



Greece: New Power Plant Projects

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Summary

The Greek market for new thermal and renewable energy power plant projects and equipment (ELP-REQ) was estimated to be \$1.9 billion in 2007. It grew over the 2005-2007 period at an annual rate of 10-12 percent as Greece is expanding its electricity generating capacity and updating its equipment.

The energy sector as a whole is expected to grow over the 2008-2012 period at an impressive rate as Greece expands its modernization plans of older units, and the development of new ones with participation from both the private and public sectors.

According to the 2008-2012 Greek Energy Development Program, announced in mid-October 2007, Greece plans to spend \$12 billion on the development and expansion of its energy sector during this period, of which \$9 billion will go for new power plants.

A factor reinforcing rapid growth in the energy sector is the European Union financing of private and public sector projects through subsidies and grants under the IV Community Support Framework.

Fourteen large power plant projects are expected to be under development in the next three years, either by private companies alone or in consortia with the Greek Public Power Corporation. In addition to the licenses for the development of wind parks, around 1,200 licensing applications on large photovoltaic units with a capacity over 150 kW/h each were filed since June 2006.

Greek manufacturers of equipment, and service providers, are currently unable to meet domestic needs, and hence, foreign presence in this market is considerable. U.S. investors with specific market knowledge in either of these wind parks or photovoltaic fields may want to consider local partnerships, direct investments or joint ventures.

U.S. manufacturers of energy production systems can find capable distributors interested in selling equipment new to the market. U.S. energy companies are known in Greece for the high quality, durability and low maintenance costs of their equipment.

All products imported into Greece must be manufactured according to EU Standards, have a CE Mark, and meet EU environmental and safety requirements.

Market Demand

The development of new power plants brings forth demand for equipment not produced locally, and thus creates very good sales opportunities for products such as: gas generating sets; cogeneration systems, including gas and steam turbines for medium and small size enterprises; automatic circuit breakers; switchgear and parts; insulators and transformers; wind turbines; photovoltaic panels automation systems; and related equipment.

Market Data

The Greek Market for New Thermal and Renewable Energy Power Plants and Equipment (ELP-REQ) In Millions of U.S. dollars			
	2005	2006	2007
<i>Total Market Size</i>	1,455	1,650	1,900
<i>Total Local Production</i>	400	460	560
<i>Total Exports</i>	45	50	60
<i>Total Imports</i>	1,100	1,240	1,400
<i>Imports from the U.S.</i>	70	80	180

The above statistics are unofficial estimates.

Best Prospects

A number of factors have helped create the necessary conditions for foreign investment in Greece and for large-scale investment initiatives in the energy sector, especially for new power plants, while reinforcing competitiveness including:

- Deregulation of the multi-billion dollar electricity market in Greece in February 2001;
- The new law approved by the Greek Parliament in December 2005, which completed Greece's harmonization with EU Directive 2003/54/EC and provided for the gradual deregulation of the electricity market by 2008;
- The new law for renewable energy;
- The new natural gas liberalization law;
- The completion of the legal framework with a number of presidential decrees;
- The increase in power/electricity demand; and,

These initiatives have created new export opportunities for U.S. companies to export technology and equipment, and to serve as consultants in the Greek energy market.

A dramatic increase in demand for equipment and expertise is expected to take place between 2008 and 2012. In 2009, the construction of new privately owned thermal power plants with an estimated capacity of 9,500 MW will begin, as will the modernization of three to four old plants with a capacity of around 2,500MW. In addition to the thermal power units, the Greek Government has committed to greater usage of renewable energy sources to save out in total domestic electrical production, i.e. from 8.4 percent in 2002 to 20.1 percent in 2010. The increase in the installed capacity of wind parks to 2,500-3,000 MW will help Greece achieve this goal by 2010. In 2007, wind turbine capacity was around 800 MW. By 2010, the Greek government forecasts that the installed wind energy capacity will be 10,09 percent of total electricity production.

U.S. firms have very good sales opportunities for the following products: gas generating sets; cogeneration systems including gas and steam turbines for medium and small size enterprises; automatic circuit breakers; switchgear and parts; and insulators and transformers.

The Greek Public Power Corporation (PPC) is planning to build and modernize the following power stations:

- 800 MW Megalopolis V natural gas/ lignite combined cycle power unit, in 2011;
- 450 MW Meliti II / lignite power unit, in 2012;
- 700-800 MW Aliveri VI / coal power unit, in 2013;
- 250-400 MW Kozani region / lignite power unit, in 2012;
- 250-400 MW Ptolemaida region / lignite power unit, in 2012;
- 550-650 MW Larimna region/ coal power unit, in 2014;

- 250MW two new combined cycle units burning oil and natural gas with capacity each, will be developed on the island of Crete;
- 400 MW Aliveri V / gas power unit expected to start operating in 2011.

