FORTUM – For a cleaner world

Investor / Analyst material
July 2018
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.
Content

Fortum today 4 – 18
European and Nordic power markets 19 – 26
Fortum’s nuclear fleet 27 – 30
Russia 31 – 33
Thermal capacity in Russia 33
Historical achieved prices 34
Half-Year Report 2018 35 – 56
Debt portfolio as of 30.6.2018 57
IR contacts 58
Appr. 125,000 shareholders

- Power and heat company in the Nordic countries, Russia, Poland and the Baltics
- Listed at the Helsinki Stock Exchange since 1998
- Among the most traded shares on the Nasdaq Helsinki stock exchange
- Market cap ~19 billion euros

30 June 2018
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.

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.

Fortum has since 1998 annually paid dividends in total ~14,580 MEUR.

Capital returns: 2017 EUR 1.10 per share ~ EUR 1 billion
Fortum – For a cleaner world

**Vision**
For a cleaner world

**Megatrends**
- Climate change and resource efficiency
- Urbanisation
- Active customers
- Digitalisation, new technologies

**Mission**
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.

**Strategy**
- Drive productivity and industry transformation
- Grow in solar and wind
- Create solutions for sustainable cities
- Build new energy ventures
Our strategic route

- **1996**: Divestment of heat operations outside of Stockholm
- **1997**: Divestment of non-strategic heat business
- **1998**: Divestment of small scale hydro
- **2000**: Divestment of electricity distribution business
- **2002**: Divestment of electricity distribution and heat businesses
- **2003**: Divestment of Grangemouth power plant
- **2011**: Divestment of electricity distribution business
- **2012**: Divestment of non-strategic heat business
- **2014**: Divestment of small scale hydro
- **2015**: Divestment of electricity distribution business
- **2016**: Divestment of electricity distribution business
- **2017**: Divestment of electricity distribution business
- **2018**: Divestment of ownership in Hafslund Produksjon

- **1996**: Länsivoima 45% → 65%
- **1998**: Birka Energi 50% Fortum 50% Stockholm Gullspång merged with Stockholm Energi
- **2000**: Länsivoima →100%
- **2002**: Elnova 50% → 100%
- **2003**: Birka Energi 50% → 100%
- **2004**: TGC-1 established
- **2005**: Shares in Lenenergo
- **2006**: District heating in Poland →
- **2007**: E.ON Finland
- **2008**: Divestment of Lenenergo shares
- **2011**: TGC-10
- **2012**: Shares in Uniper
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- **2018**: Divestment of ownership in Hafslund Produksjon
## Our current geographical presence

<table>
<thead>
<tr>
<th>Region</th>
<th>Power generation</th>
<th>Heat sales</th>
<th>Electricity customers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NORDIC COUNTRIES</strong></td>
<td>45.4 TWh</td>
<td>5.0 TWh</td>
<td>2.4 million</td>
</tr>
<tr>
<td><strong>RUSSIA</strong></td>
<td><strong>26.3 TWh</strong></td>
<td><strong>19.8 TWh</strong></td>
<td></td>
</tr>
<tr>
<td><strong>POLAND</strong></td>
<td>0.5 TWh</td>
<td>3.7 TWh</td>
<td></td>
</tr>
<tr>
<td><strong>BALTIC COUNTRIES</strong></td>
<td>0.7 TWh</td>
<td>1.4 TWh</td>
<td></td>
</tr>
<tr>
<td><strong>INDIA</strong></td>
<td>0.3 TWh</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key Figures 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>EUR 4.5 bn</td>
</tr>
<tr>
<td><strong>Comparable operating profit</strong></td>
<td>EUR 0.8 bn</td>
</tr>
<tr>
<td><strong>Balance sheet</strong></td>
<td>EUR 22 bn</td>
</tr>
<tr>
<td><strong>Personnel</strong></td>
<td>8,800</td>
</tr>
</tbody>
</table>
Still a highly fragmented Nordic power market
Fortum has largest electricity customer base in the Nordics

Power generation in 2016
395 TWh
>350 companies

Electricity retail
15 million customers
~350 companies

Source: Fortum, company data, shares of the largest actors, pro forma 2016 figures (Fortum incl. Hafslund’s 1.1 million customers).
Fortum mid-sized European power generation player; major producer in global heat

**Power generation**

**Largest producers in Europe and Russia, 2016 (TWh)**
- EDF
- RWE
- Rosenergoatom
- Enel
- Gazprom
- Uniper
- RusHydro
- ENGIE
- Inter RAO UES
- Vattenfall
- NNEGC
- Iberdrola
- Vattenfall
- EPH
- EuroSibEnergo
- Stalcraft
- CEZ
- T Plus
- PGE
- EnBW
- EDP
- DTEK
- EPS
- E.ON
- Sibgenco
- Verbund
- DEI

**Heat production**

**Largest global producers, 2016 (TWh)**
- Gazprom
- T Plus
- Inter RAO UES
- Veolia
- RusHydro
- EDF
- Sibgenco
- EuroSibEnergo
- Fortum
- Quadra
- Vattenfall
- Beijing DH
- TGC-2
- SIBECO
- KHER
- Minskenergo
- Lukoil
- PGE
- Tatenergo
- DTEK
- PNIG
- Ørsted
- Stockholm Exergi
- CEZ
- TGC-14
- Helen

**Customers**

**Electricity customers in EU, 2016 (Millions)**
- Enel
- EDF
- RWE
- E.ON
- Iberdrola
- CEZ
- DEI
- Centrica
- EDP
- ENGIE
- Vattenfall
- EnBW
- PGE
- SSE
- Tauron
- Gas Natural Fenosa
- Fortum
- Ørsted

Source: Company information, Fortum analyses, 2016 figures pro forma
Biggest nuclear and hydro generators in Europe and Russia

Source: Company information, Fortum analyses, 2013 figures pro forma
Fortum in the Nordic electricity value chain

