Disclaimer

This presentation does not constitute an invitation to underwrite, subscribe for, or otherwise acquire or dispose of any Fortum shares.

Past performance is no guide to future performance, and persons needing advice should consult an independent financial adviser.

Any references to the future represent the management’s current best understanding. However the final outcome may differ from them.
Fortum at a glance

Description of Fortum

- A leading clean-energy company across the Nordic region, the Baltic countries, Poland, and Russia
- A circular economy champion, providing solutions for sustainable cities, including waste, recycling, and biomass
- Rated BBB (negative outlook) and BBB (stable outlook) by S&P and Fitch respectively
- In 2018, Fortum closed its tender offer to shareholders in Uniper (holding of 49.99% of the outstanding shares and voting rights as of 31.12.2018)

Key shareholders

- Listed on the Helsinki Stock Exchange since 1998
- Market capitalisation of ~EUR 17bn
- Finnish State is a majority owner

Operations by business segment

- Consumer Solutions 7%
- Generation 48%
- Russia 27%
- City Solutions 18%

Production by source

- Power 74.6 TWh
  - Natural gas 38%
  - Solar 0.5%
  - Waste 0.9%
  - Wind 1%
  - Biomass 1%
  - Coal 3%
  - Hydropower 26%
  - Nuclear power 30%

- Heat 29.8 TWh
  - Natural gas 64%
  - Coal 16%
  - Biomass 8%
  - Waste 7%
  - Heat pumps, electricity 3%
  - Peat 1%
  - Others 1%

Note: All data as of FYE 2018 unless otherwise stated

(1) Comparable EBITDA defined as operating profit plus depreciation and amortisation less items affecting comparability
Fortum’s geographical footprint

Nordic countries
- Power generation: 43.5 TWh
- Heat sales: 5.9 TWh
- Electricity customers: 2.4 million

Russia
- PAO Fortum
- Power generation: 29.5 TWh
- Heat sales: 20.7 TWh

Key figures 2018
- Sales: EUR 5.2 bn
- Comparable EBITDA: EUR 1.5 bn
- Total assets: EUR 22 bn
- Personnel: 8,300

Poland
- Power generation: 0.6 TWh
- Heat sales: 3.5 TWh

Baltic countries
- Power generation: 0.7 TWh
- Heat sales: 1.4 TWh

Sales by market area 2018
- Poland: 6% of EUR 5.2 bn
- Russia: 20% of EUR 5.2 bn
- Other: 4%
- Nordics: 69% of EUR 5.2 bn

Note: Ranking based on year 2017 pro forma figures
Source: Fortum, company data, shares of the largest actors
Three main drivers are shaping the future electricity markets

**Climate and Environment**
- Decarbonisation to reach Paris agreement targets
- Electrification in heating, transportation and key industrial processes
- Resource efficiency

**Politics and Regulation**
- National and international interests
- Market models
- Emission trading
- Geopolitical uncertainty

**Technology Development**
- Solar and wind
- Digitalisation and artificial intelligence
- Short-term and seasonal storage
- E-mobility ecosystem
- Demand response
EU needs to eliminate CO₂ emissions to reach climate goals

Source: IEA World Energy Outlook 2017, Eurostat, Eurelectric, Fortum Industrial Intelligence

1 including international aviation and marine
2 residential and commercial heating & cooling
3 iron & steel and chemicals are among the biggest contributors
4 non-energy related emissions: industrial processes and product use, waste management, agriculture, fugitive emissions

Source: IEA World Energy Outlook 2017, Eurostat, Eurelectric, Fortum Industrial Intelligence
The decades of electricity will affect several sectors – and Fortum is well positioned for decarbonisation.

**Global climate challenge** (indicative)

- 4°C
- 1.5°C

**Electricity demand** (2018-2050)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Future solutions, examples</th>
<th>Fortum’s current offering, examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>CO₂-free generation, hydrogen, batteries, demand response</td>
<td>Nuclear, hydro, solar, wind</td>
</tr>
<tr>
<td>Transport</td>
<td>Electric vehicles, hydrogen/biofuels for heavy transport</td>
<td>E-mobility, pyrolysis</td>
</tr>
<tr>
<td>Heating &amp; cooling</td>
<td>Low-CO₂ DH/CHP, heat pumps, hydrogen</td>
<td>Biofuel, waste-to-energy DH/CHP</td>
</tr>
<tr>
<td>Industry</td>
<td>Electrified processes, hydrogen, resource efficiency, CCS</td>
<td>B2B solutions</td>
</tr>
<tr>
<td>Other</td>
<td>Recycling, biomaterials (e.g. fractioning)</td>
<td>Plastic recycling</td>
</tr>
</tbody>
</table>

DH/CHP = District heating/combined heat and power
CCS = Carbon capture and storage
Volatility and uncertainty in the European power market increases the value of flexible assets

- Intermittent renewables
- Nuclear and coal closures
- Increasing role of gas
- Supply-demand balance
- Increased interconnection between Nordics and Continent
- Commodity and CO₂ prices
- Weather conditions
The MSR introduces tightness to carbon market – in 2018 coal-to-gas switching was modest due to high gas price

Linear reduction factor (LRF) tightens the market

Market stability reserve restores scarcity by reducing future auction volumes

Abatement from coal to gas switching depends on coal and gas prices, together represented by a switching range

- Linear reduction factor (LRF) is the percentage of baseline supply1 by which the annual supply of allowances (cap) is reduced every year. LRF is set at
  - 1.74% for 2013-2020 (equals to a reduction of 38 MtCO₂/year)
  - 2.2% for 2021-2030 (equals to a reduction of 48 MtCO₂/year)
  - In total, emissions are set to decrease by 43% by 2030 vs. 2005
  - Next LRF review is scheduled for 2024
  - 3.03% LRF from 2030 onwards would deliver net zero emissions by 2050

- When TNAC2 > 833 Mt, MSR deducts 24% of the TNAC from the auction volume each year placing them into the reserve during 2019-2023
  - MSR rate is 12% during 2024-2030
  - When TNAC < 400 Mt, MSR releases 100 million EUAs annually from the reserve adding them to future auctions
  - 900 million back loaded allowances from 2014-2016 will be transferred into the MSR in 2019-2020
  - As from 2023, allowances in MSR above the total number of allowances auctioned during the previous year will be cancelled
  - Next MSR review is scheduled in 2021

