



Renewable Energy Policy Review

Greece

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European Renewable Energy Council
26, rue du Trone
B-1000 Brussels

Tel.: (+32) 2 546 1936

Fax: (+32) 2 546 1934

www.erec-renewables.org

erec@erec-renewables.org

1. General information

Population and geography

Greece, officially known as The Hellenic Republic, is the southernmost country on the European mainland. With an area of 131.940 square kilometres, Greece is about the same size as England. Greece's longest border is with the sea. Over 2,000 Greek islands are scattered about the eastern Mediterranean, roughly 200 of them inhabited. The Greek mainland shares land borders with Albania, the Former Yugoslav Republic of Macedonia, Bulgaria and Turkey. Today, Attica supports nearly half the Greek population. The Peloponnese (Peloponissos) gave rise to many great cities of the ancient world, including Mycenae, Sparta, and Olympia, birthplace of the Olympic Games. A fertile region with a temperate climate. Further south, are the Dodecanese. and Crete (Kriti), the fifth largest island in the Mediterranean. The terrain is primarily mountainous- agricultural land covers 30%, whilst urban areas, industrial areas and waterways represent only 8%. 60% of the population is concentrated in urban centres, half of which live in the greater Athens area. 38% of the population is active. Unemployment is reported to be around 10%.

Greece has been a member of the European Union since 1981. The political system of Greece is democracy, as is clear from the official name of the country, the Hellenic Republic. The Constitution currently in force was voted for on 11th June 1975 and reviewed in both 1986 and 2001. The supreme authority in the Hellenic Republic is the President, whose wide range of activities characterize the political system as a Presidential Democracy. The country is divided into 13 administrative regions (9 mainland and 4 insular). These are further subdivided into 51 nomoi (prefectures), each with an elected nomarkhis (prefect) each managed by a Prefecture Council, elected for 4 years. The current government's decentralisation policy has led to greater political influence for the regions. At the level of local government, the recent "Kapodistrias Programme" reorganized the map of the country at an administrative level abolishing the plethora of previously existing 'communities' and creating uniform, larger municipalities.

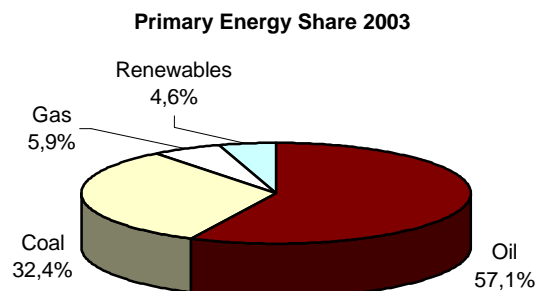
Greece occupies an area of 132.000 square kilometers, has a population of 10.96 million according to the 2001 census, accounts for 2.8% of the total budget of the EU and 1.5% of the EU gross product and 1.9% of the Eurozone. In spite of Olympic-related investment (the 2004 Olympic games will be held in Athens), Greece has not attracted as much foreign direct investment (FDI) as it would like, in part due to security concerns related to the left-wing terror group called "November 17," which has carried out numerous attacks on foreign-owned businesses around Athens (note: the Greek government launched a major crackdown on the group in July 2002). In addition, Greece has not been seen as attractive to foreign investors because of its small domestic market, underdeveloped communications and transport infrastructure, relatively high tax burden (some tax breaks were announced in early 2003), and distance from other EU markets. As a result of all this, Greece's current ratio of FDI to GDP is lower than any other EU country. The per capita gross national product (GNP) amounted in 2002 to Euro 12.000 corresponding to 69% of the EU average GNP. The growth rate as % change of the GNP was 4.1% during the same year.

