Financials 2022

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FINANCIALS 2022

Financials 2022 – 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 2022. Here you will also find a description of the risk management as well as information on sustainability, including EU taxonomy KPIs, as well as 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 2021–2022. 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 2013–2022, 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 2013–2022 as well as capex and quarterly financial information for the years 2021 and 2022.

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 2023.

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.

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These notes provide supporting information for the balance sheet.

35–37 Off-balance sheet items
The notes in this section provide information on items that are not included on the balance sheet.

38–40 Group structure and related parties
This section includes information on related party transactions, events after balance sheet date and the subsidiaries 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

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Financial performance and position

Weathering through the European energy crisis - a year of decisive actions

IFRS restatement relating to discontinued operations

Fortum lost control of Uniper on the signing of the agreement in principle to sell the shares in Uniper SE to the German State on 21 September 2022. Thus, Uniper was deconsolidated at 30 September 2022. Fortum's consolidated income statement and consolidated cash flow statement were modified in 2022 to include discontinued operations. As required by IFRS, comparatives for 2021 were restated. Comparatives for 2020 have not been restated.

Discontinued operations include Fortum's former subsidiary Uniper SE and its consolidated group companies. The Generation segment was restated regarding Fortum's ownership in the Swedish nuclear operator OKG AB as an associated company instead of the earlier proportionate consolidation. Income statement information in this operating and financial review and financial statements include only continuing operations, unless otherwise specified.

See **Note 1**, **Note 2** and **Note 3**.

Key figures

Key figures, continuing operations

EUR million or as indicated	2022	2021	2020	Change 22/21
Reported				
IS Sales	8,804	6,422	49,015	37%
IS Operating Profit	1,277	4,325	1,599	-70%
- of sales %	14.5	67.4	3.3	
IS Share of profit of associates and joint ventures	-629	168	656	-474%
IS Profit before income tax	455	4,332	2,199	-89%
- of sales %	5.2	67.5	4.5	
IS Net profit	1,011	4,008	1,855	-75%
IS Net profit (after non-controlling interests)	1,011	3,985	1,823	-75%
IS Earnings per share, EUR	1.14	4.49	2.05	-75%
CF Net cash from operating activities	2,104	1,119	2,555	88%

EUR million or as indicated	2022	2021	2020	Change 22/21
Comparable				
EBITDA	2,436	2,016	2,434	21%
IS Operating profit	1,871	1,429	1,344	31%
Share of profit of associates and joint ventures	-11	104	656	-111%
Net profit (after non-controlling interests)	1,550	1,091	1,483	42%
Earnings per share, EUR	1.74	1.23	1.67	41%

Key figures, continuing operations excl. Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding the Russia segment. See also **Note 1**.

EUR million or as indicated	2022	2021	2020	Change 22/21
Comparable				
EBITDA	2,025	1,612	N/A	26%
Operating profit	1,611	1,167	N/A	38%
Share of profit of associates and joint ventures	-40	42	N/A	-195%
Net profit (after non-controlling interests)	1,076	851	N/A	26%
Earnings per share, EUR	1.21	0.96	N/A	26%
Financial position				
Financial net debt/comparable EBITDA	0.6	N/A	N/A	

Key figures, total of continuing and discontinued operations

EUR million or as indicated	2022	2021	2020	Change 22/21
Reported				
IS Net profit (after non-controlling interests)	-2,416	739	1,823	-427%
IS Earnings per share, EUR	-2.72	0.83	2.05	-428%
CF Net cash from operating activities	-8,767	4,970	2,555	-276%
Comparable				
Net profit (after non-controlling interests)	-988	1,778	1,483	-156%
Earnings per share, EUR	-1.11	2.00	1.67	-156%

EUR million or as indicated	2022	2021	2020	Change 22/21
Shareholders' equity per share, EUR	8.55	13.66	14.58	-37%
Financial net debt (at end of period)	1,084	789	7,023	37%
Adjusted net debt (at end of period)	1,117	3,227	9,784	-65%
Financial net debt/comparable EBITDA, continuing operations	0.4	N/A	N/A	
Financial net debt/comparable EBITDA, total	N/A	0.2	2.9	
Return on shareholders' equity, %	-96.2	-0.8	12.9	
Equity-to-assets ratio, %	33	9	27	

See **Definitions and reconciliations of key figures**.

The year 2022 started with managing Uniper's liquidity challenges. These were a consequence of nervousness in the gas market - amid rapidly increasing and volatile gas prices resulting in significantly higher margining requirements for Uniper. Within a month, in February, Russia attacked Ukraine, marking the beginning of shock-like effects of the war and a full-blown energy crisis in Europe that drastically changed our operating environment.

At Fortum, we started tackling the issues one by one. Our immediate step was to halt all new activities in Russia; we would not do any new investment projects or provide any financing to our Russian subsidiaries. The decision to pursue a controlled exit from Russia was made in May. The divestment process has progressed and is still ongoing, but any major divestment in the Russian energy sector requires approval by the Russian Government Commission and the President. From a governance point of view, we have separated the management and steering of the Russian operations from the rest of the Group, simultaneously ensuring compliance with applicable laws and regulations, including sanctions. At the end of the year, we recorded additional impairments of approximately EUR 990 million related to our operations in Russia, amounting to a total of EUR 1.7 billion during the year.

The dramatic year also ended our five-year journey with Uniper. The energy crisis escalated during the summer when Russia decided to cut pipeline gas exports to Germany and most of Europe, causing massive losses to gas midstream companies. Particularly Uniper, as Germany's largest importer of Russian gas, was hit severely. Therefore, a long-term solution to rescue Uniper was required and in September Fortum agreed to sell its ownership to the German State. The divestment was completed at the end of December. Fortum's total pre-tax loss from the Uniper investment is slightly below EUR 6 billion. This outcome clearly is not what we wanted or had worked for over the past years, yet it was necessary and it provides a chance for a new beginning for Fortum.

Geopolitical tensions and gas curtailments also caused power prices to soar in the derivatives markets. Fortum's hedged power volumes on the Nasdaq exchange were affected through the unprecedentedly rapidly increasing and historically high power future prices that led to unforeseen margining requirements. This put Fortum's liquidity under pressure. In September, Fortum agreed with the Finnish State on a bridge financing facility of EUR 2.35 billion to be able to manage its liquidity position in case of further power price hikes during the winter period. In November, as a condition for the loan arrangement, Fortum's Extraordinary General Meeting resolved on a directed share issue (1% of outstanding shares) to the Finnish State-owned holding company, Solidium, without payment. We are grateful that the Finnish Government came to our aid. Also elsewhere in Europe EU member states provided energy companies with massive liquidity support to manage their margining requirements.

Despite the tight situation at the end of the summer, we were able to manage our liquidity well. At the end of the year, our financial situation was solid as Uniper repaid its EUR 4 billion shareholder loan and we received the sales proceeds of EUR 0.5 billion from the divestment of our Uniper shares. For 2023, refinancing will be a key priority for us, and we aim to return to the bond markets to rebuild our financial flexibility. Strong financial discipline will be the hallmark of our decisions and actions going forward.

During 2022, we also saw rapid developments in the regulatory environment. EU institutions focused on finalising the extensive 'Fit for 55' legislative package the main effect of which was a revision of the EU's emissions trading system, ETS. It also has an ambition to tackle the energy crisis by, for example, introducing regulation on an emergency intervention to address high energy prices. On the flip side, there is a risk that uncoordinated and very different actions by member states could lead to distortions of competitiveness; Finland, for example, is enacting a national windfall tax, whereas Sweden is implementing the revenue cap in accordance with the EU regulation.

Furthermore, as an immediate reaction to the Russian invasion of Ukraine, the Commission published the 'REPowerEU' plan. It states the EU's intention to phase out its dependency on Russian fossil fuels, outlining a series of measures to deliver on this ambition.

While crisis measures are undoubtedly necessary, it is crucial that these interventions are temporary and separate from the long-term structural reform of the power market design, which has started in the EU. Overall, to secure investments in the energy transition in the longer term, the regulatory environment needs to be clear, predictable and reliable.

As much as we would like to say the storm is over and we will get back to normal, unfortunately the energy crisis is not over yet. For the short-term, uncertainty prevails. Many economists forecast that global growth will slow down in the face of elevated inflation, higher interest rates, reduced investments, and multidimensional disruption effects caused by Russia's invasion of Ukraine. Europe is highly dependent on energy imports and thus high prices and supply constraints are likely to continue. And, due to low liquidity on the derivative markets, we must be prepared for continued volatile and unpredictable commodity markets.

As our operating environment turned upside-down in the past year, over the recent months we have worked hard to realign the company and renew our strategy to the new realities. A strong focus on sustainability is at the heart of our strategy and our purpose – *To power a world where people, businesses and nature thrive together* – is our North Star. Our new financial targets further guide how we look at investments going forward and pursue our business priorities: Delivering reliable clean energy and Drive decarbonisation in industries.

The most recent example of how we aim to implement our new strategy is the Finnish Government's welcome decision to grant a new operating licence for both units at Fortum's Loviisa nuclear power plant until the end of 2050. This helps to fulfil our goal to provide reliable, firm capacity and stability which is crucial for maintaining the increasingly intermittent energy system and enabling the decarbonisation of industries. Continuing production at Loviisa is also an investment in providing the clean power Finland needs to meet its ambitious climate targets.

In our 2022 financial results, the Generation segment's solid performance was the main driver throughout the year. The segment benefitted from the higher power prices in the Nordics and was supported by very good physical optimisation. In the fourth quarter, the segment's comparable operating profit was very strong, though somewhat offset by lower hydro volumes. Based on the solid results of Fortum's continuing operations in 2022, Fortum's Board of Directors is proposing to the Annual General Meeting a dividend of EUR 0.91 per share.

Most importantly, throughout this crisis and turbulence we have been running our power plants reliably and efficiently; providing energy to people and industries when they need it the most. We have also strengthened our customer service capabilities to better help our customers manage the energy crisis.

Uniper divestment

On 21 December, Fortum concluded the sale of its ownership in Uniper SE to the German State. On 19 December, the final agreements of the stabilisation package were signed between Fortum, the German Government and Uniper. All required approvals for the completion of the stabilisation package, including the State Aid clearances from the European Commission, were obtained.

On 21 September, Fortum, the German Government and Uniper signed an agreement in principle on a long-term solution that allowed the German State to take full control of Uniper. This final Uniper stabilisation framework agreement replaced the initial agreement between the same parties, signed in July 2022. After July, the European energy crisis escalated further and the severity of the situation made it apparent that the previously agreed stabilisation measures were insufficient and difficult to implement. By 21 September, Uniper had accumulated significant negative earnings amounting to billions of euros in gas-related losses, and it had become evident that the company, as privately-owned, was not able to fulfil its role as a critical energy provider of security of supply in Germany.

The Uniper Extraordinary General Meeting (EGM) was held on 19 December. The EGM resolved on the capital increase of Uniper and all newly issued shares were subscribed by the German State for EUR 1.70 per share. After the equity capital increase, the German State acquired all of Fortum's approximately 293 million shares in Uniper SE for EUR 1.70 per share, a total consideration of approximately EUR 0.5 billion. In addition, Uniper repaid the shareholder loan of EUR 4.0 billion granted by Fortum. From the EUR 4.0 billion parent company guarantee facility that Fortum had granted to Uniper, a total of EUR 3.0 billion was released by year-end 2022. The remaining approximately EUR 1.0 billion, with a full German State back-to-back guarantee (indemnity), will be released by the end of June 2023 at the latest.

Further, as part of the signed package, Fortum has a right of first offer in case Uniper intends to divest all or parts of its Swedish hydro and nuclear assets until the end of 2026.

Following the change of control in Uniper to the German State, Fortum's representatives on Uniper's Supervisory Board resigned: Fortum's President and CEO Markus Rauramo, who was the Chair of the Supervisory Board, Fortum's CFO Bernhard Günther, Vice Chair of the Supervisory Board, as well as Fortum's General Counsel Nora Steiner-Forsberg and Head of Fortum's CEO Office Esa Hyvärinen.

In 2017, Fortum became a major shareholder in Uniper with a 46.65% ownership stake and a majority shareholder in 2019, eventually increasing its shareholding in Uniper to approximately 80%.

The total pre-tax loss from the Uniper investment in the legal Fortum entity owning the Uniper shares is slightly below EUR 6 billion, which is the net effect from the investments in Uniper SE shares of approximately EUR 7.2 billion, the sales proceeds of EUR 0.5 billion received, and dividends of approximately EUR 0.9 billion received during Fortum's Uniper ownership.

Additional information related to Fortum's disclosures on Russia, APMs

Russia's attack war in Ukraine and its decision to use energy as a weapon fundamentally changed the geopolitical situation and operating environment for Fortum. Due to the circumstances, Fortum has consequently limited its disclosure on the Russian operations and operating environment in Russia compared to previous years.

As Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, in the reporting of 2022 Fortum introduced the following new Alternative Performance Measures (APMs): 'Comparable EBITDA from continuing operations excl. Russia', 'Comparable operating profit from continuing operations excl. Russia', 'Comparable net profit from continuing operations excl. Russia', 'Comparable earnings per share from continuing operations excl. Russia', and 'Financial net debt/comparable EBITDA excl. Russia' to provide additional financial performance indicators to support meaningful comparison of financials for Fortum's strategic businesses (**Note 1** and **Definitions and reconciliations of key figures**).

Solidium's bridge financing loan to Fortum and directed share issue without payment to Solidium

In 2022, the Russian war in Ukraine and Russia's decision to use energy as a weapon escalated to an energy crisis in Europe that also affected the Nordic power market. In August 2022, dramatically increased spot and futures power prices in the Nordics led to unprecedentedly high collateral requirements for utility companies that hedge their power sales on the market. At the end of August, Fortum's collaterals tied up on the Nordic commodities exchange Nasdaq increased to record-high levels of approximately EUR 5 billion. As prices came down, net margin receivables decreased to EUR 2.9 billion at the end of September and were EUR 2.3 billion at the end of December.

In order to ensure sufficient liquidity buffers for potential further collateral requirements in case of rising and volatile power prices, Fortum agreed with its majority owner, the Finnish State, on a EUR 2.35 billion bridge financing loan provided by the State-owned holding company Solidium. The bridge financing, announced on 6 September, was put in place in accordance with the schedule and terms set by the Finnish State. Alternative financing for the equivalent amount and with more favourable terms than the bridge financing was not available on such short notice before the end of September due to the company's unresolved strategic matters.

According to the terms of the arrangement, the first tranche was to be drawn by 30 September 2022 at the latest in order for the loan facility to remain effective thereafter. Therefore, on 26 September, Fortum announced to draw down the first minimum tranche of EUR 350 million. To date, no further drawdowns have been made due to the company's good liquidity position. The liquidity facility matures in September 2023, and the last required tranche may be drawn by 31 March 2023. The plan is to repay the drawn EUR 350 million amount and at the same time cancel the entire EUR 2,350 million bridge loan facility by the end of March 2023.

The bridge loan facility is linked to the six-month Euribor; the margin for the first six months is 10% and for the following six months 12%.

One condition subsequent of the drawdown of the loan, was a directed share issue which entitled Solidium to subscribe up to 8.97 million new ordinary registered shares in Fortum. The directed share issue required approval by Fortum's Extraordinary General Meeting (EGM) with a two-thirds majority of the shares and votes present. On 23 November, an EGM convened and resolved that the new shares, amounting to 1% of Fortum's share capital, were issued without payment after the execution of the share issue. As a consequence, the shares under control of the Finnish State increased from 50.76% to 51.26%, correspondingly diluting the ownership of other shareholders.

The arrangement also contains restrictions regarding management remuneration. The remuneration to be paid to the Board of Directors will not be increased during 2022 and 2023. Members of Fortum's Executive Management team will not be paid short- or long-term incentives under STI and LTI programmes accumulated in 2022 and 2023, and their salaries will not be increased during 2022 or 2023.

The arrangement does not include dividend restrictions.

In 2022, Fortum had sufficient liquid funds to meet current collateral requirements. In the latter part of 2022, the Nordic power prices declined from the record levels at the end of August and the market was less volatile. However, Fortum remained prepared for continued market turbulence, and drawing the first tranche in September ensured that it had access to the loan should the collateral requirements increase again during the winter. As an additional liquidity risk mitigation measure, Fortum has reduced its exposure on the Nasdaq Commodities exchange and increased the share of bilateral agreements.

In the longer term, Fortum calls for necessary regulatory changes to the EU EMIR (European Market Infrastructure Regulation), which sets the legal framework for margining and collateral requirements. The current implementation does not distinguish between requirements for pure financial counterparties and power generators that have lower risks, as they possess the power generation assets and thus the power generation. A review of the EMIR is essential to restore stability and predictability both for energy producers and users and to release power producers from unreasonable collateral requirements.

Financial results

Sales by segment

EUR million	2022	2021	Change 22/21
Generation	3,655	2,869	27%
City Solutions	1,282	1,302	-2%
Consumer Solutions	4,578	2,622	75%
Other Operations	136	138	-1%
Netting of Nord Pool transactions [1]	-2,312	-1,128	
Eliminations	435	-284	
Total continuing operations excl. Russia	**7,774**	**5,519**	**41%**
Russia	1,031	906	14%
Eliminations	-1	-2	
IS **Total continuing operations**	**8,804**	**6,422**	**37%**

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	2022	2021	Change 22/21
Generation	1,765	1,287	37%
City Solutions	177	317	-44%
Consumer Solutions	173	123	41%
Other Operations	-90	-114	21%
Total continuing operations excl. Russia	**2,025**	**1,612**	**26%**
Russia	411	404	2%
Total continuing operations	**2,436**	**2,016**	**21%**

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Comparable operating profit by segment

EUR million	2022	2021	Change 22/21
Generation	1,600	1,123	42%
City Solutions	28	135	-79%
Consumer Solutions	97	52	87%
Other Operations	-115	-142	19%
Total continuing operations excl. Russia	**1,611**	**1,167**	**38%**
Russia	260	261	0%
IS **Total continuing operations**	**1,871**	**1,429**	**31%**

Operating profit by segment

EUR million	2022	2021	Change 22/21
Generation	1,403	1,066	32%
City Solutions	719	2,671	-73%
Consumer Solutions	-149	495	-130%
Other Operations	-6	-134	96%
Total continuing operations excl. Russia	**1,967**	**4,098**	**-52%**
Russia	-690	227	-404%
IS **Total continuing operations**	**1,277**	**4,325**	**-70%**

Share of profits of associated companies and joint ventures by segment

EUR million	2022	2021	Change 22/21
Generation	-194	64	-403%
City Solutions	14	42	-67%
Consumer Solutions	-	-	-
Other Operations	-6	0	-100%
Total continuing operations excl. Russia	**-185**	**106**	**-275%**
Russia	-443	62	-815%
IS **Total continuing operations**	**-629**	**168**	**-474%**

Comparable share of profits of associated companies and joint ventures by segment

EUR million	2022	2021	Change 22/21
Generation	-49	0	-100%
City Solutions	14	42	-67%
Consumer Solutions	-	-	-
Other Operations	-6	0	-100%
Total continuing operations excl. Russia	**-40**	**42**	**-195%**
Russia	30	62	-52%
Total continuing operations	**-11**	**104**	**-111%**

For further information see **Note 6**.

Sales were EUR 8,804 (6,422) million driven by record-high power prices.

Comparable operating profit was EUR 1,871 (1,429) million. The main reason for the improvement was the higher achieved power price with strong physical and financial optimisation which, however, was partly offset by lower hydro volumes in the Generation segment.

Operating profit for the period was impacted by EUR -593 (2,897) million of items affecting comparability of which EUR -905 million were impairments related to property, plant and equipment and goodwill for the Russia segment and EUR -393 million were changes in fair values of non-hedge-accounted derivatives. Items affecting comparability also included tax-exempt capital gains of EUR 785 million related to the divestments of the ownership in Fortum Oslo Varme AS, Recharge and Plugsurfing. In the comparison period, items affecting comparability included tax-exempt capital gains of EUR 2,350 million related to divestments of Stockholm Exergi Holding AB, a EUR 254 million gain from the sale of the district heating business in the Baltics and EUR 50 million gain from the sale of eight small hydropower plants in Sweden (**Note 3**, **Note 7** and **Note 19**).

Comparable share of profits of associates and joint ventures was EUR -11 (104) million (**Note 18**). The share of profits of associates and joint ventures amounted to EUR -629 million and included EUR -475 million of impairments related to Fortum's ownership in the Russian TGC-1 and joint ventures.

Finance costs–- net amounted to EUR -193 (-161) million. The change in finance cost–- net relates mainly to foreign exchange gains from rouble receivables and the closing of rouble hedges and fair value changes, impairments and reversals of EUR -303 million recorded in 2022, which include expected credit losses of EUR 117 million related to Russian deposits and receivables, as well as EUR 171 million of write downs of other shares. Comparable finance costs–- net amounted to EUR 155 (-127) million. (**Note 11**).

Profit before income taxes was EUR 455 (4,332) million. Profit before taxes was impacted by the impairments related the Russian operations. In addition, items affecting comparability included tax-exempt capital gains of EUR 2,350 million in 2021. Comparable profit before income taxes was EUR 2,014 (1,405) million.

Income taxes for the period totalled EUR 556 (-325) million. Adjustments to income tax expense include EUR 746 million relating to onetime tax impact realised in Ireland mainly due to the Uniper divestment (**Note 7**). Comparable income taxes were EUR -454 (-290) million (**Note 12**).

Net profit was EUR 1,011 (4,008) million. Comparable net profit attributable to the owners of the parent was EUR 1,550 (1,091) million. Comparable net profit is adjusted for items affecting comparability, adjustments to the share of profit of associates and joint ventures, net finance costs, and income tax expenses (**Note 7.2** and **Definitions and reconciliations of key figures**).

Earnings per share for continuing operations were EUR 1.14 (4.49). Earnings per share for total Fortum, including the effect from discontinued operations, were EUR -2.72 (0.83). Comparable earnings per share for continuing operations were EUR 1.74 (1.23) and comparable earnings per share for total Fortum, including the effect from discontinued operations, were EUR -1.11 (2.00). Comparable earnings per share for continuing operations excluding Russia were EUR 1.21 (0.96) (**Note 7**).

Financial position and cash flow

EUR million	2022	2021	Change 22/21
Interest expense	-179	-154	-16%
Interest income	87	25	248%
Other financial expenses–- net	-101	-32	-216%
IS **Finance costs–- net**	**-193**	**-161**	**-20%**
Financial net debt	1,084	789	-37%
Adjusted net debt	1,117	3,227	65%

Cash flow

In 2022, net cash from operating activities increased by EUR 985 million to EUR 2,104 (1,119) million, mainly due to the improved comparable EBITDA as well as the change in working capital.

Net cash from investing activities, EUR 1,464 (-512) million, was positively impacted in 2022 by the EUR 2,500 (-2,500) million change in the shareholder loans to Uniper. In 2021, Fortum granted Uniper a shareholder loan of EUR 4,000 million of which EUR 2,500 million was drawn in 2021 and EUR 1,500 million in 2022. In December 2022, when Fortum sold its ownership in Uniper and the transaction was closed, the EUR 4,000 million shareholder loan was repaid to Fortum. The consideration of EUR 498 million received for the sale of the Uniper shares is presented in the cash flow from discontinued operations.

The change in margin receivables was EUR -1,311 (-1,000) million. Capital expenditure amounted to EUR 534 (470) million. Divestment of shares and capital returns of EUR 1,156 (3,816) million mainly include the divestment of the 50% ownership in the district heating company Fortum Oslo Varme AS in Norway. Divestment of shares in the comparison period 2021 mainly include the divestments of the 50% stake in the Swedish district heating and cooling company Stockholm Exergi and the district heating business in the Baltics.

Net cash used in financing activities was EUR -4,686 (1,603) million. The net decrease in interest-bearing liabilities was EUR 3,637 (increase 2,500) million while the change in margin liabilities was EUR 150 (63) million.

The net decrease in liquid funds for continuing operations was EUR 1,119 (increase 2,211) million.

Liquid funds at the beginning of the period, EUR 7,592 million, included liquid funds of EUR 2,966 million held by Uniper. Net decrease in liquid funds for discontinued operations of EUR 2,563 million include the impact from the deconsolidation of Uniper offset by the consideration of EUR 498 million received for the shares in Uniper.

Assets

At the end of 2022, total assets amounted to EUR 23,642 (149,661) million. The decrease from December 2021 was related to the deconsolidation of Uniper in the third quarter of 2022.

Equity

Total equity amounted to EUR 7,737 (13,665) million. Equity attributable to owners of the parent company totalled EUR 7,670 (12,131) million. The change from December 2021 was mainly related to the net loss for the year of EUR 2,416 million of the total of continuing and discontinued operations, the EUR -1,189 million impact from the fair valuation of cash flow hedges and the dividend payment of EUR 1,013 million. A dividend of EUR 1.14 euro per share was paid on 6 April 2022.

Financing

Since the second half of 2021, the very volatile commodity markets with unprecedentedly high prices have required significantly higher collaterals related to power and gas on the commodities exchanges. To manage this price volatility and the high price levels, Fortum took precautionary financing measures to secure its liquidity position and financial flexibility. Despite these liquidity constraints, the Group managed its financial position and ended the year with a strong balance sheet. At the end of 2022, the ratio for financial net debt to comparable EBITDA for continuing operations was 0.4 times. At the end of 2022, the ratio for financial net debt to comparable EBITDA for continuing operations excluding Russia was 0.6 times.

At the end of 2022, financial net debt was EUR 1,084 (789) million and adjusted net debt EUR 1,117 (3,227) million (**Note 27**).

At the end of 2022, the Group's liquid funds totalled EUR 3,919 (7,592) million (**Note 24**).

In January 2022, Fortum signed a EUR 3,000 million revolving credit facility to manage especially Uniper's liquidity situation around the turn of the year. In January, Fortum repaid the drawn amount of EUR 500 million of its EUR 800 million bilateral revolving credit facility.

In March 2022, Fortum extended the maturity of its EUR 3,000 million revolving credit facility to July 2022. Additionally, Fortum repaid EUR 247 million of the nuclear waste fund loans totalling EUR 918 million after the repayment. The dividend, EUR 1,013 million, was paid on 6 April 2022.

In May 2022, in conjunction with the closing of the divestment of Fortum Oslo Varme AS in Norway, Fortum deconsolidated a related EUR 210 million shareholder loan from the City of Oslo.

In June 2022, Fortum signed a new EUR 5,500 million revolving credit facility which consists of a EUR 3,100 million Liquidity revolving credit facility and a EUR 2,400 million Core revolving credit facility. Fortum drew EUR 2,000 million from the Liquidity revolving credit facility. The above-mentioned EUR 3,000 million revolving credit facility was cancelled and the EUR 1,750 million revolving credit facility was repaid and cancelled in June 2022. Fortum also drew the total EUR 800 million amount of its bilateral revolving credit facility. Further, the remaining balance of EUR 450 million of the bridge loan was repaid.

During the third quarter, as spot and future power prices in the Nordics rose dramatically, Fortum's collateral requirements increased to a record-high level and Fortum drew the remaining EUR 1,100 million of the Liquidity revolving credit facility: EUR 600 million in July and EUR 500 million in August. Additionally, the EUR 2,400 million Core revolving credit facility was fully utilised with two drawdowns: EUR 1,000 million in August and EUR 1,400 million in September. Fortum repaid a maturing bond of EUR 1,000 million in September 2022.

In September 2022, in order to have preparedness for even higher collateral requirements, Fortum signed a EUR 2,350 million bridge financing with the Finnish State-owned company Solidium. EUR 350 million of this facility has been drawn.

In November 2022, Fortum repaid EUR 1,400 million part of the Core revolving credit facility and extended the EUR 800 million bilateral revolving credit facility to mature in December 2023. In December 2022, Uniper repaid the shareholder loan of EUR 4,000 million to Fortum. Fortum repaid the remaining EUR 1,000 million of the Core revolving credit facility, EUR 2,000 million of the Liquidity credit facility and the full amount of the EUR 800 million bilateral revolving credit facility.

Fortum's liquidity significantly improved following the sale of Uniper shares and Uniper's repayment of the shareholder loan combined with declining Nordic power prices and release of collaterals. By the end of 2022, Fortum's total interest-bearing liabilities were EUR 7,785 million and liquid funds EUR 3,919 million. At the end of 2022, Fortum's total interest-bearing liabilities excluding Russia were EUR 7,581 million and liquid funds excluding Russia amounted to EUR 3,672 million.

Current loans, including EUR 1,629 million of the current portion of long-term loans, amounted to EUR 4,108 million. Short-term loans, EUR 2,479 million, include EUR 1,100 million of drawdowns from Liquidity revolving credit facility, a EUR 350 million drawdown from the Solidium bridge financing facility, and use of commercial paper programmes of EUR 475 million (**Note 27**).

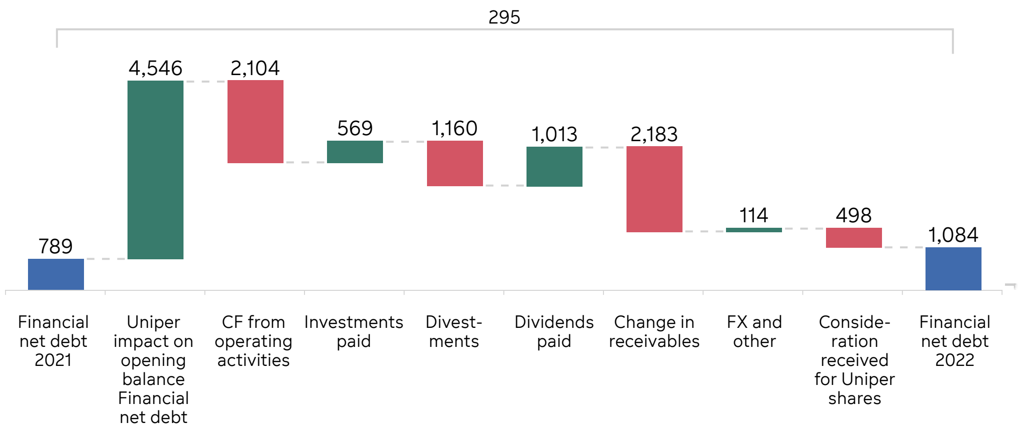
At the end of 2022, Fortum had undrawn committed credit facilities of EUR 7,200 million, including the Liquidity revolving credit facility of EUR 2,000 million (maturity in June 2023 with 6+6 months extension options by Fortum), the Core revolving credit facility of EUR 2,400 million (maturity in June 2025 with 1+1 year extension options by the lenders), the Solidium bridge financing facility of EUR 2,000 million (maturity in September 2023) and the bilateral EUR 800 million revolving credit facility (maturity in December 2023). In addition, Fortum has EUR 100 million committed overdraft limits that are valid until further notice.

On 3 August 2022, S&P Global Ratings (S&P) affirmed Fortum’s current BBB long-term credit rating with negative outlook following the announced stabilisation package to provide financial relief to Uniper. On 5 July, due to the Russian gas curtailment, S&P had placed Fortum on CreditWatch Negative.

On 5 August 2022, Fitch Ratings affirmed Fortum’s long-term credit rating at BBB with negative outlook on Uniper’s stabilisation package. On 23 June 2022, Fitch had changed Fortum’s outlook from stable to negative.

Following the completion of the Uniper divestment and the announcement of Fortum’s new strategy, the rating agencies are expected to revisit Fortum’s ratings.

Change in financial net debt during 2022, EUR million



Operating environment

European power markets

Year 2022 goes down in history for Russia’s brutal attack on Ukraine. As one of the consequences of the war, European energy markets have faced a shock that compares with the oil crisis in the 1970s. Some 25% of European gas supply was lost during the year, leading to a harsh situation that has tested the limits of European energy supply and energy markets. Europe has been able to cope with the loss of the majority of imported Russian pipeline gas, due to reduced energy demand and increased liquefied natural gas (LNG) imports.

According to preliminary statistics, power consumption in the Nordic countries was 385 (402) TWh during 2022.

In Central Western Europe (Germany, France, Austria, Switzerland, Belgium, and the Netherlands), power consumption in 2022 was 1,318 (1,366) TWh, according to preliminary statistics.

At the end of 2022, the Nordic hydro reservoir levels were at 79 TWh, which is 5 TWh below the long-term average and 6 TWh higher than in the previous year.

In 2022, the average system spot price in Nord Pool was EUR 136 (62) per MWh. The average area price in Finland was EUR 154 (72) per MWh, in the SE3 area in Sweden (Stockholm) EUR 129 (66) per MWh, and in the SE2 area in Sweden (Sundsvall) EUR 62 (43) per MWh. In Germany, the average spot price during 2022 was EUR 235 (97) per MWh.

At the end of February 2023, the Nordic system electricity forward price on Nasdaq Commodities for the remainder of 2023 was around EUR 86 per MWh and for 2024 around EUR 79 per MWh. The Nordic hydro reservoirs were at 59 TWh, which is about 2 TWh below the long-term average and 4 TWh higher than one year earlier. The German electricity forward price for the remainder of 2023 was around EUR 149 per MWh and for 2024 around EUR 153 per MWh.

European commodity markets

In 2022, gas demand in Central Western Europe was 1,867 (2,225) TWh.

The steep reduction in the Russian pipeline gas flows to Europe pushed European gas prices to unprecedented levels amid high volatility. The average gas front-month price (TTF) for full-year 2022 was EUR 133 (48) per MWh. The 2023 forward price increased from EUR 45 per MWh at the beginning of the year to EUR 88 per MWh at the end of the year.

In the EUA (EU Allowance) markets, the price decreased from EUR 85 per tonne at the beginning of the year of 2022 to EUR 84 per tonne at the end of the year. The average EUA price for full-year 2022 was EUR 81 per tonne.

The forward quotation for coal (ICE Rotterdam) for 2023 increased from USD 90 per tonne at the beginning of the year to USD 185 per tonne at the end of the year.

At the end of February 2023, the TTF forward price for gas for the remainder of 2023 was EUR 53 per MWh. The forward quotation for EUAs for 2023 was at the level of EUR 97 per tonne. The forward price for coal (ICE Rotterdam) for the remainder of 2023 was USD 160 per tonne.

Power consumption

TWh	2022	2021	2020
Nordic countries	385	402	392

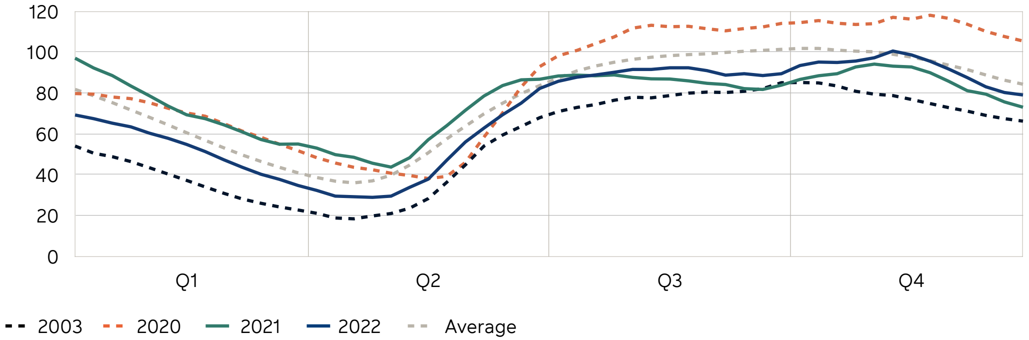
Average prices

	2022	2021	2020
Spot price for power in Nord Pool power exchange, EUR/MWh	135.9	62.3	10.9
Spot price for power in Finland, EUR/MWh	154.0	72.3	28.0
Spot price for power in Sweden, SE3, Stockholm, EUR/MWh	129.2	66.0	21.2
Spot price for power in Sweden, SE2, Sundsvall, EUR/MWh	61.9	42.6	14.4
Spot price for power in Germany, EUR/MWh	235.4	96.8	30.4
CO_2, (ETS EUA next Dec), EUR/tonne CO_2	81	54	25
Coal (ICE Rotterdam front month), USD/tonne	279	117	50
Oil (Brent front month), USD/bbl	99	71	43
Gas (TTF front month), EUR/MWh	133	47	9

Hydro reservoir

TWh	31 Dec 2022	31 Dec 2021	31 Dec 2020
Nordic hydro reservoir level	79	73	105
Nordic hydro reservoir level, long-term average	84	84	84

Nordic water reservoirs, energy content, TWh



Source: Nord Pool

Export/import Nordic area

TWh (+ = import to, - = export from Nordic area)	2022	2021	2020
Export/import between Nordic area and Continental Europe+Baltics	-35	-29	-24
Export/import between Nordic area and Russia	4	9	3
Total	**-31**	**-20**	**-21**

Regulatory environment

EU ETS revision finalised

On 18 December, the EU institutions reached a provisional agreement on the revision of the EU emissions trading directive (ETS). The revision will raise the ambition of the ETS and enlarge its scope significantly. The ETS emissions reduction target will be increased from 43% to 62% by 2030 compared to 2005 and the operation of the market stability reserve (MSR), the mechanism to balance the supply-demand of allowances, will be enhanced. The Commission will assess, and by end of 2026, will report on the possibility to include the municipal waste incineration sector in the ETS from 2028 onwards. Starting in 2027, a new emissions trading system (ETS2) will be established for private and public road transport and heating of buildings.

According to analyst assessments of the impact of the agreed reform, ETS will move from oversupply to significant tightness towards the end of the decade and beyond.

The revised ETS directive is largely in line with Fortum's priorities, as Fortum has been calling for an increased ambition, strengthening of the MSR, inclusion of waste incineration to the ETS and enlarging the scope of ETS to heating of buildings.

EU power market design developing

The review of the European power market design represents the last major legislative file on climate and energy matters to be initiated by the Commission under the von der Leyen term. The consultation with stakeholders was launched with some delay at the end of January 2022 and was closed on 13 February with possible subsequent delay on the issue of the legislative proposal. In the face of a political push for more radical changes in the key market design principles including questioning of the marginal pricing, Fortum has cautioned against solving the current energy crisis through structural and untested changes to the market design and has stressed its preference for an evolutionary rather than a revolutionary approach.

The legislative proposal should be substantiated based on a thorough and robust impact assessment. Fortum recommends that a system needs' analysis be conducted as a way to determine the necessary level of firmness, variability and flexibility.

EMIR review started

When the energy crisis escalated in the summer of 2022, it also hit the energy commodity derivatives' markets with the risk of a systemic default payment effect on utilities. As a response, the Commission adopted a set of temporary measures to notably extend the range of collaterals and to introduce a circuit breaker mechanism for the power derivatives' exchanges to enable the suspension of trading if/when prices or transactions become too erratic. On 7 December, the Commission issued a revision of the EMIR (European Market Infrastructure Regulation) legislation with the view to improve the regulation by making structural changes to this core EU financial legislation and making some of the temporary measures permanent. Whilst welcome and needed, Fortum sees the revised proposal still insufficiently equipped to protect the power sector from systemic failure risks if a margining crisis similar to the one in August 2022 were to occur again.

National measures to support electricity consumers and related political discussion

Following the unprecedentedly high retail electricity prices in the summer of 2022, measures to support electricity consumers became a heavy political debate. Governments in Finland and Sweden agreed on several support measures to help consumers manage their electricity bills. The agreed Finnish measures include, e.g., reduced VAT and improvements in social support schemes. Proposals under discussion are temporary lump reimbursement of bills and prolonging of invoice payments. In Sweden, it was decided that Svenska Kraftnät's bottleneck income would be redistributed to compensate households and companies for higher energy bills. There is a growing pressure to lower VAT and electricity tax but the government has not yet made any further decisions. At the same time, electricity retail companies have voluntarily introduced new electricity products and contracts with lower fixed prices.

While Fortum supports addressing the concerns of electricity customers, the company prefers measures that do not distort competition amongst electricity market actors nor favour network owners over retailers or vice-versa. Any kind of a retail price cap would be difficult to implement without extensive government support for retailers. There is no net effect for retail companies from the governmental support measures, but required changes in the billing systems are time-consuming.

Windfall taxation in Finland for 2023

On 29 December, following a short public consultation process, the Finnish Government presented a draft windfall tax proposal (HE 320/2022 vp). The objective of the proposal is to implement the EU regulation 2022/1854 on revenue cap and solidarity contribution through a temporary national windfall tax on the electricity sector to tax the extraordinary profits generated in the energy crisis and to redistribute the means to consumers to support their high energy bills. While Fortum agrees with the objective of the proposal, the company finds the proposed taxation model problematic in many ways. The model deviates fundamentally from the EU's revenue cap model and is much more stringent compared to the EU regulation as it deviates in scope, tax basis and application time, and hence puts the Finnish electricity sector in a disadvantageous position especially compared to Sweden which will implement the EU revenue cap in line with the EU regulation.

The tax applies to companies in the electricity sector within electricity generation, wholesale and partly retail sales in Finland. According to the proposal, the tax would be 30% of the companies' net profits generated from the aforementioned electricity operations in Finland exceeding a 10% return on equity in the fiscal year 2023. The Finnish corporate income tax is 20%; consequently, the total nominal tax rate would be 50% on net profits generated in the scope of the defined windfall tax. Based on the Government's latest estimates, it would cumulatively bring in temporary tax revenues of EUR 0.3-0.4 billion from industry participants during 2023. The Finnish Parliament adopted the legislation on temporary windfall tax on 27 February 2023. The tax becomes payable in 2024.

Fortum's electricity generation in Finland accounts for approximately one third of total Finnish electricity generation. Approximately 40% of Fortum's Nordic electricity generation and approximately 30% of its electricity customers are in Finland.

Revenue cap in Sweden to become effective 1 March 2023

The Swedish Government has presented a legislative proposal to implement the EU revenue cap legislation with effect from 1 March to 30 June 2023, in accordance with the EU regulation. The revenue cap is set at a power price of 180 EUR/MWh, as specified by the EU. Only realised revenues are proposed to be subject to the cap, meaning that hedges and other financial contracts can be subtracted from the realised spot prices. The Swedish Government estimates that the revenue cap will bring in a modest EUR 28 million in additional tax revenue.

Status of implementing the Swedish Governmental programme on nuclear and hydro

As communicated both in the governmental agreement and declaration, in January the Swedish Government has presented a legislative proposal to remove the barriers for new nuclear in the Swedish Environmental Act. The current legislation limits new nuclear to a maximum of 10 reactors at the three already existing nuclear sites. The new legislation will enable both large-scale nuclear and small modular reactors (SMRs) to be located at new sites. The proposed legislation will become effective on 1 March 2024.

In order to better safeguard existing hydropower plants the Swedish Government has decided to pause the ongoing re-permitting process for one year. The time period will be used to analyse the consequences for the power system and to adjust the re-permitting process to safeguard the value of hydropower and ensure that the total production loss from the re-permitting process stays below 1.5 TWh, as specified in the so-called national plan for hydropower. Fortum owns and operates power plants in several of the rivers that are being handled early in this process. These plants will enter into court processes for updated permits at a later stage due to the time-out and the related production losses may be lower than initially estimated.

Segment reviews

Business model

The Fortum Board of Directors resolved on Fortum's new strategy at the beginning of March, 2023, including a new business structure and operating model. The business segments below describe Fortum's organisational structure in 2022 and changes in it during the year.

Fortum's core operation are located in the Nordics and consist of CO_2-free power generation, electricity sales, district heating as well as well as smart solutions to improve resource efficiency. Fortum is one of the largest power generators and the largest electricity retailer in the Nordic countries. The company's role is to ensure security of supply and a fast and reliable transition to a carbon-neutral economy by providing customers and societies with clean energy and sustainable solutions.

In 2022, Fortum's organisation consisted of four business divisions: Generation, City Solutions, Consumer Solutions and Russia.

At the end of 2022, Fortum completed the divestment of Uniper to the German State in line with an agreement in principle signed on 21 September 2022. As a consequence of the September agreement, Fortum lost control of Uniper and deconsolidated the business in the third quarter of 2022. The divested businesses included all operations in Fortum's Uniper segment.

At the end of 2022, Fortum employed a diverse team of approximately 7,700 energy-sector professionals.

Generation

Generation is responsible for Nordic power generation. The segment comprises CO_2-free nuclear, hydro and wind power generation, as well as power portfolio optimisation, trading, market intelligence, thermal power and global nuclear services. Due to the deconsolidation of Uniper, OKG is reported as an associated company instead of the earlier proportionate consolidation (Note 6).

EUR million	2022	2021	Change 22/21
Reported			
Sales	3,655	2,869	27%
- power sales	3,600	2,660	35%
of which Nordic outright power sales [1)]	2,461	1,937	27%
- other sales	55	209	-74%
Operating profit	1,403	1,066	32%
Share of profits of associates and joint ventures [2)]	-194	64	-403%
Capital expenditure and gross investments in shares	234	175	34%
Number of employees	1,155	1,116	3%

EUR million	2022	2021	Change 22/21
Comparable			
EBITDA	1,765	1,287	37%
Operating profit	1,600	1,123	42%
Share of profits of associates and joint ventures [2)]	-49	0	-100%
Return on net assets, %	27.0	19.0	42%
Net assets (at period-end)	5,549	5,961	-7%

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 due to lower hydropower volumes. This was caused by lower inflow in the segment's power generation areas and lower hydro reservoir levels during the year. The production volumes for nuclear were stable and remained almost at the same level as in 2021. CO_2-free generation accounted for 99% of the total power generation.

The achieved power price in the Generation segment increased by EUR 17.1 per MWh, up by 40%. The achieved power price increased due to the very successful physical and financial optimisation and higher spot prices. While the spot power price increased by 97% in the segment's power generation areas, the positive result effect of the higher achieved power price was dampened by the fairly high hedge levels and a hedge price below the level of the spot price. During most of the year, the achieved power price was also negatively impacted by the significant price difference in Sweden between the high system price and the lower SE2-area spot price (Sundsvall). This situation eased during the fourth quarter. Due to low liquidity on the exchange for the SE2-area price products, the hedge ratio in SE2-area was lower than the system price hedge ratios and, consequently, negatively affected the achieved power price.

Comparable operating profit increased by 42%. The increase was mainly related to the higher achieved power price, partly offset by lower hydro volumes.

Operating profit was affected by EUR -197 (-57) million of items affecting comparability, mainly related to the fair value change of non-hedge-accounted derivatives (**Note 6**).

Comparable share of profits of associates and joint ventures totalled EUR -49 (0) million, including the share of profits of EUR -36 million from OKG (**Note 6** and **Note 18**).

On 1 February, Fortum and Uniper launched a joint organisation for the Nordic hydro and physical trading operations. Fortum took responsibility for Uniper’s hydropower asset management in Sweden and the physical trading optimisation and dispatch activities in the Nordics. After the decision to fully divest its ownership in Uniper, it was agreed to discontinue all strategic cooperation and to pursue development as two separate companies as of 1 December 2022. In hydropower, the discontinuation of the cooperation meant that some 160 Fortum employees re-joined Uniper in Sweden. In hydrogen, the development portfolio was divided between the two companies. The joint venture with Perstorp, Project Air, continues with Uniper.

On 3 March, Fortum announced its decision to apply for a new operating licence for both units at the nuclear power plant in Loviisa, Finland, until the end of 2050. On 16 February 2023, the Finnish Government granted a new operating licence for both units at Fortum’s Loviisa nuclear power plant until the end of 2050. Over the course of the new licence period, the plant is expected to generate up to 170 terawatt hours of CO_2-free electricity. Investments related to the continuation of operations and lifetime extension will amount to an estimated EUR 1 billion until 2050. Over the past five years, Fortum has already invested approximately EUR 300 million in refurbishing the Loviisa power plant. The Loviisa power plant is the first nuclear power plant in Finland. The power plant has two units: unit 1 started operating in February 1977, and unit 2 in November 1980.

On 12 March, electricity generation of TVO’s third Olkiluoto nuclear power plant unit (OL3) in Finland started. In June, the start of regular electricity generation was postponed from September to December. In October, damages were detected in the feedwater pumps located in OL3’s turbine island. On 22 December, TVO announced that the investigation into the damage in Olkiluoto 3’s feedwater pumps was mainly completed and the electricity test production continued on 27 December. In January 2023, production was again discontinued for a month for planned inspections of the impellers of the feedwater pumps and the next test production period started in February. According to TVO, regular electricity production is expected to start in April 2023. The total capacity of OL3 is 1,600 MW and once completed, it will produce approximately 14% of Finland’s total electricity consumption (**Note 29**).

On 9 June, Fortum announced that it had, together with Gasgrid Finland, signed a Letter of Intent for Finland’s first floating LNG terminal vessel FSRU, Exemplar, to be placed at Fortum’s Inkoo port. Located on the south coast of Finland, Inkoo provides an optimal deep-water port at close proximity to the pipelines distributing gas mainly to industrial end-users in the Baltic region. Gasgrid Finland is leasing the floating LNG terminal vessel for a duration of 10 years and the capacity is sufficient for the gas needs of both Finland and Estonia. On 28 December, the floating LNG terminal vessel Exemplar arrived to Inkoo. Implemented under the leadership of Gasgrid Finland, the LNG floating terminal project will secure the supply of gas to industry, energy production and households and will safeguard Finland’s security of supply from the winter of 2023 onwards. This solution also replaces the earlier Russian gas supplies through the Imatra entry point that were stopped in May.

In the third quarter of 2022, Fortum offered the Meri-Pori coal condensing power plant for peak-load reserve capacity until October 2023. On 16 September, the Finnish Energy Authority announced that Meri-Pori was not chosen to the reserve in the tendering process, so Fortum started preparing it for commercial use to help maintain security of supply in Finland during the ongoing energy crisis. In October, the power plant underwent a thorough annual outage to ensure availability of its full capacity of 560 MW if needed. Deployment of actual electricity generation depends on the situation in the power market, and, since December Meri-Pori has participated in the spot market. The Meri-Pori plant is Finland’s last coal-fired condensing plant. It was commissioned in 1994 and has been in the peak-load reserve system between June 2017 and June 2022.

On 17 October, Fortum announced that the company has started a two-year feasibility study to explore prerequisites for new nuclear in Finland and Sweden. Fortum will examine commercial, technological and societal, including political, legal and regulatory, conditions both for small modular reactors (SMRs) and conventional large reactors. Ventures in the nuclear industry will most likely involve partnership constellations and the feasibility study will also explore the potential for service business offerings for new projects in Europe and hydrogen for industrial applications. Fortum has also announced the exploration of potential cooperation and collaboration opportunities regarding nuclear with the Finnish energy company Helen, the French Electricité de France (EDF) and the Swedish Kärnfull Next AB. Any potential investment decisions will be made at a later stage.

On 22 November, Fortum signed an agreement with Westinghouse Electric Company for the design, licensing, and supply of a new fuel type for the Loviisa power plant. The new fuel type is based on British Nuclear Fuel Limited’s fuel that previously was supplied to the Loviisa power plant in 2001-2007 and used in parallel with the fuel supplied by the Russian TVEL in the early 2000s. Taking the new fuel into use is a multi-year project also requiring regulatory approvals. The fuel agreement with the Russian TVEL is valid until the end of the plant’s current operating licences, i.e. 2027 and 2030.

Power generation by source

TWh	2022	2021	Change 22/21
Hydropower, Nordic	19.1	23.3	-18%
Nuclear power, Nordic	23.4	23.5	0%
Thermal power, Nordic	0.3	0.0	6515%
Total	**42.9**	**46.8**	**-8%**

Nordic sales volume

TWh	2022	2021	Change 22/21
Nordic sales volume	50.9	54.1	-6%
of which Nordic power sales volume [1]	41.1	45.3	-9%

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

Achieved power price

EUR/MWh	2022	2021	Change 22/21
Generation's Nordic achieved power price [1]	59.9	42.8	40%

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

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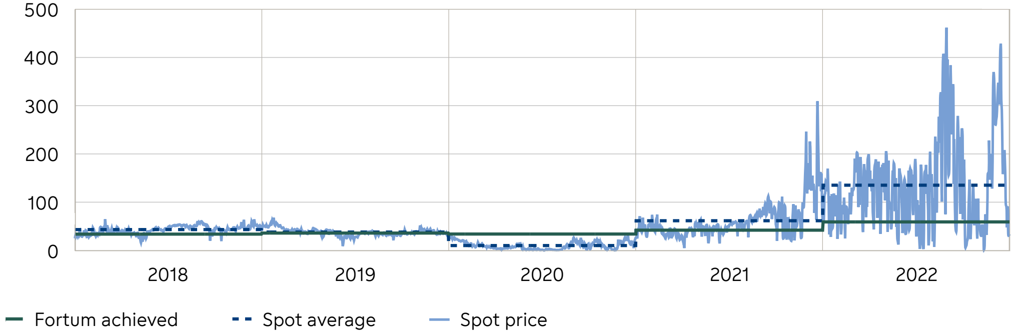
FINANCIALS 2022

Nord Pool, power price, 2018–2022, EUR/MWh



Source: Nord Pool, Fortum

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, Poland and India.

EUR million	2022	2021	Change 22/21
Reported			
Sales	1,282	1,302	-2%
- heat sales	505	612	-17%
- power sales	252	205	23%
- waste treatment sales [1)]	237	250	-5%
- other sales [2)]	288	236	22%
Operating profit	719	2,671	-73%
Share of profits of associates and joint ventures	14	42	-67%
Capital expenditure and gross investments in shares	159	162	-2%
Number of employees	1,691	1,766	-4%

EUR million	2022	2021	Change 22/21
Comparable			
EBITDA	177	317	-44%
Operating profit	28	135	-79%
Share of profits of associates and joint ventures	14	42	-67%
Return on net assets, %	2.3	6.1	-62%
Net assets (at period-end)	1,760	2,456	-28%

1) Waste treatment sales comprise gate fees and environmental construction services.
2) Other sales comprise mainly operation, maintenance and other services, and the sales of recycled products and fuel sales.

Heat sales volumes decreased by 24%, mainly due to structural changes following the divestment of the Baltic district heating business and the sale of Fortum's 50% ownership in the Norwegian district heating company Fortum Oslo Varme. Warmer weather conditions in all the heating areas also negatively affected the volumes. The power sales volumes decreased by 45%, mainly due to the divestments of the Baltic district heating business and the 250-MW Pavagada II and 250-MW Rajasthan solar plants in India as well as the sale of Fortum's 50% ownership in the Norwegian district heating company Fortum Oslo Varme. The power sales volumes were further impacted by lower power sales in Finland due to higher natural gas and CO_2 emission allowance prices that resulted in a change of fuel mix and lower produced power volumes.

Comparable operating profit decreased by 79%, or EUR 107 million, mainly as a result of clearly higher fossil fuel, pellet and CO_2 emission allowance prices as well as lower metal prices. The negative effect was partly offset by higher power and district heating sales prices. Comparable operating profit was also negatively affected by structural changes from the divestments of ownership in Fortum Oslo Varme, the Baltic district heating business and the 250-MW Pavagada II and 250-MW Rajasthan solar plants in India, the effects of which were partly offset by the tax-exempt sales gain of EUR 5 million from the divestment of the 250-MW Rajasthan solar plant in India. The profits from the Rajasthan solar park divestment were recognised in comparable operating profit and in two tranches. The first tranche − a tax-exempt sales gain of EUR 11 million − was recorded in 2021 and the second tranche – a tax-exempt sales gain of EUR 5 million – was recorded in 2022.

Operating profit was affected by EUR 690 (2,536) million of items affecting comparability, mainly related to the tax-exempt capital gain of EUR 638 million from the divestment of Fortum Oslo Varme and the fair value change of non-hedge-accounted derivatives. The comparison period includes a capital gain of EUR 2.4 billion from the sale of Stockholm Exergi Holding AB and a EUR 254 million capital gain from the sale of the district heating business in the Baltics (**Note 6**).

Comparable share of profits of associates and joint ventures totalled EUR 14 (42) million. The comparison period includes EUR 28 million of the share of profits from Stockholm Exergi. Fortum's 50% ownership was divested in September 2021 (**Note 6** and **Note 18**).

On 4 February, Fortum announced that it had won the right from Solar Energy Corporation of India (SECI) to build two solar power plants with a total capacity of 600 MW in Karnataka, India. On 16 March, Fortum participated in another solar auction in India and won the right from Gujarat Urja Vikas Nigam Limited (GUVNL) to build a 200-MW solar plant in Gujarat. These projects are planned to be developed together with a partner and are expected to be commissioned by 2024.

