



Photo: Bob Krist, Corbis

Plan to build three nuclear power plants approved

Turkey goes nuclear

The Turkish parliament has passed a bill approving the building the country's first nuclear power plants. 'Nuclear energy is Turkey's top priority,' said Turkey's minister of Energy and Natural Resources Hilmi Güler. Turkey needs \$100 billion of investment in the electricity generation industry, he added. The minister predicts that 2008 will be 'the busiest year in Turkey's entire energy industry'.

| *By Marc Guillet*

The debate in the Turkish National Assembly on the controversial nuclear initiative was emotional and tumultuous. It lasted all night and

didn't finish until the early hours of the morning. The opposition had a lot of objections and amendments but in the end it couldn't block the legal

framework for the first three nuclear plants in the country, as the ruling AK party has an overwhelming majority in the Turkish National Assembly.

Why has the Turkish government decided to go nuclear? Turkey is a vibrant emerging market with a young population and towering ambitions. Currently Turkey's fast growing economy is the 17th largest in the world, but the governing Justice and Development Party (AKP) wants the economy to take a place in the top 10 as soon as possible.

Already the country's thirst for electricity is growing by 8 to 10 percent a year due to the high growth rates of production and population. This presents a problem, because Turkey has limited indigenous energy sources and has to import 62 percent of its primary energy to meet its needs. Annual energy imports exceeded \$30 billion in 2007. Because of the soaring oil and gas prices the energy imports eat away more and more of the country's budget. Unless immediate measures are taken, the amount paid to oil and gas-producing countries will become a serious problem, said Süreyya Yücel Özden, National Committee President of the World Energy Council.

The State Planning Organization has now come up with a five-year energy plan. The plan stresses the need for increased energy efficiency, reducing illegal use of electricity, promoting renewable energy sources, improving electricity trade with neighboring countries (including Iran) and decreasing dependence on imported crude oil and natural gas. And it opts for nuclear energy, which is seen as a vital element for improving energy security.

The government is in a hurry, too. The nuclear plants should become operational in 2012. Necdet Pamir, an independent energy expert, dismisses this scenario as 'way too optimistic'. Selahattin Hakman, head of the energy group of Sabanci Holding, a conglomerate that will most likely be involved in the project, predicts: 'If you start the project now, it will take 10 years to finish the first unit'.

The ministry of Energy will decide later on the location and capacity of the

plants. The Turkish Electricity Trading and Contracting Company (TETAS) will organize the tenders. The government wants the private sector to build the plants, which are to have a total capacity of 5,000 Megawatts and a price tag of about \$7.5 billion. The construction and management consortium must be 60 per cent Turkish owned. The ministry has said that it will not consider the newest type of reactors ('fourth generation'), but prefers proven technology. The Turkish Atomic Energy Foundation (TAEK) prefers water-cooled reactors that use pressurized heavy water and natural uranium, and pressurized light water and boiling water along with enriched uranium.

Turkey has indicated that the independence of the Turkish Atomic Energy Authority (TAEK) will be increased, as required by the European Union Progress report.

Foreign investors are already showing a keen interest in the nuclear projects. The booming energy sector in Turkey promises lucrative contracts. Minister of Energy Güler has predicted that 2008 'will be the busiest and the most colourful year in the Turkey's Republic's entire energy history'.

Turkish conglomerates have been meeting with foreign companies to find the best suitable partners. Sabanci Holding, the second biggest industrial conglomerate in Turkey, is one of the interested parties to invest in the new nuclear plants. Energy is one of the company's strategic sectors. The holding will start to work within the next year on one natural gas plant, one coal plant and eight hydroelectric power plants. Building a nuclear plant is one of its priorities. Selahattin Hakman, Sabanci Holding energy group's chairman, said that the company is negotiating with several firms from the United States, Europe and the Far East. To the Turkish business daily Referans he said: 'Soon we will sign a foreign partnership deal in nuclear energy.' ■

Nuclear booms in oil-rich Middle East

Not only countries like China and India are scrambling to build new nuclear power stations, nuclear is also booming in the oil-rich Middle East. One reason is Iran's drive for nuclear energy, which is encouraging other countries in the region to follow suit. Sunni Arab states do not want to be left out of the prestigious premier league of nuclear nations. Saudi Arabia is one of the countries busy hiring atomic contractors and buying nuclear hardware. In all, about a dozen states in the Middle East have recently turned to the International Atomic Energy Agency in Vienna for help in starting their nuclear programs. King Abdullah II of Jordan has been quoted as saying: 'The rules have changed. Everybody's going for nuclear programs.'

President Nicolas Sarkozy of France, for one, is more than willing to give Muslim countries access to nuclear power. He hopes it will be a boost for the French nuclear industry, although he says his ambition is mainly political. 'Preventing a confrontation between Islam and the West means helping Muslim countries to access the energy of the future: nuclear power.' Failure to do so 'will lead to an explosion of terrorism', he warned.