Financial performance and position

Improved 2018 results on higher market prices - New phase in strategy implementation started

Key financial ratios [1)]

	2018	2017	2016
Return on capital employed, %	6.7	7.1	4.0
Comparable net debt/EBITDA	3.6	0.8	0.0

[1)] See Definitions of key figures.

Key figures

EUR million	2018	2017	2016	Change 18/17
IS Sales	5,242	4,520	3,632	16%
Comparable EBITDA	1,523	1,275	1,015	19%
IS Comparable operating profit	987	811	644	22%
IS Operating Profit	1,138	1,158	633	-2%
- of sales %	21.7	25.6	17.4	
IS Share of profits from associates and joint ventures	38	148	131	-74%
IS Profit before income tax	1,040	1,111	595	-6%
- of sales %	19.8	24.6	16.4	
IS Earnings per share, EUR	0.95	0.98	0.56	-3%
CF Net cash from operating activities	804	993	621	-19%
Shareholders' equity per share, EUR	13.33	14.69	15.15	-9%
Interest-bearing net debt (at end of period)*	5,509	988	-48	
Return on shareholders' equity, %	6.8	6.6	3.7	
Equity-to-assets ratio, %	54	61	62	

* Net cash in 2016

2018 was an eventful year for Fortum. We continued our strategy implementation with the integration and development of our Hafslund and Ekokem acquisitions, further investments in renewables, and most significantly; closing the Uniper tender offer. Our long-term belief in the need for large-scale decarbonisation took a leap forward with the strengthening of the Market Stability Reserve and subsequent tripling of emission allowance prices, having a clear positive impact on power prices.

Over the previous years we have worked hard to deliver on our strategy announced in early 2016. As a result, we now have a portfolio of businesses with good profit potential for coming years. After taking significant steps in the capital redeployment that we began in 2016, we updated Fortum's strategy in November 2018. The updated strategy is a natural continuation of the previous one and builds on four priorities.

Our first strategic priority is to pursue operational excellence and increased flexibility in order to ensure benchmark performance of our existing businesses and improve our long-term competitiveness. After the large investments done during previous years it is only natural that the second priority is to ensure value creation from these investments. We will also continue to optimise our business portfolio, considering the ongoing transformation and decarbonisation of the sector. Despite the significant capital redeployment already made, we will, as our third priority, continue to drive focused growth in the power value chain. We will build on our long-standing expertise with the strategic focus on CO_2-free power generation – For a cleaner world. Foreseeing the market development towards the end of the 2020s will be increasingly challenging, but we believe that the uncertainty will also provide new business opportunities. Consequently, as our fourth priority, we aim to build on our existing competences and emerging technologies to create new businesses, independent of power prices, that have the potential for sizeable profit contribution. One example of initiatives in this area is our commitment to invest in Valo Ventures, a new global venture capital fund. Valo Ventures invests in digital start-ups focusing on key global megatrends that are central to Fortum's strategy. Fortum launched Valo Ventures together with Scott Tierney, former Google Capital co-founder.

The urgent need to decarbonise society is perhaps the greatest challenges of our time. The EU Commission published its long-term climate vision in November. Fortum supports the net zero emission target for 2050, as proposed in the most ambitious scenario. Cost-efficient emission reduction pathways should be established for all sectors. The EU emission trading scheme currently covers less than half of EU CO2 emissions. Therefore, strengthening and broadening the scope of the EU ETS to e.g. heating, cooling, and transport should be a key tool to drive decarbonisation.

Our continued investments in wind and solar are starting to have a positive impact on our results. Commissioned in the beginning of 2018 and the first of its kind in Russia, the 35-MW Ulyanovsk wind park is one example of this. The sale of a 54% stake in our 185-MW solar power plants in India freed up capital for further investments, and in June Fortum won a 250-MW auction for an Indian solar park with a fixed tariff for 25 years. Our total wind and solar portfolio has grown substantially during 2018. Together with our associated companies, we have a portfolio of close to three gigawatts of solar and wind parks and development projects in the Nordics, Russia, and India.

Financial performance and position

Closing the offer on Uniper shares in June 2018 was the most significant milestone during the year. We have a clear vision for how Fortum and Uniper can jointly build 'The Utility of the Future', and we want to work with the company to explore how to best make this vision a reality for the benefit of all shareholders and stakeholders of both companies. To our disappointment, talks with Uniper have not yet proceeded as anticipated, but the fundamentals of our investment case are intact and we remain committed. Since the closing of the offer, we have increased our shareholding in Uniper in order to further secure Fortum’s voting position in any future Uniper General Meeting. At the end of 2018, Fortum held 49.99% of Uniper shares and voting rights.

Fortum’s fourth quarter results improved, mainly as a result of higher power prices and increased nuclear production, due to improved availability. The results were still burdened by lower than average hydropower generation volumes, due to low inflows and reservoir levels, although the situation improved from the record low volumes seen in the third quarter. The impact of the higher power prices is reflected in our full-year comparable operating profit, which increased by 22%. The investment in Uniper only had a marginal effect on Fortum's 2018 results, as they include only Fortum's share of Uniper's third-quarter results. In the future, Uniper's profit and dividends will contribute to Fortum's earnings per share and cash flow.

Highlight of the year for the Generation division was the clearly improved results, driven by higher market prices. During the year we also finalised the automation modernisation project at the Loviisa nuclear power plant, the biggest single project since the construction of the plant. Following on the strong improvement in Russia over the past years, the 2018 results in roubles improved slightly. In the City Solutions and Consumer Solutions divisions, 2018 was characterised by the integration of Hafslund, which proceeded well. Unfortunately the financial results for these two divisions has not yet reach satisfactory levels. We will continue the integration work, and expect the synergies to materialise gradually during 2019 and 2020.

Based on the results of 2018 and the outlook for future years, Fortum's Board of Directors is proposing an unchanged dividend of EUR 1.10 per share for the calendar year 2018.

Strategy update in November 2018

On 12 November 2018, Fortum announced its updated strategy. The update is a continuation of the strategy execution towards Fortum’s vision "For a cleaner world". At the same time Fortum reconfirmed its dividend policy and long-term financial targets.The strategy aims at strengthening Fortum’s competitiveness and ensuring a benchmark portfolio for the 2020's. Pursuing operational excellence and increased flexibility as well as ensuring value creation from investments and portfolio optimisation are the key priorities. Fortum will also drive focused growth in the power value chain and seek to build options for significant new businesses for the future. The updated strategy was presented in more details on Fortum’s Capital Markets Day on 13 November 2018.

Uniper investment

In September 2017, Fortum announced it had signed a transaction agreement with E.ON under which E.ON had the right to decide to tender its 46.65% shareholding in Uniper SE into Fortum’s public takeover offer (PTO). In November 2017, Fortum launched a voluntary public takeover offer to all Uniper shareholders at a total value of EUR 22 per share, implying a premium of 36% to the price prior to intense market speculation on a potential transaction at the end of May 2017. In February 2018, Fortum announced that shareholders representing 47.12% of the shares in Uniper had accepted the offer.

The PTO was conditional to regulatory and merger control approvals in several countries. During the second quarter 2018, Fortum received the required clearances in Russia under the Strategic Investment Law as well as Competition Law. The clearances allow Fortum the acquisition of up to 50% of shares and voting rights in Uniper. During the second quarter, Fortum also received an unconditional merger clearance decision from the European Commission. Clearances in the United States and South Africa had already been granted earlier.

On 26 June 2018, Fortum closed the offer and became the largest shareholder in Uniper with 47.35% of the shares. Fortum paid a total consideration of EUR 3.7 billion for all shares tendered (EUR 21.31 per share). The total consideration was financed with existing cash resources of EUR 1.95 billion and bridge loan financing of EUR 1.75 billion from committed credit facilities. Since June 2018 Fortum has increased its shareholding in Uniper in order to further secure its voting position in any future Uniper General Meeting. On 31 December 2018, Fortum owned 49.99% of the shares in Uniper.

The share of Uniper's profit will contribute to the EPS and dividends to the cash flow of Fortum. As a result of this transaction, Fortum’s leverage rose above Fortum's long-term target level for net debt/EBITDA ratio of around 2.5x. Over time, however, Fortum expects its cash generation in combination with the dividend from Uniper to reduce this ratio towards the stated target.

Fortum has consolidated Uniper as an associated company from 30 June 2018. The total acquisition cost, including direct costs relating to the acquisition, is reported in 'Participations in associated companies and joint ventures'. The purchase price allocation will be completed within the one-year window from the acquisition date, according to IFRS. As Uniper publishes its interim reports later than Fortum, Fortum's share of Uniper's results will be accounted for with a time-lag of one quarter, with potential adjustments. Fortum’s Financial Statements 2018 only includes Fortum’s share of Uniper's third-quarter results, amounting to EUR -2 million (Note 3). Uniper will report its full-year 2018 results on 12 March 2019.

Financial performance and position

Financial results

Sales by segment

EUR million	2018	2017	Change 18/17
Generation	1,837	1,677	10%
City Solutions	1,094	1,015	8%
Consumer Solutions	1,759	1,097	60%
Russia	1,069	1,101	-3%
Other Operations	129	102	26%
Netting of Nord Pool transactions [1)]	-516	-367	
Eliminations	-130	-103	
IS Total	**5,242**	**4,520**	**16%**

[1)] Sales and purchases with Nord Pool 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	2018	2017	Change 18/17
Generation	762	603	26%
City Solutions	284	262	8%
Consumer Solutions	110	57	93%
Russia	417	438	-5%
Other Operations	-50	-83	40%
IS Total	**1,523**	**1,275**	**19%**

Comparable operating profit by segment

EUR million	2018	2017	Change 18/17
Generation	631	478	32%
City Solutions	113	98	15%
Consumer Solutions	53	41	29%
Russia	271	296	-8%
Other Operations	-79	-102	23%
IS Total	**987**	**811**	**22%**

Operating profit by segment

EUR million	2018	2017	Change 18/17
Generation	738	501	47%
City Solutions	109	102	7%
Consumer Solutions	75	39	92%
Russia	273	295	-7%
Other Operations	-57	221	-126%
IS Total	**1,138**	**1,158**	**-2%**

For further information see Note 6 Segment reporting.

Fortum has reassessed the assumptions for all nuclear related assets and liabilities as of 31 December 2018. The increase in the nuclear provision for the Loviisa nuclear power plant in Finland leads to recognition of an additional share of the Finnish nuclear fund. As of 31 December 2018, Fortum still has EUR 254 million in unrecognised nuclear waste fund assets for Loviisa (Note 29). The increase in the provision and the additional share in the fund are both included in items affecting comparability. The changes in assumptions had a positive impact on interests presented in other financial expenses. The assumptions have also been changed for the respective balances of the co-owned nuclear companies in Finland and Sweden i.e. Teollisuuden Voima Oyj (TVO), Oskarshamn Kraftgrupp AB (OKG), and Forsmarks Kraftgrupp AB. The total impact of the change to share of profit from associated companies and joint ventures was EUR -37 million, net of tax, and including additional nuclear waste liability related to legacy waste obligations for Swedish nuclear. The net profit impact from all these nuclear related adjustments is close to zero.

Fortum's sales increased by 16%, mainly reflecting the consolidation of Hafslund and higher power prices. Comparable operating profit increased by 22%, mainly as a result of the higher achieved power price, the positive impact from the consolidation of the acquired Hafslund businesses, lower real-estate and capacity taxes in Swedish hydro and nuclear power plants, higher received Capacity Supply Agreement (CSA) payments in Russia, as well as the profit from the sale of a 54% share of Fortum's Indian solar power plants. The result improvement was partly offset by the very low hydropower production volumes in the third quarter and the weaker Russian rouble.

Financial performance and position

Operating profit for the period was positively impacted by EUR 151 (347) million of items affecting comparability, mainly due to the fair value change of non-hedge accounted derivatives, capital gains, and nuclear related adjustments. In 2017, the items affecting comparability included a one-time capital gain of EUR 324 million from the divestment of Hafslund ASA (Note 6).