On 3 March, Fortum announced that it decided to discontinue the strategic assessment of its Polish district heating business. Fortum is evaluating alternatives for further decarbonisation of these assets in line with its carbon neutrality target. At the end of 2022, Fortum's coal-based capacity in Poland was 0.5 GW.

On 17 March, Fortum and Microsoft announced the world's largest collaboration to heat homes, services and businesses with sustainable waste heat from the new data centre in the Helsinki metropolitan area in Finland. The concept utilises Fortum's existing district heating infrastructure, the second largest in Finland, for heat capture and distribution. Fortum's district heating infrastructure in this area includes about 900 km of underground pipes that transfer heat to approximately 250,000 users. Once operational, approximately 60% of the area's heating will be generated by climate-friendly waste heat.

On 19 May, Fortum concluded the sale of its 50% ownership in the district heating company Fortum Oslo Varme AS in Norway to a consortium of institutional investors of Hafslund Eco, Infranode and HitecVision. The total consideration of the sale amounted to approximately EUR 1 billion on a cash and debt-free basis; as part of the transaction, Fortum deconsolidated a related EUR 0.2 billion shareholder loan from the City of Oslo. Fortum recorded a tax-exempt capital gain of EUR 638 million in the City Solutions segment's 2022 results.

In July, Fortum and GIG (Green Investment Group, a specialist green investor within Macquarie Asset Management), agreed to invest in a new waste-to-energy plant in Glasgow, Scotland, through a 50/50 joint venture. When fully commissioned, the plant will have an annual processing capacity of 350,000 tonnes of waste. The plant will have a power generation capacity of 45 MWe gross, corresponding to the average annual electricity consumption of approximately 90,000 homes.

Heat sales by country

TWh	2022	2021	Change 22/21
Finland	2.8	3.1	-10%
Poland	3.5	3.8	-8%
Norway	0.8	1.8	-56%
Other countries	0.4	1.3	-62%
Total	**7.6**	**10.0**	**-24%**

Power sales by country

TWh	2022	2021	Change 22/21
Finland	0.9	1.3	-31%
Poland	0.8	0.7	14%
Other countries	0.1	1.3	-92%
Total	**1.8**	**3.3**	**-45%**

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 2.2 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	2022	2021	Change 22/21
Reported			
Sales	4,578	2,622	75%
- power sales	4,026	2,253	79%
- gas sales	392	225	74%
- other sales	161	144	12%
Operating profit	-149	495	-130%
Capital expenditure and gross investments in shares	71	68	4%
Number of employees	1,179	1,176	0%

EUR million	2022	2021	Change 22/21
Comparable			
EBITDA	173	123	41%
Operating profit	97	52	87%
Net assets (at period-end)	1,365	1,125	21%

The electricity sales volume decreased by 6%, due to warmer weather in the Nordics compared to the clearly colder temperatures in the first and the fourth quarters of 2021. The gas sales volume decreased by 20% as a consequence of higher than normal temperatures in Poland and the unprecedentedly high gas prices that continued to lower demand and overall energy consumption. The total sales revenue increased by 75%, driven by significantly higher electricity and gas prices in the Nordics and Poland.

Comparable operating profit increased by 87%, mainly due to higher electricity and gas sales margins and positive one-offs from gas storage sales. The positive effect was partly offset by higher costs and lower sales of value-added services. The result in the fourth quarter of 2021 was clearly negative due to higher electricity purchase costs and negative margins.

Customer activity with Fortum's customer service centres remained at a higher level throughout the year. In order to meet the higher customer demand, additional resources were assigned to handle the increased number of contacts. The overall customer satisfaction and recommendation rates continued to improve during the year, ensuring the business' competitiveness.

To help support its customers to manage in the exceptional market situation of unprecedentedly high and volatile power prices, Fortum continued to expand the range of its product portfolio to meet its customers' needs. Fortum also offers advice on electricity conservation and encourages smart consumption and moving consumption away from peak-hours to support the energy system as a whole. Support in more actively managing invoices and more flexible payment plans are also available.

Operating profit was affected by EUR -246 (443) million of items affecting comparability, due to the fair value change of non-hedge-accounted derivatives (**Note 6**).

On 3 March, Fortum announced that it had decided to discontinue the strategic review of the electricity retail business Consumer Solutions and is continuing to develop the business as part of the Group.

Sales volumes

TWh	2022	2021	Change 22/21
Electricity	29.6	31.5	-6%
Gas [1]	4.8	6.0	-20%

1) Not including wholesale volumes.

Number of customers

Thousands [1]	2022	2021	Change 22/21
Electricity	2,130	2,120	0%
E-mobility [2]	70	70	0%
Gas	40	50	-20%
Total	**2,240**	**2,230**	**0%**

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

Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment includes Fortum's fully owned power plants, its joint ventures for renewable power generation and the joint ventures for power and heat sales, as well as Fortum's more than 29% holding in TGC-1. These joint ventures and the associated company are accounted for using the equity method.

EUR million	2022	2021	Change 22/21
Reported			
Sales	1,031	906	14%
- power sales	856	761	12%
- heat sales	156	137	14%
- other sales	19	8	138%
Operating profit	-690	227	-404%
Share of profits of associates and joint ventures	-443	62	-815%
Capital expenditure and gross investments in shares	62	83	-25%
Number of employees	2,724	2,627	4%

EUR million	2022	2021	Change 22/21
Comparable			
EBITDA	411	404	2%
Operating profit	260	261	0%
Share of profits of associates and joint ventures	30	62	-52%
Return on net assets, %	11.3	12.9	-12%
Net assets (at period-end)	1,690	2,508	-33%

Following Russia's attack on Ukraine, Fortum decided in May 2022 to exit its Russia operations. A divestment process is ongoing. Due to existing Western sanctions on Russia and Russia's counter-sanctions, the Group's Russian operations are subject to significant foreign exchange transfer restrictions, which limit the access to cash flows and the ability to transfer funds, including potential dividend distributions, out of Russia. Fortum has stopped all new investment projects in Russia and monetary transfers to Russia and is not providing any new financing to its Russian subsidiaries.

Power generation volumes remained unchanged. Heat production volumes decreased due to the Argayash CHP plant divestment and the warmer weather in Chelyabinsk and Tyumen in the first half of year.

Sales increased by 14% due to the stronger Russian rouble and higher power prices, partly offset by expiry of the CSA payments of the Nyagan 1 production unit and the divestment of the Argayash CHP plant. The effect of the change in the Russian rouble exchange rate was EUR 160 million.

Comparable operating profit was at the level of the previous year. The negative effect from the CSA expiry for Nyagan 1 was partly offset by the EUR 40 million effect of the change in the Russian rouble exchange rate, higher power prices and lower depreciation following impairments recognised in the first quarter. The comparison period includes a EUR 17 million positive effect from the sale of the 116-MW CSA-backed solar power project to the Fortum-RDIF joint venture.

Operating profit was negatively affected by impairments of EUR 905 million related to intangible assets and property, plant and equipment for the Russia segment.

Comparable share of profits of associates and joint ventures totalled EUR 30 (62) million. The share of profits of associates and joint ventures was impacted by impairments of EUR 475 million related to Fortum's ownership in TGC-1 and joint ventures (**Note 6** and **Note 18**).

On 18 January, Fortum announced that a 1.3 GW portfolio of wind projects was to be transferred to a new joint venture. However, this wind portfolio is now part of the assets and operations that are subject to the ongoing divestment process following Fortum's decision for a controlled exit from Russia as a result of the Russia-Ukraine war. Fortum's ownership interest in the 1.3 GW portfolio is presented in other non-current assets and in interest-bearing liabilities.

On 3 May, following Russia's attack and the war in Ukraine and consequential geopolitical tensions, uncertainties and risks, Fortum announced pre-tax impairments related to the company's Russian operations recorded in its first-quarter 2022 results. On 7 February 2023, Fortum announced it would record further impairments in the fourth quarter of 2022 results. Total Russian (pre-tax) impairments for the year 2022 amount to approximately EUR 1.7 billion.

For further information, see the section '**Fortum in Russia**', **Note 7** and **Note 19**.

Russian power generation and heat production

TWh	2022	2021	Change 22/21
Russian power generation	28.6	28.6	0%
Russian heat production	15.7	17.1	-8%

Discontinued operations (Uniper)

EUR million	2022	2021	Change 22/21
Sales	128,102	106,127	21%
Comparable operating profit	-4,747	1,107	529%
Operating profit	-16,402	-4,913	-234%
Share of profits of associates and joint ventures	71	23	209%
Net profit from discontinued operations	-11,302	-4,121	-174%
Net profit from discontinued operations, attributable to the owners of the parent	-3,428	-3,246	-6%
Net cash from/used in operating activities	-10,870	3,851	382%
Number of employees	N/A	11,494	N/A

On 21 September 2022, Fortum, the German Government and Uniper signed an agreement in principle according to which Fortum fully divests shares in Uniper SE to the German State and the German State takes full control of Uniper. This resulted in Fortum losing control of Uniper and the deconsolidation of Uniper in the third quarter of 2022. On 21 December, Fortum announced that the company had concluded the sale of its ownership in Uniper SE to the German State. Fortum received the total consideration of the share transaction of approximately EUR 0.5 billion and Uniper repaid the shareholder loan of EUR 4 billion granted by Fortum.

For further information on the transaction, see '**Uniper divestment**' and on the deconsolidation of Uniper, see **Note 3**.

Capital expenditures, divestments and investments in shares

EUR million	2022	2021
Capital expenditure		
Intangible assets	88	68
Property, plant and equipment	437	375
Total	**525**	**443**
Gross investments in shares		
Subsidiaries	0	210
Associated companies and joint ventures	14	39
Other investments	19	31
Total	**33**	**281**

In 2022, capital expenditures and investments in shares totalled EUR 558 (724) million. Capital expenditures were EUR 525 (443) 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				
Pjelax-Böle and Kristinestad Norr, Finland	Wind	380		Q2/2024

Generation

On 3 March 2021, Fortum announced a substantial investment in dam safety in Sweden for an extensive rebuild of the over 100-year-old Forshuvud hydropower plant. Fortum is investing more than SEK 450 million (approximately EUR 44 million) during 2021–2025. This investment guarantees safe operation of a power plant as a supplier of renewable electricity and balancing power for more weather-dependent types of power.

On 22 December 2021, Fortum announced an investment decision to construct the 380-MW Pjelax-Böle and Kristinestad Norr wind parks in Närpes and Kristinestad in Finland in partnership with the Finnish energy company Helen Ltd. Construction started in January 2022, and the wind parks are expected to be fully operational in the second quarter of 2024 at the latest. Fortum has a 60% majority and Helen a 40% minority ownership in the project; Fortum will consolidate the investment on its balance sheet. The total capital expenditure of the project is approximately EUR 360 million, of which Fortum's share is approximately EUR 216 million.

City Solutions

In June 2021, Fortum announced the divestment of the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The parties also signed an agreement targeting potential further investments in solar power plants in India. The total consideration for the divestment on a cash and debt-free basis, including the effect of deconsolidation of the net debt, amounted to approximately EUR 280 million. The sale of the 250-MW Pavagada II solar plant was concluded in October 2021, the first phase of the Rajasthan divestment in November 2021 and the second phase in May 2022.

On 16 May, Fortum concluded the sale of its 50% ownership in the district heating company Fortum Oslo Varme AS in Norway to a consortium of institutional investors of Hafslund Eco, Infranode and HitecVision. The signing of the transaction was announced on 22 March. The total consideration of the sale amounted to approximately EUR 1 billion on a cash and debt-free basis; as part of the transaction, Fortum deconsolidated a related EUR 0.2 billion shareholder loan from the City of Oslo. Fortum recorded a tax-exempt capital gain of EUR 638 million in the City Solutions segment's 2022 results.

In July, Fortum and GIG (Green Investment Group, a specialist green investor within Macquarie Asset Management), agreed to invest in a new waste-to-energy plant in Glasgow, Scotland, through a 50/50 joint venture. When fully commissioned, the South Clyde Waste-to-Energy plant will have an annual processing capacity of 350,000 tonnes of waste per year. The plant will have a power generation capacity of 45 MWe gross, corresponding to the average annual electricity consumption of approximately 90,000 homes.

On 7 December, Fortum announced that the construction work and the gradual deployment tests of the company's new battery material recycling facility in Finland was completed according to plan. In June 2021, Fortum made an investment decision to expand its lithium-ion battery recycling capacity by building a hydrometallurgical plant in Harjavalta. The commercial operations will begin after the commissioning period in the second quarter of 2023. The investment of approximately EUR 27 million will increase Fortum's hydrometallurgical recycling capacity and enable the production of battery chemicals.

Other Operations

On 1 September, Fortum divested its e-mobility business Plugsurfing to Fleetcor Technologies, Inc., a leading global business payments company. The transaction price was approximately EUR 75 million on a cash and debt-free basis and Fortum recorded a tax-exempt capital gain of EUR 61 million in Other Operations' 2022 results.

On 18 August, Fortum closed the sale of its 30% ownership in Recharge AS (Recharge), a public charging point operator (CPO) for electric vehicles, to Infracapital, the infrastructure equity investment arm of M&G Plc. The transaction was originally announced on 10 June. After the transaction, Infracapital owns 100% of Recharge, which is the largest charging network in the Nordic region with more than 4,600 connectors at 830 locations. The transaction price was EUR 85 million and Fortum recorded a tax-exempt capital gain of EUR 77 million in Other Operations' 2022 results.

Russia

Due to the ongoing Russia-Ukraine war and the current geopolitical situation, Fortum has stopped all new investment projects in Russia.

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 clean energy solutions.

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 decarbonisation, flexibility, clean gas or 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 2022, Fortum's R&D expenditure was EUR 55 (54) million, or 0.6% (0.8%) of sales.

	2022	2021	2020	Change 22/21
R&D expenditure, EUR million	55	54	56	2%
R&D expenditure, % of sales	0.6	0.8	0.1	

Changes in Group management

As of 1 September, the head of Fortum's Russia division, Alexander Chuvaev, stepped down from his position as member of Fortum's Executive Management team. Mr Chuvaev continues in his position as Head of the Russia division and reports to the President and CEO, Markus Rauramo.

On 16 December, Fortum announced that as part of the company's ongoing strategy process, Bernhard Günther, who has served as CFO since February 2021 and was Fortum's lead in the joint project to explore a potential integration of Uniper into Fortum, asked to step down as CFO. Tiina Tuomela, CFO of Uniper, will return to Fortum and assume the CFO position and become a member of the Executive

Management Team latest in the beginning of April 2023. Bernhard Günther will remain CFO and a member of Fortum's Executive Management team until Tiina Tuomela joins.

Annual General Meeting 2022

On 28 March, the Annual General Meeting of Fortum Corporation (AGM) was held at the company headquarters in Espoo, Finland, under special arrangements. The AGM adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January−31 December 2021 and discharged from liability all the persons who had served as members of the Board of Directors and as President and CEO during the year 2021.

The AGM resolved that a dividend of EUR 1.14 per share be paid for the financial year that ended on 31 December 2021. The dividend was paid on 6 April 2022.

Further the AGM approved the Remuneration Report for the company's governing bodies for 2021. The resolution was advisory.

The AGM approved the annual fees for the Chair, Deputy Chair and other members of the Board of Directors as follows:

- for the Chair EUR 88,800 per year,
- for the Deputy Chair EUR 63,300 per year,
- for a Member EUR 43,100 per year, and
- for the Chair of the Audit and Risk Committee: EUR 63,300 per year, provided that he/she does not simultaneously act as Chair or Deputy Chair of the Board of Directors.

In addition fixed fees were approved for the Committee work as follows:

- for a Member of the Audit and Risk Committee EUR 3,000 per year,
- for the Chair of the Nomination and Remuneration Committee EUR 5,000 per year,
- for a Member of the Nomination and Remuneration Committee EUR 2,000 per year,
- for the Chair of any additional Committee established by a Board decision EUR 5,000 per year, and
- for a Member of any additional Committee established by a Board decision EUR 2,000 per year.

The meeting fee payable to a Board member, also for Committee meetings will be EUR 800 for each meeting, or EUR 1,600 if the member travels to the meeting outside his/her country of residence. When a member participates in the meeting via remote connection, or for the decisions that are confirmed without convening a meeting, the meeting fee will be EUR 800. The travel expenses of Board members are compensated in accordance with the company's travel policy. The annual fee for the Board work of the Board members will be paid in company shares and in cash in such a way that approximately 40% of the amount of the annual fee will be payable in shares acquired on behalf and in the name of the Board members, and the remainder in cash. The company will pay the costs and the transfer tax related to the purchase of the company shares. The shares will be acquired on behalf and in the name of the Board members within two weeks following the publication of the company's first-quarter 2022 interim report. If share purchases cannot be carried out within the aforementioned schedule due to a reason related to the company or a Board member, the shares will be acquired later, or the annual fee will be paid fully in cash. The meeting fees and the fixed fees for the Committee work will be paid fully in cash.

The AGM resolved that the Board of Directors will consist of nine members. Veli-Matti Reinikkala was elected as Chair and Anja McAlister as Deputy Chair. Luisa Delgado, Essimari Kairisto, Teppo Paavola, Philipp Rösler and Annette Stube were re-elected as members. Ralf Christian and Kimmo Viertola were elected as new members.

In addition, Deloitte Oy was re-elected as the auditor. The auditor's fee is paid pursuant to an invoice approved by the company.

The AGM authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares, up to 20,000,000 shares, which corresponded to approximately 2.25 per cent of all the shares in the company on 28 March 2022. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. These authorisations cancelled the authorisations resolved by the AGM 2021 and will be effective until the next Annual General Meeting and in any event for no longer than a period of 18 months. This authorisation has not been used by 1 March 2023.

The AGM 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. By 1 March 2023, EUR 209,000 of this authorisation has been used.

Board decisions

At its meeting held after the Annual General Meeting, Fortum's Board of Directors elected, among its members, Veli-Matti Reinikkala as Chair and Luisa Delgado, Anja McAlister, and Kimmo Viertola as members of the Nomination and Remuneration Committee. Furthermore, the Board elected Essimari Kairisto as Chair and Teppo Paavola, Philipp Rösler, Annette Stube, and Ralf Christian as members of the Audit and Risk Committee.

Shareholders' Nomination Board

On 15 September, Maija Strandberg, Senior Ministerial Adviser, Financial Affairs, Prime Minister's Office, Ownership Steering Department (Chair), Risto Murto, President and CEO, Varma Mutual Pension Insurance Company, Jouko Pölönen, President and CEO, Ilmarinen Mutual Pension Insurance Company, and Veli-Matti Reinikkala, Chair of Fortum's Board of Directors were appointed to Fortum Shareholders' Nomination Board. Elo Mutual Pension Insurance Company did not exercise its right to appoint a representative, and therefore the right was transferred to Ilmarinen Mutual Pension Insurance Company.

Extraordinary General Meeting 2022

On 23 November, the Extraordinary General Meeting (EGM) of Fortum Corporation was held at the Helsinki House of Culture, Finland.

The EGM resolved in accordance with the proposal of the Board of Directors, on a directed share issue without payment to the Finnish State-owned holding company Solidium Oy. In accordance with the resolution, Solidium was entitled to subscribe up to 8,970,000 new ordinary registered shares in Fortum, which corresponds to approximately 1% of all shares outstanding in Fortum. As a consequence, the shares under control of the State of Finland increased from 50.76% to 51.26%.

On 25 November, the 8,970,000 new shares issued by the company were registered with the Finnish trade register. The total amount of shares outstanding in the company after the registration of the new shares is 897,264,465. The new shares carry full shareholder rights, including the right to dividend, as of the registration date.

Other major events during the reporting period

On 30 September, Fortum's Board of Directors decided to launch the savings period for year 2023 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. The total amount of all savings for the 2023 savings period may not exceed EUR 6 million. Due to the restrictions regarding management incentives put in place by the Finnish State in the Solidium bridge financing facility, Fortum assessed and concluded that Fortum's Executive Management team will not participate in the 2023 savings period of the ESS programme.

On 29 December, the Finnish Government published its law proposal (HE 320/2022 vp) for a temporary windfall tax in the electricity sector. The law intends to implement EU's Council Regulation 2022/1854 on revenue cap and solidarity contribution as an emergency intervention to address high energy prices. This model deviates from the models proposed in other European countries. The tax applies to companies in the electricity sector within electricity generation, wholesale and partly retail sales in Finland. Pursuant to the law, the tax is 30% of the companies' net profits generated from the above listed electricity operations in Finland exceeding a 10% return on equity in the fiscal year 2023. The temporary windfall tax was approved by the Finnish Parliament on 27 February 2023 and the tax becomes payable in 2024. Fortum has assessed the law's financial impacts on the company's comparable effective income tax rate. For more information, see '**Outlook**'.

Fortum in Russia

Russia's attack war in Ukraine and its decision to use energy as a weapon fundamentally changed the geopolitical situation and operating environment for energy companies in Europe, increasing and materialising uncertainties and risks for Fortum. Throughout the crisis Fortum has focused on ensuring a secure energy supply to customers and managing the adverse effects of the crisis on the company's stakeholders. The company complies with all applicable laws and regulations, including sanctions, and prepares for various scenarios. Further information on risks is also in the section '**Risk management**'.

Pursuing a controlled exit from Russia

Soon after the war broke out, Fortum announced that it had stopped all new investment projects in Russia and would not provide any new financing to its Russian subsidiaries. In May, Fortum announced that it is preparing a controlled exit from the Russian market, with potential divestments of its Russian operations as the preferred path. Completing the exit is likely to take additional time, and there still are significant uncertainties – including regulatory approvals – related to the ongoing divestment process.

Governance of Fortum Russia division

Fortum's Russian operations are functioning on a "stand-alone" basis with e.g. separated IT-systems. Governance has been segregated to support the planned exit phase simultaneously ensuring compliance with applicable laws and regulations, including sanctions. Since spring 2022, there are no parent company representatives on the boards of the Russian subsidiaries and the head of Fortum's Russia division has stepped down from the Fortum Executive Management team. However, he continues to report to the Group CEO.

Due to existing sanctions imposed by Russia, the Group's Russian operations are subject to significant foreign exchange transfer restrictions, which limit the ability to transfer funds including potential dividend distributions, out of Russia.

Fuel supply and sourcing from Russia

Soon after the war broke out, Fortum started taking measures to secure fuel supplies for its power plants outside of Russia. Fortum no longer buys coal, pellets, biomass, oil or gas from Russia for its power plants. Fortum has also stopped electricity imports from Russia. However, Fortum buys nuclear fuel for its Loviisa nuclear power plant in Finland from the Russian TVEL, as it is not possible to quickly change suppliers due to e.g. the required certification and permitting processes. The current supply contract is valid until the end of the current operating licences in 2027 (Loviisa 1) and 2030 (Loviisa 2). To diversify the company's fuel strategy, improve security of supply and ensure reliable electricity production at the Loviisa power plant, Fortum signed an agreement with Westinghouse Electric Company in November for the design, licensing and supply of a new fuel type for the Loviisa power plant. Taking the new fuel into use is a multi-year project also requiring regulatory approvals.

Fortum's operations and assets in Russia

Fortum's Russia segment comprises its subsidiary PAO Fortum, including shares in joint ventures and Fortum's shareholding in PAO TGC-1 (ownership of more than 29%). Fortum has seven power plants in Russia, mainly natural gas-fired power plants in the Urals and Western Siberia. Six of the plants produce both electricity and heat for the market, while one plant produces only electricity. At the end of 2022, total power generation capacity amounted to 4.7 gigawatts (GW) and heat production capacity to 7.6 GW. In 2022, PAO Fortum generated 28.6 terawatt-hours (TWh) of electricity and produced 15.7 TWh of heat. Fortum's Russia segment is also active in developing renewable power generation in Russia. The segment's wind and solar portfolio comprises 1.3 GW of operational CSA-backed (Capacity Supply Agreements) capacities.

Fortum has approximately 2,700 employees in Russia.

Total impairment charges in 2022 for the Russia cash-generating unit (CGU) amount to EUR 1,697 million (pre-tax), including EUR 905 million impairment of intangible assets and property, plant and equipment, EUR 475 million impairment of participations in associates and joint ventures, EUR 145 million expected credit losses on Russian deposits and receivables, as well as EUR 171 million write down of other shares (**Note 19**).

Outlook

In the near term, the ongoing disruption of the energy sector is impacted by geopolitical tensions, the general negative economic outlook with high inflation and interest rates, tightening regulations and volatile commodity markets. In addition, in the short-term price elasticity to counter high electricity prices has an impact on power consumption.

In the long-term, electricity is expected to continue to gain a significantly higher share of total energy consumption. The electricity demand growth rate will largely be determined by classic drivers, such as macroeconomic and demographic development, but also increasingly by decarbonisation of energy intensive industrial, transport and heating sectors through direct electrification and green hydrogen.

Hedging

At the end of 2022, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged at EUR 58 per MWh for 2023 and approximately 45% at EUR 42 per MWh for 2024.

The reported hedge ratios are based on the hedges and power generation forecasts of the Generation segment.

The reported hedge ratios may vary significantly, depending on Fortum's actions on the electricity derivatives markets. Hedges are mainly financial contracts, most of which are electricity derivatives quoted on Nasdaq Commodities and traded either on Nasdaq Commodities or with bilateral counterparties. As an additional liquidity risk mitigation measure, Fortum has reduced its exposure on the Nasdaq Commodities exchange and increased the share of bilateral agreements.

Capital expenditure

Fortum estimates its capital expenditure, including maintenance but excluding acquisitions and the Russia segment, to be approximately EUR 700 million in 2023, of which the share of maintenance capital expenditure is estimated to be approximately EUR 300 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.

Income taxation

In 2023, considering the temporary windfall tax law in Finland, the comparable effective income tax rate for Fortum is estimated to be in the range of 21−24% and excluding the windfall tax in Finland, in the range of 20−22%. In 2024, the comparable effective income tax rate for Fortum is estimated to be in the range of 19−21%. Fortum's comparable effective tax rate is impacted by the weight of the profit in different jurisdictions and differences in standard nominal tax rates in these jurisdictions. The tax rate guidance excludes items affecting comparability.

Events after the balance sheet date

On 16 February 2023, the Finnish Government granted a new operating license for both units at Fortum's Loviisa nuclear power plant until the end of 2050. Over the course of the new licence period, the plant is expected to generate up to 170 terawatt hours of CO2-free electricity. Investments related to the continuation of operations and lifetime extension will amount to an estimated EUR 1 billion until 2050. Over the past five years, Fortum has already invested approximately EUR 300 million in refurbishing the Loviisa power plant. The Loviisa power plant is the first nuclear power plant in Finland. The power plant has two units: unit 1 started operating in February 1977, and unit 2 in November 1980.

At the beginning of March 2023, the Fortum Board of Directors resolved on Fortum's new strategy. Fortum's strategic priorities are to deliver reliable clean energy and drive decarbonisation in industries in the Nordics. The strategy includes new financial and sustainability targets:

- Updated financial guidance to ensure credit rating of at least BBB and optimal financial flexibility for future growth: long-term financial net debt-to-comparable EBITDA of 2.0–2.5 times.
- Disciplined growth in clean energy with capital expenditure of up to EUR 1.5 billion during 2023–2025. Investment hurdles of project WACC + 150–400 basis points will be applied and evaluated against the company's climate and biodiversity targets. Investment decisions will also be evaluated against the company's climate and biodiversity targets.
- Renewed dividend policy with payout ratio of 60–90% of comparable EPS. Fortum's Board of Directors proposes a dividend of EUR 0.91 per share for the year 2022 corresponding to a pay-out of 75% based on comparable EPS for continuing operations of EUR 1.21 (excluding Russian operations).
- Fortum has brought forward its target to reach carbon neutrality to 2030 (Scopes 1, 2, 3) and will exit all coal already by the end of 2027. To reach carbon neutrality, Fortum is committed to setting emission reduction targets based on the climate science (SBTi 1.5°C), assuming Russia exit. To measure progress, mid-point targets have been set for specific emissions at below 20 g CO2/kWh for total energy production and at below 10 g CO2/kWh for power generation by 2028.
- Fortum is also committing to an ambitious biodiversity target to have no net loss of biodiversity (excluding any aquatic impacts) from existing and new operations (Scopes 1, 2) from 2030 onwards. In addition, the company will reduce its negative dynamic terrestrial impacts in upstream Scope 3 by 50% by 2030 (base-year 2021). Fortum will continue local initiatives, especially in hydropower production, and is committed to develop a science-based methodology to assess the company's aquatic impacts during 2023.
- Fortum is already taking steps to reach the environmental targets and examples of these include the Loviisa nuclear plant lifetime extension, increasing the use on hydro power and the ongoing decarbonisation projects in district heating.

At the beginning of March 2023, the Fortum Board of Directors resolved on revising the financial segment reporting to match the new business structure and strategy. As of the beginning of 2023, Fortum will report its financial performance in the following reporting segments:

- The Generation segment will include the Hydro Generation, Nuclear Generation, Corporate Customers and Markets and Renewables and Decarbonisation business units.
- The Consumer Solutions segment includes the Consumer Solutions business unit.
- The Other segment includes the Circular Solutions business unit, Innovation and Venturing activities, enabling functions and corporate management.

Fortum will continue to consolidate and report its Russian operations as a separate segment for the time being; however, Fortum will continue to assess the basis for consolidation in the coming quarters. Fortum is committed to exiting the Russian market and a divestment is being pursued.

Fortum will publish restated quarterly segment financials for 2022 before publication of the first quarter 2023 results on 11 May 2023.

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. It also includes disclosures prepared in accordance with the EU Taxonomy Regulation Delegated Act of 6 July 2021 and Complementary Climate Delegated Act of 15 July 2022.

In this report, selected sustainability key performance indicators for continuing operations and continuing operations excluding Russia are disclosed. Comparative figures and information for the year 2021 have been restated to exclude Uniper as discontinued operations. Comparatives for 2020 have not been restated. Selected key performance indicators for discontinued operations are presented in separate tables.

Fortum Group's business model is described in **Note 6**.

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.

Fortum assessed its sustainability priorities in 2021 with a comprehensive materiality analysis, based on internal and external stakeholder surveys, and an extensive desktop review. The desktop review analysed, e.g., regulations, expectations of capital markets, peers' material sustainability topics, media coverage, and connections between the material topics and the UN Sustainable Development Goals (SDGs). In 2022, Fortum updated its materiality analysis based on a new desktop review and new stakeholder data. Based on the materiality analysis, Fortum's sustainability priority areas are:

Climate and resources	Personnel and society	Governance
Biodiversity	Corporate citizenship	Business ethics and compliance
Circular economy and waste management	Diversity, equity, and inclusion	Corporate governance
Climate change and GHG emissions	Fair and attractive employer	Customer rights and satisfaction
Emissions to air, land, and water	Health, safety, and wellbeing	Innovation and digitalisation
Energy efficiency	Human rights and supply chains	Shared value creation
Secure and affordable energy supply	Just transition	
Water use and optimisation	Stakeholder engagement	

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.

Sustainability targets

The Fortum Board of Directors resolved on Fortum's new strategy at the beginning of March, 2023. As part of this, Fortum's Sustainability targets have now been updated. A summary of Fortum's new strategy and key sustainability targets can be found in **Note 39** Events after the balance sheet date.

In 2020, as part of the joint strategy with Uniper, Fortum aligned its climate targets with the goals of the Paris Agreement to be committed to carbon neutrality by 2050 at the latest. The target covered direct CO2 emissions (Scope 1) and indirect CO_2 emissions (Scope 2 and 3). Fortum's roadmap to reduce emissions in Europe was also defined. Fortum committed to at least a 50% reduction in CO_2 emissions (Scope 1 and 2) in its European generation by 2030 (compared to base-year 2019) and to carbon neutrality (Scope 1 and 2) by 2035 at the latest. In December 2021, Fortum also committed to reduce Scope 3 greenhouse gas emissions by 35% by 2035 at the latest (compared to base year 2021).

In 2022, Fortum's CO_2-eq emissions, including all Scope 1, 2 and 3, totalled 30.2 million tonnes, compared to 31.7 million tonnes in 2021. Major changes in emissions were due to the divestment in Baltics operations and Argayash power plant in Russia in 2021, as well as emission reduction in Scope 3 emissions related to purchased goods and services and gas sales.

Fortum's direct CO_2 emissions (Scope 1) and indirect CO_2 emissions (Scope 2) in Europe totalled 2.2 million tonnes, which remained at a same level as in 2021.

In 2022, Fortum's Scope 3 greenhouse gas emissions totalled 13.2 million CO_2-eq tonnes, compared to 13.8 million CO_2-eq tonnes in 2021.

Emission reduction targets and performance for continuing operations

Group emission reduction targets set in 2020 and 2021 are part of 2022 reporting and performance against the climate targets are presented in the table below.

Climate target	Scope	2022	2021	Base-year	Base-year emissions	Change compared to base year %
Carbon neutrality by 2050 at the latest	Total Scope 1, 2 and 3 emissions, million tonnes CO_2-eq	30.2	31.7	-	-	-
At least 50% reduction in CO_2 emissions in European generation by 2030	Scope 1 and 2 emissions in European generation, million tonnes CO_2	2.2	2.2	2019	2.9	-24
Reduction of Scope 3 GHG emissions by 35% by 2035 at the latest	Total Scope 3 emissions, million tonnes CO_2-eq	13.2	13.8	2021	13.8	-4

In 2022, Fortum's target was to develop a science-based strategy to measure and enhance the biodiversity impacts of the Group's operations and the new developments. Milestones achieved are described in the chapter 'Water and biodiversity'.

Fortum's safety targets are zero severe occupational accidents, Total Recordable Injury Frequency (TRIF) for own personnel and contractors, <1.0 by the end of 2025, and Severity rate per TRI (number of lost days divided by number of Total Recordable Injuries), for own personnel and contractors, ≤11 in 2022. In 2022, Fortum's target for sickness-related absences was 2.8%.

The new Safety eLearning training for all Fortum employees was launched in the second quarter of 2022, followed by the Safety Leadership Programme 2022 for Executives, launched in the third quarter of 2022. These will be followed by the Management Safety and Security Leadership Programme starting in 2023. Fortum's goal for the completion rate of the trainings – Safety eLearning and Safety Leadership Programme for Executives – was 85% in 2022, which was achieved with a completion rate of 91.2% and 96.3%, respectively.

Fortum is a supporter of the Task Force on Climate-related Financial Disclosures (TCFD). Fortum has a long-standing focus on mitigating climate change and adopted the reporting recommendations of the TCFD starting from the financial year 2019.

Fortum's Climate Lobbying Review was first published in December 2021 and updated in December 2022. The Review is publicly disclosed on Fortum's website. A summary of the review is also published as a part of Fortum's Sustainability Report. In December 2022, Fortum also published its Lobbying Guidelines.

Group sustainability performance for continuing operations

	2022	2021
Climate and resources		
Total GHG emissions, Scope 1-3, million CO_2-eq tonnes	30.2	31.7
Total GHG emissions, Scope 1-3, excl. Russia, million CO_2-eq tonnes	10.9	11.0
Direct Scope 1 GHG emissions, million CO_2-eq tonnes	17.0	17.9
Direct Scope 1 GHG emissions, excl. Russia, million CO_2-eq tonnes	2.2	2.2
Indirect location-based Scope 2 GHG emissions, million CO_2-eq tonnes	0.04	0.05
Indirect location-based Scope 2 GHG emissions, excl. Russia, million CO_2-eq tonnes	0.03	0.05
Scope 3 GHG emissions, million CO_2-eq tonnes	13.2	13.8
Scope 3 GHG emissions, excl. Russia, million CO_2-eq tonnes	8.7	8.7
Specific CO_2 emissions from total energy production, gCO_2/kWh	184	175
Specific CO_2 emissions from total energy production, excl. Russia, gCO_2/kWh	45	39
Asset availability of power generation plants, %	90.3	90.3
Major environmental incidents [1], no.	2	-
Personnel and society		
Total Recordable Injury Frequency (TRIF), own personnel and contractors	2.7	3.1
Severity rate per TRI [2], own personnel and contractors	12.0	13.1
Severe occupational accidents, no.	2	2
Safety eLearning [3], %	91.2	-
Safety Leadership Programme for Executives [4], %	96.3	-
Sickness-related absences, %	3.2	2.9

1) Number of environmental incidents that resulted in significant harm to the environment (ground, water, air) or an environmental non-compliance with legal or regulatory requirements.
2) Number of lost days divided by number of Total Recordable Injuries (TRI).
3) Completion rate. Training launched in the second quarter of 2022.
4) Completion rate. Training launched in the third quarter of 2022.

Fortum's goal is to achieve excellent financial performance in strategically selected core areas through strong competence and responsible ways of operating. Fortum's long-term financial targets until 31 December 2022 were 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). Fortum's objective is to have a solid investment grade rating of at least BBB to preserve financial flexibility and good access to capital markets. The Fortum Board of Directors resolved on Fortum's new strategy at the beginning of March, 2023. A summary of Fortum's new strategy and key sustainability targets can be found in **Note 39** Events after the balance sheet date.

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 approach to taxation and the principles that steer the tax management are presented in the Fortum's Tax Principles disclosed on Fortum's website. Fortum publishes its tax footprint annually and, as a member of the B Team endorses the B Team's Responsible Tax Principles.

Fortum is included in several sustainability indices and has been assessed by many sustainability ratings. The list is published on Fortum's website. Fortum's sustainability reporting covers functions under Fortum's operational control, including subsidiaries in all its operating countries, unless 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. Fortum's risks are presented in the Risk management section in the Operating and Financial Review.

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. As such, Fortum is well positioned to capture opportunities resulting from the energy transition, aimed at curbing climate change. The energy transition requires not only renewables but increasingly also energy storage and other flexible solutions to provide security of supply and to decarbonise industry, transportation, heating and cooling. Building on our strengths, our future will be driven by CO_2-free power generation, sustainably transforming our own operations to become carbon neutral and engaging customers and society to decarbonise.

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's policies and instructions and for day-to-day sustainability management and improvement plans.

Fortum's short-term incentive (STI) programme, applicable to all employees, includes safety as one element. In the 2022 STI programme, the safety target contains the following elements: severity rate per Total Recordable Injuries (TRI) of own employees and contractors combined, the execution rate of Safety Leadership Training, and the execution rate of safety eLearning.

Fortum's long-term incentive (LTI) programmes includes a climate-related metric. In the 2021–2023 LTI plan, the target is 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. In the 2022–2024 LTI plan is related to the reduction of the absolute CO_2 emissions in the European fossil fleet, based on a fossil fleet review addressing the Group's European generation portfolio and a pathway developed to reach Fortum Group's 2030 and 2035 climate targets. Targets of both LTI plans were adjusted in early 2023 due to the divestment of Uniper. In the 2023–2025 LTI plan, the ESG target is linked to emission reduction targets based on the climate science (SBTi 1.5°C) and related to emissions in Europe, and Fortum's reputation index development among key stakeholders. The relative TSR measured against a peer group of European utilities remains as a measure in the plan.

Sustainability management at Fortum is strategy-driven and based on the company's Values, Code of Conduct, Supplier Code of Conduct, sustainability-related policies, and other Group policies and their specifying instructions. The Code of Conduct establishes the basic principles of conduct that everyone must follow. The Code defines how we treat each other, do business, and engage with the world. The Supplier Code of Conduct, based on the ten principles of the UN Global Compact, outlines the requirements for Fortum's suppliers and business partners.

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). Fortum also 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.

Business ethics

Zero tolerance for corruption and bribery is highlighted in Fortum's Code of Conduct and Supplier Code of Conduct. In addition, separate instructions and guidelines have been created to address various topics, including but not limited to anti-bribery, compliance management, safeguarding company assets, conflict of interest, anti-money laundering, economic sanctions and competition law. Fortum's Board of Directors has approved the company's Code of Conduct and Supplier Code of Conduct.

The Codes of Conduct are regularly reviewed in order to ensure compliance with evolving company and regulatory requirements. The latest revision of Fortum's Code of Conduct and Supplier Code of Conduct took place in 2021.The Code of Conduct online training is mandatory for all employees. In addition, relevant individuals are regularly trained in policies and systems that help to prevent corruption.

Internal and external reporting channels are offered for reporting suspicions of misconduct. The channels are described in the Code of Conduct and accessible on the company's 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.

No new cases of corruption or bribery were confirmed in Fortum's operations in 2022. One case was under investigation at year-end.

Climate and resources

Fortum's key performance indicators for climate and resources are related to CO_2 emissions, security of supply, and major environmental incidents.

Fortum's Sustainability Policy and the Minimum Requirements for EHS Management steer environmental management. Operational-level activities follow the requirements set forth in the ISO 14001 environmental management standard, and 100% of Fortum's power and heat production worldwide has ISO 14001 certification.

Energy

Fortum's power generation in the Nordic countries is mainly based on CO_2-free hydro and nuclear power. A minor share of Fortum's power generation is currently based on solar and wind. Fortum has also generation of district heating and cooling in Finland and in Poland. In Europe, heat is mainly produced at energy-efficient combined heat and power (CHP) plants. In addition, Fortum offers industrial and infrastructure solutions, e.g., waste-to-energy, as well as energy sales. In the Russian operations, Fortum has mainly natural gas-fired generation.

In 2022, Fortum's power generation was 72.8 (78.0) TWh and heat and steam production 20.9 (24.9) TWh. 59% of Fortum's total power generation was CO_2-free. In Europe, 97% 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 (69%), uranium (23%), coal and lignite (4%), waste-derived fuels (3%), and biomass fuels (1%), to produce electricity, heat, and steam. Percentage shares are based on the energy content of the fuel.

In 2022, Fortum's coal-based capacity totalled 0.7 GW and generation 1.2 TWh. The share of coal of Fortum's revenues was 3% and the share of fossil fuels of generation-based revenues was 12%.

In 2022, Fortum's coal-based power generation, excluding Russia, was 1.1 TWh. Russia exited coal on 1 November 2022. The share of coal of Fortum's revenues, excluding Russia, was 4% and the share of fossil fuels of generation-based revenues was 6%.

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 2022, the asset availability of Fortum's gas-fired and coal-fired power plants was, on average, 90.3 (90.3)%. The asset availability of Fortum's power generation includes planned outages in addition to unplanned technical unavailability.

Climate and greenhouse gas emissions

Fortum has 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 2022, Fortum's direct CO_2 emissions were 16.9 (17.8) Mt. 87% of CO_2 emissions originated from Russian power and heat production. Of the total CO_2 emissions, 1.6 (1.5) Mt were within the EU and UK emissions trading system (ETS). The estimate for Fortum's free emission allowances in 2022 is approximately 0.2 (0.2) Mt.

Fortum's direct CO_2 emissions, Scope 1 (million tonnes, Mt)	2022	2021	2020
Total emissions	16.9	17.8	48.7
Emissions subject to ETS	1.6	1.5	17.5
Free emission allowances	0.2	0.2	0.9
Emissions not subject to ETS in Europe	0.5	0.7	0.7
Emissions in Russia	14.8	15.6	30.5

Fortum's greenhouse gas emissions are defined and reported according to the Greenhouse Gas (GHG) Protocol guidelines. In 2022, Fortum's direct Scope 1 GHG emissions were 17.0 (17.9) million CO_2-eq tonnes, indirect market-based Scope 2 GHG emissions 0.03 (0.04) million CO_2-eq tonnes, and indirect location-based Scope 2 GHG emissions 0.04 (0.05) million CO_2-eq tonnes.

In 2022, Scope 3 GHG emissions were estimated to be about 13.2 (13.8) million CO_2-eq tonnes. The Group's Scope 3 emissions originate from the procurement of fuels, transportation and distribution, electricity retail to customers, use of sold products, purchased goods and services, and from capital goods, i.e., investments.

Fortum's Scope 1 GHG emissions accounted for about 56% of total GHG emissions, Scope 2 GHG emissions accounted for about 0%, and Scope 3 GHG emissions accounted for about 44%.

In 2022, Fortum's specific CO_2 emissions from total energy production were 184 (175) gCO_2/kWh. Specific CO_2 emissions from power generation were 180 gCO_2/kWh and excluding Russia 25.4 gCO_2/kWh.

Major environmental incidents

In 2022, the definition of major environmental incidents was revised. The figure now includes environmental incidents that resulted in significant harm to the environment (ground, water, air) and environmental non-compliances with legal or regulatory requirements. In 2022, there were two major environmental incidents: a breach of minimum discharge at the Untra hydropower plant in Sweden and a landfill water leakage caused by over floating of the pool in Valkeakoski, Recycling and Waste Finland.

Water and biodiversity

Fortum uses large volumes of water in its power plants, district heating networks and other production operations. In most cases, power plants do not consume water – the water is discharged back to the same water system from where it was withdrawn. In 2022, Fortum withdrew a total of 1,760 (1,930) million m^3 of water in production operations; 95% of this amount was used as cooling water.

Fortum has carried out voluntary and licence-related biodiversity measures for years to prevent negative impacts and where possible to implement biodiversity measures for improvement, as outlined in its Biodiversity Manual and Action Plan, publicly disclosed on Fortum's website.

At the start of 2022, Fortum committed to developing a science-based strategy to measure impacts on biodiversity and to work towards enhancing biodiversity in its operations and supply chain. The work conducted follows the publicly available principles of the Science Based Targets for Nature (SBTN) framework. Using the internationally recognised Global Biodiversity Score® tool, Fortum has mapped its own and its value chain's dependencies and impacts on biodiversity and ecosystem services to define its biodiversity footprint. The aquatic assessment for hydropower is pending, due to developments in methodology, so it is therefore not currently included in the overall footprint.

Based on the analysis, Fortum's main biodiversity impacts are related to the impacts from its GHG emissions, land use and fuel procurement. Fortum has set targets to reduce its GHG emissions, which will also play a key role in Fortum's efforts to reduce its impacts on biodiversity. Concrete targets and business-specific measures will be proposed in 2023.

Personnel and society

Fortum's key performance indicators for personnel and society are related to operational and occupational safety and to employee health and wellbeing. In addition Fortum 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 employee performance and engagement. Diversity and equal opportunity are seen as contributing to competitiveness and innovation.

Fortum's Values and Code of Conduct form the foundation for all daily work. The People Policy and Leadership Principles guide personnel-related matters.

Fortum's operations are mainly based in the Nordic countries, Russia, and Poland. The total number of employees at the end of 2022 was 7,712.

Group personnel statistics for continuing operations	2022	2021	2020
Number of employees, 31 December	7,712	19,140	19,933
Number of employees, 31 December, excl. Uniper	7,712	7,646	8,182
Average number of employees	7,826	8,045	17,304
Total amount of employee benefits, EUR million	504	496	1,195
Departure turnover, % (of permanent employees)	19.1	18.9	7.4
Permanent employees, %	97.2	97.6	94.8
Full-time employees, %	98.7	98.8	98.2
Female employees, %	31.3	31.2	27.0
Females in management, %	31.0	29.0	27.0

Occupational safety

For Fortum, excellence in safety and caring both about its own employees and contractors is the foundation of the company's business and an absolute prerequisite for efficient and interruption-free production.

Fortum's work is steered by the Sustainability Policy, the Minimum Requirements for EHS Management, and more detailed EHS manuals. A certified ISO 45001 safety management system covers 100% of Fortum's power and heat production worldwide.

Fortum's safety targets for 2022 included Uniper and were measured as:

- Zero severe occupational accidents
- Total Recordable Injury Frequency (TRIF), for own personnel and contractors; the ambitious goal is <1.0 by the end of 2025
- Severity rate per TRI (i.e., number of lost days divided by the number of Total Recordable Injuries) for own personnel and contractors: ≤11.

In 2022 Fortum launched the Safety Culture Programme, which once completed will include trainings, webinars and workshops addressing all organisational levels:

- New Safety eLearning training for all Fortum employees, launched in the second quarter of 2022
- Safety Leadership Programme 2022 for Executives, including ten workshops for 132 Fortum Executives, launched in the third quarter of 2022
- Safety Culture Programme will continue with Management Safety and Security Leadership Programme in 2023.

In 2022, Fortum's TRIF (Total Recordable Injury Frequency) for own personnel and contractors was 2.7 (3.1). The severity rate per TRI for own personnel and contractors was 12.0 (13.1), which did not meet the set target. Fortum's LTIF (Lost Time Injury Frequency) for own personnel and contractors was 1.6 (2.2).

Fortum strives for zero severe occupational accidents. In 2022, there were 2 (2) severe occupational accidents in the operations, one of them resulted in fatality. A Fortum employee at a customer's power plant in Rwanda fell from a height of 7 meters when installing barricading around floor grating that had been removed. Corrective actions, including, e.g., improvements in the permit to work process and clarifications in the authorities to issue and follow orders, have been implemented.

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 that also address stress management and mental wellbeing.

In 2022, the company's efforts concentrated on supporting mental wellbeing in the exceptional conditions of the geopolitical situation and the prolonged Covid-19 pandemic. The wellbeing services highlighted mental wellbeing, resilience, stress and physical health. Managers were supported in leading employees' wellbeing during the challenging period. Examples of measures taken to support mental wellbeing include providing the opportunity for personal online meetings with a mental wellbeing professional. Wellbeing coaching sessions for individuals and teams were widely offered. Also different events and activities were organised to raise awareness of mental wellbeing and the services available. According to an employee survey, 94% of respondents feel that they are managing the mental demands of their own work role.

An inclusive culture where everyone feels safe, included and is treated equally also promotes wellbeing of personnel. In 2022 Inclusive Leadership -trainings were provided for managers to enhance their knowledge and understanding of Diversity, Equity and Inclusion.

Year 2022 started with a worsened Covid-19 pandemic situation due to new variants and measures such as remote work, face masks, travel restrictions and physical distance were taken to safeguard personnel from the pandemic. When the pandemic situation eased during the spring, a hybrid work model in which the work week is divided between office and remote work days was applied when pandemic situation allowed. Several measures to support hybrid and remote working were continued and improved; examples include wellbeing and ergonomics instructions for hybrid work as well as cloud-based IT solutions and HR processes that support flexible, mobile work arrangements. Both on-site and virtual wellbeing services and events were offered to employees.

In 2022, the pandemic situation began to reflect in sickness-related absences more than in the previous pandemic years; the sickness-related absence rate increased to 3.2 (2.9).

Society

Reputation and customer satisfaction

Fortum's performance regarding reputation and customer satisfaction is monitored annually through the One Fortum Survey. In 2022, the combined reputation index of all stakeholder groups based on the One Fortum Survey decreased to 63 points (71), on a scale of 0–100. Fortum's overall reputation weakened among all stakeholder groups, but the declines were mainly driven by stakeholder views in Finland. Depending on the business area, the customer satisfaction index (CSI) varied between 60 and 83 points (58–83), on a scale of 0–100.

In 2022, gas and power prices across Europe reached all-time highs. In the exceptional market situation, Fortum continued to help its customers by expanding its product portfolio, offering tips on saving electricity, encouraging smart consumption and moving consumption away from peak-hours, supporting its customers more actively in managing their invoices, and offering more flexible payment plans.

Supply chain

Fortum expects its business partners to act responsibly and to comply with the requirements set forth in the Code of Conduct and Supplier Code of Conduct. Fortum assesses the performance of its business partners with supplier qualification and supplier audits and a Know Your Counterparty process, which was established in the beginning of 2022. In 2022, Fortum conducted five on-site and one remote supplier audit in China, India and Thailand. The Covid-19 pandemic and local restrictions continued to challenge possibilities to conduct on-site supplier audits. Fortum is a member of the Bettercoal initiative and uses the Bettercoal tools to improve sustainability in the coal supply chain. Fortum supports and participates in the development of the Solar Stewardship Initiative (SSI) together with other industry actors and organisations. Through the SSI, the sector is striving to establish the mechanisms to increase the traceability and sustainability of solar products, components and raw materials.

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 Fortum's Code of Conduct and Supplier Code of Conduct. The UN Guiding Principles on Business and Human Rights are taken into account in own operations and in supply chain management. Fortum's approach to human rights due diligence is described in the EU Taxonomy section.

Fortum 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 2022 two new country assessments were made.

Corporate citizenship

Fortum continued to steer its support to society and cooperation with local communities through its Corporate Social Responsibility (CSR) programme. The programme's focus areas, aligned with the company's strategic targets, are Climate, People, and Material Revolution. Steering of CSR activities is concentrated to a Fortum-wide Steering Group.

In 2022, Fortum continued to support charity organisations in order to help its local communities, and it launched a volunteering program for employees. In addition, Fortum engages in collaboration with universities through different research and development projects. In 2022, Fortum's support for activities promoting the common good totalled EUR 2.3 (1.8) million. In addition, the grants awarded by Fortum and Neste Foundation (earlier Fortum Foundation), not part of Fortum, totalled EUR 783,136 (701,250).

Discontinued operations (Uniper)

The following tables present selected key performance indicators for discontinued operations:

	2022 1)	2021
Climate and resources		
Total GHG emissions, Scope 1-3, million CO_2-eq tonnes	145.8	158.1
Direct Scope 1 CO_2 emissions, million tonnes	41.2	51.0
Indirect location-based Scope 2 GHG emissions, million CO_2-eq tonnes	0.7	0.6
Scope 3 GHG emissions, million CO_2-eq tonnes	89.5	106.3
Scope 3 GHG emissions caused by the use of fossil fuels sold both to end-users and resellers, million CO_2-eq tonnes	67.4	78.1
Specific CO_2 emissions from total energy production, gCO_2/kWh	454	428
Asset availability of power generation plants 2), %	70.3	78.0
Major environmental incidents 3), no.	0	-
Power generation 4), TWh	-	110
Heat and steam production 4), TWh	-	8.4
CO_2-free share of total power generation, %	20.7	23.5
Power and heat production covered by a certified ISO 14001 environmental management system worldwide, %	100	100
Personnel and society		
Total Recordable Injury Frequency (TRIF), own personnel and contractors	1.6	1.5
Severity rate per TRI 5), own personnel and contractors	19.9	18.7
Severe occupational accidents, no.	1	1
Sickness-related absences, %	5.0	4.1
Number of employees, 30 September/31 December	11,209	11,494
Power and heat production covered by a certified ISO 45001 safety management system worldwide, %	100	100

1) The figures are for I-III 2022 as Uniper was deconsolidated at 30 September 2022. The figures for Total GHG, Scope 2 and Scope 3 emissions are for full year 2022 as Scope 2 and 3 emissions have been calculated only for full year 2022.
2) Excluding Unipro, Russia.
3) Number of environmental incidents that resulted in significant harm to the environment (ground, water, air) or an environmental non-compliance with legal or regulatory requirements. Uniper did not report the figure in 2021.
4) Data not available for 2022.
5) Number of lost days divided by number of Total Recordable Injuries (TRI).

Direct CO_2 emissions (million tonnes, Mt)	2022 1)	2021
Total emissions	41.2	50.9
Emissions subject to ETS	19.0	27.5
Free emission allowances	-	0.3
Emissions not subject to ETS in Europe	0.03	0.05
Emissions in Russia	22.1	23.4

1) The figures are for I-III 2022 as Uniper was deconsolidated at 30 September 2022.

EU taxonomy

Introduction

The EU Taxonomy Regulation is a classification system for defining economic activities that can be considered as environmentally sustainable. The regulation provides specific key performance indicators (KPIs) that entities are required to report for their environmentally sustainable economic activities. The EU Taxonomy Regulation establishes six environmental objectives, two of which, the climate change mitigation (CCM) and climate change adaptation (CCA) criteria, were published on 4 June 2021 in the Climate Delegated Act. Inclusion of the Complementary Climate Delegated Act on nuclear and gas energy activities was approved on 5 July 2022. The Commission is expected to adopt the Delegated Act for the other four objectives in 2023.

Fortum's disclosure has been prepared in accordance with the EU Taxonomy Regulation Delegated Act of 6 July 2021 and the Complementary Climate Delegated Act of 15 July 2022. For the financial year ending 31 December 2022, Fortum reports the proportion of Taxonomy aligned activities, Taxonomy eligible (not aligned) activities and Taxonomy non-eligible activities in relation to the three KPIs (Sales, Operating expenses and Capital expenditure) and the plan (Capital expenditure plan) that aims either to expand Fortum's Taxonomy-aligned economic activities or to upgrade Taxonomy-eligible economic activities to render them Taxonomy-aligned within a period of five years. The reporting scope includes continuing operations from Fortum's subsidiaries consolidated to the Group as of 31 December 2022.