Nordic wholesale market

Power exchange and bilateral agreements

- Large customers
- Retail customers
- Private customers, small businesses
Fortum's power and heat production by source

Fortum's power generation in 2017

- Natural gas 35%
- Hydropower 28%
- Nuclear power 31%
- Others 1%
- Biomass 1%
- Coal 4%

Total generation: 73.2 TWh

Fortum's heat production in 2017

- Natural gas 65%
- Coal 17%
- Hydropower
  - Peat 1%
  - Heat pumps, electricity 2%
  - Waste 8%
  - Biomass 7%

Total production: 28.6 TWh

Note: Fortum’s power generation capacity 13,722 MW and heat production capacity 14,765 MW
Fortum's European power and heat production by source

**Fortum's European power generation in 2017**

- **Nuclear power**: 49%
- **Hydropower**: 44%
- **Others**: 1%
- **Waste**: 1%
- **Biomass**: 2%
- **Coal**: 3%
- **European generation**: 46.6 TWh

**Note:** Fortum's European power generation capacity 8,743 MW and heat production capacity 4,671 MW

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**Fortum's heat European production in 2017**

- **Coal**: 32%
- **Biomass**: 22%
- **Waste**: 27%
- **Peat**: 5%
- **Heat pumps, electricity**: 7%
- **Natural gas**: 7%
- **European production**: 8.6 TWh

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*Note: The percentages and production figures are illustrative for demonstration purposes only.*
Fortum’s Nordic, Baltic and Polish generation capacity

**NORWAY**  
MW  
Price areas  
NO4, Wind  32  
NO1, CHP  19  
Generation capacity  51

**FINLAND**  
MW  
Hydro  1,547  
Nuclear  1,480  
CHP  451  
Other thermal  376  
Generation capacity  3,854

**SWEDEN**  
MW  
Price areas  
SE2, Hydro  1,550  
SE2, Wind  75  
SE3, Hydro  1,575  
SE3, Nuclear  1,334  
SE3, CHP  9  
Generation capacity  4,543

**BALTICS AND POLAND**  
MW  
Generation capacity, CHP  
in Estonia  49  
in Latvia  26  
in Lithuania  18  
in Poland  186

**DENMARK, DK2**  
MW  
Generation capacity, CHP  16
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.

Fortum is listed in several sustainability indexes:

- CDP Nordic rating
- STOXX® Global ESG Leaders indices
- ECPI® Indices
- ISS-oekom
- OMX GES Sustainability Finland index
- Euronext Vigeo Eurozone 120 index
Fortum's carbon exposure among the lowest in Europe

g CO₂/kWh electricity, 2016

2017
61% of Fortum's total power generation CO₂-free
96% of Fortum's power generation in the EU CO₂-free

Note: All figures, except "Fortum total", include only European power generation.
Fortum’s specific emissions of the power generation in 2017 in the EU were 28 g/kWh and in total 174 g/kWh, same as in the previous year.
Source: PwC, December 2017, Climate Change and Electricity (including those companies with data for power generation available only), Fortum
Fortum is growing towards gigawatt scale target in solar and wind power production

*) Blaiken last stage IV inaugurated in 2017. NOTE: All figures in MWac and rounded to nearest megawatt. Additionally, target to invest 200 – 400 million euros in India solar and create partnership for operating assets.
Market coupling milestones – Cross-border power flows optimised by power exchanges

- Day-ahead market coupling between NL, BE and FR since 2006
- Market coupling for Central Western Europe (DE, FR, NL, BE) since 11/2010 with a continued coupling with Nord Pool. NorNed (NO-NL) and BritNed (UK-NL) included in 2011
- Czech, Slovakia and Hungary coupled together since 2012. Romania joined in 2014
- A common market coupling for the whole western Europe was started in 2014. Italy and Slovenia joined in 2015, and Croatia in June 2018. **Ireland to join in October 2018**
- Flow-based cross-border capacity allocation for further trade optimisation taken into use in May 2015 for the CWE region. **Nordic flow-based implementation planned for 2021**
- CEE (Central Eastern Europe) market coupling region to join possibly in 2020 with flow-based capacity allocation. Switzerland waiting for agreement with the EU
- In addition to day-ahead coupling, European-wide intraday market coupling has started with Nordic, Baltic and Continental Western European markets in June 2018
- Balancing market integration under development as well, based on both regional projects and the EU Guideline on Electricity Balancing, in force since 18 December 2017
Current transmission capacity from Nordic area is over 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 year 2017 was 15 TWh
- Net export was 18 TWh in 2015 and 10 TWh in 2016
- Approximately 25 TWh of net export is now reachable

<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>TRANSMISSION CAPACITY MW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From Nordics</td>
</tr>
<tr>
<td>Denmark - Germany</td>
<td>2,225</td>
</tr>
<tr>
<td>Sweden - Germany</td>
<td>615</td>
</tr>
<tr>
<td>Sweden - Poland</td>
<td>600</td>
</tr>
<tr>
<td>Sweden - Lithuania</td>
<td>700</td>
</tr>
<tr>
<td>Norway - Netherlands</td>
<td>723</td>
</tr>
<tr>
<td>Finland - Estonia</td>
<td>1,016</td>
</tr>
<tr>
<td>Finland - Russia</td>
<td>320</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,199</strong></td>
</tr>
</tbody>
</table>
Nordic, Baltic, Continental and UK markets are integrating – Interconnection capacity will double by 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 being built by 2020

3. 1,400 MW DK-UK Viking Link under final permitting in the UK, with commissioning timetable to be determined during 2018

4. 700 MW COBRAcable from DK to NL due to be ready in February 2019

5. Jutland – DE capacity planned to grow by 860 MW in 2020, with further 1,000 MW increase in 2022

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

- New internal Nordic grid investments provide for increased available capacity for export to the Continent and Baltics
- 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 by 2/2019
Nordic year forwards

