The Electricity Year 2013

Diagram from the publication
Trading on the spot and forward markets

Source: Nord Pool Spot
Electricity usage in the Nordic region since 1996, TWh

Source: Nord Pool Spot
Electricity spot prices on Nord Pool Spot and EEX (German electricity price)

Sources: Nord Pool Spot, EEX
Electricity spot price, forward price and price of emission allowances

Source: Nord Pool Spot
Price of emission allowances on NASDAQ OMX commodities

Source: Nord Pool Spot
Price of emission allowances and price differences between the Nordic region and Germany

Sources: Nord Pool Spot, EEX
Hourly area prices in Sweden

Source: Nord Pool Spot
<table>
<thead>
<tr>
<th></th>
<th>Luleå SE1</th>
<th>Sundsvall SE2</th>
<th>Stockholm SE3</th>
<th>Malmö SE4</th>
<th>Sweden SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydropower</td>
<td>5,177</td>
<td>8,033</td>
<td>2,593</td>
<td>347</td>
<td>16,150</td>
</tr>
<tr>
<td>Nuclear power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9,531</td>
</tr>
<tr>
<td>Wind power</td>
<td>387</td>
<td>1,047</td>
<td>1,620</td>
<td>1,416</td>
<td>4,470</td>
</tr>
<tr>
<td>Other thermal power</td>
<td>282</td>
<td>586</td>
<td>4,314</td>
<td>2,891</td>
<td>8,073</td>
</tr>
<tr>
<td>CHP, district heating system</td>
<td>160</td>
<td>270</td>
<td>2,227</td>
<td>974</td>
<td>3,631</td>
</tr>
<tr>
<td>CHP, industrial</td>
<td>122</td>
<td>316</td>
<td>602</td>
<td>335</td>
<td>1,375</td>
</tr>
<tr>
<td>Condensing power</td>
<td></td>
<td></td>
<td>493</td>
<td>1,005</td>
<td>1,498</td>
</tr>
<tr>
<td>Gas turbines</td>
<td></td>
<td></td>
<td>992</td>
<td>577</td>
<td>1,569</td>
</tr>
<tr>
<td>Solar power</td>
<td>n.d</td>
<td>n.d</td>
<td>n.d</td>
<td>n.d</td>
<td>43</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>Entire country</strong></td>
<td><strong>5,847</strong></td>
<td><strong>9,667</strong></td>
<td><strong>18,059</strong></td>
<td><strong>4,656</strong></td>
<td><strong>38,273</strong></td>
</tr>
</tbody>
</table>

n.d. = no data available

Source: Swedenergy
Number of supplier switches per year

Source: Statistics Sweden
Customer mobility, January 2001–2014

Source: Statistics Sweden
Breakdown of total electricity price for a single-family home with electrical heating and a variable rate contract, current prices, in January of each year

Sources: Swedish Energy Agency, Statistics Sweden
Total energy supply in Sweden 1973–2013

Source: Statistics Sweden

Source: Statistics Sweden

Source: Statistics Sweden
Breakdown of electricity usage by sector 1970–2013

Source: Statistics Sweden

Source: Statistics Sweden
Household electricity usage by application
(results for 2007)

- Refrigerator and freezer: 20%
- Lighting: 25%
- Cooking: 10%
- Dishwasher: 6%
- Washing machine and dryer: 6%
- Stereo: 2%
- TV: 5%
- DVD, VCR, etc.: 3%
- Computer and accessories: 9%
- Other: 7%
- Not measured: 7%

Source: Swedish Energy Agency
Total electricity supply in Sweden 1950–2013

Source: Swedenergy
Normalized electricity production mix in the Nordic region

Source: Swedenergy
Development of different power types in Sweden (capacity)

Source: Swedenergy
Development of different power types in Sweden (electricity generation)

Source: Swedenergy
Breakdown of installed power capacity and annual electricity production for different power types 2013

Source: Swedenergy
Runoff variations in relation to median value 1960–2013

Source: Swedenergy
Runoff variations in the power-generating rivers

Source: Swedenergy
Storage levels in the regulating reservoirs

Source: Swedenergy
Storage levels in the regulating reservoirs in 2013 by bidding areas

Source: Swedenergy
Energy industry gross investment in current prices

Source: Statistics Sweden
Installed wind power capacity in MW for the past 12 years

Source: Swedenergy
Average monthly generation of wind power for the past ten years in relation to the annual electricity usage profile

* Electricity consumption scaled for comparison with wind power

Source: Swedenergy
Installed power generation capacity in cogeneration district heating (at left) and industrial back-pressure plants 2002–2013

Source: Swedenergy
Power production by fuel type in cogeneration district heating and industrial back-pressure plants 2002–2013

Source: Swedenergy
Development of renewable electricity generation 2006–2013

Source: Swedenergy
Ownership of generation capacity, values for 2013

- State: 38%
- Non-Swedish owners: 38%
- Municipal: 13%
- Others: 11%

Source: Swedenergy
Changes in ownership of electricity generation 1996–2013

Source: Swedenergy
Five largest electricity producers in Sweden – production in Nordic region in 2013

Source: Swedenergy
Electricity generation and usage in Sweden 2011–2013, TWh per week

Source: Swedenergy
Electricity generation and usage in Nordic region 2011–2013, TWh per week

Source: Nord Pool
Hourly load profile for electricity usage with peak demand in 2013 and typical 24-hour period in winter and summer

Sources: Svenska kraftnät, Swedenergy
Net flow of electricity to and from Sweden per country in 2013, GWh per week

Source: Svenska kraftnät
Airborne emissions of NO$_x$ and SO$_2$ from electricity production 2000–2012, tonnes per year

Sources: Statistics Sweden, Swedish Environmental Protection Agency, Swedenergy
Electricity production in CHP plants, TWh

Source: Swedenergy
Airborne emissions of CO$_2$ from electricity production in 2001–2012

Sources: Statistics Sweden, Swedish Environmental Protection Agency, Swedenergy
SF6 leakage (% of total usage in production and transmission operations)

Source: Swedenergy
Development of electricity tax* (energy tax on electricity) since 1951

Sources: Statistics Sweden, Swedish Energy Agency

*The energy tax is lower for certain municipalities in northern Sweden
Delivery reliability in the Swedish electricity networks

Source: Swedenergy