Analysis of economic activities

Analysis of eligible economic activities

In 2022, Fortum classifies its economic activities to aligned, eligible (not aligned) and non-eligible corresponding to economic activities described in the Climate Delegated Act and Complementary Delegated Act. Eligibility of Fortum's business operations were evaluated according to the descriptions of economic activities listed in Annex I (CCM) and Annex II (CCA) and the related NACE codes (Nomenclature of Economic Activities, European statistical classification of economic activities) provided in these descriptions. The evaluation was performed either at power plant or business unit level, reflecting the nature of the operations.

Analysis of aligned economic activities

An eligible activity is considered to be aligned if it complies with the technical criteria of contributing substantially to one of the six environmental objectives, if it does not significantly harm the other environmental objectives (do no significant harm, DNSH, criteria), and if it is carried out in compliance with the minimum safeguards (MS) relating to human rights and fundamental labour rights. Fortum assessed climate change mitigation to be the most relevant objective against which the eligibility and alignment of economic activities was evaluated. The compliance with the criteria set out in Article 3 of Regulation (EU) 2020/852 and the associated technical screening criteria included in the delegated acts referred to in point (a) of the most material eligible activities were assessed as described below.

Description of the method used for the substantial contribution criteria, DNSHs and the minimum safeguards

Sustainability management at Fortum is strategy-driven and based on our Values, Code of Conduct, Supplier Code of Conduct, Sustainability Policy, other sustainability-related group policies, as well as their specifying instructions. When analysing substantial contribution and DNSHs criteria, Fortum relies specifically on its Minimum Requirements for EHS Management, Sustainability policy, Biodiversity Manual and Group Risk Policy. Fortum is committed to a high level of environmental and safety management, complies with all regulations, and has license to operate each site. In terms of sales, 100% of Fortum's electricity and heat production operations at the end of 2022 were ISO 14001 environmentally certified.

In order to assess the alignment of its activities, Fortum's relevant business units verified their economic activities' compliance with the substantial contribution and DNSHs criteria under Annex I - climate change mitigation. Substantial contribution criteria are specific to each economic activity and compliance was assessed on a system, facility or installation level, as appropriate. DNSHs criteria can be generic or economic activity specific. Compliance with each DNSHs were assessed on a most material level reflecting the nature of the economic activity.

Fortum has own and co-owned nuclear power plants in Finland and Sweden. The most important task of nuclear power operations is to produce electricity safely, reliably, and competitively, in the short- and long-term, while complying with the principles of nuclear and radiation safety, waste management safety, and nuclear material control. Compliance with all of these requirements are oversighted by national authorities in Finland and Sweden. These authorities are also responsible for national transpositions of EU Directives and regulations. Fortum's own and co-owned existing nuclear power plants have done, or are planning to start, modification of existing nuclear installations for the purposes of lifetime extension. Lifetime extension projects are always subject to national authorities approval and comprehensive environmental and safety assessment.

DNSH Climate change adaptation

The management of climate-related risks is integrated into Fortum's respective risk management framework and follows the same governance and processes as other material risks and uncertainties. Risks are identified and assessed annually through an enterprise risk management framework. Fortum's taxonomy relevant entities are required to take into account physical climate risks. Entities must also understand their assets' resilience towards different acute and chronic physical climate-related risks within different Intergovernmental Panel on Climate Change (IPCC) climate scenarios, and create adaptation plans for the most material risks. Fortum is a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) and physical climate-related risks are reported accordingly in Fortum's TCFD report in Sustainability 2022 report. Fortum's climate-related risks are also described in the Risk management section of Financial statements and operating and financial review 2022.

DNSH Sustainable use and protection of water and marine resources

Fortum manages and uses major water resources in most of its operating countries and is committed to responsible water management. Fortum's responsibility for water use is related not only to volume and availability, but also to water quality and to the aquatic habitat. Consequently, all production sites under Fortum's operational control are included in the annual reporting scope for water use metrics and water stress assessment. Fortum's water management guarantees that the operational sites comply with national regulations and have a license to operate. Fortum also carries out water-related measures locally, where relevant, in order to take into consideration the needs of other water users. Collaboration with local communities, municipalities, authorities, and research institutes is important in the implementation of these measures. Fortum's electricity generation from hydropower in Finland and Sweden are under the control of the water authorities in the frame of the Water Framework Directive (WFD), and national transposition and timeline of WFD is considered in this DNSH review.

DNSH Transition to a circular economy

Fortum takes into account the life-cycle and resource efficiency of its products and projects. Durability and recyclability of equipment and components are included in procurement processes. Fortum aims for utilisation and recovery of its own by-products and waste. Minimising the amount of waste and the efficient management of end-of life equipment and components is expected from Fortum's operating sites.

In addition to conventional industrial waste, Fortum's fully owned and co-owned nuclear power plants in Finland and Sweden generate radioactive waste. All plants take full financial and safe execution responsibility over radioactive waste originated from the operations and decommissioning; and optimise and develop treatment processes to minimise the amount of waste stored. All low-, intermediate- and high-level radioactive waste are treated and stored on site, or in the special storage site located in the same country where the waste is generated.

DNSH Pollution prevention and control

Fortum's chemical management ensures compliance with local regulations, existing permits and that operations do not do any significant harm with substances used, covering the substances listed in Annex I Appendix C. Fulfilling the requirements set by Fortum and the legislation in the respective country, proper management of chemicals in the whole chain from purchasing to disposal, minimise risks relating to handling of chemicals, and limit and continuously reduce the use of hazardous chemicals, where possible substituting to less harmful to health and environment, is ensured.

Fortum continuously aims to mitigate its environmental impact by utilising best practices and best available technologies. Minimum Requirements for EHS Management ensure compliance with permit conditions, regular monitoring and reporting of emissions to air, water and ground; and risk mitigation to prevent any cross-media effects.

The nuclear power operations' radioactive discharges to air, water bodies and ground comply with individual license conditions. Both discharges and impacts on environment are strictly monitored by national authorities in their role for national oversight of radiation plants. Spent fuel and radioactive waste is safely and responsibly managed, including an adequate storage capacity.

DNSH Protection and restoration of biodiversity and ecosystems

Fortum's biodiversity management is an integral part of the environmental management system covering all operations. Biodiversity management, defined in the Biodiversity manual, ensures compliance with biodiversity-related requirements set by local regulations; and that necessary steps are taken whenever feasible to avoid, mitigate, or address potential impacts. The Biodiversity manual requires that special consideration is needed for sites that are close to protected areas and threatened habitats, or where any known population of threatened or protected species might be affected.

Minimum Safeguards

Fortum's compliance with the Minimum Safeguards is based on Group level human rights due diligence system with relevant policies and processes in place covering the relevant human rights and labor rights. Fortum's commitment to respect human rights and to act with due diligence is in line with the United Nations Guiding Principles on Business and Humans Rights (UNGPs) and Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, and are included in the Fortum Code of Conduct, Supplier Code of Conduct and Sustainability Policy. Fortum has implemented due diligence processes for taxation, anti-corruption and bribery, as well as fair competition. Requirements for human rights, labour rights as well as for anti-corruption and fair competition are included in our procurement processes. Group level commitment, policies, instructions and guidelines apply to all of Fortum's activities in all operating countries.

EU taxonomy KPIs for continuing operations

The table below presents the proportions of aligned, eligible (not aligned) and non-eligible activities of sales, operating expenses, and capital expenditure under the Climate Delegated Act, Annex I and Complementary Climate Delegated Act, Annex I for Fortum Group's continuing operations for the financial year ending 31 December 2022.

EUR million	Sales		Operating expenses		Capital expenditure	
A.1 Environmentally sustainable activities (Taxonomy-aligned)	3,905	44%	-129	51%	285	51%
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)	1,185	13%	-37	15%	93	17%
A. Total Taxonomy-eligible activities	**5,089**	**58%**	**-166**	**66%**	**378**	**68%**
B. Taxonomy-non-eligible activities	**3,715**	**42%**	**-86**	**34%**	**175**	**32%**
Total (A+B)	**8,804**	**100%**	**-252**	**100%**	**553**	**100%**

EU taxonomy KPIs for continuing operations excluding Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 financial statements Fortum provides additional KPIs for Russia and continuing operations excluding Russia.

The table below presents EU taxonomy KPIs for Russia.

EUR million	Sales		Operating expenses		Capital expenditure	
A.1 Environmentally sustainable activities (Taxonomy-aligned)	-	0%	-	0%	-	0%
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)	983	95%	-30	82%	51	84%
A. Total Taxonomy-eligible activities	**983**	**95%**	**-30**	**82%**	**51**	**84%**
B. Taxonomy-non-eligible activities	**48**	**5%**	**-6**	**18%**	**9**	**16%**
Total (A+B)	**1,031**	**100%**	**-36**	**100%**	**61**	**100%**

The table below presents EU taxonomy KPIs for continuing operations excluding Russia.

EUR million	Sales		Operating expenses		Capital expenditure	
A.1 Environmentally sustainable activities (Taxonomy-aligned)	3,905	50%	-129	60%	285	58%
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)	201	3%	-7	3%	42	8%
A. Total Taxonomy-eligible activities	**4,106**	**53%**	**-136**	**63%**	**327**	**66%**
B. Taxonomy-non-eligible activities	**3,668**	**47%**	**-79**	**37%**	**166**	**34%**
Total (A+B)	**7,774**	**100%**	**-215**	**100%**	**493**	**100%**

Aligned economic activities (A.1)

In terms of sales, 44%, in terms of operating expenses, 51%, and in terms of capital expenditure, 51%, of Fortum's economic activities are taxonomy aligned (A.1).

The most significant aligned activities are electricity generation from hydropower with an installed capacity of 4.6 GW (35% of total capacity) and electricity generation from nuclear energy in existing installations with an installed capacity of 2.8 GW (21% of total capacity).

Electricity generation from nuclear and hydropower sales KPI includes revenue from co-owned assets that are operated under the Mankala model. In the Mankala model, the co-owned power company sells the produced electricity to its shareholders at cost in proportion to their ownership.

Eligible (not aligned) economic activities (A.2)

In terms of sales, 13%, in terms of operating expenses, 15%, and in terms of capital expenditure, 17%, of Fortum's economic activities are taxonomy eligible (not aligned) (A.2).

The most significant eligible (not aligned) economic activities are electricity generation and high-efficiency co-generation of heat/cool and power from fossil gaseous fuels (natural gas) with an installed capacity of 4.6 GW (35% of total capacity) in Russia. Fortum has announced that it is preparing for a controlled exit from Russia. Therefore, Fortum has not assessed compliance with DNSH criteria for Russian eligible assets.

The most material eligible activities are reported on separate lines under the topic A.2 Taxonomy-Eligible but not environmentally sustainable activities. The other eligible activities include non-material operations that do not comply with either technical screening or at least one of the DNSHs; or operations for which the compliance with the criteria has not been assessed during 2022. These activities are related, for example, to hydrogen, plastics recycling and operations sold in 2022. The assessments will be finalised during 2023.

Non-eligible economic activities (B)

Non-eligible economic activity does not correspond to any activity description provided in the Climate Delegated Act or the Complementary Delegated Act. Fortum's non-eligible activities include electricity wholesale (Consumer Solutions segment), electricity and commodities trading, coal-based power and heat generation, engineering services related to non-renewable assets, as well as administrative overheads. In addition, Fortum has economic activities that are currently not covered by the EU Taxonomy, such as waste-to-energy and circular economy activities.

Sales KPI

Economic activities	Code	EURm	% of total	CCM	DNSH [3]	MS
A. Taxonomy-eligible activities						
A.1 Environmentally sustainable activities (Taxonomy-aligned)						
Electricity generation from wind power	4.3	0	0%	0%	Yes	Yes
Electricity generation from hydropower	4.5	1,607	18%	93%	Yes	Yes
District heating/cooling distribution	4.15	102	1%	99%	Yes	Yes
Construction and safe operation of new nuclear power plants (T)	4.27	45	1%	100%	Yes	Yes
Electricity generation from nuclear energy in existing installations (T)	4.28	2,016	23%	100%	Yes	Yes
Material recovery from non-hazardous waste	5.9	83	1%	100%	Yes	Yes
Other [1]		53	1%	63%	Yes	Yes
A.1 Total		**3,905**	**44%**			
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)						
Manufacture of batteries (E)	3.4	2	0%			
Electricity generation from wind power	4.3	15	0%			
Electricity generation from hydropower	4.5	121	1%			
District heating/cooling distribution	4.15	1	0%			
Electricity generation from fossil gaseous fuels (T)	4.29	287	3%			
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels (T)	4.30	679	8%			
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system (T)	4.31	1	0%			
Other [2]		78	1%			
A.2 Total		**1,185**	**13%**			
A. Total Taxonomy-eligible activities		**5,089**	**58%**			
B. Taxonomy-non-eligible activities		**3,715**	**42%**			
Total (A+B)		**8,804**	**100%**			

1) Includes economic activities 4.24, 4.25.
2) Includes economic activities 3.10, 3.17, 4.1, 4.20, 4.24, 4.25, 5.10, 5.11, 6.15, 8.2.
3) Includes Climate change adaption, Water and marine resources, Circular economy, Pollution, Biodiversity and ecosystems.
(E) = Enabling activity: an activity that contributes to the climate goals by directly enabling other sustainable operations.
(T) = Transitional activity: an activity that supports the transition to a climate-neutral economy and there is no technologically and economically feasible low-carbon alternative.

Operating expenses KPI

Economic activities	Code	EURm	% of total	CCM	DNSH [3]	MS
A. Taxonomy-eligible activities						
A.1 Environmentally sustainable activities (Taxonomy-aligned)						
Electricity generation from wind power	4.3	0	0%	1%	Yes	Yes
Electricity generation from hydropower	4.5	-70	28%	99%	Yes	Yes
District heating/cooling distribution	4.15	-13	5%	91%	Yes	Yes
Construction and safe operation of new nuclear power plants (T)	4.27	-	0%	0%	Yes	Yes
Electricity generation from nuclear energy in existing installations (T)	4.28	-40	16%	100%	Yes	Yes
Material recovery from non-hazardous waste	5.9	-4	2%	100%	Yes	Yes
Other [1]		-2	1%	79%	Yes	Yes
A.1 Total		**-129**	**51%**			
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)						
Manufacture of batteries (E)	3.4	-1	0%			
Electricity generation from wind power	4.3	0	0%			
Electricity generation from hydropower	4.5	-1	0%			
District heating/cooling distribution	4.15	-1	1%			
Electricity generation from fossil gaseous fuels (T)	4.29	-12	5%			
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels (T)	4.30	-18	7%			
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system (T)	4.31	0	0%			
Other [2]		-3	1%			
A.2 Total		**-37**	**15%**			
A. Total Taxonomy-eligible activities		**-166**	**66%**			
B. Taxonomy-non-eligible activities		**-86**	**34%**			
Total (A+B)		**-252**	**100%**			

1) Includes economic activities 4.24, 4.25.
2) Includes economic activities 3.10, 3.17, 4.1, 4.20, 4.24, 4.25, 5.10, 5.11, 6.15, 8.2.
3) Includes Climate change adaption, Water and marine resources, Circular economy, Pollution, Biodiversity and ecosystems.
(E) = Enabling activity: an activity that contributes to the climate goals by directly enabling other sustainable operations.
(T) = Transitional activity: an activity that supports the transition to a climate-neutral economy and there is no technologically and economically feasible low-carbon alternative.

Capital expenditure KPI

Economic activities	Code	EURm	% of total	CCM	DNSH [3]	MS
A. Taxonomy-eligible activities						
A.1 Environmentally sustainable activities (Taxonomy-aligned)						
Electricity generation from wind power	4.3	101	18%	96%	Yes	Yes
Electricity generation from hydropower	4.5	98	18%	99%	Yes	Yes
District heating/cooling distribution	4.15	28	5%	54%	Yes	Yes
Construction and safe operation of new nuclear power plants (T)	4.27	-	0%	0%	Yes	Yes
Electricity generation from nuclear energy in existing installations (T)	4.28	34	6%	100%	Yes	Yes
Material recovery from non-hazardous waste	5.9	5	1%	100%	Yes	Yes
Other [1]		20	4%	100%	Yes	Yes
A.1 Total		**285**	**51%**			
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)						
Manufacture of batteries (E)	3.4	26	5%			
Electricity generation from wind power	4.3	4	1%			
Electricity generation from hydropower	4.5	0	0%			
District heating/cooling distribution	4.15	23	4%			
Electricity generation from fossil gaseous fuels (T)	4.29	0	0%			
High-efficiency co-generation of heat/cool and power from fossil gaseous fuels (T)	4.30	33	6%			
Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system (T)	4.31	-	0%			
Other [2]		7	1%			
A.2 Total		**93**	**17%**			
A. Total Taxonomy-eligible activities		**378**	**68%**			
B. Taxonomy-non-eligible activities		**175**	**32%**			
Total (A+B)		**553**	**100%**			

1) Includes economic activities 4.24, 4.25.
2) Includes economic activities 3.10, 3.17, 4.1, 4.20, 4.24, 4.25, 5.10, 5.11, 6.15, 8.2.
3) Includes Climate change adaption, Water and marine resources, Circular economy, Pollution, Biodiversity and ecosystems.
(E) = Enabling activity: an activity that contributes to the climate goals by directly enabling other sustainable operations.
(T) = Transitional activity: an activity that supports the transition to a climate-neutral economy and there is no technologically and economically feasible low-carbon alternative.

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Transitional activities (Nuclear and Natural gas)

Transitional activity is an activity that supports the transition to a climate-neutral economy and there is no technologically and economically feasible low-carbon alternative. Fortum's transitional activities are mainly concentrating on electricity generation from new or existing nuclear installations and power generation from fossil gaseous fuels (natural gas). Power generation from fossil gaseous fuels mainly relates to Fortum's Russian activities. Fortum does not have non-eligible economic activities related to nuclear or natural gas.

Nuclear and fossil gas related activities	
Nuclear energy related activities	
4.26 Pre-commercial stages of advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle	No
4.27 Construction and safe operation of new nuclear power plants	Yes
4.28 Electricity generation from nuclear energy in existing installations	Yes
Fossil gas related activities	
4.29 Electricity generation from fossil gaseous fuels	Yes
4.30 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	Yes
4.31 Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	Yes

Aligned economic activities (A.1)

The table below presents Fortum's aligned economic activities for the financial year ending 31 December 2022 for continuing operations. All of these activities relate to climate change mitigation (CCM) substantial contribution criteria.

Taxonomy-aligned economic activities (denominator and numerator)	Sales			Operating expenses			Capital expenditure		
Economic activities	**EURm**	**% deno-minator[1)]**	**% nume-rator[2)]**	**EURm**	**% deno-minator[1)]**	**% nume-rator[2)]**	**EURm**	**% deno-minator[1)]**	**% nume-rator[2)]**
4.27 Construction and safe operation of new nuclear power plants	45	1%	1%	-	-	-	-	-	-
4.28 Electricity generation from nuclear energy in existing installations	2,016	23%	52%	-40	16%	31%	34	6%	12%
Other taxonomy-aligned economic activities	1,844	21%	47%	-89	35%	69%	251	45%	88%
Total	**3,905**	**44%**	**100%**	**-129**	**51%**	**100%**	**285**	**51%**	**100%**

1) Proportion of taxonomy-aligned economic activity in the denominator of the applicable KPI.
2) Proportion of taxonomy-aligned economic activity in the numerator of the applicable KPI.

Eligible economic activities (A.2)

The table below presents Fortum's eligible but not taxonomy-aligned economic activities for the financial year ending 31 December 2022 for continuing operations. All of these activities relate to climate change mitigation (CCM) substantial contribution criteria.

Taxonomy-eligible but not taxonomy-aligned economic activities	Sales		Operating expenses		Capital expenditure	
Economic activities	**EURm**	**% of total**	**EURm**	**% of total**	**EURm**	**% of total**
4.29 Electricity generation from fossil gaseous fuels	287	3%	-12	5%	0	0%
4.30 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	679	8%	-18	7%	33	6%
4.31 Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	1	0%	0	0%	-	0%
Other taxonomy-eligible but not taxonomy-aligned economic activities	217	2%	-7	3%	60	11%
Total	**1,185**	**13%**	**-37**	**15%**	**93**	**17%**

Capital expenditure plan

Capital expenditure plan refers to significant future capital investments approved by management that aim either to expand Fortum's taxonomy-aligned economic activities, or to upgrade taxonomy-eligible economic activities to render them taxonomy-aligned within a period of five years.

Total planned capital expenditure meeting the above definition amounts to EUR 0.7 billion at 31 December 2022 and is expected to be incurred over the next 5 years, with the exception of the Loviisa lifetime extension for which 10 years' capital expenditure is included in the reported capital expenditure plan due to the long-term nature of the investment. Planned capital expenditure includes the Pjelax wind project, Loviisa nuclear power plant lifetime extension and projects increasing production at existing hydro plants, as well as district heating/cooling decarbonisation investments. The majority of the projects included in the capital expenditure plan will be completed during the next four years, but the Loviisa lifetime extension project will continue until 2050.

Operating expenses related to the 2022 capital expenditure plan projects are not material.

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Definitions, reconciliations and basis of calculation

Sales

Sales is based on the sales reported on Fortum's consolidated income statement (Note 6). Sales exclude discontinued operations. Breakdown of sales:

EUR million	A.1 Taxonomy-aligned	Total
Power sales	3,654	6,947
Heat sales	148	683
Other	103	1,175
Total	**3,905**	**8,804**

Operating expenses

Operating expenses consist of direct non-capitalised costs that are necessary to ensure the continued and effective functioning of property, plant and equipment. These expenses include repairs and maintenance, building servicing, short-term rentals and similar costs, as well as other direct expenditures relating to the day-to-day servicing of these assets. Operating expenses exclude discontinued operations. Breakdown of operating expenses:

EUR million	A.1 Taxonomy-aligned	Total
Repairs and maintenance	-73	-146
Short-term rentals and other property costs	-37	-70
Other	-19	-35
Total	**-129**	**-252**

Capital expenditure

Capital expenditure consists of additions to property, plant and equipment, intangible assets, right-of-use assets, as well as additions through business combinations. Capital expenditure excludes discontinued operations as information on discontinued operations up to the date of disposal is not readily available. Breakdown of capital expenditure:

EUR million	Note	A.1 Taxonomy-aligned	Total
Additions to intangible assets	16	2	88
Additions to property, plant and equipment	17	278	437
Additions to right-of-use assets	33	4	28
Total		**285**	**553**

Basis of calculation

The financial data used for calculating the EU taxonomy KPIs has been retrieved from Fortum's financial systems and is based on the same data and Group accounting principles (see notes to the consolidated financial statements for details) as Fortum's consolidated financial statements for the year ending 31 December 2022. The reporting scope includes continuing operations only. Appropriate controls have been implemented to eliminate the risk of double counting. Financial data has been allocated to aligned and eligible economic activities as follows:

- Majority of electricity sales has been allocated to aligned and eligible activities based on production volume. Electricity generation from nuclear and hydropower sales KPIs include revenue from co-owned assets that are operated under the Mankala model. In the Mankala model, the co-owned power company sells the produced electricity to its shareholders at cost in proportion to their ownership.
- Other sales and operating expenses data is available in the source systems at the cost centre-level corresponding to individual sites. These cost centres have been allocated to aligned and eligible economic activities.
- Each significant capital expenditure investment project has been allocated to aligned and eligible economic activities.

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 describes the main features of Fortum's risk management systems which consists of principles, processes and responsibilities for managing risks which, if materialise, may have a material negative impact on Fortum's current or future business operations, reputation, employees, the environment or third parties.

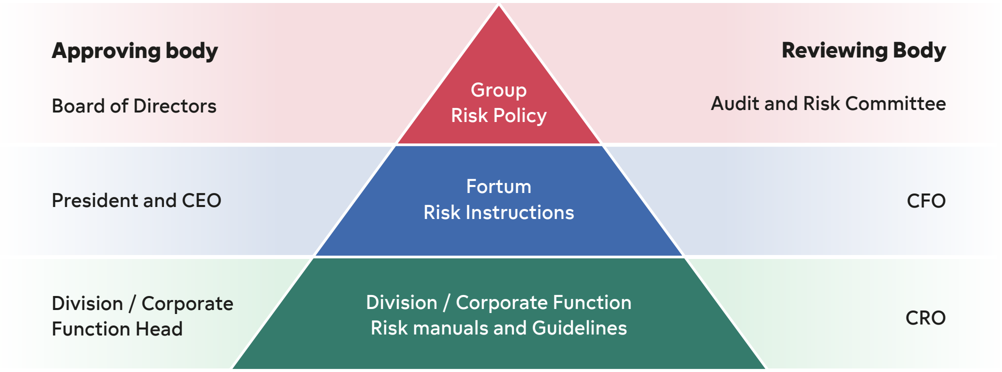
The risk management systems have been designed to support Fortum's Board of Directors, Audit and Risk Committee, Fortum's Executive Management as well as the operative business in fulfilling their duties in relation to risk management. The objectives of the risk management systems are to:

- Support Fortum's Board of Directors and Fortum Executive Management (FEM) in the development of the Group strategy,
- Support business in strategy execution,
- Support business in achieving agreed targets within acceptable risk levels so that Fortum's ability to meet financial commitments is not compromised,
- Ensure the understanding of Fortum's material risks and uncertainties,
- Support 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's risk management instructions including an instruction for enterprise risk management which sets minimum requirements for managing risks in all categories. In addition, there are specific risk instructions covering commodity market risks, counterparty and credit risks and liquidity risks applicable for all of Fortum. Fortum's Divisions and Corporate Functions issue risk manuals and guidelines, as needed, which detail how the Group Risk Policy and relevant risk management instructions are implemented within their organisations.

Corporate risk policy structure



Risk Governance

The main principle is that risks are managed at source, meaning that each manager is responsible for managing risks that arise within their business operations. For each risk, risk owners are assigned to ensure that appropriate mitigation actions are taken to respond to the risk.

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, an independent control function headed by the Chief Risk Officer (CRO) reporting to the CFO, provides instructions, methods and tools which support the business in running an efficient risk management process. Corporate Risk is responsible for assessing and reporting on the maturity of risk management in the organisation and for monitoring and reporting of Fortum's material risk exposures to FEM, the ARC and the Board of Directors.

Principle of continuous improvement

The risk management framework is developed in accordance with the principle of continuous improvement, aiming at an optimised and continuously developing risk management process. The maturity level of risk management in the organisation is evaluated annually, and Corporate Risk determines goals for the development of risk management based on the results of the assessment.

In accordance with Fortum's values, the importance of risk management is raised by increasing the personnel's risk awareness and highlighting the positive features of risk-aware decision-making. Risk management at Fortum is continuously supporting and improving the application of Fortum’s values in decision-making.

Risk management process

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

Fortum's risk management process consists of four main sub-processes; identification, assessment, response and control. The risk management process is linked to strategy development, target setting and long-term forecasting and is an integrated part of operational and business management including investment processes and project management.

The risk management process is designed to support effective risk management and to ensure that risks are regularly monitored and followed-up. Identification is regularly carried out according to a structured process which includes analysis of root causes of the risk and consequences if the risk materialises. Risks are assessed in terms of impact and likelihood. Impact is assessed not only in monetary terms in relation to forecasted earnings and / or cash flows, but also in terms of impact to health and safety, the environment and Fortum’s reputation, where relevant. 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 controls to ensure that risk exposures remain within approved limits and mandates which are defined for financial risks.

Risk factors

2022 has been an exceptional year with a number of identified risks fully or partly realising as a result of the escalation of the war in the Ukraine, the most significant of these being the use of energy as a weapon by Russia resulting in the current energy crisis with high commodity prices and potential risk to European security of supply. For Fortum, the impacts have been dramatic.

- The curtailment of Russian pipeline gas supply to Germany caused extreme losses for Uniper when replacement gas was procured at elevated prices in order to cover committed sales to customers. The unprecedented losses in Uniper led to the agreement with the German State to sell our shares in the distressed subsidiary. On 21 December, Fortum announced that it had completed the sale of its ownership in Uniper SE to the German State. The total loss from the Uniper divestment in the legal Fortum entity owning the Uniper shares was slightly below EUR 6 billion. For more information on the agreement and competition of the transaction, please see the “Uniper divestment” section of the “Financial performance and position”
- The Ukraine conflict has impacted the ability of Fortum to operate and own Russian assets. As a result, Fortum is not making any further investments in Russia and does not provide any new financing to its Russian subsidiaries. The company is pursuing a controlled exit from the Russian market with a divestment of its Russian operations as the preferred path.
- The high and volatile commodity prices led to increasing margining requirements toward clearing houses. In order to mitigate the related liquidity risk, Fortum signed a bridge financing arrangement with Solidium, fully owned by the Finnish State, in the third quarter of 2022. With the arrangement, Fortum ensured access to sufficient liquidity resources if Nordic power prices − and, with it, collateral requirements – would have risen significantly again. For more information on the agreement, see ‘Solidium's bridge financing loan to Fortum and directed share issue without payment to Solidium‘ in the “Financial performance and position”.

Fortum continues to be 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 Teollisuuden Voima Oyj, Forsmarks Kraftgrupp AB, OKG AB and Kemijoki Oy. For more information about these indirect risk exposures, please see each respective company’s annual report. Fortum is also exposed to physical climate risks and transition risks. The identified physical risks are generally found in the operational risk category, whereas transition risks are generally part of the strategic risk category.

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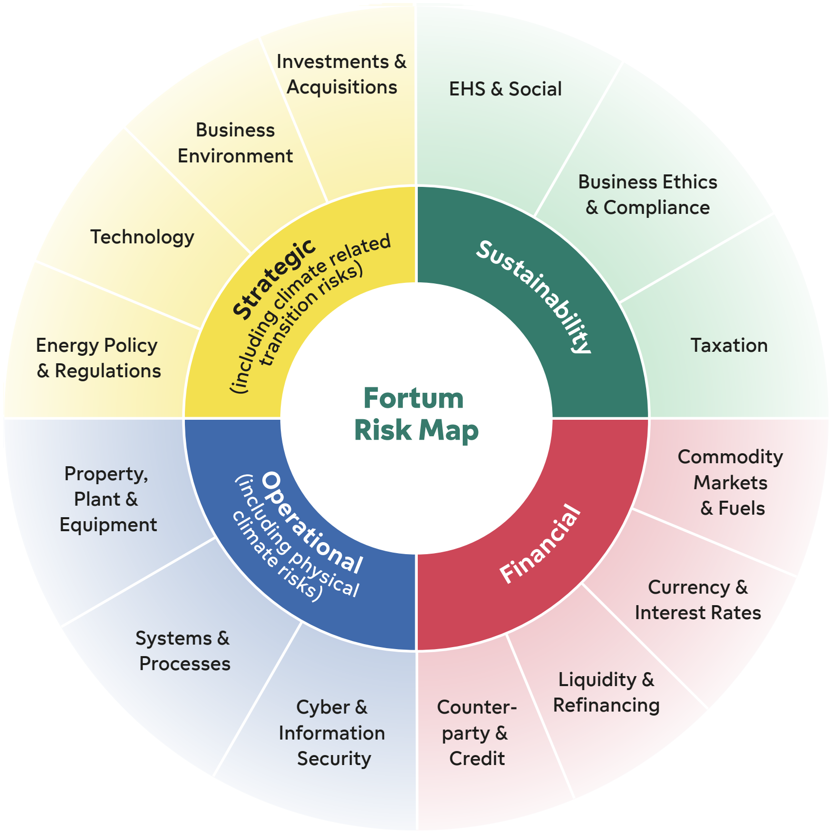

Strategic risks

The Fortum Board of Directors resolved on Fortum's new strategy at the beginning of March, 2023, including a new business structure and operating model. A summary of Fortum's new strategy can be found in the section 'Events after the balance sheet date' 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, regulation and climate scenarios as well as scenarios for how the current geopolitical situation develops, including the impact of these to Fortum's existing and potential new businesses, are regularly updated.

Risks which could hinder Fortum in executing its strategy are assessed and reported as part of regular strategy reviews.

Business Environment

Fortum operates in a global business environment, with main operational focus in the Nordic countries, and is therefore exposed to political and other risks which affect the macroeconomic development and consumer behaviour in the markets where Fortum operates.

The current geopolitical situation has raised a risk that the war could escalate outside of the Ukraine. Although unlikely, there is a concrete risk of escalation to our core markets including Finland and Sweden, the consequences of which are difficult to envisage. For example, it would cause an increase in the risk of sabotage or even direct attacks towards Fortum's or national critical energy facilities or infrastructure. In an extreme scenario, this might lead to a situation where the state of Finland or Sweden would call for an emergency act to take control over the energy sector, which would mean that Fortum would lose operational control of its business for an unknown period.

The current geopolitical uncertainty has intensified the trend of nationalistic policies and protectionism which may lead to further trade restrictions or sanctions which in turn could affect demand for Fortum's products and services, production capabilities, asset values and access to 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 continuously assessing its' business portfolio and evaluates opportunities for acquisitions, investments and divestments. Even if Fortum is able to identify candidates for acquisition, divestment or investment, it may be difficult to complete transactions. Lack of competition and potential restrictions on sale of certain assets by foreign owners or other restrictions may make it difficult to complete divestments or may result in lower than expected value received. Financial constraints, 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.

Fortum is not making any further investments in Russia and existing contracts will not be renewed when they expire. The company is also pursuing a controlled exit from the Russian market with a divestment of its Russian operations as the preferred path. In addition, Fortum does not provide any new financing to its Russian subsidiaries. The divestment process has progressed and is still ongoing, but any major divestment in the Russian energy sector requires an approval by the Russian Government Commission and the President. Completing the exit is therefore likely to take further time and there still are significant uncertainties – including regulatory approvals – related to the ongoing divestment process. If the divestment cannot be finalised or would be severely delayed, it might limit Fortum's access to capital markets, or the transaction may materialise at a lower valuation of the business or, in extreme case, expropriation of Fortum's Russian assets. Due to the increasingly complex operating environment and prolonged uncertainty regarding Fortum's Russian operations, Fortum has recorded total impairment charges in 2022 in the amount of approximately EUR 1.7 billion. The remaining value of the Russian net assets after the impairments totals approximately EUR 1.7 billion.

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. 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.

Energy and climate policy and regulation risks

The energy sector is heavily influenced by national and EU-level energy and climate 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 markets. The overall complexity and possible regulatory changes in the various operating countries pose a risk if Fortum is not able to identify, anticipate and manage those changes efficiently.

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

EU and Nordics

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 development of energy and climate policies policy and regulatory framework development are listed below.

- The Russian invasion of Ukraine drove commodity prices to new record levels and further increased price volatility. As a consequence, the EU and its member states are taking action with temporary market interventions (e.g. price caps and windfall taxation). If becoming permanent, these market interventions may pose a risk to business performance. In addition, Fortum sees risks related uncoordinated national measures aiming to tackle high energy prices and national security of supply. It is also possible that various short-term crisis measures will impact negatively on the longer-term power market reform which is about to start in the EU early 2023.
- Fortum believes that reaching the established (EU and national) decarbonisation targets requires that all CO_2 free energy production technologies are treated equally in legislation, and that there is political acceptance for them. While we see that there is currently a broader acceptance for nuclear, especially in the Nordics, there is still a risk that some technologies are preferred for reasons other than for their CO_2 footprint for example in financing schemes, leading to uneven situation between different production forms.
- Growing acceptability issues relating to various energy forms and energy technologies create uncertainty and risks for planned investments. Increasing sustainability requirements, e.g., in the context of upcoming EU Nature Restoration Regulation, could have unforeseen negative consequences for the energy system, in particular for hydro and wind power and power grids. In the context of EU Sustainable Finance Taxonomy, the inclusion of Fortum's core technologies such as hydro and nuclear power in the scope of the regulation is an encouraging signal to ensure access to the capital markets and future investments. However, the regulation is still not finalised and the remaining criteria expected to be published in 2023, might cause further hurdles for aligning Fortum's assets.
- National climate policies or steering mechanisms that exceed or are overlapping the EU climate targets risk diluting the EU emissions trading system (ETS) and creating inefficiencies based on uncoordinated national non- market-based carbon reduction mechanisms. In addition, a lower carbon price may lead to decreased profitability of carbon-free assets.
- National investment schemes and selective support systems for new renewable energy production may lower the profitability of incumbent electricity production and lead to market distortions because of increased grid costs since producers pay a large part of total grid costs. Fortum may suffer also from lower electricity prices since, all else equal, production that otherwise would not be profitable will come online. There is also a risk that the lack of Nordic power grid capacity buildout continues to keep high or even increases price area differences and lowers our earnings and asset values in low price areas.
- 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 established and enforced 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 significantly reduce the value of assets related to such operations.

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.

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.

For comments on the geopolitical uncertainty due to Russia's invasion on Ukraine, imposed sanctions and possible future sanctions and counter sanctions and their possible impacts on Fortum Group's Russian business and assets, please see **Note 2**.

Technology risks

Fortum's strategy may include 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 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 the development cycle and selectively developing and investing in projects together with our partners.

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 in 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.

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, such as the European Market Infrastructure Regulation (EMIR) and the Regulation on Energy Market Integrity and Transparency (REMIT).

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, 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 compliance management and risk management processes. 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.

Fortum's Code of Conduct and Supplier Code of Conduct stress the importance of business ethics for all employees, contractors and partners. Zero tolerance for corruption and bribery is highlighted in the Code of Conduct and Supplier Code 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, economic sanctions and competition law. Regarding economic sanctions, Fortum has, with internal and external experts, developed monitoring to follow applicable sanction regimes (EU, US, UK and UN) and relevant internal controls have been integrated to business processes to ensure compliance. Fortum has procedures for anti-corruption including prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. The Supplier Code of Conduct, which is based on the ten principles of the United Nations Global Compact, define sustainability, business ethic, human rights and environmental requirements for suppliers of goods and services.

Environmental, health and safety and social risks

Operating power and heat generation plants and circular economy services, involves the usage, storage and transportation of fuels and materials, including hazardous waste, which 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 (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 and human rights risks related to the supply chain, are evaluated through counterparty risk assessments, country risk assessments, supplier qualifications as well as internal and external audits.

EHS and social risks are evaluated for all investments. Environmental risks and liabilities in relation to past actions have been assessed and, where necessary, provisions have been made for future remedial costs. Mitigating climate change, adapting to it and driving the transition to a lower-carbon economy is an integral part of Fortum's strategy. Management of climate-related transition and physical risks are discussed in detail under the heading Climate-related risks.

Tax risk

Tax risk refers to the risk associated with unclarities, errors, failure in controls or disagreements in the interpretation of applicable tax laws and tax authority guidance, changes in operations, long-term profitability or changes in tax laws or fiscal policies 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. The risks may equally realise through national or EU fiscal policies that are drafted without considering the impacts. Tax burden may be out of the set objective and result in unexpectedly high taxes.

Mitigating actions targeting tax predictability for the business operations in all our operating countries. In order to do so, Fortum has, in line with its commitment to responsible tax management principles, specific published tax principles approved by the Board of Directors and tax governance guidance setting the frame for tax management. As concrete risk mitigation actions, Fortum targets to simplify legal structures, move towards digital solutions in data management and compliance, seek strategic clearance from tax authorities, improve transparency towards stakeholders, participate in developing responsible regulation by contributing to public hearings and clarify accountabilities and responsibilities of duties.

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 sale of energy products. The main exposure is toward electricity prices and volumes, prices and volumes of emission allowances, and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in order to improve predictability of future result by reducing volatility in earnings while ensuring cash flow risk is at an acceptable level. For further information on hedge ratios, sensitivities and outstanding derivatives contracts, see ▸ **Note 4**.

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 Poland, market prices and the amount of profitable production exhibit significant variation due 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 Poland are mainly hedged by entering electricity and gas derivatives contracts on exchanges such as Nasdaq Commodities, ICE, the European Energy Exchange and TGE (Towarowa Giełda Energii S.A. i.e., Polish commodity exchange) as well as directly with counterparties active in the energy markets. The ability to efficiently implement hedging strategies is dependent on a well-functioning and liquid derivatives market. During 2022, the energy crisis resulted in peaking energy prices and extreme volatility which escalated the trend of decreasing liquidity of especially Nordic electricity derivatives traded on Nasdaq Commodities. Alternatives, including the use of OTC derivative contracts and correlated products are used to mitigate this risk. 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.

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 2025 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.

Emission and environmental value risks

The EU has an emissions trading scheme in place 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.

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 prices 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, waste and various biomass-based fuels. 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, for example, increased demand growth in developing countries, natural disasters or supply curtailments/fuel purchase constraints in countries experiencing political or social unrest. For fuels that are sourced on local or regional markets, such as biofuels, 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. The exposure to fuel price risk is mitigated through fixed-price physical delivery contracts as well as derivative contracts. Due to the current geopolitical situation, there is an increasing risk related to especially nuclear fuel imports from Russia. Fortum continues to monitor the situation closely and prepares adapted mitigation measures to minimise the negative impacts to Fortum.

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 exposed to liquidity and refinancing risks primarily through the need to finance business operations, including margining and collaterals issued for hedging activities. Higher and more volatile commodity prices increase the net margining payments toward clearing houses and clearing banks which are mainly settled in cash. Fortum mitigates this risk by entering into OTC derivatives contracts directly with bilateral counterparties without margining requirements. The exposure to margining requirements is continuously assessed and monitored so that adequate liquidity is available to cover expected future cash collateral required for margining.

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.

At the beginning of August, both S&P Global Ratings and Fitch rating agencies affirmed Fortum's BBB rating with Negative Outlook. Following the announcement in September that Fortum would fully divest Uniper to the German State, the rating agencies commented that the divestment of the Uniper stake was regarded as credit positive for Fortum as it improves the company's financial and risk profile. The rating agencies are expected to update their ratings after the completion of the transaction and now that Fortum has published its new strategy. A lowering of credit ratings, in particular to below investment grade level (BB+ or below) could trigger counterparties' rights to demand additional cash or non-cash collateral. That may affect the access to the capital markets and increase the cost of new financing.

Fortum is targeting to have a solid investment grade rating of at least BBB.

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. Fortum manages the interest rate exposure through a duration mandate of the loan portfolio, excluding leasing liabilities and provisions, and a 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) and EUR/Swedish Krona (SEK) arising from Fortum's extensive operations in Russia and Sweden. Fluctuations of the RUB and SEK against the EUR could have an adverse effect on future results and equity when consolidating and translating results and net assets in Russian and Swedish affiliates into euros. Translation exposures in Fortum 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 Fortum. 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 not hedged.

A centralised treasury function coordinates currency risk management and executes 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. Following increasing geopolitical tensions, counterparties of Fortum could become subject to sanctions, which may impact current or future business relations. Fortum actively monitors the situation in order to ensure continued compliance with prevailing rules and applicable sanctions laws.

Credit risk exposures related to hedging arise through physical delivery contracts and financial derivative instruments. These credit risk exposures are 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, industrial end-users and financial institutions active in the financial and energy markets. In order to mitigate the liquidity risk from increased margining requirements toward CCPs, the share of hedges with OTC counterparties without margining requirements has increased. Consequently, credit exposure from hedges with OTC counterparties has increased. In general, due to Fortum's net short position in Nordic power hedges the credit exposure tends to increase with the value of hedges if Nordic power prices decrease.

Due to the Group's 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 by Fortum's Russian subsidiaries with financial institutions in Russia as well as to banks that provide guarantees for suppliers and contracting parties.

Credit risk exposures relating to customers and suppliers are 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.

Fortum has routines and processes to identify, assess and control exposure. Credit checks are performed before entering or renewing commercial obligations and exposure limits are set for larger individual counterparties as well as for counterparty groups. 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 contract 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.

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 digitalisation, 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 have 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, 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 a large number of hydro power plants and dams in the Nordics. A dam breach is a serious accident with the threat of 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 (approximately EUR 1 billion).

Nuclear power

Fortum owns and operates the Loviisa nuclear power plant and has minority interests in one Finnish and two Swedish operational nuclear power companies. Fortum also has a minority interest in the terminated Fennovoima project. Any severe accident or nuclear release in nuclear power plants could lead to high costs, environmental damages and third-party liabilities. Both in Finland and Sweden, 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) and the Swedish Radiation Safety Authority (SSM) in Sweden.

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 related to nuclear accidents is strictly under the plant operator's responsibility and must be covered by insurance or other financial cover. In Sweden and Finland, legislation requires that operators of nuclear power plants need to have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per site.

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 contribute. 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.

The current geopolitical situation has raised a new risk of nuclear fuel shortage in the Loviisa power plant. In order to mitigate this risk, Fortum has signed an agreement with Westinghouse Electric Company to have a parallel supplier for the current Russian supplier of nuclear fuel, but until the new fuels are approved by the Authority and delivered to site, a possibility exists for a limited period of fuel shortage.

Asset project risks

Fortum's business activities involve construction, modernisation, maintenance and decommissioning of power plants and other energy industry facilities. There is a risk that construction costs exceed planned costs or that construction delays occur as a result of regulatory or permit issues or failure of key suppliers, being unable to obtain permits. 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.

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.

The most significant asset project risk is the 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 (OL3), currently under test production phase, 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 earliest in April 2023.

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 2022, several risk management measures related to the OL3 project have been executed to improve TVO's readiness to start the regular electricity production the OL3 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, hedging decisions, 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 Fortum's assets are possible and can have material impacts. Due to the ongoing war in the Ukraine, the overall probability of cyber and other security risks has increased. Therefore, crisis management rehearsals have been kept to improve business resilience.

The focus in 2022 has been on improving OT cyber security capabilities to be able to improve resilience of the operations and production. There are cyber security instructions and procedures in place which set requirements for managing and mitigating cyber security risks. Security-related regulation is increasing and is therefore being monitored by a special program.

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.

Management of climate-related risks is integrated into Fortum's risk management framework 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 which are regularly reported and followed-up in various management teams and expert forums. 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 Fortum.

Climate-related risks are divided into two categories in accordance with the TCFD (Task Force on Climate-related Financial Disclosures) recommendations: 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.

See ▸ **Note 2** on how climate-related matters are reflected in Fortum's consolidated financial statements.

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 and operative risks related to changes in energy and climate policy and regulation, technology development and the business environment in which Fortum operates. Climate change may impact external market conditions which, in turn, can impact Fortum's financial and operative performance. Supply, demand and the prices achieved for Fortum's products can be affected by a wide range of factors including political developments and consumer preferences for low-carbon energy. 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. Fortum favours 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 developments and selectively invests in innovative technologies.

In the context of the EU Sustainable Finance taxonomy, the inclusion of Fortum's core technologies such as hydro and nuclear power in the scope of regulation is an encouraging signal to ensure access to capital markets and future investments. However, the regulation is still not finalised and the remaining criteria expected to be published in 2023 might cause further hurdles for aligning Fortum's assets. Additionally, there is a risk of increasing activity by NGOs which could affect key stakeholder perception. 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.

Physical risks

Fortum's entities are required to identify and assess their assets' resilience towards different acute and chronic physical climate-related risks within different Intergovernmental Panel on Climate Change (IPCC) climate scenarios and create adaptation plans for the most material risks. For example, climate change scenarios are considered in long-term dam safety investments so that extreme flooding situations can be managed. Fortum is a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) and physical climate-related risks are reported accordingly in Fortum's TCFD report in Sustainability 2022 report.

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 and extreme weather events may affect power production as well as bioenergy supply and availability. Intense storms with, for example, 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 may affect the demand and supply of energy products due to 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. Warmer weather may also impact the demand for heating to a larger extent than currently expected.

Fortum share and shareholders

Fortum Corporation's shares have been listed on Nasdaq Helsinki since 18 December 1998. The trading code is FORTUM. 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	2022	2021	2020
Earnings per share, total Fortum	-2.72	0.83	2.05
Earnings per share, continuing operations	1.14	4.49	N/A
Comparable earnings per share, total Fortum	-1.11	2.00	1.67
Comparable earnings per share, continuing operations	1.74	1.23	N/A
Comparable earnings per share, continuing operations excl. Russia	1.21	0.96	N/A
Cash flow per share, total Fortum	-9.86	5.60	2.88
Cash flow per share, continuing operations	2.37	1.26	N/A
Equity per share	8.55	13.66	14.58
Dividend per share	0.91[1]	1.14	1.12
Payout ratio, % [2]	79.8[1]	137.3	54.6
Payout ratio excl. Russia, %	75.0[1]	N/A	N/A
Dividend yield, %	5.9[1]	4.2	5.7

1) Board of Directors' proposal for the planned Annual General Meeting 13 April 2023.
2) Payout ratio for 2022 is calculated based on earnings per share from continuing operations.

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

Share price performance and volumes

Fortum's share price has depreciated approximately 6% during the last five years, while Dow Jones European Utility Index has increased 23%. During the same period Nasdaq Helsinki Cap index has increased 19%. During 2022 Fortum's share price depreciated approximately 42%, while Dow Jones European Utility index decreased approximately 11% and Nasdaq Helsinki Cap index decreased approximately 16%.

In 2022, a total of 560.8 million (2021: 351.5) Fortum Corporation shares, totalling EUR 8,500 million, were traded on Nasdaq Helsinki. The highest quotation of Fortum Corporation shares during 2022 was EUR 27.18, the lowest EUR 8.86, and the volume-weighted average EUR 15.18. The closing quotation on the last trading day of the year 2022 was EUR 15.54 (2021: 26.99). Fortum's market capitalisation, calculated using the closing quotation of the last trading day of the year, was EUR 13,943 million (2021: 23,975).

In addition to the Nasdaq Helsinki, Fortum shares were traded on several alternative market places, for example at Cboe and Turquoise, and on the OTC market. During 2022, approximately 74% (2021: 70%) 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 2022, a total of 897,264,465 shares (2021: 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 2022 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. The total amount of shares outstanding in the company after the registration of the new shares is 897,264,465. As a consequence, the shares under the control of the State of Finland has increased from 50.76% to 51.26%.

Shareholders

At the end of 2022 the Finnish State owned 51.26% 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 26.8% (2021: 25.8%).

Shareholders, 31 December 2022

Shareholders	No. of shares	Holding %
Finnish State	459,902,988	51.26
Ilmarinen Mutual Pension Insurance Company	17,662,000	1.97
Varma Mutual Pension Insurance Company	14,565,407	1.62
Elo Mutual Pension Insurance Company	9,042,000	1.01
The Finnish Social Insurance Institution	6,430,896	0.72
Kurikan Kaupunki	6,203,500	0.69
The State Pension Fund	2,700,000	0.30
Nordea Fennia Fund	2,137,603	0.24
OP-Finland	2,095,453	0.23
Danske Invest Finnish Equity Fund	1,813,412	0.20
Nordea Pro Finland Fund	1,550,842	0.17
OP-Henkivakuutus Ltd.	1,535,852	0.17
Evli Finland Fund	1,155,000	0.13
Seligson & Co OMX Helsinki 25 Exchange Traded Fund (ETF)	1,075,206	0.12
Nominee registrations and direct foreign ownership	240,321,127	26.78
Other	129,073,179	14.39
Total	**897,264,465**	**100.00**

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By shareholder category	% of total amount of shares
Finnish shareholders	
Corporations	1.57
Financial and insurance institutions	2.05
General government	57.82
Non-profit organisations	0.98
Households	10.80
Non-Finnish shareholders	26.78
Total	**100.00**

Breakdown of share ownership, 31 December 2022

Number of shares owned	No. of shareholders	% of shareholders	No. of shares	% of total amount of shares
1-100	85,476	44.30	3,660,263	0.41
101-500	65,228	33.80	16,639,128	1.85
501-1,000	20,642	10.70	15,190,625	1.69
1,001-10,000	20,511	10.63	52,930,044	5.90
10,001-100,000	1,019	0.53	21,628,248	2.41
100,001-1,000,000	66	0.03	19,143,203	2.13
1,000,001-10,000,000	12	0.01	36,806,781	4.10
over 10,000,000	3	0.00	492,130,395	54.85
	192,957	**100.00**	**658,128,687**	**73.35**
In the joint book-entry account and in special accounts on 31 December			596	0.00
Nominee registrations			239,135,182	26.60
Total			**897,264,465**	**100.00**

Management shareholding 31 December 2022

At the end of 2022, the President and CEO and other members of the Fortum Executive Management owned a total of 197,210 shares (2021: 224,369) representing approximately 0.02% (2021: 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**.

Authorisations from the Annual General Meeting 2022

In 2022, 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 20,000,000 shares, which corresponded to approximately 2.25% of all the shares in the company on 28 March 2022. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. These authorisations are effective until the next Annual General Meeting and, in any event, for a period no longer than 18 months. This authorisation has not been used as per 1 March 2023.

Dividend policy

The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supported by the company's long-term strategy. At the beginning of March 2023, the Fortum Board of Directors resolved on Fortum's new strategy including a new dividend policy. The renewed dividend policy – a payout ratio of 60-90% of comparable EPS – reflects the potential earnings fluctuations of Fortum's power generation portfolio. For additional information, see **Note 39**. For the year 2022, Fortum's Board of Directors proposes a dividend of EUR 0.91 per share which corresponds to 75% of the Group's comparable EPS of EUR 1.21 from continuing operations excluding impact from the Russian operations. The Board proposes that the dividend is paid in two instalments, in the second and fourth quarter of 2023.

Dividend distribution proposal

The distributable funds of Fortum Corporation as at 31 December 2022 amounted to EUR 6,291,275,608, including the profit for the financial period 2022 of EUR 1,542,734,239. 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 that a dividend of EUR 0.91 per share be paid for the financial year 2022. The dividend will be paid in two instalments.

Based on the number of shares registered as at 1 March 2023, the total amount of dividend would be EUR 816,510,663. The Board of Directors proposes that the remaining part of the distributable funds be retained in the shareholders' equity.

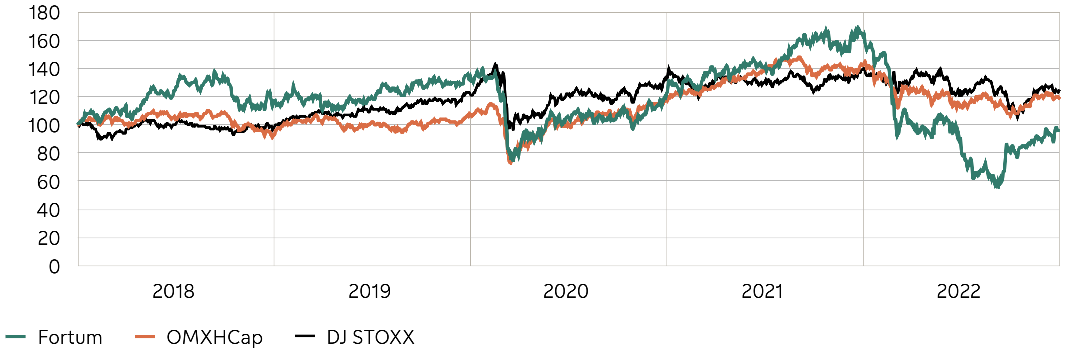
The first dividend instalment of EUR 0.46 per share would be paid to shareholders who on the record date of the first dividend instalment 17 April 2023 are recorded in the Company's shareholders' register held by Euroclear Finland Oy. The Board of Directors proposes that the first dividend instalment be paid on 24 April 2023.

The second dividend instalment of EUR 0.45 per share would be paid to the shareholders who on the record date of the second dividend instalment 2 October 2023 are recorded in the Company's shareholders' register held by Euroclear Finland Oy. The Board of Directors proposes that the second dividend instalment be paid on 10 October 2023.

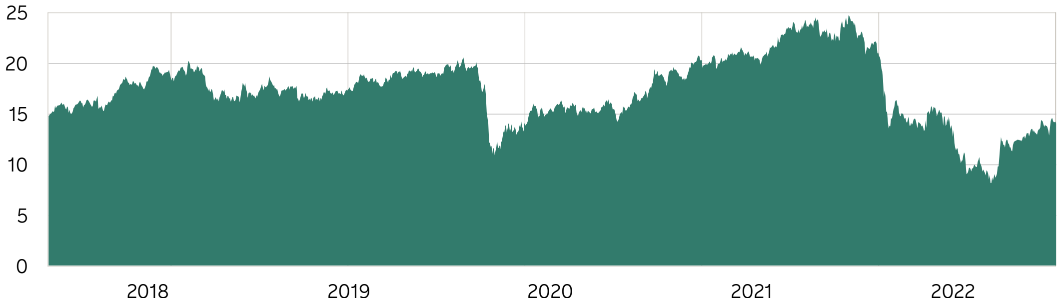
The Board of Directors further proposes that the Annual General Meeting be authorised to resolve, if necessary, on a new record date and date of payment for the second dividend instalment, should the rules of Euroclear Finland Oy or statutes applicable to the Finnish book-entry system be amended or should other rules binding upon the Company so require.

