

# Keeping Competitive

A boom in home construction, especially in the first half of 1988, and firm personal spending throughout the year prompted an increase in domestic demand for the products of Japan's petrochemical industry. The demand for polyethylene and three other major plastics rose at least 6% from 1987. This growth was larger than anticipated at the beginning of 1988. Meanwhile, demand for petrochemicals in South Korea and the rest of East Asia grew, causing supplies to become tight, with the result that imports into Japan continued to decline.

Both increasing domestic demand and decreasing imports made it necessary for the Japanese industry to increase supply even though it was utilizing virtually its entire capacity. Thus, the government made ethylene exempt from the industrial structure law, which forbids capacity expansion, effective from September 1987. Similarly, regulations on the capacity expansion of ethylene derivatives were lifted in March 1988.

The decision generally allowed the industry to increase capacity freely. But the industry chose to increase production by starting up suspended plants rather than constructing new facilities because Korean companies in particular plan to build new ethylene plants within only a few years. Japanese ethylene producers are likely to resume operations of suspended plants with a total annual capacity of nearly 700,000 tons during the period from February 1988 to March 1989. Producers have also been starting up derivative plants since June 1988.



Demand for polyethylene and three other major plastics, used in the production of an increasing number of high value-added products, rose by over 6% in 1988.

Given this situation—increasing demand at rates faster than originally anticipated and a slow increase in supply—the petrochemical market in Japan remained tight throughout 1988. Also crude oil prices remained at low levels, while the yen continued to be strong, even though the market prices for petrochemicals stayed flat. That helped producers to benefit from low production costs. They increased production and sales. In addition, they were helped by rising export prices in earning increased profits on the international market. As a result, profitability improved, especially of mass-production resins. Many producers are likely to report best-ever profits for 1988.

Japan and the rest of East Asia will not increase production capacity substantially in most of 1989, because Japan's capacity expansion will be relatively minor and the major new capacity in Korea will start up toward the end of the year.

As for the demand, both Korea and Taiwan export fairly large amounts of their derivatives and final products to developed countries and their petrochemical performance will be affected by the



Photo: Mitsubishi Chemical Industries

general economic situations in the developed countries. It is unlikely, however, that the two countries' industries will suffer from negative growth. In Japan, demand for petrochemicals is expected to grow at a moderate rate. Due to decreasing housing investment, growth in demand will slow down, but personal expenditure is expected to remain firm. Therefore, the market will likely remain tight in Japan as well as East Asian countries, and Japanese producers will continue to enjoy high levels of profits.

Meanwhile, increasing demand and firm prices have prompted Korean companies to develop new plans for constructing ethylene plants. Similar plans are being forged in other countries in East Asia as well as the rest of the world. In Japan, many suspended plants have already been started up again, forcing the industry to raise capacity further by minor modifications of existing plants in the latter half of 1988. In the spring of 1988, however, ambitious calls were made for constructing two large ethylene plants, each having an annual capacity of between 500,000 and 600,000 tons, in eastern and western Japan. This idea is worth watching.

It remains to be seen if the ideas will actually materialize. But the planned new capacity outside Japan will make it inevitable that the market will turn soft in the future. Thus, Japanese producers intend to counter the new situation, including soft prices, by trying to gain cost competitiveness and increasing the number of products with a high value-added content. The companies are in a position to make these efforts now as their profitability is good.

(Masao Mori, economist)

## Ethylene Supply and Demand and Trade in Petrochemicals

	FY 1985	FY 1986	FY 1987	FY 1988 (estimate)	FY 1989 (forecast)
<b>Domestic demand</b> (1,000 t)	4,314 (0.5)	4,415 (2.3)	4,714 (6.6)	5,010 (6.3)	5,160 (3.0)
<b>Exports</b> (1,000 t)	462 (3.0)	654 (41.4)	621 (-5.0)	620 (-0.2)	660 (6.5)
<b>Imports</b> (1,000 t)	548 (22.1)	672 (22.7)	615 (-8.4)	540 (-12.2)	530 (-1.9)
<b>Production</b> (1,000 t)	4,219 (-2.8)	4,376 (3.7)	4,705 (7.5)	5,100 (8.4)	5,300 (3.9)
<b>Sales</b> (¥ billion)	3,391.3	2,692.7	2,807.8	2,820	3,000
<b>Ordinary profits</b> (¥ billion)	97.6	80.7	159.1	210	211

Notes: 1. Sales and ordinary profits are the combined figures of five major general chemical companies and two specialized petrochemical companies.

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