Electricity network
Primary energy use in Iceland 1940–2010

- Coal
- Oil
- Geothermal
- Hydropower
- Peat
Generation of electricity in Iceland 2010 and 2009

Installed capacity in power plants at the end of the year

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th></th>
<th>2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MW</td>
<td>%</td>
<td>MW</td>
<td>%</td>
</tr>
<tr>
<td>Hydro</td>
<td>1,883</td>
<td>73.0</td>
<td>1,883</td>
<td>73.0</td>
</tr>
<tr>
<td>Geothermal</td>
<td>575</td>
<td>22.3</td>
<td>575</td>
<td>22.3</td>
</tr>
<tr>
<td>Fuel</td>
<td>121</td>
<td>4.7</td>
<td>121</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,579</strong></td>
<td><strong>100.0</strong></td>
<td><strong>2,579</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Electricity production

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th></th>
<th>2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GWh</td>
<td>%</td>
<td>GWh</td>
<td>%</td>
</tr>
<tr>
<td>Hydro</td>
<td>12.592</td>
<td>73.8</td>
<td>12.279</td>
<td>72.9</td>
</tr>
<tr>
<td>Geothermal</td>
<td>4.465</td>
<td>26.2</td>
<td>4.553</td>
<td>27.0</td>
</tr>
<tr>
<td>Fuel</td>
<td>2</td>
<td>0.0</td>
<td>3</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,059</strong></td>
<td><strong>100.0</strong></td>
<td><strong>16,835</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Comparison of energy prices for residential heating mid year 2010

- Cheap geothermal district heating
- Reykjavik geothermal district heating
- Expensive geothermal district heating
- Electrically heated district heating
- Direct electrical heating (urban)
- Direct electrical heating (provincial)
- Oil heating

Price without subsidy (¢/kWh)

US-cent/kWh (1$ = 122 ISK)
Utilisation of geothermal energy 2010

- Electricity generation: 39%
- Space heating: 45%
- Total: 41.4 PJ

- Swimming pools: 4%
- Snow melting: 4%
- Industry: 2%
- Fish farming: 4%
- Greenhouses: 2%
Oil consumption in Iceland 1982–2010
Units of power and energy

The International System of Units (SI) is the system of measurement used in Iceland. The basic and customary units for power and energy are:

<table>
<thead>
<tr>
<th>Basic unit</th>
<th>Energy</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic unit</td>
<td>Joule (J)</td>
<td>Watt (W)</td>
</tr>
<tr>
<td>Customary unit</td>
<td>Watt hour (Wh)</td>
<td>-</td>
</tr>
</tbody>
</table>

Sometimes other units which are not part of the SI system are used, e.g. horsepower, hp, or ton of oil equivalent, toe. The same prefixes are used, e.g. Ktoe and Gtoe.

1 hp = 0,75 kW
1 toe = 41,9 GJ
1 Wh = 3,6 kJ
1 PJ = 0,278 TWh
Electricity consumption 2010

- Fishing: 0%
- Agriculture: 1%
- Aluminium foils factory: 2%
- Other Industries: 3%
- Utilities: 4%
- Residential Consumption: 5%
- Ferrosilicon Industry: 6%
- Public Services: 6%
- Aluminium Industry: 73%

GWh

Áliðnaður: 74%
Þjónusta: 6%
Jarnblendiiðnaður: 5%
Heimili: 5%
Veitur: 4%
Almennur iðnaður: 4%
Landbúnaður: 1%
Fiskveiðar: 0%
Geothermal fields

Bedrock age
- < 0.8 M. years
- 0.8–3.3 M. years
- 3.3–15 M. years

Source: ÍSOR 2010: KS/HJO
Space heating 1970–2010

[The image shows a graph depicting the percentage of space heating sources from 1970 to 2010. The graph indicates a decrease in the use of oil and an increase in the use of geothermal energy.]

- **Geothermal** usage has increased significantly from 1970 to 2010.
- **Electricity** usage has also increased, although not as significantly as geothermal.
- **Oil** usage has steadily decreased over the years, with a significant drop by 2010.