- CO₂ price has more than tripled since November 2016, when the final decision was reached on the future EU ETS rules, including the intake rate of the Market Stability Reserve, which became operational in January 2019
  - The EUA market is in a process of finding the appropriate price at which enough fuel-switching occurs in order to balance supply and demand
  - The gas/coal price relationship has become a major price anchor for the EUA
  - Political risks also continue to play a role in EUA prices, with developments around Brexit in particular being closely watched

1 Average annual total quantity of allowances released in 2008-2012.
2 TNAC = total number of allowances in circulation = supply – (demand + allowances in the MSR). According to the latest publication May 15, 2018 the TNAC corresponds to 1655 million allowances.
Several Western European countries exiting coal over the next decade

- France to phase out coal from power sector at latest in 2022
- United Kingdom to exclude coal condense from capacity market by capping allowed emissions from 2025
- Netherlands’ new government aims at exit by 2030, regulation not yet in place
- Germany to set a binding coal exit date by end of 2019
  - Closure of 12.5 GW by 2022 (compared to 42.5 GW in 2017), additional 13 GW by 2030, latest 2038 all remaining capacity
  - Compensation to power plant operators remains open, coal regions to receive EUR 40 billion over next 20 years
  - EUR 2 billion annual compensation to customers in lower grid fees and/or taxes proposed
  - Respective amount of CO₂ allowances to be cancelled in the EU Emission Trading Scheme (ETS)
Positioning Fortum for the decade of electricity – For a cleaner world

1. Pursue operational excellence and increased flexibility
2. Ensure value creation from investments and portfolio optimisation
3. Drive focused growth in the power value chain
4. Build options for significant new businesses

Illustrative

Profitability

Today

2030’s

Competitive benchmark portfolio
Fortum’s strategic priorities in a changing energy market

1. Pursue operational excellence and increased flexibility
   • Ensure benchmark performance
   • Focus on cash flow and efficient use of balance sheet

2. Ensure value creation from investments and portfolio optimisation
   • Increase shareholder value from Uniper
   • Optimise portfolio to fit the changing business environment

3. Drive focused growth in the power value chain
   • Grow in CO₂-free power generation
   • Develop value-adding offerings and solutions for customers

4. Build options for significant new businesses
   • Create new sizeable profit contributor independent of power prices
   • Build on industrial logic and synergies with current businesses and competences
Delivering on financial targets through operational excellence and portfolio optimisation in the short to mid term

Strategic priorities…

**Operational excellence**
- Continue productivity improvement
- Prioritise capital expenditure

**Increased flexibility**
- Maximise flexibility in current businesses and assets
- Develop new sources of flexibility

**Value creation and portfolio optimisation**
- Ensure competitive asset fit for changing business environment
- Focus on core businesses
- Selective investments

… creating value

- Benchmark performance
- Optimise cash flow
- Strengthen balance sheet
- Create financial flexibility
- Solid investment grade rating
Investment in Uniper supports Europe’s energy transition and provides a valuable cash flow contribution

Fortum and Uniper strongly complement each other
- Uniper is an international utility with a diversified portfolio and significant hydro power assets
- Fortum and Uniper have the strategic mix of assets and expertise to drive an affordable and secure transition towards a low-carbon Europe

Fortum is the largest shareholder in Uniper
- Fortum’s CFO Markus Rauramo is the Vice Chairman of Uniper’s Supervisory Board
- Supervisory Board mandates extend until 2022
- Fortum’s shareholding at 49.99%, Russian regulatory decision limits shareholding to less than 50%

The Uniper investment creates shareholder value
- Uniper’s future dividends will contribute to Fortum’s cash flow
- Shareholder value created on higher Uniper share price compared to offer price of EUR 21.31

Generation capacity 36.6 GW in 2018

- Gas: 6.4
- Coal: 10.8
- Hydro: 10.5
- Nuclear: 4.6
- Other: 2.3
- Total: 36.6

Pie charts on map indicative of generation. Data on the accounting view are rounded numbers based on Uniper reporting 2018.
Fortum is a forerunner in sustainability

We engage our customers and society to drive the change towards a cleaner world. Our role is to accelerate this change by reshaping the energy system, improving resource efficiency, and providing smart solutions. This way we deliver excellent shareholder value.

Increasing CO₂-free power generation
Annual CO₂-free power generation has almost tripled from 15 TWh in 1990 to 43 TWh in 2018.

Among the lowest specific emissions
96% of its power generation in the EU and 57% of its total power generation was CO₂-free in 2018. Fortum’s specific emissions from power generation in the EU were 28 gCO₂/kWh in 2018, total 174 gCO₂/kWh.

Growing in solar and wind
Targeting a multi-gigawatt portfolio in solar and wind.

Fortum listed in several sustainability indexes and ratings:

- CDP
- Euronext Vigeoisris
- STOXX
- Euronext Vigeoisris
- ECPI
- Corporate Responsibility
- MSCI
- Equileap

Fortum’s strategic route
Fortum drives CO₂-emission free solutions ‘For a cleaner world’ — cases

Increased use of excess heat in district heating
- Excess heat from data centres utilised for heating homes in Espoo, Finland and Oslo, Norway
- Other excess heat sources currently in use include wastewater treatment plants, commercial and industrial buildings etc.

Fuel conversions from coal to bio and waste
- With a new multi-fuel plant in Zabrze, Fortum is a first mover in Poland utilise waste derived fuel in heat production
- Fortum is replacing part of its Finnish fossil-based heat production by building a biofuel-fired heating facility in Espoo

Better recycling improves resource efficiency and minimises the CO₂ impact
- Fortum is the first company in the Nordics to produce high-quality plastic granulates to replace virgin raw material
- The plastic refinery in Riihimäki, Finland has recently been expanded and new investments in other countries are under evaluation

Increasing investments into low-CO₂ and non-combustion heating sources

Growth in value-added recycling
Building the utility of the future

**FUTURE UTILITY**

- **Power-to-Gas**
  - Sustainable hydrogen production
  - Synthetic “clean” gas production

- **CO₂-sink**
  - Carbon capture and storage
  - Carbon capture and utilisation

- **Sustainable materials**
  - Recycling
  - Energy recovery

- **Bio economy**
  - Traffic fuels
  - Bio-based material production

**UTILITY TODAY**

- Decarbonising power and heat generation
- Customer solutions

**Fortum’s strategic route**

- Hydrogen and methane for traffic and industrial use
- Hydrogen, methane and excess heat

- Raw material
- Heat
- Electricity
Fortum’s long-term financial targets and dividend policy

