The Electricity Year 2012

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
# Installed capacity by bidding area on 1 January 2013, MWel

<table>
<thead>
<tr>
<th></th>
<th>SE1</th>
<th>SE2</th>
<th>SE3</th>
<th>SE4</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydropower</td>
<td>5,255</td>
<td>8,014</td>
<td>2,593</td>
<td>341</td>
<td>16,203</td>
</tr>
<tr>
<td>Nuclear power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind power</td>
<td>363</td>
<td>665</td>
<td>1,563</td>
<td>1,154</td>
<td>3,745</td>
</tr>
<tr>
<td>Other thermal power</td>
<td>282</td>
<td>579</td>
<td>4,306</td>
<td>2,846</td>
<td>8,013</td>
</tr>
<tr>
<td>CHP, district heating system</td>
<td>160</td>
<td>263</td>
<td>2,219</td>
<td>929</td>
<td>3,571</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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas turbines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Entire country</strong></td>
<td>5,900</td>
<td>9,258</td>
<td>17,825</td>
<td>4,341</td>
<td>37,353</td>
</tr>
</tbody>
</table>

n.d. = no data available

Source: Swedenergy
Number of supplier switches per year

Source: Statistics Sweden
Customer mobility, January 2001–2013

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 1973–2012

Source: Statistics Sweden
Total supplied energy in relation to GNP 1973–2012 (1995 prices)

Source: Statistics Sweden
Electricity usage per GNP SEK 1970–2012 (1995 prices)

Source: Statistics Sweden
Breakdown of electricity usage by sector 1970–2012

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 1950–2012

Source: Swedenergy
Normalized electricity production mix in the Nordic region

- **Denmark**
- **Finland**
- **Norway**
- **Sweden**

Legend:
- **Hydropower**
- **Nuclear power**
- **Combined heat and power**
- **Condensing power**
- **Wind power**

Source: Swedenergy
Breakdown of installed power capacity and annual electricity production for different power types 2012

Source: Swedenergy
Runoff variations in relation to median value 1960–2012

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 2012 by bidding areas

Source: Swedenergy
Energy industry gross investment in current prices

Source: Statistics Sweden
Installed wind power capacity in MW for the past 11 years

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

Source: Swedenergy
Installed power generation capacity in cogeneration district heating (at left) and industrial back-pressure plants 2002–2012

Source: Swedenergy
Power production by fuel type in cogeneration district heating and industrial back-pressure plants 2002–2012

Source: Swedenergy
Development of renewable electricity generation 2006–2012

Source: Swedenergy
Ownership of generation capacity, values for 2012

- Municipal: 12.3%
- Non-Swedish owners: 39.1%
- State: 38.6%
- Others: 10%

Source: Swedenergy
Changes in ownership of electricity generation 1996–2012

Source: Swedenergy
Five largest electricity producers in Sweden – production in Nordic region in 2012

- Vattenfall: 19%
- Fortum: 12%
- Statkraft: 12%
- E.ON: 7%
- Skellefteå Kraft: 1%
- Others: 49%

Source: Swedenergy
Electricity generation and usage in Sweden 2010–2012, TWh per week

Source: Swedenergy
Electricity generation and usage in Nordic region 2010–2012, TWh per week

Source: Nord Pool
Hourly load profile for electricity usage with peak demand in 2012 and typical 24-hour period in winter and summer

Sources: Svenska Kraftnät, Swedenergy
Net flow of electricity to and from Sweden per country in 2012, GWh per week

Source: Svenska Kraftnät
Airborne emissions of NO\textsubscript{x} and SO\textsubscript{2} from electricity production 2000–2011, tonnes per year

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

Source: Swedenergy
Airborne emissions of CO₂ from electricity production in 2000–2011

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