 the bankruptcy of the company Eco-Wind Construction S.A. was announced. As a result of taking control over the company by a bankruptcy trustee appointed by the court, the Group lost control over the company. Due to the loss of control, the net assets were derecognized from the consolidated balance sheet and the related gain from the loss of control of CZK 157 million was recognized in the statement of income on the line Other financial income.

9. Investments in Subsidiaries, Associates and Joint-ventures

The consolidated financial statements of CEZ Group include the financial figures of ČEZ, a. s. and its subsidiaries, associates and joint-ventures listed in the following table:

			% equity interest [1]		% voting interest
Subsidiaries	Country	Operating segment	Change in 2019	2019	2019
New acquisitions					
BUDRIO GFE 312 SOCIETA' AGRICOLA S.R.L.	IT	S	70.00	70.00	70.00
Detlef Walther GmbH	DE	S	95.00	95.00	100.00
e-Dome a. s.	SK	S	51.00	51.00	51.00
Elektro-Technik-Pfisterer-GmbH	DE	S	95.00	95.00	100.00
En.plus GmbH	DE	S	95.00	95.00	100.00
Euroklimat sp. z o.o.	PL	S	100.00	100.00	76.00
FEA Automation GmbH	DE	S	95.00	95.00	100.00
GBM Gesellschaft für Büromanagement mbH	DE	S	100.00	-	-
GWE Verwaltungs GmbH	DE	S	100.00	100.00	100.00
GWE Wärme- und Energietechnik GmbH & Co. KG	DE	S	100.00	100.00	100.00
H & R Elektromontagen GmbH	DE	S	95.00	95.00	100.00
HA.EM OSTRAVA, s.r.o.	CZ	S	100.00	100.00	100.00
Hermos AG	DE	S	95.00	95.00	100.00
Hermos Gesellschaft für Steuer-, Meß- und Regeltechnik mbH	DE	S	95.00	95.00	100.00
HERMOS International GmbH	DE	S	95.00	95.00	100.00
HERMOS SDN. BHD	MY	S	95.00	95.00	100.00
Hermos Schaltanlagen GmbH	DE	S	95.00	95.00	100.00
Hermos Sp. z.o.o.	PL	S	95.00	95.00	100.00
Hermos Systems GmbH	DE	S	95.00	95.00	100.00
ITX MEDIA a.s.	CZ	GenT	100.00	-	-
Kälteanlagenbau Schröder GmbH	DE	S	95.00	95.00	100.00
SYNECO ENERGY SERVICE S.R.L.	IT	S	100.00	100.00	100.00
SYNECO GROUP S.R.L.	IT	S	100.00	100.00	100.00
SYNECO PROJECT S.R.L.	IT	S	100.00	100.00	100.00
SYNECO tec GmbH	AT	S	100.00	100.00	100.00

[1] The equity interest represents effective ownership interest of the Group.

Subsidiaries	Country	Operating segment	% equity interest [1)] Change in 2019	% equity interest [1)] 2019	% voting interest 2019
Asset deals					
Ferme éolienne d'Allas-Nieul SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne de Feuillade et Souffrignac SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne de Genouillé SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne de la Petite Valade SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne de Nueil-sous-Faye SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne de Saugon SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne des Besses SAS	FR	GenN	100.00	100.00	100.00
Ferme éolienne du Blessonnier SAS	FR	GenN	100.00	100.00	100.00
Changes of non-controlling interest					
ČEZ Distribučné sústavy a.s.	SK	S	49.00	100.00	100.00
ČEZ LDS s.r.o.	CZ	S	49.00	100.00	100.00
Newly established subsidiaries					
Telco Infrastructure, s.r.o.	CZ	SuppS	100.00	100.00	100.00
Sale					
EASY POWER s.r.o.	CZ	S	(51.00)	-	-
Merger within the Group					
AYIN, s.r.o.	CZ	GenT	(100.00)	-	-
CEZ Trade Polska sp. z o.o.	PL	S	(100.00)	-	-
ČEZ Bytové domy, s.r.o.	CZ	S	(100.00)	-	-
Domat Holding s.r.o.	CZ	S	(100.00)	-	-
EVČ s.r.o.	CZ	S	(100.00)	-	-
Ferme Eolienne de Saint-Aulaye SAS	FR	GenN	(100.00)	-	-
GBM Gesellschaft für Büromanagement mbH	DE	S	(100.00)	-	-
HAu.S GmbH	DE	S	(95.00)	-	-
ITX MEDIA a.s.	CZ	GenT	(100.00)	-	-
REN Development s.r.o.	CZ	GenN	(100.00)	-	-
ŠKODA PRAHA Invest s.r.o.	CZ	GenT	(100.00)	-	-
Other subsidiaries with no change in ownership interest or voting rights in 2019					
A.E. Wind S.A.	PL	GenN	-	100.00	100.00
AirPlus, spol. s r.o.	CZ	S	-	100.00	100.00
Areál Třeboradice, a.s.	CZ	GenT	-	100.00	100.00
AZ KLIMA a.s.	CZ	S	-	100.00	100.00
AZ KLIMA SK, s.r.o.	SK	S	-	100.00	100.00
Baltic Green Construction sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green I sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green II sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green III sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green IX sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green V sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green VI sp. z o.o.	PL	GenN	-	100.00	100.00
Baltic Green VIII sp. z o.o.	PL	GenN	-	100.00	100.00
Bara Group EOOD	BG	GenN	-	100.00	100.00
BANDRA Mobiliengesellschaft mbH & Co. KG	DE	GenN	-	100.00	100.00
CASANO Mobiliengesellschaft mbH & Co. KG	DE	GenN	-	100.00	100.00
Centrum výzkumu Řež s.r.o.	CZ	GenT	-	52.46	100.00

Subsidiaries	Country	Operating segment	% equity interest [1)] Change in 2019	% equity interest [1)] 2019	% voting interest 2019
CEZ Bulgaria EAD	BG	D	-	100.00	100.00
CEZ Bulgarian Investments B.V.	NL	GenN	-	100.00	100.00
CEZ Deutschland GmbH	DE	GenN	-	100.00	100.00
CEZ Elektro Bulgaria AD	BG	S	-	67.00	67.00
CEZ Erneuerbare Energien Beteiligungs GmbH	DE	GenN	-	100.00	100.00
CEZ Erneuerbare Energien Beteiligungs II GmbH	DE	GenN	-	100.00	100.00
CEZ Erneuerbare Energien Verwaltungs GmbH	DE	GenN	-	100.00	100.00
CEZ ESCO Bulgaria EOOD	BG	S	-	100.00	100.00
Elevion Deutschland Holding GmbH	DE	S	-	95.00	92.00
CEZ ESCO II GmbH	DE	S	-	100.00	100.00
CEZ ESCO Polska sp. z o.o.	PL	S	-	100.00	100.00
CEZ ESCO Romania S.A.	RO	S	-	100.00	100.00
CEZ France SAS	FR	GenN	-	100.00	100.00
CEZ Holdings B.V.	NL	GenN	-	100.00	100.00
CEZ Hungary Ltd.	HU	GenT	-	100.00	100.00
CEZ Chorzów II sp. z o.o.	PL	GenT	-	100.00	100.00
CEZ Chorzów S.A.	PL	GenT	-	100.00	100.00
CEZ ICT Bulgaria EAD	BG	D	-	67.00	100.00
CEZ MH B.V.	NL	SuppS	-	100.00	100.00
CEZ New Energy Investments B.V.[2)]	NL	GenN	-	100.00	100.00
CEZ Polska sp. z o.o.	PL	SuppS	-	100.00	100.00
CEZ Produkty Energetyczne Polska sp. z o.o.	PL	GenT	-	100.00	100.00
CEZ Razpredelenie Bulgaria AD	BG	D	-	67.00	67.00
CEZ Romania S.A.	RO	D	-	100.00	100.00
CEZ Skawina S.A.	PL	GenT	-	100.00	100.00
CEZ Slovensko, s.r.o.	SK	S	-	100.00	100.00
CEZ Srbija d.o.o.	RS	GenT	-	100.00	100.00
CEZ Towarowy Dom Maklerski sp. z o.o.	PL	GenT	-	100.00	100.00
CEZ Trade Bulgaria EAD	BG	S	-	100.00	100.00
CEZ Trade Romania S.R.L.	RO	GenT	-	100.00	100.00
CEZ Ukraine LLC	UA	SuppS	-	100.00	100.00
CEZ Vanzare S.A.	RO	S	-	100.00	100.00
CEZ Windparks Lee GmbH	DE	GenN	-	100.00	100.00
CEZ Windparks Luv GmbH	DE	GenN	-	100.00	100.00
CEZ Windparks Nordwind GmbH	DE	GenN	-	100.00	100.00
ČEZ Asset Holding, a. s.	CZ	SuppS	-	100.00	100.00
ČEZ Bohunice a.s.	CZ	GenT	-	100.00	100.00
ČEZ Distribuce, a. s.	CZ	D	-	100.00	100.00
ČEZ Energetické produkty, s.r.o.	CZ	GenT	-	100.00	100.00
ČEZ Energetické služby, s.r.o.	CZ	S	-	100.00	100.00
ČEZ Energo, s.r.o.	CZ	S	-	50.10	50.10
ČEZ ENERGOSERVIS spol. s r.o.	CZ	GenT	-	100.00	100.00
ČEZ ESCO, a.s.	CZ	S	-	100.00	100.00
ČEZ ICT Services, a. s.	CZ	SuppS	-	100.00	100.00
ČEZ Korporátní služby, s.r.o.	CZ	SuppS	-	100.00	100.00
ČEZ Obnovitelné zdroje, s.r.o.	CZ	GenN	-	100.00	100.00
ČEZ OZ uzavřený investiční fond a.s.	CZ	GenN	-	99.96	99.96
ČEZ Prodej, a.s.	CZ	S	-	100.00	100.00
ČEZ Recyklace, s.r.o.	CZ	GenN	-	99.00	99.00
ČEZ Solární, s.r.o.	CZ	S	-	100.00	100.00

[2)] The company name CEZ New Energy Investment B.V. was changed to CEZ ESCO International B.V. in 2020.

Subsidiaries	Country	Operating segment	% equity interest [1)] Change in 2019	% equity interest [1)] 2019	% voting interest 2019
ČEZ Teplárenská, a.s.	CZ	GenT	-	100.00	100.00
D-I-E ELEKTRO AG	DE	S	-	95.00	100.00
Distributie Energie Oltenia S.A.	RO	D	-	100.00	100.00
Domat Control System s.r.o.	CZ	S	-	100.00	100.00
EAB Automation Solutions GmbH	DE	S	-	95.00	100.00
EAB Elektroanlagenbau GmbH Rhein/Main	DE	S	-	95.00	100.00
EGP INVEST, spol. s r.o., v likvidaci	CZ	GenT	-	52.46	100.00
Elektrárna Dětmarovice, a.s.	CZ	GenT	-	100.00	100.00
Elektrárna Dukovany II, a. s.	CZ	GenT	-	100.00	100.00
Elektrárna Mělník III, a. s.	CZ	GenT	-	100.00	100.00
Elektrárna Počerady, a.s.	CZ	GenT	-	100.00	100.00
Elektrárna Temelín II, a. s.	CZ	GenT	-	100.00	100.00
Elektro-Decker GmbH	DE	S	-	95.00	100.00
Elevion GmbH	DE	S	-	95.00	100.00
Energetické centrum s.r.o.	CZ	GenT	-	100.00	100.00
Energocentrum Vítkovice, a. s.	CZ	S	-	100.00	100.00
Energotrans, a.s.	CZ	GenT	-	100.00	100.00
ENESA a.s.	CZ	S	-	100.00	100.00
ESCO City I sp. z o.o.	PL	S	-	100.00	100.00
ESCO City II sp. z o.o.	PL	S	-	100.00	100.00
ESCO City III sp. z o.o.	PL	S	-	100.00	100.00
ESCO City IV sp. z o.o.	PL	S	-	100.00	100.00
ESCO City V sp. z o.o.	PL	S	-	100.00	100.00
ESCO City VI sp. z o.o.	PL	S	-	100.00	100.00
ETS Efficient Technical Solutions GmbH	DE	S	-	95.00	100.00
ETS Efficient Technical Solutions Shanghai Co. Ltd.	CN	S	-	95.00	100.00
ETS Engineering Kft.	HU	S	-	95.00	100.00
Ferme Eolienne d´Andelaroche SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne de la Piballe SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne de Neuville-aux-Bois SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne de Saint-Laurent-de-Céris SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne de Seigny SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne de Thorigny SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne des Breuils SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne des Grands Clos SAS	FR	GenN	-	100.00	100.00
Ferme Eolienne du Germancé SAS	FR	GenN	-	100.00	100.00
Free Energy Project Oreshets EAD	BG	GenN	-	100.00	100.00
High-Tech Clima d.o.o.	RS	S	-	100.00	100.00
High-Tech Clima S.A.	RO	S	-	100.00	100.00
HORMEN CE a.s.	CZ	S	-	51.00	51.00
Hybridkraftwerk Culemeyerstraße Projekt GmbH	DE	S	-	100.00	100.00
Inven Capital, SICAV, a.s.	CZ	GenN	-	100.00	100.00
Jäger & Co. Gesellschaft mit beschränkter Haftung	DE	S	-	95.00	100.00
KART, spol. s r.o.	CZ	S	-	100.00	100.00
Kofler Energies Energieeffizienz GmbH	DE	S	-	100.00	100.00
Kofler Energies Ingenieurgesellschaft mbH	DE	S	-	100.00	100.00
Kofler Energies International GmbH	DE	S	-	100.00	100.00
KOFLER ENERGIES ITALIA SRL	IT	S	-	100.00	100.00
Kofler Energies Systems GmbH	DE	S	-	100.00	100.00
M.W. Team Invest S.R.L.	RO	GenN	-	100.00	100.00

