

Minerals in the World Economy

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The general downturn in world economic activity that occurred in 1975 was clearly seen in almost every aspect of the mineral industry that can be readily quantified. Sharp downturns measured among market economy nations, particularly the developed market economy nations, were partly compensated for, in worldwide figures, by continued growth among the centrally planned economy countries of Eastern Europe. The world's economic problems, probably dominated by the sharp rise in the cost of energy materials, combined to reverse the general upward trends in mineral production, trade, and consumption that extended from recovery from the recession of 1958 until 1974. Specifically, the United Nations index of world extractive mineral industry output for 1975 declined 2 points to 114 (1970=100), a downturn of 1.7% compared with the index for 1974 to a level approximately equal to that of 1973.

The market economy nations registered a 5-point (4.4%) decline from 112 to 107, while the centrally planned economy nations recorded a 7-point (5.6%) increase from 124 to 131. In terms of current dollars (that is, without adjustment for inflation), the dollar value of world mineral production probably increased somewhat, but the United Nations index is adjusted for inflation. The index does, however, incorporate real gains in costs of products, so quantitative levels of mineral production diminished even more substantially than would be indicated by this value-based index. In terms of quantitative output statistics, 1975 output of 61 of 81 mineral commodities discussed in this chapter declined compared with 1974 levels, production of one commodity equaled the

1974 level and only 19 commodities registered increases.

In the area of mineral commodity trade, without adjustment for inflation, a decline of about 3% from the 1974 level of \$263,-140 million was indicated by preliminary returns. Owing to the continued increases in the unit value of mineral commodities in terms of current dollars, this decrease suggests a substantially greater decline in the volume of materials moved in 1975.

No comprehensive index for consumption of all commodities is available, but declines were registered on a worldwide aggregate basis for major commodities, including iron ore, iron and steel scrap, iron and steel, aluminum, copper, lead, zinc, tin, sulfur, phosphate rock, potash, and petroleum. Modest gains were registered by nitrogen fertilizers, coal, and natural gas. In terms of the aggregate of all forms of energy, total world consumption advanced 1.1% between 1974 and 1975, but world per capita consumption declined 0.6% in 1975. Perhaps more significant, however, was the fact that total energy consumption in market economy nations fell, albeit only 1.4%, while the total world increase was the result of a 6.8% increase credited to centrally planned economy nations.

The data on investment in mineral industry activities, although far from comprehensive, provide perhaps the brightest aspect of an otherwise depressed year. Investment data available seem to indicate that corporate expenditures at least paced the inflationary trend; therefore, provisions seemingly were being made for continued

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growth when commodity demand again increases. One other aspect of brightness could be found in the quarter-by-quarter results of the United Nations industrial production indexes. Most of these index numbers for most world areas showed an upturn in the final quarter of 1975, portending recovery during 1976 of at least some of the ground lost in output levels.

The reopening of the Suez Canal undoubtedly had a desirable impact on the cost of at least some mineral commodity

transportation, but most of the newer ore carriers and tankers are unable to use the Suez because of their immense size, both width and draft; therefore, the advantages to the mineral industry are somewhat limited. Moreover, any effort to improve the waterway to a size adequate to handle the giant bulk carriers would prove very time-consuming and costly. These factors, together with the continued unsettled conditions in the Near East, make improvement projects unlikely.

PRODUCTION

The estimated value of world crude mineral production in 1975 was \$191,600 million in terms of constant 1973 dollars, about 1.7% below the revised 1974 level of \$195,000 million. The quantitative decline, however, was significantly greater than is suggested by the 1.7% figure, because of increases in the unit prices of many commodities. Even in terms of

constant dollars, most mineral commodities had higher unit values in 1975 than in 1974, and thus the decline in volume of production was partly compensated for by unit-price increases.

The following tabulation summarizes approximate data on value of world mineral production for selected years in the period 1950-75:

Year	Billion constant 1973 dollars	
	Value of 53 ¹ major crude mineral commodities ²	Value of all crude mineral commodities ³
1950	46.2	52.6
1953	60.3	69.3
1958	77.4	93.0
1963	85.6	104.9
1968	99.2	120.2
1972	149.4	179.8
1973	159.2	191.6
1974	162.0	195.0
1975	159.2	191.6

¹ The list of commodities included appears in table 5 of the 1974 edition of this chapter; one commodity covered for 1950-68 (beryl) is excluded from the 1972-74 figures, but the overall impact of this omission is regarded as insignificant.

² Data for all years except 1972, 1974 and 1975 are as reported in *Annales des Mines*, December 1975, p. 13; data for 1972, 1974, and 1975 are extrapolated from the 1973 *Annales des Mines* figures on the basis of the United Nations index of extractive industry production in the United Nations Monthly Bulletin of Statistics, August 1976, p. xii.

³ Data were extrapolated from those values given for 53 commodities to compensate for commodities not included in the source of that data. For details on the basis for extrapolation, see relevant text in the 1974 edition of this chapter under "Value of World Mineral Production."

These figures belittle the role of the mineral industry in the world economy however, for they represent an approximation of the value of minerals in their crudest form—the actual product of a mine—and not the enhanced value that results from beneficiation, smelting, and other downstream processing, as well as the value added in transporting much of these mineral materials from the nations where they are produced in the crude form to the nations where they are ultimately consumed.

If the value added through processing—smelting of metals, refining of oil, and manufacture of basic materials such as cement and fertilizers—were included, a 1975 figure on the order of \$420 billion could be regarded as a conservative estimate of the value of output of primary mineral processing plants. Moreover, it should be noted that the crude and processed mineral commodities constitute the overwhelmingly dominant share of the total raw material base for all manufactur-

ing endeavors, as well as a significant requirement for the agricultural industries because they include fertilizers.

PRODUCTION INDEX PATTERNS

The United Nations indexes for mineral industry production of the world (excluding the centrally planned economy nations of Asia) are given in table 1, together with index numbers for major sectors of the industry and for overall industrial production. All figures are provided for the world aggregate and for major individual geographic and economic areas.

The index for output of the extractive industry as a whole registered a 1.7% decline between 1974 and 1975; adjustments made in this index indicate that total world extractive industry output value increased 1.8% between 1973 and 1974 (revised from the 3.5% rise reported in the 1974 edition of this chapter). Thus, in terms of the index number, world extractive mineral industry output value in 1975 was below that of 1974 and about equal to that of 1973.

The value of output of the world coal industry went counter to the general trend of the extractive industries, registering a 2.1% increase between 1974 and 1975, a marked contrast to the 3.3% decline recorded for the petroleum and natural gas industry and the 2.8% decrease computed for the metals extractive industry. The increase noted for coal is a reflection of a shift back toward coal among major energy sources following sharp increases in world oil prices and instability of oil supplies for some nations owing to political rather than economic considerations.

Also noteworthy are the sharp differences between the index patterns for the centrally planned economy nations of Europe and those for the market economy nations. For the extractive industry index, as well as two of its three components that are shown, the centrally planned economy nations registered substantial gains between 1974 and 1975. (In the case of the third component, metals extraction, these nations did not register a decline.) Nearly all the market economy nations showed declines in all indexes except that for coal. Exceptions to this were metals extraction in Australia-New Zealand, petroleum and natural gas in market economy Europe (in-

cluding the European Economic Community), petroleum and natural gas in Latin America, and total extractive industry in Australia-New Zealand.

As in the case of the extractive industries, the major sectors of processing industries that relate directly to mineral raw materials all showed declines in terms of total world output, as measured by the United Nations indexes reflecting worldwide industry. In the case of the processing industries, however, the decline in the world index was the result of shortfalls among only the developed market economy nations. Both the developing market economy nations and the centrally planned economy nations registered gains that, in part, compensated numerically for shortfalls in developed market economy countries. Clearly the general economic problems that affected the developed market economy nations were not as pronounced among developing market economy countries although they were reflected in lower levels of crude mineral production for export from the developing countries to developed countries, and thus had an impact on the economies of the developing nations. Moreover, there was only minimal effect of these general economic problems upon the centrally planned economy countries of Europe.

QUANTITATIVE COMMODITY OUTPUT

Total world production of 81 mineral commodities is given for the years 1973-75 in table 2.³ Regional distribution of these same commodities for 1975 is given by major physical geographic area in table 3 and by economic group of nations in table 4. In addition, the statistical summary at the end of this chapter includes world output of selected major commodities by principal producing country for 1973-75.

The most prominent aspect of the data in table 2 is the vast number of commodities for which production declines were registered between 1974 and 1975—of the 81 commodities listed, 61, or over 75%, showed declines, with only 19 registering gains and 1 maintaining its 1974 production level. This was a reversal of the pat-

³ The previous edition of this chapter covered only 71 commodities; additions in this edition are refined copper, smelter nickel, bentonite, fuller's earth, kaolin, sodium carbonate, sodium sulfate, carbon black, natural gas liquids, and refined petroleum.

tern between 1973 and 1974, when 57 commodities registered increases and 24 registered declines.

Nonfuel Mineral Commodities.—Of the 41 metallic mineral commodities listed in table 2, only 10 registered production increases between 1974 and 1975 and 31 showed declines. None of the major metals—iron, aluminum, copper, lead, and zinc—showed gains either in mine output or in production of ingot metal. Metal commodities registering increases were as follows: Beryl concentrate (2.8%), chromite (6.9%), mine cobalt (1.4%), manganese ore (7.3%), mine nickel (3.5%), smelter tin (0.7%), rutile titanium concentrate (6.0%), tungsten (1.4%), uranium (7.6%), and vanadium (12.9%). The fact that a number of ferroalloying metal minerals was included among the metals registering production increases did not alter the fact that total ferroalloy production declined 5.7%, a decrease only slightly smaller than those registered for pig iron and crude steel.

Among the 29 nonmetallic mineral commodities shown in table 2, only 4—barite, nitrogen fertilizers, sulfur from pyrite, and

vermiculite—registered growth in output levels between 1974 and 1975. Most declines registered by the remaining 25 commodities were 5% or less, but there were exceptions, most notably the 46.7% fall in strontium mineral production, the 14.9% drop in output of talc and related materials, the 11% decline in gem diamond output, the 10.5% decline in gypsum output, and the 10.3% drop in feldspar output. Tables 34 to 51 in the statistical summary section of this chapter give output levels of selected major nonfuel mineral commodities (metals and nonmetals) by major producing country for 1975.

Mineral Fuel Commodities.—In 1975, world production of energy from all commercial sources (excluding wood, charcoal, bagasse, and animal dung, which are regarded as noncommercial sources) totaled 8,555 million tons of standard coal equivalent (SCE), almost 5.5% below the revised 1974 level of 8,602 million tons SCE, and only slightly above the revised 1973 level of 8,504 million tons SCE. The distribution of this energy production, by fuel source, is given in the following tabulation for 1973–75:

Energy source	Share of total energy production ¹ (percent)		
	1973	1974	1975
Coal (including lignite) -----	29.2	29.3	30.9
Petroleum -----	49.8	49.4	47.1
Natural gas -----	18.8	18.9	19.4
Hydro, geothermal, and nuclear electricity -----	2.2	2.4	2.6
Total -----	100.0	100.0	100.0

¹ Based on data in United Nations, World Energy Supplies, 1971–75. Statistical Papers, ser. J, No. 20, New York, 1977, p. 2. Figures for 1973 and 1974 differ from data published in previous editions of Minerals Yearbook owing to data changes in source publication.

The increased share of the total accounted for by coal, comparing the figures of 1973 with those of 1975, is notable; the share of total commercial energy derived from coal in 1973 was the lowest on record, and the share of total energy from oil in that year was the highest on record. The 19.4% of total commercial energy production accounted for by natural gas in 1975 was the highest share ever recorded for that commodity, and the 2.6% credited to hydro, geothermal, and nuclear energy for 1975 was also a record high for these primary electrical energy sources.

Of the 11 mineral fuel commodities reported in table 2, 6 showed declines be-

tween 1974 and 1975 and 5 registered gains, including all three types of coal (anthracite, bituminous and lignite), peat, and natural gas. Details on output of major fuels, by principal producing country are given in tables 52 to 56 in the statistical summary at the end of this chapter.

VALUE OF WORLD MINERAL PRODUCTION

General estimations regarding total world mineral output value in 1974 and 1975 appear in the first paragraphs of this production section and in the tabulation that accompanies them; no data are provided in this edition of the Minerals Year-

book on the subject of value of world mineral production on a country or a commodity basis. The source for this information, the French mineral industry publication *Annales des Mines*, publishes only on a 5-year cycle in this detail, the last year covered being 1973. For information on

the 1973 distribution of world mineral output value by commodity and country and details on the methods used to extrapolate this data in aggregate to the present, the reader is referred to the corresponding section of the 1974 edition of *Minerals in the World Economy*.

TRADE

GENERAL TRENDS

The aggregate value of world mineral commodity trade rose to \$322,871 million in 1974, the latest year for which reasonably comprehensive data are available. This represents a 108.9% increase over the value of world mineral commodity trade posted in 1973. Such a jump in the export value of mineral commodities is illustrative of the inflationary trend that accelerated toward yearend 1973, when prices of crude oil and refinery products were

advanced excessively by a number of producing nations. Such fuels represent a very large portion of the value of all mineral commodities traded, with the mineral commodities share of all commodities traded jumping from 26.9% to 38.6%. In terms of actual dollar value, the increase represented an additional cost of \$168,319 million to the consumer. The following tabulation gives 5 years' data on the estimated value of world trade in mineral commodities:

	Estimated value of all mineral commodities traded ¹ (millions)	Increase from previous year (percent)	Mineral commodities share of all commodities traded (percent)
1970	\$83,558	17.4	26.8
1971 [*]	91,153	9.1	26.1
1972 [*]	106,405	16.7	25.6
1973 [*]	154,552	45.3	26.9
1974	322,871	108.9	38.6

^{*} Revised.

¹ Value estimated from data on mineral commodities appearing in table 5, to which has been added a factor for all mineral commodities not included in that table. The factor added is based on comparison of complete mineral trade value returns for selected countries with data given for these same countries in the source for table 5, which includes only the selected mineral commodity groups specified in the footnotes to that table. This comparison indicates that the recorded mineral commodities listed in table 5 represent about 81.5% of total mineral commodity trade.

The value of world trade in major mineral commodities from developing market economies increased substantially at the expense of that from developed and centrally planned economies. In contrast to previous years, the percentage distribution of export value of the various areas to the total also changed considerably, with developed areas falling nearly 11 percentage points from their 1973 share of the total.

COMMODITY GROUP TRADE PATTERNS

Table 5 gives the value of export trade in major mineral commodity groups for 1970-74, with the value of all commodities traded included for comparison. The distribution of the total export value by each of the major mineral groups is given in

table 6, while table 7 gives the growth in value of each major mineral commodity group for each year, in comparison with the growth in value of all commodities traded. The value of mineral fuels was \$170,120 million, 64.6% of the total value of all major mineral commodities traded. This represents a growth in value of 161.5% compared with that of 1973. Thus, fuels gained a significantly higher percentage of the value of world mineral trade, as well as a commanding growth rate. Mineral fuels made up \$105,060 million of the \$137,180 million increase realized by all major mineral commodity groups in 1974. The value of iron and steel world trade increased by \$17,960 million, a rise of 63.1%. The total value for that commod-

ity group is more than 230% of the 1972 level. Because of the dominant position held by mineral fuels, the percentage of the total accounted for by each of the remaining four major mineral commodity groups declined. Iron and steel's share declined for the fourth consecutive year to 17.7%, despite a 63.1% growth in value from 1973. Nonferrous metals' percentage of total mineral trade value fell to 9.6% from 13.7%, despite a 43.2% increase in value. Value of trade in ores, concentrates, and scrap accounted for 5.9% of the total, while crude nonmetals comprised only 2.2%. The growth in value of all major mineral commodity groups was 108.9%, compared with 45.1% growth in value of all commodities traded. The value of trade in mineral fuels comprised 20.4% of all

commodities traded in 1974, compared with 11.3% in 1973.

REGIONAL TRADE PATTERNS

Table 8 gives the value of world trade of the aggregate of major mineral commodity groups in comparison with the value of all commodities traded for the countries and areas listed. Table 9 gives the origins and destinations of each of the major mineral commodity groups, and table 10 amplifies the previous data by listing the origins and destinations of the aggregate of those groupings. The following tabulation represents an analysis of the value of world mineral trade by developed, developing, and centrally planned economy countries in 1974, with each area's share of the world total in percent:

Destination ¹	Source of exports ¹				Total
	Market economy countries		Centrally planned economies	Undistributed ²	
	Developed	Developing			
Value (million dollars):					
To market economy countries:					
Developed -----	72,270	118,000	9,520	20	199,810
Developing -----	15,665	28,330	1,478	—23	45,450
To centrally planned economy countries -----	5,901	1,907	6,905	—23	14,690
Undistributed ² -----	1,974	1,103	107	6	3,190
Total -----	95,810	149,340	18,010	—20	263,140
Share of world total (percent):					
To market economy countries:					
Developed -----	27.5	44.8	3.6	(³)	75.9
Developing -----	6.0	10.8	.6	(³)	17.4
To centrally planned economy countries -----	2.2	.7	2.6	(³)	5.5
Undistributed ² -----	.8	.4	(³)	(³)	1.2
Total -----	36.5	56.7	6.8	(³)	100.00

¹ Sources and destinations grouped according to United Nations practice; developed market economy countries are Austria, Belgium, Canada, Denmark, Finland, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, the Republic of South Africa, Spain, Sweden, Switzerland, Turkey, the United States, and Yugoslavia; centrally planned economy countries are Albania, Bulgaria, the People's Republic of China, Czechoslovakia, East Germany, Hungary, North Korea, Mongolia, Poland, Romania, the U.S.S.R., and North Vietnam; developing market economy countries include all countries not specifically listed previously in this footnote.

² Figures represent difference between reported totals and reported detail. Explanations for negative quantities are not provided in source publication.

³ Insignificant.

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 2, February 1976, pp. xxviii-xlii and No. 3, August 1976, pp. xxvii-xlv.

The value of mineral commodity exports from developing nations exceeded that from developed countries for the first time, rising to \$149,340 million for a 180% increase. Previously, the export value from developing nations comprised 43% of the world total, but the year's increase gained for them 56.7%. The share

of the total from developed nations declined to 36.5% from 47.2% despite a gain of \$37,340 million in absolute terms. Centrally planned economies were up 46.4% in value of trade, but lost 3 percentage points in their share of the total. Developed nations witnessed a 174% increase in the value of major mineral

commodities imported from developing nations. Thus, developed nations again accounted for approximately 76% of all world major mineral commodity trade.

In 1974, 31.5% of the value of all commodities exported consisted of major mineral commodities, compared with 21.6% in 1973. In the Near East, 95% of the value of exports consisted of mineral fuels, with the export value of that commodity group up 259%. With the exception of the Republic of South Africa, every area listed exhibited increases in terms of the aggregate value of major mineral commodities exported and in percent of total commodity exports accounted for by minerals. In examining the countries and areas listed with regard to imports, nearly all showed an increase in the value of major mineral commodity trade, as well as an increase in the percentage of all materials imported that were of a mineral nature. The sole exception was centrally planned economy countries of the Far East and South Asia, which declined to 23.1% from 25.4% in 1974, despite a gain of \$488 million in the value of major mineral commodity imports. The value of such imports by the United States jumped 115%, outpacing the gain in value of exports of the same commodities and thus widening the trade deficit of that country.