Return on capital employed (ROCE) of at least **10%**

Comparable Net debt/EBITDA ratio at around **2.5x**

Having a **solid investment grade rating** is a key priority for Fortum

Fortum’s dividend policy is to pay a **stable, sustainable, and over time increasing** dividend of 50-80% of earnings per share, excluding one-time items.
Key investment highlights

- Optimised and flexible generation mix
- Finnish State is a majority owner
- 96% CO₂-free EU generation portfolio
- Commitment to financial discipline underpins balance sheet strength
- A forerunner in sustainability with growth ambitions in solar and wind
- Leverage towards 2.5x net debt/EBITDA target over 2-3 years
- Uniper investment supports energy transition and adds to Fortum’s cash flow contribution
- Robust liquidity position with diversified access across markets
- #4 in Nordic heat, electricity sales and #3 electricity generator in the Nordics\(^{(1)}\)
- Solid investment grade rating is a key priority for Fortum

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\(^{(1)}\) Market share ranking, based on year 2017 pro forma figures. Source: Company data, shares of the largest actors
Q1 2019 – Result impacted by higher power prices and lower hydro volumes

- Nordic power price up +22% Y/Y
  - Fortum’s achieved power price +14% Y/Y
- Reservoir levels below long-term average
  - Fortum’s hydro generation -25% Y/Y
- Volatile commodity and CO₂ prices
- Comparable operating profit at EUR 408 million, +1%
- EPS at EUR 0.38 (0.43)
  - Items affecting comparability EUR -0.04 (0.07)
- Strong cash flow from operating activities totalled EUR 751 (273) million – change in settlement for futures
- Strategy implementation – operational excellence in focus
- Discussions restarted with Uniper
Q1 2019 highlights

- Kalax wind project approved within Finnish national scheme
- OL3 received its operating license
- Bonds issued EUR 2.5 billion
- Fortum wins right to build 250 MW solar power plant in Rajasthan, India
- New technology to boost EV battery recycling
- Russian Fortum-Vostok JV as guaranteeing electricity supplier to 1.5m retail customers
- Launch of world’s first market place ‘Puro’ for CO₂ removals
- Commercial operation of 50 MW wind at Ulyanovsk in Russia started

First quarter 2019
Nordic water reservoirs

Source: Nord Pool

Reservoir content (TWh)

Source: Nord Pool
Wholesale power price

EUR/MWh

- Nord Pool System Price
- Futures

Source: Nord Pool, Nasdaq Commodities
Q1 2019 – Higher achieved power price and lower hydro volumes

Comparative operating profit

<table>
<thead>
<tr>
<th>EUR million</th>
<th>405</th>
<th>4</th>
<th>8</th>
<th>-5</th>
<th>-8</th>
<th>408</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 2018</td>
<td>405</td>
<td>4</td>
<td>8</td>
<td>-5</td>
<td>-8</td>
<td>408</td>
</tr>
</tbody>
</table>

- 1.6 TWh lower hydro volumes
- 4.8 EUR/MWh higher achieved price
- Improved RWS result
- Warmer weather lowered heat sales volumes
- Higher power prices
- Higher sales margin
- Chelyabinsk heat business to Yustek JV
- FX-effect EUR -8 million
- Higher CSA payments
- Higher power margin
- Higher incentive costs
- Venture development

First quarter 2019
Key financials

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q1 2019</th>
<th>Q1 2018</th>
<th>2018</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,690</td>
<td>1,585</td>
<td>5,242</td>
<td>5,347</td>
</tr>
<tr>
<td>Comparable EBITDA</td>
<td>545</td>
<td>538</td>
<td>1,523</td>
<td>1,530</td>
</tr>
<tr>
<td>Comparable operating profit</td>
<td>408</td>
<td>405</td>
<td>987</td>
<td>990</td>
</tr>
<tr>
<td>Operating profit</td>
<td>358</td>
<td>482</td>
<td>1,138</td>
<td>1,014</td>
</tr>
<tr>
<td>Share of profits of associates and joint ventures</td>
<td>111</td>
<td>47</td>
<td>38</td>
<td>102</td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>424</td>
<td>493</td>
<td>1,040</td>
<td>971</td>
</tr>
<tr>
<td>Earnings per share, EUR</td>
<td>0.38</td>
<td>0.43</td>
<td>0.95</td>
<td>0.90</td>
</tr>
<tr>
<td>Net cash from operating activities</td>
<td>751</td>
<td>273</td>
<td>804</td>
<td>1,282</td>
</tr>
</tbody>
</table>

- **Sales and comparable operating profit** driven by higher power prices.
- **Share of profits from associates** increased mainly due to Uniper, EUR 49 million.
- **EPS excluding items affecting comparability** of EUR 0.42 (0.36).
- **Strong cash flow** due to change in settlements for futures and working capital.
## Income statement

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q1 2019</th>
<th>Q1 2018</th>
<th>2018</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,690</td>
<td>1,585</td>
<td>5,242</td>
<td>5,347</td>
</tr>
<tr>
<td>Other income</td>
<td>21</td>
<td>24</td>
<td>130</td>
<td>127</td>
</tr>
<tr>
<td>Materials and services</td>
<td>-917</td>
<td>-825</td>
<td>-2,795</td>
<td>-2,887</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>-122</td>
<td>-113</td>
<td>-459</td>
<td>-468</td>
</tr>
<tr>
<td>Depreciations and amortisation</td>
<td>-137</td>
<td>-133</td>
<td>-536</td>
<td>-540</td>
</tr>
<tr>
<td>Other expenses</td>
<td>-127</td>
<td>-133</td>
<td>-594</td>
<td>-588</td>
</tr>
<tr>
<td><strong>Comparable operating profit</strong></td>
<td><strong>408</strong></td>
<td><strong>405</strong></td>
<td><strong>987</strong></td>
<td><strong>990</strong></td>
</tr>
<tr>
<td>Items affecting comparability</td>
<td>-50</td>
<td>77</td>
<td>151</td>
<td>24</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td><strong>358</strong></td>
<td><strong>482</strong></td>
<td><strong>1,138</strong></td>
<td><strong>1,014</strong></td>
</tr>
<tr>
<td>Share of profits/loss of associates and joint ventures</td>
<td>111</td>
<td>47</td>
<td>38</td>
<td>102</td>
</tr>
<tr>
<td>Finance costs - net</td>
<td>-46</td>
<td>-36</td>
<td>-136</td>
<td>-146</td>
</tr>
<tr>
<td><strong>Profit before income tax</strong></td>
<td><strong>424</strong></td>
<td><strong>493</strong></td>
<td><strong>1,040</strong></td>
<td><strong>971</strong></td>
</tr>
<tr>
<td>Income tax expense</td>
<td>-65</td>
<td>-94</td>
<td>-181</td>
<td>-152</td>
</tr>
<tr>
<td><strong>Profit for the period</strong></td>
<td><strong>359</strong></td>
<td><strong>400</strong></td>
<td><strong>858</strong></td>
<td><strong>817</strong></td>
</tr>
</tbody>
</table>

