Financials 2020

Financials 2020 – Reader's guide

This report consists of the operating and financial review and the consolidated financial statements of Fortum Group, including the parent company financial statements. Other parts of Fortum's reporting entity include CEO's business review, corporate governance statement, remuneration report as well as tax footprint, which are published on Fortum's webpage. Sustainability reporting is an integrated part of Fortum's annual reporting and additional information on sustainability operations can be found on Forum's website in sustainability section.

Operating and financial review
This section includes description of Fortum's financial performance during 2020. Here you will also find a description of the risk management as well as information on sustainability and Fortum share performance.

Consolidated financial statements
Primary statements include Fortum's consolidated income statement, statement of comprehensive income, balance sheet, statement of changes in total equity and cash flow statement.

Notes
The notes to the consolidated financial statements are grouped to six sections based on their nature. Use the note number list on the right side of the notes pages to navigate in the financial statements.

Key figures
Key figures consist of financial key figures, share key figures and operational key figures for 2019–2020. The financial key figures derive mainly from the primary statements. Segment key figures include information on segments.

Parent company financial statements
Here you can read the parent company financial statements including the primary statements, cash flow and notes to the financial statements.

Signatures for the operating and financial review and financial statements
The Board of Directors' and the CEO's signatures of the operating and financial review and financial statements are in this section.

Auditor's report
This section includes the audit report issued by Fortum Oyj's auditor, Deloitte Oy.

Key figures 2011–2020, operational key figures and quarterly financial information
Look here for financial key figures, share key figures, operational key figures and volume related key figures for 2011–2020 as well as capex and quarterly financial information for the years 2019 and 2020.

Investor information
Here you will find information on Fortum's Annual General Meeting, dividend payment, basic share information as well as details of the financial information available to shareholders in 2021.

Notes

1–3 Basis of preparation
These notes describe the basis of preparing the consolidated financial statements and consist of the accounting policies, critical accounting estimates and judgements and information about acquisitions and disposals.

4–5 Risks
In the Risks section you will find notes that disclose how Fortum manages financial risks and capital risks.

6–13 Income statement
These notes provide supporting information for the income statement.

14–33 Balance sheet
These notes provide supporting information for the balance sheet.

34–36 Off balance sheet items
The notes in this section provide information on items that are not included on the balance sheet.

37–39 Group structure and related parties
This section includes information on related party transactions, events after balance sheet date and the group companies of Fortum group.

The following symbols show which amounts in the notes reconcile to the items in income statement, balance sheet and cash flow statement.

IS = Income statement
BS = Balance sheet
CF = Cash flow

Financials 2020

Financial performance and position

Good performance in a challenging year – Strategy updated to drive the clean energy transition

Key figures

EUR million	2020	2019	2018	Change 20/19
IS Sales	49,015	5,447	5,242	800%
Comparable EBITDA [1]	2,434	1,766	1,523	38%
IS Comparable operating profit	1,344	1,191	987	13%
IS Operating Profit	1,599	1,118	1,138	43%
- of sales %	3.3	20.5	21.7	
IS Share of profit of associates and joint ventures [1]	656	744	38	-12%
IS Profit before income tax	2,199	1,728	1,040	27%
- of sales %	4.5	31.7	19.8	
IS Earnings per share, EUR	2.05	1.67	0.95	23%
CF Net cash from operating activities [2]	2,555	1,575	804	62%
Shareholders' equity per share, EUR	14.58	14.61	13.33	0%
Financial net debt (at end of period) [3]	7,023	4,833	N/A	45%
Adjusted net debt (at end of period) [3]	9,784	4,978	N/A	97%
Interest-bearing net debt (at end of period) [3]	N/A	5,260	5,509	
Financial net debt/comparable EBITDA [1] [3]	2.9	N/A	N/A	
Comparable net debt/EBITDA [1] [3]	N/A	3.0	3.6	
Return on capital employed, % [3]	N/A	10.0	6.7	
Return on shareholders' equity, %	12.9	11.9	6.8	
Equity-to-assets ratio, %	27	57	54	

1) Comparable EBITDA is defined as an alternative performance measure and used as a component in the capital structure target 'Financial net debt-to-Comparable EBITDA'. In 2020 Comparable EBITDA includes contribution from Uniper for the period of 1 April to 31 December 2020 since Uniper was consolidated as a subsidiary from 31 March 2020. Until 31 of March 2020 Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.
2) Change in net margin liabilities has been reclassified from operating cash flows to investing cash flows and to financing cash flows.
3) Following the consolidation of Uniper, Fortum has updated its definition of net debt and uses financial net debt and adjusted net debt.

See ▸ **Definitions of key figures**

The year 2020 will be remembered first and foremost for the Covid-19 pandemic that shook the world and impacted the lives and livelihoods of people all around the globe. While the utilities sector, and Fortum more specifically, was also affected by the pandemic, we suffered clearly less than many other sectors and companies. Our focus through the challenging times was – and continues to be – on securing the well-being of our employees and thereby ensuring uninterrupted supply of power and heat to our customers and the societies around us.

Over the course of the year, we stood up to the challenge very well and successfully operated our power plants, carried out the annual overhauls, and secured the construction and commissioning of new power plants without major disturbances. In the Nordics we commissioned both the 90-MW Kalax and 99-MW Sørfjord wind parks, and in Russia we brought a total of 550 MWs of wind capacity to the market. At the same time, our subsidiary Uniper's construction projects at Irsching and Scholven in Germany and the modernisation of the Surgutskaya power plant in Russia are proceeding according to plan.

We have also continued our strategy execution tenaciously. During the year, we increased our ownership in Uniper from 49.99% to approximately 76%, and consolidated Uniper as a subsidiary into our financials as a separate reporting segment. One of the key focus areas in 2020 was intensifying the cooperation between Fortum and Uniper. As a result, we presented an updated strategy covering the whole Fortum Group at the beginning of December. Building on our strong position in CO_2-free power generation and gas as well as our expertise in sustainable industrial and infrastructure solutions, the strategy focuses on driving the clean energy transition. With determined execution of our strategy, we intend to deliver sustainable financial performance and target a growing dividend over the years to come. Our strategy is aligned with the goals of the Paris Agreement, targeting carbon neutrality for the Group by 2050 and in our European generation already in 2035.

As part of our strategy execution in 2020, we continued to optimise our portfolio and decided to divest our district heating businesses in Joensuu and Järvenpää in Finland after a strategic review. The sales gains recorded for these assets totalled EUR 722 million. The strategic reviews of our district heating assets in the Baltics, Poland, and Sweden as well as of our Consumer Solutions business are ongoing.

In 2020, Europe took determined strides on climate policy. The EU's Green Deal package with a clear commitment to climate neutrality by 2050 and tighter emissions reduction targets for 2030 was a truly welcome development as it bundles up all EU policy areas and all sectors of society. Until now, the focus of decarbonisation has largely been on the power sector, but the Green Deal has a society-wide approach. The tighter targets will be translated into a substantially tighter EU emission trading system in the upcoming years and the expansion of it is also on the table. This is something we for several years have been advocating for and we are very pleased with the development. This decision has also supported the price of CO_2 emission allowances, which are trading around twice the price compared to a year ago. The hydrogen economy also took several steps forward, with the EU Commission and several member states presenting their hydrogen strategies. This is a very welcome development, as the role of hydrogen made from CO_2-free power will play a key role in decarbonising the European economy, including many sectors that are hard to decarbonise, such as heavy transport and some industrial processes.

The market conditions in 2020 were characterised, not only by the pandemic and market volatility, but for us even more so by the wet hydrology in the Nordics that pushed power prices heavily down. Towards the end of the year, CO_2 emission allowance and commodity prices started to recover, which was also reflected in increasing power prices. While 2020 was a rough year for many energy commodities, European gas and power demand suffered only mildly – both in the region of a 3-4% decrease year-on-year.

The 2020 financial results for our Generation segment were burdened by the low power prices and low nuclear volumes especially in the fourth quarter. Our successful hedging significantly alleviated the effect of the low power prices. In the City Solutions segment, the result declined on warm weather and low power prices, while Consumer Solutions' results continued to improve. Despite the impact of the pandemic in the first half of 2020 and the lower power margins, our Russia segment fared well operationally, and the result decline was to a large extent due to the change in the Russian rouble exchange rate. Uniper's results generally follow a seasonal pattern with the first and fourth quarters being the strongest. As a result of the strong hedging and optimisation in the power and gas business, the fourth-quarter 2020 results of the Uniper segment significantly contributed to Fortum's comparable operating profit.

In line with our updated dividend policy and what we communicated in early December, the Board of Directors proposes a dividend of EUR 1.12 per share for the financial year 2020, an increase from the stable dividend we have been paying for several years.

Changes in reporting

Uniper consolidation

As the majority owner of Uniper, Fortum consolidated Uniper as a subsidiary as of 31 March 2020. Uniper is a separate reportable segment of Fortum. Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from 1 April 2020, consolidated Uniper's results into its income statement. In 2019 and in the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement.

When consolidating Uniper's results into Fortum's income statement, the income statement line items have been classified in accordance with Fortum's income statement categorisation and, as such, may not be fully comparable to Uniper's standalone income statement. In the consolidation of Uniper's results, Fortum has utilised the 'Components of adjusted EBIT' reported by Uniper (see Uniper's Annual Report 2020, page 38). Furthermore, reporting of both the Uniper segment and the Generation segment are impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG AB.

Purchase price allocation

The preparation of the purchase price allocation for the Uniper acquisition is being finalised and will be completed within the one-year window from the acquisition date, i.e. by 31 March 2021.

At 31 December 2020, Fortum presents the preliminary purchase price allocation for the Uniper acquisition, which has resulted in adjustments to Uniper's opening balance sheet on 31 March 2020. These adjustments led to restatement of the first, second, and third quarters of 2020 (Restated quarterly financials separately published on 12 March 2021).

The financial effect of the purchase price allocation of the Uniper acquisition on the comparable operating profit of the Uniper segment in 2020 totals EUR 57 million resulting from one-time adjustments of EUR +68 million and recurring adjustments of EUR -11 million. See below.

Recurring adjustments:

- Fair value adjustments made to Uniper's opening balance sheet on 31 March 2020 mainly relate to property, plant, and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, as well as deferred taxes. The increase in the value of property, plant, and equipment resulted in additional depreciations (EUR 11 million in 2020) impacting Comparable operating profit. In addition the increase in the value of the lease liability (due to a lower discount rate) resulted in lower interest costs (EUR 26 million in 2020).

One-time adjustments:

- The purchase price allocation resulted in certain one-time adjustments to the results of the Uniper segment for the second, third and fourth quarters of 2020, which are now reflected in the acquisition date opening balance sheet on 31 March 2020. The total one-time impact in 2020 on comparable operating profit is EUR +68 million, and on items affecting comparability EUR -31 million.

Excess of the acquisition value over the fair value of Uniper's net assets, resulted in a preliminary goodwill amount of EUR 515 million.

Other changes

The following changes have been made in comparison to Fortum's 2019 Annual Financial Statements in order to align with Uniper:

- Fortum updated the definition of 'net debt' and applied the use of 'financial net debt' and 'adjusted net debt' when following indebtedness of the Group.
- Fortum updated the definition of 'Items affecting comparability' and 'Comparable operating profit'.
- Fortum reclassified the 'change in net margin liabilities from operating cash flows' in the consolidated cash flow statement so that the 'change in margin receivables' is presented in 'investing cash flows', and the 'change in margin liabilities' is presented in 'financing cash flows'. The comparison figures have been reclassified accordingly.
- Nuclear fund adjustments in the consolidated income statement were reclassified from 'Items affecting comparability' to 'Other financial expenses, net'. This change does not impact Comparable operating profit. Further, in the consolidate cash flow statement, 'nuclear fund-related payments and repayments' have been reclassified from 'cash flow from operating activities' to 'cash flow from investment activities'. The comparison figures have been reclassified accordingly.

Uniper's energy trading and optimisation business accounts for more than 90% of the Uniper Group's sales. A substantial portion of Uniper's sales arises from the physical assets and contract portfolio optimisation, which is accounted for on a gross basis.

For further details on the consolidation of Uniper, see Note 1.

Strategy update

In December 2020, Fortum updated the strategy for the whole Fortum Group to drive the clean energy transition and deliver sustainable financial performance. Aligned with the goals of the Paris Agreement, Fortum targets carbon neutrality by 2050 with ambitious mid-term targets.

The updated strategy builds on four priorities: 'Transform own operations to carbon neutral', 'Strengthen and grow in CO_2-free power generation', 'Leverage strong position in gas to enable the energy transition', and 'Partner with industrial and infrastructure customers'.

Fortum has committed to the following ambitious climate and environmental targets:

- Carbon neutral, in line with the goals of the Paris Agreement, by 2050 at the latest (Scope 1, 2, and 3 emissions)
- Carbon neutral in European generation by 2035 at the latest (Scope 1 and 2)
- Reduction of CO_2 emissions (Scope 1 and 2) in European generation by at least 50% by 2030 (base year 2019)
- Number of major voluntary measures enhancing biodiversity ≥12 in 2021

During 2021, Fortum will develop a target for the reduction of Scope 3 emissions addressing the indirect emissions from our fuel sales business (category 11).

Fortum's coal-fired generation capacity will be reduced by more than 50% by the end of 2025, to approximately 5 GW. Measures for the reduction include the coal-fired plant closures in Germany announced by Uniper earlier in 2020 (and updated in December): 0.9 GW at the end of 2020, 1.5 GW by the end of 2022, and a further 0.5 GW by the end of 2025. The reduction also includes the closure of Uniper's 2 GW in the UK by the end of 2025 and Fortum's previously announced commitment to discontinue the use of coal in Espoo by 2025.

In addition to the above-mentioned planned power plant closures, Uniper will close its 1-GW coal-fired plant in the Netherlands by the end of 2029. As defined in the German coal-exit law, Uniper's 1.1-GW coal-fired power plant in Germany, Datteln 4, will be decommissioned by 2038.

Fortum will also focus on growing a sizeable portfolio of onshore wind and solar based power generation primarily in Europe to make it a meaningful EBITDA contributor. The target is to build 1.5-2 GW of new capacity by 2025. This capacity will be built partly on our own balance sheet and partly using the 'build-operate-transfer' business model.

Fortum will gradually transform its Russian asset portfolio towards renewables, while over time reducing our fossil exposure.

In parallel with the strategy alignment, Fortum and Uniper have together identified cooperation benefits with a positive cash impact on a consolidated Group basis of approximately EUR 100 million annually. More than EUR 50 million of these annual benefits are estimated to be achieved by the end of 2023, with full effect of approximately EUR 100 million annually in 2025. Through this cooperation we will be able to create value for both companies and their shareholders.

Financial targets and dividend policy

Following the consolidation of Uniper, Fortum's business profile has changed. Consequently on 15 May 2020, Fortum's Board of Directors decided to remove the financial targets (return on capital employed of at least 10% and comparable net debt-to-EBITDA of around 2.5x) as of the first quarter of 2020.

In December 2020, Fortum updated its financial targets and dividend policy. Fortum continues to be committed to maintaining a rating of at least BBB. The long-term financial targets are:

- Financial net debt/comparable EBITDA below 2x
- Hurdle rates for new investments of WACC
  - +100 bps for green investments
  - +200 bps for other investments

Fortum's dividend policy was revised and is 'to pay a stable, sustainable, and over time increasing dividend'.

Comparability of information presented in tables

As the majority owner of Uniper, Fortum consolidated Uniper as a subsidiary as of 31 March 2020. Uniper is a separate reportable segment of Fortum. This entailed changes in Fortum's reporting structure, accounting policies, as well as definitions of certain key figures and reclassification of nuclear fund adjustment, among others. For additional information, see Note 1 Significant accounting policies.

Fortum consolidated Uniper's income statement from 1.4.2020, which is the main reason for the change in the figures compared to the previous year. Financial results discussed in the operating and financial review are for Fortum, including Uniper unless otherwise stated.

Financial results

Sales by segment

EUR million	2020	2019	Change 20/19
Generation	2,006	2,141	-6%
Russia	929	1,071	-13%
City Solutions	1,075	1,200	-10%
Consumer Solutions	1,267	1,835	-31%
Uniper	44,514	-	100%
Other Operations	140	115	22%
Netting of Nord Pool transactions [1]	-317	-529	
Eliminations	-598	-387	
IS Total	**49,015**	**5,447**	**800%**

1) Sales and purchases with Nord Pool Spot are netted at the Group level on an hourly basis and posted either as revenue or cost depending on whether Fortum is a net seller or net buyer during any particular hour.

Comparable EBITDA by segment

EUR million	2020	2019	Change 20/19
Generation	886	939	-6%
Russia	394	469	-16%
City Solutions	239	308	-22%
Consumer Solutions	153	141	9%
Uniper	856	-	100%
Other Operations	-94	-91	-3%
Total	**2,434**	**1,766**	**38%**

Comparable operating profit by segment

EUR million	2020	2019	Change 20/19
Generation	722	794	-9%
Russia	251	316	-21%
City Solutions	47	120	-61%
Consumer Solutions	90	79	14%
Uniper	363	-	100%
Other Operations	-129	-118	-9%
IS Total	**1,344**	**1,191**	**13%**

Operating profit by segment

EUR million	2020	2019	Change 20/19
Generation	711	780	-9%
Russia	252	317	-21%
City Solutions	775	127	510%
Consumer Solutions	129	20	545%
Uniper	29	-	100%
Other Operations	-298	-126	-136%
IS **Total**	**1,599**	**1,118**	**43%**

Share of profits of associated companies and joint ventures

EUR million	2020	2019	Change 20/19
Generation	29	10	188%
Russia	47	59	-21%
City Solutions	57	37	54%
Consumer Solutions	-	-	-
Uniper	54	-	100%
Other Operations	470	638	-
IS **Total**	**656**	**744**	**-12%**

For further information see Note 6 Segment reporting.

Sales were EUR 49,015 (5,447) million.

Comparable operating profit increased by 13% and was EUR 1,344 (1,191) million, mainly due to the consolidation of Uniper, partly offset by the weaker results in the heating and cooling business, and the negative effect of the change in the Russian rouble exchange rate. In the Generation segment the negative impact of the lower achieved power price and lower nuclear volumes was partly offset by the higher hydro volumes.

Operating profit for the period was impacted by EUR 255 (-72) million of items affecting comparability, mainly due to the sales gains of EUR 722 million from the divestments of the Joensuu and Järvenpää district heating operations, changes in fair values of non-hedge-accounted derivatives of EUR -675 (-72) million, and a one-time, non-cash tax-exempt income statement impact of EUR -222 million from Uniper becoming Fortum's subsidiary on 31 March 2020. This one-time item did not affect Fortum's total equity, as it is merely a reclassification within equity (Note 1 and Note 7).

The share of profits of associates and joint ventures was EUR 656 (744) million. Since Fortum has accounted for Uniper's share of profits with a time-lag of one quarter, Fortum's first-quarter 2020 results include the share of Uniper's fourth-quarter 2019 profits of EUR 162 million and first-quarter 2020 profits of EUR 307 million. Fortum's share of Uniper's profits, EUR 469 (632) million, includes a reversal of the adjustment that Fortum recorded in the fourth quarter of 2019 related to the positive impact from the reinstatement of the UK capacity market. Further, Fortum also made a reversal of EUR 449 million after tax, related to the impairments Uniper recorded in the fourth quarter of 2019 and first quarter of 2020. In this reversal, Fortum utilised the fair value adjustments recorded in the purchase price allocation in 2018 (Note 18).

Net finance costs amounted to EUR 56 (134) million.

Profit before income taxes was EUR 2,199 (1,728) million.

Taxes for the period totalled EUR 344 (221) million. The effective income tax rate according to the income statement was 15.7% (2019: 12.8%). The comparable effective income tax rate (excluding the impact of the share of profit of associated companies and joint ventures as well as items affecting comparability, tax rate changes, and other major one-time income tax effects) was 23.8% (22.0%) (Note 12).

The profit for the period was EUR 1,855 (1,507) million. Earnings per share were EUR 2.05 (1.67), of which EUR 0.38 (-0.07) per share were related to items affecting comparability.

Financial position and cash flow

EUR million	2020	2019	Change 20/19
Interest expense	-170	-167	2%
Interest income	111	28	297%
Other financial expenses - net	3	5	43%
IS **Finance costs - net**	**-56**	**-134**	**58%**
Financial net debt	7,023	4,833	45%
Adjusted net debt	9,784	4,978	97%

Cash flow

In 2020, net cash from operating activities increased by EUR 980 million to EUR 2,555 (1,575) million.

Net cash used in investing activities was EUR 2,140 (-118) million. Capital expenditure increased by EUR 406 million to EUR 1,101 (695) million. Acquisition of shares, net of liquid funds, amounted to EUR 1,801 million, mainly from acquiring shares in Uniper. Divestment of shares, mainly from the divestments of the Joensuu and Järvenpää district heating operations, amounted to EUR 1,244 million. Change in margin receivables was EUR -522 (403) million. The non-cash collateral arrangement to release pledged cash from the Nordic power exchange in the first quarter of 2019 had a one-time positive impact of EUR 310 million presented in 'Change in other interest-bearing receivables'. Operational cash flow and divestments more than covered the investments resulting in cash flow before financing activities of EUR 415 (1,693) million.

Proceeds from long-term liabilities were EUR 2,569 (2,805) million. On 24 March 2020, Fortum drew a term loan of EUR 2,000 million and on 6 May 2020 a bridge loan of EUR 300 million to finance the acquisition of Uniper shares. In 2019, Fortum issued new bonds totalling EUR 2.5 billion under the Euro Medium Term Note (EMTN) programme. The total payments of long-term liabilities were EUR 507 (2,567) million including repayment of bridge loan. Change in margin liabilities was EUR -623 (-47) million. The net increase in liquid funds was EUR 920 (806) million.

Assets

At the end of 2020, total assets amounted to EUR 57,810 (23,364) million. The increase mainly relates to the consolidation of Uniper. Liquid funds at the end of the period were EUR 2,308 (1,433) million.

Equity

Equity attributable to owners of the parent company totalled EUR 12,953 (12,982) million. The change was mainly related to the net profit for the period of EUR 1,823 million, the dividend payment of EUR 977 million and the negative translation differences of EUR 492 million.

Financing

In 2020, Fortum updated the definition of net debt and started to use financial net debt and adjusted net debt when following indebtedness of the Group. At the end of 2020, financial net debt was EUR 7,023 (4,833) million and adjusted net debt EUR 9,784 (4,978) million. Net debt according to the old definition was EUR 5,260 million at the end of 2019 (Note 26).

At the end of 2020, the Group's liquid funds totalled EUR 2,308 (1,433) million. Liquid funds include EUR 289 million held by Uniper.

At the end of 2020, Fortum had undrawn committed credit facilities amounting to EUR 5,000 million. The undrawn facilities include a EUR 1,450 million revolving credit facility, maturing in November 2021 (with an option to extend the maturity by one year), a EUR 1,750 million revolving credit facility maturing in June 2023, and Uniper's revolving credit facility of EUR 1,800 million, which matures in September 2025. In addition to the revolving credit facilities, Fortum has EUR 100 million of committed overdraft limits that are valid until further notice.

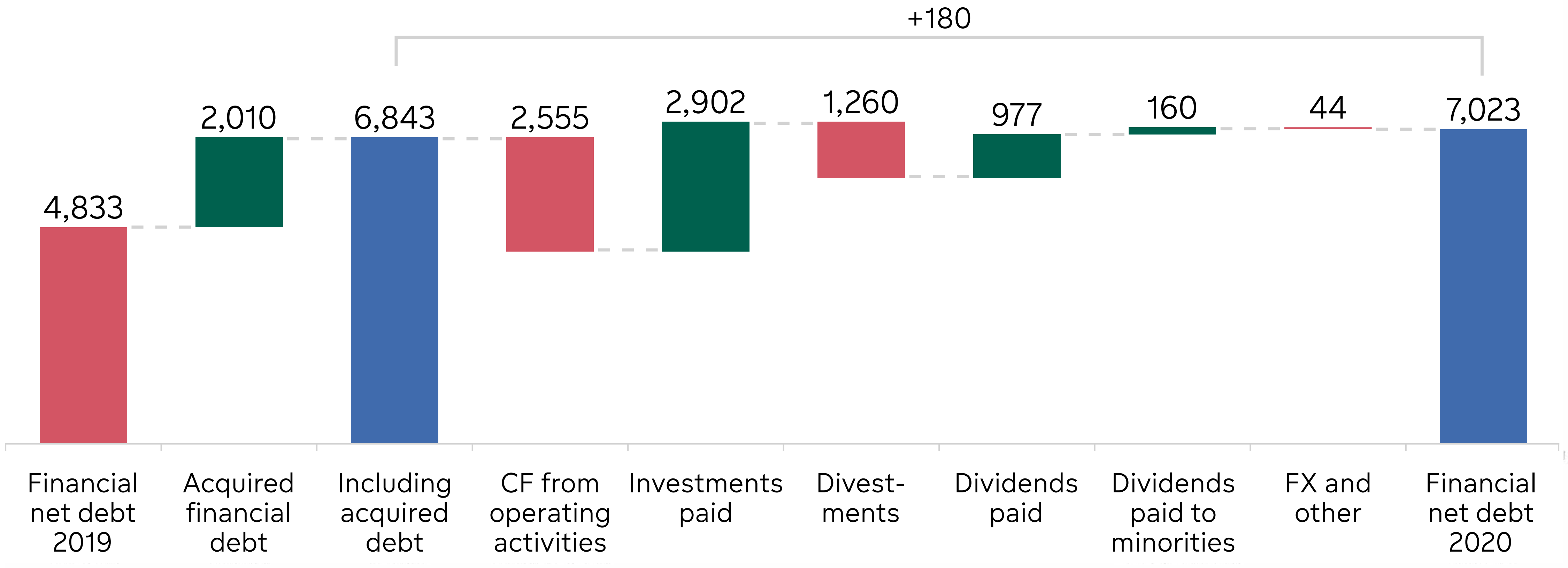
In January 2020 Fortum cancelled EUR 3,000 million, in June 2020 EUR 1,200 million and in August 350 million of facilities and the revolving credit facility maturing in November 2021. The facilities were for purchase of Uniper shares and liquidity purposes.

In March 2020, Fortum drew a term loan of EUR 2,000 million, maturing on 31 October 2022, under these facilities for the acquisition of Uniper shares. In April 2020, Fortum signed a ten-year EUR 70 million bilateral loan agreement. In May 2020, under the facilities, Fortum drew a bridge loan of EUR 300 million, which was prepaid in June 2020. On 21 December 2020, Fortum drew a ten-year SEK 814 million (EUR 80 million) bilateral loan.

In March 2020, Standard & Poor's resolved its CreditWatch Negative placement by affirming Fortum's BBB long-term rating, with a Negative Outlook. The short-term rating is at level A 2. In April 2020, Fitch removed Fortum's Rating Watch Negative placement by affirming Fortum's BBB long-term rating, with a Negative Outlook.

In March 2020, Standard & Poor's also resolved the CreditWatch Negative on Uniper's rating by affirming Uniper's BBB rating, with a Negative Outlook.

Change in financial net debt 2020, EUR million



Operating and regulatory environment

European power markets

According to preliminary statistics, electricity consumption in the Nordic countries was 383 (394) TWh during 2020. The lower power demand in the Nordics was mainly related to mild weather. Lower industrial demand in Finland and Sweden also contributed to the decline in power demand.

Measures taken to prevent the spread of Covid-19 impacted power demand in various European countries, especially during the second quarter of 2020. However, the European power demand recovered significantly in the third quarter according to preliminary statistics, demand in the fourth quarter in central western Europe (Germany, France, Austria, Switzerland, Belgium, and the Netherlands) was just 1% below the 2019 level. As a whole, consumption in 2020 in central western Europe saw a 4% decline year-on-year.

In the long term, electricity is expected to continue to gain a higher share of total energy consumption. The growth rate, however, will largely be determined by the macroeconomic development in Europe and the Nordic countries. In the longer term, the rate of electrification of the industrial, transportation, and heating sectors is a key element determining the growth in electricity consumption.

At the beginning of 2020, the Nordic water reservoirs were at 79 TWh, which is 5 TWh lower than the long-term average and 5 TWh higher than one year earlier. The rainy and mild winter led to a rapid increase of the Nordic water reservoirs during the first quarter. Spring was fairly cold and the spring inflows were significantly delayed, but once melting started, the very large snow pack resulted in the spring inflows bringing water levels close to the historical maximum levels in most Nordic water reservoirs. At the end of 2020, the reservoirs were at 105 TWh, which is 21 TWh above the long-term average and 26 TWh higher than one year earlier.

During 2020, the average system spot price in Nord Pool was EUR 10.9 (38.9) per MWh. The average area price in Finland was EUR 28.0 (44.0) per MWh, in the SE3-area in Sweden (Stockholm) EUR 21.2 (38.4) per MWh, and in the SE2-area in Sweden (Sundsvall) EUR 14.4 (37.9) per MWh. The very large hydrological surplus in many hydro reservoirs was the main reason for the low Nordic spot prices during 2020.

In Germany, the average spot price in 2020 was EUR 30.5 (37.7) per MWh.

At the end of February 2021, the Nordic system electricity forward price on Nasdaq Commodities for the remainder of 2021 was around EUR 26 per MWh and for 2022 equally around EUR 26 per MWh. The Nordic water reservoirs were about 9 TWh above the long-term average and 1 TWh lower than one year earlier. The German electricity forward price for the remainder of 2021 was around EUR 48 per MWh and for 2022 around EUR 52 per MWh.

Commodity markets

Gas demand in central western Europe was 2,119 (2,184) TWh during 2020. The central western European gas storage levels decreased from 539 TWh at the beginning of the year to 439 TWh at the end of the year, which is 8 TWh higher than the five-year average (2015–2019).

The average gas spot price (TTF) during 2020 was EUR 9.5 (13.5) per MWh. The 2021 forward price increased from EUR 16.4 per MWh at the beginning of the year to EUR 17.1 per MWh at the end of the year.

During 2020, European Emission Allowances (EUA) traded in the range of EUR 14-33 per tonne. The price increased from EUR 24.6 per tonne at the beginning of the year to EUR 32.7 per tonne at the end of the year.

The forward quotation for coal (ICE Rotterdam) for 2021 increased from USD 62.0 per tonne at the beginning of the year to USD 68.9 per tonne at the end of the year.

At the end of February 2021, the TTF forward price for gas for the remainder of 2021 was EUR 16.4 per MWh and for 2022 EUR 16.6 per MWh. The forward quotation for EUAs for 2021 was at the level of EUR 37 per tonne. The forward price for coal (ICE Rotterdam) for the remainder of 2021 was USD 67 per tonne.

Russian market

Fortum's Russia division operates thermal power plants mainly in the Tyumen and Khanty-Mansiysk area of western Siberia, where industrial production is dominated by the oil and gas industries, and in the Chelyabinsk area of the Urals, which is dominated by the metal industry. Uniper's Russian subsidiary Unipro PJSC operates in the Smolensk, Moscow, Sverdlovsk, and Krasnoyarsk regions, as well as in the Khanty-Mansiysk Autonomous District.

The Russian market is divided into two price zones; Fortum's Russia division operates in the first price zone (European and Urals part of Russia), while Uniper operates in both the first and second price zones.

In 2020, the average electricity spot price, excluding capacity prices, was RUB 1,220 (1,289) per MWh in the first price zone and by RUB 873 (892) in the second price zone. The spot price in the Urals hub was RUB 1,068 (1,117) per MWh.

The Russian Government increased the gas price by 1.4% in July 2019 and by 3% in August 2020.

In Russia, capacity payments based on CSA contracts are a key driver for earnings growth, as CSA payments are considerably higher than for capacities selected in Competitive Capacity Selection (CCS) auctions. Currently, Fortum's Russia segment's CSA capacity amounts to 2,368 MW, including 70 MW of solar and wind capacity. In addition to this, Fortum's joint ventures for renewable power generation have 600 MW of operational wind capacity, as well as 495 MW under construction and 728 MW under development. Correspondingly, Uniper's CSA capacity amounts to 2,455 MW.

In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning (see tables below). In 2021, an increase in CSA payments is expected for three units of Fortum's Russia segment's generation fleet and one unit of Fortum's Uniper segment's generation fleet. After the CSA period ends, units can receive CCS payments from CCS auctions. See the corresponding changes in the table below:

Fortum's Russia segment's units	CSA starts	Higher CSA starts	CSA ends
Tyumen CHP 1, unit 2	1 Feb 2011	1 Oct 2016	31 Dec 2020
Chelyabinsk CHP 3, unit 3	1 Jun 2011	1 Nov 2016	31 Dec 2020
Nyagan, unit 1	1 Apr 2013	1 Jan 2018	31 Dec 2021
Nyagan, unit 2	1 Dec 2013	1 Aug 2018	31 Dec 2022
Nyagan, unit 3	1 Jan 2015	1 Jan 2021	31 Dec 2025
Chelyabinsk CHP 4, unit 1	1 Dec 2015	1 Jan 2021	31 Dec 2024
Chelyabinsk CHP 4, unit 2	1 Mar 2016	1 Jan 2021	31 Dec 2024
Ulyanovsk [1]	1 Jan 2018	n/a	30 Nov 2031
Bugulchansk [2]	Nov 2016 – Mar 2017	n/a	Nov 2030 – Nov 2031
Pleshanovsk [2]	1 Mar 2017	n/a	30 Nov 2031
Grachevsk [2]	1 Mar 2017	n/a	30 Nov 2031

1) Wind CSA.
2) Solar CSA.

Fortum's Uniper segment's units	CSA starts	Higher CSA starts	CSA ends
Surgutskaya-2 GRES-2, unit 7	1 May 2011	1 May 2017	31 Jul 2021
Surgutskaya-2 GRES-2, unit 8	1 Jun 2011	1 Jun 2017	31 Aug 2021
Shaturskaya GRES, unit 7	1 Oct 2010	1 Oct 2016	31 Dec 2020
Yaivinskaya GRES, unit 5	1 Jan 2011	1 Jan 2017	31 Dec 2020
Berezovskaya GRES, unit 3 [1]	1 Nov 2014	1 Nov 2020	31 Oct 2024
Surgutskaya-2 GRES-2, unit 1 [2]	Mar 2022	n/a	Feb 2038
Surgutskaya-2 GRES-2, unit 2 [2]	Dec 2026	n/a	Nov 2042
Surgutskaya-2 GRES-2, unit 4 [2]	Dec 2025	n/a	Nov 2041
Surgutskaya-2 GRES-2, unit 6 [2]	Sep 2024	n/a	Aug 2042

1) Currently under repair and not receiving CSA payments.
2) Modernisation CSA.

Fortum's Russia division's generation capacity not receiving CSA payments, totalling 2,560 MW, is allowed to participate in the annual CCS auctions. Uniper's generation capacities allowed to participate in the CCS auction totalled 8,790 MW. The next CCS auction, for the year 2027, is expected to be held in November 2021.

Year	2019	2020	2021	2022	2023	2024	2025	2026
CCS auction price, tRUB/MW/month, first price zone [1]	110	115	134	168	171	182	193	195
CCS auction price, tRUB/MW/month, second price zone [1]	190	191	225	264	267	279	303	299
Fortum's Russia segment								
Selected in CCS auction, MW, first price zone	2,365	2,331	2,848	3,451	3,904	3,904	4,351	4,852
Fortum's Uniper segment								
Selected in CCS auction, MW, first price zone	7,190	7,190	8,829	8,035	8,035	7,225	6,427	6,326
Selected in CCS auction, MW, second price zone	1,600	1,600	1,600	1,600	1,600	2,400	2,400	2,400

1) Excluding inflation

In June 2019, Fortum won the right to build 5.6 MW of solar capacity in a CSA auction, in addition to the 110 MW won in June 2018. The power plants will receive a guaranteed CSA price for a period of 15 years, corresponding to approximately RUB 14,000 per MWh and RUB 15,000 per MWh, respectively. These plants are to be commissioned during 2021-2022.

In June 2018, the Fortum-Rusnano wind investment fund won the right to build 823 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2019-2023 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-8,000 per MWh for a period of 15 years.

In June 2017, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2018-2022 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-9,000 per MWh for a period of 15 years.

Power consumption

TWh	2020	2019	2018
Nordic countries	383	392	399
Russia	1,033	1,059	1,055
Tyumen	86	94	92
Chelyabinsk	36	35	35
Russia Urals area	246	260	260
Russia Siberia area [1]	209	211	-

1) Reported from 2019 onwards.

Average prices

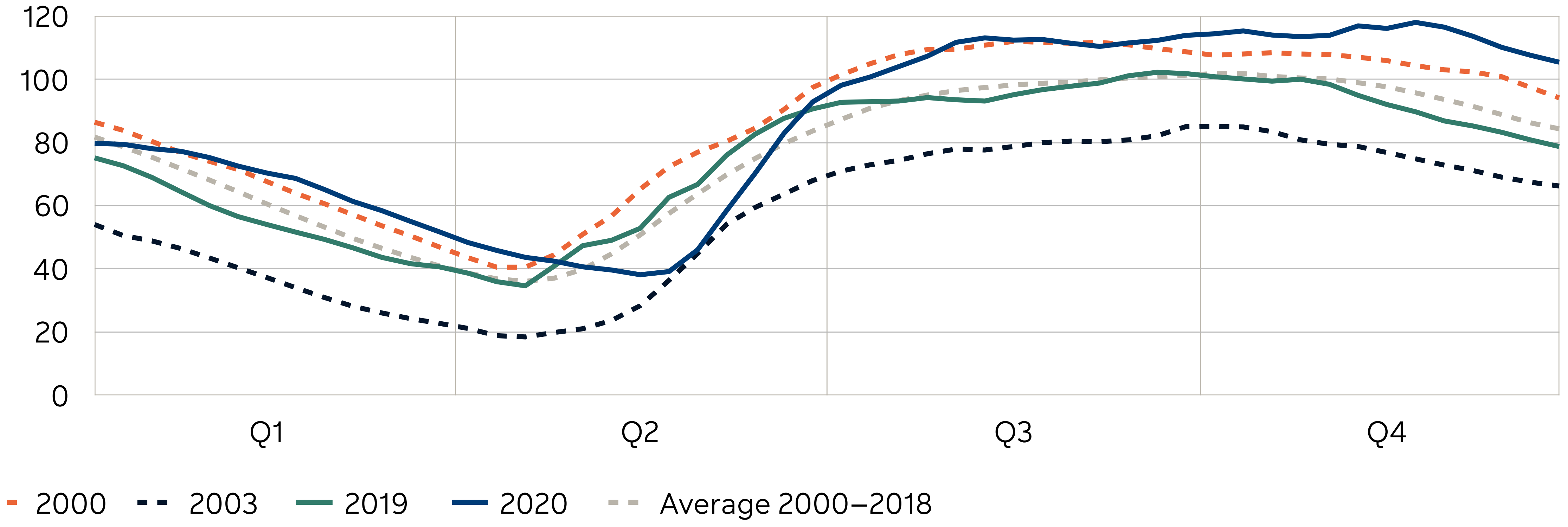
	2020	2019	2018
Spot price for power in Nord Pool power exchange, EUR/MWh	10.9	38.9	44.0
Spot price for power in Finland, EUR/MWh	28.0	44.0	46.8
Spot price for power in Sweden, SE3, Stockholm, EUR/MWh	21.2	38.4	44.5
Spot price for power in Sweden, SE2, Sundsvall, EUR/MWh	14.4	37.9	44.2
Spot price for power in the First Price Zone of Russia, RUB/MWh [1]	1,220	1,289	1,247
Spot price for power in the Second Price Zone of Russia, RUB/MWh [1] [4]	873	892	-
Average capacity price for the Russia segment, tRUB/MW/month	608	624	609
Average capacity price for the Uniper segment, tRUB/MW/month	261	-	-
Spot price for power in Germany, EUR/MWh	30.4	37.7	44.5
Average regulated gas price in Urals region, RUB/1,000 m3	3,977	3,910	3,801
Average capacity price for the Russia segment's CCS, tRUB/MW/month [2] [3]	156	154	148
Average capacity price for the Russia segment's CSA, tRUB/MW/month [3]	1,058	1,096	1,075
Average capacity price for the Uniper segment's CCS, tRUB/MW/month [2] [3]	136	-	-
Average capacity price for the Uniper segment's CSA, tRUB/MW/month [3]	951	-	-
Spot price for power (market price), Urals hub, RUB/MWh [1]	1,068	1,117	1,043
CO_2, (ETS EUA), EUR/tonne CO_2	25	25	16
Coal (ICE Rotterdam), USD/tonne	50	61	92
Oil (Brent Crude), USD/bbl	43	64	72

1) Excluding capacity tariff.
2) Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.
3) Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.
4) Reported from 2019 onwards.

Water reservoirs

TWh	31 Dec 2020	31 Dec 2019	31 Dec 2018
Nordic water reservoirs level	105	79	74
Nordic water reservoirs level, long-term average	84	84	83

Nordic water reservoirs, energy content, TWh



Source: Nord Pool

Export/import

TWh (+ = import to, - = export from Nordic area)	2020	2019	2018
Export/import between Nordic area and Continental Europe+Baltics	-24	-8	-10
Export/import between Nordic area and Russia	3	8	8
Export/import Nordic area, total	-21	-	-2

Regulatory environment

EU legislation under preparation to implement the revised 2030 climate target

On 11 December, the European Council adopted conclusions on the new 2030 climate target. The Council's decision is in line with the Commission's original proposal to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 level, increasing the ambition level from the current reduction target of 40%.

The new target is expected to be officially approved as part of the adoption of the European Climate Law during the first quarter of 2021 in the negotiations between the Council, the Parliament, and the Commission. The Parliament has called for a 60% emission reduction target.

Legislative proposals to implement the new target are under preparation and expected to be published in mid-2021. Revisions will be made e.g. to the directives on Emissions Trading, Renewable Energy, and Energy Efficiency. In early 2021, public consultations on the various legislative files were carried out, and Fortum has responded to all of them. The Commission is also working on extensive impact assessments for each legislative file.

The key issue that will potentially have a large effect on the ETS and carbon price is the allocation of the new target between the ETS and non-ETS sectors. In Fortum's view, the ETS sector should take the main responsibility for the more ambitious target.

EU Commission's delegated act on EU taxonomy regulation delayed

The consultation on the Commission's draft delegated act on climate adaptation and mitigation ended in December, with an unprecedented bulk of 46,000 responses. The act has turned even more technology-oriented than expected, raising challenges for essential power technologies such as hydro, nuclear, natural gas, and also hydrogen. The proposed criteria are of significant concern for the largely CO_2-free Nordic power generation, as hydro and nuclear might not be taxonomy-aligned.

Based on a coalition of like-minded companies and associations, Fortum has placed significant pressure on the Commission to review the delegated act to comply with the principle of technology neutrality and EU sectorial legislation.

According to the EU taxonomy regulation, the final climate change delegated acts should have been adopted by the end of 2020, but the adoption is now due during the second half of April 2021. The separate environmental assessment of nuclear should be finalised mid of this year and supporting member states stressed the need to include nuclear in the second wave of delegated acts due for adoption by year end.

Fortum firmly supports the objective of transitioning the European economy towards carbon neutrality by mid-century. However, we caution against arbitrarily ruling out 40% of European net electricity generation and two thirds of European CO_2-free electricity generation by excluding hydro and nuclear from taxonomy-aligned operations.

Last minute Brexit deal secured

On 24 December, the EU and the UK agreed on a broad trade and cooperation agreement only one week before the end of the Brexit transition period. The agreement provisionally entered into force on 1 January, and the ratification process is to be concluded during the first quarter of 2021.

The scope of the agreement is more limited compared to the EU internal market, but it goes beyond several other EU trade agreements. Provisions in the Energy Chapter aim to enable energy trading and investments between the parties as well as to support security of supply and ecological sustainability. The terminology and definitions are aligned with the EU legislation. The UK will maintain its earlier commitment to the energy and climate targets.

From the beginning of 2021, the UK needs to establish its own carbon pricing system covering emissions from energy production, industry, and air traffic. The aim is to assess the possibilities to link the UK trading system to the EU ETS while maintaining the integrity of both systems.

Most importantly a hard Brexit was avoided and there is a deal, but Fortum regrets losing a firm supporter of the strong climate policy and the free market. No major changes in the energy market are envisaged but the linkage of the UK to the EU ETS is still open.

Segment reviews

Business model

Fortum is a European energy company with activities in more than 40 countries. We provide our customers with electricity, gas, heating and cooling as well as smart solutions to improve resource efficiency. Together with our subsidiary Uniper, we are the third largest producer of CO_2-free electricity in Europe. Fortum is the largest electricity retailer in the Nordic countries and one of the leading heat producers globally.

Fortum's organisation consists of four business divisions: Generation, Russia, City Solutions, and Consumer Solutions, and additionally Uniper as a segment. Fortum employs a diverse team of almost 20,000 energy-sector professionals.

Generation

*Generation is responsible for Nordic power generation. The division comprises nuclear, hydro, wind, and thermal power generation, as well as power portfolio optimisation, trading, industrial intelligence, and global nuclear services. The segment does not include the Nordic hydro and nuclear power generation or the trading activities of Uniper. As of 31 March 2020, the segment includes Generation's proportionate share of OKG (**Note 1**).*

EUR million	2020	2019	Change 20/19
Sales	2,006	2,141	-6%
- power sales	1,878	2,006	-6%
of which Nordic power sales [1]	1,478	1,568	-6%
- other sales	128	135	-5%
Comparable EBITDA	886	939	-6%
Comparable operating profit	722	794	-9%
Operating profit	711	780	-9%
Share of profits of associates and joint ventures [2]	29	10	188%
Comparable net assets (at period-end)	6,234	6,019	4%
Comparable return on net assets, %	11.8	13.3	-11%
Capital expenditure and gross investments in shares	228	260	-12%
Number of employees	1,143	1,109	3%

1) The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.
2) Power plants are often built jointly with other power producers, and owners purchase electricity at cost including interest cost and production taxes. The share of profit/loss is mainly IFRS adjustments (e.g. accounting for nuclear-related assets and liabilities) and depreciations on fair-value adjustments from historical acquisitions (Note 18).

The Generation segment's total power generation in the Nordic countries decreased, mainly due to longer planned and some unplanned nuclear outages, the effect of which was almost offset by clearly higher hydro volumes. The CO_2 free generation accounted for 100% (99%) of the total power generation.

The achieved power price in the Generation segment decreased by EUR 2.0 per MWh, down 5%. Supported by the fairly high hedge price and hedge level, the decline was minor compared to the 44% drop in spot power prices in Fortum's power generation areas.

Comparable operating profit decreased by 9%. The negative impact of the lower achieved power price and lower nuclear volumes was partly offset by the higher hydro volumes. Hydro volumes were somewhat above the long term average annual level. Comparable operating profit was also positively affected by EUR 15 million, due to the consolidation of the Generation segment's proportionate share of OKG (**Note 1**).

Operating profit was affected by EUR -11 (14) million of items affecting comparability (see 'Changes in reporting' and **Note 6**).

The share of profits of associates and joint ventures totalled EUR 29 (10) million (**Note 18**). The Swedish hydropower real-estate tax decreased from 1.0% to 0.5% in January 2020. In 2019, the tax amounted to EUR 40 million and in 2020 it was EUR 25 million.

Power generation by source

TWh	2020	2019	Change 20/19
Hydropower, Nordic	22.4	20.3	10%
Nuclear power, Nordic	21.0	23.5	-11%
Wind power, Nordic	0.4	0.4	0%
Thermal power, Nordic	0.1	0.2	-58%
Total	**43.9**	**44.4**	**-1%**

Nordic sales volume

TWh	2020	2019	Change 20/19
Nordic sales volume	51.4	51.3	0%
of which Nordic Power sales volume [1)]	42.5	42.7	0%

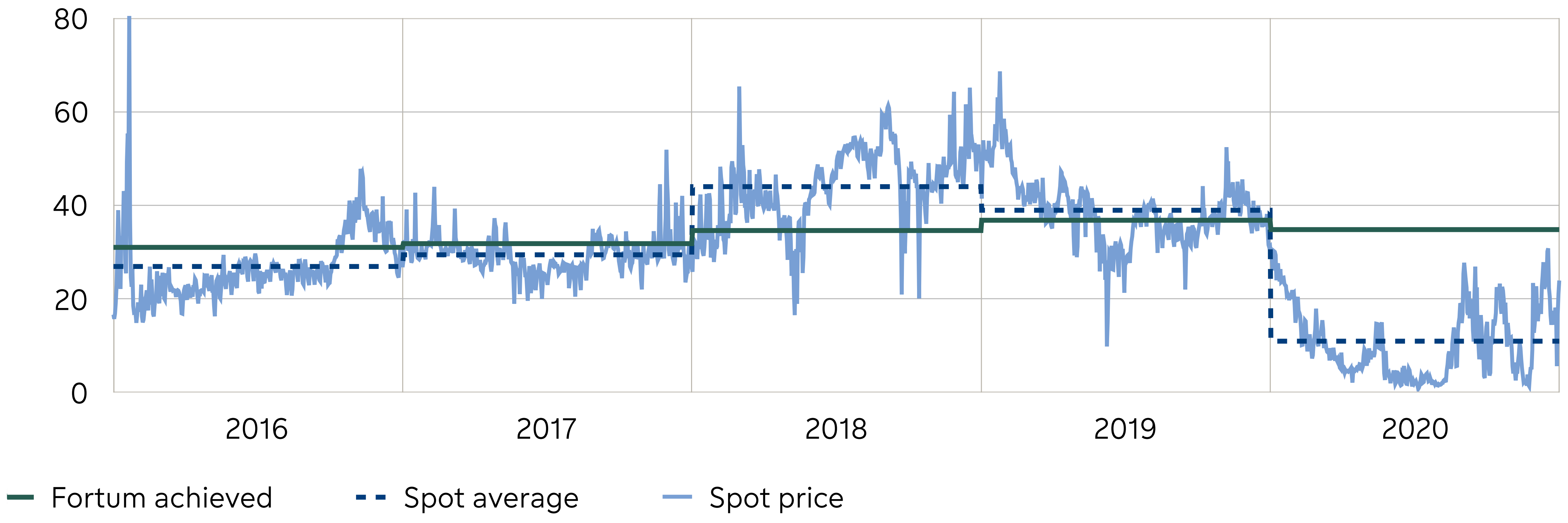
1) The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

Sales price

EUR/MWh	2020	2019	Change 20/19
Generation's Nordic power price [1)]	34.8	36.8	-5%

1) Generation's Nordic power price includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

Nord Pool, power price, 2016–2020, EUR/MWh



Source: Nord Pool, Fortum

Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment also includes Fortum's joint ventures for building and operating approximately 2 GW of renewable power generation and for power and heat sales, as well as Fortum's more than 29% holding in TGC 1. These joint ventures and associated company are accounted for using the equity method. The segment does not include Uniper's Russian subsidiary Unipro.

EUR million	2020	2019	Change 20/19
Sales	929	1,071	-13%
- power sales	791	924	-14%
- heat sales	134	145	-8%
- other sales	4	2	108%
Comparable EBITDA	394	469	-16%
Comparable operating profit	251	316	-21%
Operating profit	252	317	-21%
Share of profits of associates and joint ventures	47	59	-21%
Comparable net assets (at period-end)	2,431	3,212	-24%
Comparable return on net assets, %	11.1	12.3	-10%
Capital expenditure and gross investments in shares	91	133	-32%
Number of employees	2,935	2,955	-1%

Power generation volumes declined by 8% and heat production volumes declined by 5%. The load factor was among the highest in the Russian Federation according to market data published by the Wholesale Market Trading Administrator. Reduced oil production and lower overall economic activity following the OPEC+ decisions and Covid-19 restrictions had an adverse effect on power demand especially in the first nine months of the year. Heat production volumes were negatively affected especially by the warmer weather in the Chelyabinsk and Tyumen areas during the first three quarters.

Sales decreased by 13%, EUR 142 million, due to the weaker Russian rouble and lower power prices and volumes. The effect of the change in the Russian rouble exchange rate was EUR -127 million.

Comparable operating profit decreased by 21%, EUR 65 million, mainly due to the weaker Russian rouble, lower power margins and volumes, as well as lower CSA payments, partly offset by higher heat tariffs. To counter the effects of Covid-19 focus was put on cost efficiency and securing good availability. The effect of the change in the Russian rouble exchange rate was EUR -34 million. The decline in CSA payments is a consequence of the lower Government bond yields.

The share of profits of associates and joint ventures totalled EUR 47 (59) million, including the lower share of profits of EUR 24 (54) million from TGC-1 and the share of profits EUR 18 (2) million from the joint ventures for renewables power generation (Note 18).

Key electricity, capacity and gas prices for Fortum Russia

	2020	2019	Change 20/19
Electricity spot price (market price), Urals hub, RUB/MWh	1,068	1,117	-4%
Average regulated gas price, Urals region, RUB/1,000 m^3	3,977	3,910	2%
Average capacity price for CCS and other, tRUB/MW/month [1) 2)]	156	154	1%
Average capacity price for CSA, tRUB/MW/month [2)]	1,058	1,096	-3%
Average capacity price, tRUB/MW/month	608	624	-3%
Achieved power price for the Russia segment, RUB/MWh	1,940	1,990	-3%
Achieved power price for the Russia segment, EUR/MWh [3)]	23.4	27.3	-14%

1) Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.
2) Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.
3) Translated using the average exchange rate.

Russian power generation and heat production

TWh	2020	2019	Change 20/19
Russian power generation	27.1	29.3	-8%
Russian heat production	16.4	17.3	-5%

City Solutions

City Solutions is responsible for sustainable solutions for urban areas. The segment comprises heating, cooling, waste-to-energy, and other circular economy solutions, as well as solar power generation, services, and development of new biomass-based businesses. The business operations are located in the Nordics, the Baltic countries, Poland, and India. The segment also includes Fortum's 50% holding in Stockholm Exergi, which is a joint venture and is accounted for using the equity method. The segment does not include the operations of Fortum's subsidiary Uniper.

EUR million	2020	2019	Change 20/19
Sales	1,075	1,200	-10%
- heat sales	516	615	-16%
- power sales	121	153	-21%
- waste treatment sales [1)]	252	250	1%
- other sales [2)]	186	181	3%
Comparable EBITDA	239	308	-22%
Comparable operating profit	47	120	-61%
Operating profit	775	127	510%
Share of profits of associates and joint ventures	57	37	54%
Comparable net assets (at period-end)	3,679	3,945	-7%
Comparable return on net assets, %	2.8	4.6	-39%
Capital expenditure and gross investments in shares	333	323	3%
Number of employees	2,093	1,970	6%

1) Waste treatment sales comprise gate fees at waste treatment plants and environmental construction services.
2) Other sales comprise mainly operation and maintenance services and fuel sales.

Heat sales volumes decreased by 11% as temperatures were clearly higher than normal throughout the year, especially in the first quarter of 2020. The decline in the power sales volumes and part of the lower heat sales volumes were related to the divestments of the Joensuu and Järvenpää district heating businesses.

Comparable operating profit decreased by 61%. The main reasons for the clearly weaker profitability were lower heat sales volumes, lower power prices, and lower Norwegian heat prices, as well as weaker performance in the recycling and waste business. In Norway, the district heat pricing is linked to the power price development, which in this market environment had in a clear negative impact on the heat prices. Furthermore, the results declined due to positive one-time items of EUR 16 million in the Finnish district heating business in the fourth quarter of 2019. In addition, the results were negatively impacted by structural changes, the most significant of these being the divestments of the Joensuu and Järvenpää district heating businesses with a EUR 14 million impact. The Pavagada 2 solar park, commissioned in August 2019, contributed positively to the result. The Covid-19 pandemic had adverse effects mainly on the recycling and waste business, negatively affecting the results of City Solutions.

Operating profit was affected by EUR 728 (7) million of items affecting comparability, mainly the tax-exempt capital gains of EUR 431 million and EUR 291 million, respectively, from the divestments of the Joensuu and Järvenpää district heating businesses (Note 6).

The share of profits of associates and joint ventures totalled EUR 57 (37) million (Note 18), EUR 46 (24) million of which is related to the share of profit of Stockholm Exergi.

The cost synergies from integrating Fortum Oslo Varme's business operations materialised gradually starting in 2019, and annual synergies in line with the target level of EUR 5-10 million were achieved by the end of 2020.

On 20 December 2019, Fortum signed an agreement to sell its district heating business in Joensuu, Finland, to Savon Voima Oyj. The total consideration on a debt- and cash-free basis was approximately EUR 530 million, and the cash was received at the completion of the divestment on 10 January 2020. Fortum recorded a tax-exempt capital gain of EUR 431 million in the City Solutions segment's first-quarter 2020 results.

On 3 July 2020, Fortum announced it had agreed to sell the district heating business in Järvenpää, Finland for approximately EUR 375 million. In August, Fortum closed the transaction and recorded a tax-exempt capital gain of EUR 291 million in the City Solutions segment's third-quarter 2020 results.

Heat sales by country

TWh	2020	2019	Change 20/19
Finland	2.9	3.8	-23%
Poland	3.4	3.3	3%
Norway	1.5	1.7	-13%
Other countries	1.9	2.0	-5%
Total	**9.6**	**10.8**	**-11%**

Power sales by country

TWh	2020	2019	Change 20/19
Finland	1.0	1.6	-38%
Poland	0.6	0.6	0%
Other countries	1.4	1.0	40%
Total	**3.0**	**3.2**	**-6%**

Consumer Solutions

Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics, Poland, and Spain, including the customer service and invoicing businesses. Fortum is the largest electricity retail business in the Nordics, with approximately 2.4 million customers across different brands in Finland, Sweden, Norway, Poland, and Spain. The business provides electricity as well as related value-added and digital services.

EUR million	2020	2019	Change 20/19
Sales	1,267	1,835	-31%
- power sales	1,057	1,630	-35%
- gas sales	139	132	6%
- other sales	70	73	-4%
Comparable EBITDA	153	141	9%
Comparable operating profit	90	79	14%
Operating profit	129	20	545%
Comparable net assets (at period-end)	565	637	-11%
Capital expenditure and gross investments in shares	57	55	4%
Number of employees	1,048	1,327	-21%

The electricity sales volumes decreased by 5%, mainly due to warmer weather in the Nordics in the first quarter. Total sales revenue decreased by 31%. The gas volume increased by 20%, mainly due to an increase of enterprise customers in Poland. The Covid-19 pandemic has increased market uncertainty especially in the small and medium-sized enterprises' sector; so far, however, no major negative implications on the business, such as credit losses, have materialised. Despite these uncertainties, Consumer Solutions' competitiveness continued to strengthen, and the customer recommendation and employee engagement indices remained at all-time high levels.

Comparable operating profit continued to improve and increased by 14%, mainly driven by higher margins from value-added services and higher sales margins. The higher margins are a result of active development of the service offering following the Hafslund integration and subsequent development of the business.

Operating profit was affected by EUR 39 (-59) million of items affecting comparability, due to the fair value change of non-hedge-accounted derivatives (Note 6).

Consumer Solutions offers various services enabling our customers to reduce their carbon footprint. Positive progress has been achieved among all measured sustainability categories during 2020, with increased CO_2-free electricity volumes as the main contributor.

Sales volumes

TWh	2020	2019	Change 20/19
Electricity	29.1	30.6	-5%
Gas [1]	4.9	4.1	20%

1) Not including wholesale volumes.

Number of customers

Thousands [1]	2020	2019	Change 20/19
Electricity	2,280	2,340	-3%
E-mobility [2]	60	-	100%
Gas	50	40	25%
Total	**2,390**	**2,380**	**0%**

1) Rounded to the nearest 10,000.
2) Measured as quarterly paying customers.

Uniper

*The Uniper segment comprises Fortum's majority ownership in Uniper, a subsidiary of Fortum. Uniper is a leading international energy company with activities in more than 40 countries. Its business is the secure provision of energy and related services. Its main activities include power generation in Europe and Russia as well as global energy trading and optimisation, which Uniper reports in three businesses – European Generation, Global Commodities, and Russian Power Generation – in its financial statements. The segment includes Uniper's proportionate share of OKG (▸ **Note 1**).*

EUR million	2020	2019	Change 20/19
Sales	44,514	-	100%
- power sales	16,994	-	100%
of which Nordic power sales [1]	373	-	100%
- heat sales	191	-	100%
- gas sales	22,176	-	100%
- other sales	5,154	-	100%
Comparable EBITDA	856	-	100%
Comparable operating profit	363	-	100%
Operating profit	29	-	100%
Share of profits of associates and joint ventures [2]	54	-	100%
Comparable net assets (at period-end)	7,432	-	100%
Capital expenditure and gross investments in shares	627	-	100%
Number of employees	11,751	-	100%

1) The Nordic power sales income and volume includes hydro and nuclear generation, excluding minorities. It does not include thermal generation, minorities, customer business or other purchases.

During the last three quarters of 2020, the Continental European power markets were characterised by slightly lower demand, due to the Covid-19 pandemic. The European supply from renewable power generation was on a robust level with high water reservoir levels in the Nordics. This resulted in lower power prices and lower spreads in Uniper's core markets, especially in the Nordics. However, given the optimisation and hedging activities of the power generation fleet, and an increased focus on spot, intraday, and system-services the financial impact of the lower thermal generation was offset to a large extent.

European gas prices were depressed by reduced market demand combined with relatively high storage levels and robust supply with some support from a more balanced market to the end of the year. This presented gas suppliers with the challenge of optimising the supply and sales portfolio, leading to unusual weak results for the reporting period after a strong first quarter.

The Russian business contributed positively to Uniper's comparable operating profit despite lower electricity prices in the day-ahead market, due to demand decreases caused by the Covid-19 pandemic as well as reduced oil production in Russia, reduced foreign demand, the lower Russian rouble exchange rate, and a weather-related increase in supply.

Comparable operating profit amounted to EUR 363 (-) million.

Operating profit was affected by EUR -333 (-) million of items affecting comparability, mainly EUR -706 (-) million of fair value change of non-hedge-accounted derivatives, and income of EUR 376 (-) million resulting primarily from reversals of temporary reductions in current assets and adjustments of provisions (Note 6).

The share of profits of associates and joint-ventures totalled EUR 54 (-) million (Note 18).

On 20 May 2020, Uniper held its Annual General Meeting, which approved the dividend of EUR 421 million.

On 28 May 2020, Uniper and its co-shareholders decided to return the Irsching 4 and 5 gas power plants to the market as of 1 October 2020, due to improved market prices – in particular, lower gas prices – which should make it possible to operate the highly efficient gas power plant economically.

On 30 May 2020, Uniper commissioned the Datteln 4 coal power plant.

On 10 June 2020, the German Federal Government passed the national hydrogen strategy and decided on the members of the National Hydrogen Council (Nationaler Wasserstoffrat). The CEO of Uniper, Andreas Schierenbeck, was appointed to the expert committee.

In June 2020, Uniper and General Electric signed an agreement aiming at long-term collaboration on the decarbonisation of Uniper's gas-fired power plants and natural gas storage facilities.

On 1 December 2020, Uniper announced that the German Federal Network Agency had accepted the bid from the Heyden 4 power plant as part of the first round of auctions for the closure of hard-coal-fired power plants. The commercial electricity generation at the plant ended already by the end of 2020, five years earlier than previously announced.

Power generation by source

TWh	2020	2019	Change 20/19
Hydropower, Nordics	6.8	-	100%
Nuclear power, Nordics	7.6	-	100%
Hydropower, Central Europe	3.3	-	100%
Thermal power, Central Europe	22.1	-	100%
Thermal power, Russia	28.5	-	100%
Total	**68.3**	**-**	**100%**

Nordic sales volume

TWh	2020	2019	Change 20/19
Nordic sales volume	14.6	-	100%
of which Nordic outright power sales volume [1]	14.4	-	100%

1) The Nordic outright power sales volume includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.

Sales price

EUR/MWh	2020	2019	Change 20/19
Uniper's Nordic achieved power price [1]	26.0	-	100%
Average capacity price for Uniper CCS and other, tRUB/MW/month [2) 3)]	136	-	100%
Average capacity price for Uniper CSA, tRUB/MW/month [3]	951	-	100%
Average capacity price for Uniper, tRUB/MW/month	261	-	100%
Achieved power price for Uniper in Russia, RUB/MWh	1,798	-	100%
Achieved power price for Uniper in Russia, EUR/MWh [4]	21.7	-	100%

1) Uniper's Nordic achieved power price includes hydro and nuclear generation. It does not include thermal generation, minorities, customer business, or other purchases.
2) Including capacity receiving payments under "forced mode status", regulated tariffs, and bilateral agreements.
3) Capacity prices paid for the capacity volumes, excluding unplanned outages, repairs, and own consumption.
4) Translated using the average exchange rate.

Uniper is an international energy company with operations in more than 40 countries. With more than 35 GW of installed generation capacity, Uniper is among the largest global power generators. Approximately 50% of the power generating capacity is gas-based, 30% coal-based, and 20% hydro- or nuclear-based. Its main activities include power generation in Europe and Russia as well as global energy trading and optimisation, including a diversified gas portfolio that makes Uniper one of Europe's leading gas midstream companies.

Uniper's energy trading and optimisation business accounts for more than 90% of the Uniper Group's sales. A substantial portion of Uniper's sales arises from the physical assets and contract portfolio optimisation, which is accounted for on a gross basis.

The Uniper business generally follows a seasonal pattern with the first and fourth quarters being the strongest. Therefore, the result contribution in the second and third quarters is usually limited.

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter, consolidated Uniper's results into its income statement. The main reason for the change in the figures compared to the previous year is thus the consolidation of Uniper.

Uniper investment

Fortum is the majority owner of Uniper with an ownership of 76.1% (as of 31 December 2020) of the shares and voting rights.

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter, Fortum consolidated Uniper as a subsidiary into its income statement. The reason for the change in the figures compared to the previous year is thus the consolidation of Uniper. Fortum's first-quarter share of Uniper's results is reported in the share of profits of associates and joint venture of 'Other operations'; see Changes in reporting and Note 1.

In 2017, Fortum announced a public takeover offer to buy shares in Uniper. In June 2018, the offer was settled and Fortum's ownership was 47.35%. At the end of 2018, Fortum's ownership in Uniper was 49.99%. The total acquisition cost for the initial 49.99% stake in Uniper, including direct costs relating to the acquisition, was EUR 3,968 million (Note 3).

On 8 October 2019, Fortum entered into agreements with Elliott and Knight Vinke to acquire an additional stake of at least 20.5% in Uniper, increasing Fortum's share in Uniper to more than 70% and the total investment in Uniper to approximately EUR 6.5 billion. The transaction closed in two tranches. On 26 March 2020, Fortum closed the first tranche of the transaction after receiving all necessary regulatory clearances. Fortum's shareholding in Uniper thereby increased to 69.6%. On 8 May 2020, Fortum closed the second and final tranche, thereby increasing the ownership to 73.4%. In August 2020, Fortum increased its ownership in Uniper to more than 75%. On 31 December 2020, Fortum's ownership in Uniper was 76.1% (Note 3 and Note 18).