The value of iron and steel exports from the countries and areas listed in table 9 increased considerably over that of 1974. In Japan, such exports more than doubled in value; in Europe, exports from members of the European Free Trade Association (EFTA) increased 45.7%. The value of iron and steel exports from the European Economic Community (EEC) was up

59.4% over that of 1973, and imports of mineral fuels increased from \$23,460 million to \$62,490 million. Overall, the centrally planned economy nations displayed more modest increases in the value of major mineral commodity group trade. The value of iron and steel exports to centrally planned economy countries of the Far East and South Asia exceeded \$1 billion for the first time. The relatively low value of exports of mineral fuels from those countries in 1973 was followed by a nearly eightfold increase in value in 1974, presumably because of increased exports of higher priced fuels to gain additional exchange in foreign currency.

In terms of percentage increase, the value of trade in major mineral commodities to Latin America was 204.4% above the 1973 level. Such increases are particularly severe for developing nations confronted with sudden excessive increases in fuel prices along with runaway inflation because of limited resources. The Near East experienced a 180.2% increase in value of trade in major mineral commodities, with the Republic of South Africa close behind at 170.5%. The largest portion of Latin American trade was with the United States and Canada. In most cases, the countries of the EEC and the Near East were the primary exporters to the rest of the world in terms of value of trade in major mineral commodities. By examination of the totals credited to each area or country, the relative export-import position for that region can be determined. Exports of \$335 million for the Republic of South Africa, for instance, compared with imports of \$1,777 million, make that country a net importer.

CONSUMPTION

NONFUEL MINERAL COMMODITIES

The inflationary excesses of 1973 and 1974, spurred by higher fuel prices, led to severely dampened demand and, consequently, recession in 1975, with consumption of most mineral and mineral-related commodities for which there is information down from that of the previous year. Higher costs for the extraction of basic raw materials resulted in higher prices, with the result that willingness to maintain production levels decreased as demand

fell off, driving down consumption. The iron and steel industry, historically an indicator of overall mineral industry direction, experienced significant declines in two primary sectors.

World consumption of iron ore declined 12.3%, compared with a slight 1974 increase of 2.3%. Table 11 lists consumption by selected major countries for the 3-year period 1973-75. Market economy countries, particularly developed economies had severe declines in iron ore consumption.

Members of the EEC had a 25.1% decline, equivalent to 50.3 million tons. France and West Germany were hardest hit, down 32.7% and 25.4%, respectively. French consumption of iron ore fell 16.9 million tons, with West Germany's decrease in consumption, close behind at 16.7 million tons. Overall, EFTA consumption was up 29.1%; however, this is calculated on the basis of apparent consumption for Sweden, which was determined to be up 94.1%, or 4.8 million tons. U.S. consumption was down 24.5 million tons, a decline of 17.5%. Market conditions favored Japanese steel production in 1975, and although demand was down, the decline in iron ore consumption was not as severe as in other developed nations, falling only 2.1% or 2.6 million tons. As in past years, centrally planned economy countries generally recorded rising consumption levels, although at modest rates. Consumption in the U.S.S.R., the largest consumer, was up 3.2%.

Iron and steel scrap consumption patterns paralleled that for iron ore. World consumption fell 13.5%, with all regions or designated economic groupings showing declines, except Latin America and centrally planned economy countries of Europe. Brazil and Mexico continued to expand consumption of iron and steel scrap, together utilizing an additional 862,000 tons of scrap. Japanese consumption fell 11.9 million tons, and U.S. consumption was down 22% or 21 million tons. Denmark was the only EEC member with increased iron and steel scrap consumption. Revisions in data for the United Kingdom show that consumption has declined for 3 consecutive years from the 1972 record high. Centrally planned economy countries of Europe all registered higher iron and steel scrap consumption levels, as did India and the Republic of South Africa. It should be noted that table 12 has been revised and updated to cover 5 years' data (1971-75) and include 11 additional nations.

Information is not available on most mineral commodities regarding world consumption. However, table 13 lists consumption of five major nonferrous metals for a 3-year period. It is apparent from the table that, in the face of a general worldwide recession, basic commodities are heavily affected. In 1975, the five metals listed had

declines in consumption ranging from 11.6% for copper to 15.6% for aluminum. Consumption of aluminum, an energy-intensive industry, was down 2.2 million tons. Consumption of copper was down nearly 1 million tons, while lead consumption fell 12.6% to slightly below the 1971 level. In the case of zinc, consumption was off nearly 1 million tons from the 1973 high. The 14.1% decline in tin use was second only to that of aluminum, and brought that metal's consumption down to the 1970 level.

Consumption of nonmetals also declined. World consumption of sulfur declined from 34 million tons in 1974 to 30.8 million tons in 1975, a drop of 9.4%. In the case of major commercial fertilizers, only consumption of nitrogen was up slightly for the 1974-75 fertilizer year (July 1, 1974, to June 30, 1975). That commodity's consumption rose from 38.9 million tons to 39 million tons. Consumption of phosphate fertilizers (P_2O_5 content) was down from 25.5 million tons to 24.1 million tons, a decline of 5.5%. Potash fertilizer consumption (K_2O equivalent) also decreased, falling 900,000 tons to 20 million tons.⁴

MINERAL FUEL COMMODITIES

World consumption of energy, by energy source, is given in table 14, covering the 6-year period 1970-75 in terms of million tons SCE. Total world energy consumption was up 1.1%, only slightly higher than the 0.8% increase in 1974. This compares with 5.2% in 1972 and 5% in 1973. Per capita energy consumption declined for the second consecutive year, falling 0.6% in 1975.

The differentiation of total energy consumed, by energy source, continued to follow the trends established in 1974. The share of total consumption that was liquid fuel declined again to 44% from 44.9% in 1974. Additionally, the total consumption of liquid fuels fell 1%. Consumption of solid fuels was up 3.2%, with the proportion of total energy consumption made up of solid fuels rising to 32.7% from 32.1% in 1974. While such percentage differences appear minor, they indicate the change in energy source mix from what dominated the previous 10 years. Natural gas consumption rose 1.4% to 20.4% of

⁴ British Sulphur Corp. Ltd. (London). Statistical Supplement No. 14. November-December 1976, 20 pp.

total energy consumption. This increase was due in part to increased prices and demand, which made feasible the marketing of gas that would normally have been flared or vented. Although having the smallest share of total energy consumed at 2.8%, world consumption of hydro, nuclear, and imported electricity had the highest increase at 6.7% over consumption in 1974.

Regionally, centrally planned economy countries increased aggregate energy consumption 6.8%, topping North America for the first time. Consumption of individual energy sources by centrally planned economy nations increased in 1975, except for that of hydro, nuclear, and imported electricity, which was unchanged. Consumption of liquid fuels was up 8.8%, while that of natural gas increased 12.5%, mainly imported from Europe. Solid fuels consumption for that sector rose 4.1%, compared with 2.3% for market economy nations. Per capita consumption for centrally planned economies was up 5.2%,

compared with a decline of 3.3% for market economy countries. Coal was regaining its importance among industrialized market economy nations; petroleum and natural gas were particularly important for centrally planned economies, especially those of Europe, which currently have access to large quantities from the U.S.S.R. through massive pipeline systems. Even Western European reliance on U.S.S.R. liquid fuels was increasing as a percent of total energy consumed by that region. Per capita consumption in North America fell 5.8% since 1973, while that of Western Europe declined 6.1% for that same period. Aggregate energy consumption by developing market economies increased generally, with the exception of Caribbean America. These same regions also tended to show improvement in aggregate and per capita energy consumption, with Africa, Near East, Far East, and Oceania aggregate consumption up 11.3%, 5.8%, 0.3%, and 3.1%, respectively.

INVESTMENT

Worldwide investment in the mineral industry increased in 1975, despite the recession that began at yearend 1974. Information available on general industry developments show an upward trend, particularly for petroleum industry expenses. Steel industry investments declined in the EEC, the only significant reduction in that sector in 1974. U.S. worldwide investment in the mineral industry was up substantially, even in the face of declining earnings and income. As in past years, comprehensive information on investment by centrally planned economies is not available, and assessment of that area's investment picture can only be construed by piecing together press announcements and proclamations made by individual governments. In the case of European centrally planned economy countries, substantial investment continued in pipeline and pump-

ing facilities, as well as refinery construction or expansion.

Table 15 gives annual investment expenditures in the steel industry for selected countries for 1973 and 1974. The United States again increased investment in that sector 50.3%, or \$704 million. Japanese investment expenditures showed a reverse in the downward trend of the past 3 years, rising 37.5% or \$762 million. Steel industry investments by the nine nations making up the EEC fell 7.6% or \$229 million.

Investment expenditures by market economy countries in the petroleum industry are given by geographic area in table 16, and by industry sector and exploration expense in table 17. The following tabulation gives a percentage breakdown of such expenditures by the countries and areas listed, for 1974 and 1975:

Area	Percent of total	
	1974	1975
United States -----	38.7	36.4
Other Western Hemisphere -----	11.6	11.8
Western Europe -----	15.5	18.0
Africa -----	3.0	3.6
Near East -----	4.0	4.0
Far East -----	8.2	8.8
Unspecified -----	19.0	17.4
Total -----	100.0	100.0

The United States continued to dominate the total at 36.4%, down slightly from the 1974 level. Investment expenditures in Western Europe, particularly as affected by North Sea developments, rose to 18% of the total. The remaining areas listed increased their percentage share of the total, except for "Unspecified" areas, which fell to 17.4%, and the Near East, which remained unchanged. As in the past year, capital expenditures in terms of actual dollar value increased for every area listed in table 17. While exploration expenses were up 6.4% for the world, several of the areas listed showed declines. Capital expenditures for petroleum in the United States reached an alltime high of \$17,725 million, up 6.6%. Those for Western Europe were up 30.8%, or \$2,130 million, one of the largest yearly increases recorded. Capital expenditures in the Near East and Far East were up 14.4% and 23.7%, respectively. However, Africa had the largest percentage gain at 37.9%, which in terms of dollar value was \$460 million. Overall petroleum capital expenditures were up 13.6%, or \$5,925 million. Examination of market economy petroleum industry capital expenditures by industry sector shows expenditures for production of crude oil and natural gas comprising the largest portion of total capital expenditures at 36.9%. This sector declined slightly from 1974, but the loss was more than made up by expenditures for pipelines, refineries, and chemical plants. The

marketing sector again declined, with all other sectors registering an increase. Expenditures for pipelines jumped 143.7%, or \$3,535 million, the largest increase of any sector on both a percentage and dollar basis.

Detailed U.S. investment in the world mining, smelting, refining, and petroleum industries is given by geographic area in table 18. Overall, value of U.S. investment in petroleum was up 15.3% in 1975, or \$4,611 million, despite declines of 57.9% and 68.8% in earnings and income, respectively. Value of investment in the mining, smelting, and refining industries was up 13.1% compared with that of 1974, again despite 21.7% and 35% decreases in earnings and income, respectively. Capital outflows to Peru increased, where a major copper expansion project was underway. The additional value accounted for most of the increased investment in Latin America and other Western Hemisphere countries in 1975. In petroleum investment, Europe made up 32.7% of the total, up 14.3% from that of 1974. Investment in Far East and Pacific areas was up 31.6%, and Near East investment was up 127.7%. The sharp decline in adjusted earnings and income of petroleum affiliates was due to substantial tax and royalty increases by host countries. In the Near East, for example, earnings fell from \$8,431 million to \$2,364 million, a decline of \$6,067 million, or 72%.

TRANSPORTATION

MARINE TRANSPORT

Tankers, bulk carriers, and freighters are the primary oceangoing vessels for transport of mineral commodities. The number, gross tonnage, and deadweight tonnage of these vessels, as reported by the U.S. Maritime Commission, are given in table 19. The data listed therein are not completely comparable to those supplied in previous years owing to the inclusion of refrigerated freighters in the freighter category, and their exclusion from vessels classified as "Other." In terms of quantity, such vessels numbered approximately 1,000 in 1974, with a combined gross tonnage of 5,433,000 tons and a combined deadweight tonnage of 5,794,000 tons. When considering seaborne traffic, it must be remembered

that vessels in each of the classes listed may not be involved wholly or even partly in transport of mineral commodities. Tankers generally move petroleum and refinery products, but also included in the listing are wine, molasses, and whaling tankers. Bulk carriers move agricultural products in addition to fertilizer and crude minerals, while freighters, because of their highly evolved technical nature, move numerous and diverse materials.

The volume of trade over the 5-year period 1971-75, in terms of loadings and unloadings of tanker and dry cargo, is given in table 20. Tables 21 and 22 give a regional breakdown of such loadings and unloadings, by cargo type. Overall, loadings of tanker cargo declined 3.7% in 1975, while unloadings were down 8.5%.

In the case of tanker loadings, the tonnages shown represent 2 consecutive years of decline from 1973, while dry cargo tonnage declined for the first time since this series of tables was begun in 1971.

Regionally, examination of unloadings of tanker cargo by developed market economies indicates a 9.9% decline from those of 1974. Most conspicuous among the declining developed market economy nations were Western European countries and the United States, down 11.6% and 9.3%, respectively; unloadings by Japan declined 7.8%. Loadings by developing market economies, which include the Near East and North Africa, were down 4.2%. Near East loadings fell 70 million tons, and Venezuelan loadings fell 25 million tons. Unloadings of tanker cargo remained unchanged for centrally planned economy countries, but loadings were up 12.2% to 83 million tons. Unloadings of dry cargo by developed market economies declined for the first time, by 5.7% or 64 million tons compared with those of 1974. This was in contrast to unloadings in developing and centrally planned economies, which were up 8.7% and 23.7%, respectively. As in the case of tanker unloadings, dry cargo unloadings were most heavily reduced by Western Europe, which were down 53 million tons. The United States maintained an approximate 6% increase in dry cargo unloadings. The cumulative effect of the downturn in many developed economies is evident in the tonnage of loadings of dry cargo attributed to Western Europe, which declined 49 million tons. Loadings of dry cargo in developing market economies as a whole declined 41 million tons, with most of the decline experienced by countries listed as "Other."

The percentage of such loadings and unloadings that were mineral commodities is indicated by an examination of traffic

transiting the Panama and Suez Canals. In 1975, 62.5% of all traffic transiting the Panama Canal was mineral commodities; for the 6-month operation period of the Suez Canal, 26.1% was of mineral origin. Considering that most tanker and bulk carrier traffic bypasses the canals because of capacity limitations, it may be assumed that an even larger quantity of total seaborne traffic is mineral related.

The total merchant fleet amounted to 22,872 vessels in 1975, with a combined gross tonnage of 333,042,000 tons and a combined deadweight tonnage of 556,572,000 tons. Despite worldwide recession and the reduction in trade, the number of vessels increased 1.9%, gross tonnage was up 8.7%, and deadweight tonnage, 10.6%, compared with 1974 figures. The slight change in number of vessels in the fleet compared with extensive increases in gross weight and deadweight tonnages illustrates the increase in average size of the vessels. An additional 53,224,000 deadweight tons was added to the fleet from a net change of 423 vessels, with nearly 77% of the additional tonnage in tankers.

Bulk Carriers.—In 1975, the world bulk carrier fleet increased by 197 vessels, or 4.8%, compared with an increase of 275 vessels in 1974. Gross tonnage of all bulk carriers increased 7.1%, compared with 10.3% the previous year, while deadweight tonnage was up 7.8%, compared with 10.4% in 1974. The average size of the additional vessels was 54,888 deadweight tons, compared with 47,735 tons for the 275 vessels added in 1974. Overall, the average deadweight tonnage of all bulk carriers increased from 34,176 tons in 1974 to 35,131 tons in 1975. The following tabulation lists the leading countries with bulk carrier fleets, in order of aggregate deadweight tonnage:

Country	Number of vessels	Deadweight tonnage (thousand tons)
Liberia -----	925	37,243
Japan -----	535	21,270
Norway -----	318	16,696
United Kingdom -----	343	14,508
Greece -----	483	13,205
Italy -----	151	6,541
Sweden -----	88	4,785
Panama -----	224	4,515
Germany, West -----	79	3,993
India -----	76	3,129
France -----	57	2,405
Spain -----	61	1,943
U.S.S.R. -----	148	1,652
Poland -----	75	1,613
Singapore -----	44	1,613
Brazil -----	35	1,304
Other -----	630	13,665
Total -----	4,272	150,080

Freighters.—The number of freighters (including refrigerated freighters) in the world merchant fleet in 1975 amounted to 12,575. Advances in technology and application of these advances in shipyard construction have led to an extremely varied class of vessels. Freighters consist of general cargo carriers, full container-ships, partial containerships, roll-on/roll-off vessels, and the newest design, barge carriers. The U.S. freighter fleet alone cannot be considered solely in terms of numbers of vessels, because numerous war-built vessels have been scrapped, with a

resultant decline in the quantity of vessels over the past 10 years. The average age of the U.S. fleet has declined since 1968, with newer vessels having nearly a 20% increase in average speed and a 40% increase in deadweight tonnage. Because of the inseparability of refrigerated freighters from the class of freighters, the overall statistics are not readily comparable to previous years' data. The following tabulation lists the principal nations of registry of freighters, in order of their share of aggregate deadweight tonnage for 1975:

Country	Number of vessels	Deadweight tonnage (thousand tons)
U.S.S.R. -----	1,706	10,499
Greece -----	918	8,653
Japan -----	954	7,945
United Kingdom -----	746	7,322
Panama -----	1,060	7,187
United States -----	511	7,051
Liberia -----	586	5,814
Germany, West -----	445	3,822
Cyprus -----	472	3,267
Norway -----	309	2,559
Netherlands -----	318	2,452
China, People's Republic of -----	261	2,351
Other -----	4,289	32,326
Total -----	12,575	101,248

Tankers.—In 1975, the world tanker fleet increased by 190 vessels, compared with an increase of 308 vessels between 1973 and 1974. The additional vessels resulted in a 14.2% increase in gross tonnage and a 15.6% increase in deadweight tonnage. Average tanker size increased once again, reaching 56,900 deadweight tons compared with 51,053 deadweight

tons in 1974. Average gross tonnage of vessels rose from 28,002 tons to 30,829 tons. Table 23 lists the distribution of world oil tanker tonnage, by size group, for 1975, with 1966 included for comparison. In that 9-year period, total world tanker deadweight tonnage increased nearly threefold. The dramatic change in the composition of the fleet is evident

when one compares the tonnage of vessels of 125,000 deadweight tons and over for the 2 years. In 1966, slightly more than 1% was of that size group, while in 1975, 58.2% of the fleet was in excess of 125,000 deadweight tons. As in 1974, tankers in the 205,000- to 285,000-ton class accounted for the largest percentage of tanker tonnage afloat at 43.2%, up from 41.2% in 1974. However, only 29.6% of new tankers planned or underway in 1975 were in this class, contrasted with 35.2% the previous year. Of the vessels under

construction or on order by yearend 1975, 36.6% were to be 285,000 deadweight tons and over. Additionally, total tonnage of new vessel construction in progress or on order was 88.5 million tons, compared with 164.4 million tons a year earlier, a decline of 46.2%. By yearend 1975, 53.3% of the total world tanker tonnage had been added during the past 5 years. The following tabulation gives the percentage of total tonnage, in terms of year of completion, of vessels classified as tankers in 1974 and 1975:

Year of completion	Percent of total tonnage	
	1974	1975
Up to yearend 1945 -----	1.5	1.1
1946-50 -----	.6	.3
1951-55 -----	4.1	2.7
1956-60 -----	11.2	8.8
1961-65 -----	18.5	11.3
1966-70 -----	25.7	22.5
1971-75 -----	43.4	53.3

Source: British Petroleum Co. Ltd. BP Statistical Review of the World Oil Industry, 1974 and 1975. Bayard Press, London, 1974, 1975.