Source: Nasdaq Commodities, Bloomberg
Wholesale power prices

EUR/MWh

Spot prices

Forward prices


German
Nordic
Russian*

0 10 20 30 40 50 60 70 80 90 100

Source: Nord Pool, Nasdaq Commodities, Bloomberg Finance LP, ATS, NP “Market Council”, Fortum

* Including weighted average capacity price

| Source: ENTSO-E Statistical Factsheet | Graph sizes are illustrative. |

<table>
<thead>
<tr>
<th></th>
<th>NORDICS</th>
<th>BALTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2017</strong></td>
<td><strong>TWh</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Hydro</td>
<td>221</td>
<td>55</td>
</tr>
<tr>
<td>Nuclear</td>
<td>85</td>
<td>21</td>
</tr>
<tr>
<td>Fossil fuel</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>Biomass</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Waste</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Wind</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Solar</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total generation</strong></td>
<td>402</td>
<td>100</td>
</tr>
<tr>
<td>Net export</td>
<td>9 TWh</td>
<td>100</td>
</tr>
</tbody>
</table>

*) Normal annual Nordic hydro generation 200 TWh, variation +/- 40 TWh.
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>31.12.2017</td>
<td>-1344 MW</td>
<td>DE</td>
<td>Gundremmingen B</td>
<td>Decommissioning; German nuclear phase-out</td>
</tr>
<tr>
<td>1.1.2018</td>
<td>≈ 500 MW</td>
<td>DK1- DE</td>
<td>Transmission</td>
<td>Lowest available capacity will be increased to 700 MW, available capacity during last years has been ca 200 MW</td>
</tr>
<tr>
<td>during 2018</td>
<td>+ 1100 MW</td>
<td>DE</td>
<td>Datteln 4</td>
<td>Uniper’s coal condensing unit; targeted commissioning mid-2018.</td>
</tr>
<tr>
<td>1.10.2018</td>
<td>-1100 MW</td>
<td>DE</td>
<td>Lignite reserve</td>
<td>Niederaußem E &amp; F and Jänschwalde F moved to lignite reserve</td>
</tr>
<tr>
<td>31.12.2018</td>
<td>-280 MW</td>
<td>NO2</td>
<td>Mongstad CHP</td>
<td>The CHP at Mongstad is phased out following several years of unprofitable operations.</td>
</tr>
<tr>
<td>31.12.2018</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>31.5.2019</td>
<td>+1600 MW</td>
<td>FI</td>
<td>Olkiluoto 3</td>
<td>The previously announced commissioning date in the end of 2018 has been delayed to May 2019.</td>
</tr>
<tr>
<td>30.3.2019</td>
<td>+700 MW</td>
<td>DK1- NL</td>
<td>Transmission</td>
<td>Cobra cable: trial operation of the interconnector is expected to begin in Q1 2019.</td>
</tr>
<tr>
<td>30.6.2019</td>
<td>-854 MW</td>
<td>SE3</td>
<td>Ringhals 2</td>
<td>Decommissioning</td>
</tr>
<tr>
<td>14.6.2020</td>
<td>-856 MW</td>
<td>SE3</td>
<td>Ringhals 1</td>
<td>Decommissioning</td>
</tr>
</tbody>
</table>

Estimated capacity changes based on publically announced information from various stakeholders.
Wholesale electricity price too low to attract investments

NOTE: The presented figures are calculated based on data from recent public reports and do not represent Fortum’s view. Average achieved price (€/MWh) for the production type depends on availability and flexibility. There are large variations in the cost of hydro, wind and solar depending on location and conditions.
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 (out of oper.)**  
**Unit 2: 1974 (out of oper.)**  
**Unit 3: 1985** |
| **Generation Capacity** | **Unit 1: 507 MW**  
**Unit 2: 502 MW**  
**Total: 1009 MW** | **Unit 1: 880 MW**  
**Unit 2: 890 MW**  
**(Unit 3: 1,600 MW)**  
**Total: 1,770 MW (3,370)**  
**27% 470 MW** | **Unit 1: 473 MW**  
**Unit 2: 638 MW**  
**Unit 3: 1,400 MW**  
**Total: 1,400 MW**  
**43% 602 MW** |
| **Fortum’s share** | **8 TWh**  
**8 TWh** | **13 TWh**  
**4 TWh** | **9 TWh**  
**4 TWh** |
| **Yearly production** | **Fortum’s share of production** | **Share of Fortum’s Nordic production** | **Majority owner**  
**Fortum’s share** |
| **Fortum’s share** | **26.6%** | **OKG Aktiebolag** | **Forsmarks Kraftgrupp** |
| **Operated by** | **Fortum**  
**Teollisuuden Voima (TVO)** | **Uniper**  
**43.4%** | **Vattenfall**  
**22.2%** |

**RESPONSIBILITIES**

**LOVIISA:** 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

Finnish units world class in availability

Source: Fortum
*) O1 was shut down for decommissioning earlier as originally announced, starting 17.6.2017.
Variety of technologies and ages

