

Germany

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.

German target: 18% (2005 = 5.8%)

Key issues

Germany is an EU leader in wind utilisation, PV, solar thermal installations and biofuel production. Its onshore wind capacity covers approximately 50% of the total installed capacity in the EU. A stable and predictable policy framework has created conditions favourable to RES penetration and growth. Feed-in tariffs for RES-E, market incentives for RES-H, and tax exemptions for biofuels have proven to be a successful policy mix leading to a very dynamic market for RES. In 2006, about 70% of renewable energy was generated from biomass, and 11.8% of electricity was generated from RES.

Germany has already exceeded its 2010 biofuel target of 5.75%: in 2006, it achieved 6.3%.

Main supporting policies

With the aim of promoting RES-E, Germany has introduced the following schemes through its Renewable Energy Act of 2004:

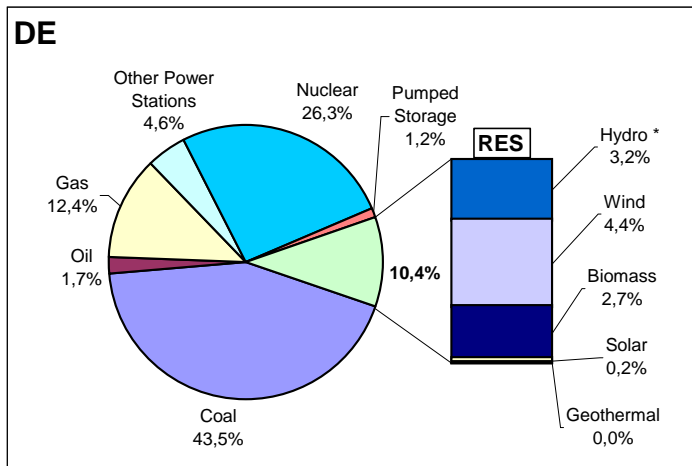
- Feed-in tariffs for onshore wind, offshore wind, PV, biomass, hydro, landfill gas, sewage gas and geothermal.
- Large subsidised loans available through the DtA (Deutsche Ausgleichsbank) Environment and Energy Efficiency Programme.

A Market Incentive Programme provides subsidies for RES-H, with excellent results in solar thermal and small-scale biomass heat generation. A large increase in budget was foreseen for 2007 (from EUR 39 million to EUR 213 million).

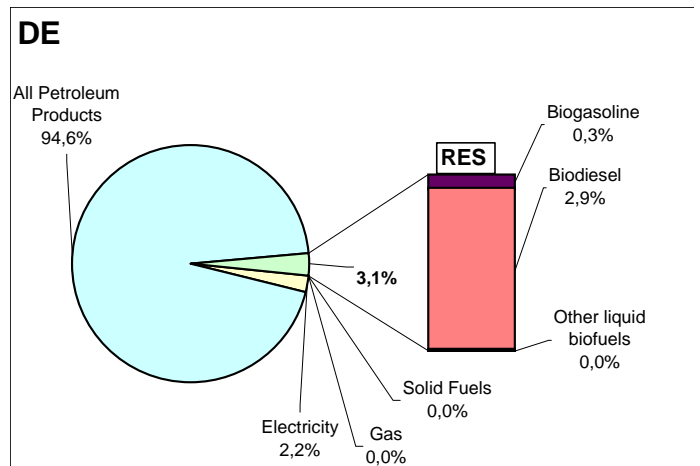
From 1 January 2007, firms have been obliged to market biofuels using a quota system: 4.4% for diesel and 1.2% for petrol; this will be increased annually. 2nd generation biofuels, biogas and pure bioethanol (E85) will be granted a decreasing tax incentive until 2015.

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 renewable energy, 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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