Liberia remained the leading country of registry of vessels classed as tankers, with an increase of 15,651,000 tons from 1974. The following tabulation breaks down the

world tanker fleet by flag of registry, in order of national aggregate deadweight tonnage, in 1975:

Country	Number of vessels	Deadweight tonnage (thousand tons)
Liberia -----	1,014	89,470
Japan -----	531	33,950
United Kingdom -----	459	32,869
Norway -----	332	28,467
Greece -----	345	15,557
France -----	154	13,190
Panama -----	238	10,224
United States -----	250	9,475
Italy -----	236	7,953
Sweden -----	79	6,524
U.S.S.R. -----	462	5,861
Germany, West -----	83	5,627
Spain -----	114	5,257
Netherlands -----	88	5,074
Denmark -----	59	4,594
Other -----	867	28,125
Total -----	5,311	302,217

OCEAN FREIGHT RATES

The economic picture of the world in 1975 as it affected the mineral commodity situation can be clearly illustrated by examining the freight-rate situation of one significant aspect of the transportation sector in the world economy. Indexes of ocean freight rates by trip charter and

time charter, vessel type, and tonnage for selected countries are given in table 24. From the table it is evident that ocean freight rates plummeted in 1975. Even rates of centrally planned economy countries for the limited tanker classes that are available fell considerably, in contrast to previous years. The annual average index of freight rates fell for every

type and class of vessel listed in table 24, with most of the decline occurring within the first quarter of 1975. Rates were driven down sharply and persistently for a variety of reasons, including high prices for mineral fuels, particularly crude oil and refinery products; the U.S. and world recessions, which were partly a consequence of the end of the Vietnam conflict; and a surfeit of new shipping tonnage, which has virtually replaced and superceded earlier record tonnages. Rates for Norwegian tankers on trip charter fell 63% for vessels over 150,000 deadweight tons, with rates for other Norwegian tanker classes falling 43% to 50%. Rates for United Kingdom tankers on time charter were down 24% to 32%, with dry cargo rates following the same pattern. As in the case of tankers, larger vessels transporting dry cargo showed the greatest decline, with United Kingdom time charter dry cargo vessels over 40,000 deadweight tons falling 64.3%.

PANAMA AND SUEZ CANALS

The number of transits and quantity of cargo moved through the Panama Canal decreased 3.5% and 6%, respectively, in 1975. The decline from the record tonnage set in 1974 was 9,189,000 tons to 142,893,000 tons. The reduction in traffic through the Canal was attributed to various causes, primarily inflation and simultaneous recession, but also to subsidence of a portion of one of the waterway's banks. The slide resulted in temporary closure of the entire canal, and the utilization of one-way traffic until March 21, 1975. Significantly, however, despite the decline in total tonnage moved, the quantity of mineral commodities moved rose 1.8% from fiscal 1974. Additionally, the percentage of total cargo moved that was mineral commodity increased to 62.5% from 57.7% the previous year. The following tabulation summarizes mineral commodity movement in comparison with other Panama Canal activity:

	Fiscal year		
	1973	1974	1975
Number of transits:			
Commercial ocean traffic -----	13,841	14,033	13,609
Other traffic -----	1,268	1,236	1,126
Total -----	15,109	15,269	14,735
Cargo moved (thousand metric tons):			
Commercial ocean traffic:			
Mineral commodities -----	72,025	87,696	89,250
Other commodities -----	56,103	62,585	53,100
Subtotal -----	128,128	150,281	142,350
Other traffic, all commodities -----	1,481	1,801	543
Total cargo moved -----	129,609	152,082	142,893

* Revised.

Modifications in the type and nature of vessels transiting the Panama Canal were again evident for the most recent year of operation. While transits and tonnage were down, average ship size continued to increase, with oceangoing commercial vessels averaging 9,931 net tons, compared with 9,679 tons in 1974. The trend continued toward replacement of smaller vessels in Canal trade by larger specialized vessels, primarily bulk carriers and container ships. Table 25 gives commercial ocean traffic through the Panama Canal in terms of number of transits and total tonnage moved, by vessel type, for 1974 and 1975. In terms of cargo weight, dry

bulk carriers accounted for 56.4% of the total moved, followed by tankers at 17.6% and general cargo ships at 16.1%. Nearly 60% of the total cargo moved through the Canal was Pacific bound, again with bulk carriers and tankers making up most of the tonnage. In terms of number of transits, general cargo ships maintained the lead at 29%, followed closely by dry bulk carriers at 27.6%.

Table 26 gives 3 years' data on the quantity of individual mineral commodities shipped through the Panama Canal by direction of movement. While over 64% of the tonnage moved was Pacific bound, the ranking by weight of the individual min-

eral commodities changed. Coal and coke movement topped the list at 26,725,000 tons, exceeding crude petroleum and refinery products for the first time since 1971. Most of the coal and coke was Pacific bound, with 92% of that amount destined for Japan in the wake of high steel demand for export from that country. The reduction in Canadian and Australian coal and coke shipments to Japan and the decline in U.S. and European shipments of iron and steel semimanufactures are believed to have led to such change in the pattern of mineral commodity movement through the Canal. The tonnage of crude petroleum and refinery products was down 25.2% from that of 1974, partly from the reasons cited earlier, but also because of damage suffered by the trans-Andean pipeline. The pipeline supplies Ecuadorian crude oil to the El Balao shipping terminal near Esmeraldas for later shipment through the Panama Canal. The disruption was principally responsible for the 58.5% fall-off in crude oil tonnage from Pacific to Atlantic via the Canal. Atlantic bound iron ore shipments were up 38%, or 906,000 tons over those of 1974, while iron and steel semimanufactures increased

by 2,839,000 tons, a 41.5% rise over the previous year's total from Pacific to Atlantic. Bauxite and alumina shipments continued the decline begun in 1972, having decreased 711,000 tons since that date. Other high-volume mineral commodities include phosphatic fertilizer, up 3%, sulfur, down 4.7%, unspecified ores and concentrates, up 2.7% and zinc ore and concentrate, down 13.8% to 852,000 tons. Shipment of copper ores and concentrates fell sharply 22.4% or 158,000 tons from the 1974 level.

On June 5, 1975, the Suez Canal opened officially for the first time since its closure in the 1967 Arab-Israeli conflict. The Canal is a major trade route for European and Asian seaborne traffic, and the re-opening considerably reduces the distance of three major transport routes. Preliminary data indicate that considerable capacity of the Suez Canal is yet to be utilized, and while available information does not make the Suez Canal operation readily comparable to the Panama Canal, the following tabulation gives a record of the level of activity for the 6-month operation period in 1975:

Number of transits:	
Commercial ocean traffic	4,577
Other traffic	50
Total	4,627
Cargo moved, commercial ocean traffic (thousand metric tons):	
Mineral commodities	15,048
Other commodities	42,566
Total	57,614

Mineral commodity movement accounted for 26.1% of total cargo transiting the Suez Canal. Table 27 lists the number of commercial transits, by vessel type, whether in ballast or laden, through the Suez Canal. General cargo ships led with 75.9% of total transits, with tankers second at 12.4%. South-bound traffic accounted for 55.4% of total traffic transiting the Canal. Table 28 lists the movement of mineral commodities through the Suez Canal, by commodity type and direction of movement (southbound or northbound) for the first 6 months of operation. Crude oil and refinery products comprised 44.1% of mineral commodity tonnage, followed by unclassified fertilizers at 13% and cement at 12.6%. As was the case with number of transits, southbound movement of mineral commodities exceeded north-

bound, with 53.9% of the total. Of the southbound movement of mineral commodities, most was accounted for by fertilizer material and crude petroleum and refinery products. Northbound cargo movements are listed for various mineral commodities. However, it should be noted that, in the case of metals, in several instances the tonnage of ore and concentrate moved is reported with the quantity of metal moved. Northbound movement of iron ore was 836,000 tons, or nearly 50% of all ores and metals transiting in that direction.

PIPELINES

In 1975, an estimated 100,000 miles of pipeline was planned or under construction around the world. Nearly 45% of the total was gas pipelines, 26% was crude oil

lines, and 23% was product lines; the remaining 5,600 miles was slurry pipeline. By far, the largest portion of the total was in the planning or proposal stage, with about 20,000 miles actually underway or in some stage of completion.

Pipeline activity in the United Kingdom and Ireland, centered primarily in the North Sea area where over 400 miles of undersea pipelines was to be laid in 1975, amounted to 1,260 miles planned or under construction. The deepest large-diameter undersea pipeline yet attempted, a 36-inch, 94-mile line extending from Firth's Voe in the Shetland Islands to the Brent, Cormorant, Dunlin, Houlton, and Thistle Fields in the North Sea, was 50% completed. Delivery capacity was to be 1 million barrels per day, equivalent to nearly one-half of current United Kingdom consumption. Western Europe, including Scandinavian countries, had 6,700 miles of pipeline planned or under construction, with approximately 3,200 miles as gaslines. Construction of the much-discussed trans-Mediterranean gasline continued, which was to extend 1,550 miles from Algeria to Italy. Contracts were let for the design and engineering of the 370-mile link from the Hassi R'Mel gasfield to the Algerian-Tunisian border. The first undersea stretch is currently being laid across the northern approaches of the Straits of Messina. Though only 2.5 miles wide, five separate lines are being laid for greater flexibility and security along a 9-mile course designed to avoid seabed problems. Construction on the 36-inch, 270-mile gasline from Ekofisk to Emden, West Germany, continued through 1975, despite a projected completion date for late that year. An estimated 12,820 miles of pipeline was planned for the U.S.S.R., the People's Republic of China, and the Eastern European countries, with 6,985 miles as crude oil lines and 5,552 miles as gaslines. In China, a 270-mile stretch of crude oil line from Chinghuangtao to Peking was completed. This section constitutes a significant portion of the 935-mile pipeline from the Taching oilfields in the northeast of the country. Construction was begun on the Adriatic pipeline to supply crude oil to inland refineries in Yugoslavia, Hungary, and Czechoslovakia. Yugoslavia was expanding its inland refinery capacity significantly, and crude oil landed at the

planned ocean terminal at Omisalj will be piped through 105 miles of 36-inch pipeline eastward to Sisak. From there a 38-inch, 63-mile branch line to Gola, with further extensions into Hungary and Czechoslovakia, will be constructed. A 245-mile branch will also be laid eastward to refineries at Bosanski Brod, Novi Sad, and Pancevo.

In the Near East, 12,000 miles of pipeline was planned or under development. Iraq, accounting for 3,100 miles of the total, currently has the 608-mile Iraq-Turkey crude oil line underway. Contracts were finally awarded for the 40-inch crude line from Kirkuk in northern Iraq to the Turkish port of Dorytol on the Mediterranean coast. Completion was scheduled for early 1977 with an initial capacity of 500,000 barrels per day and a final capacity of 700,000 barrels per day. In Iran, separate 42-inch-diameter crude oil lines and gaslines are planned to cover the 1,000 miles between southern Iran and Iskenderum.

Far East pipeline developments were generally uncertain due to political circumstances. In total, 5,000 miles were slated for construction in that region, with India and Pakistan having major projects underway. In India, construction of 900 miles of 18-, 24-, and 30-inch crude oil lines in the Gulf of Kutch continued, while Pakistan's major task, the 18-inch, 300-mile Sui-to-Karachi gasline proceeded without abatement. In Australia, where pipeline activity was expected to grow, the 34-inch, 840-mile line from Moamba to Sydney was underway, with 1,300 miles of gasline, 713 miles of product line, and 480 miles of slurry line also planned for that country.

Canada and the United States had nearly 42,000 miles of all types of pipeline planned or underway. In the United States alone, of the 22,500 miles of such pipeline listed, 10,594 miles was for gas transmission, and half of that involved natural gas from Alaska and/or the Canadian Arctic. Study was underway for a trans-U.S. pipeline for handling crude oil from the trans-Alaska pipeline when it reached the west coast. The most likely line at this stage is from the Pacific Northwest to the Middle West crude oil refineries and industries. Another development of the mineral transportation sector in the United

States was a proposal for a coal slurry pipeline from the Powder River Basin to the Texas gulf coast. It would be a 36- to 40-inch-diameter line extending 1,260 miles, with a throughput of 22 million to 29 million tons per year.

A total of 11,000 miles of pipeline was planned or underway in Central and South America, with about 6,000 miles consisting of natural gas lines. In Ecuador, crude oil

exports were halted temporarily as heavy rains and landslides damaged the trans-Andean pipeline in March. A slurry line was planned in Brazil to carry iron ore to new ocean-shipping facilities. It is to be a 20-inch-diameter, 250-mile-long pipeline with a throughput capacity of 7 million tons per year. Two mountain ranges must be crossed with a maximum elevation of 3,855 feet.

PRICES

In 1975, inflation and the high cost of fuel dampened demand for many mineral and metal commodities. The excessive cost of many raw materials and the high interest on loans tended to suppress the housing industry in many developed countries, reducing consumption of metals and industrial minerals. The pricing boom of 1974 lasted until mid-1975, during which time many industries scrambled to absorb available stocks and supplies of raw materials. Comprehensive pricing data on large-volume materials are lacking, but information on several of the major nonferrous metals reveals that prices of most of them had declined by yearend 1975, several significantly. Only in the cases of aluminum and zinc were price increases sustained.

Tables 29, 30, and 31 give monthly and annual average prices of major nonferrous metals in the United States, the United Kingdom, and Canada. Aluminum prices in the United States and the United Kingdom increased 16.6% and 13.8%, respectively, in 1975. Prices in the United States showed a slight increase at yearend, while in the United Kingdom the price showed a general decline from May to December, when a modest rise occurred. Zinc prices in the United States reached a peak price in January of 39.153 cents per pound, with the year's low occurring in September, only 0.267 cents below the January level. The annual increase was 8.4%, compared with a 5.8% increase on the Canadian market, where zinc prices were also very stable. Only 1.460 cents separated the January high from the August low on that market. Copper prices declined 17.1% on the U.S. market, 39.7% in the United Kingdom, and 21.0% in Canada. U.S. monthly prices declined steadily for the first 7 months of 1975, then rose modestly to remain at

63.165 cents per pound for the rest of the year. Copper prices in the United Kingdom were hardest hit as they were at a low annual average price of 93.097 cents per pound in 1974. The Canadian market was much less erratic, with the largest drop, 5.772 cents, occurring between January and February. Lead prices in the United Kingdom fell 30.3%, while U.S. and Canadian prices were down 4.5% and 4.0%, respectively. The U.S. price of lead remained at 24.500 cents per pound from June 1974 through April 1975, before falling to a low of 19.000 cents per pound in June and July. Canadian lead prices followed a similar trend, though at slightly lower levels. In the United Kingdom, lead prices fluctuated for 8 months before a definitive downward trend carried the price to a low of 15.098 cents per pound in December. The annual average per pound price of tin fell 56.448 cents in the United States and 59.764 cents in the United Kingdom. In the case of the latter, the decline was steady throughout the year, except for a mild rally in June. U.S. prices declined from February through October, increased slightly in November, then declined to the year's low of 303.071 cents per pound in December, still well ahead of the 1973 level. Silver price movements were relatively similar for the United States and the United Kingdom, declining about 6% at nearly equivalent prices, while Canadian prices were down 4.2% compared with those of 1974.

A general indication of price movements for basic crude mineral commodities in world trade is illustrated in table 32. Overall, crude mineral prices were up 4.4% from those of 1974, based on the change reported in the export price index. Declines were recorded for three consecutive quarters, but a jump of 7.7% took place

in the fourth quarter. A similar pattern held for fuels, with an annual average index up 1.9%, but with the fourth quarter index up 8.8% over that of the previous quarter. The export price index for metal ores was up 14.3%, all of which occurred between the final quarter of 1974 and March 1975.

The distribution of export price indexes by developed and developing market economies is reported in table 33. The index of all minerals for developing nations was

up 2.9%, while for developed nations an increase of 9.9% took place, though from a considerably lower base. For both areas, increases were recorded in the last quarter from a general yearly decline. The export price index for nonferrous base metals fell 16.1% and 31.9% for developed and developing areas, respectively. For both areas, the decline was persistent throughout the year, with the exception of a leveling off of the index at 123 in the third and fourth quarters for developed areas.

STATISTICAL SUMMARY OF WORLD PRODUCTION AND TRADE OF MAJOR MINERAL COMMODITIES

The final 36 tables of this chapter (tables 34 to 69) extend the statistical series that was started in the 1963 edition of the International Area Reports volume of the Minerals Yearbook and that was subsequently updated in the 1965 and 1967-74 editions. They are primarily a supplement to other statistical data within this chapter, but also serve as a summary of international production and trade data for major mineral commodities covered in greater detail on a commodity basis in individual chapters of Volume I of the 1975 Minerals Yearbook and on a country basis in the balance of Volume III.

The data presented here on production (tables 34 to 56) in most instances correspond directly to the individual commodity world production tables appearing in Volume I of the 1975 Minerals Yearbook, and as such may not correspond exactly with figures presented in the individual country chapters of Volume III. Such differences are usually the result of the receipt of revised data for inclusion in either a commodity chapter or a country chapter subsequent to the completion of the other chapter. In most cases, country chapters were prepared later than commodity chapters and should be regarded as more reliable.

The number of commodities covered by these summary tables has been increased by five in this edition. Four tables have been added to provide coverage of all minerals that rank high in terms of value of world output, on the basis of data in the *Annales des Mines* study on value of world mineral production,⁵ referred to previously under production. With the addition of tables on mine production of gold, nickel and diamond, and a table on natural gas liquids

plant production, the set of summary commodity production tables in this chapter now includes all of the top 16 crude mineral commodities (ranked on a value of world output basis); in descending order of 1973 value these are petroleum, anthracite and bituminous coal (taken together), natural gas, copper, iron, gold, lignite coal, natural gas liquids, zinc, nickel, lead, salt, potash, diamond, tin, and phosphates. Additionally, bauxite, sulfur (including pyrite-derived sulfur), and manganese are covered among crude mineral products because of the large volume of production.

The set of summary production tables in this chapter also includes three major downstream products obtained from listed crude minerals—aluminum metal, steel, and refined oil (the last being the fifth new production table added to this edition)—and two major downstream products for which comprehensive world production data on crude output are not available—cement and nitrogen fertilizers. The first three of these mineral product output tables are included chiefly because of the substantial difference in ranking of producing nations between the mine production stage and the processing stage, and the last two being included simply because of the lack of comprehensive data on world output of the crude materials from which they are produced and because of their significance among mineral commodities.

Further, it should be noted that pyrite (gross weight basis) has been omitted from the roster of commodities covered by individual world summary production tables. However, data on the sulfur content of

⁵ *Annales des Mines*. No. 12, December 1975, p. 14.

pyrite has been provided as a separate entry in the revised format of the world sulfur production table, and such double coverage (both gross weight and sulfur content) is regarded as unnecessary.

The five new tables in this section have been compiled for a 5-year period, rather than the 3-year period of all other tables in this section, in order to provide data not summarized in this form in the past.