<table>
<thead>
<tr>
<th>UNIT</th>
<th>MWE (NET)</th>
<th>SHARE (%)</th>
<th>SHARE (MWE)</th>
<th>COMMERCIAL OPERATION</th>
<th>AGE</th>
<th>TYPE/GENERATION</th>
<th>SUPPLIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loviisa 1</td>
<td>507</td>
<td>100,0</td>
<td>507</td>
<td>1977-05-09</td>
<td>40</td>
<td>PWR / 1</td>
<td>AEE (Atomenergoexport)</td>
</tr>
<tr>
<td>Loviisa 2</td>
<td>502</td>
<td>100,0</td>
<td>502</td>
<td>1981-01-05</td>
<td>36</td>
<td>PWR / 1</td>
<td>AEE (Atomenergoexport)</td>
</tr>
<tr>
<td>Olkiluoto 1</td>
<td>880</td>
<td>26,6</td>
<td>234</td>
<td>1979-10-10</td>
<td>38</td>
<td>BWR / 3</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Olkiluoto 2</td>
<td>890 (1,600)</td>
<td>26,6</td>
<td>237 (400)</td>
<td>1982-07-10</td>
<td>35</td>
<td>BWR / 3</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Olkiluoto 3</td>
<td>880</td>
<td>25,0</td>
<td>205</td>
<td>(May 2019)</td>
<td></td>
<td>PWR / 3</td>
<td>Areva / Siemens</td>
</tr>
<tr>
<td>Oskarshamn 1</td>
<td>473</td>
<td>43,4</td>
<td>205</td>
<td>1972-02-06</td>
<td>45</td>
<td>BWR / 1</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Oskarshamn 2</td>
<td>638</td>
<td>43,4</td>
<td>277</td>
<td>1975-01-01</td>
<td>42</td>
<td>BWR / 2</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Oskarshamn 3</td>
<td>1,400</td>
<td>43,4</td>
<td>607</td>
<td>1985-08-15</td>
<td>32</td>
<td>BWR / 4</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Forsmark 1</td>
<td>984</td>
<td>23,4</td>
<td>230</td>
<td>1980-12-10</td>
<td>37</td>
<td>BWR / 3</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Forsmark 2</td>
<td>1,120</td>
<td>23,4</td>
<td>262</td>
<td>1981-07-07</td>
<td>36</td>
<td>BWR / 3</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
<tr>
<td>Forsmark 3</td>
<td>1,167</td>
<td>20,1</td>
<td>236</td>
<td>1985-08-18</td>
<td>32</td>
<td>BWR / 4</td>
<td>Asea-Atom / Stal-Laval</td>
</tr>
</tbody>
</table>

1) Generation refers to technical resemblance based on KSU classification and not to reactor design generations. All reactors are of Generation II except Olkiluoto-3 (EPR) which is of Generation III.

**Planned capacity increase:**
- Forsmark 1, potential capacity increase of total ~110 MW in 2018-2020.

**Closing of the units:**
- OKG AB’s Extraordinary shareholders’ meeting decided on 14 October 2015 on the closure of Oskarshamn nuclear power plant units 1 and 2 in Sweden.
- Unit 1 was taken out of operation on June 17, 2017. Unit 2 has been out of operation since June 2013 due to an extensive safety modernisation, and it will not be put back into operation. The closing process for both units is estimated to take several years.
- PWR = (Pressurized Water Reactor) The most common reactor type in the world (e.g. all French units, most US units). Also the Lovisa units are PWRs, but based on Russian design. High pressure prevents water from boiling in the reactor. The steam rotating the turbine is generated in separate steam generators.
- BWR = (Boiling Water Reactor) Similar to the PWR in many ways, but the steam is generated directly in the reactor. Popular reactor type e.g. in Sweden, the US and Japan.
Third party nuclear liability in case of severe accident

Law approved by Parliament in 2010, requires separate decision from Government to come into force.

- **Sweden** (new, not in force)
  - Unlimited company responsibility: 300 M€
  - Convention parties: 500 M€
  - State responsibility: 145 M€
  - Responsibility of company (insurance or guarantee): 700 M€

- **Finland**, temporary legislation
  - Unlimited company responsibility: 300 M€
  - Convention parties: 500 M€
  - State responsibility: 145 M€
  - Responsibility of company (insurance or guarantee): 700 M€

- **Old, Finland**
  - Unlimited company responsibility: 145 M€
  - Convention parties: 240 M€
  - State responsibility: 360 M€
  - Responsibility of company (insurance or guarantee): 700 M€

- **Current, Sweden (new, not in force)**
  - Unlimited company responsibility: 145 M€
  - Convention parties: 300 M€
  - State responsibility: 700 M€
  - Responsibility of company (insurance or guarantee): 700 M€

- **New Paris convention**
  - Unlimited company responsibility: 300 M€
  - Convention parties: 500 M€
  - State responsibility: 145 M€
  - Responsibility of company (insurance or guarantee): 700 M€

In force since 1 January 2012

Requires ratification by 2/3 of member states to come into force. In Finland approved by Parliament in 2005.
Fortum - a major player in Russia

PAO Fortum (former TGC-10)

- Operates in the heart of Russia’s oil and gas producing region, fleet mainly gas-fired CHP capacity
- 26 TWh power generation, 20 TWh heat production in 2017. Investment programme to add 85%, almost 2,200 MW to power generation capacity

TGC-1

- 29.5% of territorial generating company TGC-1 operating in north-west Russia
- ~7,000 MW electricity production capacity (more than 40% hydro), ~27 TWh electricity, ~29 TWh heat in 2017
- In December 2014, Fortum and Gazprom Energoholding signed a protocol to start a restructuring process of TGC-1. Currently Gazprom Energoholding owns 51.8% of the TGC-1 shares and Fortum 29.5%. As part of the restructuring, Fortum will establish a joint venture together with Rosatom to own the hydro assets of TGC-1, while Gazprom Energoholding continues with the heat and thermal power businesses of TGC-1. By utilising its present stake in TGC-1, Fortum would obtain a 75-plus-percent ownership in the new hydro power company, and Rosatom a 25-minus-percent minority holding.
- In October 2015, Fortum announced that the discussions related to the potential restructuring of TGC-1 will continue, and it is not possible to estimate the time schedule or outcome of the discussions.
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/18</th>
<th>I/17</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity spot price (market price), Urals hub, RUB/MWh</td>
<td>1,011</td>
<td>1,034</td>
<td>1,041</td>
<td>1,035</td>
</tr>
<tr>
<td>Average regulated gas price, Urals region, RUB 1000 m³</td>
<td>3,755</td>
<td>3,614</td>
<td>3,685</td>
<td>3,720</td>
</tr>
<tr>
<td>Average capacity price for CCS &quot;old capacity&quot;, tRUB/MW/month</td>
<td>158</td>
<td>157</td>
<td>148</td>
<td>148</td>
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<tr>
<td>Average capacity price for CSA &quot;new capacity&quot;, tRUB/MW/month</td>
<td>1,147</td>
<td>980</td>
<td>899</td>
<td>943</td>
</tr>
<tr>
<td>Average capacity price, tRUB/MW/month</td>
<td>661</td>
<td>585</td>
<td>535</td>
<td>556</td>
</tr>
<tr>
<td>Achieved power price for Fortum in Russia, RUB/MWh</td>
<td>1,872</td>
<td>1,868</td>
<td>1,813</td>
<td>1,817</td>
</tr>
<tr>
<td>Achieved power price for Fortum in Russia, EUR/MWh</td>
<td>26.8</td>
<td>29.8</td>
<td>27.5</td>
<td>26.7</td>
</tr>
</tbody>
</table>

