

# The Rise and Fall of Japan's Coal Industry

By Katsundo Shimazaki

**T**he closing of Minami-Oyubari colliery on March 27 marked the end of an era for Hokkaido's Yubari City. It was on that day that underground coal mining came to a complete halt in the city, where more than 20 collieries in their heyday produced millions of tons of "black diamond." As the successive closings have destroyed the city's financial base, Yubari City is beset by a host of difficult problems including high unemployment and the need for regional development.

The end of coal mining in Yubari is symbolic of the steady decline of Japan's coal industry. Over the years coal production has continued to shrink as one colliery after another has been forced to close. Under the current coal policy, in force since fiscal 1987, production is to be reduced to about 10 million tons in fiscal 1991 as part of efforts to promote structural adjustment in the declining industry.

The coal industry provided the motive power behind the nation's economic recovery after the end of World War II. But it started to decline after a relatively short period of rapid expansion.

## How it began

The history of Japan's coal industry dates back some 200 years ago, when the mineral was first ripped from the soil in the Chikuho district of Kyushu, once the nation's largest coal-producing area. It was not until 1868 that modern machinery was used for coal mining. Mechanized underground mining began at Takashima colliery in Nagasaki in a joint undertaking between British engineers and the Nabeshima Clan which ruled what is now Saga Prefecture. The pits were closed in 1986.

The government started compiling statistics on coal production in 1874, when it was officially reported that 200,000 tons were produced. Output expanded rapidly in the years that followed, exceeding 10 million tons in 1903 and 20 million tons in

1912. After reaching 31 million tons in 1919, production leveled off for several years as the coal industry was hit by a prolonged recession. Production picked up momentum again in 1931 amid Japan's military expansion, and output reached an all-time record of 56.3 million tons in 1940. The collieries across the country were operated to capacity during World War II to fuel the war machine.

During the war, conditions in the pits remained extremely dangerous because of a serious shortage of machinery and equipment, which resulted in poor maintenance. The end of the war dealt a further blow to the coal industry, throwing a large number of miners out of work. The industry had about 400,000 workers on its payrolls at the war's end. With Japan's surrender, many of them walked out of their jobs and formed unions.

Coal production in 1945 was 22 million tons, half the prewar level. That was far short of the volume needed to run the railroad system and develop civilian industry. So the government decided, at the end of 1946, to expand production of strategic materials on a priority basis. The production target for coal was set at 30 million tons and that for steel at 800,000 tons for fiscal 1947. Under this policy, production quotas were set for individual collieries. Also, food, materials and equipment, and funds were allocated on a priority basis. In 1947, the government set up the Coal Supply Control Agency to tighten controls on coal distribution.

## End of official control

Coal production increased to 35 million tons in 1948 and to 37 million tons in 1949. But supply began to surpass demand by a wide margin as the domestic economy entered a period of stabilization under an austerity policy recommended by the Allied occupation authorities. The coal surplus reached 5.6 million tons in September 1949, forcing more than 200 collieries across the country to close ei-

ther temporarily or permanently within a year. In October of the same year, the Coal Supply Control Agency was dissolved, and the system of official controls came to an end. This opened the way for coal mining companies to regain their autonomy, but, saddled with heavy deficits, enormous debts and excess inventories—problems left over from the era of high-pitched production—they had no choice but to streamline their operations.

The outbreak of the Korean War in 1950 created a temporary boom in coal production. Once the boom subsided, however, rationalization efforts were stepped up. A 64-day strike staged by the Japan Coal Miners' Union in 1952 created an acute shortage, leading to increased imports of crude oil. The closing of a large number of collieries in rapid succession amid growing demand for lower coal prices put as many as 90,000 miners out of work. Some of the coal mining companies were unable to pay wages and retirement allowances or compensation for coal mine damage, causing serious social problems.

Nevertheless, the coal industry continued to hold a key position in the Japanese economy. Oil demand, though increasing, remained at a relatively low level of about 10 million kiloliters a year in the mid-1950s. Domestically produced coal still accounted for more than 46% of primary energy supply, over 90% of the fossil fuels used in the electric power industry and more than 50% of the coking coal consumed in the steel industry.

During the decade ending in 1964, coal mining companies stepped up efforts to streamline their operations, touching off a series of labor disputes and creating social problems in the coal belts. In Chikuho, for instance, the closure of mines increased unemployment and threatened to destroy the basic fabric of the regional economy. In these circumstances, coal policy became a major political issue.

Under a law enacted in August 1955 to



streamline the coal mining industry, the government purchased inefficient collieries and established a system of standard coal prices. A law regulating the use of heavy oil boilers followed in October of the same year.

The economic boom triggered by the outbreak of the Suez War in 1956 revived prosperity in the coal industry. But the boom ended in only two years and with it ended the ambitious plan adopted at the end of 1957 to boost production to 72 million tons in fiscal 1975. The position of coal, priced at a relatively high level, slipped after 1958 as the energy revolution progressed. In 1959 the government decided to reduce the price of coal by ¥1,200 per ton in five years.