2. Renewable Energy Policy

Energy and Renewable energy country profile

Country Profile

Population	11,1	Millions
Area	131,940	km ²
Total Primary Energy Supply	29.46	Mtoe
Electricity Production	53.704	TWh
Electricity Prod. Fossil Fuel	93.52	%
by source		
hydro	5	%
nuclear	0.00	%
Other Renew	0.68	%



Source: CIA World Factbook 2001

Source: EUROSTAT

The major indigenous energy resource is lignite, which accounts for 80% of primary energy production. Lignite is the main fuel used for electricity generation and provides over 70% of electricity production. The remainder of Greece's electrical power is generated from oil with a small amount of hydropower. The oil and gas fields discovered in the early seventies were relatively small and are being rapidly depleted. In addition to the high degree of energy dependency, Greece has also the highest energy elasticity in the EU.

Domestic energy production in Greece accounted for nearly 31% of total energy consumption in 2001_ (Eurostat booklet page 2.9.5).. Coal and oil lead the energy supply picture in Greece with over 80% of primary energy provided by imported oil, used in all sectors. (figures don't match up with import dependency figure) Natural gas consumption has increased significantly over the past few years, increasing from only 1 billion cubic feet (Bcf) in 1996 to 76 Bcf in 2001. More than two-thirds of Greece's natural gas imports currently come from Russia, with the rest coming from Algeria (source EIA country report)

Renewable Energy Sources

Renewable energy country profile

Renewable energy technology in 2003 in capacity

Greece	
Population	11,100 200
SPV (MWc)	
Grid connected	1.11
Off grid	2.14
Total	3.25
STH (square meter installed)	2.790.200 m2
Average surface for 1000(2001 figure)	264 m2
SHP (2001 figure)	60 MW
Biogaz (Mtep) (2002 figure)	42
Wood (Mtep) (2002 figure)	0.94
Wind (MW)	390

Source Eurobserv'ER 2003/Sun in Action 2/EWEA/ESHA

Renewable energy contributed 4.6% of Greece's total energy supply and 5.5% of total electricity supply in 2001 compared to EU averages of 5,8% and 15.5% respectively. (source IEA Renewables Information 2003 page 36) final energy demand was 28.70 Mtoe, up 45% compared to 1980 levels.(need comparison statistic) On the basis of CRES data, in 2001 the energy from RES amounted to 1.02 TWh, 74.12% from wind farms, 18.14% from small hydroelectric plants and 7.75% from biogas. No marked difference was noticed during 2002 since there was only a small increase in the installed capacity. (Source 2nd national report regarding penetration level of renewable energy sources in the year 2010 (articles 3 and 6 of Directive 2001/77/EC))

Hydro

The installed capacity of Small Hydropower doubled over the period from 1990 to 2001 from 30 MW to 60 MW. Despite this increase, SHP installed capacity in Greece accounted for about 0.55% of the total electrical installed capacity of the country and for about 0.61% of the total EU-15 SHP installed capacity in 2001. SHP of less than 1 MW has seen a new incentive as from 2000. SHP electricity generation in Greece has doubled from 60 GWh in 1990 to 135 GWh in 2001. 5% of the country's electricity was generated from Hydropower in 2001. Electricity from plants less than 1 MW in size have followed a more steady upward trend while electricity generation from plants larger than 1 MW has been decreasing since 1999. (source ESHA) The PPC S.A runs 15 large scale and 7 small scale hydroelectric systems with a combined capacity of 3060 MW yielding 3,381 TWh in the dry year 2002. Projects have been planned for commissioning by 2010 with an annual combined output of 1.582 TWh. (Source 2nd national report regarding penetration level of renewable energy sources in the year 2010 (articles 3 and 6 of Directive 2001/77/EC))

Two large-scale hydroelectric plants projects are in the process of implementation by other companies with a combined capacity of 153 MW. There are 24 small hydro projects not owned by PPC S.A totaling 18.83 MW ad yielding 64 GWh

Biomass

Use of wood for cooking and heating in households accounted for an estimated 0.7 Mtoe in 1996. **(to be updated)** Biomass use in this sector has been stable over the 1990s. Biomass use in industry (generally the wood industry using wood waste, but also cotton ginning residues, almond shells and straw) was estimated at 150 ktoe in 1996. A CHP plant which uses cotton ginning residues, that has a capacity of 2.1 MWth and 0.5 MWe is currently in operation at Davlia. Some interest has been shown for the production of biofuels (bioethanol) to be used in the transport sector, and some R&D has been started in this area (although there is currently no Greek production of transport biofuels). However, the use of biogas from landfills is planned: a 240 kW plant was constructed in 1996 in northern Greece (although had not yet started operating by March 1998), and a further biogas-recuperation installation is planned, and six additional permits for such systems had been submitted by early 1998. The food industry uses small quantities of biogas for space heating purposes.