PPC is also planning to replace its outdated lignite-burning units by 2020 with a total capacity of 2,500 MW.

The following new power units are also to be developed by private companies and/or consortia of private companies with PPC and other Greek government controlled entities:

- 2,000 MW HELPE (Hellenic Petroleum): 4 new stations (1 wind park, 1 lignite and 2 natural gas) by 2012;
- 5.5 MW DEPA (Natural Gas Company), natural gas-fired unit on the island of Remvithousa, Attica;
- 600 MW coal burning unit in Astakos, Aetoloakarnanias by Edison S.p.A;
- 400 MW combined cycle unit in Viotia region by Edison/Helleniki Technodomiki and Viochalko consortium;
- 440 MW natural gas plant by Endesa Hellas located in the industrial zone of Volos region in Greece, as well as a new natural gas plant developed by Halyvourgiki Inc and PPC in Elefsina with 880 MW;
- 600 MW coal burning unit in Aspra Spitia, Viotias;
- 420 MW coal-burning unit Madoudi, Evia region;
- 5 hospitals in Attica region supplied with cogeneration units;
- 2 new privately owned plants of total capacity 300 MW, 150 MW each, burning natural gas to be developed by Hellenic Transmission System Operator and two private companies.

The Fourth Community Support Framework Program (IV CSF) will provide a majority of the funding for these projects. In addition, the National Operational Program for Energy (N.O.P.E.) and the Operational Program for Energy, (EPE), will also provide funding.

Agreements on the transfer of technology or equipment and joint venture or licensing arrangements for the local production of the equipment required, including assembly, accessories, and automation instrumentation will also generate excellent sales prospects in Greece.

Key Suppliers

General Electric is the main supplier of power generators in Greece, followed by Siemens (Germany) and Alstom (France). GE Jenbacher and Dresser-Waukesha, both U.S. companies, are among the major suppliers of cogeneration systems in Greece.

Prospective Buyers

Public Sector Buyers

The main purchasers of energy production machinery and equipment owned by the Greek government are: the Public Power Corporation (PPC), and DEPA (Natural Gas Company). Purchases are always through international tenders of the above entities, the Ministry of Development and the Hellenic Transmission System Operator (HTSO).

Private Sector Buyers

The main private sector purchasers of energy machinery and equipment are: Hellenic Petroleum (HELPE), Mitilineos-Metka Group of companies, Terna Energy S.A., Enelco-Copelouzos Group, Endesa Hellas SA, Halyvourgiki Inc, and Hellenic Technodomiki.

Market Entry

For easier penetration of the Greek market, interested parties should collaborate or co-operate with a local agent. PPC in particular tends to safeguard its market position in most power projects.

Competition for U.S. companies from Greek manufacturers of equipment in this sector is minimal compared to that of other European countries. The majority of end users in Greece buying locally assembled and manufactured products consider price as the decisive factor, while quality and durability are more important to those buying imported equipment.

Greece imports complete energy generation, conversion and transmission equipment, spare parts and accessories, and major parts that are assembled and installed by local contracting firms specializing in this field. The majority of these companies also provide maintenance and service for the installed equipment unless otherwise agreed.

Market Issues & Obstacles

Import Climate

There are no restrictions or non-tariff barriers on imports of energy equipment in Greece. As a full member of the EU, Greece applies the common EU external tariff schedule to products imported from non-EU countries. Import duties for non-EU products are from 3.5 to 5.0 percent. All products, regardless of origin, (foreign and domestic), are subject to the Value Added Tax (VAT), of 19 percent. The VAT on non-EU products is applied to the total CIF (Crate, Insurance, Freight) value plus the import duty. All imported energy equipment, accessories, and parts must conform to EU standards. This means that energy units, parts or equipment being shipped into Greece must have a CE mark certificate and conform to EU Regulations. UCL and TUV certificates are essential. The Greek Standards Organization (ELOT), in cooperation with the Center for Renewable Energy Sources (CRES), is responsible for issuing specifications for imported Renewable Energy Equipment:

ELOT, 313 Aharnon Street
GR-111 45 Athens, Greece
Tel: +30/210/212-0100, Fax: +30/210/212-0430
Contact: Mrs. Maria Pitsika, Director of Certification Department
E-mail: mnp@elot.gr or info@elot.gr

Financing

Credit and financing are critical to successfully doing business in Greece. Fortunately, the import payment process is similar to that used in the rest of Europe, such as cash against documents, sight drafts, time drafts, and irrevocable letters of credit. Greek banks have extensive correspondent relationships with U.S. banks. Citicorp, Bank of America, and American Express all have offices in Athens that can assist U.S. firms.

