

Sweden

Renewable Energy Fact Sheet

Policy Background

The EU is working to reduce the effects of climate change and establish a common energy policy. As part of this policy, European Heads of State or Government agreed in March 2007 on binding targets to increase the share of renewable energy. By 2020 renewable energy should account for 20% of the EU's final energy consumption (8,5% in 2005). To meet this common target, each Member State needs to increase its production and use of renewable energy in electricity, heating and cooling and transport.

Although renewable energies are an integral part of our fight against climate change, they also contribute to growth, job creation and increase our energy security.

Country targets

The renewables targets are calculated as the share of renewable consumption to gross final energy consumption. Renewables consumption comprises the direct use of renewables (e.g. biofuels) plus the part of electricity and heat that is produced from renewables (e.g. wind, hydro), while final energy consumption is the energy that households, industry, services, agriculture and the transport sector use. The denominator for the RES share includes also distribution losses for electricity and heat and the consumption of these fuels in the process of producing electricity and heat.

Swedish target: 49% (2005 = 39.8%)

Key issues

Sweden is moving away from its RES-E target. In absolute figures, RES-E production has decreased between 1997 and 2004, mainly due to a lower level of large-scale hydro production. Other RES like biowaste, solid biomass, off-shore wind and PV have, however, shown significant growth. In Sweden, a comprehensive policy mix exists with tradable green certificates as the key mechanism. This system creates both an incentive to invest in the most cost-effective solutions, and uncertainty for investment decisions due to variable prices.

Main supporting policies

Swedish RES-E policy is composed of the following mechanisms:

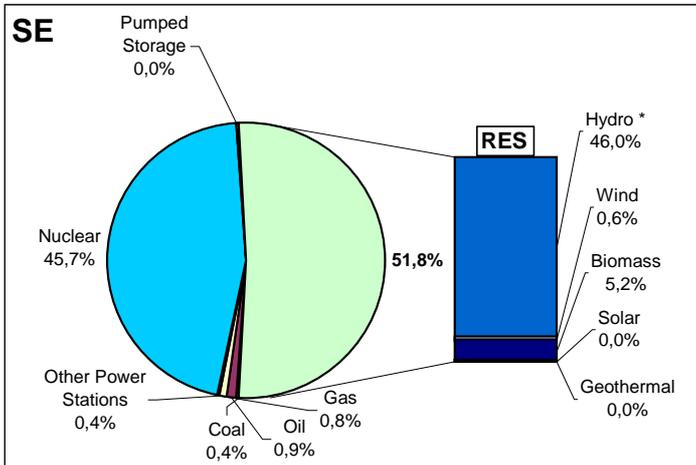
- Tradable Green Certificates were introduced in 2003. The Renewable Energy with green certificates bill that came into force on 1 January 2007 shifts the quota obligation from electricity users to electricity suppliers, and incorporates a new target of 17 TWh by 2016.
- The environmental premium tariff for wind power is a transitory measure and will be progressively phased out by 2009 for onshore wind.

Since 2005, renewable fuels must make up at least 3% of all petrol and diesel consumption for transport operations. A tax relief system is currently in place but will be amended following the implementation of the EU taxation of energy products Directive. Green taxes such as the carbon dioxide tax promote biofuels in an indirect way. In addition, the Swedish government is currently increasing the number of alternative fuel pumps and ensured that 36% of the vehicles it used in 2006 were fuelled, either wholly or in part, by biogas, ethanol or electricity. Finally, a subsidy is granted for investment in filling stations for biogas and other renewable fuels: SEK 150m was set aside in 2006 and 2007.

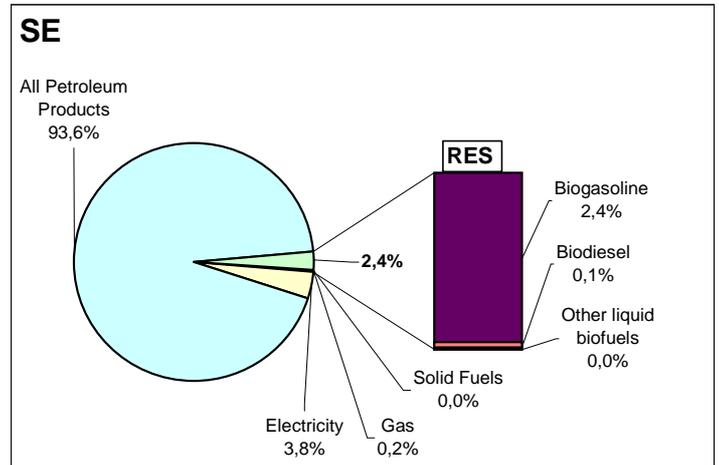
In Sweden, RES-H is supported in an indirect way by raising taxes on fuels. Biofuels, solid waste and peat are tax-exempt for most energy uses. Investment grants are available for solar heating installations.

Key figures¹

Gross Electricity Generation by fuel (2005)



Final Energy Consumption by Fuel, Transport (2005)



Source: Eurostat

* Not including generation from hydro pumped storage, but including electricity generation to pump water to storage. Municipal Solid Waste, Wood waste, Biogas included.

For further information

To find out more about renewables, go to: http://ec.europa.eu/energy/res/index_en.htm

http://ec.europa.eu/energy/intelligent/index_en.html

To find out more about the current situation of renewables in the Member States, go to

http://ec.europa.eu/energy/res/legislation/electricity_member_states_en.htm

http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm

To find out more about support measures, go to

http://ec.europa.eu/energy/res/legislation/support_electricity_en.htm

To find out about a project or contact an energy agency in your region, go to

<http://www.managenergy.net/emap/maphome.html>

¹ Reliable and complete data for heating and cooling is not yet available from Eurostat

Sweden - Renewable Energy Fact Sheet

What is meant by.....?

RES: Renewable energy sources

RES-E: Electricity production from renewable energy sources

RES-H: Production of heat and cold from renewable energy sources

Biofuels: Mainly includes biodiesel and bioethanol

Biomass: Includes solid biomass, biowaste and biogas

PV: Photo-voltaic - technology for the production of electricity from solar energy

Disclaimer

Views expressed in this document have not been adopted or in any way approved by the European Commission and should not be relied upon as a statement of the Commission's views.

The Commission does not guarantee the accuracy of the data included in this document, nor does it accept responsibility for any use made thereof.