

Emilios Margaritis Date (11/2008)

## Summary

The Greek energy sector as a whole is expected to grow over the 2008-2012 period at an impressive rate, as Greece moves towards becoming an energy hub for the Southeast Europe region. Greece is assuming this role through energy market deregulation and modernized energy laws, by expanding its modernization plans of older power units, and the development of new units with participation from both the private and public sectors, an increased emphasis on, and incentives for, clean energy initiatives, and major natural gas and oil pipeline and refineries modernization projects. Big projects are also underway in the fossil fuel, gas and wind energy sectors, as well as a private investment in the solar and biofuel sectors. An additional 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 Forth Community Support Framework (IV CSF). These factors, in conjunction with the geographical proximity to the Balkans and with Turkey, gives rise to interest by foreign investors.

Greece has exceptionally rich energy-producing potential in comparison to most other countries. It is estimated that with the appropriate legislative interventions, the existence of sufficient financial incentives, and the stimulation of broader investment interest, the Greek energy sector over the next decade will change significantly.

According to the 2008-2012 Greek Energy Development Program, Greece plans to spend \$12 billion on the development and expansion of its energy sector during this period. Energy consumption in Greece is increasing at rates faster than those of the other European countries, estimated at around 3 percent per year.

U.S. manufacturers of energy production systems can find capable Greek distributors interested in selling equipment that is new to the market. U.S. energy companies are known in Greece for the high quality, durability and low maintenance costs of their equipment. U.S. investors with specific market knowledge in energy fields may want to consider local partnerships, direct investments or joint ventures.

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 Greek market for electrical power systems and equipment (ELP) was estimated to be around \$1.9 million in 2007, and is expected to exceed \$2.0 million in 2008. The market grew over the 2006-2007 period at a rate of 10-12 percent, as Greece expanded its electric power network and updated its equipment.

Greek energy policy is intensifying the introduction of natural gas as a fuel source. A prime target of Greece's natural gas policy is to diversify its gas portfolio and, at the same time, become interconnected with the European gas network and the network neighbor countries. Greece currently buys the bulk of its natural gas from Russia via Bulgaria. In early 2000, Greece also started importing Liquefied Natural Gas (LNG) from Algeria, a practice that will extend over a 20-year period. Greece currently does not have any domestic gas production capability.

Greece's oil production is limited to about 30,000 barrels per year from the Prinos oil fields in the Aegean, off the coast of Kavala. These fields have remaining reserves of an estimated 6-8 million barrels. However, major investments are projected for the four refineries in this region. The Ministry of Development, in cooperation with Hellenic Petroleum S.A., is planning to issue new licenses for oil exploration by 2009.

The Greek Regulatory Authority for Greece, (RAE), believes that by the year 2020, the share of renewable energy, mainly via wind and solar parks will be around 20 percent.

## 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
Total Market Size	1,455	1,650	1,900
Total Local Production	400	460	560
Total Exports	45	50	60
Total Imports	1,100	1,240	1,400
Imports from the U.S.	70	80	180

The above statistics are unofficial estimates

More new regional energy investment projects and opportunities, estimated at \$30 billion, including the Greece-Italy natural gas pipeline and South Stream pipeline, and the Burgas –Alexandroupolis oil pipeline, and electricity grid interconnections with neighboring countries are also expected to start soon.

## **Best Prospects**

The development of the energy sector brings forth very good sales opportunities. Greek manufacturers of energy equipment, and energy-related service providers are currently unable to meet domestic needs, therefore, foreign presence in this market is considerable.

Major strategic objectives of the Greek Ministry of Development are:

- diversification and secure energy supplies across all of Greece;
- competitive operation of Greece's domestic energy markets;
- contribution of the energy sector to the competitiveness of the Greek economy;
- protection of the environment and dramatic reduction of emissions; and
- strengthening of Greece's role in the development of the energy sector in the Southern Mediterranean, Balkans, and the Black Sea regions.

The 2008-2012 year plan developed by Ministry officials focuses on accomplishing the following:

- completion and improvement of necessary infrastructure in the energy sector (transmission, distribution, and tank networks);
- joining international energy networks of oil, electric power, and natural gas;
- setting into place strategic actions for the effective operation of the energy sector;
- decreasing energy consumption with investments in energy efficient technologies, renewable energy sources; and
- decreasing environmental pollution generated by energy providers.

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. Specifically, consulting engineering firms for designing, managing and operating the new industrial and commercial electrical power and cogeneration systems. In addition, joint venture or licensing arrangements for the local production of wind energy equipment, accessories, automation instruments and parts have excellent sales prospects.

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; Insulators and transformers, natural gas and oil equipment. All of the above items are listed in the EU harmonized tariff schedules 84.02.19, 84.11.81, 85.02.13, 85.37.10, 84.10.10, 84.21.39.

The 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.

# **Key Suppliers**

General Electric is the main supplier of power generators in Greece, followed by Siemens (Germany) and Alsthom (France). All major U.S. and multinational natural gas and oil equipment manufacturers are exporting to the Greek market. GE Jenbacher and Dresser-Waukesha, both U.S. companies, are among the major suppliers of cogeneration systems in Greece. GE Wind and Jasper, both U.S. firms, face major competition from many European wind generating equipment manufacturers, as well as tremendous delays in developing their projects due to Greek state bureaucratic procedures. In photovoltaic sector, major competitors to U.S. firms are from Japan, China, and Italy.

## **Prospective Buyers**

#### Public Sector Buyers

The main purchasers of energy production, natural gas and renewable energy 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.

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 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: <u>mnp@elot.gr</u> or <u>info@elot.gr</u>

#### 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**

Power-Gen Europe June 2-6, 2008, Milan, Italy The organizer of the exhibition is: Penn Well Website: <u>www.powergeneurope.com</u>

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: 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: <u>www.ldk.gr</u> - E-mail: <u>main@ldk.gr</u>

## **Resources & Contacts**

http://www.ypan.gr http://www.rae.gr http://www.dei.gr http://www.eurelectric.org

## U.S. EMBASSY

U.S. Embassy The U.S. Commercial Service 91 Vas. Sophias Avenue GR-101 60 Athens, Greece Tel: +30/210/720-2302, Fax: +30/210/721-8660 Emilios Margaritis, Senior Commercial Specialist E-mail: Emilios.Margaritis@mail.doc.gov

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: <u>info@rae.gr</u> Website: <u>www.rae.gr</u>

Public Power Corporation (PPC) 30 Halkokondili Street GR-104 32 Athens, Greece Tel: +30/210/523-4604, Fax: +30/210/523-9843 Contact: Mr. Dimitris Lathouris, Director General for Power Production E-mail: a.mizan@dei.gr 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: <u>mnp@elot.gr</u> or <u>info@elot.gr</u>

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**

The U.S. Commercial Service in Athens, Greece can be contacted via e-mail at: <u>Emilios.Margaritis@mail.doc.gov</u>; Phone: +30/210/720-2325; Fax: +30/210/721-8660; or visit our website: <u>http://www:buyusa.gov/Greece/en</u>

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