In the meantime, workers at Miike colliery in Kyushu went on a massive strike in December 1959 in what is billed the worst dispute in the history of Japanese labor. Though the dispute was settled a year later, it seriously undermined relations between management and the union.

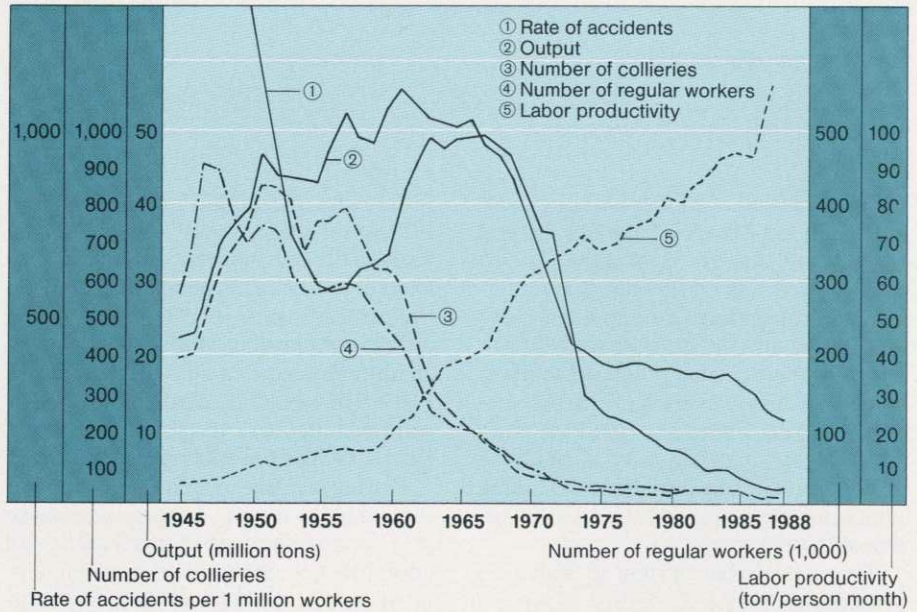
## Dramatic change

Production stayed around 50 million tons a year during the decade ending in 1964, although in fiscal 1961 it reached a postwar peak of 55.4 million tons due to a temporary rise in demand. The number of collieries dropped sharply from 843 in fiscal 1961 to 263 in fiscal 1964. In the same period, the number of workers plummeted too, from 280,000 to 110,000. On the other hand, the "scrap and build" rationalization policy paid off as it raised productivity per worker per month from 14 tons to 36 tons.

The powerful Japan Coal Miners' Union strongly opposed the rationalization drive and organized a mass campaign, arousing public interest in coal policy. Against this background, the governmental Coal Mining Investigation Group submitted a set of recommendations in 1962, on the basis of which the government worked out the first-round coal industry restructuring policy.

In making the decision the government admitted that coal had clearly lost its economic advantage to oil, but

Trends in Coal Mining Industry in Postwar Japan



Source: Coal Note 1990 edition

stressed the need to prevent the collapse of the coal mining industry, which could bring chaos to regional economies. Specifically, the policy called for maintaining coal production at 55 million tons and modernizing the collieries, while securing long-term supplies to user industries. Gloomy prospects for the future of the coal industry and coal dust explosions that occurred at Miike in November 1963 further accelerated the exodus of workers from the mines, making it difficult to maintain production at the planned level. The second-round coal policy was introduced to push the restructuring of the coal industry.

From the mid-1950s through the mid-1960s Japan's energy demand increased 2.5-fold, oil demand exceeding 500,000 kiloliters in 1962, while the share of domestic coal in primary energy supply dropped below 30%. In 1965, oil demand topped 100 million kiloliters, while coal's share shrank further to 19%. In the electric power industry, however, coal use remained at more than 20 million tons a year even after 1963, accounting for about 50% of the fuels for thermal power generation.

In the following decade, up to 1974, the government implemented three more rounds of coal industry restructuring plans. All these programs were under-

scored by two basic objectives—reducing production through the scrapping of surplus facilities (balancing supply and demand on a reduced scale), and improving the financial health of coal mining enterprises.

In fiscal 1965, output was 50 million tons, there were 222 collieries and 110,000 workers. In fiscal 1975, these numbers were down to 19 million tons, 35 collieries and 20,000 workers. These comparisons clearly show some of the dramatic changes that took place in the industry under the new policies.

Under the new policies, the government took over debts totaling ¥250 billion to improve the financial situations of maintained collieries. These debts were to be repaid in installments in the period up to 1992. In the meantime, the deepening structural recession in the coal industry stimulated debate on the management system. A variety of reform measures were proposed by a number of business leaders with a view toward changing the system, but the changes that actually took place seemed far removed from the original proposals. What happened was that coal production was merely separated by setting up subsidiaries.

