Our strategy in challenging markets

Øystein Løseth
President and CEO

Solna/Stockholm, 3 December 2012
Today’s focus

• Vattenfall at a glance
• Market trends & outlook
• Political and regulatory outlook
• Alignment of strategy
Vattenfall at a glance

Key data LTM Q3 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>169,829 MSEK</td>
</tr>
<tr>
<td>Operating profit</td>
<td>31,155 MSEK</td>
</tr>
<tr>
<td>Underlying operating profit</td>
<td>28,353 MSEK</td>
</tr>
<tr>
<td>Electricity generation</td>
<td>172.7 TWh</td>
</tr>
<tr>
<td>Sales of electricity</td>
<td>191.2 TWh</td>
</tr>
<tr>
<td>Sales of heat</td>
<td>33.5 TWh</td>
</tr>
<tr>
<td>Sales of gas</td>
<td>52.4 TWh</td>
</tr>
<tr>
<td>Number of employees (FTE)</td>
<td>33,071</td>
</tr>
<tr>
<td>Number of customers (2011)*</td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>6.4 million</td>
</tr>
<tr>
<td>Gas</td>
<td>1.9 million</td>
</tr>
<tr>
<td>Electricity network</td>
<td>4.2 million</td>
</tr>
</tbody>
</table>

*2011 numbers - excluding divested operations in Belgium (electricity and gas operations), Poland (electricity, network and heat operations) and Finland (network and heat operations)

Ratings:
- Moody’s: A2, negative outlook
- S&P: A-, stable outlook
## Vattenfall’s market positions 2011

<table>
<thead>
<tr>
<th>Service</th>
<th>Sweden</th>
<th>Germany</th>
<th>Netherlands</th>
<th>Denmark</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity generation</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>&gt;10</td>
</tr>
<tr>
<td>Electricity distribution</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Electricity sales</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>District heating</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Gas sales</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Market trends and outlook

• Todays market situation and outlook is bleak driven by low CO₂ prices, significant additions of Renewables and general oversupply

• Towards 2020 the Continental market will show scarcity signals (decommissioning of nuclear power plants in Germany and old fossil fired power plants)

• Recovery of EU ETS will further help to increase electricity price levels

• The Nordic market will benefit from higher price levels on the Continent and export potential

• Having a flexible asset fleet will be important for plants on the Continent
Previous supply concerns have changed due to strong renewables growth and impact of financial crisis ...

View in 2008...

- Shortage of 30-50 GW supply in Germany by 2020
- Similar perspective in the Netherlands
- Finland invests in nuclear to reduce reliance on Russia

Rapid growth in renewables

- EU-6* production (TWh)
  - Offshore Wind
  - Onshore Wind
  - Biomass
  - Solar

Impact of financial crisis

- Electricity demand
- CO₂ prices

*EU-6: Germany, France, Belgium, Netherlands, Poland and Great Britain
... with challenging price development as a result

Challenging electricity price development

Clean dark spreads essentially flat, clean spark spread steep decline

What could change the situation?

<table>
<thead>
<tr>
<th>Electricity price</th>
<th>Demand</th>
<th>CO₂ price</th>
<th>Capacity</th>
<th>Gas price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in the economy</td>
<td>Political intervention to push up CO₂ prices</td>
<td>Scarcity signals for post-2020 on the continent. Not likely in the Nordics</td>
<td>Gas price increase (not likely as gas price already high)</td>
<td></td>
</tr>
<tr>
<td>Recession</td>
<td>Collapse of EU Emissions Trading Scheme</td>
<td>Stronger renewables growth (not likely)</td>
<td>Gas price decrease</td>
<td></td>
</tr>
</tbody>
</table>
Long-term market outlook 1(2)

• Contradicting trends:
  - Decarbonisation of the energy sector but mistrust in the EU ETS to deliver
  - Support for renewables vs. increased awareness of the costs
  - National reregulation efforts vs. European ambitions for competitive market mechanisms and coordinated policies

• 20/20/20 targets continue to drive market developments:
  - 20% renewables target push low marginal cost generation into the market
  - 20% CO₂ reduction probably possible without increased CO₂ prices
  - ETS is affected by energy efficiency policies
Going forward we see:

• Renewables share of generation continues growing (photovoltaic in Germany +7.6GW in 2011) and leading to higher end customer prices and reduced running hours of conventional power plants.

• Renewables increasingly facing cost concerns, situation further stressed by generally weak economic environment.

• Need for flexible, or backup, capacity will increase, profitability continued challenge.

• More pessimistic outlook for nuclear power generation with also Switzerland and Belgium deciding on a decommissioning path, delayed permitting process in the Netherlands and questions raised in France.