Day ahead power market prices for Urals

Source: ATS
In addition to the power price generators receive a capacity payment.
### Thermal power generation capacity in Russia at 31.12.2017

<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>
<th>TOTAL CAPACITY</th>
</tr>
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<tbody>
<tr>
<td>&lt; 2011</td>
<td></td>
<td>Tyumen CHP-2</td>
<td>Gas</td>
<td>755</td>
<td></td>
<td>CHP/Condensing</td>
<td>755</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chelyabinsk CHP-2</td>
<td>Gas, coal</td>
<td>320</td>
<td></td>
<td>CHP/Condensing</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Argayash CHP</td>
<td>Gas, coal</td>
<td>195</td>
<td></td>
<td>CHP/Condensing</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chelyabinsk CHP-1</td>
<td>Gas, coal</td>
<td>134</td>
<td></td>
<td>CHP/Condensing</td>
<td>134</td>
</tr>
<tr>
<td>2011</td>
<td>Feb/2011</td>
<td>Tyumen CHP-1</td>
<td>Gas</td>
<td>450</td>
<td>210</td>
<td>CHP/Condensing</td>
<td>660</td>
</tr>
<tr>
<td></td>
<td>Jun/2011</td>
<td>Chelyabinsk CHP-3</td>
<td>Gas</td>
<td>360</td>
<td>233</td>
<td>CHP/Condensing</td>
<td>593</td>
</tr>
<tr>
<td></td>
<td>Oct/2011</td>
<td>Tobolsk CHP*</td>
<td>Gas</td>
<td>452</td>
<td>213</td>
<td>CHP/Condensing</td>
<td>665*</td>
</tr>
<tr>
<td>2013</td>
<td>Apr/2013</td>
<td>Nyagan 1 GRES</td>
<td>Gas</td>
<td>453</td>
<td></td>
<td>Condensing</td>
<td>453</td>
</tr>
<tr>
<td></td>
<td>Dec/2013</td>
<td>Nyagan 2 GRES</td>
<td>Gas</td>
<td>453</td>
<td></td>
<td>Condensing</td>
<td>453</td>
</tr>
<tr>
<td>2015</td>
<td>Jan/2015</td>
<td>Nyagan 3 GRES</td>
<td>Gas</td>
<td>455</td>
<td></td>
<td>Condensing</td>
<td>455</td>
</tr>
<tr>
<td></td>
<td>Dec/2015</td>
<td>Chelyabinsk GRES</td>
<td>Gas</td>
<td>247</td>
<td></td>
<td>CHP/Condensing</td>
<td>247</td>
</tr>
<tr>
<td>2016</td>
<td>Mar/2016</td>
<td>Chelyabinsk GRES</td>
<td>Gas</td>
<td>248</td>
<td></td>
<td>CHP/Condensing</td>
<td>248</td>
</tr>
<tr>
<td>2017</td>
<td>Dec/2017</td>
<td>Chelyabinsk GRES</td>
<td>Gas</td>
<td>248</td>
<td></td>
<td>CHP/CCGT</td>
<td>248</td>
</tr>
</tbody>
</table>

*) Tobolsk power plant was sold in Q1/2016

2,462 MW  
2,298 MW  
4,760 MW
Hedging improves stability and predictability

Realised prices quarterly since 2000

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

2009 onwards thermal and import from Russia excluded
Half-Year Financial Report
January-June 2018

Fortum Corporation
19 July 2018
Improved results in Q2 2018

• Increased wholesale power prices in the Nordics
  – Cold weather in Q1 2018 and warm weather in Q2 2018
• Rising commodity and CO₂ prices
• Comparable EBITDA +29% at EUR 282 million
• Comparable operating profit +40% at EUR 153 million
• EPS at EUR 0.24 (-0.08)
  – Items affecting comparability EUR 0.11 (-0.04)
• Uniper PTO closed, 47.35% of total shares
• Balance sheet discipline with focus on cash flow continues
  – Divestment and capital recycling in Q2
Public Takeover Offer on Uniper closed in June 2018

• Fortum is pleased to have become Uniper’s largest shareholder
• The Russian regulatory decisions limit Fortum’s ownership to up to 50% of shares
• Strategic rational and Fortum’s intentions remain unchanged:
  • Transaction delivers on Fortum’s vision and strategy – Uniper’s businesses are aligned with Fortum’s core competences, close to its home markets and highly cash generative
  • Transaction contributes to stable and sustainable dividends for Fortum’s shareholders – more value to be created for all stakeholders through close collaboration
  • Intention to be a committed, long-term and active partner and shareholder to Uniper
  • Fortum and Uniper have the strategic mix of assets and expertise required to successfully drive Europe’s transition from conventional to cleaner and more secure energy
Capital recycling - divesting share of solar portfolio to enable further investments

Divestment

• In June, Fortum agreed to sell 54% share of its solar power company operating four solar power plants (185 MW) in India

• Total consideration of ~EUR 150 million, result impact of ~EUR 20 million to be recorded in Q3 2018