Subsidiaries	Country	Operating segment	% equity interest 1) Change in 2019	% equity interest 1) 2019	% voting interest 2019
MARTIA a.s.	CZ	GenT	-	100.00	100.00
Metrolog sp. z o.o.	PL	S	-	100.00	100.00
NEK Facility Management GmbH	DE	S	-	100.00	100.00
OEM Energy sp. z o.o.	PL	S	-	51.00	51.00
OSC, a.s.	CZ	GenT	-	66.67	66.67
Ovidiu Development S.R.L.	RO	GenN	-	100.00	100.00
PRODECO, a.s.	CZ	M	-	100.00	100.00
Revitrans, a.s.	CZ	M	-	100.00	100.00
Rudolf Fritz GmbH	DE	S	-	95.00	100.00
SD - Kolejová doprava, a.s.	CZ	M	-	100.00	100.00
CEZ SERVIS, s.r.o.	SK	S	-	100.00	100.00
Severočeské doly a.s.	CZ	M	-	100.00	100.00
SPRAVBYTKOMFORT, a.s. Prešov	SK	S	-	55.00	55.00
ŠKODA PRAHA a.s.	CZ	GenT	-	100.00	100.00
Telco Pro Services, a. s.	CZ	SuppS	-	100.00	100.00
TENAUR, s.r.o.	CZ	S	-	100.00	100.00
Tepelné hospodářství města Ústí nad Labem s.r.o.	CZ	GenT	-	55.83	55.83
TMK Hydroenergy Power S.R.L.	RO	GenN	-	100.00	100.00
Tomis Team S.A.	RO	GenN	-	100.00	100.00
ÚJV Řež, a. s.	CZ	GenT	-	52.46	52.46
Ústav aplikované mechaniky Brno, s.r.o.	CZ	GenT	-	52.46	100.00
Windpark Baben Erweiterung GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Badow GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark FOHREN-LINDEN GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Frauenmark III GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Gremersdorf GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Cheinitz-Zethlingen GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Mengeringhausen GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Naundorf GmbH & Co. KG	DE	GenN	-	100.00	100.00
Windpark Zagelsdorf GmbH & Co. KG	DE	GenN	-	100.00	100.00
WPG Projekt GmbH	DE	S	-	100.00	100.00

Associates and Joint-ventures	Country	Operating segment	% equity interest [3] Change in 2019	% equity interest [3] 2019	% voting interest 2019
<u>New Investments</u>					
Socrates JVCo Verwaltungs GmbH	DE	GenN	50.00	50.00	50.00
Socrates Windprojekt GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
Windpark Bad Berleburg GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
Windpark Berka GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
Windpark Harrenstetter Heide GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
Windpark Palmpohl GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
Windpark Soeste GmbH & Co. KG	DE	GenN	50.00	50.00	50.00
<u>Mergers</u>					
AK-EL Yalova Elektrik Üretim A.S.	TR	GenT	(37.36)	-	-
<u>Other companies with no change in ownership interest or voting rights in 2019</u>					
Akcez Enerji A.S.	TR	D	-	50.00	50.00
AK-EL Kemah Elektrik Üretim ve Ticaret A.S.	TR	GenT	-	37.36	50.00
Akenerji Dogal Gaz Ithalat Ihracat ve Toptan Ticaret A.S.	TR	GenT	-	37.36	50.00
Akenerji Elektrik Enerjisi Ithalat Ihracat ve Toptan Ticaret A.S.	TR	GenT	-	37.36	50.00
Akenerji Elektrik Üretim A.S.	TR	GenT	-	37.36	37.36
Bytkomfort, s.r.o.	SK	S	-	49.00	49.00
Elevion Co-Investment GmbH & Co. KG	DE	S	-	37.50	37.50
GP JOULE PPX Verwaltungs-GmbH	DE	GenN	-	50.00	50.00
GP JOULE PP1 GmbH & Co. KG	DE	GenN	-	50.00	50.00
Green Wind Deutschland GmbH	DE	GenN	-	50.00	50.00
Jadrová energetická spoločnosť Slovenska, a. s.	SK	GenT	-	49.00	50.00
juwi Wind Germany 100 GmbH & Co. KG	DE	GenN	-	51.00	51.00
KLF-Distribúcia, s.r.o.	SK	S	-	50.00	50.00
LOMY MOŘINA spol. s r.o.	CZ	M	-	51.05	51.05
Sakarya Elektrik Dagitim A.S.	TR	D	-	50.00	50.00
Sakarya Elektrik Perakende Satis A.S.	TR	S	-	50.00	50.00
Windpark Moringen Nord GmbH & Co. KG	DE	GenN	-	50.00	50.00
Windpark Prezelle GmbH & Co. KG	DE	GenN	-	50.00	50.00

<u>Used shortcuts:</u>

Country ISO code	Country	Country ISO code	Country	Segment	Operating segment
AT	Austria	MY	Malaysia	GenT	Generation – Traditional Energy
BG	Bulgaria	NL	Netherlands	GenN	Generation – New Energy
CN	China	PL	Poland	D	Distribution
CZ	Czech Republic	RO	Romania	S	Sales
DE	Germany	RS	Serbia	M	Mining
FR	France	SK	Slovakia	SuppS	Support Services
HU	Hungary	TR	Turkey		
IT	Italy	UA	Ukraine		

[3] The equity interest represents effective ownership interest of the Group.

Subsidiaries with Non-controlling Interests

The following table shows the composition of Group's non-controlling interests and dividends paid to non-controlling interests by respective subsidiaries (in CZK millions):

	2019		2018	
	Non-controlling interests	Dividends paid	Non-controlling interests	Dividends paid
CEZ Razpredelenie Bulgaria AD	2,708	-	2,818	-
ÚJV Řež, a. s.	912	-	859	-
CEZ Elektro Bulgaria AD	658	-	578	-
Other	325	25	305	17
Total	4,603	25	4,560	17

Assets and liabilities of both Bulgarian companies are classified as held for sale since February 22, 2018.

The following table shows summarized financial information of subsidiaries that have material non-controlling interests for the year ended December 31, 2019 (in CZK millions):

	CEZ Razpredelenie Bulgaria AD	ÚJV Řež, a. s.	CEZ Elektro Bulgaria AD
Ownership share of non-controlling interests	33.00%	47.54%	33.00%
Current assets	1,497	1,154	4,088
Non-current assets	10,457	1,850	112
Current liabilities	(2,411)	(562)	(2,046)
Non-current liabilities	(1,712)	(513)	(158)
Equity	7,831	1,929	1,996
Attributable to:			
Equity holders of the parent	5,123	1,017	1,338
Non-controlling interests	2,708	912	658
Revenues and other operating income	4,716	1,398	7,740
Income (loss) before other income (expenses) and income taxes	(238)	145	302
Income (loss) before income taxes	(281)	139	297
Income taxes	44	(26)	(30)
Net income (loss)	(237)	113	267
Attributable to:			
Equity holders of the parent	(159)	59	179
Non-controlling interests	(78)	54	88
Total comprehensive income	(355)	111	239
Attributable to:			
Equity holders of the parent	(245)	58	159
Non-controlling interests	(110)	53	80
Operating cash flow	1,636	203	299
Investing cash flow	(1,438)	(83)	-
Financing cash flow	(215)	(17)	(20)
Net effect of currency translation in cash	(3)	(1)	(13)
Net increase (decrease) in cash and cash equivalents	(20)	102	266

The following table shows summarized financial information of subsidiaries that have material non-controlling interests for the year ended December 31, 2018 (in CZK millions):

	CEZ Razpredelenie Bulgaria AD	ÚJV Řež, a. s.	CEZ Elektro Bulgaria AD
Ownership share of non-controlling interests	33.00%	47.54%	33.00%
Current assets	1,609	1,143	4,176
Non-current assets	10,534	1,734	52
Current liabilities	(2,173)	(628)	(2,359)
Non-current liabilities	(1,785)	(430)	(113)
Equity	8,185	1,819	1,756
Attributable to:			
Equity holders of the parent	5,367	960	1,178
Non-controlling interests	2,818	859	578
Revenues and other operating income	4,606	1,632	6,829
Income before other income (expenses) and income taxes	291	112	149
Income before income taxes	256	85	146
Income taxes	(37)	(22)	(16)
Net income	219	63	130
Attributable to:			
Equity holders of the parent	146	33	87
Non-controlling interests	73	30	43
Total comprehensive income	257	59	143
Attributable to:			
Equity holders of the parent	164	31	96
Non-controlling interests	93	28	47
Operating cash flow	952	148	69
Investing cash flow	(943)	(144)	(1)
Financing cash flow	(178)	(79)	(27)
Net effect of currency translation in cash	2	(3)	12
Net increase (decrease) in cash and cash equivalents	(167)	(78)	53

Interests in Associates and Joint-ventures

The following table shows the composition of Group's investment in associates and joint-ventures and share of main financial results from associates and joint-ventures for the year ended December 31, 2019 (in CZK millions):

			Group's share of associate's and joint-venture's:		
	Carrying amount of investment	Dividends received	Net income (loss)	Other compre-hensive income	Total compre-hensive income
Akcez Group	-	-	24	60	84
Akenerji Group	-	-	-	-	-
Jadrová energetická spoločnosť Slovenska, a. s.	2,589	-	(24)	(32)	(56)
Bytkomfort, s.r.o.	239	2	7	(2)	5
LOMY MOŘINA spol. s r.o.	179	5	8	-	8
Other	276	-	3	(13)	(10)
Total	3,283	7	18	13	31

The Group is a guarantor for the liabilities of companies within the joint-venture with Akcez Enerji A.S. in the amount of USD 106.3 million and TRY 72.3 million as of December 31, 2019 (see Note 19.2). Based on calculation of recoverable amount from future cash flows a provision in the amount of CZK 1,362 million was recognized as of December 31, 2019. Because the Group's total cumulative share on losses of Akcez group did not exceeded the amount of the guarantee provided as at December 31, 2019, the Group recognized its share on losses of Akcez group in full (in the statement of income included in the line Share of profit (loss) from associates and joint-ventures). As of December 31, 2019, the provision in the amount of CZK 528 million was recorded on the balance sheet this way including the unwinding of discount and this amount was increased by CZK 834 million (in the statement of income on the line Impairment of financial assets) in order to arrive to the required amount of the provision CZK 1,362 million as at December 31, 2019.

In 2017 the share on losses of joint-venture Akenerji Elektrik Üretim A.S. exceeded the carrying amount of Group's investment in this joint-venture. The Group has made no obligations on behalf of Akenerji Elektrik Üretim A.S., so therefore the Group discontinued of using equity method of accounting as of December 31, 2017 (Note 2.2.3). The amount of unrecognized share of the Group on losses of Akenerji Group amounted to CZK 4,260 million as of December 31, 2019.

The joint-ventures Akcez Enerji A.S. and Akenerji Elektrik Üretim A.S. are formed by partnership of CEZ Group and Akkök Group in Turkey to invest mainly into power generation and electricity distribution projects. The joint-venture Jadrová energetická spoločnosť Slovenska, a. s. is a joint-venture formed by CEZ Group and the Slovak Government to prepare the project of building a new nuclear power source in Slovakia.

The following table shows the composition of Group's investment in joint-ventures and share of main financial results from joint-ventures for the year ended December 31, 2018 (in CZK millions):

			Group's share of associate's and joint-venture's:		
	Carrying amount of investment	Dividends received	Net income (loss)	Other compre-hensive income	Total compre-hensive income
Akcez Group	-	-	(425)	96	(329)
Akenerji Group	-	-	-	-	-
Jadrová energetická spoločnosť Slovenska, a. s.	2,645	-	(26)	19	(7)
ČEZ Energo, s.r.o. [1)]	-	-	31	-	31
Bytkomfort, s.r.o.	242	-	3	-	3
LOMY MOŘINA spol. s r.o.	176	5	6	-	6
Other	298	-	2	-	2
Total	3,361	5	(409)	115	(294)

1) The group gained control in the company ČEZ Energo, s.r.o. in 2018 (Note 8). Gain from remeasurement of previously held investment in ČEZ Energo, s.r.o. to fair value in the amount of CZK 101 million was included in statement of income in the line Share of profit (loss) from associates and joint-ventures.

The Group is a guarantor for the liabilities of companies within the joint-venture with Akcez Enerji A.S. in the amount of USD 112.7 million and TRY 75.6 million as of December 31, 2018 (see Note 19.2). Due to the development of Turkey's macroeconomic and political situation leading to a further weakening of the Turkish currency (TRY) the risk of potential obligation in case of claim from guarantees provided by the Group increased in connection with increased probability of lack of future cash flows to settle all liabilities of Akcez group. Based on calculation of recoverable amount from future cash flows a provision in the amount of CZK 908 million was recognized as of December 31, 2018. Because the Group's total cumulative share on losses of Akcez group did not exceeded the amount of the guarantee provided as at December 31, 2018, the Group recognized its share on losses of Akcez group in full (in the statement of income included in the line Share of profit (loss) from associates and joint-ventures). As of December 31, 2018, the liability in the amount of CZK 589 million was recorded on the balance sheet and the Group recognized additional provision in the amount of CZK 319 million (in the statement of income on the line Impairment of financial assets). The liability recorded from share on losses of Akcez group was reclassified on the balance sheet from the line Other long-term financial liabilities to the line Provisions within the current liabilities.

In 2017 the share on losses of joint-venture Akenerji Elektrik Üretim A.S. exceeded the carrying amount of Group's investment in this joint-venture. The Group has made no obligations on behalf of Akenerji Elektrik Üretim A.S., so therefore the Group discontinued of using equity method of accounting as of December 31, 2017 (Note 2.2.3). The amount of unrecognized share of the Group on losses of Akenerji Group amounted to CZK 3,666 million as of December 31, 2018.