- Sales and comparable operating profit improved mainly due to higher power prices
- Share of profits from associates increased mainly due to share of profits from Uniper, EUR 49 million
- Finance costs slightly higher due to repayment of bridge loan of EUR 1.75 billion
## Cash flow statement

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q1 2019</th>
<th>Q1 2018</th>
<th>2018</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable EBITDA</td>
<td>545</td>
<td>538</td>
<td>1,523</td>
<td>1,530</td>
</tr>
<tr>
<td>Realised FX gains/losses</td>
<td>-5</td>
<td>42</td>
<td>231</td>
<td>184</td>
</tr>
<tr>
<td>Paid net financial costs, income taxes and other</td>
<td>-59</td>
<td>-107</td>
<td>-280</td>
<td>-232</td>
</tr>
<tr>
<td>Change settlements for futures</td>
<td>292</td>
<td>-91</td>
<td>-524</td>
<td>-141</td>
</tr>
<tr>
<td>Change in working capital</td>
<td>-22</td>
<td>-109</td>
<td>-146</td>
<td>-59</td>
</tr>
<tr>
<td><strong>Net cash from operating activities</strong></td>
<td>751</td>
<td>273</td>
<td>804</td>
<td>1,282</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>-150</td>
<td>-133</td>
<td>-579</td>
<td>-596</td>
</tr>
<tr>
<td>Acquisitions of shares</td>
<td>-12</td>
<td>-18</td>
<td>-4,088</td>
<td>-4,082</td>
</tr>
<tr>
<td>Divestments of shares</td>
<td>8</td>
<td>0</td>
<td>259</td>
<td>267</td>
</tr>
<tr>
<td>Change in cash collaterals and restricted cash</td>
<td>310</td>
<td>-63</td>
<td>-36</td>
<td>337</td>
</tr>
<tr>
<td>Other investing activities</td>
<td>11</td>
<td>1</td>
<td>46</td>
<td>56</td>
</tr>
<tr>
<td><strong>Cash flow from investing activities</strong></td>
<td>167</td>
<td>-213</td>
<td>-4,398</td>
<td>-4,018</td>
</tr>
<tr>
<td><strong>Cash flow before financing activities</strong></td>
<td>918</td>
<td>60</td>
<td>-3,594</td>
<td>-2,736</td>
</tr>
<tr>
<td>Paid dividends</td>
<td>-977</td>
<td>-977</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Strong net cash from operating activities mainly due to EUR 292 million from change in settlement for futures on Nasdaq Commodities.
- Net cash from investing activities positively impacted by EUR 310 million due to new non-cash collateral agreement to release pledged cash from the Nordic power exchange.
- Dividend of EUR 977 million paid on 4 April, not impacting Q1 2019.
Ongoing actions to deleverage aims to optimise cash flow and maintain financial flexibility

- Liquid funds of EUR 1.7 billion
- Committed credit lines of EUR 1.8 billion
- EUR 2.5 billion of bonds issued in three tranches
- Total loans and borrowings of EUR 6,591 million
  - Average interest 2.2% (2018: 2.4%)
  - Portfolio mainly in EUR and SEK with average interest cost 1.4% (2018: 1.7%)
  - EUR 750 million (2018: 686) swapped to RUB, average interest cost including cost for hedging 8.5% (2018: 8.3%)
  - Other short-term debt impacted by the new non-cash collateral arrangement for the Nordic power exchange

<table>
<thead>
<tr>
<th></th>
<th>LTM</th>
<th>2018</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable EBITDA, MEUR</td>
<td>1,530</td>
<td>1,523</td>
<td></td>
</tr>
<tr>
<td>Interest-bearing net debt, MEUR</td>
<td>4,995</td>
<td>5,509</td>
<td></td>
</tr>
<tr>
<td>Comparable net debt/EBITDA ratio *)</td>
<td>3.3x</td>
<td>3.6x</td>
<td>Around 2.5x</td>
</tr>
<tr>
<td>Return on capital employed (ROCE), %</td>
<td>6.5</td>
<td>6.7</td>
<td>At least 10%</td>
</tr>
</tbody>
</table>

*) Uniper’s EBITDA or debt have not been consolidated as Uniper is accounted for as an associated company.
**) In addition, Fortum has received EUR 67 million based on Credit Support Annex agreements with several counterparties. This amount has been booked as a short term liability.
### Outlook

#### Demand growth

Electricity demand in the Nordics is expected to grow by ~0.5% on average

#### Hedging\(^1\)

- For the remainder of 2019: ~75% hedged at EUR 32 per MWh
- For 2020: ~55% hedged at EUR 31 per MWh (31 DEC 2018: 45% at EUR 29)

#### 2019 Estimated annual capital expenditure, including maintenance and excluding acquisitions

EUR 600-650 million

#### Targeted cost synergies of Hafslund transaction

- EUR 15-20 million gradually materialising 2019-2020:
  - City Solutions: EUR 5-10 million
  - Consumer Solutions: ~EUR 10 million

#### Taxation

- Effective tax rate for 2019 for the Group 19-21%
- In Sweden nuclear capacity tax abolished from 2018 and hydro assets’ real estate tax rate to decrease over a four-year period (2017-2020)

\(^1\) from the beginning of 2019 the reported hedge prices also include the effect of proxy hedging. This change had a minor effect on the prices. There was no change to the calculation method of the hedge ratio.
Still a highly fragmented Nordic power market
Fortum has the largest electricity customer base in the Nordics

**Power generation in 2017**
402 TWh
>350 companies

**Electricity retail**
15 million customers
~350 companies

Source: Fortum, company data, shares of the largest actors, pro forma 2017 figures
Fortum mid-sized European power generation player – major producer in global heat