Wind

A significant potential for wind energy exploitation exists mainly in the Aegean Islands region. By the end of 2003 total installed capacity was 375 MW.(source EWEA). CRES estimates that 15% of the country's electricity needs can be produced by wind farms, with installed wind-power capacity possibly expanding from 270 MW at present to 2,000 MW by 2010. In June 2001, Gemesa of Spain signed an agreement with Hellenic Energy and Development Company to invest 420 million Euro to develop wind power plants with a total capacity of 500 MW by 2008. Windforce of the UK plans to develop \$800 million of projects in the EU, including three wind farms in Greece (at Makronisos, Kilkis, and Lakonia) with a total capacity of 650 MW. (EIA Country Analysis Briefs 2003)

Solar

The use of solar power in Greece reduces the need for conventionally generated energy by about 1.4 billion kilowatt-hours per year. A 50-MW parabolic trough-type solar power plant is under construction in Crete. DEH is planning a 100-kilowatt photovoltaic (PV) park for the island of Gavdos, in addition to already-existing PV capability on the island. U.S.-based Energy Photovoltaics (EPV) announced in July 2001 that it would build a \$22 million manufacturing facility for PV panels in Kilkis, with annual production capacity of 5 MW. The company is also implementing a 400-kilowatt photovoltaic power station on the roof of its manufacturing unit building. (EIA Country Analysis Briefs 2003)

Solar thermal

Greece is one of the most successful countries worldwide in the use of solar thermal energy. For many years, the number of installed parks of solar collectors per capita has been the highest within Europe. The solar thermal market started 30 years ago. At that time, almost all Greek households were using electric heaters; thus, the rising price of electricity has helped the market to develop. The electric water heater is still the main competitor to the solar water heater. The main solar thermal product was then, and still is, the thermosiphonic water heater. Since 1993, the domestic market has been fluctuated between 150,000 – 200,000 m² of collectors, depending on the new building production, electricity prices, incentives etc. Many solar thermal systems are also installed in hotels and in industries, athletic centres and greenhouses. The main competitor of the solar water heater is, as mentioned above, the electric heater. In the last decade, the electricity cost decreased in real terms by 28%. Additionally, the VAT for electrical energy and gas is set to 8 %, whereas the VAT for solar systems is 18%. This has led to a decisive loss of competitiveness for solar water heaters. Currently there is no subsidy for solar systems. (source Sun in Action 2)

Geothermal

Law 3175/2003 "Exploitation of geothermal potential, district heating and other provisions" (Government Gazette A 207) established for the first time a comprehensive set of rules for the rational use of geothermal energy. The recoverable potential of the two fully exploited high-enthalpy fields for power generation purposes amounts to 170 Mwe whereas the probably potential of the whole country exceeds 500 Mwe.

RE Policy Outlook

Targets/Strategy/Climate change

The 1995 Climate Action Plan established a target for increasing the share of renewable energy (including large-scale hydro) in primary energy supply to 10% by 2000. The target was not achieved, and the actual renewables share was 5.2% in 2000. A new indicative target has been set to generate 20.1% of electricity by renewables in 2010. The government recognises that the licensing procedures for renewables are still too complex, and it now plans to establish a "one-stop shop" for permits and licences. There is also an effort to identify the potential of new energy sources. The Centre for Renewable Energy Sources investigates their technical and economic aspects. Because of Greece's windy and sunny climate, this potential is significant. (source IEA In-Depth reviews Summaries: Greece <http://www.iea.org/dbtw-wpd/textbase/nppdf/free/2002/Greece02.pdf>)

National policy is formulated by co-operation between the Ministry for Development's Directorate of Energy's Energy Policy Division and Division of Renewable Energy Sources and Energy Conservation, the General Secretariat of Research and Technology, the PPC (the State power company) and the Center for Renewable Energy Sources (CRES).

