Agenda

• Market & demand
• Russian power sector reform
• Fortum assets in Russia
• OAO Fortum investment programme
• Efficiency improvement programme
Russia, the fastest growing of Fortum’s market areas

Economic outlook brightening

- Russian economy has recovered briskly due to appreciating commodity prices – notably oil and metals
- Growth driven by commodity exports and inventory cycle turning positive in Q2/2010 supporting manufacturing
- GDP expected to grow by 4-5% in 2010 and with slowly appreciating oil price expectations a 4% trend growth assumption is reasonable for the years to come
- Rule of thumb: electricity consumption and GDP correlate by ~1/3
- Russian electricity consumption expected to increase by 30-50% to 2020

**Russian GDP expectations**

**Electricity consumption expectations**

Source: IMF (April’10), MinEcon (June’10), Consencus Economics (August’10)
Russian gas prices follow regulated tariff decisions

- 95% of fuel used at Fortum power plants in Russia is gas
- Gas price and supply-demand balance are key drivers for the wholesale price of electricity
- The gas price is expected to increase 15% per annum during 2011-2013
- The “net-back” price targeted by 2014 is being discussed
Day ahead wholesale market prices heading up

- Demand back to pre-crisis levels in the overall Russia
- Regulated gas price was increased 24% in 2010 compared to the average in 2009
  - Expected to be unchanged for the rest of 2010
- H1/2010 spark spreads (Urals) above 2009 levels

Source: ATS. Average Rub/Euro Exchange rate in 2008 = 36.45, in 2009 = 44.20, in 2010 = 39.70
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### A Nordic/Western analogy

<table>
<thead>
<tr>
<th>Unbundling of businesses by type of activity</th>
<th>Key steps in the reform</th>
</tr>
</thead>
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<tr>
<td><strong>Competitive businesses</strong></td>
<td>&quot;Power industry law&quot; approved</td>
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<td><strong>Regulated monopolies</strong></td>
<td>Restructuring of regional energos (Power and Heat companies)</td>
</tr>
<tr>
<td>• Generation</td>
<td>• Formation of new companies</td>
</tr>
<tr>
<td>• Sales</td>
<td>• Establishment of Russian power exchange (ATS)</td>
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<tr>
<td>• Transmission</td>
<td>• Launch of the free-trade sector of the wholesale market</td>
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<tr>
<td>• Distribution</td>
<td>• Launch of balancing power market</td>
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</tbody>
</table>

### Market liberalisation in competitive businesses

- Pricing model reform – from tariff regulation to competitive pricing

- Capacity market (transitional model)
- Capacity market (target model)
- **Financial derivatives market launched 21st of June 2010**
- Competitive market of ancillary services
- Gradual liberalisation of the retail market
Power market liberalisation – two markets

Capacity market

Capacity price
- Capacity auctions (next in Oct 2010)
- A higher, fixed capacity price for new capacity (CSA* agreements, >2007)
- Likely a lower capacity price for old capacity

Day ahead (spot) wholesale market

Day ahead spot market price
- Day ahead spot market auction
- 100% liberalised from 1 Jan 2011
- Supply-demand balance and fuel price the key drivers

- Capacity market is the intended mechanism for earning a (reasonable) return on invested capital
- Capacity prices are a big part of a power generator’s income
  – a typical CHP plant ~35%, CCGT ~55%, of revenues
- In the day ahead (spot) market, the price mechanism is a day ahead hourly auction, variable costs (fuel) a key driver
- Financial market started in June, 2010

* Capacity supply agreement
Day ahead wholesale power market 100% liberalised in four months

- Further liberalisation of wholesale power market
  - 100% by 1 January 2011
- The sales to households will remain regulated still after 2011
  - Below 10% of the overall volume
Capacity prices for new capacity 3-4 times the old capacity prices

- Long term rules and price parameters approved
- Both “old” and “new” capacity can participate in capacity auctions
- Old capacity (pre 2007) and new capacity priced differently
  - Old capacity is priced by capacity auctions; first auction for 2011 in October 2010
  - New capacity under capacity supply agreements to receive guaranteed payments
- The payments for new capacity are based on approved pricing formulas
  - Vary according to plant size, fuel, geographic location, capital costs, …
  - Allow the recovery of capital costs and include return on invested capital; the targeted ROCE level 12-14% (with current government benchmark bond yields)
  - After three years (2014), the regulator will review the earnings from the electricity-only market and can revise the payments, same goes after 6 years.