The following tables present summarized financial information of material associates and joint-ventures for the year ended December 31, 2019 (in CZK millions):

	Current assets	Out of which: Cash and cash equiva-lents	Non-current assets	Current liabilities	Non-current liabilities	Equity	Share of the Group	Recog-nized liability / Unrecog-nized share on loss	Goodwill	Total carrying amount of the invest-ment
Akcez Enerji A.S.	52	17	3,669	560	3,295	(134)				
Sakarya Elektrik Dagitim A.S.	1,895	102	3,191	1,259	2,290	1,537				
Sakarya Elektrik Perakende Satis A.S.	4,129	771	1,069	4,083	128	987				
Akcez Group						(1,010)	(505)	505	-	-
Akenerji Elektrik Üretim A.S.	924	209	11,133	1,715	19,766	(9,424)				
Akenerji Group						(11,403)	(4,260)	4,260	-	-
Jadrová energetická spoločnosť Slovenska, a. s.	1,496	1,486	3,800	12	-	5,284	2,589	-	-	2,589
Bytkomfort, s.r.o.	48	20	207	26	17	212	104	-	135	239
LOMY MOŘINA spol. s r.o.	146	100	251	31	15	351	179	-	-	179

	Revenues and other operating income	Depre-ciation and amorti-zation	Interest income	Interest expense	Income taxes	Net income (loss)	Other compre-hensive income	Total compre-hensive income
Akcez Enerji A.S.	-	-	16	(325)	-	(936)	47	(889)
Sakarya Elektrik Dagitim A.S.	4,593	(42)	200	(434)	(199)	764	(134)	631
Sakarya Elektrik Perakende Satis A.S.	20,124	(69)	211	(18)	(68)	229	(164)	65
Akenerji Elektrik Üretim A.S.	7,125	(485)	44	(1,833)	482	(2,210)	826	(1,384)
Jadrová energetická spoločnosť Slovenska, a. s.	14	(15)	6	-	(1)	(49)	(66)	(115)
Bytkomfort, s.r.o.	255	(24)	-	(1)	(3)	15	-	15
LOMY MOŘINA spol. s r.o.	231	(20)	-	-	(2)	16	-	16

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The following tables present summarized financial information of material joint-ventures for the year ended December 31, 2018 (in CZK millions):

	Current assets	Out of which: Cash and cash equiva-lents	Non-current assets	Current liabilities	Non-current liabilities	Equity	Share of the Group	Recog-nized liability / Unrecog-nized share on loss	Goodwill	Total carrying amount of the invest-ment
Akcez Enerji A.S.	91	15	4,095	975	3,625	(414)				
Sakarya Elektrik Dagitim A.S.	1,522	13	3,277	1,955	1,937	907				
Sakarya Elektrik Perakende Satis A.S.	5,170	415	662	4,815	142	875				
Akcez Group						(1,178)	(589)	589	-	-
Akenerji Elektrik Üretim A.S.	1,314	21	12,348	6,205	15,555	(8,098)				
Egemer Elektrik Üretim A.S. [1)]	-	-	-	-	-	-				
Akenerji Group						(9,813)	(3,666)	3,666	-	-
Jadrová energetická spoločnosť Slovenska, a. s.	1,574	1,566	3,836	11	-	5,399	2,645	-	-	2,645
Bytkomfort, s.r.o.	53	30	218	33	24	214	105	-	137	242
LOMY MOŘINA spol. s r.o.	152	114	235	26	16	345	176	-	-	176

	Revenues and other operating income	Depre-ciation and amorti-zation	Interest income	Interest expense	Income taxes	Net income (loss)	Other compre-hensive income	Total compre-hensive income
Akcez Enerji A.S.	-	-	174	(316)	8	(1,374)	(152)	(1,526)
Sakarya Elektrik Dagitim A.S.	4,254	(6)	97	(308)	(98)	600	(336)	264
Sakarya Elektrik Perakende Satis A.S.	21,988	(53)	111	(126)	(18)	50	(252)	(202)
Akenerji Elektrik Üretim A.S.	1,700	(272)	151	(842)	(88)	(814)	(1,211)	(2,025)
Egemer Elektrik Üretim A.S. [1)]	6,194	(272)	8	(1,244)	4	(5,569)	1,565	(4,004)
Jadrová energetická spoločnosť Slovenska, a. s.	16	(15)	5	-	(2)	(53)	39	(14)
Bytkomfort, s.r.o.	243	(22)	-	(1)	(5)	18	-	18
LOMY MOŘINA spol. s r.o.	224	(23)	-	-	(4)	12	-	12

[1)] The company Egemer Elektrik Üretim A.S. merged into the company Akenerji Elektrik Üretim A.S. as of December 31, 2018.

10. Cash and Cash Equivalents, Net

The composition of cash and cash equivalents, net at December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Cash on hand and current accounts with banks	4,648	4,272
Short-term securities	1	401
Term deposits	5,108	2,607
Allowance to cash and cash equivalents	(2)	(2)
Total	9,755	7,278

At December 31, 2019 and 2018, cash and cash equivalents included foreign currency deposits of CZK 3,338 million and CZK 1,726 million, respectively.

The weighted average interest rate on short-term securities and term deposits at December 31, 2019 and 2018 was 1.0% and 0.5%, respectively. For the years 2019 and 2018 the weighted average interest rate was 1.5% and 1.0%, respectively.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise the following at December 31, 2019 and 2018 (in CZK millions):

	2019	2018
Cash and cash equivalents as a separate line in the balance sheet	9,755	7,278
Cash and cash equivalents attributable to assets classified as held for sale (Note 15)	2,151	1,967
Total	11,906	9,245

11. Trade Receivables, Net

The composition of trade receivables, net at December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Trade receivables	69,076	76,210
Allowances	(4,046)	(3,976)
Total	65,030	72,234

The information about receivables from related parties is included in Note 36.

Group’s receivables pledged as security for liabilities at December 31, 2019 and 2018 are CZK 20 million and CZK 25 million, respectively.

At December 31, 2019 and 2018, the ageing analysis of receivables, net is as follows (in CZK millions):

	2019	2018
Not past due	61,668	69,131
Past due:		
Less than 3 months	1,483	1,284
3–6 months	351	360
6–12 months	287	445
more than 12 months	1,241	1,014
Total	65,030	72,234

Receivables include impairment allowance based on the collective assessment of impairment of receivables that are not individually significant.

The most significant item of receivables overdue for more than 12 months is related to receivables of the company ČEZ Distribuce, a. s. The company ČEZ Distribuce, a. s. undertakes several litigations concerning the collection of the price component related to the costs of support for the generation of electricity from renewable energy sources and combined generation of electricity and heat in 2013. The management of the company ČEZ Distribuce, a. s. is convinced that in the event of a negative judgment against ČEZ Distribuce in these and similar litigations, the Company will be able to demand the reimbursement of fees and accessories from company OTE, a.s. and in this regard the management is committed to make all necessary actions to ensure that eventual loss in such disputes will have no negative impact on the company ČEZ Distribuce, a. s.

Movements in allowance for doubtful receivables (in CZK millions):

	2019	2018
Balance as at January 1	(3,976)	(4,623)
Allowances classified as held for sale as at January 1	(1,063)	-
Adoption of IFRS 9	-	(93)
Additions	(1,654)	(1,810)
Reversals	1,249	1,356
Derecognition of impaired assets	199	141
Transfer to assets held for sale	1,166	1,063
Currency translation differences	33	(10)
Balance as at December 31	(4,046)	(3,976)

12. Materials and Supplies, Net

The composition of materials and supplies, net at December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Gross costs incurred on wind projects in Poland in development	326	309
Allowance to wind projects in Poland	(309)	(299)
Wind projects in Poland in development, net	17	10
Materials	8,557	8,468
Other work in progress	495	355
Other supplies	174	196
Allowance for obsolescence	(354)	(292)
Total	8,889	8,737

13. Emission Rights

The following table summarizes the movements in the quantity (in thousand tons) and book value of emission rights and credits held by the Group during 2019 and 2018 (in CZK millions):

	2019		2018	
	in thousands tons	in millions CZK	in thousands tons	in millions CZK
Emission rights and credits for own use:				
Emission rights and credits for own use at January 1	40,597	9,040	29,676	3,255
Emission rights acquired in business combinations	-	-	9	2
Emission rights granted	685	-	5,599	-
Settlement of prior year actual emissions with register	(26,818)	(4,996)	(26,733)	(3,197)
Emission rights purchased	39,149	16,967	31,933	8,990
Emission rights sold	(8)	-	(10)	-
Emission credits purchased	123	1	123	1
Currency translation differences	-	(1)	-	(11)
Emission rights and credits for own use at December 31	53,728	21,011	40,597	9,040
Emission rights and credits held for trading:				
Emission rights and credits held for trading at January 1	14,814	9,401	21,824	4,542
Settlement of prior year actual emissions with register	-	-	(1,134)	(382)
Emission rights purchased	74,429	46,518	114,047	42,684
Emission rights sold	(66,758)	(41,971)	(119,923)	(44,841)
Fair value adjustment	-	54	-	7,398
Emission rights and credits held for trading at December 31	22,485	14,002	14,814	9,401

The composition of emission rights and green and similar certificates at December 31, 2019 and 2018 (in CZK millions):

	2019			2018		
	Non-current	Current	Total	Non-current	Current	Total
Emission rights	9,132	25,881	35,013	3,625	14,816	18,441
Green and similar certificates	2,947	1,148	4,095	3,539	1,839	5,378
Total	12,079	27,029	39,108	7,164	16,655	23,819

Non-current emission rights for own use and non-current green and similar certificates are part of intangible assets (Note 6).

During 2019 and 2018 total emissions of greenhouse gases made by the Group amounted to an equivalent of 25,935 thousand tons and 26,818 thousand tons of CO_2, respectively. At December 31, 2019 and 2018 the Group recognized a provision for CO_2 emissions in total amount of CZK 6,801 million and CZK 5,588 million, respectively (see Notes 2.13 and 20).

14. Other Current Assets, Net

The composition of other current assets, net at December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Unbilled electricity and gas supplied to the retail customers	2,566	1,810
Received advances from retail customers	(1,475)	(935)
Unbilled supplies to retail customers, net	1,091	875
Gross contract assets based on percentage of completion, net	11,411	7,195
Received billings and advances	(9,198)	(5,814)
Net contract assets	2,213	1,381
Advances paid, net	2,692	2,523
Prepayments	1,335	1,408
Accruals	2,186	2,053
Taxes and fees, excluding income tax	1,553	1,634
Total	11,070	9,874

15. Assets and Associated Liabilities Classified as Held for Sale

On February 23, 2018, a sales contract for the sale of interests in Bulgarian companies CEZ Razpredelenie Bulgaria AD (including its interest in CEZ ICT Bulgaria EAD), CEZ Trade Bulgaria EAD, CEZ Bulgaria EAD, CEZ Elektro Bulgaria AD, Free Energy Project Oreshets EAD and Bara Group EOOD was signed. The requirements of standard IFRS 5 to classify the assets as held for sale were met by granting prior consent to the transaction by the supervisory board of ČEZ, a. s. which took place on February 22, 2018. Following the refusal of the transaction by the Bulgarian anti-trust authority, the transaction could not be carried out.

On June 20, 2019, a sales contract for the sale of the above-mentioned interests in Bulgarian companies was signed with the company Eurohold AD. The transaction is a subject to approval by the Bulgarian anti-trust authority and the Bulgarian Energy Regulatory Office.

On October 24, 2019, Bulgarian anti-trust authority refused the transaction for the sale of Bulgarian assets to the company Eurohold. CEZ Group filed an administrative action against this decision and is considering further legal steps that will protect the interest of CEZ Group. The sales contract from June 20, 2019, remains in force, as well as the intention to sell these assets to company Eurohold.

As of December 31, 2019, the Group performed an impairment test for any potential impairment loss related to assets held for sale reflecting the contractual sales price of EUR 335 million. As a result of the test, there was an impairment in the amount of CZK 1,589 million, which was presented in the statement of income on the line Impairment of property, plant and equipment and intangible assets (Note 7).

If the intention to sell should be abandoned in the future, or the sale should no longer be highly probable in the next twelve months respectively, CEZ Group does not expect negative effects on net income caused by the reclassification from assets held for sale. On hypothetical reclassification from assets held for sale as of December 31, 2019, net income for the year 2019 would be increased by CZK 116 million due to partial reversal of previously recognized impairment.

The assets classified as held for sale and associated liabilities at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019	2018
	Bulgarian companies	Bulgarian companies
Property, plant and equipment, net	10,539	10,411
Intangible assets, net	461	446
Other non-current assets	145	128
Cash and cash equivalents	2,151	1,967
Trade receivables, net	2,875	4,092
Another current assets	1,109	453
Assets classified as held for sale	17,280	17,497
Long-term debt, net of current portion	1,357	1,313
Non-current provisions	183	144
Other long-term financial liabilities	247	218
Deferred tax liability	247	291
Short-term loans	170	309
Current portion of long-term debt	251	224
Trade payables	2,498	2,999
Current provisions	432	479
Another current liabilities	207	220
Liabilities associated with assets classified as held for sale	5,592	6,197

The assets and results associated with the assets classified as held for sale are reported in the operating segments Generation – New Energy, Distribution and Sales.

16. Equity

As at December 31, 2019 and 2018, the share capital of the Company registered in the Commercial Register totaled CZK 53,798,975,900 and consisted of 537,989,759 shares with a nominal value of CZK 100 per share. All shares are bearer common shares that are fully paid and listed and do not convey any special rights.

Movements of treasury shares in 2019 and 2018 (in pieces):

	2019	2018
Number of treasury shares at beginning of period	3,125,021	3,605,021
Sales of treasury shares	(573,781)	(480,000)
Number of treasury shares at end of period	2,551,240	3,125,021

Treasury shares remaining at end of period are presented at cost as a deduction from equity.

Declared dividends per share before tax were CZK 24 in 2019 and CZK 33 in 2018. Dividends for the year 2019 will be declared at the general meeting, which will be held in the first half of 2020.

Capital Management

The primary objective of the Group's capital management is to keep its credit rating on the investment grade and on the level that is common in the industry and to maintain healthy capital ratios in order to support its business and maximize value for shareholders. The Group manages its capital structure and makes adjustments to it, in light of changes in economic conditions.

The Group primarily monitors capital using the ratio of net debt to EBITDA. Considering the current structure and stability of cash flow and the development strategy, the goal of the Group is the level of this ratio in range 2.5 to 3.0. In addition, the Group also monitors capital using a total debt to total capital ratio. The Group's policy is to keep the total debt to total capital ratio below 50% in the long term.

