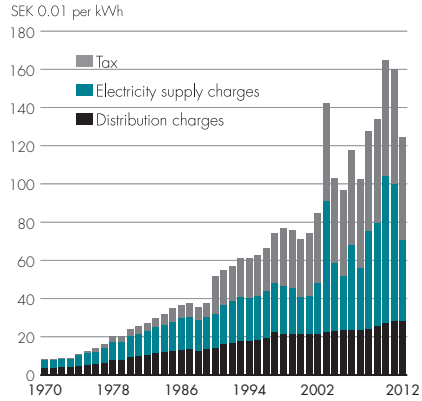
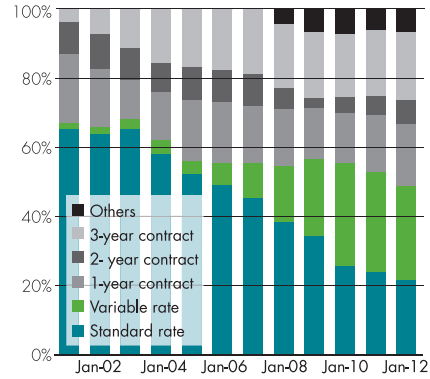


Breakdown of total electricity cost for a single-family home with electrical heating and a variable rate contract, current prices, in January of each year



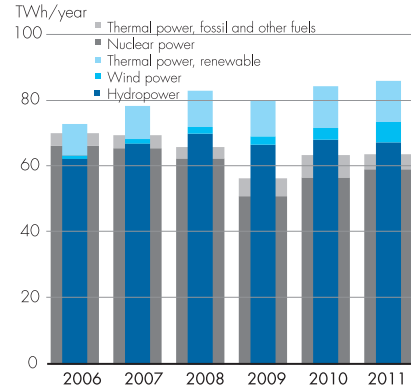
Sources: Swedish Energy Agency, Statistics Sweden

Allocation of contracts, January 2001–2012



Source: Statistics Sweden

Development of renewable electricity generation, 2006–2011



Source: Swedenergy

Gross electricity usage. Source: IEA

| Country        | Electricity usage per capita, kWh |        | Total usage, TWh |
|----------------|-----------------------------------|--------|------------------|
|                | 2010                              | 2011   | 2011             |
| Iceland        | 52,600                            | 51,200 | 16.9             |
| Norway         | 27,300                            | 25,100 | 124.3            |
| Luxembourg     | 19,000                            | 17,300 | 8.2              |
| Canada         | 17,500                            | 17,100 | 579.9            |
| Finland        | 16,300                            | 15,900 | 84.4             |
| Sweden         | 15,200                            | 14,700 | 139.7            |
| USA            | 13,500                            | 13,300 | 4,168.7          |
| Australia      | 10,900                            | 10,600 | 223.4            |
| South Korea    | 9,700                             | 10,100 | 497.9            |
| New Zealand    | 9,800                             | 10,000 | 43.1             |
| Austria        | 7,400                             | 8,500  | 71.6             |
| Switzerland    | 8,600                             | 8,200  | 65.2             |
| Belgium        | 8,400                             | 8,000  | 88.3             |
| Japan          | 8,000                             | 7,900  | 1,018.8          |
| France         | 8,200                             | 7,600  | 481.0            |
| Netherlands    | 6,900                             | 7,100  | 117.6            |
| Germany        | 7,000                             | 7,000  | 572.5            |
| Denmark        | 6,500                             | 6,200  | 34.7             |
| Czech Republic | 6,200                             | 6,000  | 64.0             |
| Ireland        | 6,100                             | 6,000  | 26.9             |
| Spain          | 5,900                             | 5,700  | 275.2            |
| UK             | 5,700                             | 5,700  | 355.7            |
| Italy          | 5,800                             | 5,500  | 334.9            |
| Greece         | 4,800                             | 4,600  | 52.5             |
| Poland         | 3,800                             | 3,800  | 143.0            |
| China*         | 3,800                             | 2,700  | 3,684.5          |

\*to the year 2009.

Total electricity usage for countries in the above table corresponds to 64.2 percent of the world total in 2009.