The data on world trade in major commodities presented in this chapter (tables 57 to 69) may not correspond exactly to those presented elsewhere in Volume III of the Minerals Yearbook because these summary tables are compiled, at least in part, from sources other than those used in the individual country chapters, in order

to obtain data on a consistent basis. The differences, however, are regarded as unimportant from the viewpoint of indicating the general pattern of trade in these commodities. It should be noted that table 67, covering world natural gas trade, is included for the first time, thereby providing coverage on trade in all commercial mineral fuel commodities. This table has been prepared in the form of a country-to-country trade table rather than on a continent-to-continent basis because of the special nature of the facilities required for moving gas (pipeline system or natural liquefaction and deliquefaction plants). Such facilities make this trade clearly intercountry rather than interregional.

Table 1.—United Nations indexes of world¹ mineral industry production
(1970=100)

Industry sector and geographic area	1973	1974	1975	1975, by quarter			
				1st	2d	3d	4th
EXTRACTIVE INDUSTRIES							
Metals:							
Market economy countries	104	105	102	104	104	99	101
Developed ²	100	99	96	96	100	93	94
United States and Canada	103	102	96	94	101	94	95
Europe	104	105	100	109	105	89	98
European Economic Community ³	90	85	83	93	84	69	85
European Free Trade Association ⁴	102	102	107	101	108	109	109
Australia and New Zealand	102	102	107	101	109	109	109
Developing ⁵	110	115	112	117	111	109	111
Latin America ⁶	109	119	115	129	112	110	100
Asia ⁷	103	105	107	105	103	106	112
Centrally planned economy countries of							
Europe ⁸	118	120	121	121	121	121	120
World	107	109	106	108	108	104	105
Coal:							
Market economy countries	88	85	88	92	89	79	90
Developed ²	87	83	84	89	86	76	87
United States and Canada	102	102	112	112	116	105	114
Europe	83	76	76	82	77	67	78
European Economic Community ³	81	74	73	80	74	63	75
European Free Trade Association ⁴	96	97	90	92	94	81	92
Australia and New Zealand	116	133	128	128	137	107	140
Developing ⁵	106	114	126	129	121	121	131
Latin America ⁶	111	125	132	NA	NA	NA	NA
Asia ⁷	104	112	125	131	121	121	126
Centrally planned economy countries of							
Europe ⁸	107	110	113	112	114	112	114
World	96	96	98	100	100	94	100
Crude petroleum and natural gas:							
Market economy countries	121	121	114	112	110	117	116
Developed ²	112	112	108	112	106	104	112
United States and Canada	104	102	98	100	97	98	99
Europe	159	166	169	196	153	127	199
European Economic Community ³	166	175	177	208	160	130	212
European Free Trade Association ^{4,9}	--	--	--	--	--	--	--
Australia and New Zealand ⁹	--	--	--	--	--	--	--
Developing ⁵	127	127	117	113	112	126	118
Latin America ⁶	102	99	100	96	98	106	100
Asia ⁷	149	150	136	134	131	144	133
Centrally planned economy countries of							
Europe ⁸	122	130	140	141	140	142	136
World	121	123	119	119	116	122	120
Total extractive industry:							
Market economy countries	112	112	107	107	106	107	108
Developed ²	104	103	100	102	101	96	102
United States and Canada	105	104	100	100	100	98	100
Europe	100	98	97	103	98	85	100
European Economic Community ³	98	96	94	102	95	81	99
European Free Trade Association ⁴	110	112	107	111	112	102	102
Australia and New Zealand	136	144	146	142	148	141	151

See footnotes at end of table.

Table 1.—United Nations indexes of world ¹ mineral industry production—Continued
(1970=100)

Industry sector and geographic area	1973	1974	1975	1975, by quarter			
				1st	2d	3d	4th
EXTRACTIVE INDUSTRIES—Continued							
Total extractive industry—Continued							
Market economy countries—Continued							
Developing ⁵	123	126	118	115	113	123	118
Latin America ⁶	105	109	108	111	105	109	106
Asia ⁷	145	148	134	132	130	141	132
Centrally planned economy countries of							
Europe ⁸	118	124	131	131	132	131	129
World	114	116	114	114	114	114	114
PROCESSING INDUSTRIES							
Base metals:							
Market economy countries	117	119	104	110	105	97	103
Developed ²	117	118	100	107	102	93	98
United States and Canada	117	116	92	102	94	85	89
Europe	112	117	102	110	105	91	108
European Economic Community ³	109	112	97	104	98	86	98
European Free Trade Association ⁴	113	116	100	111	104	88	98
Australia and New Zealand	107	111	107	112	103	108	103
Developing ⁵	121	137	146	137	148	148	151
Latin America ⁶	128	145	153	142	159	152	158
Asia ⁷	105	121	136	127	124	146	146
Centrally planned economy countries of							
Europe ⁸	119	127	140	134	135	140	151
World	118	121	114	117	114	110	117
Nonmetallic mineral products:							
Market economy countries	122	121	113	107	115	114	116
Developed ²	121	118	108	102	110	108	111
United States and Canada	123	119	105	97	104	110	108
Europe	118	118	112	108	117	108	114
European Economic Community ³	116	115	109	105	113	105	113
European Free Trade Association ⁴	117	118	100	103	108	92	98
Australia and New Zealand	122	116	114	99	117	120	120
Developing ⁵	131	140	150	140	152	153	154
Latin America ⁶	135	144	152	142	153	156	158
Asia ⁷	125	137	148	135	152	154	151
Centrally planned economy countries of							
Europe ⁸	125	134	143	142	145	144	142
World	124	126	125	121	127	126	126
Chemicals, petroleum and coal products:							
Market economy countries	127	130	124	119	122	123	130
Developed ²	127	130	121	117	120	120	128
United States and Canada	126	128	120	112	117	123	127
Europe	126	131	124	125	125	116	131
European Economic Community ³	125	129	121	122	121	113	128
European Free Trade Association ⁴	123	129	111	120	120	106	123
Australia and New Zealand	127	126	113	107	114	115	117
Developing ⁵	127	134	139	131	136	141	147
Latin America ⁶	134	145	151	NA	NA	NA	NA
Asia ⁷	117	115	117	113	110	122	125
Centrally planned economy countries of							
Europe ⁸	134	149	167	167	169	167	164
World	128	135	134	130	133	133	138
OVERALL INDUSTRIAL PRODUCTION							
Market economy countries	120	121	115	114	115	113	120
Developed ²	119	119	112	110	112	108	117
United States and Canada	119	119	109	106	108	110	112
Europe	116	118	115	116	116	104	123
European Economic Community ³	114	116	112	114	113	102	120
European Free Trade Association ⁴	115	119	112	113	114	100	121
Australia and New Zealand	119	117	116	110	116	120	120
Developing ⁵	127	135	140	136	136	142	146
Latin America ⁶	128	138	142	NA	NA	NA	NA
Asia ⁷	131	137	144	147	134	146	147
Centrally planned economy countries of							
Europe ⁸	128	140	153	151	154	153	153
World	122	126	126	124	126	124	130

NA Not available.

¹ Excludes Albania, the People's Republic of China, Mongolia, North Korea, and North Vietnam.² Canada, the United States, all countries of Europe except those listed in footnotes 1 and 8, the Republic of South Africa, Israel, Japan, Australia, and New Zealand.³ Belgium, Denmark, France, West Germany, Ireland, Italy, Luxembourg, the Netherlands, and the United Kingdom.⁴ Austria, Norway, Portugal, Sweden, and Switzerland.⁵ Countries not indicated in footnotes 1, 2, and 8.⁶ Corresponds to the United Nations classifications "Caribbean, Central and South America."⁷ Corresponds to the United Nations classification "Asia, excluding Israel and Japan."⁸ Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R.⁹ Reported as none in source but Austria and Norway among European Free Trade Association countries, as well as both Australia and New Zealand, produce petroleum and natural gas; insufficient data were available to calculate index number.

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 8, August 1976, pp. xii-xxv.

Table 2.—World production of major mineral commodities¹

Commodity	1973	1974	1975 P
METALS			
Aluminum:			
Bauxite, gross weight ----- thousand metric tons--	70,384	78,082	75,120
Alumina, gross weight ----- do-----	26,464	28,564	26,431
Unalloyed ingot metal ----- do-----	12,123	13,172	12,042
Antimony, mine output, metal content ----- metric tons--	70,013	72,126	68,076
Arsenic, white ^{2,3} ----- do-----	46,272	50,660	48,399
Beryl concentrate, gross weight ^{2,3} ----- do-----	3,596	3,097	3,183
Bismuth ² ----- do-----	3,688	4,047	3,579
Cadmium, smelter output ----- do-----	17,174	17,276	15,339
Chromite, gross weight ³ ----- thousand metric tons--	6,696	7,427	7,941
Cobalt:			
Mine output, metal content ----- metric tons--	29,451	32,497	32,937
Refined ----- do-----	23,159	25,329	20,863
Columbium-tantalum concentrates ^{3,4} ----- do-----	24,409	23,916	23,360
Copper:			
Mine output, metal content ----- thousand metric tons--	7,117	7,315	6,967
Smelter ----- do-----	7,147	7,358	6,893
Refinery ----- do-----	7,270	7,279	6,883
Gold, mine output, metal content ----- thousand troy ounces--	43,002	39,641	38,637
Iron and steel:			
Iron ore, gross weight ----- thousand metric tons--	845,772	895,374	891,592
Pig iron ----- do-----	510,776	512,131	477,413
Ferroalloys ----- do-----	10,776	11,311	10,661
Crude steel ----- do-----	697,473	707,378	646,416
Lead:			
Mine output, metal content ----- do-----	3,485	3,476	3,433
Smelter ----- do-----	3,478	3,494	3,364
Magnesium, primary smelter ⁵ ----- metric tons--	128,866	131,386	129,209
Manganese ore, gross weight ----- thousand metric tons--	21,747	22,743	24,399
Mercury, mine output, metal content ----- metric tons--	9,310	8,999	8,683
Molybdenum, mine output, metal content ----- do-----	83,946	86,356	81,274
Nickel:			
Mine output, metal content ----- do-----	709,732	790,748	813,440
Smelter ----- do-----	697,330	702,790	653,431
Platinum-group metals, mine output ----- thousand troy ounces--	5,232	5,774	5,767
Selenium, smelter output ^{3,4} ----- metric tons--	1,216	1,230	1,139
Silver, mine output, metal content ----- thousand troy ounces--	307,974	294,935	293,452
Tellurium, smelter output ^{3,4} ----- metric tons--	202	203	146
Tin:			
Mine output, metal content ----- do-----	237,847	233,747	225,195
Smelter ----- do-----	233,874	228,341	230,055
Titanium concentrates, gross weight:			
Ilmenite ^{3,4,6} ----- thousand metric tons--	3,566	3,660	3,345
Rutile ^{2,3,4} ----- do-----	350	331	351
Tungsten, mine output, metal content ----- metric tons--	37,952	36,971	37,488
Uranium oxide, mine output, U ₃ O ₈ content ^{3,4} ----- do-----	23,404	22,296	23,987
Vanadium, mine output, metal content ----- do-----	19,638	19,091	21,555
Zinc:			
Mine output, metal content ----- thousand metric tons--	5,710	5,699	5,563
Smelter ----- do-----	5,330	5,463	5,042
NONMETALS			
Asbestos ----- do-----	4,190	4,169	4,104
Barite ----- do-----	4,492	4,491	4,808
Cement, hydraulic ----- do-----	701,935	703,967	695,338
Clays:			
Bentonite ^{3,4} ----- do-----	4,107	4,408	4,293
Fuller's earth ^{3,4} ----- do-----	1,481	1,542	1,470
Kaolin ³ ----- do-----	15,394	16,237	14,805
Diamond:			
Gem ³ ----- thousand carats--	12,462	12,212	10,867
Industrial ³ ----- do-----	30,605	32,310	30,259
Total ³ ----- do-----	43,067	44,522	41,126
Diatomite ³ ----- thousand metric tons--	1,633	1,697	1,632
Feldspar ³ ----- do-----	2,763	3,055	2,741
Fluorspar ----- do-----	4,708	4,906	4,773
Graphite ² ----- metric tons--	392,491	489,177	437,974
Gypsum ----- thousand metric tons--	61,498	58,584	54,414
Lime ³ ----- do-----	107,692	111,988	105,745
Magnesite ² ----- do-----	9,122	10,036	9,954
Mica ³ ----- do-----	246	234	234
Nitrogen fertilizers, contained nitrogen ----- do-----	37,843	40,472	42,189
Phosphate rock ----- do-----	98,751	110,839	107,648
Potash, marketable, K ₂ O equivalent ----- do-----	21,775	23,756	22,364
Pumice ^{3,4} ----- do-----	15,713	13,975	13,551
Salt ----- do-----	154,702	164,792	162,008
Sodium compounds:			
Sodium carbonate ³ ----- do-----	21,371	22,091	21,118
Sodium sulfate ³ ----- do-----	4,024	4,080	3,926

See footnotes at end of table.

Table 2.—World production of major mineral commodities¹—Continued

Commodity	1973	1974	1975 ^p
NONMETALS—Continued			
Strontium minerals ^{3,4} -----metric tons--	93,187	99,184	52,873
Sulfur, elemental basis:			
Elemental ⁷ -----thousand metric tons--	16,128	17,932	17,859
From pyrite -----do----	10,415	10,021	10,192
Byproduct ⁸ -----do----	21,650	22,184	21,872
Total -----do----	48,193	50,137	49,923
Talc, soapstone, pyrophyllite -----do----	5,406	5,706	4,856
Vermiculite ^{3,4} -----metric tons--	498,234	503,342	523,355
MINERAL FUELS AND RELATED MATERIALS			
Carbon black ^{3,4} -----thousand metric tons--	3,558	3,540	3,110
Coal:			
Anthracite -----million metric tons--	177	176	177
Bituminous -----do----	2,088	2,126	2,240
Lignite -----do----	819	834	860
Total -----do----	3,084	3,136	3,277
Coke:			
Metallurgical ⁹ -----thousand metric tons--	365,826	367,317	361,198
Other ⁹ -----do----	17,705	18,152	17,495
Gas, natural, marketed -----billion cubic feet--	46,128	47,171	47,207
Natural gas liquids ³ -----million barrels--	1,043	1,034	1,024
Peat -----thousand metric tons--	220,145	220,695	223,327
Petroleum:			
Crude -----million 42-gallon barrels--	20,368	20,538	19,498
Refined -----do----	20,610	20,430	19,705

^p Preliminary.¹ Incorporates numerous revisions from world production tables and country production tables appearing in Volumes I and III, respectively, of the Minerals Yearbook, as well as from similar tables in Mineral Trade Notes and from the table corresponding to this table in previous editions of this chapter.² Excludes data for the United States (withheld to avoid disclosing individual company confidential data).³ Excludes data for the People's Republic of China (no adequate basis for estimation available).⁴ Excludes data for the U.S.S.R. (no adequate basis for estimation available).⁵ Excludes data for the United States (withheld for 1974 and 1975 to avoid disclosing individual company confidential data, and excluded for 1973 in order to provide a uniform statistical series). U.S. output in 1973 totaled 111,068 metric tons, and was of the same general order of magnitude in 1974 and 1975.⁶ Includes titaniferous slag.⁷ Comprises sulfur produced by the Frasch process plus sulfur mined in the elemental state from ores.⁸ Comprises sulfur recovered from coal gasification, metallurgical operations (except pyrite processing), natural gas, petroleum, tar sands, spent oxides, and gypsum, whether recovered in the elemental state or as a sulfur compound.⁹ Production of coke, other than metallurgical coke, for the People's Republic of China and the U.S.S.R. included with metallurgical coke production.

Table 3.—Geographic distribution of world production of major mineral products in 1975
(Percent)

Commodity	Western Hemisphere				Eastern Hemisphere			
	Northern North America	Central America and Caribbean Islands	South America	Total	Europe	Africa	Near East	Oceania Far East Total
METALS								
Aluminum:								
Bauxite, gross weight	2.4	17.1	12.1	31.6	21.0	13.4	0.8	28.0
Alumina, gross weight	23.4	8.5	6.4	38.3	30.5	2.4	.6	61.7
Unalloyed ingot metal	36.8	3	1.7	38.8	43.3	2.3	1.4	61.2
Antimony, mine output, metal content	3.1	6.1	17.7	26.9	17.5	23.7	5.0	27
Arsenic, white ^{1,2}	NA	13.2	3.1	16.3	68.9	14.4	—	2.1
Beryl concentrate, gross weight ^{1,2}	NA	—	33.3	33.3	51.1	12.8	—	2.8
Bismuth ¹	1.0	12.4	37.9	51.3	—	1	—	11.8
Cadmium, smelter output	20.9	3.8	1.3	26.0	48.9	2.4	—	48.7
Chromium, gross weight ²	—	3	1.3	1.6	38.0	36.1	11.0	74.0
Cobalt:								
Mine output, metal content	4.1	4.9	—	9.0	9.3	68.0	—	98.4
Refined	2.7	—	—	2.7	22.3	74.3	—	91.0
Columbium-tantalum concentrates, gross weight ^{2,3}	15.9	—	77.5	93.4	NA	5.3	—	97.3
Copper:								
Mine output, metal content	28.8	1.2	14.7	44.7	20.3	21.1	.7	5.6
Smelter	24.0	1.1	12.8	37.9	25.2	19.7	.5	2.6
Gold, mine output, metal content	7.0	1.9	2.3	11.2	20.4	62.7	—	62.1
Iron and steel:								
Iron ore, gross weight	14.3	.5	13.0	27.8	40.1	7.2	.3	11.3
Pig iron and ferroalloys	17.1	.6	2.0	19.7	49.4	1.6	.4	1.5
Crude steel	18.4	.3	2.2	21.4	53.7	1.3	.1	22.3
Lead:								
Mine output, metal content	27.6	5.9	8.2	41.7	32.7	4.3	1.1	11.8
Smelter	22.2	5.3	4.5	32.0	43.9	2.6	.1	68.0
Magnesium, primary smelter ⁴	3.5	—	—	3.5	89.1	—	—	9.2
Manganese ore, gross weight	—	1.8	6.9	8.7	37.0	—	—	96.5
Mercury, mine output, metal content	—	—	—	—	36.2	—	—	6.5
Molybdenum, mine output, metal content	8.5	5.7	1.4	15.6	65.0	5.4	8.5	91.3
Nickel:								
Mine output, metal content	74.0	(⁵)	11.9	85.9	12.0	NA	—	84.4
Smelter	32.0	8.3	.3	40.6	24.0	5.9	—	14.1
Platinum-group metals, mine output	24.8	7.5	.4	32.7	37.6	—	—	25.4
Selenium, smelter output ^{2,3}	7.7	—	—	7.7	46.0	45.5	—	11.2
Silver, mine output, metal content	40.9	5.1	1.6	47.6	12.6	—	—	67.3
Tellurium, smelter output ^{2,3}	25.0	14.4	17.7	57.1	25.5	3.8	(⁵)	91.9
Tin:								
Mine output, metal content	65.1	—	20.5	85.6	NA	NA	—	3.2
Smelter	1	.2	15.6	15.9	16.0	6.5	—	5.1
	2.8	.4	5.6	8.8	24.8	2.9	—	14.4
								84.1
								91.2

See footnotes at end of table.

