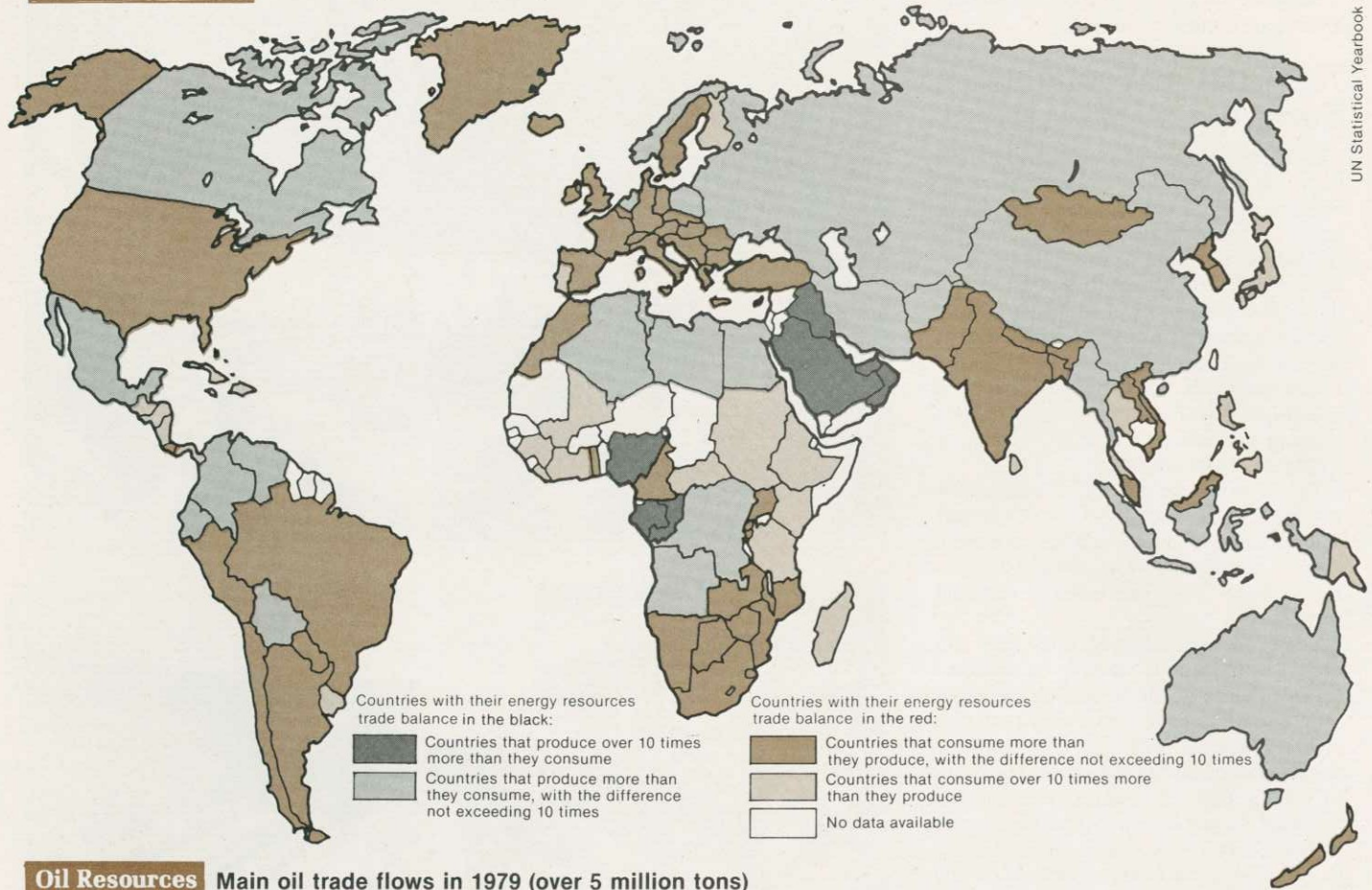