Units of measurements

|                       |                              |
|-----------------------|------------------------------|
| 1 kilowatt (kW)       | = 1,000 watt (W)             |
| 1 megawatt (MW)       | = 1,000 kW                   |
| 1 gigawatt (GW)       | = 1,000,000 kW               |
| 1 megawatt hour (MWh) | = 1,000 kilowatt hours (kWh) |
| 1 gigawatt hour (GWh) | = 1,000,000 kWh              |
| 1 terawatt hour (TWh) | = 1,000,000,000 kWh          |



Svensk Energi – Swedenergy – AB  
SE-101 53 Stockholm, Sweden  
Visiting address: Olaf Palmes Gata 31  
Phone: +46 8 677 25 00  
Fax: +46 8 677 25 06  
Website: www.svenskenergi.se

© Svensk Energi – Swedenergy – AB  
Printing: Planograf, October 2012  
Order: directly via our website



## QUICK FACTS ABOUT SWEDEN AND ENERGY

2012 edition



| Sweden's surface according to Statistics Sweden 449,964 km <sup>2</sup> |           |           |
|---|-----------|-----------|
| cultivated land and grassland.....                                      | 10%       |           |
| forests.....  | 50%       |           |
| mountains.....  | 25%       |           |
| lakes.....  | 10%       |           |
| cities.....   | 5%        |           |
| Maximum length.....   | 1,574 km  |           |
| Maximum width.....  | 499 km    |           |
| Population 31 Dec. 2011 according to Statistics Sweden 9,482,855        |           |           |
| Per square km of land surface.....                                      | 21        |           |
| Gainfully employed population.....                                      | 4,603,000 |           |
| National income, SEK M, according to Statistics Sweden                  |           |           |
|   | 2010      | 2011      |
| Gross domestic product.....   | 3,330,581 | 3,492,471 |
| Gross investment.....   | 495,283   | 531,169   |
| Household consumption.....  | 1,610,777 | 1,664,100 |
| Public consumption.....   | 891,289   | 928,202   |
| Foreign trade, SEK M, according to Statistics Sweden                    |           |           |
|   | 2010      | 2011      |
| Export of goods and services.....                                       | 1,655,946 | 1,750,519 |
| Import of goods and services.....                                       | 1,495,225 | 1,648,816 |

| Energy usage by sector according to Statistics Sweden (TWh) |            |            |            |             |
|---|------------|------------|------------|-------------|
|   | 2009       | 2010       | 2011*      |             |
| Industrial  | 134        | 147        | 141        | 36%         |
| Public transport  | 102        | 104        | 104        | 27%         |
| Residential, service, etc.                                  | 151        | 162        | 147        | 38%         |
| <b>Total</b>  | <b>387</b> | <b>413</b> | <b>392</b> | <b>100%</b> |

\*Preliminary data from Swedenergy

| Breakdown of electricity usage by sector (TWh) according to Statistics Sweden |              |              |              |             |
|---|--------------|--------------|--------------|-------------|
|   | 2009         | 2010         | 2011*        |             |
| Industrial  | 50.7         | 54.6         | 53.2         | 38%         |
| Service   | 35.9         | 36.3         | 35.1         | 25%         |
| Residential   | 41.3         | 45.4         | 40.4         | 29%         |
| Transmission losses   | 10.5         | 10.7         | 11.0         | 8%          |
| <b>Total</b>  | <b>138.4</b> | <b>147.0</b> | <b>139.7</b> | <b>100%</b> |