EBITDA consists of income before income taxes and other income (expenses) plus depreciation and amortization, plus impairment of property, plant and equipment and intangible assets and less gain (or loss) on sale of property, plant and equipment. The Group includes within total debt the long-term and short-term interest bearing loans and borrowings. Net debt is defined as total debt less cash and cash equivalents and highly liquid financial assets. Highly liquid financial assets consist for capital management purposes of short-term and long-term debt financial assets and short-term and long-term bank deposits. Total capital is total equity attributable to equity holders of the parent plus total debt. The items related to assets classified as held for sale, which are presented separately on the balance sheet, are always included in these calculations.

The calculation and evaluation of the ratios is done using consolidated figures (in CZK millions):

	2019	2018
Long-term debt	167,633	149,183
Short-term loans	4,260	11,783
Long-term debt associated with assets classified as held for sale (Note 15)	1,608	1,537
Short-term loans associated with assets classified as held for sale (Note 15)	170	309
Total debt [1]	173,671	162,812
Less:		
Cash and cash equivalents	(9,755)	(7,278)
Cash and cash equivalents classified as held for sale (Note 15)	(2,151)	(1,967)
Highly liquid financial assets:		
Current debt financial assets (Note 5)	(403)	(1,287)
Non-current debt financial assets (Note 5)	(111)	(513)
Current term deposits (Note 5)	(3)	(505)
Total net debt	161,248	151,262
Income before income taxes and other income (expenses)	26,429	19,759
Depreciation and amortization	29,016	28,139
Impairment of property, plant and equipment and intangible assets	4,860	1,766
Gains and losses on sale of property, plant and equipment (Note 25 and 31)	(130)	(129)
EBITDA	60,175	49,535
Equity attributable to equity holders of the parent	250,761	234,721
Total debt	173,671	162,812
Total capital	424,432	397,533
Net debt to EBITDA ratio	2.68	3.05
Total debt to total capital ratio	40.9%	41.0%

[1] Part of total debt are accrued interest expenses, which amounted to CZK 2,151 million and CZK 2,200 million as at December 31, 2019 and 2018, respectively.

17. Long-term Debt

Long-term debt at December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
3.005% Eurobonds, due 2038 (JPY 12,000 million)	2,516	2,468
2.845% Eurobonds, due 2039 (JPY 8,000 million)	1,679	1,647
5.000% Eurobonds, due 2021 (EUR 750 million)	19,228	19,457
6M Euribor + 1.25% Eurobonds, due 2019 (EUR 50 million)	-	1,287
4.875% Eurobonds, due 2025 (EUR 750 million)	19,671	19,909
4.500% Eurobonds, due 2020 (EUR 750 million)	19,478	19,693
2.160% Eurobonds, due in 2023 (JPY 11,500 million)	2,416	2,370
4.600% Eurobonds, due in 2023 (CZK 1,250 million)	1,287	1,287
2.150%*IR CPI Eurobonds, due 2021 (EUR 100 million) [1)]	2,602	2,634
4.102% Eurobonds, due 2021 (EUR 50 million)	1,273	1,288
4.375% Eurobonds, due 2042 (EUR 50 million)	1,271	1,286
4.500% Eurobonds, due 2047 (EUR 50 million)	1,269	1,284
4.383% Eurobonds, due 2047 (EUR 80 million)	2,062	2,087
3.000% Eurobonds, due 2028 (EUR 725 million)	19,133	19,419
0.875% Eurobonds, due 2022 (EUR 500 million)	12,675	12,824
0.875% Eurobonds, due 2026 (EUR 750 million)	18,847	-
4.250% U.S. bonds, due 2022 (USD 289 million)	6,578	6,525
5.625% U.S. bonds, due 2042 (USD 300 million)	6,817	6,768
4.500% Registered bonds, due 2030 (EUR 40 million)	1,006	1,017
4.750% Registered bonds, due 2023 (EUR 40 million)	1,056	1,068
4.700% Registered bonds, due 2032 (EUR 40 million)	1,048	1,060
4.270% Registered bonds, due 2047 (EUR 61 million)	1,531	1,549
3.550% Registered bonds, due 2038 (EUR 30 million)	780	790
Total bonds and debentures	144,223	127,717
Less: Current portion	(21,163)	(3,419)
Bonds and debentures, net of current portion	123,060	124,298
Long-term bank loans and lease liabilities:		
Less than 2.00% p. a.	7,651	13,726
2.00% to 2.99% p. a.	9,458	4,041
3.00% to 3.99% p. a.	2,773	919
4.00% p. a. and more	3,528	2,780
Total long-term bank loans and lease liabilities	23,410	21,466
Less: Current portion	(3,900)	(3,324)
Long-term bank loans and lease liabilities, net of current portion	19,510	18,142
Total long-term debt	167,633	149,183
Less: Current portion	(25,063)	(6,743)
Total long-term debt, net of current portion	142,570	142,440

1) The interest rate is based on inflation realized in Eurozone Countries (Harmonized Index of Consumer Prices – HICP) and is fixed through the closed swap to the rate 4.553% p. a.

The interest rates indicated above are historical rates for fixed rate debt and current market rates for floating rate debt. The actual interest payments are affected by interest rate risk hedging carried out by the Group.

All long-term debt is recognized in original currencies while the related hedging derivatives are recognized using the method described in Note 2.15.

The future maturities of long-term debt are as follows (in CZK millions):

	2019	2018
Within 1 year	25,063	6,743
Between 1 and 2 years	26,598	22,675
Between 2 and 3 years	24,790	26,058
Between 3 and 4 years	6,437	24,286
Between 4 and 5 years	1,687	5,910
Thereafter	83,058	63,511
Total long-term debt	167,633	149,183

The following table analyses the long-term debt by currency (in millions):

	2019		2018	
	Foreign currency	CZK	Foreign currency	CZK
EUR	5,426	137,875	4,767	121,914
USD	592	13,395	592	13,293
JPY	31,716	6,611	31,714	6,485
PLN	390	2,326	440	2,634
RON	650	3,455	492	2,716
HUF	117	9	-	-
CZK	-	3,962	-	2,141
Total long-term debt		167,633		149,183

Long-term debt with floating interest rates exposes the Group to interest rate risk. The following table summarizes long-term debt with floating rates of interest by contractual reprising dates at December 31, 2019 and 2018 without considering interest rate hedging (in CZK millions):

	2019	2018
Floating rate long-term debt		
with interest rate fixed to 1 month	13	19
with interest rate fixed from 1 to 3 months	5,467	6,317
with interest rate fixed from 3 months to 1 year	8,622	12,186
Total floating rate long-term debt	14,102	18,522
Fixed rate long-term debt	153,531	130,661
Total long-term debt	167,633	149,183

Fixed rate long-term debt exposes the Group to the risk of changes in fair values of these financial instruments. For related fair value information and risk management policies of all financial instruments see Note 18 and Note 19.

The following table analyses the changes in liabilities and receivables arising from financing activities in 2019 and 2018 (in CZK millions):

	Debt	Other financial liabilities	Other long-term liabilities	Other current financial assets, net	Total liabilities / assets from financing activities
Amount at January 1, 2018	154,307	55,373	3,335	(43,098)	
Less: Liabilities / assets from other than financing activities	-	(53,319)	(3,304)	43,063	
Liabilities / assets arising from financing activities at January 1, 2018	154,307	2,054	31	(35)	156,357
Cash flows	5,235	(18,151)	-	6	(12,910)
Foreign exchange movement	1,698	1	-	-	1,699
Changes in fair values	255	-	-	-	255
Acquisition of subsidiaries	1,209	18	-	-	1,227
Liabilities associated to assets classified as held for sale	(1,846)	(104)	-	-	(1,950)
Declared dividends	-	17,621	-	-	17,621
Other [1)]	108	(273)	-	-	(165)
Liabilities / assets arising from financing activities at December 31, 2018	160,966	1,166	31	(29)	162,134
Liabilities / assets arising from other than financing activities	-	124,175	-	(93,274)	
Total amount on balance sheet at December 31, 2018	160,966	125,341	31	(93,303)	
Less: Liabilities / assets from other than financing activities	-	(124,175)	-	93,274	
Adoption of IFRS 16	5,987	-	-	-	
Liabilities / assets arising from financing activities at January 1, 2019	166,953	1,166	31	(29)	168,121
Cash flows	5,570	(13,626)	-	3	(8,053)
Additions of leases	293	-	-	-	293
Foreign exchange movement	(61)	(18)	-	-	(79)
Changes in fair values	(1,453)	-	-	-	(1,453)
Acquisition of subsidiaries	286	-	-	-	286
Liabilities associated to assets classified as held for sale	71	1	-	-	72
Declared dividends	-	12,831	-	-	12,831
Other	234	12	-	-	246
Liabilities / assets arising from financing activities at December 31, 2019	171,893	366	31	(26)	172,264
Liabilities / assets arising from other than financing activities	-	72,521	-	(61,088)	
Total amount on balance sheet at December 31, 2019	171,893	72,887	31	(61,114)	

1) This includes reclassification of liability recorded from share on losses of Akcez group from line Other long-term financial liabilities to line Provisions within current liabilities in the amount of CZK 259 million.

The column Debt consists of balance sheet items Long-term debt, net of current portion, Current portion of long-term debt and Short-term loans. In terms of financing activities, item Other financial liabilities consists of dividend payable and other financial liabilities (short-term and long-term including short-term portion), item Other long-term liabilities consists especially of long-term deposits and received advanced payments, item Other current financial assets, net consists of advanced payments to dividend administrator.

18. Fair Value of Financial Instruments

Fair value is defined as the amount at which the instrument could be exchanged in a current transaction between knowledgeable willing parties in an arm's length transaction, other than in a forced or liquidation sale. Fair values are obtained from quoted market prices, discounted cash flow models and option pricing models, as appropriate.

The following methods and assumptions are used to estimate the fair value of each class of financial instruments:

Cash and Cash Equivalents, Current Investments

The carrying amount of cash and other current financial assets approximates fair value due to the relatively short-term maturity of these financial instruments.

Securities Held for Trading

The fair values of equity and debt securities that are held for trading are estimated based on quoted market prices.

Non-current Debt and Equity Financial Assets

The fair values of non-current debt and equity financial assets, which are publicly traded on active markets, are determined based on quoted market prices. The fair values of non-current debt and equity financial assets, which are not publicly traded on active markets, are determined using appropriate valuation models.

Short-term Receivables and Payables

The carrying amount of receivables and payables approximates fair value due to the short-term maturity of these financial instruments.

Short-term Loans

The carrying amount approximates fair value because of the short period to maturity of those instruments.

Long-term Debt

The fair value of long-term debt is based on the quoted market price for the same or similar issues or on the current rates available for debt with the same maturity profile. The carrying amount of long-term debt and other payables with variable interest rates approximates their fair values.

Derivatives

The fair value of derivatives is based upon mark to market valuations.

Carrying amounts and the estimated fair values of financial assets (except for derivatives) at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Non-current assets at amortized cost:				
Other financial receivables	688	688	505	505
Investment in finance lease	305	305	302	302
Debt financial assets	10	10	10	10
Non-current assets at fair value through other comprehensive income:				
Restricted debt financial assets	16,119	16,119	15,205	15,205
Debt financial assets	101	101	503	503
Equity financial assets	2,711	2,711	3,055	3,055
Non-current assets at fair value through profit or loss:				
Equity financial assets	1,468	1,468	2,139	2,139
Current assets at amortized cost:				
Term deposits	3	3	505	505
Other financial receivables	56	56	35	35
Investment in finance lease	48	48	51	51
Current assets at fair value through other comprehensive income:				
Debt financial assets	403	403	1,287	1,287

Carrying amounts and the estimated fair values of financial liabilities (except for derivatives) at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Long-term debt	(167,633)	(179,164)	(149,183)	(158,115)
Other long-term financial liabilities	(3,360)	(3,360)	(1,435)	(1,435)
Short-term loans	(4,260)	(4,260)	(11,783)	(11,783)
Other short-term financial liabilities	(343)	(343)	(1,229)	(1,229)

Carrying amounts and the estimated fair values of derivatives at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Cash flow hedges:				
Short-term receivables	1,064	1,064	126	126
Long-term receivables	4,732	4,732	2,185	2,185
Short-term liabilities	(939)	(939)	(9,637)	(9,637)
Long-term liabilities	(5,464)	(5,464)	(12,732)	(12,732)
Commodity derivatives:				
Short-term receivables	59,225	59,225	91,025	91,025
Long-term receivables	-	-	100	100
Short-term liabilities	(61,733)	(61,733)	(99,217)	(99,217)
Other derivatives:				
Short-term receivables	315	315	274	274
Long-term receivables	908	908	1,149	1,149
Short-term liabilities	(172)	(172)	(204)	(204)
Long-term liabilities	(876)	(876)	(887)	(887)

18.1. Fair Value Hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.

Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.

Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

For assets and liabilities that are recognized in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

There were no transfers between the levels of financial instruments at fair value in 2019 and 2018.