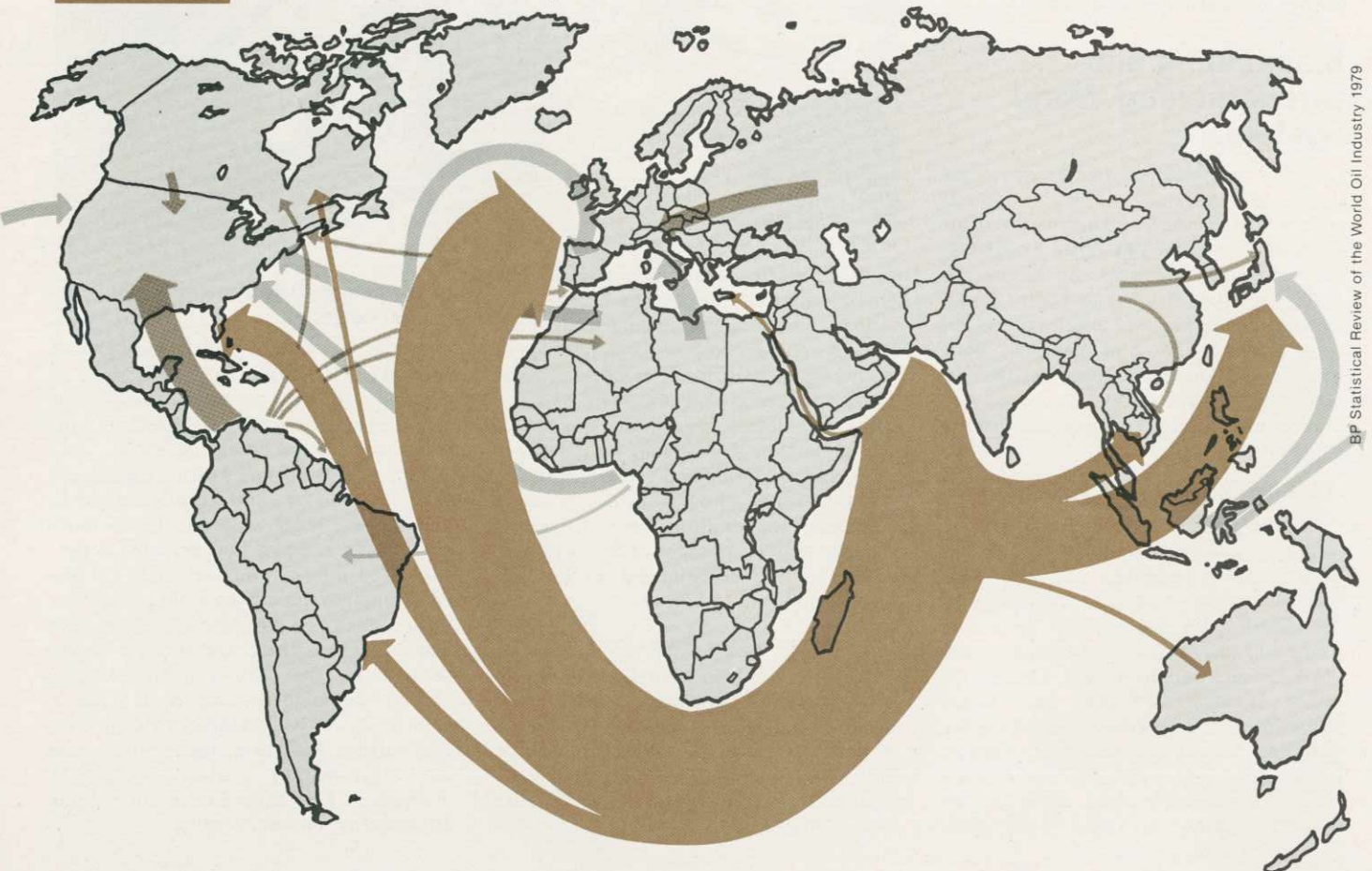