• This frees up capital for further investments and enables Fortum to continue to utilise its key competencies to develop, construct and operate solar power plants

Constructing new solar

• In June, Fortum won the right to build a 250 MW solar power plant in India

• The capital expenditure is estimated to be approximately EUR 120 million with commissioning expected in 2019
Fortum won the right to build CSA-supported capacity in Russia – 110 MW solar and 823 MW wind

- In June, Fortum won the right to build 110 MW of solar capacity with a guaranteed power price corresponding to ~RUB 14,000/MWh (~EUR 191/MWh) for 15 years, commissioning in 2021-2022

- The Fortum-Rusnano wind investment fund won the right to build 823 MW wind capacity with a guaranteed power price corresponding to ~RUB 7,000-8,000/MWh (~EUR 96-109/MWh) for 15 years, commissioning in 2019-2023

- Fortum’s previously communicated maximum equity commitment is RUB 15 billion and covers the above mentioned capacities and Fortum's share of the wind capacities within the Fortum-Rusnano wind investment fund.

- Fortum’s ‘capital recycling’ strategy - intends to use partnerships and other forms of cooperation to create a more asset-light structure and thereby enable more investments into building new renewable capacity
Divestment of minority ownership in Hafslund Produksjon

- In June, Fortum sold its 10% ownership in Hafslund Produksjon Holding AS to Svartisen Holding AS.
- Sales price of EUR 160 million and capital gain of EUR 77 million recorded in Q2.
- Our minority share in Hafslund Produksjon was a financial investment and thus a non-core asset for Fortum.

- *Fortum focuses on balance sheet discipline and cash flow generation and will continue to evaluate possibilities to optimise its asset portfolio.*
Nordic water reservoirs clearly below normal level - dry Q2 in the Nordics

Reservoir content (TWh)

Source: Nord Pool
Increased commodity and CO₂ prices

Source: ICE, Thomson Reuters
Wholesale power price increase in the Nordics continued in Q2 – dry and warm weather, higher marginal cost for coal condense

Source: Nord Pool, Nasdaq Commodities
Higher power prices in the Nordics due to dry and warm weather

Changes refer to year-on-year difference (Q2 2018 versus Q2 2017)
NOTE: Achieved power price (includes capacity payments) in roubles increased by 4%
### Key figures

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,087</td>
<td>937</td>
<td>2,672</td>
<td>2,169</td>
<td>4,520</td>
<td>5,023</td>
</tr>
<tr>
<td>Comparable EBITDA</td>
<td>282</td>
<td>219</td>
<td>820</td>
<td>642</td>
<td>1,275</td>
<td>1,453</td>
</tr>
<tr>
<td>Comparable operating profit</td>
<td>153</td>
<td>109</td>
<td>558</td>
<td>421</td>
<td>811</td>
<td>948</td>
</tr>
<tr>
<td>Operating profit</td>
<td>256</td>
<td>66</td>
<td>738</td>
<td>456</td>
<td>1,158</td>
<td>1,440</td>
</tr>
<tr>
<td>Share of profits of associates and joint ventures</td>
<td>24</td>
<td>35</td>
<td>70</td>
<td>94</td>
<td>148</td>
<td>124</td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>241</td>
<td>49</td>
<td>734</td>
<td>461</td>
<td>1,111</td>
<td>1,384</td>
</tr>
<tr>
<td>Earnings per share, EUR</td>
<td>0.24</td>
<td>-0.08</td>
<td>0.68</td>
<td>0.30</td>
<td>0.98</td>
<td>1.35</td>
</tr>
<tr>
<td>Net cash from operating activities</td>
<td>361</td>
<td>232</td>
<td>634</td>
<td>514</td>
<td>993</td>
<td>1,113</td>
</tr>
</tbody>
</table>

- Improved comparable operating profit in Q2, +40%  
  - Higher achieved power price in Q2 and lower Swedish taxes  
  - Partly offset by lower result in City Solutions, due to warm weather, and weaker Russian rouble
Higher achieved power price increased sales

Clearly improved comparable operating profit in Q2, +95%

- Higher achieved power prices and lower real-estate and capacity taxes in Sweden
- Partly offset by lower nuclear volumes due to closure of Oskarshamn 1

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>425</td>
<td>402</td>
<td>923</td>
<td>876</td>
<td>1,677</td>
<td>1,724</td>
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<tr>
<td>Comparable EBITDA</td>
<td>183</td>
<td>111</td>
<td>435</td>
<td>277</td>
<td>603</td>
<td>761</td>
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<tr>
<td>Comparable operating profit</td>
<td>152</td>
<td>78</td>
<td>372</td>
<td>214</td>
<td>478</td>
<td>636</td>
</tr>
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<td>Comparable net assets</td>
<td></td>
<td></td>
<td>5,765</td>
<td>5,724</td>
<td>5,672</td>
<td></td>
</tr>
<tr>
<td>Comparable RONA %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.4</td>
<td>11.1</td>
</tr>
<tr>
<td>Gross investments</td>
<td>37</td>
<td>42</td>
<td>76</td>
<td>67</td>
<td>264</td>
<td>273</td>
</tr>
</tbody>
</table>
City Solutions

- Higher heat sales due to the consolidation of Fortum Oslo Varme (Hafslund)
- Comparable operating loss in Q2
  - Lower heat and power sales volumes, change to seasonal heat pricing in Finland and weaker recycling and waste business
- Higher comparable operating profit in H1, +16%
  - Good result in Q1 due to Fortum Oslo Varme offset by higher fuel prices in Q1, lower Q2 heat and power volumes and weaker result in the recycling and waste business in Q2