Power generation
Largest producers in Europe and Russia, 2017

Heat production
Largest global producers, 2017

Customers
Electricity customers in Europe, 2017

Source: Company information, Fortum analyses, 2017 figures pro forma.
EPH incl. LEAG. Chinese data incomplete.
Biggest nuclear and hydro generators in Europe and Russia

Source: Company information, Fortum analyses, 2016 figures pro forma

1) Formerly Natural Gas Fenosa
Nordic year forwards

Source: Nasdaq Commodities, Bloomberg
Wholesale power prices

Spot prices

Forward prices

EUR/MWh

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>100</td>
<td>90</td>
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<td>30</td>
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<td>0</td>
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</tbody>
</table>

German
Nordic
Russian*

Source: Nord Pool, Bloomberg Finance LP, ATS, NP "Market Council", Fortum

Updated
7.5.2019
Forwards
6.5.2019

* Including weighted average capacity price
Fuel and CO₂ allowance prices

Source: ICE, Thomson Reuters
Market prices 10 May 2019; 2019-2020 future quotations
German – Nordic price spread

**SPOT PRICE**
- During Q1 2019, the average spread was -6.0 EUR/MWh with the Nordic system average price at 46.9 EUR/MWh and German price at 40.9 EUR/MWh
- Weak demand and very high wind power output in Germany lowered the German spot price, especially during the first half of March
- During 2012-2018, the average realised German-Nordic spot spread was 4.6 EUR/MWh, fluctuating on an annual level in the range of -1-15 EUR/MWh
- The realised German-Nordic spread is impacted by realised supply and demand fundamentals in Continental Europe and the Nordics

**FORWARD PRICE**
- During Q1 2019, the spread for 2020 delivery traded in the range 9.9-12.9 EUR/MWh, average at 11.6 EUR/MWh
- Expected supply/demand balance in the Nordics and in Continental Europe has an effect on the spread: investments in new interconnector capacity, growth of demand and new renewable capacity as well as amount of exiting nuclear and coal capacity all play a role

European and Nordic power markets
Current transmission capacity from the Nordic area is >6,000 MW

- Theoretical maximum in transmission capacity ~40 TWh per annum, but restrictions especially between DK & DE
- Net export from the Nordic area to Continental Europe and Baltics during the year 2018 was 10 TWh
- Net export during the relatively wet year 2017 was 15 TWh
- Approximately 25 TWh of net export is now reachable

<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>TRANSMISSION CAPACITY MW</th>
<th>From Nordics</th>
<th>To Nordics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark - Germany</td>
<td>2,225</td>
<td>2,100</td>
<td></td>
</tr>
<tr>
<td>Sweden - Germany</td>
<td>615</td>
<td>615</td>
<td></td>
</tr>
<tr>
<td>Sweden - Poland</td>
<td>600</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Sweden - Lithuania</td>
<td>700</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>Norway - Netherlands</td>
<td>723</td>
<td>723</td>
<td></td>
</tr>
<tr>
<td>Finland - Estonia</td>
<td>1,016</td>
<td>1,016</td>
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<tr>
<td>Finland - Russia</td>
<td>320</td>
<td>1,300</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>6,199</strong></td>
<td><strong>7,054</strong></td>
<td></td>
</tr>
</tbody>
</table>
Nordics, Baltics, the Continental and the UK markets are integrating – interconnection capacity to double by end-2023

The Northern Seas Offshore Grid and the Baltic Energy Market Integration Plan are included as priority electricity corridors in EU’s Infrastructure Guidelines, approved in April 2013

1. Two 1,400 MW NO-UK links as EU Projects of Common Interest: NSL to England due to be ready in 2021, NorthConnect to Scotland under debate in Norway and not yet permitted

2. 1,400 MW NordLink as first direct NO-DE link is due to start commercial operation in March 2021

3. 1,400 MW DK-UK Viking Link has got its final permits and is to be built by end-2023

4. 700 MW COBRAcable from DK to NL is due to be ready during Q3/2019

5. Jutland – DE capacity will grow by 860 MW by end-2020, with further 1,000 MW increase by end-2023

6. EU’s Connecting Europe Facility co-financing 3rd EE-LV transmission line, due to be ready in 2020

7. Baltic synchronisation roadmap in June 2018 prioritised a DC sea cable as the required additional PL-LT interconnection by 2025

8. Svenska Kraftnät and 50Hertz signed 1/2017 a cooperation agreement on building the 700 MW Hansa PowerBridge DC link between Sweden and Germany by 2025/26


New interconnections will double the Nordic export capacity to over 12,000 MW by end-2023

- New internal Nordic grid investments provide for increased available capacity for export to the Continent and Baltics
- Nordic export capacity to over 12,000 MW by end-2023
- EU’s Connecting Europe Facility co-financing 3rd EE-LV transmission line, due to be ready in 2020
- Baltic synchronisation roadmap in June 2018 prioritised a DC sea cable as the required additional PL-LT interconnection by 2025
- Svenska Kraftnät and 50Hertz signed 1/2017 a cooperation agreement on building the 700 MW Hansa PowerBridge DC link between Sweden and Germany by 2025/26
- New 400 MW Zealand – DE connection via Kriegers Flak offshore wind area ready in Q3/2019

New interconnectors | New Nordic lines | Existing interconnectors

| Source: ENTSO-E Statistical Factsheet |

<table>
<thead>
<tr>
<th>NORDICS</th>
<th>BALTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>TWh</td>
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<tr>
<td>Hydro</td>
<td>*221</td>
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<tr>
<td>Nuclear</td>
<td>85</td>
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<tr>
<td>Fossil fuel</td>
<td>26</td>
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<tr>
<td>Biomass</td>
<td>24</td>
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<tr>
<td>Waste</td>
<td>4</td>
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<tr>
<td>Wind</td>
<td>40</td>
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<tr>
<td>Solar</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
</tr>
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</table>

**Total generation**

| Germany  | 602 TWh (610) |
| Norway   | 149 TWh (149) |
| Sweden   | 159 TWh (152) |
| Finland  | 65 TWh (66)   |
| Denmark  | 29 TWh (29)   |
| Estonia  | 11 TWh (10)   |
| Latvia   | 7 TWh (6)     |
| Lithuania| 4 TWh (4)     |
| Poland   | 158 TWh (154) |

Net export 9 TWh
Net import 6 TWh

*) Normal annual Nordic hydro generation 200 TWh, variation +/- 40 TWh.
Northern European conventional capacity decreasing