The share of profit from associates and joint ventures decreased to EUR 38 (148) million, mainly due to nuclear related adjustments of EUR -37 million and other items relating to nuclear decommissioning of EUR -33 million, mainly from OKG. The decrease was also due to that the comparison period included the share of profit from Hafslund ASA of EUR 39 million, divested in August 2017. Uniper accounted for EUR -2 (0) million, Stockholm Exergi (formerly Fortum Värme) for EUR 61 (66) million, and TGC-1 for EUR 40 (32) million. The share of profit from TGC-1 is based on the company's published fourth-quarter 2017 and January-September 2018 interim reports. The share of profit from Uniper is based on the company's published third-quarter 2018 interim report (Note 19).

Net finance costs amounted to EUR 136 (195) million. The decline was mainly due to nuclear related adjustments of EUR 49 million.

Profit before income taxes was EUR 1,040 (1,111) million.

Taxes for the period totalled EUR 181 (229) million. The effective income tax rate, according to the income statement, was 17.5% (20.6%). The comparable effective income tax rate, excluding the impact of the share of profit from associated companies and joint ventures, non-taxable capital gains, tax rate changes and other major one-time income tax effects was 22.0% (18.8%) (Note 13).

The profit for the period was EUR 858 (882) million. Earnings per share were EUR 0.95 (0.98), of which EUR 0.15 (0.38) per share was related to items affecting comparability, including capital gains of EUR 0.09 from the sale of the 10% stake in Hafslund Produksjon. In the comparison period in 2017, the sales gain from the Hafslund transaction was EUR 0.36 and the impact from a Swedish income tax case was EUR -0.14.

Financial position and cash flow

EUR million	2018	2017	Change 18/17
Interest expense	-148	-164	10%
Interest income	34	32	6%
Fair value gains and losses on financial instruments	-8	-12	33%
Other financial expenses - net	-15	-50	70%
IS Finance costs - net	**-136**	**-195**	**30%**
Interest-bearing liabilities	6,093	4,885	25%
Less: Liquid funds	584	3,897	-85%
Interest-bearing net debt	**5,509**	**988**	**458%**

Cash flow

In 2018, net cash from operating activities decreased by EUR 189 million to EUR 804 (993) million, mainly impacted by an increase in comparable EBITDA of EUR 248 million, an increase of realised foreign exchange gains and losses of EUR 314 million, and the negative effect of a EUR 751 million increase in working capital. The foreign exchange gains and losses of EUR 231 (-83) million relate to the rollover of foreign exchange contract hedging loans to Russian and Swedish subsidiaries. The EUR -670 (81) million change in working capital mainly resulted from the daily cash settlements for futures on Nasdaq Commodities (Additional cash flow information).

Capital expenditure decreased by EUR 78 million to EUR 579 (657) million, and was below the 2018 guidance of EUR 600-700 million. Acquisition of shares was EUR 4,088 (972) million, mainly related to the Uniper transaction (Note 3). The impact of divestment of shares was EUR 259 (741) million, mainly resulting from the sale of the 10% stake in Hafslund Produksjon and a 54% share of a solar power company. Acquisitions and divestments in 2017 were mainly related to the Hafslund transaction. Net cash used in investing activities increased to EUR 4,398 (807) million.

Cash flow before financing activities was EUR -3,594 (187) million.

Proceeds from long-term liabilities were EUR 1,764 (35) million, of which the main part is related to the bridge loan financing from committed credit facilities for the acquisition of Uniper shares. Payments of long-term liabilities totalled EUR 586 (543) million. The dividends paid for 2017 amounted to EUR 977 million. The net decrease in liquid funds was EUR 3,268 (1,241) million.

Assets and capital employed

At the end of the reporting period, total assets amounted to EUR 22,409 (21,753) million. Liquid funds at the end of the period decreased to EUR 584 (3,897) million, impacted by the Uniper transaction. Capital employed was EUR 18,170 (18,172) million.

Equity

Equity attributable to owners of the parent company totalled EUR 11,841 (13,048) million. The decrease of EUR 1,207 million was mainly due to the dividends of EUR 977 million paid for 2017, the EUR -599 million impact from fair valuation of cash flow hedges, and translation differences of EUR -518 million, partly offset by the net profit for the period of EUR 843 million. The dividend of EUR 1.10 per share for 2017 was approved by the 2018 Annual General Meeting on 28 March 2018 and paid on 10 April 2018.

Financial performance and position

Financing

Net debt increased by EUR 4,521 million to EUR 5,509 (988) million, mainly due to the closing of the Uniper offer in the latter part of the second quarter.

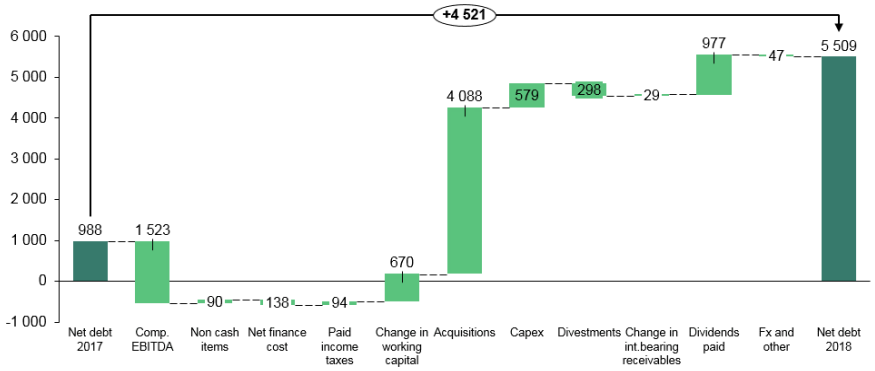
At the end of 2018, the Group's liquid funds totalled EUR 584 (3,897) million. Liquid funds include cash and bank deposits of EUR 317 (246) million held by PAO Fortum. In addition to liquid funds, Fortum's undrawn committed credit facilities totalled EUR 1.8 billion (1.8) (Note 24).

Net financial expenses totalled EUR 136 (195) million, of which net interest expenses were EUR 114 (132) million. Net financial expenses included the impact of EUR 49 million from nuclear related adjustments (Note 29). In 2017, net financial expenses included costs relating to financing arrangements of the Uniper transaction.

On 12 September 2018, Fortum received information from Nasdaq Commodities that it had closed-out the positions of a clearing member and that the funds from the commodity member default fund had been utilised to cover the loss. Fortum is trading on Nasdaq Commodities and is a member of the default fund. On 13 September, Nasdaq requested the members of the default fund to replenish their contribution in the fund. Fortum's participation in the default fund was approximately EUR 30 million and the requested replenishment was approximately EUR 20 million. Consequently, Fortum booked approximately EUR 20 million as a financing cost in its 2018 results. In November 2018, a legally binding agreement for a consensual arrangement was finalised between the defaulting member and the creditors of the defaulted member in order to recover part of the losses arising from the default.

In January 2018, Standard & Poor's downgraded Fortum's long-term credit rating from BBB+ to BBB with Negative Outlook. The short-term rating was affirmed at level A-2. In June 2018, Fitch Ratings downgraded Fortum's long-term credit rating from BBB+ to BBB with Stable Outlook. The short-term rating was downgraded to level F3. Having a solid investment grade rating is a key priority for Fortum.

Change in net debt during 2018, EUR million



Key figures

At the end of 2018, the comparable net debt to EBITDA ratio for the last 12 months was 3.6x (0.8x), which is above the long-term over-the-cycle target of approximately 2.5x.

Gearing was 46% (7%) and the equity-to-assets ratio 54% (61%). Equity per share was EUR 13.33 (14.69). Return on capital employed (ROCE) for the last twelve months was 6.7% (7.1%). Fortum targets a long-term over-the-cycle return on capital employed of at least 10%.

Operating and regulatory environment

Nordic countries

According to preliminary statistics, electricity consumption in the Nordic countries was 399 (392) TWh. The higher consumption was mainly driven by colder weather during the first quarter of 2018 and the somewhat higher industrial consumption.

At the beginning of 2018, the Nordic water reservoirs were at 86 TWh, which is 3 TWh above the long-term average and 11 TWh higher than one year earlier. At the end of 2018, the reservoirs were at 74 TWh, which is 9 TWh below the long-term average and 12 TWh lower than one year earlier.

In 2018, the average system spot price in Nord Pool was EUR 44.0 (29.4) per MWh, the average area price in Finland was EUR 46.8 (33.2) per MWh and in Sweden SE3 (Stockholm) EUR 44.5 (31.2) per MWh.

In Germany, the average spot price was EUR 44.5 (34.2) per MWh in 2018.

The market price of CO_2 emission allowances (EUA) increased from EUR 8 per tonne at the beginning of the year to EUR 25 per tonne at the end of 2018.

Financial performance and position

Russia

Fortum operates mainly in the Tyumen and Khanty-Mansiysk area of Western Siberia, where industrial production is dominated by the oil and gas industries, and in the Chelyabinsk area of the Urals, which is dominated by the metal industry. The Russian market is divided into two price zones and Fortum operates in the First Price Zone (European and Urals part of Russia).

According to preliminary statistics, Russian electricity consumption was 1,056 (1,035) TWh and the corresponding figure for the First Price Zone was 810 (799) TWh in 2018.

In 2018, the average electricity spot price, excluding capacity price, increased by 3.6% to RUB 1,247 (1,204) per MWh in the First Price Zone and increased by 0.2% to RUB 1,043 (1,041) per MWh in the Urals hub.

Power consumption

TWh	2018	2017	2016
Nordic countries	399	392	390
Russia	1,055	1,035	1,027
Tyumen	92	95	94
Chelyabinsk	35	33	35
Russia Urals area	260	261	259

Average prices

	2018	2017	2016
Spot price for power in Nord Pool power exchange, EUR/MWh	44.0	29.4	26.9
Spot price for power in Finland, EUR/MWh	46.8	33.2	32.4
Spot price for power in Sweden, SE3, Stockholm, EUR/MWh	44.5	31.2	29.2
Spot price for power in Sweden, SE2, Sundsvall, EUR/MWh	44.2	30.8	29
Spot price for power in European and Urals part of Russia, RUB/MWh [1)]	1,247	1,204	1,204
Average capacity price, tRUB/MW/month	609	535	481
Spot price for power in Germany, EUR/MWh	44.5	34.2	29
Average regulated gas price in Urals region, RUB/1,000 m^3	3,801	3,685	3,614
Average capacity price for old capacity (CCS), tRUB/MW/month [2)]	148	148	140
Average capacity price for new capacity (CSA), tRUB/MW/month [2)]	1,075	899	815
Spot price for power (market price), Urals hub, RUB/MWh [1)]	1,043	1,041	1,054
CO_2, (ETS EUA), EUR/tonne CO_2	16	6	5
Coal (ICE Rotterdam), USD/tonne	92	84	59
Oil (Brent Crude), USD/bbl	72	55	45

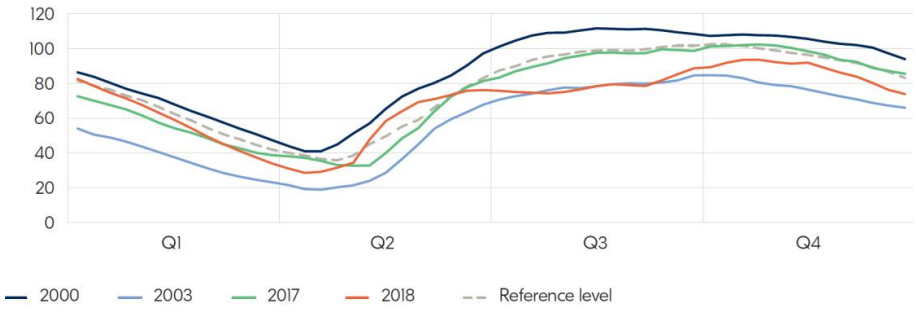
[1)] Excluding capacity tariff.

[2)] Capacity prices paid only for the capacity available at the time.

Water reservoirs

TWh	31 Dec 2018	31 Dec 2017	31 Dec 2016
Nordic water reservoirs level	74	86	75
Nordic water reservoirs level, long-term average	83	83	83

Nordic water reservoirs, energy content, TWh



Source: Nord Pool

Financial performance and position

Export/import

TWh (+ = import to, - = export from Nordic area)	2018	2017	2016
Export/import between Nordic area and Continental Europe+Baltics	-10	-15	-10
Export/import between Nordic area and Russia	8	6	6
Export/import Nordic area, total	-2	-9	-4

European regulatory environment

COP24 agreed on the operational rules of the Paris Agreement

On 15 December, the United Nation's climate conference (COP24) in Poland approved the rules of the implementation of the Paris Agreement. The Agreement will come into force in 2020. The rules include monitoring and reporting of greenhouse gas emissions, reporting on climate finance, and the process for increasing the climate ambition in the future. However, rules on market mechanisms and global carbon markets are pending and will be negotiated late 2019.