As at December 31, 2019, the fair value hierarchy was the following (in CZK millions):

Assets measured at fair value:

	Total	Level 1	Level 2	Level 3
Commodity derivatives	59,225	1,413	57,812	-
Cash flow hedges	5,796	696	5,100	-
Other derivatives	1,223	3	1,220	-
Restricted debt securities	16,119	16,119	-	-
Debt financial assets at fair value through other comprehensive income	504	504	-	-
Equity financial assets at fair value through profit or loss	1,468	-	-	1,468
Equity financial assets at fair value through other comprehensive income	2,711	-	-	2,711

Liabilities measured at fair value:

	Total	Level 1	Level 2	Level 3
Commodity derivatives	(61,733)	(5,193)	(56,540)	-
Cash flow hedges	(6,403)	(1,122)	(5,281)	-
Other derivatives	(1,048)	(15)	(1,033)	-

Assets and liabilities for which fair values are disclosed:

	Total	Level 1	Level 2	Level 3
Term deposits	3	-	3	-
Other financial receivables	744	-	744	-
Debt financial assets	10	-	10	-
Investment in finance lease	353	-	353	-
Long-term debt	(179,164)	(131,473)	(47,691)	-
Short-term loans	(4,260)	-	(4,260)	-
Other financial liabilities	(3,703)	-	(3,703)	-

As at December 31, 2018, the fair value hierarchy was the following (in CZK millions):

Assets measured at fair value:

	Total	Level 1	Level 2	Level 3
Commodity derivatives	91,125	6,292	84,833	-
Cash flow hedges	2,311	25	2,286	-
Other derivatives	1,423	3	1,420	-
Restricted debt securities	15,205	15,205	-	-
Debt financial assets at fair value through other comprehensive income	1,790	1,790	-	-
Equity financial assets at fair value through profit or loss	2,139	-	-	2,139
Equity financial assets at fair value through other comprehensive income	3,055	-	-	3,055

Liabilities measured at fair value:

	Total	Level 1	Level 2	Level 3
Commodity derivatives	(99,217)	(11,562)	(87,655)	-
Cash flow hedges	(22,369)	(4,593)	(17,776)	-
Other derivatives	(1,091)	(32)	(1,059)	-

Assets and liabilities for which fair values are disclosed:

	Total	Level 1	Level 2	Level 3
Term deposits	505	-	505	-
Other financial receivables	540	-	540	-
Debt financial assets	10	-	10	-
Investment in finance lease	353	-	353	-
Long-term debt	(158,115)	(112,369)	(45,746)	-
Short-term loans	(11,783)	-	(11,783)	-
Other financial liabilities	(2,664)	-	(2,664)	-

The Group enters into derivative financial instruments with various counterparties, principally large power and utility groups and financial institutions with high credit ratings. Derivatives valued using valuation techniques with market observable inputs are mainly commodity forward and futures contracts, foreign exchange forward contracts, interest rate swaps and options. The most frequently applied valuation techniques include forward pricing and swap models, using present value calculations and option pricing models (e.g. Black-Scholes). The models incorporate various inputs including the forward rate curves of the underlying commodity, foreign exchange spot and forward rates and interest rate curves.

The following table shows roll forward of the financial assets measured at fair value – Level 3, for the years ended December 31, 2019 and 2018 (in CZK millions):

	Equity financial assets at fair value through profit or loss	Equity financial assets at fair value through other comprehensive income
Balance at January 1, 2018	1,658	3,111
Additions	389	-
Disposals	(26)	(143)
Revaluation	118	87
Balance at December 31, 2018	2,139	3,055
Additions	230	3
Disposals	(962)	-
Revaluation	61	(347)
Balance at December 31, 2019	1,468	2,711

The main investment in the portfolio Equity financial assets at fair value through other comprehensive income is 15% interest in the company Veolia Energie ČR, a.s. (Note 5). Equity instruments of the company are not quoted on any market. Fair value at December 31, 2019 and 2018 was determined using available public EBITDA data and the usual range of 8 to 10 EBITDA multiples which corresponds to the transactions observed on the market for acquisition of the 100% interest before the adjustment for outstanding debt. The fair value at December 31, 2019 and 2018 was determined using 9 EBITDA multiple as the best estimate of the fair value.

Equity financial assets at fair value through profit or loss include investments of the CEZ Group's investment fund in the company Inven Capital, SICAV, a.s. (Note 5). The fair value of the investments included in this portfolio was determined at 31 December 2019 and 2018 by valuator’s appraisal. The fair value is stated especially with regard to capital contributions and to other forms of financing made by the co-investors recently. In addition, the valuation takes into account further developments and eventual subsequent significant events, such as received bids for redemption.

18.2. Offsetting of Financial Instruments

The following table shows the recognized financial instruments that are offset, or subject to enforceable master netting agreement or other similar agreements but not offset, as of December 31, 2019 and 2018 (in CZK millions):

	2019		2018	
	Financial assets	Financial liabilities	Financial assets	Financial liabilities
Derivatives	66,244	(69,184)	94,859	(122,677)
Other financial instruments [1]	43,151	(40,984)	44,492	(41,372)
Collaterals paid (received) [2]	1,182	(683)	2,878	(1,611)
Gross financial assets / liabilities	110,577	(110,851)	142,229	(165,660)
Assets / liabilities set off under IAS 32	-	-	-	-
Amounts presented in the balance sheet	110,577	(110,851)	142,229	(165,660)
Effect of master netting agreements	(93,251)	93,251	(128,574)	128,574
Net amount after master netting agreements	17,326	(17,600)	13,655	(37,086)

1) Other financial instruments consist of invoices due from derivative trading and are included in Trade receivables, net or Trade payables.

2) Collaterals paid are included in Trade receivables, net and collaterals received are included in Trade payables.

When trading with derivative instruments, ČEZ enters into the EFET and ISDA framework contracts. These contracts generally allow mutual offset of receivables and payables upon the premature termination of agreement. The reason for premature termination is insolvency or non-fulfillment of agreed terms by the counterparty. The right to mutual offset is either embedded in the framework contract or results from the security provided. There is CSA (Credit Support Annex) concluded with some counterparties defining the permitted limit of exposure. When the limit is exceeded, there is a transfer of cash reducing exposure below an agreed level. Cash security (collateral) is also included in the final offset.

The information about offset of unbilled electricity supplied to retail customers with advances received is included in Note 14 and 23. The information about offset of construction contracts and related billings and advances received is included in Note 14.

Short-term derivative assets are included in the balance sheet in Other current financial assets, net, long-term derivative assets in Other non-current financial assets, net, short-term derivative liabilities in Other short-term financial liabilities and long-term derivative liabilities in Other long-term financial liabilities.

19. Financial Risk Management

Risk Management Approach

A risk management system is being successfully developed in order to protect the Group's value while taking the level of risk acceptable for the shareholders. In the Group, the risk is defined as a potential difference between the actual and the expected (planned) developments and is measured by means of the extent of such difference in CZK and the likelihood with which such a difference may occur.

A risk capital concept is applied within the Group. The concept allows the setting of basic cap for partial risk limits and, in particular, the unified quantification of all kinds of risks. The value of aggregate annual risk limit (Profit@Risk) is approved by the Board of Directors based on the Risk Management Committee proposal for every financial year. The proposed limit value is derived from historical volatility of profit, revenues and costs of the Group (the top-down method). The approved value in CZK is set on the basis of a 95% confidence level and expresses a maximum profit decrease, which is the Group willing to take in order to reach the planned annual profit.

The bottom-up method is used for setting and updating the Risk frames. The Risk frames include the definition of risk and departments/units of the Group for which the frame is obligatory; definition of rules and responsibilities for risk management; permitted instruments and methods of risk management and actual risk limits, including a limit which expresses the share in the annual Profit@Risk limit.

The main Business Plan market risks are quantified in the Group (EBITDA@Risk based on MonteCarlo simulation in Y+1 to Y+5 horizon). The market risks are actively managed through gradual electricity sales and emission allowances' purchases in the following 6-year horizon, closed long-term contracts for electricity sale and emission allowances purchase and the FX and IR risk hedging in medium-term horizon. In Business Plan horizon, the risk management is also based on Debt Capacity concept which enables to assess the impact of main Investment and other Activities (incl. the risk characteristics), on expected cash flow and total debt in order to maintain corporate rating.

Risk Management Organization

The supreme authority responsible for risk management in ČEZ, a. s. is the CFO, except for approval of the aggregate annual budget risk limit (Profit@Risk) within the competence of the ČEZ, a. s. Board of Directors. CFO decides, based on the recommendation of the Risk Management Committee, on the development of a system of risk management, on an overall allocation of risk capital to the individual risks and organizational units, he approves obligatory rules, responsibilities and limit structure for the management of partial risks.

The Risk Management Committee (advisory committee of CFO) continuously monitors an overall risk impact on the Group, including Group risk limits utilization, status of risks linked to Business Plan horizon, hedging strategies status, assessment of impact of Investment and other Activities on potential Group debt capacity and cash flow in order to maintain corporate rating.

Overview and Methods of Risk Management

The Group applies a unified categorization of the Group's risks which reflects the specifics of a corporate, i.e. non-banking company, and focuses on primary causes of unexpected development. The risks are divided into four basic categories listed below.

1. Market risks	**2. Credit risks**	**3. Operation risks**	**4. Business risks**
1.1 Financial (FX, IR)	2.1 Counterparty default	3.1 Operating	4.1 Strategic
1.2 Commodity	2.2 Supplier default	3.2 Internal change	4.2 Political
1.3 Volumetric	2.3 Settlement	3.3 Liquidity management	4.3 Regulatory
1.4 Market liquidity		3.4 Security	4.4 Reputation

From the view of risk management, the Group activities can be divided into two basic groups:

- Activities with the unified quantification of the share of respective activity in the aggregate risk limit of the Group (i.e. using specific likelihood, it is possible to objectively determine what risk is associated with an activity/planned profit). These risks are managed by the rules and limits set by the CFO of ČEZ, a. s. based on the recommendation of the Risk Management Committee and, concurrently, in accordance with governing documents of the respective units/processes of the Group.
- Activities whose share in the aggregate risk limit of the Group has not been quantified so far or for objective reasons. These risks are managed by the responsible owners of the relevant processes in accordance with internal governing documents of the respective units/processes of the Group.

For all risks quantified on a unified basis, a partial risk limit is set whose continuous utilization is evaluated on a monthly basis and is usually defined as a sum of the actually expected deviation of expected annual profit from the plan and the potential risk of loss on a 95% confidence. The Group's methodologies and data provide for a unified quantification of the following risks:

- Market risks: financial (currency, interest and stock price) risks, commodity prices (electricity, emission allowances, coal, gas, crude oil), volume (volume of electricity produced by wind power plants)
- Credit risks: financial and business counterparty risk and electricity, gas and heat end customer risk
- Operational risks: risks of nuclear and fossil power plants operation in the Czech Republic, investment risks.

The development of the Group's quantified risks is reported to the Risk Management Committee every month through 3 regular reports:

- Annual budget risks (annual Profit@Risk limit utilization)
- Business plan risks (EBITDA@Risk based on MonteCarlo simulation)
- Debt capacity (actual deviation from the optimal debt within Y+5 horizon, derived from rating agency requirements on debt indicators in order to preserve the ČEZ rating).

19.1. Qualitative Description of Risks Associated with Financial Instruments

Commodity Risks

The development of electricity, emission allowances, coal and gas prices is a key risk factor of the Group's value. The current system of commodity risk management is focused on (i) the margin from the own electricity production sales, i.e. from trades resulting in optimizing the sales of the Group's production and in optimizing the emission allowances position for production (the potential risk is managed on the EaR, VaR and the EBITDA@Risk bases), and (ii) the margin from the proprietary trading of commodities within the whole Group (the potential risk is managed on the VaR basis).

Market Financial Risks (currency, interest and stock price risks)

The development of foreign exchange rates, interest rates and stock prices is a significant risk factor of the Group's value. The current system of financial risk management is focused mainly on (i) the future cash flows and (ii) financial trades which are realized for the purposes of an overall risk position management in accordance with the risk limits (the potential risk is managed on the basis of VaR, EBITDA@Risk and complementary position limits). Own financial instruments (i.e. active and passive financial trades and derivative trades) are realized entirely in the context of an overall expected cash flows of the Group (including operational and investment foreign currency flows).

Credit Risks

With respect to the Group's activities managed on a centralized level, credit exposures of individual financial partners and wholesale partners are managed in accordance with individual credit limits. The individual limits are set and continuously updated according to the counterparty's credibility (in accordance with international rating and internal financial evaluation of counterparties with no international rating).

With respect to the electricity sales to end customers in the Czech Republic, the actual credibility is monitored for each business partner based on payment history (in addition, the financial standing is considered for selected partners). This credibility determines the payment conditions of partners (i.e. it indirectly determines an amount of an approved credit exposure) and also serves to quantify both the expected and the potential losses.

The Group's maximum exposure to credit risk to receivables and other financial instruments as at December 31, 2019 and 2018 is the carrying value of each class of financial assets except for financial guarantees. Credit risk from balances with banks and financial institutions is managed by the Group's risk management department in cooperation with Group's treasury department in accordance with the Group's policy. Investments of surplus funds are made only with approved counterparties and within credit limits assigned to each counterparty.

In accordance with the credit risk methodology applied to the banking sector per Basel II, every month the expected and potential losses are quantified on a 95% confidence level. It means that the share of all credit risks mentioned above in the aggregate annual Profit@Risk limit is quantified and evaluated.

Liquidity Risks

The Group's liquidity risk is primarily perceived as an operational risk (risk of liquidity management) and a risk factor is the internal ability to effectively manage the future cash flows planning process in the Group and to secure the adequate liquidity and effective short-term financing (the risk is managed on a qualitative basis). The fundamental liquidity risk management (i.e. liquidity risk within the meaning for banking purposes) is covered by the risk management system as a whole. In any given period, the future deviations of the Group's expected cash flows are managed in accordance with the aggregate risk limit and in the context of the actual and the targeted debt/equity ratio of the Group.

19.2. Quantitative Description of Risks Associated with Financial Instruments

Commodity Risks

The required quantitative information on risks (i.e. a potential change of market value resulting from the effects of risk factors as at December 31) was prepared based on the assumptions given below:

- the indicator of risk associated with financial instruments is defined as the monthly parametric VaR (95% confidence) which expresses a maximum potential decrease in fair value of contracts classified as derivatives under IFRS 9 (the underlying commodities in the Group's derivative transactions are: electricity, EUA and CER/ERU emission allowances, gas, coal ARA, Richards Bay, Newcastle and crude oil and crude oil products) on the given confidence level
- highly probable forecasted future electricity generation sales with the delivery in the CZ power grid are included in the VAR calculation to reflect the hedging character of significant portion of the existing derivative sales of electricity with delivery in Germany
- for the calculation of volatility and correlations (between commodity prices), the SMA (Simple Moving Average) method is applied to 60 daily time series
- the source of market data is mainly EEX, PXE and ICE
- the indicator VaR illustrates mainly the impact of revaluation of above-mentioned financial instruments to statement of income.