In April 2020, the chairman of Uniper's Supervisory Board as well as four other board members resigned from their duties and the Düsseldorf District Court appointed five new Supervisory Board members. Fortum's Executive Management members Sirpa-Helena Sormunen and Tiina Tuomela, as well as Klaus-Dieter Maubach, member of Fortum's Board of Directors, joined Fortum's current President and CEO Markus Rauramo on the Supervisory Board of Uniper. The Supervisory Board elected Mr. Maubach as the new chairman of Uniper's Supervisory Board.

In March 2021, amendments to the Russian Strategic Investment Law were approved. According to these amendments Fortum is able to exercise direct control in Uniper's Russian subsidiary Unipro PJSC. However, a customary merger control approval from the Russian Federal Antimonopoly Service under the Competition Law is still required.

For further information, see Uniper's full year 2020 results published on 4 March 2021.

Capital expenditures, divestments and investments in shares

EUR million	2020	2019
Capital expenditure		
Intangible assets	124	75
Property, plant and equipment	1,010	638
Total	**1,135**	**713**
Gross investments in shares		
Subsidiaries	3,646	13
Associated companies and joint ventures	119	73
Other investments	42	20
Total	**3,807**	**106**

In 2020, capital expenditures and investments in shares totalled EUR 4,941 (819) million. Capital expenditures were EUR 1,135 (713) million (Note 3 and Note 6).

Fortum expects to start, or has started, power and heat production capacity of new power plants and expects to upgrade its existing plants as follows:

	Type	Electricity capacity MW	Heat capacity MW	Supply starts/ started
Generation				
Sørfjord, Norway [1]	Wind	99		26 October 2020
Russia				
Solar [2]	Solar	116		2021-2022
City Solutions				
Kivenlahti, Finland	Bio HOB [3]		58	May 2020
Suomenoja, Finland	Heat pump		20	2021
Rajasthan, India	Solar	250		Q2/2021
Uniper				
Datteln IV, Germany	Coal	1,052	380	30 May 2020
Berezovskaya 3, Russia	Lignite	754		Q1-Q2/2021
Irsching 6, Germany	Gas	300		October 2022
Scholven, Germany	Gas	137	125	Q4/2022
Killingholme and Grain, UK	Grid stability			Q4/2021 and Q1/2022
Surgutskaya 1, Russia	Gas	20		Q1/2022
Surgutskaya 4, Russia	Gas	20		Q4/2025
Surgutskaya 6, Russia	Gas	20		Q3/2024

1) The Sørfjord wind park is part of the transaction with Credit Suisse Energy Infrastructure Partners and the sale of an 80% took place in January 2021.
2) On 2 March 2021, Fortum announced it has decided to construct the solar power plant through a joint venture recently established with RDIF.
3) Biofuel-fired heat-only boiler (HOB).

Generation

In December 2020, Fortum decided to sell eight small hydropower plants in Sweden with an average annual power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc. The power plants are mainly run-off river plants and not essential to Fortum's strategic focus due to their small size and limited flexibility. The total purchase price on a debt- and cash-free basis was EUR 64.5 million. The transaction was closed on 2 February 2021.

In December 2019, Fortum and Energy Infrastructure Partners AG (EIP, formerly Credit Suisse Energy Infrastructure Partners) signed an agreement whereby funds advised by EIP would acquire an 80% stake in Fortum's Nordic wind portfolio. Fortum retained a 20% minority ownership in this wind power portfolio and will continue to manage the construction and serve as the long-term asset manager for the wind portfolio. The transaction was closed on 14 May 2020 (Note 3). The Sørfjord wind park, commissioned on 26 October 2020, is part of the transaction with EIP and the sale of an 80% share took place in January 2021.

Russia

Together with its joint ventures in Russia, Fortum holds the largest portfolio of wind and solar power parks and projects in Russia, almost 2 GW. Once operational, the wind and solar parks receive a guaranteed CSA price for a period of 15 years.

In 2017 and 2018, the Fortum-Rusnano wind investment fund (joint venture, Fortum's ownership 50%) won the right to build a total of 1,823 MW of wind capacity in CSA auctions. 600 MW of the wind capacity is operational, 495 MW under construction, and 728 MW under development. In 2020, 550 MW of new wind capacity, including four wind power plants in the Rostov region (Kamenskaya, Sulinskaya, Gukovo and Kazachiya) and two in the Kalmykia region (Salynskaya and Tselinskaya) started operations. During the second half of 2020, the Fortum-Rusnano wind investment fund sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a joint venture recently established with the Russian Direct Investment Fund (RDIF) aimed at the operation of renewable power plants in Russia.

In 2018 and 2019, Fortum won the right to build a total of 116 MW of solar capacity in CSA auctions. On 2 March 2021, Fortum announced it has decided to construct the solar power plant through a joint venture recently established with RDIF. 78 MW of the capacity is expected to be commissioned in the fourth quarter of 2021 and the remaining part in the fourth quarter of 2022.

The investment decisions related to the solar and wind capacities won by Fortum and the Fortum-Rusnano wind investment fund in the Russian CSA auctions in 2017, 2018, and 2019 are made on a case-by-case basis. Fortum's maximum equity commitment is RUB 15 billion.

City Solutions

On 20 December 2019, Fortum signed an agreement to sell its district heating business in Joensuu, Finland, to Savon Voima Oyj. The total consideration on a debt- and cash-free basis was approximately EUR 530 million, and the cash was received at the completion of the divestment on 10 January 2020. Fortum recorded a tax-exempt capital gain of EUR 431 million in the City Solutions segment's first-quarter 2020 results.

On 6 February 2020, Fortum decided to assess strategic options, including possible divestment, of its district heating and cooling businesses in Poland, Estonia, Lithuania, Latvia, and in Järvenpää, Finland. Based on initial assessments, these district heating and cooling businesses have been identified as operations that could provide higher growth and value potential with an alternative ownership structure. In July, Fortum increased its ownership in the Tartu district heating business to 100% in order to increase the flexibility in potential future options for the Estonian district heating businesses.

On 3 July 2020, Fortum announced it had agreed to sell the district heating business in Järvenpää for approximately EUR 375 million. In August, Fortum closed the transaction and recorded a tax-exempt capital gain of EUR 291 million in the City Solutions segment's third-quarter 2020 results.

On 31 July 2020, Fortum announced its decision to assess strategic options, including possible divestment, of its 50% holding in Stockholm Exergi. As part of the process, Fortum has held discussions on the matter with the City of Stockholm, the owner of the other 50% share in Stockholm Exergi. In December 2020, as part of the discussions, the City of Stockholm informed Fortum that they have concluded to keep their ownership in Stockholm Exergi at the current level and not consider entering into discussions to acquire Fortum's ownership share. Fortum and the City of Stockholm will continue cooperating to ensure an efficient assessment and a mutually beneficial outcome of the process. Fortum continues the assessment of strategic options as planned.

Consumer Solutions

In December 2020, Fortum decided to assess strategic options, including possible divestment, of its Consumer Solutions business. Based on initial assessments, this business has been identified as operations that could provide higher growth and value potential with an alternative ownership structure.

Uniper

In February 2020, Uniper signed an agreement to sell its 58% stake in Schkopau, a lignite-fired power plant in Saxony-Anhalt in eastern Germany, to Saale Energie GmbH, a subsidiary of Czech energy producer EPH, which owns the other 42%. The transfer of ownership will take place in October 2021.

Research and development

Sustainability is at the core of Fortum's strategy and, alongside Fortum's current businesses, the company is carefully exploring and developing new sources of growth within renewable energy production.

Fortum's goal is to be at the forefront of energy technology and application development. To accelerate innovation and the commercialisation of new offerings, Fortum is strengthening its in-house innovation and digitalisation efforts and building partnerships with leading global suppliers, technology and service companies, and research institutions. Fortum makes direct and indirect investments in start-ups that have promising new innovations focused on connectivity, have disruptive potential and accelerate the transition towards a circular economy. Fortum also invests in technologies that support better utilisation of the current asset base and that can create new markets and products for Fortum. The company is continuously looking for emerging clean energy solutions and for solutions that increase resource and system efficiency.

The Group reports its R&D expenditure on a yearly basis. In 2020, Fortum's R&D expenditure was EUR 56 (67) million, or 0.1% (1.2%) of sales.

	2020	2019	2018	Change 20/19
R&D expenditure, EUR million	56	67	56	-16%
R&D expenditure, % of sales	0.1	1.2	1.1	

Changes in Group management

On 2 March 2020, Fortum announced that the President and CEO Pekka Lundmark had resigned from the company. Mr. Lundmark left Fortum at the end of July 2020.

On July 1 2020, Fortum's CFO Markus Rauramo started as President and CEO of Fortum, and Timo Karttinen, former CFO of Fortum (2014-2017), started as acting CFO for an interim period.

On 18 December 2020, Fortum announced that Mr. Bernhard Günther (age 53, Ph.D. Econ.) was appointed as Chief Financial Officer (CFO) and member of the Executive Management Team as of 1 February 2021.

Annual General Meeting 2020

Fortum's Annual General Meeting (AGM) 2020 was scheduled for 17 March 2020. On 16 March 2020, Fortum's Board of Directors decided to cancel the AGM due to the accelerated situation with the Covid-19 pandemic and the consequent restrictions announced by the Finnish Government on that same day. The AGM 2020 was held on Thursday, 23 April 2020.

The Annual General Meeting adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January-31 December 2019 and discharged from liability the members of the Fortum Board of Directors and the President and CEO for the year 2019.

The Annual General Meeting decided that a dividend of EUR 1.10 per share be paid for the financial year that ended on 31 December 2019. The record date for the dividend payment was 27 April 2020, and dividends of EUR 977 million were paid on 5 May 2020.

The Annual General Meeting decided to approve the remuneration policy for the company's governing bodies.

The Annual General Meeting confirmed the remuneration for the Board of Directors for the upcoming term as follows: for the chair EUR 77,200 per year, for the deputy chair EUR 57,500 per year, for a member EUR 40,400 per year, and for the member acting as the chair of the Audit and Risk Committee EUR 57,500 per year, if he or she is not simultaneously acting as chair or deputy chair of the board. In addition, a fee of EUR 600 will be paid for each board meeting and board committee meeting. For members living outside Finland in Europe, the fee for each meeting will be doubled, and for members living outside Europe, the fee for each meeting will be tripled. For members living in Finland, the fee for each board and board committee meeting will be doubled for meetings held outside Finland and tripled for meetings held outside Europe. For board and committee meetings held as a telephone conference, the basic fee will be paid to all members.

The Annual General Meeting decided that the number of the members of the Board of Directors will be nine. Mr Matti Lievonen was elected as chair, Mr Veli-Matti Reinikkala as deputy chair, and Ms Eva Hamilton, Ms Essimari Kairisto, Mr Klaus-Dieter Maubach, Ms Anja McAlister, Mr Philipp Rösler, Mr Teppo Paavola, and Ms Annette Stube as members.

In addition, Deloitte Oy was re-elected as the auditor, with Reeta Virolainen, APA, as the responsible auditor. The auditor's fee is paid pursuant to an invoice approved by the company. In September 2020, Jukka Vattulainen of Deloitte Oy was appointed as the responsible auditor for Fortum.

Fortum's Annual General Meeting 2020 authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. These authorisations will be effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. These authorisations have not been used as per 11 March 2021.

The Annual General Meeting authorised the Board of Directors to decide on contributions in the total maximum amount of EUR 500,000 for charitable or similar purposes and to decide on the recipients, purposes, and other terms of the contributions. The authorisation will be effective until the next Annual General Meeting. As per 11 March 2021, EUR 165,000 of this authorisation has been used.

After a vote, the Annual General Meeting rejected the proposal of shareholder Maailman Luonnon Säätiö, World Wide Fund for Nature, Suomen rahasto sr to amend the Articles of Association of the company.

Board decisions

At the meeting held after the Annual General Meeting 2020, Fortum's Board of Directors elected to the Nomination and Remuneration Committee Matti Lievonen as chair, and Eva Hamilton, Klaus-Dieter Maubach, and Anja McAlister as members.

Furthermore, the board elected to the Audit and Risk Committee Essimari Kairisto as chair and Teppo Paavola, Veli-Matti Reinikkala, Philipp Rösler, and Annette Stube as members.

Shareholders' Nomination Board

On 11 September 2020, Mr. Kimmo Viertola, Director General, Prime Minister's Office, Ownership steering department (chair), Mr. Jouko Pölönen, President and CEO, Ilmarinen Mutual Pension Insurance Company, and Mr. Risto Murto, President and CEO, Varma Mutual Pension Insurance Company, were appointed to Fortum's Shareholders' Nomination Board. In addition, the chair of Fortum's Board of Directors, Mr. Matti Lievonen, is a member of the Shareholders' Nomination Board.

Other major events during the reporting period

On 18 December 2020, the Board of Directors decided to commence the 2021-2023 long-term incentive (LTI) plan for key employees and executives. The 2021-2023 LTI plan is part of Fortum's ongoing LTI programme and follows the same principles as the previous plan. The performance measures applied to the 2021-2023 LTI plan will be based on the total shareholder return measured relative to the peer group comprising selected European utility and gas companies, as well as a target linked to the reduction of Fortum's coal-based power generation capacity in line with Fortum's coal-exit path, with a minimum level requiring exceeding the communicated ambition level. The 2021-2023 LTI plan will comprise approximately 150 participants, including the members of Fortum Executive Management. The Board of Directors also decided to commence the 2021-2023 restricted share (RS) plan as a supplement to the LTI programme and reserve shares that potentially will be delivered in spring 2024. The maximum number of shares that may be delivered as a reward is expected to be 800,000 shares for the 2021-2023 LTI plan and 60,000 shares for the 2021-2023 RS plan.

On 30 September 2020, Fortum's Board of Directors decided to launch the savings period for the year 2021 under its Employee Share Savings (ESS) programme. The ESS programme was established in October 2019 and the Board of Directors decides separately on the annual launch of each individual savings period.

Events after the balance sheet date

There have been no material events after the balance sheet date.

Key drivers and risks

Fortum's financial results are exposed to a number of financial, operational, strategic, and sustainability-related risks. Fortum is exposed to these risks both directly and indirectly through its subsidiaries, associated companies, and joint ventures. The principal associated companies and joint ventures are Teollisuuden Voima Oyj (TVO), Forsmarks Kraftgrupp AB, Kemijoki Oy, TGC 1, and Stockholm Exergi AB. For more information about the risk exposures, please see each respective company's annual report.

On 26 March 2020, Fortum became the majority shareholder of Uniper. Fortum consolidated Uniper into Fortum's balance sheet as of 31 March 2020, and the income statement from the second quarter. However, Uniper remains a separate listed company operating under German law and regulations; Uniper has its own risk management systems including a set of risk policies defining the risk management organisation principles, processes, and responsibilities for managing risks. Therefore, Uniper does not directly apply the risk management systems applicable to Fortum's other divisions and corporate functions. The risk management systems of Uniper, including the key principles and processes, are materially in line with those of Fortum. The target is to further align the risk management systems going forward.

For more information about Uniper's risk management systems and risk exposures, please see Uniper's annual report for 2020.

In December 2020, Fortum presented the updated strategy for the whole Fortum Group. Fortum and Uniper have agreed to co-operate in a number areas including physical trading and optimisation of Nordic hydro operations, jointly developing a portfolio of solar and wind projects in Europe, and a joint growth strategy in hydrogen. In addition, Fortum has announced a number of growth areas for future investments and has initiated a strategic review of the heating and cooling businesses in the Baltics and Poland, it's 50% stake in Stockholm Exergi, and the Consumer Solutions business. The ability of Fortum to deliver on its strategic targets and achieve the expected benefits depends on successful portfolio restructuring and co-operation between the two companies.

Fortum is exposed to power, emissions, and fuel price movements and volume changes mainly through its power and heat generation. The profitability of outright production assets, such as hydro, nuclear, and wind power generation, are primarily exposed to fluctuations in electricity prices and volumes, whereas the profitability of coal and gas fired generation assets depend on the spread between the electricity price and the emission and fuel prices.

In the Nordics and central European countries, power prices and, consequently, the amount of profitable production, exhibit significant variation on the back of several factors, for instance, but not limited to weather conditions, outage patterns in production and transmission lines, CO_2 allowance prices, fuel prices, as well as the power demand.

Uniper has long-term gas supply contracts which generally include the possibility for the customer and the supplier to adapt contractual terms to changed market conditions. This entails the risk that suppliers will impose contractual changes and/or new conditions that are detrimental, but also represents an opportunity as renegotiated conditions may be beneficial for Fortum.

For Fortum's Russian businesses, the key drivers are economic growth, the rouble exchange rate, regulation of the heat business, and the further development of the electricity and capacity markets. A key profitability driver is the received capacity payments based on the CSA contracts and CCS auctions. The main part of Fortum's generation capacity built after 2007 is entitled to CSA payments for approximately 10 years after commissioning of each new unit (approximately 15 years for renewable generation). The received capacity payments vary, depending on the age, location, type, and size of the plant, as well as on seasonality and availability. The CSA payments are adjusted for, among other factors, the Government bond yield, the rate of return, the consumer price index (CPI), and re-examination of earnings from the electricity-only (spot) market (done every three and six years after commissioning of a unit). In addition, thermal power plants are entitled to clearly higher CSA payments starting approximately six years after commissioning.

The energy sector is heavily influenced by national and EU-level energy policies and regulations. Fortum's strategy has been developed based on scenarios of the future development of the regulatory environment in both existing and potential new businesses and market areas. The overall complexity and possible regulatory changes in Fortum's various operating countries pose risks and create opportunities for the energy, environmental management, and consumer businesses. Fortum analyses and assesses a number of future market and regulation scenarios, including the impact of these on different generation forms and technologies in the development of its strategy.

Fortum has cash flows, assets, and liabilities in currencies other than the euro and is therefore exposed to fluctuations in exchange rates. Currency risk arise mainly from physical and financial trading of commodities, existing and new investments, external financing, and shareholder loans within the Group. The main currency exposure is toward euro/Swedish krona, euro/Russian rouble, and euro/British pound sterling, arising from Fortum's extensive operations in Sweden, Russia, and the United Kingdom.

Fortum is currently rated BBB with a negative outlook by both Standard & Poor's and Fitch credit rating agencies. The key risk factors that could lead to a weakening credit metrics and rating downgrade include a continuing decline in European and Russian power prices, lower-than-expected amounts received from planned divestments, and an increase in leverage. A lowering of the credit rating, in particular to below investment-grade level (BB+ or below), could affect access to capital markets and the increase cost of new financing. Uniper is also currently rated BBB with a negative outlook by Standard & Poor's. A downgrade from the current BBB investment-grade rating to BBB- or below could negatively affect liquidity as it would trigger counterparties', especially in the trading business, right to demand increased collateral, which would need to be provided via liquid assets or bank guarantees.

Energy generation, storage, distribution, and control of operations is a complex process and therefore accidents can occur. Any unwanted operational event (which could be caused by e.g. technical failure, human or process error, natural disasters, sabotage, or terrorist attack) can endanger personal safety or lead to environmental or physical damage, business interruptions and possible third-party liability. The cost of repairing damage can be high especially in the Group's largest units.

Fortum's business activities involve the construction, modernisation, maintenance, and decommissioning of power plants or other energy industry facilities. There is a risk that construction costs exceed planned costs or construction delays occur as the result of regulatory or permit issues, failure of key suppliers, being unable to obtain permits, or as a result of Covid-19 causing the discontinuation of the project. Asset projects also face environmental, health, and safety risks. Asset project risks may realise both for Fortum's own assets projects, or projects carried out through joint ventures or associated companies. The most significant asset projects which are still exposed to significant risks are Datteln 4, Nord Stream 2, and Olkiluoto 3.

During 2020, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. Although the impacts for Fortum have so far been limited, the exposure to risk and uncertainty in all risk categories has increased compared to the 2019 year-end situation. If the Covid-19 pandemic continues longer than expected or results in a more severe economic downturn than anticipated, results will be negatively impacted, as the hedge level for future years is lower. The main risk factors include lower commodity prices and decreased demand, credit defaults and delayed payments, project delays and increased risk of operational incidents or prolonged maintenance as a result of travel restrictions, absence of key personnel, as well as difficulties in obtaining key materials and spare parts.

Fortum is closely monitoring the development of the pandemic and its effects on our operations so that we can quickly respond to changes and continue to ensure the safe and reliable delivery of electricity, heat and related services. For further details on Fortum's risks and risk management, see the ▸ **Risk management** section of the Operating and financial review and ▸ **Note 4** Financial risk management.

Outlook

Hedging

At the end of 2020, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged at EUR 33 per MWh for 2021 and approximately 50% at EUR 31 per MWh for 2022.

At the end of 2020, approximately 90% of the Uniper segment's estimated Nordic power sales volume was hedged at EUR 27 per MWh for 2021, approximately 65% at EUR 24 per MWh for 2022 and approximately 25% at EUR 22 per MWh for 2023.

The reported hedge ratios are based on the hedges and power generation forecasts of the Generation segment and of the Uniper segment's Nordic generation. The underlying generation assets and definition of hedges differ to some extent and thus are not fully comparable.

The reported hedge ratios may vary significantly, depending on Fortum's and Uniper's actions on the electricity derivatives markets. Hedges are mainly financial contracts, most of them electricity derivatives quoted on Nasdaq Commodities.

Capital expenditure and divestments

Fortum estimates its capital expenditure, including maintenance but excluding acquisitions, to be approximately EUR 1,400 million in 2021, of which the share of maintenance capital expenditure is estimated to be approximately EUR 700 million, well below the level of depreciation.

Generation

The Generation segment's achieved Nordic power price typically depends on factors such as hedge ratios, hedge prices, spot prices, availability and utilisation of Fortum's flexible generation portfolio, as well as currency fluctuations. Excluding the potential effects from changes in the power generation mix (currently approximately 45 TWh), a EUR 1 per MWh change in the Generation segment's achieved Nordic power price will result in an approximately EUR 45 million change in the segment's annual comparable operating profit. The achieved power price also includes the results of optimisation of Fortum's hydro and nuclear generation, as well as operations in the physical and financial commodity markets.

Russia

In February 2021, the Wholesale Market Trading Administrator published data from 2020 regarding the rate of return and the CPI, which are used to calculate the CSA price for 2021. The CSA payments were revised downwards, mainly due to the lower Government bond yield (6.3% for 2021 vs. 7.6% for 2020). In 2021, in the Russia segment, the negative financial effect related to the ending of the CSA period of two production units is expected to exceed the positive effect of three units entering the four-year period of higher CSA payments.

Uniper

Excluding the potential effects from changes in the power generation mix, a EUR 1 per MWh change in the Uniper segment's power sales price for the outright generation (hydro and nuclear, currently approximately 25 TWh) will result in an approximately EUR 25 million change in the segment's annual comparable operating profit. Uniper also has generation other than hydro and nuclear power, and the sensitivity for that generation is different and is not included in the previously mentioned sensitivity.

With regard to Uniper, reference is made to the guidance that the company publishes quarterly.

Income taxation

In 2021, the comparable effective income tax rate for Fortum is estimated to be in the range of 20-25%. The actual effective income tax rate on the income statement differs from the guided comparable effective income tax rate range depending on capital gains, share of profits from associates and joint ventures, and volatility in fair valuations.

In June 2018, the Swedish Government decided to lower the Swedish corporate tax in two steps, from 22.0% to 21.4%, effective January 2019, and to 20.6%, effective January 2021.

Sustainability

Sustainability at Fortum

Introduction

This section covers Fortum's non-financial reporting in accordance with the Finnish Accounting Act 1336/1997, Securities Market Act 746/2012 and Limited Liability Companies Act 624/2006. The reporting scope includes Uniper, which Fortum has consolidated as a subsidiary as of 31 March 2020.

Indicators following the same calculation principles have been consolidated and are disclosed as one figure. In cases where the definitions currently differ, two KPIs are presented; one for Fortum, excluding Uniper, and one for Uniper. No historical figures have been restated.

Fortum Group's business model is described in the Segment review section on page 10.

Uniper is a listed company in Germany, and has its own sustainability processes, approach and standalone sustainability reporting. Uniper also prepares and publishes a Combined Separate Non-Financial Report in accordance with §§315c in conjunction with 289c to 289e of the German Commercial Code.

Material non-financial aspects

Fortum's non-financial reporting includes information on the four mandatory aspects defined in the Finnish Accounting Act. These are: environmental matters, social and personnel matters, respect for human rights, and prevention of corruption and bribery.

As a result of Uniper consolidation, Fortum has reassessed its material aspects. Fortum's materiality assessment was originally conducted in 2019, and the 2020 reassessment was based on a desk-top review following the same methodology Uniper applies. The assessment results of the two companies were combined with an equal weight in the end result.

Fortum highlights the importance of decarbonisation and climate change mitigation, while at the same time the necessity to secure reliable and affordable energy for all. Fortum also gives balanced consideration in its operations to the promotion of energy efficiency and a circular economy, as well as its impacts on personnel and societies.

Based on the above-mentioned priorities, Fortum's updated sustainability priority areas include:

Climate and resources	Personnel and society	
Climate change and GHG emissions	Employee wellbeing, health and safety	Business ethics and compliance
Emissions to air, land and water	Corporate governance	Labour rights
Energy efficiency	Human rights	Diversity and equal opportunity
Security of supply	Innovation and digitalisation	Stakeholder engagement
Water use	Economic value creation	Customer rights and satisfaction
Biodiversity		
Circular economy		

Fortum's sustainability performance is monitored and disclosed in interim and annual reporting. Fortum publishes an annual Sustainability Report with more extensive information on Fortum's sustainability performance.

Revised Sustainability targets

Fortum updated its climate targets aligned with the goals of the Paris Agreement in December 2020 and is committed to carbon neutrality by 2050 at the latest. The target covers direct CO_2 emissions (Scope 1) and indirect CO_2 emissions (Scope 2 and 3). Fortum's roadmap to reduce emissions in Europe has also been defined. Fortum is committed to at least 50% CO_2 emissions reduction (Scope 1 and 2) in its European generation by 2030 (compared to base-year 2019) and to be carbon neutral by 2035 at the latest.

Scope 3 emissions play a significant role in Fortum's total emissions. During 2021, Fortum will develop a target for the reduction of Scope 3 GHG emissions, addressing the indirect emissions from fossil fuel sales to end users.

Fortum has also set a target for biodiversity, addressing the year 2021. Fortum aims at conducting a minimum of 12 major voluntary measures that improve the living conditions of species and strengthen populations, covering all countries where Fortum has hydropower production. The projects focus on threatened species or habitats, in particular, and in 2021 are planned to include restoring aquatic and terrestrial habitats, improving fish migration and migratory fish populations and combating invasive species.

For Fortum, excellence in safety is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production. The new safety target is measured as Total Recordable Injury Frequency (TRIF), for own personnel and contractors, and the ambitious goal is to be below 1.0 by the end of 2025. Fortum's Total Recordable Injury Frequency (TRIF) was 2.3 in 2020.

Development of sustainability targets will continue in 2021 and Fortum aims to align targets also addressing other areas of sustainability in addition to climate, biodiversity and safety.

The sustainability targets for the year 2020 were defined for Fortum, excluding Uniper. However, as Fortum started to consolidate Uniper as a subsidiary as of 31 March 2020, the extent of operations, sustainability impacts and performance figures of Fortum materially changed. Therefore, Fortum only reports sustainability performance with selected key indicators presented in the tables below without comparing performance against the previously set targets for 2020, as they are no longer relevant for the altered Group.

Group sustainability performance

	2020	2019
Climate and resources		
Specific CO_2 emissions from total energy production [1], gCO_2/kWh	287	189
Energy availability of CHP plants [2], %	93.2	95.9
Asset availability of Uniper's power generation plants [3], %	75.0	-
Personnel and society		
Lost Time Injury Frequency (LTIF), own personnel and contractors [1]	1.3	1.7
Severe occupational accidents [1], no.	1	1

Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first-quarter 2020. The figures for full-year 2019 do not include Uniper.
1) 2020 figures include Uniper from the second-quarter 2020.
2) Excludes Uniper
3) 2020 figures include Uniper's power generation from gas and coal power plants from the second-quarter 2020.

Other key sustainability performance indicators [1)]

	2020	2019
Climate and resources		
Energy-efficiency improvement by 2020, baseline 2012, GWh/a	1,840	1,707
Major EHS incidents, no.	16	11
Personnel and society		
Reputation index, based on One Fortum Survey, scale 0–100	72.5	72.3
Customer satisfaction index (CSI), based on One Fortum Survey, scale 0–100	61–81	54–80
Quality of investigation process of occupational accidents, major EHS incidents and near misses, scale 1–5	Level 4.0	Level 3.0
GAP index, implementation of EHS minimum requirements, scale 1–5	Level 3.0	Level 3.0
Contractor safety improvement index, scale 1–5	Level 4.0	Level 2.0 [2)]
Sickness-related absences, %	2.9	2.9 [3)]

1) All figures excluding Uniper.
2) Reporting of the Contactor Safety Improvement index started in the second quarter of 2019.
3) The figure has been revised from the one presented in the Financials 2019 report (3.0).

Fortum's goal is to achieve excellent financial performance in strategically selected core areas through strong competence and responsible ways of operating. The financial targets include a target for capital structure (financial net debt/comparable EBITDA below 2x) and two different hurdle rates for new investments (WACC +100 BPS for green investments and WACC +200 BPS for other investments). Accordingly, Fortum aims to provide good returns for its owners, and its dividend policy stipulates to pay a stable, sustainable, and over time increasing dividend.

Fortum is a significant economic actor in its operating countries. The most significant direct monetary flows of Fortum's operations come from revenue from customers, procurements of goods and services from suppliers, compensation to lenders, dividends to shareholders, growth and maintenance investments, employee wages and salaries, and taxes paid.

Fortum supports social development and wellbeing in its operating countries by, e.g., paying taxes. The tax benefits Fortum produces to society include not only corporate income taxes, but also several other taxes. Fortum's, excluding Uniper, approach to taxation and the principles that steer the tax management are presented in Fortum's Tax Principles disclosed on Fortum's website. Fortum publishes its tax footprint annually, and Uniper will publish its first tax footprint in spring 2021.

Fortum is included in several sustainability indices and has been assessed by many sustainability ratings; see the list on Fortum's website. Fortum's sustainability reporting covers functions under Fortum's operational control, including subsidiaries in all its operating countries, if not otherwise stated.

Sustainability risks and opportunities

Fortum's operations are exposed to risks, which, if materialised, can have adverse effects on the environment and on the safety and security of employees, contractors and neighbouring societies. Key sustainability risks, including climate-related risks, are reported to Fortum Executive Management and the Audit and Risk Committee as part of the annual review of material risks and uncertainties for Fortum Group. Fortum Group's risks are presented in the Risk management section in the Operating and financial review.

As a separate listed company, Uniper applies its own processes aligned with its enterprise risk management to systematically identify, assess and manage Environmental, Social and/or Governance (ESG) risks. In 2020 Uniper had no reportable ESG risks pursuant to Section 289c of the German Commercial Code. The impact of its net risks was below the reporting threshold.

Climate change and the need for decarbonisation and resource efficiency are changing the energy industry in a profound way, and these changes also create new business opportunities for Fortum. Fortum has transformed itself, having invested about EUR 11 billion over the past six years to become Europe's third largest CO_2-free power generator and a significant player in gas. As such, Fortum is now well positioned to capture opportunities resulting from the energy transition, aimed at curbing climate change. To be successful, the energy transition must balance sustainability, affordability, and security of supply. It requires not only renewables, but also increasingly clean gas (e.g. hydrogen), energy storage, and other flexible solutions to provide security of supply and to decarbonise also industry, transportation, heating, and cooling. Fortum's updated strategic priorities address and provide solutions for these very areas: Fortum aims to decarbonise its own operations and to strengthen and grow in CO_2-free power generation while leveraging its strong position in gas to enable the energy transition. At the same time, Fortum aims to provide industrial and infrastructure customers with decarbonisation and environmental solutions, such as grid stability, waste-to-energy, and low-carbon industrial solutions, and to capture the opportunities in hydrogen as they become commercially available.

Sustainability governance and policies

As sustainability is an integral part of Fortum's strategy, the highest decision making on sustainability and climate-related matters falls within the duties of the members of the Board of Directors, who share joint responsibility in these matters.

Fortum Executive Management decides on the sustainability approach and Group-level sustainability targets that guide annual planning. The Group's performance targets, including sustainability and climate-related targets, are approved by Fortum's Board of Directors. Fortum's line management is responsible for the implementation of Fortum Group's policies and instructions and for day-to-day sustainability management and improvement plans. Realisation of the safety targets (Lost Time Injury Frequency, own employees and contractors combined) is a part of Fortum's short-term incentive (STI) programme. Fortum's long-term incentive (LTI) programme includes a climate-related metric. In the 2020–2022 LTI plan, the target is related to the reduction of CO_2 emissions aligned with Fortum's strategy. In the 2021–2023 LTI plan, the target is linked to the reduction of coal-fired power generation capacity in line with Fortum's coal-exit path. Both STI and LTI targets are applicable to Fortum, excluding Uniper. Uniper continues to follow its own STI and LTI plans.

The Uniper SE Management Board bears the overall responsibility for the adoption and implementation of Uniper's sustainability measures. Uniper's highest governance board, the Supervisory Board, monitors the fulfilment of Uniper's sustainability obligations. Three of Fortum's Executive Managers, including the President and CEO of Fortum, as well as one member of Fortum's Board of Directors are members of the Supervisory Board.

Sustainability management at Fortum is strategy-driven and based on its Values, Code of Conduct, Supplier Code of Conduct, sustainability-related policies, and other Group policies and their specifying instructions. For now, Uniper continues to have its own separate Code of Conduct and Supplier Code of Conduct. Both companies' Codes of Conduct are based on similar fundaments and they establish the basic principles of conduct that everyone must follow. They define how we treat each other, do business and engage with the world. The companies' Supplier Codes of Conduct, both based on the ten principles of UN Global Compact, outline the requirements for Fortum's and Uniper's suppliers and business partners.

Fortum's Sustainability Policy and Uniper's Health, Safety, Security and Environment (HSSE) and Sustainability Policy Statement define the companies' ambitions and priorities for sustainability. Both companies have sound policies and specifying instructions guiding the operations in the areas of environmental matters, social and personnel matters, human rights, and anti-corruption and bribery. The most important policies and instructions are described in the respective sections of this report.

Fortum follows and respects the International Bill of Human Rights, the United Nations Convention on the Rights of the Child, and the core conventions of the International Labour Organisation (ILO). Additionally, Fortum recognises in its operations the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the International Chamber of Commerce's anti-bribery and anti-corruption guidelines, and the Bettercoal initiative's Code on responsible coal mining.

Fortum is a participant of the UN Global Compact initiative and the UN Caring for Climate initiative. Uniper follows the ten principles of the UN Global Compact, but is not a formal participant.

Business ethics

Zero tolerance for corruption and bribery is highlighted in both Fortum's and Uniper's Codes of Conduct and Supplier Codes of Conduct. In addition, separate instructions and guidelines have been created to address, e.g., anti-bribery, compliance management, safeguarding company assets, conflict of interest, anti-money laundering and competition law.

Fortum's Board of Directors has approved the company's Code of Conduct and Supplier Code of Conduct. Uniper's Code of Conduct and Supplier Code of Conduct have been approved by the Uniper Management Board.

The Codes of Conduct are regularly reviewed in order to ensure compliance with evolving company and regulatory requirements. Fortum's Code of Conduct and Supplier Code of Conduct were updated during 2020 and published in early 2021. Training on the updated Codes will be organised during 2021. The Code of Conduct online training is mandatory to all employees. Uniper's updated Code of Conduct was released in early 2020. Uniper seeks to make all compliance and Code of Conduct training mandatory to all employees starting in 2021. In addition, relevant individuals are regularly trained in policies and systems that prevent corruption.

Internal and external reporting channels are offered for reporting suspicions of misconduct. The channels are described in the Codes of Conduct and accessible on the companies' internal and external webpages. Suspected misconduct and measures related to ethical business practices and compliance with regulations are regularly monitored and assessed by Fortum's Audit and Risk Committee. Uniper's Compliance Management System includes quarterly compliance reports to the Uniper Management Board. Uniper's Audit and Risk Committee monitors compliance issues on a regular basis. Uniper Management Board's Compliance Commitment is published annually on the company's webpage in accordance with the German Governance Code.

During 2020, one case of corruption or bribery was confirmed in Fortum's operations, excluding Uniper. Two instances of alleged corruption and bribery were reported at Uniper during the year. One case is pending, the other was closed as unfounded.

Climate and resources

Fortum's key performance indicators for climate and resources are related to CO_2 emissions, security of supply, energy efficiency, and major Environmental, Health and Safety (EHS) incidents.

Fortum's Sustainability Policy together with the Minimum Requirements for EHS Management steer environmental management. Uniper has its HSSE & Sustainability Policy Statement and HSSE and Sustainability Improvement Plan. Operational-level activities follow the requirements set forth in the ISO 14001 environmental management standard, and 99.9% of Fortum's power and heat production worldwide has ISO 14001 certification.

Energy

Fortum Group's power generation is mainly based on natural gas-fired generation, and carbon dioxide-free hydro and nuclear power. Fortum targets to reduce the share of coal in power generation rapidly. A minor share of Fortum's power generation is currently based on solar and wind, but Fortum targets significant growth in the area over the next five years.

Fortum is also a large producer of district heat. The heat is mainly produced at natural gas-fired and energy-efficient combined heat and power (CHP) plants. In addition, Uniper operates a large commodities trading business and has natural gas storage sites, which play an important role in ensuring a secure and flexible gas supply.

Fortum wants to enable the energy transition by providing a reliable and affordable supply of low-carbon energy. In the future, the energy system – and Fortum's asset portfolio – will be based on renewable energy, increasingly clean gas (e.g. hydrogen) and nuclear power. In addition, Fortum will continue to offer industrial and infrastructure solutions, e.g., waste-to-energy, grid stability services, as well as energy sales and storage.

In 2020, Fortum's power generation was 142.1 TWh and heat and steam production 29.6 TWh. 45% of Fortum's total power generation was CO_2-free. In Europe, 73% of the power generation was CO_2-free. The figures for power and heat generation and capacities also include figures from Fortum's share in associated companies and joint ventures that sell their production to the owners at cost.

Fortum uses various fuels, such as natural gas, uranium, coal, lignite, waste-derived fuels and biomass fuels, to produce electricity, heat and steam. The most significant fuel used was natural gas.

An uninterrupted and reliable energy supply is critical for society to function. With planned preventive maintenance and condition monitoring, Fortum ensures that the power plants operate reliably to produce the electricity and heat customers need. In the exceptional conditions caused by the Covid-19 pandemic, Fortum's top priority was to maintain business continuity. This goal was well achieved; there were no interruptions in Fortum's energy production due to the pandemic. Maintenance outages were, in general, also implemented as scheduled with careful planning and special measures to protect own and contractors' employees' health. In some cases, the duration of maintenance periods was extended to reduce the number of workers on site at the same time.

Uniper's definition for asset availability differs from that of the rest of the Fortum Group. The energy availability of Fortum's CHP plants, excluding Uniper, excludes planned maintenance outages, whereas Uniper's asset availability for power production includes planned outages in addition to unplanned technical unavailability. In 2020, the energy availability of Fortum's CHP plants, excluding Uniper, was, on average, 93.2%, and the asset availability of Uniper's gas and coal-fired power production plants was, on average, 75.0%. For Uniper, the figure (75.0%) was for the time period of consolidation as a subsidiary, i.e. the second-fourth quarters 2020 only.

Climate

In December 2020, Fortum Group committed to carbon neutrality by 2050 at the latest, in line with the goals of the Paris Agreement. Fortum's priority is to transform its own operations to carbon neutral by continuously strengthening and growing in CO_2-free power generation and by decarbonising its carbon-emitting energy production fleet.

In 2020, Fortum's direct CO_2 emissions were 48.7 Mt. 63% of CO_2 emissions originated from Russian power and heat production. Of the total CO_2 emissions, 17.5 Mt were within the EU emissions trading system (ETS). The estimate for Fortum's free emission allowances in 2020 is 0.9 Mt.

Fortum's total CO_2 emissions [1] (million tonnes, Mt)	2020	2019	2018
Total emissions	48.7	19.1	20.1
Emissions subject to ETS	17.5	2.1	2.5
Free emission allowances	0.9	0.7	0.8
Emissions not subject to ETS in Europe	0.7	0.7	0.7
Emissions in Russia	30.5	16.3	16.9

1) Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first-quarter 2020. The figures for full years 2018 and 2019 do not include Uniper.

In 2020, Fortum Group's specific CO_2 emissions from total energy production were 287 gCO_2/kWh.

Fortum, excluding Uniper, achieved annual energy-efficiency improvements of 1,840 GWh/a by the end of 2020 compared to 2012.

EHS incidents

Major EHS incidents are monitored, reported and investigated, and corrective actions are implemented. In 2020, there were 16 major EHS incidents in Fortum's operations, excluding Uniper. The major EHS incidents consisted of six fires, eight leaks or spills, one environmental non-compliance, and one INES level 1 incident. The major EHS incidents did not have significant environmental impacts, apart from the oil spill that occurred at the Inkoo oil storage in Finland. The clean-up measures in Inkoo have been completed. As Uniper's definitions of major EHS incidents vary from that of the rest of the Fortum Group, Uniper's EHS incidents are currently not included in the reporting.

Water and biodiversity

Fortum uses large volumes of water at various types of power plants and in district heating networks. The majority of water is used for cooling. In most cases, power plants do not consume water – the water is discharged back to the same water system from where it was withdrawn.

Fortum's operations in e.g. hydropower generation impact biodiversity. Fuel procurement and flue-gas emissions may also have a negative impact on biodiversity. On the other hand, increasing CO_2-free production mitigates the biodiversity loss caused by climate change. Fortum's Biodiversity Manual and Biodiversity Action Plan define the company's approach to biodiversity management, excluding Uniper. Fortum has set a new Group target for biodiversity for 2021: number of major voluntary measures enhancing biodiversity ≥12. The measures planned for 2021 are primarily related to hydropower generation in Sweden, Finland and Germany.

Personnel and society

Fortum's key performance indicators for personnel and society are related to operational and occupational safety, as well as employee health and wellbeing. In addition Fortum, excluding Uniper, annually measures its reputation and customer satisfaction with the One Fortum Survey.

Personnel

Fortum places a significant emphasis on an open and trusting corporate culture and highlights systematic two-way feedback on employees' performance and engagement. Diversity and equal opportunity are seen to contribute to competitiveness and innovation. Fortum and Uniper Values and Codes of Conduct form the foundation for all daily work. For Fortum, the People Policy and Leadership Principles guide personnel-related matters, excluding Uniper. For Uniper, the Uniper Way builds corporate culture and describes the core elements and guiding statements for leadership, teamwork and individual contribution. Uniper defined a new People Strategy in 2020 to support the journey towards a green future.

Fortum's operations are mainly based in the Nordic countries, Central Europe, the UK, Russia, Poland and the Baltic Rim area. The total number of employees at the end of 2020 was 19,933.

Group personnel statistics [1]	2020	2019	2018
Number of employees, 31 December	19,933	8,191	8,286
Average number of employees	19,988	8,248	8,767
Total amount of employee benefits, EUR million	1,195	480	459
Departure turnover, % (of permanent employees)	7.4	11.2	16.1
Permanent employees, %	94.8	96.8	95.9
Full-time employees, %	98.2	97.7 [2]	98.2 [2]
Female employees, %	27	32	32
Females in management, %	27 [3]	30	30

1) Fortum consolidated Uniper as a subsidiary into its income statement from the second quarter of 2020. The figures for 2020 do not include Uniper for the first-quarter 2020. The figures for full years 2018 and 2019 do not include Uniper.
2) Figure includes only permanent, not temporary, employees.
3) Calculation principle changed due to alignment with Uniper.

Occupational safety

For Fortum, excellence in safety is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production. Fortum strives to be a safe workplace for the employees, contractors and service providers who work for the company. For Fortum, the Sustainability Policy, the Minimum Requirements for EHS Management and more detailed EHS manuals steer the work. For Uniper, the most important tools guiding safety efforts are the HSSE & Sustainability Policy Statement and the HSSE and Sustainability Improvement Plan. A certified OHSAS 18001 or ISO 45001 safety management system covers 98.8% of Fortum's power and heat production worldwide.

New tools were implemented in 2020 to improve occupational safety in pandemic conditions. Fortum, excluding Uniper, created a concept for virtual safety walks to replace physical visits at the sites, the goal being to reinforce positive safety behaviour and raise safety awareness. In addition, guidelines for safe remote working were issued, including tips on how to ensure fire safety at home as well as paying attention to ergonomics.

In 2020, Fortum's Lost Time Injury Frequency (LTIF) for own personnel and contractors was 1.3. Fortum strives for zero severe occupational accidents. In 2020, there was one severe occupational accident in the operations. In September 2020, an employee of Uniper was fatally injured by an electrical shock while working on a switchgear upgrade project at a customer's premises in Germany. A comprehensive investigation was conducted to determine the incident's circumstances and root causes. Specific actions resulting from the investigation are in the process of being implemented.

Fortum, excluding Uniper, applies three internal control points covering its EHS processes. These include the quality of the investigation process of occupational accidents, major EHS incidents, and serious near misses; the GAP index; and the Contractor Safety Improvement index, all measured on a scale of 1–5, with five indicating the highest maturity level.

In 2020, the quality of the investigation process of occupational accidents, major EHS incidents, and serious near misses was at a very good level of 4.0.

In 2020, the GAP index was at the desired level of 3.0. The GAP index measures how well Fortum's, excluding Uniper, EHS minimum requirements are realised at the power plant level.

The Contractor Safety Improvement index was at a very good level of 4.0 in 2020. The Contractor Safety Improvement index measures how well Fortum, excluding Uniper, has managed to implement measures targeting improvements in contractor safety.

In 2020, Fortum, excluding Uniper, launched new mandatory online training addressing the most important safety requirements expressed in the updated Safety and Security Handbook. In addition, online courses were offered in chemical safety and the use of safety walks to support the safety culture. More than 200 managers participated in training on how to conduct a virtual safety walk utilising a smartphone. Uniper provides safety leadership training to all newly hired senior managers and to current senior managers as a periodic refresher.

Personnel wellbeing

Fortum's goal regarding workplace wellbeing activities is to promote the health and occupational safety of employees and the functionality of the work community. Employees have access to a wide range of services, from medical check-ups to exercise and coaching programmes also addressing stress management and mental wellbeing.

In 2020, the company's efforts focused on safeguarding personnel from the Covid-19 pandemic and supporting their physical and mental wellbeing in the exceptional conditions. At the beginning of the pandemic, coordination teams consisting of senior management were established in both Fortum and Uniper to closely monitor the development of the pandemic and its effects on the companies' operations and personnel, and to agree on related actions.

Examples of measures to combat the Covid-19 pandemic include remote working in those positions in which a physical presence is not required, as well as on-site work with special arrangements, such as staggered arrival, breaks and lunch, maintaining physical distance, use of face masks and enhanced cleaning.

Travel restrictions have been in place since March 2020. Several measures have been implemented to support employees working remotely; examples include cloud-based IT solutions and HR processes that support flexible, mobile work arrangements. Also virtual wellbeing services and events have been offered to employees. More than 80% of Fortum personnel, excluding Uniper, felt that they are well informed and supported when working remotely, according to an employee survey.

In 2020, the percentage of sickness-related absences was 2.9. The figure excludes Uniper.

Society

Customer satisfaction

Fortum's performance regarding reputation and customer satisfaction, excluding Uniper, is monitored annually. In 2020, the combined reputation index of all stakeholder groups based on the One Fortum Survey was 72.5 points, on a scale of 0–100, and the customer satisfaction index (CSI) was, depending on the business area, between 61 and 81 points, on a scale of 0–100. Fortum's overall reputation improved slightly, with all-time high results from employees; however, a negative development was seen amongst NGOs and opinion influencers especially in Finland.

One of Fortum's top priorities at the beginning of the Covid-19 pandemic was to ensure interruption-free customer service while enabling employees in call centres to shift to remote work as swiftly as possible. To support this, several new technical solutions were implemented successfully, and the company was able to maintain good quality services for customers during this major change in ways of working.

Supply chain

Fortum and Uniper expect their business partners to act responsibly and to comply with the requirements set forth in their respective Codes of Conduct and Supplier Codes of Conduct. Fortum assesses the performance of its business partners with supplier qualification and supplier audits. In 2020, Fortum, excluding Uniper, conducted a total of four on-site supplier audits in India, Indonesia, China and Finland. Due to the Covid-19 pandemic and travel restrictions, the possibilities to conduct on-site supplier audits have been limited since March 2020. Consequently, Fortum, excluding Uniper, conducted two remote audits in 2020: one of a Finnish supplier and one of a Dutch supplier. Uniper applies its own processes for ESG Due Diligence and Know Your Counterparty. Both companies are members of the Bettercoal Initiative and use the Bettercoal tools to improve sustainability in the coal supply chain.

Human rights

Fortum follows and respects internationally recognised human rights, which are included in the key human rights treaties. Respect for human rights is expressed in both Fortum's and Uniper's Codes of Conduct and Supplier Codes of Conduct. The UN Guiding Principles on Business and Human Rights are taken into account in own operations and in supply chain management.

Fortum, excluding Uniper, conducts a human rights assessment for investment projects – especially in new operating areas – and also for new countries where Fortum plans to expand the sales of products and services. In 2020, five of these assessments were made.

Uniper annually performs a worldwide assessment, which is based on a combination of economic and social indexes, to map key potential country-specific issues that may directly affect the company. The assessment findings contribute to the implementation of modified due diligence requirements and mitigation measures, such as the inclusion of specific contract clauses.

Corporate citizenship

Fortum, excluding Uniper, launched a Corporate Social Responsibility (CSR) programme to steer its support to society and co-operation with local communities. The programme's focus areas, aligned with the company's strategic targets, are Climate, People and Material Revolution. A new CSR programme Governance Model Group Instruction was approved. Steering of CSR activities was concentrated to a Fortum-wide Steering Group.

During the Covid-19 pandemic, Fortum has supported local communities, e.g. by providing face masks to local communities, including health care workers in Russia, Poland, Latvia and India. Uniper provided 5,100 face masks for public transportation customers in Düsseldorf, Germany. Fortum also supported charity organisations in order to help its local communities during the pandemic. In addition, Fortum engages in collaboration with universities through different research and development projects. In 2020, Fortum's, excluding Uniper, support for activities promoting the common good totalled approximately EUR 2.5 million. In addition, the grants awarded by Fortum and Neste Foundation (earlier Fortum Foundation), not part of Fortum Group, totalled EUR 612,500.

Risk management

Risk management framework and objectives

The Group Risk Policy provides a risk management framework for Fortum, the purpose of which is to support business in managing risks effectively and to ensure compliance with relevant regulations. The Group Risk Policy includes an overview of Fortum's risk management systems consisting of the general principles of risk management, the main features of the risk management process and responsibilities for managing and controlling risks within the Group.

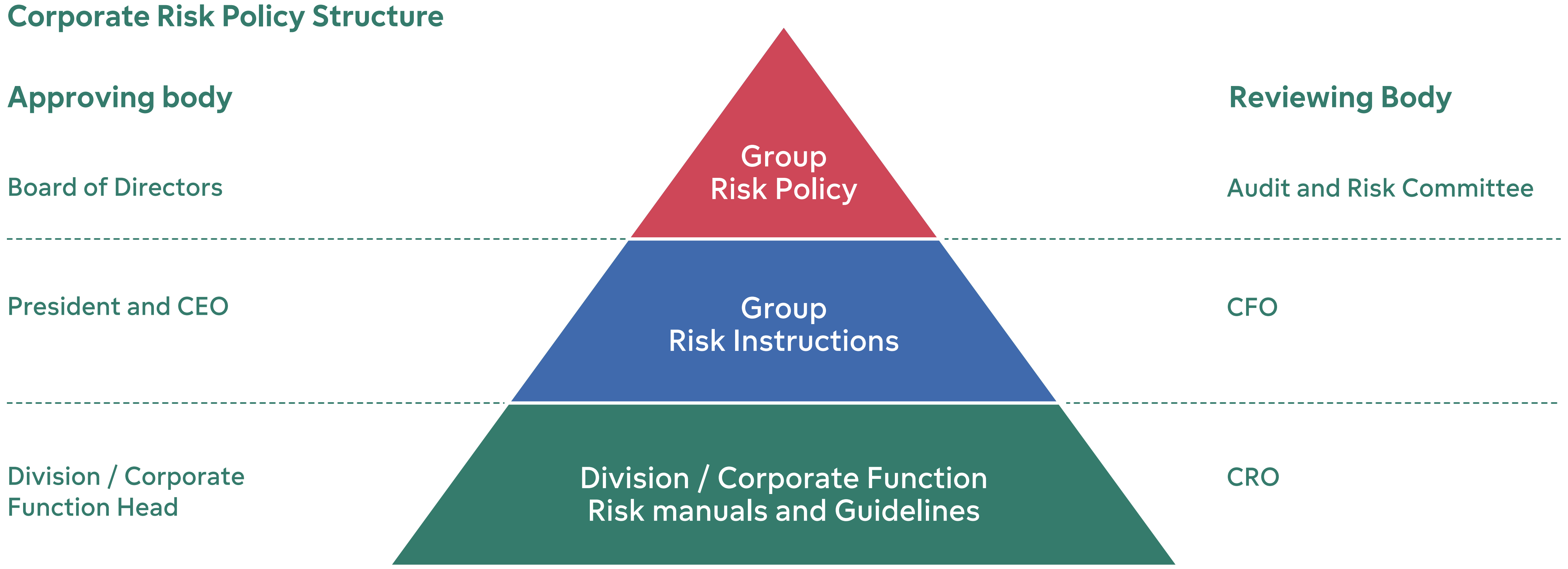
The risk management systems have been designed to support Fortum's Board of Directors, Audit and Risk Committee, Fortum's Executive Management as well as the operative business in fulfilling their duties in relation to risk management. The objectives of the risk management systems are to:

- support Fortum Executive Management (FEM) in the development of the strategy,
- support business in strategy execution,
- support business in achieving agreed targets within acceptable risk levels so that the Group's ability to meet financial commitments is not compromised,
- ensure the understanding of the Group's material risks and uncertainties , and
- the prevention of accidents that can have a severe effect on the health and safety of employees or third parties, and incidents that can have a material impact on Fortum's assets, reputation or the environment.

Risk management organisation

Fortum's Board of Directors approves the Group Risk Policy and the President and CEO approves Fortum, excluding Uniper, risk instructions covering commodity market risks, counterparty credit risks, and operational risks as well as instructions for compliance management, EHS management, treasury and the governance framework for cyber and information security risks all of which are aligned with the Group Risk Policy. Fortum's Divisions and Corporate Functions, issue risk manuals and guidelines as needed which detail how the Group Risk Policy and relevant risk instructions are implemented within their organisations.

Corporate Risk Policy Structure



Uniper remains a separate listed company operating under German law and regulations with its own risk management systems including a set of risk policies which define the risk management organisation principles, processes and responsibilities for managing risks. Uniper does therefore not directly apply the risk management systems applicable to Fortum's other Divisions and Corporate Functions. The risk management systems of Uniper including the key risk management principles and processes are materially in line with those of the rest of Fortum. The target is to further align the risk management systems going forward. For more information about Uniper's risk management systems, please see Uniper's annual report.

Risk Governance

The main principle is that risks are managed at source meaning that each Division and Corporate Function Head, as well as Uniper's Management Board, is responsible for managing risks that arise within their business operations.

Fortum's Audit and Risk Committee (ARC) is responsible for monitoring the efficiency of the company's risk management systems and for annually reviewing the Group Risk Policy and the Group's material risks and uncertainties. Corporate Risk Management, a function headed by the Chief Risk Officer (CRO) reporting to the CFO, provides instructions, methods and tools which support the Divisions and Corporate Functions, excluding Uniper, in running an efficient risk management process. Corporate Risk Management is responsible for assessing and reporting on the maturity of risk management in Divisions and Corporate Functions and for providing independent monitoring and reporting of the Group's material risk exposures to Fortum Executive Management (FEM), the ARC and the Board of Directors. Risk control functions and controllers in the business monitor and report risks to the CRO.

Uniper, a separate listed company operating under German law and regulations, is consolidated to Fortum's balance sheet and income statement, and reported as a separate segment. Four out of the six shareholder representatives on the Supervisory Board have been appointed by Fortum. Any changes to the risk management systems which are considered to be material within the governance framework of Uniper, are reviewed by the Audit and Risk Committee of Uniper and informed to the Supervisory Board of Uniper.

Risk management process

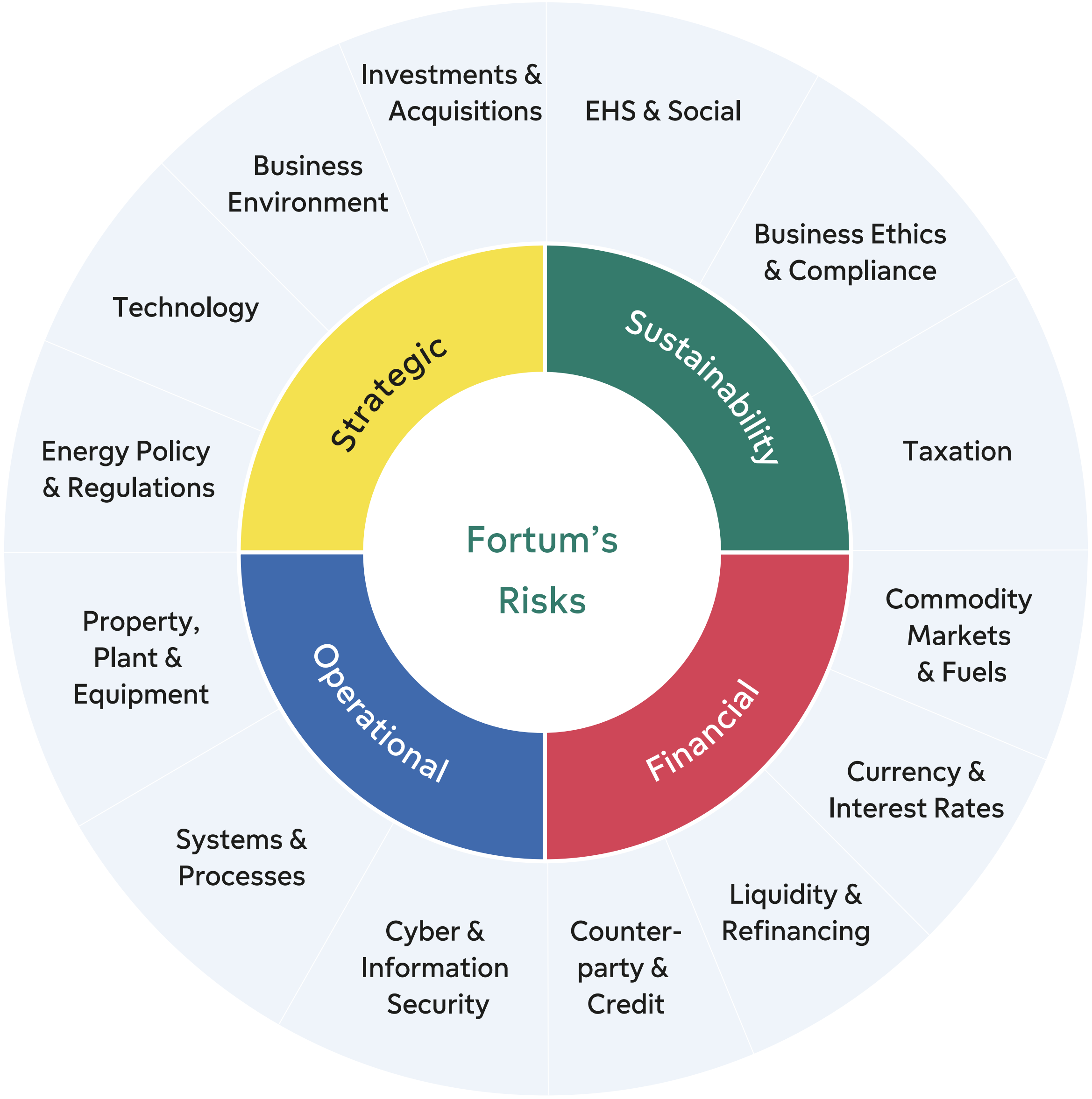
Identify – Root causes and consequences → **Assess** – Impact and likelihood → **Respond** – Accept, avoid, mitigate or transfer → **Control** – Monitor and report

Uniper operates a separate risk management process from the rest of Fortum which follow similar principles.

Both risk management processes are designed to support effective risk management and ensure that risks are regularly monitored and followed-up. The risk management processes consist of identification, risk assessment, response and control processes and procedures. Identification is regularly carried out according to a structured process which includes analysis of root causes of the risk and consequences should the risk materialise. Risks are assessed in terms of impact and likelihood or probability of the risk realising. Impact is primarily assessed in monetary terms in relation to forecasted earnings and / or cash flows, but also in terms of health and safety, environment and reputation where relevant. Identified risks have a risk owner responsible for implementing actions to respond to the risk. Risk responses can be to accept, avoid, mitigate or transfer the risk. Risk control processes and procedures, which include validating, monitoring, aggregating and reporting risks, are designed to ensure compliance with relevant external regulations and recommendations as well as with internal policies, instructions, manuals and guidelines. This includes strict controls to ensure that risk exposures remain within approved limits and mandates related to, for example, credit and market risks.

Risk factors

Fortum is exposed to a number of financial, operational, strategic, and sustainability-related risks both directly and indirectly through its subsidiaries, associated companies, and joint ventures. The associated companies and joint ventures have their own risk management systems. The principal associated companies and joint ventures are TVO, Forsmarks Kraftgrupp AB, Kemijoki Oy, TGC-1, and Stockholm Exergi AB. For more information about these indirect risk exposures, please see each respective company's annual report.



Strategic risks

The main strategic risks are that energy policy, regulation, technology or the business environment develop in ways that have not been foreseen and prepared for. Future energy market and regulation scenarios, including the impact of these to Fortum's business, are continuously assessed and analysed.

Risks which could hinder Fortum in executing its strategy are continuously assessed, monitored and reported as part of the strategy work.

Business Environment

Fortum operates in a global business environment and is therefore exposed to political and other risks which affect the macroeconomic development and consumer behaviour in the markets where Fortum operates. As operations expand to new geographical regions, markets and businesses, the operating environment becomes more complex and these risks may increase. The current trend of nationalistic policies and protectionism may lead to trade restrictions or imposed sanctions which in turn could affect demand for Fortum's products and services, asset values and financing. Fortum continuously monitors how the business environment develops in its operating countries in order to be able to react quickly to market shifts and changes in consumer behaviour.

Investment and acquisition risks

Fortum is the majority shareholder of Uniper, a separate listed company operating under German regulation, with an ownership of 76.1% as per 31 December 2020. The companies have initiated strategic alignment and agreed to co-operate in a number areas including physical trading and optimisation of Nordic hydro operations, jointly developing a portfolio of solar and wind projects in Europe and a joint growth strategy in hydrogen. The benefits from these and other areas of co-operation are estimated to be in the range of MEUR 50-100 annually materialising during the period 2023 to 2025. The ability of Fortum to deliver on its strategic targets and achieve the expected benefits depends on successful strategy execution and co-operation between the two companies.

Fortum has ruled out a domination and profit & loss transfer agreement or squeeze out of minority shareholders at least until the end of 2021, with Uniper continuing as a separate listed company operating under German regulation under these circumstances. In the event that such steps would be made at a later stage, and if that would lead to a potential full merger of the companies, it would entail both increased risks and opportunities. The risks and opportunities related to the potential integration of business operations could include. creating a common culture, realizing cost and revenue synergy benefits, combining operating models of the two companies, and motivating and keeping key personnel during the integration phase.

Fortum is continuously assessing its' business portfolio and evaluates opportunities for acquisitions, investments and divestments primarily in the Nordic, EU and Russian markets. As part of the updated strategy, Fortum has announced a number of growth areas for future investments including a sizeable renewables portfolio. Even if Fortum is able to identify candidates for acquisition or investment, it may be difficult to complete transactions. Competition for acquisitions or greenfield investments could limit Fortum's ability to grow or could raise the prices and make them less attractive to Fortum. Furthermore, Fortum has initiated a strategic review of the heating and cooling businesses in the Baltics and Poland, it's 50% stake in Stockholm Exergi and the Consumer Solutions business. The ongoing Covid-19 pandemic has led to increased uncertainty about macroeconomic development and possible impact on future regulation. As a result, there may currently be less potential investors which could lead to planned divestments being postponed or not being carried out as planned.

Risks related to acquisitions, divestments and investments are managed as part of the investment process. The Investment Manual includes requirements for risk identification, assessment and action plans for mitigating identified risks before investment decisions are made. It also sets requirements to follow-up risks in projects and acquisitions. Risks in large projects are mitigated through contract structures and insurance coverage. Partner risk assessments are performed before entering into joint ventures or other material partnership agreements. There is also a country entry process which includes a country risk assessment before decisions to enter into a new market can be made.

Energy policy and regulation risks

The energy sectors is heavily influenced by national and EU-level energy policies and regulations. Fortum's strategy has been developed based on scenarios of the future development of the regulatory environment in both existing and potential new businesses and market areas. The overall complexity and possible regulatory changes in the various operating countries pose a risk if Fortum is not able to anticipate, identify and manage those changes efficiently.

Fortum maintains an active dialogue with different bodies and stakeholders involved in the development of laws and regulations in order to manage these risks and proactively contribute to the development of the energy and climate policy and regulatory framework.

EU, Nordics and UK

Fortum has to manage risks related to both EU regulation and national regulation in the countries where we operate. Key risks related to the future energy, circular economy and climate policy framework development are listed below.

- Reaching the established (EU and national) decarbonization targets requires that all CO_2 free energy production technologies are treated equally in legislation and that there is political acceptance for them to play a role in decarbonization. Despite being CO_2 free production technologies, there is a risk that some technologies are preferred for reasons other than their CO_2 footprint, leading to uneven playing field between different production forms.
- Growing acceptability issues relating to various energy forms and energy technologies create uncertainty and risks for planned investments. Increasing and broadening sustainability requirements e.g. in the context of the EU Sustainable Finance taxonomy could lead to a situation where a big part of Fortum's CO_2 free or low carbon energy production is classified as non-sustainable which might lead to higher capital costs for new investments. Similarly, there is a risk that technologies or activities not regarded as sustainable in the context of taxonomy will be excluded from the EU and national financing schemes.
- National climate policies or steering mechanisms that exceed the EU climate targets can lead to policy overlaps. Policy overlaps risk diluting the EU emissions trading system (the ETS) and creating inefficiencies based on uncoordinated national non-market-based carbon reduction mechanisms. This in turn could lead to inefficiencies for Fortum in execution of its strategy. In addition, lower carbon prices may lead to decreased profitability of carbon-free assets.
- In the context of national climate strategies several countries have decided to phase out certain energy production technologies such as coal and nuclear. In case such political decisions are done without offering sufficient compensation to investors/asset owners there is a risk of lost earnings as well as dismantling costs. Following the coal exit law in Germany coming into effect in August 2020, the coal exit paths and conditions are now largely determined in most European countries where Fortum operates coal plants. Consequently the financial uncertainty which existed for Uniper around such exits has reduced significantly. The residual risk in Germany stems from the coal exist law having agreed review points, which could result in the German government deciding to shorten the runtime of Datteln 4. In the Netherlands, the Dutch government is proposing additional measures for coal-fired plants as a result of the Urgenda Verdict to achieve the greenhouse gas reduction targets. These measures for coal-fired power production restrictions could affect the Maasvlakte3 plant for the years 2021 to 2024 although compensation by the Dutch government is expected.