\*Preliminary data from Swedenergy

| Electrical balance (net TWh)                        |              |              |              |              |
|---|--------------|--------------|--------------|--------------|
| Sources: Statistics Sweden and Swedenergy           |              |              |              |              |
|   | 2009         | 2010         | 2011*        |              |
| <b>Domestic production</b>                          | <b>133.7</b> | <b>144.9</b> | <b>146.9</b> | <b>100%</b>  |
| <b>Renewable</b>                                    | <b>78.4</b>  | <b>82.7</b>  | <b>84.3</b>  | <b>57.4%</b> |
| Hydropower  | 65.3         | 66.8         | 66.0         |              |
| Wind power  | 2.5          | 3.5          | 6.1          |              |
| Thermal power                                       | <b>10.6</b>  | <b>12.4</b>  | <b>12.2</b>  | <b>8.3%</b>  |
| CHP, district heating                               | 5.2          | 6.5          | 6.3          |              |
| CHP, industry                                       | 5.2          | 5.6          | 5.5          |              |
| Condensing power                                    | 0.2          | 0.3          | 0.4          |              |
| <b>Nuclear power</b>                                | <b>50.0</b>  | <b>55.6</b>  | <b>58.0</b>  | <b>39.5%</b> |
| <b>Other thermal power (fossil and other fuels)</b> | <b>5.3</b>   | <b>6.6</b>   | <b>4.6</b>   | <b>3.1%</b>  |
| CHP, district heating                               | 4.1          | 5.6          | 3.6          |              |
| CHP, industry                                       | 0.7          | 0.5          | 0.4          |              |
| Condensing power                                    | 0.5          | 0.5          | 0.6          |              |
| Gas turbine, diesel, etc.                           | 0.02         | 0.03         | 0.01         |              |
| <b>Domestic usage</b>                               | <b>138.4</b> | <b>147.0</b> | <b>139.7</b> |              |
| <b>Transmission losses</b>                          | <b>10.2</b>  | <b>10.7</b>  | <b>11.0</b>  |              |
| <b>Electricity from neighbouring countries</b>      | <b>16.4</b>  | <b>17.6</b>  | <b>14.8</b>  |              |
| <b>Electricity to neighbouring countries (-)</b>    | <b>-11.7</b> | <b>-15.6</b> | <b>-22.0</b> |              |
| <b>Net exchange with neighbouring countries**</b>   | <b>4.7</b>   | <b>2.1</b>   | <b>-7.2</b>  |              |

\*Preliminary data from Swedenergy. \*\* Negative values represent exports.

| Peak load 23 Feb (08-09), MW   |  | 26,000        |
|--|--|---------------|
| <b>Installed capacity at 31 Dec. 2011 (MW electricity)</b>             |  |               |
| Hydropower.....  |  | <b>16,197</b> |
| Wind power.....  |  | <b>2,899</b>  |
| Nuclear power.....   |  | <b>9,363</b>  |
| Other thermal power.....   |  | <b>7,988</b>  |
| <b>Total</b>   |  | <b>36,447</b> |
| <b>Maximum transmission capacity of international connections (MW)</b> |  |               |
| from neighbouring countries.....                                       |  | 9,725         |
| to neighbouring countries.....   |  | 9,685         |

| Ownership of electricity generation, share of installed capacity |     |
|--|-----|
| State (Vattenfall AB, Svenska Kraftnät).....                     | 40% |
| Non-Swedish owners.....  | 40% |
| Municipalities.....  | 12% |
| Others.....  | 8%  |

## Electricity networks in Sweden

The local networks are normally divided into low voltage (400/230V) and high voltage networks (typically 10–20 kV). The total line length of Sweden's low voltage networks is over 306,000 km, of which 74,500 km consist of overhead lines and 231,500 km of underground cable. The local high voltage networks, also frequently referred to as medium voltage networks, are made up of 93,000 km of overhead lines and 98,000 km of underground cable. Some 5.2 million electricity users are connected to the low voltage networks and 6,500 to the high voltage networks. The regional grids are mainly owned by three DSOs and have a combined line length of around 33,000 km. The Swedish national grid is owned and operated by the public utility Svenska Kraftnät, and is made up primarily of 400 kV and 220 kV lines with a total length of around 15,000 km. In total, the Swedish electricity grid contains 545,000 km of power lines, including 329,500 km of underground cable. If the Swedish grid were stretched out in one long line, it would extend more than thirteen times around the earth.

| Largest member companies in Swedenergy |                               |                       |                    |
|--|-------------------------------|-----------------------|--------------------|
| Member company (corporate group)       | Power generation capacity, MW | Low voltage customers | Regional grids, km |
| Vattenfall AB                          | 13,802                        | 920,701               | 16,417             |
| E.ON Sverige AB                        | 6,686                         | 1,000,404             | 8,221              |
| Fortum Power and Heat AB               | 5,870                         | 882,661               | 6,137              |
| Göteborg Energi AB                     | 355                           | 282,077               | 178                |
| Skellefteå Kraft AB                    | 836                           | 63,545                | 1,002              |
| Statkraft Sverige AB                   | 1,262                         |                       |                    |
| Mälarenenergi AB                       | 569                           | 101,959               | 65                 |
| Jämfkraft AB                           | 291                           | 59,572                | 588                |
| Lunds Energikoncern AB                 | 30                            | 105,867               | 39                 |
| Tekniska Verken i Linköping AB         | 249                           | 89,216                | 66                 |
| Öresundskraft AB                       | 128                           | 94,804                | 148                |
| Umeå Energi AB                         | 233                           | 56,700                | 235                |
| Jönköping Energi Nät AB                | 40                            | 53,169                | 127                |
| Karlstads Energi AB                    | 111                           | 33,687                | 15                 |
| Gävle Energi AB                        | 39                            | 45,939                | 31                 |
| Eskilstuna Energi & Miljö AB           | 39                            | 45,696                | 3                  |
| Sundsvall Elnät AB                     | 74                            | 27,977                |                    |
| Holmen Energi AB                       | 253                           |                       |                    |
| Arise Elnät AB                         | 139                           |                       |                    |