The Annual General Meeting is planned to take place on 13 April 2023.

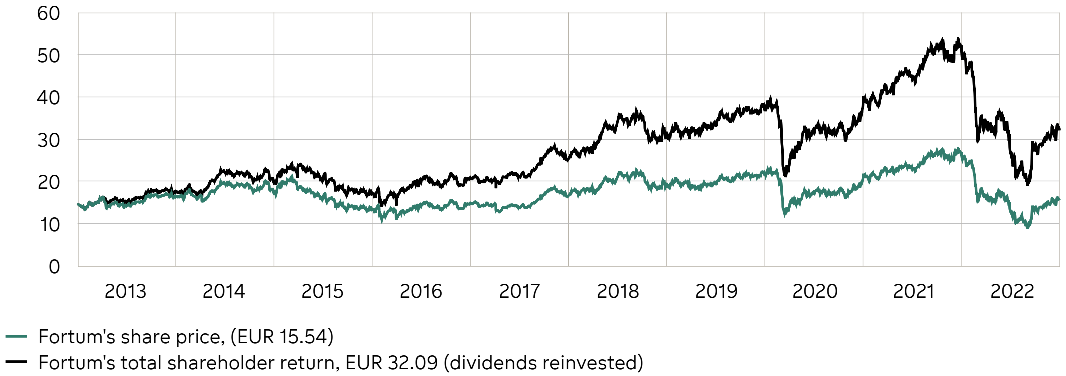
Share quotations, index 100 = quote on 2 January 2018



Market capitalisation, EUR billion



Total shareholder return, EUR



FINANCIAL STATEMENTS

Consolidated financial statements

Fortum’s consolidated income statement and consolidated cash flow statement were modified in 2022 to include Uniper segment as discontinued operations. As required by IFRS, comparatives for 2021 were restated. Consolidated balance sheet at 31 December 2021 included Uniper. For further information, see **Note 1** Significant accounting policies, **Note 2** Critical accounting estimates and judgements and **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

Consolidated income statement

EUR million	Note	2022	2021
Sales	6	8,804	6,422
Other income	8	101	91
Materials and services	9	-5,350	-3,419
Employee benefits	10	-504	-496
Depreciation and amortisation	6, 16, 17	-566	-587
Other expenses	8	-615	-582
Comparable operating profit	6	**1,871**	**1,429**
Items affecting comparability	6, 7	-593	2,897
Operating profit	6	**1,277**	**4,325**
Share of profit of associates and joint ventures	6, 18	-629	168
Interest expense		-179	-154
Interest income		87	25
Other financial items - net		-101	-32
Finance costs - net	11	-193	-161
Profit before income tax		**455**	**4,332**
Income tax expense	12	556	-325
Net profit for the year from continuing operations		**1,011**	**4,008**
Attributable to:			
Owners of the parent		1,011	3,985
Non-controlling interests		0	23
Net profit for the year from discontinued operations	3	**-11,302**	**-4,121**
Attributable to:			
Owners of the parent		-3,428	-3,246
Non-controlling interests		-7,874	-875
Net profit for the year, total Fortum		**-10,290**	**-114**
Attributable to:			
Owners of the parent		-2,416	739
Non-controlling interests		-7,874	-852
Earnings per share for profit attributable to the equity owners of the company (EUR per share)	13		
Basic, continuing operations		1.14	4.49
Basic, discontinued operations		-3.86	-3.65
Basic, total Fortum		-2.72	0.83

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

EUR million	Note	2022	2021
Comparable operating profit		**1,871**	**1,429**
Impairment charges and reversals		-905	-35
Capital gains and other related items		785	2,673
Changes in fair values of derivatives hedging future cash flow		-393	264
Other		-80	-6
Items affecting comparability	6, 7	-593	2,897
Operating profit		**1,277**	**4,325**

See **Definitions and reconciliations of key figures**

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Consolidated statement of comprehensive income

EUR million	Note	2022	2021
Net profit for the year, total Fortum		**-10,290**	**-114**
Other comprehensive income			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedges			
Fair value gains/losses		-2,594	-1,231
Transfers to income statement		1,102	119
Transfers to inventory/property, plant and equipment		1	1
Deferred taxes		292	223
Net investment hedges			
Fair value gains/losses		37	-5
Deferred taxes		-7	1
Exchange differences on translating foreign operations	4.3	-82	97
Share of other comprehensive income of associates and joint ventures	18	41	8
Other changes		-	-13
		-1,209	**-799**
Items that will not be reclassified to profit or loss in subsequent periods:			
Remeasurement of investments		-15	-7
Actuarial gains/losses on defined benefit plans	31	50	22
Actuarial gains/losses on defined benefit plans in associates and joint ventures		7	30
		42	**45**
Other comprehensive income/expense for the period from continuing operations, net of deferred taxes		**-1,168**	**-754**
Other comprehensive income/expense for the period from discontinued operations, net of deferred taxes		701	357
Total comprehensive income/expense for the period		**-10,757**	**-510**
Total comprehensive income/expense for total Fortum attributable to:			
Owners of the parent		-3,337	185
Non-controlling interests		-7,420	-695
		-10,757	**-510**

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 are 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 commodity sales price for future transactions, where hedge accounting is applied. When commodity market price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Exchange differences on translating foreign operations include translation differences from translation of foreign entities, mainly SEK and RUB.

Consolidated balance sheet

EUR million	Note	31 Dec 2022	31 Dec 2021
ASSETS			
Non-current assets			
Intangible assets	16	657	2,167
Property, plant and equipment and right-of-use assets	17	7,266	19,049
Participations in associates and joint ventures	18	1,249	2,461
Shares in Nuclear Waste Funds	29	966	3,515
Other non-current assets	20	628	570
Deferred tax assets	28	933	2,149
Derivative financial instruments	14, 15	343	17,096
Long-term interest-bearing receivables	21	624	2,392
Total non-current assets		**12,668**	**49,399**
Current assets			
Inventories	22	465	2,275
Derivative financial instruments	14, 15	1,486	65,392
Short-term interest-bearing receivables	21	660	715
Income tax receivables	28	71	161
Margin receivables	27	2,607	9,163
Trade and other receivables	23	1,767	14,856
Liquid funds	24	3,919	7,592
Total current assets		**10,975**	**100,155**
Assets held for sale	3	-	108
Total assets		**23,642**	**149,661**

EUR million	Note	31 Dec 2022	31 Dec 2021
EQUITY			
Equity attributable to owners of the parent			
Share capital	25	3,046	3,046
Share premium		73	73
Retained earnings		6,467	10,062
Other equity components		-1,916	-1,050
Total		**7,670**	**12,131**
Non-controlling interests	26	67	1,534
Total equity		**7,737**	**13,665**
LIABILITIES			
Non-current liabilities			
Interest-bearing liabilities	27	3,658	8,701
Derivative financial instruments	14, 15	756	16,657
Deferred tax liabilities	28	152	827
Nuclear provisions	29	966	3,891
Other provisions	30	118	4,108
Pension obligations, net	31	13	1,190
Other non-current liabilities	32	121	397
Total non-current liabilities		**5,784**	**35,771**
Current liabilities			
Interest-bearing liabilities	27	4,127	8,519
Derivative financial instruments	14, 15	3,973	71,947
Other provisions	30	13	2,299
Margin liabilities	27	352	985
Trade and other payables	33	1,657	16,477
Total current liabilities		**10,122**	**100,226**
Total liabilities		**15,905**	**135,997**
Total equity and liabilities		**23,642**	**149,661**

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 2022		**3,046**	**73**	**12,830**	**-2,768**	**-1,138**	**34**	**54**	**12,131**	**1,534**	**13,665**
IS Net profit for the year, total Fortum				-2,416					-2,416	-7,874	-10,290
Translation differences					-112	40	1	-5	-75	-6	-82
Other comprehensive income				209		-1,189	-146	45	-1,082	-4	-1,086
OCI related to discontinued operations					-152	105	284	-1	236	465	701
Total comprehensive income for the year				-2,208	-264	-1,044	139	39	-3,337	-7,420	-10,757
Cash dividend	13			-1,013					-1,013	-23	-1,036
Disposal of subsidiary companies				16					16	6,104	6,119
Transactions with non-controlling interests				-127					-127	-122	-249
Other				1					1	-6	-5
BS Total equity 31 December 2022		**3,046**	**73**	**9,499**	**-3,031**	**-2,182**	**172**	**93**	**7,670**	**67**	**7,737**
Total equity 1 January 2021		**3,046**	**73**	**13,097**	**-2,948**	**-158**	**-175**	**18**	**12,953**	**2,624**	**15,577**
IS Net profit for the year, total Fortum				739					739	-852	-114
Translation differences					77	2	2		81	16	97
Other comprehensive income						-887	11	38	-838	-13	-851
OCI related to discontinued operations					103	-94	196	-1	204	154	357
Total comprehensive income for the year				739	180	-980	209	37	185	-695	-510
Cash dividend	13			-995					-995	-171	-1,166
Transactions with non-controlling interests				-15					-15	-221	-236
Other				3					3	-3	0
BS Total equity 31 December 2021		**3,046**	**73**	**12,830**	**-2,768**	**-1,138**	**34**	**54**	**12,131**	**1,534**	**13,665**

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 SEK and RUB) 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.

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 commodity derivatives, such as futures and forwards, hedging commodity sales price of future transactions, where hedge accounting is applied. When commodity market price is higher (lower) than the hedging price, the impact on equity is negative (positive).

Cash dividends

A dividend for 2021 of EUR 1.14 per share, amounting to a total of EUR 1,013 million, was decided in the Annual General Meeting on 28 March 2022. The dividend was paid on 6 April 2022. See **Note 13** Earnings and dividend per share.

Share capital

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. The total amount of shares outstanding in the company after the registration of the new shares is 897,264,465. As a consequence, the shares under the control of the State of Finland has increased from 50.76% to 51.26%.

fortum

FINANCIALS 2022

Consolidated cash flow statement

EUR million	Note	2022	2021
Cash flow from operating activities			
IS **Net profit from continuing operations**		**1,011**	**4,008**
Adjustments:			
Income tax expense		-556	325
Finance costs - net		193	161
Share of profit/loss of associates and joint ventures		629	-168
Depreciation and amortisation		566	587
Operating profit before depreciations (EBITDA)		**1,842**	**4,913**
Items affecting comparability		593	-2,897
Comparable EBITDA		**2,436**	**2,016**
Non-cash and other items		153	-74
Interest received		84	25
Interest paid		-201	-147
Dividends received		18	72
Income taxes paid		-167	-279
Funds from operations		**2,322**	**1,613**
Change in working capital		-219	-494
Net cash from operating activities, continuing operations		**2,104**	**1,119**
Cash flow from investing activities, continuing operations			
Capital expenditures	16, 17	-534	-470
Acquisitions of shares [1]	3	-35	-282
Proceeds from sales of property, plant and equipment		4	2
Divestments of shares and capital returns		1,156	3,816
Shareholder loans to associated companies and joint ventures		50	-33
Change in margin receivables		-1,311	-1,000
Change in other interest-bearing receivables and other [2]		2,134	-2,545
Net cash from/used in investing activities, continuing operations		**1,464**	**-512**

EUR million	Note	2022	2021
Cash flow before financing activities, continuing operations		**3,568**	**608**
Cash flow from financing activities, continuing operations			
Proceeds from long-term liabilities		2,421	2,809
Payments of long-term liabilities		-5,888	-2,153
Change in short-term liabilities		-170	1,844
Dividends paid to the owners of the parent	13	-1,013	-995
Dividends paid to non-controlling interests		-19	-14
Change in margin liabilities		150	63
Other financing items		-168	50
Net cash from/used in financing activities, continuing operations		**-4,686**	**1,603**
Net increase(+)/decrease(-) in liquid funds, continuing operations		**-1,119**	**2,211**
Cash flow from discontinued operations			
Net cash from/used in operating activities, discontinued operations		-10,870	3,851
Net cash from/used in investing activities, discontinued operations [3]		-2,450	-5,215
Net cash from/used in financing activities, discontinued operations		10,757	4,409
Net increase(+)/decrease(-) in liquid funds, discontinued operations		**-2,563**	**3,045**
Cash flow, total Fortum			
Total net cash from/used in operating activities		-8,767	4,970
Total net cash from/used in investing activities		-985	-5,727
Total net cash from/used in financing activities		6,070	6,013
Net increase(+)/decrease(-) in liquid, total Fortum		**-3,682**	**5,256**
Liquid funds 1 January		**7,592**	**2,308**
Foreign exchange differences and expected credit loss allowance in liquid funds		7	29
Liquid funds 31 December	23	**3,919**	**7,592**

1) In 2022, acquisition of additional shares in Uniper are presented in cash flow from financing activities to better reflect the requirements of IAS 7 Statement of cash flows. In 2021 acquisition of additional shares in Uniper were presented in cash flow from investing activities. Comparatives have not been restated.
2) In 2021 Fortum granted Uniper a shareholder loan of EUR 4,000 million of which EUR 2,500 million was drawn in 2021 and EUR 1,500 million in 2022. In December 2022, as part of the closing of the Uniper transaction, the EUR 4,000 million shareholder loan was fully repaid to Fortum.
3) The consideration received for the Uniper shares, EUR 498 million, is presented in cash flow from discontinued operations in 2022.

Change in financial net debt

EUR million	Note	Continuing operations 1) 2022	Fortum total 2) 2021
Financial net debt 1 January		**789**	**7,023**
Uniper's net financial position in Uniper's Annual report		1,969	-
Internal shareholder loans to Uniper and OKG		2,764	-
Reversal of purchase price allocation		-187	-
Uniper impact total on Financial net debt, 1 January		4,546	-
Net cash flow:			
Comparable EBITDA		2,436	3,817
Non-cash and other items		153	1,506
Paid net financial costs and dividends received		-99	-3
Income taxes paid		-167	-493
Change in working capital		-219	144
Capital expenditures		-534	-1,178
Acquisitions		-35	-294
Divestments and proceeds from sale of property, plant and equipment		1,160	3,883
Change in interest-bearing receivables		2,183	-174
Dividends to the owners of the parent		-1,013	-995
Dividends to non-controlling interests		-19	-171
Other financing activities		-168	43
Net cash flow ('-' increase in financial net debt)		3,679	6,084
Consideration received for Uniper shares		498	-
Foreign exchange rate differences and other changes		-74	-150
Financial net debt 31 December	27	**1,084**	**789**

1) Items included in Net cash flow for 2022 are based on continuing operations.
2) Items included in Net cash flow for 2021 are based on continuing and discontinued operations (total) as the balance sheet has not been restated.

Additional cash flow information

Change in working capital

EUR million	2022	2021
Change in interest-free receivables, decrease(+)/increase(-)	-352	-633
Change in inventories, decrease(+)/increase(-)	-201	2
Change in interest-free liabilities, decrease(-)/increase(+)	335	137
CF **Total**	**-219**	**-494**

Capital expenditure in cash flow

EUR million	Note	2022	2021
Capital expenditure	16, 17	525	443
Change in not yet paid investments, decrease(+)/increase(-)		14	30
Capitalised borrowing costs		-5	-3
CF **Total**		**534**	**470**

Acquisition of shares in cash flow

Acquisition of shares, net of cash acquired, amounted to EUR 35 million during 2022 (2021: 282). For further information see **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations. From 2022, acquisition of additional shares in Uniper are presented in cash flow from financing activities to better reflect the requirements of IAS 7 Statement of cash flows. In 2021 acquisition of additional shares in Uniper were presented in cash flow from investing activities. Comparatives have not been restated.

Divestment of shares in cash flow

EUR million	Note	2022	2021
Proceeds from sales of subsidiaries, net of cash disposed	3	1,070	915
Proceeds from sales and capital returns of associates and joint ventures	3, 18	86	2,901
CF **Total**		**1,156**	**3,816**

During 2022 Fortum completed the divestment of the e-mobility business Plugsurfing, the 30% stake in the public charging operator Recharge AS and the 50% ownership in the district heating company Fortum Oslo Varme AS in Norway. During 2021, Fortum completed the divestment of the 50% stake in the Swedish district heating and cooling company Stockholm Exergi, the district heating business in the Baltics, the Pavagada II and the Rajasthan solar power plants in India, the 80% stake in the Sørfjord wind park in Norway and eight small hydropower plants in Sweden. For further information, see **Note 3** Acquisitions and disposals, assets held for sale and discontinued operations.

On 21 December 2022 Fortum completed the divestment of Uniper. The consideration of the share transaction of EUR 498 million is presented in the cash flow from discontinued operations.

Notes to the consolidated financial statements

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 an energy company driving the change for a cleaner world. Our role is to ensure the security of supply and a fast and reliable transition to a carbon-neutral economy by providing customers and societies with clean energy and sustainable solutions. Fortum's core operation are located in the Nordics and consist of CO_2-free power generation, electricity sales, district heating as well as recycling and waste solutions.

These financial statements were approved by the Board of Directors on 1 March 2023. 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 2022 have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRIC Interpretations as adopted by the European Union. The notes to the consolidated financial statements also comply with the supplementing requirements of the Finnish accounting and company 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).

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

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

Fortum's consolidated income statement was modified in 2022 to include discontinued operations disclosure as required by IFRS 5 Non-current assets held for sale and discontinued operations. See **Note 1.7** Impact of Uniper deconsolidation on consolidated financial statements.

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, assets held for sale and discontinued operations.

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 40** 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 26** 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.

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.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced the following new APMs: 'Comparable EBITDA from continuing operations excl. Russia', 'Comparable operating profit from continuing operations excl. Russia', 'Comparable net profit from continuing operations excl. Russia', 'Comparable earnings per share from continuing operations excl. Russia', and 'Financial net debt/comparable EBITDA excl. Russia' to provide additional financial performance indicators to support meaningful comparison of financials for Fortum's strategic businesses.

See **Note 7** Comparable operating profit and comparable net profit. Definitions are presented in the section **Definitions and reconciliations of key figures.**

Fortum's long-term financial target for capital structure until 31 December 2022 was 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. The European Central Bank stopped publishing rouble (RUB) rates from 2 March 2022. From 2 March 2022, the daily spot rate at 17:15 EET from the market has been used.

Key exchange rates used in consolidated financial statements

	Average rate		Balance sheet date rate	
	2022	2021	31 Dec 2022	31 Dec 2021
United Kingdom (GBP)	0.8528	0.8596	0.8869	0.8403
Norway (NOK)	10.1026	10.1633	10.5138	9.9888
Poland (PLN)	4.6861	4.5652	4.6808	4.5969
Russia (RUB)	73.6173	87.1527	77.8998	85.3004
Sweden (SEK)	10.6296	10.1465	11.1218	10.2503
United States (USD)	1.0530	1.1827	1.0666	1.1326

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 40

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, assets held for sale and discontinued operations	IFRS 3, IFRS 10
Assets held for sale	3. Acquisitions, disposals, assets held for sale and discontinued operations	IFRS 5
Discontinued operations	3. Acquisitions, disposals, assets held for sale and discontinued operations	IFRS 5
Financial instruments	4. Financial risk management 14. Financial assets and liabilities by categories 15. 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. Segment reporting 23. 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
Government grants	8. Other income and other expenses	IAS 20
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. Financial assets and liabilities by categories 20. 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
Tangible assets	17. Property, plant and equipment and Right-of-use Assets	IAS 16
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
Impairment testing	19. Impairment testing	IAS 36
Inventories	22. Inventories	IAS 2
Trade receivables	23. Trade and other receivables	IFRS 9
Liquid funds	24. Liquid funds	IAS 7
Borrowings	27. Interest-bearing liabilities	IFRS 9
Income taxes	28. Income taxes on the balance sheet	IAS 12
Decommissioning obligation	29. Nuclear related assets and liabilities	IFRIC 5
Provisions	30. Other provisions	IAS 37
Pensions and similar obligations	31. Pension obligations	IAS 19
Leases	34. Leases	IFRS 16
Contingent liabilities	36. Pledged assets and contingent liabilities	IAS 37
Events after the balance sheet date	39. Events after the balance sheet date	IAS 1

1.7 Impact of Uniper deconsolidation on consolidated financial statements

Uniper SE, a German listed company, was acquired in March 2020. Uniper is an 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.

1.7.1 Discontinued operations

Fortum lost control of Uniper on the signing of the agreement in principle to sell the shares in Uniper SE to the German State on 21 September 2022. Thus, Uniper was deconsolidated at 30 September 2022. Uniper has been a separate reportable segment in Fortum's consolidated financial statements, which results in Uniper being classified as discontinued operations. The transaction was completed on 21 December 2022. See also **Note 2** Critical accounting estimates and judgements.

Fortum's consolidated income statement consolidated cash flow statement were modified in 2022 to include discontinued operations disclosure as required by IFRS 5 Non-current assets held for sale and discontinued operations. Comparatives for 2021 were restated and a separate stock exchange release with restated comparatives was issued on 6 October 2022. Discontinued operations include Fortum's former subsidiary Uniper SE and its consolidated group companies.

Income statement information in the following notes to the financial statements include only continuing operations, unless otherwise specified. Uniper was deconsolidated at 30 September 2022, and thus Uniper's balance sheet items are not included on Fortum's 31 December 2022 consolidated balance sheet. Consolidated balance sheet at 31 December 2021 included Uniper.

1.7.2 Joint ownership in the Swedish nuclear company OKG AB

Fortum and Uniper are co-owners in the Swedish nuclear company OKG Aktiebolag (OKG AB), with Fortum owning 45.5%. Fortum accounted for the shareholding in OKG AB as a subsidiary from 31 March 2020 to 30 September 2022, with the results of the company being split between the Uniper segment and the Generation segment according to ownership. On deconsolidation of Uniper at 30 September 2022, OKG AB was reclassified as an associated company. The reclassification resulted in the restatement of the Generation segment's 2021 financials.

1.7.3 Group impact from Uniper deconsolidation

On deconsolidation of Uniper at 30 September 2022, Fortum recorded EUR 28.0 billion one-time, mainly non-cash positive effect. The amount consists of the net effect from the deconsolidation of Uniper's assets, liabilities and non-controlling interest, and the book value of Uniper-related goodwill and other fair value adjustments made on acquisition; as well as certain items previously recognised in other comprehensive income, mainly foreign exchange differences, that are reclassified to profit and loss on disposal. See also **Note 3.4** Discontinued operations.

1.8 New accounting standards, amendments and interpretations

New accounting standards, amendments and interpretations effective from 1 January 2022 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 2023, 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 based on, for instance, the analysis of energy policy and the regulatory environment. The Russia-Ukraine war has fundamentally changed the geopolitical situation; and given the uncertainty and risks arising from the geopolitical situation, there may be future effects on the consolidated financial statements arising from more volatile global economy and especially commodity markets. These factors can affect the carrying amounts of assets and liabilities, the amount and timing of earnings recognition, as well as cash flows.

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 determining the valuation of certain financial instruments	14. Financial assets and liabilities by categories 15. Financial assets and liabilities by fair value hierarchy
Assumptions used when determining loss of control on disposal of subsidiaries	2. Critical accounting estimates and judgments 3. Acquisitions, disposals, assets held for sale and discontinued operations
Assigned values and useful lives determined for intangible assets and property, plant and equipment acquired in a business combination	16. Intangible assets 17. 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. Intangible assets 17. Property, plant and equipment and right-of-use assets 18. Participations in associated companies and joint ventures 19. Impairment testing
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	28. Income taxes on the balance sheet 37. Legal actions and official proceedings
Assumptions made to determine long-term cash flow forecasts of estimated costs for provision related to nuclear production	29. Nuclear related assets and liabilities
Assumptions made when estimating provisions	30. Other provisions
Assumptions used to determine future pension obligations	31. Pension obligations
Assumptions used to determine the lease liability	34. Leases

2.1 Russia's invasion of Ukraine and macroeconomic environment

Russia's attack on Ukraine in February 2022 has severely impacted Fortum's current and future businesses. The main impacts on Fortum's 2022 financials include the events that led to the divestment of Uniper to the German State for EUR 0.5 billion; the severe liquidity constraints caused by significantly higher collaterals related to power and gas on the commodities exchanges, which required additional financing measures; as well as the overall impact of the war on Fortum's Russian operations.

2.1.1 Uniper divestment to the German State

Following the war in Ukraine, particularly the Uniper segment's business and financial risk profiles significantly deteriorated in 2022, mainly due to Russian gas curtailments and commodity price volatility, which significantly increased margining requirements and liquidity needs. In July 2022, Fortum and Uniper reached out to the German Government to agree on a long-term solution for Uniper.

On 21 September 2022, Fortum, the German Government and Uniper signed an agreement in principle allowing the German State to take full control of Uniper. This final Uniper agreement in principle replaced the initial agreement between the same parties, signed in July 2022. After July, the European energy crisis escalated further and the severity of the situation made it apparent that the previously agreed stabilisation measures were insufficient and difficult to implement. By 21 September 2022, Uniper had accumulated significant negative earnings amounting to billions of euros in gas-related losses, and it had become evident that the company, as privately-owned, was not able to fulfil its role as a critical energy provider of security of supply in Germany.

The transaction was completed on 21 December 2022. Under the agreement, Uniper issued new ordinary registered shares, which the German State subscribed at a nominal value of EUR 1.70 per share. At completion of the equity capital increase, the German State bought all of Fortum's approximately 293 million shares in Uniper SE for EUR 1.70 per share, i.e. for a total of EUR 0.5 billion; and Uniper repaid the EUR 4 billion shareholder loan. Out of the EUR 4.0 billion parent company guarantee facility that Fortum had granted to Uniper, a total of EUR 3.0 billion was released by year-end 2022. The remaining, approximately EUR 1.0 billion, with a full German State back-to-back guarantee (indemnity), will be released latest at the end of June 2023.

The signing of the agreement in principle with the German Government on 21 September 2022 triggered a control assessment as required by IFRS 10 Consolidated financial statements. Management concluded that Fortum's rights are no longer substantive as it does not have practical ability to use control over Uniper. The loss of control was impacted by the signing of the agreement in principle and the significant financial support to Uniper through the KfW Bank's bridge financing. In the judgement of the management, the overall effect of that financing, combined with the agreement in principle, was such that the German Government was in practice subsequently able to approve or reject the most important decisions in relation to the business of Uniper. Consequently, control was assessed to have been lost and Uniper was deconsolidated at 30 September 2022. In addition, Uniper was presented as discontinued operations in accordance with IFRS 5 Non-current assets held for sale and discontinued operations as management was committed to fully disposing of Uniper SE's shares, and Uniper had been a separate reportable segment and a significant component of Fortum Group. See also **Note 1** Significant accounting policies.

Deferred tax assets at 31 December 2022 include EUR 706 million recognised in 2022 relating to a one-time tax impact realised in Ireland, which resulted in increased deferred tax assets on tax loss carry forward. The deferred tax asset mainly relates to impacts caused by the Uniper divestment, and the utilisation is subject to future taxable income in Ireland. See **Note 28** Income taxes on the balance sheet.

2.1.2 Liquidity

The energy crisis in Europe has resulted in the very volatile commodity markets with unprecedentedly high prices that have required significantly higher collaterals related to power and gas on the commodities exchanges. In the latter part of 2022, the Nordic power prices declined from the record levels at the end of August and the market was less volatile. However, Fortum remained prepared for continued market turbulence, and has taken precautionary financing measures to secure its liquidity position and financial flexibility. On 6 September 2022 Fortum signed a EUR 2,350 million bridge financing with Finnish State-owned company, Solidium. According to loan terms, in order to keep the facility effective for the one year period, on 26 September 2022, Fortum announced to draw EUR 350 million under this facility. On 21 December 2022, Uniper repaid its EUR 4 billion shareholder loan and Fortum received the sales proceeds of EUR 0.5 billion from the divestment of Uniper shares. At the end of the year, Fortum's financial situation was solid, Fortum Group had undrawn committed credit facilities amounting to EUR 7,200 million, as well as EUR 100 million committed overdraft limits that are valid until further notice. See also **Note 27** Interest-bearing liabilities.

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2.1.3 Geopolitical uncertainties and impacts on Russian operations

Due to the sanctions imposed by the Russian Federation, Fortum's Russian subsidiaries are subject to foreign exchange transfer restrictions, which currently limit the transfer of funds, such as potential dividend distributions, into the EU. The sanctions currently do not, however, restrict Fortum from exercising its voting rights at the general meetings of the Russian subsidiaries. Hence, Fortum's Russian subsidiaries continue to be consolidated as subsidiaries at 31 December 2022. However, the cash and cash equivalents held by Fortum's Russia segment in Russia, a total of EUR 247 million, are not available to the other group companies.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, however there are no decisions and these processes might take some time and are subject to regulatory approvals. See also Risk management section in the Operating and financial review.

Total impairment charges in 2022 for the Russia cash-generating unit (CGU) amount to EUR 1,697 million (pre-tax), including EUR 905 million impairment of intangible assets and property, plant and equipment, EUR 475 million impairment of participations in associates and joint ventures, EUR 145 million expected credit losses on Russian deposits and receivables, as well as EUR 171 million write down of other shares. The remaining book value of Russia segment's net assets is approximately EUR 1.7 billion at 31 December 2022 (31 Dec 2021: 2.5). The book value is based on the assumption that the controlled exit can be executed, and that other assumptions made by management realise as expected. The carrying amount of the Russia CGU is equal to its recoverable amount, meaning that any detrimental future changes may cause further impairment. See **Note 19** Impairment testing.

2.2 Climate-related matters

Fortum's power generation in the Nordic countries is mainly based on CO_2-free hydro and nuclear power. A minor share of Fortum's power generation is currently based on solar and wind. Fortum has also generation of district heating and cooling in Finland and Poland. In Europe, heat is mainly produced at energy-efficient combined heat and power (CHP) plants. In addition, Fortum offers industrial and infrastructure solutions, e.g., waste-to-energy, as well as energy sales. In Russia, Fortum has mainly natural gas-fired generation.

Main climate-related risks facing Fortum include transition risks, such as changes in legislation, changes in technology, impact on supply or demand, and reputation; as well as physical risks, such as those arising from extreme weather conditions or changes in long-term weather patterns. For instance, floods will impact the optimal operation of hydro power plants. Fortum is systematically reducing risks related to dam safety through long-term investments to secure the discharge capacity in extreme flood situations.

The impacts of climate change are reflected in the consolidated financial statements generally when specific actions, such as new investments, to transition to CO_2-free production or to tackle climate change have been approved; or when climate-related risks have materialised. The impact from climate-related risks to 2022 financial statements has not been material.

The following financial statement items are most relevant when considering the impact of climate-related matters:

- Impairment testing: approved actions towards Fortum's climate risks and targets are reflected in the assumptions used in the impairment testing, as appropriate. See **Note 19** Impairment testing.
- Property, plant and equipment: economic lives and book values of property, plant and equipment reflect approved actions towards Fortum's climate-related risks and targets. See **Note 17** Property, plant and equipment.
- Nuclear provisions include future costs for decommissioning nuclear power plants, and the appropriate treatment of spent fuel. See **Note 29** Nuclear-related assets and liabilities.

For accounting treatment applied to emission allowances, see **Note 22** Inventories.
Fortum's new climate-related targets are disclosed in **Note 39** Events after the balance sheet date.

3 Acquisitions, disposals, assets held for sale and discontinued operations

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 assets transferred and liabilities assumed. 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.

DISCONTINUED OPERATIONS

A discontinued operation is a component of the Group that has been disposed of or is classified as held for sale, and that represents a separate major line of business or geographical area of operations or is part of a single co-ordinated plan to dispose of such a line of business or area of operations. The results of discontinued operations are presented separately in the consolidated income statement.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS: ASSUMPTIONS REGARDING LOSS OF CONTROL

Fortum reassesses if it controls its subsidiaries if facts and circumstances indicate that there are changes to the three elements of control: power over the investee, exposure or rights to variable returns, or the ability to use power over to affect the amount of returns. Therefore, the date on which control over a subsidiary is lost may require management judgment. With regards to Uniper deconsolidation, management has used judgment in concluding that the signing of the agreement with the German Government on 21 September 2022 resulted in loss of control. See also **Note 2** Critical accounting estimates and judgements.

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3.1 Acquisitions

EUR million	2022	2021
Gross investments in shares in subsidiary companies	0	210
Gross investments in shares in associated companies and joint ventures	14	39
Gross investments in other shares	19	31
Total	**33**	**281**

Gross investments in shares during 2022 were EUR 33 million (2021: 281). Acquisition of subsidiary shares in 2021 mainly relate to the acquisition of Uniper shares. From 2022, acquisition of additional shares in Uniper are not included in gross investments in shares. This reflects the change in presentation in the cash flow where the acquisition of additional shares in 2022 are presented in cash flow from financing activities to better reflect the requirements of IAS 7 Statement of cash flows. Until 2021 acquisition of additional shares in Uniper were presented in cash flow from investing activities. Comparatives have not been restated.

3.2 Disposals

EUR million	2022	2021
Gross divestments of shares in subsidiary companies	1,279	1,136
Gross divestments of shares in associated companies and joint ventures	86	2,898
Total	**1,365**	**4,034**

3.2.1 Disposals of subsidiary companies

Disposals during 2022

On 21 September 2022, Fortum, the German Government and Uniper signed an agreement in principle allowing the German State to take full control of Uniper and Uniper was deconsolidated. On 21 December 2022, the transaction was completed and Fortum received the total consideration of the share transaction of EUR 498 million and Uniper repaid the EUR 4 billion shareholder loan. The consideration received for the shares is presented in the cash flow from discontinued operations. See also **Note 1** Significant accounting policies, **Note 2** Critical accounting estimates and judgements and **Note 3.4** Discontinued operations.

On 1 September 2022, Fortum announced that it had concluded the sale of its e-mobility business Plugsurfing to Fleetcor Technologies, Inc., a leading global business payments company. The transaction price was approximately EUR 75 million on a cash and debt free basis and Fortum recorded a tax-exempt capital gain of EUR 61 million in the Other Operations' 2022 results.

On 19 May 2022, Fortum announced that it had concluded the sale of its 50% ownership in the district heating company Fortum Oslo Varme AS in Norway to a consortium of institutional investors of Hafslund Eco, Infranode and HitecVision. The total consideration of the sale amounted to approximately EUR 1 billion on a cash- and debt-free basis; and as part of the transaction, Fortum deconsolidated a related EUR 210 million shareholder loan from the City of Oslo. Fortum recorded a tax-exempt capital gain of EUR 638 million in the City Solutions segment's 2022 results.

In May 2022, the second phase of the Rajasthan divestment was concluded and a tax-exempt sales gain of EUR 5 million was recorded in comparable operating profit in City Solutions segment's 2022 results.

Disposals during 2021

On 22 June 2021, Fortum announced that it had signed an agreement to divest the 250-MW Pavagada II and the 250-MW Rajasthan solar power plants in India to Actis. The total consideration from the divestment on a debt and cash-free basis, including the effect of deconsolidating of the net debt amounted to approximately EUR 280 million. The sale of Pavagada II was concluded in October 2021 and the first phase of Rajasthan divestment in November 2021. Fortum recorded a tax-exempt sales gain of EUR 11 million in the 2021 comparable operating profit of the City Solutions segment.

On 12 March 2021, Fortum announced that it had signed an agreement to sell its district heating business in the Baltics to Partners Group. On 2 July 2021, Fortum concluded the sale. The total consideration of the sale amounted to approximately EUR 710 million. Fortum recorded a tax-exempt capital gain of EUR 254 million in the City Solutions segment's 2021 results.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF, which had a positive effect of EUR 17 million in the 2021 comparable operating profit of the Russia segment.

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.

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.

Divestments of shares in subsidiaries - Impact on financial position

The table below does not include the impact of deconsolidation of Uniper, which is presented separately in **Note 3.4.3** Deconsolidation effect.

EUR million	2022	2021
Gross divestments of shares in subsidiary companies	1,279	1,136
Intangible assets and property, plant and equipment	797	786
Other non-current and current assets	592	75
Liquid funds	44	42
Interest-bearing loans	-206	-211
Other liabilities and provisions	-816	-29
Net assets divested	**411**	**662**
Reclassified to participations in associates and joint ventures	-	37
Result from transaction	**702**	**350**

3.2.2 Other disposals

On 18 August 2022, Fortum concluded the sale of its 30% ownership in Recharge AS, a public charging point operator for electric vehicles, to Infracapital, the infrastructure equity investment arm of M&G Plc. The transaction price was approximately EUR 85 million. Fortum recorded a tax-exempt capital gain of EUR 77 million in Other Operations' 2022 results.

On 20 September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB (publ) to a consortium of European institutional investors of APG, Alecta, PGGM, Keva, and AXA. The signing of the transaction was announced on 30 June 2021. The total consideration of the sale amounted to SEK 29.5 billion (approximately EUR 2.9

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billion). Fortum recorded a tax-exempt capital gain of EUR 2,350 million in the City Solutions segment's 2021 results.

3.3 Assets held for sale

Assets held for sale at 31 December 2021 included EUR 108 million of Uniper SE's assets held for sale relating to an equity investment in Javelin, UK and the Öresundverket power plant in Malmö, Sweden.

3.4 Discontinued operations

Uniper segment has been classified as discontinued operations in 2022. See also **Note 1** Significant accounting policies and **Note 2** Critical accounting estimates and judgments. Financial performance and cash flow information for the discontinued operations is presented until 30 September 2022. The transaction was completed on 21 December 2022, and the consideration received for the shares of EUR 498 million is presented in cash flow from discontinued operations in 2022.

3.4.1 Financial performance

The result from discontinued operations is disclosed on one line on the face of the consolidated income statement. The following table presents breakdown of income statement information for discontinued operations. The effects of eliminations from internal sales and purchases have been included in the discontinued operations. The net financial costs are based on the historical financial costs in the separate companies.

EUR million	2022	2021
Sales	128,102	106,127
Other income	22,508	12,289
Materials and services	-132,287	-101,889
Employee benefits	-709	-1,065
Depreciation and amortisation	-573	-694
Other expenses	-21,788	-13,661
Comparable operating profit	**-4,747**	**1,107**
Deconsolidation effect	27,966	-
Items affecting comparability	-39,621	-6,021
Operating profit	**-16,402**	**-4,913**
Share of profit/loss of associates and joint ventures	71	23
Finance costs - net	-1,052	269
Profit before income tax	**-17,383**	**-4,621**
Income tax expense	6,081	500
Net profit from discontinued operations	**-11,302**	**-4,121**
Attributable to:		
Owners of the parent	-3,428	-3,246
Non-controlling interests 1)	-7,874	-875
Earnings per share, discontinued operations, EUR	-3.86	-3.65
Comparable net profit from discontinued operations	-2,538	687
Comparable earnings per share, discontinued operations, EUR	-2.86	0.77

1) Non-controlling interest is not calculated on the Deconsolidation effect as the deconsolidation effect is calculated based on Fortum's share of Uniper's net assets.

3.4.2 Cash flow information

In the cash flow statement, the net cash flows attributable to the operating, investing and financing activities of the discontinued operations are disclosed separately. The consideration received for the shares of Uniper, EUR 498 million, is presented in net cash from/used in investing activities of the discontinued operations. Net cash from/used in investing activities in 2022 is presented net of liquid funds due to the deconsolidation of Uniper. Liquid funds of Uniper were EUR 2,248 million at 30 September 2022.

EUR million	2022	2021
Net cash from/used in operating activities	-10,870	3,851
Net cash from/used in investing activities	-2,450	-5,215
Net cash from/used in financing activities	10,757	4,409
Total net decrease/increase in liquid funds	**-2,563**	**3,045**

3.4.3 Deconsolidation effect

On deconsolidation of Uniper at 30 September 2022, Fortum recorded EUR 28.0 billion one-time, mainly non-cash positive effect that is included in 2022 in net profit from discontinued operations in the consolidated income statement. The amount consists of the net effect from the consideration received for the shares, EUR 498 million; Uniper's negative net assets divested resulting in a positive impact to the deconsolidation effect of EUR 26 658 million; as well as certain items previously recognised in other comprehensive income, EUR 810 million, mainly foreign exchange differences, that are reclassified to Income statement on disposal.

EUR million	30 Sep 2022
Intangible assets	1,224
Property, plant and equipment and right-of-use assets	9,638
Participations in associates and joint ventures	671
Derivative financial instruments, net	-18,017
Deferred taxes, net	7,595
Margin receivables, net	8,763
Interest-bearing receivables	860
Other non-current and current assets	21,070
Liquid funds	2,248
Non-controlling interests	6,237
Interest-bearing liabilities	-20,391
Provisions	-30,281
Pension obligations, net	-516
Nuclear provisions	-2,696
Other liabilities	-13,063
Net assets divested	**-26,658**
Consideration received for the shares	498
Items recycled to Income statement	810
Deconsolidation effect	**27,966**

Fortum's total pre-tax loss from the Uniper investment was slightly below EUR 6 billion which is the net effect from the investments in Uniper shares during 2018-2022 of approximately EUR 7.2 billion, the sales proceeds of EUR 0.5 billion received and dividends of approximately EUR 0.9 billion received during the Uniper ownership.

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4 Financial risk management

Fortum's risk management framework, objectives, organisation 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).

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, prices of emissions, and price and availability of fuels. Fortum hedges its exposure to commodity market risks in order to improve the predictability of the future result by reducing volatility in earnings while ensuring cash flow risk is at an acceptable level.

Risk management for commodity hedging 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. 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.

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.

These 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. 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 has derivatives.

Sensitivity according to IFRS 7

+/- 1 EUR/MWh change in electricity forward and futures quotations, EUR million	Effect	2022	2021
Effect on profit before income tax	-/+	2	1
Effect on equity	-/+	47	57

4.1.2. Electricity price and volume risk

The exposure to Nordic electricity prices and normal volume fluctuations (e.g. due to weather-driven demand and supply changes) is the largest commodity market risk exposure for Fortum in terms of impact to earnings. 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 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 in earnings while ensuring the cash flow risk is at an acceptable level, and to increase the predictability of future results. The Generation segment’s hedging strategies cover 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.

The 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 2022, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged for the calendar year 2023 with a price of 58 EUR/MWh and approximately 45% for the calendar year 2024 with a price of 42 EUR/MWh.

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 derivative contracts in the Russia segment.

4.1.3 Commodity derivatives

The table below discloses Fortum Group's commodity derivatives for which hedge accounting according to IFRS 9 is applied. 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.

Commodity derivatives subject to hedge accounting 2022

	Volume, TWh				Fair value, EUR million		
	Under 1 year	1–5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	18	27	1	47	1,376	4,302	-2,926
Netting against commodity exchanges [1]					-546	-546	-
Total	**18**	**27**	**1**	**47**	**830**	**3,756**	**-2,926**

1) Receivables and liabilities against commodity exchanges arising from standard derivative contracts with same delivery period are netted.

Commodity derivatives subject to hedge accounting 2021

	Volume, TWh				Fair value, EUR million		
	Under 1 year	1–5 years	Over 5 years	Total	Positive	Negative	Net
Electricity derivatives	25	31	1	57	349	1,648	-1,298
Gas derivatives	30	-	-	30	335	1,750	-1,415
Netting against commodity exchanges [1]					-215	-215	-
Total	**55**	**31**	**1**	**87**	**469**	**3,183**	**-2,713**

1) Receivables and liabilities against commodity exchanges arising from standard derivative contracts with same delivery period are netted.

Maturity analysis of commodity derivatives

Amounts in the table are fair values.

EUR million	2022 Under 1 year	2022 1-5 years	2022 Over 5 years	2022 Total	2021 Under 1 year	2021 1-5 years	2021 Over 5 years	2021 Total
Commodity derivatives, assets	1,370	194	30	**1,594**	65,165	16,965	44	**82,174**
Commodity derivatives, liabilities	3,919	601	35	**4,554**	71,839	16,495	126	**88,460**

Change in maturity analysis of commodity derivatives' total assets and total liabilities from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

4.2 Liquidity and refinancing risk

Fortum's business is exposed to liquidity and refinancing risks primarily through the need to finance the Group's business operations including margining and collaterals issued for hedging activities. Trading derivative financial instruments exposes the Group to a liquidity risk associated with having to provide financial collaterals like cash or bank guarantees. A downgrade in rating could trigger counterparties' right to demand additional collateral, which would need to be provided via cash or bank guarantees.

The derivative instruments used by the Group are traded via exchanges and over-the-counter with selected counterparties based on bilateral agreements. Trading through exchanges requires the exchange of cash to cover credit risks (margining payments). Since the second half of 2021, the very volatile commodity markets with unprecedently high prices have required significantly high net margining payments. During the third quarter 2022, as Nordic power prices followed the very high Continental European power and gas prices, Fortum's standalone (excl. Uniper) collateral requirements increased to a record-high level peaking at around EUR 5 billion. Fortum has arranged new financing to meet the demands, for further information see **Note 24** Liquid funds and **Note 27** Interest-bearing liabilities. Margin receivables from commodity hedging activities at balance sheet date were EUR 2,607 million (2021: 9,163) and margin liabilities EUR 352 million (2021: 985).

The exposure to margining requirements is continuously assessed and monitored so that adequate liquidity is available to cover expected future cash collateral required for margining.

Liquidity and refinancing risks are managed through a combination of cash positions and committed credit and other guarantee facility agreements with the core banks. The maturity profile of loans is monitored to ensure that there is at all times access to adequate liquidity for investments, loan maturities and margining required for commodity trading and hedging activities.

Fortum's business is capital intensive and it has a diversified loan portfolio. Long-term financing is primarily raised by issuing bonds under Fortum Corporation's Euro Medium Term Note programme (EMTN), 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.

On 31 December 2022, 89% (2021: 66%) of the Group's total external loans was raised by the parent company Fortum Corporation, and remaining 11% by other subsidiaries (2021: 29% by the Uniper segment and 5% by other subsidiaries).

At the end of 2022, financial net debt was EUR 1,084 million (2021: 789) and adjusted net debt EUR 1,117 million (2021: 3,227).

On 31 December 2022, loan maturities for the coming twelve-month period amounted to EUR 4,108 million (2021: 8,389) which include EUR 1,090 million maturing bonds, EUR 475 million commercial papers, EUR 1,100 million revolving credit facility (6+6 months extension options by Fortum), EUR 350 million Solidium bridge financing and EUR 500 million bilateral loan (8 months extension option by Fortum). Maturities in 2023 also include EUR 592 million loans with no contractual due date.

At the end of the reporting period, the Group's liquid funds totalled EUR 3,919 million (2021: 7,592). Liquid funds include EUR 247 million (2021: 300) relating to Fortum's Russian operations.

Maturity of loans

EUR million	2022
2023	4,108
2024	717
2025	7
2026	730
2027	17
2028 and later	2,087
Total	**7,666**

For more information on loans, see **Note 27** Interest-bearing liabilities.

Liquid funds, major credit lines and debt programmes 2022

EUR million			2022
Liquid funds			**3,919**
of which in Russia			247
Committed credit lines	**Total facility**	**Available amount**	**Drawn amount**
Fortum Corporation, EUR 5,500 million syndicated credit facility	5,500	4,400	1,100
Fortum Corporation, EUR 800 million bilateral credit facility	800	800	-
Fortum Corporation, EUR 2,350 million Finnish State bridge financing	2,350	2,000	350
Fortum Corporation, bilateral overdraft facilities	100	100	-
Total [1)]	**8,750**	**7,300**	**1,450**

1) Additionally, Fortum has uncommitted commercial paper programmes in Finland and Sweden and uncommitted EMTN programme. From the commercial paper programmes, EUR 475 million (2021: 3,129) was drawn, and from the EMTN programme EUR 2,690 million (2021: 3,698) bonds were outstanding at the end of the reporting period.

Liquid funds, major credit lines and debt programmes 2021

EUR million			2021
Liquid funds			
Fortum			4,626
Uniper segment			2,966
Total			**7,592**
of which in Russia			300
Committed credit lines	**Total facility**	**Available amount**	**Drawn amount**
Fortum Corporation, EUR 1,750 million syndicated credit facility	1,750	-	1,750
Fortum Corporation, EUR 800 million bilateral credit facility	800	300	500
Uniper, EUR 1,800 million syndicated credit facility	1,800	-	1,800
Fortum Corporation, bilateral overdraft facilities	100	100	-
Total	**4,450**	**400**	**4,050**

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Maturity analysis of interest-bearing loans and derivatives

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 derivatives on the balance sheet. Maturity analysis of commodity derivatives is disclosed separately in the Note 4.1.3 Commodity derivatives.

	2022				2021			
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	4,290	1,831	2,254	8,374	8,490	5,728	2,450	16,669
Interest rate and currency derivative liabilities	54	46	75	175	107	17	19	143
Interest rate and currency derivative receivables	-116	-28	-92	-235	-227	-87	-1	-315
Total	**4,228**	**1,849**	**2,237**	**8,314**	**8,371**	**5,659**	**2,468**	**16,498**

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.

Fortum manages the interest rate exposure through a duration target of the loan portfolio (excluding lease 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 2022, the duration of Fortum's loan portfolio (including derivatives) was 1.2 years (2021: 1.7). Approximately 77% (2021: 82%) 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 93 million (2021: 63). The increase of flow risk is mainly driven by increase of new loans, especially floating loans as a response to high collateral demand, and a significant increase in interest rate volatilities at the end of 2022 in several currencies.

The average interest rate for the total loan portfolio, including derivatives in finance costs, was 3.9% at the balance sheet date (2021: 1.3%). The average interest rate of EUR loans was 3.1% (2021: 0.6%).

Fortum uses interest rate derivatives and to large extend applies hedge accounting when hedging the loan portfolio of the Group. There is an ongoing reform of certain floating interest benchmark rates to alternative risk free rates (ARR) due to the IBOR (Interbank Offered Rates) transition. Since EURIBOR (Euro Interbank Offered Rate) is expected to continue as the benchmark rate, as it has been already fully reformed, all hedges are expected to continue to be 100% effective with no impact on finance costs – net. In addition to significant EURIBOR exposure, the Group has interest rate derivatives in SEK and sees that the IBOR transition will not have significant impact on the value and effectiveness of these derivatives. Fortum Group will continue to monitor the development of the IBOR transition.

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 income statement. An exception is Generation segment's hedging of power sales in Sweden where the currency component is not hedged. Derivatives are used to hedge existing foreign exchange risks, not for proprietary trading. As a result of sanctions against the Russian Federation followed by low liquidity in RUB and crossborder payment restrictions, hedging of RUB position was stopped during first part of 2022 and existing hedges were unwinded.

Fortum's transaction exposure

	2022			2021		
EUR million	Net Position	Hedge	Open	Net Position	Hedge	Open
RUB	869	-	869	744	-744	0
SEK	-669	679	10	-898	901	3
PLN	531	-529	2	499	-498	1
NOK	751	-745	5	748	-746	2
USD	-993	993	0	-36	37	1
Other	4	-	4	5	-2	3
Total	**492**	**398**	**890**	**1,062**	**-1,052**	**11**

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 are 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 operating profit. There was no significant ineffectiveness arising from cash flow hedges in 2022.

As of 31 December 2022, the one-day value-at-risk (VAR) with 99% confidence from loans, receivables and derivatives was EUR 28.8 million (2021: 2.4 excluding Uniper) in the income statement and EUR 3.2 million (2021: 1.4 excluding Uniper) in equity. Income statement sensitivity resulted mainly from cash flows in RUB, SEK and NOK, and equity sensitivity mainly from cash flows in CNY, 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 and Russia, 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 -75 million in 2022 (2021: 184). Part of this translation exposure has been hedged and the notional amount of foreign currency hedges were EUR 2,813 million in 2022 (2021: 263). The foreign currency hedge result amounted to EUR 41 million in 2022 (2021: -12). There was no significant ineffectiveness arising from net investment hedges in 2022.

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 40

Interest rate and currency derivatives by instrument 2022

EUR million	Notional amount Remaining lifetimes Under 1 year	1-5 years	Over 5 years	Total	Fair value Posi-tive	Nega-tive	Net
Hedge accounting							
Foreign exchange derivatives	3,056	108	-	3,163	25	3	22
Interest rate swaps	740	825	1,350	2,915	112	120	-9
Cross currency swaps	-	76	-	76	3	-	3
Non-hedge accounting							
Foreign exchange derivatives	8,445	36	-	8,481	93	51	42
Interest rate swaps	18	13	-	31	2	-	2
Cross currency swaps	-	24	-	24	1	-	1
Total	**12,259**	**1,081**	**1,350**	**14,690**	**235**	**175**	**61**
Of which long-term					119	121	-1
Short-term					116	54	62

Interest rate and currency derivatives by instrument 2021

EUR million	Notional amount Remaining lifetimes Under 1 year	1-5 years	Over 5 years	Total	Fair value Posi-tive	Nega-tive	Net
Hedge accounting							
Foreign exchange derivatives	282	136	-	417	9	2	7
Interest rate swaps	1,300	1,323	1,175	3,798	71	27	44
Cross currency swaps	214	47	-	261	30	2	28
Non-hedge accounting							
Foreign exchange derivatives	15,404	1,050	-	16,455	204	111	93
Interest rate swaps	-	34	-	34	0	0	0
Cross currency swaps	-	24	-	24	-	1	-1
Total	**17,200**	**2,613**	**1,175**	**20,989**	**315**	**143**	**172**
Of which long-term					88	36	52
Short-term					227	107	120

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. In order to mitigate the liquidity risk from increased margining requirements toward CCPs, the share of hedges with OTC counterparties without margining requirements has increased. Consequently, credit exposure from hedges with OTC counterparties has increased. In general, due to Fortum's net short position in Nordic power hedges credit exposure tends to increase with the value of hedges if Nordic power prices decrease. Currency and interest rate derivative counterparties are limited to investment grade banks and financial institutions. International Swaps and Derivatives Association (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 those published by ISDA and European Federation of Energy Traders (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 2022. Fortum also has exposure to the Russian financial sector in terms of deposits by Fortum's Russian subsidiary with financial institutions, as well as to banks that provide guarantees for suppliers and contracting parties. There are challenges in assessing the creditworthiness of Russian banks as credit ratings have been removed and in many cases there are no publicly available financial information. The creditworthiness of banks and financial institutions is monitored so that mitigating actions can be taken as ratings or the financial situation changes. In Russia, this means using available information provided by government authorities and credit ratings issued by local credit information agencies.

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, Poland and Russia. The credit risk in the electricity and heat sales business in Russia is deemed to be higher than in the Nordic and Polish market.

4.4.1 Credit quality of major financial assets

Fortum recognises loss allowance for expected credit losses (ECL) 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. See **Note 23** Trade and other receivables for details on expected credit losses recognised for trade receivables.

Expected credit loss is calculated on an individual counterparty 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 risk of default is evaluated at each reporting date based on credit ratings to determine if credit risk has increased significantly. 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.

Deposits in Russian banks with a total cross carrying amount of EUR 356 million at 31 December 2022 were considered as being exposed to significant increase in credit risk since initial recognition. For these deposits, ECL of EUR 109 million was recognised at 31 December 2022. Significant increase in credit risk in Russian deposits resulted from deterioration of the counterparties' credit worthiness and the consequent increase in probability of default following from geopolitical and economic uncertainty in Russia during 2022. During the first half of the year 2022, the rating agencies first downgraded the Russian banks to the lowest rating categories and then withdrew the ratings. Consequently, the probability of default for the Russian counterparties has been assumed to be the equivalent of the lowest rating category for the purposes of calculating ECL.

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 40

The loss allowance for interest-bearing receivables totalled EUR 117 million on 31 December 2022 (2021: 16). Amounts for interest-bearing receivables including bank deposits and derivative financial instruments recognised as assets are presented by counterparties in the following table.

For derivative financial instruments the counterparty credit risk has been taken into account when determining fair value. The impact of credit risk is measured on a counterparty basis through credit value adjustment (CVA) method applying similar inputs and assumptions to which are used in the measurement of ECL. See also **Note 15** Financial assets and liabilities by fair value hierarchy for basis of fair value estimations.

All counterparties for currency and interest rate derivatives and the majority of counterparties for bank deposits have an external rating from S&P Global Ratings, Fitch and/or Moody’s credit agencies, except for Russia. For counterparties rated by more than one rating agency, the lowest rating 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 S&P Global Ratings, 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 S&P Global Ratings, Fitch or Moody’s.