Potential impact of the above risk factors as at December 31 (in CZK millions):

	2019	2018
Monthly VaR (95%) – impact of changes in commodity prices	2,361	1,974

Currency Risks

The required quantitative information on risks (i.e. a potential change of market value resulting from the effects of currency risk as at December 31) was prepared based on the assumptions given below:

- the indicator of currency risk is defined as the monthly VaR (95% confidence)
- for the calculation of VaR, based on volatility and internal correlations of each considered currency, the method of historical simulation VaR is applied to 90 daily historical time series
- the relevant currency position is defined mainly as a discounted value of foreign currency cash flows from all contracted financial instruments, from expected foreign currency operational revenues and costs in 2020 and from highly probable forecasted foreign currency revenues, costs or capital expenditures that are being hedged by financial instruments etc.
- the relevant currency positions reflect all significant foreign-currency flows of the Group companies in the monitored basket of foreign currencies
- the source of market FX and interest rate data is mainly IS Reuters and IS Bloomberg
- the indicator VaR illustrates mainly the impact of revaluation of above-mentioned currency position to statement of income.

Potential impact of the currency risk as at December 31 (in CZK millions):

	2019	2018
Monthly currency VaR (95% confidence)	122	254

Interest Risks

For the quantification of the potential impact of the interest risk was chosen the sensitivity of the interest revenue and cost to the parallel shift of yield curves. The approximate quantification (as at December 31) was based on the following assumptions:

- parallel shift of the yield curves (+10bp) was selected as the indicator of interest risk
- the statement of income sensitivity is measured as an annual change of the interest revenue and cost resulting from the interest-sensitive positions as at December 31
- the considered interest positions reflect all significant interest-sensitive positions of the Group companies
- the source of market interest rates is mainly IS Reuters and IS Bloomberg.

Potential impact of the interest risk as at December 31 (in CZK millions):

	2019	2018
IR sensitivity* to parallel yield curve shift (+10bp)	(6)	(6)

* Negative result denotes higher increase in interest costs than in interest revenues.

Credit Exposure

The Group is exposed to credit risk arising on all financial assets presented on the balance sheet and from provided guarantees. Credit exposure from provided guarantees not recorded on balance sheet at December 31 (in CZK millions):

	2019	2018
Guarantees off balance sheet provided to joint-ventures *	1,317	1,945

* Some of the guarantees could be called until June 2026 at the latest.

The guarantees provided relate to bank loans. The beneficiary may claim the guarantee only upon failure to comply with certain conditions of loans. The companies whose liabilities are the subject to the guarantees currently comply with their obligations.

Liquidity Risk

Maturity profile of financial liabilities based on contractual undiscounted payments at December 31, 2019 (in CZK millions):

	Loans	Bonds and debentures	Trade payables and other financial liabilities	Derivatives 1)	Guarantees issued 2)
Due in 2020	8,511	26,229	66,586	431,118	1,317
Due in 2021	4,690	27,057	3,002	75,296	-
Due in 2022	5,863	22,122	274	25,772	-
Due in 2023	1,945	7,331	37	4,074	-
Due in 2024	1,840	2,541	47	946	-
Thereafter	7,745	95,220	-	28,120	-
Total	30,594	180,500	69,946	565,326	1,317

Contractual maturity of undiscounted cash-flow of financial liabilities at December 31, 2018 (in CZK millions):

	Loans	Bonds and debentures	Trade payables and other financial liabilities	Derivatives 1)	Guarantees issued 2)
Due in 2019	15,276	6,240	63,885	444,227	1,945
Due in 2020	3,631	24,194	62	104,613	-
Due in 2021	3,113	27,193	-	34,950	-
Due in 2022	5,131	22,071	-	16,952	-
Due in 2023	1,318	7,148	7	4,714	-
Thereafter	5,627	78,976	-	29,525	-
Total	34,096	165,822	63,954	634,981	1,945

1) Contractual maturities for derivatives represent contractual cash out-flows of these instruments, but at the same time the Group will receive corresponding consideration. For fair values of derivatives see Note 18.

2) Maximum amount of the guarantee is allocated to the earliest period in which the guarantee could be called.

The committed credit facilities available to the Group as at December 31, 2019 and 2018 amounted to CZK 26.9 billion and CZK 15.8 billion, respectively. In addition, in December 2019, the Company signed a committed loan facility agreement with the European Investment Bank to support financing of the grid renewal and further development program in the Czech Republic up to EUR 330 million, i.e. CZK 8.4 billion, which was not drawn as of December 31, 2019.

19.3. Hedge Accounting

The Group enters into cash flow hedges of future highly probable cash inflows from the sales denominated in EUR against the currency risk. The hedged cash flows are expected to occur in the period from 2020 to 2026. The hedging instruments as at December 31, 2019 and 2018 are the EUR denominated liabilities from the issued Eurobonds and bank loans in the total amount of EUR 5.1 billion and EUR 4.0 billion, respectively, and currency forward contracts and swaps. The fair value of these derivative hedging instruments (currency forward contracts and swaps) amounted to CZK 695 million and CZK 178 million at December 31, 2019 and 2018, respectively.

The Group also enters into cash flow hedges of highly probable future sales of electricity in the Czech Republic from 2020 to 2025. The hedging instruments are the futures and forward contracts electricity sales in Germany. The fair value of these derivative hedging instruments amounted to CZK (1,302) million and CZK (20,236) million at December 31, 2019 and 2018, respectively.

The Group applied cash flow hedges of future highly probable purchases of emission allowances which had been expected to occur in 2018. The hedging instruments were the futures contracts for the purchase of allowances equivalent to 6.0 million tons of CO_2 emissions. The final settlement of the purchase of these hedged emission allowances was in December 2018.

In 2019 and 2018 the amounts removed from equity in respect of cash flow hedges were recognized in profit or loss and included in the lines Sales of electricity, heat, gas and coal, Gains and losses from commodity derivative trading, Other financial expenses and Other financial income and on the balance sheet in the lines Intangible assets, net and Emission rights. In 2019 and 2018 the Group recognized in profit or loss the ineffectiveness that arises from cash flow hedges in the amount of CZK 503 million and CZK (29) million, respectively. The ineffectiveness in 2019 and 2018 was mainly caused by the fact that the hedged cash flows are no more highly probable to occur.

20. Provisions

Provisions at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019			2018		
	Non-current	Current	Total	Non-current	Current	Total
Nuclear provisions	73,563	2,199	75,762	61,363	2,283	63,646
Provision for reclamation of mines and mining damages	9,138	234	9,372	8,285	317	8,602
Provision for waste storage reclamation	729	78	807	649	56	705
Provision for CO_2 emissions (Note 13)	-	6,801	6,801	-	5,588	5,588
Provision for obligation in case of claim from guarantee for Akcez group loans	-	1,362	1,362	-	908	908
Other provisions	6,082	3,579	9,661	5,501	3,171	8,672
Total	89,512	14,253	103,765	75,798	12,323	88,121

20.1. Nuclear Provisions

The Company operates two nuclear power plants. Nuclear power plant Dukovany consists of four units which were put into service from 1985 to 1987. Nuclear power plant Temelín has two units which have started commercial operation in 2002 and 2003. A Nuclear Act which defines obligations for the decommissioning of nuclear facilities and the disposal of radioactive waste and spent fuel (disposal). The Nuclear Act requires that all nuclear parts of plant and equipment be decommissioned following the end of the plant's operating life. For the purpose of accounting for the nuclear provisions, it is assumed that the end of operation will be 2037 for Dukovany and 2052 for Temelín. A 2018 Dukovany and a 2019 Temelín decommissioning cost study estimate that nuclear decommissioning will cost CZK 28.6 billion and CZK 22.4 billion, respectively. The Company makes contributions to a restricted bank accounts in the amount of the nuclear provisions recorded under the Nuclear Act. These funds can be invested in government bonds in accordance with legislation. These restricted financial assets are shown in the balance sheet as part of Restricted financial assets, net (see Note 4).

The Ministry of Industry and Trade established the Radioactive Waste Repository Authority (RAWRA) as the central organizer and operator of facilities for the final disposal of radioactive waste and spent fuel. The RAWRA operates, supervises and is responsible for disposal facilities and for disposal of radioactive waste and spent fuel therein. The activities of the RAWRA are financed through a nuclear account funded by the originators of radioactive waste. Contribution to the nuclear account is stated by Nuclear Act at 55 CZK per MWh produced at nuclear power plants. In 2019 and 2018, the payments to the nuclear account amounted to CZK 1,663 million and CZK 1,646 million, respectively. The originator of radioactive waste and spent fuel directly covers all costs associated with interim storage of radioactive waste and spent fuel.

The Group has established provisions as described in Note 2.24, to recognize its estimated liabilities for decommissioning and spent fuel storage. The following is a summary of the provisions for the years ended December 31, 2019 and 2018 (in CZK millions):

	Accumulated provisions			
	Nuclear decommis-sioning	Spent fuel storage: Interim	Spent fuel storage: Long-term	Total
Balance at January 1, 2018	20,813	7,647	33,156	61,616
Discount accretion and effect of inflation	537	191	829	1,557
Provision charged in profit or loss	-	527	-	527
Effect of change in estimate recognized in profit or loss	-	(43)	-	(43)
Effect of change in estimate added to (deducted from) fixed assets	2,429	-	(110)	2,319
Current cash expenditures	-	(684)	(1,646)	(2,330)
Balance at December 31, 2018	23,779	7,638	32,229	63,646
Discount accretion and effect of inflation	611	191	806	1,608
Provision charged in profit or loss	-	487	-	487
Effect of change in estimate recognized in profit or loss	-	979	-	979
Effect of change in estimate added to fixed assets	10,478	-	865	11,343
Current cash expenditures	-	(638)	(1,663)	(2,301)
Balance at December 31, 2019	34,868	8,657	32,237	75,762

The current cash expenditures for the long-term storage of spent nuclear fuel represent payments to the state controlled nuclear account and the expenditures for interim storage represent mainly the purchase of interim fuel storage containers and other related equipment.

In 2019 the Group recorded the change in estimate for interim storage of spent nuclear fuel in connection with the change in expectations of future storage cost and change in discount rate, the change in estimate in provision for nuclear decommissioning due to the update of the expert decommissioning study for nuclear power plant in Temelín and change in discount rate and the change in long-term spent fuel storage in connection with the modification of the expected output of the nuclear power plants and change in discount rate.

In 2018 the Group recorded the change in estimate for interim storage of spent nuclear fuel in connection with the change in expectations of future storage cost, the change in estimate in provision for nuclear decommissioning due to the update of the expert decommissioning study for nuclear power plant in Dukovany and the change in long-term spent fuel storage in connection with the modification of the expected output of the nuclear power plants.

The actual decommissioning and spent fuel storage costs could vary substantially from the above estimates because of new regulatory requirements, changes in technology, increased costs of labor, materials and equipment and/or the actual time required to complete all decommissioning, disposal and storage activities.

20.2. Provision for Mine Reclamation and Mining Damages and Waste Storage Reclamation

The following table shows the movements of provisions for the years ended December 31, 2019 and 2018 (in CZK millions):

	Mine reclamation and damages	Waste storage
Balance at January 1, 2018	7,922	1,002
Discount accretion and effect of inflation	193	25
Provision charged in profit or loss	251	-
Effect of change in estimate added to (deducted from) fixed assets	239	(71)
Current cash expenditures	(216)	(33)
Reversal of provision	-	(5)
Reclassification	213	(213)
Balance at December 31, 2018	8,602	705
Discount accretion and effect of inflation	204	18
Provision charged in profit or loss	131	-
Effect of change in estimate added to fixed assets	748	133
Current cash expenditures	(313)	(49)
Balance at December 31, 2019	9,372	807

The provision for decommissioning and reclamation of mines and mining damages was recorded by Severočeské doly a.s., a mining subsidiary of ČEZ. Severočeské doly a.s. operates open pit coal mines and is responsible for decommissioning and reclamation of the mines as well as for damages caused by the operations of the mines. These provisions have been calculated using the best estimates of the expenditures required to settle the present obligation at the balance sheet date. Current cash expenditures represent cash payments for current reclamation of mining area and settlement of mining damages. Change in estimate represents change in provision as result of updated cost estimates in the current period, mainly due to changes in expected prices of reclamation activities.

21. Other Financial Liabilities

Other financial liabilities at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019		
	Long-term liabilities	Short-term liabilities	Total
Payables from non-current assets purchase	1,531	-	1,531
Payables from purchase of emission rights held for trading	1,757	-	1,757
Other	72	343	415
Financial liabilities at amortized cost	3,360	343	3,703
Cash flow hedge derivatives	5,463	939	6,402
Commodity and other derivatives	877	61,905	62,782
Financial liabilities at fair value	6,340	62,844	69,184
Total	9,700	63,187	72,887

	2018		
	Long-term liabilities	Short-term liabilities	Total
Payables from non-current assets purchase	1,366	-	1,366
Deposits and other	69	1,229	1,298
Financial liabilities at amortized cost	1,435	1,229	2,664
Cash flow hedge derivatives	12,732	9,637	22,369
Commodity and other derivatives	887	99,421	100,308
Financial liabilities at fair value	13,619	109,058	122,677
Total	15,054	110,287	125,341

Short-term payables arising from purchase of non-current assets and emission rights held for trading are included in the line Trade payables.

22. Short-term Loans

Short-term loans at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019	2018
Short-term bank and other loans	4,253	11,516
Bank overdrafts	7	267
Total	4,260	11,783

Interest on short-term loans is variable. The weighted average interest rate was 0.7% and 0.4% at December 31, 2019 and 2018, respectively. For the years 2019 and 2018 the weighted average interest rate was 2% and 0.7%, respectively.

23. Other Short-term Liabilities

Other short-term liabilities at December 31, 2019 and 2018 are as follows (in CZK millions):

	2019	2018
Advances received from retail customers	20,927	20,125
Unbilled electricity and gas supplied to retail customers	(18,452)	(16,621)
Received advances from retail customers, net	2,475	3,504
Taxes and fees, except income tax	3,238	2,684
Other advances received	1,299	926
Deferred income	439	347
Other contract liability	93	-
Total	7,544	7,461

24. Leases

24.1. Group as a Lessee

The Group has lease contracts for various items of offices, cars, buildings and land used to place its own electricity and heat production facilities, and in some cases leases the entire production factory. Leases of cars generally have lease terms between 1 to 8 years, while buildings and lands between 4 to 21 years.