• Nordic prices will be affected via price development in Continental Europe and the expansion of interconnectors to UK and the Continent.
Electricity demand development

Drivers for demand development:
- Population development
- Industry structure and development
- Electrification
- Energy efficiency
Energy and climate policies are under transformation/development in Europe

• Ongoing discussions within the EU on a possible backloading of allowances in the EU-ETS system to keep up the CO2-prices. Possible decision in February 2013.

• In all markets, public discussions regarding pricing of energy. Measures taken to strengthen the consumers rights.

• A number of initiatives from the Commission is expected until summer 2013. Paper on RES beyond 2020 recently presented.

• An Electricity Market Reform (ERM) is under way in the UK.

• Steps towards a competitive market to open up hydro sector in France.
### Political and regulatory issues in Vattenfall’s main markets

<table>
<thead>
<tr>
<th>Sweden/Nordic</th>
<th>Germany</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>- No major change in political environment/support for nuclear operations post Fukushima and the German decision to phase out nuclear.</td>
<td>- “Energiewende” under construction. Discussion about energy mix/support schemes after nuclear phase out: biomass, CHP, pumped storage.</td>
<td>- New Government after elections in September. Highlights in the coalition agreement are:</td>
</tr>
<tr>
<td></td>
<td>- Implementation of the EU water directive may lead to high initial costs and potentially lower hydro power production.</td>
<td></td>
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<tr>
<td></td>
<td>- The building of new transmission lines within Nordic and to continental Europe.</td>
<td></td>
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<tr>
<td></td>
<td>- Measures to strengthen the consumers; hourly metering etc.</td>
<td>- Increased share of renewable energy from 14% to 16% by 2020.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- An energy-saving deal with energy companies and housing associations to speed up measures to make existing homes more sustainable.</td>
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<tr>
<td></td>
<td></td>
<td>- Launch initiatives in partnership with energy companies and the Dutch offshore industry to reduce cost of offshore wind power.</td>
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<tr>
<td></td>
<td></td>
<td>- Small-scale, renewable, decentralised generation of (solar) power will be given a tax incentive</td>
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<tr>
<td></td>
<td></td>
<td>- Coal tax, introduced in the Spring Agreement, is kept as announced.</td>
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</tbody>
</table>
Challenging environment requires Vattenfall to align our strategy

New strategic direction launched in 2010

- Focus on Nordics, Germany and the Netherlands
- Remain an integrated utility active in electricity, heat and gas
- Create financial flexibility
- Improve operating performance
- Focus growth in low CO₂ emitting generation

Four focus areas in the aligned strategy

1. Strengthen focus on Operational Excellence
2. Ensure continued strong and profitable Nordic position
3. Define options to meet 65 Mtonnes CO₂ target by 2020
4. Selected growth in renewables
1. Strengthen focus on operational excellence

Operational excellence: “Optimising resources to achieve the greatest results”

Cost savings target of SEK 6 bn will be reached by 2012 (one year earlier than planned). Additional SEK 3 bn run rate at the end of 2013.

Current state
- Various interpretations
- Initiatives led in business
- Best practice in silos
- Reach top-down target
- “We do it because we must”

Future state
- One common definition
- Initiatives led in business
- Platform for sharing best practice
- Continuous improvement
- “We do it because we can”

![Graph showing cost savings targets and actual decreases by Q3 2013 and additional target 2013.](image)
2. Ensure continued strong and profitable Nordic position

There is a risk of 25-70 TWh oversupply in the Nordic market by 2030, relative to a total market of ~400 TWh.

<table>
<thead>
<tr>
<th></th>
<th>Over-supply 2010</th>
<th>Demand increase</th>
<th>Supply increase</th>
<th>Planned interconnectivity</th>
<th>Over-supply 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind +46</td>
<td>281</td>
<td>18</td>
<td>59</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Nuclear +20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydro +10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHPs +3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condense -20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) Maximum supply in a normal weather year (409 TWh), excluding reserve capacity, demand (381 TWh)

Vattenfall will protect its position, using three possible levers:

- Encourage the development of interconnectors
- Consolidate the existing renewables growth
- Investigate implications on the nuclear portfolio
3. Vattenfall must reduce CO$_2$ exposure to keep pace with the utility industry

Specific CO$_2$ emissions from European* electricity and heat generation, gCO$_2$/kWh (2010)

- **RWE**: 730 gCO$_2$/kWh
- **Dong**: 520 gCO$_2$/kWh
- **Vattenfall**: 450 gCO$_2$/kWh
- **E.ON**: 390 gCO$_2$/kWh
- **Enel**: 390 gCO$_2$/kWh
- **Iberdrola**: 260 gCO$_2$/kWh
- **EdF**: 110 gCO$_2$/kWh
- **Fortum**: 110 gCO$_2$/kWh
- **Statkraft**: 40 gCO$_2$/kWh

**EU 27**:
- 2010: 350 gCO$_2$/kWh
- 2020: 260 gCO$_2$/kWh

**Vattenfall**:
- 2010: 450 gCO$_2$/kWh
- 2020: 330 gCO$_2$/kWh

**EU average**: 350 gCO$_2$/kWh

*European: EU 27 + Norway & Switzerland

Source: The 11-list, Carbon Market Data

3. In light of the changing market environment Vattenfall will redefine options to meet the 65 Mtonnes CO₂ target by 2020.