The Paris Agreement asks countries to submit their long-term climate strategies and revisions of the existing emission reduction commitments by early 2020. The current aggregated commitments are far from enough to meet the global goal of keeping the temperature increase below 1.5 °C. According to the International Panel on Climate Change (IPCC), this requires “rapid and far-reaching transitions” including carbon dioxide removal from the atmosphere. Global net carbon dioxide emissions have to decline by 45% from 2010 to 2030 and be net-zero by 2050. According to the IPCC, the power sector should reduce emissions by 100% well before 2050.

The EU 2050 climate strategy sets the long-term framework

On 28 November, the European Commission published the proposal "A Clean Planet for All", establishing a strategic vision for 2050. The Commission foresees a 30-50% decline in energy consumption and a significantly growing role of electricity by 50-200%. Concrete proposals for the EU targets and policies post 2030 are expected from the next Commission.

Fortum considers the proposed strategy as ambitious and balanced. The carbon neutrality target for 2050 and the intermediate targets for 2030-2050 should be confirmed by the EU as soon as possible. In Fortum’s view, carbon pricing will be the key measure for reaching carbon neutrality, and the EU should develop a market mechanism to reward also the capture of CO_2 directly from the air or from flue gases.

The German Coal Commission adopts its final report

The Coal Commission suggests in its report to the German Government that coal would be phased out from the German energy mix by 2038. In 2032, there will be an assessment on the option to phase-out coal already in 2035. The report suggests that after 2022 30 GW of coal capacity could be online meaning that 12.5 GW of coal capacity would have to be closed down compared to 2017. In 2030, only 17 GW of coal capacity would remain. Closing down nuclear and coal at the same time underlines the important role of gas in the energy mix.

The report proposes compensations for coal plant operators. A compensation to customers should be offered through lower grid fees or lowered electricity tax rates, as the Commission expects the power price to increase as a result of the closures. Also the regions suffering from the coal phase-out should receive compensation in order to mitigate the resulting negative structural effects on their economies. Furthermore, it is suggested that a consequent amount of CO_2 allowances would be cancelled so that the national policy measure would not water down the operation of the EU Emission Trading Scheme (ETS).

Fortum hopes that the German Government will give its opinion on the report as soon as possible, and that the preparations for the respective laws and regulations will start swiftly. Detailed rules on compensations would be necessary for the operators to make decisions on their production capacities.

Sustainable financing rules affect the whole EU financing sector

In May 2018, the EU Commission presented the first set of legislative proposals based on the strategy and action plan of sustainable financing. This includes a proposal to develop an EU-wide taxonomy system to help investors assess the sustainability and impact of economic activities. In addition, the guidelines on non-financial reporting will be revised and EU labels for green financial products will be developed.

The risk related to the taxonomy development is, among other things, that it will take a negative view on certain low-carbon technologies (e.g. waste-to-energy and nuclear) which can increase the financing costs of future investments.

In Fortum's view, while supporting the overall objective of the Commission proposals, initiatives to promote sustainable investments in the energy sector have to be technology neutral and aim for low-carbon fossil-free solutions. It is also essential to ensure that the planned taxonomy is developed in a transparent manner with a market-based approach.

EU waste package entered into force

The EU waste package, expected to effectively promote a circular economy, was officially published in June 2018 and member states are to implement the legislation by July 2020. The recycling targets for municipal solid waste and packaging waste will be increased and the landfilling of municipal waste will be further limited by 2030. Further, the quality and comparability of waste statistics will be improved, the calculation methods for recycling targets will be aligned, and e-registers for hazardous waste will be established.

Financial performance and position

Rules on sustainable plastics use

In January 2018, the EU Commission published a communication for an EU plastics strategy. The target is to transform the way plastic products are designed, produced, used, and recycled in the EU. Better design of plastic products, higher recycling rates, and better quality recyclates will help boost the markets for secondary raw material plastics with greater added value for a competitive European plastics industry. All Nordic countries have developed their own roadmaps on sustainable plastics use.

Fortum welcomes the initiative to boost the markets for recycled plastics. The plastics strategy is expected to result in business opportunities for Fortum's recycling and waste solutions.

Unexpected end-user price freeze in Poland

On 1 January 2019, the new Act on the Excise Tax and changes in other laws suddenly and unexpectedly came into effect in Poland, freezing end-user electricity prices at the level of 30 June 2018, with a proposed governmental mechanism to compensate suppliers for potential losses. The price freeze is a response to rapidly increased electricity prices, caused by the higher CO_2 price. The law is expected to be challenged by the European Commission as the planned compensation to power companies can be regarded as illegal state aid and the measure should have been notified to the Commission before implementing it. Fortum will continue to monitor the situation closely and will work jointly with the relevant bodies to seek improved understanding and clarification of the new legislation.

Segment reviews

Fortum’s business activities cover the production and sales of electricity and heat, waste-to-energy and circular economy solutions, as well as energy-sector expert services and various consumer solutions. Fortum is the third largest power generator and the largest electricity retailer in the Nordic countries. Globally, the company is one of the leading heat producers. As two thirds of Fortum's power production is hydro and nuclear, the company is also among the lowest-emitting generators in Europe.

With core operations in 10 countries, Fortum employs a diverse team of more than 8,000 energy-sector professionals. Fortum has 124 hydro power plants, 27 CHP (combined heat and power), condensing, and nuclear power plants as well as three wind power parks and three solar power plants. Globally, the company supplies heat in 23 cities and towns and has five main waste treatment facilities. Fortum’s key markets are the Nordic and Baltic countries, Russia, Poland, and India.

Fortum's reportable segments under IFRS are Generation, City Solutions, Consumer Solutions, and Russia. M&A and Solar & Wind Development, Technology and New Ventures as well as corporate functions are reported under Other Operations. Fortum's participation in Uniper SE is also reported as part of Other Operations.

In November 2018, Fortum announced that the solar and wind businesses were reorganised as they have grown beyond the initial development phase. The wind operations became a business area within the Generation division and the solar operations a business within the City Solutions division. The Russian wind and solar operations continues as a part of the Russia division. The segment reporting will be changed as of 2019 and 2018 figures will be restated accordingly.

Financial performance and position

Generation

The Generation segment comprises power production in the Nordics including nuclear, hydro and thermal power production, power portfolio optimisation, trading and industrial intelligence, and nuclear services globally.

EUR million	2018	2017	Change 18/17
Sales	1,837	1,677	10%
- power sales	1,767	1,649	7%
of which Nordic power sales [1)]	1,401	1,342	4%
- other sales	70	28	150%
Comparable EBITDA	762	603	26%
Comparable operating profit	631	478	32%
Operating profit	738	501	47%
Share of profits from associates and joint ventures [2)]	-72	-1	-7100%
Comparable net assets (at period-end)	6,295	5,672	11%
Comparable return on net assets, %	11.1	8.4	32%
Capital expenditure and gross investments in shares	194	264	-27%
Number of employees	1,075	1,035	4%

[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 19).

The Generation segment's total power generation in the Nordic countries decreased due to lower hydropower volumes caused by low inflows and low reservoir levels in the third and fourth quarters and slightly lower nuclear power generation resulting from the closure of Oskarshamn 1 in June 2017. The CO_2-free production accounted for 100% (99%) of the total power production.

The achieved power price in the Generation segment increased by EUR 2.8, +9% due to higher spot prices.

Comparable operating profit increased by 32%, driven by the higher achieved power price and lower real-estate and capacity taxes in Swedish hydro and nuclear power plants, partly offset by lower hydro production volumes.

Operating profit was positively affected by EUR 108 (23) million of capital gains, fair value change of non-hedge accounted derivatives, nuclear related adjustments, and impairment charges (Note 6).

The negative result contribution from associates and joint ventures was mainly due to nuclear related adjustments. The adjustments had a positive impact on other financial expenses and the total impact on Fortum's net profit was marginal (Note 19).

In June 2018, Fortum sold its 10% ownership in Hafslund Produksjon and booked a one-time tax-free capital gain of EUR 77 million in the Generation segment's 2018 results.

Power generation by source

TWh	2018	2017	Change 18/17
Hydropower, Nordic	19.1	20.7	-8%
Nuclear power, Nordic	22.8	23.0	-1%
Thermal power, Nordic	0.1	0.5	-80%
Total	**42.0**	**44.2**	**-5%**

Nordic sales volume

TWh	2018	2017	Change 18/17
Nordic sales volume	48.4	51.8	-7%
of which Nordic Power sales volume [1)]	40.5	42.2	-4%

[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.

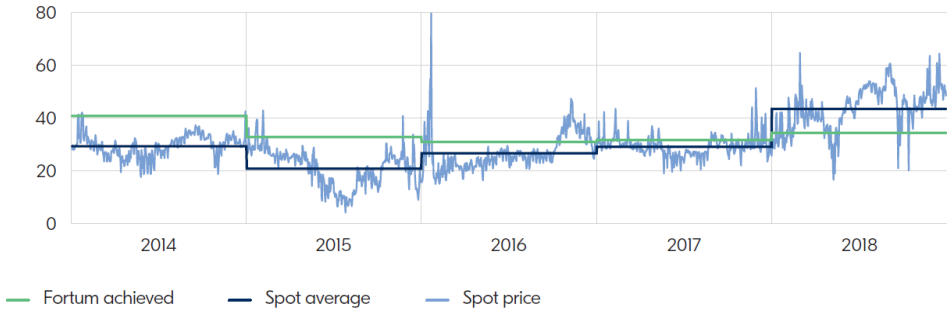
Financial performance and position

Sales price

EUR/MWh	2018	2017	Change 18/17
Generation's Nordic power price [2)]	34.6	31.8	9%

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

Nord Pool, power price, 2014–2018, EUR/MWh



Source: Nord Pool, Fortum

City Solutions

City Solutions develops sustainable solutions for urban areas into a growing business for Fortum. The segment comprises heating, cooling, waste-to-energy, operation and maintenance services, biomass, and other circular economy solutions. The business operations are located in the Nordics, the Baltic countries, and Poland. The segment also includes Fortum's 50% holding in Stockholm Exergi (formerly Fortum Värme), which is a joint venture and is accounted for using the equity method.

EUR million	2018	2017	Change 18/17
Sales	1,094	1,015	8%
- heat sales	604	523	15%
- power sales	119	121	-2%
- waste treatment sales [1)]	211	195	8%
- other sales [2)]	161	175	-8%
Comparable EBITDA	284	262	8%
Comparable operating profit	113	98	15%
Operating profit	109	102	7%
Share of profits from associates and joint ventures	74	80	-8%
Comparable net assets (at period-end)	3,743	3,728	0%
Comparable return on net assets, %	5.0	5.5	-9%
Capital expenditure and gross investments in shares	222	556	-60%
Number of employees	1,956	1,907	3%

1) Waste treatment sales comprise gate fees at waste treatment plants and environmental construction services.

2) Other sales comprise mainly operation and maintenance services and fuel sales.

On 4 August 2017, Fortum concluded the restructuring of its ownership in Hafslund. As of 1 August 2017, Fortum's 50% ownership in Fortum Oslo Varme (the combined company of Hafslund's Heat business area and Klemetsrudanlegget) has been consolidated as a subsidiary to Fortum in the results of City Solutions.

Heat sales volumes increased by 8% mainly driven by the consolidation of Fortum Oslo Varme. The negative impact of the warm weather in the second quarter offset the positive effects of the cold weather in the first quarter.

Comparable operating profit increased by 15%. The positive effect of EUR 37 (15) million of the consolidation of Fortum Oslo Varme was partly offset by the weaker result in the recycling and waste business.

The seasonality of the City Solutions business has increased, due to the consolidation of Fortum Oslo Varme and the new seasonal pricing. On average, the annual effect of the seasonal pricing is neutral.

The consolidation of Fortum Oslo Varme had a positive effect of EUR 70 (29) million on the comparable EBITDA.

Operating profit was negatively affected by EUR -4 (4) million of fair-value change of non-hedge-accounted derivatives (Note 6).