The Group has entered into lease contracts with fixed and variable payments. The variable payments are regularly adjusted according to the inflation index or are based on use of the underlying assets.

The Group also has certain leases of buildings, machinery or equipment with lease terms of 12 months or less or with low value. The Group applies the short-term lease and lease of low-value assets recognition exemptions for these leases.

The net book values of the right-of-use assets presented under Property, plant and equipment are described in the Note 3.

The amounts of lease liability are presented under Debt (see Note 17).

The following table sets out total cash outflows for lease payments (in CZK millions):

	2019
Payments of principal	787
Payments of interests	165
Lease payments not included in valuation of lease liability	119
Total cash outflow for leases	1,071

The following are the amounts that are recognized in profit or loss (in CZK millions):

	2019
Expense relating to short-term leases	108
Expense relating to low-value assets	4
Variable lease payments not included in valuation of lease liability	7
Depreciation charge for right-of-use assets	778
Interest expenses	174

Next year, the Group expects to pay lease payments that are not included in valuation of lease liability of CZK 119 million.

24.2. Group as a Lessor

Finance Lease

The most significant lease under finance lease is the lease of assets for electricity and heat production directly at the customer.

The following table sets out a maturity analysis of investment in finance lease, showing the undiscounted lease payments to be received after the reporting date (in CZK millions):

	2019	2018
Up to 1 year	59	62
Between 1 and 2 years	60	61
Between 2 and 3 years	54	55
Between 3 and 4 years	51	49
Between 4 and 5 years	46	45
Thereafter	145	145
Total undiscounted investment in finance lease	415	417
Unearned finance income	(62)	(64)
Net investment in the lease	353	353

The Group recognized interest income on lease receivables of CZK 14 million and CZK 7 million at December 31, 2019 and 2018, respectively.

Operating Lease

The net book values of the property, plant and equipment leased out under operating lease are disclosed in the Note 3.

Rental income recognized by the Group during 2019 and 2018 was CZK 200 million and CZK 187 million, respectively. In the following years, the Group expects rental income to be similar to the year 2019.

25. Revenues and Other Operating Income

The composition of revenues and other operating income for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Sales of electricity:		
Sales of electricity to end customers	49,620	45,941
Sales of electricity through energy exchange	742	4,134
Sales of electricity to traders	39,913	36,830
Sales to distribution and transmission companies	250	177
Other sales of electricity	28,083	20,733
Effect of hedging – presales of electricity (Note 19.3)	(9,662)	(5,596)
Effect of hedging – currency risk hedging (Note 19.3)	1,302	878
Total sales of electricity	110,248	103,097
Sales of gas, coal and heat:		
Sales of gas	7,968	7,072
Sales of coal	4,400	4,489
Sales of heat	7,802	6,792
Total sales of gas, coal and heat	20,170	18,353
Total sales of electricity, heat, gas and coal	130,418	121,450
Sales of services and other revenues:		
Distribution services	44,778	39,356
Other services	24,153	18,033
Rental income	200	187
Revenues from goods sold	1,110	1,132
Other revenues	1,122	1,160
Total sales of services and other revenues	71,363	59,868
Other operating income:		
Granted green and similar certificates	1,144	995
Contractual fines and interest fees for delays	474	334
Gain on sale of property, plant and equipment	147	137
Gain on sale of material	126	169
Other	2,520	1,533
Total other operating income	4,411	3,168
Total revenues and other operating income	206,192	184,486

The Group drew in 2019 and 2018 grants related to income in amount CZK 491 million and CZK 552 million, respectively. Grants related to income are included in Other operating income in item Other.

Revenues from contracts with customers for the years ended December 31, 2019 and 2018 were CZK 209,941 million and CZK 185,849 million, respectively, and can be linked to the above figures as follows:

	2019	2018
Sales of electricity, heat, gas and coal	130,418	121,450
Sales of services and other revenues	71,363	59,868
Total revenues	201,781	181,318
Adjustments:		
Effect of hedging – presales of electricity	9,662	5,596
Effect of hedging – currency risk hedging	(1,302)	(878)
Rental income	(200)	(187)
Revenues from contracts with customers	209,941	185,849

The Group assumes that the revenues related to construction contracts liabilities that are unsatisfied as at December 31, 2019, will recognize in statement of income in the following periods (in CZK millions):

	2019
Within 1 year	9,504
More than 1 year	2,253
Total	11,757

Revenues related to construction contracts liabilities that were unsatisfied as at December 31, 2018, were CZK 7,834 million.

26. Gains and Losses from Commodity Derivative Trading

The composition of gains and losses from commodity derivative trading for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Electricity derivative trading:		
Sales – domestic	18,997	13,537
Sales – foreign	290,588	259,360
Purchases – domestic	(18,467)	(13,311)
Purchases – foreign	(291,464)	(264,806)
Changes in fair value of derivatives	8,359	5,601
Total gains from electricity derivative trading	8,013	381
Other commodity derivative trading:		
Loss from gas derivative trading	(513)	(409)
Gain (loss) from oil derivative trading	6	(22)
Gain (loss) from coal derivative trading	(298)	(84)
Gain from emission rights derivative trading	402	709
Total gains and losses from commodity derivative trading	7,610	575

27. Purchase of Electricity, Gas and Other Energies

The composition of purchase of electricity, gas and other energies for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Purchase of electricity for resale	(46,583)	(44,611)
Purchase of gas for resale	(6,539)	(5,211)
Purchase of other energies	(2,423)	(2,346)
Total purchase of electricity, gas and other energies	(55,545)	(52,168)

28. Fuel and Emission Rights

The composition of fuel and emission rights for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Consumption of fossil energy fuel and biomass	(6,939)	(7,236)
Amortization of nuclear fuel	(4,096)	(4,027)
Consumption of gas	(3,717)	(2,712)
Emission rights for generation	(6,605)	(5,089)
Total fuel and emission rights	(21,357)	(19,064)

29. Services

The composition of services for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Transmission grid services for distribution of electricity	(5,544)	(4,701)
Other distribution services	(2,964)	(518)
Repairs and maintenance	(5,734)	(4,584)
Other services	(16,989)	(16,289)
Total services	(31,231)	(26,092)

Information about fees charged by independent auditors is provided in the annual report of CEZ Group.

30. Salaries and Wages

Salaries and wages for the years ended December 31, 2019 and 2018 were as follows (in CZK millions):

	2019		2018	
	Total	Key management personnel [1]	Total	Key management personnel [1]
Salaries and wages including remuneration of the board members	(20,852)	(251)	(18,386)	(247)
Share options	(38)	(38)	(33)	(33)
Social and health security	(6,064)	(47)	(5,427)	(46)
Other personal expenses	(1,866)	(14)	(1,774)	(23)
Total	(28,820)	(350)	(25,620)	(349)

[1] Key management personnel represent members of Supervisory Board, Audit Committee and Board of Directors of the parent company and selected managers of departments with group field of activity. The remuneration of former members of company bodies is also included in personal expenses.

At December 31, 2019 and 2018, the aggregate number of share options granted to members of Board of Directors and selected managers was 1,651 thousand and 1,904 thousand, respectively.

Members of the Board of Directors and selected managers were entitled until December 31, 2019 to receive share options based on the conditions stipulated in the share option agreement. Members of the Board of Directors and selected managers were granted certain quantity of share options each year of their tenure according to rules of the share option plan until the share option plan was terminated as of December 31, 2019. The exercise price for the granted options was based on the average quoted market price of the shares on the regulated exchange in the Czech Republic during one-month period preceding the grant date each year. Options granted could be exercised at the earliest 2 years and latest 3.5 years after each grant date. Option right is limited so that the profit per share option will not exceed 100% of exercise price.

Beginning on January 1, 2020, the new program of long-term performance bonus has been started, replacing the options program. New options will no longer be granted and the existing granted options as at December 31, 2019 in the number of 1,651 thousand are preserved, i.e. after a proportional reduction of the original annual allocations in 2019. The program of long-term performance bonus is based on performance units that will be allocated to each beneficiary every year. The number of performance units allocated is based on the defined yearly value of a given long-term bonus and the price of stocks before the allocation. The Supervisory Board sets out the performance indicators for each year's allocation of the performance units. The defined performance indicators will be evaluated by the Supervisory Board and number of performance units allocated to a beneficiary will be adjusted accordingly. Then a two-year holding period will follow. The long-term performance bonus will be paid three years after the initial allocation, and the amount will be based on the adjusted number of performance units as well as on the stock price at the end of the holding period and the amount of dividends distributed during the holding period.

The following table shows changes during 2019 and 2018 in the number of granted share options and the weighted average exercise price of these options:

	Number of share options			
	Board of Directors ‘000s	Selected managers ‘000s	Total ‘000s	Weighted average exercise price (CZK per share)
Share options at January 1, 2018	1,814	512	2,326	496.89
Options granted	590	185	775	542.63
Options exercised [1)]	(350)	(130)	(480)	438.03
Options forfeited	(560)	(157)	(717)	615.88
Share options at December 31, 2018 [2)]	1,494	410	1,904	485.52
Options granted [3)]	239	117	356	536.25
Options exercised [1)]	(454)	(120)	(574)	434.74
Options forfeited	-	(35)	(35)	536.96
Share options at December 31, 2019 [2)]	1,279	372	1,651	513.02

[1)] In 2019 and 2018 the weighted average market share price at the date of the exercise for the options exercised was CZK 542.81 and CZK 539.42, respectively.

[2)] At December 31, 2019 and 2018 the number of exercisable options was 540 thousand and 390 thousand, respectively. The weighted average exercise price of the exercisable options was CZK 455.32 per share and CZK 443.84 per share at December 31, 2019 and 2018, respectively.

[3)] The original annual allocations in 2019 were proportionally reduced on the termination of the share options plan at December 31, 2019 to correspond to the number of options determined based on the number of days remaining from the date of the relevant 2019 allocation until the end of the share option plan. The presented number corresponds to the total number of options granted in 2019 after this reduction.

The fair value of the options is estimated on the date of grant using the binomial option-pricing model. Because these stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, the existing models do not necessarily provide a reliable single measure of the fair value of stock options.

At the grant dates, the underlying assumptions and the resulting fair values per option were as follows:

	2019	2018
Weighted average assumptions:		
Dividend yield	3.6%	2.7%
Expected volatility	15.7%	18.1%
Mid-term risk-free interest rate	1.6%	0.9%
Expected life (years)	1.4	1.4
Grant-date share price (CZK per share)	533.7	543.4
Weighted average grant-date fair value of options (CZK per 1 option)	36.3	41.4

The expected life of the options is based on historical data and is not necessarily indicative of the exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility is indicative of future trends, which may also not necessarily be the actual outcome.

As at December 31, 2019 and 2018 the exercise prices of outstanding options were in the following ranges (in thousand pieces):

	2019	2018
CZK 400–500 per share	540	1,124
CZK 500–600 per share	1,111	780
Total	1,651	1,904

The options granted which were outstanding as at December 31, 2019 and 2018 had an average remaining contractual life of 1.9 years and 2.3 years, respectively.

31. Other Operating Expenses

Other operating expenses for the years ended December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019	2018
Change in provisions	1,005	541
Taxes and fees	(3,256)	(3,330)
Cost of goods sold	(778)	(778)
Consumption of guarantees of origin and green and similar certificates	(1,766)	(938)
Insurance	(739)	(696)
Costs related to trading of commodities	(415)	(356)
Gifts	(349)	(336)
Bad debt expense	(210)	(205)
Loss on sale of property, plant and equipment	(17)	(10)
Other	(2,357)	(992)
Total	(8,882)	(7,100)

Taxes and fees include the contributions to the nuclear account (see Note 20.1). The settlement of the provision for long-term spent fuel storage is accounted for at the amount of contributions to nuclear account. Settlement of provision for long-term spent fuel storage is included in Change in provisions.

32. Interest Income

Interest income for each category of financial assets for the years ended December 31, 2019 and 2018 is as follows (in CZK millions):

	2019	2018
Debt financial assets designated at fair value through other comprehensive income	228	197
Bank accounts	126	84
Loans and receivables	41	13
Debt financial assets at amortized cost	7	8
Financial assets and liabilities at fair value through profit or loss	1	13
Total	403	315

33. Other Financial Expenses

Other financial expenses for the years ended December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019	2018
Derivative losses	(199)	(47)
Foreign exchange rate loss	(315)	(776)
Loss on sales of debt financial assets	-	(11)
Creation and settlement of provision	(26)	(17)
Loss on revaluation of equity financial assets	(90)	-
Other	(183)	(200)
Total	(813)	(1,051)

34. Other Financial Income

Other financial income for the years ended December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019	2018
Derivative gains	77	933
Gain from revaluation of financial assets	151	128
Dividend income	140	177
Gain on disposal of subsidiaries, associates and joint-ventures	3	159
Foreign exchange rate gain	33	-
Other	257	890
Total	661	2,287

35. Income Taxes

Companies resident in the Czech Republic calculated corporate income tax in accordance with the Czech tax regulations at the rate of 19% in 2019 and 2018. Management believes that it has adequately provided for tax liabilities in the accompanying financial statements. However, the risk remains that the relevant financial authorities could take differing positions with regard to interpretive issues, which could have a potential effect on reported income.