CRES is the state institution that is responsible for the promotion of Renewable Energy Sources and Energy Efficiency in Greece. To date, the PPC has been almost the exclusive source of renewable electricity in Greece. It owns all the large hydro power stations and 97% of the small hydro capacity, 72% of photovoltaic capacity. Changes in support measures for renewables are likely to increase the role of non-PPC generators in renewable energy supply.

Security of supply and the development of diverse indigenous energy resources are the central pillars of Government's strategic approach to energy. The development of renewable energy sources did not really become an issue of concern until the 'Energy Crises' of the 1970s. The accession of Greece to the European Community in 1980 prompted a significant change in energy policy which, until then had primarily focused upon the promotion of energy saving measures and ensuring the security of supply

At present renewables are mainly promoted through financial incentives such as tax breaks, direct subsidies and an attractive feed-in tariff system

The two main financial-support instruments that provide substantial public subsidies to RES investment projects are:

- The so-called "National Development Law" (Law 2601/98)
- The Greek Operational Programme for Competitiveness (OPC) of the Third Community Support Framework (CSF III; 2000-2006) for Greece.

During the period 1994-1999 the CSF II programme granted a cumulative total of about €92 m in public subsidies to 78 RES investment projects, which had a total budget of about €213 m (i.e. mean subsidy rate ~ 43%) and a total installed capacity of 161 MWe +102 MWth. This programme was instrumental in encouraging substantial RES activity and in facilitating a large number of commercial-scale RES projects in Greece, particularly in the period 1997-2000.

- The Operational Programme for Energy (OPE) : fiscal incentives for renewables and energy conservation

The Renewable Energies Subprogramme of the Operational Programme for Energy (1994-1999), which has a total budget of 191 Mecu, and supports both basic and broad "infrastructure" work, such as the development of the National Certification System, the assessment of the technically exploitable RES potential or the determination of the optimum administrative and legislative framework for RES, as well as demonstration projects or investments in renewables

Law 2244/94, and the implementing Ministerial Decision 8295/95, broke new ground for the promotion of RES in Greece.

The main provisions of these are to:

- Remove restrictions and liberate regulations for electricity production from RES, with a maximum capacity of 50 MW for independent producers;
- Remove restrictions for the exploitation of small water falls;
- Allow auto-(self) producers the possibility of compensating on equal terms their own production of electricity from RES and their consumption (net metering);
- Limit the amount of bureaucracy involved in the issuing of the licenses required;
- Define all basic elements of the new improved pricing system.

The forms of Government financial support available for renewables (with the emphasis on renewable electricity production):

- Law 2244/1994 set up a new pricing policy between PPC and independent or auto (self) producers, whose installations are connected with either the PPC's isolated grids on islands or with the PPC's interconnected system in the mainland.
- Law 1892/1990 provides economic incentives (a subsidy of up to 45 per cent reaching 55 per cent in certain cases, according to location) for the promotion of various investments including renewable energy production.
- Law 2364/1995 allows for 75% of renewable appliances for households, such as solar water heating systems, to be deducted from a person's taxable income and up to 100% exemption for private companies.
- Aid to Market Penetration of Renewables Grants Renewable Energy Industry
- Priority Network Dispatching for Renewables net metering/ connection

Incentive systems have been implemented by the Development Law 2601/98 to increase the market penetration of renewables and co-generation. This law replaced the previous one (Law 1892/90), and the Operational Programmes for Energy and Competitiveness. These mechanisms provide a maximum 35% grant for investments in power generation and a maximum 75% deduction from taxable income for the residential and service sectors for solar heating systems. Greece does not intend to establish a green certificate system in the near future but considers it a viable option in the long term.