Table 3.—Geographic distribution of world production of major mineral products in 1975—Continued
(Percent)

Commodity	Western Hemisphere				Eastern Hemisphere			
	Northern America	Central America and Caribbean Islands	South America	Total	Europe	Africa	Near East	Oceania
METALS—Continued								
Titanium concentrates, gross weight:								
Ilmenite ^{1,3,6}	41.9	--	0.2	42.1	19.5	--	--	8.1
Rutile ^{1,3}	NA	--	(⁶)	(⁶)	NA	--	--	1.9
Tungsten, mine output, metal content	9.7	.7	11.4	21.8	28.3	2.2	--	43.6
Uranium oxide, mine output, U ₃ O ₈ content ^{2,3}	67.1	--	.1	67.2	9.6	23.2	--	NA
Vanadium, mine output, metal content	19.7	--	2.5	22.2	25.7	52.1	--	--
Zinc:								
Mine output, metal content	28.8	4.8	8.5	42.1	31.6	5.1	1.5	10.8
Smelter	17.4	3.0	2.6	23.0	50.2	3.6	--	19.5
NONMETALS								
Asbestos	27.6	--	1.6	29.2	50.8	13.5	1.2	4.4
Barite	26.1	6.2	6.8	39.1	36.3	4.5	2.1	17.9
Cement, hydraulic	10.5	2.5	4.8	17.8	52.9	3.1	3.6	21.7
Clays:								
Bentonite ^{2,3}	68.2	.8	4.7	73.6	22.3	1.5	2.5	(⁵)
Fuller's earth ^{2,3}	73.4	2.5	(⁵)	76.0	16.4	6.8	NA	.8
Kaolin ²	32.7	.8	3.0	36.5	54.6	1.0	.9	6.1
Diamond:								
Gem ²	--	--	3.5	3.5	18.0	78.2	--	.3
Industrial ²	--	--	3.2	3.2	25.6	71.2	--	--
Diatomite ²	31.9	3.6	.6	36.1	62.7	.4	--	.6
Feldspar ²	22.7	5.3	5.2	33.2	61.0	1.5	--	4.2
Fluorspar	4.0	22.8	2.2	29.0	43.8	7.1	(⁵)	20.1
Graphite ¹	NA	13.9	.6	14.5	35.3	4.2	--	46.0
Gypsum	26.7	3.1	2.8	32.6	52.3	2.6	5.9	4.8
Lime ²	18.0	.3	5.5	23.8	63.2	1.7	1.2	9.3
Magnesite ¹	NA	4	3.8	4.2	59.6	1.0	4.8	.2
Mica ²	52.3	3	2.5	55.1	21.3	1.8	21.8	21.8
Nitrogen fertilizers, nitrogen content	22.3	1.3	1.0	24.6	52.5	1.1	1.6	19.7
Phosphate rock	41.1	.4	.4	41.9	25.0	21.4	3.0	6.4
Potash, marketable, K ₂ O equivalent	31.8	2.8	1.3	35.9	62.5	1.3	2.6	1.8
Pumice ^{2,3}	26.2	2.8	1.3	30.3	69.0	--	--	NA
Salt	26.2	4.9	2.8	33.9	35.3	1.3	1.0	25.4
Sodium compounds:								
Sodium carbonate ²	30.5	2.0	.7	33.2	57.5	.4	NA	8.9
Sodium sulfate ^{2,3}	41.6	7.6	1.7	50.9	39.0	NA	2.6	7.5
Strontium minerals ^{2,3}	47.3	27.8	.9	76.0	22.6	--	.6	.8

See footnotes at end of table.

Sulfur, elemental basis: ⁷

Elemental	41.0	12.1	.6	53.7	41.6	--	3.9	.8	46.3
From pyrite	2.5	.2	--	2.7	74.0	3.9	1.3	17.0	1.1
Byproduct	52.2	1.1	--	54.1	30.1	.9	3.4	9.8	1.7
Talc, soapstone, pyrophyllite	18.7	(⁶)	7.0	25.7	28.1	.6	--	43.7	1.9
Vermiculite ^{2,3}	57.2	--	1.3	58.5	NA	41.1	--	.4	41.5
MINERAL FUELS AND RELATED MATERIALS									
Carbon black ^{2,3}	43.2	1.2	5.3	49.7	31.7	1.3	.2	14.8	2.3
Coal:									
Anthracite and bituminous	24.4	.2	.4	25.0	41.6	3.0	.3	27.2	2.9
Lignite	2.5	--	--	2.5	92.5	--	.9	.7	3.3
Coke:									
Metallurgical ⁸	15.7	.6	.8	17.1	56.0	1.4	.5	23.6	1.4
Other ⁹	--	(⁶)	--	.3	52.9	.8	.2	45.6	.2
Gas, natural, marketed	49.1	1.3	2.3	52.7	37.9	1.3	3.0	4.7	99.7
Natural gas liquids ²	69.2	3.1	4.5	76.8	10.6	2.3	8.1	.4	47.3
Peat	--	--	--	.6	99.4	--	--	(⁶)	23.2
Petroleum:									
Crude	18.4	1.9	6.3	26.6	20.4	9.4	36.6	6.2	73.4
Refined	29.0	3.6	5.0	37.6	40.7	1.7	4.5	14.3	1.2
									62.4

NA Production data not available and no basis available for reliable estimate of output level.

¹ Percentages based on a world total that excludes data for the United States (withheld to avoid disclosing individual company confidential data), inclusion of which would significantly alter percentages for all countries.

² Percentages based on a world total that excludes data for the People's Republic of China (no adequate basis for estimation available) inclusion of which might significantly alter percentages for all countries.

³ Percentages based on a world total that excludes data for the U.S.S.R. (no adequate basis for estimation available), inclusion of which might significantly alter percentages for all countries.

⁴ Percentages based on a world total that excludes data for the United States (withheld to avoid disclosing individual company confidential data). On the basis of results for 1973, when the U.S. figure was publishable, all other nations together accounted for only slightly more than one-half of the world total (the United States accounted for 46.8% alone), and thus the percentages presented here would be virtually halved if the U.S. figure were included in the total.

⁵ Production negligible (less than 0.05% of world output).

⁶ Percentages based on a world total of ilmenite plus titaniferous slag.

⁷ For details on forms of sulfur included in each of the three subgroups, see footnotes to table 2.

⁸ Percentages based on a world total that includes coke other than metallurgical for the People's Republic of China and the U.S.S.R.

⁹ Percentages based on a world total that excludes figures for the People's Republic of China and the U.S.S.R. (These data are reported as an inseparable part of the data entered under metallurgical coke.)

Table 4.—Role of various country groups in production of major mineral products in 1975

Commodity	Developed market economies	Developing market economies	Total market economies	Centrally planned economies	EEC	EFTA	OECD	OPEC	CMEA
METALS									
Aluminum:									
Bauxite, gross weight	41.2	47.3	88.5	11.5	3.4	--	42.0	1.3	10.2
Alumina, gross weight	64.0	13.3	83.3	16.7	12.5	--	64.9	--	15.2
Unalloyed ingot metal	76.4	6.8	82.2	17.8	13.2	6.9	74.7	.9	16.5
Antimony, mine output, metal content	33.9	36.3	70.2	23.8	1.4	.8	15.5	--	12.2
Arsenic, white ^{1,2}	53.5	30.7	84.2	15.8	18.1	35.0	53.5	--	15.8
Beryl concentrate, gross weight ^{1,2}	3.7	46.0	49.7	50.3	--	.8	3.6	--	50.3
Bismuth ¹	35.5	53.6	89.1	10.9	2.0	.4	36.5	--	3.9
Cadmium, smelter output	69.7	7.3	77.0	23.0	22.8	.6	69.1	--	21.6
Chromite, gross weight ²	23.8	35.3	64.1	35.9	--	--	11.1	2.2	26.5
Cobalt:									
Mine output, metal content	15.4	74.2	89.6	10.4	--	--	15.4	--	10.4
Refined	16.6	74.8	91.4	8.6	6.0	3.7	16.6	--	8.6
Columbium-tantalum concentrates, gross weight ^{2,3}	16.4	83.6	100.0	NA	--	--	16.4	4.2	NA
Copper:									
Mine output, metal content	39.6	42.2	81.8	18.2	.1	1.1	37.4	.9	16.5
Smelter	49.5	32.5	82.0	18.0	2.6	1.1	47.7	.1	16.3
Gold, mine output, metal content	68.9	11.0	79.9	20.1	.1	.2	9.5	.3	19.6
Iron and steel:									
Iron ore, gross weight	40.2	24.4	64.6	35.4	6.9	4.6	39.0	3.3	27.0
Pig iron, and ferroalloys	60.6	5.3	65.9	34.1	18.3	1.8	59.5	.4	26.9
Crude steel	60.3	5.0	65.3	34.7	19.5	1.8	59.3	.4	29.8
Lead:									
Mine output, metal content	52.0	21.3	73.3	26.7	4.3	2.4	52.9	1.0	20.9
Smelter	53.4	13.1	71.5	23.5	12.6	1.5	58.5	--	22.7
Magnesium, primary smelter ¹	50.5	28.3	50.5	43.5	10.3	23.6	50.5	--	48.7
Manganese ore, gross weight	30.7	28.3	59.0	41.0	--	--	7.2	9.4	36.9
Mercury, mine output, metal content	43.2	16.1	65.3	34.7	15.2	--	52.7	5.3	24.3
Molybdenum, mine output, metal content	74.8	12.0	86.8	13.2	--	.6	74.8	--	11.4
Nickel:									
Mine output, metal content	47.7	27.9	75.6	24.4	--	(⁵)	45.2	2.6	23.7
Smelter	53.8	17.2	76.0	24.0	7.3	5.7	56.2	--	24.0
Platinum-group metals, mine output	53.6	.4	54.0	46.0	--	--	8.1	--	46.0
Selenium, smelter output ^{2,3}	93.3	6.7	100.0	NA	4.4	4.0	93.3	--	NA
Silver, mine output, metal content	43.6	37.2	80.8	13.2	1.9	1.5	42.7	.4	18.7
Tellurium, smelter output ^{2,3}	79.5	20.5	100.0	NA	NA	--	79.5	--	NA
Tin:									
Mine output, metal content	8.0	68.2	76.2	23.8	1.7	.2	6.8	12.9	13.9
Smelter	17.2	59.6	76.8	23.2	7.5	--	16.9	9.7	13.5

Titanium concentrates, gross weight:									
Ilmenite ^{2,3}	91.8	8.2	100.0	NA	--	15.8	91.8	--	NA
Rutile ^{2,3}	98.1	1.9	100.0	NA	--	--	98.1	--	NA
Tungsten, mine output, metal content	23.1	26.2	49.3	50.7	2.3	4.1	21.0	--	21.0
Uranium oxide, mine output, U ₃ O ₈ content ^{2,3}	83.4	11.6	100.0	NA	8.4	7.7	76.7	4.6	NA
Zinc, mine output, metal content	79.9	5.2	86.1	14.9	--	4.8	30.5	--	14.9
NONMETALS									
Zinc:									
Mine output, metal content	54.4	21.7	76.1	23.9	6.6	2.9	55.0	1.4	19.2
Smelter	64.5	8.8	73.3	26.7	20.0	1.5	63.2	.2	22.0
Asbestos	41.2	8.3	49.5	50.5	3.6	--	33.0	--	46.8
Barite	51.8	29.0	80.8	19.2	19.1	--	52.0	3.3	11.5
Cement, hydraulic	49.1	19.5	68.6	31.4	18.1	2.7	49.4	2.2	26.0
Clays:									
Bentonite ^{2,3}	86.9	8.4	95.3	4.7	6.8	--	86.8	1.7	4.7
Fuller's earth ^{2,3}	89.8	10.2	100.0	NA	16.4	--	89.8	4.1	NA
Kaolin ²	68.8	9.9	78.7	21.3	30.6	.8	68.4	1.0	21.3
Diamond:									
Gem ²	31.6	50.4	82.0	18.0	--	--	--	2.3	18.0
Industrial ²	12.8	61.6	74.4	25.6	--	--	--	2.7	25.6
Diatomite ²	70.1	4.8	74.9	25.1	34.8	.2	70.1	.3	25.1
Feldspar ²	75.0	15.7	88.7	11.3	31.1	11.2	73.9	.2	11.3
Fluorspar	38.0	33.7	71.7	28.3	21.8	.1	33.7	--	20.4
Graphite ¹	13.5	36.1	49.6	50.4	4.1	9.3	13.4	--	21.9
Gypsum	69.7	15.8	85.5	14.5	28.4	1.8	69.1	5.2	13.0
Lime ²	52.6	7.8	60.4	39.6	18.7	2.2	51.1	1.0	39.6
Magnesite ¹	35.4	12.5	47.9	52.1	--	12.7	39.4	1.2	25.0
Mica ²	56.8	25.3	82.1	17.9	1.7	1.7	55.7	--	17.9
Nitrogen fertilizers, nitrogen content	52.6	11.2	63.8	36.2	17.4	2.2	52.2	1.8	28.8
Phosphate rock	46.3	26.4	72.7	27.3	1	--	43.8	.8	22.4
Potash, marketable, K ₂ O equivalent	56.9	1.3	58.2	41.8	20.1	--	54.3	--	40.0
Pumice ²	95.8	4.2	100.0	NA	57.6	1	95.8	--	NA
Salt	51.3	15.6	66.9	33.1	18.4	1.0	51.5	.6	14.2
Sodium compounds:									
Sodium carbonate ²	57.7	6.7	64.4	35.6	18.2	7	57.7	NA	35.5
Sodium sulfate ²	69.8	11.9	81.7	18.3	12.9	1.3	71.8	.6	18.3
Sulfur, elemental basis: ⁷	69.9	30.1	100.9	NA	6.5	--	69.9	.6	NA
Strontium minerals:									
Elemental	42.0	16.6	58.6	41.4	3	--	42.1	3.8	40.7
From pyrite	43.1	3.5	46.6	53.4	7.3	6.2	40.8	.1	42.6
Byproduct	81.5	6.4	87.9	12.1	14.7	1.0	81.1	3.7	11.5
Talc, soapstone, pyrophyllite	63.4	20.6	84.0	16.0	9.2	4.9	63.0	--	10.2
Vermiculite ^{2,3}	96.9	3.1	100.0	NA	--	--	57.2	--	NA

See footnotes at end of table.

Table 4.—Role of various country groups in production of major mineral products in 1975—Continued

Commodity	Developed market economies	Developing market economies	Total market economies	Centrally planned economies	EEC	EFTA	OECD	OPEC	CMEA
MINERAL FUELS AND RELATED MATERIALS									
Carbon black ^{2,3}	86.7	9.6	96.3	3.7	25.3	0.8	85.4	0.9	3.7
Coal:									
Anthracite and bituminous	41.7	5.9	47.6	52.4	10.3	--	39.0	.1	30.9
Lignite	27.6	1.3	28.9	71.1	14.8	.4	28.5	--	71.3
Coke:									
Metallurgical ⁴	54.9	4.9	59.8	40.2	21.8	.6	54.1	.1	31.8
Other ⁵	35.6	22.2	57.8	42.2	10.5	.2	35.2	--	42.2
Gas, natural, marketed	62.6	8.4	71.9	28.1	12.5	.2	62.6	6.2	25.1
Natural gas liquids ⁶	72.2	18.4	90.6	9.4	1.1	--	72.2	18.2	9.4
Peat	5.4	--	5.4	94.6	4.5	.1	5.4	--	94.6
Petroleum:									
Crude	20.4	57.4	77.8	22.2	.4	.5	20.4	51.0	19.2
Refined	62.1	18.0	80.1	19.9	18.7	1.4	61.7	5.7	17.8

NA Production data not available and no basis available for reliable estimate of output level.

¹ Percentages based on a world total that excludes data for the United States (withheld to avoid disclosing individual company confidential data), inclusion of which would significantly alter percentages for all countries.

² Percentages based on a world total that excludes data for the People's Republic of China (no adequate basis for estimation available), inclusion of which might significantly alter percentages for all countries.

³ Percentages based on a world total that excludes data for the U.S.S.R. (no adequate basis for estimation available), inclusion of which might significantly alter percentages for all countries.

⁴ Percentages based on a world total that excludes data for the United States (withheld to avoid disclosing individual company confidential data). On the basis of results for 1973, when the U.S. figure was publishable, all other nations together accounted for only slightly more than one-half of the world total (the United States accounted for 46.8% alone), and thus the percentages presented here would be virtually halved if the U.S. figure were included in the total.

⁵ Production negligible (less than 0.05% of world output).

⁶ Percentages based on a world total of limestone plus titaniferous slag.

⁷ For details on forms of sulfur included in each of the three subgroups, see footnotes to table 2.

⁸ Percentages based on a world total that includes coke other than metallurgical for the People's Republic of China and the U.S.S.R.

⁹ Percentages based on a world total that excludes figures for the People's Republic of China and the U.S.S.R. (These data are reported as an inseparable part of the data entered under metallurgical coke.)

NOTE.—EEC: European Economic Community.

EFTA: European Free Trade Association.

OECD: Organization for Economic Cooperation and Development.

OPEC: Organization of Petroleum Exporting Countries.

CMEA: Council for Mutual Economic Assistance.

Table 5.—Value of world export trade in major mineral commodity groups ¹
(Million dollars)

Commodity group ¹	1970	1971	1972	1973 ^r	1974
Metals:					
All ores, concentrates, scrap -----	8,110	7,120	7,730	11,170	15,630
Iron and steel -----	17,070	17,760	20,080	28,480	46,440
Nonferrous metals -----	12,200	10,410	11,700	17,220	25,180
Subtotal -----	37,380	35,290	39,510	56,870	87,250
Nonmetals (crude only) -----	2,380	2,820	3,190	4,030	5,770
Mineral fuels -----	^r 28,440	^r 36,180	^r 44,020	65,060	170,120
Total -----	^r 68,200	^r 74,290	^r 86,720	125,960	263,140
All commodities -----	^r 312,260	^r 348,850	^r 415,280	575,640	835,490

^r Revised.

¹ Data presented are for selected major commodity groups of the Standard International Trade Classification—Revised (SITC—R), and as such exclude mineral commodities classified in that data array together with other (nonmineral) commodities. SITC—R categories included are as follows: Ores, concentrates, and scrap—SITC Division 28; iron and steel—SITC Division 67; nonferrous metals—SITC Division 68; nonmetals (crude only)—SITC Division 27; and mineral fuels—SITC Division 3. Major items not included are the metals, metalloids, and metal oxides of SITC Group 513; mineral tar and crude chemicals from coal, petroleum, and natural gas of SITC Division 52; manufactured fertilizers of SITC Division 56; and nonmetallic mineral manufactures of SITC Groups 661, 662, 663, and 667.

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 8, August 1976, pp. xxvii–xlv.

Table 6.—Distribution of total value of export trade in major mineral commodity groups ¹
(Percent)

Commodity group ¹	1970	1971	1972	1973	1974
Metals:					
All ores, concentrates, scrap -----	11.9	^r 9.6	8.9	^r 8.9	5.9
Iron and steel -----	^r 25.0	^r 23.9	23.1	^r 22.6	17.7
Nonferrous metals -----	17.9	14.0	13.5	13.7	9.6
Total -----	^r 54.8	^r 47.5	45.5	^r 45.2	33.2
Nonmetals (crude only) -----	3.5	3.8	3.7	^r 3.2	2.2
Mineral fuels -----	^r 41.7	^r 48.7	50.8	^r 51.6	64.6
Grand total -----	100.0	100.0	100.0	100.0	100.0

^r Revised.

¹ For detailed definition of groups, see footnote 1, table 5.

Table 7.—Growth of value of export trade in major mineral commodity groups ¹
(Percent increase over previous year)

Commodity group ¹	1970	1971	1972	1973	1974
Metals:					
All ores, concentrates, scrap -----	27.5	-12.2	8.6	44.5	39.9
Iron and steel -----	24.5	4.0	13.1	41.3	63.1
Nonferrous metals -----	9.1	-14.7	12.4	47.2	46.2
All metals -----	19.6	-5.6	12.0	43.9	53.4
Nonmetals (crude only) -----	4.9	18.5	13.1	26.3	43.2
Mineral fuels -----	16.2	27.2	21.7	47.8	161.5
All major mineral commodity groups -----	17.6	9.1	16.7	45.3	108.9
All commodity groups -----	14.8	11.7	19.0	38.6	45.1

¹ For detailed definition of groups, see footnote 1, table 5.