Financial performance and position

Heat sales by country

TWh	2018	2017	Change 18/17
Finland	3.8	3.9	-3%
Poland	3.5	3.7	-5%
Norway	1.6	0.7	129%
Other countries	1.9	1.8	6%
Total	**10.8**	**10.0**	**8%**

Power sales by country

TWh	2018	2017	Change 18/17
Finland	1.4	1.5	-7%
Poland	0.5	0.4	25%
Other countries	0.8	0.7	14%
Total	**2.7**	**2.6**	**4%**

Consumer Solutions

Consumer Solutions comprises electricity and gas retail businesses in the Nordics and Poland, including the customer service, invoicing, and debt collection business. Fortum is the largest electricity retailer in the Nordics with approximately 2.5 million customers across different brands in Finland, Sweden, Norway, and Poland. The business provides electricity and related value-added products as well as new digital customer solutions.

EUR million	2018	2017	Change 18/17
Sales	1,759	1,097	60%
- power sales	1,547	862	79%
- other sales	212	235	-10%
Comparable EBITDA	110	57	93%
Comparable operating profit	53	41	29%
Operating profit	75	39	92%
Comparable net assets (at period-end)	648	638	2%
Capital expenditure and gross investments in shares	47	493	-90%
Number of employees	1,399	1,543	-9%

On 4 August 2017, Fortum concluded the restructuring of its ownership in Hafslund. As of 1 August 2017, Hafslund Markets has been consolidated into the results of Consumer Solutions.

The consolidation of Hafslund and the cold weather in February and March increased electricity sales volumes and, consequently, sales for the segment. Increasing spot power prices during the year also had a positive impact. The competition and customer churn in the Nordic market continued to be a challenge.

Comparable operating profit increased by 29%, due to the consolidation of Hafslund, partly offset by lower sales margins and the amended service agreements for the divested electricity distribution companies. The effect of the consolidation of Hafslund was EUR 31 (13) million.

The consolidation of Hafslund had a positive effect of EUR 54 (22) million on the comparable EBITDA. Due to the capitalisation of sales commissions, the implementation of IFRS 15 had a positive effect of EUR 32 million on the comparable EBITDA. EUR 22 million of the IFRS 15 effect was related to the Hafslund operations.

Operating profit was positively affected by EUR 22 (-2) million of fair-value change of non-hedge-accounted derivatives (Note 6).

Sales volumes

TWh	2018	2017	Change 18/17
Electricity	30.3	20.5	48%
Gas*	4.1	4.0	2%

* Not including wholesale volumes.

Number of customers

Thousands*	2018	2017	Change 18/17
Electricity	2,440	2,470	-1%
Gas	30	20	50%
Total	**2,470**	**2,490**	**-1%**

* Rounded to the nearest 10,000.

Financial performance and position

Russia

The Russia segment comprises power and heat generation and sales in Russia. The segment also includes Fortum's over 29% holding in TGC-1, which is an associated company and is accounted for using the equity method.

EUR million	2018	2017	Change 18/17
Sales	1,069	1,101	-3%
- power sales	872	837	4%
- heat sales	193	258	-25%
- other sales	4	6	-33%
Comparable EBITDA	417	438	-5%
Comparable operating profit	271	296	-8%
Operating profit	273	295	-7%
Share of profits from associates and joint ventures	36	31	16%
Comparable net assets (at period-end)	2,789	3,161	-12%
Comparable return on net assets, %	10.3	10.1	2%
Capital expenditure and gross investments in shares	117	277	-58%
Number of employees	2,941	3,495	-16%

Power generation volumes increased, due to the commissioning of the Chelyabinsk GRES unit 3 and good availability. Heat production volumes increased, due to cold weather, partly offset by the transfer of the heat-only boilers in Chelyabinsk to the Yustek joint venture. Power generation volumes in the first quarter of 2017 were lower due to a maintenance outage at the Nyagan power plant.

Sales declined due to the weaker Russian rouble and the transfer of the heat business in Tyumen to the Yustek joint venture. The decline was partly offset by higher received CSA payments and higher power and heat sales volumes.

Comparable operating profit decreased by 8%. The new production units and higher received CSA payments had a positive effect on the results. The result was negatively impacted by the change in the Russian rouble exchange rate, bad-debt provisions, and lower electricity margins. The increase in CSA payments was related to Nyagan 1 and Nyagan 2 receiving higher payments for the last years of the CSA period, positive spot market corrections, and contributions from renewable generation. The increase in CSA payments was partly offset by the corrections arising from lower bond yields. The result for the comparison period in 2017 was positively affected by a one-time item from improved bad-debt collections. The effect of the change in the Russian rouble exchange rate was EUR -32 million.

Key electricity, capacity and gas prices for Fortum Russia

	2018	2017	Change 18/17
Electricity spot price (market price), Urals hub, RUB/MWh	1,043	1,041	0%
Average regulated gas price, Urals region, RUB/1,000 m^3	3,801	3,685	3%
Average capacity price for CCS and other, tRUB/MW/month [1) 2)]	148	148	0%
Average capacity price for CSA, tRUB/MW/month [2)]	1,075	899	20%
Average capacity price, tRUB/MW/month	609	535	14%
Achieved power price for Fortum in Russia, RUB/MWh	1,888	1,813	4%
Achieved power price for Fortum in Russia, EUR/MWh [3)]	25.6	27.5	-7%

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

Russian power generation and heat production

TWh	2018	2017	Change 18/17
Russian power generation	29.6	26.3	13%
Russian heat production	20.4	20.0	2%

The Chelyabinsk GRES unit 3 was commissioned in November 2017. Fortum's 35-MW wind power plant was commissioned in January 2018, and the 35-MW solar plants have been consolidated since December 2017.

Financial performance and position

Other Operations

Other Operations comprises the two development units 'M&A and Solar & Wind Development' and 'Technology and New Ventures' as well as corporate functions. Other Operations also includes Fortum's shareholding in Uniper, which is consolidated as an associated company as of 30 June 2018 (Note 3).

The total acquisition cost for Uniper, including direct costs relating to the acquisition, is reported in 'Participations in associated companies and joint ventures'. The purchase price allocation will be completed within the one-year window from the acquisition date, according to IFRS. As Uniper publishes its interim reports later than Fortum, Fortum's share of Uniper's results will be accounted for with a time-lag of one quarter, with potential adjustments. Fortum's Financial Statements 2018 only includes Fortum's share of Uniper's third-quarter results amounting to EUR -2 million (Note 3). Uniper will report its full-year 2018 results on 12 March 2019.

In December 2018, Fortum committed to invest EUR 150 million in Valo Ventures over a period of 10 years. Valo Ventures is a new global venture capital fund launched by former Google Capital co-founder, Scott Tierney. It is an independent fund investing in digital and cloud-scale technology startups in North America and Europe. Valo Ventures is aligned with Fortum's vision 'For a cleaner world' and strategy. One of Fortum's strategic priorities to drive decarbonisation is building options for significant new innovative businesses. Becoming a digital leader is a critical enabler to achieve these goals.

In June 2018, Fortum agreed to sell a 54% share of its solar power company operating four solar power plants in India. The transaction was closed in August 2018. The total consideration from the divestment on a debt- and cash-free basis, including the effect of deconsolidating Fortum's minority part of the net debt, was EUR 147 million. The positive impact on Fortum's 2018 comparable operating profit was EUR 26 million. Fortum's capital recycling business model enables Fortum to efficiently utilise its key competences to develop, construct, and operate power plants while utilising partnerships and other forms of cooperation to create a more asset-light structure and thereby enable more investments into building new renewable capacity. Profits from the capital recycling business model are recorded in comparable operating profit because the business results are realised through divesting the shareholding, either partially or totally.

Capital expenditures, divestments and investments in shares

EUR million	2018	2017
Capital expenditure		
Intangible assets	53	18
Property, plant and equipment	532	672
Total	**584**	**690**
Gross investments in shares		
Subsidiaries	36	982
Associated companies and joint ventures	4,041	135
Other investments	11	8
Total	**4,088**	**1125**

In 2018, capital expenditures and investments in shares totalled EUR 4,672 (1,815) million, mainly related to the purchase of Uniper shares. Capital expenditures were EUR 584 (690) million (Note 6), below the 2018 guidance of EUR 600-700 million. Capital expenditures for 2018 were below the guidance level due to the timing of some capital expenditures being shifted to 2019.

See also Note 18.2 Capital expenditure.

Fortum expects to start the supply of power and heat from new power plants and to upgrade existing plants as follows:

	Type	Electricity capacity MW	Heat capacity MW	Supply starts
Generation				
Loviisa, Finland	Nuclear	5		2018
Hydro plants in Sweden and Finland	Hydro	5		2018
Hydro plants in Sweden and Finland	Hydro	~15		2019
City Solutions				
Zabrze, Poland	CHP	75	145	Q1/2019
Kivenlahti, Finland	Bio HOB [1)]		58	2020
Russia				
Ulyanovsk	Wind	35		Jan 2018
Solar [2)]	Solar	110		2021-2022
Other Operations				
Ånstadblåheia, Norway	Wind	50		Q4/2018
Sørfjord, Norway	Wind	97		2019
Pavagada 2, India	Solar	250		2019

[1)] Biofuel-fired heat-only boiler (HOB).

[2)] Separate investment decision needed.

Financial performance and position

Generation

Through its interest in TVO, Fortum is participating in the building of Olkiluoto 3 (OL3), a 1,600-MW nuclear power plant unit in Finland. OL3 is funded through external loans, share issues and shareholder loans according to shareholder agreements between the owners and TVO. As a 25% shareholder in OL3, Fortum has committed to funding of the project pro rata. At the end of 2018, Fortum's outstanding receivables regarding OL3 were EUR 170 million and the outstanding commitment was EUR 63 million (Note 19). In March 2018, TVO and the supplier consortium companies signed a comprehensive settlement agreement whereby the arbitration concerning the delay of OL3 is settled by financial compensation of EUR 450 million to be paid to TVO. Based on the project schedule of March 2018 and the effect of the settlement agreement, TVO estimated the total investment in OL3 to be approximately EUR 5.5 billion. According to the time plan updated by plant supplier Areva-Siemens Consortium in November 2018, the plant is expected to start regular electricity production in January 2020.

In June 2018, Fortum sold its 10% ownership in Hafslund Produksjon Holding AS to Svartisen Holding AS. As part of the restructuring of the Hafslund ownership in 2017, Fortum acquired the ownership in Hafslund Produksjon. The sales price for the shares was EUR 160 million. Fortum booked a capital gain of EUR 77 million in the Generation segment 2018 results.

City Solutions

In October 2018, Fortum announced it is replacing part of its fossil-based heat production by building a biofuel-fired heating facility in Kivenlahti, Finland. The construction of the plant is a significant step towards carbon neutral district heating production in Espoo, as the plant will allow for the decommissioning of the old coal-fired heating boiler in Suomenoja. The value of the investment is approximately EUR 40 million. The new facility will have a maximum heat output of 58 MW. Construction started in November 2018 and heat production is expected to begin in 2020.

The joint venture Kauno Kogeneracinė Jėgainė, owned by Fortum and Lietuvos Energija, is building a waste-to-energy CHP plant in Kaunas, Lithuania. The electricity capacity of the Kaunas plant will be 24 MW and the thermal capacity approximately 70 MW. Fortum's ownership in the joint venture is 49%. The CHP plant is expected to be commissioned in mid-2020.

In 2015, Fortum decided to build a new multi-fuel CHP plant in Zabrze, Poland, which primarily will be fuelled by refuse derived fuel (RDF) and coal but can also use biomass and a mixture of fuels. The new plant replaces the existing purely coal-fired units in Zabrze and Bytom. It will have a production capacity of 145 MW of heat and 75 MW of electricity and the planned start of commercial operations is during the first quarter of 2019.

Russia

In June 2018, Fortum won the right to build 110 MW of solar capacity in a CSA auction. The power plants are to be commissioned during the years 2021-2022.

In June 2018, the Fortum-Rusnano wind investment fund (Fortum's ownership 50%) won the right to build 823 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during the years 2019-2023. During the fourth quarter 2018, the wind investment fund made an investment decision on a 100-MW wind farm. Power production is expected to start during the first half of 2020.

In June 2017, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during the years 2018-2022. In October 2017 and October 2018, the wind investment fund made investment decisions on 50-MW and a 200-MW wind farm, respectively. On 1 January 2019, the 50-MW wind farm started operation. Power production at the 200-MW wind farm is expected to start during the first half of 2020.