The Japanese economy achieved rapid growth from the mid-1960s to the mid-



1970s, bringing revolutionary changes in the structure of energy consumption. Oil consumption reached nearly 200 million kiloliters in 1970 and 300 million kiloliters in 1975, and oil thermal power stations went into operation in rapid succession. By contrast, domestic coal consumption in the electric power industry, which reached a record 26 million tons (40% of the fuels used at thermal power plants) in 1967, dwindled to 7 million tons by 1974.

The rise of "resources nationalism" in the 1970s changed the world energy situation significantly, raising questions over future energy supply-demand relationships. The first oil crisis, triggered by the fourth Middle East War in the autumn of 1973, came at a time when Japan was shifting its energy policy to reduce the dependence on foreign oil and diversify the sources of energy supply including non-oil energy. The future position of domestic coal became an important issue.

A law providing for special measures to promote coal industry rationalization was revised in April 1977 to implement the sixth recommendation in 1975 submitted by the Coal Mining Council, an advisory body to the Ministry of International Trade and Industry. Main points of the revision were the subsidization of overseas coal development projects (payment of subsidies for development studies, loans of exploration funds and guarantees of development loans, all by the Agency for the Rationalization of the Coal Mining Industry), and financial assistance for disaster relief (loan guarantees or financing by the agency).

## Consolidation efforts

The supply-demand relationship of domestic coal continued to worsen from fiscal 1977 amid a global economic slump caused by soaring oil prices following the first oil crisis. The price gap between domestic and foreign coal widened as the yen appreciated sharply beginning in the second half of the year. Stocks of domestic coal reached 3.5 million tons at the end of fiscal 1979, and coal companies faced serious cash-flow problems.

After a relative calm prevailing from fiscal 1975 to 1976, the oil situation deteri-

orated steadily from fiscal 1977 to 1978, reflecting the political instability in oil-producing countries and the resultant sharp rise in oil prices.

In May 1979, the Ministerial Council of the International Energy Agency (IEA) decided 12 basic principles to expand coal use. The IEA also decided, among other things, to ban the construction of new oil-fired thermal power stations and abolish restrictions on coal trade.

The Japanese government for its part stepped up moves to reduce dependence on oil, beginning around July 1979, right after the Tokyo summit of industrialized nations, as part of its efforts toward energy conservation and expanding the use of non-oil energy. In May 1980, a law designed to promote the development and introduction of alternative energy was enacted. And, in October the same year, the New Energy Development Organization (NEDO) was created to lead the development and introduction of non-oil energy (not including nuclear energy) under the provisions of the new law. With the establishment of NEDO, financial assistance for overseas coal projects was increased. The Agency for the Rationalization of the Coal Mining Industry was dissolved and its activities were taken over by NEDO.

The price of oil in the early part of fiscal 1980 was 50% higher than domestic steaming coal per caloric unit. Also, the relative price of domestic coal dropped sharply as the price of foreign steaming coal soared against a background of global supply shortfalls. The seventh recommendation presented by the Coal Mining Council in August 1983 envisaged an annual production level of about 20 million tons in the future with primary emphasis on maintaining stable production at the existing collieries.

The price competitiveness of domestic coal seemed to be improving as the price of overseas steaming coal had risen markedly amid the prolongation of the Iran-Iraq war, frequent and extended strikes in Poland and other coal-producing countries, and the growth of world coal demand. The slackening of oil demand and the onset of a global economic slump in 1982 led to a weakening of de-

mand for coal, however, as its appeal as a non-oil energy form diminished. The situation worsened in the second half of 1982 when prices for some overseas steaming coal began to plummet. As a result, the price gap between domestic and foreign coal widened further. The weakening of coal demand also put a major damper on the domestic coal trade, causing its inventories to swell.

The Coal Mining Council presented a new recommendation, the eighth in a series, in November 1986 in view of the changes in the energy situation and the position of the coal industry that followed the implementation of the seventh-round coal policy. The council report emphasized the need to reduce domestic coal production in stages, eventually to approximately 10 million tons, and to alleviate as much as possible the effects which such adjustments would have on regional economies and employment.

On the basis of the recommendation, the coal industry is making utmost efforts to consolidate the production system along the lines of the eighth-round coal policy (effective for five years from fiscal 1987), with the cooperation of the industries concerned as well as the support of the government.

Even under the current eighth-round coal policy four collieries—Sunagawa, Mayachi, Horonai and Minami-Oyubari, all in Hokkaido—were closed. There are only six underground coal mines left in Japan—four in Hokkaido and two in Kyushu. Each mine is striving to smoothly consolidate the production system. At the same time, the government and the coal industry are envisioning the effective utilization abroad of the coal development technology that has been cultivated in Japan for over a century. They are making comprehensive studies on the feasibility of overseas transfer of the technologies, including the basic concept, organization, system and funding. ■

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