Table 8.—Significance of trade in major mineral commodity groups¹ to total trade of various world areas in 1974

Area and country ²	Value, millions				Major minerals' share of total commodities (percent)	
	Major mineral commodity groups		All commodities			
	Exports from	Exports to	Exports from	Exports to	Exports from	Exports to
Northern North America:						
Canada -----	\$11,010	\$5,885	\$32,780	\$30,070	33.6	19.6
United States -----	9,630	38,380	97,140	100,000	9.9	38.4
Total -----	20,640	44,265	129,920	130,070	15.9	34.0
Latin America -----	³ 25,060	19,545	48,680	55,700	⁴ 51.5	35.1
Europe:						
Market economy countries:						
EEC -----	48,400	95,560	274,440	238,130	17.6	33.2
EFTA -----	6,645	14,030	49,340	58,740	13.5	23.9
Other -----	2,475	8,820	13,260	27,720	18.7	31.8
Subtotal -----	57,520	118,410	337,040	374,590	17.1	31.6
Centrally planned economy countries -----	16,950	12,680	64,640	62,350	26.2	20.3
Total -----	74,470	131,090	401,680	436,940	18.5	30.0
Africa:						
Republic of South Africa -----	⁵ 335	1,777	4,980	8,140	⁴ 6.7	21.8
Other -----	⁶ 27,870	5,056	38,390	31,580	⁴ 72.6	16.0
Total -----	28,205	6,833	43,370	39,720	65.0	17.2
Near East -----	⁷ 83,100	6,852	87,570	28,540	⁴ 94.9	22.3
Far East and South Asia:						
Market economy countries:						
Japan -----	⁸ 12,180	32,385	55,530	56,980	⁴ 21.9	56.8
Other -----	³ 11,680	14,195	46,070	59,040	⁴ 25.4	24.0
Subtotal -----	23,860	46,580	101,600	116,020	23.5	40.2
Centrally planned economy countries -----	1,060	1,918	6,490	8,300	16.3	23.1
Total -----	24,920	48,498	108,090	124,320	23.1	39.0
Australia and New Zealand -----	³ 3,625	2,574	13,220	14,070	⁴ 27.4	18.3
Not reported -----	3,120	3,983	2,960	6,180	(⁹)	65.0
Grand total -----	263,140	263,140	835,490	835,490	31.5	31.5

¹ For detailed definition of groups, see footnote 1, table 5.

² Regional groups generally conform to United Nations practice; modifications and special aspects of classification scheme are as follows: (1) Latin America includes Mexico, Central America, and South America, but excludes Caribbean Islands; (2) EEC consists of Belgium, Denmark, France, West Germany, Ireland, Italy, Luxembourg, the Netherlands, and the United Kingdom; (3) EFTA consists of Austria, Finland, Iceland, Norway, Portugal, Sweden, and Switzerland; (4) other market economy Europe consists of Greece and Spain, as well as Yugoslavia (a centrally planned economy country); (5) centrally planned Europe includes Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R.; (6) other Africa corresponds to the United Nations category "Developing Africa"; (7) Near East corresponds to the United Nations category "Developing Asia, Middle East"; (8) other market economy South Asia and Far East refers to the United Nations category "Developing Asia, Other"; (9) centrally planned Far East and South Asia consists of the People's Republic of China, North Korea, Mongolia, and North Vietnam; and (10) the category "Not reported" is derived by subtracting all listed figures from reported totals, and includes the Caribbean and Pacific Islands.

³ Partial figure; value of crude nonmetals excluded but presumably included under "Not reported."

⁴ Percentage based on partial figure; see footnote to entry in "Exports from" value column.

⁵ Partial figure; includes value of mineral fuels and crude nonmetals only; totals for other commodity groups presumably included under "Not reported."

⁶ Partial figure; value of iron and steel excluded, but presumably included under "Not reported."

⁷ Partial figure; includes value of mineral fuels only; totals for other commodity groups presumably included under "Not reported."

⁸ Partial figure; value of metal ores, concentrates, and scrap, as well as crude nonmetals, excluded but presumably included under "Not reported."

⁹ Value of major mineral commodities from "Not reported" exceeds value of all commodities exported from that area by \$160 million. Discrepancy may be due in part to (1) revisions in totals reported in later source data for developed market economy countries which could not be distributed among those countries individually, and (2) rounding.

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 2, February 1976, pp. xxviii-xlii, and No. 3, August 1976, pp. xxviii-xlv.

Table 9.—Export origins and destinations for major mineral commodity group¹ shipments, by value, in 1974
(Million dollars)

Area and country ²	Exports from				Exports to			
	Metal ores, concentrates, scrap	Iron and steel	Non-ferrous metals	Non-ferrous metals	Metal concentrates, scrap	Iron and steel	Non-ferrous metals	Mineral fuels
Northern North America:								
Canada	2,430	800	2,080	520	285	1,440	455	145
United States	1,470	2,560	1,500	660	1,950	5,690	3,930	330
Total³	3,900	3,360	3,580	1,180	2,235	7,130	4,385	525
Latin America								
	2,850	480	2,900	(⁴)	16,880	305	1,040	260
Europe:								
Market economy countries:								
EEC	2,330	22,460	7,570	1,090	5,850	13,130	11,700	2,390
EFTA	780	1,930	1,380	165	900	720	1,730	430
Other ³	140	840	670	135	690	1,600	670	280
Subtotal	3,250	26,170	10,170	1,390	7,170	18,160	14,100	3,090
Centrally planned economy countries								
	1,150	3,580	1,920	300	9,400	5,710	1,280	730
Total	4,400	29,850	12,090	2,190	8,250	23,870	15,380	3,820
Africa:								
Republic of South Africa								
Other	(⁴)	(⁴)	(⁴)	190	34	455	67	21
Total³	870	(⁴)	2,590	1,370	26,040	2,000	305	105
Near East								
	(⁴)	(⁴)	2,590	1,560	23,185	2,455	372	126
Total	(⁴)	(⁴)	(⁴)	(⁴)	83,100	27	2,870	335
Far East and South Asia:								
Market economy countries:								
Japan	(⁴)	10,790	1,140	(⁴)	250	3,690	310	455
Other	940	800	1,260	(⁴)	8,680	425	3,530	880
Subtotal³	940	11,590	2,400	(⁴)	8,930	4,115	3,840	2,160
Centrally planned economy countries								
	90	155	165	140	510	70	1,240	445
Total³	1,030	11,745	2,565	140	9,440	4,185	5,080	2,605
Australia and New Zealand								
	1,490	415	750	(⁴)	970	84	660	135
Not reported³	1,090	590	705	700	35	484	355	51
Grand total	15,630	46,440	25,180	5,770	170,120	15,630	46,440	25,180
								5,770
								170,120

¹ For detailed definition of groups, see footnote 1, table 5.

² For detailed definition of areas listed, see footnote 2, table 8.

³ Not reported in source but derived from data therein.

⁴ Not reported separately for this area, presumably included under "Not reported."

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 2, February 1976, pp. xxviii-xlii, and No. 8, August 1976, pp. xxvii-xiv.

Table 10.—Direction of trade in m
(Million)

Source ²	Northern North America			Latin America	Market economy Europe			
	United States	Canada	Total ³		EEC	EFTA	Other ³ Total	
Northern North America:								
America:								
Canada -----	7,550	XX	7,550	203	1,435	317	52	1,804
United States -----	XX	1,885	1,885	1,695	2,090	192	293	2,575
Total ³ -----	7,550	1,885	9,435	1,898	3,525	509	345	4,379
Latin America ⁶ -----	12,480	1,478	13,958	5,620	1,677	276	232	2,185
Europe:								
Market economy countries:								
EEC -----	3,333	341	3,674	1,472	26,470	5,865	1,615	33,950
EFTA -----	381	44	425	157	3,570	1,432	188	5,190
Other ³ -----	300	17	317	57	990	158	112	1,260
Subtotal -----	4,014	402	4,416	1,686	31,030	7,455	1,915	40,400
Centrally planned economy countries -----	318	49	367	458	4,225	2,412	1,213	7,850
Total ³ -----	4,332	451	4,783	2,144	35,255	9,867	3,128	48,250
Africa:								
Republic of South Africa ⁷ -----	NA	NA	NA	NA	NA	NA	NA	NA
Other ⁸ -----	4,168	192	4,360	2,203	16,700	783	1,147	18,630
Total ³ -----	4,168	192	4,360	2,203	16,700	783	1,147	18,630
Near East ⁹ -----	4,790	1,480	6,270	5,550	34,110	2,140	3,430	39,680
Far East and South Asia:								
Market economy countries:								
Japan ¹⁰ -----	2,443	341	2,784	1,525	810	210	242	1,262
Other ⁶ -----	2,115	4	2,119	524	586	42	58	686
Subtotal -----	4,558	345	4,903	2,049	1,396	252	300	1,948
Centrally planned economy countries -----	12	1	13	8	104	17	10	131
Total ³ -----	4,570	346	4,916	2,057	1,500	269	310	2,079
Australia and New Zealand ⁶ -----	117	3	120	8	631	13	31	675
Not reported ³ -----	373	50	423	65	2,162	173	197	2,532
Grand total ⁴ -----	38,380	5,885	44,265	19,545	95,560	14,030	8,820	118,410

NA Not available. XX Not applicable.

¹ For detailed listing of commodities included, see footnote 1, table 5. It should be noted that certain commodities excluded for specific areas as indicated by footnotes are presumably included in grand totals.² For detailed definition of areas listed, see footnote 2, table 8.³ Not reported in source but derived from data therein.⁴ As reported in source. Detail may not add to listed total.⁵ Detail exceeds total by \$1 million in the case of Canada and \$1,450 million in the case of "Not reported." Discrepancy is presumed to be due, in part to (1) revisions in totals reported in later source data for developed market economy countries which could not be distributed among those countries individually, and (2) rounding.⁶ Excludes crude nonmetals.⁷ Includes crude nonmetals and mineral fuels only.⁸ Excludes iron and steel.⁹ Includes mineral fuels only.¹⁰ Excludes crude nonmetals and metal ores and scrap.

Source: United Nations. Monthly Bulletin of Statistics, V. 30, No. 2, February 1976, pp. xxviii-xlii, and No. 3, August 1976, pp. xxviii-xlv.

Major mineral commodities ¹ in 1974

(dollars)

Destination ²											
Centrally planned economy Europe	Near East	Africa			Market economy Far East and South Asia			Centrally planned economy Far East and South Asia	Aus- tralia and New Zea- land	Not re- ported ³	Grand total ⁴
		Republic of South Africa	Other	Total ³	Japan	Other	Total ³				
11	38	16	28	44	1,095	118	1,213	85	63	(⁵)	11,010
44	257	83	161	244	2,159	611	2,770	15	115	30	9,630
55	295	99	189	288	3,254	729	3,983	100	178	29	20,640
266	7	14	143	157	921	34	955	170	20	1,722	25,060
2,859	1,376	319	1,819	2,138	201	516	717	305	144	1,765	48,400
474	79	35	60	95	67	48	115	27	28	55	6,645
422	149	6	136	142	43	6	49	62	2	15	2,475
3,755	1,604	360	2,015	2,375	311	570	881	394	174	1,835	57,520
6,480	222	--	361	361	570	305	875	216	5	116	16,950
10,235	1,826	360	2,376	2,736	881	875	1,756	610	179	1,951	74,470
NA	NA	XX	NA	NA	NA	NA	NA	NA	NA	335	335
350	47	6	569	575	1,353	157	1,510	56	4	135	27,870
350	47	6	569	575	1,353	157	1,510	56	4	470	28,205
800	2,650	1,120	1,120	2,240	17,170	7,040	24,210	NA	1,220	480	83,100
653	1,222	162	390	552	XX	2,850	2,850	878	406	48	12,180
126	70	5	85	90	5,717	1,882	7,599	27	198	241	11,680
779	1,292	167	475	642	5,717	4,732	10,449	905	604	289	23,860
98	18	2	26	28	575	101	676	NA	4	84	1,060
877	1,310	169	501	670	6,292	4,833	11,125	905	608	373	24,920
1	17	6	6	12	1,763	331	2,094	73	217	408	3,625
96	200	3	152	155	751	196	947	4	148	(⁵)	3,120
12,680	6,352	1,777	5,056	6,833	32,385	14,195	46,580	1,918	2,574	3,983	263,140

Table 11.—Iron ore consumption,¹ by selected major country
(Million metric tons)

Country	1973	1974	1975 ^p
EEC:			
Belgium -----	r 21.7	22.3	15.7
France ² -----	r 40.3	51.7	34.8
Germany, West -----	r 59.8	65.8	49.1
Italy -----	r 16.0	18.4	* 15.2
Luxembourg -----	r 12.7	12.6	9.3
Netherlands -----	r 7.6	7.8	6.5
United Kingdom ³ -----	r 27.5	22.1	19.8
Total -----	r 185.6	200.7	150.4
EFTA:			
Austria -----	r 5.8	6.4	5.6
Norway -----	r 2.0	2.2	2.3
Portugal ⁴ -----	.5	.4	.4
Sweden -----	10.3	5.1	* 9.9
Total -----	r 18.6	14.1	18.2
Other European market economies:			
Finland -----	r 2.2	2.2	2.2
Spain -----	r 10.7	11.9	* 12.4
Total -----	r 12.9	14.1	14.6
Centrally planned economy countries of Europe:			
Czechoslovakia ⁴ -----	r 15.3	r 16.9	18.0
Hungary -----	r 4.3	4.7	4.6
Poland ⁴ -----	r 13.5	15.0	NA
Romania ⁴ -----	9.5	10.0	NA
U.S.S.R. ⁴ -----	171.0	177.2	182.8
Yugoslavia -----	r 3.2	3.5	3.4
Total -----	r 216.8	227.3	208.8
Other:			
Canada ⁴ -----	14.6	14.6	15.7
Japan -----	r 117.4	121.5	118.9
Turkey -----	2.9	* 2.2	* 2.1
United States -----	r 149.3	140.4	115.9
Total -----	r 284.2	278.7	252.6
Grand total -----	r 718.1	734.9	644.6

* Estimate. ^p Preliminary. ^r Revised. NA Not available.

¹ Yearly data based on a total of three categories: Iron ore for steelworks, for agglomerates, and iron ore and concentrate for blast furnaces. An estimated figure is based on a partial total of these three categories or is an apparent consumption computed by adding production and imports and then deducting exports.

² Includes sinter produced at mines.

³ Includes calcined ores.

⁴ Includes 211,000 tons of contained metal for steelworks in 1973, and 208,000 tons in 1974.

Source: United Nations Economic Commission for Europe, 1975 Annual Bulletin of Steel Statistics for Europe. V. 3, 1976. Official production and trade statistics for selected countries were also used as source material.

Table 12.—Iron and steel scrap consumption, by selected country ¹
(Thousand metric tons)

Country	1971	1972	1973	1974	1975
EEC:					
Belgium ² -----	3,467	4,360	4,590	4,925	3,711
Denmark ² -----	520	506	420	523	575
France ^{3 4 5} -----	8,128	8,560	8,993	9,380	7,536
Germany, West ⁴ -----	21,176	22,713	24,984	25,578	20,407
Ireland -----	* 75	* 85	110	110	* 80
Italy ² -----	11,174	12,378	13,238	14,710	13,650
Luxembourg -----	1,545	1,634	1,773	1,903	1,373
Netherlands -----	2,227	2,242	2,040	2,125	1,582
United Kingdom ^{2 5} -----	17,879	18,691	* 18,600	16,955	15,899
Total ⁶ -----	66,191	71,169	74,748	76,209	64,813
EFTA:					
Austria ^{3 5} -----	1,578	1,575	1,585	1,727	1,474
Norway ^{2 4 5} -----	³ 484	³ 490	³ 508	559	561
Portugal ^{2 3 4 5} -----	167	* 170	* 180	* 140	* 170
Sweden ^{2 3} -----	3,164	3,285	⁷ 3,587	3,737	* 3,350
Total ⁶ -----	5,393	5,520	5,860	6,163	5,555

See footnotes at end of table.

Table 12.—Iron and steel scrap consumption, by selected country¹—Continued
(Thousand metric tons)

Country	1971	1972	1973	1974	1975
Other European market economy countries: ²					
Finland	586	717	742	709	695
Spain	⁵ 5,800	⁵ 5,848	⁵ 6,518	7,465	⁵ 6,700
Yugoslavia ⁸	1,616	1,535	1,729	⁵ 1,900	⁵ 2,000
Total ⁶	7,502	8,100	8,989	10,074	9,396
European centrally planned economy countries: ⁵					
Czechoslovakia ^{2 4 5}	³ 4,534	³ 5,981	5,593	6,918	7,154
Germany, East ^{2 3 4 5}	⁵ 4,300	⁵ 4,360	⁵ 4,370	4,387	4,402
Hungary ^{2 4 5}	1,937	2,052	2,044	2,076	2,170
Poland ^{2 4 5}	⁵ 6,900	7,318	7,863	8,237	⁵ 8,500
Romania ^{2 4 5 9}	2,995	2,830	⁵ 2,800	⁵ 3,000	⁵ 3,200
U.S.S.R. ^{2 3 4 5 10}	¹¹ 43,850	44,947	46,257	46,862	46,998
Total ⁶	64,516	67,488	68,927	71,480	72,424
Latin America: ¹²					
Argentina ⁵	⁵ 1,480	⁵ 1,660	1,704	1,772	1,595
Brazil ⁵	⁵ 2,780	⁵ 3,020	3,314	3,421	3,665
Chile ⁵	⁵ 215	⁵ 160	181	227	168
Colombia ⁵	⁵ 155	⁵ 180	173	168	225
Mexico ⁵	⁵ 2,240	⁵ 2,590	2,784	2,705	3,323
Peru ⁵	⁵ 68	⁵ 70	136	158	174
Venezuela ⁵	⁵ 500	⁵ 610	573	568	527
Other ^{5 13}	⁵ 12	⁵ 12	11	22	40
Total ⁶	⁵ 7,450	⁵ 8,302	8,876	9,041	9,717
Other countries:					
Canada ^{2 3 4 5}	5,240	5,487	6,923	7,114	6,753
India ^{2 3 4 5}	¹⁴ 1,596	¹⁴ 1,473	¹⁴ 1,582	⁵ 1,620	⁵ 1,300
Japan ⁵	33,406	39,668	43,651	46,146	34,214
South Africa, Republic of ^{2 3 4 5}	¹⁵ 2,175	¹⁵ 2,007	¹⁵ 2,352	⁵ 2,440	⁵ 2,700
Turkey ^{2 5}	⁵ 320	⁵ 455	⁵ 260	637	⁵ 460
United States ²	74,904	86,418	93,975	95,708	74,689
Total ⁶	117,641	135,508	153,743	153,665	120,616
Grand total ⁶	268,693	296,087	321,143	326,632	282,521

⁵ Estimate.

¹ Unless otherwise noted, figures represent consumption of scrap in the production of pig iron, ferroalloys, crude steel, foundry products, and rerolled steel, as well as in other unspecified uses by the steel industry and by other (unspecified) industries. Also, unless otherwise noted, figures are from: United Nations Economic Commission for Europe. 1975 Annual Bulletin of Steel Statistics for Europe. V. 3, 1976, 97 pp.