Credit quality of major financial assets

	2022		2021	
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	3,602	-	7,342	-
Fair values of interest rate and currency derivatives	235	-	315	-
Fair values of commodity derivatives on exchanges	394	-	27,856	-
Fair values of OTC commodity derivatives	879	-	49,886	-
Loan and other interest bearing receivables	-	-	1,036	-
Lease receivables	-	-	136	-
Total receivables with investment grade or comparable rating	**5,110**	**-**	**86,571**	**-**
Receivables with non-investment grade or comparable rating				
Deposits, commercial papers and cash in bank accounts	247	-	164	-
Fair values of OTC commodity derivatives	321	-	4,433	-
Loan and other interest bearing receivables	39	-	59	-
Total receivables with non-investment grade or comparable rating	**607**	**-**	**4,656**	**-**
Other receivables [1]				
Loan receivables from associates and joint ventures	592	-	1,158	-
Restricted cash mainly given as collateral for commodity exchanges	27	-	59	-
Cash in other bank accounts	70	-	87	-
Other receivables	3	-	-	-
Total other receivables	**692**	**-**	**1,304**	**-**
Total	**6,409**	**-**	**92,531**	**-**

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

Change in credit quality of major financial assets’ total assets from 31 December 2022 is mainly due to the deconsolidation of Uniper at 30 September 2022

4.4.2 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 2022

EUR million	Gross amount	Gross amount netted on the balance sheet [1]	Net amounts presented on the balance sheet	Conditional netting amount (netting agreements)	Financial collateral received /pledged	Net amount
Financial assets						
Interest-rate and currency derivatives	235	-	235	124	64	48
Commodity derivatives	3,349	1,755	1,594	957	5	632
Trade receivables	1,625	-	1,625	-	-	1,625
Total	**5,209**	**1,755**	**3,455**	**1,080**	**69**	**2,305**
EUR million						
Financial liabilities						
Interest-rate and currency derivatives	175	-	175	124	40	11
Commodity derivatives	6,309	1,755	4,554	957	-	3,598
Trade payables	720	-	720	-	-	720
Total	**7,203**	**1,755**	**5,449**	**1,080**	**40**	**4,329**

1) 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 2021

EUR million	Gross amount	Gross amount netted on the balance sheet [1]	Net amounts presented on the balance sheet	Conditional netting amount (netting agreements)	Financial collateral received /pledged	Net amount
Financial assets						
Interest-rate and currency derivatives	315	-	315	129	153	33
Commodity derivatives	87,019	4,845	82,174	56,383	-1,576	27,368
Trade receivables	12,916	-	12,916	5,651	-	7,265
Total	**100,250**	**4,845**	**95,405**	**62,162**	**-1,423**	**34,666**
EUR million						
Financial liabilities						
Interest-rate and currency derivatives	143	-	143	129	5	9
Commodity derivatives	93,306	4,845	88,460	56,383	4,293	27,785
Trade payables	12,152	-	12,152	5,651	-	6,501
Total	**105,600**	**4,845**	**100,755**	**62,162**	**4,298**	**34,295**

1) Receivables and liabilities from electricity and other commodity exchanges arising against standard derivative contracts with same delivery period are netted.

Change in netting agreements for financial assets and liabilities’ total assets and total liabilities from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

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 40

5 Capital risk management

At the beginning of March 2023, the Fortum Board of Directors resolved on Fortum's new strategy including new financial and sustainability targets as well as dividend policy. The renewed dividend policy – a payout ratio of 60-90% of comparable EPS – reflects the potential earnings fluctuations of Fortum's power generation portfolio. For additional information, see **Note 39** Events after the balance sheet date. For the year 2022, Fortum's Board of Directors proposes a dividend of EUR 0.91 per share which corresponds to 75% of the Group's comparable EPS of EUR 1.21 from continuing operations excluding impact from the Russian operations. The Board proposes that the dividend is paid in two instalments, in the second and fourth quarter of 2023.

The long-term financial targets until 31 December 2022 were:

- 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

On 14 March 2022, S&P placed Fortum's and Uniper's BBB ratings on CreditWatch Negative. On 16 May 2022, S&P resolved the CreditWatch and affirmed Fortum's BBB rating with negative outlook. However, Uniper's long-term credit rating was downgraded by one notch from BBB to BBB-, also with negative outlook.

On 17 March 2022, Fitch Ratings affirmed its long-term credit rating for Fortum to BBB with stable outlook.

On 5 July 2022, due to the Russian gas curtailment, S&P again placed Fortum's and Uniper's credit ratings on CreditWatch Negative. On 29 July 2022, following the announcements of the agreement with the German Government on Uniper's stabilisation package, S&P resolved Uniper's CreditWatch Negative by affirming the BBB- rating with negative outlook. Due to the strong governmental support, S&P now considers Uniper a "government-related entity", which enabled Uniper to retain its investment grade rating, despite an overall weaker stand-alone credit quality. The negative outlook of Uniper's rating reflects prevailing uncertainty around gas flows, which in S&P's view may necessitate an increase of the government package and the fact that details of the stabilisation package are still to be approved.

On 3 August 2022, S&P affirmed Fortum's current BBB long-term credit rating with negative outlook. S&P assesses that the support package for Uniper will prevent further incremental costs for Fortum and considers Fortum's financial exposure as capped. According to S&P, the negative outlook reflects Fortum's exposure to Uniper until the European Commission has approved the support package and the longer-term uncertainties about the company's strategy.

On 5 August 2022, Fitch Ratings affirmed Fortum's current long-term credit rating at BBB with negative outlook. According to Fitch, the affirmation mainly reflects the rating agency's view that Fortum is well-shielded from the losses incurred by Fortum's German subsidiary Uniper, following Uniper's stabilisation package that was agreed with the German State.

Following the September announcement that Fortum will fully divest Uniper to the German State, the rating agencies commented that the divestment of the Uniper stake was regarded as credit positive for Fortum, as it will improve the company's financial and risk profile. However, the rating agencies concluded that it was premature to determine the full effect of the Uniper divestment on Fortum's rating. Now that the Uniper divestment has been completed, the rating agencies are expected to update their ratings as Fortum also has published its new strategy.

Fortum's objective is to have a solid investment grade rating of at least BBB to preserve financial flexibility and good access to capital markets.

Financial net debt/comparable EBITDA ratio

EUR million	Note	Continuing operations 2022	Fortum total [1] 2021
+Interest-bearing liabilities		7,785	17,220
- BS Liquid funds		3,919	7,592
- Non-current securities		-	111
- Collateral arrangement securities		527	549
- Securities in interest-bearing receivables		527	660
- BS Margin receivables		2,607	9,163
+ BS Margin liabilities		352	985
+ Net margin liabilities		-2,255	-8,179
Financial net debt	27	**1,084**	**789**
IS Operating profit		1,277	-588
+ IS Depreciation and amortisation		566	1,281
EBITDA		**1,842**	**693**
- IS Items affecting comparability		593	3,124
Comparable EBITDA		**2,436**	**3,817**
Financial net debt/comparable EBITDA		**0.4**	**0.2**

1) 2021 figures based on continuing and discontinued operations (total).

Financial net debt/comparable EBITDA excl. Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding Fortum's Russian operations. See also **Note 1** Significant accounting policies.

EUR million	2022
Financial net debt	**1,084**
- Interest-bearing liabilities, Russia	204
+ Liquid funds, Russia	247
Financial net debt excl. Russia	**1,127**
Comparable EBITDA from continuing operations excl. Russia	**2,025**
Financial net debt/comparable EBITDA excl. Russia	**0.6**

See **Note 7** Comparable operating profit and comparable net profit for details on items affecting comparability, and **Note 27** Interest-bearing liabilities, including further details of the financing and liquidity status and see **Definitions and reconciliations 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'.

6 Segment reporting

SIGNIFICANT ACCOUNTING POLICIES

REVENUE RECOGNITION

Fortum's operations comprise the provision of electricity, heating and cooling, gas and waste management services. Revenue streams can be divided into five groups: power sales to wholesale markets, power sales to retail customers, heating sales, gas 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 include effects from physically settled contracts for which own use exemption cannot be used according to IFRS 9, see **Note 7** Comparable operating profit and comparable net profit. 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 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 retail and industrial customers, 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.

6.1 Business structure

Fortum's reportable segments under IFRS are Generation, City Solutions, Consumer Solutions and Russia. Other Operations includes corporate functions, R&D and technology development projects. Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding the Russia segment. Hence, a new subtotal for continuing operations excluding Russia was introduced in segment information tables. The Uniper segment was classified as discontinued operations in 2022. See also **Note 1** Significant accounting policies, **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations, and **Definitions and reconciliations of key figures**.

Fortum and Uniper are co-owners in the Swedish nuclear company OKG Aktiebolag (OKG AB), with Fortum owning 45.5%. Fortum accounted for the shareholding in OKG AB as a subsidiary from 31 March 2020 to 30 September 2022, with the results of the company being split between the Uniper segment and the Generation segment according to ownership. On deconsolidation of Uniper at 30 September 2022, OKG AB was reclassified as an associated company. The reclassification resulted in the restatement of the Generation segment's 2021 financials.

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. Fortum's reportable segments are the business divisions Generation, City Solutions, Consumer Solutions and Russia.

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 CO_2 -free nuclear, hydro, and wind power generation, one coal-condensing plant, as well as power portfolio optimisation, trading, market intelligence, and global nuclear services.

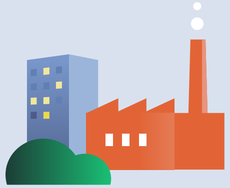
CITY SOLUTIONS

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, Poland, and India.

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 2.2 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.

RUSSIA [1)]



The Russian operations comprise power and heat generation and sales in Russia. The segment includes fully-owned power plants, joint ventures for renewables and power and heat sales, as well as more than 29% holding in TGC-1.

1) Following Russia's attack on Ukraine in February 2022, Fortum stopped all new investment projects in Russia and financing to its Russian subsidiaries. In May, Fortum decided to pursue a controlled exit from Russia with a divestment as the preferred path. The divestment process is ongoing, will likely take time and is subject to regulatory approvals.

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 40

6.4 Segment information

Consolidated income statement

EUR million	Note	Generation [1] 2022	Generation [1] 2021	City Solutions [1] 2022	City Solutions [1] 2021	Consumer Solutions 2022	Consumer Solutions 2021	Other Operations 2022	Other Operations 2021	Total continuing operations excl. Russia 2022	Total continuing operations excl. Russia 2021	Russia 2022	Russia 2021	Total continuing operations 2022	Total continuing operations 2021
Power sales [1]		3,600	2,660	252	205	4,026	2,253	0	0	7,878	5,118	856	761	8,734	5,879
Heat sales		0	0	505	612	0	0	0	0	505	612	156	137	661	749
Gas sales		0	167	0	1	392	225	0	0	392	393	0	0	392	393
Waste treatment sales		0	0	237	250	0	0	0	0	237	250	0	0	237	250
Other sales		55	42	288	235	161	144	136	138	639	559	19	8	659	567
Sales		**3,655**	**2,869**	**1,282**	**1,302**	**4,578**	**2,622**	**136**	**138**	**9,651**	**6,931**	**1,031**	**906**	**10,682**	**7,837**
Internal eliminations		645	-140	-75	-29	-30	-14	-106	-102	435	-285	0	0	434	-286
Netting of Nord Pool transactions [2]										-2,312	-1,128			-2,312	-1,128
IS **External sales**		**4,299**	**2,729**	**1,207**	**1,273**	**4,549**	**2,608**	**30**	**36**	**7,774**	**5,519**	**1,031**	**906**	**8,804**	**6,422**
Comparable EBITDA		1,765	1,287	177	317	173	123	-90	-114	2,025	1,612	411	404	2,436	2,016
IS Depreciation and amortisation		-165	-164	-148	-182	-75	-71	-25	-28	-415	-445	-151	-142	-566	-587
IS **Comparable operating profit**		**1,600**	**1,123**	**28**	**135**	**97**	**52**	**-115**	**-142**	**1,611**	**1,167**	**260**	**261**	**1,871**	**1,429**
Impairment charges and reversals		0	0	0	0	0	0	0	0	0	0	-905	-35	-905	-35
Capital gains and other related items		0	50	643	2,608	0	0	142	14	785	2,672	0	1	785	2,673
Changes in fair values of derivatives hedging future cash flow		-177	-107	47	-72	-246	443	0	0	-376	264	-17	0	-393	264
Other		-20	0	1	0	0	0	-33	-6	-52	-6	-28	0	-80	-6
IS **Items affecting comparability**	6, 7	**-197**	**-57**	**690**	**2,536**	**-246**	**443**	**109**	**8**	**356**	**2,931**	**-949**	**-34**	**-593**	**2,897**
IS **Operating profit**		**1,403**	**1,066**	**719**	**2,671**	**-149**	**495**	**-6**	**-134**	**1,967**	**4,098**	**-690**	**227**	**1,277**	**4,325**
Comparable share of profit/loss of associates and joint ventures		-49	0	14	42	0	0	-6	0	-40	42	30	62	-11	104
IS Share of profit/loss of associates and joint ventures	18	-194	64	14	42	0	0	-6	0	-185	106	-443	62	-629	168

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. Power sales in Fortum contains realised result from commodity derivatives, which have not had hedge accounting status under IFRS 9, but have been considered operatively as hedges.
2) 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.

Gross investments / divestments

EUR million	Note	Generation 2022	Generation 2021	City Solutions 2022	City Solutions 2021	Consumer Solutions 2022	Consumer Solutions 2021	Other Operations 2022	Other Operations 2021	Total continuing operations excl. Russia 2022	Total continuing operations excl. Russia 2021	Russia 2022	Russia 2021	Total continuing operations 2022	Total continuing operations 2021
Gross investments in shares [1]	3	3	7	4	2	0	-	21	237	29	245	4	36	33	281
Capital expenditure	16, 17	231	168	155	161	71	68	10	15	467	396	58	47	525	443
Gross divestments of shares	3	-	129	1,213	3,870	0	0	150	19	1,363	4,017	1	18	1,365	4,034

1) From I/2022, acquisition of additional shares in Uniper are not included in gross investments in shares. For additional information, see Note 3 Acquisitions, disposals, assets held for sale and discontinued operations.

Segment assets and liabilities

EUR million	Note	Generation 2022	Generation 2021	City Solutions 2022	City Solutions 2021	Consumer Solutions 2022	Consumer Solutions 2021	Other Operations 2022	Other Operations 2021	Russia 2022	Russia 2021	Uniper [1] 2021	Total 2022	Total 2021
Non-interest-bearing assets		5,347	5,545	2,128	2,874	1,801	1,496	238	283	1,614	1,923	27,137	11,128	39,258
BS Participations in associates and joint ventures	18	937	1,032	77	74	-	-	25	32	211	678	644	1,249	2,461
Eliminations													-373	-386
Total segment assets		**6,283**	**6,577**	**2,204**	**2,949**	**1,801**	**1,496**	**263**	**315**	**1,825**	**2,601**	**27,781**	**12,004**	**41,333**
Interest-bearing receivables	21												1,284	3,107
BS Deferred tax assets	28												933	2,149
Other assets													5,502	95,481
BS Liquid funds	24												3,919	7,592
BS Total assets													**23,642**	**149,661**
Segment liabilities		**734**	**616**	**445**	**492**	**436**	**371**	**199**	**190**	**135**	**93**	**22,435**	**1,949**	**24,196**
Eliminations													-373	-386
Total segment liabilities													**1,576**	**23,810**
BS Deferred tax liabilities	28												152	827
Other liabilities													6,392	94,140
Total liabilities included in capital employed													**8,120**	**118,777**
Interest-bearing liabilities	27												7,785	17,220
BS Total equity													7,737	13,665
BS Total equity and liabilities													**23,642**	**149,661**

1) As Uniper was deconsolidated at 30 September 2022 Uniper's balance sheet items are not included on Fortum's 31 December 2022 consolidated balance sheet. Consolidated balance sheet at 31 December 2021 included Uniper.

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

EUR million	Note	Generation 2022	Generation 2021	City Solutions 2022	City Solutions 2021	Consumer Solutions 2022	Consumer Solutions 2021	Russia 2022	Russia 2021
Comparable operating profit		1,600	1,123	28	135	97	52	260	261
Comparable share of profit/loss of associates and joint ventures	7, 18	-49	0	14	42	-	-	30	62
Comparable operating profit including comparable share of profit of associates and joint ventures		**1,551**	**1,123**	**42**	**177**	**97**	**52**	**290**	**323**
Segment assets at the end of the year		6,283	6,577	2,204	2,949	1,801	1,496	1,825	2,601
Segment liabilities at the end of the year		734	616	445	492	436	371	135	93
Comparable net assets		**5,549**	**5,961**	**1,760**	**2,456**	**1,365**	**1,125**	**1,690**	**2,508**
Comparable net assets average [1]		**5,739**	**5,925**	**1,833**	**2,915**	**1,068**	**746**	**2,570**	**2,516**
Comparable return on net assets, %		**27.0**	**19.0**	**2.3**	**6.1**	**9.1**	**6.9**	**11.3**	**12.9**

1) Average net assets are calculated using the opening balance of the financial year and each quarter's closing value.

Employees

	Generation 2022	Generation 2021	City Solutions 2022	City Solutions 2021	Consumer Solutions 2022	Consumer Solutions 2021	Other Operations 2022	Other Operations 2021	Total continuing operations excl. Russia 2022	Total continuing operations excl. Russia 2021	Russia 2022	Russia 2021	Total continuing operations 2022	Total continuing operations 2021	Discontinued operations (Uniper) 2022	Discontinued operations (Uniper) 2021	Total 2022	Total 2021
Number of employees 31 December	1,155	1,116	1,691	1,766	1,179	1,176	963	961	4,988	5,019	2,724	2,627	7,712	7,646	N/A	11,494	7,712	19,140
Average number of employees	1,278	1,153	1,676	1,964	1,177	1,091	989	976	5,120	5,183	2,706	2,862	7,826	8,045	8,723	11,751	16,549	19,796

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 40

6.5 Group-wide disclosures

The Group's operating segments operate mainly in the Nordic countries and Russia. The Group's domicile is Finland.

The table below presents sales by geographical area based on customer location. Capital expenditure, assets 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	2022	2021
Nordics	6,426	4,628
Poland	1,101	649
Russia	1,031	906
Other	246	239
IS **Total**	**8,804**	**6,422**

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

Capital expenditure by country

EUR million	2022	2021
Finland	258	160
Sweden	116	103
Norway	38	58
Poland	44	34
Russia	58	47
Other	12	42
Total	**525**	**443**

Non-current assets by country

EUR million	2022	2021
Finland	3,079	3,058
Sweden	3,815	6,988
Norway	407	1,198
Poland	518	517
Russia	1,189	4,542
Other and eliminations	163	7,373
Total	**9,173**	**23,677**

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

	2022	2021
Finland	2,529	2,377
Sweden	914	1,755
Norway	395	606
Poland	635	594
Russia	2,724	6,902
Other	515	6,906
Total	**7,712**	**19,140**

6.6 Other revenue-related disclosures

Fortum anticipates revenues of EUR 29 million (2021: 1,340) from unsatisfied performance obligations. Of this total, EUR 26 million is attributable to 2023 (2021: EUR 453 million to 2022) and EUR 3 million to years after 2023 (2021: EUR 887 million to years after 2022). Change in anticipated revenues from unsatisfied performance obligations from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

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 40

7 Comparable operating profit and comparable net profit

7.1 Reconciliation of operating profit to comparable operating profit

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. Definitions are presented in the section ▸ **Definitions and reconciliations of key figures**.

Reconciliation of operating profit to comparable operating profit 2022

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Changes in fair values of derivatives hedging future cash flow	Other	Reported
Sales	8,827	-	-	-23	-	8,804
Other income	734	-	-785	153	-1	101
Materials and services	-5,576	-	-	206	20	-5,350
Employee benefits	-504	-	-	-	-	-504
Depreciation and amortisation	-1,471	905	-	-	-	-566
Other expenses	-734	-	-	57	61	-615
IS **Comparable operating profit**		**905**	**-785**	**393**	**80**	**1,871**
IS Items affecting comparability		-905	785	-393	-80	-593
IS **Operating profit**	**1,277**					**1,277**

Reconciliation of operating profit to comparable operating profit 2021

EUR million	Unadjusted	Impairment charges and reversals	Capital gains and other related items	Changes in fair values of derivatives hedging future cash flow	Other	Reported
Sales	6,234	-	-	188	-	6,422
Other income	2,773	-	-2,673	-9	-	91
Materials and services	-2,976	-	-	-443	-	-3,419
Employee benefits	-496	-	-	-	-	-496
Depreciation and amortisation	-622	35	-	-	-	-587
Other expenses	-589	-	1	-	6	-582
IS **Comparable operating profit**		**35**	**-2,673**	**-264**	**6**	**1,429**
IS Items affecting comparability		-35	2,673	264	-6	2,897
IS **Operating profit**	**4,325**					**4,325**

Impairment charges and reversals

Impairment charges and reversals of previously recognised impairments are adjusted from depreciation and amortisation and presented in items affecting comparability. Impairments in 2022 include EUR 905 million impairment in the Russia segment. Impairments were recognised against goodwill, and property, plant and equipment. See ▸ **Note 19** Impairment testing. Impairments in 2021 included a tax-deductible non-cash impairment of EUR 35 million in connection with the sale of the Argayash CHP plant in Russia (Russia segment).

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 2022 includes EUR 638 million gain from the sale of the 50% ownership in the district heating company Fortum Oslo Varme AS in Norway, EUR 77 million gain from the sale of the 30% ownership in the public charging point operator for electric vehicles Recharge AS, as well as EUR 61 million gain from the sale of the e-mobility business Plugsurfing. Capital gains and other related items in 2021 included EUR 2,350 million gain from the sale of the 50% stake in the Swedish district heating and cooling company, Stockholm Exergi Holding AB, EUR 254 million gain from the sale of the district heating business in the Baltics, and EUR 50 million gain from the sale of eight small hydropower plants in Sweden. See ▸ **Note 3.2** Disposals.

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.

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

Other

Other includes restructuring and cost management expenses, and other miscellaneous non-operating items, which are adjusted mainly from materials and services or other expenses.

7.2 Reconciliation from operating profit to comparable net profit

EUR million	Note	2022	2021
IS **Operating profit**		**1,277**	**4,325**
IS Items affecting comparability	6, 7.1	593	-2,897
IS **Comparable operating profit**		**1,871**	**1,429**
IS Share of profit/loss of associates and joint ventures		-629	168
Adjustments to share of profit/loss of associates and joint ventures	18	618	-65
Comparable share of profit/loss of associates and joint ventures		-11	104
IS Finance costs - net		-193	-161
Adjustments to finance costs - net	11	348	34
Comparable finance costs - net		155	-127
Comparable profit before income tax		**2,014**	**1,405**
IS Income tax expense		556	-325
Adjustments to income tax expense		-1,010	34
Comparable income tax expense		-454	-290
IS Non-controlling interests		0	-23
Adjustments to non-controlling interests		-11	-1
Comparable non-controlling interests		-11	-24
Comparable net profit from continuing operations		**1,550**	**1,091**
Comparable net profit from discontinued operations	3.4	-2,538	687
Comparable net profit, total Fortum		**-988**	**1,778**
Comparable earnings per share, continuing operations, EUR	13	**1.74**	**1.23**
Comparable earnings per share, discontinued operations, EUR	3.4	**-2.86**	**0.77**
Comparable earnings per share, total Fortum, EUR	13	**-1.11**	**2.00**

Comparable share of profit/loss of associates and joint ventures

Share of profit/loss of associates and joint ventures is adjusted for significant items, similar to adjustments made to arriving at comparable net profit. In 2022, the share of profits of associates and joint ventures include EUR 414 million impairments related to Fortum's ownership in the Russian TGC-1 and EUR 62 million of impairments of the renewables joint ventures in Russia. See **Note 19** Impairment testing.

Comparable finance costs - net

Finance costs – net are adjusted for e.g. nuclear-related items recognised in other financial items - net, fair value changes on financial items, as well as impairment charges and reversals of previously recorded impairment charges on financial items. In 2022, Finance costs – net include expected credit losses of EUR 117 million on Russian deposits and receivables, as well as EUR 171 million write down of other shares. See **Note 11** Finance costs – net.

Comparable income tax expense

Income tax expense is adjusted for tax impacts on items affecting comparability, adjustments to finance costs – net, tax rate changes and other onetime adjustments. In 2022, adjustments to income tax expense include EUR 746 million relating to onetime tax impact realised in Ireland mainly due to the Uniper divestment. See **Note 28** Deferred income taxes on the balance sheet.

7.3 Reconciliation of income statement alternative performance measures excluding Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding Fortum's Russian operations. See also **Note 1** Significant accounting policies.

EUR million	2022	2021
Comparable net profit from continuing operations	1,550	1,091
- Comparable operating profit, Russia	260	261
- Comparable share of profit/loss of associates and joint ventures, Russia	30	62
- Comparable finance costs - net, Russia	324	-25
- Comparable income tax expense, Russia	-138	-55
- Comparable non-controlling interests, Russia	-2	-4
Comparable net profit from continuing operations excl. Russia	**1,076**	**851**
Comparable earnings per share from continuing operations excl. Russia, EUR	**1.21**	**0.96**

See also **Definitions and reconciliations of key figures**.

8 Other income and other expenses

ACCOUNTING POLICIES

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 deferred and recognised in the income statement to match with the related costs.

8.1 Other income

EUR million	2022	2021
Rental income	25	21
Other	76	70
IS Total	101	91

8.2 Other expenses

EUR million	2022	2021
Operation and maintenance costs	123	128
IT and telecommunication costs	112	108
Property taxes	54	51
Other	326	294
IS Total	615	582

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

Auditors' fees

EUR million	2022	2021
Audit fees	2.7	2.9
Audit-related assignments	0.3	0.5
Other assignments	-	0.7
Total	3.0	4.1

Deloitte Oy is the appointed auditor until the next Annual General Meeting in 2023.

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. Other assignments consist of advisory services.

9 Materials and services

EUR million	2022	2021
Materials	4,748	2,861
Materials purchased from associated and joint ventures	421	368
External services	127	132
Transmission costs	53	57
IS Total	5,350	3,419

Materials consists mainly of coal, gas and nuclear fuels.

Materials purchased from associates and joint ventures consist of nuclear and hydropower purchased at production cost (including interest costs and production taxes) and purchased steam. Total materials and services include production taxes of EUR 39 million (2021: 35), including hydro power related property taxes of EUR 13 million (2021: 12). Taxes related to nuclear and hydro production are included in taxes paid through purchases from associates and joint ventures. See ▶ **Note 38** Related party transactions.

10 Employee benefits and Board remuneration

EUR million	2022	2021
Wages and salaries	386	370
Pensions		
Defined contribution plans	14	42
Defined benefit plans	10	7
Social security costs	64	51
Share-based incentives	7	7
Other employee costs	22	20
IS Total	**504**	**496**

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

For further information on pensions see ▸ **Note 31** Pension obligations.

10.1 Short-term incentives

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

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 each year. Awards under the STI programme are paid solely in cash.

10.2 Long-term incentives

The purpose of long-term incentive programmes 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.

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.

The share awards are not subject to a 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.

The Restricted share programme is supplementing the current LTI programme. The Restricted share programme is following 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 liabilities for share-based plans including social charges at the end of the year 2022 was EUR 12 million (2021: 12), including EUR 10 million (2021: 9) recorded in equity.

At year end 2022, approximately 140 key employees are participants in at least one of the ongoing LTI plans.

Shares granted

The following table presents changes in the number of share rewards:

Number of shares	2022	2021
1 January	1,818,093	1,603,146
Granted	594,400	920,517
Settled	-240,867	-410,830
Expired or forfeited	-775,437	-294,740
Outstanding 31 December	**1,396,189**	**1,818,093**

Expired or forfeited shares in 2022 include also the impact from the remuneration restrictions of Fortum Executive Management members according the terms of Solidium bridge financing with the Finnish state.

10.3 Employee share savings programme

The purpose of Fortum's employee share savings programme is to motivate Fortum employees to invest and retain ownership in the company.

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

For each savings period 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.

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 40

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 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 2022 and the fund then had a total of 2,553 members (2021: 2,508). At the end of April 2022 Fortum contributed EUR 4.3 million (2021: 0.4) to the personnel fund as an annual profit-sharing bonus based on the financial results of 2021. The combined amount of members' shares in the fund was EUR 20 million (2021: 20).

10.5 The President and CEO and the Fortum Executive Management (FEM) remuneration

In the end of 2022 Fortum Executive Management (FEM) consists of eight 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.

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a bridge financing arrangement. In accordance with the Solidium bridge financing facility with the Finnish State, Fortum Executive Management members will not be paid any short- or long-term incentives that are accumulated in 2022 and 2023.

Management remuneration

	2022		2021	
EUR thousand	Markus Rauramo, President and CEO 3)	Other FEM members 3)	Markus Rauramo, President and CEO 3)	Other FEM members 3)
Salaries and fringe benefits	1,549	3,447	1,559	3,727
Short-term incentives 1)	-	100	423	896
Long-term incentives 2)	816	756	1,334	2,276
Pensions (statutory)	271	591	311	829
Pensions (voluntary)	315	717	315	536
Social security expenses	53	221	69	405
Total	**3,004**	**5,831**	**4,011**	**8,670**

1) Including separate project awards paid to certain FEM members in August 2022.
2) LTI costs for 2022 relate to LTI plans decided before 2022. Costs are accrued over the vesting period. President and CEO's costs for 2021 are updated for the share plan 2019-2021.
3) In addition to the information provided in the above table, compensation for the membership in the Supervisory Board of Uniper SE for the President and CEO Markus Rauramo was EUR 157 thousand (2021:305), and for other FEM members, EUR 157 thousand (2021: 255). In 2022 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 up to that time.

For the other members of the FEM, the retirement age varies between 63 and 65, or is determined in accordance with the Finnish Employees' Pension Act. According to Group policy, all new supplementary pension arrangements are defined contribution plans. The pension premium for FEM members is 20% of the annual base salary. In the end of 2022, the additional pension arrangements for the President and CEO and other FEM members are defined contribution pension plans 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 usually entitled to the salary for the notice period and a severance pay equal to 6 months' salary.

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.

	2022 2)	2021 3)
FEM members at 31 December 2022		
Markus Rauramo, CEO	12,661	25,921
Nebahat Albayrak, member of FEM from 1 June 2021	-	-
Eveliina Dahl, member of FEM from 1 May 2021	1,127	N/A
Bernhard Günther, member of FEM from 1 February 2021	-	-
Per Langer	3,102	4,555
Simon-Erik Ollus, member of FEM from 29 March 2021	1,847	3,046
Mikael Rönnblad	4,112	5,985
Nora Steiner-Forsberg, member of FEM from 1 May 2021	716	N/A
Former FEM members		
Arun Aggarwal, member of FEM until 17 November 2021	-	5,304
Alexander Chuvaev, member of FEM until 1 September 2022 1)	16,034	20,013
Risto Penttinen, member of FEM until 30 April 2021	-	4,906
Arto Räty, member of FEM until 31 May 2021	-	4,476
Sirpa-Helena Sormunen, member of FEM until 30 April 2021	-	4,992
Total	**39,599**	**79,198**

1) Estimated number of shares after local tax and tax-related deductions. Due to local legislation, share rights were paid in cash instead of shares.
2) Share delivery based on share plan 2019-2021.
3) Share delivery based on share plan 2018-2020.

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 40

10.6 Board of Directors and management shareholding

On 31 December 2022, the members of the Board of Directors owned a total of 15,370 shares (2021: 5,000), which corresponds to 0.00% (2021: 0.00%) of the company's shares and voting rights.

Number of shares held by members of the Board of Directors

	2022	2021
Board members at 31 December 2022		
Veli-Matti Reinikkala, Chair	7,029	5,000
Anja McAlister, Deputy Chair	1,446	-
Ralf Christian	985	-
Luisa Delgado	985	-
Essimari Kairisto	985	-
Teppo Paavola	985	-
Philipp Rösler	985	-
Annette Stube	985	-
Kimmo Viertola	985	-
Total	**15,370**	**5,000**

The President and CEO and other members of the FEM owned a total of 197,210 shares (2021: 224,369), which corresponds to approximately 0.02% (2021: 0.03%) of the company's shares and voting rights.

Number of shares held by members of the Fortum Executive Management

	2022	2021
FEM members at 31 December 2022		
Markus Rauramo	112,739	99,308
Nebahat Albayrak	555	-
Eveliina Dahl	2,554	806
Bernhard Günther	555	-
Per Langer	52,265	48,971
Simon-Erik Ollus	6,462	3,854
Mikael Rönnblad	20,619	16,454
Nora Steiner-Forsberg	1,461	374
Former FEM members		
Alexander Chuvaev	N/A	54,602
Total	**197,210**	**224,369**

10.7 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 2022.

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 were not paid in 2022 (2021: 2).

Fees for the Board of Directors

EUR thousand	2022	2021
Annual fee for the Board work		
Chair	88.8	77.2
Deputy Chair	63.3	57.5
Chair of the Audit and Risk Committee [1)]	63.3	57.5
Members	43.1	40.4
Fixed fee for the Committee work		
Member of the Audit and Risk Committee	3.0	N/A
Chair of the Nomination and Remuneration Committee	5.0	N/A
Member of the Nomination and Remuneration Committee	2.0	N/A
Chair of any additional Committee established by a Board decision	5.0	N/A
Member of any additional Committee established by a Board decision	2.0	N/A

1) If not simultaneously Chair or Deputy Chair of the Board.

Every member of the Board of Directors receives a fixed annual fee for the Board work and a meeting fee for each meeting attended. The annual fee for the Board work is paid in company shares and in cash in such a way that approximately 40% of the amount of the annual fee is payable in shares acquired on behalf and in the name of the Board members, and the remainder in cash. The company pays the costs and the transfer tax related to the purchase of the company shares.

A new fixed fee for the Committee work was introduced in 2022. A meeting fee of EUR 800 is paid for Board and Committee meetings, or EUR 1,600 in case the member travels to the meeting outside his/her country of residence. When a member participates in the meeting via remote connection, or for the decisions that are confirmed without convening a meeting, the meeting fee will be EUR 800. Fees for the Committee work and the meeting fees are paid fully in cash.

The travel expenses of Board members are compensated in accordance with the company's travel policy.

Compensation for the Board of Directors

EUR thousand	2022	2021
Board members at 31 December 2022		
Veli-Matti Reinikkala, Chair from 28 April 2021	181	92
Anja McAlister, Deputy Chair from 28 April 2021	122	65
Ralf Christian, member of the board from 28 March 2022	90	N/A
Luisa Delgado, member of the board from 28 April 2021	102	34
Essimari Kairisto, Chair of the Audit and Risk Committee	135	76
Teppo Paavola	117	58
Philipp Rösler	101	55
Annette Stube	105	57
Kimmo Viertola, member of the board from 28 March 2022	86	N/A
Former Board members		
Eva Hamilton, member of the board until 28 April 2021	-	19
Matti Lievonen, Chair until 28 April 2021	-	32
Klaus-Dieter Maubach, member of the board until 28 April 2021 [1)]	-	15
Total	**1,039**	**504**

1) In 2021 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 51 thousand.

11 Finance costs – net

EUR million	Note	2022	2021
Interest expense			
Borrowings		-181	-154
Leasing and other interest expenses		-3	-4
Capitalised borrowing costs	17	5	3
IS Total		**-179**	**-154**
Interest income			
Loan receivables and deposits		58	23
Leasing and other interest income		29	2
IS Total		**87**	**25**
Other financial items - net			
Return from nuclear fund, nuclear fund adjustment and unwinding of nuclear provisions	29	-71	-35
Fair value changes, impairments and reversals		-303	1
Unwinding of discounts on other provisions and pension obligations	30, 31	7	0
Other financial expenses and income		266	2
IS Total		**-101**	**-32**
IS Finance costs - net		**-193**	**-161**

EUR million	Note	2022	2021
IS Finance costs - net		**-193**	**-161**
Adjustments to finance costs - net			
Return from nuclear fund, nuclear fund adjustment and unwinding of nuclear provisions		71	35
Fair value changes, impairments, reversals and other adjustments [1)]		276	-1
Comparable finance costs - net		**155**	**-127**

1) Other adjustments in 2022 include EUR 27 million interest income from tax authorities on refunded tax payment.

See **Definitions and reconciliations of key figures**.

Interest expenses on borrowings totalled EUR 181 million (2021: 154) including interest expenses on loans of EUR 194 million (2021: 130), and EUR -12 million (2021: 24) interest cost – net from derivatives hedging the loan portfolio.

Interest income, EUR 87 million (2021: 25), includes EUR 44 million (2021: 13) interest income from shareholder loan receivables and other loan receivables, and EUR 14 million (2021: 10) from deposits. Interest income from leases and other interest income EUR 29 million (2021: 2) include EUR 27 million interest income from tax authorities on refunded tax payment. See more information in **Note 37** Legal actions and official proceedings.

Return from nuclear fund, nuclear fund adjustment and unwinding of nuclear provisions relate to Loviisa nuclear plant. For additional information see **Note 29** Nuclear-related assets and liabilities.

Fair value changes, impairments and reversals EUR -303 million in 2022 include expected credit losses of EUR -117 million on Russian deposits and receivables, as well as EUR -171 million write down of other shares.

Other financial expenses and income EUR 266 million in 2022 include mainly foreign exchange gains from Russian rouble receivables and closing of Russian rouble hedges.

Interest rate and currency derivatives in finance costs – net

EUR million	2022	2021
Interest rate and cross currency swaps		
Interest expenses on borrowings	16	16
Exchange rate difference from derivatives	-16	-12
Rate difference in fair value gains and losses on financial instruments [1)]	-65	-55
Total fair value change of interest rate derivatives in finance costs - net	**-65**	**-51**
Foreign exchange derivatives		
Interest expenses on borrowings	-4	-40
Exchange rate difference from derivatives	217	-15
Rate difference in fair value gains and losses on financial instruments	-8	4
Total fair value change of currency derivatives in finance costs - net	**205**	**-51**
Total	**140**	**-102**

1) Fair value gains and losses on financial instruments include fair value change of hedging derivatives in fair value hedge relationship to EUR -66 million (2021: -55).

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 40

12 Income tax expense

12.1 Profit before tax by country

EUR million	2022	2021
Finland	592	561
Sweden	583	2,798
Ireland	754	216
Germany	-110	95
Russia	-1,437	-89
Other	72	751
IS **Total**	**455**	**4,332**

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 profits include such items as for example share of profits from associates and joint ventures, effects of accounting for derivatives under IFRS standards and other group level consolidation adjustments, which are not included in taxable profits in the local subsidiaries.

12.2 Major components of income tax expense by country

EUR million	2022	2021
Current taxes		
Finland	-206	-107
Sweden	-120	-98
Ireland	11	-85
Germany	0	-11
Russia	-42	-4
Other	-36	-48
Total	**-392**	**-353**
Deferred taxes		
Finland	90	-1
Sweden	-53	37
Ireland	704	45
Germany	0	-1
Russia	148	-
Other	44	-55
Total	**934**	**26**
Adjustments recognised for current tax of prior periods		
Finland	0	0
Sweden	8	0
Ireland	0	0
Germany	0	0
Russia	7	0
Other	-1	3
Total	**15**	**2**
IS **Income tax expense**	**556**	**-325**

12.3 Income tax rate reconciliation

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	2022	%	2021	%
Profit before tax	455		4,332	
Tax calculated at nominal Finnish tax rate	-91	20.0	-866	20.0
Differences in tax rates in other jurisdictions	48	-10.6	-9	0.2
Tax rate changes	-	-	1	0.0
Tax exempt capital gains	117	-25.7	562	-13.0
Other items impacting comparable tax expense	668	-146.7	-	-
Tax exempt income and other non-deductible expenses	-5	1.2	-6	0.1
Share of profit of associates and joint ventures	-126	27.7	31	-0.7
Taxes related to dividend distributions	-	-	-12	0.3
Tax effects of changes in value and non-recognition of deferred taxes	-41	8.9	-30	0.7
Other items	-17	3.6	1	0.0
Adjustments recognised for taxes of prior periods	3	-0.6	3	-0.1
IS **Income tax expense**	**556**	**-122.1**	**-325**	**7.5**

Key tax indicators:

- The weighted average applicable income tax rate for 2022 is 9.4% (2021: 20.2%).
- The effective income tax rate in the income statement for 2022 is -122.1% (2021: 7.5%).
- The comparable effective income tax rate for 2022 is 22.4% (2021: 22.2%).

See **Note 7** Comparable operating profit and comparable net profit and **Definitions and reconciliations of key figures**.

The major items affecting the effective income tax rate are as follows:

- Tax exempt capital gains decreased the rate by 25.7% (2021: 13.0%). Gains mainly relate to the sale of Fortum Oslo Varme AS in Norway.
- Other items impacting comparable tax expense include other tax exempt or non-deductible items and tax impacts from group internal items. These items decreased the rate by 146.7% (2021: 0.0%). Impact is realised in Ireland leading to creation of deferred tax asset of tax loss carry forward. This tax loss carry forward is a consequence of the disposal of Uniper SE and write down of Russian assets.
- Tax effects of changes in value and non-recognition of deferred taxes during 2022 increased the effective tax rate by 8.9% (2021: 0.7%), mainly due to derecognition of deferred tax assets on tax losses carry forwards in Ireland.

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

	2022	2021
IS Profit attributable to owners of the parent, continuing operations (EUR million)	1,011	3,985
IS Profit attributable to owners of the parent, total Fortum (EUR million)	-2,416	739
Weighted average number of shares (thousand)	889,204	888,294
Basic earnings per share, continuing operations (EUR)	1.14	4.49
Basic earnings per share, total Fortum (EUR)	-2.72	0.83

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

Comparable earnings per share

	2022	2021
Comparable net profit, continuing operations (EUR million)	1,550	1,091
Comparable net profit, total Fortum (EUR million)	-988	1,778
Weighted average number of shares (thousand)	889,204	888,294
Comparable earnings per share, continuing operations (EUR)	1.74	1.23
Comparable earnings per share, total Fortum (EUR)	-1.11	2.00

Comparable earnings per share, continuing operations excl. Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding Fortum's Russian operations. See also **Note 1** Significant accounting policies.

	2022	2021
Comparable net profit from continuing operations excl. Russia (EUR million)	1,076	851
Weighted average number of shares (thousand)	889,204	888,294
Comparable earnings per share, continuing operations excl. Russia (EUR)	1.21	0.96

See **Definitions and reconciliations of key figures**.

13.2 Dividend per share

The Board of Directors proposes that a dividend of EUR 0.91 per share be paid for the financial year 2022. The dividend will be paid in two instalments. Based on the number of shares registered as at 1 March 2023, the total amount of dividend would be EUR 817 million. These Financial statements do not reflect this dividend.

A dividend for 2021 of EUR 1.14 per share, amounting to a total of EUR 1,013 million, was decided in the Annual General Meeting on 28 March 2022. The dividend was paid on 6 April 2022

A dividend for 2020 of EUR 1.12 per share, amounting to a total of EUR 995 million, was decided in the Annual General Meeting on 28 April 2021. The dividend was paid on 7 May 2021.

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 (SPPI). 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.

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 23** 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 effective hedges for the associated risk components.

In addition, hedge accounting is applied to certain derivative contracts hedging gas price risk. These are physically settled fixed-price forward and futures contracts, for which the own-use exemption cannot be applied (failed own-use contracts), where the contract constitutes an effective hedge of cash flows of the gas volumes to be delivered ("all-in one" hedge).

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 representing economic hedging relationship do not qualify for hedge accounting. Unrealised fair value changes of non-hedge accounted commodity derivatives hedging future cash flow and physical contracts that are accounted for as derivatives within the scope of IFRS 9 are recognised in items affecting comparability in the income statement. Gains and losses on interest rate and currency derivative instruments are recognised in finance costs – net with corresponding hedge items.

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 40

Financial assets by category 2022

EUR million	Note	Amortised cost	Fair value through profit or loss: Hedge accounting, fair value hedges	Fair value through profit or loss: Non-hedge accounting	Fair value through profit or loss: Other financial assets	Fair value through other comprehensive income: Net investment and Cash flow hedges	Fair value through other comprehensive income: Other equity investments	Lease receivables	Total financial assets
Financial instruments in non-current assets									
Other non-current assets	20	85			543				628
Derivative financial instruments	4								
Commodity derivatives				170		54			224
Interest rate and currency derivatives			84	3		33			119
Long-term interest-bearing receivables	21	593			31				624
Total financial instruments in non-current assets		**677**	**84**	**174**	**574**	**86**	**-**	**-**	**1,595**
Financial instruments in current assets									
Derivative financial instruments	4								
Commodity derivatives				594		776			1,370
Interest rate and currency derivatives			1	92		23			116
Trade receivables	23	1,625							1,625
Other receivables	23	142							142
Short-term interest-bearing receivables	21	122			535			3	660
Liquid funds	24	3,919							3,919
Total financial instruments in current assets		**5,808**	**1**	**687**	**535**	**799**	**-**	**3**	**7,832**
Total		**6,486**	**84**	**860**	**1,109**	**885**	**-**	**3**	**9,427**

Financial assets by category 2021

EUR million	Note	Amortised cost	Fair value through profit or loss: Hedge accounting, fair value hedges	Fair value through profit or loss: Non-hedge accounting	Fair value through profit or loss: Other financial assets	Fair value through other comprehensive income: Net investment and Cash flow hedges	Fair value through other comprehensive income: Other equity investments	Lease receivables	Total financial assets
Financial instruments in non-current assets									
Other non-current assets	20	316			136		118		570
Derivative financial instruments	4								
Commodity derivatives				16,955		53			17,009
Interest rate and currency derivatives			49	34		5			88
Long-term interest-bearing receivables	21	2,125			147			119	2,392
Total financial instruments in non-current assets		**2,441**	**49**	**16,989**	**284**	**58**	**118**	**119**	**20,058**
Financial instruments in current assets									
Derivative financial instruments	4								
Commodity derivatives				64,750		416			65,165
Interest rate and currency derivatives			22	170		34			226
Trade receivables	23	12,916							12,916
Other receivables	23	1,927			13				1,940
Short-term interest-bearing receivables	21	145			553			17	715
Liquid funds	24	7,545			47				7,592
Total financial instruments in current assets		**22,533**	**22**	**64,920**	**613**	**450**	**-**	**17**	**88,555**
Total		**24,974**	**71**	**81,909**	**897**	**507**	**118**	**136**	**108,613**

Financial liabilities by category 2022

		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 liabilities**	**Net investment and Cash flow hedges**	**Lease liabilities**	**Total financial liabilities**
Financial instruments in non-current liabilities								
Interest-bearing liabilities	27	2,978	580 [1]				100	3,658
Derivative financial instruments	4							
Commodity derivatives				245		390		635
Interest rate and currency derivatives			119	-		2		121
Total financial instruments in non-current liabilities		**2,978**	**699**	**245**		**392**	**100**	**4,413**
Financial instruments in current liabilities								
Interest-bearing liabilities	27	3,581			527		19	4,127
Derivative financial instruments	4							
Commodity derivatives				553		3,366		3,919
Interest rate and currency derivatives			2	51		1		54
Trade payables	33	720						720
Other liabilities	33	185						185
Total financial instruments in current liabilities		**4,486**	**2**	**604**	**527**	**3,367**	**19**	**9,005**
Total		**7,463**	**701**	**849**	**527**	**3,759**	**119**	**13,419**

1) Fair valued part of bond in fair value hedge relationship.

Financial liabilities by category 2021

		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 liabilities**	**Net investment and Cash flow hedges**	**Lease liabilities**	**Total financial liabilities**
Financial instruments in non-current liabilities								
Interest-bearing liabilities	27	6,087	1,669 [1]				945	8,701
Derivative financial instruments	4							
Commodity derivatives				16,373		248		16,621
Interest rate and currency derivatives			9	8		18		36
Total financial instruments in non-current liabilities		**6,087**	**1,678**	**16,381**	**-**	**267**	**945**	**25,358**
Financial instruments in current liabilities								
Interest-bearing liabilities	27	7,840			549		130	8,519
Derivative financial instruments	4							
Commodity derivatives				68,905		2,934		71,839
Interest rate and currency derivatives			2	103		2		107
Trade payables	33	12,152						12,152
Other liabilities	33	425						425
Total financial instruments in current liabilities		**20,417**	**2**	**69,008**	**549**	**2,936**	**130**	**93,043**
Total		**26,503**	**1,680**	**85,390**	**549**	**3,202**	**1,075**	**118,400**

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 40

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.

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

EUR million	Note	Level 1 2022	Level 1 2021	Level 2 2022	Level 2 2021	Level 3 2022	Level 3 2021	Netting [2] 2022	Netting [2] 2021	Total 2022	Total 2021
In non-current assets											
Other investments [1]	20	-	71	-	46	543	99			543	216
Derivative financial instruments											
Commodity derivatives	4										
Hedge accounting				54	62				-9	54	53
Non-hedge accounting		85	5,136	58	11,708	57	207	-30	-96	170	16,955
Interest rate and currency derivatives	4										
Hedge accounting				116	54					116	54
Non-hedge accounting				3	34					3	34
Interest-bearing receivables		-	111			31	36			31	147
Total in non-current assets		**85**	**5,318**	**231**	**11,904**	**631**	**342**	**-30**	**-105**	**917**	**17,459**
In current assets											
Derivative financial instruments											
Commodity derivatives	4										
Hedge accounting		781	50	542	572			-546	-207	777	416
Non-hedge accounting		1,129	22,876	252	45,575	9	326	-796	-4,028	594	64,750
Interest rate and currency derivatives	4										
Hedge accounting				23	57					23	57
Non-hedge accounting				92	170					92	170
Other receivables				-	13					-	13
Interest-bearing receivables		527	596			7	4			535	600
Total in current assets		**2,437**	**23,522**	**909**	**46,387**	**16**	**330**	**-1,342**	**-4,235**	**2,021**	**66,006**
Total		**2,522**	**28,840**	**1,140**	**58,291**	**648**	**672**	**-1,372**	**-4,340**	**2,938**	**83,465**

1) Other investments mainly include shares in unlisted companies.
2) Receivables and liabilities from standard electricity and other commodity derivative contracts against exchanges with same delivery period are netted in Fortum, except Uniper segment included in 31 Dec 2021 balances.

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 40

Financial liabilities

EUR million	Note	Level 1 2022	Level 1 2021	Level 2 2022	Level 2 2021	Level 3 2022	Level 3 2021	Netting [2] 2022	Netting [2] 2021	Total 2022	Total 2021
In non-current liabilities											
Interest-bearing liabilities [1]	27			580	1,669					580	1,669
Derivative financial instruments											
Commodity derivatives	4										
Hedge accounting				390	257				-9	390	248
Non-hedge accounting		38	4,874	234	11,336	4	259	-30	-96	246	16,373
Interest rate and currency derivatives	4										
Hedge accounting				121	27					121	27
Non-hedge accounting				-	8					-	8
Total in non-current liabilities		**38**	**4,874**	**1,324**	**13,298**	**4**	**259**	**-30**	**-105**	**1,336**	**18,326**
In current liabilities											
Interest-bearing liabilities	27			527	549					527	549
Derivative financial instruments											
Commodity derivatives	4										
Hedge accounting		2,672	420	1,240	2,721			-546	-207	3,366	2,934
Non-hedge accounting		883	20,316	465	52,531	1	86	-796	-4,028	553	68,905
Interest rate and currency derivatives	4										
Hedge accounting				3	4					3	4
Non-hedge accounting				51	103					51	103
Total in current liabilities		**3,555**	**20,736**	**2,286**	**55,908**	**1**	**86**	**-1,342**	**-4,235**	**4,500**	**72,496**
Total		**3,593**	**25,610**	**3,610**	**69,205**	**5**	**345**	**-1,372**	**-4,340**	**5,836**	**90,822**

1) Fair valued part of bonds when hedge accounting is applied (fair value hedge).
2) Receivables and liabilities from standard electricity and other commodity derivative contracts against exchanges with same delivery period are netted in Fortum, except Uniper segment included in 31 Dec 2021 balances.

At the end of December 2022, the net fair value of commodity derivatives was EUR -2,960 million, including assets of EUR 1,594 million and liabilities of EUR 4,554 million (EUR -6,225 million in December 2021, including assets of EUR 82 billion and liabilities of EUR 88 billion). The change from December 2021 mainly relates to deconsolidation of Uniper at 30 September 2022 which was dampened by impacts from increased commodity market prices affecting the continuing operations.

Net fair value amount of interest rate and currency derivatives was EUR 61 million, including assets EUR 235 million and liabilities EUR 175 million. Fortum has cash collateral agreements with some counterparties. At the end of December 2022 Fortum had received EUR 64 million from collateral agreements. The received cash has been booked as short-term liability.

The increase in other investments in fair value hierarchy level 3 mainly relate to the 1.3 GW portfolio of wind projects in Russia. Uniper's fair valued long-term gas supply contracts accounted for as derivatives, EUR 3,529 million, were transferred from level 2 to level 3 during the reporting period due to changed market situation affecting the inputs used to determine the credit value adjustment. Uniper deconsolidation decreased total level 3 fair values by EUR 1,416 million. There were no other transfers out of level 3. Gains and losses of level 3 items in consolidated income statement are presented mainly in items affecting comparability. See **Note 7** Comparable operating profit and comparable net profit.

Changes in fair value hierarchy Level 3

EUR million	1 Jan 2022	Purchases	Sales	Settlements	Gains / losses in income statement	Transfers and additions into level 3	Gains / losses in OCI	Disposal of subsidiary companies	31 Dec 2022
On balance sheet, net									
Other investments	99	19	-17		-126	572	-2	-2	543
Commodity derivatives, fair values	765		135	-104	-1,903	3,529	-1	-2,360	61
Commodity derivatives, day-1 gains and losses	-575	2		24	-397			946	-
Interest bearing receivables	40			-4	3				39
Total on balance sheet, net	**329**	**21**	**118**	**-84**	**-2,423**	**4,101**	**-3**	**-1,416**	**643**

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 40

16 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.

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 19** Impairment testing.

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. Contract-based intangible assets in 2021 related to Uniper.

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. See further information on the impairment testing in **Note 19** Impairment testing.

	Goodwill		Contract-based		Other		Total	
EUR million	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Cost 1 January	**1,021**	**1,069**	**1,334**	**1,328**	**1,586**	**1,514**	**3,941**	**3,911**
Translation differences and other adjustments	10	22	-5	29	-96	27	-91	78
Capital expenditure	1	-	-	-	125	118	126	119
Disposals	-	-	-	-1	-71	-21	-71	-21
Disposal of subsidiary companies 1)	-615	-70	-1,329	-22	-664	-58	-2,608	-150
Reclassifications	-	-	-	-	48	6	48	6
Cost 31 December	**417**	**1,021**	**-**	**1,334**	**929**	**1,586**	**1,346**	**3,941**
Accumulated depreciation 1 January	**-**	**-**	**820**	**794**	**955**	**850**	**1,775**	**1,643**
Translation differences and other adjustments	-	-	-6	29	-85	16	-91	45
Disposals	-	-	-	-1	-71	-20	-71	-21
Disposal of subsidiary companies 1)	-	-	-830	-22	-447	-37	-1,277	-59
Reclassifications	-	-	-	-	34	-	34	-
Depreciation for the year	-	-	14	20	130	144	144	164
Impairment charges 2)	167	-	1	-	6	2	174	2
Accumulated depreciation 31 December	**167**	**-**	**-**	**820**	**521**	**955**	**689**	**1,775**
BS Carrying amount 31 December	**250**	**1,021**	**-**	**514**	**408**	**632**	**657**	**2,167**

1) See **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.
2) See **Note 19** Impairment testing.

Changes during the year include Uniper until 30 September 2022.

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	**2022**	**2021**
Consumer Solutions	214	223
City Solutions	36	137
Uniper	-	515
Russia	-	144
Total	**250**	**1,021**

Other intangible assets

Other intangible assets include customer contracts, and costs for software products and software licenses.

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 40

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 30** Other provisions for information about asset retirement obligations, **Note 29** Nuclear-related assets and liabilities, for information about provisions for decommissioning nuclear power plants and **Note 34** 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 19** Impairment testing.

