

Finland

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.

Finnish target: 38% (2005 = 28.5%)

Key issues

Finland is nearing its RES-E target for 2010, and continues to adjust and refine its energy policies in order to further enhance the competitiveness of RES. Through subsidies and energy tax exemptions, Finland encourages investment in RES. Solid biomass and large-scale hydropower dominate the market, and biowaste is also increasing its share. Additional support in the form of feed-in tariffs based on purchase obligations or green certificates is being considered for onshore wind power.

Biomass is the most important renewable energy source in Finland, with its use accounting for about 20% of primary energy consumption.

Main supporting policies

Finland has taken the following measures to encourage use of RES-E:

- Tax subsidies: RES-E has been made exempt from the energy tax paid by end users.
- Discretionary investment subsidies: new investments are eligible for subsidies up to 30% (40% for wind).
- Guaranteed access to the grid for all electricity users and electricity-producing plants, including RES-E generators (Electricity Market Act - 386/1995).

Taxes imposed on heat are calculated on the basis of the net carbon emissions of the input fuels and are zero for RES. Further encouragement of RES-H takes the form of direct biomass investment support.

Feed-in tariff for biogas plants is in the agenda of current government; it is planned to start in 2008 and to include plants of up to 20MW.

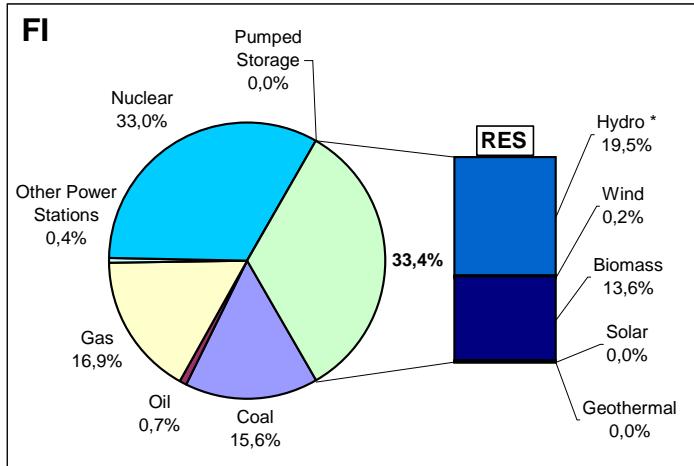
Biofuels benefit from tax exemptions under certain conditions. Biogas used as motor fuel, for instance, is exempt from excise duty. A new law on the promotion of biofuels will enter into force on 1 January 2008; this will oblige fuel distributors to supply a minimum of 2% biofuels to the transport market in 2008, with annual increases so that it will be at least 5.75% by 2010.

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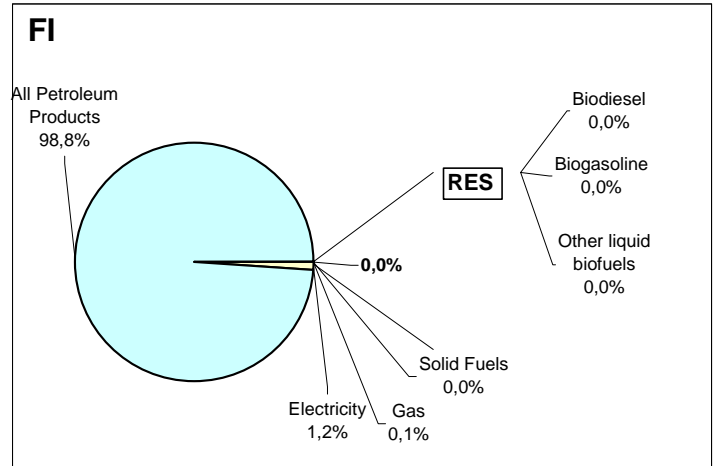
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Key figures¹

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

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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

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