- “Old” capacity prices will depend on auction outcomes, but likely remain relatively low
- “New” capacity prices (under agreements) to be 3-4 times the “old” capacity prices
Capacity payments currently ~1/3 of total revenues for Fortum Russia

- Last twelve months revenues were almost equally split between three components
  - Liberalised power (spot) price
  - Regulated power price
  - Regulated capacity payments
- Regulated power sales not relevant post 2010
- Higher share of capacity payments from new capacity
  - First units available in 2011

*Based on realised, disclosed power revenues and volumes; power and capacity prices
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Fortum – a major player in Russia

OAO Fortum (former TGC-10)
- Operates in the heart of Russia’s oil and gas producing region, fleet mainly gas fired CHP capacity
- 16 TWh power generation, 26 TWh heat production in 2009; more than Fortum’s Nordic heat sales
- Investment programme to add 85%, almost 2,400 MW to power generation capacity

TGC-1
- Slightly over 25% ownership of territorial generating company TGC-1 operating in north-west Russia, adjacent to Finnish boarder
- ~6,350 MW electricity production capacity (46% hydro), ~27 TWh/a electricity, ~31 TWh/a heat
OAO Fortum assets in brief

- Fortum holding now is about 95%.
- 8 existing power plants, district heating in 3 cities
- Power generation capacity now 2,800 MW, to increase up to 5,100 MW
- Heat capacity 15,800 MW, main heat supplier in the area
- Sales about EUR 630 million in 2009
- EBITDA improved from EUR -25 million in 2008* to EUR 92 million in the last twelve months
- Personnel about 4,500

* 2008 consolidated from 1 April 2008; Q1/08 not included
Fortum in Western Siberia region

- Tobolsk CHP – 452 MWₑ
- Tyumen CHP-1 – 755 MWₑ
- Tyumen CHP-2 – 472 MWₑ
- Tyumen and Surgut district heating: Connected heat load – 6,490 MWₘ
Fortum in Urals (Chelyabinsk) region

- Chelyabinsk GRES – 82 MWₑ
- Chelyabinsk CHP 1 – 149 MWₑ
- Chelyabinsk CHP 2 – 320 MWₑ
- Chelyabinsk CHP 3 – 360 MWₑ

Argayash CHP – 195 MWₑ

Chelyabinsk district heating:
Connected heat load – 5,567 MWₜ
TGC-1 in brief

- Fortum's holding is now slightly over 25%
- TGC-1 generates electricity and supplies heat in St. Petersburg and north-west Russia
- Total electricity capacity 6,347 MW of which 46% is hydro power
- High share of hydro power makes TGC-1 unique among Russian territorial generating companies
- Production in 2009 26.7 TWh electricity and 31.3 TWh heat
- Sales\(^1\) about EUR 960 million (in 2009)
- EBITDA\(^1\) improved from EUR 60 million in 2008 to EUR180 million in 2009
- Personnel about 9,060

\(^1\) Based on IFRS figures; €/RUB = 43.154 (31.12.2009)
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OAO Fortum investment programme

• Total amount of investments EUR 2.5 billion
  – Of which EUR 1.7 billion still to be invested
• Increasing capacity by almost 85%
  – More than any other Russian generating company

*Construction of power unit of 418 MW at Tyumen CHP-2 has been substituted by construction of two CCGT 225 MW each at Tyumen CHP-1

*Construction of power unit of 418 MW at Tyumen CHP-2 has been substituted by construction of two CCGT 225 MW each at Tyumen CHP-1