- National investment schemes and support systems for new renewable energy production such as offshore wind may lower the profitability of incumbent electricity production and lead to market distortions.
- Tightening emission standards, restrictions or taxation of waste incineration and increasing tax burden on heating fuels can also negatively impact Fortum's targeted earnings in the future.

The inter-linkage of these issues create uncertainty as changes in policies in one area could undermine the effects of policy changes in other areas.

Russia

Fortum's business in Russia is exposed to political, economic and social uncertainties and risks resulting from changes in regulation, legislation, economic and social upheaval and other similar factors. Among the more significant risks are those arising from the establishment or enforcement of foreign exchange restrictions, which could effectively prevent Fortum from repatriating profits or liquidating assets, and changes in tax regulations or enforcement mechanisms, which could substantially reduce or eliminate any revenues derived from operations and reduce significantly the value of assets related to such operations.

The ongoing political tensions between the EU, U.S. and Russia and the unpredictable nature of the threat of sanctions pose a risk for Fortum. Transactions from Russian units, Uniper's global trading business, as well as Uniper's financing of the Nord Stream 2 project, are the main sources of potential sanctions risk. The imposition of any further sanctions, may have a direct and indirect impact on the business environment and may negatively affect the operations and value of certain investments in Russia. Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws.

The main energy policy-related risks in Russia are linked to the development of the whole energy sector which to a large extent is regulated. Regulated sectors are inherently exposed to a risk of regulatory changes which could affect Fortum's operations.

Technology risks

Fortum's strategy includes investing in new or not yet commercially viable technologies, such as hydrogen production, which will support the transition towards a future low-carbon economy as well as developing circular economy solutions, bio-economy, other renewable energy concepts and innovative solutions for its customers There are risks inherent in investing in new technologies including if and when these will become economically viable and protecting intellectual property rights. Technology risks are managed by assessing and monitoring the viability of new technology throughout its development cycle, and selectively developing and investing in a diversified portfolio of projects consisting of different technologies.

Sustainability risks

Corporate social responsibility and sustainable development are integral parts of Fortum's strategy. Fortum gives balanced consideration to economic, environmental and social responsibility aspects. Changes to laws, regulations and the business environment, including the views of our main stakeholder, can pose a risk if not identified and managed effectively. In order to identify and manage these risks, Fortum endorses a number of international voluntary charters, standards and guidelines in the area of sustainability, conducts stakeholder surveys annually in order to identify the most material issues for our stakeholders, engages with non-governmental organisations and has defined internal policies and instructions on how to conduct business.

Environmental, health and safety and social risks

Operating power and heat generation plants, gas transmission and storage facilities and circular economy services involves the usage, storage and transportation of fuels and materials, including hazardous waste, that can have adverse effects on the environment and expose personnel, contractors and third parties to safety risks. Assessment of environmental risks and preparedness to operate in exceptional and emergency situations follows legislative requirements as well as the requirements in the environmental management standard (ISO 14001). The same approach, based on the requirements in the operational health and safety standard (OHSAS 18001 or ISO 45001), applies to risks related to occupational health and safety and how to operate in emergency situations.

Environmental, health and safety (EHS) risks as well as social risks related to the supply chain are evaluated through supplier qualification as well as internal and external audits and risk assessments including partner and country risk assessments. Corrective and preventive actions are implemented when necessary. EHS and social risks related to investments are evaluated in accordance with Fortum's Investment Manual. Environmental risks and liabilities in relation to past actions have been assessed and, where necessary, provisions have been made for future remedial costs. As a separate listed company Uniper applies its own processes aligned with its enterprise risk management to systematically identify, assess and manage Environmental, Social and or Governance (ESG) risks.

Tax risk

Tax risk refers to the risk associated with changes, errors or disagreements in the interpretation of applicable tax laws, changes in operations, long-term profitability or changes in tax laws in one or multiple countries which could result in increased charges or financial loss. Fortum operates in a number of countries and is therefore exposed to these events in multiple countries. These risks may materialise through a tax authority initiated process followed by a legal process in one or multiple jurisdictions with a court confirming valid interpretation of local or EU law or tax treaties. In case multiple countries are involved, it may result in a mutual agreement process defining the final stand in the case. A legal process may result in a tax assessment of deductibility, income recognition or applicable tax rate on withholding in a business transaction. Risk may materialise also by a revaluation of tax related assets, so called deferred tax assets, and liabilities due to changes in operations or tax law.

Fortum manages tax-related uncertainties by targeting tax predictability for the business operations in all our operating countries. As risk mitigation actions, we have identified simplifying legal structures, improving data management, seeking strategic clearance from tax authorities, improving transparency, improving resources and reviewing accountabilities and responsibilities.

Business ethics and compliance risks

Fortum's operations are subject to laws, rules and regulations set forth by the relevant authorities, exchanges, and other regulatory bodies in all markets in which Fortum operates. Fortum aims to comply with all relevant laws, rules and regulations, but the ability to operate in certain countries may be affected by future changes to local laws and regulations.

Since Fortum trades financial instruments, it is exposed to risks arising from the implementation and amendment of financial market regulations and directives that affect Fortum, such as the European Market Infrastructure Regulation (EMIR), the Regulation on Energy Market Integrity and Transparency (REMIT) and the Markets in Financial Instruments Directive (MiFiD II). Potential changes to existing financial market regulation could significantly increase administrative burdens and result in the need for additional liquidity.

Fortum's operations in a variety of jurisdictions expose Fortum to various legal risks. These mainly comprise risks arising from threatened or pending legal proceedings regarding contract and price adjustments in connection with long-term supply or sales contracts, energy law and regulatory issues, licensing matters, liabilities arising from acquired companies as well as supplier disputes or disputes related to investment agreements.

Fortum systematically identifies, assesses, mitigates and reports compliance risks including risks related to business ethics as part of the risk management process. Effective internal controls are a key mitigating activity and have been implemented to prevent the possibilities of unauthorised activities or non-compliance with relevant policies and instructions. Furthermore, continuous training and communication play a key role in increasing the awareness and ensuring the understanding of the importance of business ethics and compliance in the organisation. Regular trainings include mandatory e-learnings to ensure coverage throughout the organisation.

Uniper has a separate Code of Conduct and Supplier Code of Conduct from the rest of the Fortum Group, both of which stress the importance of business ethics for all employees, contractors and partners. Zero tolerance for corruption and bribery is highlighted in the Codes of Conduct and Supplier Codes of Conduct. In addition, separate instructions and guidelines have been created to address e.g. anti-bribery, compliance management, safeguarding company assets, conflict of interest, anti-money laundering and competition law. Both companies have procedures for anti-corruption including prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. The Supplier Codes of Conduct set sustainability requirements for suppliers of goods and services. The Supplier Codes of Conduct are based on the ten principles of the United Nations Global Compact.

Financial risks

Commodity market and fuel risks

Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sales of energy products. The main exposure is toward electricity prices and volumes, gas prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results. For further information on hedge ratios, sensitivities and outstanding derivatives contracts, see Note 4 Financial risk management.

Electricity price and volume risks

Fortum is exposed to electricity market price movements and volume changes mainly through its power and heat generation.

In the Nordics and central European countries, market prices and, consequently, the amount of profitable production exhibit significant variation on the back of several factors, for instance, but not limited to weather conditions, outage patterns in production and transmission lines, CO_2 allowance prices, fuel prices, as well as the amount of electricity demand. Electricity price risks in the Nordics and central European markets are mainly hedged by entering into electricity derivatives contracts on exchanges such as the Nasdaq Commodities exchange or the European Energy Exchange as well as directly with counterparties active in the energy and financial markets.. The ability to efficiently implement hedging strategies is dependent on a well-functioning and liquid derivatives market. There is a risk of decreasing liquidity of especially Nordic electricity derivatives on the Nasdaq Commodities exchange. Alternatives including use of OTC derivative contracts and correlated products traded on other exchanges are used to mitigate this risk. The Generation segment and Uniper segment have separate hedging strategies covering several years in the short to medium term. Hedging strategies are continuously evaluated as electricity and other commodity market prices, the hydrological balance and other relevant parameters change. Hedging of the Generation segment's power sales is performed in EUR on a Nordic level covering both Finland and Sweden, and the currency component of these hedges in the Swedish entity is currently not hedged. Uniper's Nordic power hedging is performed only in Sweden and the currency component of these hedges in the Swedish entity is hedged.

In Russia, electricity and capacity prices are the main source of market risk. Capacity from newer units is sold under capacity supply agreements where the price is set by the Russian Federation to ensure the return on investments. Capacity from old units has been sold until 2024 via capacity supply auctions which have already been conducted.

Electricity price exposure is partly mitigated through regulated fixed-price bilateral agreements, but the majority of electricity sales is exposed to spot price risk. In the short-term, electricity prices and volumes are mainly impacted by changes in industrial demand, gas prices and weather-driven demand changes. As a result of the Covid-19 pandemic and temporary restrictions in the oil and gas industry following the OPEC+ decisions, closure of many factories and industries caused a significant decline oil production, followed by lower electricity consumption.

Gas prices and volumes

Long-term gas supply contracts of Uniper generally include the possibility for the customer and the supplier to adapt contractual terms to changed market conditions.

This entails the major risk for Uniper that suppliers will impose conditions that are detrimental. In order to limit the risk, negotiations are conducted by the most experienced employees utilizing all available internal and external expertise.

A deterioration in the economic situation or upheavals in the market for LNG could lead to a lower than planned utilization of the long-term capacity booked in the regasification plants in Uniper's LNG business and make it necessary to set up provisions for onerous contracts over the entire remaining booking period. Uniper strives to further increase the utilization of this booked capacity and thus improve the revenue situation.

Emission and environmental value risks

The European Union and the United Kingdom have emissions trading schemes to reduce the amount of CO_2 emissions. In addition to the emissions trading schemes, there are other trading schemes in environmental values in place in Sweden, Norway and Poland. Part of Fortum's power and heat generation is subject to requirements of these schemes. There is currently no trading scheme in Russia for emissions or other environmental values. However, Russia has announced intentions to comply with the Paris Agreement, but there is uncertainty related to how and when a possible carbon market could be implemented.

The main factors influencing the prices of CO_2 emission allowances and other environmental values are political decisions and the supply and demand balance. Fortum hedges its exposure to these prices and volumes through the use of CO_2 derivatives and environmental certificates.

Fuel price and volume risks

Power and heat generation requires use of fuels that are purchased on global or local markets. The main fuels used by Fortum are natural gas, uranium, coal, various biomass-based fuels and waste. The main risk factor for fuels that are traded on global markets such as coal and natural gas, is the uncertainty in price. Prices are largely affected by demand and supply imbalances that can be caused by, e.g. increased demand growth in developing countries, natural disasters or supply constraints in countries experiencing political or social unrest. For fuels that are sourced on local or regional markets, such as bio-fuels, the volume risk in terms of availability of the raw material of appropriate quality is more significant as there may be a limited number of suppliers. Due to the current sanctions, there are also risks related to imported fuels from Russia.

The exposure to fuel price risk is mitigated through fixed- price physical delivery contracts or derivative contracts. The main fuel source for heat and power generation in Russia is natural gas which is partially regulated limiting the price risk exposure. Long-term gas supply contracts are concluded with gas suppliers to ensure gas availability for power plants.

Liquidity and refinancing risks

Fortum's business is capital intensive and there is a constant need to ensure efficient financing. Fortum maintains a diversified financing structure in terms of debt maturity profile, debt instruments and geographical markets. Liquidity and refinancing risks are managed through a combination of cash positions and committed credit facility agreements. The credit risk of cash positions has been mitigated by diversifying the deposits to high-credit quality financial institutions and issuers of corporate debt.

Fortum Corporation is currently rated BBB with a negative outlook by both Fitch and Standard & Poor's (S&P) rating agencies. The key risk factors which could lead to a weakening credit metrics and potentially trigger rating downgrade include a continuing decline in European and Russian power prices, lower-than-expected amounts received from planned divestments and an increase in leverage A lowering of credit ratings, in particular to below investment grade level (BB+ or below) could affect access to the capital markets and increase the costs of new financing.

Uniper, a separate listed company operating under German laws and regulations, is currently also rated BBB with a negative outlook by S&P. The negative outlook on Uniper's rating reflect the negative outlook on the BBB rating of Fortum, which serves as a cap for Uniper's rating. A downgrade of Fortum's rating could lead to a corresponding downgrade of Uniper's rating. A downgrade from the current BBB investment grade rating to BBB- or below could negatively affect Uniper's liquidity as it would trigger counterparties' – particularly in the trading business – right to demand additional collateral which would need to be provided via liquid assets or bank guarantees. The related risk is measured, monitored and managed against a given limit.

Fortum is targeting to maintain at least its current rating and to strengthen its financial profile and to improve its business risk profile. Fortum and Uniper maintain an active dialogue with credit rating agencies to ensure understanding of Fortum and Uniper's aligned strategy and planned measures which target to achieve a financial and business profile that supports the current rating.

Currency and interest rate risks

Fortum's debt portfolio consists of interest-bearing liabilities and derivatives on a fixed- and floating-rate basis with differing maturity profiles. Fortum is exposed to cash flow risk from changes in interest rates mainly from interest-bearing liabilities and derivatives on a fixed- and floating rate basis. Additionally changes in general interest rate levels may have an impact on discount rates of various provisions like pension provisions and asset retirement obligations causing changes in amount of interest-bearing debt and finance net, but without a cash flow impact. Fortum manages the interest rate exposure through a duration mandate of the loan portfolio excluding leasing liabilities and provisions, and cash flow at risk limit. Fortum uses different types of financing contracts and interest rate derivative contracts to manage the interest rate exposure and evaluates and develops the strategies in order to find an optimal balance between risk and financing cost.

Fortum has cash flows, assets and liabilities in currencies other than EUR and is therefore exposed to fluctuations in exchange rates. Currency exposures are divided into transaction exposures (foreign exchange exposures relating to contracted cash flows and balance sheet items where changes in exchange rates will have an impact on earnings and cash flows) and translation exposure (foreign exchange exposure that arises when profits and balance sheets in foreign entities are consolidated at the Group level).

The main translation exposure is toward EUR/Russian Rouble ("RUB"), EUR/Swedish Krona ("SEK") and EUR/British Pound Sterling ("GBP"), arising from Fortum's extensive operations in Russia, Sweden and the United Kingdom. Fluctuations of the RUB, SEK and the GBP against the EUR could have an adverse effect on future results and equity when consolidating and translating results and net assets in Russian, Swedish and UK affiliates into euros. Translation exposures in the Fortum Group are generally not hedged as the majority of these assets are considered to be long-term strategic holdings.

Transaction exposure arises mainly from physical and financial trading of commodities, existing and new investments, external and internal financing and shareholder loans within the Group. Fortum hedges major transaction exposures on a local level in the reporting currency of each legal entity in order to avoid exchange differences in the profit and loss statement. An exception is the Generation segment's hedging of power sales in Sweden where the currency component is currently not hedged.

Centralised treasury functions in Uniper and the rest of the Fortum Group separately coordinate currency risk management and execute external hedges consisting of currency derivative contracts, which are matched against the underlying future cash flow according to maturity. Derivatives are used exclusively to hedge existing foreign exchange risks, not for proprietary trading.

Counterparty and credit risks

Fortum is exposed to counterparty risk whenever there is a contractual arrangement with an external counterparty including customers, suppliers, partners, banks, clearing houses and trading counterparties.

Credit risk exposures relating to financial derivative instruments are often volatile and include both the replacement risk and the settlement risk. Exchange-traded derivatives are cleared through central clearing parties (CCPs) or through clearing banks while OTC derivative contracts are concluded directly with a number of different counterparties including energy wholesalers and retailers, utilities, trading companies, energy companies, industrial end-users and financial institutions active in the financial and energy markets.

Due to the financing needs and management of liquidity, Fortum has counterparty credit exposure toward a number of banks and financial institutions. The majority of the exposure is toward Fortum's key relationship banks, which are highly creditworthy institutions. Fortum also has exposure to the Russian financial sector in terms of deposits with financial institutions as well as to banks that provide guarantees for suppliers and contracting parties. Deposits in Russia have been concentrated to the most creditworthy state-owned or controlled banks as well as affiliates of the key relationship banks.

Credit risk exposures relating to customers, suppliers and trading partners is spread across a wide range of industrial counterparties, energy companies, government and municipal entities, utilities, small businesses, housing associations and private individuals over a range of geographic regions. The risk of credit losses in the electricity and heat sales business in Russia is deemed higher than in Fortum's other operating countries.

In order to manage counterparty credit risk, Fortum has routines and processes to identify, assess and control exposure. Credit checks are performed before entering into commercial obligations and exposure limits are set for larger individual counterparties. Creditworthiness is monitored through the use of internal and external sources so that mitigating actions can be taken when needed. Mitigating actions include demanding collateral, such as guarantees, managing payment terms and contract length, and the use of netting agreements.

Operational risks

Operational risks are unexpected events which can lead to negative monetary, safety, environmental or reputational impacts as a result of inadequate or failed internal processes, systems or equipment, or from external events.

People and Process Risks

People risks include an inability to attract and retain the right competences, risks due to the loss of special skills and risks due to errors on the part of employees who have not been sufficiently trained or who are not sufficiently qualified. Specifically, in its commodity trading business, Uniper has particular expertise and key persons which - in case they were to leave - could have a tangible impact on Uniper Global Commodities earnings potential, business continuation, innovation and development. In order to reduce people risks, Fortum invests in the development and distribution of skills and succession planning. In addition, the existing compensation system for employees is regularly reviewed and adjusted.

Process risks are mainly caused by design failures or human errors. Mitigation includes process automation, testing and education. Process-related risks are assessed and controls for the most relevant risks are defined and implemented as part of the internal controls framework. IT-system risk management is based on an IT Service Lifecycle Model, and related processes and practices which has been developed using reference frameworks such as COBIT and ITIL. Business continuity plans are in place for business critical processes.

Property, plant and equipment

Operational events at power and heat generation, gas storage and distribution, fuel handling and recycling and waste facilities can lead to environmental and physical damages, business interruption, clean-up costs and third party liabilities Property, plant and equipment risks are primarily managed through condition monitoring and maintenance planning. In addition, Fortum's industrial assets are covered by insurance policies for property damage and business interruption risks which mitigates the impact of internal and external events should they occur.

Hydro power

Fortum has large number of hydro power plants and dams in the Nordics and Germany. A dam breach is a serious accident with the threat of possible significant damage downstream. A long-term programme is in place for improving the surveillance of the condition of dams and for securing the discharge capacity in extreme flood situations. Third-party liabilities from dam failures are strictly the plant owner's responsibility. Together with other hydro power producers, Fortum has a shared dam liability insurance programme in place that covers Finnish and Swedish dam failure liabilities up to SEK 10,000 million.

Nuclear power

Fortum owns and operates the Loviisa nuclear power plant and is the owner of OKG AB which owns three nuclear power reactors in Sweden, of which one is in operation. Additionally, Fortum has minority interests in two Finnish and two Swedish nuclear power companies. Any severe accident or nuclear release in nuclear power plants could lead to high costs, environmental damages and third-party liabilities. At the Loviisa power plant, the assessment and improvement of nuclear safety is a continuous process performed under the supervision of the Radiation and Nuclear Safety Authority of Finland (STUK).

Owners of nuclear facilities in Finland and Sweden have statutory liabilities for damages resulting from accidents occurring in those nuclear facilities and for accidents involving any radioactive substance connected to the operation of those facilities. Third-party liability relating to nuclear accidents is strictly the plant operator's responsibility and must be covered by insurance. In Finland, as the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of 600M SDR (Special Drawing Right) equivalent of approximately EUR 700 million. In Sweden, legislation requires that operators of nuclear power plants have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per incident.

In both Finland and Sweden, the future costs of the final disposal of spent fuel, the management of low and intermediate-level radioactive waste and the decommissioning of the radioactive part of the nuclear power plant are provided for by a state-established fund to which nuclear power plant operators finance. Contributions to these funds should be sufficient to fully cover expected costs for handling all the produced radioactive waste, but the possibility exists that future costs could exceed currently estimated fund provisions. If this were to occur, Fortum, would be responsible for any such excess costs in relation to its share of operations and assets.

Asset project risks

Fortum's business activities involve construction, modernisation, maintenance and decommissioning of power plants or other energy industry facilities. There is a risk that construction costs exceed planned costs or construction delays occur as the result of regulatory or permit issues, failure of key suppliers, being unable to obtain permits or as a result of Covid-19 discontinuing the project. Asset projects also face environmental, health and safety risks. Asset project risks may realise both for Fortum's own assets projects, or projects carried out through joint ventures or associated companies. The most significant of these asset projects are listed below.

Managing asset project risk is an integral part of every project. Project managers are responsible for ensuring that project-related risks which may lead to delays, increased costs, negative impacts to the environment or which could jeopardise the health and safety of personnel and contractors are identified and assessed and that actions are taken to minimise such risks.

Datteln 4: Permitting risk

Since May 30, 2020, the coal-fired power plant Datteln 4 with a net electrical output of approximately 1,055 MW is in commercial operation. Construction and operation are based on the currently granted immission control permit from the district government of Munster and the project-based development plan No. 105a by the city of Datteln. However, the project continues to be the subject of several administrative lawsuits. If, as a result of the pending legal proceedings, the permit is revoked, or the development plan is declared ineffective, there is the risk that all investments made to date will have to be written off and planned earnings cannot be realised. The coal exit law which entered into force in August 2020 has also not changed the potential for this permitting risk.

Nord Stream 2: Project Failure Risk

Uniper is involved in financing the Nord Stream 2 project. As part of this financing, there is a default risk for receivables from Nord Stream 2 AG, particularly in the event the project cannot be completed successfully. The main risk for the completion of the project are actual and potential US sanctions. Current sanctions have only been imposed on a pipelay vessel and its owner. Nord Stream 2 AG confirmed repeatedly that they are working to complete the project.

Olkiluoto 3 project delay risk

In Finland, Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through the shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 400 MW in capacity. Olkiluoto 3 EPR (OL3 EPR), currently under construction, was procured as a fixed-price turnkey project from a consortium formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the plant contract, the consortium companies have joint and several liability for the contractual obligations. According to the latest schedule regular electricity production starts in February 2022.

The risk related to the planned completion refers to a situation in which commercial use cannot be launched as planned, which leads to additional costs of electricity for Fortum. During 2020, several risk management measures related to the OL3 EPR project have been executed to improve TVO's readiness to commission the OL3 EPR plant. For more information about these measures, please see TVO's annual report.

Cyber and information security risks

Fortum's business operations and customer related services are dependent on well-functioning IT, communications and information management systems and processes. Due to the nature of the business, large amounts of data are processed, often in real-time, and used for operating critical infrastructure including power stations and gas storage facilities, decision-making, serving customers and in internal and external communication and reporting. Like all operators of critical infrastructure, Fortum is increasingly exposed to cyber security risks, including risks related to information and operational technology systems, digitalisation and privacy. Also, physical attacks against Issuer's assets are possible and can have material impacts.

Securing information and availability of the systems are essential for Fortum. Cyber and physical security risks, including risks related to information, operation technology (OT) and digitalisation, are managed in collaboration with business and other support functions. There are cyber security instructions and procedures in place which set requirements for managing and mitigating cyber security risks.

Support functions and outsourcing partners are responsible for identifying and mitigating operational IT/OT security related risks as well as managing IT/OT security incidents. Business is responsible for business continuity planning and IT functions are responsible for IT service continuity.

Climate-related risks

Mitigating climate change, adapting to it and driving the transition to a lower-carbon economy is an integral part of Fortum's strategy.

As a result, Fortum has committed to ambitious climate targets and to be carbon-neutral as a Group by 2050 at the latest in line with the goals of the Paris Agreement.

Management of climate-related risks is integrated into Fortum's and Uniper's respective risk management frameworks and follows the same governance and processes as for other material risk and uncertainties, Risks are regularly identified and assessed through a structured process. Risk owners are assigned for managing the risks and they are regularly reported and followed-up in various management teams and expert forums. In Fortum, excluding Uniper, there is a specific review of the key climate-related risks by a group of experts from selected functions. These risks are reported to FEM and the ARC as part of the annual review of material risks and uncertainties for the Fortum Group.

Climate-related risks are divided into two categories; transition risks and physical risks. The identified physical risks are generally found in the operational risk category whereas transition risks are generally part of the strategic risk category. As Uniper currently does not apply the same approach to climate-related risks, the transition risks and physical risks described below have been assessed for Fortum, excluding Uniper.

Transition risks

Fortum's strategy is to a large extent built on taking advantage of the opportunities associated with the transition to a low-carbon economy and successfully mitigating the risks. The transition to a low carbon economy poses a number of strategic risks related to changes in energy and climate policy and regulation, technology development and the business environment in which Fortum operates. Additionally, Fortum's brand and reputation can be negatively impacted by changes in stakeholder perception about Fortum's ability to deliver on its strategy.

The key risks related to climate policy and regulation include national climate policies or steering mechanisms that exceed EU targets for greenhouse gas reduction, renewable energy production and energy efficiency. This can lead to overlapping or inefficient mechanisms such as diluting the EU emissions trading system (ETS), tighter restrictions on incineration and burning of various fuels and a more regulated electricity market. In the context of national climate strategies, several countries have decided to phase out certain energy production technologies such as coal and nuclear. In case such political decisions are done without offering sufficient compensation there is a risk of write-offs, impairments or early retirement of existing assets as well as social and dismantling costs. Fortum favours a market-based approach to decarbonisation with CO_2 pricing as a key tool and clear criteria for capacity remuneration in case such mechanisms are implemented. Additionally, increased demand flexibility is needed to cope with the expected increase in intermittent renewable production.

The transition to a low-carbon economy also poses risks if there emerge new, disruptive technologies that create cheap sources of flexibility or storage in the energy market. Additionally, if there is an accelerated decline in the cost of renewable energy, it could decrease the value of existing conventional power and heat generation assets. Fortum continuously monitors technology development and invests into a broad portfolio of innovative technologies. Fortum aims to grow a sizeable renewables portfolio, focusing on wind and solar primarily in Europe, and therefore monitors the price development of renewables and evaluates both divestment and investment opportunities to optimise the portfolio with the aim of lower carbon emissions. As part of the updated strategy, Fortum is targeting to invest in hydrogen and clean gas solutions. Technological challenges could prevent or slow-down the growth of hydrogen negatively impacting any such investments and delaying the decarbonisation of natural gas and industrial sectors.

Climate-change may affect the demand and supply of energy products due to consumer behaviour and changing weather patterns. This could lead to, e.g. lower and more volatile electricity and gas prices which negatively affect the revenues of power generation assets. Energy efficiency measures and warmer weather may also impact the demand for heating to a larger extent than currently expected.

Increasing and broadening sustainability requirements, e.g. in the context of the EU Sustainable Finance taxonomy, could lead to a situation where a big part of Fortum's CO_2 free or low carbon energy production is classified as non-sustainable which might lead to higher capital costs for new investments. Additionally, there is a risk of increasing activity by NGOs which could affect key stakeholder perception. Fortum's exposure to these risks is increasing as a result of the consolidation of Uniper as a subsidiary with coal and gas-fired power generation assets. In order to mitigate these risks, Fortum focuses on the sustainability impacts of strategy and business decisions, communicating transparently about strategy implementation to key stakeholders, ensuring a broad base of investors and flexibility in financing. The aligned strategy for the Fortum Group includes a commitment to reduce its' coal exposure and reach a carbon neutral European generation by 2035 at the latest and reducing CO_2 emissions in European generation with at least 50% by 2030.

Physical risks

Fortum's operations and assets are exposed to external events, the frequency and magnitude of which may increase as a result of climate change. Changes in precipitation, inflows and temperatures may affect hydropower production as well as bioenergy supply and availability. Intense storms with, e.g. flash floods could increase the risk of dam breaches as well as causing local damages and production outages. Warmer weather may also lead to a need for new cooling or process water sources and extreme warm and dry summer periods could result in forest fires which potentially damage assets or lead to grid outages restricting power supply. Fortum adapts its operations to the changing climate and takes it into consideration in production and maintenance planning and in evaluating growth and investment projects. Climate change scenarios are. taken into account in long-term dam safety investments so that extreme flooding situations can be managed.

Covid-19 Risks

During 2020, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. As a result, the exposure to risk and uncertainty in all risk categories has increased compared to the 2019 year-end situation. There has been a certain stabilisation and partial recovery of commodity prices in the three last quarters, but market prices for electricity remain lower than at the beginning of 2020 due to lower commodity prices and European demand as well as the extremely wet, warm, and windy winter in the Nordics during the first quarter. Fortum's hedges, especially for the year 2021, will offer some protection against short-term fluctuations in electricity and other commodity market prices, but if the Covid-19 pandemic continues longer than expected or results in a more severe economic downturn than anticipated, results will be negatively impacted, as the hedge level for future years is lower.

Additionally, there is an increased risk of credit defaults caused by the abrupt shut-down of society in many parts of the world. Fortum has OTC derivative contracts with a number of energy wholesalers and retailers, utilities, trading companies, energy companies, industrial end-users and financial institutions active on the energy and financial markets. Fortum also has credit exposure toward customers and suppliers consisting of industrial counterparties, energy companies, government and municipal entities, utilities, small businesses, housing associations and private individuals, over a range of geographic regions. Credit defaults have not yet had a significant impact, but if the pandemic continues for a longer period of time without extension of effective support schemes for affected businesses, we expect to see increased default rates and delayed payments from customers, especially in the small and medium businesses in high-risk sectors and from non-investment grade counterparties that have been weakened economically by the pandemic. Fortum applies the expected credit loss model when recognising loss allowances for expected credit losses on financial assets. A similar model is applied when making credit value adjustments to the fair value of derivatives contracts. The model inputs have been reviewed taking into account the ongoing Covid-19 pandemic. There is no significant increase in credit losses due to Covid-19, however, the probability of defaults used in the expected credit loss model have been increased compared to before the pandemic, resulting in slightly higher loss allowances and credit value adjustments.

Operational risks have also increased due to the pandemic. Travel restrictions, risk of prolonged absences of key personnel, and difficulties in obtaining key materials, spare parts, and resources from our suppliers increase the risk of operational incidents or prolonged maintenance periods. So far, the risks have been mitigated through the activation of business continuity plans and a review of the timing and prioritisation of maintenance work. Although there have been some delays impacting maintenance periods and projects, there have been no significant incidents that have impacted Fortum's operations. However, the longer the Covid-19 pandemic continues, the higher the risk of such incidents in the future.

Fortum is closely monitoring the development of the pandemic and its effects on our operations so that we can quickly respond to changes and continue to ensure the safe and reliable delivery of energy and related services.

Fortum share and shareholders

Fortum Corporation's shares have been listed on Nasdaq Helsinki since 18 December 1998. The trading code is FORTUM (until 25 January 2017: FUM1V). Fortum Corporation's shares are in the Finnish book entry system maintained by Euroclear Finland Ltd which also maintains the official share register of Fortum Corporation.

Share key figures

EUR	2020	2019	2018
Earnings per share	2.05	1.67	0.95
Cash flow per share	2.88	2.27	0.91
Equity per share	14.58	14.61	13.33
Dividend per share	1.12 1)	1.10	1.10
Payout ratio, %	54.6 1)	65.9	115.8
Dividend yield, %	5.7 1)	5.0	5.8

1) Board of Directors' proposal for the planned Annual General Meeting 28 April 2021.

For full set of share key figures, see the section ▸ Key figures in the Financial Statements.

Shareholders value, share price performance and volumes

Fortum's mission is to deliver excellent value to its shareholders. Fortum's share price has appreciated approximately 42% during the last five years, while Dow Jones European Utility Index has increased 26%. During the same period Nasdaq Helsinki Cap index has increased 36%. During 2020 Fortum's share price depreciated approximately 10%, while Dow Jones European Utility index increased approximately 8% and Nasdaq Helsinki Cap index increased approximately 10%.

In 2020, a total of 647.9 million (2019: 372.3) Fortum Corporation shares, totalling EUR 11,142 million, were traded on Nasdaq Helsinki. The highest quotation of Fortum Corporation shares during 2020 was EUR 23.46, the lowest EUR 12.25, and the volume-weighted average EUR 17.20. The closing quotation on the last trading day of the year 2020 was EUR 19.70 (2019: 22.00). Fortum's market capitalisation, calculated using the closing quotation of the last trading day of the year, was EUR 17,499 million (2019: 19,542).

In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Boat, Cboe and Turquoise, and on the OTC market. During 2020, approximately 68% (2019: 73%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

Share capital

Fortum Corporation has one class of shares. By the end of 2020, a total of 888,294,465 shares (2019: 888,294,465) had been issued. Each share entitles the holder to one vote at the Annual General Meeting. All shares entitle holders to an equal dividend. At the end of 2020 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

Shareholders

At the end of 2020 the Finnish State owned 50.76% of the company's shares. The Finnish Parliament has authorised the Government to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the share capital and voting rights.

The proportion of nominee registrations and direct foreign shareholders was 24.2% (2019: 30.5%).

Shareholders, 31 December 2020

Shareholders	No. of shares	Holding %
Finnish State	450,932,988	50.76
Ilmarinen Mutual Pension Insurance Company	14,681,000	1.65
Varma Mutual Pension Insurance Company	8,621,167	0.97
Elo Mutual Pension Insurance Company	7,679,921	0.86
The Finnish Social Insurance Institution	7,030,896	0.79
Kurikan Kaupunki	6,203,500	0.70
The State Pension Fund	4,600,000	0.52
OP-Finland	2,292,000	0.26
Danske Invest Finnish Equity Fund	2,250,000	0.25
Nordea Bank Abp	1,988,386	0.22
Schweizerische Nationalbank	1,772,532	0.20
Mandatum Life Insurance Company Ltd.	1,504,618	0.17
OP-Henkivakuutus Ltd.	1,436,708	0.16
Säästöpankki Korko Plus Mutual Fund	1,265,800	0.14
Nominee registrations and direct foreign ownership 1)	213,460,801	24.03
Other shareholders in total	162,574,148	18.30
Total	**888,294,465**	**100.00**

1) Excluding Schweizerische Nationalbank

By shareholder category	% of total amount of shares
Finnish shareholders	
Corporations	2.29
Financial and insurance institutions	2.24
General government	56.57
Non-profit organisations	1.50
Households	13.16
Non-Finnish shareholders	24.24
Total	**100.00**

Breakdown of share ownership, 31 December 2020

Number of shares owned	No. of shareholders	% of shareholders	No. of shares	% of total amount of shares
1-100	79,926	39.19	3,814,834	0.43
101-500	73,119	35.85	18,774,960	2.11
501-1,000	24,308	11.92	17,956,092	2.02
1,001-10,000	25,137	12.32	65,336,522	7.36
10,001-100,000	1,354	0.66	30,637,906	3.45
100,001-1,000,000	92	0.05	23,891,053	2.69
1,000,001-10,000,000	15	0.01	49,890,281	5.62
over 10,000,000	2	0.00	465,613,988	52.42
	203,953	**100.00**	**675,915,636**	**76.09**
In the joint book-entry account and in special accounts on 31 December			596	0.00
Nominee registrations			212,378,233	23.91
Total			**888,294,465**	**100.00**

Management shareholding 31 December 2020

At the end of 2020, the President and CEO and other members of the Fortum Executive Management owned 281,308 shares (2019: 263,002) representing approximately 0.03% (2019: 0.03%) of the total shares in the company.

A full description of the shareholdings and interests in long-term incentive schemes of the President and CEO and other members of the Fortum Executive Management is shown in Note 10 Employee benefits and Board remuneration.

Authorisations from the Annual General Meeting 2020

In 2020, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. These authorisations are effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. These authorisations had not been used as per 11 March 2021.

Dividend policy

The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supported by the company's long-term strategy that aims at increasing earnings and cash flow and thereby the dividend. When proposing the dividend, the Board of Directors looks at a range of factors, including the macro environment, balance sheet strength as well as future investment plans. Fortum Corporation's dividend policy is to pay a stable, sustainable and over time increasing dividend.

Dividend distribution proposal

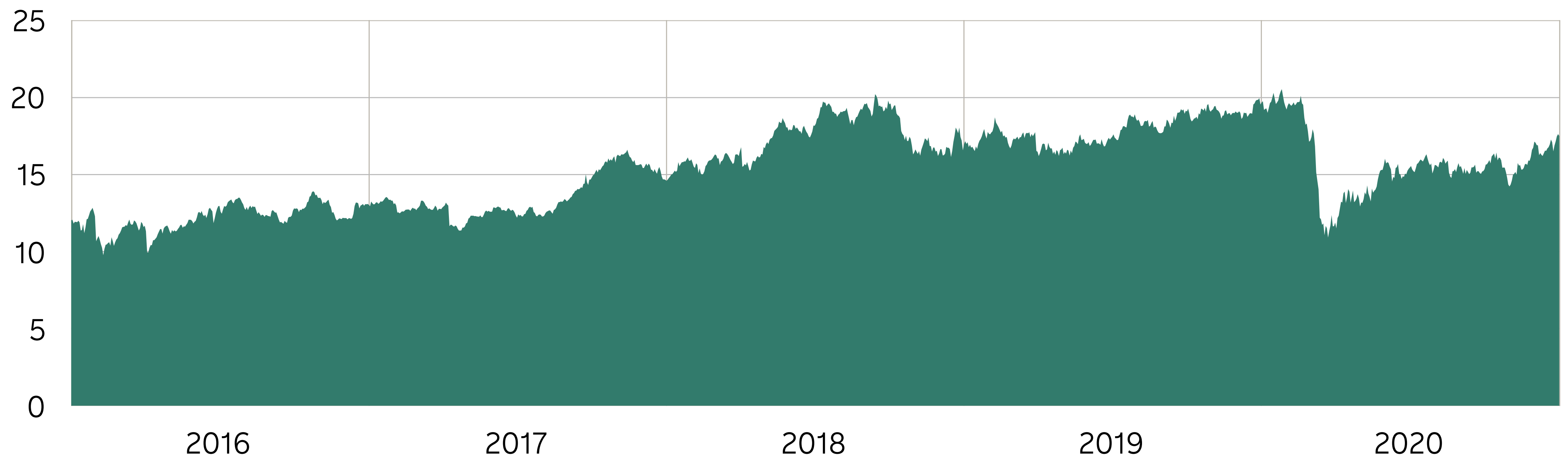
The distributable funds of Fortum Corporation as at 31 December 2020 amounted to EUR 4,915,857,735 including the profit of the financial period 2020 of EUR 1,678,521,550. The company's liquidity is good and the dividend proposed by the Board of Directors will not compromise the company's liquidity.

The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 1.12 per share be paid for 2020.

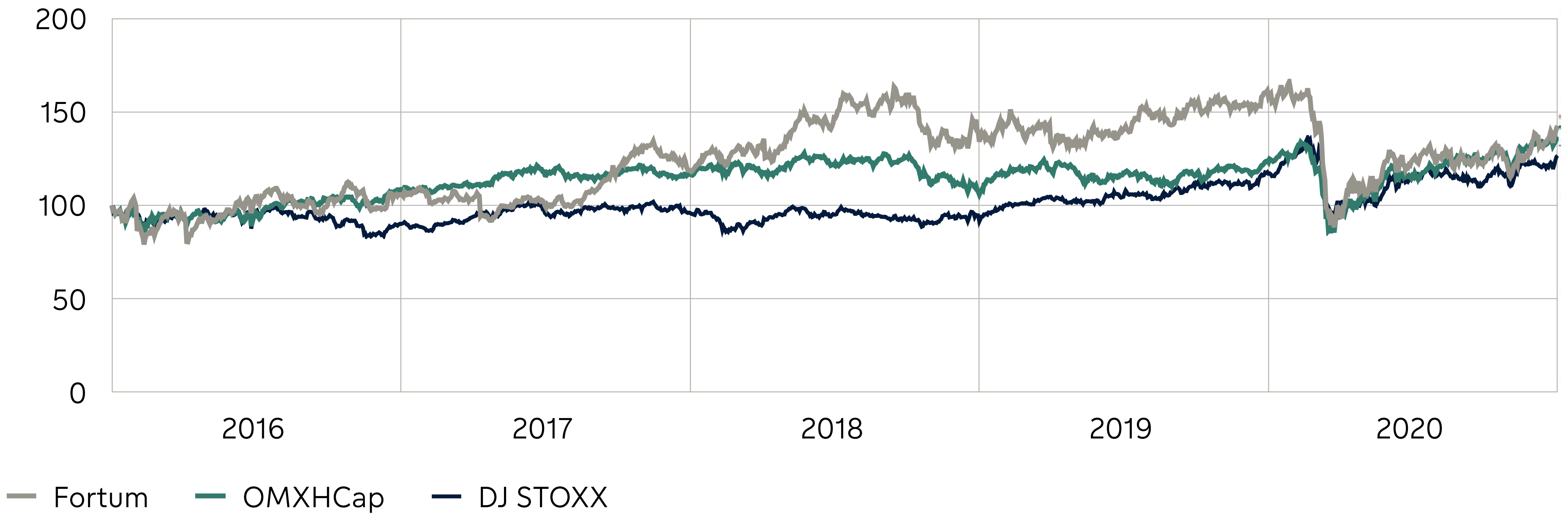
Based on the number of registered shares as at 11 March 2021 the total amount of dividend would be EUR 994,889,801. The Board of Directors proposes, that the remaining part of the distributable funds be retained in the shareholders' equity.

The Annual General Meeting is planned to take place on 28 April 2021 at 14:00 EEST.

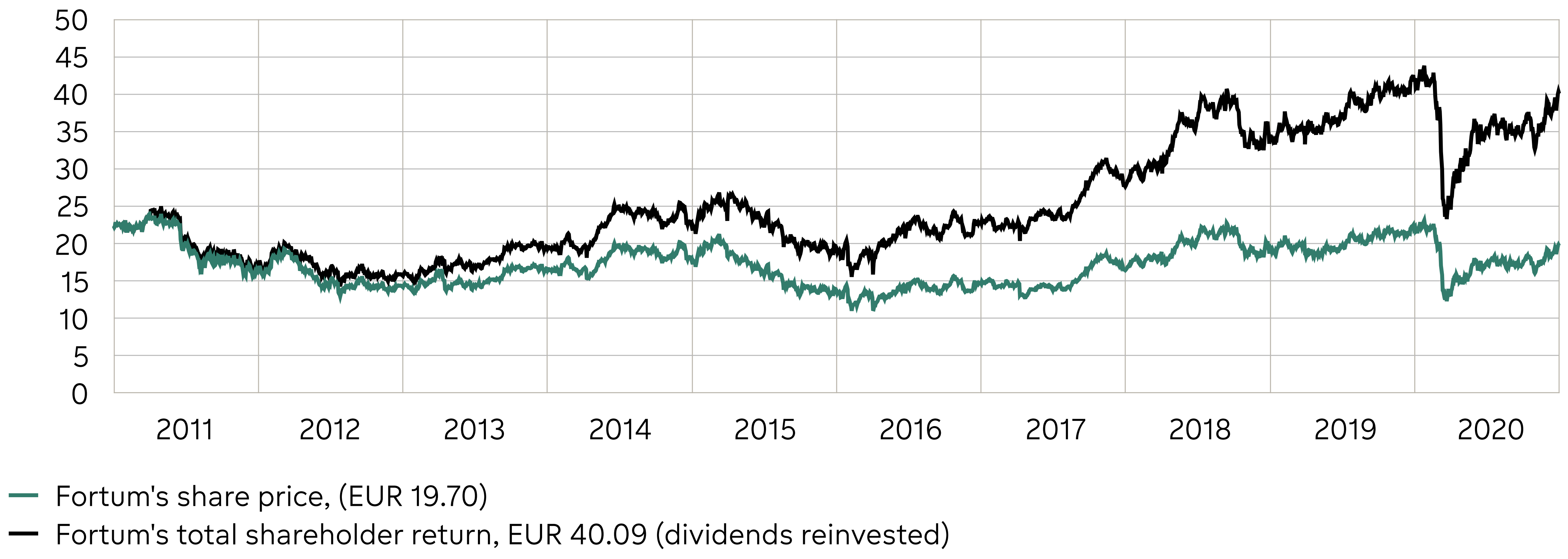
Market capitalisation, EUR billion



Share quotations, index 100 = quote on 4 January 2016



Total shareholder return, EUR



Consolidated income statement

EUR million	Note	2020	2019
Sales	6	49,015	5,447
Other income	8	4,802	110
Materials and services	9	-44,298	-2,721
Employee benefits	10	-1,195	-480
Depreciation and amortisation	6, 16, 17	-1,090	-575
Other expenses	8	-5,890	-591
Comparable operating profit	6	**1,344**	**1,191**
Items affecting comparability [1]	7	255	-72
Operating profit	6	**1,599**	**1,118**
Share of profit of associates and joint ventures	6, 18	656	744
Interest expense		-170	-167
Interest income		111	28
Other financial expenses - net		3	5
Finance costs - net [1]	11	-56	-134
Profit before income tax		**2,199**	**1,728**
Income tax expense	12	-344	-221
Profit for the year		**1,855**	**1,507**
Attributable to:			
Owners of the parent		1,823	1,482
Non-controlling interests		32	25
		1,855	**1,507**
Earnings per share for profit attributable to the equity owners of the company (EUR per share)	13		
Basic		2.05	1.67

As Fortum currently has no dilutive instruments outstanding, diluted earnings per share is the same as basic earnings per share.

EUR million	Note	2020	2019
Comparable operating profit		**1,344**	**1,191**
Impairment charges and reversals		2	-8
Capital gains and other related items		765	7
Impact from acquisition accounting		-222	-
Changes in fair values of derivatives hedging future cash flow		-675	-72
Other		386	-
Items affecting comparability [1]	6, 7	255	-72
Operating profit		**1,599**	**1,118**

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

See Definitions for key figures

Consolidated statement of comprehensive income

EUR million	Note	2020	2019
Profit for the year		**1,855**	**1,507**
Other comprehensive income			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedges			
Fair value gains/losses		-155	82
Transfers to income statement		45	635
Transfers to inventory/property, plant and equipment		2	-4
Deferred taxes		21	-151
Net investment hedges			
Fair value gains/losses		48	-24
Deferred taxes		-8	5
Exchange differences on translating foreign operations	4.3	-524	259
Share of other comprehensive income of associates and joint ventures	18	-250	72
Transfer to income statement due to impact from acquisition accounting		222	-
Other changes		-70	5
		-667	**877**
Items that will not be reclassified to profit or loss in subsequent periods:			
Remeasurement of investments		-28	-
Actuarial gains/losses on defined benefit plans	30	-244	-21
Actuarial gains/losses on defined benefit plans in associates and joint ventures		67	-208
		-205	**-229**
Other comprehensive income/expense for the year, net of deferred taxes		**-873**	**649**
Total comprehensive income for the year		**982**	**2,155**
Total comprehensive income attributable to:			
Owners of the parent		1,052	2,120
Non-controlling interests		-70	36
		982	**2,155**

Other comprehensive income (OCI) includes items of income and expense that are recognised in equity and not recognised in the consolidated income statement. They include unrealised items, such as fair value gains and losses on financial instruments hedging future cash flows. These items will be realised in the Consolidated income statement when the underlying hedged items is recognised. OCI also includes gains and losses on fair valuation of other investments, actuarial gains and losses from defined benefit plans, items on comprehensive income in associated companies and translation differences.

Fair valuation of cash flow hedges mainly relates to fair valuation of derivatives, such as futures and forwards, hedging electricity price for future transactions, where hedge accounting is applied. When electricity price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Translation differences from translation of foreign entities, mainly RUB and SEK.

Consolidated balance sheet

EUR million	Note	31 Dec 2020	31 Dec 2019
ASSETS			
Non-current assets			
Intangible assets	16	2,808	1,143
Property, plant and equipment and right-of-use assets	17	19,367	10,123
Participations in associates and joint ventures	18	2,912	6,435
Shares in Nuclear Waste Funds	28	3,445	813
Other non-current assets	19	479	151
Deferred tax assets	27	1,089	77
Derivative financial instruments	14, 15	2,946	180
Long-term interest-bearing receivables	20	2,402	651
Total non-current assets		**35,448**	**19,571**
Current assets			
Inventories	21	1,396	230
Derivative financial instruments	14, 15	7,531	131
Short-term interest-bearing receivables	20	598	384
Income tax receivables	27	156	133
Margin receivables	26	1,132	177
Trade and other receivables	22	8,906	999
Liquid funds	23	2,308	1,433
Total current assets		**22,027**	**3,486**
Assets held for sale	3	335	307
Total assets		**57,810**	**23,364**

EUR million	Note	31 Dec 2020	31 Dec 2019
EQUITY			
Equity attributable to owners of the parent			
Share capital	24	3,046	3,046
Share premium		73	73
Retained earnings		10,149	9,982
Other equity components		-316	-118
Total		**12,953**	**12,982**
Non-controlling interests	25	2,624	252
Total equity		**15,577**	**13,235**
LIABILITIES			
Non-current liabilities			
Interest-bearing liabilities	26	8,785	6,118
Derivative financial instruments	14, 15	2,657	137
Deferred tax liabilities	27	952	865
Nuclear provisions	28	3,866	813
Other provisions	29	3,452	87
Pension obligations, net	30	1,520	125
Other non-current liabilities	31	344	167
Total non-current liabilities		**21,576**	**8,311**
Current liabilities			
Interest-bearing liabilities	26	1,877	570
Derivative financial instruments	14, 15	7,937	252
Other provisions	29	780	13
Margin liabilities	26	331	32
Trade and other payables	32	9,525	898
Total current liabilities		**20,451**	**1,766**
Liabilities related to assets held for sale	3	206	52
Total liabilities		**42,233**	**10,129**
Total equity and liabilities		**57,810**	**23,364**

Consolidated statement of changes in total equity

		Share capital	Share premium	Retained earnings		Other equity components			Owners of the parent	Non-controlling interests	Total equity
EUR million	**Note**			**Retained earnings**	**Translation of foreign operations**	**Cash flow hedges**	**Other OCI items**	**OCI items associates and joint ventures**			
Total equity 1 January 2020		**3,046**	**73**	**12,441**	**-2,459**	**-70**	**60**	**-108**	**12,982**	**252**	**13,235**
Net profit for the year				1,823					1,823	32	1,855
Translation differences					-490	-1	-3	2	-492	-32	-524
Other comprehensive income						-87	-231	40	-279	-70	-349
Total comprehensive income for the year				1,823	-490	-88	-235	42	1,052	-70	982
Cash dividend	13			-977					-977	-160	-1,137
Changes due to business combinations	3								-	2,847	2,847
Impact from acquisition accounting	7			-84				84	-	-	-
Transactions with non-controlling interests				-107					-107	-247	-354
Other				2					2	1	4
BS Total equity 31 December 2020		**3,046**	**73**	**13,097**	**-2,948**	**-158**	**-175**	**18**	**12,953**	**2,624**	**15,577**
Total equity 1 January 2019		**3,046**	**73**	**11,937**	**-2,705**	**-638**	**99**	**30**	**11,841**	**236**	**12,077**
Net profit for the year				1,482					1,482	25	1,507
Translation differences					247	7	0	-1	253	6	259
Other comprehensive income						561	-40	-136	385	5	390
Total comprehensive income for the year				1,482	247	568	-40	-137	2,120	36	2,155
Cash dividend	13			-977					-977	-23	-1,000
Other				-2					-2	4	2
BS Total equity 31 December 2019		**3,046**	**73**	**12,441**	**-2,459**	**-70**	**60**	**-108**	**12,982**	**252**	**13,235**

Translation differences

Translation of financial information from subsidiaries in foreign currency is done using the average rate for the income statement and the end rate for the balance sheet. The exchange rate differences arising from translation (mainly related to RUB and SEK) to EUR are recognised in equity.

For information regarding exchange rates used, see Note 1 Significant accounting policies. For information about translation exposure see Note 4.3 Interest rate risk and currency risk.

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity. The above resulted in EUR -84 million being reclassified from OCI to retained earnings. See Note 7 Items affecting comparability.

Cash flow hedges

The impact on equity attributable to owners of the parent from fair valuation of cash flow hedges mainly relates to fair valuation of derivatives, such as futures and forwards, hedging electricity price for future transactions, where hedge accounting is applied. When electricity price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Cash dividends

A dividend for 2019 was decided in the Annual General Meeting on 23 April 2020 and paid on 5 May 2020. See Note 13 Earnings and dividend per share.

Non-controlling interests

Non-controlling interests increased by EUR 2,847 million following the acquisition of Uniper at 31 March 2020, including EUR 424 million non-controlling interest from Uniper's standalone balance sheet; and EUR 2,423 million representing the 26.6% non-controlling interest in Uniper when Uniper was consolidated as a subsidiary to Fortum Group. See Note 3 Acquisitions, disposals and assets held for sale.

Consolidated cash flow statement

EUR million	Note	2020	2019
Cash flow from operating activities			
Profit for the year		**1,855**	**1,507**
Adjustments:			
Income tax expense		344	221
Finance costs - net		56	134
Share of profit/loss of associates and joint ventures		-656	-744
Depreciation and amortisation		1,090	575
Operating profit before depreciations (EBITDA)		**2,688**	**1,693**
Items affecting comparability		-255	72
Comparable EBITDA		**2,434**	**1,766**
Non-cash and other items [1]		293	-83
Interest received		46	29
Interest paid		-208	-177
Dividends received		121	239
Income taxes paid		-267	-165
Funds from operations		**2,419**	**1,608**
Change in working capital		136	-33
Net cash from operating activities		**2,555**	**1,575**
Cash flow from investing activities			
Capital expenditures	16, 17	-1,101	-695
Acquisitions of shares	6	-1,801	-107
Proceeds from sales of property, plant and equipment		16	35
Divestments of shares and capital returns		1,244	53
Shareholder loans to associated companies and joint ventures		-44	9
Change in margin receivables [2]		-552	403
Change in other interest-bearing receivables [1]		98	420
Net cash from/used in investing activities		**-2,140**	**118**

EUR million	Note	2020	2019
Cash flow before financing activities		**415**	**1,693**
Cash flow from financing activities			
Proceeds from long-term liabilities		2,569	2,805
Payments of long-term liabilities		-507	-2,567
Change in short-term liabilities		207	-78
Dividends paid to the owners of the parent	13	-977	-977
Dividends paid to non-controlling interests		-160	-23
Change in margin liabilities [2]		-623	-47
Other financing items		-3	1
Net cash from/used in financing activities		**505**	**-886**
Net increase(+)/decrease(-) in liquid funds		**920**	**806**
Liquid funds 1 January		**1,435**	**584**
Foreign exchange differences in liquid funds		-45	44
Liquid funds 31 December [3]	23	**2,308**	**1,435**

1) In 2020, nuclear fund-related payments and repayments have been reclassified from cash flow from operating activities to cash flow from investing activities. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.
2) In 2020, in order to align with the presentation of net debt and to better to reflect the nature of these items, Fortum reclassified in the consolidated cash flow statement the change in net margin liabilities from operating cash flows so that the change in margin receivables is presented in investing cash flows, and the change in margin liabilities is presented in financing cash flows. Comparatives have been reclassified accordingly.
3) Included cash balances of EUR 2 million relating to assets held for sale at 31 December 2019. See Note 3 Acquisitions, disposals and assets held for sale.

Capital expenditures in cash flow do not include not yet paid investments. Capitalised borrowing costs are presented in interest paid.

Change in net debt

From I/2020 Fortum updated the definition of net debt to align it with Uniper. See further details in Note 26 Interest-bearing liabilities.

EUR million	Note	2020
Net debt 1 January		**5,260**
Collateral arrangement securities		-281
Net margin liabilities		-145
Financial net debt 1 January		**4,833**
Comparable EBITDA		2,434
Non-cash and other items		293
Paid net financial costs and dividends received		-40
Income taxes paid		-267
Change in working capital		136
Capital expenditures		-1,101
Acquisitions		-1,801
Divestments and proceeds from sale of property, plant and equipment		1,260
Change in interest-bearing receivables		54
Dividends to the owners of the parent		-977
Dividends to non-controlling interests		-160
Other financing activities		-3
Net cash flow		-173
Acquired financial debt		2,010
Foreign exchange rate differences and other changes		6
Financial net debt 31 December	26	**7,023**

Excludes financial net debt relating to assets held for sale at 31 December 2020, see Note 3 Acquisitions, disposals and assets held for sale.

Additional cash flow information

Change in working capital

EUR million	2020	2019
Change in interest-free receivables, decrease(+)/increase(-)	-1,106	63
Change in inventories, decrease(+)/increase(-)	407	4
Change in interest-free liabilities, decrease(-)/increase(+)	835	-100
CF Total	**136**	**-33**

Capital expenditure in cash flow

EUR million	Note	2020	2019
Capital expenditure	16, 17	1,135	713
Change in not yet paid investments, decrease(+)/increase(-)		-6	-9
Capitalised borrowing costs	17	-27	-9
CF Total		**1,101**	**695**

Acquisition of shares in cash flow

Acquisition of shares, net of cash acquired, amounted to EUR 1,801 million during 2020 (2019: 107), including mainly the acquisition of shares in Uniper SE. For further information see Note 3 Acquisitions, disposals and assets held for sale.

Divestment of shares in cash flow

EUR million	Note	2020	2019
Proceeds from sales of subsidiaries, net of cash disposed	3	1,156	15
Proceeds from sales and capital returns of associates and joint ventures	18, 3	49	33
Proceeds from sales of other investments	3	40	4
CF Total		**1,244**	**53**

During 2020 Fortum completed the divestment of the district heating business in Järvenpää and Joensuu, Finland, the 80% stake in the Nordic wind portfolio and the 60% stake in the public charging point operator for electrical vehicles in the Nordics. For further information, see Note 3 Acquisitions and disposals and assets held for sale.

1 Significant accounting policies

1.1 Basic information

Fortum Corporation (the company) is a Finnish public limited liability company domiciled in Espoo, Finland. Fortum's shares are traded on Nasdaq Helsinki. Fortum is a European energy company with activities in more than 40 countries. We provide our customers with electricity, gas, heating and cooling as well as smart solutions to improve resource.

These financial statements were approved by the Board of Directors on 11 March 2021. The Financial Statements are also published in accordance with the European Single Electronic Format (ESEF) reporting requirement. The audit firm, Deloitte Oy, has provided an independent auditor's reasonable assurance report on Fortum's ESEF Financial Statements in accordance with ISAE 3000 (Revised). The ESEF report is available at https://www.fortum.com/about-us/investors/reports-and-presentations.

1.2 Basis of preparation

The consolidated financial statements of Fortum Group for the year ended 31 December 2020 have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRIC Interpretations as adopted by the European Union. The consolidated financial statements also comply with Finnish accounting principles and corporate legislation.

The consolidated financial statements have been prepared under the historical cost convention, except for financial assets and financial liabilities (including derivative instruments) that are valued at fair value through profit and loss or other comprehensive income.

The figures in the consolidated financial statements have been rounded and consequently the sum of individual figures may deviate from the sum presented. Key figures have been calculated using exact figures. Unless otherwise indicated, all amounts are presented in millions of euro (EUR million).

1.3 Principles for consolidation

These consolidated financial statements comprise of the parent company, subsidiaries, joint ventures and associated companies.

Fortum Group was formed in 1998 by using the pooling-of-interests method for consolidating Fortum Power and Heat Oy and Fortum Oil and Gas Oy (the latter demerged to Fortum Oil Oy and Fortum Heat and Gas Oy 1 May 2004). In 2005 Fortum Oil Oy (current Neste Oyj) was separated from Fortum by distributing 85% of its shares to Fortum's shareholders and by selling the remaining 15%. This means that the acquisition cost of Fortum Power and Heat Oy and Fortum Heat and Gas Oy has been eliminated against the share capital of the companies. The difference has been entered as a decrease in shareholders' equity.

1.3.1 Subsidiaries

Subsidiaries are defined as companies over which Fortum has control. Control exists when Fortum is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. See ▸ Note 3 Acquisitions, disposals and assets held for sale.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Where necessary, subsidiaries' accounting policies have been changed to ensure consistency with the policies the Group has adopted.

Certain subsidiaries and associated companies are not included in the consolidated financial statements on materiality grounds. These companies are accounted for outside the scope of IFRS 9 and measured at cost, with adjustments for any loss allowance.

Fortum Group subsidiaries are disclosed in ▸ Note 39 Group companies by segment. Group holding % for companies owned via subsidiaries is based on the Fortum Corporation ownership % in the direct subsidiary times the ownership % of the direct subsidiary in the indirect subsidiary / associate / joint venture.

1.3.2 Associates

Associated companies are entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. The Group's interests in associated companies are accounted for using the equity method of accounting. See ▸ Note 18 Participations in associated companies and joint ventures.

1.3.3 Joint ventures

Joint ventures are arrangements in which the Group has joint control. Joint ventures are accounted for using the equity method of accounting. See ▸ Note 18 Participations in associated companies and joint ventures.

1.3.4 Non-controlling interests

Non-controlling interests in subsidiaries are identified separately from the equity of the owners of the parent company. Non-controlling interests are generally initially measured at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. Changes in non-controlling interest due to changes in ownership interest of a subsidiary are accounted for as equity transactions. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. See ▸ Note 25 Non-controlling interests.

1.4 Measures for performance

According to the ESMA Guidelines on Alternative Performance Measures, an Alternative Performance Measure (APM) is understood as a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework.

Fortum uses APMs, such as Comparable operating profit and Comparable EBITDA in the financial target setting and forecasting, management's follow-up of financial performance of segments and the Group, as well as for the allocation of resources in the Group's performance management process. Items affecting comparability are excluded from Comparable operating profit and Comparable EBITDA and disclosed separately in Fortum's consolidated income statement to support the transparency of underlying business performance when comparing results between periods.

Items classified as Items affecting comparability include accounting effects from valuation according to IFRS not arising from the performance of business operations. Such items include fair value changes of financial derivatives hedging future cash flows where hedge accounting is not applied and fair value changes of physical contracts accounted for as derivatives according to IFRS 9, Financial Instruments.

Further, business performance of operations cannot be compared from one period to another without adjusting for one-time items relating to capital gains and other related items, such as transaction costs arising from acquisitions; impacts from acquisition accounting; significant impairments and reversals of impairments as well as other miscellaneous non-operating items, such as restructuring and cost management expenses. Such items are also treated as Items affecting comparability.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

According to IFRS 3, Business Combinations, transaction costs related to the acquisitions of subsidiary shares are recognised in the consolidated income statement. Such costs are presented in Capital gains and other within Items affecting comparability.

Following the consolidation on Uniper's income statement in 2020, Fortum updated the definition of Items affecting comparability and Comparable operating profit to align with Uniper's Adjusted earnings before interest and tax (Adjusted EBIT) definition. This update resulted in some changes to the definitions of existing items, as well as one new category (Other) for other non-operating items.

Further, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. This change did not impact Comparable operating profit.

Items affecting comparability are now categorised as follows:

- Impairment charges and reversals (reversal of previously recorded impairment charges has been added)
- Capital gains and other related items
- Impact from acquisition accounting
- Changes in fair values of derivatives hedging future cash flow
- Other (including restructuring and cost management expenses and other miscellaneous non-operating items)

See Note 7 Items affecting comparability. Definitions are presented in the section Definitions of key figures.

In 2020, Fortum updated the definition of net debt and started to use financial net debt and adjusted net debt when following indebtedness of the Group. The previously used net debt included interest-bearing loans, lease liabilities and liquid funds. See Note 26 Interest-bearing liabilities for details. Fortum also updated its long-term financial target to be financial net debt / comparable EBITDA below 2x. See Note 5 Capital risk management.

1.5 Foreign currency transactions and translation

1.5.1 Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in euros, which is the company's functional and presentation currency.

1.5.2 Transactions and balances

Transactions denominated in foreign currencies are translated using the exchange rate at the date of transaction. Receivables and liabilities denominated in foreign currencies outstanding on the balance sheet date are translated using the balance sheet date exchange rate. Exchange rate differences are recognised in the consolidated income statement. Net exchange differences relating to financing components are recognised in the income consolidated statement, except when deferred to equity as qualifying cash flow hedges. Translation differences on financial assets through other comprehensive income are included in Other equity components in equity.

1.5.3 Group companies

Income statement and cash flow statement of subsidiaries, whose functional currencies are not euro, are translated into euro using the average exchange rates; whereas the balance sheets of such subsidiaries are translated into euro using the closing exchange rates on the balance sheet date. On consolidation, exchange rate differences arising from the translation of net investment in foreign entities, as well as borrowings and other currency instruments designated as hedges for such investments, are taken to equity. When a foreign operation is sold, such exchange differences are recognised in the consolidated income statement as part of the gain or loss on sale. Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at closing rate.

The balance sheet date rate is based on the exchange rate published by the European Central Bank for the closing date. The average exchange rate is calculated as an average of daily closing rates from the European Central Bank. Until 2019 the average exchange rate was calculated as an average of each month's ending rate.

Key exchange rates used in consolidated financial statements

		Average rate		Balance sheet date rate	
	Currency	2020	2019	31 Dec 2020	31 Dec 2019
United Kingdom	GBP	0.8897	0.8773	0.8990	0.8508
Norway	NOK	10.7228	9.8524	10.4703	9.8638
Poland	PLN	4.4430	4.2992	4.5597	4.2568
Russia	RUB	82.7248	72.7949	91.4671	69.9563
Sweden	SEK	10.4848	10.5572	10.0343	10.4468
United States	USD	1.1422	1.1214	1.2271	1.1234

1.5.4 Associates and joint ventures

Associates and joint ventures, whose measurement and reporting currencies are not euro, are translated into the Group reporting currency using the same principles as for subsidiaries.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

1.6 Other significant accounting policies

Fortum describes other significant accounting policies in conjunction with the relevant disclosure information. The table below lists significant accounting policies and the financial statement note where they are presented, as well as the relevant IFRS standard.