| Largest hydropower stations, net capacity (MW) |     |
|--|-----|
| Harsprånget (Lule älv).....                    | 830 |
| Stornorrors (Ume älv).....                     | 591 |
| Messaurer (Lule älv).....                      | 452 |
| Porjus (Lule älv).....                         | 440 |
| Letsj (Lule älv).....                          | 440 |
| Ligga (Lule älv).....                          | 343 |
| Vietas (Lule älv).....                         | 325 |
| Ritsem (Lule älv).....                         | 320 |
| Trängslet (Dalälven).....                      | 300 |
| Porsi (Lule älv).....                          | 275 |
| Kilforsen (Ångermanälven).....                 | 275 |

| Nuclear power plants, net capacity (MW) |       |
|---|-------|
| Ringshals.....                          | 3,702 |
| Forsmark.....                           | 3,150 |
| Oskarshamn.....                         | 2,511 |
| Barsebäck.....                          | 0     |

| Largest other thermal power plants, net capacity (MW)     |     |
|---|-----|
| Karlskrona (condensing, oil).....                         | 990 |
| Västerås (CHP, condensing, biomass/cool/oil).....         | 566 |
| Öresundsverket (CHP, natural gas + gas turbine).....      | 566 |
| Stenungsund (condensing, oil).....                        | 500 |
| Värtan, Stockholm (CHP, coal/oil incl. gas turbines)..... | 389 |
| Ryaverket, Göteborg (CHP, natural gas).....               | 260 |
| Halmstad (gas turbines).....                              | 250 |
| Lahall (gas turbines).....                                | 240 |

| Hydropower production      |                 |                                |                  |
|----------------------------|-----------------|--------------------------------|------------------|
| River                      | Normal year GWh | Water flows* m <sup>3</sup> /s | Regulation level |
| Lule älv.....              | 13,800          | 505                            | 67%              |
| Skellefte älv.....         | 4,300           | 158                            | 60%              |
| Ume älv.....               | 7,500           | 440                            | 26%              |
| Ume älv, excl. Vindelälven |                 | 237                            | 48%              |
| Gide älv.....              | 300             | 35                             | 16%              |
| Ångermanälven.....         | 11,400          | 490                            | 39%              |
| Indalsälven.....           | 9,600           | 444                            | 39%              |
| Ljungan.....               | 2,300           | 138                            | 27%              |
| Ljusån.....                | 3,700           | 233                            | 21%              |
| Dalälven.....              | 4,300           | 342                            | 23%              |
| Lagan.....                 | 500             | 70                             | 20%              |
| Klarälven.....             | 1,600           | 165                            | 20%              |
| Göta älv.....              | 1,500           | 536                            | 35%              |

\* Mean flow at mouth of river.

| Largest storage reservoirs, capacity (million m <sup>3</sup> ) |       |
|--|-------|
| Vänern (Göta älv).....   | 9,400 |
| Suurva (Lule älv).....   | 6,000 |
| Tjaktajaurer (Lule älv).....                                   | 1,675 |
| Storsjön (Indalsälven).....                                    | 1,250 |
| Satsjaurer (Lule älv).....                                     | 1,240 |
| Torrån (Indalsälven).....                                      | 1,180 |
| Storuman (Ume älv).....  | 1,100 |
| Trängslet (Dalälven).....                                      | 880   |
| Gardiken (Ume älv).....  | 875   |
| Storavan-Uddajaur (Skellefte älv).....                         | 780   |
| Hornavan (Skellefte älv).....                                  | 750   |
| Rebnisjaurer (Skellefte älv).....                              | 740   |