A NEW ENERGY ERA

For most of the period post WWII the Greek energy sector was dominated by state monopolies. Monolithic public sector enterprises controlled the electricity and late-developing gas industries. Refining and petroleum products markets were open to private enterprise but, until the last decade, were rigorously controlled by the state. In recent years, the Panhellenic Socialist Movement (PASOK) government has been moving to relinquish state control – part-privatising the monopolies and gradually opening markets to competition. The liberalisation largely has been in response to EU directives designed to create a continent-wide energy network and market that will provide both more secure and cheaper supplies. But the Greek opening is also a reflection of the mixed-economy mentality which the majority of socialist politicians have begun to embrace. Foreign firms, primarily from EU countries, are forming partnerships with Greek investors to develop the liberalised markets. The EU Community Support Frameworks have helped create the necessary domestic infrastructure. Now inter-connections with Turkey to the east, Italy to the west and with Russia and Balkan countries to the north have either been constructed or are under study. Greece's energy isolation is gradually ending. Indeed planners are trying to co-ordinate policies that might make Greece a hub for energy flows from as far away as the Caucuses, the Middle East and North Africa. If this happens, Greece can be said definitively to be moving towards a new energy era.

Greece is a small energy market. Primary energy demand in 2000 was estimated at just 2.7 tonnes of oil equivalent (toe) per person. This compared with around 4.5 toe per capita in European countries such as Germany and France and 8.5 toe in the US.

The country is dependent on imports for two thirds of its energy requirements. These consist 89% of crude oil and petroleum products, which comprise three-fifths (60.2%) of total energy requirements.

This high dependency on imported oil is a major factor influencing inflation and leaves the economy prey to the vagaries of international oil prices. Because of the particularly high Greek level of import dependency the impact is greater than for other European partners.

Greece has one oil field, Prinos, in the north Aegean Sea, that, at one time, supplied up to 10% of total domestic oil needs. Today it is all but depleted and no new fields have been discovered.

The principal hydrocarbon resource is lignite, which is of low calorific value and highly polluting. But it is still used to produce nearly 70% of electricity while another 15% is generated using sulphurous fuel oil.

Current policy is to replace lignite with less-polluting natural gas both in the latest thermal generating plants of the Public Power Corporation (DEH) and in the new stations licensed to private-sector independent power producers (IPPs).

The problem is securing adequate supplies. Greece has international contracts totalling approximately 6.5 bn m^3 but by the end of this decade, if all the IPPs come on line, it will need approximately 8 bn m^3.

There is currently only one gas pipeline from Russia via Romania and Bulgaria. Three others are under study – to Iran and the Caspian via Turkey, to the Ukraine via Turkey and to Italy by a submarine connection under the Straits of Otranto – but preliminary work suggests that the costs will be high.

Nevertheless the country will have to bear them in order to meet its commitments for the abatement of greenhouse gases made under the Kyoto Agreement.

[1] This is the baseline scenario advanced by the Greek Regulatory Authority for Energy(RAE) in a November 2001 submission to the OECD's International Energy Agency (IEA) for its in-depth review of Greek energy 2001-2002. (An alternative scenario in which Kyoto targets were fully met would see per capita consumption grow in the decade to 2010 by just 1.1% a year to 3 tonnes of oil equivalent.) The rate of growth in total demand under the baseline scenario is forecast to slow in succeeding decades, rising an average 0.7% a year to stand at 3.6 toe per capita in 2020 and an average 1.4% a year to stand at 3.9 toe per capita in 2030.

[2] The government's target is to achieve parity with the EU norm for GPD per capita by 2010. It currently stands at around 70%.