Accounting policy	Note		IFRS standard
Subsidiaries	3	Acquisitions, disposals and assets held for sale	IFRS 3, IFRS 10
Assets held for sale	3	Acquisitions, disposals and assets held for sale	IFRS 5
Financial instruments	4, 14, 15	Financial risk management, Financial assets and liabilities by categories and Financial assets and liabilities by fair value hierarchy	IAS 32, IFRS 7, IFRS 9, IFRS 13
Segment reporting	6	Segment reporting	IFRS 8, IFRS 15
Revenue recognition	6, 22	Segment reporting and Trade and other receivables	IFRS 15
Other income	8	Other income and other expenses	IFRS 15
Research and development costs	8	Other income and other expenses	IAS 38
Share-based payments	10	Employee benefits and Board remuneration	IFRS 2
Earnings per share	13	Earnings and dividend per share	IAS 33
Other shares and participations	14, 19	Financial assets and liabilities by categories and Other non-current assets	IAS 32, IAS 36, IFRS 9
Fair value measurement	15	Financial assets and liabilities by fair value hierarchy	IFRS 13
Intangible assets	16	Intangible assets	IAS 38
Government grants	17	Property, plant and equipment and Right-of-use Assets	IAS 20
Tangible assets	17	Property, plant and equipment and Right-of-use Assets	IAS 16, IAS 36, IAS 40
Joint arrangements	18	Participations in associated companies and joint ventures	IFRS 11, IAS 28, IFRS 12
Investments in associates	18	Participations in associated companies and joint ventures	IAS 28, IFRS 12
Inventories	21	Inventories	IAS 2
Trade receivables	22	Trade and other receivables	IFRS 9
Liquid funds	23	Liquid funds	IAS 7
Borrowings	26	Interest-bearing liabilities	IFRS 9
Income taxes	27	Income taxes on the balance sheet	IAS 12
Decommissioning obligation	28	Nuclear related assets and liabilities	IFRIC 5
Provisions	29	Other provisions	IAS 37
Pensions and similar obligations	30	Pension obligations	IAS 19
Leases	33	Leases	IFRS 16
Contingent liabilities	35	Pledged assets and contingent liabilities	IAS 37

1.7 Summary of Uniper acquisition impact on consolidated financial statements

1.7.1 Consolidation of Uniper as a subsidiary at 31 March 2020

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Elliott Management Corporation and its affiliates ("Elliott") and Knight Vinke Energy Advisors Limited and its affiliates ("Knight Vinke"). The transaction was closed in two tranches. Control over Uniper was acquired on 26 March 2020 upon closing of the first tranche of the agreement, 19.6% of the shares. A liability for the maximum amount of shares in the second tranche, 3.8% of the shares, was recognised on the acquisition date. The second tranche of the agreement was closed on 8 May 2020 with the maximum amount of shares.

On 31 March 2020, Fortum's consolidated stake in Uniper was 73.4%, including the shares from the second tranche. On 31 March 2020, Fortum consolidated the balance sheet of Uniper. The income statement impact from 26 March 2020 to 31 March 2020 was not material. See Note 3.1 Acquisitions. In August 2020 Fortum's stake in Uniper exceeded 75%, and was 76.1% on 31 December 2020.

Fortum consolidated Uniper's results into its income statement from 1 April 2020. Income statement line items have been classified in accordance with Fortum's income statement categorisation and, as such, may not be fully comparable to Uniper's standalone income statement. Further, reporting of both the Uniper segment, and the Generation segment are impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG AB. See paragraph below.

1.7.2 Purchase price accounting on 31 March 2020

The purchase price allocation is being finalised and will be completed within the one-year window from the acquisition date, i.e. by 31 March 2021.

In these financial statements, Fortum presents the preliminary purchase price allocation for the Uniper acquisition, which has resulted in adjustments to Uniper's 31 March 2020 opening balance sheet.

Fair value adjustments made to Uniper's 31 March 2020 opening balance sheet mainly relate to property, plant and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, and deferred taxes. Increase in the value of property, plant and equipment resulted in additional depreciation (EUR 11 million in 2020); and increase in the value of the lease liability (due to a lower discount rate) resulted in lower interest cost (EUR 26 million in 2020).

In connection with the purchase price allocation, Fortum is also required to assess the circumstances giving rise to items recognised in Uniper segment's income statement during the one-year window from the acquisition date, and to reflect these in the acquisition date opening balance if they give more information on acquisition date fair values of assets or liabilities. This has led to certain one-time adjustments to Uniper segment's 2020 income statement, which are now reflected in the acquisition date opening balance sheet on 31 March 2020. Total impact on Comparable operating profit is EUR +68 million, and Items affecting comparability EUR -31 million in 2020.

Excess of the acquisition value over the fair value of Uniper's net assets, EUR 515 million, is preliminary goodwill. See Note 3.1 Acquisitions.

1.7.3 Alignment of accounting policies and presentation

Following the acquisition of Uniper, Fortum has reviewed Uniper's accounting policies to identify any significant differences to Fortum accounting policies. No significant accounting policy differences have been identified, except as explained below.

Fortum has aligned accounting policies and assumptions for nuclear related asset and liabilities on 31 December 2020. The alignment led to an increase in nuclear provisions, as well as a corresponding increase in nuclear funds for the overfunded plans; and resulted in 2020 in a positive net impact of EUR 12 million to other financial expenses in the consolidated income statement.

The accounting policies and assumptions have also been aligned for the respective balances of the co-owned nuclear companies. The total impact of the alignment to share of profits from associated companies and joint ventures in 2020 was EUR 47 million, net of tax.

Differences in financial statement presentation have also been addressed. The following changes have been made in comparison to Fortum's 2019 annual report to align with Uniper:

- Fortum updated the definition of net debt and started to use financial net debt and adjusted net debt when following indebtedness of the Group. The previously used net debt included interest-bearing loans, lease liabilities and liquid funds. See Note 26 Interest-bearing liabilities for details.
- Fortum updated the definition of Items affecting comparability and Comparable operating profit. The update resulted in some changes to definitions of existing items, as well as one new category (Other) for other non-operating items. See Note 1.4 Measures for performance for details.
- In order to align with the presentation of net debt and to better to reflect the nature of these items, Fortum reclassified in the consolidated cash flow statement the change in net margin liabilities (in 2019, presented as change in settlements for futures) from operating cash flows so that the change in margin receivables is presented in investing cash flows, and the change in margin liabilities is presented in financing cash flows. Comparatives have been reclassified accordingly.
- Nuclear fund adjustment in the consolidated income statement was reclassified from Items affecting comparability to Other financial expenses, net. This change does not impact Comparable operating profit. Further, in the consolidate cash flow statement, nuclear fund-related payments and repayments have been reclassified from cash flow from operating activities to cash flow from investment activities. Comparatives have been reclassified accordingly.

Further changes to the presentation of financial statements are still possible.

1.7.4 Joint ownership in the Swedish nuclear company OKG AB

Fortum and Uniper are co-owners in the Swedish nuclear company OKG Aktiebolag (OKG AB). OKG AB is consolidated into Uniper Group as a subsidiary with a 45.5% minority representing Fortum's ownership in OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020. As of 31 March 2020, OKG AB is consolidated as a subsidiary to Fortum Group.

Fortum has adjusted Uniper's standalone income statement and balance sheet numbers in respect of Fortum's shareholding in OKG AB, as well as adjusted operating profit, share of profit/loss in associates and joint ventures and net assets of OKG AB recorded in the Generation segment. Consequently, the Group's subsidiary, OKG AB, is split between the two segments according to ownership. This means that the standalone income statement and balance sheet as reported by Uniper in its interim reports is not fully comparable to Uniper's income statement and balance sheet as consolidated to Fortum Group. The adjustments made to Uniper's standalone income statement and balance sheet mainly impact Interest-bearing liabilities, Share of Nuclear fund, Nuclear provisions and Non-controlling interest as reported by Uniper. See Note 3.1 Acquisitions and Note 26 Interest-bearing liabilities.

1.7.5 Segment reporting

Following the consolidation of Uniper as a subsidiary on 31 March 2020, Fortum revised its reportable segments and reports Uniper as a separate segment. Until 31 March 2020 Fortum's share of Uniper's associated company results was presented in Other operations. See Note 6 Segment reporting.

Fortum previously accounted for Uniper as an associated company with a three-month time lag as Fortum published the annual report before Uniper's financial information was available. From the first quarter 2020, Fortum revised its financial reporting schedule and publishes annual and interim reports after Uniper. Fortum's first quarter results therefore included Fortum's share of Uniper's results from 1 October 2019 to 31 March 2020. See Note 18 Participations in associated companies and joint ventures.

Reporting of both the Uniper segment, and the Generation segment are impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG AB. See paragraph above.

1.7.6 One-time impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity.

The above reclassification resulted in a one-time, non-cash income statement impact of EUR -222 million on 31 March 2020 when Uniper became Fortum's subsidiary. This amount represented a part of Fortum's share of Uniper's OCI for the time when Uniper was an associated company, with no impact to Fortum's total equity. The amount mainly related to exchange rate differences arising from the translation of foreign operations recorded by Uniper. See Note 7 Items affecting comparability

1.8 New accounting standards, amendments and interpretations

New accounting standards, amendments and interpretations effective from 1 January 2020 did not have a material impact on Fortum's consolidated financial statements.

New accounting standards, amendments and interpretations issued by the balance sheet date and effective from 1 January 2021, or later, are not expected to have a material impact on Fortum's consolidated financial statements.

2 Critical accounting estimates and judgements

The preparation of IFRS consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities existing at the balance sheet date, as well as the reported amounts of revenues and expenses during the reporting period.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results and timing may differ from these estimates.

The table below lists the areas where management's accounting estimates and judgements are most critical to reported results and financial position; as well as where to find more information on the areas of critical accounting estimate and judgement.

Critical accounting estimates and judgements	Note
Judgement used in the purchase price allocation of the acquisition of Uniper shares	3. Acquisitions, disposals and assets held for sale
Judgement used in determining the valuation of certain financial instruments	14. Financial assets and liabilities by categories 15. Financial assets and liabilities by fair value hierarchy
Assigned values and useful lives determined for intangible assets and property, plant and equipment acquired in a business combination	16, 17. Intangible assets; Property, plant and equipment and right-of-use assets
Assumptions related to impairment testing of property, plant and equipment and intangible assets as well as associated companies and joint ventures	16, 17. Intangible assets; Property, plant and equipment and right-of-use assets
Judgement used when assessing the nature of Fortum's interest in its investees, when considering the classification of Fortum's joint arrangements, as well as commitments arising from these arrangements	18. Participations in associated companies and joint ventures
Estimates used for the recognition and measurement of deferred tax assets	27. Income taxes on the balance sheet 36. Legal actions and official proceedings
Assumptions made to determine long-term cash flow forecasts of estimated costs for provision related to nuclear production	28. Nuclear related assets and liabilities
Assumptions made when estimating provisions	29. Other provisions
Assumptions used to determine future pension obligations	30. Pension obligations
Assumptions used to determine the lease liability	33. Leases
Judgement used in accounting for price-adjustment clauses contained in long-term contracts	34. Capital and other commitments

Impact of Covid-19 on consolidated financial statements

Fortum has considered the potential impact of the Covid-19 pandemic on its business operations, and concluded the overall effect in the consolidated financial statements not to be significant.

During 2020, the Covid-19 pandemic resulted in new and partly unexpected risks as societies and governments across the world implemented drastic measures to contain the spread of the disease. As a result, the exposure to risk and uncertainty in all risk categories has increased compared to the 2019 year-end situation. There has been a certain stabilisation and partial recovery of commodity prices in the three last quarters, but market prices for electricity remain lower than at the beginning of 2020 due to lower commodity prices and European demand as well as the extremely wet, warm, and windy winter in the Nordics during the first quarter. Fortum's hedges, especially for the year 2021, will offer some protection against short-term fluctuations in electricity and other commodity market prices, but if the Covid-19 pandemic continues longer than expected or results in a more severe economic downturn than anticipated, results will be negatively impacted, as the hedge level for future years is lower.

Additionally, there is an increased risk of credit defaults caused by the abrupt shut-down of society in many parts of the world. Fortum has OTC derivative contracts with a number of energy wholesalers and retailers, utilities, trading companies, energy companies, industrial end-users and financial institutions active on the energy and financial markets. Fortum also has credit exposure toward customers and suppliers consisting of industrial counterparties, energy companies, government and municipal entities, utilities, small businesses, housing associations and private individuals, over a range of geographic regions. Credit defaults have not yet had a significant impact, but if the pandemic continues for a longer period of time without extension of effective support schemes for affected businesses, we expect to see increased default rates and delayed payments from customers, especially in the small and medium businesses in high-risk sectors and from non-investment grade counterparties that have been weakened economically by the pandemic. Fortum applies the expected credit loss model when recognising loss allowances for expected credit losses on financial assets. A similar model is applied when making credit value adjustments to the fair value of derivatives contracts. The model inputs have been reviewed taking into account the ongoing Covid-19 pandemic. There is no significant increase in credit losses due to Covid-19, however, the probability of defaults used in the expected credit loss model have been increased compared to before the pandemic, resulting in slightly higher loss allowances and credit value adjustments.

Fortum has further assessed whether there are any indications for impairment based on internal and external sources of information, such as the effects of the Covid-19. Fortum does not currently foresee that Covid-19 would have such long-term effects that it would impact the overall values of its non-current assets, such as property, plant and equipment and intangible assets. See Note 16 Intangible assets for details on 2020 impairment testing.

Discount rates for pension plans were updated to reflect the fall in interest rates, which led to a corresponding increase in pension provisions during 2020. See Note 30 Pension obligations.

3 Acquisitions, disposals and assets held for sale

ACCOUNTING POLICIES

SUBSIDIARIES

Acquisition of subsidiaries are accounted for using the acquisition method. The consideration transferred is measured as the aggregate of acquisition date fair values of acquired net assets. Identifiable assets acquired and liabilities assumed are measured initially at acquisition date fair values, irrespective of the extent of any minority interest. The excess of the cost of acquisition over the fair value of the identifiable net assets acquired is recorded as goodwill.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases. See Note 1.3 Principles for consolidation.

ASSETS HELD FOR SALE

Assets or disposal groups are classified as assets held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset, or the disposal group, must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets or disposal groups, and the sale must be highly probable. These assets, or in the case of disposal groups, assets and liabilities, are presented separately on the consolidated balance sheet and measured at the lower of the carrying amount and fair value less costs to sell. Assets classified as held for sale, or included in a disposal group classified as held for sale, are not depreciated.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS: UNIPER PURCHASE PRICE ALLOCATION

Preparing purchase price allocation requires management to make judgements when determining the fair value of the assets acquired and liabilities assumed. In the Uniper transaction, determining the fair values of property, plant and equipment and right-of-use assets, lease liabilities, provisions, contingent liabilities and long-term purchase obligations has required management judgement.

3.1 Acquisitions

EUR million	2020	2019
Gross investments in shares in subsidiary companies	3,646	13
Gross investments in shares in associated companies and joint ventures	119	73
Gross investments in other shares	42	20
Total	**3,807**	**106**

3.1.1 Acquisitions of subsidiary companies 2020

Uniper acquisition in March 2020

On 8 October 2019, Fortum entered into agreements to acquire all the shares held by funds managed by Elliott Management Corporation and its affiliates ("Elliott") and Knight Vinke Energy Advisors Limited and its affiliates ("Knight Vinke"). The transaction was closed in two tranches. Control over Uniper was acquired on 26 March 2020 upon closing of the first tranche of the agreement, 19.6% of the shares. A liability for the maximum amount of shares in the second tranche, 3.8% of the shares, was recognised on the acquisition date. The second tranche of the agreement was closed on 8 May 2020 with the maximum amount of shares.

At 31 March 2020 Fortum's consolidated stake in Uniper was 73.4%. The total purchase consideration for the combined shareholding was EUR 2.6 billion, which increased Fortum's total investment in Uniper to EUR 6.5 billion.

EUR million	Uniper
Acquisition of shares	2,858
Liquid funds in acquired companies	-1,328
Acquisition of shares in cash flow	**1,530**
Interest-bearing liabilities in acquired companies	1,414
Other financial net debt in acquired companies	596
Gross investments in shares	**3,540**

Acquisition accounting

The purchase price allocation on the Uniper acquisition is being finalised and will be completed within the one-year window from the acquisition date, i.e. by 31 March 2021. The preliminary purchase price allocation for the Uniper acquisition has resulted in adjustments to Uniper's 31 March 2020 opening balance sheet. Fair value adjustments were mainly made to property, plant and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, and deferred taxes. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements. Excess of the acquisition value over Uniper's net assets is presented as preliminary goodwill.

Fortum elected to measure non-controlling interest in Uniper based on the proportionate value of acquired net assets. Any adjustments to the fair values of the assets acquired and liabilities assumed will impact the value of non-controlling interest.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Acquired net assets are presented in the following table.

EUR million	31 Mar 2020
ASSETS	
Goodwill	1,779
Other intangible assets	980
Property, plant and equipment and right-of-use assets	9,268
Participations in associates and joint ventures	750
Derivative financial instruments	21,958
Interest-bearing receivables	1,840
Shares in Nuclear Waste Funds	1,602
Margin receivables	413
Trade and other receivables	7,236
Deferred and income tax assets	1,021
Inventories	1,565
Liquid funds	1,328
Total assets	**49,739**
LIABILITIES	
Derivative financial instruments	21,084
Interest-bearing liabilities	1,575
Pension obligations	953
Nuclear provisions	1,758
Other provisions	3,935
Deferred and income tax liabilities	348
Margin liabilities	924
Trade and other payables	7,852
Total liabilities	**38,428**
Net assets on Uniper's balance sheet	**11,312**
Less goodwill on Uniper's balance sheet [1)]	-1,779
Net assets from Uniper excluding goodwill	**9,533**
Purchase consideration	2,587
Previously held equity interest	4,613
Acquisition value	**7,201**
Non-controlling interest on Uniper's balance sheet	-424
Non-controlling interest from Uniper acquisition	-2,423
Total non-controlling interest (NCI)	**-2,847**
Preliminary goodwill	**515**

1) Goodwill on Uniper's balance sheet is deducted as it is not an identifiable asset of Fortum according to IFRS.

Acquired net assets are based on Uniper's first quarter financial report published on 7 May 2020. Balance sheet line items have been classified in accordance with Fortum's balance sheet categorisation and, as such, is not fully comparable to Uniper's standalone balance sheet. Further, Fortum and Uniper are both co-owners in the Swedish nuclear company OKG AB. OKG AB is consolidated into Uniper Group as a subsidiary with a 45.5% minority representing Fortum's ownership in OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020, and consolidated OKG AB as a subsidiary from 31 March 2020.

Shareholding in Uniper has been acquired in stages as Fortum held 49.99% of Uniper shares prior to the acquisition of control on 26 March 2020. Under IFRS, the previously held associated company interest is fair valued upon gaining control, and any gain or loss from the difference between the balance sheet value and the fair value of the interest is recognised to the consolidated income statement. The fair value of the previously held associated company interest in Uniper was EUR 4,613 million. The fair value was based on Uniper share price at 26 March 2020, slightly adjusted by a premium for significant influence. There are no significant unobservable inputs used in the valuation (market approach corresponding to fair value hierarchy level 2). No gain or loss was recognised from fair valuing the previously held equity interest as the fair value was approximately equal to the carrying amount.

Acquisition-related costs of EUR 20 million are included in items affecting comparability in the consolidated income statement. See Note 7 Items affecting comparability.

Preparing a purchase price allocation requires management to make judgements when determining the fair values of the assets acquired and liabilities assumed. The preliminary purchase price allocation may change when analyses are conducted and further information becomes available. Any adjustments to the fair values of the assets acquired and liabilities assumed will impact the preliminary estimate of goodwill. These adjustments may be material. Fortum expects to conduct further analysis to assess the fair values of items such as property, plant and equipment, provisions, contingent liabilities and long-term purchase obligations.

See Note 6 Segment reporting for Uniper's impact on Fortum's consolidated income statement.

3.1.2 Acquisitions of subsidiary companies 2019

In May 2019, Fortum announced the restructuring of Fortum's and Skellefteå Kraft's ownership in the two jointly owned Swedish wind parks Solberg and Blaiken. Through an asset swap arrangement Fortum, became the sole owner of the 76-MW Solberg wind park and Skellefteå Kraft the sole owner of the 248-MW Blaiken wind park. Both the investments in Solberg and divestment of Blaiken includes shares and assets. The asset swap arrangement was finalised in August 2019 and had only a minor impact on Fortum's cash flow and results.

3.1.3 Other share transactions

During 2020 Fortum invested EUR 25 million (2019: 66) to the wind investment fund 50/50 owned by Fortum and RUSNANO in Russia.

During 2020, Fortum's joint venture, the Fortum-Rusnano Wind Investment Fund, sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a new joint venture recently established with Russian Direct Investment Fund (RDIF) aimed at the operation of renewable power plants in Russia.

3.2 Disposals

EUR million	2020	2019
Gross divestments of shares in subsidiary companies	1,156	15
Gross divestments of shares in associated companies and joint ventures	31	10
Gross divestments of other investments	40	4
Total	**1,226**	**30**

3.2.1 Disposals of subsidiary companies

In December 2019, Fortum signed an agreement to sell its district heating business in Joensuu, Finland to Savon Voima Oyj. The total consideration on a debt- and cash-free basis was approximately EUR 530 million. The transaction was completed on 10 January 2020, and Fortum recorded a tax-exempt capital gain of EUR 431 million in the City Solutions segment's 2020 results.

In December 2019, Fortum and Credit Suisse Energy Infrastructure Partners (CSEIP) signed an agreement whereby funds advised by CSEIP acquired an 80% stake in Fortum's Nordic wind portfolio. The total consideration on a debt- and cash-free basis was approximately EUR 170 million. The transaction, excluding the Sørfjord wind park, which was still under construction, was closed on 14 May 2020.

On 27 April 2020, Fortum signed an agreement to sell 60% of its public charging point operator, Fortum Recharge AS, for electrical vehicles in the Nordics to Infracapital. The transaction closed on 29 May 2020, and Fortum recorded a tax-exempt capital gain of EUR 72 million in Other Operation's 2020 results. The cash consideration was EUR 87 million.

On 3 July, Fortum announced it had agreed to sell the district heating business in Järvenpää, Finland for EUR 375 million to a consortium consisting of Vantaa Energy Ltd, Infranode, and Keva. Fortum completed the transaction on 19 August 2020 and recorded a tax-exempt capital gain of EUR 291 million in the City Solutions segment's 2020 results.

In December 2020, Fortum decided to sell eight small hydropower plants in Sweden with an average annual power generation of 0.1 TWh to Downing Renewables & Infrastructure Trust plc. The total purchase price on a debt and cash free basis is EUR 64.5 million. The transaction closed on 2 February 2021.

During 2019 there were no material divestments.

Divestments of shares in subsidiaries - Impact on financial position

EUR million	2020	2019
Gross divestments of shares in subsidiary companies	1,156	15
Intangible assets and property, plant and equipment	394	9
Other non-current and current assets	66	1
Liquid funds	10	0
Interest-bearing loans	-250	-
Other liabilities and provisions	-79	-1
Net assets divested	**142**	**9**
Reclassified to participations in associates and joint ventures	11	-
Result from transaction	**794**	**7**

3.2.2 Other disposals

In August 2019, the restructuring of Fortum's and Skellefteå Kraft's ownership in the two jointly owned Swedish wind parks Solberg and Blaiken was finalised. See Note 3.1.2 Acquisitions of subsidiary companies 2019 for additional information.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

3.3 Assets held for sale

Assets held for sale at 31 December 2020 include Schkopau lignite-fired power plant (Uniper segment) and Sørfjord wind park (Generation segment).

In February 2020, Uniper signed an agreement with Saale Energie GmbH, a subsidiary of the Czech company Energetický a průmyslový holding, a. s., on the sale of the interest in the Schkopau lignite-fired power plant in Germany. Uniper is the operator of the power plant and holds a stake of about 58%. Saale Energie holds a stake of around 42% in the Schkopau power plant and will take over Uniper's stake effective 1 October 2021. The proceeds from the sale will be determined when the transaction closes on 1 October 2021, taking into account various purchase price adjustment clauses.

In December 2019, Fortum and Credit Suisse Energy Infrastructure Partners (CSEIP) signed an agreement whereby funds advised by CSEIP acquired an 80% stake in Fortum's Nordic wind portfolio. The transaction, excluding the Sørfjord wind park which was still under construction, was closed on 14 May 2020. The transaction on Sørfjord wind park was closed on 20 January 2021.

EUR million	31 Dec 2020	31 Dec 2019
Assets held for sale		
Intangible assets and property, plant and equipment and right-of-use assets	230	290
Deferred tax assets	9	0
Other non-current and current assets	96	15
Liquid funds	0	2
Total	**335**	**307**
Liabilities related to assets held for sale		
Interest-bearing liabilities	43	6
Deferred tax liabilities	33	20
Pension and asset retirement obligations	18	-
Other liabilities and provisions	112	26
Total	**206**	**52**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

4 Financial risk management

Fortum's risk management framework, objectives, organization and processes as well as a description of strategic, sustainability, financial and operational risks can be found in the Risk management section of the Operating and financial review (OFR).

Uniper was consolidated to Fortum as a subsidiary as of March 31, 2020 and Uniper is a separate reportable segment of Fortum. Additionally, Uniper is a separate listed company operating under German laws and regulations with its own risk management systems including a set of risk policies defining the risk management organisation principles, processes and responsibilities. Uniper does not directly apply the risk management systems applicable to other Fortum segments, however its key risk management principles and processes are materially similar.

4.1 Commodity market and fuel risks

Fortum’s business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sales of energy products. The main exposure is toward electricity prices and volumes, gas prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results.

Risk management for commodity hedging and trading activities is based on general standards in the industry and involves the segregation of duties as well as daily calculation, monitoring and reporting of results, positions and risks. Instructions and guidelines, and controls are in place to ensure exposures are kept within approved limits and mandates. Hedging involves the use of derivative financial instruments as well as fixed-price physical delivery contracts.

The derivatives are also entered into for proprietary trading purposes. This takes place exclusively in the compliance with tight internal and regulatory restrictions.

4.1.1. Sensitivity arising from commodity derivatives according to IFRS 7

Sensitivity analysis shows the sensitivity arising from financial commodity derivatives as defined in IFRS 7. Sensitivities are presented with most descriptive measure about the risk management and usage of derivatives in Uniper segment and other Fortum’s segments.

Fortum, excluding Uniper

In Fortum, excluding Uniper, derivatives are used for hedging purposes with hedge accounting applied to most hedging strategies. Sensitivities in the table below are calculated based on the electricity position as of 31 December 2020 (31 December 2019). Positions are actively managed in the day-to-day business operations and therefore the sensitivities vary from time to time. Sensitivity analysis includes only the market risks arising from derivatives i.e. the underlying physical electricity sales and purchases are not included. Sensitivity is calculated with the assumption that electricity forward and futures quotations would change 1 EUR/MWh for the period Fortum, excluding Uniper, has derivatives.

Sensitivity according to IFRS 7

+/- 1 EUR/MWh change in electricity forward and futures quotations, EUR million	Effect	2020	2019
Effect on profit before income tax	-/+	1	4
Effect on equity	-/+	58	49

Uniper

In Uniper, derivatives are used mainly for hedging, but also for proprietary trading purposes. Hedge accounting is not applied in Uniper for commodity derivatives.

Commodity price risks in Uniper are measured based on a value-at-risk approach with 95% confidence interval and take into account the amount of open position as well as the prices, their volatility and the liquidity on the respective markets. Value-at-risk figures are supplemented by stop-loss and volume based indicators. When necessary, additional portfolio-specific restrictions are set.

Based on the current Uniper portfolio, as of December 2020, the calendar year based, weighted value-at-risk, which takes market liquidities into account and ignores correlations between years, was EUR 463 million for financial and physical commodity positions covering next three years.

4.1.2. Electricity price and volume risk

Electricity price and volume risk in the Nordic region is the largest commodity market risk exposure for Fortum. The exposure arising from outright power production (hydro and nuclear production assets) is mainly hedged by entering into electricity derivatives contracts on exchanges such as Nasdaq Commodities exchange or the European Energy Exchange as well as directly with counterparties active in the energy and financial markets. The main objective of hedging is to reduce the effect of electricity price volatility on cash flows and to increase the predictability of future results. The Generation segment and Uniper have separate hedging strategies covering several years in the short to medium term. These hedging strategies are executed within approved mandates and are continuously evaluated as electricity and other commodity market prices, the hydrological balance and other relevant parameters change.

Generation segment’s hedging for power sales is performed in EUR on a Nordic level covering both Finland and Sweden. The currency component of these hedges in the Swedish entity is currently not hedged. Generation segment’s sensitivity to the Nordic electricity market price is dependent on the hedge level for a given time period. As per 31 December 2020, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged for the calendar year 2021 with a price 33 EUR/MWh and approximately 50% for the calendar year 2022 with a price 31 EUR/MWh.

Uniper segment’s power hedging is performed in EUR only in Sweden as there is no electricity production in other Nordic countries. The currency exposure in the Swedish entity is hedged according to a separate hedging strategy. Uniper segment’s sensitivity to the Nordic electricity price is dependent on the hedge level for a given time period. The Uniper segment’s Nordic generation hedges as per 31 December 2020 was approximately 90% at 27 EUR/MWh for 2021, and approximately 65% at 24 EUR/MWh for 2022.

In the Russia segment, electricity prices are the main sources of market risk. The electricity price is highly correlated with the gas price. Exposure is partly mitigated through regulated fixed-price bilateral agreements, but the majority of electricity sales is exposed to spot price risk. There are no derivatives contracts in Russia segment.

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4.1.3 Electricity derivatives

The table below discloses the Fortum Group's electricity derivatives subject to hedge accounting, which are used for hedging electricity price risk. The fair values represent the values disclosed on the balance sheet. See also Note 14 Financial assets and liabilities by categories for accounting principles and Note 15 Financial assets and liabilities by fair value hierarchy for basis of fair value estimations.

Electricity derivatives by instrument 2020

	Volume, TWh				Fair value, EUR million		
	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	28	28	1	58	237	410	-173
Netting against electricity exchanges [1]					-89	-89	-
Total					**148**	**321**	**-173**

Electricity derivatives by instrument 2019 [2]

	Volume, TWh				Fair value, EUR million		
	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	29	20		49	110	181	-71
Netting against electricity exchanges [1]					-67	-67	-
Total					**43**	**115**	**-71**

1) Receivables and liabilities against electricity exchanges arising from standard derivative contracts with same delivery period are netted.
2) Table has been revised from previously published to include only those electricity derivatives for which hedge accounting is applied. Previously published table also includes electricity derivatives for which hedge accounting is not applied.

4.2 Liquidity and refinancing risk

Liquidity and refinancing risks are managed through a combination of cash positions and committed credit and other facility agreements with the core banks. Maturity profile of loans is monitored to ensure that there is all times access to adequate liquidity for investments, loan maturities and margining required for commodity trading and hedging activities. Uniper has its own independent treasury organization to manage the liquidity and refinancing risks. Cash pools of Uniper are not combined with the cash pools of its ultimate parent company Fortum Corporation and there was no intra-group financing between the companies as of 31 December 2020.

Fortum's business is capital intensive and it has a diversified loan portfolio mainly consisting of long-term financing denominated in EUR. Long-term financing is primarily raised by issuing bonds under Fortum Corporation's Euro Medium Term Note programme as well as through bilateral and syndicated loan facilities from a variety of different financial institutions.

In Fortum financing is primarily raised on parent company level and funds are distributed internally through various internal financing arrangements. For example operations of PAO Fortum are mainly financed via equity and intra-group long-term RUB denominated loans. The internal RUB loan receivables are hedged via external derivative contracts offsetting the currency exposure for the parent company.

On 31 December 2020, 85% (2019: 89%) of the Group's total external loans was raised by the parent company Fortum Corporation, and remaining 6% by Uniper and 9% by other subsidiaries. However Uniper SE raises financing for Uniper companies.

In 2020, Fortum updated the definitions of net debt and started to use financial net debt and adjusted net debt when following indebtedness of the Group. At the end of 2020, financial net debt of Fortum, was EUR 7,023 million and adjusted net debt EUR 9,784 million. The previously used net debt EUR 5,260 million at the end of 2019 included interest-bearing loans, lease liabilities and liquid funds.

On 31 December 2020, loan maturities of Fortum, for the coming twelve-month period amounted to EUR 1,717 million (2019: 551). Liquid funds of Fortum amounted to EUR 2,308 million (2019: 1,433). Liquid funds include EUR 289 million held by Uniper. Russian subsidiaries held EUR 244 million (2019: 201) of liquid funds in the form of cash and bank deposits.

Maturity of loans

EUR million	2020
2021	1,717
2022	3,055
2023	1,120
2024	320
2025	20
2026 and later	3,375
Total	**9,607**

For more information on loans, see Note 26 Interest-bearing liabilities.

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Liquid funds, major credit lines and debt programmes 2020

EUR million	Total facility	Drawn amount	Available amount
Liquid funds			
Fortum Corporation			2,019
Uniper			289
Total			**2,308**
of which in Russia			244
Committed credit lines			
Fortum Corporation, EUR 1,750 million syndicated credit facility	1,750	-	1,750
Fortum Corporation, EUR 1,450 million syndicated credit facility[1)]	1,450	-	1,450
Uniper, EUR 1,800 million syndicated credit facility	1,800	-	1,800
Fortum Corporation, Bilateral overdraft facilities	100	-	100
Total	**5,100**	**-**	**5,100**
Debt programmes (uncommitted)			
Fortum Corporation, CP programme EUR 1,000 million	1,000	120	880
Fortum Corporation, CP programme SEK 10,000 million	997	75	921
Uniper, CP programme EUR 1,800 million	1,800	65	1,735
Fortum Corporation, EMTN programme EUR 8,000 million	8,000	4,195	3,805
Uniper, Debt Issuance programme EUR 2,000 million	2,000	-	2,000
Total	**13,797**	**4,455**	**9,341**

Liquid funds, major credit lines and debt programmes 2019

EUR million	Total facility	Drawn amount	Available amount
Liquid funds			
Cash and cash equivalents			1,357
Deposits and securities over 3 months			76
Total			**1,433**
of which in Russia (PAO Fortum)			201
Committed credit lines			
EUR 1,750 million syndicated credit facility	1,750	-	1,750
EUR 8,300 million syndicated credit facility[1)]	8,300	-	8,300
Bilateral overdraft facilities	50	-	50
Total	**10,100**	**-**	**10,100**
Debt programmes (uncommitted)			
Fortum Corporation, CP programme EUR 1,000 million	1,000	10	990
Fortum Corporation, CP programme SEK 10,000 million	957	-	957
Fortum Corporation, EMTN programme EUR 8,000 million	8,000	4,206	3,804
Total	**9,957**	**4,206**	**5,751**

1) In 2019, Fortum signed committed credit facilities of EUR 8.3 billion for the purchase of Uniper shares announced on 8 October 2019 and for the liquidity purposes. At the end of 2020 Fortum had EUR 2.0 billion drawn and outstanding under the facilities and EUR 1.45 billion available. The rest of the facilities (EUR 4.85 billion) was either prepaid or cancelled during 2020. For further information, see Note 23 Liquid funds and Note 26 Interest-bearing liabilities.

Maturity analysis of interest-bearing loans and derivative liabilities

	2020				2019			
EUR million	Under 1 year	1-5 years	Over 5 years	Total	Under 1 year	1-5 years	Over 5 years	Total
Interest-bearing loans	1,856	4,912	3,711	10,479	661	3,207	3,333	7,201
Commodity derivatives	8,523	3,715	37	12,275	1,146	206	0	1,352
Interest rate and currency derivatives	181	82	37	300	53	53	21	127
Cash outflows of interest-bearing loans and derivatives	**10,560**	**8,709**	**3,785**	**23,053**	**1,860**	**3,466**	**3,354**	**8,680**

Interest-bearing loans are non-discounted expected cash flows including future interest payments and amortisations. For derivative contracts that are settled in cash or another financial instrument, the amounts represent the fair value of the derivative liability before any offsetting of assets and liabilities in the balance sheet. Commodity purchase contracts with physical settlement included within the scope of IFRS 9 ("failed own use transactions") are presented at the contractually agreed settlement amount.

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4.3 Interest rate risk and currency risk

4.3.1 Interest rate risk

Fortum is exposed to cash flow risk from changes in interest rates mainly from interest-bearing liabilities and derivatives on a fixed- and floating rate basis. Additionally changes in general interest rate level may have impact on discount rates of various provisions like pension provisions and asset retirement obligations causing changes in amount of adjusted net debt and finance costs without cash flow impact.

Fortum manages the interest rate exposure through a duration target of the loan portfolio (excluding leasing liabilities and provisions), and cash flow at risk limit. Fortum uses different types of financing contracts and interest rate derivative contracts to manage the interest rate exposure and evaluates and develops the strategies in order to find an optimal balance between risk and financing cost.

On 31 December 2020, the duration of the Fortum's loan portfolio (including derivatives) was 2.0 years (2019: 2.6). Approximately 76% (2019: 65%) of the loan portfolio was on a floating rate basis or fixed rate loans maturing within the next 12-month period. The flow risk, measured as the difference between the base case interest cost estimate and the worst-case scenario estimate for Fortum's loan portfolio for the coming 12 months, was EUR 16 million (2019: 10).

The average interest rate for the total loan portfolio including derivatives in finance costs was 1.5% at the balance sheet date (2019: 2.3%). Part of the external loans EUR 634 million (2019: 787) have been swapped to RUB and the average interest cost for these loans, including cost for hedging the RUB, was 6.2% at the balance sheet date (2019: 7.8%). The average interest rate of EUR loans was 0.9 % (2019: 0.9%).

4.3.2 Currency risk

Fortum's policy is to hedge major transaction exposures on a local level in the reporting currency of each legal entity in order to avoid exchange differences in the profit and loss statement. An exception is Generation segment's hedging of power sales in Sweden where the currency component is currently not hedged. Fortum Treasury and Uniper Treasury manage each own risks centrally by executing internal and external currency deals to mitigate the currency risk. Derivatives are used to hedge existing foreign exchange risks, not for proprietary trading.

Fortum transaction exposure, excluding Uniper

	2020			2019		
EUR million	**Net Position**	**Hedge**	**Open**	**Net Position**	**Hedge**	**Open**
RUB	455	-455	0	570	-570	-
SEK	1,825	-1,825	1	1,439	-1,440	-1
PLN	417	-416	2	439	-439	1
NOK	84	-82	2	245	-244	-
INR	86	-86	0	132	-132	-
USD	-87	89	1	-147	147	-
Other	-4	4	0	-4	5	1
Total	**2,777**	**-2,771**	**6**	**2,674**	**-2,673**	**1**

Fortum has cash flows, assets and liabilities in currencies other than EUR and is therefore exposed to fluctuations in exchange rates. Currency exposures are divided into transaction exposures (foreign exchange exposures relating to contracted or estimated cash flows and balance sheet items where changes in exchange rates will have an impact on earnings and cash flows) and translation exposure (foreign exchange exposure that arises when profits and balance sheets in foreign entities are consolidated).

Transaction exposures arise mainly from physical and financial trading of commodities, existing and new investments, external and internal financing and shareholder loans. Contracted cash flow exposures shall be hedged to reduce volatility in future cash flows. These hedges normally consist of currency derivative contracts, which are matched against the underlying future cash flow according to maturity. Fortum has currency cash flow hedges both with and without hedge accounting treatment under IFRS. Those currency cash flow hedges for which hedge accounting is not applied are mainly hedging commodity derivatives and create volatility in the operating profit. There was no significant ineffectiveness arising from cash flow hedges in 2020.

As of 31 December 2020 Fortum, excluding Uniper, the one day value at risk (VAR) with 99% confidence from loans, receivables and derivatives was EUR 1.4 million (2019: 2.2) in income statement and EUR 2.4 million (2019: 1.5) in equity. Income statement sensitivity resulted mainly from flows in SEK and NOK and equity sensitivity mainly from flows in RUB, SEK and PLN. For Uniper one day VAR with 99% confidence from translation of deposits and borrowings in foreign currency and derivatives was EUR 18.4 million and resulted primarily from the positions in GBP, USD and SEK.

Translation exposure position includes net investments in foreign subsidiaries and associated companies. Translation exposures in Fortum are generally not hedged as the majority of these assets are considered to be long-term strategic holdings. In Fortum, this means mainly entities operating in Sweden, Russia and UK, whose base currency is not euro.

Exchange differences arising from the translation of the net investment in foreign entities are taken to equity. The net effect of exchange differences on equity attributable to equity holders mainly from RUB and SEK was EUR -492 million in 2020 (2019: 253). Part of this translation exposure has been hedged and the notional amount of foreign currency hedges were -238 million in 2020 (2019: -365). The foreign currency hedge result amounted to EUR 53 million in 2020 (2019: -14). There was no significant ineffectiveness arising from net investment hedges in 2020.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Interest rate and currency derivatives by instrument 2020

	Notional amount Remaining lifetimes				Fair value		
EUR million	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Hedge accounting							
Foreign exchange derivatives	304	88	-	392	4	5	-1
Interest rate swaps	825	1,875	1,675	4,375	154	61	93
Cross currency swaps	14	261	-	275	38	3	35
Non-hedge accounting							
Foreign exchange derivatives	7,991	1,743	-	9,734	135	228	-93
Interest rate swaps	-	20	-	20	-	0	0
Cross currency swaps	-	24	-	24	-	1	-1
Total	**9,134**	**4,010**	**1,675**	**14,819**	**331**	**299**	**32**
Of which long-term					216	118	98
Short-term					115	181	-66

Interest rate and currency derivatives by instrument 2019

	Notional amount Remaining lifetimes				Fair value		
EUR million	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Hedge accounting							
Foreign exchange derivatives	280	97	-	376	3	5	-2
Interest rate swaps	-	2,696	1,525	4,221	153	53	100
Cross currency swaps	104	263	-	367	8	17	-9
Non-hedge accounting							
Foreign exchange derivatives	3,645	263	-	3,908	9	52	-43
Interest rate swaps	-	19	-	19	-	-	-
Cross currency swaps	-	-	-	-	-	-	-
Total	**4,029**	**3,337**	**1,525**	**8,891**	**172**	**127**	**45**
Of which long-term					156	74	82
Short-term					16	53	-37

4.4 Credit risk

Fortum is exposed to counterparty risk whenever there is a contractual arrangement with an external counterparty.

Credit risk exposures relating to financial derivative instruments are often volatile and include both the replacement risk and the settlement risk. Exchange-traded derivatives are cleared through central clearing parties (CCPs) or through clearing banks while over-the-counter (OTC) derivative contracts are concluded directly with a number of different counterparties including energy wholesalers and retailers, utilities, trading companies, energy companies, industrial end-users and financial institutions active in the financial and energy markets. Currency and interest rate derivative counterparties are limited to investment grade banks and financial institutions. ISDA Master agreements, which include netting clauses and in some cases Credit Support Annex agreements, are in place with most of these counterparties. The majority of commodity derivative counterparties have investment-grade or comparable ratings. Master agreements, such as ISDA, FEMA and EFET, which include netting clauses, are in place with the majority of the counterparties.

Due to the financing needs and management of liquidity, Fortum has counterparty credit exposure towards a number of banks and financial institutions in the form of deposits and towards corporate issuers of commercial papers, mainly in the Nordic market. The majority of the exposure is towards Fortum's key relationship banks, which are highly creditworthy institutions. Investments in commercial papers were all with investment grade issuers at 31 December 2020. Fortum also has exposure to the Russian financial sector in terms of deposits with financial institutions as well as to banks that provide guarantees for suppliers and contracting parties. Deposits in Russia have been concentrated to the most creditworthy state-owned or controlled banks as well as affiliates of key relationship banks. The creditworthiness of banks and financial institutions is monitored so that mitigating actions can be taken as ratings or the financial situation changes.

Credit risk relating to customers, suppliers and trading partners is spread across a wide range of industrial counterparties, energy companies, government and municipal entities, utilities, small businesses, housing associations and private individuals over a range of geographic regions. The majority of exposure is in the form of trade receivables from the sale of electricity, gas and heat in the Nordic market, continental Europe and Russia. The credit risk in the electricity and heat sales business in Russia is deemed to be higher than in the Nordic and continental European market.

4.4.1 Credit quality of major financial assets

Fortum recognises the loss allowance for expected credit losses on financial assets classified to amortised cost category at each reporting date. The impairment model is applied to financial assets such as trade receivables, deposits, commercial papers and loan and other interest-bearing receivables. Please see Note 22 Trade and other receivables for details on expected credit losses recognised for trade receivables.

Expected credit loss is calculated on an individual contract basis for deposits, commercial papers and loan and other interest-bearing receivables. No impairment loss is recognised on cash in bank accounts since expected credit loss is immaterial due to low risk of default. The expected credit losses according to this model are based on assessment of the individual counterparty's risk of default. The risk of default is evaluated at each reporting date based on credit ratings to determine if credit risk has increased significantly. Whenever possible, the risk of default is derived from available market data (liquid credit default swaps or liquid debt instruments) which ensures that forward-looking information is considered. If there are no publicly available market data, an internal credit rating is applied. The value of collateral and other measures taken to reduce credit risk (e.g., credit default insurance) is included in the calculation of expected credit losses in the "loss given default" ratio.

A financial asset with an investment-grade rating is assumed to have low credit risk. A change of credit rating from investment to non-investment grade constitutes a significant increase in credit risk. If the credit risk on the financial asset has not increased significantly since the initial recognition, loss allowance equals to 12 month ECL. If the credit risk on the financial asset has increased significantly since initial recognition, loss allowance equals to the lifetime expected credit losses. There have been no significant increases in credit risk during 2020.

The loss allowance for interest-bearing receivables totalled EUR 7 million on 31 December 2020 (2019: 1). Amounts for interest-bearing receivables including bank deposits and derivative financial instruments recognised as assets are presented by counterparties in the following table.

All counterparties for currency and interest rate derivatives and the majority of counterparties for bank deposits have an external rating from Standard & Poor's, Fitch and/or Moody's credit agencies. For counterparties rated by more than one rating agency, the lowest of the ratings is used to determine if it is investment grade.

In the commodity derivatives and commercial paper market, there are a number of counterparties not rated by Standard & Poor's, Fitch or Moody's. For these counterparties, Fortum assigns an internal rating. The internal rating categories that are considered to be comparable to investment grade have similar financial metrics or display historical default rates which correspond to investment grade companies rated by Standard & Poor's, Fitch or Moody's.

Credit quality of major financial assets

	2020		2019	
EUR million	Carrying amount	of which past due	Carrying amount	of which past due
Receivables with investment grade or comparable rating				
Deposits, commercial papers and cash in bank accounts	2,107	-	1,255	-
Fair values of interest rate and currency derivatives	331	-	172	-
Fair values of derivatives on exchanges	3,795	-	58	-
Fair values of commodity derivatives	5,638	-	40	-
Loan and other interest-bearing receivables	995	-	-	-
Lease receivables	196	-	-	-
Total receivables with investment grade or comparable rating	**13,062**	**-**	**1,525**	**-**
Receivables with non-investment grade or comparable rating				
Deposits, commercial papers and cash in bank accounts	94	-	60	-
Fair values of commodity derivatives	711	-	39	-
Loan and other interest-bearing receivables	58	-	6	-
Receivable from SIBUR related to divested shares of OOO Tobolsk CHP	23	-	57	-
Total receivables with non-investment grade or comparable rating	**886**	**-**	**162**	**-**
Other receivables [1]				
Loan receivables from associates and joint ventures	1,150	-	625	-
Restricted cash mainly given as collateral for commodity exchanges	48	-	65	-
Cash in other bank accounts	107	-	118	-
Total other receivables	**1,305**	**-**	**808**	**-**
Total	**15,253**	**-**	**2,495**	**-**

1) Other receivables include financial assets which have not been divided to investment-grade and non-investment grade or comparable ratings.

Financial instruments subject to master netting agreements:

The following tables present the recognised financial instruments that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset. The column 'net amount' shows the impact on the Group's balance sheet if all netting rights were exercised.

Netting agreements for financial assets and liabilities 2020

EUR million	Gross amount	Gross amount netted in the balance sheet [1]	**Net amounts presented in the balance sheet**	Conditional netting amount (netting agreements)	Financial collateral received /pledged	**Net amount**
Financial assets						
Interest-rate and currency derivatives	331	0	**331**	87	109	**135**
Commodity derivatives	10,939	793	**10,146**	5,290	-100	**4,956**
Trade receivables	7,115	0	**7,115**	3,692	0	**3,424**
Total	**18,386**	**793**	**17,593**	**9,069**	**9**	**8,515**
EUR million						
Financial liabilities						
Interest-rate and currency derivatives	299	0	**299**	87	3	**209**
Commodity derivatives	11,088	793	**10,295**	5,290	151	**4,854**
Trade payables	7,126	0	**7,126**	3,692	0	**3,434**
Total	**18,513**	**793**	**17,720**	**9,069**	**154**	**8,497**

1) In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

Netting agreements for financial assets and liabilities 2019

EUR million	Gross amount	Gross amount netted in the balance sheet [1]	**Net amounts presented in the balance sheet**	Conditional netting amount (netting agreements)	Financial collateral received /pledged	**Net amount**
Financial assets						
Interest-rate and currency derivatives	172	0	**172**	76	65	**31**
Commodity derivatives	817	679	**139**	61	0	**78**
Trade receivables	736	0	**736**	0	0	**736**
Total	**1,725**	**679**	**1,046**	**137**	**65**	**844**
EUR million						
Financial liabilities						
Interest-rate and currency derivatives	127	0	**127**	76	4	**47**
Commodity derivatives	941	679	**262**	61	0	**201**
Trade payables	316	0	**316**	0	0	**316**
Total	**1,383**	**679**	**705**	**137**	**4**	**564**

1) In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

5 Capital risk management

In December 2020, Fortum updated the strategy for the whole Fortum Group to drive the clean energy transition and deliver sustainable financial performance. Aligned with the goals of the Paris Agreement, Fortum targets carbon neutrality by 2050 with ambitious mid-term targets.

The updated strategy builds on four priorities:

- 'Transform own operations to carbon neutral',
- 'Strengthen and grow in CO_2-free power generation',
- 'Leverage strong position in gas to enable the energy transition', as well as
- 'Partner with industrial and infrastructure customers'.

Fortum's coal-fired generation capacity will be reduced by more than 50% by the end of 2025, to approximately 5 GW. Measures for the reduction include coal-fired plant closures in Germany announced by Uniper in 2020: 0.9 GW at the end of 2020, 1.5 GW by end of 2022, and a further 0.5 GW by the end of 2025. The reduction also includes the closure of Uniper's 2 GW in the UK by the end of 2025 and Fortum's previously announced commitment to discontinue the use of coal in Espoo by 2025.

Fortum will also focus on growing a sizeable portfolio of onshore wind and solar based power generation primarily in Europe to make it a meaningful EBITDA contributor. The target is to build 1.5-2 GW of new capacity by 2025. This capacity will partly be built on our own balance sheet and partly using the 'build-operate-transfer' business model.

Further, Fortum aims to gradually transform its Russian asset portfolio towards renewables, while over time reducing our fossil exposure.

In parallel with the strategy alignment, Fortum and Uniper have together identified cooperation benefits expected to bring a positive cash impact on a consolidated Group basis of approximately EUR 100 million annually. More than EUR 50 million of these annual benefits are estimated to be achieved by the end of 2023, with full effect of approximately EUR 100 million annually in 2025 creating value for both companies and their shareholders.

Financial targets, dividend policy, and 2021 guidance for capital expenditure

Following the consolidation of Uniper, Fortum's business profile changed. In May 2020, Fortum's Board of Directors decided to remove the financial targets (return on capital employed of at least 10% and comparable net debt-to-EBITDA of around 2.5x) as of the first quarter of 2020.

In December 2020, in connection with its strategy update, the Group also updated its financial targets. Fortum continues to be committed to maintaining a rating of at least BBB. The long-term financial targets are:

- Financial net debt/comparable EBITDA below 2x, defined as Alternative Performance Measure.
- Hurdle rates for new investments based on weighted average cost of capital ("WACC")
  - +100 basis points for green investments
  - +200 basis points for other investments

Fortum's revised dividend policy is 'to pay a stable, sustainable, and over time increasing dividend'. Fortum's Board of Directors proposes a dividend of EUR 1.12 per share for the year 2020 with the target to increase the dividend going forward.

The estimated annual capital expenditure for the whole Fortum Group, including Uniper, for 2021 is approximately EUR 1,400 million, including maintenance and excluding acquisitions. The share of maintenance is estimated to be EUR 700 million.

Standard & Poor's long-term credit rating for Fortum is BBB with Negative Outlook. Fitch Ratings long-term credit rating for Fortum is BBB with Negative Outlook.

Standard & Poor's long-term credit rating for Uniper is BBB with Negative Outlook.

Financial net debt/comparable EBITDA ratio

EUR million	Note	2020
+Interest-bearing liabilities		**10,662**
- Liquid funds		**2,308**
- Non-current securities		98
- Collateral arrangement securities		432
- Securities in interest-bearing receivables		**530**
- Margin receivables		1,132
+ Margin liabilities		331
+ Net margin liabilities		**-801**
Financial net debt	26	**7,023**
Operating profit		1,599
+ Depreciation and amortisation		-1,090
EBITDA		**2,689**
- Items affecting comparability		-255
Comparable EBITDA		**2,434**
Financial net debt/comparable EBITDA		**2.9**

See ▸ Definitions of key figures.

Comparable EBITDA is defined as an alternative performance measure and used as a component in the capital structure target 'Financial net debt-to-Comparable EBITDA'. In 2020 Comparable EBITDA includes contribution from Uniper for the period of 1 April to 31 December 2020 since Uniper was consolidated as a subsidiary from 31 March 2020. Until 31 of March 2020 Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.

6 Segment reporting

SIGNIFICANT ACCOUNTING POLICIES

REVENUE RECOGNITION

Fortum's operations comprise the provision of gas, electricity, heating and cooling as well global energy trading and optimisation and waste management services. Revenue streams can be divided into five groups: gas sales, power sales to wholesale markets, power sales to retail customers, heating sales and waste treatment sales. Revenue is recognised when goods are transferred or services are performed, i.e. when a performance obligation is satisfied and control of the good or service underlying the particular performance obligations is transferred to the customer. Revenue is shown at the price that Fortum expects to be entitled to and it is presented net of rebates, discounts, value-added tax and selective taxes, such as electricity tax. Revenues also include the surcharge mandated by the German Renewable Energy Sources Act in the Uniper segment. Revenues include effects from physically settled contracts for which own use exemption cannot be used according to IFRS 9, see Note 7 Items affecting comparability. Accounting policies for the different revenue streams are described below.

POWER SALES TO WHOLESALE MARKETS AND THROUGH BILATERAL CONTRACTS

Physical electricity trades to wholesale markets are made at a spot price and thus there are no variable elements. Electricity sales are recognised on delivery at the price defined in wholesale market. Fortum is also selling power to industrial customers and municipalities through bilateral contracts. These contracts can include fixed price components that are recognised in line with the customer's actual consumption profile, when the nature of the performance obligation is to deliver power instead of standing-ready to deliver power. When Fortum is acting as an agent in electricity trade by granting access to Nord Pool power trading system, Fortum presents the bilateral trades between Fortum and the customer on a net basis and only the service fee is recorded as revenue.

POWER SALES TO RETAIL CUSTOMERS

Fortum's contracts with consumer and business customers cover electricity sales, while the distribution service is delivered by the transmission company operating the local network. There is only one performance obligation, which is to stand-ready to supply electricity to the customer. The transaction price generally includes both a fixed monthly charge and a variable fee based on the volume of electricity supplied. As Fortum's promise is to stand ready to deliver electricity, the fixed and variable components are recognised based on the fees chargeable from the customer. If automated meter reading is not available, electricity consumption between the last meter reading and the end of the month is estimated.

HEAT SALES

In many areas the district heating service covers both the distribution and sale of heat. Fortum is usually responsible for delivering the whole service, even when heat is being produced by a third party, and is acting as a principal for heat sales as well. There is only one performance obligation, which is to stand-ready to supply heat to the customer. The fees charged from the customer generally comprise a fixed monthly charge and a variable fee based on the volume of heat supplied. As Fortum's promise is to stand ready to deliver heat, the fixed and variable components are recognised based on the fees chargeable from the customer. In Russia, Baltics and Poland there are also areas where Fortum operates only the heat production facilities while some third party is responsible for the distribution of heat. In these areas the performance obligation is to supply heat and revenue is recognised based on the volume of heat that Fortum is entitled to charge from the customer.

GAS SALES

Revenues are generated from sales of gas via traded markets, as well as to industrial customers and resellers, and include hedges settled through physical delivery, which are recognised when delivery takes place and control is transferred to the customer. Gas sales include also revenues earned from the transportation of gas. Contracts generally contain one performance obligation for which the entire transaction price is recognised.

For physically settled transactions that are in the scope of IFRS 15 (own-use transactions), revenue is recognised based on contract prices, as these reflect the economic character of the transactions and the contractually agreed consideration amounts. If IFRS 15 provides for a different method, for example when constraint on variable considerations is applicable, contract prices are adjusted accordingly.

Gas contracts can also include fixed price components that are recognised in line with the customer's actual consumption profile, when the nature of the performance obligation is to deliver gas instead of standing-ready to deliver gas.

WASTE TREATMENT SALES

Majority of revenue from waste management services arises from fees charged for receiving waste from customers (i.e. gate fees). The fee is usually determined based on the volume of waste received, there are no variable elements in pricing. Fortum is required to treat the waste and this performance obligation is satisfied when treatment has been performed. Transportation of the waste forms another performance obligation. Fees for waste treatment and transportation services are separately agreed in the contract and correspond to the price that would be charged for these services separately. Revenue for transportation service is recognised when the service has been provided.

Waste treatment sales include also various types of soil and landfill site projects, which mostly take place at customer sites. Fees charged are invoiced based on payment schedules agreed with the customer. The customer obtains the benefit of the construction work simultaneously when the construction work proceeds, and therefore project revenues are recognised over time. Progress of the construction is best measured either through costs incurred, or the completed area of the construction site.

NETTING AND INTER-SEGMENT TRANSACTIONS

Generation and City Solution segments sell their electricity production to Nord Pool and Consumer Solutions segment buys its electricity from Nord Pool. For these segments eliminations of sales include eliminations of sales and purchases with Nord Pool that are netted at Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour. Intersegment sales, expenses and results for the different business segments are affected by intragroup deliveries, which are eliminated on consolidation. Inter-segment transactions are based on commercial terms.

Fortum anticipates revenues of EUR 922 million (2019: 15) from unsatisfied performance obligations, mostly relating to gas and bilateral electricity contracts. Of this total, EUR 234 million is attributable to 2021 (2019: EUR 14 million to 2020) and EUR 688 million to years after 2021 (2019: EUR 1 million to years after 2020).

6.1 Business structure

Fortum's reportable segments are Generation, Russia, City Solutions, Consumer Solutions and Uniper. Other Operations includes corporate functions, R&D and technology development projects.

Fortum revised its reportable segments following the consolidation of Uniper as a subsidiary on 31 March 2020, and reports Uniper as a separate segment.

As Fortum has previously accounted for Uniper as an associated company with three-month time lag (see Note 18 Participations in associated companies and joint ventures), Fortum's first quarter results included Fortum's share of Uniper results from 1 October 2019 to 31 March 2020 reported in Other Operations.

Reporting of both the Uniper segment, and the Generation segment are impacted by adjustments for the joint ownership in the Swedish nuclear company, OKG AB. See also Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

6.2 Segment structure

Fortum discloses segment information in a manner consistent with internal reporting to Fortum's Board of Directors and Fortum Executive Management, led by the President and CEO. Fortum segments are based on the type of business operation, combined with one segment based on geographical area and one segment based on a separately listed sub group. Fortum's reportable segments are the business divisions Generation, Russia, City Solutions, Consumer Solutions and Uniper.

6.3 Definitions for segment information

Fortum's segment information discloses the financial measurements used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the Group's performance management process. See Note 1.4 Measures for performance.

Segment reporting is based on the same accounting policies as Fortum Group.

Description of reportable segments:

Group

Reportable segments

Generation

Generation is responsible for Nordic power generation. The segment comprises nuclear, hydro, wind, and thermal power generation, as well as power portfolio optimisation, trading, industrial intelligence, and global nuclear services. The segment does not include the Nordic hydro and nuclear power generation or the trading activities of Uniper. As of 31 March 2020, the segment includes Generation's proportionate share of OKG.

Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment also includes Fortum's joint ventures for building and operating approximately 2 GW of renewable power generation and for power and heat sales, as well as Fortum's more than 29% holding in TGC 1. These joint ventures and associated company are accounted for using the equity method. The segment does not include Uniper's Russian subsidiary Unipro.

City Solutions

City Solutions is responsible for sustainable solutions for urban areas. The segment comprises heating, cooling, waste-to-energy, and other circular economy solutions, as well as solar power generation, services, and development of new biomass-based businesses. The business operations are located in the Nordics, the Baltic countries, Poland and India. The segment also includes Fortum's 50% holding in Stockholm Exergi, which is a joint venture and is accounted for using the equity method. The segment does not include the operations of Fortum's subsidiary Uniper.

Consumer Solutions

Consumer Solutions is responsible for the electricity and gas retail businesses in the Nordics, Poland and Spain, including the customer service and invoicing businesses. Fortum is the largest electricity retail business in the Nordics, with approximately 2.4 million customers across different brands in Finland, Sweden, Norway, Poland and Spain. The business provides electricity as well as related value-added and digital services.

Uniper

The Uniper segment comprises Fortum's majority ownership in Uniper, a subsidiary of Fortum. Uniper is a leading international energy company with activities in more than 40 countries. Its business is the secure provision of energy and related services. Its main activities include power generation in Europe and Russia as well as global energy trading and optimisation, which Uniper reports in three businesses – European Generation, Global Commodities and Russian Power Generation – in its financial statements. The segment includes Uniper's proportionate share of OKG.

6.4 Segment information

Consolidated income statement

		Generation 1)		Russia		City Solutions 1)		Consumer Solutions		Uniper 2)		Other Operations 2)		Total	
EUR million	**Note**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Power sales 3)		1,878	2,006	791	924	121	153	1,057	1,630	16,994	-	0	-	20,841	4,714
Heat sales		-	-	134	145	516	615	-	-	191	-	-	-	841	760
Gas sales		84	91	-	-	1	3	139	132	22,176	-	-	-	22,400	226
Waste treatment sales		-	-	-	-	252	250	-	-	-	-	-	-	252	250
Other sales		44	44	4	2	185	178	70	74	5,154	-	140	115	5,598	413
Sales		**2,006**	**2,141**	**929**	**1,071**	**1,075**	**1,200**	**1,267**	**1,835**	**44,514**	**-**	**140**	**115**	**49,931**	**6,363**
Internal eliminations		-421	-259	-2	-	-64	-45	-2	3	-0	-	-110	-86	-598	-387
Netting of Nord Pool transactions 4)														-317	-529
IS **External sales**		**1,585**	**1,883**	**927**	**1,071**	**1,012**	**1,155**	**1,264**	**1,839**	**44,514**	**-**	**30**	**29**	**49,015**	**5,447**
Comparable EBITDA		886	939	394	469	239	308	153	141	856	-	-94	-91	2,434	1,766
IS **Depreciation and amortisation**		**-164**	**-145**	**-143**	**-153**	**-191**	**-188**	**-63**	**-62**	**-494**	**-**	**-35**	**-28**	**-1,090**	**-575**
IS **Comparable operating profit**		**722**	**794**	**251**	**316**	**47**	**120**	**90**	**79**	**363**	**-**	**-129**	**-118**	**1,344**	**1,191**
Impairment charges and reversals	7	2	-3	-	-	-	-	-	-	-0	-	-	-6	2	-8
Capital gains and other related items	7	0	3	1	1	723	5	0	-	-13	-	53	-2	765	7
Impact from acquisition accounting	7	-	-	0	-	-	-	-	-	-	-	-222	-	-222	-
Changes in fair values of derivatives hedging future cash flow	7	-12	-15	0	-	5	2	39	-59	-706	-	-	-	-675	-72
Other		0	-	-	-	-	-	-	-	386	-	-	-	386	-
IS Items affecting comparability 5)	7	-11	-14	1	1	728	7	39	-59	-333	-	-169	-8	255	-72
IS **Operating profit**		**711**	**780**	**252**	**317**	**775**	**127**	**129**	**20**	**29**	**-**	**-298**	**-126**	**1,599**	**1,118**
IS Share of profit/loss of associates and joint ventures	18, 28	29	10	47	59	57	37	-	-	54	-	470	638	656	744
IS Finance costs - net														-56	-134
IS Income taxes														-344	-221
IS **Profit for the year**														**1,855**	**1,507**

1) Sales, both internal and external, include effects from realised hedging contracts. Effect on sales can be negative or positive depending on the average contract price and the realised spot price.
2) Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter, Fortum consolidated Uniper as a subsidiary into its income statement. Fortum's first-quarter share of Uniper's results is reported in the share of profits of associates and joint venture of 'Other operations'; see Note 1.
3) Power sales in Fortum, excluding Uniper, contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.
4) Sales and purchases with Nord Pool Spot are netted on Group level on an hourly basis and posted either as revenue or cost depending on whether Fortum is a net seller or net buyer during any particular hour.
5) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

Segment assets and liabilities

		Generation		Russia		City Solutions		Consumer Solutions		Uniper		Other Operations		Total	
EUR million	**Note**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Non-interest-bearing assets		**5,780**	**5,461**	**2,020**	**2,637**	**3,512**	**3,780**	**780**	**939**	**20,646**	**-**	**270**	**237**	**33,009**	**13,054**
BS Participations in associates and joint ventures	18, 28	961	838	577	681	612	584	-	-	729	-	33	4,331	2,912	6,435
Eliminations														-57	-107
Total segment assets		**6,742**	**6,299**	**2,597**	**3,319**	**4,123**	**4,364**	**780**	**939**	**21,375**	**-**	**303**	**4,568**	**35,863**	**19,381**
Interest-bearing receivables	20													3,000	1,035
BS Deferred tax assets	27													1,089	77
Other assets														15,550	1,437
BS Liquid funds	23													2,308	1,435
Total assets														**57,810**	**23,364**
Segment liabilities		**508**	**279**	**166**	**107**	**445**	**419**	**215**	**302**	**13,943**	**-**	**167**	**168**	**15,443**	**1,274**
Eliminations														-57	-107
Total segment liabilities														**15,386**	**1,168**
BS Deferred tax liabilities	27													952	885
Other liabilities														15,233	1,382
Total liabilities included in capital employed														**31,570**	**3,435**
Interest-bearing liabilities	26													10,662	6,694
BS Total equity														15,577	13,235
Total equity and liabilities														**57,810**	**23,364**

Segment assets and liabilities at 31 December 2019 included assets held for sale. See **Note 3** Acquisitions, disposals and assets held for sale.