Estimated annual net changes in nuclear and thermal capacity

<table>
<thead>
<tr>
<th>DATE</th>
<th>CAPACITY</th>
<th>AREA</th>
<th>UNIT/TRANSMISSION</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10.2018</td>
<td>-1100 MW</td>
<td>DE</td>
<td>Lignite reserve E &amp; F</td>
<td>Niederaußem E &amp; F and Jänschwalde F moved to lignite reserve</td>
</tr>
<tr>
<td>31.3.2019</td>
<td>-937 MW</td>
<td>DE</td>
<td>Coal</td>
<td>Gersteinwerk, Kiel-Ostüfer, decommissioning</td>
</tr>
<tr>
<td>during 2019</td>
<td>-619 MW</td>
<td>EE</td>
<td>Oil shale</td>
<td>Closure of four older units in Estonia</td>
</tr>
<tr>
<td>1.9.2019</td>
<td>+700 MW</td>
<td>DK1-NL</td>
<td>Transmission</td>
<td>Cobra cable: trial operation expected to begin in Q3-19</td>
</tr>
<tr>
<td>1.10.2019</td>
<td>-800 MW</td>
<td>DE</td>
<td>Lignite reserve E</td>
<td>Jänschwalde E, Neurath C</td>
</tr>
<tr>
<td>1.10.2019</td>
<td>+0-400 MW</td>
<td>DK2-DE</td>
<td>Kriegers Flak</td>
<td>Offshore connection between DK2 and DE used for both grid connection of offshore wind farms and interconnection.</td>
</tr>
<tr>
<td>31.12.2019</td>
<td>-1470 MW</td>
<td>DE</td>
<td>Phillipsburg 2</td>
<td>Nuclear unit, decommissioning</td>
</tr>
<tr>
<td>31.12.2019</td>
<td>-850 MW</td>
<td>SE3</td>
<td>Ringhals 2</td>
<td>Decommissioning</td>
</tr>
<tr>
<td>1.1.2020</td>
<td>+1600 MW</td>
<td>FI</td>
<td>Olikuluoto 3</td>
<td>Start of regular electricity production expected in January 2020.</td>
</tr>
<tr>
<td>31.3.2020</td>
<td>-100 MW</td>
<td>DK</td>
<td>Amagerværket 3</td>
<td>250 MW coal replaced by 150 MW biomass</td>
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<tr>
<td>during 2020</td>
<td>+1100 MW</td>
<td>DE</td>
<td>Datteln 4</td>
<td>Uniper’s coal condensing unit; targeted commissioning mid-2020.</td>
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<tr>
<td>31.12.2020</td>
<td>-856 MW</td>
<td>SE3</td>
<td>Ringhals 1</td>
<td>Decommissioning</td>
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<tr>
<td>31.12.2021</td>
<td>-4060 MW</td>
<td>DE</td>
<td>Nuclear</td>
<td>Decommissioning Brokdorf, Grohnde, Gundremmingen C</td>
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<tr>
<td>31.12.2022</td>
<td>-4040 MW</td>
<td>DE</td>
<td>Nuclear</td>
<td>Decommissioning Isar 2, Emsland, Neckarwestheim 2</td>
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<tr>
<td>By end of 2022</td>
<td>-7000 MW</td>
<td>DE</td>
<td>Coal commission</td>
<td>German Coal Commission proposes 7 GW additional reduction of lignite/hard coal</td>
</tr>
</tbody>
</table>

Estimated capacity changes based on publically announced information from various stakeholders.
Fortum’s evolution and historical strategic route

- **1996**: Divestment of heat operations outside of Stockholm.
- **1997**: Divestment of Fingrid shares.
- **1998**: Gullspång merged with Stockholm Energi.
- **1999**: Länsivoima shares →.
- **2000**: Länsivoima →100%.
- **2001**: Elnova 50% → 100%.
- **2002**: Birka Energi 50% → 100%.
- **2003**: Shares in Lenenergo.
- **2004**: Shares in Hafslund.
- **2005**: TGC-1 established.
- **2006**: E.ON Finland.
- **2007**: Divestment of Lenenergo shares.
- **2008**: TGC-10.
- **2011**: Divestment of electricity distribution businesses.
- **2012**: Divestment of non-strategic heat business.
- **2013**: Divestment of small scale hydro.
- **2014**: Divestment of Grangemouth power plant.
- **2015**: Divestment of electricity distribution business.
- **2016**: Divestment of electricity distribution business.
- **2017**: DUON.
- **2018**: Nordkraft wind power.

**Russia**

- **2007**: Divestment of electricity distribution and heat businesses.
- **2008**: Russian wind power JV.
- **2009**: Divestment of ownership in Hafslund Produksjon.
Fortum's power and heat production by source

Fortum's power generation in 2018

- Natural gas: 38%
- Solar: 0.5%
- Waste: 0.5%
- Wind: 1%
- Biomass: 1%
- Coal: 3%

Total generation: 74.6 TWh

Fortum's heat production in 2018

- Natural gas: 64%
- Others: 1%
- Peat: 1%
- Heat pumps, electricity: 3%
- Waste: 7%
- Biomass: 8%
- Coal: 16%

Total production: 29.8 TWh

Note: Fortum's power generation capacity 13,724 MW and heat production capacity 15,009 MW
Fortum's European power and heat production by source

Fortum's European power generation in 2018

European generation 44.7 TWh
- Nuclear power 50%
- Hydropower 43%
- Natural gas 1%
- Wind 1%
- Waste 1%
- Biomass 2%
- Coal 2%

Fortum's heat European production in 2018

European production 9.4 TWh
- Coal 28%
- Waste 22%
- Biomass 24%
- Heat pumps, electricity 10%
- Natural gas 10%
- Others 2%
- Peat 4%

Note: Fortum's European power generation capacity 8,811 MW and heat production capacity 4,780 MW
Fortum’s Nordic, Baltic and Polish generation capacity

**GENERATION CAPACITY**  **MW**

- **Hydro**: 4,672
- **Nuclear**: 2,819
- **CHP**: 785
- **Other thermal**: 376
- **Wind**: 159

Nordic, Baltic and Polish generation capacity: **8,811**

**Figures 31 December 2018**

- **FINLAND**
  - Hydro: 1,548
  - Nuclear: 1,485
  - CHP: 451
  - Other thermal: 376
  - Generation capacity: 3,860

- **SWEDEN**
  - Price areas:
    - SE2, Hydro: 1,550
    - SE2, Wind: 75
    - SE3, Hydro: 1,574
    - SE3, Nuclear: 1,334
    - SE3, CHP: 9
  - Generation capacity: 4,542