1,254 MW
Greenfield
3 units

200 MW
Nyagan GRES

231 MW
Tobolsk CHP

1,254 MW
Tyumen CHP-1

1,254 MW
Tobolsk

1,254 MW
Tyumen

1,254 MW
Chelyabinsk

2,361 MW
+85%

2,785
2008

5,146
2014

226 MW
2 x 225 MW

*Construction of power unit of 418 MW at Tyumen CHP-2 has been substituted by construction of two CCGT 225 MW each at Tyumen CHP-1
85% increase in power generation capacity by the end of 2014 through the investment programme

<table>
<thead>
<tr>
<th>Plant</th>
<th>Supply date</th>
<th>Fuel type</th>
<th>Existing</th>
<th>Planned</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Tyumen CHP-2</td>
<td></td>
<td>Gas</td>
<td>755</td>
<td></td>
<td>755</td>
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<tr>
<td>Tyumen CHP-1</td>
<td>Q1/2011; 2014</td>
<td>Gas</td>
<td>472</td>
<td><strong>231</strong>; <strong>2x225</strong></td>
<td>1153</td>
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<tr>
<td>Tobolsk CHP</td>
<td>Q2/2011</td>
<td>Gas</td>
<td></td>
<td><strong>200</strong></td>
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<tr>
<td>Chelyabinsk CHP-3</td>
<td>Q2/2011</td>
<td>Gas</td>
<td>452</td>
<td><strong>226</strong></td>
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<td>Chelyabinsk CHP-2</td>
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<td>Gas, coal</td>
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<td>Argayash CHP</td>
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<td>Chelyabinsk CHP-1</td>
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<td>Gas, coal</td>
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<tr>
<td>Chelyabinsk GRES</td>
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<td>Gas</td>
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<tr>
<td>Nyagan GRES</td>
<td>2012, 2012, 2013</td>
<td>Gas</td>
<td>82</td>
<td><strong>3x418</strong></td>
<td>1,254</td>
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<tr>
<td>Boilers</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>2,785</strong></td>
<td><strong>2,361</strong></td>
<td><strong>5,146</strong></td>
</tr>
</tbody>
</table>
Availability of new capacity a key driver for earnings

- Nyagan 1, 418 MW, 2012
- Nyagan 3, 418 MW, 2013
- Nyagan 2, 418 MW, 2012
- Tyumen CHP-1, 2x225 MW, 2014
- Chelyabinsk CHP-3, 226 MW, Q2/2011
- Tobolsk CHP, 200 MW, Q2/2011
- Tyumen CHP-1, 231 MW, Q1/2011

16 Sep 2010

2014
Nyagan green field (3 units x 418 MW)

- The biggest green field project in the modern Russian power and heat industry (with the exception of nuclear)
- State-of-the-art technologies with high production and environmental efficiency

- Work on equipment manufacture ongoing
- Start-up boiler house and main building being erected
- Scheduled to be commissioned in 2012/2013
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Efficiency improvement programme in Russia: ~100 M€ EBITDA improvement in 2011

- Purchasing
- Portfolio Management and Trading (PMT)
- Heat regulation
- Heat - technical and business improvements
- Generation - technical improvements
- Others
Key factors behind the profitability improvement

Efficiency improvement programme
- Increasing heat production profitability
- Fuel efficiency improvement
- Savings in purchasing process

New capacity commissioning
- Additional capacity 2,360 MW
- Capacity is sold at CSA* contracts with guaranteed higher price

* Capacity Supply Agreement
Determined steps to gain efficiencies

- Fortum has taken deliberate steps to improve efficiency
- The reduction in full time employees (FTEs) since the end of 2008 is
  - $\approx 1,100$ FTEs in OAO Fortum (power and heat generation)
  - $\approx 1,400$ FTEs in the heat operations in Russia; 750 of which due to termination of O&M agreement with Tyumen in July 2009
  - $\approx 200$ FTEs in the Service operations in Russia
Key messages

• Electricity demand in Russia is back on pre-crisis level
• Russian power sector reform has progressed on schedule
  – Wholesale power market to be fully liberal from 1 Jan 2011
• New generation capacity will receive 3-4 times the old capacity prices
• Fortum’s power generation capacity will increase by 85% through the ongoing investment programme
  – Progressing with accelerated schedule
• Earnings improvement targeted also through the efficiency improvement programme