The investment decisions related to the renewable capacities won by Fortum and the Fortum-Rusnano wind investment fund in 2017 and 2018 are made on a case-by-case basis. Fortum’s maximum equity commitment is RUB 15 billion. In the longer term, Fortum seeks to maintain an asset-light structure by forming potential partnerships and other forms of co-operation.

Financial performance and position

Other Operations

In December 2018, Fortum committed to invest EUR 150 million in Valo Ventures over a period of 10 years. It is an independent fund investing in digital and cloud-scale technology start-ups in North America and Europe.

In December 2018, Fortum won the right from Gujarat Urja Vikas Nigam Ltd. to build a 250-MW solar power plant in Raghanesda solar park in District Banaskhata, Gujarat, India. In January 2019, the Government of Gujarat cancelled the result of the auction on the grounds that it considers the winning tariffs to be too high. The Government of Gujarat has indicated that there will be a new auction, for which they intend to reduce the solar park charges to operators, in order to lower the costs for the bidders and enable lower bids.

In June 2018, Fortum won the right to build a 250-MW solar power plant in the Pavagada solar park in Karnataka, India. The capital expenditure is estimated to be approximately EUR 120 million. Commissioning of the plant is expected in 2019.

In June 2018, Fortum signed an agreement to sell a 54% share of its solar power company operating four solar power plants in India to UK Climate Investments (40%) and Elite Alfred Berg (14%). Elite Alfred Berg has the option to buy up to an additional 16% from Fortum. The total capacity of this portfolio is 185 MW. Fortum aims to retain a significant minority ownership in the solar power company and to continue to provide operation and maintenance services based on a long-term agreement. The total consideration from the divestment on a debt- and cash-free basis, including the effect of deconsolidating Fortum's minority part of the net debt, was EUR 147 million. The positive impact on Fortum's third quarter comparable operating profit was EUR 26 million. The transaction was closed in August 2018.

In January 2017, Fortum finalised the acquisition of three wind power projects from the Norwegian company Nordkraft. The transaction consisted of the already operational Nygårdsfjellet wind farm as well as the fully-permitted Ånstadblåheia and Sørfjord projects. The Ånstadblåheia wind farm was commissioned during the fourth quarter of 2018 and the Sørfjord wind farm is expected to be commissioned in 2019. The total installed capacity of the three wind farms will be approximately 180 MW.

In 2016, Fortum made the final investment decision on the 75-MW Solberg wind park project in northern Sweden. Skellefteå Kraft is participating in the project with a 50% share. The wind park was taken into operation in the first quarter of 2018.

Research and development

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

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

The Group reports its R&D expenditure on a yearly basis. In 2018, Fortum’s R&D expenditure was EUR 56 (53) million, or 1.1% (1.2%) of sales.

	2018	2017	2016	Change 17/16
R&D expenditure, EUR million	56	53	52	6%
R&D expenditure, % of sales	1.1	1.2	1.4	

Changes in Fortum’s Management

On 29 August 2018, Fortum announced that Mr. Kari Kautinen, Senior Vice President, Solar & Wind Development and M&A, had resigned. He left Fortum at the end of September 2018.

On 3 September 2018, Fortum announced that Mr. Arun Aggarwal, M.Sc. (Eng.), 49, was appointed Senior Vice President, Business Technology and member of Fortum's Executive Management. This is a new position at Fortum. Mr. Aggarwal has Group-wide responsibility to lead Fortum's strategic IT, as well as digital innovation and transformation. He assumed this position in mid-October 2018 and reports to the President and CEO.

Financial performance and position

Annual General Meeting 2018

Fortum Corporation's Annual General Meeting, held in Helsinki on 28 March 2018, adopted the Financial Statements and the Consolidated Financial Statements for the financial period 1 January-31 December 2017 and discharged from liability the members of the Fortum Board of Directors and the President and CEO for the year 2017.

The Annual General Meeting decided to pay a dividend of EUR 1.10 per share for the financial year that ended on 31 December 2017. The record date for the dividend payment was 3 April 2018, and the dividend payment date was 10 April 2018.

The Annual General Meeting confirmed the remuneration of EUR 75,000 per year to the Chairman, EUR 57,000 per year to the Deputy Chairman, EUR 40,000 per year to each member of the Board, as well as EUR 57,000 per year to the Board member acting as the Chairman of the Audit and Risk Committee if he or she is not at the same time acting as Chairman or Deputy Chairman of the Board. In addition, a EUR 600 meeting fee is paid for Board meetings as well as for committee meetings. The meeting fee is doubled for Board members who live outside Finland in Europe and tripled for members living outside Europe. For Board members living in Finland, the fee for each Board and Board Committee meeting is doubled for meetings held outside Finland and tripled for meetings outside Europe. For Board and Committee meetings held as a telephone conference, the basic meeting fee is paid to all members. No fee is paid for decisions made without a separate meeting.

The Annual General Meeting also confirmed the number of members in the Board of Directors to be eight. Mr. Matti Lievonen was elected as Chairman, Mr. Klaus-Dieter Maubach as a new member and Deputy Chairman, Mr. Heinz-Werner Binzel, Ms. Eva Hamilton, Mr. Kim Ignatius, Ms. Anja McAlister, and Mr. Veli-Matti Reinikkala were re-elected as members, and Ms. Essimari Kairisto was elected as a new member.

In addition, Deloitte Oy was re-elected as auditor, with Authorised Public Accountant Ms Reeta Virolainen as the principal auditor. The auditor's fee is paid pursuant to an invoice approved by the company.

The Annual General Meeting authorised the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25 per cent of all the shares in the company. It was also decided that own shares could be repurchased or disposed of in connection with acquisitions, investments or other business transactions, or be retained or cancelled. The repurchases or disposals could not be made for the purposes of the company's incentive and remuneration schemes. The authorisation cancelled the authorisation resolved by the Annual General Meeting of 2017 and it will be effective until the next Annual General Meeting and, in any event, for a period of no longer than 18 months.

The Annual General Meeting decided on the following amendments to the Articles of Association of the company:

The first sentence of Art. 6 is amended in order to set the maximum number of members of the Board of Directors of the company at ten members instead of the current eight members, as follows: "The Board of Directors shall have a Chairman, a Deputy Chairman, and a minimum of three (3) and a maximum of eight (8) ordinary members who are elected at the General Meeting." Art. 6 is otherwise unchanged.

Due to the new Auditing Act (1141/2015) which entered into force on 1 January 2015, the reference to approval by the Central Chamber of Commerce set forth in the first sentence of Art. 11 shall be deleted and replaced with a reference to an auditing firm referred to in the Auditing Act, as follows: "The company shall have one regular auditor who must be an Auditing Firm referred to in the Auditing Act." Art. 11 is otherwise unchanged.

Due to the amendment of the Limited Liability Companies Act that entered into force on 21 June 2017, the reference to Chapter 4, Section 2, Subsection 2 of the Finnish Limited Liability Companies Act set forth in the last sentence of Art. 12 shall be replaced with a reference to Chapter 5, Section 6 a of the Limited Liability Companies Act, as follows: "However, the notice of GM must in any event be delivered at least nine (9) days prior to the General Meeting Record Date referred to in Chapter 5, Section 6 a of the Finnish Limited Liability Companies Act." Art. 12 is otherwise unchanged.

The Annual General Meeting of Fortum Corporation decided, in accordance with Chapter 3, Section 14 a (3) of the Finnish Companies Act, that the rights to all such shares entered in the Joint Account and to the rights attached to such shares that had not been requested to be registered in the book-entry system in accordance with Chapter 6, Section 3 of the Act on the Book-Entry System and Clearing Operations prior to the decision by the Annual General Meeting, are forfeited. In the merger of Länsivoima Oyj (former Lounais-Suomen Sähkö Oy) to Fortum Corporation in 2000, those shareholders of Länsivoima Oyj that had not produced their share certificates and had not requested their rights to be registered in the book-entry system, received their respective shares of Fortum Corporation as merger consideration to a joint book-entry account opened on their behalf (the "Joint Account"). In addition to the shares, the rights attached to such shares, such as undrawn dividends, are forfeited. The provisions applicable to treasury shares held by the company will apply to the forfeited shares.

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

Furthermore, the Board elected to the Audit and Risk Committee Kim Ignatius as Chairman and Heinz-Werner Binzel, Essimari Kairisto and Veli-Matti Reinikkala as members.

Financial performance and position

Shareholders Nomination Board

On 5 October 2018, Mr. Kimmo Viertola, Director General, Prime Minister's Office, Ownership steering department (Chairman), Mr. Risto Murto, President and CEO, Varma Mutual Pension Insurance Company, and Mr. Jouko Pölönen, President and CEO, Ilmarinen Mutual Pension Insurance Company were appointed to Fortum's Shareholders' Nomination Board. In addition, the Chairman of Fortum's Board of Directors Mr. Matti Lievonen, is a member of the Shareholders' Nomination Board.

On 29 January 2019, Fortum's Shareholders' Nomination Board submitted its proposals to Fortum's Board of Directors for the 2019 Annual General Meeting concerning the number of the Board members, the members to be nominated to the Board of Directors, and the election of the Chairman and Deputy Chairman. The Shareholders' Nomination Board did not reach a unanimous proposal, and consequently did not make a proposal for the remuneration paid to the Board of Directors for their following term of office.

Other events during the reporting period

The Board of Directors of Fortum Corporation has decided to commence the 2019-2021 long-term incentive (LTI) plan for key employees and executives. The 2019-2021 LTI plan is part of Fortum's ongoing LTI programme and follows the same principles as the previous plan. The performance measure applied to the 2019-2021 LTI plan will be based on the total shareholder return measured relative to the peer group comprising selected European utility companies. The 2019-2021 LTI plan will comprise approximately 130 participants, including the members of Fortum Executive Management.

Events after the balance sheet date

On 1 January 2019, Fortum acquired all remaining C-shares of TVO entitling to the power production of the Meri-Pori coal condensing power plant. Fortum is now entitled to 100% of the power production of the plant, an increase from 67% previously. The Meri-Pori power plant is mainly used in Fingrid’s capacity reserve and as back-up capacity. See more information in Note 19 Participations in associated companies and joint ventures.

Key drivers and risks

Fortum's financial results are exposed to a number of economic, strategic, energy policy and regulation, financial, and operational risks. Fortum is exposed to these risks both directly and indirectly through its associated companies.

Some of the key factors influencing Fortum's business performance are the European commodity and electricity wholesale prices. The key short-term drivers behind the electricity wholesale price development in the Nordic region are the prices of fuels and CO_2 emission allowances, the hydrological situation, temperature, economic development, and the electricity import-export balance.

Global economic growth impacts commodity and CO2 emission allowance prices, which, in turn, impact the Nordic wholesale price of electricity. In all regions, fuel prices and power plant availability also impact profitability. In addition, increased volatility in exchange rates could have both translation and transaction effects on Fortum's financials, especially through the Russian rouble and Swedish krona.

In the Nordic countries, changes in the regulatory and fiscal environment add risks for the energy and environmental management sectors. The main strategic risk is that the regulatory and market environment develops in a way that we have not been able to foresee and prepare for. In response to these uncertainties, Fortum has analysed and assessed a number of future energy market and regulation scenarios, including the impact of these on different generation forms and technologies. As a result, Fortum’s updated strategy includes broadening of the revenue base and diversification into new businesses, technologies, and markets. The environmental management business is based on the framework and opportunities created by environmental regulation. Being able to respond to customer needs created by the tightening regulation is a key success factor.

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

For further details on Fortum’s risks and risk management, see the Risk management section of the Operating and financial review and Note 4 Financial risk management.

Outlook

Hedging

At the end of 2018, approximately 75% of the Generation segment's estimated Nordic power sales volume was hedged at EUR 31 per MWh for 2019, and approximately 45% at EUR 29 per MWh for 2020.

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

Financial performance and position

Capital expenditure and divestments

Fortum currently estimates its capital expenditure, including maintenance but excluding acquisitions, to be in the range of EUR 600-650 million in 2019 . This includes solar and wind investments, which can be divested through the capital recycling business model. The maintenance capital expenditure in 2019 is estimated at approximately EUR 300 million, well below the level of depreciation.

In 2020, capital expenditure is expected to decline.