- **BALTICS AND POLAND**
  - Generation capacity, CHP:
    - in Estonia: 49
    - in Latvia: 34
    - in Lithuania: 20
    - in Poland: 186
    - in Latvia, Wind: 2

- **DENMARK, DK2**
  - Generation capacity, CHP: 16

**Associated companies’ plants**

- (not included in the MWs) Stockholm Exergi (Former Fortum Värme), Stockholm; TSE, Naantali
Fortum is growing towards gigawatt scale target in solar and wind power production

Fortum’s power Generation

<table>
<thead>
<tr>
<th>PORTFOLIO</th>
<th>TECHNOLOGY</th>
<th>STATUS</th>
<th>CAPACITY</th>
<th>FORTUM SHARE, MW</th>
<th>SUPPLY STARTS/ STARTED</th>
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<tbody>
<tr>
<td>FINLAND</td>
<td>Wind</td>
<td>Under development</td>
<td>90</td>
<td>90</td>
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<tr>
<td>Kalax</td>
<td>Wind</td>
<td>Operational</td>
<td>179</td>
<td>179</td>
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<tr>
<td>NORWAY</td>
<td>Wind</td>
<td>Operational</td>
<td>32</td>
<td>32</td>
<td>2006 and 2011</td>
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<tr>
<td>Nygårdsfjellet</td>
<td>Wind</td>
<td>Operational</td>
<td>50</td>
<td>50</td>
<td>2018</td>
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<tr>
<td>Åstadbåleia</td>
<td>Wind</td>
<td>Under construction</td>
<td>97</td>
<td>97</td>
<td>Q4 2019</td>
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<td>Norway</td>
<td>Wind</td>
<td>Operational</td>
<td>323</td>
<td>75</td>
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<td>Blaiken</td>
<td>Wind</td>
<td>Operational</td>
<td>248</td>
<td>37 (15%)</td>
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<td>Solberg</td>
<td>Wind</td>
<td>Operational</td>
<td>76</td>
<td>38 (50%)</td>
<td>2018</td>
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<td>RUSSIA</td>
<td>Solar</td>
<td>Operational</td>
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<td>Bugulchansk</td>
<td>Solar</td>
<td>Operational</td>
<td>15</td>
<td>15</td>
<td>2016-2017</td>
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<td>Solar</td>
<td>Operational</td>
<td>10</td>
<td>10</td>
<td>2017</td>
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<td>Grachevsk</td>
<td>Solar</td>
<td>Operational</td>
<td>10</td>
<td>10</td>
<td>2017</td>
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<tr>
<td>Solar</td>
<td>Under development</td>
<td>110</td>
<td>110</td>
<td>2021-2022</td>
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<tr>
<td>Ulyanovsk</td>
<td>Wind</td>
<td>Operational</td>
<td>35</td>
<td>35</td>
<td>2018</td>
</tr>
<tr>
<td>Ulyanovsk 2</td>
<td>Wind</td>
<td>Operational</td>
<td>50</td>
<td>25 (50%)</td>
<td>1.1.2019</td>
</tr>
<tr>
<td>Rusnano JV</td>
<td>Wind</td>
<td>Under construction</td>
<td>300</td>
<td>150 (50%)</td>
<td>H1 2020</td>
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<tr>
<td>Rusnano JV</td>
<td>Wind</td>
<td>Under development</td>
<td>1,473</td>
<td>737 (50%)</td>
<td>2018-2023</td>
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<tr>
<td>INDIA</td>
<td>Solar</td>
<td>Operational</td>
<td>685</td>
<td>581</td>
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<tr>
<td>Amrit</td>
<td>Solar</td>
<td>Operational</td>
<td>5</td>
<td>2 (44%)</td>
<td>2012</td>
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<tr>
<td>Kapeli</td>
<td>Solar</td>
<td>Operational</td>
<td>10</td>
<td>4 (44%)</td>
<td>2014</td>
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<tr>
<td>Bhadla</td>
<td>Solar</td>
<td>Operational</td>
<td>70</td>
<td>31 (44%)</td>
<td>2017</td>
</tr>
<tr>
<td>Pavagada</td>
<td>Solar</td>
<td>Operational</td>
<td>100</td>
<td>44 (44%)</td>
<td>2017</td>
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<td>Pavagada 2</td>
<td>Solar</td>
<td>Under construction</td>
<td>250</td>
<td>250</td>
<td>Q3 2019</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>Solar</td>
<td>Under construction</td>
<td>250</td>
<td>250</td>
<td>Q4 2020</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Under development</td>
<td>1,673</td>
<td>937</td>
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<td></td>
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<tr>
<td>Under construction</td>
<td>897</td>
<td>747</td>
<td></td>
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<tr>
<td>Operational</td>
<td>711</td>
<td>333</td>
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</tbody>
</table>

*) Blaiken last stage IV inaugurated in 2017. NOTE: Table numbers not accounting; tells the size of renewables projects. All not consolidated to Fortum capacities. All figures in MW and rounded to nearest megawatt. Additionally, target to invest 200 – 400 million euros in India solar and create partnership for operating assets. Under construction includes investment decisions made.
# Fortum’s nuclear fleet

<table>
<thead>
<tr>
<th>LOVIISA</th>
<th>OLKILUOTO</th>
<th>OSKARSHAMN</th>
<th>FORSMARK</th>
</tr>
</thead>
</table>
| **Commercial operation started** | Unit 1: 1977  
Unit 2: 1981 | Unit 1: 1978  
Unit 2: 1980  
Unit 3: (Under construction) | Unit 1: 1972*  
Unit 2: 1974*  
Unit 3: 1985 |
| **Generation Capacity** | Unit 1: 507 MW  
Unit 2: 507 MW  
**Total: 1,014 MW** | Unit 1: 890 MW  
Unit 2: 890 MW  
(Unit 3: 1,600 MW)  
**Total: 1,780 MW (3,380 MW)** | Unit 1: 984 MW  
Unit 2: 1,116 MW  
Unit 3: 1,159 MW  
**Total: 3,259 MW** |
| **Fortum’s share** | 100% 1,014 MW | 27% 473 MW | 43% 602 MW |
| **Yearly production** | 8 TWh  
8 TWh | 14 TWh  
4 TWh | 11 TWh  
5 TWh | 25 TWh  
6 TWh |
| **Fortum’s share of production** | 19%  
9% | 11% | 13% |
| **Share of Fortum’s Nordic production** | 26.6% | 43.4% | 22.2% |
| **Majority owner** | Fortum | Pohjolan Voima | Uniper |
| **Fortum’s share** | | 43.4% | Vattenfall 22.2% |
| **Operated by** | Fortum | Teollisuuden Voima (TVO) | OKG Aktiebolag |
| **Operated by** | | | Forsmarks Kraftgrupp |

