

Policy Background

A European energy policy must pursue the objective of a sustainable, competitive and secure supply of energy. If the EU continues on its present course, this key objective will not be attained. In January 2007, the European Commission adopted an energy policy for Europe. This was supported by several documents on different aspects of energy and included an action plan to meet the major energy challenges Europe faces. Each European citizen must be informed of these challenges and the role they should play in meeting them.

Renewable energies help combat climate change while increasing security of supply.

Key Issues

Hydro power has traditionally been important in Greece, and the markets for wind energy and active solar thermal systems have grown in recent years. Geothermal heat is also a popular source of energy. The Greek parliament has recently revised the RES policy framework partly to reduce administrative burdens on the renewable energy sector.

Current national RES target

The RES-E target to be achieved by Greece according to the EU Directive is 20.1% of gross electricity consumption by 2010. For biofuels, the following national targets have been set: 0.7% by 2005, 3% by 2007, 4% by 2008, 5% by 2009 and 5.57% by 2010.

Progress towards meeting national targets

In terms of RES-E share of gross electricity consumption, the 1997 figure of 8.6% had risen to 9.56% by 2004.

Main supporting policies

General policies relevant to RES include a measure related to investment support, a 20% reduction of taxable income on expenses for domestic appliances or systems using RES, and a concrete bidding procedure to ensure the rational use of geothermal energy. In addition, an inter-ministerial decision was taken in order to reduce the administrative burden associated with RES installations.

Greece has introduced the following mechanisms to stimulate the growth of RES-E:

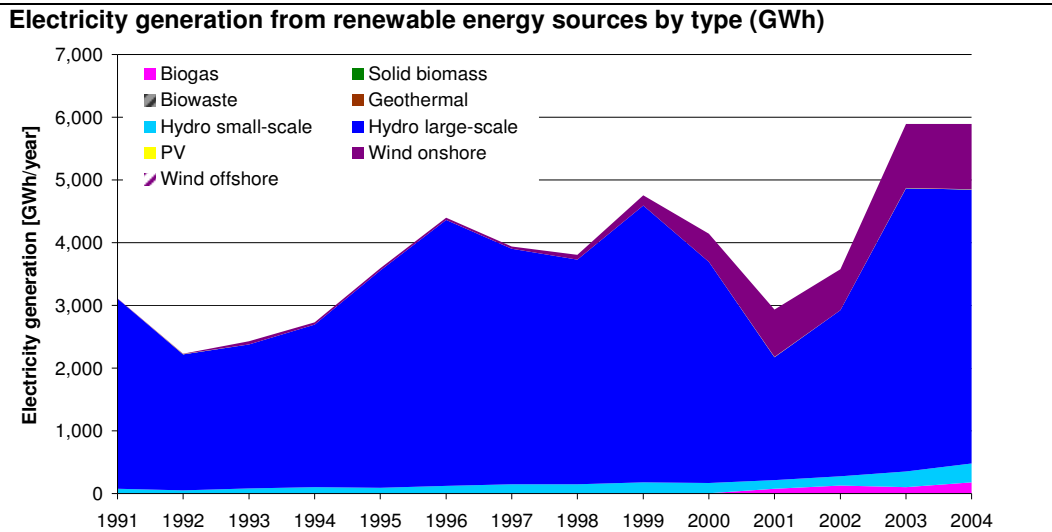
- *Feed-in tariffs* were introduced in 1994 and amended by the recently approved Feed-in Law. Tariffs are now technology specific, instead of uniform, and a guarantee of 12 years is given, with a possibility of extension to up to 20 years.
- *Liberalisation* of RES-E development is the subject of Law 2773/1999.

Fossil fuel taxes are not applied to biofuels.

Tax incentives were in place to promote RES-H, but these have been suspended for budgetary reasons.

Key renewable energy statistics

Electricity from RES: Large-scale hydro power continues to hold the largest share of the RES-E market (4,369 GWh in 2004). Onshore wind power accounted for 1,041 GWh in 2004, and grew at an average annual rate of 61% between 1997 and 2004. The level of production registered in 2005 was 1,243 GWh. PV accounted for 1 GWh in 2004, and grew annually, on average, by 27% between 1997 and 2004.



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

Biofuels: Production in the biofuels sector stood at 3 ktoe in 2005.

Heating and cooling: Biomass provides most of the RES-H in Greece (920 ktoe out of 1051 ktoe in 2004). Production has increased in the solar thermal sector, and the highest average annual growth, is that of heat from geothermal sources which stood at 28% between 1997 and 2004.

	Penetration 1997 (ktoe)	Penetration 2004 (ktoe)	Av. Annual growth [%]
Biomass heat	911	920	0%
Solar thermal heat	101	128	3%
Geothermal heat incl. heat pumps	2	13	28%

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

Good example: Project "5 MW WIND FARM IN COMPLEX TERRAIN"

A 5 MW wind farm, with 10 wind turbines of 500 kW each, has been constructed on rough terrain in Sitia, on Crete. The wind turbines are produced by different manufacturers and come in two different forms, with different design and control concepts. The installation of the wind turbines on the same site enabled performance comparisons to be made under the same climatic conditions. In addition, the rough terrain in the area offered the opportunity of monitoring of the response of the wind turbines to a particularly turbulent wind flow. The results could be put to use in similar applications. The project was coordinated by the Organisation for the Development of Sitia.

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 renewable energy 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>

Further fact sheets on Greece and other Member States can be found on:
http://ec.europa.eu/energy/energy_policy/facts_en.htm

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

CHP: Combined Heat and Power

GWh: Gigawatthour

ktoe: Thousand tonnes of oil equivalent

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

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