Gross investments / divestments

		Generation		Russia		City Solutions		Consumer Solutions		Uniper		Other Operations		Total	
EUR million	**Note**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Gross investments in shares	18, 3	70	13	48	66	114	9	0	-	3	-	3,572	18	3,807	106
Capital expenditure	16, 17	158	247	43	67	219	314	57	55	624	-	34	30	1,135	713
Gross divestments of shares	3	171	12	0	-	895	2	10	-	69	-	81	16	1,226	30

Comparable operating profit including share of profit of associates and joint ventures and Comparable return on net assets

EUR million	Note	Generation 2020	Generation 2019	Russia 2020	Russia 2019	City Solutions 2020	City Solutions 2019	Consumer Solutions 2020	Consumer Solutions 2019	Uniper [3] 2020	Uniper [3] 2019
Comparable operating profit		**722**	**794**	**251**	**316**	**47**	**120**	**90**	**79**	**363**	**-**
Share of profit/loss of associates and joint ventures	18	29	10	47	59	57	37	-	-	54	-
Adjustment to share of profit/loss of associates and joint ventures [1]		-45	-13	-	-	-	22	-	-	-	-
Comparable operating profit including share of profit of associates and joint ventures		**706**	**791**	**298**	**375**	**104**	**179**	**90**	**79**	**417**	**-**
Segment assets at the end of the year		6,742	6,299	2,597	3,319	4,123	4,364	780	939	21,375	-
Segment liabilities at the end of the year		508	279	166	107	445	419	215	302	13,943	-
Comparable net assets		**6,234**	**6,019**	**2,431**	**3,212**	**3,679**	**3,945**	**565**	**637**	**7,432**	**-**
Comparable net assets average [2]		**6,006**	**5,959**	**2,693**	**3,048**	**3,679**	**3,865**	**569**	**595**	**N/A**	**-**
Comparable return on net assets, %		**11.8**	**13.3**	**11.1**	**12.3**	**2.8**	**4.6**	**15.9**	**13.3**	**N/A**	**-**

1) See Definitions of key figures.
2) Average net assets are calculated using the opening balance of the financial year and each quarter's closing value.
3) The Uniper segment was acquired on 31 March 2020. Comparable net assets average and Comparable return on net assets for the Uniper segment will be presented once information for full 12 months is available.

Segment assets and liabilities at 31 December 2019 included assets held for sale. See **Note 3** Acquisitions, disposals and assets held for sale.

Employees

	Generation 2020	Generation 2019	Russia 2020	Russia 2019	City Solutions 2020	City Solutions 2019	Consumer Solutions 2020	Consumer Solutions 2019	Uniper 2020	Uniper 2019	Other Operations 2020	Other Operations 2019	Total 2020	Total 2019
Number of employees 31 December	1,143	1,109	2,935	2,955	2,093	1,970	1,048	1,327	11,751	-	963	830	19,933	8,191
Average number of employees	1,163	1,122	2,969	2,942	2,051	1,979	1,216	1,379	11,629	-	959	825	19,988	8,248

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

6.5 Group-wide disclosures

The Group's operating segments operate mainly in the Nordic countries, Germany, United Kingdom, Russia, the Netherlands and the Baltic Rim area.

The Group's domicile is Finland.

The table below presents sales by geographical area based on customer location. Assets, capital expenditure and personnel are reported where assets and personnel are located. Participations in associates and joint ventures are not presented by location since these companies may have business in several geographical areas.

Due to the large number of customers and the variety of business activities, there is no individual customer whose business volume is material to Fortum's total business volume.

Sales by geographical area based on customer location

EUR million	2020	2019
Nordics	4,754	3,740
Germany	12,223	52
United Kingdom	9,618	26
Other central western Europe	17,790	51
Russia	1,610	1,071
Other	3,021	506
IS **Total**	**49,015**	**5,447**

Nordic power production is not presented by country since Nordic power production is mainly sold through Nord Pool.

Capital expenditure by country

EUR million	2020	2019
Finland	160	199
Germany	279	0
Russia	158	67
Sweden	186	114
United Kingdom	89	11
Norway	71	115
Other countries	191	207
Total	**1,135**	**713**

Non-current assets by country

EUR million	2020	2019
Finland	3,136	3,150
Germany	5,190	4,302
Russia	4,291	3,108
Sweden	8,003	4,508
United Kingdom	833	11
Other and eliminations	3,633	2,621
Total	**25,086**	**17,700**

Non-current assets include intangible assets, property, plant and equipment and right-of-use assets as well as participations in associates and joint ventures.

Number of employees on 31 December by country

	2020	2019
Finland	2,370	2,234
Germany	4,947	68
Russia	7,466	2,955
Sweden	1,752	985
United Kingdom	1,047	75
Other	2,351	1,874
Total	**19,933**	**8,191**

7 Items affecting comparability

EUR million	2020	2019
Impairment charges and reversals	2	-8
Capital gains and other related items	765	7
Impact from acquisition accounting	-222	-
Changes in fair values of derivatives hedging future cash flow	-675	-72
Other	386	-
IS Total [1]	**255**	**-72**

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

Fortum uses Alternative performance measures (APMs) in the financial target setting and forecasting, management's follow up of financial performance of segments and the Group as well as allocation of resources in the Group's performance management process. The business performance of the operations cannot be compared from one period to another without adjusting for items affecting comparability and therefore they are excluded from Comparable operating profit and Comparable EBITDA. See Note 1.4 Measures for performance for changes made to Items affecting comparability in 2020. Definitions are presented in the section **Definitions of key figures**.

Capital gains and other related items

Capital gains and other related items include capital gains and transaction costs from acquisitions, which are adjusted from other income and other expenses, respectively.

Capital gains and other related items in 2020 included EUR 72 million gain from the divestment of Fortum Recharge AS; EUR 431 million gain from the divestment of the district heating business in Joensuu, Finland; and EUR 291 million gain from divestment of the district heating business in Järvenpää, Finland; as well as Uniper acquisition-related costs of EUR 20 million. See Note 3 Acquisitions, disposals and assets held for sale.

Impact from acquisition accounting

Consolidation of an associated company results includes recording a share of the associated company's other comprehensive income (OCI). If an associated company is either divested or becomes a subsidiary, IFRS requires that these previously recorded OCI items are reclassified inside equity either via the consolidated income statement or directly to retained earnings, depending on the nature of the OCI item. Reclassification does not have an impact on total equity.

The above reclassification resulted in a one-time, non-cash income statement impact of EUR -222 million on 31 March 2020 when Uniper became Fortum's subsidiary. This amount represented a part of Fortum's share of Uniper's OCI for the time when Uniper was an associated company, with no impact to Fortum's total equity. The amount mainly related to exchange rate differences arising from translation of foreign operations recorded by Uniper. Fortum's share of Uniper's non-recyclable other comprehensive income, EUR -84 million, was reclassified to retained earnings. See Consolidated statement of changes in equity.

Changes in fair values of derivatives hedging future cash flow

Unrealised changes in the fair values of financial derivative instruments hedging future cash flows that do not qualify for hedge accounting and physical contracts that are treated as derivatives are recognised in items affecting comparability. For additional information, see Note 14 Financial assets and liabilities by categories.

Impacts from settlement of physical contracts that have been treated as derivatives are adjusted to sales and materials and services to reflect the contract pricing as opposed to market pricing ("contract pricing adjustment").

Adjustments are needed to improve the understanding of the financial performance when comparing results from one period to another.

Other

Other includes restructuring expenses, adjustments to certain provisions, and reversals of temporary reductions in current assets.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Reconciliation of operating profit to comparable operating profit, 2020

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Impact from acquisition accounting	Changes in fair values of derivatives hedging future cash flow	Other	Reported
Sales	42,517				6,499		49,015
Other income	10,517	0	-784		-4,679	-252	4,802
Materials and services	-38,286				-5,805	-208	-44,298
Employee benefits	-1,206					11	-1,195
Depreciation and amortisation	-1,092	-1				3	-1,090
Other expenses	-10,851		20	222	4,659	60	-5,890
IS **Comparable operating profit**	**-**	**-2**	**-765**	**222**	**675**	**-386**	**1,344**
IS Items affecting comparability	-	2	765	-222	-675	386	255
IS **Operating profit**	**1,599**						**1,599**

Reconciliation of operating profit to comparable operating profit, 2019

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Impact from acquisition accounting	Changes in fair values of derivatives hedging future cash flow	Other	Reported
Sales	5,418				29		5,447
Other income	122		-12		0		110
Materials and services	-2,764				43		-2,721
Employee benefits	-480						-480
Depreciation and amortisation	-583	8					-575
Other expenses	-596		6				-591
IS **Comparable operating profit**	**-**	**8**	**-7**	**-**	**72**	**-**	**1,191**
IS Items affecting comparability	-	-8	7		-72		-72
IS **Operating profit**	**1,118**						**1,118**

8 Other income and other expenses

ACCOUNTING POLICIES

In Uniper segment realised gains and losses on non-hedge accounted commodity derivatives are reported in gross within other operating income and expenses. These consist of gains and losses representing economic hedging result on derivative financial instruments for which hedge accounting according to IFRS 9 is not applied and to limited extent transactions conducted in connection with proprietary trading.

Income and loss from exchange rate differences reported within other operating income and expenses consist primarily of realised and unrealised gains and losses from the translation of foreign currency receivables and liabilities in Uniper segment.

8.1 Other income

EUR million	2020	2019
Realised gains on non-hedge accounted derivatives	3,989	-
Gains on exchange rate differences	636	-
Other	177	110
IS **Total**	**4,802**	**110**

8.2 Other expenses

EUR million	2020	2019
Realised losses on non-hedge accounted derivatives	4,339	-
Losses on exchange rate differences	521	-
IT and telecommunication costs	248	94
Other	781	497
IS **Total**	**5,890**	**591**

The major components recorded in other are the external operation and maintenance costs of power and heat plants, expenses relating to properties and other operative expenses.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Auditors' fees

EUR million	2020	2019
Deloitte		
Audit fees	2.6	2.3
Audit-related assignments	0.3	0.3
Tax assignments	0.2	-
Other assignments	0.2	0.8
Total	**3.3**	**3.4**
PwC		
Audit fees	11.3	-
Audit-related assignments	0.5	-
Tax assignments	0.1	-
Other assignments	1.2	-
Total [1]	**13.1**	**-**

1) PwC fees are presented for the period after consolidating Uniper as a subsidiary on 31 March 2020.

Deloitte Oy is the appointed auditor until the next Annual General Meeting in 2021. Audit fees include fees for the audit of the consolidated financial statements, review of interim reports, as well as fees for the audit of Fortum Corporation and its subsidiaries. Audit-related assignments include fees for assurance of sustainability reporting, and other assurance and associated services related to the audit. Tax assignments include fees for tax advice services. Other assignments consist of advisory services.

PricewaterhouseCoopers GmbH Wirtschaftsprüfingsgesellschaft ("PwC Germany") is the appointed auditor of the subsidiary Uniper SE.

9 Materials and services

EUR million	2020	2019
Materials	43,377	2,569
Transmission costs	532	42
External services	389	110
IS **Total**	**44,298**	**2,721**

Materials consists mainly of coal, gas and nuclear fuels.

Materials include EUR 624 million (2019: 259) purchased from associates and joint ventures consisting of nuclear and hydropower purchased at production cost (including interest costs and production taxes) and purchased steam. See ▸ Note 37 Related party transactions.

10 Employee benefits and Board remuneration

EUR million	2020	2019
Wages and salaries	913	351
Pensions		
Defined contribution plans	51	38
Defined benefit plans	64	5
Social security costs	133	51
Share-based incentives	9	12
Other employee costs	26	23
IS **Total**	**1,195**	**480**

The compensation package for Fortum employees consists of salaries, fringe benefits, short-term incentives, profit sharing paid to the Personnel Fund (in Finland) and share-based long-term incentives.

For further information on pensions see ▸ Note 30 Pension obligations.

10.1 Short-term incentives (STI)

Fortum's STI programme is designed to support the achievement of the Group's financial and other relevant targets on an annual basis. As a main principle, all employees are covered by the programme or alternatively by a business specific or a comparable local variable pay arrangement.

The Board of Directors determines the performance criteria and award levels for the Fortum Executive Management. The awards are based on the achievement of Group financial performance, divisional targets and individual targets. The target incentive opportunity is 20% and the maximum incentive opportunity is 40% of the annual base salary. The Board of Directors assesses the performance of the President and CEO and the members of the Fortum Executive Management on a regular basis.

Awards for other employees are based on a combination of Group, divisional, functional and personal or team targets. The targets are set in annual performance discussions held at the beginning of the year. Awards under the STI programme are paid solely in cash.

10.2 Share-based long-term incentives (LTI)

The purpose of Fortum's share-based long-term incentive programme is to support the delivery of sustainable long-term performance, align the interests of management with those of shareholders and support in committing and retaining key individuals.

Fortum's LTI programme provides participants with the opportunity to earn company shares. Under the LTI programme, and subject to the decision of the Board of Directors, a new LTI plan commences annually. The Board of Directors approves participation of the Fortum Executive Management members in each annually commencing LTI plan. Subject to a decision by the Board of Directors, the President and CEO is authorised to decide on individual participants and potential maximum awards for other participants than the Fortum Executive Management in accordance with the nomination guidelines approved by the Board of Directors. Participation in the LTI plan precludes the individual from being a member in the Fortum Personnel Fund.

Each LTI plan begins with a three-year earnings period, during which participants may earn share rights if the performance criteria set by the Board of Directors are fulfilled. If the minimum performance criteria are not met, no shares will be awarded. If performance is exceptionally good and the targets approved by the Board of Directors are achieved, the combined gross value of all variable compensation cannot exceed 120% of the person's annual salary in any calendar year. After the earnings period has ended and the relevant taxes and other employment-related expenses have been deducted, participants are paid the net balance in the form of shares.

For LTI plans commencing in 2015 to 2016, any shares awarded to Fortum Executive Management members are subject to a three-year lock-up period. Subject to a decision by the Board of Directors, the lock-up period can be reduced to one year for those Fortum Executive Management members whose aggregate ownership of Fortum shares is greater than or equal to their annual salary. If the value of the shares decreases or increases during the lock-up or retention period, the participant will carry the potential loss or gain. For LTI plans commencing in 2017 and later, the share awards will not be subject to a minimum lock-up period. However, Fortum Executive Management members aggregate ownership of Fortum shares has to be greater than or equal to their annual salary. Those members, whose aggregate ownership of Fortum shares does not yet fulfil the shareholding requirement are required to retain at least 50% of the shares received until the required level of shareholding is met.

Board of Directors decided in December 2019 to establish a Restricted Share programme as of the beginning of 2020 to supplement the current LTI programme. The Restricted Share programme will follow the main terms and conditions of the general LTI programme with the exception that the allocated shares will be delivered after the three-year plan period independent of performance measures, subject to continued employment. The Restricted Share programme is designated for special purposes defined by the Board of Directors, such as retention.

The Board of Directors has the right to revise the targets set in the incentive plans, deviate from the payment based on achievement of the set earnings criteria, or to discontinue any ongoing incentive plan.

The share plans under the LTI arrangement are accounted for as partly equity- and partly cash-settled arrangements. The earned reward that the participants receive in shares is accounted for as an equity-settled transaction. For participants receiving cash only, the total arrangement is accounted for as cash-settled transaction. The reward is recognised as an expense during the earnings period with a corresponding increase in the liabilities for transactions settled in cash, and a corresponding increase in equity for the transactions settled in shares. The social charges related to the arrangement payable by the employer are accrued as a liability. The LTI liability including social charges at the end of the year 2020 was EUR 12 million (2019: 14), including EUR 8 million (2019: 7) recorded in equity.

At year end 2020 approximately 160 key employees are participants in at least one of the on-going LTI plans.

Uniper has historically had cash-settled performance plans. At the year end 2020 Uniper did not have any such plans ongoing.

Shares granted

The following table presents the changes in number of share rewards during 2020 (for LTI plans 2017 onwards).

	2020	2019
1 January	1,717,656	1,116,663
Granted	630,475	608,051
Settled	-434,607	-
Expired or forfeited	-310,378	-7,058
31 December	**1,603,146**	**1,717,656**

At the year end 2020, for plans started before 2017, number of shares under lock-up was 64,465 shares.

10.3 Employee share savings programme (ESS)

Fortum's employee share savings (ESS) programme was launched in 2020. The objective of the ESS programme is to motivate Fortum employees to invest and retain ownership in the company and to align the employees' interests with its shareholders.

The ESS programme includes annually commencing savings periods during which the employees can save a proportion of their salaries and purchase Fortum shares with the accrued savings.

For the 2020 savings period that commenced on 1 January 2020, participants will, as a gross reward, be granted one matching share for each two purchased savings shares after approximately three years from the beginning of the savings period. The prerequisites for receiving matching shares are that the participant holds the purchased savings shares until the end of the holding period, and that his or her employment has not ended before the end of the holding period.

Each plan consists of one-year savings period followed by two-year holding period. Shares are purchased with the accumulated savings at the market price quarterly after the release of Fortum's interim reports. The programme is accounted for as an equity-settled transaction, and the cost related to matching shares is recognised as expense during the vesting period.

10.4 Uniper's Supervisory Board virtual shares

Supervisory Board members of Uniper SE receive a component of 20% of their compensation in the form of variable compensation. That compensation is granted as a right to a future payment in the form of virtual shares. The virtual shares are used purely for calculation purposes and do not confer on the beneficiary any entitlements of shareholder rights - particularly voting rights or dividend rights. To determine the number of virtual shares, the variable compensation from the previous year is divided in January by the volume-weighted average share price of Uniper SE from the last 60 trading days prior to 1 January of the reporting year. After four calendar years, the virtual shares are multiplied by the average share price of Uniper SE from the last 60 trading days prior to 1 January of the fourth calendar year and increased by the amount of dividends paid to shareholders on each share of Uniper SE over the previous four years. The variable compensation is paid within the first month after the end of the four-year period and is limited to 200% of the allocation amount. The plan is settled in cash.

10.5 Fortum Personnel Fund

The Fortum Personnel Fund (for employees in Finland only) has been in operation since 2000. The Board of Directors determines the criteria for the fund's annual profit-sharing bonus. Members of the personnel fund are the permanent and fixed-term employees of the Group.

The profit-sharing received by the fund is distributed equally between the members. Each employee's share is divided into a tied amount and an amount available for withdrawal. It is possible to transfer a maximum of 15% of capital from the tied amount to the amount available for withdrawal each year.

The fund's latest financial year ended at 30 April 2020 and the fund then had a total of 2,379 members (2019: 2,280). At the end of April 2020 Fortum contributed EUR 1.7 million (2019: 2.4) to the personnel fund as an annual profit-sharing bonus based on the financial results of 2019. The combined amount of members' shares in the fund was EUR 18 million (2019: 20).

The contribution to the personnel fund is expensed as it is earned.

10.6 The President and CEO and the Fortum Executive Management remuneration

The Fortum Executive Management (FEM) consists of nine members, including the President and CEO. The following table presents the total remuneration of the President and CEO and the FEM and takes into account the changes in FEM during the year. The expenses are shown on accrual basis.

Management remuneration

	2020			2019	
EUR thousand	**Markus Rauramo, President and CEO from 1 July 2020** [2]	**Pekka Lundmark, President and CEO until 1 July 2020**	**Other FEM members** [2]	**Pekka Lundmark, President and CEO**	**Other FEM members**
Salaries and fringe benefits	808	521	3,195	1,057	3,382
Performance bonuses [1]	82	-	472	200	661
Share-based incentives [1]	249	94	2,553	898	3,506
Pensions (statutory)	140	82	599	207	748
Pensions (voluntary)	158	132	593	265	647
Social security expenses	31	18	279	39	344
Total	**1,467**	**848**	**7,691**	**2,666**	**9,287**

1) Based on estimated amounts.
2) In addition to the information provided in the above table, the estimated compensation for the membership in the Supervisory Board of Uniper SE for the President and CEO Markus Rauramo was EUR 101 thousands, and for other FEM members, EUR 181 thousand. This compensation is for the period that Uniper has been consolidated as subsidiary.

The annual contribution for the President and CEO Markus Rauramo's pension arrangement is 20% of the annual fixed compensation. The annual fixed compensation consists of base salary and fringe benefits. The President and CEO's retirement age is determined in accordance with the Finnish Employees' Pension Act. In case his assignment is terminated before the retirement age, the President and CEO is entitled to retain the benefits accrued in the arrangement. The annual contribution for the President and CEO Pekka Lundmark's pension arrangement was 25% of the annual salary. The annual salary consisted of base salary and fringe benefits.

For the other members of the FEM, the retirement age varies between 62 and 65. According to Group policy, all new supplementary pension arrangements are defined contribution plans. For the members of the FEM that have defined contribution arrangements, the maximum pension premium percentage can be 25% of the annual salary. For members joining the FEM after the end of the year 2016, as well as for those current members to whom the premium has been below 20% of the annual salary, the pension premium is 20% of the annual base salary as of 1 January 2017. Finnish FEM members, who have joined Fortum prior to 1 January 2009, are participating in defined benefit pension arrangements, where the benefit is 60–66% of the final pensionable salary with the pension provided by an insurance company or Fortum's Pension Fund.

A pension liability of EUR 1,283 thousand (2019: 824) related to the defined benefit plans for FEM members has been recognised on the balance sheet. The additional pension arrangement for the President and CEO is a defined contribution pension plan and thus no liability has been recognised on the balance sheet.

In the event that Fortum decides to give notice of termination to the President and CEO, he is entitled to the salary for the notice period (6 months) and a severance pay equal to 6 months' salary. For other FEM members, the notice period for both parties is six months, and in case the company terminates the contract, members are entitled to the salary for the notice period and a severance pay equal to 6 months' salary, except for one member who is entitled to a payment of 18 months' salary in case of notice by the company.

Number of shares delivered to the management

The table below shows the number of shares delivered to the President and CEO and other FEM members under the LTI arrangements. FEM members whose aggregate ownership of Fortum shares does not yet fulfil the shareholding requirement are required to retain at least 50% of the shares received until the required level of shareholding is met.

	2020 [2]	**2019** [3]
FEM members at 31 December 2020		
Markus Rauramo, CEO from 1 July 2020	12,273	11,137
Arun Aggarwal	4,012	-
Alexander Chuvaev [1]	36,417	33,522
Per Langer	5,656	5,057
Risto Penttinen	6,612	6,232
Arto Räty	5,392	4,931
Mikael Rönnblad	6,787	3,435
Sirpa-Helena Sormunen	6,230	6,012
Tiina Tuomela	7,239	7,206
Former FEM members		
Pekka Lundmark (CEO until 1 July 2020)	28,527	25,765
Total	**119,145**	**103,297**

1) Estimated number of shares after local tax and tax related deductions. Due to local legislation, share rights will be paid in cash instead of shares.
2) Share delivery based on share plans 2017-2019.
3) Share delivery based on share plan 2016-2021.

10.7 Board of Directors and management shareholding

On 31 December 2020, the members of the Board of Directors owned a total of 9,540 shares (2019: 8,540), which corresponds to 0.00% (2019: 0.00%) of the company's shares and voting rights.

Number of shares held by members of the Board of Directors

	2020	2019
Board members at 31 December 2020		
Matti Lievonen, Chairman	4,500	1,500
Veli-Matti Reinikkala, Deputy Chairman	5,000	3,000
Eva Hamilton	40	40
Essimari Kairisto	-	-
Klaus-Dieter Maubach	-	-
Anja McAlister	-	-
Teppo Paavola	-	N/A
Philipp Rösler	-	-
Annette Stube	-	N/A
Former Board members		
Kim Ignatius	N/A	4,000
Total	**9,540**	**8,540**

The President and CEO and other members of the FEM owned a total of 281,308 shares (2019: 263,002), which corresponds to approximately 0.03% (2019: 0.03%) of the company's shares and voting rights.

Number of shares held by members of the Fortum Executive Management

	2020	2019
FEM members at 31 December 2020		
Markus Rauramo	72,949	45,272
Arun Aggarwal	4,461	-
Alexander Chuvaev	54,602	22,053
Per Langer	44,155	38,248
Risto Penttinen	30,559	18,587
Arto Räty	10,592	4,931
Mikael Rönnblad	10,356	3,435
Sirpa-Helena Sormunen	21,195	12,668
Tiina Tuomela	32,439	24,877
Former FEM members		
Pekka Lundmark	N/A	92,931
Total	**281,308**	**263,002**

10.8 Board remuneration

The Board of Directors comprises five to ten members who are elected at the Annual General Meeting for a one-year term of office, which expires at the end of the first Annual General Meeting following the election. The Board of Directors consists of nine members at the end of 2020.

The Annual General meeting confirms the yearly compensation for the Board of Directors. Board members are not offered any long-term incentive benefits or participation in other incentive schemes. There are no pension arrangements for the Board members. Social security costs EUR 6 thousand (2019: 11) have been recorded for the fees in accordance with local legislation in respective countries.

Fees for the Board of Directors

EUR thousand	2020	2019
Chairman	77.2	75.0
Deputy Chairman	57.5	57.0
Chairman of the Audit and Risk Committee [1)]	57.5	57.0
Members	40.4	40.0

1) If not Chairman or Deputy Chairman simultaneously.

Every member of the Board of Directors receives a fixed yearly fee and additional fees for each meeting attended.

A meeting fee of EUR 600 is paid for Board and Committee meetings. For Board members living outside Finland in Europe, the meeting fee is EUR 1,200; for Board members living outside Europe, the meeting fee is EUR 1,800. For Board and Committee meetings held as a telephone conference, the meeting fee is paid as EUR 600 to all members. No fee is paid for decisions made without a separate meeting.

Board members are entitled to travel expense compensation in accordance with the company's travel policy.

Compensation for the Board of Directors

EUR thousand	2020	2019
Board members at 31 December 2020		
Matti Lievonen, Chairman	101	89
Veli-Matti Reinikkala, Deputy Chairman from 23 April 2020	77	58
Eva Hamilton	55	54
Essimari Kairisto, Chairman of the Audit and Risk Committee from 23 April 2020	72	56
Klaus-Dieter Maubach, Deputy Chairman until 23 April 2020 [1)]	65	71
Anja McAlister	57	59
Teppo Paavola (member of the board from 23 April 2020)	45	N/A
Philipp Rösler (member of the board from 26 March 2019)	57	44
Annette Stube (member of the board from 23 April 2020)	42	N/A
Former Board members		
Heinz-Werner Binzel (member of the board until 26 March 2019)	N/A	12
Kim Ignatius (Chairman of the Audit and Risk Committee and member of the board until 23 April 2020)	21	67
Marco Ryan (member of the board from 26 March 2019 to 1 August 2019)	N/A	19
Total	**593**	**529**

1) In addition to the information provided in the above table, the estimated compensation for the membership in the Supervisory Board of Uniper SE for Klaus-Dieter Maubach was EUR 157 thousand. This compensation is for the period that Uniper has been consolidated as subsidiary.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

11 Finance costs – net

EUR million	Note	2020	2019
Interest expense			
Borrowings		-186	-171
Leasing and other interest expenses		-12	-4
Capitalised borrowing costs	17	27	9
Total		**-170**	**-167**
Interest income			
Loan receivables and deposits		96	25
Leasing and other interest income		16	3
Total		**111**	**28**
Other financial expenses - net			
Return from Nuclear Funds, Nuclear fund adjustment and unwinding of discounts on provisions [1]	28, 29, 30	-26	-4
Fair value changes, impairments and reversals	20	29	8
Other financial expenses and income		0	1
Total		**3**	**5**
IS **Finance costs - net**		**-56**	**-134**

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

Interest expenses on borrowing in 2020 totalled EUR 186 million (2019: 171) including interest expenses on loans of EUR 160 million (2019: 134), and EUR 26 million (2019: 37) interest cost net from derivatives hedging the loan portfolio. Interest expenses from leases were EUR 9 million (2019: 3).

Interest income in 2020 of EUR 111 million (2019: 28) include EUR 88 million (2019: 12) interest income from shareholder loan receivables and other loan receivables, and EUR 8 million (2019: 11) from deposits. Interest income from leases were EUR 12 million (2019: 0).

Return from Nuclear Funds include fund adjustment, interest income from the Finnish Nuclear waste fund and changes in fair values in the Swedish Nuclear waste fund. Unwinding of discount on provisions relates to Nuclear waste related provisions, pensions and other provisions. For additional information see Note 28 Nuclear related assets and liabilities.

Interest rate and currency derivatives in finance costs – net

EUR million	2020	2019
Interest rate and cross currency swaps		
Interest expenses on borrowings	24	20
Exchange rate difference from derivatives	52	30
Rate difference in fair value gains and losses on financial instruments [1]	-2	25
Total fair value change of interest rate derivatives in finance costs - net	**74**	**75**
Foreign exchange derivatives		
Interest expenses on borrowings	-50	-57
Exchange rate difference from derivatives	61	-120
Rate difference in fair value gains and losses on financial instruments	0	-1
Total fair value change of currency derivatives in finance costs - net	**11**	**-178**
Total	**85**	**-103**

1) Fair value gains and losses on financial instruments include fair value changes from interest rate swaps not getting hedge accounting status amounting to EUR 0 million (2019: -2) and fair value change of hedging derivatives in fair value hedge relationship to EUR -2 million (2019: 27).

12 Income tax expense

12.1 Profit before tax

EUR million	2020	2019
Finnish companies	1,088	303
German companies [1)]	269	592
Russian companies	403	312
Swedish companies	-65	383
Other companies	504	138
IS Total	**2,199**	**1,728**

1) Includes share of profits from associates related to Uniper, EUR 469 million (2019: 632), and impact from acquisition accounting, EUR -222 million (2019: 0).

Profit before tax by country represents the respective countries' part of total profit before tax for Fortum Group according to IFRS, based on the same accounting principles as consolidated financial statements. This means that the respective country's profits include such items as share of profits from associates, and effects of accounting for nuclear provisions, which are not included in taxable profits in the local subsidiaries.

12.2 Major components of income tax expense by major countries

EUR million	2020	2019
Current taxes		
Finnish companies	-35	-40
German companies	-81	-2
Russian companies	-84	-51
Swedish companies	30	-79
Other companies	-52	-61
Total	**-222**	**-233**
Deferred taxes		
Finnish companies	-32	-15
German companies	-23	-
Russian companies	-12	-6
Swedish companies	-81	6
Other companies	25	30
Total	**-123**	**15**
Adjustments recognised for current tax of prior periods		
Finnish companies	1	-2
German companies	1	-
Russian companies	-	-
Swedish companies	-1	-
Other companies	1	-1
Total	**2**	**-3**
IS Income tax expense	**-344**	**-221**

12.3 Income tax rate

The table below explains the difference between the theoretical enacted tax rate in Finland compared to the tax rate in the consolidated income statement.

EUR million	2020	%	2019	%
Profit before tax	2,199		1,728	
Tax calculated at nominal Finnish tax rate	-440	20.0	-346	20.0
Differences in tax rates in other jurisdictions	-52	2.4	-62	3.6
Tax rate changes	4	-0.2	-3	0.2
Tax exempt capital gains	167	-7.6	2	-0.1
Impact of acquisition accounting	-70	3.2	-	-
Tax exempt income and other non-deductible expenses	24	-1.1	-8	0.4
Share of profit of associates and joint ventures	189	-8.6	220	-12.7
Taxes related to dividend distributions	-24	1.1	-17	1.0
Tax effects of changes in value and non-recognition of deferred taxes	-129	5.9	-3	0.3
Other items	-16	0.7	-1	-0.1
Adjustments recognised for taxes of prior periods	3	-0.1	-3	0.2
IS Income tax expense	**-344**	**15.7**	**-221**	**12.8**

Key tax indicators:

- The weighted average applicable income tax rate for 2020 is 22.1% (2019: 23.6%)
- The effective income tax rate in the income statement for 2020 is 15.7% (2019: 12.8%)
- The comparable effective income tax rate (excluding the share of profits from associates and joint ventures, as well as items affecting comparability, tax exempt capital gains, tax rate changes and other major one-time income tax effects) for 2020 is 23.8% (2019: 22.0%).

See ▸ **Definitions of key figures.**

The major items affecting the effective income tax rate are as follows:

- Share of profit of associates and joint ventures during 2020 reduced the effective income tax rate by 8.6% (2019: -12.7%), the main impact being from Uniper, EUR 469 million (2019: 632).
- This share of profit has also largely impacted by the difference in tax rates in other jurisdictions, increasing the rate by 2.4% (2019: 3.6%) overall.
- The one-time tax-free capital gains mainly relate to the sale of the district heating businesses in Joensuu and Järvenpää, Finland.
- The impact from acquisition accounting related to the one time, non taxable impact when Uniper became Fortum's subsidiary on 31 March 2020. See Note 7 Items affecting comparability.
- The tax impact from the non-recognition of deferred taxes in line with the accounting policy.

Fortum has had ongoing tax audits during 2020. Based on earlier audits, Fortum has received income tax assessments in Belgium for the years 2008-2012. In previous years, Fortum has appealed all assessments received. Based on legal analysis, no provision has been accounted for in the financial statements related to Belgium 2008-2012 tax audits, therefore additional taxes of EUR 114 million that have been paid during prior years has been booked as an income tax receivable.

For further information regarding the ongoing tax appeals see Note 36 Legal actions and official proceedings.

During 2020, entities primarily in Belgium, Ireland and Russia used a portion of the deferred tax asset relating to tax loss carry forwards.

13 Earnings and dividend per share

ACCOUNTING POLICIES

EARNINGS PER SHARE

Basic earnings per share is calculated by dividing the net profit attributable to the owners of the parent company by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Group and held as treasury shares.

DIVIDENDS

Dividends proposed by the Board of Directors are not recognised in the financial statements until they have been approved by the company's shareholders at the Annual General Meeting.

13.1 Earnings per share

Earnings per share, basic

	2020	2019
IS Profit attributable to owners of the parent (EUR million)	1,823	1,482
Weighted average number of shares (thousand)	888,294	888,294
Basic earnings per share (EUR)	2.05	1.67

As Fortum currently has no dilutive instruments outstanding, diluted earnings per share is the same as basic earnings per share.

13.2 Dividend per share

A dividend in respect of 2020 of EUR 1.12 per share, amounting to a total dividend of EUR 995 million based on the amount of shares registered as at 11 March 2021, is to be proposed at the planned Annual General Meeting on 28 April 2021. These Financial statements do not reflect this dividend.

A dividend for 2019 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 23 April 2020 and the dividend was paid on 5 May 2020.

A dividend for 2018 of EUR 1.10 per share, amounting to a total of EUR 977 million, was decided in the Annual General Meeting on 26 March 2019 and the dividend was paid on 4 April 2019.

14 Financial assets and liabilities by categories

ACCOUNTING POLICIES

FINANCIAL ASSETS

Fortum classifies its financial assets in the following categories according to IFRS 9: financial assets at amortised cost, financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. The classification is made at initial recognition and depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them.

In order for the financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of the principal and interest on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. When the SPPI criteria is not met, financial assets are classified to fair value through profit or loss category.

Financial assets are presented as non-current assets unless they are held for trading, expected to be realised within 12 months at the closing date or they have a maturity of under 12 months at closing date. These are classified as current assets.

FINANCIAL ASSETS AT AMORTISED COST

Fortum measures financial assets at amortised cost when the financial asset is included in the held-to-collect business model with fixed or determinable payments that are payments of amount outstanding or interest on it. They arise when the Group provides money, goods or services directly to a debtor. Financial assets at amortised cost include non-derivative financial assets with fixed or determinable payments that are not quoted in an active market.

Financial assets at amortised cost are subject to impairment using expected credit loss (ECL) model. Gains and losses from derecognition of the asset are recognised in profit and loss.

FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets at fair value through profit or loss include financial assets held for trading in the short term, financial assets designated upon initial recognition irrevocably as fair value through profit or loss and financial assets mandatorily recognised at fair value through profit or loss according to IFRS 9. Derivatives are classified as held for trading unless they are designated as effective hedging instruments.

Gains and losses arising from changes in the fair value are included in the income statement in the period in which they arise.

FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

Other equity investments designated at fair value through other comprehensive income are not subject to impairment assessment and accumulated reserves are not recycled to profit or loss upon derecognition. Dividends received are recognised in profit and loss.

Investments designated at fair value through other comprehensive income mainly consist of other equity investments coming from the acquisition of Uniper which the Group has elected to designate irrevocably at fair value through other comprehensive income.

DERECOGNITION

Fortum derecognises financial assets when the rights to receive cash flows from the assets have expired or when it has substantially transferred the risks and rewards of the assets outside of the Group.

IMPAIRMENT

Fortum recognises an allowance for expected credit losses (ECL) according to IFRS 9 for financial assets measured at amortised cost. See further information on ECL in Note 4.4.1 Credit quality of major financial assets and in Note 22 Trade and other receivables.

Financial assets measured at fair value through profit or loss are not included in ECL assessment as they are already measured at fair value. A financial asset is written-off when there is no reasonable expectation of recovering the contractual cash flows.

FINANCIAL LIABILITIES

All financial liabilities are recognised initially at fair value. In the case of loans and borrowings and payables, incurred transaction costs are deducted. In subsequent periods, all financial liabilities, except derivatives and financial liabilities which the Group has at initial recognition irrevocably designated at fair value through profit or loss, are stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognised as interest cost over the period of the borrowing using the effective interest rate method.

Derivative financial instruments entered into by the Group, that are not designated as hedging instruments are classified as liabilities at fair value through profit and loss. Amortisation of the effective interest rate and gains and losses of liabilities are recognised in the income statement.

Group's financial liabilities include trade and other payables, loans and borrowings and derivative financial instruments. Borrowings or portion of borrowings being hedged with a fair value hedge are recognised at fair value through profit or loss. Derecognition of financial liabilities takes place when the Group has fulfilled the contractual obligations.

ACCOUNTING FOR DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACTIVITIES

Within the ordinary course of business the Group routinely enters into sale and purchase transactions for commodities. Contracts that were entered into and continue to be held for the purpose of receipt or delivery of the commodity in accordance with the Group's expected sale, purchase or usage requirements are not within the scope of IFRS 9 ("own use exemption"). Physical contracts to buy or sell a non-financial item, which are fair valued using the fair value option to off-set accounting mismatch, or where own use exemption or hedge accounting cannot be applied are fair valued through the income statement.

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. Gains and losses resulting from the initial fair value measurement of a derivative ("day one" gains and losses) are eliminated against the corresponding derivative asset or liability, if the initial fair value is determined based on valuation model with input parameters that are unobservable from active markets. For derivatives whose initial fair value is evidenced by a quoted price in an active market for an identical contract or based on a valuation technique that uses only data from observable markets, gains and losses from the initial measurement are accounted for similarly to gains or losses on the subsequent measurement.

The method of recognising the resulting gain or loss on the subsequent measurement depends on whether the derivative is designated as a hedging instrument eligible for hedge accounting, and if so, the nature of the item being hedged. The Group designates certain derivatives as either: (1) hedges of highly probable forecast transactions (cash flow hedges); (2) hedges of the fair value of recognised assets or liabilities, or unrecognised firm commitments (fair value hedge); or (3) hedges of net investments in foreign operations.

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, whether the hedged item is one or several risk components separately or in aggregation, as well as its risk management objective and strategy for undertaking various hedge transactions. When applying hedge accounting the Group also documents its assessment, of whether the derivatives that are used in hedging transactions are meeting the hedge accounting effectiveness criteria: (1) there is an economic relationship between the hedged item and the hedging instrument, (2) the effect of credit risk does not dominate the value changes that result from that economic relationship; and (3) the hedge ratio of the hedging relationship is the same as applied in the risk management. 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 by assessing the prospective capacity of the derivatives in offsetting changes in fair values or cash flows of hedged items. Hedge accounting is discontinued only when the hedging relationship ceases to meet the hedge effectiveness criteria.

CASH FLOW HEDGE

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in equity. Gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are recycled in the income statement in the periods when the hedged item will affect profit and loss (e.g. when the forecasted sale that is hedged takes place). However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (e.g. inventory) or a liability, the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset or liability. When a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity is recognised in the income statement when the forecast transaction is ultimately also recognised in the income statement. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately recognised in the income statement.

Fortum hedges its exposure to commodity market risks and applies hedge accounting by risk components. Hedge accounting is applied to Nordic electricity price risk, where the Nordic area priced physical electricity delivery is commonly divided into three risk components: (1) system price risk, (2) electricity price area difference risk (EPAD) and (3) currency risk. For each of these separate risk components there are specific derivative contracts available, which each are being a highly effective hedge for the associated risk component.

FAIR VALUE HEDGE

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortised to profit or loss for the periods until maturity of the hedged item.

NET INVESTMENT HEDGING IN FOREIGN OPERATIONS

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in equity; the gain or loss relating to the ineffective portion is recognised immediately in the income statement. Gains and losses accumulated in equity are included in the income statement when the foreign operation is disposed of.

DERIVATIVES THAT DO NOT QUALIFY FOR HEDGE ACCOUNTING

Certain derivative instruments hedging future cash flows do not qualify for hedge accounting. Fair value changes of these commodity derivative instruments are recognised in items affecting comparability in the income statement, whereas fair value changes of interest rate and currency derivative instruments are recognised in finance costs - net.

Financial assets and liabilities in the tables below are split into categories in accordance with IFRS 9. The categories are further divided into classes which are the basis for valuing a respective asset or liability. Further information can be found in the Notes mentioned in the table.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Financial assets by category 2020

		Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income			
EUR million	**Note**		**Hedge accounting, fair value hedges**	**Non-hedge accounting**	**Other financial assets**	**Net investment and Cash flow hedges**	**Other equity investments**	**Lease receivables**	**Total financial assets**
Financial instruments in non-current assets									
Other non-current assets	19	291			70		118		479
Derivative financial instruments									
Commodity derivatives				2,707		23			2,730
Interest rate and currency derivatives	4		134	46		36			216
Long-term interest-bearing receivables	20	2,106			116			181	2,402
Financial instruments in current assets									
Derivative financial instruments									
Commodity derivatives				7,292		125			7,416
Interest rate and currency derivatives	4		20	89		6			115
Trade receivables	22	7,115							7,115
Other receivables	22	1,728			62				1,790
Short-term interest-bearing receivables	20	145			437			16	598
Liquid funds	23	2,262			46				2,308
Total		**13,646**	**154**	**10,133**	**732**	**190**	**118**	**196**	**25,170**

Financial assets by category 2019

		Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income	
EUR million	**Note**		**Hedge accounting, fair value hedges**	**Non-hedge accounting**	**Other financial assets**	**Net investment and Cash flow hedges**	**Total financial assets**
Financial instruments in non-current assets							
Other non-current assets	19	75			75		151
Derivative financial instruments							
Commodity derivatives				22		1	23
Interest rate and currency derivatives	4		153	2		1	156
Long-term interest-bearing receivables	20	628			23		651
Financial instruments in current assets							
Derivative financial instruments							
Commodity derivatives				74		42	116
Interest rate and currency derivatives	4			7		9	16
Trade receivables	22	736					736
Other receivables [1]	22	263					263
Short-term interest-bearing receivables	20	69			315		384
Liquid funds	23	1,433					1,433
Total		**3,204**	**153**	**105**	**413**	**53**	**3,928**

1) Table has been revised from previously published to include Other receivables.

Financial liabilities by category 2020

EUR million	Note	Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income	Lease liabilities	Total financial liabilities
			Hedge accounting, fair value hedges	Non-hedge accounting	Other financial liabilities	Net investment and Cash flow hedges		
Financial instruments in non-current liabilities								
Interest-bearing liabilities	26	5,746	2,145 1)				894	8,785
Derivative financial instruments								
Commodity derivatives				2,462		77		2,539
Interest rate and currency derivatives	4		25	63		30		118
Financial instruments in current liabilities								
Interest-bearing liabilities	26	1,284			432		161	1,877
Derivative financial instruments								
Commodity derivatives				7,512		244		7,756
Interest rate and currency derivatives	4		10	167		4		181
Trade payables	32	7,126						7,126
Other liabilities	32	972						972
Total		**15,128**	**2,180**	**10,203**	**432**	**356**	**1,055**	**29,354**

1) Fair valued part of bond in fair value hedge relationship.

Financial liabilities by category 2019

EUR million	Note	Amortised cost	Fair value through profit or loss			Fair value through other comprehensive income	Lease liabilities	Total financial liabilities
			Hedge accounting, fair value hedges	Non-hedge accounting	Other financial liabilities	Net investment and Cash flow hedges		
Financial instruments in non-current liabilities								
Interest-bearing liabilities	26	3,736	2,293 1)				89	6,118
Derivative financial instruments								
Commodity derivatives				33		30		63
Interest rate and currency derivatives	4		25	3		47		75
Financial instruments in current liabilities								
Interest-bearing liabilities	26	270			281		19	570
Derivative financial instruments								
Commodity derivatives				114		85		199
Interest rate and currency derivatives	4			49		4		53
Trade payables	32	316						316
Other liabilities	32	168						168
Total		**4,490**	**2,318**	**199**	**281**	**166**	**108**	**7,562**

1) Fair valued part of bond in fair value hedge relationship.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

15 Financial assets and liabilities by fair value hierarchy

ACCOUNTING POLICIES

Fair value measurements are classified using a fair value hierarchy i.e. Level 1, Level 2 and Level 3 that reflects the significance of the inputs used in making the measurements.

FAIR VALUES UNDER LEVEL 1 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 1 is based on unadjusted quoted prices in active markets at the closing date. Level 1 consist e.g. commodity derivatives traded in active markets.

FAIR VALUES UNDER LEVEL 2 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 2 is based on observable input parameters, which are other than quoted prices.

The fair value of financial instruments traded in active markets in Level 2 is calculated using prices derived from quoted market prices at the closing date. Known calculation techniques, such as estimated discounted cash flows, are used to determine fair value of interest rate and currency financial instruments. The fair value of interest-rate swaps is calculated as the present value of the estimated future cash flows. The fair value of forward foreign exchange contracts is determined using forward exchange market rates at the closing date. Fair values of options are determined by using option valuation models. The fair value of financial liabilities is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments. The counterparty credit risk has been taken into account when determining fair value. The credit risk is determined based on a portfolio valuation in a bilateral approach covering both Fortum's own credit risk (debt value adjustment) and the credit risk of the corresponding counterparty (credit value adjustment).

The Group bases the calculation on existing market conditions at each closing date. Financial instruments used in Fortum are standardised products that are either cleared via exchanges or widely traded in the market. Credit risk from trading commodity derivatives is mitigated by clearing trades through exchanges or by limiting trades to OTC counterparties considered to be creditworthy, or secured by credit worthy guarantees. Financial derivatives are traded with credit worthy financial institutions with investment grade ratings.

FAIR VALUES UNDER LEVEL 3 MEASUREMENT HIERARCHY

The fair value of financial assets and liabilities classified as Level 3 is based on unobservable input parameters.

Level 3 consist mainly investments in unlisted shares classified as other investments for which the fair value can't be reliably measured and derivative financial instrument for which the fair value has been determined using valuation techniques with unobservable inputs. The input parameters of Level 3 of the fair value hierarchy for equity investments are specified taking into account economic developments and available industry and corporate data. The counterparty credit risk has been adjusted when determining the fair value.

Financial assets

		Level 1		Level 2		Level 3		Netting 1)		Total	
EUR million	**Note**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
In non-current assets											
Other investments	19	75	0	43		70	75			188	75
Derivative financial instruments											
Commodity derivatives											
Hedge accounting	4			52	9			-29	-8	23	1
Non-hedge accounting		1,030	10	1,563	27	138		-24	-16	2,707	21
Interest rate and currency derivatives	4										
Hedge accounting				170	154					170	154
Non-hedge accounting				46	2					46	2
Interest-bearing receivables		98				17	23			116	23
In current assets											
Derivative financial instruments											
Commodity derivatives											
Hedge accounting	4			185	101			-60	-59	125	42
Non-hedge accounting		2,851	315	5,090	306	6		-655	-547	7,292	74
Interest rate and currency derivatives	4										
Hedge accounting				26	9					26	9
Non-hedge accounting				89	7					89	7
Other receivables				62						62	
Interest-bearing receivables		432	281	46		5	34			483	315
Total		**4,486**	**606**	**7,372**	**615**	**237**	**132**	**-768**	**-630**	**11,326**	**724**

1) In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

Financial liabilities

		Level 1		Level 2		Level 3		Netting [2]		Total	
EUR million	**Note**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
In non-current assets											
Interest-bearing liabilities [1]	26			2,145	2,293					2,145	2,293
Derivative financial instruments											
Commodity derivatives											
Hedge accounting	4			106	38			-29	-8	77	30
Non-hedge accounting		634	11	1,598	37	254		-24	-16	2,462	32
Interest rate and currency derivatives	4										
Hedge accounting				56	72					56	72
Non-hedge accounting				63	3					63	3
In current liabilities											
Interest-bearing liabilities	26			497	281					497	281
Derivative financial instruments											
Commodity derivatives											
Hedge accounting	4			304	143			-60	-59	244	84
Non-hedge accounting		2,545	334	5,612	328	10		-655	-547	7,512	115
Interest rate and currency derivatives	4										
Hedge accounting				14	4					14	4
Non-hedge accounting				167	49					167	49
Total		**3,179**	**345**	**10,561**	**3,248**	**264**	**-**	**-768**	**-630**	**13,236**	**2,963**

1) Fair valued part of bonds in fair value hedge relationship.
2) In Fortum, excluding Uniper, receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

Net fair value amount of interest rate and currency derivatives is EUR 32 million, including assets EUR 331 million and liabilities EUR 299 million. Fortum has cash collateral agreements with some counterparties. At the end of December 2020 Fortum had received EUR 144 million from collateral agreements. The received cash has been booked as short-term liability.

Impact from first time consolidation of Uniper to total financial assets in the fair value hierarchy table on 31 March 2020 was EUR 22,210 million (Level 1: EUR 7,354 million, Level 2: EUR 14,758 million, Level 3: EUR 98 million); and to total financial liabilities EUR 21,129 million (Level 1: EUR 7,248 million, Level 2: EUR 13,476 million, Level 3: EUR 405 million) mainly due to commodity derivatives. For Uniper's impact on accounting policies, see more information in Note 1 Significant accounting policies, and for consolidation impacts of Uniper, see more information in Note 3 Acquisitions, disposals and assets held for sale.

During 2020 there has been no transfers between Level 1 and Level 2, nor transfers into or out of Level 3.

Changes in fair value hierarchy Level 3

EUR million	**1 Jan 2020**	**Acquisition of subsidiary companies**	**Purchases**	**Settlements**	**Gains / losses in income statement**	**Gains / losses in OCI**	**31 Dec 2020**
On balance sheet, net							
Other investments	75	8	38			-51	70
Commodity derivatives, fair values		108	111	-15	178		382
Commodity derivatives, day-1 gains and losses		-423	-85		7		-501
Interest-bearing receivables	57			-26	-9		22
Total on balance sheet, net	**132**	**-307**	**64**	**-41**	**176**	**-51**	**-27**

16 Intangible assets

16.1 Intangible assets

ACCOUNTING POLICIES

Intangible assets, except goodwill, are stated at historical cost less accumulated amortisation and impairment losses; and amortised on a straight-line basis over their expected useful lives.

GOODWILL

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of net identifiable assets of the acquired subsidiary, associate or joint venture at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets and tested annually for impairment. Goodwill on acquisition of associates and joint ventures is included in investments in associates and joint ventures and is tested for impairment as part of the overall balance. Goodwill is carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on disposal of an entity include the carrying amount of goodwill relating to the entity sold.

CONTRACT-BASED INTANGIBLE ASSETS

Majority of contract-based intangible assets are concession rights in Germany, which are valued at amortised costs. The remaining useful life of concession rights is approximately 30 years.

EMISSION ALLOWANCES

Intangible assets include CO2 emission allowances for covering emissions caused by power and heat production. CO2 emission allowances received free of charge are accounted at nominal value. Purchases of CO2 emissions allowances meeting the IFRS 9 "own use"-criteria, are accounted for at contracted purchase price. Purchases of CO2 emission allowances, which have failed to meet the "own use" –criteria, and are thus accounted for as derivatives, are recognised at market price applicable at the time of delivery.

CO2 emission costs are settled by returning the emission allowances. The obligation for CO2 emission costs is presented in Other payables. To the extent that the Group already holds allowances to cover the emission costs, the obligation is measured at the carrying amount of those allowances. Any shortfall of allowances needed to cover the settlement obligation is valued at the current market value of allowances.

The emission cost is recognised in the income consolidated statement within materials and services.

RESEARCH AND DEVELOPMENT COSTS

Research and development costs are recognised as expense as incurred and included in other expenses in the consolidated income statement. If development costs are expected to generate future income, they are capitalised as intangible assets and depreciated over the period of the income streams.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSIGNED VALUES AND USEFUL LIVES IN ACQUISITIONS

In an acquisition acquired intangible and tangible assets are fair valued and their remaining useful lives are determined. Management believes that the assigned values and useful lives, as well as the underlying assumptions, are reasonable. Different assumptions and assigned lives could have a significant impact on the reported amounts.

The Group has significant carrying values in property, plant and equipment, intangible assets and participations in associated companies and joint ventures which are tested for impairment according to the accounting policy.

Intangible assets

	Goodwill		Contract-based		Other		Total	
EUR million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Cost 1 January	**612**	**588**	**-**	**-**	**954**	**869**	**1,566**	**1,457**
Translation differences and other adjustments	-58	24	-	-	-54	-	-112	24
Acquisition of subsidiary companies	515	-	1,349	-	773	12	2,637	12
Capital expenditure	-	-	-	-	124	75	124	75
Changes in emission rights	-	-	-	-	257	14	257	14
Disposals	-	-	-	-	-14	-43	-14	-43
Sale of subsidiary companies	-	-	-	-	-4	-	-4	-
Transfer to assets held for sale [1]	-	-	-22	-	-	-12	-22	-12
Reclassifications	-	-	-	-	15	40	15	40
Cost 31 December	**1,069**	**612**	**1,328**	**-**	**2,050**	**954**	**4,447**	**1,566**
Accumulated depreciation 1 January	**-**	**-**	**-**	**-**	**422**	**370**	**422**	**370**
Translation differences and other adjustments	-	-	-1	-	-15	-1	-16	-1
Acquisition of subsidiary companies	-	-	809	-	324	-	1,134	-
Disposals	-	-	-	-	-14	-43	-14	-43
Sale of subsidiary companies	-	-	-	-	-3	-	-3	-
Transfer to assets held for sale [1]	-	-	-22	-	-	-1	-22	-1
Reclassifications	-	-	-8	-	1	14	-7	14
Depreciation for the year	-	-	15	-	130	84	145	84
Accumulated depreciation 31 December	**-**	**-**	**794**	**-**	**846**	**422**	**1,640**	**422**
BS **Carrying amount 31 December**	**1,069**	**612**	**534**	**-**	**1,205**	**531**	**2,808**	**1,143**

1) See Note 3 Acquisitions, disposals and assets held for sale.

Goodwill included EUR 515 million from the acquisition of Uniper at 31 March 2020 and excluded goodwill on Uniper's balance sheet at 31 March 2020, EUR 1,779 million, that is not considered to be an identifiable asset according to IFRS. Other intangible assets included EUR 980 million from the acquisition of Uniper at 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

Goodwill in groups of cash-generating units

Goodwill is allocated to operating segments corresponding to groups of cash-generating units that benefit from the synergies of the acquired goodwill.

EUR million	2020	2019
Uniper	515	-
Consumer Solutions	214	228
City Solutions	205	208
Russia	134	176
Total	**1,069**	**612**

Other intangible assets

Other intangible assets include emission allowances amounting to EUR 540 million (2019: 36), as well as customer contracts, and costs for software products and software licenses.

16.2 Impairment testing

Uniper segment was not included in the annual impairment testing as at 31 December 2020 as the purchase price allocation of the Uniper acquisition is still ongoing, which means that the values assigned to identified assets and liabilities, as well as goodwill, at 31 December 2020 are still preliminary (see Note 3 Acquisitions, disposals and assets held for sale). Further, there have been no indication of impairment. Uniper segment is subject to regular impairment indication review, and will be tested for impairment in the 2021 annual impairment testing cycle.

ACCOUNTING POLICIES

The carrying values of goodwill, other intangible assets, property, plant and equipment, right-of-use assets, and non-financial investments are reviewed regularly for indication of impairment.

Indications of impairment are business-specific and are thus analysed separately by each segment; and include risks, such as changes in electricity and fuel prices, regulatory/political risks relating to energy taxes, price regulations, and limitations to the life time of assets.

Impairment testing is performed if there is an indication of impairment; and the asset is written down to its recoverable amount if its carrying amount is greater than the estimated recoverable amount.

In addition, goodwill and other intangible assets that have an indefinite useful life, and as such are not subject to amortisation, are tested annually for impairment, even if there is no indication of impairment. Impairment testing is performed and documented annually in connection with the long-term forecasting process.

Annual impairment testing is performed on a cash-generating unit level. Fortum defines cash-generating unit as the smallest group of assets that generate cash flows that are independent of the cash flows generated by other assets.

Goodwill is allocated to groups of cash-generating units that benefit from the synergies of the acquired goodwill.

Fortum uses value in use to establish the recoverable amount of cash-generating units. Value in use is determined by discounting future cash flows expected to be derived from group of assets. The carrying amount of group of cash generating units comprises net operating assets, including goodwill and fair value adjustments arising from acquisitions.

Non-financial assets, other than goodwill, that have been impaired in the past are reviewed for possible reversal of impairment at each reporting date.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS RELATED TO IMPAIRMENT TESTING

Impairment testing is forward-looking and requires management to make certain assumptions, as explained below.

The recoverable amounts of cash-generating units are determined by value in use calculations. These calculations are based on estimated discounted future cash flows in local currency from most recent, long-term forecast approved by management and the Board of Directors, covering an explicit forecast period of six years. The explicit forecast period is longer than five years as significant assets used by the business, such as power plants, have useful lives exceeding 20 years. Cash flow projections beyond the explicit forecast period are estimated by extrapolating projections using a steady or declining growth rate.

The period covered by cash flows is related to the useful lives of the assets being reviewed for impairment. The growth rate used to extrapolate the cash flow projections until the end of assets' useful lives is in line with the assumed inflation. Cash flows arising from future investments, such as new plants, are excluded; unless projects have been started, in which case the cash outflow needed to complete the started projects is included. In Russia, the generation capacity built after 2007 under the Russian Government's Capacity Supply Agreements receives guaranteed capacity payments for a period of 10 years after commissioning.

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The discount rates reflect current assessments of the time value of money and relevant market risk premiums specific to each cash generating unit, reflecting risks and uncertainties for which the future cashflow estimates have not been adjusted.

Preparation of these cash flow estimates requires management to make assumptions relating to future expectations. Assumptions vary depending on the business the tested assets are in.

Key assumptions used in impairment testing are presented below, as well as the basis for determining the value of each assumption. Assumptions are based on internal and external data that are consistent with observable market information, when applicable.

Key assumptions	Basis for determining the value for key assumptions
Power market development, recycling and waste solutions market development	Historical analysis and prospective forecasting
Regulation framework	Current market setup and prospective forecasting (e.g. CSA mechanism in Russia)
Utilisation of power plants and treatment facilities	Past experience, technical assessment and forecasted market development
Forecasted maintenance investments	Past experience, technical assessment and planned maintenance work
Discount rate	Mostly market based information

Annual impairment testing

Annual impairment testing was performed as at 31 December 2020. The table below presents long-term pre-tax discount rates used in impairment testing by cash generating units:

Discount rate %	2020	2019
Consumer Solutions [1)]	5.1-6.3	5.2-7.0
City Solutions	4.8	7.3
Russia	11.8	11.4

1) Discount rate depends on location and type of business.

The change in discount rates is due to declining interest rates and a more detailed assessment of discount rate components by underlying business.

At 31 December 2020, the recoverable values were greater than their carrying values and therefore no impairments were booked.

The Group has considered the sensitivity of key assumptions as part of the impairment testing. When doing this, any consequential effect of the change on the other variables has also been considered. The calculations are most sensitive to changes in estimated future EBITDA levels, and changes in discount rate.

Management estimates that no reasonably possible change in the discount rate used, or in future earnings would cause the carrying amount to exceed its recoverable amount in any group of cash generating units.

17 Property, plant and equipment and right-of-use assets

ACCOUNTING POLICIES

Property, plant and equipment mainly include power and heat production-related buildings, structures and machinery, waterfall rights, and other buildings and machinery.

Property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses on the consolidated balance sheet. Historical cost includes expenditure that is directly attributable to the acquisition of an item. Borrowing costs are included in the cost of qualified assets. Additionally the cost of an item of property, plant and equipment includes the estimated cost of its dismantlement, removal or restoration when there is a contractual obligation towards a third party, or a legal obligation.

Acquired assets on the acquisition of a new subsidiary are stated at their fair values at the date of acquisition.

See Note 29 Other provisions for information about asset retirement obligations, Note 28 Nuclear related assets and liabilities, for information about provisions for decommissioning nuclear power plants and Note 33 Leases, for information about right-of-use assets.

Land, water areas and waterfall rights are not depreciated since they have indefinite useful lives.

Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

- Buildings and structures: 10-50 years
- Machinery and equipment: 3-65 years

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance expenses are charged to the income statement during the financial period in which they are incurred.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each closing date. An asset's carrying amount is written down to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. See further information on the impairment testing in Note 16 Intangible assets.

GOVERNMENT GRANTS

Government grants are recognised at their fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants are either deferred and recognised in the income statement to match with the related costs, or deducted from the acquisition cost of the asset.

BORROWING COSTS

Borrowing costs directly attributable to the construction of qualifying assets are added to the cost of those assets. Qualifying assets are assets that take a substantial time to get ready for their intended use or sale.

EUR million	Land and waterfall rights 2020	Land and waterfall rights 2019	Buildings and structures 2020	Buildings and structures 2019	Machinery, equipment and other 2020	Machinery, equipment and other 2019	Advances paid and construction in progress 2020	Advances paid and construction in progress 2019	Total 2020	Total 2019
Cost 1 January	**2,578**	**2,617**	**4,103**	**3,908**	**8,667**	**8,162**	**419**	**631**	**15,768**	**15,319**
Translation differences and other adjustments	219	-55	-259	114	-213	252	-41	6	-294	317
Acquisition of subsidiary companies	1,636	-	6,414	1	22,825	8	3,088	4	33,963	12
Capital expenditure 1)	6	12	35	8	335	184	668	435	1,045	638
Additions to right-of-use assets	-	8	97	27	57	4	-	-	154	38
Decreases in right-of-use assets	-	-4	-60	-2	-29	-1	-	-	-90	-7
Nuclear asset retirement cost	-	-	-	-	172	-14	-	-	172	-14
Disposals	-1	-1	-51	-29	-191	-89	-23	-	-267	-118
Sale of subsidiary companies	-1	-4	-89	-22	-117	-2	-2	-	-209	-27
Transfer to assets held for sale 2)	-3	-6	-126	-71	-1,375	-264	-	-30	-1,504	-371
Reclassifications	4	11	336	170	2,154	428	-2,507	-627	-14	-18
Cost 31 December	**4,436**	**2,578**	**10,400**	**4,103**	**32,285**	**8,667**	**1,602**	**419**	**48,723**	**15,768**
Accumulated depreciation 1 January	**1**	**-**	**1,765**	**1,678**	**3,877**	**3,562**	**-**	**-**	**5,644**	**5,241**
Translation differences and other adjustments	7	-	-68	28	110	82	12	-	61	111
Acquisition of subsidiary companies	265	-	4,124	-	18,679	-	1,263	-	24,331	-
Disposals	-1	-	-48	-27	-179	-57	-8	-	-236	-84
Sale of subsidiary companies	-	-	-39	-18	-53	-1	-	-	-92	-19
Decreases in right-of-use assets	-	-	-3	-	-29	-	-	-	-32	-
Transfer to assets held for sale 2)	-	-	-118	-27	-1,156	-66	-	-	-1,274	-93
Depreciation for the year	7	2	164	130	774	359	1	-	946	491
Reclassifications	-	-	160	-	959	-3	-1,111	-	8	-3
Accumulated depreciation 31 December	**280**	**1**	**5,936**	**1,765**	**22,983**	**3,877**	**157**	**-**	**29,357**	**5,644**
BS **Carrying amount 31 December**	**4,156**	**2,577**	**4,464**	**2,339**	**9,302**	**4,790**	**1,445**	**419**	**19,367**	**10,123**

1) Includes EUR 39 million of other asset retirement costs.
2) See Note 3 Acquisitions, disposals and assets held for sale.

Property, plant and equipment, and right-of-use assets included EUR 9,268 million from the acquisition of Uniper at 31 March 2020, mainly relating to machinery and equipment; and buildings and structures. The balance from Uniper included EUR 645 million of right-of-use assets. See Note 3 Acquisitions, disposals and assets held for sale.

Property, plant and equipment that are subject to restrictions in the form of real estate mortgages amount to EUR 380 million (2019: 139). See Note 35 Pledged assets and contingent liabilities.

Borrowing costs of EUR 27 million were capitalised in 2020 (2019: 9). The interest rate used for capitalising borrowing costs varied from 2% to 5% (2019: 2%-7%). For constructions financed by the Group, a uniform rate may be used based on interest rates of financial liabilities, including leases.

Property, plant and equipment includes right-of-use assets from leases in which Fortum acts as the lessee. See Note 33 Leases.

18 Participations in associated companies and joint ventures

ACCOUNTING POLICIES

The Group's interests in associated companies and jointly controlled entities are accounted for using the equity method of accounting. Assets acquired and liabilities assumed in the investment in associates or joint ventures are measured initially at their fair values at the acquisition date. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill.

The Group's share of its associates or joint ventures post-acquisition profits or losses after tax, and the expenses related to the adjustments to the fair values of the assets and liabilities assumed are recognised in the income statement. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. The Group's share of post-acquisition adjustments to associates or joint ventures equity that has not been recognised in the associate's or joint venture's income statement, is recognised directly in Group's shareholder's equity, and against the carrying amount of the investment.

When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the associate or joint venture, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Material unrealised gains on transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's interest in the associate or joint venture. Material unrealised losses are also eliminated, unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates or joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

If more recent information is not available, the share of the profit of certain associated or joint venture companies is included in the consolidated accounts based on the latest available information.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Management is required to make significant judgements when assessing the nature of Fortum's interest in its investees and when considering the classification of Fortum's joint arrangements. In the classification, emphasis has been put on decision making, legal structure and financing of the arrangements.

Management judgement is required when testing the carrying amounts for participations in associated companies and joint ventures for impairment. See Note 16 Intangible assets for more information.

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18.1 Principal associated companies and joint ventures

	Forsmarks Kraftgrupp AB	Kemijoki Oy	TGC-1	TVO Oyj	Stockholm Exergi AB
Nature of the relationship	Co-owned nuclear company	Co-owned hydro company	Energy company (listed)	Co-owned nuclear company	Power and heat company
Classification	Associated company	Associated company	Associated company	Joint venture	Joint venture
Segment	Generation	Generation	Russia	Generation	City Solutions
Domicile	Sweden	Finland	Russia	Finland	Sweden
Ownership interest, % 1)	34	58	30	26	50
Votes, %	34	28	30	26	50

1) Kemijoki and TVO have different series of shares. The ownership interest varies due to the changes in equity assigned to the different share series. The ownership interests for 2019 for Kemijoki Oy and TVO were 58% and 28%, respectively.