² Excludes scrap consumed in rerolling.

³ Excludes scrap consumed in foundries.

⁴ Excludes scrap consumed within the steel industry for purposes other than manufacture of pig iron, ferroalloys, crude steel, and foundry products, and that used in rerolling.

⁵ Excludes scrap used outside the steel industry.

⁶ Total of listed figures.

⁷ Central Statistics Bureau. Bergshantering (Mining) 1973. Stockholm, 1974, p. 105.

⁸ Following United Nations practice, Yugoslavia has been included with other market economy nations of Western Europe.

⁹ Excludes scrap used in production of pig iron.

¹⁰ Excludes scrap used in production of steel by any method of production except open-hearth furnace.

¹¹ British Steel Corporation. International Steel Statistics, U.S.S.R. 1973, p. 2.

¹² 1971-72: U.S. Bureau of Mines estimates; 1973-74: Latin American Iron and Steel Institute. Anuario Estadístico de la Siderurgia y Minería del Fierro de América Latina 1974, p. 18, Santiago (undated); 1975: Latin American Iron and Steel Institute. Informativo Estadístico No. 29, September 16, 1976 (not paginated). Data for 1973-74 are given in sources as total consumption by the steel industry, but no breakdown by use within that industry is provided, and sources do not make it clear whether or not consumption in foundries and rerolling plants is included; consumption other than in the steel industry is clearly excluded.

¹³ Uruguay plus unspecified countries in Central America, as reported in source.

¹⁴ British Steel Corporation. International Steel Statistics, India 1973, p. 2.

¹⁵ British Steel Corporation. International Steel Statistics, Republic of South Africa 1973, p. 2.

Table 13.—Estimated world ¹ consumption of major nonferrous metals
(Thousand metric tons)

Commodity	1973 ^r	1974	1975 ^p
Aluminum ²	13,248	13,957	11,777
Copper ³	8,785	8,401	7,430
Lead ⁴	4,266	4,098	3,582
Zinc ⁵	5,934	5,776	4,996
Tin ⁶	213	199	171

^p Preliminary. ^r Revised.

¹ In general, figures are totals for major consuming countries only; sum of consumption by excluded minor consumers may be significant; data included for centrally planned economy countries (except Yugoslavia) are listed as conjectural in source.

² Includes secondary metal.

³ Primary and secondary refined metal.

⁴ Chiefly primary, but including some secondary.

⁵ Primary and secondary slab.

⁶ Primary only as reported by the International Tin Council. Centrally planned economy countries (except Yugoslavia) are excluded; consumption of primary and secondary tin by these countries is estimated at about 60,000 tons annually.

Source: American Bureau of Metal Statistics, Inc. Nonferrous Metal Data, 1975. New York, 1976, 143 pp.

Table 14.—World energy consumption, ¹ by energy source
(Million metric tons of standard coal equivalent unless otherwise specified)

Area ² and year	Solid fuels	Liquid fuel	Natural and imported gas	Hydro, nuclear, imported elec- tricity	Total energy	
					Aggre- gate ¹	Per capita (kilo- grams)
Market economy:						
North America:						
1970	499	1,047	840	53	2,438	10,775
1971	464	1,086	872	58	2,480	10,840
1972	515	1,172	889	64	2,640	11,437
1973	512	1,230	878	70	2,689	11,560
1974	515	1,186	843	79	2,623	11,187
1975	548	1,153	789	85	2,576	10,888
Other America:						
1970	8	86	8	7	108	692
1971	8	93	9	7	117	727
1972	7	98	10	8	123	748
1973	7	107	11	9	135	800
1974	8	110	12	11	141	814
1975	8	112	13	12	145	813
Caribbean America:						
1970	7	89	31	4	130	1,067
1971	7	97	33	4	142	1,124
1972	8	102	34	4	148	1,142
1973	9	110	37	4	160	1,201
1974	9	116	39	5	168	1,226
1975	9	113	39	5	166	1,174
Western Europe:						
1970	448	770	101	47	1,367	3,858
1971	419	804	131	48	1,403	3,935
1972	379	851	168	52	1,450	4,039
1973	391	910	193	53	1,548	4,285
1974	389	862	220	58	1,529	4,207
1975	368	803	234	62	1,468	4,023
Africa:						
1970	59	45	2	3	109	308
1971	63	51	2	3	120	333
1972	64	55	3	4	125	337
1973	67	59	4	4	134	352
1974	70	62	5	4	142	363
1975	75	70	9	5	158	395
Near East:						
1970	7	47	28	1	83	792
1971	7	54	28	1	90	837
1972	7	59	30	1	98	885
1973	8	68	35	1	111	979
1974	8	73	37	1	120	1,026
1975	8	78	38	2	127	1,055

See footnotes at end of table.

Table 14.—World energy consumption,¹ by energy source—Continued
(Million metric tons of standard coal equivalent unless otherwise specified)

Area ² and year	Solid fuels	Liquid fuel	Natural and imported gas	Hydro, nuclear, imported elec- tricity	Total energy	
					Aggre- gate ¹	Per capita (kilo- grams)
Market economy—Continued						
Far East:						
1970 -----	180	334	14	16	544	491
1971 -----	172	371	17	17	577	509
1972 -----	170	398	20	18	606	524
1973 -----	178	446	25	16	666	563
1974 -----	191	432	30	20	672	556
1975 -----	200	419	33	21	674	545
Oceania:						
1970 -----	35	39	2	3	78	4,055
1971 -----	35	41	3	3	82	4,158
1972 -----	36	42	4	3	86	4,269
1973 -----	37	46	6	3	92	4,520
1974 -----	40	48	6	4	98	4,722
1975 -----	42	48	7	4	101	4,782
Total market economy:						
1970 -----	1,243	2,457	1,026	134	4,857	1,987
1971 -----	1,175	2,597	1,095	141	5,011	2,012
1972 -----	1,186	2,777	1,158	154	5,276	2,074
1973 -----	1,209	2,976	1,189	160	5,535	2,137
1974 -----	1,230	2,889	1,192	182	5,493	2,077
1975 -----	1,258	2,796	1,162	196	5,415	2,009
Centrally planned economy:						
Europe: ³						
1970 -----	768	437	317	17	1,540	4,425
1971 -----	786	469	347	18	1,619	4,613
1972 -----	808	510	365	18	1,700	4,803
1973 -----	815	555	389	18	1,777	4,980
1974 -----	819	590	415	20	1,845	5,126
1975 -----	849	630	467	20	1,965	5,412
Asia: ⁴						
1970 -----	389	41	2	5	436	536
1971 -----	421	52	3	5	481	581
1972 -----	434	59	3	6	502	596
1973 -----	468	66	4	6	543	635
1974 -----	491	80	4	6	581	668
1975 -----	514	99	5	7	625	706
Total centrally planned economy:						
1970 -----	1,157	478	319	22	1,976	1,700
1971 -----	1,207	521	350	23	2,100	1,781
1972 -----	1,242	569	368	24	2,202	1,840
1973 -----	1,283	620	393	24	2,320	1,915
1974 -----	1,310	670	419	26	2,426	1,973
1975 -----	1,363	729	471	26	2,590	2,075
World total:						
1970 -----	2,400	2,935	1,345	156	6,833	1,895
1971 -----	2,382	3,118	1,445	164	7,111	1,938
1972 -----	2,428	3,346	1,526	178	7,478	1,999
1973 -----	2,492	3,596	1,582	184	7,855	2,066
1974 -----	2,540	3,559	1,611	208	7,919	2,043
1975 -----	2,621	3,525	1,633	222	8,005	2,030

¹ In most cases, data are aggregates of country figures representing apparent inland consumption—the arithmetic result of adding production and imports and subtracting from this sum the total of exports, bunker loadings, and additions to stocks (where the latter are known). All totals in this table are reported in source except for "Total market economy," which is the sum of individual market economy areas. In some cases, totals may not represent the sum of listed parts because of rounding and/or omission from detail of minor quantities not listed separately. A large number of entries in this table have been revised from those appearing in previous editions of this chapter due to revisions published in new edition of source; such revisions have not been identified by footnote.

² Areas listed are those appearing in source and have not been conformed in scope to standard terms used in the Minerals Yearbook.

³ Includes Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R.

⁴ Includes the People's Republic of China, North Vietnam, Mongolia, and North Korea.

Source: United Nations. World Energy Supplies 1971-1975. Statistical Papers, ser. J, No. 20, New York, 1977, pp. 2-9.

Table 15.—Annual investment expenditure in the steel industry for selected countries
(Million dollars)

Country or country group	1973	1974
EEC	3,028	2,799
EFTA	439	452
Other countries:		
Australia	131	92
Canada	238	373
Finland	36	65
Japan	2,033	2,795
Spain	239	NA
Turkey	180	206
United States	1,400	2,104

NA Not available.

Source: Organization for Economic Cooperation and Development. The Iron and Steel Industry in 1974 and Trends in 1975. P. 56.

Table 16.—Market economy country petroleum capital expenditures and
exploration expenses, by geographic area
(Million dollars)

Area and type of expenditure	1973	1974	1975
United States:			
Capital expenditures	10,640	16,625	17,725
Exploration expenses	850	1,130	1,196
Total	11,490	17,755	18,920
Other Western Hemisphere:			
Capital expenditures	3,305	4,945	5,775
Exploration expenses	275	405	380
Total	3,580	5,350	6,155
Western Europe:			
Capital expenditures	4,825	6,920	9,050
Exploration expenses	175	225	300
Total	5,000	7,145	9,350
Africa:			
Capital expenditures	975	1,215	1,675
Exploration expenses	125	150	200
Total	1,100	1,365	1,875
Near East:			
Capital expenditures	1,390	1,770	2,025
Exploration expenses	50	50	50
Total	1,440	1,820	2,075
Far East:			
Capital expenditures	2,410	3,525	4,360
Exploration expenses	225	225	200
Total	2,635	3,750	4,560
Unspecified: Capital expenditures (no exploration expenses)	6,450	8,700	9,015
Total:			
Capital expenditures	29,995	43,700	49,625
Exploration expenses	1,700	2,185	2,325
Grand total	31,695	45,885	51,950

Source: Energy Division, Chase Manhattan Bank. N. A. Capital Investments of the World Petroleum Industry, 1975. Pp. 14-19.

Table 17.—Market economy country petroleum industry capital expenditures, by industry sector, and exploration expenses
(Million dollars)

	1973	1974	1975
Capital expenditures:			
Production:			
Crude oil and natural gas	12,415	18,765	18,295
Natural gasoline plants	510	770	960
Pipelines	1,230	2,460	5,995
Marine	6,550	8,900	9,240
Refineries	4,865	7,720	8,725
Marketing	2,480	2,215	2,160
Chemical plants	1,175	1,995	3,145
Other	770	875	1,105
Total	29,995	43,709	49,625
Exploration expenses	1,700	2,185	2,325
Grand total	31,695	45,885	51,950

Source: Energy Division, Chase Manhattan Bank. N. A. Capital Investments of the World Petroleum Industry, 1975. Pp. 14-15.

Table 18.—U.S. direct foreign investment in mineral industries:
Value, earnings, and income
(Million dollars)

Area and country	Mining, smelting, refining			Petroleum		
	Value	Earn- ings ¹	In- come ²	Value	Earn- ings ¹	In- come ²
1972	7,110	419	395	26,263	3,311	2,826
1973	6,038	617	497	27,313	6,123	4,249
1974:						
Canada	2,794	209	125	5,731	782	252
Latin America and other Western Hemisphere:						
Latin American Republics:						
Chile	25	5	4	NA	NA	(³)
Peru	412	69	68	239	50	48
Venezuela	21	NA	NA	659	332	333
Other	271	145	107	1,138	264	175
Subtotal ⁴	729	219	179	2,036	546	460
Other Western Hemisphere	402	102	102	1,528	216	207
Total	1,131	321	281	3,564	762	667
Europe:						
EEC:						
Denmark and Ireland	2	(³)	(³)	504	24	26
United Kingdom	NA	(³)	(³)	2,956	90	49
Other ⁵	NA	—2	—1	4,805	547	417
Subtotal ⁴	NA	—2	—1	8,265	661	342
Other Western Europe	NA	—5	—4	1,695	133	17
Total	37	—7	—5	9,960	794	359
Africa:						
Republic of South Africa	NA	37	30	NA	NA	NA
Other	439	NA	NA	1,346	920	732
Total ⁴	439	37	30	1,346	920	732
Near East	3	--	--	1,613	8,431	8,420
Far East and Pacific:						
Japan	--	--	--	1,367	99	23
Australia	952	187	129	781	NA	NA
New Zealand	NA	1	1	NA	NA	—1
Other	211	NA	NA	1,734	1,011	859
Total ⁴	1,163	188	NA	3,882	1,110	881
International shipping	--	--	--	3,605	418	238
Grand total ⁶	5,790	868	680	30,195	13,433	11,714

See footnotes at end of table.

Table 18.—U.S. direct foreign investment in mineral industries:
Value, earnings, and income—Continued
(Million dollars)

Area and country	Mining, smelting, refining			Petroleum		
	Value	Earn- ings ¹	In- come ²	Value	Earn- ings ¹	In- come ²
1975:						
Canada	3,058	256	100	6,209	845	311
Latin America and other Western Hemisphere:						
Latin American Republics:						
Chile	13	NA	(³)	NA	NA	(³)
Peru	700	NA	-26	242	NA	-98
Venezuela	NA	1	1	861	161	174
Other	299	32	25	1,092	42	78
Subtotal ⁴	1,012	33	(³)	2,195	203	154
Other Western Hemisphere	460	86	86	1,175	141	102
Total	1,472	119	86	3,370	344	256
Europe:						
EEC:						
Denmark and Ireland	2	(³)	(³)	424	-27	-21
United Kingdom	11	(³)	(³)	3,840	42	-53
Other ⁵	1	-3	-1	5,282	464	412
Subtotal ⁴	14	-3	-1	9,546	479	333
Other Western Europe	27	(³)	(³)	1,835	91	38
Total	41	-3	-1	11,381	570	376
Africa:						
Republic of South Africa	NA	9	7	405	NA	NA
Other	486	NA	NA	1,337	417	278
Total ⁴	486	9	7	1,742	417	278
Near East	5	2	(³)	3,673	2,364	2,336
Far East and Pacific:						
Japan	--	--	--	1,314	45	12
Australia	1,063	230	189	888	NA	NA
New Zealand	NA	1	1	139	-1	(³)
Other	181	NA	NA	2,766	780	-122
Total ⁴	1,244	231	190	5,107	824	-110
International shipping	--	--	--	3,324	84	81
Grand total ⁶	6,551	680	442	34,806	5,658	3,657

NA Not available.

¹ Sum of U.S. share in net earnings of subsidiary and branch profits.

² Sum of interest, dividends, and branch earnings.

³ Less than 1/2 unit.

⁴ Partial figure; excludes quantity for detail listed as not reported.

⁵ Includes Belgium, Luxembourg, France, West Germany, Italy, and the Netherlands.

⁶ Detail may not add to totals shown because of independent rounding and exclusion of some data in detail.

Source: U.S. Department of Commerce. Survey of Current Business. V. 56, No. 8, August 1976, pp. 40-60.

Table 19.—World merchant fleet distribution, by type ¹

	1971	1972	1973	1974	1975
Number of vessels:					
Tankers -----	4,431	4,581	4,813	5,121	5,311
Bulk carriers -----	3,218	3,539	3,800	4,075	4,272
Freighters -----	11,095	11,087	11,170	11,449	² 12,575
Other -----	1,800	1,802	1,817	1,804	³ 714
Total -----	20,544	21,009	21,600	22,449	22,872
Gross tonnage:					
Tankers ----- thousand tons--	99,105	108,558	122,370	143,399	163,731
Bulk carriers ----- do--	55,009	64,822	74,660	82,313	88,194
Freighters ----- do--	64,038	65,179	66,790	68,855	² 75,284
Other ----- do--	12,150	11,984	11,907	11,799	³ 5,833
Total ----- do--	230,302	250,543	275,727	306,366	333,042
Deadweight tonnage:					
Tankers ----- do--	173,196	192,894	220,481	261,440	302,217
Bulk carriers ----- do--	90,962	108,512	126,140	139,267	150,080
Freighters ----- do--	88,305	88,970	90,511	93,476	² 101,248
Other ----- do--	9,276	9,176	9,238	9,165	³ 3,027
Total ----- do--	361,739	399,552	446,370	503,348	556,572

¹ Maritime Administration classification. Tankers include whaling tankers. Vessels shown here as "other" include combination passenger and cargo, combination passenger and refrigerated cargo, and refrigerated freighters, except as otherwise indicated. Contribution of these vessels to mineral commodity trade is regarded as unimportant. Data are as of December 31 of year indicated.

² Figures include refrigerated freighters.

³ Figures exclude refrigerated freighters.

Source: U.S. Department of Commerce, Maritime Administration. Merchant Fleets of the World. September 1976, 43 pp.

Table 20.—World shipping (tanker and dry cargo) loadings and unloadings
(Million metric tons)

	1971	1972	1973 ^r	1974 ^r	1975
Loaded:					
Tanker cargo -----	1,526	1,654	1,873	1,808	1,742
Dry cargo -----	1,173	^r 1,247	1,403	1,509	1,433
Total -----	2,699	^r 2,901	3,276	3,317	3,175
Unloaded:					
Tanker cargo -----	1,505	^r 1,643	1,862	1,793	1,640
Dry cargo -----	1,144	^r 1,223	1,376	1,463	1,441
Total -----	2,649	^r 2,866	3,238	3,256	3,081

^r Revised.

Source: United Nations. Monthly Bulletin of Statistics. V. 31, No. 1, January 1977, p. xxiii.

Table 21.—World shipping of tanker cargo, by region
(Million metric tons)

Region	Loadings					Unloadings				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
Developed market economies:										
Australia and New Zealand	2	2	3	3	5	17	16	16	17	15
Canada	2	5	7	7	6	18	24	25	22	23
Japan	1	2	1	2	2	223	245	273	268	247
South Africa, Republic of	--	--	--	--	--	16	14	15	14	23
United States	4	3	3	2	--	174	206	275	270	245
Western Europe	98	115	123	109	114	737	796	853	809	715
Other	13	22	27	40	27	12	20	25	29	20
Total	120	149	164	163	154	1,197	1,321	1,482	1,429	1,288
Developing market economies:										
Caribbean	63	60	74	67	69	100	99	119	111	110
Far East	64	79	92	90	94	91	100	118	107	101
Near East	762	855	1,001	1,031	961	12	15	16	17	19
North Africa	183	165	166	127	131	17	8	9	9	11
Other Africa	84	103	18	130	110	15	15	17	15	17
Venezuela	169	163	164	146	121	--	--	--	--	--
Other Latin America	9	11	20	15	19	48	50	62	61	61
Other	1	1	101	(¹)	--	2	4	3	16	2
Total	1,335	1,437	1,636	1,571	1,505	285	291	344	336	321
Centrally planned economies:										
U.S.S.R.	68	63	69	70	72	5	8	13	4	6
Other	3	4	4	4	11	18	19	23	24	22
Total	71	67	73	74	83	23	27	36	28	28

¹ As reported in source. Sum of reported detail exceeds reported total by 35 million tons. Reason for discrepancy is unaccounted for.

Source: United Nations. Monthly Bulletin of Statistics. V. 31, No. 1, January 1977, pp. xxiii-xxvi.