The components of the income tax provision are as follows (in CZK millions):

	2019	2018
Current income tax charge	(4,100)	(4,191)
Adjustments in respect of current income tax of previous periods	(19)	(57)
Deferred income taxes	208	1,231
Total	(3,911)	(3,017)

The differences between income tax expense computed at the statutory rate and income tax expense provided on earnings are as follows (in CZK millions):

	2019	2018
Income before income taxes	18,411	13,517
Statutory income tax rate in Czech Republic	19%	19%
"Expected" income tax expense	(3,498)	(2,568)
Tax effect of:		
Non-deductible expenses related to shareholdings	6	(26)
Goodwill and other non-current assets impairment	(244)	(174)
Share of profit (loss) from associates and joint-ventures	3	(72)
Adjustments in respect of current income tax of previous periods	(19)	(57)
Effect of different tax rate in other countries	115	(80)
Change in unrecorded deferred tax asset	11	236
Provisions	(155)	(131)
Dividend income	27	34
Other already taxed, tax exempt or non-deductible items, net	(157)	(179)
Income taxes	(3,911)	(3,017)
Effective tax rate	21%	22%

Deferred income taxes, net, at December 31, 2019 and 2018 consist of the following (in CZK millions):

	2019	2018
Nuclear provisions	12,422	10,217
Financial statement depreciation in excess of tax depreciation	2,149	2,141
Revaluation of financial instruments	737	4,451
Allowances	1,245	1,088
Other provisions	3,327	2,771
Lease liabilities	853	67
Tax loss carry forwards	1,597	1,492
Other temporary differences	633	475
Unrecorded deferred tax asset	(818)	(829)
Total deferred tax assets	22,145	21,873
Tax depreciation in excess of financial statement depreciation	(36,254)	(32,377)
Revaluation of financial instruments	(101)	(184)
Other provisions	(402)	(441)
Right-of-use assets	(816)	(3)
Investment in finance lease	(96)	(97)
Other temporary differences	(3,621)	(4,201)
Total deferred tax liability	(41,290)	(37,303)
Total deferred tax liability, net	(19,145)	(15,430)
Reflected in the balance sheet as follows:		
Deferred tax assets	1,481	1,269
Deferred tax liability	(20,626)	(16,699)
Total deferred tax liability, net	(19,145)	(15,430)

Movements in net deferred tax liability, net in 2019 and 2018 were as follows (in CZK millions):

	2019	2018
Balance at January 1	15,430	18,696
Deferred tax classified as held for sale as of January 1	164	-
Adoption of IFRS 9 and IFRS 15	-	565
Deferred tax recognized in profit or loss	(208)	(1,231)
Deferred tax recognized in other comprehensive income	3,626	(2,544)
Acquisition of subsidiaries	248	175
Disposal of subsidiaries	-	(47)
Currency translation differences	(12)	(20)
Deferred tax classified as held for sale as of December 31	(103)	(164)
Balance at December 31	19,145	15,430

At December 31, 2019 and 2018 the aggregate amount of temporary differences associated with investments in subsidiaries, for which no deferred tax liability was recognized, amounted to CZK 24,617 million and CZK 25,889 million, respectively.

Tax effects relating to each component of other comprehensive income (in CZK millions):

	2019			2018		
	Before tax amount	Tax effect	Net of tax amount	Before tax amount	Tax effect	Net of tax amount
Change in fair value of cash flow hedges	10,891	(2,069)	8,822	(16,016)	3,043	(12,973)
Cash flow hedges reclassified to statement of income	8,253	(1,568)	6,685	3,927	(746)	3,181
Cash flow hedges reclassified to assets	-	-	-	(972)	185	(787)
Change in fair value of debt instruments	326	(60)	266	(363)	73	(290)
Disposal of debt instruments	(7)	1	(6)	-	-	-
Change in fair value of equity instruments	(347)	67	(280)	87	(11)	76
Translation differences – subsidiaries	(1,337)	-	(1,337)	107	-	107
Translation differences – associates and joint-ventures	21	-	21	115	-	115
Disposal of translation differences	-	-	-	1	-	1
Share on other equity movements of associates and joint-ventures	(8)	-	(8)	-	-	-
Re-measurement gains (losses) on defined benefit plans	(48)	3	(45)	(22)	-	(22)
Total	17,744	(3,626)	14,118	(13,136)	2,544	(10,592)

36. Related Parties

The Group purchases from and sells to related parties products, goods and services in the ordinary course of business.

At December 31, 2019 and 2018, the receivables from related parties and payables to related parties are as follows (in CZK millions):

	Receivables		Payables	
	2019	2018	2019	2018
Akenerji Elektrik Üretim A.S.	2	18	-	-
Elevion Co-Investment GmbH & Co. KG	-	-	80	123
in PROJEKT LOUNY ENGINEERING s.r.o.	7	5	3	5
LOMY MOŘINA spol. s r.o.	1	2	27	20
Socrates Windprojekt GmbH & Co. KG [1)]	111	-	-	-
Výzkumný a zkušební ústav Plzeň s.r.o.	86	74	5	2
Other	29	19	29	78
Total	236	118	144	228

[1)] Company is related party since April 30, 2019.

The following table provides the total amount of transactions, which have been entered into with related parties for 2019 and 2018 (in CZK millions):

	Sales to related parties		Purchases from related parties	
	2019	2018	2019	2018
Akcez Enerji A.S.	12	21	-	-
Akenerji Elektrik Enerjisi Ithalat Ihracat ve Toptan Ticaret A.S.	-	-	102	25
Akenerji Elektrik Üretim A.S.	-	30	-	-
in PROJEKT LOUNY ENGINEERING s.r.o.	23	32	18	26
LOMY MOŘINA spol. s r.o.	10	13	194	176
Teplo Klášterec s.r.o.	57	57	-	-
VLTAVOTÝNSKÁ TEPLÁRENSKÁ a.s.	27	27	3	2
Other	18	153	43	216
Total	147	333	360	445

Dividend income, interest and other financial income from related parties for the relevant financial year (in CZK millions):

	Interest and other financial income		Dividend income	
	2019	2018	2019	2018
Akcez Enerji A.S.	24	16	-	-
LOMY MOŘINA spol. s r.o.	-	-	5	5
Sakarya Elektrik Dagitim A.S.	6	6	-	-
Other	6	-	11	3
Total	36	22	16	8

Information about compensation of key management personnel is included in Note 30. Information about guarantees provided to joint-ventures is included in Note 19.2.

37. Segment Information

The Group reports its result using six reportable operating segments:

- Generation – Traditional Energy
- Generation – New Energy
- Distribution
- Sales
- Mining
- Support Services

The segments are defined across the countries that CEZ Group operates. Segment is a functionally autonomous part of CEZ Group that serves a single part of the value chain in the energy sector and is within the purview of individual members of the ČEZ, a. s. Board of Directors.

A change in the classification of CEZ Group companies into operating segments was made with effect from January 1, 2019. In particular, most companies from the "Other" segment were transferred to different segments and the segment was renamed to "Support Services". The original segmentation primarily reflected core business activities of the respective company; now more account is taken of mutual business relations making up the overall segment chain. For example, SD - Kolejová doprava (a service subsidiary of Severočeské doly) was transferred from the "Other" segment to the "Mining" segment. The segment information for previous period of the year 2018 has been adjusted to provide fully comparative information on the same basis.

The Group accounts for intersegment revenues and transfers as if the revenues or transfers were to third parties, that is, at current market prices or where the regulation applies at regulated prices.

In segment reporting, IFRS 16 is applied to external leases from the Group's perspective, but it is not applied to leases between individual operating segments, although in some cases the asset is leased to another segment internally.

The Group evaluates the performance of its segments based on EBITDA (see Note 16).

The following tables summarize segment information by operating segments for the years ended December 31, 2019 and 2018 (in CZK millions):

Year 2019:	Generation – Traditional Energy	Generation – New Energy	Distribution	Sales	Mining	Support Services	Combined	Elimination	Consolidated
Revenues and other operating income – other than intersegment	61,498	6,353	43,151	86,549	4,883	3,758	206,192	-	206,192
Revenues and other operating income – intersegment	36,864	382	632	7,063	6,099	4,781	55,821	(55,821)	-
Total revenues and other operating income	98,362	6,735	43,783	93,612	10,982	8,539	262,013	(55,821)	206,192
EBITDA	25,632	3,936	20,553	3,726	4,991	1,347	60,185	(10)	60,175
Depreciation and amortization	(15,167)	(1,881)	(6,669)	(1,340)	(2,763)	(1,196)	(29,016)	-	(29,016)
Impairment of property, plant and equipment and intangible assets	(3,182)	1,041	(2,754)	(1)	22	14	(4,860)	-	(4,860)
EBIT	7,291	3,096	11,165	2,407	2,280	200	26,439	(10)	26,429
Interest on debt and provisions	(6,777)	(239)	(821)	(337)	(211)	(103)	(8,488)	1,122	(7,366)
Interest income	775	180	176	157	109	128	1,525	(1,122)	403
Share of profit (loss) from associates and joint-ventures	(24)	1	(90)	123	8	-	18	-	18
Income taxes	(550)	(156)	(2,218)	(468)	(454)	(65)	(3,911)	-	(3,911)
Net income	11,859	3,063	7,259	1,867	1,862	696	26,606	(12,106)	14,500
Identifiable assets	249,324	27,712	116,132	6,616	22,612	5,692	428,088	-	428,088
Investment in associates and joint-ventures	2,589	235	-	280	179	-	3,283	-	3,283
Unallocated assets									273,203
Total assets									704,574
Capital expenditure	10,759	682	13,709	1,530	2,306	1,088	30,074	(285)	29,789
Average number of employees	9,934	166	9,008	6,574	4,789	1,101	31,572	-	31,572

Year 2018:

	Gene-ration – Traditional Energy	Gene-ration – New Energy	Distribu-tion	Sales	Mining	Support Services	Combined	Elimina-tion	Consoli-dated
Revenues and other operating income – other than intersegment	56,482	5,678	40,656	76,555	4,827	288	184,486	-	184,486
Revenues and other operating income – intersegment	32,820	511	787	7,189	5,830	4,167	51,304	(51,304)	-
Total revenues and other operating income	89,302	6,189	41,443	83,744	10,657	4,455	235,790	(51,304)	184,486
EBITDA	16,664	2,895	19,922	4,280	4,507	1,272	49,540	(5)	49,535
Depreciation and amortization	(16,117)	(1,790)	(6,201)	(473)	(2,644)	(914)	(28,139)	-	(28,139)
Impairment of property, plant and equipment and intangible assets	(1,249)	191	(671)	1	20	(58)	(1,766)	-	(1,766)
EBIT	(635)	1,297	13,074	3,808	1,906	314	19,764	(5)	19,759
Interest on debt and provisions	(6,565)	(165)	(397)	(170)	(194)	(98)	(7,589)	612	(6,977)
Interest income	499	121	130	61	41	75	927	(612)	315
Share of profit (loss) from associates and joint-ventures	(25)	-	(458)	169	6	-	(308)	-	(308)
Income taxes	871	(241)	(2,394)	(806)	(361)	(86)	(3,017)	-	(3,017)
Net income	25,673	1,292	9,605	3,021	1,504	788	41,883	(31,383)	10,500
Identifiable assets	247,784	27,400	109,806	4,046	22,055	4,823	415,914	(6)	415,908
Investment in associates and joint-ventures	2,645	235	-	305	176	-	3,361	-	3,361
Unallocated assets									288,174
Total assets									707,443
Capital expenditure	8,268	439	12,900	669	2,576	1,848	26,700	(314)	26,386
Average number of employees	9,788	164	9,165	5,503	4,850	1,075	30,545	-	30,545

Prices in certain intersegment transactions are regulated by the Energy Regulatory Office (see Note 1).

The following table shows the split of revenues and other operating income according to the location of the entity where the revenues are originated (in CZK million):

	2019	2018
Czech Republic	138,324	128,526
Bulgaria	18,339	16,546
Romania	16,379	13,653
Germany	13,704	9,170
Poland	10,148	10,930
Other	9,298	5,661
Total revenues and other operating income	206,192	184,486

The following table shows the split of property, plant and equipment according to the location of entity which they belong to at December 31, 2019 and 2018 (in CZK million):

	2019	2018
Czech Republic	388,917	378,663
Romania	24,431	23,734
Germany	7,987	6,458
Poland	5,265	6,182
Other	1,488	871
Total property, plant and equipment	428,088	415,908

38. Net Income per Share

	2019	2018
Numerator (CZK millions)		
Basic and diluted:		
Net income attributable to equity holders of the parent	14,373	10,327
Denominator (thousands shares)		
Basic:		
Weighted average shares outstanding	535,255	534,733
Dilutive effect of share options	119	246
Diluted:		
Adjusted weighted average shares	535,374	534,979
Net income per share (CZK per share)		
Basic	26.9	19.3
Diluted	26.8	19.3

39. Commitment and Contingencies

Investment Program

The Group is engaged in a continuous construction program, currently estimated as of December 31, 2019 over the next five years as follows (in CZK billion):

2020	37.1
2021	36.4
2022	40.7
2023	37.4
2024	34.0
Total	185.6

These figures do not include the expected acquisitions of subsidiaries, associates and joint-ventures and any specific development investments, whose implementation will depend on the specific future market conditions. New investments in subsidiaries, associates and joint-ventures will depend on the number of future investment opportunities, for which the Group will be a successful bidder and also considering the recoverability of these investments.

The construction programs are subject to periodic reviews and actual construction may vary from the above estimates. At December 31, 2019 significant purchase commitments were outstanding in connection with the construction program.

Insurance Matters

The Nuclear Act sets limits for liabilities for nuclear damages so that the operator of nuclear installations for energy generation purposes is liable for up to CZK 8 billion per incident. The Nuclear Act limits the liability for damage caused by other nuclear installations and activities (such as transportation) to CZK 2 billion. The Nuclear Act also requires an operator to insure its liability connected with the operation of a nuclear power plant up to a minimum of CZK 2 billion and up to a minimum of CZK 300 million for other activities (such as transportation). The Company concluded the above-mentioned insurance policies with company Generali Česká pojišťovna a.s. (representing Czech Nuclear Insurance Pool) and European Liability Insurance for the Nuclear Industry. The Company has obtained all insurance policies with minimal limits as required by the law.

The Group also maintains the insurance policies covering the assets of its coal-fired, hydroelectric, CCGT and nuclear power plants and general third party liability insurance in connection with main operations of the Group.

These consolidated financial statements have been authorized for issue on March 16, 2020.

Daniel Beneš
Chairman of Board of Directors

Martin Novák
Member of Board of Directors