Economic lives and book values of property, plant and equipment reflect approved actions towards Fortum's climate-related targets.

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.

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 40

EUR million	Land and waterfall rights 2022	Land and waterfall rights 2021	Buildings and structures 2022	Buildings and structures 2021	Machinery, equipment and other 2022	Machinery, equipment and other 2021	Advances paid and construction in progress 2022	Advances paid and construction in progress 2021	Total 2022	Total 2021
Cost 1 January	**4,371**	**4,436**	**10,574**	**10,400**	**32,996**	**32,285**	**1,172**	**1,602**	**49,113**	**48,723**
Translation differences and other adjustments	-275	-75	422	145	588	444	-166	41	569	554
Acquisition of subsidiary companies	8	-	8	-	-	-	6	-	21	-
Capital expenditure [1]	4	6	13	56	49	232	758	754	824	1,046
Additions to right-of-use assets	6	34	29	41	12	97	-	-	47	173
Decreases in right-of-use assets	-	-	-18	-11	-12	-21	-	-	-30	-32
Nuclear asset retirement cost	-	-	-	-	-9	56	-	-	-9	56
Disposals	-4	-14	-35	-33	-149	-337	-3	-8	-190	-392
Disposal of subsidiary companies [2]	-1,680	-17	-7,645	-257	-26,086	-602	-1,033	-100	-36,444	-975
Reclassifications	-	2	58	233	135	841	-222	-1,116	-28	-41
Cost 31 December	**2,429**	**4,371**	**3,406**	**10,574**	**7,525**	**32,996**	**513**	**1,172**	**13,872**	**49,113**
Accumulated depreciation 1 January	**279**	**280**	**6,164**	**5,936**	**23,460**	**22,983**	**162**	**157**	**30,064**	**29,357**
Translation differences and other adjustments	-7	4	199	143	63	180	-4	-2	252	325
Acquisition of subsidiary companies	-	-	1	-	-	-	-	-	1	-
Disposals	-	-10	-33	-32	-100	-331	-1	-1	-134	-373
Disposal of subsidiary companies [2]	-275	-1	-5,089	-78	-20,589	-269	-164	-	-26,116	-348
Decreases in right-of-use assets	-	-	-5	-1	-10	-12	-	-	-15	-13
Depreciation for the year	11	5	316	180	666	932	-	1	994	1,117
Impairment charges [3]	1	-	518	19	1,050	15	5	-	1,574	34
Reclassifications	-3	-	-83	-3	72	-40	-	8	-14	-35
Accumulated depreciation 31 December	**5**	**279**	**1,989**	**6,164**	**4,612**	**23,460**	**-**	**162**	**6,606**	**30,064**
BS Carrying amount 31 December	**2,424**	**4,093**	**1,417**	**4,410**	**2,913**	**9,536**	**513**	**1,010**	**7,266**	**19,049**

1) Includes EUR 51 million (2021: 50) of other asset retirement costs.
2) See **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.
3) See **Note 19** Impairment testing.

Changes during the year include Uniper until 30 September 2022.

Property, plant and equipment that are subject to restrictions in the form of real estate mortgages amount to EUR 167 million (2021: 81). See **Note 36** Pledged assets and contingent liabilities.

Borrowing costs of EUR 5 million relating to continuing operations were capitalised in 2022 (2021: 3). The interest rate used for capitalising borrowing costs varied from 2% to 10% (2021: 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 34** Leases.

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 40

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, financing and risks of the arrangements.

Management judgement is required when testing the carrying amounts for participations in associated companies and joint ventures for impairment. See **Note 19** Impairment testing for more information.

18.1 Principal associated companies and joint ventures

	Forsmarks Kraftgrupp AB	Kemijoki Oy	OKG AB	TVO Oyj
Nature of the relationship	Co-owned nuclear company	Co-owned hydro company	Co-owned nuclear company	Co-owned nuclear company
Classification	Associated company	Associated company	Associated company	Joint venture
Segment	Generation	Generation	Generation	Generation
Domicile	Sweden	Finland	Sweden	Finland
Ownership interest, % 1)	26	58	46	26
Votes, %	26	28	46	26

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. In 2022 there were no changes in the ownership interests in Kemijoki and TVO.

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, Kemijoki Oy and OKG) or as joint venture (Teollisuuden Voima Oyj (TVO)).

In Sweden, nuclear production company shareholdings are 25.5% ownership of the shares in Forsmarks Kraftgrupp AB and 45.5% ownership of the shares in OKG AB. Excluding non-controlling interests in the subsidiaries, Fortum's participation in the companies are 22.2% and 43.4% respectively, 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 currently under test production phase, Olkiluoto 3, and Fortum's ownership in this share series is 25.0%.

See also Associated companies in **Note 29** 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.

Changes in shareholdings in principal associated companies and joint ventures

Fortum and Uniper are co-owners in the Swedish nuclear company OKG Aktiebolag (OKG AB), with Fortum owning 45.5%. Fortum accounted for the shareholding in OKG AB as a subsidiary from 31 March 2020 to 30 September 2022. On deconsolidation of Uniper at 30 September 2022, OKG AB was reclassified as an associated company.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path. Therefore, TGC-1 is no longer classified as a principal associated company at 31 December 2022.

On 20 September 2021, Fortum concluded the sale of its 50% ownership in the Swedish district heating and cooling company Stockholm Exergi Holding AB (publ). See also **Note 3.2.2** Other disposals.

Summarised financial information of the principal associated companies in 2022

EUR million	Forsmarks Kraftgrupp AB	Kemijoki Oy	OKG AB
Balance sheet	**31 Dec 2021**	**31 Dec 2021**	**31 Dec 2021**
Non-current assets	2,393	489	825
Current assets	525	5	184
Non-current liabilities	2,783	289	920
Current liabilities	105	154	76
Equity	31	52	13
Attributable to the owners of the parent	31	52	13
Attributable to non-controlling interests	-	-	-
Statement of comprehensive income	**1 Jan 2021 - 31 Dec 2021**	**1 Jan 2021 - 31 Dec 2021**	**1 Jan 2021 - 31 Dec 2021**
Sales	594	50	312
Profit or loss	-	1	2
Attributable to the owners of the parent	-	1	2
Attributable to non-controlling interests	-	-	-
Total comprehensive income	-	1	2
Attributable to the owners of the parent	-	1	2
Attributable to non-controlling interests	-	-	-
Reconciliation to carrying amount in Fortum Group			
Group's interest in the equity of the associate 1 January	12	30	-
Reclassification	-4		6
Change in share of profit and OCI items		-1	-
Group's interest in the equity of the associate 31 December	**8**	**30**	**6**
Fair values on acquisitions and different accounting principles [1]	77	148	-6
Carrying amount 31 December	**85**	**178**	**-**

1) Impact of different accounting principles include mainly IFRS adjustments for nuclear-related assets and liabilities, 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 29** Nuclear-related assets and liabilities.
2) The market quotation was impacted by the limited free float of TGC-1 shares in 2021.

Summarised financial information of the principal associated companies in 2021

EUR million	Forsmarks Kraftgrupp AB	Kemijoki Oy	TGC-1
Balance sheet	**31 Dec 2020**	**31 Dec 2020**	**30 Sept 2021**
Non-current assets	2,619	483	1,863
Current assets	441	7	273
Non-current liabilities	2,899	323	213
Current liabilities	128	116	223
Equity	33	52	1,700
Attributable to the owners of the parent	33	52	1,548
Attributable to non-controlling interests	-	-	153
Statement of comprehensive income	**1 Jan 2020 - 31 Dec 2020**	**1 Jan 2020 - 31 Dec 2020**	**1 Oct 2020 - 30 Sept 2021**
Sales	561	53	1,136
Profit or loss	-1	1	104
Attributable to the owners of the parent	-1	1	103
Attributable to non-controlling interests	-	-	2
Total comprehensive income	-1	1	105
Attributable to the owners of the parent	-1	1	103
Attributable to non-controlling interests	-	-	2
Reconciliation to carrying amount in Fortum Group			
Group's interest in the equity of the associate 1 January	12	30	409
Change in share of profit and OCI items	-	-	31
Dividends received	-	-	-14
Translation differences and other adjustments	-	-	39
Group's interest in the equity of the associate 31 December	**12**	**30**	**464**
Fair values on acquisitions and different accounting principles [1]	479	149	-8
Carrying amount 31 December	**491**	**179**	**456**
Market value of listed shares [2]			**135**

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 40

Summarised financial information of the principal joint ventures

EUR million	2022 TVO Oyj	2021 TVO Oyj
Balance sheet	**31 Dec 2022**	**31 Dec 2021**
Non-current assets	8,308	7,946
Current assets	863	716
of which cash and cash equivalents	353	172
Non-current liabilities	6,517	5,967
of which non-current interest-bearing liabilities	5,223	4,599
Current liabilities	437	632
of which current financial liabilities	259	449
Equity	2,218	2,063
Attributable to the shareholders of the company	2,218	2,063
Attributable to non-controlling interests	-	-
Statement of comprehensive income	**1 Jan 2022 - 31 Dec 2022**	**1 Jan 2021 - 31 Dec 2021**
Sales	358	299
Depreciation and amortisation	-47	-44
Interest income	6	5
Interest expense	-81	-42
Income tax expense or income	0	-
Profit or loss	-48	-20
Other comprehensive income	212	44
Total comprehensive income	164	25
Attributable to the shareholders of the company	164	25
Reconciliation to carrying amount in Fortum Group		
Group's interest in the equity of the joint venture at 1 January	523	518
Change in share of profit and OCI items	41	5
Group's interest in the equity of the joint venture 31 December	**564**	**523**
Fair values on acquisitions and different accounting principles [1]	-9	3
Carrying amount 31 December	**556**	**526**

1) Impact of different accounting principles include mainly IFRS adjustments for nuclear-related assets and liabilities 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 29** 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	2022	2021
Principal associates	262	1,126
Principal joint ventures	556	526
Other associates	158	309
Other joint ventures	273	500
BS Total	**1,249**	**2,461**

Changes in participation during the year

EUR million	2022 Associated companies	2022 Joint ventures	2021 Associated companies	2021 Joint ventures
Opening balance 1 January	1,435	1,026	1,508	1,404
Investments	5	9	6	39
Share of profit of associates and joint ventures	-542	-16	104	88
Dividend income received	-21	-16	-37	-76
Divestments and capital returns [1]	-15	-13	-18	-551
Disposal of subsidiary companies [2]	-527	-109	-	-
Reclassifications	70	-137	-152	94
OCI items in associates and joint ventures	1	40	-1	39
Translation differences and other adjustments	14	45	26	-12
Carrying amount at 31 December	**421**	**828**	**1,435**	**1,026**

1) Divestments and capital returns in 2021 mainly relate to the sale of Stockholm Exergi AB.
2) See **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

Changes during the year include Uniper until 30 September 2022. Disposal of subsidiary companies and Reclassifications include EUR -671 million from the deconsolidation of Uniper at 30 September 2022.

During 2022 Fortum received EUR 37 million (2021: 113) in dividends from associates and joint ventures. 2021 included EUR 42 million dividends from Stockholm Exergi.

The share of profits of associates and joint ventures include EUR 414 million impairments related to Fortum's ownership in the Russian TGC-1 and EUR 62 million of impairments of the renewables joint ventures in Russia. See **Note 19** Impairment testing.

For information about investments and divestments of shares in associated companies and joint ventures, see **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

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 40

Share of profit of associates and joint ventures

EUR million	2022	2021
Principal associates		
Forsmarks Kraftgrupp AB	-78	40
Kemijoki Oy	-1	-1
OKG AB	-99	28
Principal associates, total	**-178**	**67**
Principal joint ventures		
TVO Oyj	-13	-3
Principal joint ventures, total	**-13**	**-3**
Other associates	-420	33
Other joint ventures	-17	72
IS **Total**	**-629**	**168**

There are no unrecognised share of losses of associated companies and joint ventures.

Comparable share of profit of associates and joint ventures

EUR million	2022	2021
IS **Share of profit/loss of associates and joint ventures**	**-629**	**168**
Adjustments to share of profit/loss of associates and joint ventures	618	-65
Comparable share of profit/loss of associates and joint ventures	**-11**	**104**

In 2022, the adjustment to share of profits of associates and joint ventures include EUR 414 million impairments related to Fortum's ownership in the Russian TGC-1 and EUR 62 million of impairments of the renewables joint ventures in Russia. See **Note 19** Impairment testing.

19 Impairment testing

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 lifetime 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, and / or long-term assumptions approved by management. Cash flows cover an explicit forecast period of three years for City Solutions CGU and six years for Consumer Solutions CGU. 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, taking into consideration market outlook forecast. 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.

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. Approved actions towards Fortum's climate targets are reflected in the assumptions used in the impairment testing.

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
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

Impairment testing due to triggering event

On 24 February 2022, Russia started a widespread invasion into Ukraine. As a consequence, the US, the EU and the UK, amongst others, imposed sanctions targeting Russia's ability to access capital and financial markets, sanctioning numerous individuals and banks; as well as trading in general. The war, the resulting sanctions, and the impact on business operations was considered as an impairment indicator, which triggered impairment testing on the Russia cash-generating unit (CGU) at 31 March 2022.

For goodwill, other intangible assets, property, plant and equipment, and right-of-use assets, Fortum uses value in use to establish the recoverable amount of CGUs. Value in use is determined by discounting future cash flows expected to be derived from a group of assets. In order to reflect the uncertainty related to the Russia-Ukraine geopolitical situation at 31 March 2022, Fortum used the expected cash flow approach with three different probability-weighted cash flow scenarios prepared by the management: the base scenario with 40% weighting, as well as two different downside scenarios, each with 30% weighting. Cash flows used for annual impairment testing at the previous year end were based on the most likely scenario. In addition, Fortum updated the discount rate for Russia CGU. Discount rate from 11% to 31% was applied on a reducing scale over the cash flow period, with higher discount rate in the first three years.

The recoverable amount of the Russian associate TCG-1 was based on fair value less costs of disposal using two different probability-weighted scenarios prepared by the management. The scenarios were consistent with external sources of information, the recoverable amount corresponding to fair value hierarchy level 3.

The recoverable amount of the Russia CGU (Russia segment) was below the book value resulting in EUR 445 million impairment charge in I/2022. Impairment was recognised against goodwill, property, plant and equipment and participations in associates and joint ventures.

Discontinued operations (Uniper)

Impairment testing was also performed on the Unipro CGU at 31 March 2022. Unipro CGU was reclassified as discontinued operations in III/2022. The recoverable amount of the Unipro CGU was below the book value resulting in EUR 555 million impairment charge in I/2022.

Annual impairment testing

Annual impairment testing was performed as at 31 December 2022.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, however there are no decisions and these processes might take some time and are subject to regulatory approvals, Fortum continues to classify its Russian operations as continuing. Fortum generally uses value in use to establish the recoverable amount of CGUs. However, in connection with the annual impairment testing as of 31 December 2022, management concluded that due to the increasingly complex operating environment and prolonged uncertainty regarding the future of its Russian operations, fair value less costs of disposal is now more appropriate method to establish the recoverable amount of the Russia CGU. Fair value less costs of disposal for the Russia CGU was determined by an external party and is based on discounted cash flow model using 12.8% to 13.9% discount rate. Management made an additional risk adjustment to account for market restrictions. The valuation method is consistent with external sources of information, the recoverable amount corresponding to fair value hierarchy level 3. Management estimates that value in use method would not give a higher value to the Russia CGU.

The recoverable amount of the Russian associate TGC-1 was based on fair value less costs of disposal using quoted market price, the recoverable amount corresponding to fair value hierarchy level 2.

The recoverable amount of the Russia CGU (Russia segment) was below the book value resulting in EUR 778 million impairment charge in the Russia CGU. Impairments were recognised against property, plant and equipment and participations in associates and joint ventures. Total impairment charges in 2022 for the Russia CGU amount to EUR 1,697 million, including EUR 905 million impairment of intangible assets and property, plant and equipment, EUR 475 million impairment of participations in associates and joint ventures, EUR 145 million expected credit losses on Russian deposits and receivables, as well as EUR 171 million write down of other shares. The remaining book value of Russia segment's net assets is approximately EUR 1.7 billion at 31 December 2022 (31 Dec 2021: 2.5). The book value is based on the assumption that the controlled exit can be executed, and that other assumptions made by management realise as expected. The carrying amount of the Russia CGU is equal to its recoverable amount, meaning that any detrimental future changes may cause further impairment.

See also **Note 2** Critical accounting estimates and judgements.

The table below presents long-term pre-tax discount rates used in impairment testing by cash generating units:

Discount rate %	2022	2021
Consumer Solutions [1)]	7.6-9.8	4.5-5.6
City Solutions [1)]	7.4	4.8
Russia	12.8-13.9	11.7
Uniper [1)]	N/A	4.6-11.7

1) Discount rate depends on location and type of business.

At 31 December 2022, the recoverable amounts of Consumer Solutions and City Solutions CGUs 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 Consumer Solutions or City Solutions cash generating units.

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FINANCIALS 2022

20 Other non-current assets

EUR million	2022	2021
Other investments	543	254
Interest-free receivables	85	316
BS Total	**628**	**570**

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, as well as shares in unlisted companies. Change in other investments from 31 December 2021 is mainly due to the 1.3 GW portfolio of wind projects in Russia, as well as the deconsolidation of Uniper at 30 September 2022.

Interest-free receivables mainly include prepaid expenses. Change in interest-free receivables from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

21 Interest-bearing receivables

EUR million	2022	2021
Interest-bearing receivables	1,281	2,971
Finance lease receivables	3	136
Total	**1,284**	**3,107**

	2022		2021	
EUR million	Carrying amount	Fair value	Carrying amount	Fair value
Long-term loan receivables from associates and joint ventures	593	612	1,138	1,185
Non-current securities	-	-	111	111
Other long-term interest-bearing receivables	31	31	1,024	1,024
Total long-term interest-bearing receivables	**624**	**643**	**2,273**	**2,320**
Collateral arrangement securities	527	527	549	549
Other short-term interest-bearing receivables	130	130	149	149
Total short-term interest-bearing receivables	**657**	**657**	**698**	**698**
Total	**1,281**	**1,301**	**2,971**	**3,018**

Changes in interest-bearing receivables from 31 December 2021 are mainly due to the deconsolidation of Uniper at 30 September 2022.

Long-term interest-bearing receivables include receivables from associated companies and joint ventures of EUR 593 million (2021: 1,138). These receivables include EUR 498 million from Swedish nuclear companies, Forsmarks Kraftgrupp AB and OKG AB (2021: 955 Forsmarks Kraftgrupp AB and Ringhals AB), which are mainly funded with shareholder loans, pro-rata to each shareholder's ownership.

22 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.

EMISSION ALLOWANCES

Inventories include CO_2 emission allowances for covering emissions caused by power and heat production. CO_2 emission allowances received free of charge are accounted at nominal value. Purchases of CO_2 emissions allowances meeting the IFRS 9 "own use"-criteria, are accounted for at contracted purchase price. Purchases of CO_2 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.

CO_2 emission costs are settled by returning the emission allowances. The obligation for CO_2 emission costs is presented in Other payables, see Note 33 Trade and 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 consolidated income statement within materials and services.

EUR million	2022	2021
Raw materials and supplies	298	703
Goods purchased for resale	-	1,247
Emission rights and green certificates	112	168
Other	55	156
BS Total	**465**	**2,275**

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. Change in inventories from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

In 2021, inventories stated at fair value less costs to sell amounted to EUR 74 million and related to Uniper.

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 40

23 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 expected 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	2022	2021
Trade receivables	1,625	12,916
Other	142	1,940
BS Total	**1,767**	**14,856**

Other category includes other operating assets, accrued income and prepaid expenses. Change in trade and other receivables from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

Trade receivables

Ageing analysis of trade receivables

	2022			2021		
EUR million	**Gross**	**Expected credit loss allowance**	**Expected credit loss rate, %**	**Gross**	**Expected credit loss allowance**	**Expected credit loss rate, %**
Not past due	1,541	3	0	12,662	14	0
Past due 1-30 days	70	3	4	192	5	2
Past due 31-90 days	9	2	22	22	9	42
Past due 91-180 days	6	3	50	34	16	48
Past due more than 181 days	77	67	87	204	154	75
Total	**1,703**	**78**	**5**	**13,114**	**198**	**2**

Changes in expected credit loss allowance

EUR million	2022	2021
1 January	198	178
Expected credit loss allowance recognised during the year	78	43
Disposal of subsidiary companies	-168	-
Write-offs	-39	-25
Translation differences and other changes	9	3
31 December	**78**	**198**

Changes during the year include Uniper until 30 September 2022.

Trade receivables by currency (Gross)

EUR million	2022	2021
EUR	461	9,966
NOK	456	353
SEK	406	346
PLN	207	143
RUB	163	295
USD	3	1,196
GBP	-	795
Other	7	20
Total	**1,703**	**13,114**

Trade receivables are arising from a large number of customers mainly in EUR, NOK and SEK 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.

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 40

24 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 or 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	2022	2021
Cash at bank and in hand	2,673	3,858
Deposits and securities with maturity under 3 months	1,098	3,687
Cash and cash equivalents	**3,771**	**7,545**
Deposits and commercial papers with maturity more than 3 months	147	-
Securities, fixed-term with maturity more than 3 months	-	47
Deposits and securities, maturity over 3 months but less than 12 months	**147**	**47**
BS **Total**	**3,919**	**7,592**

Changes in liquid funds from 31 December 2021 are mainly due to the deconsolidation of Uniper at 30 September 2022.

At the end of the reporting period, the Group's liquid funds totalled EUR 3,919 million (2021: 7,592). Liquid funds include EUR 247 million relating to Fortum's Russian operations (2021: 300). These funds are not available to the other Group companies as payment transactions with the Russian Federation are subject to general restrictions.

Liquid funds totalling EUR 3,600 million (2021: 7,342) 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 7,200 million. The undrawn facilities consisted of EUR 2,000 million Liquidity revolving credit facility maturing in June 2023 (6+6 months extension options by Fortum), EUR 2,400 million Core revolving credit facility maturing in June 2025 (1+1 year extension options by the lenders), EUR 2,000 million Solidium bridge financing facility maturing in September 2023 and EUR 800 million bilateral revolving credit facility maturing in December 2023. In addition, Fortum has EUR 100 million committed overdraft limits that are valid until further notice.

The EUR 3,000 million revolving credit facility with maturity in July 2022 was cancelled in June 2022 and the EUR 1,750 million revolving credit facility with maturity in June 2023 was repaid and cancelled in June 2022.

For further information regarding credit risk management and credit risks, see ▸ **Note 4.4** Credit risk.

25 Share capital

EUR million	2022 Number of shares	2022 Share capital	2021 Number of shares	2021 Share capital
Registered shares at 1 January	888,294,465	3,046	888,294,465	3,046
Share issue to Solidium Oy	8,970,000	-	-	-
Registered shares at 31 December	**897,264,465**	**3,046**	**888,294,465**	**3,046**

Fortum Corporation has one class of shares. By the end of 2022, a total of 897,264,465 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 2022 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. The total amount of shares outstanding in the company after the registration of the new shares is 897,264,465. As a consequence, the shares under the control of the State of Finland has increased from 50.76% to 51.26%.

Fortum Corporation's shares are listed on Nasdaq Helsinki. The trading code is FORTUM. 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.

25.1 Authorisations from the Annual General Meeting 2022

In 2022, 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 corresponded to approximately 2.25% of all the shares in the company on 28 March 2022. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorisation. 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 1 March 2023.

25.2 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.

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 40

26 Non-controlling interests

Principal non-controlling interests

EUR million	2022	2021
Uniper, Germany	-	1,318
Fortum Oslo Varme AS Group, Norway	-	150
Other	67	66
BS Total	**67**	**1,534**

Change in non-controlling interests from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

EUR million	Uniper 2021
Sales	105,992
Profit for the period	-4,122
Dividends paid to non-controlling interests	-157
Total cash flows	2,663
Current assets	91,093
Current liabilities	95,331
Current net liabilities	**-4,238**
Non-current assets	27,683
Non-current liabilities	25,782
Non-current net assets	**1,901**
Net liabilities	**-2,337**
of which attributable to non-controlling interests	1,318
Ownership interests held by non-controlling interests (%)	22

27 Interest-bearing liabilities

Financial net debt and adjusted net debt

EUR million	2022	2021
+ Interest-bearing liabilities	**7,785**	**17,220**
- BS Liquid funds	**3,919**	**7,592**
- Non-current securities	-	111
- Collateral arrangement securities	527	549
- Securities in interest-bearing receivables	**527**	**660**
- BS Margin receivables	2,607	9,163
+ BS Margin liabilities	352	985
+/- Net margin liabilities/receivables	**-2,255**	**-8,179**
Financial net debt	**1,084**	**789**
+ BS Pension obligations	13	1,190
+ Other asset retirement obligations	19	872
- BS Share of Finnish and Swedish Nuclear Waste Funds	966	3,515
+ BS Nuclear provisions	966	3,891
+ Nuclear provisions net of assets in Nuclear Waste Funds	0	375
+ Total provisions net of assets in Nuclear Waste Funds	**33**	**2,438**
Adjusted net debt	**1,117**	**3,227**

Fortum has a collateral arrangement to release cash from the Nordic Power Exchange. This arrangement is presented with equal amounts, EUR 527 million (2021: 549), as a short-term interest-bearing liability and an interest-bearing receivable.

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	2022	2021
Non-current loans	3,558	7,756
Current loans	4,108	8,389
Total loans	**7,666**	**16,144**
Non-current lease liabilities	100	945
Current lease liabilities	19	130
Total lease liabilities	**119**	**1,075**
Total	**7,785**	**17,220**

EUR million	2022	2021
Bonds	1,545	2,706
Loans from financial institutions	980	3,715
Reborrowing from the Finnish State Nuclear Waste Management Fund	918	916
Lease liabilities	100	945
Other long-term interest-bearing liabilities	115	419
BS Total long-term interest-bearing liabilities	**3,658**	**8,701**
Current portion of long-term bonds	1,090	999
Current portion of loans from financial institutions	539	468
Current portion of other long-term interest-bearing liabilities	-	264
Commercial paper liabilities	475	3,129
Current portion of lease liabilities	19	130
Collateral arrangement liability	527	549
Other short-term interest-bearing liabilities	1,477	2,980
BS Total short-term interest-bearing liabilities	**4,127**	**8,519**
Total	**7,785**	**17,220**

Loans

EUR million	Effective interest rate, %	Carrying amount 2022	Repricing Under 1 year	Repricing 1-5 years	Repricing Over 5 years	Fair value 2022	Carrying amount 2021	Fair value 2021
Bonds	1.8	2,634	1,088	715	832	2,569	3,705	3,919
Loans from financial institutions	4.5	1,519	1,343	-	177	1,545	4,183	4,222
Reborrowing from the Finnish State Nuclear Waste Management Fund [1)]	0.5	918	918	-	-	938	1,165	1,213
Other long-term loans	4.6	115	82	-	33	126	433	463
Total long-term loans [2)]	**2.4**	**5,187**	**3,430**	**715**	**1,042**	**5,178**	**9,487**	**9,817**
Collateral arrangement liability	0.9	527	527	-	-	527	549	549
Commercial paper liabilities	2.9	475	475	-	-	475	3,129	3,129
Other short-term loans	7.2	1,477	1,477	-	-	1,477	2,980	2,980
Total short-term loans	**5.0**	**2,479**	**2,479**	**-**	**-**	**2,479**	**6,658**	**6,658**
Total [3)]	**3.3**	**7,666**	**5,909**	**715**	**1,042**	**7,657**	**16,144**	**16,475**

1) The reborrowing from the Finnish State Nuclear Waste Management Fund includes the part relating to Loviisa nuclear power plant as well as borrowing done through TVO.
2) Includes current portion of long-term loans of EUR 1,629 million (2021: 1,731).
3) The average interest rate on loans and derivatives was 3.9% (2021: 1.3%).

Changes in interest-bearing liabilities from 31 December 2021 are mainly due to the deconsolidation of Uniper at 30 September 2022.

In January 2022, Fortum repaid the drawn amount of EUR 500 million of its EUR 800 million bilateral revolving credit facility. In March 2022, Fortum repaid EUR 247 million of the nuclear waste fund loans totalling EUR 918 million after the repayment.

In June 2022, Fortum drew EUR 800 million of its EUR 800 million bilateral revolving credit facility. Fortum signed a new EUR 5,500 million revolving credit facility which consists of a EUR 3,100 million Liquidity revolving credit facility and a EUR 2,400 million Core revolving credit facility. Fortum drew EUR 2,000 million from the Liquidity revolving credit facility and at the same time repaid and cancelled the EUR 1,750 million revolving credit facility. The remaining balance of the bridge loan, EUR 450 million, was prepaid in June 2022.

In July 2022, Fortum executed the second drawdown of EUR 600 million from the Liquidity revolving credit facility. In August 2022, Fortum drew the remaining EUR 500 million from the Liquidity revolving credit facility and furthermore drew EUR 1,000 million from the Core revolving facility.

In September 2022, Fortum utilised the remaining part, EUR 1,400 million, of the Core revolving credit facility. Fortum repaid a maturing bond of EUR 1,000 million in September 2022. Additionally, Fortum signed a EUR 2,350 million bridge financing facility with Finnish State-owned company Solidium. Fortum drew EUR 350 million from the Solidium bridge financing facility in September 2022.

In November 2022, Fortum repaid EUR 1,400 million part of the Core revolving credit facility and Fortum used the one year extension option of the EUR 800 million bilateral revolving credit facility to mature in December 2023. In December 2022, Uniper repaid the shareholder loan of EUR 4,000 million to Fortum. Fortum repaid the remaining EUR 1,000 million of the Core revolving credit facility, EUR 2,000 million of the Liquidity credit facility and the EUR 800 million bilateral revolving credit facility was fully repaid in December 2022.

Current loans, EUR 4,108 million (2021: 8,389), include the current portion of long-term loans, EUR 1,629 million (2021: 1,731), and short-term loans EUR 2,479 million (2021: 6,658).

Current portion of long-term loans, EUR 1,629 million, consist of maturing bonds and loans from financial institutions. Maturing bonds include EUR 1,000 million bond maturing in February 2023 and EUR 90 million Swedish krona bond maturing in June 2023. Maturing loans from financial institutions include EUR 500 million loan maturing in June 2023 (with 8-month extension option by Fortum).

Short-term loans, EUR 2,479 million, include EUR 1,100 million drawdowns from Liquidity revolving credit facility (with 6+6 months extension options by Fortum), a EUR 350 million drawdown from Solidium bridge financing facility and use of commercial paper programmes of EUR 475 million.

The average interest rate for the portfolio of EUR loans was 3.1% at the balance sheet date (2021: 0.6%). The average interest rate on total loans and derivatives was 3.9% at the balance sheet date (2021: 1.3%).

Interest-bearing liabilities of EUR 7,785 million include EUR 204 million interest-bearing liabilities relating to Fortum's Russian operations, which consists of EUR 199 million loans and EUR 5 million lease liabilities.

For more information, see ▸ **Note 4** Financial risk management, ▸ **Note 34** Leases, ▸ **Note 36** Pledged assets and contingent liabilities and ▸ **Note 38** Related party transactions.

Reconciliation of interest-bearing liabilities

EUR million	1 Jan 2022	Divestment of subsidiary companies	Cash flow from financing activities 1)	Non-cash changes: Non-cash collateral arrangement	Non-cash changes: Valuation differences/ Change in consolidation	Non-cash changes: Lease liabilities	31 Dec 2022
Bonds	3,705		-1,000		-71		2,634
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,165		-247				918
Financial and other interest-bearing liabilities 2)	11,274	-19,723	9,672	-21	2,910		4,113
Lease liabilities	1,075	-874	-104			22	119
Total	**17,220**	**-20,597**	**8,320**	**-21**	**2,840**	**22**	**7,785**

EUR million	1 Jan 2021	Divestment of subsidiary companies	Cash flow from financing activities	Non-cash changes: Non-cash collateral arrangement	Non-cash changes: Valuation differences/ Change in consolidation	Non-cash changes: Lease liabilities	31 Dec 2021
Bonds	4,258		-500		-52		3,705
Reborrowing from the Finnish State Nuclear Waste Management Fund	1,145		21				1,165
Financial and other interest-bearing liabilities	4,204	-202	7,120	117	35		11,274
Lease liabilities	1,055		-152			173	1,075
Total	**10,662**	**-202**	**6,488**	**117**	**-17**	**173**	**17,220**

1) Repayments and borrowings from continuing and discontinued operations.
2) Other interest-bearing liabilities include impact from Uniper deconsolidation as well as Uniper and OKG AB shareholder loans which were previously eliminated in group consolidation.

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)						
2019/2023	Fixed	0.875	0.996	EUR	1,000	998
2019/2026	Fixed	1.625	1.638	EUR	750	715
2019/2029	Fixed	2.125	2.247	EUR	750	735
2013/2023	Floating	Stibor 3M+1.13		SEK	1,000	90
2013/2043	Fixed	3.500	3.719	EUR	100	97
Total outstanding carrying amount 31 December 2022						**2,634**

1) EMTN = Euro Medium Term Note

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 40

28 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 substantially 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 are 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.

Fortum continually evaluates the probability of utilising deferred tax assets and considers various factors that, in addition to the actual and planned earnings of the past, take into account medium-term and long-term planning. The basis for recognising deferred tax assets is an estimate by management of the extent to which it is probable that there will be sufficient taxable profit in the foreseeable future against which the unused tax losses, tax credits and deductible temporary differences can be offset.

Assumptions and estimates regarding main 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 4 million at 31 December 2022.

28.1 Deferred taxes on the balance sheet

	2022			2021		
EUR million	**1 Jan**	**Change**	**31 Dec**	**1 Jan**	**Change**	**31 Dec**
BS Deferred tax assets	2,149	-1,215	933	1,089	1,060	2,149
BS Deferred tax liabilities	-827	676	-152	-952	125	-827
Net deferred taxes	**1,321**	**-539**	**782**	**138**	**1,184**	**1,321**

Deferred tax assets are recognised to the extent it is probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilised in the relevant jurisdictions. As of 31 December 2022, Fortum has recognised deferred tax assets of EUR 933 million (2021: EUR 2,149 million).

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.

Movement in deferred tax assets and liabilities 2022

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 2022	-200	-1,551	268	1,658	1,476	146	-476	1,321
Charged to income statement	-15	275	-16	5,869	29	702	215	7,061
Charged to other comprehensive income	-	-	-33	-	248	-	-	215
Exchange rate differences, reclassifications and other changes	5	-85	-144	-38	-39	-9	40	-269
Disposals of subsidiary companies [1]	156	830	-77	-7,509	-1,126	-89	269	-7,546
31 December 2022	**-54**	**-530**	**-3**	**-19**	**589**	**751**	**48**	**782**

Movement in deferred tax assets and liabilities 2021

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 2021	-241	-1,228	542	1,273	-63	168	-312	138
Charged to income statement	44	-282	-156	395	1,258	-23	-161	1,076
Charged to other comprehensive income	-	-	-98	-	269	-	0	171
Exchange rate differences, reclassifications and other changes	-2	-44	-20	-10	11	1	0	-63
Acquisitions and disposals	0	2	-	0	0	0	-3	-1
31 December 2021	**-200**	**-1,551**	**268**	**1,658**	**1,476**	**146**	**-476**	**1,321**

1) Disposals of subsidiary companies in 2022 included EUR 7 595 million from the deconsolidation of Uniper as of 30 September 2022. See **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

Changes during the year include Uniper until 30 September 2022. Charges to income statement regarding Uniper is presented in the results from discontinued operations. See **Note 3.4** Discontinued operations.

Net change in deferred taxes from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022. The decrease was partly offset by an increase in deferred tax assets related to derivatives caused by high commodity market prices. The increase in deferred tax assets on tax loss carry forward is mainly in Ireland and caused by the Uniper divestment and Russia related impairments. Fortum has prepared a comprehensive forecast to assess the future profitability of the Irish legal entity holding the loss carried forward, and has relied on this estimate to support the value of the deferred tax asset of EUR 706 million at 31 December 2022.

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 40

Expiry of tax losses carried forward and recognised deferred tax assets

EUR million	2022 Tax losses	2022 Deferred tax asset	2021 Tax losses	2021 Deferred tax asset
Tax losses carried forward without expiration date [1]	5,836	749	675	132
Tax losses carried forward with expiration date	9	2	58	8
Total	**5,844**	**751**	**733**	**139**

1) Majority relates to Ireland.

Deferred tax assets are recognised for tax losses carried forward to the extent that realisation of the related tax benefit through future profits is probable. The increase is mainly in Ireland related to impacts caused by Uniper divestment.

Unrecognised deferred tax

The amount of temporary differences, tax losses carried forward and tax credits for which no deferred tax asset was recognised due to uncertainty of utilisation:

EUR million	2022	2021
Temporary differences	280	4,910
Tax losses carried forward	108	463
Tax credits	5	3
Total	**393**	**5,376**

The decrease of unrecognised amounts of temporary differences and losses carry forwards is mainly due to the deconsolidation of Uniper at 30 September 2022. The unrecognised temporary differences in 2022 mainly relate to Germany.

Deferred tax liabilities were not recognised on temporary differences of EUR 476 million (2021: 164) relating to investments in subsidiaries as Fortum can control the reversal effect, and it is probable that temporary differences will not be reversed in the foreseeable future. Such temporary differences are mainly related to undistributed taxable profits from Russia.

28.2 Income tax receivables

EUR million	2022	2021
Belgium	36	113
Other	35	48
BS **Total**	**71**	**161**

Income tax receivable in Belgium relates to ongoing tax disputes on income tax assessments for the years 2008–2012. Total amount of these taxes was EUR 113 million, which was booked as a receivable on the consolidated balance sheet on 31 December 2021. On 29 June 2022, the Antwerp court of First Instance, Belgium, ruled in favour of Fortum on the company's income tax assessments in Belgium for the years 2009-2012, and in September 2022, the Belgian tax authorities refunded Fortum the paid taxes amounting to EUR 78 million. The amount for the year 2008, EUR 36 million, continues to be recognised on the balance sheet. See ▶ **Note 37** Legal actions and official proceedings.

Other income tax receivables reflect corporate income taxes paid mainly in relation to the financial year, as well as payments according to received tax audit assessments in relation to previous years.

29 Nuclear-related assets and liabilities

ACCOUNTING POLICIES

Fortum owns Loviisa nuclear power plant in Finland. In Fortum's consolidated balance sheet, Share in the Nuclear Waste Funds and the Nuclear provisions relate to Loviisa nuclear power plant. Comparatives include also Barsebäck Kraftbolag AB and OKG Aktiebolag AB.

Fortum and Uniper are co-owners in the Swedish nuclear company OKG AB, with Fortum owning 45.5%. Fortum accounted for the shareholding in OKG AB as a subsidiary from 31 March 2020 to 30 September 2022. On deconsolidation of Uniper on 30 September 2022, OKG AB was reclassified as an associated company. Uniper's 100% ownership in Barsebäck Kraftbolag AB was also deconsolidated.

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 items - net.

The interest income and possible fair valuation effects on the Nuclear Waste Funds assets are presented in other financial items - 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 other nuclear power companies, i.e. 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-related assets and liabilities have been changed where necessary to ensure consistency with the policies adopted by the Group.

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.

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.

29.1 Nuclear-related assets and liabilities for consolidated nuclear power plants

EUR million	2022	2021
Carrying values on the balance sheet		
BS Nuclear provisions	966	3,891
BS Fortum's share of the Nuclear Waste Funds	966	3,515
Fortum's share of the fair value of the net assets in the Nuclear Waste Funds in Finland and Sweden	1,148	3,924
Share of fund not recognised on the balance sheet	182	408

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, decreased by EUR 2,924 million compared to 31 December 2021, totalling EUR 966 million at 31 December 2022. The decrease is mainly due to the deconsolidation of Uniper. Cost estimate and technical plan updates did not have a significant effect on Fortum's financials.

Fortum's share of the Nuclear Waste Funds are from an IFRS perspective overfunded by EUR 182 million, since Fortum's share of the Funds on 31 December 2022 was EUR 1,148 million and the carrying value on the balance sheet was EUR 966 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 items - 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.

Legal liability for Loviisa nuclear power plant

The legal liability on 31 December 2022, decided by the Ministry of Economic Affairs and Employment in December 2022, was EUR 1,197 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. Finnish nuclear operators submitted updated technical plan and cost estimates to the Ministry of Economic Affairs and Employment in June 2022. The decision on the updated legal liability from the Ministry of Economic Affairs and Employment was received in December 2022.

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. The current funding obligation target decided in December 2022 is EUR 1,197 million.

Nuclear provisions

EUR million	2022	2021
1 January	3,891	3,866
Increase in provisions	40	211
Provision used	-145	-189
Provision reversed	-16	-
Unwinding of discount	65	65
Exchange rate differences	-173	-62
Disposal of subsidiary companies [1]	-2,696	-
BS 31 December	**966**	**3,891**
BS Fortum's share in the Nuclear Waste Funds	966	3,515

1) See Note 3 Acquisitions, disposals, assets held for sale and discontinued operations.

Changes during the year include Uniper until 30 September 2022.

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 27 Interest-bearing liabilities and Note 36 Pledged assets and contingent liabilities.

29.2 Nuclear power plants in associated companies and joint ventures

OKG, 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.

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 40

TVO's total nuclear related assets and liabilities (100%)

EUR million	2022	2021
Carrying values in TVO with Fortum assumptions		
Nuclear provisions	1,620	1,713
Share of the State Nuclear Waste Management Fund	1,157	1,159
Net amount	**-463**	**-554**
of which Fortum's net share consolidated with equity method	**-116**	**-139**
TVO's legal liability and actual share of the State Nuclear Waste Management Fund		
Liability for nuclear waste management according to the Nuclear Energy Act	1,840	1,816
Share in the State Nuclear Waste Management Fund	1,436	1,451
Share of the fund not recognised on the balance sheet	279	292

TVO's legal liability, provision and share of the fund are based on the same principles as described above for Loviisa nuclear power plant. The liabilities and shares in the Fund are calculated and recorded separately for OL1/OL2 plant units and OL3 plant unit, as the corresponding total cost estimates are prepared separately. The updated technical plan did not have a material impact on Fortum's share in TVO's nuclear related assets and liabilities.

The difference between TVO's share in the State Nuclear Waste Management Fund and the carrying value of the TVO's share in the Fund is due to IFRIC 5, which requires that the carrying amount of the share in the State Nuclear Waste Management Fund is the lower of fair value or the value of the related liability. On 31 December 2022 the OL1/OL2 plant units' share in the Fund is higher than the provision according to IFRS. The OL3 plant unit's share in the Fund is on the other hand lower than the provision according to IFRS. TVO's share of the Finnish State Nuclear Waste Management Fund is from an IFRS perspective overfunded by EUR 279 million (of which Fortum's share is EUR 74 million), since TVO's share of the Fund on 31 December 2022 was EUR 1,436 million and the carrying value on the consolidated balance sheet with Fortum assumptions was EUR 1,157 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 27** Interest-bearing liabilities.

OKG's and Forsmark's total nuclear related assets and liabilities (100%)

EUR million	2022	2021
OKG's and Forsmark's nuclear-related assets and liabilities with Fortum assumptions [1)]		
Nuclear provisions	4,641	2,634
Share in the State Nuclear Waste Management Fund	3,200	2,397
Net amount	**-1,441**	**-237**
of which Fortum's net share consolidated with equity method	**-456**	**-76**

1) Comparatives do not include OKG AB as it is included in the comparatives of consolidated nuclear power plants. Comparatives include Uniper's minority ownership of Forsmark which is now deconsolidated.

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). 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 December 2022. In December 2020, the Swedish government decided the waste fees and guarantees for year 2021 only, and in January 2022 for 2022-2023. 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.

Status of TVO's Olkiluoto 3 project

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 (OL3), currently under test production phase, 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 settlement agreement with the plant supplier consortium companies Areva NP, Areva GmbH, and Siemens AG as well as with Areva Group parent company Areva SA, a company wholly owned by the French State. The settlement agreement was amended with agreements signed in June 2021. The supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 project will be adequate and will cover all applicable guarantee periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the costs of completing the OL3 project. During the period under review, the fund, which was previously replenished in July 2021, has been used to cover costs incurred to the Areva companies for the completion of the OL3 project in accordance with the settlement agreement.

On 12 March 2022, OL3 was connected to the national grid and electricity production started. The electricity power level was gradually increased to approximately 850 megawatts, until the production tests were interrupted on 26 April 2022 due to the boron pumps unexpectedly switching on. Simultaneously, a leak in the generator's cooling system was observed. Foreign material detached from the steam guide plates was found in the turbine's steam reheater in May 2022, which required repair work. The work was completed on 8 August 2022. TVO communicated on 11 August 2022 that a turbine automation update of approximately two weeks would be carried out. The test production continued on 28 August 2022 with tests at a 60% power level. On 6 September 2022, STUK granted permission to increase OL3's power level to over 60% and from thereon to 100%. According to STUK, the production tests and investigations conducted so far showed that OL3 has worked safely, and that increasing the plant unit's power level can be continued. Tests at an 80% power level were started on 9 September 2022. Tests at full power, approximately 1,600 megawatts, were started on 30 September 2022. Test production was interrupted on 18 October 2022 due to damage detected in the internals of feedwater pumps in OL3's turbine island. Test production continued 27 December 2022 after investigations into the damage were mainly completed.

According to latest information received from the Plant Supplier, OL3's regular electricity production is to start in April 2023. The Plant Supplier is obliged to complete the plant unit in accordance with the plant contract and settlement agreements.

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 36** Pledged assets and contingent liabilities.

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30 Other provisions

ACCOUNTING POLICIES

Provisions are recognised when the Group has a present legal or constructive obligation to a third party as a result of past events, 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 in 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.

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 retire-ment	Power produc-tion related	Gas distri-bution-related	Environmental remediation and similar	Personnel-related	Other	Total
1 January 2022	**2,893**	**872**	**653**	**354**	**253**	**368**	**1,013**	**6,406**
Increase in provisions	26,590	8	12	9	11	61	218	26,909
Provisions used	-1,647	-4	-	-66	-9	-94	-56	-1,877
Unused provisions reversed	-295	-50	-	-66	-2	-56	-139	-608
Exchange rate differences and other changes	-1	-1	-	-1	-1	1	-94	-96
Unwinding of discounting	-76	-36	-112	-27	-24	-28	-19	-322
Disposal of subsidiary companies [1]	-27,465	-770	-552	-203	-186	-253	-852	-30,281
31 December 2022	**-**	**19**	**-**	**-**	**41**	**-**	**70**	**130**
BS Of which current provisions	-	-	-	-	-	-	13	13
BS Of which non-current provisions	-	19	-	-	41	-	58	118

1) See Note 3 Acquisitions, disposals, assets held for sale and discontinued operations.

Changes during the year include Uniper until 30 September 2022.

Provisions for supplier- and customer-related obligations in 2021 related to Uniper and included EUR 2.6 billion of onerous contract provisions for procurement of electricity sales contracts for which the own-use exemption under IFRS 9 is applied, and to long-term infrastructure purchase contracts used in the gas storage business.

Provisions for asset retirement obligations consist of obligations for conventional power plants. The majority of the provision is estimated to be used within 5-10 years. In 2021, provisions for asset retirement obligations were mainly related to Uniper and consisted of obligations for conventional and renewable energy power plants, including the conventional plant components in the nuclear power segment; as well as provisions for environmental improvements at gas storage facilities.

Power production-related provisions in 2021 related to Uniper and consisted mainly of provisions from the hydroelectric power business.

Gas distribution-related provisions in 2021 related to Uniper and consisted mainly of onerous contract provisions for gas transportation and regasification.

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 10-15 years.

Personnel-related provisions in 2021 related to Uniper and mainly included provisions for performance-based compensation components, long-service bonus obligations, in-kind obligations, restructuring and other deferred personnel costs.

Other provisions include a number of individually immaterial items, and in 2021 mainly related to Uniper.

For provisions for decommissioning, and provision for disposal of spent fuel for nuclear production, see Note 29 Nuclear-related assets and liabilities.

31 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 are to 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 other 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.

Pension arrangements related to disposed operations (Uniper)

The comparative period includes Uniper's defined benefit pension arrangements, mostly in Germany and United Kingdom. As Uniper was deconsolidated on 30 September 2022, Fortum does not have any material arrangements in these countries as of 31 December 2022.

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".

Pension plans are funded through designated pension vehicles that are legally distinct from the company. 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). Only the "Pensionskassen" vehicles and the pension fund are subject to regulatory provisions in relation to the investment of capital and funding requirements. For the CTA, there are only funding rules stipulated in a corporate agreement.

United Kingdom

There are 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 since 2005 and 2008, respectively. Since the closure of these plans, new hires have been joining the open defined contribution plan.

Plan assets are administered by a trustee which is independent from the group and wholly responsible for the investment of the plan assets.

Other countries

As of December 2022, there were no material defined benefit pension arrangements in Fortum's other operating countries.

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	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
1 January	**4,437**	**4,636**	**-3,290**	**-3,117**	**1,146**	**1,519**
Included in consolidated income statement 1)						
Current service cost	49	73	-	-	50	73
Past service cost	1	30	-	-	1	30
Settlements	-138	-4	2	1	-136	-3
Net interest	44	43	-34	-31	10	12
	-44	142	-32	-28	-76	113
Included in OCI						
Remeasurement gains(-)/losses(+)	-1,513	-297	905	-121	-608	-418
Actuarial gains/losses arising from changes in financial assumptions	-1,517	-279	-	-	-1,517	-279
Actuarial gains/losses arising from experience adjustments	4	-18	-	-	4	-18
Return on plan assets (excluding amounts included in net interest expense)	-	-	905	-122	905	-122
Exchange rate differences and other changes	-22	52	35	-50	12	2
	-1,536	-245	940	-171	-596	-416
Other						
Contributions paid by/to the employer	-	-	11	-64	11	-64
Benefits paid	-81	-95	78	90	-2	-5
Acquisitions of subsidiary companies	1	-	0	-	1	-
Disposals of subsidiary companies 2)	-2,511	-	2,012	-	-499	-
Transfer to assets held for sale	-	0	-	0	-	0
31 December	**267**	**4,437**	**-280**	**-3,290**	**-13**	**1,146**
Present value of funded defined obligation					263	4,405
Fair value of plan assets					-280	-3,290
Funded status					**-17**	**1,115**
Present value of unfunded obligation 3)					4	32
Net liability arising from defined benefit obligation					-13	1,146
Pension assets included in other non-current assets on the balance sheet					27	44
BS Pension obligations on the balance sheet					13	1,190

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) and in 2021 also Items affecting comparability. In 2022 part of settlements are netted with defined contribution plans costs in income statement.
2) See **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.
3) The unfunded obligation in 2022 relates to arrangements in Russia and Poland. In 2021 it relates mainly to Germany.

Changes during the year include Uniper until 30 September 2022.
Contributions expected to be paid during 2023 total EUR 5 million.

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 40

Fair value of plan assets

EUR million	2022 Quoted	2022 Unquoted	2022 Total	2021 Quoted	2021 Unquoted	2021 Total
Equity instruments	88	7	94	1,327	8	1,335
Debt instruments	105	40	145	1,025	183	1,208
Cash and cash equivalents	-	18	18	-	104	104
Real estate	-	12	12	-	234	234
Investment funds	-	-	-	396	-	396
Other assets	-	11	11	0	14	14
Total	**193**	**88**	**280**	**2,748**	**543**	**3,290**

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.

Derivatives used to hedge the risks have been allocated to the respective asset classes.

The actual return on plan assets totalled EUR -12 million (2021: 145).

Amounts recognised on the balance sheet by country 2022

EUR million	Finland	Germany	United Kingdom	Other countries	Total
Present value of funded obligations	205	-	-	58	263
Fair value of plan assets	-225	-	-	-56	-280
Deficit(+)/surplus(-)	**-19**	**-**	**-**	**2**	**-17**
Present value of unfunded obligations	-	-	-	4	4
Net asset(-)/liability(+) on the balance sheet	**-19**	**-**	**-**	**6**	**-13**
Pension asset included in non-current assets	21	-	-	6	27
BS Pension obligations on the balance sheet	1	-	-	12	13

Amounts recognised on the balance sheet by country 2021

EUR million	Finland	Germany	United Kingdom	Other countries	Total
Present value of funded obligations	283	3,147	719	256	4,405
Fair value of plan assets	-251	-2,122	-756	-161	-3,290
Deficit(+)/surplus(-)	**32**	**1,025**	**-36**	**93**	**1,115**
Present value of unfunded obligations	-	26	-	6	32
Net asset(-)/liability(+) on the balance sheet	**32**	**1,051**	**-36**	**99**	**1,146**
Pension asset included in non-current assets	-	7	36	1	44
BS Pension obligations on the balance sheet	32	1,058	-	100	1,190

The principal actuarial assumptions used

%	2022 Finland	2022 Germany	2022 United Kingdom	2021 Finland	2021 Germany	2021 United Kingdom
Discount rate	3.80	-	-	1.00	1.20	2.00
Future salary increases	2.70	-	-	2.30	2.30	3.00
Future pension increases	2.80	-	-	2.40	1.80	3.10
Rate of inflation	2.60	-	-	2.10	1.80	3.20

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 reporting period, 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 reporting period 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	-5.9%
0.5% decrease in discount rate	6.6%
0.5% increase in benefit	5.9%
0.5% decrease in benefit	-5.4%
0.5% increase in salary growth rate	0.3%
0.5% decrease in salary growth rate	-0.3%
10% increase in mortality	-3.6%
10% decrease in mortality	3.6%

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 2022, the life expectancy of a 63-year-old male retiree would increase by approximately one year, if mortality were to decrease by 10%.

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.

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 40

Maturity profile of the undiscounted defined benefit obligation on 31 December 2022

EUR million	Future benefit payments
Maturity under 1 year	14
Maturity between 1 and 5 years	63
Maturity between 5 and 10 years	77
Maturity between 10 and 20 years	139
Maturity between 20 and 30 years	92
Maturity over 30 years	48

The weighted average duration of defined benefit obligation at 31 December 2022 is 16 years.

32 Other non-current liabilities

EUR million	2022	2021
Contract liabilities	-	95
Connection fees	70	70
Other	51	232
BS Total	**121**	**397**

Change in other non-current liabilities from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

Connection fees include refundable fees paid by the customer when connected to district heating network in Finland. Connection fees were refundable until 2013.

33 Trade and other payables

EUR million	2022	2021
Trade payables	720	12,152
Accrued expenses and deferred income		
Accrued personnel expenses	109	256
Accrued interest expenses	59	72
Contract liabilities	24	754
Other accrued expenses and deferred income	201	144
Other liabilities		
Liability to return emission rights [1]	99	1,938
Current tax liability	261	735
Other	185	425
BS Total	**1,657**	**16,477**

1) For additional information see **Note 22** Inventories.

Change in trade and other payables from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

Contract liabilities comprise mainly of project and waste management services that are invoiced but not delivered at the reporting date.

The management considers that the amount of trade and other payables approximates fair value.

34 Leases

ACCOUNTING POLICIES

LESSEE ACCOUNTING

The Group leases mainly office buildings and land areas. The 2021 comparative also included gas storage facilities related to Uniper. 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 Russia. The 2021 comparative also included finance lease receivables concerning certain electricity delivery contracts related to Uniper.

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.

34.1 Amounts recognised in consolidated financial statements

Lessee

EUR million	2022	2021
In consolidated income statement		
Depreciation, of which	-21	-22
Land	-2	-1
Buildings and structures	-13	-14
Machinery and equipment	-7	-7
Interest expense on lease liabilities	-2	-3
Expense relating to variable lease payments within Other expenses	0	-1
Expense relating to low-value asset leases within Other expenses	-1	-2
Income from subleasing right-of-use assets	0	1
On consolidated balance sheet		
Additions to right-of-use assets, of which	47	173
Land	6	35
Buildings and structures	29	41
Machinery and equipment	12	97
Acquisition of subsidiary companies, of which	1	-
Land	1	-
Disposal of subsidiary companies, of which [1]	-508	-7
Land	-40	-6
Buildings and structures	-403	0
Machinery and equipment	-64	0
Carrying amount of right-of-use assets, of which	122	730
Land	55	93
Buildings and structures	55	536
Machinery and equipment	12	101
Lease liabilities	119	1,075
In consolidated cash flow statement		
Cash outflow for leases	-22	-25

1) See Note 3 Acquisitions, disposals, assets held for sale and discontinued operations.

