Today’s focus

- Organisation and key figures
- Installed capacity
- Focus areas
- Main activities and achievements
- Future challenges
Organisation and key figures

Key figures

- Installed capacity (2011): 34,600 MW_{el}
- Electricity Production: 149 TWh_{el}
- FTE: ~ 15,200

Production

Lignite
- Operations in Germany
- 5 Lignite mines
- 12 Lignite units
- ~ 7,660 FTE

Nuclear
- Operations in Sweden and Germany
- 2 of 3 units decom. in Germany
- 7 units in Sweden
- ~ 4,220 FTE

Hydro
- Operations in Sweden, Finland and Germany
- More than 100 units
- ~ 640 FTE

Thermal (Fossil & CHP)
- Operations in Germany, the Netherlands and Denmark
- almost 50 units
- mainly Hard coal and Gas based
- ~ 2,640 FTE
Installed capacity (GW)

Total installed capacity:
- Hydro: 11.2 GW
- Lignite: 7.4 GW
- Nuclear: 7.1 GW
- Thermal: 8.9 GW

Nordic:
- Hydro: 8.4 GW
- Nuclear: 6.8 GW
- Thermal: 1.5 GW

Germany:
- Hydro: 2.8 GW
- Nuclear: 0.3 GW
- Lignite: 7.4 GW
- Thermal: 3.9 GW

Core markets:
Netherlands:
- Thermal: 3.5 GW
Focus areas

- Improve safety and commercial availability
- Optimise plant operations and maintenance to reduce costs
- Secure lignite mining reserves to fully utilize the remaining life time of existing capacities
- Prepare for the decommissioning of German nuclear plants
- Review the asset portfolio to identify and fix underperforming assets
- World class safety in nuclear
Our main activities and achievements so far

• Priority for Safety
  - Top-KPI “Lost Time Injury Frequency” (LTIF) closely monitored
  - LTIF is decreasing (H1 2011: 4.3), continued positive development

• Availability at 82% during H1 2011 (2010: 80%)
  - however nuclear plants and some thermal plants lower than expected

• Division-wide cost reduction and continuous improvement programmes have been initiated
  - Positive development of cost cutting efforts during H1 2011
  - Maintenance costs lower than plan
  - Organisational streamlining ongoing

• Asset portfolio review has been completed and low performing assets identified

• Benchmarking of operations is under way
## Future challenges

| Nuclear phase-out Germany | • No restart of Vattenfall’s nuclear plants Brunsbüttel and Krümmel  
• All German nuclear plants to be shut down at the latest by 2022 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear Availability Sweden</td>
<td>• Unsatisfactory due to a number of delayed outages in Q2</td>
</tr>
<tr>
<td>CCS* legislation Germany</td>
<td>• Vattenfall will not build any lignite or hard coal fired plants until CCS is commercially viable</td>
</tr>
</tbody>
</table>
| Start of full auction of CO₂ in 2013 | • Abatement of CO₂ by higher techn. efficiency and co-firing of biomass  
• Expected additional costs 2013 vs. 2012 due to full auctioning: ~EUR 750 million |
| Fees and taxes | • Continued discussion about increasing fees and taxes (e.g. property tax Sweden) |

* Carbon Capture and Storage