Shareholding in Uniper and OKG

On 31 March 2020 Fortum consolidated Uniper as a subsidiary, meaning that Uniper is no longer included in participations in associates and joint ventures on Fortum's consolidated balance sheet. Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. Fortum accounted for the shareholding in OKG AB as an associated company until 31 March 2020, and consolidated OKG AB as a subsidiary from 31 March 2020. See also Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

Shareholdings in power production companies

Power plants are often built jointly with other power producers. Under the consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, or other agreements, and each owner is liable for an equivalent portion of costs. The production companies are not profit making, since the owners purchase electricity at production cost, including interest cost and production taxes. The share of profit of these companies is mainly IFRS adjustments (e.g. accounting for nuclear related assets and liabilities) and depreciations on fair value adjustments from historical acquisitions since the companies are not profit making under local accounting principles.

Fortum has material shareholdings in such power production companies (mainly nuclear and hydro) that are consolidated using equity method either as associated companies (Forsmarks Kraftgrupp AB and Kemijoki Oy) or as joint venture (Teollisuuden Voima Oyj (TVO)).

In Sweden, nuclear production company shareholding is 34.0% ownership of the shares in Forsmarks Kraftgrupp AB. Excluding non-controlling interests in the subsidiaries, Fortum's participation in the company is 29.7%, which reflects the share of electricity produced that Fortum can sell further to the market. The minority part of the electricity purchased is invoiced further to each minority owner according to their respective shareholding and treated as pass-through.

In Finland, Fortum has an ownership in power production company TVO that has two series of shares which entitle the shareholders to electricity produced in the different power plants owned by TVO. Shares in series A entitle to electricity produced in nuclear power plants Olkiluoto 1 and 2 and Fortum owns 26.6% of these shares. Series B entitles to electricity in the nuclear power plant presently being built, Olkiluoto 3, and Fortum's ownership in this share series is 25%. The C series shares entitling to electricity generated at Meri-Pori were invalidated in 2020, as Fortum acquired all remaining C shares on 1 January 2019.

See also Associated companies in Note 28 Nuclear related assets and liabilities.

The most significant hydro production company shareholding is 63.8% of the hydro shares and 26.7% of the monetary shares in Kemijoki Oy. Each owner of hydro shares is entitled to the hydropower production in proportion to its hydro shareholding.

Shareholdings in other principal associated companies and joint ventures

Fortum has also other shareholdings in listed companies, such as Territorial Generating Company 1 (TGC-1). The shareholding in TGC-1 is accounted for as an associated company as Fortum has representatives in the Board of Directors of the company. The share of profit of TGC-1 is accounted for based on previous quarter information since updated information as at 31 December is not available for financial statements.

In Sweden, Fortum has a 50% ownership in Stockholm Exergi AB (publ) that is co-owned with the City of Stockholm through Stockholms Stadshus AB. Stockholm Exergi produces district heating, district cooling and electricity, and supplies heat and cooling to customers in the Stockholm area.

Summarised financial information of the principal associated companies in 2020

EUR million	Forsmarks Kraftgrupp AB	Kemijoki Oy	TGC-1 group
Balance sheet	**31 Dec 2019**	**31 Dec 2019**	**30 Sept 2020**
Non-current assets	2,641	480	1,699
Current assets	423	6	211
Non-current liabilities	2,889	316	238
Current liabilities	141	118	1,725
Equity	34	52	1,498
Attributable to the owners of the parent	34	52	1,379
Attributable to NCI	-	-	120
Statement of comprehensive income	**1 Jan 2019 - 31 Dec 2019**	**1 Jan 2019 - 31 Dec 2019**	**1 Oct 2019 - 30 Sept 2020**
Sales	543	53	1,077
Profit or loss	-	1	42
Attributable to the owners of the parent	-	1	50
Attributable to NCI	-	-	-8
Total comprehensive income	-	1	40
Attributable to the owners of the parent	-	1	48
Attributable to NCI	-	-	-8
Reconciliation to carrying amount in Fortum Group			
Group's interest in the equity of the associate 1 January	8	30	523
Change in share of profit and OCI items	-	-	25
Dividends received	-	-	-14
Translation differences and other adjustments	3	-	-124
Group's interest in the equity of the associate 31 December	**12**	**30**	**409**
Fair values on acquisitions and different accounting principles [1]	444	151	-5
Carrying amount 31 December	**456**	**181**	**404**
Market value of listed shares [2]			**141**

1) Impact of different accounting principles include mainly IFRS adjustments for Nuclear liabilities and assets, capitalised borrowing costs and fair value adjustment for the acquired assets and liabilities. Fortum records its share of nuclear related assets and liabilities in its nuclear associated companies according to equity method. The basis for recognition is similar as for Loviisa power plant, see accounting principles in Note 28 Nuclear related assets and liabilities.

2) The market quotation is impacted by the limited free float of TGC-1 share.

Summarised financial information of the principal associated companies in 2019

EUR million	OKG AB	Forsmarks Kraftgrupp AB	Kemijoki Oy	Uniper SE group	TGC-1 group
Balance sheet	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**	**30 Sept 2019**	**30 Sept 2019**
Non-current assets	683	2,473	474	23,917	2,162
Current assets	230	388	4	16,728	312
Non-current liabilities	827	2,704	295	12,507	395
Current liabilities	73	124	131	16,012	152
Equity	13	33	52	12,125	1,926
Attributable to the owners of the parent	13	33	52	11,547	1,775
Attributable to NCI	-	-	-	578	152
Statement of comprehensive income	**1 Jan 2018 - 31 Dec 2018**	**1 Jan 2018 - 31 Dec 2018**	**1 Jan 2018 - 31 Dec 2018**	**1 Oct 2018 - 30 Sept 2019**	**1 Oct 2018 - 30 Sept 2019**
Sales	289	536	48	77,895	1,357
Profit or loss	1	-1	-5	1,085	176
Attributable to the owners of the parent	1	-1	-5	1,107	173
Attributable to NCI	-	-	-	-22	3
Total comprehensive income	1	-1	-5	856	178
Attributable to the owners of the parent	1	-1	-5	850	175
Attributable to NCI	-	-	-	6	3
Reconciliation to carrying amount in Fortum Group					
Group's interest in the equity of the associate 1 January	6	9	33	5,512	421
Change in share of profit and OCI items	-	-	-3	473	54
Dividends received	-	-	-	-165	-10
Translation differences and other adjustments	-	-	-	-	56
Group's interest in the equity of the associate 31 December	**6**	**8**	**30**	**5,820**	**523**
Fair values on acquisitions and different accounting principles	-6	77	153	-1,514	-18
Carrying amount 31 December	**-**	**86**	**182**	**4,306**	**505**
Market value of listed shares				**5,399**	**209**

Summarised financial information of the principal joint ventures

	2020		2019	
EUR million	**TVO Oyj group**	**Stockholm Exergi AB group**	**TVO Oyj group**	**Stockholm Exergi AB group**
Balance sheet	**31 Dec 2020**	**31 Dec 2020**	**30 Sept 2019**	**31 Dec 2019**
Non-current assets	7,691	2,663	7,200	2,541
Current assets	490	274	669	305
of which cash and cash equivalents	161	1	203	-
Non-current liabilities	5,599	1,461	5,466	1,356
of which non-current interest-bearing liabilities	4,569	1,023	4,472	983
Current liabilities	539	316	636	365
of which current financial liabilities	429	173	514	223
Equity	2,043	1,161	1,767	1,126
Attributable to the shareholders of the company	2,043	1,160	1,767	1,125
Attributable to NCI	-	1	-	1
Statement of comprehensive income	**1 Jan 2020 - 31 Dec 2020**	**1 Jan 2020 - 31 Dec 2020**	**1 Oct 2018 - 30 Sept 2019**	**1 Jan 2019- 31 Dec 2019**
Sales	275	589	287	658
Depreciation and amortisation	-45	-144	-46	-199
Interest income	12	-	13	-
Interest expense	-40	-18	-36	-18
Income tax expense or income	-	-22	-	-11
Profit or loss	-	84	29	41
Other comprehensive income	-22	-14	-18	-17
Total comprehensive income	-22	70	10	24
Attributable to the shareholders of the company	-22	70	10	24
Reconciliation to carrying amount in Fortum Group				
Group's interest in the equity of the joint venture at 1 January	462	563	448	602
Change in share of profit and OCI items	-	35	1	12
Dividends received	-	-41	-	-40
Investments	63	-	-	-
Translation differences and other adjustments	-6	24	2	-11
Group's interest in the equity of the joint venture 31 December	**518**	**580**	**451**	**563**
Fair values on acquisitions and different accounting principles [1)]	3	-61	-9	-63
Carrying amount 31 December	**521**	**519**	**442**	**500**

1) Impact of different accounting principles include mainly IFRS adjustments for Nuclear liabilities and assets and capitalised borrowing costs. Fortum records its share of nuclear related assets and liabilities in its nuclear associated companies according to equity method. The basis for recognition is similar as for Loviisa power plant, see accounting principles in Note 28 Nuclear related assets and liabilities.

18.2 Participations in and share of profits from associated companies and joint ventures

Participations in associated companies and joint ventures on the balance sheet

EUR million	2020	2019
Principal associates	1,041	5,079
Principal joint ventures	1,039	942
Other associates	474	65
Other joint ventures	358	348
BS Total	**2,912**	**6,435**

Participations in associated companies and joint ventures include EUR 750 million from the acquisition of Uniper at 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

Changes in participation during the year

	2020		2019	
EUR million	Associated companies	Joint ventures	Associated companies	Joint ventures
1 January	5,144	1,290	4,709	1,268
Acquisitions	742	9	-	-
Investments	3	116	-	75
Share of profit of associates and joint ventures	559	97	696	48
Dividend income received	-61	-56	-176	-63
Divestments and capital returns	-26	-22	-	-27
Reclassifications	-4,666	3	-12	-4
OCI items in associates and joint ventures	-174	-8	-130	-8
Translation differences and other adjustments	-14	-25	58	1
31 December	**1,508**	**1,404**	**5,144**	**1,290**

Acquisitions and reclassifications mainly relate to Uniper consolidation at 31 March 2020.

During 2020 Fortum received EUR 116 million (2019: 239) in dividends from associates and joint ventures of which EUR 41 million (2019: 40) was received from Stockholm Exergi. 2019 includes dividends of EUR 165 million received from Uniper SE.

For information about investments and divestments of shares in associated companies, see Note 3 Acquisitions, disposals and assets held for sale.

Share of profit of associates and joint ventures

EUR million	2020	2019
Principal associates		
Forsmarks Kraftgrupp AB	46	-3
Kemijoki Oy	-1	-5
TGC-1	24	54
Principal associates, total	**69**	**46**
Principal joint ventures		
Stockholm Exergi AB	46	24
TVO Oyj	21	6
Principal joint ventures, total	**67**	**30**
Other associates [1]	490	650
Other joint ventures	30	18
IS Total	**656**	**744**

1) Includes share of profit of EUR 469 million from Uniper SE (2019: 632).

There are no unrecognised share of losses of associated companies and joint ventures.

Uniper

Fortum previously accounted for Uniper as an associated company with a three-month time lag as Fortum published the annual report before Uniper's financial information was available. As of the first quarter 2020, Fortum revised its financial reporting schedule and publishes annual and interim reports after Uniper. Fortum's first quarter results included Fortum's share of Uniper's results from 1 October 2019 to 31 March 2020.

Fortum's share of Uniper's IV/2019 profits, EUR 162 million, included a reversal of the adjustment which Fortum already made in IV/2019 related to the impact from the reinstatement of the UK capacity market. Fortum also made a reversal of EUR 389 million (after tax) related to the negative impact of Uniper's IV/2019 impairments.

Fortum's share of Uniper's I/2020 profits, EUR 307 million, included a reversal of EUR 61 million after tax related to the negative impact of Uniper's I/2020 impairments.

Other associates and joint ventures

In 2019 the share of profit from Stockholm Exergi included the EUR -22 million effect of the impairment booked in Stockholm Exergi relating to the early decommissioning of combined heat and power (CHP) plant 6, CHP6.

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19 Other non-current assets

EUR million	2020	2019
Other investments	224	75
Interest-free receivables	255	75
BS Total	**479**	**151**

Other investments mainly include certain subsidiaries that are not included in the consolidated financial statements on materiality grounds, accounted for outside the scope of IFRS 9 and measured at cost (see **Note 39** Group companies by segment); as well as shares in unlisted companies.

Interest-free receivables mainly include prepaid expenses.

Other investments included EUR 152 million, and interest-free receivables EUR 190 million from the acquisition of Uniper at 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

20 Interest-bearing receivables

EUR million	2020	2019
Interest-bearing receivables	2,804	1,035
Finance lease receivables	196	-
Total	**3,000**	**1,035**

	2020		2019	
EUR million	**Carrying amount**	**Fair value**	**Carrying amount**	**Fair value**
Long-term loan receivables from associates and joint ventures	1,113	1,161	625	668
Non-current securities	98	98	-	-
Other long-term interest-bearing receivables	1,010	1,010	26	27
Total long-term interest-bearing receivables	**2,221**	**2,270**	**651**	**695**
Collateral arrangement securities	432	432	281	281
Other short-term interest-bearing receivables	151	151	103	103
Total short-term interest-bearing receivables	**582**	**582**	**384**	**384**
Total	**2,804**	**2,852**	**1,035**	**1,079**

Long-term interest-bearing receivables include receivables from associated companies and joint ventures of EUR 1,113 million (2019: 625). These receivables include EUR 964 million from Swedish nuclear companies, Forsmarks Kraftgrupp AB and Ringhals AB (2019: 558 from Swedish nuclear companies, OKG AB and Forsmarks Kraftgrupp AB), which are mainly funded with shareholder loans, pro rata each shareholder's ownership.

Interest-bearing receivables included interest-bearing receivables of EUR 1,634 million and finance lease receivables of EUR 206 million from the acquisition of Uniper at 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

21 Inventories

ACCOUNTING POLICIES

Inventories are stated at the lower of cost and net realisable value being the estimated selling price for the end product, less applicable variable selling expenses and other production costs. Cost is generally determined using the weighted average cost method.

Inventories which are acquired for the purpose of buying and selling commodities in the near future, generating profit from the fluctuation in market price, are stated at fair value less cost to sell.

EUR million	2020	2019
Raw materials and supplies	671	180
Goods purchased for resale	583	-
Other	141	50
BS **Total**	**1,396**	**230**

Raw materials and supplies mainly consist of fuels consumed in the production process, or in the rendering of services; and include, in particular, coal, uranium and nuclear fuel rods. Goods purchased for resale include gas and coal inventories. Other mainly consists of work in progress and finished goods.

Inventories stated at fair value less costs to sell total EUR 45 million.

Inventories included EUR 1,565 million from the acquisition of Uniper on 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

22 Trade and other receivables

ACCOUNTING POLICIES

Trade receivables include revenue based on an estimate of electricity, gas, heat and cooling already delivered but not yet measured and not yet invoiced.

Impairment losses for trade receivables are calculated according to the expected credit loss (ECL) model. Loss allowances on trade receivables are measured at an amount equal to lifetime expected credit losses.

An allowance is made on the balance sheet for the expected future credit losses and remains on the balance sheet until it is written off as a credit loss or reversed. Allowances may remain on the balance sheet for several years pending the outcome of collection processes and court proceedings. Write-off policies differ by country depending on local legislation and assessment of recovery possibilities. For large trade receivables, ECL is calculated for the individual customer based on the estimated probability of default and expected recovery rate for the customer. These estimates are derived from available market data when possible, or based on the customer's rating. Adjustments are made if there are indications of decreased creditworthiness, e.g. based on payment behaviour. ECL for trade receivables from small customers are calculated on portfolio basis by country and business segment. The credit loss allowances are based on historical analysis of losses when possible, or on average default rates for customers based on externally available information. These rates are adjusted if there are any forward-looking indicators showing changes in expected credit losses. Trade receivables overdue more than 180 days are generally considered to be credit-impaired and allowances are made for the full amount, adjusted for expected recovery rates.

EUR million	2020	2019
Trade receivables	7,115	736
Other	1,790	263
BS **Total**	**8,906**	**999**

Other category includes other operating assets, accrued income and prepaid expenses.

Trade and other receivables included EUR 7,236 million from the acquisition of Uniper at 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Trade receivables

Ageing analysis of trade receivables

	2020			2019		
EUR million	Gross	Expected credit loss allowance	Expected credit loss rate, %	Gross	Expected credit loss allowance	Expected credit loss rate, %
Not past due	6,988	6	0	653	3	0
Past due 1-30 days	60	3	4	58	2	3
Past due 31-90 days	21	7	31	18	5	28
Past due 91-180 days	18	4	20	11	5	45
Past due more than 181 days	206	159	77	95	84	88
Total	**7,293**	**178**	**2**	**836**	**99**	**12**

Changes in expected credit loss allowance

EUR million	2020	2019
1 January	**99**	**85**
Expected credit loss allowance recognised during the year	17	7
Write-offs	-51	-2
Acquisition of subsidiary companies	127	-
Translation differences and other changes	-14	9
31 December	**178**	**99**

The majority of impaired trade receivables relate to the Russia and Uniper segments.

Trade receivables by currency (Gross)

EUR million	2020	2019
EUR	5,867	219
GBP	433	-
USD	377	-
RUB	274	204
SEK	126	118
PLN	102	95
NOK	86	175
Other	28	25
Total	**7,293**	**836**

Trade receivables are arising from a large number of customers mainly in EUR, GBP, USD and RUB mitigating the concentration of risk.

For further information regarding credit risk management and credit risks, see ▸ Counterparty and credit risks in the Operating and financial review and ▸ Note 4.4 Credit risk.

23 Liquid funds

ACCOUNTING POLICIES

Cash and cash equivalents in Liquid funds include cash in hand, deposits held at call with banks and other short-term, highly liquid investments with original maturities of three months or less. Cash and cash equivalents, deposits and commercial papers are measured at amortised cost. Fixed-term securities are measured at fair value through profit and loss.

Drawn amount of bank overdrafts are shown within borrowings in current liabilities on the balance sheet. Trading-related cash collaterals are included in margin receivables and otherwise restricted cash is treated as short-term interest-bearing receivables.

EUR million	2020	2019
Cash at bank and in hand	834	118
Deposits and securities with maturity under 3 months	1,063	1,239
Cash and cash equivalents	**1,898**	**1,356**
Deposits and commercial papers with maturity more than 3 months	363	76
Securities, fixed-term with maturity more than 3 months	46	-
Deposits and securities, maturity over 3 months but less than 12 months	**410**	**76**
BS **Total** [1]	**2,308**	**1,433**

1) Excluded cash balances of EUR 2 million relating to assets held for sale at 31 December 2019. See ▸ Note 3 Acquisitions, disposals and assets held for sale.

At the end of the reporting period, the Group's liquid funds totalled EUR 2,308 million (2019: 1,433). Liquid funds include EUR 289 million held by Uniper. Russian subsidiaries held EUR 244 million (2019: 201) of liquid funds in the form of cash and bank deposits.

Liquid funds included EUR 1,328 million from the acquisition of Uniper at 31 March 2020. See ▸ Note 3 Acquisitions, disposals and assets held for sale.

Liquid funds totalling EUR 2,107 million (2019: 1,099) are placed with counterparties that have an investment grade credit rating.

At the end of the reporting period, Fortum had undrawn committed credit facilities amounting to EUR 5,000 million. The undrawn facilities include EUR 1,450 million revolving credit facility, maturing in November 2021 (with an option to extend the maturity by one year), EUR 1,750 million revolving credit facility maturing in June 2023, and Uniper's revolving credit facility of EUR 1,800 million, which matures in September 2025. In addition to the revolving credit facilities, Fortum has EUR 100 million of committed overdraft limits that are valid until further notice.

In January 2020 Fortum cancelled EUR 3,000 million, in June 2020 EUR 1,200 million and in August 350 million of facilities and the revolving credit facility maturing in November 2021. The facilities were for purchase of Uniper shares and liquidity purposes.

For further information regarding credit risk management and credit risks, see ▸ Note 4.4 Credit risk.

24 Share capital

	2020	2019
Number of registered shares 1 January and 31 December	888,294,465	888,294,465
Share capital, EUR million, 1 January and 31 December	3,046	3,046

Fortum Corporation has one class of shares. By the end of 2020, a total of 888,294,465 shares had been issued. Each share entitles the holder to one vote at the Annual General Meeting. All shares entitle holders to an equal dividend. At the end of 2020 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

Fortum Corporation's shares are listed on Nasdaq Helsinki. The trading code is FORTUM (FUM1V until 25 January 2017). Fortum Corporation's shares are in the Finnish book entry system maintained by Euroclear Finland Ltd.

Details on the President and CEO and other members of the Fortum Executive Management Team's shareholdings and interest in the equity incentive schemes is presented in Note 10 Employee benefits and Board remuneration.

24.1 Authorisations from the Annual General Meeting 2020

On 23 April 2020, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. The authorisation cancelled the authorisation resolved by the Annual General Meeting of 2019. The authorisation is effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. The authorisation had not been used by the end of 2020.

24.2 Convertible bond loans and bonds with warrants

Fortum Corporation has not issued any convertible bonds or bonds with attached warrants, which would entitle the bearer to subscribe for Fortum shares. The Board of Directors of Fortum Corporation has no unused authorisations from the General Meeting of shareholders to issue convertible bond loans or bonds with warrants or increase the company's share capital.

25 Non-controlling interests

Principal non-controlling interests

EUR million		2020	2019
Uniper	Germany	2,430	-
Fortum Oslo Varme AS Group	Norway	147	166
Other		48	87
BS **Total**		**2,624**	**252**

EUR million	Uniper 2020 1)
Sales	44,514
Profit for the period	4
Dividends paid to non-controlling interests	-139
Total cash flows	-1,032
Current assets	17,919
Current liabilities	17,781
Current net assets	**138**
Non-current assets	12,224
Non-current liabilities	10,729
Non-current net assets	**1,495**
Net assets	**1,633**
of which attributable to non-controlling interests	2,430
Ownership interests held by non-controlling interests (%)	23.9

1) Uniper's income statement and cash flow information are included from 1 April 2020.

26 Interest-bearing liabilities

Financial net debt and adjusted net debt

EUR million	2020	2019
+ Interest-bearing liabilities	**10,662**	**6,694**
- Liquid funds	**2,308**	**1,435**
- Non-current securities	98	-
- Collateral arrangement securities	432	281
- Securities in interest-bearing receivables	**530**	**281**
- Margin receivables	1,132	177
+ Margin liabilities	331	32
+ Net margin liabilities	**-801**	**-145**
Financial net debt	**7,023**	**4,833**
+ Pension obligations	1,520	125
+ Other asset retirement obligations	821	20
- Share of Finnish and Swedish Nuclear Waste Funds	3,445	813
+ Nuclear provisions	3,866	813
+ Nuclear provisions net of assets in Nuclear Waste Funds	421	-
+ Total provisions net of assets in Nuclear Waste Funds	**2,762**	**145**
Adjusted net debt	**9,784**	**4,978**

Net debt

EUR million	Net debt 2019	Classified as assets held for sale 1)	BS Total 2019
Interest-bearing liabilities	6,694	-6	6,688
Liquid funds	1,435	-2	1,433
Net debt	**5,260**	**-4**	**5,256**

1) See Note 3 Acquisitions, disposals and assets held for sale.

In 2020, Fortum updated the definition of net debt and started to use financial net debt and adjusted net debt when following indebtedness of the Group. The previously used net debt included interest-bearing loans, lease liabilities and liquid funds.

Margin receivables and liabilities (settlement of futures) are included in Financial net debt. Prior to change of definition, fluctuations in commodity prices have caused an asymmetric impact to net debt as the funds received or paid from future settlements have been recognised as a change in working capital.

Fortum has a collateral arrangement to release cash from the Nordic Power Exchange. This arrangement is presented with equal amounts as a short-term interest-bearing liability and an interest-bearing receivable. Previously only the liability of the arrangement was included in net debt, but now collateral arrangement securities in interest-bearing receivables are also included in financial net debt calculations.

Underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds, are included in adjusted net debt.

Interest-bearing liabilities

EUR million	2020	2019
Loans	9,607	6,580
Lease liabilities	1,055	108
Total	**10,662**	**6,688**

EUR million	2020	2019
Bonds	3,758	4,251
Loans from financial institutions	2,556	329
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,145	1,145
Lease liabilities	894	89
Other long-term interest-bearing liabilities	433	304
BS Total long-term interest-bearing liabilities	**8,785**	**6,118**
Current portion of long-term bonds	500	-
Current portion of loans from financial institutions	20	33
Current portion of other long-term interest-bearing liabilities	14	40
Commercial paper liabilities	260	10
Current portion of lease liabilities	161	19
Collateral arrangement liability	432	281
Other short-term interest-bearing liabilities	490	187
BS Total short-term interest-bearing liabilities	**1,877**	**570**
Total	**10,662**	**6,688**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Loans

EUR million	Effective interest rate, %	Carrying amount 2020	Repricing: Under 1 year	Repricing: 1-5 years	Repricing: Over 5 years	Fair value 2020	Carrying amount 2019	Fair value 2019
Bonds	2.5	4,258	602	2,023	1,633	4,521	4,251	4,478
Loans from financial institutions	0.9	2,576	2,570	6	-	2,638	362	378
Reborrowing from the Finnish State Nuclear Waste Management Fund	0.5	1,145	1,145	-	-	1,210	1,185	1,250
Other long-term loans	2.6	447	229	-	218	488	304	346
Total long-term loans [1]	**1.7**	**8,425**	**4,546**	**2,029**	**1,851**	**8,857**	**6,102**	**6,452**
Collateral arrangement liability	0.7	432	432	-	-	432	281	281
Commercial paper liabilities	0.2	260	260	-	-	260	10	10
Other short-term loans	0.4	490	490	-	-	490	187	187
Total short-term loans	**0.5**	**1,182**	**1,182**	**-**	**-**	**1,182**	**478**	**478**
Total [2]	**1.6**	**9,607**	**5,728**	**2,029**	**1,851**	**10,039**	**6,580**	**6,930**

1) Includes current portion of long-term loans of EUR 534 million (2019: 73).
2) The average interest rate on loans and derivatives was 1.5% (2019: 2.3%).

The interest-bearing liabilities increased in 2020 by EUR 3,974 million to EUR 10,662 million (2019: 6,688). The amount of short-term financing increased by EUR 704 million, and at the end of the year the amount of short-term financing was EUR 1,182 million (2019: 478).

Interest-bearing liabilities included interest-bearing loans of EUR 557 million and lease liabilities of EUR 1,018 million from the acquisition of Uniper at 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

Fortum used cash and credit facility to finance the first tranche of acquiring Uniper shares. On 24 March 2020 Fortum drew a loan of EUR 2,000 million under the credit facility.

On 22 April 2020, Fortum signed a ten-year EUR 70 million bilateral loan agreement, and on 6 May 2020 Fortum drew a bridge loan of EUR 300 million under the facilities for the purchase of Uniper shares. The bridge loan was prepaid on 8 June 2020. On 21 December 2020, Fortum drew a ten-year SEK 814 million (EUR 80 million) bilateral loan.

The average interest rate for the portfolio of EUR loans was 0.9% at the balance sheet date (2019: 0.9%). The average interest rate on total loans and derivatives was 1.5% at the balance sheet date (2019: 2.3%). Part of the external loans, EUR 634 million (2019: 787), have been swapped to RUB and the average interest cost for these loans, including cost for hedging the RUB, was 6.2% at the balance sheet date (2019: 7.8%).

For more information, see Note 4 Financial risk management Note 33 Leases and Note 35 Pledged assets and contingent liabilities.

Reconciliation of interest-bearing liabilities

EUR million	1 Jan 2020	Acquisition of subsidiary companies	Cash flow from financing activities [2]	Non-cash changes: Non-cash collateral arrangement	Non-cash changes: Valuation differences/ Change in consolidation	Non-cash changes: Lease liabilities [3]	31 Dec 2020
Bonds	4,251				7		4,258
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,185		-40				1,145
Financial and other interest-bearing liabilities	1,144	557	2,414	151	-61		4,204
Lease liabilities	108	1,018	-105		-5	38	1,055
Total	**6,688**	**1,575**	**2,269**	**151**	**-60**	**38**	**10,662**

EUR million	31 Dec 2018	Impact from change in accounting policy (IFRS 16) [1]	1 Jan 2019	Cash flow from financing activities [2]	Non-cash changes: Non-cash collateral arrangement	Non-cash changes: Valuation differences/ Change in consolidation	Non-cash changes: Lease liabilities [3]	31 Dec 2019
Bonds	2,496		2,496	1,729		26		4,251
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,158		1,158	27				1,185
Financial and other interest-bearing liabilities	2,440		2,440	-1,585	281	8		1,144
Lease liabilities	-	99	99	-15			25	108
Total	**6,093**	**99**	**6,192**	**156**	**281**	**34**	**25**	**6,688**

1) See Note 1 Significant accounting policies and Note 33 Leases.
2) Repayments and borrowings.
3) Excluded lease liabilities of EUR 6 million relating to assets held for sale at 31 December 2019. See Note 3 Acquisitions, disposals and assets held for sale.

Bond issues

Issued/Maturity	Interest basis	Interest rate, %	Effective interest, %	Currency	Nominal value million	Carrying amount EUR million
Fortum Corporation EUR 8,000 million EMTN Programme [1]						
2011/2021	Fixed	4.000	4.123	EUR	500	502
2012/2022	Fixed	2.250	2.344	EUR	1,000	1,024
2019/2023	Fixed	0.875	0.996	EUR	1,000	999
2019/2026	Fixed	1.625	1.638	EUR	750	765
2019/2029	Fixed	2.125	2.247	EUR	750	770
2013/2023	Floating	Stibor 3M+1.13		SEK	1,000	100
2013/2043	Fixed	3.500	3.719	EUR	100	97
Total outstanding carrying amount 31 December 2020						**4,258**

1) EMTN = Euro Medium Term Note

27 Income taxes on the balance sheet

ACCOUNTING POLICIES

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated income statement, because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is provided in full, using the balance sheet approach on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, if the deferred tax arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss, it is not accounted for. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the closing date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred tax assets are set off against deferred tax liabilities if they relate to income taxes levied by the same taxation authority.

Deferred tax is provided on temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group, and it is probable that the temporary difference will not be reversed in the foreseeable future.

The Group recognises liabilities for anticipated tax dispute issues based on estimates of whether additional taxes will be due. No provision will be recognised in the financial statements if Fortum considers the claims unjustifiable. Therefore, if taxes regarding ongoing tax disputes have to be paid before final court decisions, they will be booked as a receivable. Where the final outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS AND ESTIMATES REGARDING FUTURE TAX CONSEQUENCES

Fortum has deferred tax assets and liabilities which are expected to be realised through the income statement over the extended periods of time in the future. In calculating the deferred tax items, Fortum is required to make certain assumptions and estimates regarding the future tax consequences attributable to differences between the carrying amounts of assets and liabilities as recorded in the financial statements and their tax basis.

Assumptions made include the expectation that future operating performance for subsidiaries will be consistent with historical levels of operating results, recoverability periods for tax loss carry-forwards will not change, and that existing tax laws and rates will remain unchanged into foreseeable future. Fortum believes that it has prudent assumptions in developing its deferred tax balances.

Assumptions and estimates regarding uncertain tax positions are supported by external legal counsel or expert opinion.

If the actual final outcome (regarding tax disputes) would differ negatively from management's estimates with 10%, the Group would need to increase the income tax liability by EUR 11 million at 31 December 2020. For additional information regarding tax disputes, see Note 36 Legal actions and official proceedings.

27.1 Deferred income taxes on the balance sheet

	2020			2019		
EUR million	**1 Jan**	**Change**	**31 Dec**	**1 Jan**	**Change**	**31 Dec**
BS Deferred tax assets	77	1,013	1,089	70	7	77
BS Deferred tax liabilities	-865	-87	-952	-720	-144	-865
Net deferred taxes	**-788**	**926**	**138**	**-651**	**-137**	**-788**

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Movement in deferred tax assets and liabilities 2020

EUR million	Intangible assets	Property, plant and equipment and right-of-use assets	Pension obligations	Provisions	Derivative financial instruments	Tax losses and tax credits carry-forward	Other	Net deferred taxes
1 January 2020	**-104**	**-823**	**25**	**-17**	**33**	**63**	**36**	**-788**
Charged to income statement	-10	-123	-8	-141	197	25	-84	-144
Charged to other comprehensive income	-	-3	135	-	27	-	-1	158
Exchange rate differences, reclassifications and other changes	6	122	238	177	3	12	-281	277
Acquisitions and disposals [1]	-133	-447	159	1,254	-323	73	28	611
Transfer to assets held for sale [1]	-	46	-7	-	-	-5	-10	24
31 December 2020	**-241**	**-1,228**	**542**	**1,273**	**-63**	**168**	**-312**	**138**

1) Acquisition and disposals included EUR 579 million from the acquisition of Uniper at 31 March 2020. See Note 3 Acquisition, disposals and assets held for sale.

Movement in deferred tax assets and liabilities 2019

EUR million	Intangible assets	Property, plant and equipment and right-of-use assets	Pension obligations	Provisions	Derivative financial instruments	Tax losses and tax credits carry-forward	Other	Net deferred taxes
1 January 2019	**-106**	**-788**	**20**	**-15**	**169**	**70**	**-1**	**-651**
Charged to income statement	-5	-30	-	1	19	-5	35	15
Charged to other comprehensive income	7	1	5	-	-156	-	-2	-144
Exchange rate differences, reclassifications and other changes	1	-29	1	-3	-	-1	6	-25
Acquisitions and disposals	-1	-1	-	-	-	-	-	-2
Transfer to assets held for sale [1]	-	24	-	-	-	-2	-1	20
31 December 2019	**-104**	**-823**	**25**	**-17**	**33**	**63**	**36**	**-788**

1) See Note 3 Acquisition, disposals and assets held for sale.

Retained earnings when distributed as dividends are subject to withholding tax (e.g. Russia). Provision has been made for these taxes only to extent that it is expected that these earnings will be remitted in the foreseeable future. At the end of the year 2020, deferred income tax liabilities of EUR 10 million (2019:13) have been recognised for the withholding tax and other taxes that would be payable on the distributions.

Fortum historically had a material deferred tax liability owing to its investments in non-current assets. These assets are depreciated more rapidly for tax than for accounting purposes resulting in lower current tax payments at the start of an asset's lifetime and higher tax payments at the end of its lifetime. This difference results in a deferred tax liability. This position has changed with the acquisition on Uniper who historically has a material deferred tax asset owing to its operations.

Deferred income tax assets recognised for tax loss carry-forwards

Deferred income tax assets are recognised for tax loss carry-forward to the extent that realisation of the related tax benefit through future profits is probable. The recognised tax assets relate to losses carry-forward with no expiration date and partly with expiry date as described below.

	2020		2019	
EUR million	**Tax losses**	**Deferred tax asset**	**Tax losses**	**Deferred tax asset**
Losses without expiration date [1)]	789	137	171	36
Losses with expiration date	166	31	170	29
Total	**955**	**168**	**340**	**65**

1) In 2020, includes tax losses of EUR 588 million and deferred tax asset of EUR 94 million from the acquisition of Uniper on 31 March 2020.

Unrecognised deferred tax

Deferred tax assets are not recognised on the balance sheet for loss carry-forwards of EUR 468 million (2019: 65) because the realisation is not probable. The deferred tax impact of these losses would be EUR 78 million (2019: 16). The major part of the unrecognised tax asset relates to loss carry-forwards that are unlikely to be used in the foreseeable future. The increase is mainly due to Uniper acquisition on 31 March 2020.

No deferred tax assets are recognised in respect of temporary differences of EUR 2,437 million (2019: 39). The increase is mainly due to Uniper becoming Fortum's subsidiary on 31 March 2020.

No deferred tax liabilities were recognised on temporary differences of EUR 374 million (2019: 344) for investments in subsidiaries, branches, and associates and joint arrangements to the extent that Fortum can control the reversal effect, and it is probable that temporary differences will not be reversed in the foreseeable future.

27.2 Income tax receivables

EUR million	**2020**	**2019**
Belgium	113	114
Other	43	19
BS Total	**156**	**133**

Income tax receivables reflect payments of corporate income tax in relation to the year 2020, as well as payments according to received tax audit assessments in relation to previous years.

In Belgium, Fortum has received income tax assessments for the years 2008–2012. Additional taxes of EUR 114 million have been paid during prior years, and based on a supporting legal opinion, booked as an income tax receivable.

See ›Note 36 Legal actions and official proceedings.

28 Nuclear related assets and liabilities

ACCOUNTING POLICIES

Fortum owns Loviisa nuclear power plant in Finland, and through the acquisition of Uniper, OKG Aktiebolag (OKG) and Barsebäck Kraft AB (Barsebäck) nuclear power companies in Sweden. Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB. In Fortum's consolidated balance sheet, Shares in Nuclear Waste Funds and the Nuclear provisions relate to Loviisa, OKG and Barsebäck nuclear power plants. Fortum's nuclear related provisions and the related part of the Nuclear Waste Funds are both presented separately on the balance sheet.

Fortum's shares in the Nuclear Waste Funds are accounted for according to IFRIC 5, Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds which states that the fund assets are measured at the lower of fair value or the value of the related liabilities since Fortum does not have control or joint control over the Nuclear Waste Funds. The Nuclear Waste Funds are managed by governmental authorities. The related provisions are the provision for decommissioning and the provision for disposal of spent fuel.

The fair values of the provisions are calculated according to IAS 37 by discounting the separate future cash flows, which are based on estimated future costs and actions already taken. The initial net present value of the provision for decommissioning (at the time of commissioning the nuclear power plant) has been included in the investment cost and is depreciated over the estimated operating time of the nuclear power plant. Changes in the technical plans etc., which have an impact on the future cash flow of the estimated costs for decommissioning, are accounted for by discounting the additional costs to the current point in time. The increased asset retirement cost due to the increased provision for decommissioning is added to property, plant and equipment and depreciated over the remaining estimated operating time of the nuclear power plant. For power plant units taken from use the increase is recognised immediately in the income statement.

The provision for spent fuel covers the future disposal costs for fuel used until the end of the accounting period. Costs for disposal of spent fuel are expensed during the operating time based on fuel usage. The impact of the possible changes in the estimated future cash flow for related costs is recognised immediately in the income statement based on the accumulated amount of fuel used until the end of the accounting period. The related interest costs due to unwinding of the provision is recognised in other financial expenses, net.

The interest income and possible fair valuation effects on the Nuclear Waste Funds assets are presented in other financial expenses, net.

Fortum's actual share of the Nuclear Waste Funds can be higher than the carrying value of the Fund in the balance sheet. The legal nuclear liability should be fully covered by payments and guarantees to the Nuclear Waste Fund in Finland. The same applies in Sweden for the nuclear power plants that are taken out of operation. For Swedish nuclear power plants in operation the nuclear liability should be fully covered at the end of the plants operating lifetimes. The difference between the legal liability and provisions can be material per power plant, as the legal liability in Finland is not discounted while the provisions are and in Sweden the legal liability is based on different assumptions than the provisions.

The annual fees to the Fund are based on changes in the legal liability, the return generated in the Nuclear Waste Fund and incurred costs of taken actions.

Fortum also has minority interests in nuclear power companies, including Teollisuuden Voima Oyj (TVO) in Finland and Forsmarks Kraftgrupp AB (Forsmark) in Sweden. The minority shareholdings are classified as associated companies and joint ventures and are consolidated with equity method. Both the Finnish and the Swedish companies are non-profit making, i.e. electricity production is invoiced to the owners at cost according to local GAAP. Accounting policies of the associates regarding nuclear assets and liabilities have been changed where necessary to ensure consistency with the policies adopted by the Group.

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CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS MADE WHEN ESTIMATING PROVISIONS RELATED TO NUCLEAR PRODUCTION

The provision for future obligations for nuclear waste management including decommissioning of Fortum's nuclear power plants and related spent fuel is based on long-term cash flow forecasts of estimated future costs. The main assumptions are technical plans, timing, cost estimates and discount rate. The technical plans, timing and cost estimates are approved by governmental authorities.

Any changes in the assumed discount rate would affect the provision. If the discount rate used would be lowered, the provision would increase. For the power plants where the actual Share of the Nuclear Waste Fund is higher than the provision an increase in provisions would be offset by an increase in the recorded share of Fortum's part of the Nuclear Waste Funds on the balance sheet. The total effect on the income statement would be positive since the decommissioning part of the provision is treated as an asset retirement obligation. This situation will prevail as long as the actual Share of the Nuclear Waste Fund is higher than recognised in the balance sheet and IFRS is limiting the carrying value of the assets to the amount of the provision since Fortum does not have control or joint control over the fund.

Based on Finnish and Swedish laws, Fortum has legal obligations to fully fund the legal liabilities decided by the governmental authorities, for decommissioning of the power plants and disposal of spent fuel through the Nuclear Waste Funds.

Both in Finland and in Sweden nuclear operators are legally obligated for the decommissioning of the plants and the disposal of spent fuel (nuclear waste management). In both countries the nuclear operators are obligated to secure the funding of nuclear waste management by paying to government operated nuclear waste funds. The nuclear operators also have to give securities to guarantee that sufficient funds exist to cover future expenses of decommissioning of the power plant and the disposal of spent fuel.

Fortum has aligned accounting policies and assumptions used for nuclear related assets and liabilities as of 31 December 2020. The alignment resulted in an increase in nuclear provisions. The increase in the nuclear provisions for Loviisa and Barsebäck nuclear power plants leads to recognition of an additional share of the Nuclear funds. As of 31 December 2020, Fortum still has EUR 441 million in unrecognised nuclear waste fund assets for Loviisa and Barsebäck. In the Income statement the alignment resulted in a positive net impact in other financial expenses of EUR 12 million.

The accounting policies and assumptions have also been aligned for the respective balances of the co-owned nuclear companies. The total impact of the alignment to share of profits from associated companies and joint ventures was EUR 47 million, net of tax.

28.1 Nuclear related assets and liabilities for consolidated nuclear power plants

EUR million	2020	2019
Carrying values on the balance sheet		
BS Nuclear provisions	3,866	813
BS Fortum's share of the Nuclear Waste Funds	3,445	813
Fortum's share of the fair value of the net assets in the Nuclear Waste Funds in Finland and Sweden	3,886	1,180
Share of fund not recognised on the balance sheet	441	316
Short-term receivable from the Nuclear Waste Fund	-	51

Nuclear provision and fund accounted according to IFRS

Nuclear provisions include the provision for decommissioning and the provision for disposal of spent fuel. The carrying value of the nuclear provisions, calculated according to IAS 37, increased by EUR 3,053 million compared to 31 December 2019, totalling EUR 3,866 million at 31 December 2020. The increase is mainly driven by the acquisition of Uniper and changes in assumptions.

Fortum's share of the Nuclear Waste Funds are from an IFRS perspective overfunded by EUR 441 million, since Fortum's share of the Funds on 31 December 2020 was EUR 3,886 million and the carrying value on the balance sheet was EUR 3,445 million. The Fund on Fortum's balance sheet can at maximum be equal to the amount of the provisions according to IFRS. As long as the Fund is overfunded from an IFRS perspective, the other financial expenses, net, is adjusted positively if the provisions increase more than the Fund, and negatively if the provision decreases below the actual value of the fund.

During 2020 Nuclear fund adjustment in the consolidated income statement was reclassified from Items affecting comparability to Other financial expenses, net. This change does not impact Comparable operating profit. Further, in the consolidate cash flow statement, nuclear fund-related payments and repayments have been reclassified from cash flow from operating activities to cash flow from investment activities. Comparatives have been reclassified accordingly.

Legal liability for Loviisa nuclear power plant

The legal liability on 31 December 2020, decided by the Ministry of Economic Affairs and Employment in November 2020, was EUR 1,208 million.

The legal liability is based on a cost estimate, which is updated every year; and a technical plan, which is updated every three years. The legal liability is determined by assuming that the decommissioning would start at the beginning of the year following the assessment year and discounting is not applied in determining the amount.

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Fortum's share in the Finnish Nuclear Waste Fund

According to Nuclear Energy Act, Fortum is obligated to contribute funds in full to the State Nuclear Waste Management Fund to cover the legal liability. Fortum contributes funds to the Finnish State Nuclear Waste Management Fund based on the yearly funding obligation target decided by the governmental authorities in connection with the decision of size of the legal liability. Based on the law, Fortum applied for a periodisation of the fund target, due to a change in the legal liability. The application was approved by the Ministry of Economic Affairs and Employment and the funding target for 2021 was confirmed at EUR 1,168 million in November 2020.

Nuclear provisions

EUR million	2020	2019
1 January	**813**	**899**
Increase in provisions	476	10
Acquisition of subsidiary companies	2,412	-
Provision used	-155	-29
Provision reversed	-	-100
Unwinding of discount	62	32
Exchange rate differences	258	-
BS **31 December**	**3,866**	**813**
Fortum's share in the Nuclear Waste Fund	3,445	813

Borrowing from the State Nuclear Waste Management Fund

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum uses the right to borrow back and has pledged shares in Kemijoki Oy as security for the loans. The loans are renewed yearly. See Note 26 Interest-bearing liabilities and Note 35 Pledged assets and contingent liabilities.

OKG and Barsebäck nuclear power plants in Sweden

In Sweden, Svensk Kärnbränslehantering AB (SKB), a company owned by the nuclear operators, takes care of all nuclear waste management related activities on behalf of nuclear operators. SKB receives its funding from the Swedish Nuclear Waste Fund, which in turn is financed by the nuclear operators.

Nuclear waste fees and guarantees are normally updated every three years by governmental decision after a proposal from the Swedish Radiation Safety Authority (SSM). From September 2018, the proposal is prepared by the National Debt Office. The proposal is based on cost estimates done by SKB and the license holders. An updated technical plan for nuclear waste management was decided by SKB in September 2019 and was handed in to SSM in the end of III/2019. In December 2017 the Swedish government decided the waste fees and guarantees for years 2018-2020. Nuclear waste fees paid by licensees with a unit/units that are still in operation are currently based on future costs with the assumed lifetime of 50 years for each unit of a nuclear power plant. The fee is calculated in relation to the energy delivered and set as an amount of öre (1 öre = SEK 0,01) per kWh delivered. For Barsebäck, which have no units in operation, the fee is determined as a fixed fee in SEK per year.

28.2 Nuclear power plants in associated companies and joint ventures

Forsmark and TVO are non-profit making companies, i.e. electricity production is invoiced to the owners at cost. Invoiced cost is accounted for according to local GAAP. In addition to the invoiced electricity production cost, Fortum makes IFRS adjustments to comply with Fortum's accounting principles. These adjustments include also Fortum's share of the companies' nuclear waste funds and nuclear provisions.

The tables below present the 100% figures relating to nuclear funds and provisions for the companies as well as Fortum's net share.

Nuclear related assets and liabilities relating to associated companies (100%)

EUR million	2020	2019
Carrying values with Fortum assumptions [1]		
Nuclear provisions	3,674	4,973
Share of the Nuclear Waste Funds	3,406	4,403
of which Fortum's net share consolidated with equity method	**-59**	**-202**
Fortum's share of the fair value of the net assets in the Nuclear Waste Funds	880	1,426
Receivables from the waste fund that are overfunded (underfunded) from an IFRS perspective	14	-78
TVO's share of the fund not recognised in the balance sheet	73	124

1) Accounted for according to Fortum's accounting principles.

TVO's legal liability, provision and share of the fund are based on the same principles as described above for Loviisa nuclear power plant.

TVO's share of the Finnish State Nuclear Waste Management Fund is from an IFRS perspective overfunded with EUR 274 million (of which Fortum's share EUR 73 million).

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the fund according to certain rules. Fortum is using the right to reborrow funds through TVO based on its ownership. See more information in Note 26 Interest-bearing liabilities.

Forsmark's provision and share of the fund are based on same principles as described above for OKG and Barsebäck nuclear power plants.

Status of TVO's Olkiluoto 3 project

In Finland, Fortum is participating in the country's fifth nuclear power plant unit, Olkiluoto 3 (OL3), through the shareholding in Teollisuuden Voima Oyj (TVO) with an approximately 25% share representing some 400 MW in capacity. Olkiluoto 3 EPR (OL3 EPR), currently under construction, was procured as a fixed-price turnkey project from a consortium (Plant Supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the plant contract, the consortium companies have joint and several liability for the contractual obligations.

In March 2018, TVO signed a comprehensive Global Settlement Agreement (GSA) with the OL3 EPR plant supplier consortium companies Areva NP, Areva GmbH, and Siemens AG, as well as with the Areva Group parent company Areva SA, which is wholly owned by the French State. The agreement entered into force at the end of March 2018. In the GSA, the plant supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 EPR project are sufficient and cover all applicable guarantee periods.

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Consequently, a trust mechanism was set up funded by Areva companies to secure the funds required to cover Areva's costs for the completion of the OL3 EPR project. During the period under review the trust has been replenished in accordance with the terms of the agreement. During the accounting period, TVO has recognised receivables from the Plant Supplier amounted to the accumulated compensation until the end of the accounting period in accordance with the GSA. The EUR 240 million compensation decreases the historical costs of property, plant, and equipment on the balance sheet.

The Finnish Government granted an operating license for the plant unit in March 2019. TVO submitted on 8 April 2020 a permission application to STUK for nuclear fuel loading of the OL3 EPR nuclear power plant unit.

TVO issued on 28 August 2020 a stock exchange release stating that TVO has received an updated re-baseline schedule on the commissioning of the OL3 EPR plant unit from the supplier Areva–Siemens consortium. According to the schedule, fuel will be loaded into the reactor in March 2021, the unit will be connected to the grid in October of the same year, and regular electricity production starts in February 2022. The new Areva management, appointed in the summer of 2020, is preparing a financial solution to finalise the project until the end of the guarantee period. TVO continues negotiations with the Areva–Siemens consortium on the terms for project completion.

Nuclear related guarantees

In addition to nuclear waste fees nuclear power companies provide guarantees for any uncovered liability and unexpected events.

For more information regarding Fortum's guarantees given on behalf of nuclear companies, see Note 35 Pledged assets and contingent liabilities.

29 Other provisions

ACCOUNTING POLICIES

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events to a third party, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation at the reporting date using a discount rate that reflects current market assessment of the time value of money. When risk is not covered in the estimated cash flows, the discount rate also includes the risks specific to the obligation.

Increase in the provision due to the passage of time, and changes in provisions due to changes discount rates are recognised as interest expense in the consolidated income statement. Changes in provisions, except for changes in asset retirement obligations, are recognised in the consolidated income statement.

ASSET RETIREMENT OBLIGATIONS

Asset retirement obligations for the decommissioning or dismantling of property, plant and equipment are recognised either when there is a contractual obligation towards a third party, or a legal obligation. The obligation is generally based on detailed cost estimates validated by external experts.

The asset retirement obligation is recognised as part of the cost of an item of property, plant and equipment when the asset is put in service. Costs are depreciated over the remainder of the asset's useful life. Changes in asset retirement obligations are recognised in property, plant and equipment on the consolidated balance sheet; unless the item of property, plant and equipment has already been fully depreciated when changes are recognised in the consolidated income statement.

ONEROUS CONTRACT PROVISIONS

An onerous contract provision is recognised for a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. Unavoidable costs is the lower of the excess obligation from the performance under the contract, and any potential penalties or compensation arising in the event of non-performance.

ENVIRONMENTAL PROVISIONS

Environmental provisions are recognised based on the current interpretation of environmental laws and regulations when it is probable that a present obligation has arisen, and the amount of such liability can be reliably estimated. The obligation is generally based on detailed cost estimates validated by external experts.

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CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS MADE WHEN ESTIMATING PROVISIONS

Provisions for present obligations require management judgment in determining whether it is probable that an outflow of economic benefits will be required to settle the obligation. Estimation is required in determining the value of the obligation as the amount recognised as a provision is based on the best estimate of unavoidable costs required to settle the obligation at the end of the reporting period. When estimating unavoidable costs, management may be required to consider a range of possible outcomes and their associated probabilities, risks and uncertainties surrounding the events and circumstances as well as making assumptions of the timing of payment. Estimation is also required in determining the rate used to discount provisions to present value. Changes in estimates of timing or amounts of costs required to settle the obligation may become necessary as time passes and/or more accurate information becomes available.

EUR million	Supplier- and customer-related	Asset retirement	Power production-related	Gas distribution-related	Environmental remediation and similar	Personnel-related	Other	Total
1 January 2020	**-**	**20**	**-**	**-**	**49**	**-**	**32**	**101**
Acquisition of subsidiary companies	861	757	630	402	207	298	780	3,935
Increase in provisions	300	44	14	14	23	22	176	593
Provisions used	-178	-	-	-3	-10	-6	-57	-254
Unused provisions reversed	-34	-	-	-37	-8	-66	-33	-178
Exchange rate differences and other changes	-1	-3	-1	2	-	-1	13	10
Unwinding of discounting	-	3	-	-	-	-	22	25
31 December 2020	**948**	**821**	**643**	**378**	**261**	**247**	**933**	**4,232**
BS Of which current provisions	322	26	-	81	13	70	268	**780**
BS Of which non-current provisions	626	795	643	297	248	177	665	**3,452**

Provisions for asset retirement obligations consist of obligations for conventional and renewable energy power plants, including the conventional plant components in the nuclear power segment, that are based on legally binding civil agreements and public regulations; as well as provisions for environmental improvements at gas storage facilities. The majority of the provision is estimated to be used within 46 years.

Provisions for supplier- and customer-related obligations include EUR 0.5 billion (2019: 0) of onerous contract provisions for long-term infrastructure purchase contracts used in the gas storage business. See Note 34 Capital and other commitments.

Power production-related provisions consist mainly of provisions from the hydroelectric power business. The majority of the provision is estimated to be used within 62 years.

Gas distribution-related provisions consist mainly of onerous contract provisions for gas transportation and regasification. The majority of the provision is estimated to be used within 6 years.

Environmental provisions mainly include provisions for redevelopment and water protection measures, the rehabilitation of contaminated sites, and other environmental improvement measures. The majority of the provision is estimated to be used within 23 years.

Personnel-related provisions mainly include provisions for performance-based compensation components, long-service bonus obligations, in-kind obligations, restructuring and other deferred personnel costs. The majority of the provision is estimated to be used within 42 years.

Other includes EUR 0.3 billion (2019: 0) provisions for risk-related contingencies, as well as a number of individually immaterial items.

Other provisions included EUR 3,935 million from the acquisition of Uniper on 31 March 2020. See Note 3 Acquisitions, disposals and assets held for sale.

For provisions for decommissioning, and provision for disposal of spent fuel for nuclear production, see Note 28 Nuclear related assets and liabilities.

30 Pension obligations

ACCOUNTING POLICIES

The Group companies have various pension schemes in accordance with the local conditions and practices in the countries in which they operate. The schemes are generally funded through various pension vehicles including payments to insurance companies, Group's pension funds and other separate arrangements. The Group has both defined benefit and defined contribution plans.

For defined benefit plans, pension costs are assessed using the projected unit credit method. The cost of providing pensions is charged to the income statement as to spread the service cost over the service lives of employees. Current and past service cost, as well as gains or losses from settlements are reported under personnel costs. The net interest is reported in financial items.

The defined benefit obligation is calculated annually on the balance sheet date and is measured as the present value of the estimated future cash flows using interest rates of high-quality corporate bonds, or similar, that have terms to maturity approximating to the terms of the related pension liability. The plan assets for pensions are valued at market value. The net liability recognised on the balance sheet is the defined benefit obligation at the closing date less the fair value of plan assets.

Any net asset position that might arise from offsetting the present value of the defined benefit obligations against the corresponding fair value of plan assets is recognised taking into account the applicable asset restrictions. Such an asset position is reported in Other non-current assets on the balance sheet.

In the case of a plan amendment, curtailment or settlement (each a "plan event") occurring in a defined benefit plan during an annual reporting period, the current service cost and the net interest on the net liability or asset are remeasured for the remainder of the reporting period after the plan event. The actuarial assumptions applicable as of the date of the plan event is be used as the basis for such remeasurement. When the benefits of a plan are changed, or when a plan is curtailed, the resulting change in the present value of the defined benefit obligation that relates to past service, or the gain or loss related to a curtailment is recognised immediately in profit or loss. Gains or losses on settlements of defined benefit plans are recognised when the settlement occurs.

Remeasurements of the net defined benefit liability or asset include actuarial gains and losses that may arise especially from differences between estimated and actual variations in underlying assumptions about demographic and financial variables; and, additionally, from developments in these assumptions as of each reporting date. Additionally included is the difference between the actual return on plan assets and the interest income on plan assets contained in the net interest result, as well as any change in the effect of the asset ceiling, excluding amounts already included in net interest. Remeasurement results and related deferred taxes are recognised in full in the period in which they occur and are reported in the statement of comprehensive income.

The Group's contributions to defined contribution plans are charged to the income statement in the period to which the contributions relate.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS USED TO DETERMINE FUTURE PENSION OBLIGATIONS

The present value of the pension obligations is based on actuarial calculations that use several assumptions. Any changes in these assumptions will impact the carrying amount of pension obligations.

Fortum's pension arrangements

Finland

The statutory pension benefits (as determined in Employee's Pension Act /TyEL) in Finland provide the employees pension coverage for old age, disability and death of a family provider. The benefits are insured with an insurance company, and determined to be defined contribution plans.

In addition the Group has historical old-age and survivor pension benefits with the Fortum Pension Fund covering a limited number of people. The Fortum Pension Fund is a closed fund managed by a Board, consisting of both employers' and employees' representatives. The promised benefit is defined in the rules of the Fund, mostly at a maximum of 66% of the salary basis. The salary basis is an average of the ten last years' salaries, which are indexed by a common salary index to the accounting year. After retirement the benefits payable are indexed yearly with the TyEL-index.

The Fund is operating under the regulation from the Financial Supervisory Authority (FSA). The liability has to be fully covered according to the regulations. The national benefit obligation related to the defined benefit plans is calculated so that the promised benefit is fully funded until retirement.

Germany

The majority of active and former employees are covered by occupational benefit plans in addition to the state retirement benefits. The benefits offered under these plans primarily include retirement, disability and survivor benefits.

The majority of the reported pension obligation for the active employees arises from the ”BAS Plan” and from the ”Zukunftssicherung” plan, that have been closed to the new hires since 2008. The only plan open to new hires is a defined contribution-oriented benefit plan, which is based on “units of capital”.

The benefit expense for all these plans is dependent on compensation, and is determined at different percentage rates based on the ratio between compensation and the contribution limit in the statutory retirement pension system. The plans contain different interest rate assumptions. Up to, and including 31 December 2018, fixed interest rate assumptions had applied for both the “BAS-Plan” and the “Zukunftssicherung” plan. From 1 January 2019, the pension units established have earned interest at a rate that is linked to market rates and hedged by applying guaranteed minimum interest rates and a maximum of 6.0% per year. Pension units granted through 31 December 2018 remain unchanged by this adjusted interest calculation. The units of capital established under the open defined contribution-oriented benefit plan earn interest at the average yield of long-term government bonds of the Federal Republic of Germany observed in the fiscal year.

Future pension increases at a rate of 1% per year are guaranteed for certain individuals including a large number of active employees. For the remaining eligible individuals, pensions are adjusted mostly in line with the rate of inflation, usually in a three-year cycle.

Pension plans are funded through designated pension vehicles that are legally distinct from the company. In addition, plan assets are funded in form of “Pensionskassen” and a Group-wide pension fund as well as in the form of a Contractual Trust Arrangement (CTA).

United Kingdom

The Group operates three pension plans in the United Kingdom, one defined contribution plan and two defined benefit plans. The defined benefit plans were closed for new hires from 2005 and 2008, respectively. Since the closure of these plans, new hires have been joining the open defined contribution plan.

Benefit payments under the existing defined benefit pension plans are adjusted for inflation as measured by the United Kingdom Retail Price Index (“RPI”) through specified increases (limited to a fixed maximum amount).

Plan assets are administered by a trust which is independent from the group.

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The Pension Regulator in the United Kingdom requires a valuation of the funding of pension plans in the United Kingdom to be performed at least once every three years. The last valuation on 31 March 2019 showed a technical funding deficit of GBP 26 million (EUR 30 million) for which a deficit repair plan has been agreed.

Main risks relating to defined benefit plans

Typical risk factors for defined benefit plans are changes in discount rates, risks related to other actuarial assumptions, as well as investment and volatility risks.

Change in discount rate

The discount rate used to calculate the defined benefit obligation (according to IFRS) depends on the value of corporate bond yields as at the reporting date. A decrease in yields increases the benefit obligation that is often only partially offset by an increase in the value of fixed income holdings.

Risk related to other actuarial assumptions

Assumptions for future inflation, salary levels and mortality are used for actuarial calculations. Should the actual outcome differ from these assumptions, the liability may increase.

Investment and volatility risk

Pension plan assets are allocated to different asset classes based on the statutory legislation or investment strategy of the corresponding pension plan. Depending on the pension plan, underlying investment management plans are updated on a regular basis. If the return of the fund's assets is not enough to cover the raise in liability and benefit payments over the financial year, then, in certain legislations, the employer has to fund the deficit with contributions, unless the fund has sufficient covering.

Movement in the net defined benefit liability

	Defined benefit obligation		Fair value of plan assets		Net defined benefit asset(-)/liability(+)	
EUR million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
1 January	**529**	**483**	**-406**	**-386**	**123**	**97**
Included in consolidated income statement						
Current service cost	52	6	-	-	53	6
Past service cost	11	-1	-	-	11	-1
Net interest [1]	50	10	-36	-7	14	2
	112	14	-35	-6	77	7
Included in OCI						
Remeasurement gains(-)/losses(+)	820	50	-366	-26	454	25
Actuarial gains/losses arising from changes in financial assumptions	835	52	-	-	835	52
Actuarial gains/losses arising from experience adjustments	-16	-2	-	-	-16	-2
Return on plan assets (excluding amounts included in net interest expense)	-	-	-366	-26	-366	-26
Exchange rate differences	-9	-2	8	1	-1	-
	811	49	-358	-24	453	24
Other						
Contributions paid by the employer	-	-	-59	-2	-59	-2
Benefits paid	-66	-17	61	13	-5	-4
Acquisitions of subsidiary companies	3,288	-	-2,343	-	944	-
Transfer to assets held for sale	-38	-	22	-	-15	-
31 December	**4,636**	**529**	**-3,117**	**-406**	**1,518**	**123**
Present value of funded defined obligation					4,600	524
Fair value of plan assets					-3,117	-406
Funded status					**1,483**	**119**
Present value of unfunded obligation [2]					35	5
Net liability arising from defined benefit obligation					**1,518**	**123**
Pension assets included in other non-current assets on the balance sheet					2	2
BS Pension obligations on the balance sheet					1,520	125

1) Net interest is presented in financial items in the income statement, the rest of costs related to defined benefit plans are included in staff costs (row defined benefits plans in the staff cost specification in Note 10 Employee benefits and Board remuneration).
2) The unfunded obligation mainly relates to Germany.

Pension obligations included EUR 953 million from the acquisition of Uniper at 31 March 2020, mainly relating to pension obligations in Germany.

Contributions expected to be paid during 2021 total EUR 59 million.

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Fair value of plan assets

	2020			2019		
EUR million	**Quoted**	**Unquoted**	**Total**	**Quoted**	**Unquoted**	**Total**
Equity instruments	972	177	1,149	145	8	152
Debt instruments	947	174	1,120	69	105	174
Cash and cash equivalents	-	156	156	-	47	47
Real estate	-	228	228	-	14	14
Investment funds	105	-	105	2	-	2
Other assets	-	359	359	-	16	16
Total	**2,023**	**1,094**	**3,117**	**216**	**190**	**406**

A specification of plan assets has not been available for pension plans financed through an insurance company. In these cases, the fair value of plan assets has been included in other assets.

Plan assets in the United Kingdom are invested in investment funds ("pooled funds") that are not listed in an active market.

Derivatives used to hedge the risks have been allocated to the respective asset classes.

The actual return on plan assets totalled EUR 405 million (2019: 32).

Amounts recognised on the balance sheet by country 2020

EUR million	**Finland**	**Germany**	**United Kingdom**	**Other countries**	**Total**
Present value of funded obligations	294	3,396	655	256	4,600
Fair value of plan assets	-242	-2,074	-642	-159	-3,117
Deficit(+)/surplus(-)	**51**	**1,322**	**12**	**98**	**1,483**
Present value of unfunded obligations	-	28	-	7	35
Net asset(-)/liability(+) on the balance sheet	**51**	**1,350**	**12**	**105**	**1,518**
Pension asset included in non-current assets	-	-	-	2	2
BS Pension obligations on the balance sheet	51	1,350	12	106	1,520

Amounts recognised on the balance sheet by country 2019

EUR million	**Finland**	**Germany**	**United Kingdom**	**Other countries**	**Total**
Present value of funded obligations	283	-	-	241	524
Fair value of plan assets	-244	-	-	-162	-406
Deficit(+)/surplus(-)	**39**	**-**	**-**	**80**	**119**
Present value of unfunded obligations	-	-	-	5	5
Net asset(-)/liability(+) on the balance sheet	**39**	**-**	**-**	**84**	**123**
Pension asset included in non-current assets	-	-	-	2	2
BS Pension obligations on the balance sheet	39	-	-	85	125

The principal actuarial assumptions used

	2020			2019		
%	**Finland**	**Germany**	**United Kingdom**	**Finland**	**Germany**	**United Kingdom**
Discount rate	0.30	0.80	1.50	0.80	-	-
Future salary increases	1.50	2.30	2.60	1.60	-	-
Future pension increases	1.60	1.80	2.70	1.60	-	-
Rate of inflation	1.30	1.80	2.80	1.30	-	-

The discount rate in Finland is based on high quality European corporate bonds with maturity that best reflects the estimated term of the defined benefit pension plans. The discount rate in Germany is based on the returns on high-quality EURO corporate bonds available at the end of the respective fiscal year, and take into account the average duration of the respective underlying benefit obligations. The United Kingdom discount rate is based on currency-specific returns on high-quality corporate bonds available at the end of the respective fiscal year and takes into account the average duration of the respective underlying obligations.

