The generating heart of Vattenfall
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3 December 2012
Organisation and key figures

Key figures
FY 2012 (forecast)

- Installed capacity: $27,987\,\text{MW}_{\text{el}}$
- Electricity Production: $127\,\text{TWh}_{\text{el}}$
- Employees: $\sim 10,430\,(\text{FTE})$

Production

Lignite Mining & Generation
- Operations in Germany
- 5 Lignite mines
- 12 Lignite units
- $\sim 6,870\,(\text{FTE})$

Generation Wind
- Operations in Sweden, Denmark, Germany, the Netherlands and UK
- $\sim 90\,\text{sites}$
- $\sim 180\,\text{FTE}$

Hydro Power
- Operations in Sweden, Finland and Germany
- More than 100 units
- $\sim 610\,\text{FTE}$

Thermal Power & Heat
- Operations in Germany, the Netherlands and Denmark
- almost 50 units
- mainly Hard coal and Gas based
- $\sim 2,530\,\text{FTE}$
Installed capacity (GW)

Total installed capacity:
- Hydro: 11.4 GW
- Lignite: 7.0 GW
- Thermal: 8.2 GW
- Wind: 1.4 GW

Total: 28.0 GW

Nordic
- Hydro: 8.6 GW
- Thermal: 1.2 GW
- Wind: 0.6 GW

Germany
- Hydro: 2.8 GW
- Lignite: 7.0 GW
- Thermal: 3.8 GW
- Wind: 0.0 GW

UK
- Wind: 0.6 GW

Netherlands
- Thermal: 3.2 GW
- Wind: 0.2 GW

Core markets

[Map showing installed capacity across Europe with specific regions highlighted for Nordic and Germany]
Focus areas

• Improve safety and commercial availability

• Optimise plant operations and maintenance to reduce costs

• Integrate new power plants;
  - Diemen 34 (gas-fired power plant in the Netherlands; 435 MW electricity and 260 MW Heat)
  - Hemweg 9 (combined cycle gas-fired power plant in the Netherlands, 435 MW)
  - Boxberg R (lignite-fired power plant, 675 MW)

• Review the asset portfolio to identify and improve underperforming assets

• Secure lignite mining reserves to fully utilize the remaining life time of existing lignite fired generation capacities

• Increase cost competitiveness and further build up competence in wind generation
Our main activities and achievements so far

- Priority safety
  - Top-KPI “Lost Time Injury Frequency” (LTIF) closely monitored
  - LTIF* is decreasing, continued positive development from 3.1 in 2011 to 2.0 in Oct 2012
- Availability on a continuously high level (FY 2012 forecast: 88.5%, 2011: 88.5%)
  - Lignite and Hydro performing well, however some thermal plants lower than expected
- Full commercial operation of Boxberg unit R (675 MW) in October, 2012
- Continued focus on cost-reduction. Programme for continuous improvement ongoing
  - Cost cutting efforts during 2012 lead to 700 MSEK savings; targets fulfilled
  - Maintenance investments (excl. higher expenses for planned lignite outages) below 2011 level
- Asset portfolio continuously reviewed with changing market outlook
  - Low performing assets identified. Actions initiated and partly finalized

*old BD structure
## Future challenges

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
</table>
| Market development                           | • The market outlook changes the preconditions for our asset portfolio; change in merit order and increased need for flexibility  
• Active management of asset portfolio - Thermal and Hydro in particular |
| Integration of new assets                    | • Successful integration of power plants in Lignite, Thermal and Wind    |
| Mining permissions                           | • Two permitting processes to secure additional lignite reserves are running in parallel |
| Regulatory management                        | • Managing regulatory issues such as the implementation of the EU’s Water Framework Directive increasingly important  
• Continued discussion about increasing fees and taxes (e.g. property tax Sweden) |
| Start of full auctioning of CO₂ in 2013      | • Abatement of CO₂ by higher plant efficiency and co-firing of biomass  
• Estimated additional costs 2013 vs. 2012 due to full auctioning: SEK 4-5bn (= total Vattenfall) |