Energy Resources Domestic production and consumption of all energy resources in 1976:



UN Statistical Yearbook 1978

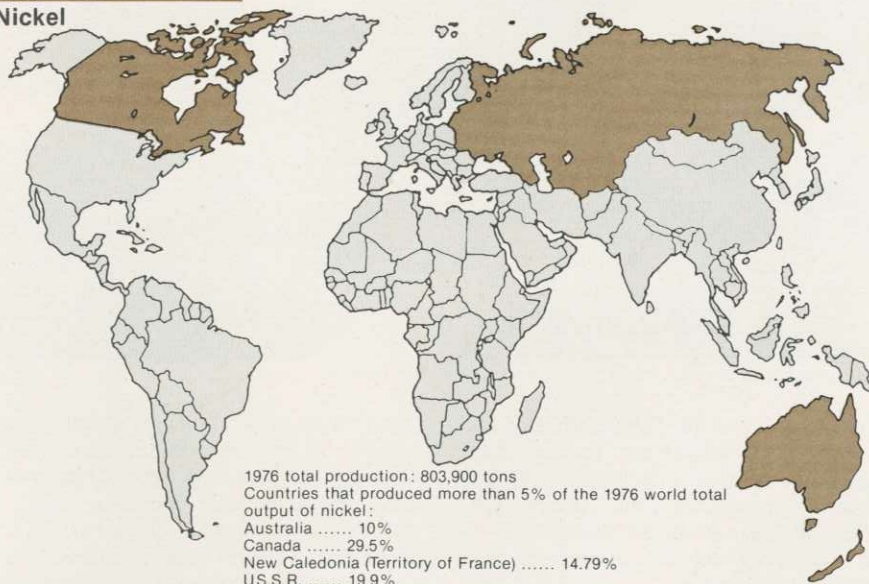
Oil Resources Main oil trade flows in 1979 (over 5 million tons)



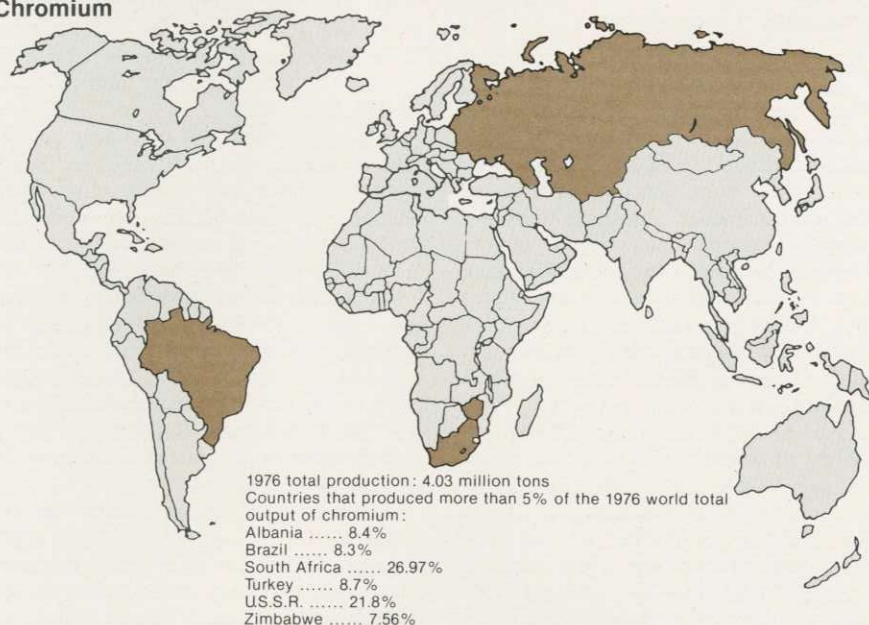
BP Statistical Review of the World Oil Industry 1979

Mineral Resources

Nickel



Chromium



Foodstuffs Areas of surplus and deficit in food trade

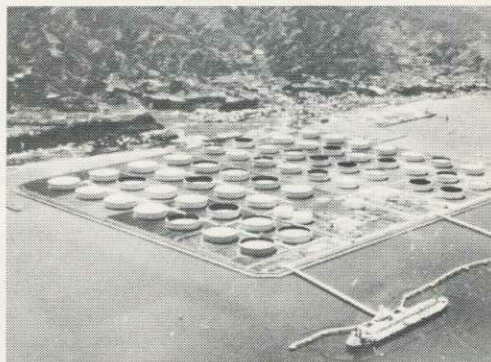


Ensuring Stable Supply of Key Materials

(1) Energy

There is optimism in some quarters about the oil supply/demand outlook. However, there are still a number of factors contributing to instability in the Middle East, a region providing 60% of world crude-oil exports, while energy consumption and supply trends in poorer countries and the Eastern bloc—areas which play a major role in oil supply and demand—are far from clear. It would thus appear that there has been in fact no change in the instability and opacity of the long-term supply/demand picture.