The discount, inflation, salary growth and pension growth rates, as well as mortality are the key assumptions when calculating defined benefit obligations. Changes in the key actuarial assumptions would lead to the following changes in the present value of the defined benefit obligations:

Sensitivity of defined benefit obligation to changes in assumptions

Change in the assumption	**Impact to the pension obligation increase(+)/decrease(-)**
0.5% increase in discount rate	-9.6%
0.5% decrease in discount rate	11.2%
0.5% increase in benefit	3.2%
0.5% decrease in benefit	-2.8%
0.5% increase in salary growth rate	1.0%
0.5% decrease in salary growth rate	-0.9%
10% increase in mortality	-3.0%
10% decrease in mortality	3.3%

A 10% decrease in mortality would result in higher life expectancy of beneficiaries, depending of the age of each individual beneficiary. At the end of 2020, the life expectancy of a 63-year-old male retiree would increase by approximately one year, if mortality were to decrease by 10%.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

The sensitivities indicated are computed based on the same methods and assumptions used to determine the present value of the defined benefit obligations. If one of the actuarial assumptions is changed for the purpose of computing the sensitivity of results to changes in that assumption, all other actuarial assumptions are included in the computation unchanged. Potential correlation effects between the individual actuarial assumptions are not taken into account when computing sensitivities. When considering sensitivities, it must be noted that the change in the present value of the defined benefit obligations resulting from changing multiple actuarial assumptions simultaneously is not necessarily equivalent to the cumulative effect of the individual sensitivities.

Maturity profile of the undiscounted defined benefit obligation on 31 December 2020

EUR million	Future benefit payments
Maturity under 1 year	92
Maturity between 1 and 5 years	405
Maturity between 5 and 10 years	621
Maturity between 10 and 20 years	1,490
Maturity between 20 and 30 years	1,397
Maturity over 30 years	1,571

The weighted average duration of defined benefit obligation at 31 December 2020 is 22 years.

31 Other non-current liabilities

EUR million	2020	2019
Contract liabilities	101	-
Connection fees	71	85
Other	172	82
BS Total	**344**	**167**

Connection fees include refundable fees paid by the customer when connected to district heating network in Finland. Connection fees were refundable until 2013. Other non-current liabilities included EUR 267 million from the acquisition of Uniper on 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

32 Trade and other payables

EUR million	2020	2019
Trade payables	7,126	316
Accrued expenses and deferred income		
Accrued personnel expenses	218	97
Accrued interest expenses	85	80
Contract liabilities	557	31
Other accrued expenses and deferred income	215	42
Other liabilities		
VAT liability	32	54
Current tax liability	307	64
Advances received	13	46
Other	972	168
BS Total	**9,525**	**898**

Contract liabilities comprise mainly of project and waste management services that are invoiced but not delivered at the reporting date. Other accrued expenses and deferred income includes the liability of EUR 27 million related to the periodisation of the Finnish nuclear waste management fund target. For additional information see **Note 28** Nuclear related assets and liabilities. Trade and other payables included EUR 7,852 million from the acquisition of Uniper on 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

The management considers that the amount of trade and other payables approximates fair value.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

33 Leases

ACCOUNTING POLICIES

LESSEE ACCOUNTING

The Group leases mainly gas storage facilities, office buildings and land areas. The Group recognises all leases, with the exception of short-term (i.e. lease term less than 12 months) and low value leases as right-of-use assets with a corresponding lease liability at the date at which the leased asset is available for use by the Group.

Right-of-use assets and lease liabilities are initially recognised on the consolidated balance sheet at future fixed lease payments over the lease term. Lease payments are discounted to present value. Right-of-use assets are depreciated on a straight-line basis over the lease term, or the useful life of the leased asset if shorter; and reviewed periodically for indication of impairment.

When the future lease payments are revised due to changes in index-linked considerations or the lease term changes, the right-of-use asset and the corresponding lease liability is remeasured. Any differences arising on reassessments are recognised in the consolidated income statement.

Interest expense on lease liabilities is presented within Interest expense in the consolidated income statement. In the consolidated cash flow statement, the principal portion of the lease payment is presented under Payments of long-term liabilities, and the interest portion as Interest paid under Funds from operations. Variable lease payments, as well as costs for leases not capitalised due to exemptions in the standard, are expensed to consolidated income statement.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ESTIMATES TO DETERMINE LEASE LIABILITY

Calculation of the lease liability requires certain assumption based input factors. The main estimates are related to the lease term, the discount rate, as well as the determination whether a contract contains a lease.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option. Extension options are only included in the lease term if the lease is reasonably certain to be extended. The lease term is reassessed if underlying circumstances are significantly changing.

Lease payments are discounted to present value using an incremental borrowing rate. The incremental borrowing rate is determined based on reasonable third party financing conditions considering the length of the lease term and the currency of cash flows.

A contract is or contains a lease if the Group has the right to control the use of an identified asset for a period of time in exchange for a consideration. A capacity portion of an asset is an identified asset if it is physically distinct, or if the Group has the right to use substantially all the capacity of the asset during the lease term.

LESSOR ACCOUNTING

Leases in which the Group acts as the lessor and substantially all the risks and rewards arising from the use of the leased asset are transferred to the lessee are classified as finance leases. Finance lease receivables mainly relate to certain electricity delivery contracts.

In this type of lease, the present value of the minimum lease payments is recorded as a receivable. Interest income from such arrangements is recognised over the lease term, using the effective interest method.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

33.1 Amounts recognised in consolidated financial statements

Lessee

EUR million	2020	2019
In consolidated Income Statement		
Depreciation	-123	-18
Of which land	-4	-2
Of which buildings and structures	-68	-12
Of which machinery and equipment	-52	-4
Interest expense on lease liabilities	-9	-3
Expense relating to short-term leases within Other expenses	-92	-1
Income from subleasing right-of-use assets	17	-
On consolidated balance sheet		
Additions to right-of-use assets	154	38
Of which land	1	8
Of which buildings and structures	97	27
Of which machinery and equipment	57	4
Acquisition of subsidiary companies	645	-
Of which land	42	-
Of which buildings and structures	512	-
Of which machinery and equipment	91	-
Carrying amount of right-of-use assets	726	114
Of which land	69	33
Of which buildings and structures	573	70
Of which machinery and equipment	84	11
Lease liabilities	1,055	108
In consolidated cash flow statement		
Cash outflow for leases	-257	-18

Right-of-use assets included EUR 645 million and lease liabilities EUR 1,018 million from the acquisition of Uniper on 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

Maturity of undiscounted lease liabilities

EUR million	2020
Due within one year	170
Due after one year and within five years	406
Due after five years	828
Total	**1,404**

Lessor

EUR million	2020	2019
In consolidated income statement		
Interest income from finance lease	12	-
Rental income from operating lease	24	19
On consolidated balance sheet		
Lease receivables	**196**	**1**
Current	16	-
Non-current	181	-
Maturity analysis of undiscounted lease payments - Finance leases		
Due within 1 year	28	1
Due in 1 to 2 years	28	1
Due in 2 to 3 years	28	-
Due in 3 to 4 years	27	-
Due in 4 to 5 years	27	-
Due in more than 5 years	175	-
Total undiscounted lease payments	**314**	**1**
Interest component	116	-

Finance lease receivables included EUR 206 million from the acquisition of Uniper on 31 March 2020. See **Note 3** Acquisitions, disposals and assets held for sale.

33.2 Lease commitments

Possible additional lease payments amounting to EUR 224 million were not included in the measurement of lease liabilities on 31 December 2020.

See **Note 4** Financial risk management, **Note 17** Property, plant and equipment and right-of-use assets, and **Note 26** Interest-bearing liabilities for more information.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

34 Capital and other commitments

Capital and other commitments are contractual or regulatory obligations that are not recognised as liabilities on the consolidated balance sheet, or disclosed as contingent liabilities.

34.1 Capital commitments

EUR billion	2020	2019
Property, plant and equipment and intangible assets	0.8	0.3

Increase in capital commitments is mainly from the acquisition of Uniper (EUR 0.7 billion on 31 March 2020). Capital commitments at 31 December 2020 include Uniper segment's commitments of EUR 0.6 billion, mainly related to outstanding investments in connection with new power plant construction projects and the expansion and modernisation of existing generation assets.

34.2 Long-term purchase commitments

EUR billion	Due within one year	Due after one year	Total
Gas	5.3	100.5	105.7
Electricity	0.1	0.1	0.2
Transportation and storage	0.7	5.6	6.3
Other	0.2	0.6	0.8

Increase in long-term purchase commitments is mainly from the acquisition of Uniper (EUR 110.0 billion on 31 March 2020).

Gas

Gas for supplying industrial customers is usually procured by means of long-term purchase contracts with major international producers of natural gas. Such contracts are generally take-or-pay in nature. The prices paid for natural gas are normally tied to market reference prices, as dictated by market conditions and the procurement behaviour of wholesale market customers. The conditions of these long-term contracts are reviewed at certain specific intervals (usually every three years) as part of contract negotiations and may change accordingly. In the absence of agreement on a pricing review, a neutral board of arbitration makes the final binding decision. Financial obligations arising from these contracts are calculated based on the same principles that govern internal budgeting. Further, the take-or-pay conditions in the individual contracts are also considered in the calculations.

Electricity

Contractual obligations for the purchase of electricity relate in part to purchases from resellers and energy utilities, especially those under procurement contracts for the wholesale portfolio.

Transportation and storage

Purchase commitments for transportation and storage are for long-term commitments for contracts that are not capitalised on the balance sheet as they do not meet the definition of a lease. Purchase commitments exclude any onerous part of the commitment that is included in provisions. See Note 29 Other provisions.

34.3 Other commitments to associates and joint ventures

Teollisuuden Voima Oyj (TVO) is building Olkiluoto 3, the nuclear power plant, which is funded through external loans, share issues and shareholder loans according to shareholders' agreement between the owners of TVO. At end of December 2020, Fortum had EUR 232 million (2019: 170) outstanding receivables regarding Olkiluoto 3 and is additionally committed to providing at maximum EUR 100 million. TVO shareholder loan is classified as participation in joint ventures. For more information, see Note 28 Nuclear related assets and liabilities.

34.4 Other commitments

Fortum has committed to providing financing to Voimaosakeyhtiö SF for its participation in the Fennovoima nuclear power project in Finland. Remaining commitment, EUR 76 million, is to be paid within 9 years.

In June 2018, the Swedish Government approved the legislation regarding Sweden's national strategy for implementation of the EU's Water Framework Directive. The largest hydro industry companies will create a common hydro-power fund to finance large parts of the environmental actions needed. The fund will have a total financial cap of SEK 10 billion to be paid over a 20-year period, and the largest operators will contribute to the fund proportionately based on their respective market share of hydro-power production. Fortum's share is 31% of the funds' total financing.

35 Pledged assets and contingent liabilities

ACCOUNTING POLICIES

PLEDGED ASSETS

Pledged assets are given to a lender as security for a loan, trading or other commitment. If the borrower or trading party is unable to make the agreed payments, the lender can use the pledged assets to mitigate its losses. Pledged assets at Fortum mostly consist of securities and real estate mortgages.

CONTINGENT LIABILITIES

A contingent liability is disclosed when there is a possible obligation that arises from past events and whose existence is only confirmed by one or more doubtful future events; or when there is an obligation that is not recognised as a liability or provision because it is not probable that an outflow of resources will be required, or the amount of the obligation cannot be reliably estimated.

35.1 Pledged assets

EUR million	2020	2019
For debt		
Pledges	291	288
Real estate mortgages	275	137
For other commitments		
Pledges	498	309
Real estate mortgages	105	2
Pledged assets on behalf of others	42	33

For debt

Participants in the Finnish State Nuclear Waste Management Fund are allowed to borrow from the Fund. Fortum has pledged shares in Kemijoki Oy as a security. The value of the pledged shares amounts to EUR 269 million (2019: 269).

Real estate mortgages include mainly mortgages given for Solar operations in India amounting to EUR 139 million (2019: 0) and mortgages given for Fortum Tartu in Estonia amounting to EUR 96 million (2019: 96). See Note 26 Interest-bearing liabilities for related interest-bearing liabilities.

For other commitments

Pledges include securities and cash of EUR 495 million (2019: 281) for trading mainly in Nasdaq Commodities. See Note 20 Interest-bearing receivables.

Real estate mortgages include EUR 105 million (2019: 2) of real estate mortgages for the liability to the Finnish State Nuclear Waste Management Fund. These are given as a security for the uncovered part of the legal liability and unexpected events relating to future costs for decommissioning and disposal of spent fuel in Loviisa nuclear power plant. According to the Nuclear Energy Act, Fortum is obligated to contribute the funds in full to the State Nuclear Waste Management Fund to cover the legal liability. Any uncovered legal liability relates to periodising of the payments to the fund. The size of the securities given is updated yearly in the second quarter based on the decisions regarding the legal liabilities and the funding target which are determined at the end of the previous year. See Note 28 Nuclear related assets and liabilities.

35.2 Contingent liabilities

In relation to divestment of shareholdings, Fortum has entered into indemnification agreements, which cover the customary representations and warranties, as well as environmental damage and tax contingencies. Any obligations that may exist are covered in the first instance by provisions of the companies sold before Fortum itself is required to make any payments. Moreover, the Fortum Group has commitments under which it assumes joint and several liability arising from its interests in civil-law companies, non-corporate commercial partnerships and consortia in which it participates.

Fortum's 100% owned subsidiary Fortum Heat and Gas Oy has a contingent liability, based on the Finnish Companies Act's (734/1978) Chapter 14a Paragraph 6, with Neste Oyj following the demerger of Fortum Oil and Gas Oy in 2004.

35.3 Guarantees relating to Nuclear operations

With respect to the activities of the Swedish nuclear power plants, the companies of the Swedish nuclear units have issued guarantees for OKG, Forsmark and Barsebäck to governmental authorities in accordance with the Swedish law. There are two types of guarantees given. The Financing Amount is given to cover Fortum's share of the uncovered part in the Nuclear Waste Fund, assuming no further production and that no further nuclear waste fees are paid in. The uncovered amount is calculated by the authorities and is based on the difference between the expected costs and the funds to cover these costs at the time of the calculation. The Supplementary Amount constitutes a guarantee for deficits that can arise as a result of unplanned events. The amounts for the guarantees are updated every third year by governmental decision. In addition, the licensee are responsible for all costs related to the disposal of low-level radioactive waste.

Owners of nuclear facilities in Finland and Sweden have statutory liabilities for damages resulting from accidents occurring in those nuclear facilities and for accidents involving any radioactive substance connected to the operation of those facilities. Third-party liability relating to nuclear accidents is strictly the plant operator's responsibility and must be covered by insurances.

In Finland, as the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of SDR 600 million, approximately EUR 700 million (Special Drawing Right).

In Sweden, the Swedish Parliament passed a law on 1 July 2010 that requires the operator of a nuclear power plant in operation to have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per incident. The conditions enabling this new law to take effect were not yet in place at 31 December 2020. Nevertheless, the Swedish government decided to increase the insured amount from 1 January 2019 by amending the existing legislation. Accordingly, the liability per incident at 31 December 2020 is henceforth limited to SDR 1,000 million, approximately EUR 1.2 billion.

The necessary insurance for the affected nuclear power plants have been purchased. Same type of insurance policies are in place also for the operators where Fortum has minority interest.

The guarantee given on behalf of Teollisuuden Voima Oyj to the Finnish State Nuclear Waste Management Fund amounts to EUR 26 million (2019: 21). The guarantee covers the unpaid legal liability due to periodisation as well as risks for unexpected future costs.

For information regarding nuclear related assets and liabilities see Note 28 Nuclear related assets and liabilities.

36 Legal actions and official proceedings

Various routine court actions, arbitration proceedings, tax and regulatory investigations and proceedings are currently pending against entities of the Group, and further actions or proceedings may be instituted or asserted in the future. Through the acquisition of Uniper, the Group is facing wider exposure, in addition to dispute under public law, this in particular includes legal actions and proceedings on contract amendments and price adjustments initiated in response to market upheavals and the changed economic situation in the gas and electricity sectors (also as a consequence of the energy transition) and concerning anticompetitive and fraudulent practices, as well as general commercial contract disputes.

The aforementioned proceedings include several court and arbitration proceedings with major customers and major suppliers, also initiated in some instances by the Group, concerning contract amendments and price adjustments in long-term supply contracts and procurement options for electricity and gas, as well as long- term contracts for storage capacity in response to the altered situation brought about by market upheavals, and also reimbursements of costs. In some of these cases, the validity of the price-adjustment clauses applied, and of the contracts in their entirety is in dispute. Long-term LNG and gas procurement contracts generally include the option for producers and importers to adjust the terms in line with changed market conditions. On this basis, the Group is currently involved in court and arbitration proceedings and continuously conducts extensive negotiations with producers. The possibility of further legal disputes cannot be excluded. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Furthermore, proceedings are pending concerning the clarification of regulatory requirements. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Public-law disputes are pending, in particular, in connection with the operating license for the hard-coal power plant in Datteln. Applying the provisions of IAS 37.92, Fortum is making no additional disclosures on the proceedings presented or on the associated risks or measures taken, particularly because such disclosure could prejudice their outcome.

Tax cases

Tax cases in Belgium

On 16 June 2020, the Court of Appeal of Ghent, Belgium, ruled in favour of Fortum on Fortum's income tax assessments in Belgium for the year 2008. The decision concerns Fortum's Belgian financing company, Fortum EIF NV, which granted internal financing to a Swedish group company for financing of an acquisition in Russia. The Belgian tax authorities argued that Fortum EIF should not benefit from the notional interest deduction regime in Belgium and disagreed with the Court of Appeal ruling. In September 2020, the Belgian tax authorities filed an appeal to the Supreme Court.

The additional taxes claimed for 2008 amount to EUR 36 million. Fortum has similar tax cases pending for the years 2009-2012 and expects the remaining years to follow the decisions for 2008. The disputed amount for years 2008-2012 totals EUR 114 million. All taxes have been paid and recognised as income tax receivables. Should the decision from the Court of Appeal of Ghent become final, the possible repayment of the disputed amounts of EUR 114 million would have a positive cash flow effect for Fortum.

For critical accounting estimates regarding uncertain tax positions, ▸ Note 27 Income taxes on the balance sheet. See also ▸ Note 12 Income tax expense.

37 Related party transactions

37.1 The Finnish State and companies owned by the Finnish State

At the end of 2020, the Finnish State owned 50.76% of the company's shares (2019: 50.76%). The Finnish Parliament has authorised the Government to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the share capital and voting rights.

All transactions between Fortum and other companies owned by the Finnish State are on arm's length basis.

37.2 Board of Directors and Fortum Executive Management

The key management personnel of the Fortum Group are the members of Fortum Executive Management and the Board of Directors.

Fortum has not been involved in any material transactions with members of the Board of Directors or Fortum Executive Management. No loans exist to any member of the Board of Directors or Fortum Executive Management at 31 December 2020.

The total compensation (including pension benefits and social costs) for the key management personnel for 2020 was EUR 11 million (2019: 12). See ▸ Note 10 Employee benefits and Board remuneration for further information on the Board of Directors and Fortum Executive Management remuneration and shareholdings.

37.3 Associated companies and joint ventures

In the ordinary course of business, Fortum engages in transactions with associated companies, joint ventures, and other related parties. These transactions are on the same commercial terms as they would be with third parties, except for some associates and joint ventures, as noted below.

Fortum owns shareholdings in associated companies and joint ventures which own hydro and nuclear power plants. Under consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, or based on other agreement. In turn, each owner is liable for an equivalent portion of costs, regardless of output. These associated companies and joint ventures are not profit making since the owners purchase electricity at production cost, including interest costs and production taxes. See ▸ Note 18 Participations in associated companies and joint ventures.

On 31 March 2020, Uniper SE was reclassified from an associated company to a subsidiary. Transactions with Uniper Group companies are presented until 31 March 2020, but balances with Uniper Group companies were excluded from 31 March 2020 since Uniper was consolidated as a subsidiary. In addition, balances with any Uniper Group's related parties that have become Fortum Group's related parties through the acquisition are disclosed from 31 March 2020. See ▸ Note 3 Acquisitions, disposals and assets held for sale.

During 2020, Fortum's joint venture, the Fortum-Rusnano Wind Investment Fund, sold the 50-MW Ulyanovsk 2 and the 300-MW Rostov wind farms to a new joint venture recently established with Russian Direct Investment Fund (RDIF) aimed at the operation of renewable power plants in Russia.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Transactions with associates and joint ventures

	Associated Companies		Joint Ventures		Other related parties		Total	
EUR million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Sales	147	1	51	23	3	-	201	24
Interest income on loan receivables and other income	92	12	3	-	9	-	104	12
Purchases	443	260	130	113	51	-	624	373

Balances with associates and joint ventures

	Associated Companies		Joint Ventures		Other related parties		Total	
EUR million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Receivables								
Long-term interest-bearing loan receivables	874	564	82	61	157	-	1,113	625
Trade and other receivables	98	-	183	86	26	-	307	86
Liabilities								
Long-term loan payables	-	1	293	293	-	-	293	294
Trade and other payables	94	-	150	24	96	-	340	24

In addition, Fortum has long-term purchase commitments of approximately EUR 2.0 billion at 31 December 2020 from associates and joint ventures.

See also **Note 28** Nuclear related assets and liabilities and **Note 35** Pledged assets and contingent liabilities for details on commitments related to associates and joint ventures.

37.4 Pension funds

The Fortum pension funds in Finland, Germany, Russia, Sweden, the United Kingdom and Norway are stand-alone legal entities which manage pension assets related to part of the pension coverage in these countries. In 2020, Fortum paid a total of EUR 59 million (2019: 2) direct contribution to these pension plans. See **Note 30** Pension obligations.

The assets in the pension fund in Finland include Fortum shares representing 0.04% (2019: 0.04%) of the company's outstanding shares. Real estate mortgages have been given for a loan from Fortum's Finnish pension fund for EUR 41 million (2019: 41).

38 Events after the balance sheet date

There have been no material events after the balance sheet date.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

39 Group companies by segment

G = Generation
R = Russia
C = City Solutions
CS = Consumer Solutions
U = Uniper
O = Other Operations

1) Shares held by the parent company
2) Subsidiary not consolidated due to materiality grounds (valued at cost)
3) Associated company or joint venture valued at cost due to materiality grounds

Group holding % for companies owned via subsidiaries is based on the Fortum Corporation ownership % in the direct subsidiary times the ownership % of the direct subsidiary in the indirect subsidiary/associate /joint venture as of 31 December 2020.

Subsidiaries by segment

Entity Name	Domicile	Segment	Group holding, %
Böle Vindkraft Ab/Oy	Finland	G	100.0
CrisolteQ Oy	Finland	C	100.0
Ekopartnerit Turku Oy	Finland	C	51.0
Fincumet Oy	Finland	C	100.0
Fortum Asiakaspalvelu Oy	Finland	CS	100.0[1)]
Fortum Assets Oy	Finland	O	100.0
Fortum Clean Oy	Finland	O	100.0[1)]
Fortum Future Oy	Finland	O	100.0
Fortum Growth Oy	Finland	C	100.0
Fortum Heat and Gas Oy	Finland	C,O	100.0[1)]
Fortum Heat Estonia Oy	Finland	C	100.0
Fortum Markets Oy	Finland	CS	100.0[1)]
Fortum Norm Oy	Finland	O	100.0[1)]
Fortum Power and Heat Holding Oy	Finland	G	100.0
Fortum Power and Heat Oy	Finland	C,CS,G,O,R	100.0[1)]
Fortum Real Estate Oy	Finland	O	100.0[1)]
Fortum Waste Solutions Oy	Finland	C	100.0[1)]
Katajamäen Tuulivoima Oy	Finland	G	100.0
Koillis-Pohjan Energiantuotanto Oy	Finland	G	100.0
Kotimaan Energia Oy	Finland	CS	100.0
Kristinestad-Tjöck Vindpark Ab	Finland	G	100.0
Molpe Vindkraft Ab/Oy	Finland	G	100.0
Närpes Vindkraft Ab/Oy	Finland	G	100.0
Niemen Romukauppa Oy	Finland	CS	100.0
Oy Pauken Ab	Finland	O	100.0
Oy Tersil Ab	Finland	O	100.0
Oy Tertrade Ab	Finland	O	100.0
Pjelax Vindkraft Ab/Oy	Finland	G	100.0
Poikel Vindkraft Ab/Oy	Finland	G	100.0
Uniper Global Commodities Canada Inc.	Canada	U	76.1[2)]
Uniper Trading Canada Ltd.	Canada	U	76.1
Barry Danmark ApS	Denmark	O	100.0
Fortum Waste Solutions A/S	Denmark	C	100.0
Fortum Waste Solutions OW A/S	Denmark	C	100.0
AS Anne Soojus	Estonia	C	100.0
AS Fortum Tartu	Estonia	C	100.0
AS Tartu Joujaam	Estonia	C	100.0
AS Tartu Keskkatlamaja	Estonia	C	100.0
Fortum CFS Eesti OU	Estonia	O	100.0
Fortum Eesti AS	Estonia	C	100.0
Barry France SAS	France	O	100.0[2)]
Fortum France S.A.S	France	G	100.0
Liqvis France SASU	France	U	76.1
BauMineral GmbH	Germany	U	76.1
Deutsche Flüssigerdgas Terminal beschränkt haftende oHG	Germany	U	68.5[2)]
DFTG-Deutsche Flüssigerdgas Terminal Gesellschaft mit beschränkter Haftung	Germany	U	68.5[2)]
Donau-Wasserkraft Aktiengesellschaft	Germany	U	59.1
Etzel Gas-Lager GmbH & Co. KG	Germany	U	57.2
Fortum Deutschland SE	Germany	O	100.0
Fortum Service Deutschland GmbH	Germany	C,G	100.0
Freya Bunde-Etzel GmbH & Co. KG	Germany	U	45.6
Freya Bunde-Etzel Verwaltungsgesellschaft mbH	Germany	U	45.6[3)]
Gemeinschaftskraftwerk Irsching GmbH	Germany	U	38.2
Hydropower Evolutions GmbH	Germany	U	76.1[2)]
Induboden GmbH & Co. Industriewerte OHG	Germany	U	76.1[2)]
Kokereigasnetz Ruhr GmbH	Germany	U	76.1
Kraftwerk Schkopau Betriebsgesellschaft mbH	Germany	U	42.3
Kraftwerk Schkopau GbR	Germany	U	44.2
Liqvis GmbH	Germany	U	76.1[2)]
LNG Terminal Wilhelmshaven GmbH	Germany	U	76.1[2)]
Lubmin-Brandov Gastransport GmbH	Germany	U	76.1
Mainkraftwerk Schweinfurt Gesellschaft mit beschränkter Haftung	Germany	U	44.2[2)]
METHA-Methanhandel GmbH	Germany	U	76.1
Mittlere Donau Kraftwerke Aktiengesellschaft	Germany	U	35.4[2)]

Entity Name	Domicile	Segment	Group holding, %
Obere Donau Kraftwerke Aktiengesellschaft	Germany	U	35.4[2)]
Plugsurfing GmbH	Germany	O	100.0
RGE Holding GmbH	Germany	U	76.1
Rhein-Main-Donau GmbH	Germany	U	58.9
RMD-Consult GmbH	Germany	U	76.1
RuhrEnergie GmbH, EVR	Germany	U	76.1
Uniper Anlagenservice GmbH	Germany	U	76.1
Uniper Beteiligungs GmbH	Germany	U	76.1
Uniper Energy Sales GmbH	Germany	U	76.1
Uniper Energy Storage GmbH	Germany	U	76.1
Uniper Exploration & Production GmbH	Germany	U	76.1
Uniper Financial Services GmbH	Germany	U	76.1
Uniper Global Commodities SE	Germany	U	76.1
Uniper Holding GmbH	Germany	U	76.1
Uniper HR Services Hannover GmbH	Germany	U	76.1
Uniper Hydrogen GmbH	Germany	U	76.1[2)]
Uniper International Holding GmbH	Germany	U	76.1
Uniper IT GmbH	Germany	U	76.1
Uniper Kraftwerke GmbH	Germany	U	76.1
Uniper Market Solutions GmbH	Germany	U	76.1[2)]
Uniper Renewables GmbH	Germany	U	76.1[2)]
Uniper Risk Consulting GmbH	Germany	U	76.1
Uniper Ruhrgas International GmbH	Germany	U	76.1
Uniper SE	Germany	U	76.1
Uniper Solar 1 WHV GmbH	Germany	U	76.1[2)]
Uniper Systemstabilität GmbH	Germany	U	76.1
Uniper Technologies GmbH	Germany	U	76.1
Uniper Wärme GmbH	Germany	U	76.1[2)]
Untere Iller AG	Germany	U	45.6
Fortum Insurance Ltd	Guernsey	O	100.0
Uniper Hungary Energetikai Kft.	Hungary	U	76.1
Fortum Charge & Drive India Private Limited	India	O	100.0
Fortum India Private Limited	India	C	100.0[1)]
Fortum Solar India Private Limited	India	C	100.0
Fortum Solar Plus Private Limited	India	C	100.0
Uniper India Private Ltd.	India	U	76.1[2)]
PT Fortum Energy Solution	Indonesia	C	95.0
Fortum eNext Ireland Ltd	Ireland	C	100.0
Fortum Finance Ireland Designated Activity Company	Ireland	O	100.0[1)]
Fortum Global Finance Designated Activity Company	Ireland	O	100.0
Fortum P&H Ireland Limited	Ireland	O	100.0

Entity Name	Domicile	Segment	Group holding, %
Fortum Participation Ltd	Ireland	C,O	100.0
Fortum Jelgava, SIA	Latvia	C	100.0
Fortum Latvia SIA	Latvia	C	100.0
SIA Fortum Daugavpils	Latvia	C	100.0
SIA Lake Development	Latvia	C	100.0
UAB Fortum Heat Lietuva	Lithuania	C	100.0
UAB Fortum Klaipeda	Lithuania	C	96.0
UAB Joniskio energija	Lithuania	C	66.2
UAB Svencioniu energija	Lithuania	C	50.0
UPT Global Alternatives S.C.S. SICAV-SIF	Luxembourg	U	72.5
Ergon Holdings Ltd	Malta	U	76.1
Ergon Insurance Ltd	Malta	U	76.1
E.ON Benelux Geothermie B.V. (in liquidation)	Netherlands	U	76.1[2)]
Fortum 2 B.V.	Netherlands	O	100.0
Fortum 3 B.V.	Netherlands	G	100.0
Fortum Charge & Drive B.V.	Netherlands	O	100.0
Fortum Finance B.V.	Netherlands	O	100.0
Fortum H&C 1 B.V.	Netherlands	O	100.0
Fortum H&C B.V.	Netherlands	O	100.0
Fortum Holding B.V.	Netherlands	C,CS,G,O	100.0[1)]
Fortum Hydro B.V.	Netherlands	O	100.0
Fortum India B.V.	Netherlands	C	100.0
Fortum Power Holding B.V.	Netherlands	O	100.0
Fortum Russia B.V.	Netherlands	R	100.0
Fortum SAR B.V.	Netherlands	C	100.0
Fortum Star B.V.	Netherlands	O	100.0
PolarSolar B.V.	Netherlands	C	100.0
Uniper Benelux CCS Project B.V.	Netherlands	U	76.1[2)]
Uniper Benelux Holding B.V.	Netherlands	U	76.1
Uniper Benelux N.V.	Netherlands	U	76.1
Uniper Energy Trading NL Staff Company B.V.	Netherlands	U	76.1[2)]
Uniper Gas Transportation and Finance B.V.	Netherlands	U	76.1
Uniper Infrastructure Asset Management B.V.	Netherlands	U	76.1
Uniper Ruhrgas BBL B.V.	Netherlands	U	76.1
Uniper Technologies B.V.	Netherlands	U	76.1[2)]
E.ON Ruhrgas Nigeria Limited	Nigeria	U	76.1[2)]
Fortum Consumer Solutions AS	Norway	CS	100.0
Fortum Fiber AS	Norway	C	30.0
Fortum Forvaltning AS	Norway	CS,G,O	100.0
Fortum Hedging AS	Norway	G	100.0
Fortum Kundesenter AS	Norway	CS	100.0

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Entity Name	Domicile	Segment	Group holding, %
Fortum Markets AS	Norway	CS	100.0
Fortum Oslo Varme AS	Norway	C	50.0
Fortum Plastics Recycling Norway AS	Norway	C	100.0
Fortum Strøm AS	Norway	CS	100.0
Fortum Tellier AS	Norway	CS	100.0
Fortum Waste Solutions Norway AS	Norway	C	100.0
Hallingkraft AS	Norway	CS	100.0
NorgesEnergi AS	Norway	CS	100.0
Oslo Energi AS	Norway	CS	100.0
Sørfjord Vindpark AS	Norway	G	100.0
Fortum Marketing and Sales Polska S.A.	Poland	CS	100.0
Fortum Network Częstochowa Sp. z o.o.	Poland	C	100.0
Fortum Network Płock Sp. z o.o.	Poland	C	100.0
Fortum Network Wrocław Sp. z o.o.	Poland	C	100.0
Fortum Power and Heat Polska Sp. z o.o.	Poland	C,CS	100.0
Fortum Silesia SA	Poland	C	100.0
Fortum Sprzedaż Sp. z o.o.	Poland	CS	100.0
Rejonowa Spółka Ciepłownicza Sp. z o.o.	Poland	C	100.0
Fortum-New Generation 2 Limited Liability Company	Russia	R	100.0
Fortum-New Generation 3 Limited Liability Company	Russia	R	100.0
Fortum-New Generation 5 Limited Liability Company	Russia	R	98.2
Joint Stock Company Chelyabenergoremont	Russia	R	100.0
LLC Bugulchanskaya Solar power station	Russia	R	98.2
OOO Agro-industrial Park «Siberia»	Russia	U	63.7[2)]
OOO Unipro Engineering	Russia	U	63.7[2)]
PAO Fortum	Russia	R	98.2
PAO Unipro	Russia	U	63.7
Uniper NefteGaz LLC	Russia	U	76.1[2)]
Ural Heat Networks Company Joint Stock Company	Russia	R	98.2
HQ Services Limited	Rwanda	C	49.0
Uniper Energy Trading Srbija d.o.o. - u Likvidaciji	Serbia	U	76.1[2)]
Uniper Energy Asia Pacific Pte. Ltd.	Singapore	U	76.1[2)]
Uniper Energy Southern Africa (Pty) Ltd.	South Africa	U	76.1[2)]
Escandinava de Electricidad S.L.U	Spain	CS	100.0
Barsebäck Kraft AB	Sweden	U	76.1[2)]
Blåsjön Kraft AB	Sweden	G,U	88.0
Blåsjön Nät AB	Sweden	G,U	88.0
Blybergs Kraftaktiebolag	Sweden	G	66.7
Brännälven Kraft AB	Sweden	G,U	81.5
Bullerforsens Kraft Aktiebolag	Sweden	G	88.0
Energikundservice Sverige AB	Sweden	CS	100.0

Entity Name	Domicile	Segment	Group holding, %
Fortum 1 AB	Sweden	R	100.0
Fortum Energy AB	Sweden	CS	100.0
Fortum Fastigheter AB	Sweden	O	100.0
Fortum Markets AB	Sweden	CS	100.0
Fortum Miljö AB	Sweden	O	100.0
Fortum Produktionsnät AB	Sweden	G	100.0
Fortum Ren AB	Sweden	O	100.0
Fortum Skott AB	Sweden	O	100.0
Fortum Sverige AB	Sweden	C,G,O	100.0
Fortum Sweden AB	Sweden	O	100.0[1)]
Fortum Vind Norr AB	Sweden	G	100.0
Fortum Waste Solutions AB	Sweden	C	100.0
Fortum Waste Solutions Holding AB	Sweden	C	100.0
Göta Energi AB	Sweden	CS	100.0
Kolbäckens Kraft KB	Sweden	U	76.1
Mellansvensk Kraftgrupp Aktiebolag	Sweden	G,U	91.0
Nordgroup Waste Management AB	Sweden	C	100.0
OKG Aktiebolag	Sweden	G;U	84.8
Oreälvens Kraftaktiebolag	Sweden	G	65.0
Sävar Vindkraft AB	Sweden	G	100.0
Stensjön Kraft AB	Sweden	G,U	88.0
Sydkraft AB	Sweden	U	76.1
Sydkraft Försäkring AB	Sweden	U	76.1
Sydkraft Hydropower AB	Sweden	U	76.1
Sydkraft Nuclear Power AB	Sweden	U	76.1
Sydkraft Thermal Power AB	Sweden	U	76.1
Uddeholm Kraft Aktiebolag	Sweden	G	100.0
Värmlandskraft-OKG-delägarna Aktiebolag	Sweden	G	73.3
Uniper Energy DMCC	United Arab Emirates	U	76.1
Uniper Energy Fujairah FZE	United Arab Emirates	U	76.1[2)]
Uniper Energy Services MENA DMCC	United Arab Emirates	U	76.1[2)]
Fortum Carlisle Limited	United Kingdom	C	100.0
Fortum Energy Ltd	United Kingdom	O	100.0
Fortum Glasgow Limited	United Kingdom	C	100.0
Fortum O&M(UK) Limited	United Kingdom	C	100.0
Holford Gas Storage Limited	United Kingdom	U	76.1
IVO Energy Limited	United Kingdom	G	100.0
Uniper Energy Limited	United Kingdom	U	76.1[2)]
Uniper Energy Trading UK Staff Company Limited	United Kingdom	U	76.1
Uniper Global Commodities London Ltd.	United Kingdom	U	76.1
Uniper Global Commodities UK Limited	United Kingdom	U	76.1

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Entity Name	Domicile	Segment	Group holding, %
Uniper Holdings Limited	United Kingdom	U	76.1[2]
Uniper Technologies Limited	United Kingdom	U	76.1
Uniper UK Corby Limited	United Kingdom	U	76.1
Uniper UK Cottam Limited	United Kingdom	U	76.1[2]
Uniper UK Gas Limited	United Kingdom	U	76.1
Uniper UK Ironbridge Limited	United Kingdom	U	76.1
Uniper UK Limited	United Kingdom	U	76.1
Uniper UK Trustees Limited	United Kingdom	U	76.1[2]
Greanex LLC	USA	U	38.8[2]
Uniper Global Commodities North America LLC	USA	U	76.1
Valo Ventures I LP Fund	USA	O	99.0

Associated companies and joint ventures by segment

Entity Name	Country	Segment	Group holding %
Chempolis Oy	Finland	C	33.9
Kemijoki Oy	Finland	G	28.3
Keuruun Sähkö Oy	Finland	O	35.1
Posiva Oy	Finland	G	40.0
Sallila Energia Oy	Finland	O	46.0
Teollisuuden Voima Oyj	Finland	G	25.8
Turun Seudun Energiantuotanto Oy	Finland	C	53.5
Turun Seudun Kaukolämpö Oy	Finland	C	30.0
Wello Oy	Finland	O	18.6[1]
RAG-Beteiligungs-Aktiengesellschaft	Austria	U	22.8
SOCAR-UNIPER LLC	Azerbaijan	U	32.3[3]
BIOPLYN Třeboň spol. s r.o.	Czech Republic	U	18.8[3]
Solar Energy s.r.o.	Czech Republic	U	19.0[3]
E.ON Perspekt GmbH	Germany	U	22.8[3]
Energie-Pensions-Management GmbH	Germany	U	22.8[3]
Gemeinschaftskraftwerk Kiel Gesellschaft mit beschränkter Haftung	Germany	U	38.0[3]
Grüne Quartiere GmbH	Germany	U	38.0[3]
Kraftwerk Buer GbR	Germany	U	38.0[3]
Assam Bio Refinery Private Limited	India	C	49.6
India Uniper Power Services Private Limited	India	U	38.0[3]
PT Jakarta Solusi Lestari	Indonesia	C	56.0
AS Jelgavas Situmtiklu uznemums	Latvia	C	27.6
AB Klaipedos energija	Lithuania	C	19.6
UAB Kauno Kogeneracine Jegaine	Lithuania	C	49.0

Entity Name	Country	Segment	Group holding %
B.V. NEA	Netherlands	U	19.0[3]
BBL Company V.O.F.	Netherlands	U	15.2
India Sun B.V.	Netherlands	C	43.8
Nordic Wind B.V.	Netherlands	G	20.0
Yustek Holding B.V.	Netherlands	R	50.0
Fortum Nordkraft Vind DA	Norway	G	50.0
Linnvasselv Kraftlag SA	Norway	G	40.8
OF Energi AS	Norway	C	25.0
Recharge AS	Norway	O	36.5
Fortum-New Generation 4 Limited Liability Company	Russia	R	48.1
Kurgan Plant of Energy Technologies Limited Liability	Russia	R	50.0
OOO E.ON Connecting Energies	Russia	U	31.8[3]
TGC1 Territorial Generating Company 1	Russia	R	30.0
Ural energy retail LLC	Russia	R	49.1
Wind Power Assets Management LLC	Russia	R	49.1
AB Svafo	Sweden	G,U	38.4[3]
Ångefallen Kraft AB	Sweden	G	50.0
Bergeforsens Kraftaktiebolag	Sweden	U	30.4
Forsmarks Kraftgrupp Aktiebolag	Sweden	G,U	29.7
Horrmundsvalla Kraftaktiebolag	Sweden	G	50.0
Kärnkraftsäkerhet & Utbildning AB	Sweden	G,U	45,4[3]
Klåvbens AB	Sweden	U	38.0[3]
Ringhals AB	Sweden	U	22.5
SQC Swedish Qualification Centre AB	Sweden	G,U	45,7[3]
Stockholm Exergi Holding AB (publ)	Sweden	C	50.0
Svensk Kärnbränslehantering AB	Sweden	G,U	36.7[3]
Tåsans Kraftaktiebolag	Sweden	G	40.0
Väsa Kraftaktiebolag	Sweden	G	50.0
Vattenkraftens Miljöfond Sverige AB	Sweden	G,U	31.3
Vaultige AB	Sweden	U	38.0
Javelin Global Commodities Holdings LLP	United Kingdom	U	21.3
Exporting Commodities International LLC	USA	U	37.3

Financial key figures

For information of Alternative Performance Measures used by Fortum, see **Definitions of key figures** and **Note 1** Significant accounting policies.

EUR million or as indicated	2020	2019	Change 20/19 %
Income statement			
Sales	49,015	5,447	800
EBITDA	2,688	1,693	59
Comparable EBITDA	2,434	1,766	38
Operating profit	1,599	1,118	43
- of sales %	3.3	20.5	
Comparable operating profit	1,344	1,191	13
Share of profit/loss of associates and joint ventures	656	744	-12
Profit before income tax	2,199	1,728	27
- of sales %	4.5	31.7	
Profit for the period	1,855	1,507	23
- of which attributable to owners of the parent	1,823	1,482	23
Financial position and cash flow			
Capital employed	26,239	19,929	
Financial net debt [1]	7,023	4,833	45
Adjusted net debt [1]	9,784	4,978	97
Interest-bearing net debt [1]	N/A	5,260	
Capital expenditure and gross investments in shares	4,941	819	503
- of sales %	10.1	15.0	
Capital expenditure	1,135	713	59
Net cash from operating activities	2,555	1,575	62

EUR million or as indicated	2020	2019	Change 20/19 %
Key ratios			
Return on shareholders' equity, %	12.9	11.9	
Interest coverage	27.3	8.0	
Interest coverage including capitalised borrowing costs	18.6	7.5	
Funds from operations/interest-bearing net debt, %	N/A	32.2	
Gearing, % [1]	45	40	
Equity-to-assets ratio, %	27	57	
Financial net debt/comparable EBITDA [2]	2.9		
Comparable net debt/EBITDA [2]	N/A	3.0	
Return on capital employed, % [2]	N/A	10.0	
Other data			
Dividends	995[3]	977	2
Research and development expenditure	56	67	-16
- of sales %	0.1	1.2	
Average number of employees	19,988	8,248	

1) Following the consolidation of Uniper, Fortum has updated its definition of net debt and uses financial net debt and adjusted net debt. As a consequence, the definition of gearing has been updated.
2) Comparable EBITDA is defined as an alternative performance measure and used as a component in the capital structure target 'Financial net debt-to-Comparable EBITDA'. In 2020 Comparable EBITDA includes contribution from Uniper for the period of 1 April to 31 December 2020 since Uniper was consolidated as a subsidiary from 31 March 2020. Until 31 of March 2020 Uniper's contribution to the income statement was recognised in the Share of profit/loss of associates and joint ventures.
3) Board of Directors' proposal for the planned Annual General Meeting on 28 April 2021.

See **Definitions of key figures.**

Share key figures

EUR or as indicated	2020	2019	Change 20/19 %
Data per share			
Earnings per share	2.05	1.67	23
Cash flow per share	2.88	2.27	27
Equity per share	14.58	14.61	0
Dividend per share	1.12[1)]	1.10	2
Payout ratio, %	54.6[1)]	65.9	
Dividend yield, %	5.7[1)]	5.0	
Price/earnings ratio (P/E)	9.6	13.2	
Share prices			
At the end of the period	19.70	22.00	
Average	17.20	20.06	
Lowest	12.25	18.09	
Highest	23.46	22.50	
Other data			
Market capitalisation at the end of the period, EUR million	17,499	19,542	
Trading volumes[2)]			
Number of shares, 1 000 shares	647,869	372,272	
In relation to weighted average number of shares, %	72.9	41.9	
Number of shares, 1 000 shares	888,294	888,294	
Number of shares excluding treasury shares, 1 000 shares	N/A	N/A	
Average number of shares, 1 000 shares	888,294	888,294	
Diluted adjusted average number of shares, 1 000 shares	888,294	888,294	

1) Board of Directors' proposal for the Annual General Meeting on 28 April 2021.
2) Trading volumes in the table represent volumes traded on Nasdaq Helsinki. In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Boat, Cboe and Turquoise, and on the OTC market as well. During 2020, approximately 68% (2019: 73%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

See › **Definitions of key figures**.

Segment key figures

Sales by segment, EUR million	**2020**	**2019**
Generation	2,006	2,141
- of which internal	421	259
Russia	929	1,071
- of which internal	2	-
City Solutions	1,075	1,200
- of which internal	64	45
Consumer Solutions	1,267	1,835
- of which internal	2	-3
Uniper	44,514	-
- of which internal	0	-
Other Operations	140	115
- of which internal	110	86
Eliminations and Netting of Nord Pool transactions	-916	-916
Total	**49,015**	**5,447**

Comparable operating profit by segment, EUR million	**2020**	**2019**
Generation	722	794
Russia	251	316
City Solutions	47	120
Consumer Solutions	90	79
Uniper	363	-
Other Operations	-129	-118
Comparable operating profit	**1,344**	**1,191**
Impairment charges and reversals	2	-8
Capital gains and other related items	765	7
Impact from acquisition accounting	-222	-
Changes in fair values of derivatives hedging future cash flow	-675	-72
Other	386	-
Operating profit	**1,599**	**1,118**

Comparable EBITDA by segment, EUR million	**2020**	**2019**
Generation	886	939
Russia	394	469
City Solutions	239	308
Consumer Solutions	153	141
Uniper	856	-
Other Operations	-94	-91
Total	**2,434**	**1,766**

Depreciation and amortisation, EUR million	**2020**	**2019**
Generation	164	145
Russia	143	153
City Solutions	191	188
Consumer Solutions	63	62
Uniper	494	-
Other Operations	35	28
Total	**1,090**	**575**

Share of profit of associates and joint ventures by segment, EUR million	**2020**	**2019**
Generation	29	10
Russia	47	59
City Solutions	57	37
Uniper	54	-
Other Operations	470	638
Total	**656**	**744**

Capital expenditure by segment, EUR million	**2020**	**2019**
Generation	158	247
Russia	43	67
City Solutions	219	313
Consumer Solutions	57	55
Uniper	624	-
Other Operations	34	31
Total	**1,135**	**713**

Gross investments in shares by segment, EUR million

	2020	2019
Generation	70	13
Russia	48	66
City Solutions	114	9
Consumer Solutions	-	-
Uniper	3	-
Other Operations	3,572	18
Total	**3,807**	**106**

Gross divestments of shares by segment, EUR million

	2020	2019
Generation	171	12
Russia	-	-
City Solutions	895	2
Consumer Solutions	10	-
Uniper	69	-
Other Operations	81	16
Total	**1,226**	**30**

Comparable net assets by segment, EUR million

	2020	2019
Generation	6,234	6,019
Russia	2,431	3,212
City Solutions	3,679	3,945
Consumer Solutions	565	637
Uniper	7,432	-
Other Operations	136	4,400
Total	**20,477**	**18,214**

Comparable return on net assets by segment, %

	2020	2019
Generation	11.8	13.3
Russia	11.1	12.3
City Solutions	2.8	4.6
Consumer Solutions	15.9	13.3
Uniper [1]	N/A	-

1) 2020 for Uniper segment is calculated based on cumulative figures from 1 April 2020. Comparable return on net assets for the Uniper segment will be presented once information for full 12 months is available.

Average number of employees

	2020	2019
Generation	1,163	1,122
Russia	2,969	2,942
City Solutions	2,051	1,979
Consumer Solutions	1,216	1,379
Uniper	11,629	-
Other Operations	959	825
Total	**19,988**	**8,248**

Definitions of key figures

Alternative performance measures

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Comparable EBITDA	Operating profit + depreciations and amortisations - items affecting comparability	Comparable EBITDA is representing the underlying cash flow generated by the total Group and segments. Used as a component in the capital structure target of Financial net debt to Comparable EBITDA.	Note 5 Capital risk management
Comparable operating profit	Operating profit - items affecting comparability	Comparable operating profit is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Income statement
Items affecting comparability	Impairment charges and reversals + capital gains and other related items + impact from acquisition accounting + changes in fair values of derivatives hedging future cash flow + other	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Impairment charges and reversals	Impairment charges and related provisions (mainly dismantling), as well as the reversal of previously recorded impairment charges. Impairment charges are adjusted from depreciation and amortization, and reversals from other income.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Capital gains and other related items	Capital gains and transaction costs from acquisitions, which are adjusted from other income and other expenses respectively. Profits from the capital recycling business model are presented in comparable operating profit because the business results are realised through divesting the shareholding, either partially or totally.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Impact from acquisition accounting	Non-cash accounting impact resulting from reclassifying part of Uniper's other comprehensive income to the income statement when Uniper was consolidated as a subsidiary.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Changes in fair values of derivatives hedging future cash flow	Effects from financial derivatives hedging future cash-flows where hedge accounting is not applied or own use exemption cannot be used according to IFRS 9, which are adjusted from other income or to sales and materials and services respectively when calculating Fortum's alternative performance measures.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Other	Restructuring and cost management expenses, and other miscellaneous non-operating items, which are adjusted mainly from materials and services or employee benefits.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Comparable return on net assets, %	$\frac{\text{Comparable operating profit + share of profit/loss in associates and joint ventures + adjustment for share of profit/loss in associates and joint ventures}}{\text{Comparable net assets average}} \times 100$	Comparable return on net assets is used in financial target setting and forecasting, management's follow up of financial performance and allocation of resources in the group's performance management process.	Note 6 Segment reporting
Adjustment for Share of profit/loss in associates and joint ventures	Adjustment for material items affecting comparability.	Share of profit/loss in associates and joint ventures is included in profit component in the comparable return on net assets calculation and the adjustments are done based on similar components as in Items affecting comparability.	Note 6 Segment reporting

Capital structure	Definition	Reason to use the measure	Reconciliation
Comparable net assets	Non-interest-bearing assets - non-interest-bearing liabilities - provisions (non-interest-bearing assets and liabilities do not include finance related items, tax and deferred tax and assets and liabilities from fair valuations of derivatives used for hedging future cash flows).	Comparable net assets is a component in Comparable return on net assets calculation where return on capital allocated directly to the businesses is measured.	Note 6 Segment reporting
Financial net debt / comparable EBITDA	$\frac{\text{Financial net debt}}{\text{Comparable EBITDA}}$	Financial net debt to comparable EBITDA is Fortum's long-term financial target for capital structure since December 2020.	Note 5 Capital risk management
Comparable net debt / EBITDA	$\frac{\text{Interest-bearing net debt}}{\text{Comparable EBITDA}}$	Comparable net debt to EBITDA was the capital structure target of the Group until Q1 2020.	N/A
Financial net debt	Interest-bearing liabilities - liquid funds - securities in interest-bearing receivables + net margin liabilities	In Q1 2020 Fortum updated the definition of net debt. Financial net debt is used in the follow-up of the indebtedness of the group and it is a component in the capital structure target of Financial net debt to Comparable EBITDA since December 2020.	Note 26 Interest-bearing liabilities

Capital structure	Definition	Reason to use the measure	Reconciliation
Adjusted net debt	Financial net debt + underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds	In Q1 2020 Fortum updated the definition of net debt. Adjusted net debt is used in the follow-up of the indebtedness of the group.	Note 26 Interest-bearing liabilities
Interest-bearing net debt	Interest-bearing liabilities - liquid funds	Until Q1 2020 interest-bearing net debt was used in the follow-up of the indebtedness of the group i.e. capital structure especially as a component in the long-term over-the-cycle financial target of Comparable net debt / EBITDA in the Group.	Note 26 Interest-bearing liabilities
Return on capital employed (ROCE), %	$\frac{\text{Profit before taxes + interest and other financial expenses}}{\text{Capital employed average}} \times 100$	Until Q1 2020 return on capital employed (ROCE) was a long-term over the cycle financial ratio target measuring the profitability and how efficiently invested capital was used.	N/A
Capital employed	Total assets - total non-interest-bearing liabilities	Capital employed is the book value of the invested capital and it was used as a component when calculating the Return of capital employed in the group.	N/A

See Note 1.4 Measures for performance and Note 7 Items affecting comparability

Other key figures

Share based key figures

Earnings per share (EPS)	$\frac{\text{Profit for the period - non-controlling interests}}{\text{Average number of shares during the period}}$
Cash flow per share	$\frac{\text{Net cash from operating activities}}{\text{Average number of shares during the period}}$
Equity per share	$\frac{\text{Shareholders' equity}}{\text{Number of shares at the end of the period}}$
Payout ratio, %	$\frac{\text{Dividend per share}}{\text{Earnings per share}} \times 100$
Dividend yield, %	$\frac{\text{Dividend per share}}{\text{Share price at the end of the period}} \times 100$
Price/earnings (P/E) ratio	$\frac{\text{Share price at the end of the period}}{\text{Earnings per share}}$
Average share price	$\frac{\text{Amount traded in euros during the period}}{\text{Number of shares traded during the period}}$
Market capitalisation	Number of shares at the end of the period x share price at the end of the period
Trading volumes	Number of shares traded during the period in relation to the weighted average number of shares during the period
Funds from operations (FFO)	Net cash from operating activities before change in working capital
Capital expenditure	Capitalised investments in property, plant and equipment and intangible assets including maintenance, productivity, growth and investments required by legislation including borrowing costs capitalised during the construction period. Maintenance investments expand the lifetime of an existing asset, maintain usage/availability and/or maintains reliability. Productivity investments improve productivity in an existing asset. Growth investments' purpose is to build new assets and/or to increase customer base within existing businesses. Legislation investments are done at certain point of time due to legal requirements.

Other key figures

EBITDA	Operating profit + depreciations and amortisations
Gross investments in shares	Investments in subsidiary shares, shares in associated companies and joint ventures and other investments. Investments in subsidiary shares are net of liquid funds and grossed with interest-bearing liabilities and other items included in financial net debt in the acquired company.
Return on shareholders' equity (ROE), %	$\frac{\text{Profit for the year}}{\text{Total equity average}} \times 100$
Gearing, %	$\frac{\text{Financial net debt (until 2019 interest-bearing net debt)}}{\text{Total equity including non-controlling interests}} \times 100$
Equity-to-assets ratio, %	$\frac{\text{Total equity including non-controlling interests}}{\text{Total assets}} \times 100$
Interest coverage	$\frac{\text{Operating profit}}{\text{Net interest expenses}}$
Interest coverage including capitalised borrowing costs	$\frac{\text{Operating profit}}{\text{Net interest expenses - capitalised borrowing costs}}$
Average number of employees	Based on monthly average for the whole period

Definitions for tax figures

Effective income tax rate,%	$\frac{\text{Income tax expense}}{\text{Profit before income tax}} \times 100$
Comparable effective income tax rate, %	$\frac{\text{Income tax expense – effects from tax rate changes - taxes on items affecting comparability - other major onetime tax effects}}{\text{Profit before income tax - share on profits from associated companies and joint ventures - items affecting comparability}} \times 100$
Weighted average applicable income tax rate	Sum of the proportionately weighted share of profits before taxes of each group operating country multiplied with an applicable nominal tax rate of the respective countries.

Parent company financial statements, Finnish GAAP (FAS)

Income statement

EUR	Note	2020	2019
Sales	2	115,411,878	82,296,856
Other income	3	6,973,020	7,009,833
Employee benefits	4	-44,908,024	-37,413,190
Depreciation, amortisation and write-downs	8	-8,582,395	-7,558,508
Other expenses		-107,095,843	-84,081,721
Operating loss		**-38,201,364**	**-39,746,730**
Financial income and expenses	6	1,514,790,424	4,291,445
Profit/loss before appropriations		**1,476,589,060**	**-35,455,285**
Group contributions received [1]		233,438,000	286,059,000
Profit before income tax		**1,710,027,060**	**250,603,715**
Income tax expense	7	-31,505,510	-37,193,917
Profit for the year		**1,678,521,550**	**213,409,798**

1) Taxable profits transferred from Finnish subsidiaries.

Balance sheet

EUR	Note	31 Dec 2020	31 Dec 2019
ASSETS			
Non-current assets			
Intangible assets	8	34,662,194	24,418,353
Property, plant and equipment	8	7,334,897	11,925,952
Shares in Group companies	8	16,201,939,149	16,702,395,633
Interest-bearing receivables from Group companies	8	5,045,167,286	2,952,175,763
Interest-bearing receivables from associated companies	8	1,415,476	1,327,005
Other non-current assets	8	110,000	110,000
Derivative financial instruments	13, 14	186,647,390	160,060,936
Deferred tax assets		6,348,686	4,572,153
Total non-current assets		**21,483,625,079**	**19,856,985,795**
Current assets			
Other current receivables from Group companies	9	248,621,578	313,509,394
Other current receivables from associated companies		40,920	245
Derivative financial instruments	13, 14	210,402,684	126,024,632
Other current receivables	9	22,182,143	9,521,011
Deposits and securities (maturity over three months)		363,372,670	69,826,292
Cash and cash equivalents		1,348,674,226	1,094,712,314
Liquid funds		1,712,046,896	1,164,538,606
Total current assets		**2,193,294,222**	**1,613,593,888**
Total assets		**23,676,919,300**	**21,470,579,683**
EQUITY			
Shareholders' equity	10		
Share capital		3,046,185,953	3,046,185,953
Share premium		2,821,690,902	2,821,690,902
Hedging reserve		-24,202,381	-19,534,278
Retained earnings		3,261,538,565	4,025,252,679
Profit for the year		1,678,521,550	213,409,798
Total equity		**10,783,734,590**	**10,087,005,054**
Provisions for liabilities and charges		**2,636,509**	**-**
LIABILITIES			
Non-current liabilities			
External interest-bearing liabilities	11, 13, 14	7,060,135,440	5,413,938,194
Interest-bearing liabilities to Group companies		4,334,630,712	5,239,797,779
Interest-bearing liabilities to associated companies		293,355,523	293,355,523
Derivative financial instruments	13, 14	71,935,077	77,717,879
Other non-current liabilities		27,936,234	23,175,524
Total non-current liabilities		**11,787,992,985**	**11,047,984,898**
Current liabilities			
External interest-bearing liabilities	11	818,108,111	136,056,071
Trade and other payables to Group companies	12	31,346,824	10,303,983
Trade and other payables to associated companies	12	4,018,710	8,914,821
Derivative financial instruments	13, 14	114,628,492	62,693,386
Trade and other payables	12	134,453,079	117,621,470
Total current liabilities		**1,102,555,216**	**335,589,731**
Total liabilities		**12,890,548,202**	**11,383,574,629**
Total equity and liabilities		**23,676,919,300**	**21,470,579,683**

Cash flow statement

EUR 1,000	2020	2019
Cash flow from operating activities		
Profit for the year	1,678,522	213,410
Adjustments:		
Income tax expense	31,506	37,194
Group contributions	-233,438	-286,059
Finance costs - net	-1,514,790	-4,291
Depreciation, amortisation and write-downs	8,582	7,559
Operating profit before depreciation (EBITDA)	**-29,619**	**-32,187**
Non-cash flow items	2,623	-73
Interest and other financial income received	34,970	25,604
Interest and other financial expenses paid	-51,724	-96,577
Dividends received	1,129,720	87,000
Group contributions received	286,059	84,518
Realised foreign exchange gains and losses	-75,092	36,924
Income taxes paid	-35,403	-2,720
Funds from operations	**1,261,534**	**102,489**
Other short-term receivables increase(-)/decrease(+)	-915	-11,908
Other short-term payables increase(+)/decrease(-)	19,729	-1,038
Change in working capital	18,814	-12,946
Net cash from operating activities	**1,280,348**	**89,543**
Cash flow from investing activities		
Capital expenditures	-13,215	-8,448
Acquisition of shares and capital contributions in subsidiaries	-8	-8
Proceeds from sales of shares	921,162	-
Proceeds from sales of property, plant and equipment	148	21
Change in interest-bearing receivables and other non-current assets	-2,092,580	-2,287
Net cash used in investing activities	**-1,184,492**	**-10,722**
Cash flow before financing activities	**95,856**	**78,821**

EUR 1,000	2020	2019
Cash flow from financing activities		
Proceeds from long-term liabilities	2,455,419	2,807,623
Payment of long-term liabilities	-366,156	-2,539,992
Change in cash pool liabilities	-882,562	1,837,657
Change in short-term liabilities	222,360	-201,171
Dividends paid	-977,408	-977,070
Net cash from financing activities	**451,653**	**927,047**
Net increase(+)/decrease(-) in liquid funds	**547,508**	**1,005,868**
Liquid funds 1 January	**1,164,539**	**158,674**
Liquid funds 31 December	**1,712,047**	**1,164,539**

Notes to the Parent Company Financial Statements, FAS

1 Accounting policies and principles

The financial statements of Fortum Oyj for the year ended 31 December 2020 are prepared in accordance with Finnish Accounting Standards (FAS).

1.1 Sales
Sales include sales revenue from actual operations and exchange rate differences on trade receivables, less discounts and indirect taxes such as value added tax.

1.2 Other income
Other income includes gains on the sales of property, plant and equipment and shareholdings, as well as all other operating income not related to the sales of products or services, such as rents.

1.3 Foreign currency items and derivative instruments
Transactions denominated in foreign currencies have been valued using the exchange rate at the date of the transaction. Receivables and liabilities denominated in foreign currencies outstanding on the balance sheet date have been valued using the exchange rate quoted on the balance sheet date. Exchange rate differences have been entered in the financial net in the income statement.

Fortum Oyj enters into derivative contracts mainly for hedging foreign exchange and interest rate exposures in Fortum Group.

Fortum Oyj applies IFRS 9 Financial Instruments standard for derivative instruments and hedge accounting in statutory financial statements. Accounting principles on financial derivatives, see Note 4 Financial risk management, Note 14 Financial assets and liabilities by categories and Note 15 Financial assets and liabilities by fair value hierarchy in the Consolidated financial statements.

1.4 Income taxes
Income taxes presented in the income statement consist of accrued taxes for the financial year and tax adjustments for prior years.

1.5 Shares in group companies
The balance sheet value of shares in group companies consists of historical costs less write-downs. If the estimated future cash flows generated by a non-current asset are expected to be permanently lower than the carrying amount, an adjustment to the value is made to write-down the difference as an expense. If the basis for the write-down can no longer be justified at the balance sheet date, it is reversed.

1.6 Intangible assets and Property, plant and equipment
The balance sheet value of intangible assets and property, plant and equipment consists of historical costs less depreciation and possible write-downs. Intangible assets and Property, plant and equipment are depreciated using straight-line depreciation based on the expected useful life of the asset.

The depreciation is based on the following expected useful lives:

Machinery and equipment	3 – 15 years
Intangible assets	5 – 10 years

1.7 Pension expenses
Statutory pension obligations are covered through a compulsory pension insurance policy or Group's own pensionfund. Costs for pension fund are recorded in the income statement based on contributions paid pursuant to the Finnish pension laws and regulations.

1.8 Long-term incentive schemes
Costs related to the Fortum long-term incentive plans are accrued over the earnings period and the related liabilityis booked to the balance sheet.

1.9 Provisions
Foreseeable future expenses and losses that have no corresponding revenue to which Fortum is committed or obliged to settle, and whose monetary value can be reasonably assessed, are entered as expenses in the income statement and included as provisions on the balance sheet.

2 Sales by market area

EUR 1,000	2020	2019
Finland	56,758	53,442
Other countries	58,654	28,855
Total	**115,412**	**82,297**

3 Other income

EUR 1,000	2020	2019
Rental and other income	6,973	7,010
Total	**6,973**	**7,010**

4 Employee benefits

EUR 1,000	2020	2019
Personnel expenses		
Wages, salaries and remunerations	35,938	28,940
Indirect employee costs		
Pension costs	5,129	4,812
Other indirect employee costs	1,188	920
Other personnel expenses	2,654	2,741
Total	**44,908**	**37,413**

EUR 1,000	2020 Markus Rauramo, President and CEO from 1 July 2020	2020 Pekka Lundmark, President and CEO until 1 July 2020	2019 Pekka Lundmark, President and CEO
Compensation for the President and CEO			
Salaries and fringe benefits	808	521	1,057
Performance bonuses 1)	82	-	200
Share-based incentives 1)	249	94	898
Pensions (statutory)	140	82	207
Pensions (voluntary)	158	132	265
Social security expenses	31	18	39
Total	**1,467**	**848**	**2,666**

1) Based on estimated amounts.

EUR 1,000	2020	2019
Compensation for the Board of Directors	593	529

The compensation above is presented on accrual basis. Paid salaries and remunerations for the President and CEO Markus Rauramo were EUR 808 thousand, and for the former President and CEO Pekka Lundmark EUR 1,899 thousand (2019: 2,213).

For the President and CEO Markus Rauramo the retirement age is determined in accordance with the Finnish Employees' Pension Act. The pension obligations are covered through insurance company.

Board members are not in an employment relationship or service contract with Fortum, and they are not given the opportunity to participate in Fortum's STI or LTI programme, nor does Fortum have a pension plan that they can opt to take part in. The compensation of the board members is not tied to the sustainability performance of the Group.

See ▸ **Note 10** Employee benefits and Board remuneration and ▸ **Note 30** Pension obligations in the Consolidated financial statements.

	2020	2019
Average number of employees	329	268

5 Auditor's fees

EUR 1,000	2020	2019
Audit fees	687	614
Audit-related assignments	20	73
Tax assignments	30	3
Total	**738**	**690**

Deloitte Oy is the appointed auditor until the next Annual General Meeting, to be held in 2021. Audit fees include fees for the audit of the consolidated financial statements, review of the interim reports as well as the fees for the audit of Fortum Oyj. Audit related assignments include fees for assurance of sustainability reporting and other assurance and associated services related to the audit. Tax assignments include fees for tax advice services.