The main legislations and policies related directly to the penetration of RES in Greece are ¹:

- The law 2773/99 regarding the liberalization of the electricity market in Greece, which establishes the priority to the electricity produced from RES to cover the demand of electricity. Under this framework a ten-year contract will be given to the producers of electricity from RES by the system Operator at a price, which will be 90% of the existing medium voltage tariff, at maximum, for the energy produced.
- The law 2601/98 "National Development Law" that foresees a combination of subsidy options that is either: capital investment subsidies up to 40% interest subsidy up to 40% and subsidy for leasing up to 40% or tax deduction up to 100% and interest subsidy up to 40% for investments in RES.
- The New Operational Program for Energy (2000-2006) related to RES applications and Rational Use of Energy.
- The Public Power Corporation's program for the development of renewable energy sources forms part of the electricity utility's 10-year Development plan for the period 1994-2003. The program for RES covers wind energy, PV, geothermal energy and power form hydro systems.
- A new law is also under consideration, considering low enthalpy geothermal applications, which will probably simplify even further the procedure required for such installations.

Electricity

The RES-E Directive sets the national indicative target for the share of gross electricity consumption to be met from renewable energy sources at 20,1% in 2010;

The electricity production amounted to 50.6 TWh in 2002, with 11.739 MW supplied from PPC owned installations and 515 MW from autoproducers and RES generators. The main fuel source was domestically extracted low-calorific lignite (70.3 tonnes), which accounted for 59.1% of the total. Oil mainly used by the islands not connected to the mainland system, had a share of 14%. Natural gas imported from Russia and Algeria in the form of LNG yielded 12.7%. Hydroelectric plants covered 6.3%. Lastly wind, small hydro, biomass and photovoltaics combined represented 2.4% and the net of imports-exports made up the remaining 3%. (Source 2nd national report regarding penetration level of renewable energy sources in the year 2010 (articles 3 and 6 of Directive 2001/77/EC))

Approximately 34 % of the Greek electricity market was opened up to competition in February 2001 in accordance with Law 2773/99 on the liberalisation of the domestic electricity market. Law 2773/99 contains two provisions that are of relevance to RES power projects. Firstly, an electricity-production license will be required for the construction and operation of an electricity-generating installation, and secondly, system operators are to give priority to generating installations using renewable energy sources or waste or producing combined heat and power when distributing electricity from different suppliers.

In Greece all RES-E benefit from feed-in tariffs whose level depends on category: Independent Power Producers (IPPs) and Autoproducers (APs). Moreover, prices are different for Low Voltage (220/380 V); Medium Voltage (6,6,15,20,22 KV); High Voltage (150 KV) and for peak zone, medium zone and low zone. The

¹ GREEK ENERGY AGENCY : *Policy Affecting RES*, (s.l.e), 2000. p. 6

Law 2773/99 sets an average rate between 5.6 cents €/kWh and 7.2 cents €/kWh, while the Law 2244/94 sets an average rate between 1.6 cents €/kWh and 6 cents €/kWh. In both cases Independent Power Producers receive up to 90% of retail price, while Autoproducers receive up to 70% and contracts are awarded for ten years

Law 2941/2001 "Simplification of procedures for establishing companies, licensing Renewable Energy Sources plants, regulation, of issues of the company GREEK SHIPYARDS S.A and other provisions"(Government Gazette A 201), not only filled some gaps in the legislative framework but also attempted to deal the licensing process pathogenesis a thorough blow. The main pillars of the law are, RES permitted to be implemented in forest and scrublands, no building requirements for the installation of solar systems or wind farms, connection of RES suppliers lines to the grids open to all investors, relaxing of zoning and subdivision controls in favour of RES.