Maturity of undiscounted lease liabilities

EUR million	2022
Due within one year	18
Due after one year and within five years	53
Due after five years	57
Total	**128**

Change in leases from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022. See **Note 4** Financial risk management, **Note 17** Property, plant and equipment and right-of-use assets, and **Note 27** Interest-bearing liabilities for more information.

Lessor

EUR million	2022	2021
In consolidated income statement		
Rental income from operating lease	19	17
On consolidated balance sheet		
Lease receivables	**3**	**136**
Current	3	17
Non-current	0	119
Maturity analysis of undiscounted lease payments - Finance leases		
Due within 1 year	3	26
Due in 1 to 2 years	-	23
Due in 2 to 3 years	-	23
Due in 3 to 4 years	-	23
Due in 4 to 5 years	-	22
Due in more than 5 years	-	92
Total undiscounted lease payments	**3**	**209**
Interest component	0	73

35 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. Change in capital and other commitments from 31 December 2021 is mainly due to the deconsolidation of Uniper at 30 September 2022.

35.1 Capital commitments

EUR billion	2022	2021
Property, plant and equipment and intangible assets	0.4	1.0

Capital commitments at 31 December 2021 included Uniper segment's commitments of EUR 0.5 billion.

35.2 Other commitments to associates and joint ventures

Teollisuuden Voima Oyj (TVO) is building Olkiluoto 3, the nuclear power plant funded through external loans, share issues and shareholder loans according to shareholders' agreement between the owners of TVO. At end of December 2022, Fortum had EUR 232 million (2021: 232) 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 29** Nuclear-related assets and liabilities.

Fortum has formed a joint venture with Green Investment Group to build the South Clyde waste-to-energy plant in Glasgow, Scotland. At 31 December 2022, Fortum had an outstanding commitment of EUR 54 million to the joint venture, which is funded by external loans, share issues and shareholder loans.

35.3 Other commitments

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.

On 2 May 2022, Fennovoima announced that it had terminated the contract for the delivery of the nuclear power plant with RAOS Project Oy. At 31 December 2021, Fortum Power and Heat Holding Oy had EUR 69 million commitment to providing financing to Voimaosakeyhtiö SF for its participation in the Fennovoima nuclear power project in Finland.

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 40

36 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.

36.1 Pledged assets

For debt

Fortum has pledged shares in Kemijoki as a security for the reborrowing from the Finnish State Nuclear Waste Management Fund for the Loviisa nuclear power plant part, amounting to EUR 689 million (31 Dec 2021: 876).

Real estate mortgages total EUR 41 million (2021: 41).

For other commitments

Fortum has pledged real estate mortgages in Pyhäjoki hydro plant as security to the Ministry of Economic Affairs and Employment amounting to EUR 126 million (2021: 81). 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 29** Nuclear-related assets and liabilities.

36.2 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 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.

In 2021 Fortum signed an EUR 8 billion credit facility agreement with Uniper comprising tranches for both a shareholder loan and a parent company guarantee. The shareholder loan, EUR 4 billion, was repaid on 21 December 2022 on completion of the transaction to sell Uniper to the German State. Out of the EUR 4.0 billion parent company guarantee facility that Fortum had granted to Uniper, a total of EUR 3.0 billion was released by year-end 2022. The remaining, approximately EUR 1.0 billion, with a full German State back-to-back guarantee (indemnity), will be released latest at the end of June 2023.

36.3 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 and Forsmark 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 normally updated every third year by governmental decision. In addition, the licensees 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 under the plant operator's responsibility.

In Finland, as the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of approximately EUR 1.2 billion.

In Sweden, the operator of a nuclear power plant in operation is required to have a liability insurance or other financial cover in the amount equivalent to EUR 1.2 billion per site.

The necessary insurances for the nuclear power plants have been purchased. Similar 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 Ministry of Economic Affairs and Employment increased following the fuel loading in Olkiluoto 3, and amounts to EUR 136 million (2021: 122). 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 29** Nuclear-related assets and liabilities.

37 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.

Tax cases

On 29 June 2022, the Antwerp Court of First Instance, Belgium, ruled in favour of Fortum on the company’s income tax assessments in Belgium for the years 2009-2012. The decision concerned Fortum’s Belgian financing company, Fortum EIF NV, which financed Fortum’s Swedish subsidiary, Fortum 1 AB, in the acquisition of Russian operations in 2008, currently operating as PAO Fortum. The Belgian tax authorities argued that Fortum EIF should not benefit from the notional interest deduction regime in Belgium.

In accordance with the court ruling, Belgian tax authorities have in 2022 refunded Fortum the paid taxes amounting to EUR 78 million. These taxes had been recognised on the balance sheet as income tax receivable. The Belgian tax authorities also refunded the related interest amounting to EUR 27 million, which is recognised in the consolidated income statement in 2022.

Considering Fortum’s income tax assessment in Belgium for the year 2008, on 16 June 2020, the Court of Appeal of Ghent ruled in favour of Fortum, and 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 and have been recognised as income tax receivable.

For critical accounting estimates regarding uncertain tax positions, **Note 28** Income taxes on the balance sheet. See also **Note 12** Income tax expense.

38 Related party transactions

38.1 The Finnish State and companies owned by the Finnish State

At the end of 2022, the Finnish State owned 51.26% of the company’s shares (2021: 50.76%). On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. The bridge loan facility is linked to the six-month Euribor; the margin for the first six months is 10% and for the following six months 12%.

As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. As a consequence, the proportion of shares under the control of the State of Finland has increased to 51.26%.

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.

38.2 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 2022.

The total compensation (including pension benefits and social costs) for the key management personnel for 2022 was EUR 10 million (2021: 13). See **Note 10** Employee benefits and Board remuneration for further information on the Board of Directors and Fortum Executive Management remuneration and shareholdings.

38.3 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.

38.4 Balances and transactions with related parties

Transactions with associates, joint ventures and other related parties

EUR million	Associated companies 2022	Associated companies 2021	Joint ventures 2022	Joint ventures 2021	Other related parties 2022	Other related parties 2021	Total 2022	Total 2021
Sales	2	2	72	18	-	-	74	20
Purchases	284	234	154	146	-	-	438	379
Other income	-	1	4	19	-	-	4	20
Interest income on loan receivables	10	10	2	3	-	-	12	13

Balances with associates, joint ventures and other related parties

EUR million	Associated companies 2022	Associated companies 2021	Joint ventures 2022	Joint ventures 2021	Other related parties 2022	Other related parties 2021	Total 2022	Total 2021
Receivables								
Long-term interest-bearing loan receivables	505	1,009	88	129	-	-	593	1,138
Trade and other receivables	12	4	75	70	-	36	87	110
Liabilities								
Long-term loan payables	-	-	229	228	-	-	229	228
Short-term loan payables	-	-	-	62	-	69	-	131
Trade and other payables	3	4	50	32	-	78	53	114

Uniper was classified as discontinued operations in 2022, and 2021 income statement comparatives have been restated. This means that Uniper SE's transactions with its related parties are excluded from the above table but balances with its related parties are included in 2021. See also **Note 1** Significant accounting policies and **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

Other related parties are entities that are not consolidated on materiality grounds. For more information see **Note 1** Significant accounting policies.

See also **Note 29** Nuclear-related assets and liabilities and **Note 36** Pledged assets and contingent liabilities for details on commitments related to associates and joint ventures.

Transactions with Russian joint ventures

On 18 January 2022, Fortum announced that 1.3 GW portfolio of wind projects is being transferred to a new joint venture. However, this wind portfolio is now part of the assets and operations that are subject to the ongoing divestment process following Fortum's decision for a controlled exit from Russia as a result of the Russia-Ukraine war. Fortum's ownership interest in the 1.3 GW portfolio is presented in other non-current assets and in interest-bearing liabilities.

In June 2021, the Fortum-Rusnano wind investment fund sold the 200-MW Kalmykia wind parks to the Fortum-Russian Direct Investment Fund (RDIF) joint venture. Fortum recorded a gain of EUR 11 million from the transfer in the share of profits from associates and joint ventures.

On 2 March 2021, Fortum announced it had decided to construct the largest solar power plant in Russia through a joint venture established with RDIF. The power plant is based on capacities won by Fortum in CSA auctions in 2018 and 2019. In March 2021, Fortum sold the CSA-backed solar power project to the joint venture with RDIF.

38.5 Pension funds

At 31 December 2022, Fortum has a pension fund in Finland, which is a stand-alone legal entity managing pension assets related to part of the pension coverage in Finland. Following the deconsolidation of Uniper at 30 September 2022, Fortum no longer has pension funds in Germany or the United Kingdom. Fortum's Swedish pension fund was terminated in 2022. In 2022, Fortum had a net income of EUR 11 million from pension funds, including a termination fee for the Swedish pension fund, partly offset by direct contributions paid (2021: 64 expense). See **Note 31** Pension obligations.

The assets in the pension fund in Finland include Fortum shares representing 0.04% (2021: 0.04%) of the company's outstanding shares. The loan granted by Fortum's Finnish pension fund has been secured by real estate mortgages of EUR 41 million (2021: 41). See **Note 36** Pledged assets and contingent liabilities.

39 Events after the balance sheet date

On 16 February 2023, the Finnish Government granted a new operating license for both units at Fortum's Loviisa nuclear power plant until the end of 2050. Over the course of the new licence period, the plant is expected to generate up to 170 terawatt hours of CO_2-free electricity. Investments related to the continuation of operations and lifetime extension will amount to an estimated EUR 1 billion until 2050. Over the past five years, Fortum has already invested approximately EUR 300 million in refurbishing the Loviisa power plant. The Loviisa power plant is the first nuclear power plant in Finland. The power plant has two units: unit 1 started operating in February 1977, and unit 2 in November 1980.

At the beginning of March 2023, the Fortum Board of Directors resolved on Fortum's new strategy. Fortum's strategic priorities are to deliver reliable clean energy and drive decarbonisation in industries in the Nordics. The strategy includes new financial and sustainability targets:

- Updated financial guidance to ensure credit rating of at least BBB and optimal financial flexibility for future growth: long-term financial net debt-to-comparable EBITDA of 2.0–2.5 times.
- Disciplined growth in clean energy with capital expenditure of up to EUR 1.5 billion during 2023–2025. Investment hurdles of project WACC + 150–400 basis points will be applied and evaluated against the company's climate and biodiversity targets.
- Renewed dividend policy with payout ratio of 60–90% of comparable EPS. Fortum's Board of Directors proposes a dividend of EUR 0.91 per share for the year 2022 corresponding to a pay-out of 75% based on comparable EPS for continuing operations of EUR 1.21 (excluding Russian operations).
- Fortum has brought forward its target to reach carbon neutrality to 2030 (Scopes 1, 2, 3) and will exit all coal already by the end of 2027. To reach carbon neutrality, Fortum is committed to setting emission reduction targets based on the climate science (SBTi 1.5°C), assuming Russia exit. To measure progress, mid-point targets have been set for specific emissions at below 20 g CO_2/kWh for total energy production and at below 10 g CO_2/kWh for power generation by 2028.
- Fortum is also committing to an ambitious biodiversity target to have no net loss of biodiversity (excluding any aquatic impacts) from existing and new operations (Scopes 1, 2) from 2030 onwards. In addition, the company will reduce its negative dynamic terrestrial impacts in upstream Scope 3 by 50% by 2030 (base-year 2021). Fortum will continue local initiatives, especially in hydropower production, and is committed to develop a science-based methodology to assess the company's aquatic impacts during 2023.
- Fortum is already taking steps to reach the environmental targets and examples of these include the Loviisa nuclear plant lifetime extension, increasing the use on hydro power and the ongoing decarbonisation projects in district heating.

At the beginning of March 2023, the Fortum Board of Directors resolved on revising the financial segment reporting to match the new business structure and strategy. As of the beginning of 2023, Fortum will report its financial performance in the following reporting segments:

- The Generation segment will include the Hydro Generation, Nuclear Generation, Corporate Customers and Markets and Renewables and Decarbonisation business units.
- The Consumer Solutions segment includes the Consumer Solutions business unit.
- The Other segment includes the Circular Solutions business unit, Innovation and Venturing activities, enabling functions and corporate management.

Fortum will continue to consolidate and report its Russian operations as a separate segment for the time being; however, Fortum will continue to assess the basis for consolidation in the coming quarters. Fortum is committed to exiting the Russian market and a divestment is being pursued.

Fortum will publish restated quarterly segment financials for 2022 before publication of the first quarter 2023 results on 11 May 2023.

40 Group companies by segment

G = Generation
C = City Solutions
CS = Consumer Solutions
O = Other Operations
R = Russia

1) Shares held by the parent company

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 2022.

Subsidiaries by segment

Entity Name	Domicile	Segment	Group holding, %
Brändskogen Vindkraft Ab Oy	Finland	G	100.0
Ekopartnerit Turku Oy	Finland	C	51.0
EX-KE Oy	Finland	CS	100.0
Fortum Alku Oy	Finland	O	100.0
Fortum Asiakaspalvelu Oy	Finland	CS	100.0
Fortum Assets Oy	Finland	O	100.0
Fortum Battery Recycling Oy	Finland	C	100.0
Fortum Bio Oy	Finland	O	100.0
Fortum Clean Oy	Finland	O	100.0[1)]
Fortum Heat and Gas Oy	Finland	C,O	100.0[1)]
Fortum Kasvu Oy	Finland	O	100.0
Fortum Markets Oy	Finland	CS	100.0
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 Renewables Oy	Finland	G	100.0
Fortum RES Oy	Finland	O	100.0
Fortum TwoGether 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
Lamminnevan Tuulivoima Oy	Finland	G	100.0
Molpe Vindkraft Ab/Oy	Finland	G	100.0
Närpes Vindkraft Ab/Oy	Finland	G	100.0
Oy Pauken Ab	Finland	O	100.0
Oy Tersil Ab	Finland	O	100.0
Oy Tertrade Ab	Finland	O	100.0
Penkkisuon Tuulivoima Oy	Finland	G	100.0
Pjelax Vindkraft Ab/Oy	Finland	G	60.0
Poikel Vindkraft Ab/Oy	Finland	G	100.0
Tecofe Oy	Finland	G	100.0
TGS Finland Oy	Finland	C	100.0
Barry Danmark ApS	Denmark	O	100.0
Fortum Waste Solutions A/S	Denmark	C	100.0
Fortum CFS Eesti OU	Estonia	O	100.0
Barry France SAS	France	O	100.0
Fortum France S.A.S	France	G	100.0
Fortum Batterie Recycling GmbH	Germany	C	100.0
Fortum Deutschland SE	Germany	O	100.0
Fortum Service Deutschland GmbH	Germany	C,G,O	100.0
MAWAL Energie GmbH	Germany	O	100.0
SALWAL Energie GmbH	Germany	O	100.0
TGS Germany GmbH	Germany	C	100.0
Fortum Insurance Limited	Guernsey	O	100.0
Fortum India Private Limited	India	C	100.0[1)]
Solar One Energy Private Limited	India	C	100.0
SolarXL Alpha Energy Private Limited	India	C	100.0
SolarXL Beta Energy Private Limited	India	C	100.0
SolarXL Delta Energy Private Limited	India	C	100.0
SolarXL Gamma Energy Private Limited	India	C	100.0
SolarXL Zeta Energy Private Limited	India	C	100.0
PT Fortum Energy Solution	Indonesia	C	95.0
Fortum eNext Ireland Ltd	Ireland	C	100.0
Fortum Finance Ireland Designated Activity Company	Ireland	O,C,G	100.0[1)]
Fortum Global Finance Designated Activity Company	Ireland	O	100.0
Fortum P&H Ireland Limited	Ireland	O	100.0
Fortum Participation Limited	Ireland	O,C	100.0
Fortum 2 B.V.	Netherlands	C	100.0
Fortum 3 B.V.	Netherlands	C	100.0
Fortum H&C B.V.	Netherlands	C	100.0
Fortum Holding B.V.	Netherlands	C,CS,G,O,R	100.0[1)]
Fortum Hydro B.V.	Netherlands	O	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	C	100.0
PolarSolar B.V.	Netherlands	C	100.0
Fortum Consumer Solutions AS	Norway	CS	100.0
Fortum Forvaltning AS	Norway	C,O,G	100.0
Fortum Hedging AS	Norway	G	100.0
Fortum Kundesenter AS	Norway	CS	100.0
Fortum Plastics Recycling Norway AS	Norway	C	100.0
Fortum Strøm AS	Norway	CS	100.0
Fortum Waste Solutions Norway AS	Norway	C	100.0
NorgesEnergi AS	Norway	CS	100.0
Tellier Service AS	Norway	CS	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 Service Poland Sp. z o.o.	Poland	O	100.0
Fortum Silesia SA	Poland	C	100.0
Fortum Sprzedaż Sp. z o.o.	Poland	CS	100.0
Fortum Wind Energy Joint Stock Company, AO FEW	Russia	R	98.2
Fortum-New Generation 3 Limited Liability Company	Russia	R	100.0

Entity Name	Domicile	Segment	Group holding, %
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
PAO Fortum	Russia	R	98.2
Ural Heat Networks Company Joint Stock Company	Russia	R	98.2
Ylyanovsk Wind Farm LLC	Russia	R	98.2
HQ Services Limited	Rwanda	C	49.0
Escandinava de Electricidad S.L.U	Spain	CS	100.0
Blybergs Kraftaktiebolag	Sweden	G	66.7
Borgvik Vindkraft AB	Sweden	G	100.0
Brännälven Kraft AB	Sweden	G	67.0
Bullerforsens Kraft Aktiebolag	Sweden	G	88.0
Energikundservice Sverige AB	Sweden	CS	100.0
Fortum 1 AB	Sweden	R	100.0
Fortum Energy AB	Sweden	CS	100.0
Fortum Fastigheter AB	Sweden	O	100.0
Fortum Grön AB	Sweden	O	100.0
Fortum Markets AB	Sweden	CS	100.0
Fortum Mockfors Kraft AB	Sweden	G	88.0
Fortum Power AB	Sweden	O	100.0[1)]
Fortum Produktionsnät AB	Sweden	G	100.0
Fortum Sverige AB	Sweden	C,G,O	100.0
Fortum Sweden AB	Sweden	C,O	100.0[1)]
Fortum Vindkraft Sverige 3 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 4 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 5 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 6 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 7 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 8 AB	Sweden	G	100.0
Fortum Vindkraft Sverige 9 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
Mellansvensk Kraftgrupp Aktiebolag	Sweden	G	86.9
Nya Bullerforsen Kraft AB	Sweden	G	88.0
Oreälvens Kraftaktiebolag	Sweden	G	65.0
Salviken Solpark AB	Sweden	G	100.0
Sävar Vindkraft AB	Sweden	G	100.0
TGS Sweden AB	Sweden	C	100.0
Uddeholm Kraft Aktiebolag	Sweden	G	100.0
Värmlandskraft-OKG-delägarna Aktiebolag	Sweden	G	73.3
Fortum Carlisle Limited	United Kingdom	C	100.0
Fortum Energy Limited	United Kingdom	O	100.0
Fortum O&M (UK) Limited	United Kingdom	C	100.0
Fortum Ratcliffe Limited	United Kingdom	C	100.0
IVO Energy Limited	United Kingdom	G	100.0
Valo Ventures I LP Fund	USA	O	99.0

Associated companies and joint ventures by segment

Entity Name	Country	Segment	Group holding %
Battery Intelligence Oy	Finland	C	32.9
Chempolis Oy	Finland	C	32.9
Kemijoki Oy	Finland	G	28.2
Posiva Oy	Finland	G	40.0
Puro.earth Oy	Finland	O	16.6
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	16.2[1)]
Assam Bio Refinery Private Limited	India	C	40.3
Fortum Charge & Drive India Private Limited	India	C	63.0
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	50.0
Fortum-New Generation 4 Limited Liability Company	Russia	R	50.0
TGC1 Territorial Generating Company 1	Russia	R	29.99
Ural energy retail LLC	Russia	R	50.0
Ängefallen Kraft AB	Sweden	G	50.0
Blåsjön Kraft AB	Sweden	G	50.0
Forsmarks Kraftgrupp Aktiebolag	Sweden	G	25.5
Horrmundsvalla Kraftaktiebolag	Sweden	G	50.0
OKG Aktiebolag	Sweden	G	45.5
Stensjön Kraft AB	Sweden	G	50.0
Tåsans Kraftaktiebolag	Sweden	G	40.0
Väsa Kraftaktiebolag	Sweden	G	50.0
Vattenkraftens Miljöfond Sverige AB	Sweden	G	22.7
South Clyde Energy Recovery Holdings Limited	United Kingdom	C	50.0

Key figures

Financial key figures

For information of Alternative Performance Measures used by Fortum, see **Definitions and reconciliations of key figures** and **Note 1** Significant accounting policies.

Fortum's consolidated income statement and consolidated cash flow statement were modified in 2022 to include Uniper segment as discontinued operations. As required by IFRS, comparatives for 2021 were restated. Consolidated balance sheet at 31 December 2021 included Uniper. For further information, see **Note 1** Significant accounting policies, **Note 2** Critical accounting estimates and judgements and **Note 3** Acquisitions, disposals, assets held for sale and discontinued operations.

Key figures, continuing operations

EUR million or as indicated	2022	2021	Change 22/21 %
Income statement			
Reported			
Sales	8,804	6,422	37
EBITDA	1,842	4,913	-63
Operating profit	1,277	4,325	-70
- of sales %	14.5	67.4	
Share of profit/loss of associates and joint ventures	-629	168	-474
Profit before income tax	455	4,332	-89
- of sales %	5.2	67.5	
Net profit for the year	1,011	4,008	-75
Net profit for the year attributable to owners of the parent	1,011	3,985	-75
Comparable			
EBITDA	2,436	2,016	21
Operating profit	1,871	1,429	31
Share of profit/loss of associates and joint ventures	-11	104	-111
Net profit for the year attributable to owners of the parent	1,550	1,091	42
Cash flow, key ratios and other data			
Capital expenditure and gross investments in shares	558	724	-23
- of sales %	6.3	11.3	
Capital expenditure	525	443	19
Net cash from operating activities	2,104	1,119	88
Financial net debt/comparable EBITDA	0.4	N/A	
Research and development expenditure	55	54	2
- of sales %	0.6	0.8	
Average number of employees	7,826	8,045	

Continuing operations excl. Russia

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding Fortum's Russian operations. See also **Note 1** Significant accounting policies.

EUR million or as indicated	2022	2021	Change 22/21 %
Comparable			
EBITDA	2,025	1,612	26
Operating profit	1,611	1,167	38
Share of profit/loss of associates and joint ventures	-40	42	-195
Net profit for the year attributable to owners of the parent	1,076	851	26
Earnings per share, EUR	1.21	0.96	26
Financial position			
Financial net debt/comparable EBITDA	0.6	N/A	

Key figures, total of continuing and discontinued operations

EUR million or as indicated	2022	2021	Change 22/21 %
Income statement			
Reported			
Net profit for the year attributable to owners of the parent	-2,416	739	-427
Comparable			
Net profit for the year attributable to owners of the parent	-988	1,778	-156
Financial position and cash flow			
Capital employed	15,522	30,885	
Financial net debt	1,084	789	37
Adjusted net debt	1,117	3,227	-65
Net cash from operating activities	-8,767	4,970	-276
Key ratios			
Return on shareholders' equity, %	-96.2	-0.8	
Interest coverage	-75.5	-12.7	
Interest coverage including capitalised borrowing costs	-72.2	-9.4	
Gearing, %	14	6	
Equity-to-assets ratio, %	33	9	
Financial net debt/comparable EBITDA	N/A	0.2	
Other data			
Dividends	817 [1]	1,013	-19
Average number of employees	16,549	19,796	

1) Board of Directors' proposal for the planned Annual General Meeting on 13 April 2023.

See **Definitions and reconciliations of key figures**.

Share key figures

EUR or as indicated	2022	2021	Change 22/21 %
Data per share			
Earnings per share, total Fortum	-2.72	0.83	-428
Earnings per share, continuing operations	1.14	4.49	-75
Earnings per share, discontinued operations	-3.86	-3.65	6
Comparable earnings per share, total Fortum	-1.11	2.00	-156
Comparable earnings per share, continuing operations	1.74	1.23	41
Comparable earnings per share, discontinued operations	-2.86	0.77	-471
Comparable earnings per share, continuing operations excl. Russia	1.21	0.96	26
Cash flow per share, total Fortum	-9.86	5.60	-276
Cash flow per share, continuing operations	2.37	1.26	88
Cash flow per share, discontinued operations	-12.22	4.34	-382
Equity per share	8.55	13.66	-37
Dividend per share	0.91 1)	1.14	-20
Payout ratio, % 2)	79.8 1)	137.3	
Payout ratio excl. Russia, %	75.0 1)	N/A	
Dividend yield, %	5.9 1)	4.2	
Price/earnings ratio (P/E) 2)	13.6	32.5	
Share prices			
At the end of the period	15.54	26.99	
Average	15.18	23.65	
Lowest	8.86	19.72	
Highest	27.18	27.96	
Other data			
Market capitalisation at the end of the period, EUR million	13,943	23,975	
Trading volumes 3)			
Number of shares, 1,000 shares	560,775	351,450	
In relation to weighted average number of shares, %	63.1	39.6	
Average number of shares, 1,000 shares	889,204	888,294	
Diluted adjusted average number of shares, 1,000 shares	889,204	888,294	
Number of registered shares, 1,000 shares	897,264	888,294	

1) Board of Directors’ proposal for the planned Annual General Meeting on 13 April 2023.
2) Payout ratio and price/earnings ratio for 2022 is calculated based on earnings per share from continuing operations.
3) 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 2022, approximately 74% (2021: 70%) of Fortum’s shares were traded on markets other than the Nasdaq Helsinki Ltd.

See ▶ **Definitions and reconciliations of key figures**.

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Segment key figures

Sales by segment, EUR million	2022	2021
Generation	3,655	2,869
- of which internal	-645	140
City Solutions	1,282	1,302
- of which internal	75	29
Consumer Solutions	4,578	2,622
- of which internal	30	14
Other Operations	136	138
- of which internal	106	102
Eliminations and Netting of Nord Pool transactions	-1,877	-1,413
Total continuing operations excl. Russia	**7,774**	**5,519**
Russia	1,031	906
Eliminations	-1	-2
Total continuing operations	**8,804**	**6,422**

Comparable operating profit by segment, EUR million	2022	2021
Generation	1,600	1,123
City Solutions	28	135
Consumer Solutions	97	52
Other Operations	-115	-142
Total continuing operations excl. Russia	**1,611**	**1,167**
Russia	260	261
Comparable operating profit, continuing operations	**1,871**	**1,429**
Impairment charges and reversals	-905	-35
Capital gains and other related items	785	2,673
Changes in fair values of derivatives hedging future cash flow	-393	264
Other	-80	-6
Operating profit, continuing operations	**1,277**	**4,325**

Comparable EBITDA by segment, EUR million	2022	2021
Generation	1,765	1,287
City Solutions	177	317
Consumer Solutions	173	123
Other Operations	-90	-114
Total continuing operations excl. Russia	**2,025**	**1,612**
Russia	411	404
Total continuing operations	**2,436**	**2,016**

Depreciation and amortisation, EUR million	2022	2021
Generation	165	164
City Solutions	148	182
Consumer Solutions	75	71
Other Operations	25	28
Total continuing operations excl. Russia	**415**	**445**
Russia	151	142
Total continuing operations	**566**	**587**

Comparable share of profit of associates and joint ventures by segment, EUR million	2022	2021
Generation	-49	0
City Solutions	14	42
Other Operations	-6	0
Total continuing operations excl. Russia	**-40**	**42**
Russia	30	62
Total continuing operations	**-11**	**104**

Share of profit of associates and joint ventures by segment, EUR million	2022	2021
Generation	-194	64
City Solutions	14	42
Other Operations	-6	0
Total continuing operations excl. Russia	**-185**	**106**
Russia	-443	62
Total continuing operations	**-629**	**168**

Capital expenditure by segment, EUR million	2022	2021
Generation	231	168
City Solutions	155	161
Consumer Solutions	71	68
Other Operations	10	15
Total continuing operations excl. Russia	**467**	**396**
Russia	58	47
Total continuing operations	**525**	**443**

Gross investments in shares by segment, EUR million	2022	2021
Generation	3	7
City Solutions	4	2
Consumer Solutions	0	-
Other Operations	21	237
Total continuing operations excl. Russia	**29**	**245**
Russia	4	36
Total continuing operations	**33**	**281**

Gross divestments of shares by segment, EUR million	2022	2021
Generation	-	129
City Solutions	1,213	3,870
Consumer Solutions	0	0
Other Operations	150	19
Total continuing operations excl. Russia	**1,363**	**4,017**
Russia	1	18
Total continuing operations	**1,365**	**4,034**

Comparable net assets by segment, EUR million	2022	2021
Generation	5,549	5,961
City Solutions	1,760	2,456
Consumer Solutions	1,365	1,125
Other Operations	64	125
Total continuing operations excl. Russia	**8,737**	**9,668**
Russia	1,690	2,508
Total continuing operations	**10,427**	**12,176**

Comparable return on net assets by segment, %	2022	2021
Generation	27.0	19.0
City Solutions	2.3	6.1
Consumer Solutions	9.1	6.9
Russia	11.3	12.9

Average number of employees	2022	2021
Generation	1,278	1,153
City Solutions	1,676	1,964
Consumer Solutions	1,177	1,091
Other Operations	989	976
Total continuing operations excl. Russia	**5,120**	**5,183**
Russia	2,706	2,862
Total continuing operations	**7,826**	**8,045**
Uniper	8,723	11,751
Total	**16,549**	**19,796**

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Definitions and reconciliations 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 + 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 amortisation, 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 are reported in comparable operating profit, if this reflects the business model.	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 and are adjusted from other income or expenses 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

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Other	Restructuring and cost management expenses, and other miscellaneous non-operating items, which are adjusted mainly from materials and services or other expenses.	Component used in calculating comparable operating profit and comparable EBITDA.	Income statement
Comparable share of profit/loss of associates and joint ventures	Share of profit/loss of associates and joint ventures +/- significant adjustments for share of profit /loss in associates and joint ventures.	Component used in calculating comparable net profit and comparable return on net assets.	Note 7 Comparable operating profit and comparable net profit
Comparable finance-costs - net	Finance costs – net +/- return from nuclear funds, nuclear fund adjustment and unwinding of nuclear provisions +/- fair value changes on financial items +/- impairment charges and reversals of previously recorded impairment charges on financial items and other onetime adjustments.	Component used in calculating comparable net profit.	Note 7 Comparable operating profit and comparable net profit
Comparable profit before income tax	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs – net.	Subtotal in comparable net profit calculation.	Note 7 Comparable operating profit and comparable net profit
Comparable income tax expense	Income tax expense excluding taxes on items affecting comparability, adjustments to finance costs – net, tax rate changes and other onetime adjustments.	Component used in calculating comparable net profit.	Note 7 Comparable operating profit and comparable net profit
Comparable net profit	Comparable operating profit +/- comparable share of profit/loss of associates and joint ventures +/- comparable finance costs - net +/- comparable income tax expense +/- comparable non-controlling interests.	Comparable net profit is used to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.	Note 7 Comparable operating profit and comparable net profit

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Comparable earnings per share	$\frac{\text{Comparable net profit}}{\text{Average number of shares during the period}}$	Comparable earnings per share is used to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods.	Note 7 Comparable operating profit and comparable net profit
Comparable return on net assets, %	$\frac{\text{Comparable operating profit + comparable share of profit/loss in associates and joint ventures}}{\text{Comparable net assets average}} \times 100$	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
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

Capital structure	Definition	Reason to use the measure	Reconciliation
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.	Note 5 Capital risk management
Financial net debt	Interest-bearing liabilities - liquid funds - securities in interest-bearing receivables +/- net margin liabilities/receivables	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.	Note 27 Interest-bearing liabilities
Adjusted net debt	Financial net debt + underfunded pension obligations and asset retirement obligations, net of share in nuclear waste funds	Adjusted net debt is used in the follow-up of the indebtedness of the group.	Note 27 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.	N/A
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

Alternative performance measures excluding Russia

Business performance	Definition	Reason to use the measure	Reference to reconciliation
Comparable EBITDA from continuing operations excl. Russia	Comparable EBITDA from continuing operations - comparable EBITDA, Russia	Comparable EBITDA from continuing operations excluding Russia is representing the underlying cash flow generated by the total Group, excluding Russian operations. Used as a component in the capital structure target of Financial net debt to Comparable EBITDA excl. Russia.	Definitions and reconciliations of key figures
Comparable operating profit from continuing operations excl. Russia	Comparable operating profit - comparable operating profit, Russia	Comparable operating profit from continuing operations excluding Russia is an additional financial performance indicator to support meaningful comparison of financials for Fortum's strategic businesses.	Note 7 Comparable operating profit and comparable net profit
Comparable net profit from continuing operations excl. Russia	Comparable net profit from continuing operations - comparable share of profit/loss of associates and joint ventures, Russia, - comparable finance costs - net, Russia, - comparable income tax expense, Russia, - comparable non-controlling interests, Russia.	Comparable net profit from continuing operations excluding Russia is an additional financial performance indicator to support meaningful comparison of financials for Fortum's strategic businesses.	Note 7 Comparable operating profit and comparable net profit
Comparable earnings per share from continuing operations excl. Russia	Comparable net profit from continuing operations excl. Russia / Average number of shares during the period	Comparable earnings per share from continuing operations excluding Russia is an additional financial performance indicator to support meaningful comparison of financials for Fortum's strategic businesses.	Note 7 Comparable operating profit and comparable net profit

Capital structure	Definition	Reason to use the measure	Reconciliation
Financial net debt/comparable EBITDA excl. Russia	Financial net debt, excl. Russia / Comparable EBITDA from continuing operations excl. Russia	Financial net debt/comparable EBITDA excluding Russia is an additional financial performance indicator to support meaningful comparison of the capital structure for Fortum's strategic businesses.	Note 5 Capital risk management
Financial net debt excl. Russia	Financial net debt - Interest-bearing liabilities, Russia + Liquid funds, Russia	Financial net debt excluding Russia is an additional financial performance indicator to support meaningful comparison in the follow-up of the indebtedness of the group and it is a component in the calculation of Financial net debt to Comparable EBITDA excluding Russia.	Note 5 Capital risk management

See **Note 1.4** Measures for performance and **Note 7** Comparable operating profit and comparable net profit.

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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, %	$\frac{\text{Dividend per share}}{\text{Earnings per share}} \times 100$
Payout ratio excl. Russia, %	$\frac{\text{Dividend per share}}{\text{Comparable earnings per share, continuing operations excl. Russia}} \times 100$
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

Other key figures

EBITDA	Operating profit + depreciations and amortisations
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.
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, %	$\frac{\text{Financial net debt}}{\text{Total equity including non-controlling interests}} \times 100$
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	Average of the number of employees at the end of each calendar month during the period and at the end of the previous period

Tax key figures

Effective income tax rate,%	$\frac{\text{Income tax expense}}{\text{Profit before income tax}} \times 100$
Comparable effective income tax rate, %	$\frac{\text{Comparable income tax}}{\text{Comparable profit before income tax excluding comparable share of profit/loss from associated companies and joint ventures}} \times 100$
Weighted average applicable income tax rate	Sum of the proportionately weighted share of profits before taxes of each of the group's operating country multiplied by an applicable nominal tax rate of the respective countries.

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Reconciliations of alternative performance measures

Comparable EBITDA

EUR million	Note	2022	2021
IS Operating profit		1,277	4,325
+ IS Depreciation and amortisation		566	587
EBITDA		1,842	4,913
- IS Items affecting comparability	7	593	-2,897
Comparable EBITDA		**2,436**	**2,016**

Comparable operating profit

EUR million	Note	2022	2021
IS Operating profit		1,277	4,325
- IS Items affecting comparability	7	593	-2,897
IS Comparable operating profit	7	**1,871**	**1,429**

Items affecting comparability

EUR million	Note	2022	2021
Impairment charges and reversals		-905	-35
Capital gains and other related items	3	785	2,673
Changes in fair values of derivatives hedging future cash flow		-393	264
Other		-80	-6
IS Items affecting comparability	7	**-593**	**2,897**

Comparable net profit

EUR million	Note	2022	2021
IS Net profit		1,011	4,008
- IS Items affecting comparability	7	593	-2,897
- Adjustments to share of profit/loss of associates and joint ventures	18	618	-65
- Adjustments to finance costs - net	11	348	34
- Adjustments to income tax expenses		-1,010	34
- IS Non-controlling interests		0	-23
- Adjustments to non-controlling interests		-11	-1
Comparable net profit	7	**1,550**	**1,091**

Comparable earnings per share

	Note	2022	2021
Comparable net profit from continuing operations, EUR million	7	1,550	1,091
Average number of shares during the period, 1 000 shares		889,204	888,294
Comparable earnings per share from continuing operations, EUR		**1.74**	**1.23**
Comparable net profit from discontinued operations, EUR million	7	-2,538	687
Average number of shares during the period, 1 000 shares		889,204	888,294
Comparable earnings per share from discontinued operations, EUR		**-2.86**	**0.77**
Comparable net profit, total Fortum, EUR million	7	-988	1,778
Average number of shares during the period, 1 000 shares		889,204	888,294
Comparable earnings per share, total Fortum, EUR		**-1.11**	**2.00**

Financial net debt and adjusted net debt

EUR million	Note	31 Dec 2022	31 Dec 2021
+ Interest-bearing liabilities		**7,785**	**17,220**
- BS Liquid funds		**3,919**	**7,592**
- Non-current securities		-	111
- Collateral arrangement securities		527	549
- Securities in interest-bearing receivables		**527**	**660**
- BS Margin receivables		2,607	9,163
+ BS Margin liabilities		352	985
+/- Net margin liabilities/receivables		**-2,255**	**-8,179**
Financial net debt	27	**1,084**	**789**
+ BS Pension obligations		13	1,190
+ Other asset retirement obligations		19	872
- BS Share of Finnish and Swedish Nuclear Waste Funds		966	3,515
+ BS Nuclear provisions		966	3,891
+ Nuclear provisions net of assets in Nuclear Waste Funds		0	375
+ Total provisions net of assets in Nuclear Waste Funds		**33**	**2,438**
Adjusted net debt		**1,117**	**3,227**

Financial net debt/comparable EBITDA

EUR million	Note	Continuing operations 2022	Fortum total [1] 2021
+ Interest-bearing liabilities		**7,785**	**17,220**
- BS Liquid funds		**3,919**	**7,592**
- Non-current securities		-	111
- Collateral arrangement securities		527	549
- Securities in interest-bearing receivables		**527**	**660**
- BS Margin receivables		2,607	9,163
+ BS Margin liabilities		352	985
+/- Net margin liabilities/receivables		**-2,255**	**-8,179**
Financial net debt	27	**1,084**	**789**
IS Operating profit		1,277	-588
+ IS Depreciation and amortisation		566	1,281
EBITDA		**1,842**	**693**
- IS Items affecting comparability		593	3,124
Comparable EBITDA		**2,436**	**3,817**
Financial net debt/comparable EBITDA		**0.4**	**0.2**

1) 2021 figures based on continuing and discontinued operations (total).

Reconciliation of alternative performance measures excluding Russia

Comparable EBITDA from continuing operations excl. Russia

EUR million	Note	2022	2021
Comparable EBITDA from continuing operations	6	2,436	2,016
- Comparable EBITDA, Russia	6	411	404
Comparable EBITDA from continuing operations excl. Russia	6	**2,025**	**1,612**

Comparable operating profit from continuing operations excl. Russia

EUR million	Note	2022	2021
IS Comparable operating profit from continuing operations		1,871	1,429
- Comparable operating profit, Russia	6	260	261
Comparable operating profit from continuing operations excl. Russia	6	**1,611**	**1,167**

Comparable net profit from continuing operations excl. Russia

EUR million	Note	2022	2021
Comparable net profit from continuing operations	7	1,550	1,091
- Comparable operating profit, Russia		260	261
- Comparable share of profit/loss of associates and joint ventures, Russia	6	30	62
- Comparable finance costs - net, Russia		324	-25
- Comparable income tax expense, Russia		-138	-55
- Comparable non-controlling interests, Russia		-2	-4
Comparable net profit from continuing operations excl. Russia		**1,076**	**851**

Comparable earnings per share from continuing operations excl. Russia

EUR million	Note	2022	2021
Comparable net profit from continuing operations excluding Russia		1,076	851
Average number of shares during the period, 1 000 shares		889,204	888,294
Comparable earnings per share from continuing operations excl. Russia, EUR		**1.21**	**0.96**

Financial net debt/comparable EBITDA excl. Russia

EUR million	Continuing operations 2022
Financial net debt	**1,084**
- Interest-bearing liabilities, Russia	204
+ Liquid funds, Russia	247
Financial net debt excl. Russia	**1,127**
Comparable EBITDA from continuing operations excl. Russia	**2,025**
Financial net debt/comparable EBITDA excl. Russia	**0.6**

Interest-bearing liabilities excl. Russia

EUR million	2022
Interest-bearing liabilities	**7,785**
- Interest-bearing liabilities, Russia	204
Interest-bearing liabilities excl. Russia	**7,581**

Liquid funds excl. Russia

EUR million	2022
Liquid funds	**3,919**
- Liquid funds, Russia	247
Liquid funds excl. Russia	**3,672**

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Parent company financial statements, Finnish GAAP (FAS)

Income statement

EUR	Note	2022	2021
Sales	2	150,270,878	138,653,366
Other income	3	25,066,880	8,154,517
Employee benefits	4	-58,824,730	-54,312,599
Depreciation, amortisation and write-downs	8	-10,984,728	-10,476,708
Other expenses		-148,946,872	-123,370,573
Operating loss		**-43,418,572**	**-41,351,995**
Financial income and expenses	6	1,629,174,418	1,658,966,966
Profit before appropriations and income tax		**1,585,755,846**	**1,617,614,971**
Appropriations		-1,023,551	-909,896
Group contributions received [1)]		24,013,000	235,685,000
Profit before income tax		**1,608,745,295**	**1,852,390,074**
Income tax expense	7	-66,011,056	-36,363,330
Profit for the year		**1,542,734,239**	**1,816,026,744**

1) Taxable profits transferred from Finnish subsidiaries.

Balance sheet

EUR	Note	31 Dec 2022	31 Dec 2021
ASSETS			
Non-current assets			
Intangible assets	8	29,993,944	32,746,447
Property, plant and equipment	8	5,350,975	7,404,389
Shares in Group companies	8	14,232,843,131	16,176,622,539
Interest-bearing receivables from Group companies	8	12,060,281,161	7,050,724,884
Interest-bearing receivables from associated companies	8	1,592,410	1,503,943
Other non-current assets	8	209,997	161,547
Derivative financial instruments	13, 14	123,889,406	59,505,726
Deferred tax assets		649,741	3,661,428
Total non-current assets		**26,454,810,764**	**23,332,330,902**
Current assets			
Other current receivables from Group companies	9	51,234,101	377,081,611
Other current receivables from associated companies		140,737	513,126
Derivative financial instruments	13, 14	145,296,548	138,448,001
Other current receivables	9	50,446,974	18,236,847
Cash and cash equivalents		3,603,509,216	4,240,206,975
Total current assets		**3,850,627,576**	**4,774,486,560**
Total assets		**30,305,438,341**	**28,106,817,462**

EUR	Note	31 Dec 2022	31 Dec 2021
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		23,685,963	-13,279,837
Retained earnings		4,748,541,369	3,945,170,314
Profit for the year		1,542,734,239	1,816,026,744
Total equity		**12,182,838,426**	**11,615,794,077**
Accumulated appropriations		**1,933,447**	**909,896**
Provisions for liabilities and charges		**-**	**343,198**
LIABILITIES			
Non-current liabilities			
External interest-bearing liabilities	11, 13, 14	3,037,907,935	6,481,656,534
Interest-bearing liabilities to Group companies		10,741,043,062	5,567,468,774
Interest-bearing liabilities to associated companies		228,962,461	227,507,037
Derivative financial instruments	13, 14	130,472,330	37,050,594
Other non-current liabilities		16,274,932	27,589,524
Total non-current liabilities		**14,154,660,720**	**12,341,272,463**
Current liabilities			
External interest-bearing liabilities	11	3,558,361,054	3,837,837,491
Interest-bearing liabilities to associated companies		-	61,701,555
Trade and other payables to Group companies	12	41,408,137	34,846,355
Trade and other payables to associated companies	12	1,239,200	1,475,327
Derivative financial instruments	13, 14	178,618,112	123,639,596
Trade and other payables	12	186,379,244	88,997,502
Total current liabilities		**3,966,005,747**	**4,148,497,827**
Total liabilities		**18,120,666,468**	**16,489,770,290**
Total equity and liabilities		**30,305,438,341**	**28,106,817,462**

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Cash flow statement

EUR 1,000	2022	2021
Cash flow from operating activities		
Profit for the year	1,542,734	1,816,027
Adjustments:		
Income tax expense	66,011	36,363
Group contributions	-24,013	-235,685
Finance costs - net	-1,629,174	-1,658,967
Depreciation, amortisation, write-downs and appropriations	12,008	11,320
Operating profit before depreciation (EBITDA)	**-32,434**	**-30,942**
Non-cash flow items	-395	-2,975
Interest and other financial income received	102,767	34,307
Interest and other financial expenses paid	-149,150	-72,118
Dividends received	2,899,861	1,582,270
Group contributions received	235,685	233,438
Realised foreign exchange gains and losses	386,715	127,949
Income taxes paid	-804	-63,226
Funds from operations	**3,442,245**	**1,808,703**
Other short-term receivables increase(-)/decrease(+)	-883	1,664
Other short-term payables increase(+)/decrease(-)	9,424	-460
Change in working capital	**8,541**	**1,204**
Net cash from operating activities	**3,450,786**	**1,809,907**
Cash flow from investing activities		
Capital expenditures	-7,465	-12,027
Acquisition of shares and capital contributions in subsidiaries	-2,660,412	-
Acquisition of other shares	-48	-52
Proceeds from sales of shares	3,006,437	126,504
Proceeds from sales of property, plant and equipment	53	1,415
Change in interest-bearing receivables and other non-current assets	-4,921,996	-2,129,895
Net cash used in investing activities	**-4,583,431**	**-2,014,054**
Cash flow before financing activities	**-1,132,645**	**-204,147**

EUR 1,000	2022	2021
Cash flow from financing activities		
Proceeds from long-term liabilities	2,400,059	2,674,819
Payment of long-term liabilities	-5,860,140	-2,095,218
Change in cashpool liabilities	5,173,574	1,232,838
Change in short-term liabilities	-204,716	1,915,137
Dividends paid	-1,012,830	-995,268
Net cash from financing activities	**495,947**	**2,732,307**
Net increase(+)/decrease(-) in liquid funds	**-636,698**	**2,528,160**
Liquid funds at the beginning of the year	**4,240,207**	**1,712,047**
Liquid funds at the end of the year	**3,603,509**	**4,240,207**

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 2022 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 pension fund. 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 liability is 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	2022	2021
Finland	72,501	66,021
Other countries	77,770	72,632
Total	**150,271**	**138,653**

3 Other income

EUR 1,000	2022	2021
Rental and other income	25,067	8,155
Total	**25,067**	**8,155**

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4 Employee benefits

EUR 1,000	2022	2021
Personnel expenses		
Wages, salaries and remunerations	46,185	43,226
Indirect employee costs		
Pension costs	7,906	6,822
Other indirect employee costs	1,593	1,549
Other personnel expenses	3,140	2,715
Total	**58,824**	**54,313**

EUR 1,000	2022 Markus Rauramo, President and CEO	2021 Markus Rauramo, President and CEO
Compensation for the President and CEO		
Salaries and fringe benefits	1,549	1,559
Short-term incentives [1]	-	423
Long-term incentives [1) 2)]	816	1,334
Pensions (statutory)	271	311
Pensions (voluntary)	315	315
Social security expenses	53	69
Total	**3,004**	**4,011**

1) Based on estimated amounts.
2) LTI costs for 2022 relate to LTI plans decided before 2022. Costs are accrued over the vesting period. President and CEO's costs for 2021 are updated for the share plan 2019-2021.

EUR 1,000	2022	2021
Compensation for the Board of Directors	1,039	504

The compensation above is presented on accrual basis. Paid salaries and remunerations for the President and CEO Markus Rauramo were EUR 2,384 thousand (2021: 2,821).

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a bridge financing arrangement. In accordance with the Solidium bridge financing facility with the Finnish State, Fortum Executive Management members will not be paid any short- or long-term incentives that are accumulated in 2022 and 2023.

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 31** Pension obligations in the Consolidated financial statements.

	2022	2021
Average number of employees	410	374

5 Auditor's fees

EUR 1,000	2022	2021
Audit fees	794	833
Audit-related assignments	85	99
Total	**879**	**932**

Deloitte Oy is the appointed auditor until the next Annual General Meeting, to be held in 2023. 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.

6 Financial income and expenses

EUR 1,000	2022	2021
Dividend income from group companies	2,899,861	1,582,270
Interest and other financial income from group companies	103,408	42,957
Interest and other financial income from associated companies	9	7
Gain on sale of shares to other group companies	2,902,283	98,559
Write-downs of participations in group companies	-4,500,000	-
Interest and other financial income	1,526	3,103
Exchange rate differences	385,052	-82
Changes in fair values of derivatives	-685	9,686
Interest and other financial expenses to group companies	-40,130	-2,597
Interest and other financial expenses	-122,150	-74,937
Total	**1,629,174**	**1,658,967**
Interest income	97,653	38,153
Interest expenses	-165,300	-71,500
Interest costs - net	**-67,647**	**-33,347**

Gain on sales of shares to other group companies of EUR 2,902 million relates to internal restructurings in Swedish subsidiaries.

Due to the divestment of Uniper shares Fortum Oyj wrote down shares in subsidiaries amounting to EUR 4,500 million.

7 Income tax expense

EUR 1,000	2022	2021
Taxes on regular business operations	61,208	-10,774
Taxes on group contributions	4,803	47,137
Total	**66,011**	**36,363**
Current taxes for the period	65,628	36,421
Current taxes for prior periods	-61	-15
Changes in deferred tax	444	-43
Total	**66,011**	**36,363**

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8 Non-current assets

Intangible assets

EUR 1,000	Total
Cost 1 January 2022	**68,104**
Additions	17,247
Disposals	-21,195
Cost 31 December 2022	**64,156**
Accumulated depreciation 1 January 2022	**35,358**
Disposals	-10,886
Depreciation for the year	9,699
Accumulated depreciation 31 December 2022	**34,170**
Carrying amount 31 December 2022	**29,986**
Carrying amount 31 December 2021	32,746

Property, plant and equipment

EUR 1,000	Machinery and equipment	Advances paid and con-struction in progress	Total
Cost 1 January 2022	**9,890**	**4,806**	**14,696**
Additions and transfers between categories	503	2,339	2,842
Disposals	-488	-3,674	-4,162
Cost 31 December 2022	**9,904**	**3,472**	**13,376**
Accumulated depreciation 1 January 2022	**7,292**	**-**	**7,292**
Disposals	-478	-	-478
Depreciation for the year	1,211	-	1,211
Accumulated depreciation 31 December 2022	**8,025**	**-**	**8,025**
Carrying amount 31 December 2022	**1,879**	**3,472**	**5,351**
Carrying amount 31 December 2021	2,598	4,806	7,404

Investments

EUR 1,000	Shares in Group companies	Partici-pation in associated companies	Re-ceivables from Group companies	Re-ceivables from associated companies	Other non-current assets	Total
Cost 1 January 2022	**17,321,633**	**5,656**	**7,050,725**	**16,780**	**8,144**	**24,402,938**
Additions [1]	2,660,412		5,009,556	88	48	7,670,104
Disposals	-104,191					-104,191
Cost 31 December 2022	**19,877,853**	**5,656**	**12,060,281**	**16,868**	**8,192**	**31,968,851**
Accumulated write-downs 1 January 2022	**1,145,010**	**5,656**	**-**	**15,276**	**7,982**	**1,173,925**
Impairment charges	4,500,000					4,500,000
Accumulated write-downs 31 December 2022	**5,645,010**	**5,656**	**-**	**15,276**	**7,982**	**5,673,925**
Carrying amount 31 December 2022	**14,232,843**	**-**	**12,060,281**	**1,592**	**210**	**26,294,927**
Carrying amount 31 December 2021	16,176,623	-	7,050,725	1,504	162	23,229,013

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	2022	2021
Other current receivables from group companies		
Trade receivables	18,862	14,435
Group contribution and other receivables	24,013	359,560
Accrued income and prepaid expenses	8,359	3,086
Total	**51,234**	**377,082**
Other current receivables		
Trade receivables	589	719
Other receivables	40,146	3,236
Accrued income and prepaid expenses	9,712	14,282
Total	**50,447**	**18,237**

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 2022	**3,046,186**	**2,821,691**	**-13,279**	**5,761,197**	**11,615,794**
Cash dividend				-1,012,656	-1,012,656
Change in hedging reserve			36,966		36,966
Profit for the year				1,542,734	1,542,734
31 December 2022	**3,046,186**	**2,821,691**	**23,686**	**6,291,276**	**12,182,838**
1 January 2021	**3,046,186**	**2,821,691**	**-24,202**	**4,940,060**	**10,783,735**
Cash dividend				-994,890	-994,890
Change in hedging reserve			10,923		10,923
Profit for the year				1,816,027	1,816,027
31 December 2021	**3,046,186**	**2,821,691**	**-13,279**	**5,761,197**	**11,615,794**

EUR 1,000	2022	2021
Distributable funds		
Retained earnings 31 December	6,291,276	5,761,197
Hedging reserve	-	-13,280
Total	**6,291,276**	**5,747,917**

On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. The total amount of shares outstanding in the company after the registration of the new shares is 897,264,465. As a consequence, the shares under the control of the State of Finland has increased from 50.76% to 51.26%.

11 Interest-bearing liabilities

EUR 1,000	2022	2021
External interest-bearing loans		
Bonds	1,544,821	2,706,115
Loans from financial institutions	803,703	3,086,153
Other long-term interest-bearing loans	689,384	689,389
Total long-term interest-bearing loans	**3,037,908**	**6,481,657**
Current portion of long-term bonds	1,089,647	999,152
Current portion of loans from financial institutions	516,849	462,908
Other short-term interest-bearing loans	1,951,865	2,375,777
Total short-term interest-bearing loans	**3,558,361**	**3,837,837**
Total	**6,596,269**	**10,319,494**

Maturity of external interest-bearing loans

EUR 1,000	2022
2023	3,558,361
2024	716,607
2025	6,969
2026	729,891
2027	16,849
2028 and later	1,567,592
Total	**6,596,269**

See ▸ **Note 4.2** Liquidity and refinancing risk and ▸ **Note 27** Interest-bearing liabilities in the Consolidated financial statements.

External interest-bearing loans due after five years [1)]

EUR 1,000	2022	2021
Bonds	734,765	845,538
Other long-term loans	735,813	755,596
Total	**1,470,578**	**1,601,134**

1) Excludes loans to Group and associated companies.

Other interest-bearing loans due after five years

EUR 1,000	2022	2021
Interest-bearing loans to associated companies	228,962	227,507
Total	**228,962**	**227,507**

Non-discounted cash flows of interest-bearing loans and their maturities, see ▸ **Note 13** Financial derivatives.

