

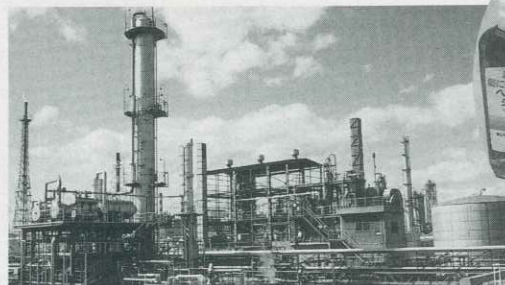
# Rivalry Intensifying

There was good news and bad news in Japan's petrochemical industry in 1990. The good news is that the general economy continued to grow, sustaining firm demand for most petrochemical goods. The bad news is that the Gulf crisis caused naphtha prices to skyrocket. These were the two crucial factors influencing the petrochemical sector in the past year.

The demand for products, measured in terms of ethylene equivalent, remained generally strong for most of the year. The market was tight, especially in the first half, when a number of ethylene plants and other petrochemical complexes were shut down for regular maintenance.

Unlike 1989, however, strong demand for products did not extend across the board. Demand for both polypropylene and polyethylene resins, for instance, was strong due to demand from makers of industrial parts and packaging. But the growth of demand for polyvinyl chloride slowed because sales to housing-related users failed to continue their rapid expansion.

Among raw materials for synthetic fibers, demand for both ethylene glycol and caprolactam remained strong in response to uninterrupted growth in production of polyester fibers and films and nylon, respectively. By comparison, demand for acrylonitrile, used in the production of acrylic fibers, was sluggish.



After years of benefiting from a booming economy and rising demand, Japan's petrochemical industry now has to cope with higher costs and fierce foreign competition.



Photo: Mitsubishi Kasei Corp.

The market for polypropylene and polyethylene resins was strong in 1990, thanks to demand from industrial parts and package manufacturers.

Meanwhile, rising production costs and other costs forced corporate incomes to decline substantially in the first half of fiscal 1990. Even before the Gulf crisis, rising naphtha costs, beginning in late 1989, prodded producers to propose price hikes for their products in and after April 1990. But the price hikes did not go into effect until the summer. Producers also had to grapple with higher labor and distribution costs as well as rising depreciation and interest payments.

The Gulf crisis pushed naphtha prices even further skyward, bringing the companies' earnings outlook into serious question. Corporate income results will depend on price-hike negotiations for ethylene and other olefins, including their derivatives, and for plastics and other final products. At this point, however, it looks fairly certain that even price hikes

will not offset the higher naphtha costs, and that producers will report earnings declines for the second half of fiscal 1990.

The petrochemical industry had had extensive plans for investments aimed at raising production capacity and improving R&D programs for fiscal 1990. A survey by the Industrial Bank of Japan in August indicated that petrochemical producers had planned to expand their capital spending for plant and equipment by 26.5% over fiscal 1989. It now looks as if these ambitious plans will have to be revised somewhat from fiscal 1990 to 1991, both in light of uncertainty about crude oil prices and the severe environment for fund procurement, i.e. higher interest rates and the stock market slump.

Until recently, Japan's petrochemical industry, including the "bulk" mass production commodities sector, benefited from years of economic boom and rising demand, raking in unprecedented profits. Now, however, the industry faces a severe environment. Following the Gulf crisis, Japan's petrochemical industry appears to be descending from a peak.

Besides higher costs, Japan now faces increasingly fierce competition from foreign manufacturers in general. East Asian manufacturers in particular are becoming increasingly competitive in the bulk section, further intensifying the race. To stay ahead of the pack, Japanese producers will have to strengthen their fine and specialty chemical lines under medium- and long-term corporate strategies.

## Trends in Japanese Petrochemical Industry

	FY 1987	FY 1988	FY 1989	FY 1990 (estimate)	FY 1991 (forecast)
<b>Domestic demand</b> (1,000 t;)	4,705 (6.6)	5,139 (9.2)	5,471 (6.5)	5,800 (6.0)	5,900 (1.7)
<b>Exports</b> (1,000 t)	621 (-5.0)	576 (-7.2)	713 (23.8)	630 (-11.6)	650 (3.2)
<b>Imports</b> (1,000 t)	616 (-8.3)	578 (-6.2)	591 (2.2)	590 (-0.2)	640 (8.5)
<b>Production</b> (1,000 t)	4,705 (7.5)	5,161 (9.7)	5,652 (9.5)	5,870 (3.9)	5,970 (1.7)
<b>Sales</b> (¥ billion)	2,804.1	3,100.9	3,381.4	3,585.0	3,740.0
<b>Ordinary profits</b> (¥ billion)	159.1	253.1	263.9	217.0	166.0
<b>Profit margin</b> (%)	5.7	8.2	7.8	6.1	4.4

Notes: 1. Petrochemical tonnage in ethylene equivalent

2. Figures in parentheses denote growth rate over the previous year.

3. Sales and ordinary profits are the combined figures of seven leading producers—Mitsubishi Petrochemical, Mitsui Petrochemical Industries, Mitsubishi Kasei, Mitsui Toatsu Chemicals, Showa Denko, Ube Industries and Sumitomo Chemical.

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