However, the main scope of the Law was to revise Law 2773/1999 in order to make up for the slowness of the liberalisation process of the electricity market mostly attributed to the dominant position held by PPC. This revision was also necessary in order to reflect the modifications portended in Directive 2003/54/EC *concerning common rules for the internal market in electricity and repealing of Directive 96/92/EC*(OJ L 76/15.7.2003) (Source 2nd national report regarding penetration level of renewable energy sources in the year 2010 (articles 3 and 6 of Directive 2001/77/EC))

In Greece the Public Power Corporation of Greece (PPC) still remains the exclusive electricity buyer and retailer. The system used for the promotion of RES-E is "Buy back rate". The Public Power Corporation (PPC) was established in 1950 with main purpose the production and transmission of electric power and actually continues that role under Directive 96/92 regarding the deregulation of the electricity market and the relevant national enactment being Law 2773/1999 "*Liberalization of the Electricity Market-Regulation of energy policy issues and other provisions*" (Government Gazette A 286). The exploitation of lignite fields constitutes an unchallengeable preferential concession which in combination with the cheap price of natural gas the utility enjoys as the major consumer first entering the area, gives it a key role in the electricity sector.

Climate Change

The 2nd National Plan for the abatement of GHG emissions in Greece includes specific policies that will assist in restraining national emissions to the desired percentage (Table 4). Three of these policies are the most significant due to their assessed contribution:

The three main components of the Hellenic climate policy, laid out in the 2nd National Plan for the abatement of GHG emissions, are the promotion of renewable energy sources, the further penetration of natural gas into the industrial and tertiary sector and the promotion of energy efficiency in the tertiary sector. The promotion of RES is expected to contribute up to 38% to the total necessary effort, so that Greece meets its national Kyoto obligation (not to overcome an increase rate of 25% (130Mt eq CO₂) in GHG emissions for the first Kyoto commitment period of 2008-2012.)

Heating and cooling

A programme on sustainable buildings has been launched through a Common Ministerial Decision on the limitation of carbon dioxide emissions at the building sector. (21475/4707/98 dated 19 August 1998) (Ministry for the Environment, Physical Planning and Public Works Ministry for Development Ministry of National Economy/Ministry of the Interior). A regulation for the rational energy use and energy conservation in buildings (KOXEE) is being prepared, which will replace the existing Regulation 2 on the thermal insulation of buildings. Consequently, minimum energy standards for new buildings will be established, as well as other measures, such as energy audits, classification of buildings according to their energy consumption etc.

Research and Development

Renewable R&D is carried out by CRES, institutions of higher education and other organisations such as the National Centre for Physics Research "Democritus", the Institute for Geological and Mineral Exploration, PPC, etc. CRES is preparing a detailed national plan for the market deployment of renewables up to year 2005. Furthermore, the Government has earmarked 75 per cent of 100 million ECUs allocated for national R&D funding for renewables. R&D expenditure in 1996 was \$3.4m, mainly spent on wind, biomass and geothermal energy.

3. RE Highlights

National Success Story

Greece — Solar thermal

Solar collectors have been widely installed throughout Greece since the 1980s. There are a number of factors that make solar thermal technologies attractive for providing an increasing proportion of Greece's energy needs, including the country's favourable climate. There is no district heating tradition in Greece, so typical water-heating systems in households are electricity based, and electricity prices are relatively high compared to the Greek household disposable income. The island of Crete is one area of Greece that has carried out extensive studies and activities to develop its indigenous renewable energy resources. There has been a high take-up of solar thermal collectors among the population, both for domestic dwellings and in the hotel and tourism sector. To date, about 20 % of Crete households have solar collectors. These are mostly produced and installed by local companies, and supply cost-effective and reliable hot water.

Success factors:

• **Political: Support policies for renewable energy use**

The Operational Programme for Energy, which ran from 1994 to 1999, provided a total of EUR 140 million of public, EU and private funds for renewable energy development. Crete benefited from this programme through targeted support for renewable energy technology development. Crete adopted an energy policy in 1994 that placed a high importance on the use of renewable energy, and the implementation plan was finalised by the regional energy agency in 1999. Greece's new Operational Programme for Energy, which began in 2000, supports tax exemptions, loans and third-party financing for renewable energy and energy efficiency in the building sector.