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>187</td>
<td>205</td>
<td>562</td>
<td>495</td>
<td>1,015</td>
<td>1,082</td>
</tr>
<tr>
<td>Comparable EBITDA</td>
<td>21</td>
<td>37</td>
<td>150</td>
<td>131</td>
<td>262</td>
<td>281</td>
</tr>
<tr>
<td>Comparable operating profit</td>
<td>-21</td>
<td>1</td>
<td>66</td>
<td>57</td>
<td>98</td>
<td>107</td>
</tr>
<tr>
<td>Comparable net assets</td>
<td>3,623</td>
<td>2,889</td>
<td>3,728</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparable RONA %</td>
<td></td>
<td></td>
<td></td>
<td>5.5</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Gross investments</td>
<td>54</td>
<td>43</td>
<td>84</td>
<td>63</td>
<td>556</td>
<td>577</td>
</tr>
</tbody>
</table>
Higher sales in Q2 driven by the Hafslund consolidation
  - High competition and customer churn in the Nordics continued
Increased comparable operating profit in Q2, +83%
  - Consolidation of Hafslund had a positive impact of EUR 8 million
  - Profit burdened by the amended service agreements for the divested electricity distribution companies and lower sales margins, partly offset by improved cost efficiency

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>326</td>
<td>164</td>
<td>873</td>
<td>406</td>
<td>1,097</td>
<td>1,564</td>
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<td>Comparable EBITDA</td>
<td>26</td>
<td>8</td>
<td>57</td>
<td>22</td>
<td>57</td>
<td>92</td>
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<tr>
<td>Comparable operating profit</td>
<td>11</td>
<td>6</td>
<td>29</td>
<td>18</td>
<td>41</td>
<td>52</td>
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<tr>
<td>Comparable net assets</td>
<td></td>
<td></td>
<td>645</td>
<td>129</td>
<td>638</td>
<td></td>
</tr>
<tr>
<td>Customer base, million</td>
<td></td>
<td></td>
<td>2.48</td>
<td>1.36</td>
<td>2.49</td>
<td></td>
</tr>
<tr>
<td>Gross investments</td>
<td>12</td>
<td>1</td>
<td>21</td>
<td>3</td>
<td>493</td>
<td>511</td>
</tr>
</tbody>
</table>
Russia

- Sales in euros decreased due to weaker rouble
- Comparable operating profit in Q2 decreased, -30%
  - EUR 6 million negative impact of weaker rouble
  - Negative impact from bad debt provisions, unplanned outage in Tyumen 1 and lower electricity margins
  - Positive impact from higher CSA payments and contribution from new production units

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>228</td>
<td>238</td>
<td>565</td>
<td>586</td>
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<td>1,080</td>
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<tr>
<td>Comparable EBITDA</td>
<td>73</td>
<td>88</td>
<td>215</td>
<td>256</td>
<td>438</td>
<td>397</td>
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<tr>
<td>Comparable operating profit</td>
<td>37</td>
<td>53</td>
<td>141</td>
<td>185</td>
<td>296</td>
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<tr>
<td>Comparable net assets</td>
<td></td>
<td></td>
<td>2,986</td>
<td>3,156</td>
<td>3,161</td>
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<tr>
<td>Comparable RONA %</td>
<td></td>
<td></td>
<td></td>
<td>10.1</td>
<td></td>
<td>9.5</td>
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<tr>
<td>Gross investments</td>
<td>22</td>
<td>42</td>
<td>40</td>
<td>73</td>
<td>277</td>
<td>244</td>
</tr>
</tbody>
</table>
Uniper investment to be reported in Fortum’s ’Other Operations’

- Total acquisition cost, incl. direct related costs, amounted to EUR 3.7 billion (EUR 21.31 per share)
  - Financed with existing cash resources of EUR 1.95 billion and bridge loan financing from committed credit facilities of EUR 1.75 billion
  - Reported under ‘Participations in associated companies and joint ventures’
- Uniper consolidated as an associated company as of 30 June 2018
  - EPS contribution through Fortum’s share of Uniper’s profit
  - Uniper dividend to strengthen Fortum’s cash flow
  - Share of profits reported with one quarter time-lag as Uniper publishes interim results after Fortum
  - Consequently, the share of Uniper’s Q3 profits will be reported in Fortum’s Q4 2018 interim report for the first time
Q2 2018: comparable operating profit positively impacted by higher achieved price and lower Swedish taxes

- 3.1 EUR/MWh higher achieved price
- 0.2 TWh higher hydro volumes
- Lower volumes due to warm weather
- Seasonal pricing in Finland
- Weaker result in recycling and waste business
- Consolidation of Hafslund
- Lower sales margin
- Amended service agreements for the divested electricity distribution companies
- FX- effect MEUR -6
- Negative impact of bad-debt provisions
- Unplanned outage at Tyumen 1
- Lower electricity margin
- Higher CSA payments

- Lower taxes
- Lower volumes due to warm weather
- Seasonal pricing in Finland
- Weaker result in recycling and waste business
- Consolidation of Hafslund
- Lower sales margin
- Amended service agreements for the divested electricity distribution companies
- FX- effect MEUR -6
- Negative impact of bad-debt provisions
- Unplanned outage at Tyumen 1
- Lower electricity margin
- Higher CSA payments
H1 2018: comparable operating profit positively impacted by higher hydro volumes and higher achieved price

- 1.3 TWh higher hydro volumes
- 2.1 EUR/MWh higher achieved price
- Lower taxes
- Consolidation of Fortum Oslo Varme
- Higher fuel prices in Q1
- Lower heat and power sales in Q2
- Weaker result in recycling and waste
- Consolidation of Hafslund
- Lower sales margin
- Amended service agreements for the divested electricity distribution companies
- FX-effect MEUR -18
- Lower electricity margin
- Higher CSA payments
- Negative impact of bad-debt provisions
- Lower electricity margins
- H1 2017 was positively affected by improved bad-debt collections