At the same time, there are still many problems to be solved in developing alternative energy sources, not the least of which are the securing of overseas resources, the selection of domestic sites for energy plants, and the development of technology for producing petroleum substitutes. Given its weak position in energy relative to other industrial countries,



Nippon Oil's oil reserve base at Kiire in Kyushu.

Japan should bring together government and private efforts for the sustained promotion of comprehensive measures on energy, including development of alternative energy sources. Nor should it allow the present slack demand for energy to divert its attention from this vital task.

The energy problem is closely related to other North-South and East-West issues. It is necessary to take this into account when consolidating Japan's policy toward energy-producing regions and preparing for any possible emergency in energy supplies.

(2) Mineral Resources

Mineral resources are indispensable to modern industrial activities and the life of the nation. Nickel, chrome and other rare metals in particular play an extremely important role in a broad range of industrial fields. They can be appropriately called the vitamins of modern society, and any disruption in their supply would have a critical impact on the economy. Their prices tend to be inelastic, while sources of supply are limited geographically. Some

UN Statistical Yearbook 1978

FAO Trade Yearbook 1977

rare metals are only obtainable from communist and/or politically unstable developing countries. All these factors result in an extremely unstable supply structure.

European and American industrial countries retain closer ties with resource-producing nations and companies than does Japan. This has not, however, stopped them from moving positively to build up considerable reserves of rare metals in readiness for possible supply cutoffs or other emergencies.

Japan, too, should take long-term and structural measures in this regard. It should strengthen interdependence with resource-rich countries, promote resource exploration and development, and further resource-related technology. In addition, it is necessary that it implement both government stockpiling of rare metals and an expansion of private reserves as one measure for coping with short-term or unexpected threats to supplies.

(3) Food

A look at the prospects for global food supply and demand based on various aspects of the food problem suggests there is little likelihood of large-scale or long-term supply uncertainty occurring in the near future. But there can be no denying the possibility of localized and temporary supply shortages. Moreover, the impact of supply anxiety once it occurs should not be discounted, even if temporary, because food is so indispensable to life.

Japan should make a positive, and global, contribution to expanding the world's food-supply capabilities through cooperation in agricultural technology and other measures. It is especially necessary when maintaining and improving food self-sufficiency that a balance be struck between trade problems and calls for international cooperation; Japan is required to try to improve the productivity of its domestic agriculture instead of building protectionist barriers so as to make its domestic markets as open as possible.

It is also important to take into consideration the importance of a given food product, the prospects for productivity



Japan relies heavily on safe passage of waterways such as the Suez Canal.

improvement and like factors when distinguishing between those foods which should be domestically produced and those where reliance upon imports is in order. In this way Japan should seek to arrive at an optimum mix of domestic production and imports.

(4) Maritime Transportation

Japan is a resource-poor, trade-dependent nation surrounded on all sides by sea. Trouble-free maritime transportation is obviously crucial to its economic development. At the same time, Japan relies more heavily upon a number of specific sea lanes than do other countries; there are regional tensions and other factors harboring the threat of instability in many countries proximate to straits, canals and other waterways vital to Japan. The Hormuz and Malacca straits, the Panama and Suez canals, and the Cape of Good Hope are just a few key examples.

It is to be hoped that there will be rapid progress in studies on appropriate measures for guaranteeing free maritime transportation. It is of fundamental importance that the economies of countries neighboring crucial sea areas develop favorably. Stability in their national livelihood will greatly contribute to the maintenance of peace and order.

Toward a Technological State Committed to International Cooperation

(1) Contribution Through Technology

The report "MITI's policies in the 1980s" asserts that Japan should contribute positively to the world by seeking to establish itself as a technology-oriented country that makes the best use of brain power. In materializing that proposal, Japan should tread a path toward becoming a new technology-based nation with an emphasis on contributing to international society.

To that end, the following four points should be adopted as Japan's fundamental directions for the future. First, the

basic target of technological development should be the creation of assets to be shared by all mankind. Second, untapped areas should be identified as the fields to be covered by such development. Third, technological development should be furthered as much as possible in cooperation with the other technologically advanced countries. And fourth, the technology so developed should be transferred to the rest of the world in a fair and mutually beneficial manner.