• **Financial: Grants and loans available**

In the early stages of their development, in the late 1970s and early 1980s, the use of solar Water-heating systems was stimulated through subsidies. From 1990, Law 1892 provided Subsidies up to 45 %–55 % (depending on location) for the promotion of various investments including in renewable energies. Hotels which invested in solar water heaters benefited considerably from this law.

• **Fiscal: Tax exemptions to individuals for buying renewable appliances**

Since 1995 Law 2364 has provided tax exemptions to households buying renewable appliances, such as solar water heaters; 75 % of the purchase value of a renewable appliance is deducted from a person's taxable income.

• **Technological development: Strong domestic manufacturing industry**

The financial support given in the late 1970s and early 1980s to promote the use of solar water heaters created an opportunity, and a market, for the emergence and establishment of a local industry which developed over the 1980s and reached maturity in the early 1990s. Local industry was an important driving force in solar thermal expansion in Greece. *Greece has the highest per capita use of solar thermal technologies in the EU.*

In 1993: 92.5 ktoe In 1999: 124.4 ktoe Increase 1993–99: 31.9 ktoe, 34 %

Regional or Local Best Practise

Corfu – Thinalli

The Municipality of Thinalli was formed in 1990 by the merging of the 12 pre-existing communities of the region. It covers an area of 8,000 hectares, with a permanent population of 5,500 people, which is tripled in the summer months (March-October), due to tourism. In 1995 the Municipality of Thinalli started an initiative aiming the establishment of environmental protection projects and policies. In spring 1999 the Technical Services of the Municipality started a programme for the next 5 years. The objectives of the "Renewable Energy Park" programme has many objectives, one of which is to provide the communities of Acharavi, Perithia, Palea Peritheia, Lafki and Klimatia with 100% of renewable energy, by the year 2004-5.

Loads were recorded so the energy consumption could be monitored, then targets for renewables were set accordingly. Energy efficiency measures have been taken, with the main of reducing the municipalities annual energy consumption by 40%. Other activities included the building of a biomass plant, a project consisting of the installation of a waste-water network and a biological waste-water treatment plant, together with a anaerobic digester unit for methane production. The project started in 1999 and it will be concluded by late 2002. The Municipality achieved public financing for this project of 6,060,606 Euro. In order to cover the energy needs of the communities belonging to the municipality, it is estimated that a plant generating an approximate 5 M kWh/annum will be required. Installation was scheduled to begin in 2003. A demonstration installation of PV panels, the replacing of electric boilers with solar thermal systems in a local sports centre.

The municipality of Thinalli reserved funds from the year 2000 budget for the financing of the small systems (PV street lighting, solar thermal collectors and energy efficiency measures). An application for finance for the wind measurements and the preliminary study for the biomass plant will be made under the Altener programme. All the participating Municipalities have declared their financial and political contribution to the installation of the plant after 2001. Financing of the biomass plant will be achieved from the Municipality's budget, public funding and bank loans. The financing of the anaerobic digester for the waste is already achieved. Since the Municipality of Thinalli is limited in financial resources, it has introduced the Development Company in the action, in order to attract financing from public and private sources.

4. Websites

Name	Description	Website
Ministry of Development, Directorate of Energy	Specifically the Energy Policy Division and Division of Renewable Energy and Energy Conservation are responsible for energy policy,	http://www.ypan.gr/fysikoi_poroi/gen_dieythinsi_energeias_eng.htm
General Secretariat for Research and Technology	Collaborates on energy policy under the authority of the Ministry of Development. Supports research, information dissemination and establishes new technology institutes.	http://www.gsrt.gr/default.asp?V_ITEM_ID=139
Public Power Corporation	The state power company	http://www.dei.gr
Centre for Renewable Energy Sources (CRES)		http://www.cres.gr