6 Financial income and expenses

EUR 1,000	2020	2019
Dividend income from group companies	1,129,720	87,000
Interest and other financial income from group companies	39,768	31,531
Interest and other financial income from associated companies	10	11
Gains on sale of shares	420,701	-
Write-downs of participations in group companies	-	-22,184
Interest and other financial income	1,065	309
Exchange rate differences	1,763	667
Changes in fair values of derivatives	-4,439	-7,098
Interest and other financial expenses to group companies	-2,699	-6,122
Interest and other financial expenses	-71,099	-79,823
Total	**1,514,790**	**4,291**
Interest income	35,612	26,888
Interest expenses	-68,213	-75,277
Interest costs - net	**-32,601**	**-48,389**

7 Income tax expense

EUR 1,000	2020	2019
Taxes on regular business operations	-15,182	-20,018
Taxes on group contributions	46,688	57,212
Total	**31,506**	**37,194**
Current taxes for the period	32,116	36,437
Current taxes for prior periods	-1	-159
Changes in deferred tax	-610	916
Total	**31,506**	**37,194**

8 Non-current assets

Intangible assets

EUR 1,000	Total
Cost 1 January 2020	**48,465**
Additions	16,725
Disposals	-16
Cost 31 December 2020	**65,174**
Accumulated depreciation 1 January 2020	**24,047**
Disposals	-8
Depreciation for the year	6,473
Accumulated depreciation 31 December 2020	**30,512**
Carrying amount 31 December 2020	**34,662**
Carrying amount 31 December 2019	24,418

Property, plant and equipment

EUR 1,000	Machinery and equipment	Advances paid and construction in progress	Total
Cost 1 January 2020	**9,593**	**6,897**	**16,490**
Additions and transfers between categories	1,205	-	1,205
Disposals	-296	-3,562	-3,858
Cost 31 December 2020	**10,502**	**3,335**	**13,837**
Accumulated depreciation 1 January 2020	**4,564**	**-**	**4,564**
Disposals	-155		-155
Depreciation for the year	2,092		2,092
Accumulated depreciation 31 December 2020	**6,502**	**-**	**6,502**
Carrying amount 31 December 2020	**4,000**	**3,335**	**7,335**
Carrying amount 31 December 2019	5,029	6,897	11,926

Investments

EUR 1,000	Shares in Group companies	Participation in associated companies	Receivables from Group companies	Receivables from associated companies	Other non-current assets	Total
Cost 1 January 2020	**17,847,406**	**5,656**	**2,952,176**	**16,603**	**8,092**	**20,829,933**
Additions [1]	5		2,092,992	88		2,093,085
Disposals	-500,461					-500,461
Cost 31 December 2020	**17,346,950**	**5,656**	**5,045,168**	**16,691**	**8,092**	**22,422,557**
Accumulated write-downs 1 January 2020	**1,145,010**	**5,656**	**-**	**15,276**	**7,982**	**1,173,925**
Accumulated write-downs 31 December 2020	**1,145,010**	**5,656**	**-**	**15,276**	**7,982**	**1,173,925**
Carrying amount 31 December 2020	**16,201,940**	**-**	**5,045,168**	**1,415**	**110**	**21,248,632**
Carrying amount 31 December 2019	16,702,396	-	2,952,176	1,327	110	19,656,008

1) Additions regarding shares comprise acquisitions of shares and capital contributions and reclassification between other non-current assets and shares in Group companies.

9 Other current receivables

EUR 1,000	2020	2019
Other current receivables from group companies		
Trade receivables	12,209	9,285
Group contribution and other receivables	233,438	286,059
Accrued income and prepaid expenses	2,974	18,165
Total	**248,621**	**313,509**
Other current receivables		
Trade receivables	79	38
Other receivables	3,289	3,845
Accrued income and prepaid expenses	18,814	5,638
Total	**22,182**	**9,521**

See Note 4.2 Liquidity and refinancing risk in the Consolidated financial statements.

10 Changes in shareholders' equity

EUR 1,000	Share capital	Share premium	Hedging reserve	Retained earnings	Total
1 January 2020	**3,046,186**	**2,821,691**	**-19,534**	**4,238,662**	**10,087,004**
Cash dividend				-977,124	-977,124
Change in hedging reserve			-4,668		-4,668
Profit for the year				1,678,522	1,678,522
31 December 2020	**3,046,186**	**2,821,691**	**-24,202**	**4,940,060**	**10,783,734**
1 January 2019	**3,046,186**	**2,821,691**	**-10,987**	**5,002,377**	**10,859,265**
Cash dividend				-977,124	-977,124
Change in hedging reserve			-8,547		-8,547
Profit for the year				213,410	213,410
31 December 2019	**3,046,186**	**2,821,691**	**-19,534**	**4,238,662**	**10,087,004**

EUR 1,000	2020	2019
Distributable funds		
Retained earnings 31 December	4,940,060	4,238,662
Hedging reserve	-24,202	-19,534
Total	**4,915,858**	**4,219,128**

11 Interest-bearing liabilities

EUR 1,000	2020	2019
External interest-bearing loans		
Bonds	3,758,061	4,250,899
Loans from financial institutions	2,450,263	311,240
Other long-term interest-bearing loans	851,812	851,799
Total long-term interest-bearing loans	**7,060,135**	**5,413,938**
Current portion of long-term bonds	499,689	-
Current portion of loans from financial institutions	13,695	26,308
Current portion of other long-term interest-bearing loans	-	33,525
Other short-term interest-bearing loans	304,725	76,223
Total short-term interest-bearing loans	**818,108**	**136,056**
Total [1]	**7,878,244**	**5,549,994**

Maturity of external interest-bearing loans

EUR 1,000	2020
2021	818,108
2022	3,039,310
2023	1,116,692
2024	317,747
2025	17,782
2026 and later	2,568,604
Total [1]	**7,878,244**

See Note 4.2 Liquidity and refinancing risk and Note 26 Interest-bearing liabilities in the Consolidated financial statements.

EUR 1,000	2020	2019
External interest-bearing loans due after five years		
Bonds	1,631,999	1,615,738
Other long-term loans	936,606	851,799
Total [1]	**2,568,604**	**2,467,538**

EUR 1,000	2020	2019
Other interest-bearing loans due after five years		
Interest-bearing loans to associated companies	293,356	293,356
Total	**293,356**	**293,356**

1) Excludes loans to Group and associated companies.

Non-discounted cash flows of interest-bearing loans and their maturities, see Note 13 Financial derivatives.

12 Trade and other payables

EUR 1,000	2020	2019
Trade and other payables to group companies		
Trade payables	1,615	823
Deposits from group companies and other liabilities	29,616	9,383
Accruals and deferred income	116	98
Total	**31,347**	**10,304**
Trade and other payables to associated companies		
Accruals and deferred income	4,019	8,915
Total	**4,019**	**8,915**
Trade and other payables		
Trade payables	25,370	13,982
Other liabilities	6,137	35,121
Accruals and deferred income	102,945	68,518
Total	**134,453**	**117,621**

13 Financial derivatives

Interest rate and currency derivatives by instrument 2020

	Notional amount Remaining lifetimes				Fair value		
EUR 1,000	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Hedge accounting							
Foreign exchange derivatives	450,201	177,048	-	627,249	8,802	9,114	-312
Interest rate swaps	825,000	1,874,658	1,675,000	4,374,658	153,721	61,068	92,653
Cross currency swaps	14,056	261,341	-	275,397	38,182	3,087	35,095
Non-hedge accounting							
Foreign exchange derivatives	9,529,153	572,978	-	10,102,131	196,345	111,668	84,677
Interest rate swaps	-	19,932	-	19,932	-	259	-259
Cross currency swaps	-	23,656	-	23,656	-	1,367	-1,367
Total	**10,818,410**	**2,929,613**	**1,675,000**	**15,423,023**	**397,050**	**186,563**	**210,487**
Of which long-term					186,647	71,935	114,712
Short-term					210,403	114,628	95,775

Interest rate and currency derivatives by instrument 2019

	Notional amount Remaining lifetimes				Fair value		
EUR 1,000	Under 1 year	1-5 years	Over 5 years	Total	Positive	Negative	Net
Hedge accounting							
Foreign exchange derivatives	438,813	189,413	-	628,226	7,393	7,417	-24
Interest rate swaps	-	2,695,723	1,525,000	4,220,723	152,799	52,954	99,846
Cross currency swaps	103,797	262,897	-	366,694	7,831	17,473	-9,642
Non-hedge accounting							
Foreign exchange derivatives	10,049,868	526,596	-	10,576,464	118,063	62,449	55,614
Interest rate swaps	-	19,145	-	19,145	-	119	-119
Cross currency swaps	-	-	-	-	-	-	-
Total	**10,592,477**	**3,693,774**	**1,525,000**	**15,811,251**	**286,086**	**140,411**	**145,674**
Of which long-term					160,061	77,718	82,343
Short-term					126,025	62,693	63,332

Maturity analysis of interest-bearing loans and derivative liabilities

Interest-bearing loans are non-discounted expected cash flows including future interest payments and amortisations. Interest rate and currency derivatives represent the fair value of the derivative liabilities in the balance sheet.

	2020				2019			
EUR 1,000	Under 1 year	1-5 years	Over 5 years	Total	Under 1 year	1-5 years	Over 5 years	Total
Interest-bearing loans	948,619	4,642,160	2,998,928	8,589,707	268,803	3,150,966	2,994,898	6,414,668
Interest rate and currency derivatives	114,628	35,084	36,851	186,564	62,693	56,419	21,299	140,411
Cash outflows of interest-bearing loans and derivatives	**1,063,247**	**4,677,245**	**3,035,778**	**8,776,270**	**331,497**	**3,207,385**	**3,016,197**	**6,555,079**

Interest-bearing loans include loans from the State Nuclear Waste Management Fund and Teollisuuden Voima Oyj of EUR 1,145 million (2019: 1,185). These loans are renewed yearly and the related interest payments are calculated for ten years in the table above.

14 Derivatives and liabilities by fair value hierarchy

Fair value measurements are classified using a fair value hierarchy, i.e. Level 1, Level 2 and Level 3 that reflects the significance of the inputs used in making the measurements. For further information see accounting principles in Fortum consolidated accounts ▸ Note 15 Financial assets and liabilities by fair value hierarchy.

Derivatives in financial assets

	Level 1		Level 2		Level 3		Total	
EUR 1,000	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
In non-current assets								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			171,797	155,401			171,797	155,401
Non-hedge accounting			14,851	4,660			14,851	4,660
In current assets								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			28,868	12,622			28,868	12,622
Non-hedge accounting			181,535	113,403			181,535	113,403
Total			**397,050**	**286,086**			**397,050**	**286,086**

Derivatives and liabilities at fair value in financial liabilities

	Level 1		Level 2		Level 3		Total	
EUR 1,000	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
In non-current liabilities								
Interest-bearing liabilities [1]			2,145,032	2,293,192			2,145,032	2,293,192
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			56,525	72,929			56,525	72,929
Non-hedge accounting			15,410	4,789			15,410	4,789
In current liabilities								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			16,703	4,915			16,703	4,915
Non-hedge accounting			97,926	57,778			97,926	57,778
Total			2,331,595	2,433,603			2,331,595	2,433,603

1) Fair valued part of bond in the fair value hedge relationship.

Net fair value amount of interest rate and currency derivatives is EUR 210 million (2019: 146), including assets EUR 397 million (2019: 286) and liabilities, EUR 187 million (2019: 140). Fortum Corporation has cash collaterals based on Credit Support Annex agreements with some counterparties. At the end of December 2020 Fortum Corporation had received EUR 109 million (2019: 65) from Credit Support Annex agreements. The received cash has been booked as a short-term interest-bearing liability.

15 Contingent liabilities and other commitments

EUR 1,000	2020	2019
On own behalf		
Other contingent liabilities	438	956
On behalf of group companies		
Guarantees	1,330,784	565,510
On behalf of associated companies		
Guarantees on behalf of associated companies	359,497	818,527
Total	**1,690,719**	**1,384,993**

Operating lease commitments

EUR 1,000	2020	2019
Operating lease commitments		
Due within one year	7,884	6,887
Due after one year and within five years	19,322	16,588
Due after 5 years	7,093	9,062
Total	**34,299**	**32,537**

16 Related party transactions

See Note 37 Related party transactions in the Consolidated financial statements.

Investments in group companies, associated companies and other holdings

		No. of shares units	Holding %
Investments in group companies			
Fortum Waste Solutions Oy	Finland	3,520,800	100.00
Fortum Asiakaspalvelu Oy	Finland	10,010	100.00
Fortum Heat and Gas Oy	Finland	2,000,000	100.00
Fortum Markets Oy	Finland	24,039	100.00
Fortum Norm Oy	Finland	250	100.00
Fortum Power and Heat Oy	Finland	91,197,543	100.00
Fortum Real Estate Oy	Finland	2,000,000	100.00
Fortum Holding B.V.	Netherlands	61,062	100.00
Fortum India Private Ltd	India	1	0.10
Fortum Finance Ireland Designated Activity Company	Ireland	25,000	100.00
Fortum Sweden AB	Sweden	1,000,000	100.00
Investments in associated companies			
Wello Oy	Finland	1,100,000	18.60
Other holdings			
AW-Energy Oy	Finland	2,854,688	3.43
Clic Innovation Oy	Finland	100	3.80
East Office of Finnish Industries Oy	Finland	1	5.88
Prototype Carbon Fund	USA	N/A	

17 Events after the balance sheet date

There have been no material events after the balance sheet date.

Signatures for the operating and financial review and financial statements

Espoo, 11 March 2021

Matti Lievonen	Veli-Matti Reinikkala	Eva Hamilton	Teppo Paavola
Essimari Kairisto	Anja McAlister	Klaus-Dieter Maubach	Philipp Rösler
	Annette Stube	Markus Rauramo President and CEO	

Auditor's report

To the Annual General Meeting of Fortum Oyj

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Fortum Oyj (business identity code 1463611-4) for the year ended 31 December, 2020. The financial statements comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in total equity, consolidated cash flow statement and notes to the consolidated financial statements, including a summary of significant accounting policies, as well as the parent company's, income statement, balance sheet, cash flow statement and notes to the financial statements.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position, financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU,
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 8 to the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

Key audit matter	How our audit addressed the key audit matter

Provisional acquisition accounting for Uniper
 	
Refer to notes 1, 2 and 3.
• At the beginning of the financial year 2020 Fortum held 49,99% of Uniper's shares, and Uniper was consolidated as an associated company in Fortum Group.
• Fortum acquired all Uniper shares held by the funds managed by Elliott Management Corporation and Knight Vinke Energy Advisors Limited, and their affiliates, and on 31 March 2020, Uniper was consolidated as a subsidiary. After the transaction, Fortum's consolidated stake in Uniper was 73.4%, and the total investment in Uniper EUR 6.5 billion. See Note 1.7.
• In the consolidated financial statements 2020, Fortum presents the preliminary purchase price allocation for the Uniper acquisition, which has resulted in adjustments to Uniper's 31 March 2020 opening balance sheet. The Fair value adjustments were mainly related to property, plant and equipment and right-of-use assets, participations in associates and joint ventures, lease liabilities, other provisions, and deferred taxes. Excess of the acquisition value over the fair value of Uniper's net assets, EUR 515 million, is preliminary goodwill. See Note 1.7.2 and 3.
• The preliminary Uniper purchase price allocation is being finalized and will be completed within the one-year window from the acquisition date, by 31 March 2021.
	• As part of our audit procedures we obtained understanding on the approach adopted by the management, when considering the provisional purchase price allocation in the financial accounting in accordance with IFRS 3. Furthermore, we evaluated the significant estimates, assumptions and judgment applied by management.
	• Our audit procedures involved e.g.:
	  – We have read through the relevant contracts and the minutes of the meetings of the Board of Directors, in order to identify the contractual terms, which would potentially have an impact on accounting of the transaction;
	  – We have audited the purchase consideration to supporting documentation;
	  – We have evaluated, utilizing Deloitte's valuation experts, if management's approach and the valuation methods used by Fortum's advisors are adequate and in compliance with the requirements as set by IFRS-standards: and
	  – Benchmarking the key market parameters used by the management to external data, such as comparing the applied discount rate to comparable discount rates applied in the industry.

Key audit matter	How our audit addressed the key audit matter
• Preparing a purchase price allocation requires management judgement when determining the fair values of the assets acquired and liabilities assumed. The preliminary purchase price allocation may change when analyses are conducted, and further information becomes available. Any adjustments to the fair values of the assets acquired and liabilities assumed will impact the preliminary estimate of goodwill. These adjustments may be material. Fortum expects to conduct further analysis to assess the fair values of items such as property, plant and equipment, provisions, contingent liabilities and long-term purchase obligations. • We consider acquisition as a key audit area due to its size and required judgement both from the accounting and the auditing perspective. Identification and valuation of the assets and liabilities are included in judgmental areas. Values of assets are determined by using the future cash flows and estimated profit before tax.	• With our IFRS specialists we have evaluated the accounting treatment and accounting principles of the purchase price allocation in accordance with IFRS. • We have assessed the appropriateness of financial statement disclosures related to preliminary purchase price allocation.

Key audit matter	How our audit addressed the key audit matter
Valuation of property, plant and equipment and goodwill Refer to Notes 2, 16 and 17. • The consolidated balance sheet includes property, plant and equipment amounting to EUR 18 641 million (EUR 10 009 million) and goodwill amounting to EUR 1 069 million (EUR 612 million). • At the end of each reporting period management has to assesses whether there is any indication that asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated. Goodwill is subject to annual impairment test. • The main assumptions used in the valuation of energy and heat production property, plant and equipment and goodwill relate to the estimated future operating cash flows and the discount rates that are used in calculating the present value. • The potential indicators for impairment are among other things changes in electricity and fuel prices, regulatory/political changes relating to energy taxes and price regulations. • The assumptions used in the valuation of the balances in question require management judgment. • Estimates are also made in an acquisition when determining the fair values and remaining useful lives of acquired intangible and tangible assets. • This matter is a significant risk of material misstatement referred to in EU Regulation No 537/241, point (c) of Article 10(2).	• We have evaluated the process how management has assessed the indicators for potential impairment. We have performed audit procedures on impairment models relating to material cash generating units. • We have obtained entity's impairment testing documentation for goodwill and energy production assets and tested and evaluated the rationale of key assumptions applied by management on a sample basis, including commodity price forecasts, profit and cash flow forecasts, terminal values, foreign exchange rates and the selection of discount rates. • We have compared, that the forecasts used in the impairment testing calculations are based on forecasts approved by management. • We challenged management's assumptions and judgments with reference to historical data and, where applicable, external benchmarks. • We assessed the models used in the impairment testing and carried out our testing for the sensitivity calculations. • We assessed the adequacy of related disclosures in the financial statements.

Key audit matter	How our audit addressed the key audit matter
Fair value measurement of derivative financial instruments and hedge accounting Refer to Notes 4, 7, 14 and 15 • Assets related to derivative financial instruments in Fortum's consolidated balance sheet amount to EUR 10,477 million (EUR 311 million) and liabilities to EUR 10,594 million (EUR 389 million). Changes in the fair value of derivatives hedging future cash flows in items affecting the comparability of the income statement amount to EUR -675 million (EUR -72 million) and cash flow hedges in other equity components to EUR -158 million (EUR -70 million). • The fair values of derivatives and their changes may have a material effect on Fortum's financial statements. Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production, transmission and sales of energy products. The main exposure is toward electricity prices and volumes, gas prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results.	• Our audit procedures included the assessment of Fortum's internal controls related to derivative transactions, hedging activities and the determination of fair values. • We have assessed the appropriateness of the valuation models used by Fortum, including the assumptions used in the models. We have validated model input data with observable external information. • We have conducted audit procedures regarding the existence and completeness of open derivative contracts. • We have assessed the appropriateness of hedge accounting application according to the requirements of IFRS 9. • We have assessed the appropriate presentation of derivatives in the consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Shares in Nuclear Waste Funds and Nuclear provisions Refer to Notes 2 and 28. • Fortum's balance sheet includes Nuclear related provisions amounting to EUR 3 866 million (EUR 813 million) and Fortum's share of the Nuclear Waste Management Fund amounting to EUR 3 445 million (EUR 813 million). • Fortum's nuclear related provisions and the related part of the Nuclear Waste Management Fund are both presented separately in the balance sheet as disclosed in note 28. • Fortum's share in the Nuclear Waste Management Funds is accounted for according to IFRIC 5 which states that the fund assets are measured at the lower of fair value or the value of the related liabilities. • Due to complexity and materiality, the accounting treatment for nuclear decommissioning is complex and requires application of special accounting practice and management judgment when forming estimates for the basis of accounting such as technical plans, timing, cost estimates and discount rate.	• We have assessed Fortum's accounting manual and principles for Nuclear Decommissioning Accounting, whether they are in line with IFRS accounting principles. • We have assessed the assumptions and judgments made and adopted by the management in the accounting for the nuclear waste provisions and share in nuclear waste management fund which have been based on current legislation and submitted by authorities. • We assessed the adequacy of related disclosures in the financial statements.

Responsibilities of the Board of Directors and the President and CEO for the Financial Statements

The Board of Directors and the President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the President and CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the President and CEO are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

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

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting on 16.3.2006, and our appointment represents a total period of uninterrupted engagement of 15 years.

Other information

The Board of Directors and the President and CEO are responsible for the other information. The other information comprises the Operating and Financial Review and the information included in the Financials, but does not include the financial statements and our auditor´s report thereon. We have obtained the Operating and Financial Review prior to the date of this auditor's report, and the Financials is expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to Operating and Financial Review, our responsibility also includes considering whether the Operating and Financial Review has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the Operating and Financial Review is consistent with the information in the financial statements and the Operating and Financial Review has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor´s report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other opinions

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown on the balance sheet is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO should be discharged from liability for the financial period audited by us.

Espoo, 11 March 2021

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Financial key figures

Comparability of information presented in tables

Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from 1 April 2020, consolidated Uniper's results into its income statement. In 2019 and in the first quarter of 2020, Uniper was consolidated as an associated company into Fortum's income statement.

Following the consolidation of Uniper, Fortum's business profile changed and the previous long-term financial targets did not appropriately reflect the Group's new business profile. In May 2020, Fortum's Board of Directors consequently decided to remove the financial targets (return on capital employed of at least 10% and comparable net debt-to-EBITDA of around 2.5x) as of the first quarter of 2020. In December 2020 in connection with the strategy update, Fortum updated its long-term financial target to be Financial net debt/comparable EBITDA below 2x. For more information, see Note 5 Capital risk management.

Fortum announced the sale of Swedish Distribution business in March 2015. After the divestment of the Swedish Distribution business Fortum has no electricity distribution operations and therefore Distribution segment was treated as discontinued operations in 2015, with restatement of year 2014, according to IFRS 5 Non-current Assets Held for Sale and Discontinued Operations.

Information in the tables and graphs presented for year 2012 or earlier is not restated due to the adoption of IFRS 10 and IFRS 11. Adoption of standards influences treatment of Fortum's holding in Stockholm Exergi AB (Exergi), (previously AB Fortum Värme samägt med Stockholms stad), in the consolidated financial statements. From 1 January 2014 onwards Exergi is treated as a joint venture and thus consolidated with equity method. Before the change the company was consolidated as a subsidiary with 50% minority interest.

Fortum adopted IFRS 16 on 1 January 2019, and IFRS 9 and IFRS 15 on 1 January 2018. Fortum applied the transition relief for not restating the comparatives of 2018 and 2017, respectively.

In 2019, Fortum classified certain assets as held for sale. These assets and the related liabilities are included in segment assets and liabilities at 31 December 2019.

For information of Alternative Performance Measures used by Fortum, see Definitions of key figures and Note 1 Significant accounting policies.

EUR million or as indicated	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change 20/19 %
Income statement											
Sales total Fortum	6,161	6,159	5,309	4,751	3,702	3,632	4,520	5,242	5,447	49,015	800
Sales continuing operations				4,088	3,459	3,632	4,520	5,242	5,447	49,015	800
EBITDA total Fortum	3,008	2,538	2,129	3,954	4,640	1,006	1,623	1,674	1,693	2,688	59
EBITDA continuing operations				1,673	196	1,006	1,623	1,674	1,693	2,688	59
Comparable EBITDA total Fortum	2,374	2,416	1,975	1,873	1,265	1,015	1,275	1,523	1,766	2,434	38
Comparable EBITDA continuing operations				1,457	1,102	1,015	1,275	1,523	1,766	2,434	38
Operating profit total Fortum	2,402	1,874	1,508	3,428	4,245	633	1,158	1,138	1,118	1,599	43
- of sales%	39.0	30.4	28.4	72.2	114.7	17.4	25.6	21.7	20.5	3.3	
Operating profit continuing operations				1,296	-150	633	1,158	1,138	1,118	1,599	43
- of sales%				31.7	-4.3	17.4	25.6	21.7	20.5	3.3	
Comparable operating profit total Fortum	1,802	1,752	1,403	1,351	922	644	811	987	1,191	1,344	13
Comparable operating profit continuing operations				1,085	808	644	811	987	1,191	1,344	13
Share of profit/loss of associates and joint ventures total Fortum	91	23	178	149	20	131	148	38	744	656	-12
Profit before income tax total Fortum	2,228	1,586	1,398	3,360	4,088	595	1,111	1,040	1,728	2,199	27
- of sales%	36.2	25.8	26.3	70.7	110.4	16.4	24.6	19.8	31.7	4.5	
Profit before income tax continuing operations				1,232	-305	595	1,111	1,040	1,728	2,199	27
- of sales%				30.1	-8.8	16.4	24.6	19.8	31.7	4.5	
Profit for the period total Fortum	1,862	1,512	1,212	3,161	4,142	504	882	858	1,507	1,855	23
- of which attributable to owners of the parent	1,769	1,416	1,204	3,154	4,138	496	866	843	1,482	1,823	23
Profit for the period continuing operations				1,089	-228	504	882	858	1,507	1,855	23
- of which attributable to owners of the parent				1,081	-231	496	866	843	1,482	1,823	23

EUR million or as indicated	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change 20/19 %
Financial position and cash flow											
Capital employed total Fortum	17,931	19,420	19,183	17,918	19,870	18,649	18,172	18,170	19,929	26,239	32
Financial net debt									4,833	7,023	45
Adjusted net debt									4,978	9,784	97
Interest-bearing net debt	7,023	7,814	7,793	4,217	-2,195	-48	988	5,509	5,260	N/A	
Interest-bearing net debt without Exergi financing			6,658	3,664	N/A	N/A	N/A	N/A	N/A	N/A	
Capital expenditure and gross investments in shares total Fortum	1,482	1,574	1,020	843	669	1,435	1,815	4,672	819	4,941	503
- of sales%	24.1	25.6	19.2	17.7	18.1	39.5	40.2	89.1	15.0	10.1	
Capital expenditure and gross investments in shares continuing operations				695	625	1,435	1,815	4,672	819	4,941	503
Capital expenditure total Fortum	1,408	1,558	1,005	774	626	591	690	584	713	1,135	59
Capital expenditure continuing operations				626	582	591	690	584	713	1,135	59
Net cash from operating activities total Fortum	1,613	1,382	1,548	1,762	1,381	621	993	804	1,575	2,555	62
Net cash from operating activities continuing operations				1,406	1,228	621	993	804	1,575	2,555	62
Key ratios											
Return on capital employed total Fortum, %	14.8	10.2	9.0	19.5	22.7	4.0	7.1	6.7	10.0	N/A	
Return on shareholders' equity total Fortum, %	19.7	14.6	12.0	30.0	33.4	3.7	6.6	6.8	11.9	12.9	
Interest coverage total Fortum	10.5	7.6	6.7	19.9	27.6	4.6	8.7	10.0	8.0	27.3	
Interest coverage including capitalised borrowing costs total Fortum	8.5	5.7	5.3	15.7	21.5	4.1	7.8	9.2	7.5	18.6	
Funds from operations/interest-bearing net debt total Fortum,%	21.5	19.9	18.8	42.9	-59.7	-1,503.4	83.9	26.8	32.2	N/A	
Funds from operations/interest-bearing net debt without Exergi financing total Fortum,%			22.1	49.3	N/A	N/A	N/A	N/A	N/A	N/A	
Gearing, %	69	73	77	39	-16	0	7	46	40	45	
Financial net debt/comparable EBITDA										2,9	
Comparable net debt/EBITDA total Fortum	3.0	3.2	3.9	2.3	-1.7	0.0	0.8	3.6	3.0	N/A	
Comparable net debt/EBITDA without Exergi financing			3.4	2.0	N/A	N/A	N/A	N/A	N/A	N/A	
Equity-to-assets ratio, %	44	43	43	51	61	62	61	54	57	27	
Other data											
Dividends	888	888	977	1,155	977	977	977	977	977	995[1]	2
Research and development expenditure	38	41	49	41	47	52	53	56	67	56	-16
- of sales%	0.6	0.7	0.9	1.0	1.4	1.4	1.2	1.1	1.1	0.1	
Average number of employees total Fortum	11,010	10,600	9,532	8,821	8,193	7,994	8,507	8,767	8,248	19,988	
Average number of employees continuing operations				8,329	8,009	7,994	8,507	8,767	8,248	19,988	

1) Board of Directors' proposal for the planned Annual General Meeting on 28 April 2021.

See ▸ **Definitions of key figures.**

Share key figures

EUR or as indicated	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change 20/19 %
Data per share											
Earnings per share total Fortum	1.99	1.59	1.36	3.55	4.66	0.56	0.98	0.95	1.67	2.05	23
Earnings per share continuing operations				1.22	-0.26	0.56	0.98	0.95	1.67	2.05	23
Earnings per share discontinued operations	-	-	-	2.33	4.92	-	-	-	-		
Diluted earnings per share total Fortum	1.99	1.59	1.36	3.55	4.66	0.56	0.98	0.95	1.67	2.05	23
Diluted earnings per share continuing operations				1.22	-0.26	0.56	0.98	0.95	1.67	2.05	23
Diluted earnings per share discontinued operations	-	-	-	2.33	4.92	-	-	-	-		
Cash flow per share total Fortum	1.82	1.56	1.74	1.98	1.55	0.70	1.12	0.91	2.27	2.88	27
Cash flow per share continuing operations				1.38	1.38	0.70	1.12	0.91	2.27	2.88	27
Equity per share	10.84	11.30	11.28	12.23	15.53	15.15	14.69	13.33	14.61	14.58	-
Dividend per share	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.12 1)	2
Extra dividend				0.20	-	-	-				
Payout ratio, %	50.3	62.9	80.9	36.6	23.6	196.4	112.2	115.8	65.9	54.6 1)	
Dividend yield, %	6.1	7.1	6.6	7.2	7.9	7.5	6.7	5.8	5.0	5.7 1)	
Price/earnings ratio (P/E)	8.3	8.9	12.2	5.1	3.0	26.1	16.8	20.1	13.2	9.6	
Share prices											
At the end of the period	16.49	14.15	16.63	17.97	13.92	14.57	16.50	19.10	22.00	19.70	
Average	19.77	15.66	15.11	17.89	16.29	13.56	15.28	19.10	20.06	17.20	
Lowest	15.53	12.81	13.10	15.13	12.92	10.99	12.69	16.43	18.09	12.25	
Highest	24.09	19.36	18.18	20.32	21.59	15.74	18.94	22.91	22.50	23.46	
Other data											
Market capitalisation at the end of the period, EUR million	14,649	12,570	14,774	15,964	12,366	12,944	14,658	16,966	19,542	17,499	
Trading volumes 2)											
Number of shares, 1 000 shares	524,858	494,765	465,004	454,796	541,858	611,572	582,873	474,705	372,272	647,869	
In relation to weighted average number of shares, %	59.1	55.7	52.3	51.2	61.0	68.8	65.6	53.4	41.9	72.9	
Number of shares, 1 000 shares	888,367	888,367	888,367	888,367	888,367	888,367	888,367	888,294	888,294	888,294	
Number of shares excluding own shares, 1 000 shares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Average number of shares, 1 000 shares	888,367	888,367	888,367	888,367	888,367	888,367	888,367	888,312	888,294	888,294	
Diluted adjusted average number of shares, 1 000 shares	888,367	888,367	888,367	888,367	888,367	888,367	888,367	888,312	888,294	888,294	

1) Board of Directors' proposal for the planned Annual General Meeting on 28 April 2021
2) Trading volumes in the table represent volumes traded on Nasdaq Helsinki. In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Boat, Cboe and Turquoise, and on the OTC market as well. In 2020, approximately 68% (2019: 73%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

See ▸ **Definitions of key figures.**

Segment key figures

Fortum renewed its business structure as of 1 March 2014. The reorganisation lead to a change in Fortum's external financial reporting structure as previously separately reported segments Heat and Electricity Sales were combined into one segment: Heat, Electricity Sales and Solutions.

Fortum has applied new IFRS 10 Consolidated financial statements and IFRS 11 Joint arrangements from 1 January 2014. The effect of applying the new standards to Fortum Group financial information relates to Stockholm Exergi AB (publ) (previously AB Fortum Värme samägt med Stockholm Stad), that is treated as a joint venture and thus consolidated with equity method from 1 January 2014 onwards. Before the change the company was consolidated as a subsidiary with 50% minority interest.

Fortum announced the sale of Swedish Distribution business in March 2015. After the divestment of the Swedish Distribution business Fortum does not have any distribution operations and therefore Distribution segment has been treated as discontinued operations in 2015 with restatement of year 2014, according to IFRS 5 Non-current Assets Held for Sale and Discontinued Operations.

Fortum reorganised its operating structure as of 1 April 2016. The business divisions are: Generation (mainly the former Power and Technology); City Solutions (mainly the former Heat, Electricity Sales and Solutions) and Russia. Because of the minor financial impact, the comparable segment information for 2015 was not restated.

As of 1 March 2017, the City Solutions division was divided into two divisions: City Solutions and Consumer Solutions, both reported as separate reporting segments. Fortum has restated its 2016 comparison segment reporting figures in accordance with the new organisation structure.

In November 2018, Fortum announced that the solar and wind businesses were reorganised and the wind operations became a business area within the Generation segment and the solar operations within the City Solutions segment. Previously these were included in Other Operations. The Russian wind and solar operations continue as a part of the Russia segment. Fortum has restated its 2018 comparative segment reporting figures in accordance with the new organisation structure.

Following the consolidation of Uniper as a subsidiary on 31 March 2020, Fortum revised its reportable segments and reports Uniper as a separate segment. Until 31 March 2020 Fortum's share of Uniper's associated company results is presented in Other operations.

See more information in ▸ Note 6 Segment reporting.

Sales by segment, EUR million	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Generation	2,481	2,415	2,252	2,156	1,722	1,657	1,677	1,842	2,141	2,006
- of which internal	-24	296	69	85	83	15	15	-2	259	421
Russia	920	1,030	1,119	1,055	893	896	1,101	1,069	1,071	929
- of which internal	-	-	-	-	-	-	-	-	-	2
City Solutions			1,516	1,332	1,187	782	1,015	1,110	1,200	1,075
- of which internal			87	34	-13	1	19	37	45	64
Heat	1,737	1,628								
- of which internal	8	18								
Consumer Solutions						668	1,097	1,759	1,835	1,267
- of which internal						2	3	11	-3	2
Electricity Sales	900	722								
- of which internal	95	55								
Uniper										44,514
- of which internal										0
Other Operations	108	137	63	58	114	92	102	103	115	140
- of which internal	115	-66	54	44	75	61	67	79	86	110
Distribution	973	1,070	1,064							
- of which internal	15	37	19							
Eliminations and Netting of Nord Pool transactions	-958	-843	-706	-513	-458	-463	-470	-641	-916	-916
Total for continuing operations	**6,161**	**6,159**	**5,309**	**4,088**	**3,459**	**3,632**	**4,520**	**5,242**	**5,447**	**49,015**
Discontinued operations				751	274					
Eliminations 1)				-89	-31					
Total				**4,751**	**3,702**	**3,632**	**4,520**	**5,242**	**5,447**	**49,015**

1) Sales to and from discontinued operations.

Comparable operating profit by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	1,201	1,146	859	877	561	417	478	628	794	722
Russia	74	68	156	161	201	191	296	271	316	251
City Solutions			109	104	108	64	98	135	120	47
Heat	278	271								
Consumer Solutions						48	41	53	79	90
Electricity Sales	27	39								
Uniper										363
Other Operations	-73	-92	-54	-57	-63	-77	-102	-99	-118	-129
Distribution	295	320	332							
Comparable operating profit	**1,802**	**1,752**	**1,403**	**1,085**	**808**	**644**	**811**	**987**	**1,191**	**1,344**
Impairment charges and reversals					-918	27	6	-4	-8	2
Capital gains and other related items	284	155	61	305	22	38	326	102	7	765
Impact from acquisition accounting										-222
Changes in fair values of derivatives hedging future cash flow						-65	14	98	-72	-675
Nuclear fund adjustment [1]						-11	1	-45		
Other										386
Other items affecting comparability [2]	316	-33	45	-94	-62					
Operating profit, continuing operations	**2,402**	**1,874**	**1,508**	**1,296**	**-150**	**633**	**1,158**	**1,138**	**1,118**	**1,599**
Discontinued operations				2,132	4,395					
Operating profit				**3,428**	**4,245**	**633**	**1,158**	**1,138**	**1,118**	**1,599**

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives for 2019 have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.
2) Other items affecting comparability comprise Changes in fair values of derivatives hedging future cash flow and Nuclear fund adjustment.

Comparable EBITDA by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	1,310	1,260	1,007	998	680	527	603	763	939	886
Russia	148	189	258	304	267	312	438	417	469	394
City Solutions			211	204	209	186	262	310	308	239
Heat	471	481								
Consumer Solutions						55	57	110	141	153
Electricity Sales	29	40								
Uniper										856
Other Operations	-66	-83	-49	-49	-53	-64	-83	-78	-91	-94
Distribution	482	529	548							
Total for continuing operations	**2,374**	**2,416**	**1,975**	**1,457**	**1,102**	**1,015**	**1,275**	**1,523**	**1,766**	**2,434**
Discontinued operations				416	163					
Total				**1,873**	**1,265**	**1,015**	**1,275**	**1,523**	**1,766**	**2,434**

Depreciation and amortisation, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	109	114	148	121	118	110	125	135	145	164
Russia	108	121	150	147	117	123	142	147	153	143
City Solutions			102	100	101	121	163	175	188	191
Heat	193	210								
Consumer Solutions						7	16	57	62	63
Electricity Sales	2	1								
Uniper										494
Other Operations	7	9	5	8	10	13	18	22	28	35
Distribution	187	209	216							
Total for continuing operations	**606**	**664**	**621**	**377**	**346**	**373**	**464**	**536**	**575**	**1,090**
Discontinued operations				150	50					
Total				**526**	**395**	**373**	**464**	**536**	**575**	**1,090**

Share of profit of associates and joint ventures by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	3	-12	4	-14	-111	-34	-1	-72	10	29
Russia	30	27	46	35	32	38	31	36	59	47
City Solutions			91	88	59	76	80	74	37	57
Heat	19	20								
Electricity Sales	2	-								
Uniper										54
Other Operations	23	-20	32	37	40	51	38	0	638	470
Distribution	14	8	4							
Total for continuing operations	**91**	**23**	**178**	**146**	**20**	**131**	**148**	**38**	**744**	**656**
Discontinued operations				3	0					
Total				**149**	**20**	**131**	**148**	**38**	**744**	**656**

Capital expenditure by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	131	190	179	197	187	196	174	248	247	158
Russia	670	568	435	340	285	201	152	54	67	43
City Solutions			123	86	105	109	170	209	314	219
Heat	297	464								
Consumer Solutions						3	7	47	55	57
Electricity Sales	5	1								
Uniper										624
Other Operations	16	11	12	3	6	83	187	26	30	34
Distribution	289	324	255							
Total for continuing operations	**1,408**	**1,558**	**1,005**	**626**	**582**	**591**	**690**	**584**	**713**	**1,135**
Discontinued operations				147	44					
Total				**774**	**626**	**591**	**690**	**584**	**713**	**1,135**

Gross investments in shares by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	17	-	2	2	16	7	90	14	13	70
Russia	24	-	0	27	0	0	125	63	66	48
City Solutions			11	37	23	698	386	33	9	114
Heat	32	10								
Consumer Solutions						117	486	0	-	0
Uniper										3
Other Operations	1	6	2	4	4	22	39	3,977	18	3,572
Distribution	-	-	0							
Total for continuing operations	**74**	**16**	**15**	**69**	**43**	**844**	**1,125**	**4,088**	**106**	**3,807**
Discontinued operations				-	-					
Total				**69**	**43**	**844**	**1,125**	**4,088**	**106**	**3,807**

Gross divestments of shares by segment, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	3	102	79	67	0	0	0	160	12	171
Russia	23	-	-	0	0	127	0	0	-	0
City Solutions			11	446	27	33	0	147	2	895
Heat	203	269								
Consumer Solutions						1	55	0	-	10
Electricity Sales	16	2								
Uniper										69
Other Operations	0	0	-	2	-	0	687	0	16	81
Distribution	323	37	52							
Total for continuing operations	**568**	**410**	**142**	**515**	**27**	**161**	**742**	**306**	**30**	**1,226**
Discontinued operations				2,681	6,369					
Total				**3,196**	**6,395**	**161**	**742**	**306**	**30**	**1,226**

Comparable net assets by segment, EUR million	2015	2016	2017	2018	2019	2020
Generation	5,931	5,815	5,672	6,485	6,019	6,234
Russia	2,561	3,284	3,161	2,789	3,212	2,431
City Solutions	2,182	2,873	3,728	3,794	3,945	3,679
Consumer Solutions		154	638	648	637	565
Uniper						7,432
Other Operations	258	514	276	4,023	4,400	136
Total for continuing operations	**10,932**	**12,641**	**13,474**	**17,739**	**18,214**	**20,477**

Fortum is disclosing Comparable net assets instead of Net assets from 2016 onwards. Net assets until 2015 are disclosed below.

Net assets by segment, EUR million	2011	2012	2013	2014	2015 1)
Generation	6,247	6,389	6,355	6,001	5,913
City Solutions			2,295	2,112	2,170
Heat	4,191	4,286			
Electricity Sales	11	51			
Russia	3,273	3,848	3,846	2,597	2,561
Other Operations	208	158	295	496	291
Distribution	3,589	3,889	3,745		
Total for continuing operations	**17,519**	**18,621**	**16,537**	**11,206**	**10,934**
Net assets related to discontinued operations				2,615	
Total				**13,820**	**10,934**

1) Fortum is disclosing Comparable net assets instead of Net assets from 2016 onwards.

Comparable return on net assets by segment, %	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	19.9	18.5	13.8	14.2	9.5	6.9	8.4	10.8	13.3	11.8
Russia	3.5	2.7	5.2	5.6	8.2	8.0	10.1	10.3	12.3	11.1
City Solutions			8.7	8.7	7.9	5.9	5.5	5.5	4.6	2.8
Heat	7.4	7.0								
Consumer Solutions						44.3	11.7	7.8	13.3	15.9
Electricity Sales	33.5	203.1								
Uniper 1)										N/A
Distribution 2)	8.6	8.8	8.8	9.3						

1) 2020 for the Uniper segment is calculated based on cumulative figures from 1 April 2020. Comparable return on net assets for the Uniper segment will be presented once information for full 12 months is available.
2) Classified as discontinued operations from 2014 onwards.

Return on net assets by segment, %	2011	2012	2013	2014	2015 1)
Generation	24.6	18.7	14.5	13.6	-8.5
City Solutions			9.7	19.1	7.7
Heat	9.9	8.8			
Electricity Sales	4.2	152.3			
Russia	3.5	3.0	5.2	5.6	8.3
Distribution 2)	13.7	9.1	9.3	73.6	

1) Fortum is disclosing Comparable net assets instead of Net assets from 2016 onwards.
2) Classified as discontinued operations from 2014 onwards.

Average number of employees	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	1,873	1,896	1,900	1,685	1,389	1,064	1,036	1,107	1,122	1,163
Russia	4,436	4,301	4,245	4,196	4,180	3,814	3,710	3,378	2,942	2,969
City Solutions			2,051	1,913	1,458	1,529	1,807	1,994	1,979	2,051
Heat	2,682	2,354								
Consumer Solutions						877	1,180	1,473	1,379	1,216
Electricity Sales	510	515								
Uniper										11,629
Other Operations	607	661	550	536	983	711	774	814	825	959
Distribution	902	873	786							
Total for continuing operations	**11,010**	**10,600**	**9,532**	**8,329**	**8,009**	**7,994**	**8,507**	**8,767**	**8,248**	**19,988**
Discontinued operations				492						
Total				**8,821**						

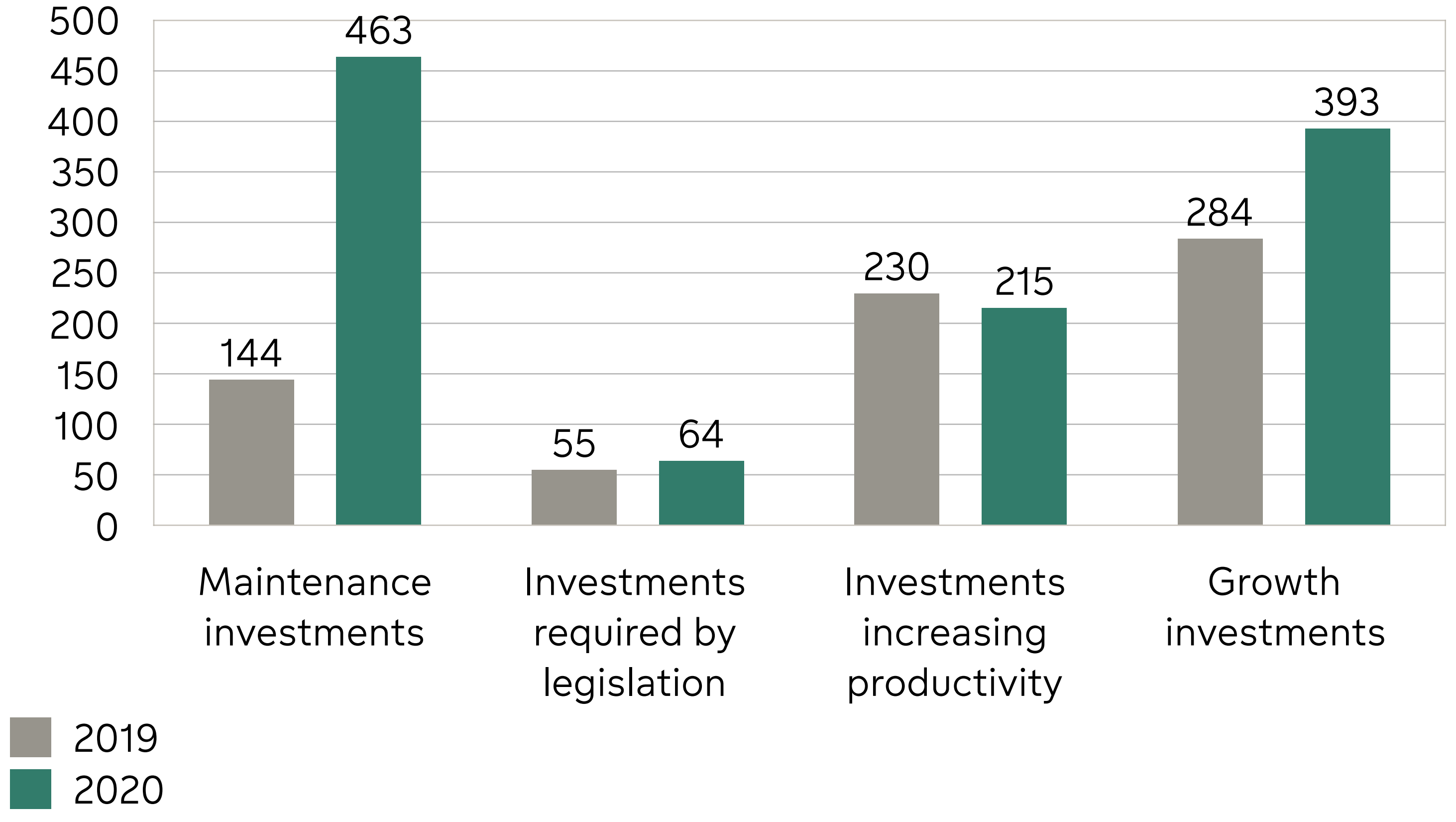
Capital expenditure

Capital expenditure by type and segment [1)]

	Finland		Sweden		Norway		Russia		Germany		United Kingdom		Other countries		Total	
EUR million	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Generation																
Hydropower	16	12	54	56											69	68
Nuclear power	49	57													49	57
Renewable-based electricity, wind	3	22		32	27	56									30	111
Fossil-based electricity		7														7
Other	3	4	7	1	0	0									9	5
Total	**70**	**102**	**61**	**89**	**27**	**56**									**158**	**247**
Russia																
Fossil-based electricity							25	49							25	49
Fossil-based heat							14	18							14	18
Renewable-based electricity, wind							4								4	
Total							**43**	**67**							**43**	**67**
City Solutions																
Fossil-based heat		2				0							7	5	8	7
Fossil-based electricity																
Renewable, of which	36	39	7	7	5	9					1	11	107	166	156	231
waste	20	19	7	7	5	9					1	11	7	21	40	66
biofuels	9	20											2	2	10	21
solar													98	143	98	143
other	8	1													8	1
District heat network	10	17			19	27							17	19	46	63
Other	4	3	2	2		1			0	0		0	3	6	9	12
Total	**49**	**62**	**9**	**9**	**24**	**36**			**0**	**0**	**1**	**11**	**134**	**195**	**219**	**313**
Consumer Solutions																
Other	16	15	14	14	19	17							8	9	57	55
Total	**16**	**15**	**14**	**14**	**19**	**17**							**8**	**9**	**57**	**55**
Uniper																
Hydropower			34						19						53	
Nuclear power			50												50	
Fossil-based electricity			13				115		214		86		44		472	
Fossil-based heat									4						4	
Global commodities investments									23		1				25	
Other									19		1		1		21	
Total			**97**				**115**		**279**		**88**		**45**		**624**	
Other																
Other	23	20	6	2	2	5							3	3	34	31
Total	**23**	**20**	**6**	**2**	**2**	**5**							**3**	**3**	**34**	**31**
Segments total	**160**	**199**	**186**	**114**	**71**	**115**	**159**	**67**	**279**	**0**	**89**	**11**	**191**	**207**	**1,135**	**713**
Of which investments in CO_2 free production	**84**	**112**	**138**	**88**	**27**	**56**	**4**	**0**	**19**	**0**	**0**	**0**	**100**	**145**	**372**	**401**

1) Includes capital expenditure to both intangible assets and property, plant and equipment.

Fortum classifies investments in four main categories, EUR million



Generation

Fortum invested EUR 30 million (2019: 111) into wind power production in the Nordics. The largest wind power investment was EUR 27 million to the Sørfjord wind park in Norway. In Finland, Fortum invested EUR 49 million (2019: 57) into the Loviisa nuclear power plant. Fortum additionally invested EUR 69 million (2019: 68) into hydro production, mainly maintenance, legislation and productivity investments. Investments in CO_2 free production were EUR 149 million (2019: 236).

Russia

Investments to the Russia division were EUR 43 million (2019: 67). They consisted mainly of maintenance, legislation and productivity projects. Investments in CO_2 free production were EUR 4 million (2019: 0).

City Solutions

The largest investment project in 2020 was EUR 98 million to the Jaisalmer solar plant in India. Maintenance, legislation and productivity investments totalled EUR 112 million (2019: 157). This amount consists mainly of investments in district heat networks and plants as well as the maintenance of existing CHP plants and measures defined by legal requirements. Investments in CO_2 free production were EUR 116 million (2019: 165).

Consumer Solutions

Investments in Consumer solutions totalled EUR 57 million (2019: 55). The amount consists mainly of sales commissions for customer acquisition that are capitalised starting from the implementation of IFRS 15 and new product development costs.

Uniper

Investments by Uniper totalled EUR 624 million. Maintenance, legislation and productivity investments totalled EUR 378 million. Investments in CO_2 free production were EUR 103 million.

Other

Investments in Other segment were EUR 34 million (2019: 31). They consisted mainly of IT investments and investments into internal ventures.

Operational key figures

Note: Operational key figures are unaudited

Comparability of information presented in tables and graphs

Information in the tables and graphs presented for year 2012 or earlier is not restated due to the adoption of IFRS 10 and IFRS 11. Adoption of standards influences treatment of Fortum's holding in Stockholm Exergi AB (Exergi), (previously AB Fortum Värme samägt med Stockholms stad), in the consolidated financial statements. From 1 January 2014 onwards Exergi is treated as a joint venture and thus consolidated with equity method. Before the change the company was consolidated as a subsidiary with 50% minority interest. Uniper sales and production volumes are disclosed from 1 April 2020 onwards.

Production

Fortum's total power and heat production in Nordics, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Power generation									45.5	59.2
Heat production									6.3	5.1

Fortum is disclosing total power and heat production in Nordics instead of EU and Norway from 2019 onwards. Power and heat production in EU and Norway until 2018 are disclosed below.

Fortum's total power and heat production in EU and Norway, TWh	2011	2012	2013	2014	2015	2016	2017	2018 1)
Power generation	55.3	53.9	47.4	50.1	50.2	47.5	46.6	44.7
Heat production	22.0	18.5	10.4	8.2	6.4	7.1	8.6	9.4

1) Fortum is disclosing total power and heat production in Nordics instead of EU and Norway from 2019 onwards.

Fortum's total power and heat production in other European countries, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019 1)	2020
Power generation									1.3	26.7
Heat production									2.8	7.1

1) Disclosed from 2019 onwards.

Fortum's total power and heat production in Russia, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Power generation	17.4	19.2	20.0	23.3	25.7	25.5	26.3	29.6	29.3	55.6
Heat production	25.4	24.8	24.2	26.4	25.8	20.7	20.0	20.4	17.3	17.4

Fortum's power generation by source, total in the Nordic area, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hydro and wind power	21.0	25.2	18.1	22.4	25.1	20.8	20.9	19.4	20.7	29.6
Nuclear power	24.9	23.4	23.7	23.8	22.7	24.1	23.0	22.8	23.5	28.6
Thermal power	7.2	3.0	3.4	1.8	1.0	1.4	1.6	1.3	1.4	1.0
Total	**53.1**	**51.6**	**45.2**	**48.0**	**48.8**	**46.2**	**45.4**	**43.5**	**45.5**	**59.2**

Fortum's power generation by source, total in the Nordic area, %	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hydro and wind power	40	49	40	46	51	45	46	45	45	50
Nuclear power	47	45	52	50	47	52	51	52	52	48
Thermal power	13	6	8	4	2	3	3	3	3	2
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Fortum's power generation by source, total in other European countries, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019 1)	2020
Hydro and wind power									-	3.3
Thermal power									1.3	23.4
Total									**1.3**	**26.7**

1) Disclosed from 2019 onwards.

Fortum's power generation by source, total in other European countries, %	2011	2012	2013	2014	2015	2016	2017	2018	2019 1)	2020
Hydro and wind power									-	12
Thermal power									100	88
Total									100	100

1) Disclosed from 2019 onwards.

Power generation capacity by segment, MW	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	9,752	9,702	9,475	9,063	8,046	8,039	7,862	7,867	8,220	8,163
Heat	1,670	1,569								
City Solutions			793	803	743	760	775	788	1,082	988
Russia	3,404	3,404	4,250	4,758	4,903	4,482	4,794	4,912	4,928	4,928
Uniper									-	36,218
Other Operations						53	292	157	-	-
Total	**14,826**	**14,675**	**14,518**	**14,624**	**13,692**	**13,334**	**13,722**	**13,724**	**14,230**	**50,297**

Heat production capacity by segment, MW	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Generation	250	250	250	-	-	-	-	-	-	-
Heat	10,375	8,785								
City Solutions			4,317	3,936	3,915	3,818	4,671	4,780	4,812	4,057
Russia	14,107	13,396	13,466	13,466	12,696	9,920	10,094	10,229	8,437	8,437
Uniper									-	7,017
Total	**24,732**	**22,431**	**18,033**	**17,402**	**16,611**	**13,738**	**14,765**	**15,009**	**13,249**	**19,511**

	Finland		Sweden		Russia		Germany		United Kingdom		Netherlands		Other		Total	
Fortum's power generation capacity by type and area, MW	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Hydropower	1,553	1,553	4,895	3,124	-	-	1,991	-	-	-	-	-	-	-	8,439	4,677
Nuclear power	1,487	1,487	3,361	1,334	-	-	-	-	-	-	-	-	-	-	4,848	2,821
Combined heat and power	375	452	455	9	3,497	4,858	3,222	-	-	-	525	-	355	370	8,429	5,689
Condensing power	565	565	1,162	-	12,151	-	6,383	-	6,401	-	1,070	-	428	-	28,160	565
Wind power	-	-	-	75	35	35	-	-	-	-	-	-	101	84	136	194
Solar power	-	-	-	-	35	35	-	-	-	-	-	-	250	250	285	285
Total	**3,980**	**4,057**	**9,873**	**4,542**	**15,718**	**4,928**	**11,596**	**-**	**6,401**	**-**	**1,595**	**-**	**1,134**	**704**	**50,297**	**14,230**

	Finland		Norway		Russia		Germany		Poland		Netherlands		Other		Total	
Fortum's heat production capacity by area, MW	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Heat	1,417	2,002	888	1,032	11,010	8,437	3,061	-	941	941	1,133	-	1,061	837	19,511	13,249

Sales

Fortum's total power and heat sales in Nordics, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Power sales									2,877	2,494
Heat sales									390	271

Fortum is disclosing total power and heat sales in Nordics instead of EU and Norway from 2019 onwards. Power and heat production in EU and Norway until 2018 are disclosed below.

Fortum's total power and heat sales in EU and Norway, EUR million	2011	2012	2013	2014	2015	2016	2017	2018 [1]
Power sales	2,868	2,700	2,462	2,344	1,921	1,893	2,244	2,922
Heat sales	1,278	1,201	538	468	423	449	524	615

1) Fortum is disclosing total power and heat sales in Nordics instead of EU and Norway from 2019 onwards.

Fortum's total power and heat sales in other European countries, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019 [1]	2020
Power sales [2]									130	16,226
Heat sales									228	410

1) Disclosed from 2019 onwards.
2) Including commodity trading.

Fortum's total power and heat sales in Russia, EUR million	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Power sales	590	713	822	758	661	691	837	872	924	1,411
Heat sales	324	300	290	285	228	199	258	193	145	145

Fortum's total power sales by area, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Finland	24.6	21.6	23.4	21.6	22.3	22.8	22.5	23.1	23.1	23.1
Sweden	29.4	30.1	23.3	28.2	29.8	28.8	30.8	29.7	31.5	44.7
Norway						1.5	7.2	15.3	15.0	13.8
Russia	20.2	23.3	25.6	26.5	29.4	29.5	30.5	34.1	33.8	68.3
Germany [1]									-	338.8
United Kingdom									-	13.0
Netherlands									-	6.3
Other countries	3.6	3.8	4.3	3.8	2.8	2.1	2.9	1.8	2.5	8.1
Total	**77.8**	**78.8**	**76.6**	**80.1**	**84.3**	**84.7**	**93.9**	**104.0**	**105.8**	**516.0**

1) Including commodity trading.

NordPool transactions are calculated as a net amount of hourly sales and purchases at the Group level.

Fortum's total heat sales by area, TWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Finland	8.5	5.8	5.5	3.2	3.1	3.6	3.9	3.8	3.8	2.9
Russia	26.7	26.4	24.1	26.0	25.4	20.7	19.8	20.7	16.9	17.4
Norway									1.7	1.5
Sweden	8.5	8.5	-	-	-	0.1	0.3	0.3	0.3	0.3
Poland	4.3	4.3	4.1	3.4	3.4	3.6	3.7	3.5	3.3	3.4
Germany									-	2.4
United Kingdom									-	0.0
Netherlands									-	2.3
Other countries	3.4	2.9	3.1	2.8	1.2	1.4	2.2	3.2	1.6	1.6
Total	**51.4**	**47.9**	**36.8**	**35.4**	**33.2**	**29.4**	**29.9**	**31.5**	**27.6**	**31.7**

Volume of distributed electricity in distribution networks, TWh	2011	2012	2013	2014	2015
Finland	9.5	9.8	9.5	2.8	
Sweden	14.2	14.4	14.1	13.7	6.4
Norway	2.3	2.4	2.5	1.1	
Estonia	0.1	-			
Total	**26.1**	**26.6**	**26.1**	**17.6**	**6.4**

Quarterly financial information

Note: Quarterly financial information is unaudited.

Selected data based on quarterly consolidated income statement

EUR million	I/2019	II/2019	III/2019	IV/2019	2019	I/2020	II/2020	III/2020	IV/2020	2020
IS **Sales**	**1,690**	**1,144**	**1,060**	**1,553**	**5,447**	**1,357**	**12,330**	**14,049**	**21,279**	**49,015**
Comparable EBITDA	**545**	**372**	**295**	**552**	**1,766**	**543**	**512**	**132**	**1,247**	**2,434**
IS **Comparable operating profit**	**408**	**232**	**153**	**398**	**1,191**	**393**	**203**	**-179**	**928**	**1,344**
IS **Operating profit** 1)	**363**	**230**	**124**	**401**	**1,118**	**603**	**539**	**-1**	**458**	**1,599**
IS Share of profit/loss of associates and joint ventures	111	461	106	65	744	479	39	25	113	656
IS Finance costs - net 1)	-51	-39	-32	-12	-134	-67	3	27	-18	-56
IS **Profit before income tax**	**424**	**652**	**198**	**454**	**1,728**	**1,014**	**581**	**51**	**554**	**2,199**
IS Income tax expense	-65	-45	-25	-88	-221	-76	-178	51	-142	-344
IS **Profit for the period**	**359**	**607**	**173**	**367**	**1,507**	**938**	**403**	**103**	**411**	**1,855**
IS Non-controlling interests	-19	0	5	-10	-25	-9	-63	71	-31	-32
IS **Profit for the period, owners of the parent**	**341**	**607**	**178**	**356**	**1,482**	**930**	**340**	**174**	**379**	**1,823**
Earnings per share for profit attributable to the equity owners of the company (EUR per share)										
Basic	0.38	0.69	0.20	0.40	1.67	1.05	0.38	0.19	0.43	2.05

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial expenses, net. Comparatives have been reclassified accordingly. See Note 1.7 Summary of Uniper acquisition impact to consolidated financial statements.

Quarterly sales by segment

EUR million	I/2019	II/2019	III/2019	IV/2019	2019	I/2020	II/2020	III/2020	IV/2020	2020
Generation 1)	601	500	458	583	2,141	574	450	441	541	2,006
Russia	298	239	229	306	1,071	317	202	172	238	929
City Solutions 1)	405	228	200	366	1,200	342	212	184	337	1,075
Consumer Solutions	669	346	311	510	1,835	424	237	235	370	1,267
Uniper	-	-	-	-	-	-	11,365	13,159	19,990	44,514
Other Operations 1)	26	28	29	32	115	34	34	34	38	140
Netting of Nord Pool transactions 2)	-192	-99	-100	-1,369	-529	-83	-54	-74	-105	-317
Eliminations	-117	-98	-68	-105	-387	-250	-115	-102	-130	-598
IS **Total**	**1,690**	**1,144**	**1,060**	**1,553**	**5,447**	**1,357**	**12,330**	**14,049**	**21,279**	**49,015**

1) Sales, both internal and external, includes effects from realised hedging contracts. Effect on sales can be negative or positive depending on the average contract price and realised spot price.
2) Sales and purchases with Nord Pool Spot is netted on Group level on an hourly basis and posted either as revenue or cost depending on if Fortum is a net seller or net buyer during any particular hour.

Quarterly comparable operating profit by segments

EUR million	I/2019	II/2019	III/2019	IV/2019	2019	I/2020	II/2020	III/2020	IV/2020	2020
Generation	223	191	140	239	794	235	173	136	177	722
Russia	99	69	53	94	316	99	37	40	76	251
City Solutions	92	-15	-36	80	120	58	-15	-36	41	47
Consumer Solutions	26	19	16	19	79	32	19	18	21	90
Uniper	-	-	-	-	-	-	24	-310	649	363
Other Operations	-32	-31	-21	-34	-118	-31	-34	-27	-36	-129
IS **Comparable operating profit**	**408**	**232**	**153**	**398**	**1,191**	**393**	**203**	**-179**	**928**	**1,344**
Impairment charges and reversals	-3	0	-6	0	-8	-	-1	-1	4	2
Capital gains and other related items	3	3	3	-2	7	413	69	299	-16	765
Impact from acquisition accounting	-	-	-	-	-	-222	-	-	-	-222
Changes in fair values of derivatives hedging future cash flow	-46	-5	-27	5	-72	19	154	-242	-605	-675
Other	-	-	-	-	-	-	115	123	147	386
IS **Operating profit**	**363**	**230**	**124**	**401**	**1,118**	**603**	**539**	**-1**	**458**	**1,599**

The first and last quarters of the year are usually the strongest quarters for power and heat businesses.

Investor information

Fortum 2020 reporting entity comprises CEO's Business Review, Financials, Corporate Governance Statement and Remuneration Report, Tax footprint as well as Sustainability.

Annual General Meeting 2021

The Annual General Meeting 2021 of Fortum Corporation will be held on Wednesday, 28 April 2021, starting at 14:00 EET.

Payment of dividends

The Board of Directors proposes to the Annual General Meeting that Fortum Corporation pays a dividend of EUR 1.12 per share for 2020, totalling approximately EUR 995 million based on the registered shares as of 11 March 2021. The possible dividend related dates planned for 2021 are:

- the ex-dividend date 29 April 2021,
- the record date for dividend payment 30 April 2021 and
- the dividend payment date 7 May 2021.

Financial information in 2021

Fortum will publish three interim reports in 2021:

- January–March Interim Report on 12 May
- January–June Half-year Financial Report on 17 August, and
- January–September Interim Report on 12 November.

The reports are published at approximately 9:00 EET in Finnish and English, and are available on Fortum's website at www.fortum.com/investors

Fortum's management hosts regular press conferences, targeted at analysts and the media. Webcasts of these conferences are available online at www.fortum.com/investors. Management also gives interviews on a one-on-one and group basis. Fortum observes silent period of 30 days prior to publishing its results.

Fortum share basics

Listed on Nasdaq Helsinki
Trading ticker: FORTUM
Number of shares, 11 March 2021: 888,294,465
Sector: Utilities

Fortum's activities in capital markets during 2020

Fortum's Investor Relations activities cover equity and fixed-income markets to ensure full and fair valuation of the company's shares, access to funding sources and stable bond pricing. The key task of Investor Relations is to provide correct, adequate and up-to-date information regularly and equally to all market participants. By doing this, Investor Relations aims to minimise the investor's risk and reduce the share's volatility. Investors and analysts primarily are met on a regular basis in Europe and North America.

In 2020, Fortum met approximately 550 professional equity investors individually or in group meetings and at investor conferences, mostly virtually, and maintained regular contact with equity research analysts at investment banks and brokerage firms.