The government will inevitably have to play a greater role in this process than it would in more general technological development. Achieving a system of international cooperation will be one of the government's most important tasks.

To simply reject government involvement in technological development as official assistance to industry would run the risk of causing global technological stagnation, hindering the revitalization of the world economy. It would, in short, run counter to the goal of increasing the wealth of all mankind.

Realizing this, Japan should for the present promote international joint development of technology for reinvigorating the world economy and further the establishment of international rules for smoother technology exports. It should work to strengthen the international system for providing technological information and expand international exchange among researchers.

(2) An Industrial Structure Supporting Technological Interrelations

It can be said that technological interrelationships have played an important part in the process by which Japan has achieved its present international industrial competitiveness. By technological interrelationship is meant the mutual relationships between needs on the demand side and the development of new technology on the supply side, both of which contribute to each other in a mutually stimulative way among the basic-materials, processing and assembling industries.

Electronics and other high-technology industries are, needless to say, important



pioneers in the establishment of a technology-based country. In view of the technological interrelationships between industries, however, it is insufficient to look simply at these peaks of the technological mountain range. Japan must pay attention to the foothills as well. It must justly value the roles of the various industries that support the peaks, and build an industrial structure that will maintain and further develop important technological interrelationships.

Here arises the question of what to do with those industries which are essential to technological interrelationships but lacking in international competitiveness. Since Japan can no longer resort to import controls, it should take appropriate measures

to permit these industries to continue on a limited scale for a given period when there are prospects for a recovery in their international competitiveness in the foreseeable future, while promoting as a general principle international division of labor based on the theory of comparative cost advantages.

Many basic materials industries have been forced to make structural adjustments in the wake of sharp increases in oil prices. Some, however, are not only very important from the viewpoint of maintaining and fostering the technological interrelationships on which their development is based, but can also be expected to regain cost advantages in the medium- or long-term, through positive technological

development from a total-industry perspective. Japan should step up development of technology for revitalizing these basic-materials industries, including international joint research and development. ●

Ohtaro Sueki is chief of the Policy Planning Office of the Minister's Secretariat of the Ministry of International Trade and Industry, and engages in planning and drafting of Japan's trade policy.

Sueki, 48, joined MITI in 1959 after graduating from the University of Tokyo. He once served as chief of the Japan Trade Center in Düsseldorf.

Following articles are the commentaries on the report "Seeking the Establishment of Economic Security of Japan" contributed by three distinguished observers. They are Michael K. Young, director, Center for Japanese Legal Studies, Columbia University School of Law, Yoichi Masuzoe, associate professor at the School of Liberal Arts, the University of Tokyo and Mitsuo Kohno, deputy chief editorial writer of the Yomiuri Shimbun.

COMMENTARY

Economic Security: Japan Reviews its Options

By Michael K. Young
*Director,
Center for Japanese Legal Studies,
Columbia University School of Law*

The small English booklet *Economic Security of Japan 1982* is most thoughtful and interesting and should stimulate rather energetic debate on two—one expected and, I suspect, one unexpected—separate and rather distinct fronts.

That part of the report which will engender expected debate involves the substance of the report itself. Both the underlying premises and the proposals

which supposedly flow from these premises will provoke sharp controversy both here and in Japan.

Additionally, however, I suspect that, at least in America, debate will be equally vigorous, though, at least from the Japanese perspective, somewhat unexpected, over what this booklet suggests about the dynamics of the process of solving problems such as this in Japan. This interim

report is the first step in what seems to me a rather typical process for dealing with important political and economic issues in Japan. That this process is being played out rather more internationally and, at least to foreigners, more accessibly than is commonly the case will help sharpen and focus debate on the relationship between the process and substance of Japanese "industrial policy." (These latter revelations will be particularly timely for America as we struggle to develop a coherent industrial policy, if indeed there is such an animal.)

The booklet is a summary of an interim working report of the Special Subcommittee on Economic Security of the Industrial Structure Council, attached to the Ministry of International Trade and Industry (MITI). The subcommittee, created in November 1980 with membership drawn largely from academic and corporate circles, has met on a number of occasions during the past two years to