Nordic market

Electricity is expected to continue to gain a higher share of total energy consumption. Electricity demand in the Nordic countries is expected to grow by approximately 0.5% on average, while the growth rate for the next few years will largely be determined by the macroeconomic development in Europe and especially in the Nordic countries.

During the fourth quarter of 2018, oil and coal prices started to decrease, while EUA prices still increased. In late January 2019, the forward quotation for coal (ICE Rotterdam) for the remainder of 2019 was around USD 84 per tonne and the market price for EUAs for 2019 at the level of EUR 23 per tonne. The Nordic system electricity forward price at Nasdaq Commodities for the remainder of 2019 was around EUR 48 per MWh and for 2020 around EUR 39 per MWh. In Germany, the electricity forward price for the remainder of 2019 was around EUR 51 per MWh and for 2020 around EUR 49 per MWh. The Nordic water reservoirs were about 10 TWh below the long-term average and were 8 TWh lower than one year earlier.

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 production portfolio, as well as currency fluctuations. Excluding the potential effects from changes in the power generation mix, a 1 EUR/MWh change in the Generation segment’s Nordic power sales achieved price will result in an approximately EUR 45 million change in Fortum's annual comparable operating profit. The achieved power price also includes the results of optimisation of Fortum’s hydro and nuclear production as well as operations in the physical and financial commodity markets.

As a result of the nuclear stress tests in the EU, the Swedish Radiation Safety Authority (SSM) has decided on new regulations for Swedish nuclear reactors. For the operators, this means that safety investments should be in place no later than 2020.

The process to review the Swedish nuclear waste fees is done in a three-year cycle. In March 2017, the Swedish Government decided on the new nuclear waste fees for years 2018-2020. In October 2017, the Swedish Parliament decided on changes in the legal framework, impacting calculations of nuclear waste fees and the investment of the nuclear waste fund. In the revised legal framework, the assumed operating time for calculating the waste fee is 50 years, as opposed to the previous assumption of 40 years. The fund is now also allowed to invest in other financial instruments in addition to bonds. Based on these changes, the annual waste fees for Fortum increased by EUR 8 million in 2018.

On 19 June 2018, the Swedish parliament adopted new hydro legislation to come into force on 1 January 2019. According to the new legislation all hydropower shall apply for updated permits. At the same time hydropower shall be protected to be able to play a key role in the future energy system. In order to protect hydropower, all exemptions of the Water Framework Directives shall be utilised when classifying water bodies. In the new legislation it is stated that the industry shall create a joint hydropower fund to finance major parts of the environmental actions needed. A fund has been established with a total financial cap of SEK 10 billion to be paid over a 20-year period. The major utilities will contribute to the fund based on their share of hydropower production. Fortum's share is expected to be 20-25% of the fund's total financing. In addition to the new legislation, the government has issued an ordinance to establish a national prioritisation plan for the revision of hydropower permits (valid from 11 January 2019).

On 11 June 2018, the Swedish Administrative Court of Appeal gave its decisions on Fortum Sverige AB’s hydropower production-related real-estate tax assessments for the years 2009-2014. The court decisions were not in Fortum’s favour. Fortum applied for the right to appeal from the Supreme Administrative Court, but did not receive permission to appeal. As the Administrative Court, the Administrative Court of Appeal in Stockholm, and the Supreme Administrative Court have handled only the arguments concerning state aid, the case concerning the other legal documents is now transferred back to the Administrative Court. The disputed amount, excluding interest for the time period, totals approximately SEK 510 million (approximately EUR 50 million). Moreover, Fortum's Swedish companies have appeals for 2011-2016 pending in the Administrative Court relating to the property tax rate for their hydropower plants referring to the same legal grounds. Fortum has paid the real-estate tax in accordance with the legislation. If the final court decision is unfavourable to Fortum, it will not impact Fortum's results. In December 2018, Fortum Sverige AB filed a complaint to the EU Commission regarding the Swedish property tax for hydropower plants regarding 2017 and prior years. Fortum has asked the Commission to investigate whether the Swedish legislation regarding the property tax for hydropower plants and the Swedish court decisions are in line with EU state aid rules.

In September 2016, the Swedish Government presented the budget proposal for the coming years, according to which the nuclear capacity tax will be reduced to 1,500 SEK/MW per month from 1 July 2017 and abolished on 1 January 2018. In 2017, Fortum's Swedish nuclear capacity tax was EUR 44 million. In 2018, there is no capacity tax. Further, the Swedish hydropower real-estate tax will decrease from 2.8% to 0.5%. The tax is being reduced in four steps: in January 2017 to 2.2%; in January 2018 to 1.6%; in January 2019 to 1.0%; and in January 2020 to 0.5%. In 2018, the tax for Fortum decreased by EUR 20 million to EUR 65 million. In addition to the decrease in the tax rate, the hydropower real-estate tax values, which are linked to electricity prices, will be updated in 2019. The real-estate tax values are updated every six years. With the current electricity prices, the tax values for the 2019-2024 period would be lower than they are today.

In 2015, the Swedish OKG decided to permanently discontinue electricity production at Oskarshamn’s nuclear plant units 1 and 2. Unit 1 was shut down on 17 June 2017 and unit 2 has been out of operation since June 2013. The closing processes for both units are estimated to take several years.

Financial performance and position

City Solutions

In City Solutions, stable growth, cash flow and earnings are achieved through investments in new plants and through acquisitions. Fuel cost, availability, flexibility, efficiency, as well as gate fees are key drivers for profitability, but also the power supply/demand balance, electricity prices, and weather conditions affect profitability.

The development of Fortum Oslo Varme's business operations is estimated to require integration-related one-time costs and increased investments over the coming years. The realisation of cost synergies is estimated to gradually start materialising from 2019 onwards, with targeted annual synergies of EUR 5-10 million expected to be achieved by the end of 2020.

Consumer Solutions

After the acquisition of Hafslund Markets in August 2017, a new business strategy for Consumer Solutions was approved by the Fortum Board of Directors in December 2017. The strategic objective is to establish Consumer Solutions as the leading consumer business in the Nordics, with a customer-centric, multi-brand structure.

Competition in the Nordic electricity retail market is expected to remain challenging, with continued pressure on sales margins and customer churn. To counter the market challenges and create a solid foundation for competitive operations, Consumer Solutions will continue its cost spend in developing new digital services for consumers.

The combined Hafslund Markets and Fortum Markets business, while largely complementary, has identified synergy potential, in terms of both revenue and costs. The short-term priority will be on achieving identified revenue synergies by leveraging established best practices and providing additional products and services to the whole customer base. The realisation of cost synergies will start materialising once the integration of Hafslund Markets is completed, expected in 2019, with cost synergy realisation gradually increasing over the coming years and targeted annual synergies of approximately EUR 10 million to be achieved by the end of 2020.

Russia

In the Russia segment, capacity payments based on CSA contracts are a key driver for earnings growth, as it receives considerably higher capacity payments than through the CCS auctions. Currently Fortum's CSA capacity amounts to 2,368 MW. In February 2018, the System Administrator of the wholesale market published data on the WACC and the CPI for 2017, which were used to calculate the 2018 CSA price. The CSA payments were revised downwards accordingly to reflect the lower bond rates. The regulator also reviewed the guaranteed CSA payments by re-examining earnings from the electricity-only market and revised the CSA payments upwards due to the lower earnings from the electricity-only market.

Fortum’s other Russian generation capacity, totalling 2,544 MW, is allowed to participate in the CCS auctions. The long-term CCS for the years 2017-2019 was held at the end of 2015, the CCS for the year 2020 in September 2016, and the CCS for the year 2021 in September 2017. All Fortum plants offered in the auction were selected. Fortum also obtained "forced mode status", i.e. it receives payments for the capacity at a higher rate for some of the units at the Argayash power plant. For the years 2017-2019, "forced mode status" was obtained for 195 MW; for the year 2020 for 175 MW, and for the year 2021 for 105 MW. The date of the CCS auction for 2022 has been postponed from 15 September 2018 to 1 May 2019.

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

In June 2018, the Fortum-Rusnano wind investment fund (Fortum's ownership 50%) won the right to build 823 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2019-2023 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-8,000 per MWh for a period of 15 years. In December 2018, the wind investment fund made an investment decision on a 100-MW wind farm.

As of January 2018, Fortum’s Ulyanovsk wind farm is listed in the registry of capacity. The 35-MW power plant is Russia’s first industrial wind park. It will receive CSA payments for a period of approximately 15 years after commissioning. The CSA price currently corresponds to approximately RUB 11,000 per MWh.

In June 2017, the Fortum-Rusnano wind investment fund won the right to build 1,000 MW of wind capacity in a CSA auction. The wind parks were to be commissioned during 2018-2022 and will receive a guaranteed CSA price corresponding to approximately RUB 7,000-9,000 per MWh for a period of 15 years. In October 2017 and October 2018, the wind investment fund made investment decisions on a 50-MW and a 200-MW wind farm, respectively.

The Russian annual average gas price growth was 3.1% in 2018. Fortum estimates the Russian annual average gas price growth to be 3% in 2019.

Financial performance and position

Other Operations

For information on the financial impact of the Uniper shareholding, please see the Uniper investment section of Note 3.

In December 2018, Fortum won the right from Gujarat Urja Vikas Nigam Ltd. to build a 250-MW solar power plant in Raghanesda solar park in District Banaskhata, Gujarat, India. In January 2019, the Government of Gujarat cancelled the result of the auction on the grounds that it considers the winning tariffs to be too high. The Government of Gujarat has indicated that there will be a new auction, for which they intend to reduce the solar park charges to operators, in order to lower the costs for the bidders and enable lower bids.

In June 2018, Fortum won the right to build a 250-MW solar power plant in the Pavagada solar park in Karnataka, India. The capital expenditure is estimated to be approximately EUR 120 million, and the solar park will be entitled to a fixed tariff of 2.85 INR/kWh for 25 years. Commissioning of the plant is expected in 2019.

Income taxation

In 2019, the effective corporate income tax rate for Fortum is estimated to be 19-21%, excluding the impact of the share of profits of associated companies and joint ventures, non-taxable capital gains, as well as tax rate changes.

Fortum has received income tax assessments in Sweden for the years 2013, 2014, and 2015 concerning the loans given by Fortum's Dutch financing company to Fortum's subsidiaries in Sweden. The interest income for these loans was taxed in the Netherlands. After Fortum received a negative decision from the Administrative Court in Stockholm in 2017, Fortum filed an appeal to the Administrative Court of Appeal in Stockholm. In October 2018, the Administrative Court of Appeal in Stockholm, Sweden, announced its decision relating to the income tax assessment for the year 2013. The decision was favourable to Fortum. The Administrative Court of Appeal confirmed that Fortum had sufficient business reasons for the loans and accepted Fortum's appeal. The decision regarding the year 2013 is final. The Administrative Court in Stockholm announced its decisions in the cases for 2014 and 2015 in November 2018. Also these decisions were favourable to Fortum. The decisions became non-appealable by the end of January 2019. Fortum had not made provisions for the cases regarding the years 2013-2015, as Fortum considers the additional tax unjustified. Therefore, the favourable decisions issued by the Administrative Court of Appeal in October 2018 and by the Administrative Court in November 2018 did not have any impact on profits. The amount of additional tax claimed by the Swedish tax authority was originally SEK 273 million (EUR 26 million) for the year 2013, SEK 282 million (EUR 27 million) for the year 2014, and SEK 200 million (EUR 19 million) for the year 2015. The additional tax cost for 2013 was paid in 2017 and was refunded to Fortum in 2018. Additional taxes and interest for the years 2014 and 2015 had not been paid by Fortum.

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

In March 2018, the Swedish Supreme Administrative Court decided not to grant leave to appeal to Fortum with respect to the interest deduction cases relating to the years 2009-2012. The unfavourable decision of the Administrative Court of Appeal from June 2017 therefore remains in force. The additional tax and interest, in total SEK 1,175 million (EUR 122 million), was paid in 2016 and booked as a cost in the 2017 results. There are strong grounds to argue that these decisions of the Administrative Court of Appeal and the Supreme Administrative Court violate EU law and fundamental rights under EU law. On these grounds, Fortum filed a summons application in December 2018 to the District Court of Stockholm in which damages are claimed from the Swedish state in these cases. Fortum also filed a request to initiate a mutual agreement procedure between Sweden and the Netherlands for the year 2012 (Note 37).