*Out of operation; on decommissioning phase*

**RESPONSIBILITIES**

**Lovisa**: Fortum is the owner, licensee and operator with all the responsibilities specified in the Nuclear Energy Act, Nuclear Liability Act, and other relevant nuclear legislation

**Other units**: Fortum is solely an owner with none of the responsibilities assigned to the licensee in the nuclear legislation. Other responsibilities are specified in the Companies Act and the Articles of Association and are mostly financial.
## Fortum's nuclear power in the Nordics

### Overview of production and consumption:

www.fortum.com/investors - energy related links

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Oskarshamn 1*</td>
<td>80</td>
<td>51</td>
<td>63</td>
<td>85</td>
<td>68</td>
<td>77</td>
<td>72</td>
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<td>Oskarshamn 2*</td>
<td>90</td>
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<tr>
<td>Oskarshamn 3</td>
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</table>

Source: Fortum

*) Out of operation; on decommissioning phase

Finnish units world class in availability
<table>
<thead>
<tr>
<th>YEAR</th>
<th>SUPPLY STARTS</th>
<th>POWER PLANT</th>
<th>FUEL TYPE</th>
<th>CCS CAPACITY</th>
<th>CSA CAPACITY</th>
<th>PRODUCTION TYPE</th>
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<td>&lt; 2011</td>
<td></td>
<td>Tyumen CHP-2</td>
<td>Gas</td>
<td>755</td>
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<td>CHP/Condensing</td>
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<td>CHP/Condensing</td>
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<td>Chelyabinsk CHP-1</td>
<td>Gas, coal</td>
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<td>CHP/Condensing</td>
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<td>2011</td>
<td>Feb/2011</td>
<td>Tyumen CHP-1</td>
<td>Gas</td>
<td>472</td>
<td>210</td>
<td>CHP/Condensing</td>
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<td>Chelyabinsk CHP-3</td>
<td>Gas</td>
<td>360</td>
<td>233</td>
<td>CHP/Condensing</td>
<td>593</td>
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<td>Apr/2013</td>
<td>Nyagan 1 GRES</td>
<td>Gas</td>
<td>453</td>
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<td>Condensing</td>
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<tr>
<td></td>
<td>Dec/2013</td>
<td>Nyagan 2 GRES</td>
<td>Gas</td>
<td>453</td>
<td></td>
<td>Condensing</td>
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<td>Gas</td>
<td>455</td>
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<td>Chelyabinsk GRES</td>
<td>Gas</td>
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<td>Mar/2016</td>
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<td>Gas</td>
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<td>Chelyabinsk GRES</td>
<td>Gas</td>
<td>248</td>
<td></td>
<td>CHP/CCGT</td>
<td>248</td>
</tr>
</tbody>
</table>

2,093 MW 2,086 MW 4,179 MW

Tobolsk power plant was sold in Q1/2016
# Day ahead wholesale market prices in Russia

## Key electricity, capacity and gas prices in the PAO Fortum area

<table>
<thead>
<tr>
<th></th>
<th>I/19</th>
<th>I/18</th>
<th>2018</th>
<th>LTM</th>
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</thead>
<tbody>
<tr>
<td>Electricity spot price (market price), Urals hub, RUB/MWh</td>
<td>1,128</td>
<td>1,011</td>
<td>1,043</td>
<td>1,072</td>
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<tr>
<td>Average regulated gas price, Urals region, RUB 1000 m³</td>
<td>3,883</td>
<td>3,755</td>
<td>3,801</td>
<td>3,833</td>
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<tr>
<td>Average capacity price for CCS, tRUB/MW/month</td>
<td>162</td>
<td>158</td>
<td>148</td>
<td>149</td>
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<tr>
<td>Average capacity price for CSA, tRUB/MW/month</td>
<td>1,196</td>
<td>1,147</td>
<td>1,075</td>
<td>1,087</td>
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<tr>
<td>Average capacity price, tRUB/MW/month</td>
<td>678</td>
<td>661</td>
<td>609</td>
<td>614</td>
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<tr>
<td>Achieved power price for Fortum in Russia, RUB/MWh</td>
<td>2,002</td>
<td>1,872</td>
<td>1,888</td>
<td>1,924</td>
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<tr>
<td>Achieved power price for Fortum in Russia, EUR/MWh</td>
<td>26.4</td>
<td>26.8</td>
<td>25.6</td>
<td>25.5</td>
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</tbody>
</table>

### Day ahead power market prices for Urals

![Graph showing day ahead power market prices for Urals](image)

Source: ATS

In addition to the power price generators receive a capacity payment.
Hedging improves stability and predictability – principles based on risk mitigation

Realised prices quarterly since 2000

- Achieved power price
- Spot price, SE&FI avg.

2009 onwards thermal and import from Russia excluded
Fortum’s dividend policy is based on the following preconditions:

- The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supported by the company’s long-term strategy that aims at increasing earnings per share and thereby the dividend.

- When proposing the dividend, the Board of Directors looks at a range of factors, including the macro environment, balance sheet strength as well as future investment plans.

Since 1998 Fortum has paid dividends totaling EUR 15.6 billion.

Capital returns: 2018 EUR 1.10 per share ~ EUR 1 billion

Fortum's target is to pay a stable, sustainable, and over time increasing dividend of 50-80% of earnings per share excluding one-off items.

Five year history of dividend per share

<table>
<thead>
<tr>
<th>Year</th>
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<td>2014</td>
<td>0.2</td>
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<tr>
<td>2015</td>
<td>1.1</td>
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<tr>
<td>2016</td>
<td>1.10</td>
</tr>
<tr>
<td>2017</td>
<td>1.10</td>
</tr>
<tr>
<td>2018</td>
<td>1.10</td>
</tr>
</tbody>
</table>

- 2014: 37%
- 2015: 24%
- 2016: 196%
- 2017: 112%
- 2018: 116%
Fortum Investor Relations and Financial Communications

For more information, please visit [www.fortum.com/investors](http://www.fortum.com/investors)

Next events:
Q2/2019 results on 19 July 2019
Q3/2019 results on 24 October 2019

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