## **Dual Challenge**

The Gulf crisis has rewritten the ground rules for Japan's energy industry. The crisis came just as Japan was examining its long-term energy policy in light of such structural issues as the tightening energy supply-demand situation worldwide, soaring domestic energy demand and accelerating environmental destruction. The industry now must face the dual challenge of short-term problems arising from the Gulf crisis and longer-term corporate management issues.

Japan's energy demand has grown steadily in fiscal 1990, reflecting continued growth in capital investment and brisk consumer spending. Soaring demand for electricity for air-conditioning during the unusually hot summer also drove up the higher energy demand. Growth in demand for energy, in particular industrial energy, is expected to slow in fiscal 1991 due mainly to industrial production slackening and a deterioration of the capital investment environment.

Assuming that a prolonged Gulf crisis keeps crude oil prices above the \$30 WTI benchmark per barrel, oil demand in fiscal 1990 should rise 4.5% and in fiscal 1991 by 2.3%. Growth in electricity demand is projected at 6.5% in fiscal 1990 and 3.0% the following year.

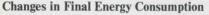
The soaring energy prices triggered by the Gulf crisis and higher interest rates threaten to batter the energy industry's balance sheet.

Japan's oil industry, plagued by overcompetition, can seldom pass on increases in crude prices. Conversely, a

drop in oil prices tends to drive product prices down even further than the actual reduction in costs. Since September 1990. oil companies have been trying to pass on crude oil hikes directly to products. Companies have even provided the Ministry of International Trade and Industry with monthly reports on their refining costs to assure consumers that there has been no price gouging. Yet these higher product prices have failed to make up for earlier increases in costs, leaving oil companies faced with a drastic trimming of their fiscal 1990 profits.

If the eventual end of the Gulf crisis triggers a new round of price wars among the oil companies accompanying a downturn in crude prices, the oil industry could face even further deterioration in its balance sheet in fiscal 1991.

Meanwhile, in the electric power industry, higher depreciation and interest expenses plus soaring fuel costs are likely to tighten the balance sheets of all power companies. The electric power industry is far less vulnerable to fluctuations in oil prices than at the time of the oil crunch in the early 1970s. Yet even today a crude oil price rise averaging \$1 per barrel a year would still translate into an aggregate ¥65 billion in higher costs for Japan's nine power companies. Although the effect of the Gulf crisis on oil prices was only felt in the second half of fiscal 1990 and brisk power demand during the year should more than make up for increased costs, power companies may suffer a hefty decline in their fiscal 1991 profits unless crude oil prices come down.



(million kl in crude oil terms)

Final consumption of energy	FY 1986		FY 1987		FY 1988		FY 1989	
	294	(0.4)	308	(4.8)	325	(5.7)	337	(3.4)
Industrial use	156	(-1.2)	163	(4.8)	173	(5.9)	178	(2.8)
Household use	72	(1.1)	76	(5.3)	80	(5.4)	82	(2.1)
Transportation use	64	(3.5)	69	(4.1)	72	(5.6)	77	(6.5)

Note: Figures in parentheses denote growth rate over the previous year. Source: Ministry of International Trade and Industry



A futuristic high-performance electric car



An energy-saving heat pump that turns exhaust heat into new heat energy. Various factors are pushing Japan to further examine its long-term energy policy.

After a year of deliberations, the Advisory Committee for Energy, an advisory body to the international trade and industry minister, announced a basic guideline for Japan's new energy policy in June 1990. The guideline was accompanied by a new long-term energy demand outlook. In October, the government also announced a program for stabilizing Japan's carbon dioxide emissions to reduce the greenhouse effect and prevent the longterm warming of the earth. The firststage target is to stabilize per-capita carbon dioxide emissions after 2000 at 1990 levels

These two long-term programs, both of which focus on conserving energy and resources, represent a departure from previous reports. Both call not only for improving energy-saving devices but emphasize the importance of a more systematic approach to coping with energy issues. This new approach will require recycling of urban heat emissions and waste, as well as a thorough reassessment of existing transportation systems. The energy industry will have to work seriously to conserve energy, operating its facilities more effectively and expanding regional energy supplies. The process will bring new challenges as well as fresh business opportunities.

(Masaki Aoyama, economist)