Risk management framework and objectives

Fortum's Risk Management framework is described in the Group Risk Policy and supporting documents. The Group Risk Policy includes an overview of Fortum's risk management systems consisting of the general principles of risk management and the main features of the risk management process. The objective of the risk management systems are to;

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

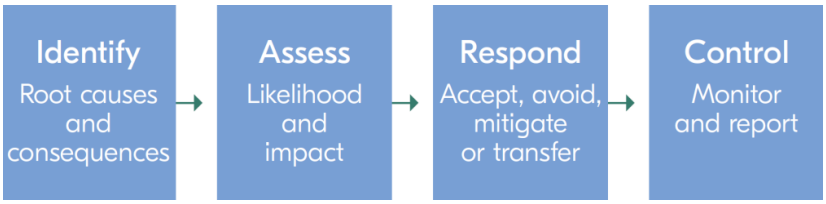
Risk management organisation

The main principle is that risks are managed at source meaning that each Division and Corporate Function Head is responsible for managing risks that arise within their business operations. However, in order to take advantage of synergies, certain risks are managed centrally. For example, Group Treasury is responsible for managing currency, interest rate, liquidity and refinancing risks and cyber and information security risks are managed by Corporate Security.

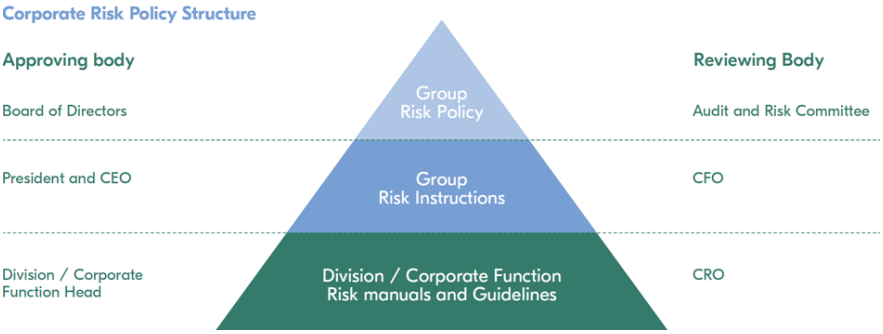
The Audit and Risk Committee (ARC) is responsible for monitoring the efficiency of the company's risk management systems and for annually reviewing the Group Risk Policy and the material risks and uncertainties. Corporate Risk Management, a function headed by the Chief Risk Officer (CRO) reporting to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

Risk management process

Fortum's risk management process is designed to support the achievement of agreed targets by ensuring that risk management activities are consistent with the general principles of risk management and that risks are monitored and followed-up in a prudent manner. The main features of risk management process consist of event identification, risk assessment, risk response and risk control. Identification is regularly carried out according to a structured process and risks are assessed in terms of impact and likelihood according to a Group-common methodology. Impact is assessed not only in monetary terms, but also in terms of health and safety, environment and reputation. All risks have risk owners who are responsible for implementing actions to respond to the risk. Risk responses can be to accept, avoid, mitigate or transfer the risk. Risk control processes, which include monitoring and reporting of risks, are designed to support compliance with approved instructions, manuals and guidelines and to ensure that risk exposures remain within approved limits and mandates.

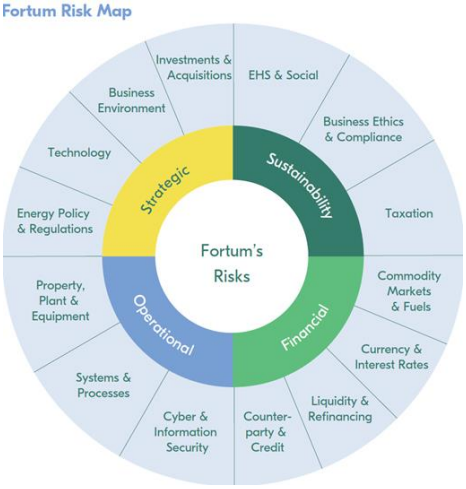


Fortum's Board of Directors approves the Group Risk Policy and the CEO approves Group Risk Instructions covering commodity market risks, counterparty credit risks, and operational risks. Fortum also has other Group policies and instructions covering e.g. compliance, privacy, sustainability, treasury and cyber and information security risks which are aligned with the Group Risk Policy. There are risk mandates or limits defined for commodity market risks, counterparty credit risks and financial risks. Divisions and Corporate Functions issues risk manuals and guidelines as needed which detail how the Group Risk Instructions are implemented.



Risk factors

Fortum Risk Map



Strategic risks

The main strategic risks are that energy policy, regulation, technology or the business environment develop in ways that we have not been able to foresee and prepare for. Future energy market and regulation scenarios, including the impact of these to Fortum's business, are continuously assessed and analysed. It is part of Fortum's strategy to, in the long-term, broaden the base of revenues and diversify into new businesses, technologies and markets.

Risks which could hinder Fortum in executing its strategy are continuously assessed, monitored and reported as part of the strategy work. These risks include an inability to identify and carry out successful investments and acquisitions with the related project and integration risks.

Business Environment

Fortum operates in a global business environment and is therefore exposed to political and other risks which affect the macroeconomic development and consumer behavior in the markets where we operate. As we increase operations to new geographical regions, this risk may also increase. The current trend of increasingly nationalistic policies and protectionism may lead to increased trade restrictions which in turn could affect demand for our products and services. Fortum monitors the development in order to react quickly to market shifts and changes in consumer behavior.

Investment and acquisition risks

Fortum's strategy includes growth of operations in new businesses, technologies and geographies. This includes an increasing number of associated companies and joint ventures where we do not exercise control, including the Uniper investment and a joint-venture with Rusnano for wind development in Russia. These recent investments as well as any future investment or acquisition, including possible future partnerships, entail risk such as:

- increased overall operating complexity and requirements for management, personnel and other resources,
- the need to understand the value drivers and their uncertainties in investments or potential acquisition targets,
- the need to manage complex integrations of companies with different culture and infrastructure,
- the need to understand and manage new markets with different cultural, ethical and legal frameworks,
- the need to understand and manage risks related to sustainability and safety issues related to new businesses, markets and technologies.

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

Energy policy and regulation risks

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

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

Nordic/EU

Fortum's strategy in the power and heat sectors is based on a market-driven development, which would mean more interconnections and competition supported by increasing policy harmonization. Even if the Nordic power market has a long tradition of harmonization, national policies vary considerably when it comes to e.g. taxation, permitting, subsidies and market model meaning that we have to manage risks related to both EU regulation and national regulation. Potential risks related to the future energy and climate policy framework include;

- Increasing policy costs and uncoordinated national mechanisms delaying the development towards an integrated, flexible and dynamic power market,
- Overlapping national carbon policies diluting the EU ETS and carbon price despite the ETS reform,
- Increasing cost burden for hydro power in Finland, driven by fish obligations, grid costs and real estate taxation and unbalanced implementation of the EU Water Framework directive in Sweden leading to lower production volumes,
- Stricter sustainability requirements for forest biomass leading to reduced availability and increasing costs,
- Implementation of national waste incineration taxes or restrictive measures affecting the operational environment or the competitiveness of the waste-to-energy business as part of overall recycling promotion,
- Substantial retroactive changes and/or discontinuation of prevailing CHP support schemes in Baltic countries and Poland or deteriorating competitiveness of CHP due to fuel tax increases,
- Undue heavy-touch price-regulation of district heating in order to enhance the affordability and other social aspects of protecting the end-customers which could be driven by an increase of national or local political steering in this sector,
- Introduction of a national plastic tax aiming to reduce the use of plastics,
- Emergence of windfall tax discussions following possible increasing electricity and carbon price development.

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

Our 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. The current economic sanctions may be enlarged and/or extended having direct and indirect impacts on the business environment. The main energy policy-related risks in Russia are linked to the development of the whole energy sector, part of which, like the wholesale power market, is liberalised while other parts, like gas, heat, and retail electricity, are not. Regulated sectors are inherently exposed to a risk of regulatory changes which could affect Fortum's operations.

Technology risks

Fortum's strategy includes developing or acquiring new technologies, as well as digitalizing the business. Fortum's R&D and innovation activities focus on the development of the energy system towards a future solar economy. Fortum is, for example, developing circular economy, bio-economy and other renewable energy concepts as well as innovative solutions for its customers. New technologies expose Fortum to risks related to intellectual property rights, data privacy and viability of technologies. Technology risks are managed primarily through developing a diversified portfolio of projects consisting of different technologies.

Sustainability risks

Corporate social responsibility and sustainable development are integral parts of Fortum's strategy. Fortum gives balanced consideration to economic, environmental and social responsibility. Changes to laws, regulations and the business environment can pose a risk if not identified and managed effectively and the same applies to changes in views of our main stakeholders. 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 and has defined internal policies and instructions on how to conduct business. Divisions and Corporate Functions identify and assess sustainability risks related to their operations and define mitigation measures annually. Corporate Sustainability executes oversight as part of the Group's risk management process.

Environmental, health and safety and social risks

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

Environmental, health and safety (EHS) risks as well as social risks related to Fortum's supply chain are evaluated through supplier qualification, internal and external audits and risk assessments including partner and country risk assessment. Corrective and preventive actions are implemented when necessary. EHS and social risks related to investments are evaluated in accordance with Fortum's Investment manual. Environmental risks and liabilities in relation to past actions have been assessed and provisions have been made for future remedial costs.

Fortum's operations are exposed to physical risks caused by climate change, including changes in weather patterns that could alter energy demand and, for instance, hydropower production volumes. Changes in precipitation and temperatures may affect hydropower production, dam safety, and also bioenergy supply and availability. Fortum adapts its operations to the changing climate and takes it into consideration, for example, in production and maintenance planning and in evaluating growth and investment projects.

Tax risk

Fortum operates in a number of countries and is therefore exposed to changes in taxation and how tax authorities interpret tax laws. Political pressure has resulted in numerous new laws and rules which have created a tax environment that is leading to new or increased taxes and new interpretations of existing tax laws. Clarity and predictability around how our operations are taxed have decreased due to the changing regulation. In addition, new regulation creates material volume of new complex compliance work.

Fortum aims to identify simple and cost-efficient solutions to manage taxes in a sustainable manner. Fortum's tax principle is that tax is a consequence of business and that compliance with tax rules and legislation and transparency result in a correct tax contribution. This principle leaves no room for artificial or other aggressive solutions. Fortum is continuously following the development of tax related issues and their impact on the Group and maintains an active dialogue with tax authorities in unclear cases. Tax-related issues are communicated openly both internally and externally and Fortum's tax footprint is published annually.

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's ability to operate in certain countries may be affected by future changes to local laws and regulations.

Fortum's Code of Conduct enhances the understanding of the importance of business ethics for all Fortum employees, contractors and partners. Prevention of corruption is one of the Code of Conduct's focus areas. Fortum has procedures for anti-corruption including prevention, oversight, reporting and enforcement based on the requirements prescribed in international legislation. Fortum's supplier code of conduct sets sustainability requirements for suppliers of goods and services. The Supplier Code of Conduct is based on the principles of the United Nations Global Compact and is divided into four sections: business principles including anti-corruption, human rights, labour standards and environment.

Fortum systematically identifies, assesses, mitigates and reports compliance risks including risks related to business ethics. Internal controls are implemented to prevent the possibilities of unauthorised activities or non- compliance with Group policies and instructions. Fortum's rolling compliance programme includes a risk-based prioritization of the development and mitigating actions. Training and communications plays a central role in increasing the awareness in the organization.

Financial risks

Commodity market and fuel risks

Fortum's business is exposed to fluctuations in prices and availability of commodities used in the production and sales of energy products. The main exposure is toward electricity prices and volumes, prices of emissions and prices and availability of fuels. Fortum hedges its exposure to commodity market risks in accordance with approved Hedging Guidelines and Mandates. For further information on hedge ratios, exposures, sensitivities and outstanding derivatives contracts, see Note 4 Financial risk management.

Electricity price and volume risks

In competitive electricity markets, such as the Nordpool spot market exchange in the Nordic region, the wholesale price of electricity is determined as the balance between supply and demand. The short-term factors affecting electricity prices and volumes on the Nordic market include hydrological conditions, temperature, wind, CO2 allowance prices, fuel prices, economic development, transmission capacity and the import/export situation.