U.S. exporters, however, should be aware that letters of credit are very expensive in Greece. Greek banks usually require the cash equivalent on deposit before issuing any guarantees. In a country where working capital loans carry high interest rates, this creates a heavy economic burden for the importer. Therefore, Greek businesses often seek extended credit terms of 60-90 days or longer from their suppliers. U.S. suppliers unfamiliar with these practices and expenses, or who require more stringent payment terms may make their U.S. products less competitive.

Incentive Policies

Greek policy concerning investment activity is governed by a number of laws which establish a variety of financing mechanisms and incentives for investors in the public and private sectors. These incentives include: EU III and IV CSF Funds for new power plant projects, interest rate subsidies; tax-free allowances; extra depreciation rates; lower social security contributions; and favorable tax rates.

Procurement

Although EU countries enjoy close proximity and lower transportation costs over non-EU contenders bidding on Greek government tenders, U.S. products have an excellent reputation for quality, durability and efficiency, viewed similarly to German products mainly due to the relatively low maintenance cost required. The key to success in the Greek market is to have an experienced agent or joint venture partner with suitable background, experience and an extensive sales network, who can offer full customer support, including after-sales service. The most important competitive factor that influences the sale of equipment is the close relation between the manufacturer, agent, distributor and the end user. It is essential that agents participate in government tenders on behalf of U.S. suppliers. Before making a commitment to prospective agents/joint venture partners, U.S. firms are advised to obtain background information and credit reports providing reliable information about a prospective business partner.

Trade Events

Greek business representatives frequently visit major trade shows held in the United States and Europe where U.S. firms can make good contacts. The following events in the Greek market offer good opportunities to U.S. exhibitors to promote their products.

Power-Gen Europe June 2-6, 2008, Milan, Italy

The organizer of the exhibition is

Penn Well

Website: www.powergeneurope.com

2nd Energy Week November 10–14, 2008, Athens, Greece

The exhibition is specialized in energy and natural gas machinery, equipment, parts and technology. The organizer of the exhibition is the:

Institute of Energy for Southeast Europe (IENE)

Alexandrou Soutsou Street 3

GR-106 71 Athens, Greece

Tel: +30/210/362-8457, +30/210/364-0278, Fax: +30/210/364-6144

Website: www.iene.gr

E-mail: secretariat@iene.gr

AERION 2009 November 2-6, 2009, Athens, Greece

The event takes place every other year: An exhibition specializing in energy and natural gas machinery, equipment, parts and technology. The organizer of the exhibition is:

LDK Consultants, Engineers and Planners

21 Parodos Thivaidos Street

GR 145 64 Kifissia, Greece

Tel: +30/210/819-6700, Fax: +30/210/819 6709

Mr. Leonidas Damianidis, Managing Director

Website: www.ldk.gr

E-mail: main@ldk.gr

Resources & Contacts

<http://www.ypan.gr>

<http://www.rae.gr>

<http://www.dei.gr>

<http://www.eurelectric.org>

Host Country Government:

Ministry of Development
119 Mesogeion Avenue
GR-101 92 Athens, Greece
Tel: +30/210/697-4801-803, Fax: +30/210/696-9604
Contact: Mr. Christos Folias, Minister
E-mail: grafyp@ypan.gr

Regulatory Authority For Energy (RAE)
69 Panepistimiou & Aiolou Street
GR-105 64 Athens, Greece
Tel: +30/210/372-7400, Fax: +30/210/325-5460
Contact: Dr. Michalis Thomadakis, Vice President
E-mail: info@rae.gr
Site: www.rae.gr

Public Power Corporation (PPC)
30 Halkokondili Street
GR-104 32 Athens, Greece
Tel: +30/210/523-4604, Fax: +30/210/523-9843
Contact: Mr. Avraam Mizan, Director General for Power Production

The Hellenic Transmission System Operator (HTSO-DESMHE),
11 Amfitheas Street
GR-175 64 Nea Smyrni, Greece
Tel: +30/210/ 946-6789, Fax +30/210/948-3221
Contact: Mr. Ioannis Theodorakopoulos, Managing Director
E-mail: itheodorak@desmie.gr

Greek Standards Organization (ELOT)
313 Aharnon Street
GR-111 45 Athens, Greece
Tel: +30/210/212-0100, Fax: +30/210/212-0430
Contact: Mrs. Maria Pitsika, Director of Certification Department
E-mail: mnp@elot.gr or info@elot.gr

Association of Greek Importers
15 Voulis Street
GR-105 63 Athens, Greece
Tel: +30/210/323-2622, Fax: +30/210/323-8378
Mr. N. Theodoropoulos, Director

Major Specialized magazines

Energy (monthly magazine)
Published by Periodikos Typos S.A
222 Syngrou Avenue
GR-17672 Kallithea, Athens
Tel: +30/210/956-7161, Fax: +30/210/957-9009

For More Information

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