EUR million

H1 2018: 558
H1 2017: 421
-9
11
-44
2

-158
9
11
-44
2
## Cash flow statement

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Q2 2018</th>
<th>Q2 2017</th>
<th>Q1-Q2 2018</th>
<th>Q1-Q2 2017</th>
<th>2017</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable EBITDA</td>
<td>282</td>
<td>219</td>
<td>820</td>
<td>642</td>
<td>1,275</td>
<td>1,453</td>
</tr>
<tr>
<td>Realised FX gains/losses</td>
<td>91</td>
<td>-6</td>
<td>133</td>
<td>-63</td>
<td>-83</td>
<td>113</td>
</tr>
<tr>
<td>Paid net financial costs, income taxes and other</td>
<td>-39</td>
<td>-34</td>
<td>-146</td>
<td>-130</td>
<td>-281</td>
<td>-297</td>
</tr>
<tr>
<td>Change in working capital</td>
<td>27</td>
<td>54</td>
<td>-174</td>
<td>65</td>
<td>81</td>
<td>-158</td>
</tr>
<tr>
<td>of which change of settlements for futures</td>
<td>-199</td>
<td>75</td>
<td>-290</td>
<td>94</td>
<td>141</td>
<td>-243</td>
</tr>
<tr>
<td>Net cash from operating activities</td>
<td>361</td>
<td>232</td>
<td>634</td>
<td>514</td>
<td>993</td>
<td>1,113</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>-118</td>
<td>-128</td>
<td>-252</td>
<td>-308</td>
<td>-657</td>
<td>-601</td>
</tr>
<tr>
<td>Acquisitions of shares</td>
<td>-3,732</td>
<td>-25</td>
<td>-3,750</td>
<td>-51</td>
<td>-972</td>
<td>-4,671</td>
</tr>
<tr>
<td>Divestments of shares</td>
<td>170</td>
<td>0</td>
<td>170</td>
<td>0</td>
<td>741</td>
<td>911</td>
</tr>
<tr>
<td>Change in cash collaterals and restricted cash</td>
<td>-113</td>
<td>-110</td>
<td>-176</td>
<td>72</td>
<td>-3</td>
<td>-251</td>
</tr>
<tr>
<td>Other investing activities</td>
<td>47</td>
<td>65</td>
<td>49</td>
<td>87</td>
<td>85</td>
<td>47</td>
</tr>
<tr>
<td>Cash flow from investing activities</td>
<td>-3,747</td>
<td>-198</td>
<td>-3,959</td>
<td>-199</td>
<td>-807</td>
<td>-4,567</td>
</tr>
<tr>
<td>Cash flow before financing activities</td>
<td>-3,386</td>
<td>34</td>
<td>-3,326</td>
<td>315</td>
<td>187</td>
<td>-3,454</td>
</tr>
<tr>
<td>Paid dividends</td>
<td>-977</td>
<td>-977</td>
<td>-977</td>
<td>-977</td>
<td>-977</td>
<td>-977</td>
</tr>
</tbody>
</table>

- Increased net cash from operating activities due to improved EBITDA
- Positive impact of EUR 133 million due to realised FX compared to H1 2017
- More cash tied to the daily cash settled futures and cash collaterals for forwards hedging power price
- Acquisition of Uniper shares EUR 3.7 billion financed with existing cash resources of EUR 1.95 billion and bridge loan financing of EUR 1.75 billion
- Payment of dividend EUR 977 million
**Higher debt and lower cash due to payment of the Uniper investment in Q2 2018**

<table>
<thead>
<tr>
<th></th>
<th>LTM</th>
<th>2017</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable EBITDA, MEUR</td>
<td>1,453</td>
<td>1,275</td>
<td></td>
</tr>
<tr>
<td>Interest-bearing net debt, MEUR</td>
<td>5,271*</td>
<td>988</td>
<td></td>
</tr>
<tr>
<td>Comparable net debt/EBITDA ratio</td>
<td>3.6x</td>
<td>0.8x</td>
<td>Around 2.5x</td>
</tr>
<tr>
<td>Return on capital employed (ROCE), %</td>
<td>8.8**</td>
<td>7.1**</td>
<td>At least 10%</td>
</tr>
</tbody>
</table>

*) As per 30.6.2018  
**) Includes capital gains of Hafslund transactions

Higher debt and lower cash due to payment of the Uniper investment in Q2 2018  
Liquid funds EUR 0.8 billion  
Committed credit lines EUR 1.8 billion
Divestment of non-core assets and capital recycling improves cash flow to maintain financial flexibility

1. Investment scrutiny

- 250 MW investment in Indian solar, enabled by capital recycling in India
- Investments in Russian renewables without increasing the RUB 15 billion commitment

2. Business focus

- Divestment of Hafslund Produksjon (EUR 160 million, capital gain EUR 77 million)
- Divestment of 54% stake of Indian solar (EUR 150 million*, result impact EUR 20 million)

   *including the effect of deconsolidated debt

3. Efficiency improvements

- Continued cost consciousness with efficiency improvements and fixed cost scrutiny
Outlook

Hedging

For remainder of 2018: ~75% hedged at EUR 29 per MWh (60% at EUR 27)

For 2019: ~60% hedged at EUR 28 per MWh (45% at EUR 26)

2018 Estimated annual capital expenditure, including maintenance and excluding acquisitions EUR 600-700 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 2018 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

Demand growth

Electricity demand in the Nordics is expected to grow by ~0.5% on average
Maturity profile as of 30 June 2018

Total interest-bearing debt of EUR 6,041 million

- Average interest 2.5% (2017: 3.6%)
- Portfolio mainly in EUR and SEK with average interest cost 1.8% (2017: 2.4%)
- EUR 746 million (2017: 773) swapped to RUB, average interest cost including cost for hedging 8.0% (2017: 9.5%)

*) In addition Fortum has received EUR 98 million based on Credit Support Annex agreements with several counterparties. This amount has been booked as a short term liability.
For more information, please visit www.fortum.com/investors

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Next events:
Q3/2018 results on 24 October 2018  
CMD on 13 November 2018

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