Electricity price risks are mainly hedged by entering into electricity derivatives contracts on the Nasdaq Commodities exchange. The ability to implement hedging strategies is dependent on a well-functioning and liquid derivatives market. There is a risk of decreasing liquidity on the Nasdaq Commodities exchange, and alternatives including use of OTC derivative contracts and proxy products traded on other exchanges 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 prices and capacity sales 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. In India, the electricity price received from solar production are fixed through long term power-purchasing agreements.

Emission and environmental value risks

The European Union has an emissions trading scheme to reduce the amount of CO2 emissions. In addition to the emissions trading scheme, 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 CO2 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 CO2 futures and environmental certificates.

Fuel price and volume risks

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

In the Nordic market, exposure to fuel prices is limited due to Fortum’s flexible generation capacity which allows for switching between different fuels according to prevailing market conditions. The remaining exposure to fuel price risk is mitigated through fixed- price physical delivery contracts or derivative contracts. The main fuel source for heat and power generation in Russia is natural gas. Natural gas prices are partially regulated, so the price risk exposure is limited.

Liquidity and refinancing risks

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

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 manages the duration of the debt portfolio through use of different types of financing contracts and interest rate derivative contracts such as interest rate swaps.

Fortum’s 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 principle is that material transaction exposures should be hedged while translation exposures are not hedged, or are hedged selectively. An exception is the Generation segment’s hedging of power sales in Sweden where the currency component is currently not hedged. The main translation exposures toward the EUR/RUB, EUR/SEK and EUR/NOK are monitored continuously. Changes in these currency rates affect Fortum’s profit level and equity when translating results and net assets to euros.

Counterparty & credit risks

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

Credit risk exposures relating to financial derivative instruments are often volatile. The majority of commodity derivatives are exchange-traded and cleared through clearing houses such as Nasdaq Clearing AB or through clearing banks. The recent default of a trader active on Nasdaq Commodities has shown that there is also credit risk toward clearing houses. The trend toward more use of futures contracts instead of forward contracts is decreasing the credit exposure toward clearing houses. Derivatives contracts are also entered into directly with external counterparties and such contracts are limited to high-credit-quality counterparties active on the financial or commodity markets.

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

Credit risk exposures relating to customers is spread across a wide range of industrial counterparties, small businesses and private individuals over a range of geographic regions. The majority of exposure is to the Nordic market, Poland and Russia. The risk of non-payment in the electricity and heat sales business in Russia is higher than in the Nordic market. In order to manage counterparty credit risk, Fortum has routines and processes to identify, assess and control exposure. Credit checks are performed before entering into commercial obligations and exposure limits are set for larger individual counterparties. Creditworthiness is monitored through the use of internal and external sources so that mitigating actions can be taken when needed. Mitigating actions include demanding collateral, such as guarantees, managing payment terms and contract length, and the use of netting agreements.

Operational risks

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

Systems and Process Risks

System and process risks are mainly caused by design failures or human errors. Mitigation includes process automation, testing and education. Process-related risks are assessed and controls for the most relevant risks are defined and implemented as part of the internal controls framework. IT-system risk management is based on an IT Service Lifecycle Model, and related processes and practices. ITIL and CobIT are the main frameworks which have been used as reference for the model. Business continuity plans are created for most critical processes.

Property, plant and equipment

Property, plant and equipment risks are primarily managed through monitoring and maintenance planning. In addition, all Fortum's industrial assets are covered by a Group Master Policy covering property damage and business interruption risks which mitigates the impact of internal and external events.

Combined heat and power (CHP) and recycling and waste

Operational events at CHP and recycling and waste facilities, or in the storage and transportation of fuels, waste and materials can lead to physical damages, business interruption, and environment, health and safety and social impacts. Leakage and contamination of the surrounding environment could lead to clean-up costs and third-party liabilities. An explosion or fire at a facility could cause damages to the plant or third-parties and lead to possible business interruption. Requirements for waste are clearly specified and samples are tested for selected incoming waste deliveries. These risks are mitigated by condition monitoring, preventive maintenance and other operational improvements as well as competence development of personnel operating the plants.

Hydro power

Operational events at hydro power generation facilities can lead to physical damages, business interruptions, and third- party liabilities. A long-term program is in place for improving the surveillance of the condition of dams and for securing the discharge capacity in extreme flood situations. In Sweden, 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 program in place that covers Swedish dam failure liabilities up to SEK 10,000 million.

Nuclear power

Fortum owns the Loviisa nuclear power plant, and has minority interests in two Finnish and two Swedish nuclear power companies. At the Loviisa power plant, the assessment and improvement of nuclear safety is a continuous process performed under the supervision of the Radiation and Nuclear Safety Authority of Finland (STUK).

Third-party liability relating to nuclear accidents is strictly the plant operator's responsibility and must be covered by insurance. As the operator of the Loviisa power plant, Fortum has a statutory liability insurance policy of 600M SDR (Special Drawing Right) and the same type of insurance policies are in place for the operators where Fortum has a minority interest.

Wind and Solar

Fortum is involved in the construction, development and operations of several wind and solar projects in the Nordics, Russia and in India. Operational incidents during both construction and operational phases can lead to accidents, delays in commissioning and business interruption. These risks are mitigated as part of the project planning and through maintenance and continuous training of personnel operating the plants.

Cyber and information security risks

Fortum's business operations and customer related services are dependent on well-functioning IT 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 decision-making, serving customers and in internal and external communication and reporting. Securing information and availability of the systems are essential for Fortum. Cyber security risks, including risks related to information, industrial control systems (ICS), digitalization and privacy, are managed centrally by Corporate Security in collaboration with business. Group instructions and procedures set requirements for managing and mitigating cyber security risks.

General Data Protection Regulation became applicable on 25th of May 2018. The regulation contains a number of requirements related to processing personal data. Fortum established a Group-wide program to ensure the fulfilment of the requirements. The program was to a large extent implemented during 2018 and the future work continues under the guidance of the Data Privacy Office and in accordance with the Group Instructions for Privacy.

IT functions in the business, support functions and outsourcing partners are responsible for identifying and mitigating operational IT security related risks as well as managing IT security incidents. IT functions are also responsible for IT service continuity.

Fortum share and shareholders

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

Share key figures

EUR	2018	2017	2016
Earnings per share	0.95	0.98	0.56
Cash flow per share	0.91	1.12	0.7
Equity per share	13.33	14.69	15.15
Dividend per share	1.10 [1)]	1.10	1.10
Payout ratio, %	115.8 [1)]	112.2	196.4
Dividend yield, %	5.8 [1)]	6.7	7.5

[1)] Board of Directors' proposal for the Annual General Meeting 26 March 2019.

For full set of share Key figures 2009-2018, see the section Key figures in the Financial Statements.

Shareholders value, share price performance and volumes

Fortum's mission is to deliver excellent value to its shareholders. Fortum's share price has appreciated approximately 17% during the last five years, while Dow Jones European Utility Index has increased 3%. During the same period Nasdaq Helsinki Cap index has increased 27%. During 2018 Fortum's share price appreciated approximately 16%, while Dow Jones European Utility index decreased 3% and Nasdaq Helsinki Cap index decreased 8%.

In 2018, a total of 474.7 million (2017: 582.9) Fortum Corporation shares, totalling EUR 9,065 million, were traded on the Nasdaq Helsinki. The highest quotation of Fortum Corporation shares during 2018 was EUR 22.91, the lowest EUR 16.43, and the volume-weighted average EUR 19.09. The closing quotation on the last trading day of the year 2018 was EUR 19.10 (2017: 16.50). Fortum's market capitalisation, calculated using the closing quotation of the last trading day of the year, was EUR 16,966 million (2017: 14,658).

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. In 2018, approximately 68% (2017: 61%) of Fortum's shares were traded on markets other than the Nasdaq Helsinki Ltd.

Share capital

	2018	
EUR million	Number of shares	Share capital
Registered shares at 1 January	888,367,045	3,046
Cancellation of treasury shares	72,580	-
Registered shares at 31 December	888,294,465	3,046

Fortum Corporation has one class of shares. By the end of 2018, a total of 888,294,465 shares (2017: 888,367,045) 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 2018 Fortum Corporation's share capital, paid in its entirety and entered in the trade register, was EUR 3,046,185,953.00.

In the merger of Länsivoima Oyj (former Lounais-Suomen Sähkö Oy) to Fortum Corporation in 2000, those shareholders of Länsivoima Oyj that did not produce their share certificates and did not request their rights to be registered in the book-entry system, received their respective shares of Fortum Corporation as merger consideration to a joint book-entry account opened on their behalf (the "Joint Account"). The Annual General Meeting 2018 of Fortum Corporation decided, that the rights to all such shares entered in the Joint Account and to the rights attached to such shares that had not been requested to be registered in the book-entry system prior to the decision by the Annual General Meeting 2018, were forfeited. In addition to the shares, the rights attached to such shares, such as undrawn dividend, were forfeited. The provisions applicable to treasury shares held by the company were applied to the forfeited shares. On 17 December 2018, Board of Directors decided to cancel all these 72,580 Fortum shares owned by the company without decreasing the share capital. The cancellation was entered in the Trade Register on 21 December 2018.

Shareholders

At the end of 2018, the Finnish State owned 50.76% of the company's shares. The Finnish Parliament has authorised the Government to reduce the Finnish State's holding in Fortum Corporation to no less than 50.1% of the share capital and voting rights.

The proportion of nominee registrations and direct foreign shareholders was 30.8 % (2017: 30.6%).

Fortum share and shareholders

Shareholders, 31 December 2018

Shareholders	No. of shares	Holding %
Finnish State	450,932,988	50.76
Ilmarinen Mutual Pension Insurance Company	8,955,600	1.01
Varma Mutual Pension Insurance Company	8,575,167	0.97
The Finnish Social Insurance Institution	7,030,896	0.79
Kurikan Kaupunki	6,203,500	0.70
The State Pension Fund	4,600,000	0.52
Elo Mutual Pension Insurance Company	4,420,000	0.50
OP-Finland	2,710,654	0.31
The Local Government Pensions Institution	2,568,955	0.29
Schweizerische Nationalbank	2,010,237	0.23
Danske Finnish Institutional Equity Fund	1,080,000	0.12
OP-Henkivakuutus Ltd.	962,467	0.11
Kauhajoen Kaupunki	902,640	0.10
Seligson & Co OMX 25 fund	837,941	0.09
Nominee registrations and direct foreign ownership [1)]	271,655,835	30.58
Other shareholders in total	114,847,585	12.93
Total number of shares	**888,294,465**	**100.00**

[1)] Excluding Schweizerische Nationalbank

By shareholder category	% of total amount of shares
Finnish shareholders	
Corporations	1.14
Financial and insurance institutions	1.67
General government	55.78
Non-profit organisations	1.14
Households	9.46
Non-Finnish shareholders	30.81
Total	**100.00**

Breakdown of share ownership, 31 December 2018

Number of shares owned	No. of shareholders	% of shareholders	No. of shares	% of total amount of shares
1-100	37,557	30.54	1,980,752	0.22
101-500	47,199	38.38	12,546,537	1.41
501-1,000	18,498	15.04	13,621,769	1.53
1,001-10,000	18,684	15.19	48,637,140	5.48
10,001-100,000	949	0.77	20,834,163	2.35
100,001-1,000,000	70	0.06	22,060,974	2.48
1,000,001-10,000,000	10	0.01	48,155,009	5.42
over 10,000,000	1	0.00	450,932,988	50.76
	122,968	**100.00**	**618,769,332**	**69.66**
In the joint book-entry account and in special accounts on 31 December			596	0.00
Nominee registrations			269,524,537	30.34
Total			**888,294,465**	**100.00**

Management shareholding 31 December 2018

At the end of 2018, the President and CEO and other members of the Fortum Executive Management owned 193,227 shares (2017: 200,667) representing approximately 0.02% (2017: 0.02%) 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 11 Employee benefits.

Authorisations from the Annual General Meeting 2018

In 2018, the Annual General Meeting decided to authorise the Board of Directors to decide on the repurchase and disposal of the company's own shares up to a maximum number of 20,000,000 shares, which corresponds to approximately 2.25% of all the shares in the company. The authorisation is effective for a period of 18 months from the resolution of the General Meeting. The authorisation had not been used by the end of 2018.