

In the case of emergency supply situations, however, the government has reserved for itself a strong, direct interventionist position. If a severe shortage of oil were to materialize, Japanese law permits the government to put in place controls over the production, marketing and import plans of the private oil companies. Other tools at the disposal of the central authorities is the establishment of oil consumption ceilings for major consumers, the introduction of quotas for the supply of gasoline to service station, the regulation of petroleum product prices and the introduction of a rationing system to allocate oil supplies.

To further enhance the security of Japan's energy supplies, the government reserves the right to refuse overseas investment in the oil industry. Companies that wish to invest must give the government assurance that oil supply will not be diverted in times of supply emergencies.

### **B. Towards A Reduced Dependence On Oil**

As was previously mentioned, Japan has been quite successful in reducing the percentage of its primary energy requirements met by oil, from 77% in 1973 to about 57% in 1991. For the most part, this diversification in the energy mix has been achieved through an increased reliance on nuclear power and LNG in electricity generation.

The Japanese government, in its October 1990 long-term energy supply-demand outlook, has stated its intention to attempt to reduce oil dependence even further to a point where only 45% of energy needs are satisfied by oil. In order to attain this target, much greater reliance will need to be placed on nuclear power. This is problematic for two reasons: the long lead times for construction, which adds to capital costs; and the growing public opposition to the siting of nuclear facilities. Nevertheless, the government continues to allocate more than 80% of its energy-related R&D expenditure on nuclear.

Emphasis will also be placed on the introduction of cogeneration systems mainly based on fuel cells, and an increased use of LNG for electric power generation. The government is also looking to increase the contribution which new energy sources make to domestic supply, from the current 1.3% to 5.3% by 2010. To accomplish this goal, the government will continue to stimulate activity in the renewable energy sector through a number