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12 Trade and other payables

EUR 1,000	2022	2021
Trade and other payables to group companies		
Trade payables	4,828	5,273
Deposits from group companies and other liabilities	29,429	29,573
Accruals and deferred income	7,151	-
Total	**41,408**	**34,846**
Trade and other payables to associated companies		
Accruals and deferred income	1,239	1,475
Total	**1,239**	**1,475**
Trade and other payables		
Trade payables	22,014	23,098
Other liabilities	4,193	4,443
Accruals and deferred income	160,172	61,456
Total	**186,379**	**88,998**

13 Financial derivatives

Interest rate and currency derivatives by instrument 2022

	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	3,323,927	215,003	-	3,538,930	27,455	12,494	14,961
Interest rate swaps	739,914	825,000	1,350,000	2,914,914	111,748	120,462	-8,714
Cross currency swaps	-	75,638	-	75,638	2,616	-	2,616
Non-hedge accounting							
Foreign exchange derivatives	19,270,706	343,403	-	19,614,110	124,498	176,135	-51,636
Interest rate swaps	17,983	13,487	-	31,470	1,687	-	1,687
Cross currency swaps	-	23,656	-	23,656	1,181	-	1,181
Total	**23,352,530**	**1,496,188**	**1,350,000**	**26,198,717**	**269,186**	**309,090**	**-39,904**
Of which long-term					123,889	130,472	-6,583
Short-term					145,297	178,618	-33,322

Interest rate and currency derivatives by instrument 2021

	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	482,534	271,364	-	753,898	10,838	10,891	-52
Interest rate swaps	1,300,000	1,322,558	1,175,000	3,797,558	71,385	26,972	44,413
Cross currency swaps	214,384	46,957	-	261,341	29,996	1,963	28,032
Non-hedge accounting							
Foreign exchange derivatives	13,700,810	331,925	-	14,032,734	85,461	119,935	-34,474
Interest rate swaps	-	34,145	-	34,145	273	93	180
Cross currency swaps	-	23,656	-	23,656	-	836	-836
Total	**15,697,728**	**2,030,606**	**1,175,000**	**18,903,334**	**197,954**	**160,690**	**37,264**
Of which long-term					59,506	37,051	22,455
Short-term					138,448	123,640	14,808

Maturity analysis of interest-bearing loans and derivatives

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 derivatives on the balance sheet.

	2022				2021			
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	3,768,717	1,812,840	2,114,899	7,696,457	4,006,987	5,034,504	2,000,842	11,042,334
Interest rate and currency derivative liabilities	178,618	55,889	74,583	309,090	123,640	18,540	18,510	160,690
Interest rate and currency derivative receivables	-145,297	-32,225	-91,665	-269,186	-138,448	-29,386	-30,120	-197,954
Total	**3,802,039**	**1,836,504**	**2,097,818**	**7,736,361**	**3,992,179**	**5,023,659**	**1,989,233**	**11,005,070**

Interest-bearing loans include loans from the State Nuclear Waste Management Fund and Teollisuuden Voima Oyj of EUR 918 million (2021: 1,165). 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 at fair value in financial assets

	Level 1		Level 2		Level 3		Total	
EUR 1,000	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
In non-current assets								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			118,061	54,867			118,061	54,867
Non-hedge accounting			5,829	4,639			5,829	4,639
In current assets								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			23,759	57,353			23,759	57,353
Non-hedge accounting			121,538	81,095			121,538	81,095
Total			**269,187**	**197,954**			**269,187**	**197,954**

Derivatives and liabilities at fair value in financial liabilities

	Level 1		Level 2		Level 3		Total	
EUR 1,000	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
In non-current liabilities								
Interest-bearing liabilities [1]			580,256	1,669,072			580,256	1,669,072
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			122,810	32,085			122,810	32,085
Non-hedge accounting			7,662	4,966			7,662	4,966
In current liabilities								
Derivative financial instruments								
Interest rate and currency derivatives								
Hedge accounting			10,146	7,742			10,146	7,742
Non-hedge accounting			168,472	115,898			168,472	115,898
Total			**889,346**	**1,829,762**			**889,346**	**1,829,762**

1) Fair valued part of bond in the fair value hedge relationship.

Net fair value amount of interest rate and currency derivatives was EUR -40 million (2021: 37), including assets EUR 269 million (2021: 197) and liabilities, EUR 309 million (2021: 161). Fortum Corporation has cash collaterals based on Credit Support Annex agreements with some counterparties. At the end of December 2022 Fortum Corporation had received EUR 64 million (2021: 40) 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	**2022**	**2021**
On own behalf		
Other contingent liabilities	1,339	832
On behalf of group companies		
Guarantees	1,037,997	3,794,749
On behalf of associated companies		
Guarantees	1,160,536	280,610
On behalf of others		
Guarantees	937,559	-
Total	**3,137,431**	**4,076,191**

In 2021 Fortum signed an EUR 8 billion credit facility agreement with Uniper comprising tranches for both a shareholder loan and a parent company guarantee. The shareholder loan, EUR 4 billion, was repaid on 21 December 2022 on completion of the transaction to sell Uniper to the German State. Out of the EUR 4.0 billion parent company guarantee facility that Fortum Oyj had granted to Uniper, a total of EUR 3.0 billion was released by year-end 2022. The remaining, approximately EUR 1.0 billion, with a full German State back-to-back guarantee (indemnity), will be released latest at the end of June 2023.

Operating lease commitments

EUR 1,000	**2022**	**2021**
Due within one year	5,946	5,727
Due after one year and within five years	17,979	17,294
Due after five years	0	3,010
Total	**23,925**	**26,031**

16 Related party transactions

At the end of 2022, the Finnish State owned 51.26% of the company's shares (2021: 50.76%). On 6 September 2022, Fortum announced that it had agreed with the Finnish State on a EUR 2.35 billion bridge financing arrangement. On 26 September 2022, Fortum announced to draw the first tranche of the liquidity facility, EUR 350 million. The bridge loan facility is linked to the six-month Euribor; the margin for the first six months is 10% and for the following six months 12%.

As a condition in the agreement following the first draw down, the Finnish State-owned holding company, Solidium Oy, was entitled to subscribe 8,970,000 new ordinary registered shares in Fortum in a directed share issue, without payment. The share issue to Solidium Oy was resolved in the Extraordinary General Meeting on 23 November 2022 and the new shares were registered with the Finnish trade register on 25 November 2022. The new shares carry full shareholder rights, including the right to dividend, as of the registration date. As a consequence, the proportion of shares under the control of the State of Finland has increased to 51.26%.

See also **Note 38** 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 Heat and Gas Oy	Finland	2,000,000	100.00
Fortum Clean Oy	Finland	100	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 TwoGether Oy	Finland	100	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	500,000	50.00
Fortum Power AB	Sweden	100	100.00
Investments in associated companies			
Wello Oy	Finland	1,100,000	16.25
Other holdings			
AW-Energy Oy	Finland	2,854,688	3.43
Clic Innovation Oy	Finland	100	3.40
East Office of Finnish Industries Oy	Finland	1	5.88
Green Industry Park Oy	Finland	19	19.00
Prototype Carbon Fund	USA	N/A	

17 Events after the balance sheet date

At the beginning of March 2023, the Fortum Board of Directors resolved on Fortum's new strategy. The strategy includes renewed dividend policy with payout ratio of 60–90% of comparable EPS. Fortum's Board of Directors proposes a dividend of EUR 0.91 per share for the year 2022 corresponding to a pay-out of 75 % based on comparable EPS of EUR 1.21 (excluding Russian operations). See also **Note 39** Events after the balance sheet date in the Consolidated financial statements.

Signatures for the operating and financial review and financial statements

Espoo, 1 March 2023

Veli-Matti Reinikkala	Anja McAlister	Philipp Rösler	Teppo Paavola
Essimari Kairisto	Annette Stube	Luisa Delgado	Kimmo Viertola
	Ralf Christian	Markus Rauramo President and CEO	

The auditor’s note

Our auditor’s report has been issued today.

Espoo, 1 March 2023

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Auditor's report

(Translation of the Finnish original)

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, 2022. 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
Discontinued operations – Uniper Refer to Notes 1, 2 and 3 • On 21 September 2022, Fortum, the German government and Uniper signed an agreement in principle that allowed the German State to take full control of Uniper and Uniper was deconsolidated. On 21 December 2022, the transaction was completed. The signing of the agreement with the German government on 21 September 2022 triggered a control assessment as required by IFRS 10 Consolidated financial statements. Management concluded that Fortum's rights are no longer substantive as it does not have the practical ability to exercise control over Uniper. Consequently, control was assessed to have been lost and Uniper was deconsolidated at 30 September 2022. Due to this, Uniper was presented as discontinued operations in accordance with IFRS 5 Noncurrent assets held for sale and discontinued operations. • Due to the Uniper sales transaction, Fortum's consolidated income statement was modified in 2022 to include a discontinued operations disclosure as required by IFRS 5 Non-current assets held for sale and discontinued operations. Comparative financial information for 2021 were restated for income statement and cash flow statement, so that on the comparative information for 2021 considers Fortum's continuing operations, without Uniper as a discontinued operation. The consolidated balance sheet at 31 December 2021 included Uniper. • The transaction was completed on 21 December 2022. Under the agreement, Uniper issued new ordinary registered shares, which the German State subscribed at a nominal value of EUR 1.70 per share. At completion of the equity capital increase, the German State bought all of Fortum's approximately 293 million shares in Uniper SE for EUR 1.70 per share, i.e. for a total of EUR 0.5 billion; and Uniper repaid the EUR 4 billion shareholder loan. Out of the EUR 4.0 billion parent company guarantee facility that Fortum had granted to Uniper, a total of EUR 3.0 billion was released by year-end 2022. The remaining, approximately EUR 1.0 billion, with a full German State back-to-back guarantee, will be released latest at the end of June 2023. • Fortum's total loss from the Uniper investment was slightly below EUR 6 billion which is the net effect from the investments in Uniper shares of approximately EUR 7.2 billion, the sales proceeds of EUR 0.5 billion received and dividends of approximately EUR 0.9 billion received during the Uniper ownership. On deconsolidation of Uniper at 30 September 2022, Fortum recorded EUR 28.0 billion one-time, noncash positive effect that is included in 2022 in net loss of EUR -11.3 billion from discontinued operations in the consolidated income statement. The amount consists of the net effect from the deconsolidation of Uniper's assets, liabilities and non-controlling interest, and the book value of Uniper-related goodwill and other fair value adjustments made on acquisition; as well as certain items previously recognised in other comprehensive income, mainly foreign exchange differences, that are reclassified to profit and loss on disposal. • The accounting treatment for discontinued operations is a key audit matter, because the accounting treatment for changes in the group structure and the classification of discontinued operations and businesses for sale in accordance with IFRS 5 involves significant management judgment and the changes have a material impact on the financial statements	Our audit procedures have consisted e.g. the following amongst others: • We gain an understanding of the group's accounting principles related to business sales and discontinued operations. • Regarding the sale of Uniper's business operations, we evaluated how management has applied accounting principles and assumptions related to accounting practices in accordance with IFRS 10 Consolidated Financial Statements standard and IFRS 5 Non-current assets held for sale and discontinued operations standard. • Regarding the sales of Uniper's businesses, we tested the sales result determined by management and the effect of the transaction on the income statement and balance sheet in accordance with the related agreements and based on the transactions which occurred. • We evaluated the appropriate presentation of discontinued operations in the financial statements in accordance with the IFRS 5 Non-current assets held for sale and discontinued operations standard.

Key audit matter	How our audit addressed the key audit matter
Fair value of commodity derivatives and liquidity Refer to Notes 4, 6, 7, 8, 9, 14, 15, 27 and 38 • 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 and gas prices and volumes, prices and volumes of emission allowances, and prices and availability of fuels relating to Fortum's sales EUR 8,804 million (EUR 6,422 million restated comparative financials) and materials EUR 4,748 million (EUR 2,861 million restated comparative financials). Fortum hedges its exposure to commodity market risks in order to reduce volatility in cash flow and to increase the predictability of future results. The fair values of derivatives and their changes may have a material effect on Fortum's financial statements. • The energy crisis in Europe has resulted in very volatile commodity markets with unprecedentedly high prices that have required significantly higher collaterals related to power and gas on the commodities exchanges. In the latter part of 2022, the Nordic power prices declined from the record levels at the end of August and the market was less volatile. However, Fortum remained prepared for continued market turbulence, and has taken precautionary financing measures to secure its liquidity position and financial flexibility. On 6 September 2022 Fortum signed a EUR 2,350 million bridge financing with the Finnish state-owned company, Solidium. According to loan terms, in order to keep the facility effective for the one-year period, on 30 September 2022, Fortum drew EUR 350 million under this facility. On 21 December 2022, Uniper repaid its EUR 4 billion shareholder loan and Fortum received the sales proceeds of EUR 0.5 billion from the divestment of Uniper shares. • In December 31, 2022, assets related to commodity derivative financial instruments in Fortum's consolidated balance sheet amounts to EUR 1,594 million (EUR 82,174 million including Uniper) and liabilities to EUR 4,554 million (EUR 88,460 million including Uniper). The Margin receivables related to the derivative financial instruments amounted to EUR 2,607 million (EUR 9,163 million including Uniper) and liabilities to EUR 352 million (EUR 985 million including Uniper). Changes in the fair value of derivatives hedging future cash flows in items affecting the comparability in the income statement amount to EUR -393 million (EUR 264 million restated comparative financials) and cash flow hedges in other equity components to EUR -2,182 million (EUR -1,138 million). • Changes in liquid funds in 2022 include EUR 2,248 million from the deconsolidation of Uniper at 30 September 2022. At the end of the reporting period, the Group's liquid funds totalled EUR 3,919 million (7,592 including Uniper). Liquid funds include EUR 247 million relating to Fortum's Russian operations (300 including Uniper). These funds are not available to the other Group companies as payment transactions with the Russian Federation are subject to general restrictions. • At the end of the reporting period, Fortum had undrawn committed credit facilities amounting to EUR 7,200 million. The undrawn facilities consisted of EUR 2,000 million Liquidity revolving credit facility maturing in June 2023 (6+6 months extension options by Fortum), EUR 2,400 million Core revolving credit facility maturing in June 2025 (1+1 year extension options by the lenders), EUR 2,000 million Solidium bridge financing facility maturing in September 2023 and EUR 800 million bilateral revolving credit facility maturing in December 2023. In addition, Fortum has EUR 100 million committed overdraft limits that are valid until further notice. The EUR 3,000 million revolving credit facility with maturity in July 2022 was cancelled in June 2022 and the EUR 1,750 million revolving credit facility with maturity in June 2023 was repaid and cancelled in June 2022. • The fair value of commodity derivatives and liquidity is a key audit matter, as Fortum's business is exposed to liquidity and refinancing risk primarily due to the need to finance the group's business and cover collateral requirements related to hedging activities. Trading in derivatives exposes the group to liquidity risk, when collateral such as money or bank guarantees must be provided for trading.	• 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 accounting application according to the requirements of IFRS 9. • We have assessed the risk scenario prepared by Fortum over further price changes and impact to liquidity requirements for margin calls and Fortum's ability to meet liquidity requirements for the next 12 months. • We have performed audit procedures regarding the existence, completeness, accounting and presentation for the loan and financing agreements and arrangements. • We have assessed the appropriate presentation of derivatives and the liquidity measures in the consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Valuation of property, plant and equipment and goodwill Refer to Notes 1, 2, 16, 17 and 19. • The consolidated balance sheet includes property, plant and equipment amounting to EUR 7,144 million (EUR 18,319 million including Uniper) and goodwill amounting to EUR 250 million (EUR 1,021 million including Uniper). The changes in the consolidated balance sheet from the prior year relates mostly due to the de-consoldiation of Uniper, and Fortum's EUR 1,697 million impairments to property, plant and equipment and goodwill for Russia operations during 2022. • At the end of each reporting period management has to assess whether there is any indication that assets may be impaired. If any such indication exists, the recoverable amount of the asset is estimated. Goodwill is subject to an 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 risk relating to energy taxes, price regulations and limitations to the lifetime of production assets, coupled with changes in anticipated impacts arising from climate change. Furthermore, the geopolitical situation may have and have had further negative impacts to the valuation of Fortum's Russia operations. • The assumptions used in the valuation of the balances in question require substantial management judgment, and thus this is a key audit matter.	• We have evaluated the process of 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 have assessed management's assessment of climate change impact to Fortum's business and how this has been taken into account in determining the cashflows used in impairment testing. • We assessed the adequacy of related disclosures in the 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 29. • Fortum's balance sheet includes Nuclear related provisions amounting to EUR 966 million (EUR 3,891 million including Uniper) and Fortum's share of the Nuclear Waste Management Fund amounting to EUR 966 million (EUR 3,515 million including Uniper). • 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 29. • 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 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 skepticism 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 17 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, 1 March 2023

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

fortum

FINANCIALS 2022

Auditor's assurance report of ESEF financial statements

(Translation of the Finnish Original)

Independent auditor's report on the ESEF consolidated financial statements of Fortum Oyj

To the Board of Directors of Fortum Oyj

We have performed a reasonable assurance engagement on whether the iXBRL tagging of the consolidated financial statements in the ESEF consolidated financial statements (FORTUMOYJ-2022-12-31-fi.zip) of Fortum Oyj (1463611-4) for the financial year 1 January – 31 December 2022 has been prepared in accordance with the requirements of Article 4 of Commission Delegated Regulation (EU) 2018/815 (ESEF RTS).

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and Managing Director are responsible for the preparation of the report of the Board of Directors and financial statements (ESEF financial statements) that comply with the requirements of ESEF RTS. This responsibility includes:

- preparation of ESEF financial statements in XHTML format in accordance with Article 3 of ESEF RTS
- tagging the consolidated financial statements in the ESEF financial statements with iXBRL tags in accordance with Article 4 of ESEF RTS, and
- ensuring consistency between ESEF financial statements and audited financial statements.

The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of ESEF financial statements in accordance with the requirements of ESEF RTS.

Auditor's Independence and Quality Control

We are independent of the company in accordance with the ethical requirements that are applicable in Finland and are relevant to the engagement we have performed, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The auditor applies International Standard on Quality Management 1 and, accordingly, an audit firm shall design, implement, and maintain a system of quality control including policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Auditor's Responsibilities

In accordance with the engagement letter, we express an opinion on whether the tagging of the consolidated financial statements in the ESEF financial statements has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS. We conducted a reasonable assurance engagement in accordance with International Standard on Assurance Engagements ISAE 3000.

The engagement includes procedures to obtain evidence on:

- whether the tagging of the consolidated financial statements in the ESEF financial statements has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS, and
- whether the consolidated financial statements, including disclosures and identifying information, are marked up using the XBRL mark-up language in accordance with Article 4 of ESEF RTS
- whether the ESEF financial statements are consistent with the audited financial statements.

The nature, timing and extent of the procedures selected depend on the auditor's judgment. This includes the assessment of risk of material departures from the requirements set out in ESEF RTS, whether due to fraud or error.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the tagging of the consolidated financial statements in the ESEF financial statements (FORTUMOYJ-2022-12-31.zip) of Fortum Oyj for the financial year 1 January – 31 December 2022 has been prepared in all material respects in accordance with the requirements of Article 4 of ESEF RTS.

Our audit opinion on the consolidated financial statements of Fortum Oyj for the financial year 1 January – 31 December 2022 has been expressed in our auditor's report dated 1 March 2023. In this report, we do not express an audit opinion or any other assurance conclusion on the consolidated financial statements.

Espoo, 1 March 2023

Deloitte Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Key figures 2013–2022

Financial key figures

Comparability of information presented in tables

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.

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.

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.

In 2021, Fortum introduced two new Alternative Performance Measures (APM) to provide additional financial performance indicators to support meaningful comparison of underlying net profitability between periods: Comparable net profit, and Comparable earnings per share. Comparable net profit is shown after non-controlling interest and adjusted for items affecting comparability, as well as adjustments to share of profit of associates and joint ventures, net finance costs, income tax expenses, and non-controlling interest. Comparable earnings per share is calculated from comparable net profit. For more information, see **Definitions and reconciliations of key figures** and **Note 7** Comparable operating profit and comparable net profit.

Fortum lost control of Uniper on the signing of the agreement in principle to sell the shares in Uniper SE to the German State on 21 September 2022. Thus, Uniper was deconsolidated at 30 September 2022. Uniper has been a separate reportable segment in Fortum's consolidated financial statements, which results in Uniper being classified as discontinued operations. Fortum's consolidated income statement and consolidated cash flow statement were modified in 2022 to include Uniper segment as discontinued operations. As required by IFRS, comparatives for 2021 were restated. Consolidated balance sheet at 31 December 2021 included Uniper.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding Fortum's Russian operations.

For information of Alternative Performance Measures used by Fortum, see **Definitions and reconciliations of key figures** and **Note 1** Significant accounting policies.

EUR million or as indicated	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change 22/21 %
Income statement, continuing operations											
Reported											
Sales	5,309	4,088	3,459	3,632	4,520	5,242	5,447	49,015	6,422	8,804	37
EBITDA	2,129	1,673	196	1,006	1,623	1,674	1,693	2,688	4,913	1,842	-63
Operating profit	1,508	1,296	-150	633	1,158	1,138	1,118	1,599	4,325	1,277	-70
- of sales %	*28.4*	*31.7*	*-4.3*	*17.4*	*25.6*	*21.7*	*20.5*	*3.3*	*67.4*	*14.5*	
Share of profit/loss of associates and joint ventures	178	146	20	131	148	38	744	656	168	-629	-474
Profit before income tax	1,398	1,232	-305	595	1,111	1,040	1,728	2,199	4,332	455	-89
- of sales %	*26.3*	*30.1*	*-8.8*	*16.4*	*24.6*	*19.8*	*31.7*	*4.5*	*67.5*	*5.2*	
Net profit for the year	1,212	1,089	-228	504	882	858	1,507	1,855	4,008	1,011	-75
Net profit for the year attributable to owners of the parent	1,204	1,081	-231	496	866	843	1,482	1,823	3,985	1,011	-75
Comparable											
EBITDA	1,975	1,457	1,102	1,015	1,275	1,523	1,766	2,434	2,016	2,436	21
Operating profit	1,403	1,085	808	644	811	987	1,191	1,344	1,429	1,871	31
Share of profit/loss of associates and joint ventures								656	104	-11	-111
Net profit for the year attributable to owners of the parent								1,483	1,091	1,550	42
Income statement, continuing operations excl. Russia											
Comparable											
EBITDA									1,612	2,025	26
Operating profit									1,167	1,611	38
Net profit for the year attributable to owners of the parent									851	1,076	26
Income statement, total of continuing and discontinued operations											
Reported											
Net profit for the year attributable to owners of the parent	1,204	3,154	4,138	496	866	843	1,482	1,823	739	-2,416	-427
Comparable											
Net profit for the year attributable to owners of the parent								1,483	1,778	-988	-156

EUR million or as indicated	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change 22/21 %
Financial position and cash flow											
Capital employed	19,183	17,918	19,870	18,649	18,172	18,170	19,929	26,239	30,885	15,522	-50
Financial net debt							4,833	7,023	789	1,084	37
Adjusted net debt							4,978	9,784	3,227	1,117	-65
Interest-bearing net debt	7,793	4,217	-2,195	-48	988	5,509	5,260	N/A	N/A	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	N/A	N/A	
Capital expenditure and gross investments in shares, continuing operations	1,020	695	625	1,435	1,815	4,672	819	4,953	724	558	-23
- of sales %	*19.2*	*17.0*	*18.1*	*39.5*	*40.2*	*89.1*	*15.0*	*10.1*	*11.3*	*6.3*	
Capital expenditure, continuing operations	1,005	626	582	591	690	584	713	1,146	443	525	19
Net cash from operating activities, total Fortum	1,548	1,762	1,381	621	993	804	1,575	2,555	4,970	-8,767	-276
Net cash from operating activities, continuing operations		1,406	1,228						1,119	2,104	88
Key ratios, total of continuing and discontinued operations, or as indicated											
Return on capital employed, %	9.0	19.5	22.7	4.0	7.1	6.7	10.0	N/A	N/A	N/A	
Return on shareholders' equity, %	12.0	30.0	33.4	3.7	6.6	6.8	11.9	12.9	-0.8	-96.2	
Interest coverage	6.7	19.9	27.6	4.6	8.7	10.0	8.0	27.3	-12.7	-75.5	
Interest coverage including capitalised borrowing costs	5.3	15.7	21.5	4.1	7.8	9.2	7.5	18.6	-9.4	-72.2	
Funds from operations/interest-bearing net debt, %	18.8	42.9	-59.7	-1,503.4	83.9	26.8	32.2	N/A	N/A	N/A	
Funds from operations/interest-bearing net debt without Exergi financing, %	22.1	49.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Gearing, %	77	39	-16	0	7	46	40	45	6	14	
Financial net debt/comparable EBITDA, total Fortum								2.9	0.2	N/A	
Financial net debt/comparable EBITDA, continuing operations									N/A	0.4	
Financial net debt/comparable EBITDA, continuing operations excl. Russia									N/A	0.6	
Comparable net debt/EBITDA	3.9	2.3	-1.7	0.0	0.8	3.6	3.0	N/A	N/A	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	N/A	N/A	
Equity-to-assets ratio, %	43	51	61	62	61	54	57	27	9	33	
Other data											
Dividends	977	1,155	977	977	977	977	977	995	1,013	817 1)	-19
Research and development expenditure, continuing operations	49	41	47	52	53	56	67	56	54	55	2
- of sales %	*0.9*	*1.0*	*1.4*	*1.4*	*1.2*	*1.1*	*1.1*	*0.1*	*0.8*	*0.6*	
Average number of employees, total Fortum	9,532	8,821	8,193	7,994	8,507	8,767	8,248	17,304	19,796	16,549	
Average number of employees, continuing operations		8,329	8,009						8,045	7,826	

1) Board of Directors' proposal for the planned Annual General Meeting on 13 April 2023.

See ▸ **Definitions and reconciliations of key figures**.

Share key figures

EUR or as indicated	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change 22/21 %
Data per share											
Earnings per share, total Fortum	1.36	3.55	4.66	0.56	0.98	0.95	1.67	2.05	0.83	-2.72	-428
Earnings per share, continuing operations		1.22	-0.26						4.49	1.14	-75
Earnings per share, discontinued operations		2.33	4.92						-3.65	-3.86	6
Comparable earnings per share, total Fortum								1.67	2.00	-1.11	-156
Comparable earnings per share, continuing operations									1.23	1.74	41
Comparable earnings per share, discontinued operations									0.77	-2.86	-471
Comparable earnings per share, continuing operations excl. Russia									0.96	1.21	26
Cash flow per share, total Fortum	1.74	1.98	1.55	0.70	1.12	0.91	2.27	2.88	5.60	-9.86	-276
Cash flow per share, continuing operations		1.38	1.38						1.26	2.37	88
Cash flow per share, discontinued operations		0.60	0.17						4.34	-12.22	-382
Equity per share	11.28	12.23	15.53	15.15	14.69	13.33	14.61	14.58	13.66	8.55	-37
Dividend per share	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.12	1.14	0.91 [1]	-20
Extra dividend		0.20	-	-	-						
Payout ratio, % [2]	80.9	36.6	23.6	196.4	112.2	115.8	65.9	54.6	137.3	79.8 [1]	
Payout ratio excl. Russia, %										75.0 [1]	
Dividend yield, %	6.6	7.2	7.9	7.5	6.7	5.8	5.0	5.7	4.2	5.9 [1]	
Price/earnings ratio (P/E) [2]	12.2	5.1	3.0	26.1	16.8	20.1	13.2	9.6	32.5	13.6	
Share prices											
At the end of the period	16.63	17.97	13.92	14.57	16.50	19.10	22.00	19.70	26.99	15.54	
Average	15.11	17.89	16.29	13.56	15.28	19.10	20.06	17.20	23.65	15.18	
Lowest	13.10	15.13	12.92	10.99	12.69	16.43	18.09	12.25	19.72	8.86	
Highest	18.18	20.32	21.59	15.74	18.94	22.91	22.50	23.46	27.96	27.18	
Other data											
Market capitalisation at the end of the period, EUR million	14,774	15,964	12,366	12,944	14,658	16,966	19,542	17,499	23,975	13,943	
Trading volumes [3]											
Number of shares, 1,000 shares	465,004	454,796	541,858	611,572	582,873	474,705	372,272	647,869	351,450	560,775	
In relation to weighted average number of shares, %	52.3	51.2	61.0	68.8	65.6	53.4	41.9	72.9	39.6	63.1	
Average number of shares, 1,000 shares	888,367	888,367	888,367	888,367	888,367	888,312	888,294	888,294	888,294	889,204	
Diluted adjusted average number of shares, 1,000 shares	888,367	888,367	888,367	888,367	888,367	888,312	888,294	888,294	888,294	889,204	
Number of registered shares, 1,000 shares	888,367	888,367	888,367	888,367	888,367	888,294	888,294	888,294	888,294	897,264	

1) Board of Directors' proposal for the planned Annual General Meeting on 13 April 2023.
2) Payout ratio and price/earnings ratio for 2022 is calculated based on earnings per share from continuing operations.
3) 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 2022, approximately 74% (2021: 70%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

See ▸ **Definitions and reconciliations of key figures.**

Segment key figures

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.

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.

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.

Fortum lost control of Uniper on the signing of the agreement in principle to sell the shares in Uniper SE to the German State on 21 September 2022. Thus, Uniper was deconsolidated at 30 September 2022. Uniper has been a separate reportable segment in Fortum's consolidated financial statements, which results in Uniper being classified as discontinued operations. Fortum's consolidated income statement and consolidated cash flow statement were modified in 2022 to include Uniper segment as discontinued operations. As required by IFRS, comparatives for 2021 were restated. Consolidated balance sheet at 31 December 2021 included Uniper.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding the Russia segment. Hence, a new subtotal for continuing operations excluding Russia was introduced in segment information tables.

See more information in **Note 6** Segment reporting.

Sales by segment, EUR million	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Generation	2,252	2,156	1,722	1,657	1,677	1,842	2,141	2,006	2,869	3,655
- of which internal	69	85	83	15	15	-2	259	421	140	-645
Russia	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	1,302	1,282
- of which internal	87	34	-13	1	19	37	45	64	29	75
Consumer Solutions				668	1,097	1,759	1,835	1,267	2,622	4,578
- of which internal				2	3	11	-3	2	14	30
Uniper								44,514		
- of which internal								0		
Other Operations	63	58	114	92	102	103	115	140	138	136
- of which internal	54	44	75	61	67	79	86	110	102	106
Distribution	1,064									
- of which internal	19									
Eliminations and Netting of Nord Pool transactions	-706	-513	-458	-463	-470	-641	-916	-916	-1,413	-1,877
Total continuing operations excl. Russia									**5,519**	**7,774**
Russia									906	1,031
Eliminations									-2	-1
Total continuing operations	**5,309**	**4,088**	**3,459**	**3,632**	**4,520**	**5,242**	**5,447**	**49,015**	**6,422**	**8,804**
Discontinued operations		751	274						106,127	128,102

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Comparable operating profit by segment, EUR million	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Generation	859	877	561	417	478	628	794	722	1,123	1,600
Russia	156	161	201	191	296	271	316	251		
City Solutions	109	104	108	64	98	135	120	47	135	28
Consumer Solutions				48	41	53	79	90	52	97
Uniper								363		
Other Operations	-54	-57	-63	-77	-102	-99	-118	-129	-142	-115
Distribution	332									
Total continuing operations excl. Russia									**1,167**	**1,611**
Russia									261	260
Comparable operating profit, continuing operations	**1,403**	**1,085**	**808**	**644**	**811**	**987**	**1,191**	**1,344**	**1,429**	**1,871**
Impairment charges and reversals			-918	27	6	-4	-8	2	-35	-905
Capital gains and other related items	61	305	22	38	326	102	7	765	2,673	785
Impact from acquisition accounting								-222	-	-
Changes in fair values of derivatives hedging future cash flow				-65	14	98	-72	-675	264	-393
Nuclear fund adjustment [1)]				-11	1	-45				
Other								386	-6	-80
Other items affecting comparability [2)]	45	-94	-62							
Operating profit, continuing operations	**1,508**	**1,296**	**-150**	**633**	**1,158**	**1,138**	**1,118**	**1,599**	**4,325**	**1,277**
Discontinued operations		2,132	4,395						-4,913	-16,402

1) In 2020, Nuclear fund adjustment was reclassified from Items affecting comparability to Other financial items - net. Comparatives for 2019 have been reclassified accordingly.
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	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Generation	1,007	998	680	527	603	763	939	886	1,287	1,765
Russia	258	304	267	312	438	417	469	394		
City Solutions	211	204	209	186	262	310	308	239	317	177
Consumer Solutions				55	57	110	141	153	123	173
Uniper								856		
Other Operations	-49	-49	-53	-64	-83	-78	-91	-94	-114	-90
Distribution	548									
Total continuing operations excl. Russia									**1,612**	**2,025**
Russia									404	411
Total continuing operations	**1,975**	**1,457**	**1,102**	**1,015**	**1,275**	**1,523**	**1,766**	**2,434**	**2,016**	**2,436**

Depreciation and amortisation, EUR million	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Generation	148	121	118	110	125	135	145	164	164	165
Russia	150	147	117	123	142	147	153	143		
City Solutions	102	100	101	121	163	175	188	191	182	148
Consumer Solutions				7	16	57	62	63	71	75
Uniper								494		
Other Operations	5	8	10	13	18	22	28	35	28	25
Distribution	216									
Total continuing operations excl. Russia									**445**	**415**
Russia									142	151
Total continuing operations	**621**	**377**	**346**	**373**	**464**	**536**	**575**	**1,090**	**587**	**566**
Discontinued operations		150	50						694	573

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Comparable share of profit of associates and joint ventures by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation								13	0	-49
Russia								47		
City Solutions								57	42	14
Uniper								38		
Other Operations								502	0	-6
Distribution										
Total continuing operations excl. Russia									**42**	**-40**
Russia									62	30
Total continuing operations								**656**	**104**	**-11**

Comparable share of profit/loss of associates and joint ventures for 2020 has been recalculated following the introduction of comparable net profit APM in 2021.

Share of profit of associates and joint ventures by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	4	-14	-111	-34	-1	-72	10	29	64	-194
Russia	46	35	32	38	31	36	59	47		
City Solutions	91	88	59	76	80	74	37	57	42	14
Uniper								54		
Other Operations	32	37	40	51	38	0	638	470	0	-6
Distribution	4									
Total continuing operations excl. Russia									**106**	**-185**
Russia									62	-443
Total continuing operations	**178**	**146**	**20**	**131**	**148**	**38**	**744**	**656**	**168**	**-629**
Discontinued operations		3	-						23	71

Capital expenditure by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	179	197	187	196	174	248	247	158	168	231
Russia	435	340	285	201	152	54	67	43		
City Solutions	123	86	105	109	170	209	314	219	161	155
Consumer Solutions				3	7	47	55	57	68	71
Uniper								635		
Other Operations	12	3	6	83	187	26	30	34	15	10
Distribution	255									
Total continuing operations excl. Russia									**396**	**467**
Russia									47	58
Total continuing operations	**1,005**	**626**	**582**	**591**	**690**	**584**	**713**	**1,146**	**443**	**525**

Gross investments in shares by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	2	2	16	7	90	14	13	70	7	3
Russia	0	27	0	0	125	63	66	48		
City Solutions	11	37	23	698	386	33	9	114	2	4
Consumer Solutions				117	486	0	-	0	-	0
Uniper								3		
Other Operations	2	4	4	22	39	3,977	18	3,572	237	21
Distribution	0									
Total continuing operations excl. Russia									**245**	**29**
Russia									36	4
Total continuing operations	**15**	**69**	**43**	**844**	**1,125**	**4,088**	**106**	**3,807**	**281**	**33**

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Gross divestments of shares by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	79	67	0	0	0	160	12	171	129	-
Russia	-	0	0	127	0	0	-	0		
City Solutions	11	446	27	33	0	147	2	895	3,870	1,213
Consumer Solutions				1	55	0	-	10	0	0
Uniper								69		
Other Operations	-	2	-	0	687	0	16	81	19	150
Distribution	52									
Total continuing operations excl. Russia									**4,017**	**1,363**
Russia									18	1
Total continuing operations	**142**	**515**	**27**	**161**	**742**	**306**	**30**	**1,226**	**4,034**	**1,365**

Comparable net assets by segment, EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation			5,931	5,815	5,672	6,485	6,019	6,234	5,961	5,549
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	2,456	1,760
Consumer Solutions				154	638	648	637	565	1,125	1,365
Uniper								7,432		
Other Operations			258	514	276	4,023	4,400	136	125	64
Total continuing operations excl. Russia									**9,668**	**8,737**
Russia									2,508	1,690
Total continuing operations			**10,932**	**12,641**	**13,474**	**17,739**	**18,214**	**20,477**	**12,176**	**10,427**

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	2013	2014	2015 1)
Generation	6,355	6,001	5,913
City Solutions	2,295	2,112	2,170
Russia	3,846	2,597	2,561
Other Operations	295	496	291
Distribution	3,745		
Total continuing operations	**16,537**	**11,206**	**10,934**
Net assets related to discontinued operations		2,615	
Total		**13,820**	**10,934**

Comparable return on net assets by segment, %	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	13.8	14.2	9.5	6.9	8.4	10.8	13.3	12.2	19.0	27.0
City Solutions	8.7	8.7	7.9	5.9	5.5	5.5	4.6	2.8	6.1	2.3
Consumer Solutions				44.3	11.7	7.8	13.3	15.9	6.9	9.1
Russia	5.2	5.6	8.2	8.0	10.1	10.3	12.3	11.1	12.9	11.3
Uniper 1)								N/A	16.5	N/A
Distribution 2)	8.8	9.3								

1) Fortum consolidated Uniper into its balance sheet as of 31 March 2020 and, from the second quarter of 2020, consolidated Uniper's results into its income statement. Comparable return on net assets for the Uniper segment is presented for 2021.
2) Classified as discontinued operations from 2014 onwards.

Return on net assets by segment, %	2013	2014	2015 1)
Generation	14.5	13.6	-8.5
City Solutions	9.7	19.1	7.7
Russia	5.2	5.6	8.3
Distribution 2)	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.

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Average number of employees	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Generation	1,900	1,685	1,389	1,064	1,036	1,107	1,122	1,163	1,153	1,278
Russia	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	1,964	1,676
Consumer Solutions				877	1,180	1,473	1,379	1,216	1,091	1,177
Uniper [1]								8,945		
Other Operations	550	536	983	711	774	814	825	959	976	989
Distribution	786									
Total continuing operations excl. Russia									**5,183**	**5,120**
Russia									2,862	2,706
Total continuing operations [1]	**9,532**	**8,329**	**8,009**	**7,994**	**8,507**	**8,767**	**8,248**	**17,304**	**8,045**	**7,826**
Discontinued operations		492							11,751	8,723

1) 2020 comparative figure was revised to reflect the consolidation of Uniper from 31 March 2020.

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Capital expenditure

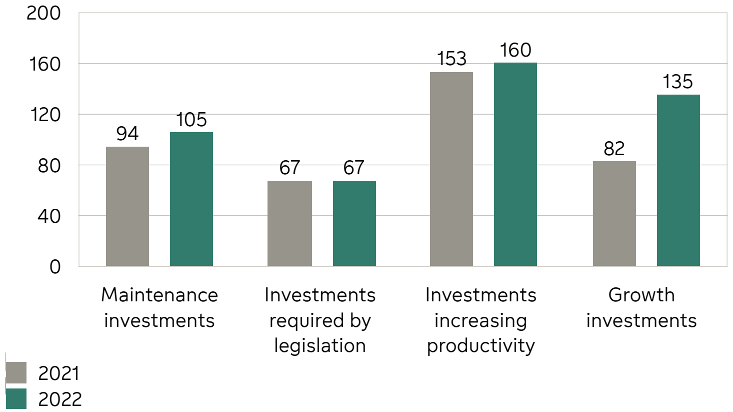
Capital expenditure by type and segment [1)]

	Finland		Sweden		Norway		Russia		Poland		Other countries		Total	
EUR million	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Generation														
Hydropower	14	20	82	83									96	104
Nuclear power	34	31											34	31
Renewable-based electricity, wind	100	29	1										100	29
Other	1	3		1									1	4
Total	**148**	**83**	**83**	**85**									**231**	**168**
City Solutions														
Fossil-based heat	2	1							8	4			9	5
Fossil-based electricity									1	6			1	6
Renewable, of which	40	28	12	7	9	21					9	38	69	94
waste	16	14	12	7		5					7	6	34	32
biofuels					1	2							1	3
solar											2	32	2	32
other	24	14			8	13							32	28
District heat network	10	9			3	13			21	12		2	34	36
Other	32	14	6	4					2	2	3		42	19
Total	**83**	**53**	**17**	**11**	**12**	**34**			**31**	**24**	**11**	**40**	**155**	**161**
Consumer Solutions														
Other	19	11	14	6	26	25			12	9		1	71	52
Total	**19**	**11**	**14**	**6**	**26**	**25**			**12**	**9**		**1**	**71**	**52**
Other														
Other	8	13	2	1								1	10	15
Total	**8**	**13**	**2**	**1**								**1**	**10**	**15**
Total continuing operations excl. Russia	**258**	**160**	**116**	**103**	**38**	**58**			**44**	**34**	**12**	**42**	**467**	**396**
Of which investments in CO_2 free production	**171**	**95**	**83**	**83**	**9**	**16**					**2**	**32**	**265**	**226**
Russia														
Fossil-based electricity							30	33					30	33
Fossil-based heat														
District heat network							16	12					16	12
Renewable-based electricity, wind							2						2	
Other							11	2					11	2
Total							**58**	**47**					**58**	**47**
Total continuing operations	**258**	**160**	**116**	**103**	**38**	**58**	**58**	**47**	**44**	**34**	**12**	**42**	**525**	**443**
Of which investments in CO_2 free production	**171**	**95**	**83**	**83**	**9**	**16**	**2**				**2**	**32**	**266**	**227**

1) Includes capital expenditure to both intangible assets and property, plant and equipment.

Fortum is pursuing a controlled exit from the Russian market with potential divestments of its Russian operations as the preferred path, and in 2022 Fortum introduced new APMs to provide additional financial information excluding the Russia segment. Hence, a new subtotal for continuing operations excluding Russia was introduced in segment information tables.

Fortum classifies investments in four main categories, EUR million



Generation

Fortum invested EUR 100 million (2021: 29) into wind power production in the Nordics. The majority of this was related to the Pjelax-Böle and Kristinestad Norr wind farms in Finland. In Finland, Fortum also invested EUR 34 million (2021: 31) into the Loviisa nuclear power plant. Fortum additionally invested EUR 93 million (2021: 100) into hydro production, mainly maintenance, legislation and productivity investments. Investments in CO_2 free production were EUR 230 million (2021: 164).

City Solutions

The largest investment project in 2022 was EUR 22 million to the Harjavalta battery recycling plant in Finland. Maintenance, legislation and productivity investments totalled EUR 122 million (2021: 123). 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 35 million (2021: 63).

Consumer Solutions

Investments in Consumer Solutions totalled EUR 71 million (2021: 52). The amount consists mainly of sales commissions for customer acquisition that are capitalised and new product development costs.

Other

Investments in Other segment were EUR 10 million (2021: 15). They consisted mainly of IT investments.

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Operational key figures

Note: Operational key figures are unaudited

Comparability of information presented in tables

Uniper sales and production volumes are disclosed from 1 April 2020 until 31 December 2020.

Production

Fortum's total power and heat production in Nordics, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Power generation							45.5	59.2	47.9	43.5
Heat production							6.3	5.1	5.5	4.1

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	2013	2014	2015	2016	2017	2018 1)
Power generation	47.4	50.1	50.2	47.5	46.6	44.7
Heat production	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, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019 1)	2020	2021	2022
Power generation							1.3	26.7	1.1	0.8
Heat production							2.8	7.1	2.3	1.2

1) Disclosed from 2019 onwards.

Fortum's total power and heat production in Russia, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Power generation	20.0	23.3	25.7	25.5	26.3	29.6	29.3	55.6	28.6	28.6
Heat production	24.2	26.4	25.8	20.7	20.0	20.4	17.3	17.4	17.1	15.7

Fortum's power generation by source, total in the Nordic area, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hydro and wind power	18.1	22.4	25.1	20.8	20.9	19.4	20.7	29.6	23.3	19.1
Nuclear power	23.7	23.8	22.7	24.1	23.0	22.8	23.5	28.6	23.5	23.4
Thermal power	3.4	1.8	1.0	1.4	1.6	1.3	1.4	1.0	1.0	0.9
Total	**45.2**	**48.0**	**48.8**	**46.2**	**45.4**	**43.5**	**45.5**	**59.2**	**47.9**	**43.5**

Fortum's power generation by source, total in the Nordic area, continuing operations

%	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hydro and wind power	40	46	51	45	46	45	45	50	49	44
Nuclear power	52	50	47	52	51	52	52	48	49	54
Thermal power	8	4	2	3	3	3	3	2	2	2
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Fortum's power generation by source, total in other European countries, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019 [1]	2020	2021	2022
Hydro and wind power							-	3.3	-	-
Thermal power							1.3	23.4	1.1	0.8
Total							**1.3**	**26.7**	**1.1**	**0.8**

1) Disclosed from 2019 onwards.

Fortum's power generation by source, total in other European countries, continuing operations

%	2013	2014	2015	2016	2017	2018	2019 [1]	2020	2021	2022
Hydro and wind power							-	12	-	-
Thermal power							100	88	100	100
Total							**100**	**100**	**100**	**100**

1) Disclosed from 2019 onwards.

Power generation capacity by segment, continuing operations

MW	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	9,475	9,063	8,046	8,039	7,862	7,867	8,220	8,163	8,041	8,041
Russia	4,250	4,758	4,903	4,482	4,794	4,912	4,928	4,928		
City Solutions	793	803	743	760	775	788	1,082	988	559	535
Uniper							-	36,218		
Other Operations				53	292	157	-	-	-	-
Total excl. Russia [1]									**8,600**	**8,576**
Russia [1]									4,672	4,672
Total	**14,518**	**14,624**	**13,692**	**13,334**	**13,722**	**13,724**	**14,230**	**50,297**	**13,272**	**13,248**

1) From 2021 onwards.

Heat production capacity by segment, continuing operations

MW	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Generation	250	-	-	-	-	-	-	-	-	-
Russia	13,466	13,466	12,696	9,920	10,094	10,229	8,437	8,437		
City Solutions	4,317	3,936	3,915	3,818	4,671	4,780	4,812	4,057	3,026	2,135
Uniper							-	7,017		
Total excl. Russia [1]									**3,026**	**2,135**
Russia [1]									7,613	7,613
Total	**18,033**	**17,402**	**16,611**	**13,738**	**14,765**	**15,009**	**13,249**	**19,511**	**10,639**	**9,748**

1) From 2021 onwards.

Fortum's power generation capacity by type and area, continuing operations

	Finland		Sweden		Poland		Other		Total excl. Russia		Russia		Total	
MW	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Hydropower	1,553	1,553	3,100	3,100	-	-	-	-	4,653	4,653	-	-	4,653	4,653
Nuclear power	1,487	1,487	1,336	1,336	-	-	-	-	2,823	2,823	-	-	2,823	2,823
Combined heat and power	375	375	6	6	145	145	9	33	535	559	3,241	3,241	3,776	3,800
Condensing power	565	565	-	-	-	-	-	-	565	565	1,361	1,361	1,926	1,926
Wind power	-	-	-	-	-	-	-	-	-	-	35	35	35	35
Solar power	-	-	-	-	-	-	-	-	-	-	35	35	35	35
Total	**3,980**	**3,980**	**4,442**	**4,442**	**145**	**145**	**9**	**33**	**8,576**	**8,600**	**4,672**	**4,672**	**13,248**	**13,272**

Fortum's heat production capacity by area, continuing operations	Finland		Norway		Poland		Other		Total excl. Russia		Russia		Total	
MW	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Heat	1,440	1,440	-	888	619	622	76	76	2,135	3,026	7,613	7,613	9,748	10,639

Sales

Fortum's total power and heat sales in Nordics, continuing operations EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Power sales							2,877	2,494	3,602	5,444
Heat sales							390	271	403	325

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	2013	2014	2015	2016	2017	2018 [1]
Power sales	2,462	2,344	1,921	1,893	2,244	2,922
Heat sales	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, continuing operations EUR million	2013	2014	2015	2016	2017	2018	2019 [1]	2020	2021	2022
Power sales							130	16,226	325	643
Heat sales							228	410	240	202

1) Disclosed from 2019 onwards.

Fortum's total power and heat sales in Russia, continuing operations EUR million	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Power sales	822	758	661	691	837	872	924	1,411	761	856
Heat sales	290	285	228	199	258	193	145	145	137	156

Fortum's total power sales by area, continuing operations TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Finland	23.4	21.6	22.3	22.8	22.5	23.1	23.1	23.1	23.0	21.5
Sweden	23.3	28.2	29.8	28.8	30.8	29.7	31.5	44.7	32.1	27.3
Russia	25.6	26.5	29.4	29.5	30.5	34.1	33.8	68.3		
Norway				1.5	7.2	15.3	15.0	13.8	13.7	11.3
Germany							-	338.8		
United Kingdom							-	13.0		
Netherlands							-	6.3		
Other countries	4.3	3.8	2.8	2.1	2.9	1.8	2.5	8.1	4.2	4.5
Total excl. Russia [1]									**73.0**	**64.7**
Russia [1]									32.5	32.0
Total	**76.6**	**80.1**	**84.3**	**84.7**	**93.9**	**104.0**	**105.8**	**516.0**	**105.5**	**96.7**

1) From 2021 onwards.

NordPool transactions are calculated as a net amount of hourly sales and purchases at the Group level.

Fortum's total heat sales by area, continuing operations

TWh	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Russia	24.1	26.0	25.4	20.7	19.8	20.7	16.9	17.4		
Finland	5.5	3.2	3.1	3.6	3.9	3.8	3.8	2.9	3.1	2.8
Norway							1.7	1.5	1.8	0.8
Poland	4.1	3.4	3.4	3.6	3.7	3.5	3.3	3.4	3.8	3.5
Germany							-	2.4		
United Kingdom							-	0.0		
Netherlands							-	2.3		
Other countries	3.1	2.8	1.2	1.5	2.5	3.5	2.0	1.9	1.3	0.4
Total excl. Russia [1]									**10.0**	**7.6**
Russia [1]									17.0	15.6
Total	**36.8**	**35.4**	**33.2**	**29.4**	**29.9**	**31.5**	**27.6**	**31.7**	**27.0**	**23.2**

1) From 2021 onwards.

Volume of distributed electricity in distribution networks,

TWh	2013	2014	2015
Finland	9.5	2.8	
Sweden	14.1	13.7	6.4
Norway	2.5	1.1	
Estonia			
Total	**26.1**	**17.6**	**6.4**

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Quarterly financial information

Note: Quarterly financial information is unaudited.

Selected data based on quarterly consolidated income statement

EUR million	I/2021	II/2021	III/2021	IV/2021	2021	I/2022	II/2022	III/2022	IV/2022	2022
Reported										
IS Sales	1,721	1,233	1,296	2,171	6,422	2,162	1,754	2,152	2,736	8,804
IS Operating profit	530	248	3,000	547	4,325	246	767	917	-653	1,277
IS Share of profit/loss of associates and joint ventures	80	59	7	21	168	-215	-81	-37	-295	-629
IS Finance costs - net	-42	-47	-46	-26	-161	59	499	-141	-610	-193
IS Profit before income tax	568	261	2,961	542	4,332	90	1,187	737	-1,559	455
IS Income tax expense	-91	-47	-73	-114	-325	-104	-150	-138	947	556
IS Net profit	477	214	2,888	428	4,008	-14	1,037	600	-611	1,011
IS Non-controlling interests	15	0	-4	11	23	7	-2	-1	-4	0
IS Profit for the period, owners of the parent	462	214	2,892	417	3,985	-21	1,039	601	-608	1,011
IS Net profit (after non-controlling interests)	462	214	2,892	417	3,985	-21	1,039	601	-608	1,011
Earnings per share (basic), EUR	0.52	0.24	3.26	0.47	4.49	-0.02	1.17	0.67	-0.68	1.14
Comparable										
EBITDA	603	354	386	673	2,016	527	453	561	895	2,436
IS Operating profit	459	207	243	519	1,429	388	318	421	744	1,871
Share of profit/loss of associates and joint ventures	61	42	5	-4	104	21	12	9	-53	-11
Net profit (after non-controlling interests)	403	156	171	361	1,091	375	683	276	216	1,550
Earnings per share (basic), EUR	0.44	0.19	0.19	0.41	1.23	0.42	0.77	0.31	0.24	1.74

Quarterly sales by segment

EUR million	I/2021	II/2021	III/2021	IV/2021	2021	I/2022	II/2022	III/2022	IV/2022	2022
Generation [1]	669	571	676	953	2,869	701	715	894	1,344	3,655
City Solutions [1]	418	256	201	427	1,302	390	229	254	409	1,282
Consumer Solutions	661	424	485	1,052	2,622	1,168	856	1,094	1,460	4,578
Other Operations [1]	34	36	33	35	138	35	34	34	32	136
Netting of Nord Pool transactions [2]	-223	-137	-229	-540	-1,128	-448	-379	-568	-917	-2,312
Eliminations	-102	-98	-63	-22	-285	94	81	181	79	435
Total continuing operations excl. Russia	**1,458**	**1,052**	**1,104**	**1,906**	**5,519**	**1,940**	**1,537**	**1,890**	**2,407**	**7,774**
Russia	264	182	193	267	906	223	218	262	329	1,031
Eliminations	-1	0	0	-1	-2	-1	0	0	0	-1
IS Total continuing operations	**1,721**	**1,233**	**1,296**	**2,171**	**6,422**	**2,162**	**1,754**	**2,152**	**2,736**	**8,804**

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/2021	II/2021	III/2021	IV/2021	2021	I/2022	II/2022	III/2022	IV/2022	2022
Generation	268	190	237	428	1,123	275	300	375	650	1,600
City Solutions	86	-4	-21	73	135	48	-36	-16	32	28
Consumer Solutions	36	19	13	-17	52	35	21	17	25	97
Other Operations	-31	-36	-31	-44	-142	-32	-24	-22	-37	-115
Total continuing operations excl. Russia	**359**	**170**	**198**	**440**	**1,167**	**326**	**262**	**354**	**669**	**1,611**
Russia	100	37	45	80	261	61	57	67	75	260
IS **Comparable operating profit, continuing operations**	459	207	243	519	1,429	388	318	421	744	1,871
Impairment charges and reversals	-	-29	-1	-5	-35	-275	-46	-35	-550	-905
Capital gains and other related items	50	12	2,612	-1	2,673	3	640	138	5	785
Changes in fair values of derivatives hedging future cash flow	21	58	146	40	264	160	-141	396	-808	-393
Other	-	-	-	-6	-6	-29	-3	-3	-45	-80
IS **Operating profit, continuing operations**	**530**	**248**	**3,000**	**547**	**4,325**	**246**	**767**	**917**	**-653**	**1,277**

The first and last quarters of the year are usually the strongest quarters for power and heat businesses.

Investor information

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. All financial and investor communications and activities at Fortum are coordinated by the IR function.

Fortum's investor website **www.fortum.com/investors** provides information about Fortum's financial targets and performance, business environment, strategy, risks, outlook and share. All financial reports, presentations, webcasts are also available on the site.

Annual General Meeting 2023

The Annual General Meeting 2023 of Fortum Corporation will be held on Thursday, 13 April 2023, starting at 14.00 EEST.

Payment of dividends

The Board of Directors proposes to the Annual General Meeting that Fortum Corporation pays a dividend of EUR 0.91 per share for 2022, totalling approximately EUR 817 million based on the registered shares as of 1 March 2023. The possible dividend-related dates planned for 2023 are:

- ex-dividend date of the first dividend instalment: 14 April 2023
- record date of the first dividend instalment: 17 April 2023
- payment date of the first dividend instalment: 24 April 2023
- ex-dividend date of the second dividend instalment: 29 September 2023
- record date of the second dividend instalment: 2 October 2023
- payment date of the second dividend instalment: 10 October 2023

Financial information in 2023

Fortum will publish three interim reports in 2023:

- January–March Interim Report on 11 May
- January–June Half-year Financial Report on 4 August, and
- January–September Interim Report on 2 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 share basics

Listed on Nasdaq Helsinki
Trading ticker: FORTUM
Number of shares, 1 March 2023: 897,264,465
Sector: Utilities

Silent period

The company voluntarily applies a "silent period" before announcing earnings, during which time it will not comment on the company's business prospect for the current or previous, non-disclosed quarter. The silent period starts 30 days prior to the date of the earnings announcement.

Fortum's activities in capital markets during 2022

In 2022, Fortum had approximately 680 investor meetings and conference calls and met some 195 professional equity investors individually or in group meetings. Due to COVID-19 pandemic the meetings were mainly arranged virtually. IR also maintained regular contact with equity research analysts at investment banks and brokerage firms.