Total absolute CO₂ emissions in Vattenfall’s portfolio
Mn tonnes, specific emission within brackets

<table>
<thead>
<tr>
<th>2010</th>
<th>New production plan</th>
<th>Under construction and planned investments</th>
<th>Divestments</th>
<th>Abatement (e.g. biomass co-firing)</th>
<th>Fuel switching and other portfolio changes</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 (450 gCO2/kWh)</td>
<td>8</td>
<td>15</td>
<td>11</td>
<td>9</td>
<td>15</td>
<td>65 (330 gCO2/kWh)</td>
</tr>
</tbody>
</table>

Pro-rata ownership share
Electricity and heat
4. Selected growth in renewables

Vattenfall is examining the possibility to grow in equity partnership within onshore and offshore wind to realize industrialization

- Capex for growth in onshore will be lower than expected
  - Equity partnerships will be explored to realize scale benefits

- Focus on equity partnerships of up to 49% and maintaining Vattenfall control over projects
New sustainability targets

“Vattenfall should be among the leaders in developing environmentally sustainable energy production”.

• **CO₂ emissions**
  - Reduce CO₂ exposure to 65 Mtonne to 2020, corresponding to 330 g CO₂/KWh

• **Renewables**
  - Vattenfall’s growth rate of new renewables capacity should be above that of our markets in Northern and Central Europe (excluding hydro power)

• **Energy efficiency**
  - Identifying activities in scope – set activity based target 2013
  - Set quantitative targets and measure actual savings from internal activities when a measurement system is in place (2014)
  - Set quantitative “external” targets as relevant/necessary when national Energy Efficiency Directive targets have been defined
Vattenfall will deliver

Sustainable heat and electricity production
- Be one of the leaders in transforming the production portfolio to low emitting technologies
  - Meet 65m tonne target
  - Make production capacity flexible
  - Focus investments on renewables

Sustainable energy consumption
- Deliver smart energy solutions. Focus on resource efficiency
  - Meet need for optimized consumption
  - Increase focus on energy efficiency (internal & external)

Sustainable economic performance
- Meet our financial targets
  - "Excellence in everything we do"
  - Cost leadership
  - Operational excellence programme
  - Excellent project execution
Vattenfall’s six energy sources

**WIND**
Vattenfall will continue to expand offshore wind in the North Sea countries and onshore in prioritised markets.

**COAL**
Vattenfall is investing to enhance efficiency and reduce CO₂ emissions in existing plants, but will not build any new plants without commercially proven CCS.

**BIOMASS**
Vattenfall will increase co-firing of biomass in existing coal-fired plants to reduce CO₂ emissions.

**GAS**
Vattenfall will maintain its current portfolio and will continuously monitor the potential for growth.

**NUCLEAR**
Vattenfall aims to maintain its current nuclear positions in Sweden, and will keep its options open for future growth.

**HYDRO**
Vattenfall is exploring options to build small-scale hydro power plants and to acquire larger hydro power plants in central and western Europe.
All energy sources have a role to play

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAL</td>
<td>Deliver large volumes of heat and electricity, but produces high levels of CO₂ emissions and the mining process impacts the local environment.</td>
</tr>
<tr>
<td>NUCLEAR</td>
<td>Low-emitting, competitive and deliver large volumes of electricity, but has environmental challenges connected to mining and radioactive waste.</td>
</tr>
<tr>
<td>HYDRO</td>
<td>Renewable, low-emitting and competitive energy source that can be used as both base load and balancing power. It has effects on the local environment.</td>
</tr>
<tr>
<td>GAS</td>
<td>Growing energy source within Europe that is economically attractive and provides flexibility and security of supply. It also has lower specific CO₂ emissions than other fossil fuels.</td>
</tr>
<tr>
<td>BIOMASS</td>
<td>Renewable energy source that can be used to produce both electricity and heat, but is dependent on subsidies for economic competitiveness. The market for sourcing biomass is still undeveloped.</td>
</tr>
<tr>
<td>WIND</td>
<td>Renewable and low-emitting energy source which adds intermittent power to the energy system. It is dependent on subsidies for competitiveness.</td>
</tr>
</tbody>
</table>