Table 22.—World shipping of dry cargo, by region
(Million metric tons)

Region	Loadings					Unloadings				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
Developed market economies:										
Australia and New Zealand	115	121	149	166	169	16	16	21	24	23
Canada	94	94	105	99	96	37	38	41	39	41
Japan	51	52	55	65	68	238	277	315	329	302
South Africa, Republic of	15	18	19	19	22	7	7	7	11	9
United States	182	207	247	244	246	133	135	147	155	164
Western Europe	240	265	308	329	280	449	469	534	574	521
Other	4	1	1	(¹)	1	5	4	6	1	9
Total	701	758	884	1,911	882	885	946	1,071	1,133	1,069
Developing market economies:										
Caribbean	29	27	30	28	23	13	14	14	13	15
Far East	98	102	121	117	114	80	80	89	102	105
Near East	9	13	9	11	8	24	23	28	36	37
North Africa	28	29	29	34	28	20	20	23	31	33
Other Africa	74	73	81	79	78	25	23	21	15	17
Venezuela	27	18	23	28	28	4	5	5	6	6
Other Latin America	109	103	125	146	157	32	38	45	49	52
Other	9	6	7	46	12	3	2	5	2	11
Total	383	371	425	489	448	201	205	230	254	276
Centrally planned economies:										
U.S.S.R.	45	46	44	48	48	10	22	24	18	29
Other	44	46	50	61	55	48	48	51	58	65
Total	89	92	94	109	103	58	70	75	76	94

¹ As reported in source. Sum of reported detail exceeds reported total by 11 million tons. Reason for discrepancy is unaccounted for.

Source: United Nations. Monthly Bulletin of Statistics. V. 31, No. 1, January 1977, pp. xxiii-xxvi.

Table 23.—Distribution of world oil tanker tonnage, by size group

Size group (deadweight tons)	1966		1975			
	Million dead- weight tons	Percent of total	In service		New construction in progress or on order at yearend	
			Million dead- weight tons	Percent of total	Million dead- weight tons ¹	Percent of total
Under 25,000 ² -----	30.0	30.2	19.7	6.8	0.9	1.0
25,000-45,000 -----	25.3	25.5	28.9	9.9	4.8	5.4
45,000-65,000 -----	21.2	21.3	21.9	7.5	2.0	2.3
65,000-125,000 -----	21.8	21.9	51.4	17.7	9.3	10.5
125,000-205,000 -----	1.1	1.1	23.3	8.0	12.9	14.6
205,000-285,000 -----	--	--	126.0	43.2	26.2	29.6
285,000 and over -----	--	--	20.2	6.9	32.4	36.6
Total -----	99.4	100.0	³ 291.4	100.0	88.5	100.0

¹ Excludes 7.4-million-deadweight-ton combined carriers.

² Includes vessels 2,000 deadweight tons and over for 1966 and 10,000 deadweight tons and over for 1975.

³ Data differ slightly from total given in table 19 because of difference in source.

Source: British Petroleum Co. Ltd. BP Statistical Review of the World Oil Industry. Bayard Press, London. 1966, p. 15; 1975, p. 14.

Table 24.—Indexes of ocean freight rates
(1970=100)

Year and quarter	Trip charter									
	West Germany		Norway				Centrally planned economy countries ¹			
	Tankers		Tankers (deadweight tons)		Dry cargo		Tankers (deadweight tons)			
	30,000 (clean)	30,000 (dirty)	30,000-60,000	60,000-150,000	Over 150,000	Less than 1,100	2,000-3,000	Over 8,000		
1972	41	--	--	43	--	62	108	87	73	
1973	116	--	--	119	--	135	164	158	162	
1974: ²										
First quarter	95	137	112	91	56	205	241	228	278	
Second quarter	67	89	100	71	52	190	245	294	297	
Third quarter	52	87	73	56	36	172	236	228	189	
Fourth quarter	57	80	75	50	31	162	245	267	240	
Annual average	75	106	90	68	44	182	245	246	250	
1975: ²										
First quarter	30	44	46	30	18	129	163	176	135	
Second quarter	46	58	52	36	23	116	144	149	134	
Third quarter	46	66	59	42	25	109	147	145	96	
Fourth quarter	39	59	58	43	25	114	198	160	134	
Annual average	40	54	51	36	22	119	175	162	128	

		Time charter					
		West Germany		Norway		United Kingdom	
		Dry cargo		Tankers ³ (deadweight tons)		Dry cargo (deadweight tons)	
		16,500- 24,999	25,000- 44,999	45,000- 79,999	80,000- 160,000	Over 160,000	9,000- 16,000
		Over 40,000			20,000- 40,000		
1972	---						
1973	---						
	---	r 213	r 84 r 177	88 131	85 129	89 133	r 70 r 144
	---						57 150
	---						r 48 r 129
1974: 2	---						
First quarter	---	286	250	169	155	135	128
Second quarter	---	266	222	162	150	133	118
Third quarter	---	221	261	138	136	122	110
Fourth quarter	---	202	230	106	101	90	79
Annual average	---	248	240	153	143	128	116
	---						87
	---						211
	---						182
	---						126
1975: 2	---						
First quarter	---	143	158	100	100	90	79
Second quarter	---	91	144	102	102	83	73
Third quarter	---	94	122	110	104	95	81
Fourth quarter	---	121	132	59	97	86	74
Annual average	---	121	137	105	103	92	79
	---						66
	---						132
	---						93
	---						45
	---						67
	---						83
	---						123
	---						87
	---						88
	---						35
	---						141
	---						115
	---						93
	---						45

r Revised.

1 Includes Bulgaria, Czechoslovakia, East Germany, Hungary, Mongolia, Poland, Romania, and the U.S.S.R.

² Quarterly figures are for the last month in the quarter except for those of United Kingdom dry cargo, which are averages for the quarter indicated.

Quarterly figures are for the last month in the quarter except for those of United Kingdom dry cargo, which are averages for the quarter indicated. Index numbers represent the ton/time shorter of the average freight rate assessments calculated on the basis of rates prevailing during the period.

³³ Index numbers represent the trip/time charter of the average freight rate assessments calculated on the basis of rates prevailing

Table 25.—Commercial ocean traffic through the Panama Canal in terms of number of transits and total cargo moved, by type of vessel

	Tankers	Con- tainer cargo ships	Dry bulk carriers	General cargo ships	Other	Total
1974						
Number of transits:						
In ballast:						
Atlantic to Pacific -----	139	5	40	56	651	891
Pacific to Atlantic -----	587	8	212	233	127	1,167
Total -----	726	13	252	289	778	2,058
Laden:						
Atlantic to Pacific -----	1,038	463	1,907	2,174	694	6,276
Pacific to Atlantic -----	536	533	1,321	1,995	1,314	5,699
Total -----	1,574	996	3,228	4,169	2,008	11,975
In ballast and laden:						
Atlantic to Pacific -----	1,177	468	1,947	2,230	1,345	7,167
Pacific to Atlantic -----	1,123	541	1,533	2,228	1,441	6,866
Grand total -----	2,300	1,009	3,480	4,458	2,786	14,033
Cargo moved (thousand metric tons):						
Atlantic to Pacific ^r -----	20,130	4,529	51,591	15,213	1,335	92,798
Pacific to Atlantic ^r -----	13,167	5,365	22,880	13,124	2,947	57,483
Total ^r -----	33,297	9,894	74,471	28,337	4,282	150,281
1975						
Number of transits:						
In ballast:						
Atlantic to Pacific -----	92	2	153	86	708	1,041
Pacific to Atlantic -----	551	6	169	190	117	1,033
Total -----	643	8	322	276	825	2,074
Laden:						
Atlantic to Pacific -----	849	499	1,873	1,801	687	5,709
Pacific to Atlantic -----	417	557	1,557	1,868	1,427	5,866
Total -----	1,266	1,056	3,430	3,669	2,114	11,535
In ballast and laden:						
Atlantic to Pacific -----	941	501	2,026	1,887	1,395	6,750
Pacific to Atlantic -----	968	563	1,726	2,058	1,544	6,859
Grand total -----	1,909	1,064	3,752	3,945	2,939	13,609
Cargo moved (thousand metric tons):						
Atlantic to Pacific -----	16,741	3,727	53,266	10,459	1,249	85,442
Pacific to Atlantic -----	8,351	5,884	27,083	12,486	3,104	56,908
Total -----	25,092	9,611	80,349	22,945	4,353	142,350

^r Revised.

Source: Panama Canal Co. Annual Reports for fiscal years ending June 30, 1974, and June 30, 1975.

Table 26.—Movement of mineral commodities through the Panama Canal by commodity and direction of movement

(Thousand metric tons)

Commodity	Atlantic to Pacific				Pacific to Atlantic				Total		
	1973	1974	1975		1973	1974	1975		1973	1974	1975
METALS											
Aluminum:											
Bauxite and alumina	1,593	1,071	1,174		576	671	414		2,159	1,742	1,588
Metal, except scrap	59	76	41		90	51	75		149	127	116
Chromium, chromite	96	53	77		185	247	195		281	300	272
Copper:											
Ore and concentrate	46	36	12		557	669	535		603	705	547
Metal, except scrap	17	17	21		541	402	739		558	419	760
Iron and steel:											
Metal, except scrap	212	591	324		2,134	2,384	3,290		2,346	2,975	3,614
Pig iron, steel ingots, other crude forms, except scrap	143	221	428		20	71	225		163	292	653
Semimanufactures (excluding tinplate)	1,796	2,085	1,733		7,993	6,845	9,684		9,789	8,930	11,417
Lead:											
Ore and concentrate	3	6	12		136	194	121		139	200	133
Metal, except scrap	6	15	4		4	202	209		208	183	213
Manganese ore and concentrate	203	172	254		116	146	273		319	318	527
Tin:											
Ore and concentrate	3	2	4		78	61	77		81	63	81
Metal (including tinplate)	122	135	100		134	107	141		256	242	241
Zinc:											
Ore and concentrate	255	262	159		530	726	698		785	988	852
Metal, except scrap	9	28	7		147	81	120		156	109	127
Other and unclassified:											
Ore and concentrate	118	144	250		765	995	920		883	1,139	1,170
Metal, except scrap	59	75	60		213	147	337		272	397	397
Metal scrap, all metals	3,286	3,512	2,175		17	39	51		3,303	3,551	2,226
NONMETALS											
Asbestos	123	81	53		54	63	38		177	144	91
Borax	4	7	7		457	444	491		461	451	498
Cement	120	145	181		42	17	23		162	162	204
Clays and clay products:											
Fire clay and kaolin	281	338	229		31	26	10		312	364	239
Brick and tile	64	75	89		149	98	55		213	173	144
Diatomaceous earth	9	6	6		48	33	21		57	39	27
Fertilizer materials:											
Nitrogenous:											
Ammonia compounds	368	568	600		28	50	168		396	618	768
Sodium nitrate	33	43	29		304	288	368		357	331	357
Phosphatic	4,665	5,218	5,347		3	1	89		4,666	5,219	5,486
Potassic	345	274	295		498	620	479		843	774	774
Unclassified	1,114	1,371	1,199		138	146	117		1,262	1,517	1,316

See footnote at end of table.

Table 26.—Movement of mineral commodities through the Panama Canal by commodity and direction of movement—Continued
(Thousand metric tons)

Commodity	Atlantic to Pacific			Pacific to Atlantic			Total		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
NONMETALS—Continued									
Sodium compounds:									
Salt	108	83	130	439	101	186	547	184	316
Caustic soda	462	642	587	3	11	108	465	653	693
Other	106	119	91	14	5	46	120	124	137
Stone including marble	41	75	46	1	2	1	42	77	47
Sulfur	352	501	226	755	940	1,148	1,107	1,441	1,874
Other, slag, dross, and similar waste, not metal bearing	59	46	88	76	39	78	135	85	166
MINERAL FUELS AND RELATED MATERIALS									
Carbon black	23	29	15	4	2	4	27	31	19
Coal and coke	13,864	13,526	25,136	361	629	1,539	14,225	19,155	26,725
Petrochemicals	435	564	276	259	426	391	694	990	667
Petroleum:									
Crude	4,622	6,218	6,500	7,159	10,899	4,527	11,781	17,117	11,027
Refinery products	8,461	12,329	9,466	3,093	3,033	3,795	11,554	15,362	13,261
Total	† 43,675	† 55,819	57,481	† 28,350	† 31,877	31,769	† 72,025	† 87,696	89,250

† Revised.

Source: Panama Canal Co. 1975 Annual Report. Pp. 54-57.

Table 27.—Commercial ocean traffic through the Suez Canal, by number of transits and type of vessel for 1975¹

	Tankers	Combination carriers	Container cargo ships	Dry bulk carriers	General cargo ships	Other	Total
In ballast:							
Southbound -----	236	2	--	14	62	45	359
Northbound -----	40	--	2	12	430	34	518
Total -----	276	2	2	26	492	79	877
Laden:							
Southbound -----	110	6	7	168	1,803	83	2,177
Northbound -----	181	--	15	103	1,178	46	1,523
Total -----	291	6	22	271	2,981	129	3,700
In ballast and laden:							
Southbound -----	346	8	7	182	1,865	128	2,536
Northbound -----	221	--	17	115	1,608	80	2,041
Grand total -----	567	8	24	297	3,473	208	4,577

¹ Data are for 6 months.

Source: Arab Republic of Egypt. Suez Canal Report. Monthly issues June–December 1975.

Table 28.—Movement of mineral commodities through the Suez Canal, by commodity and direction of movement for 1975¹
(Thousand metric tons)

Commodity	South-bound	North-bound	Total
METALS			
Aluminum, bauxite -----	--	33	33
Chromium, metal and ores -----	--	125	125
Copper, metal and ores -----	--	70	70
Iron and steel:			
Iron ore -----	--	836	836
Metal:			
Pig iron -----	64	--	64
Plates and sheets -----	277	--	277
Lead, metal and ores -----	--	78	78
Manganese ore and concentrate -----	--	193	193
Tin, metal and ores -----	--	22	22
Titanium ore and concentrate -----	--	109	109
Zinc, metal and ores -----	--	106	106
Other metals and ores, n.e.s. -----	548	149	697
NONMETALS			
Cement -----	1,865	5	1,870
Fertilizer materials:			
Nitrogenous -----	381	--	381
Phosphatic -----	770	--	770
Potassic -----	149	--	149
Unclassified -----	1,548	374	1,922
Salt -----	13	--	13
Other, unspecified -----	97	142	239
MINERAL FUELS AND RELATED MATERIALS			
Coal and coke -----	76	252	328
Petroleum:			
Crude oil -----	91	2,192	2,283
Refinery products -----	2,107	2,188	4,245
Total -----	7,986	6,824	14,810

¹ Data are for 6 months.

Source: Arab Republic of Egypt. Suez Canal Report. Monthly issues June–December 1975.

Table 29.—Nonferrous metal prices in the United States
(Average, cents per pound, unless otherwise specified)

Year and month	Aluminum ¹	Copper ²	Lead ³	Zinc ⁴	Tin ⁵	Silver ⁶
1973 -----	25.000	58.865	16.285	20.658	227.558	255.339
1974 -----	34.133	76.640	22.533	35.945	399.266	470.798
1975:						
January -----	39.000	68.403	24.500	39.153	363.761	419.250
February -----	39.000	63.555	24.500	39.109	372.066	435.684
March -----	39.000	63.555	24.500	38.951	366.038	433.150
April -----	39.000	63.555	24.500	38.929	354.102	420.918
May -----	39.000	63.155	23.338	38.938	342.536	453.810
June -----	39.000	62.511	19.000	38.944	342.476	448.914
July -----	39.000	61.859	19.000	38.917	333.216	470.455
August -----	40.429	63.165	19.557	38.902	331.821	492.510
September -----	41.000	63.165	20.000	38.886	322.774	451.595
October -----	41.000	63.165	20.000	38.955	321.946	432.886
November -----	41.000	63.165	20.000	38.897	324.026	433.244
December -----	41.000	63.165	19.455	38.931	303.071	408.486
Average -----	39.786	63.535	21.529	38.959	339.818	441.852

¹ Unalloyed ingot, 99.5%, delivered United States.

² Electrolytic copper, domestic refineries, on Atlantic seaboard.

³ Refined lead, nationwide.

⁴ Prime Western slab, f.o.b. East St. Louis.

⁵ Straits tin, New York.

⁶ Cents per troy ounce, 999 fine, New York.

Source: American Bureau of Metal Statistics, Inc. Nonferrous Metal Data, 1975. New York, 1976, 143 pp.

Table 30.—Nonferrous metal prices in the United Kingdom
(Average, U.S. cents per pound, unless otherwise specified)¹

Year and month	Aluminum ²	Copper ³	Lead ⁴	Zinc	Tin ⁵	Silver ⁶
1973 -----	26.326	80.805	19.382	38.314	218.148	254.370
1974 -----	34.690	93.097	26.801	55.973	371.391	470.600
1975:						
January -----	40.570	54.940	24.383	36.181	348.976	422.840
February -----	41.140	57.504	24.559	35.978	342.508	439.517
March -----	41.540	60.852	24.607	36.394	334.720	438.173
April -----	40.710	60.309	21.727	35.462	323.507	418.708
May -----	41.680	56.841	19.108	33.838	312.789	463.170
June -----	40.960	54.071	15.986	34.005	314.140	448.697
July -----	39.240	55.446	16.266	32.041	307.994	469.397
August -----	37.980	57.928	17.380	33.385	306.030	492.642
September -----	37.420	54.859	16.323	32.786	296.373	448.757
October -----	36.940	53.496	15.620	31.983	287.369	428.534
November -----	36.790	53.461	15.274	31.949	283.872	431.577
December -----	38.520	52.205	15.098	31.083	280.357	408.941
Average -----	39.460	56.110	18.681	33.792	311.627	441.746

¹ London Metal Exchange, average settlement prices.

² Ingot, 99.5%.

³ Electrolytic wirebar.

⁴ Refined pig lead, 99.97%.

⁵ Standard tin.

⁶ U.S. cents per troy ounce, 999 fine.

Source: American Bureau of Metal Statistics, Inc. Nonferrous Metal Data, 1975. New York, 1976, 143 pp.

Table 31.—Nonferrous metal prices in Canada
(Average, U.S. cents per pound, unless otherwise specified)

Year and month	Copper ¹	Lead ²	Zinc ²	Silver ³
1973	63.662	16.224	23.568	(⁴)
1974	79.487	20.774	34.381	460.126
1975:				
January	69.120	21.613	37.195	419.797
February	63.348	21.491	36.984	437.538
March	63.346	21.490	36.983	433.615
April	62.686	21.266	36.598	421.540
May	61.614	20.556	35.972	453.837
June	61.744	19.114	36.048	448.480
July	61.476	18.916	35.891	471.934
August	61.208	18.833	35.735	495.140
September	61.751	19.000	36.052	450.085
October	61.827	19.024	36.096	430.566
November	62.507	19.233	36.493	425.973
December	62.505	18.809	36.492	402.266
Average	62.761	19.945	36.378	440.931

¹ Electrolytic wirebar, f.o.b. delivered Canadian points.

² Pig lead, Prime Western zinc; producers' prices, carload quantities, communicated by Cominco Ltd.

³ U.S. cents per troy ounce, average price of Cominco Ltd.

⁴ No yearly average reported for 1973.

Source: American Bureau of Metal Statistics, Inc. Nonferrous Metal Data, 1975. New York, 1976, 143 pp.

Table 32.—Mineral commodity export price indexes
(1970=100)

Year and quarter	Metal ores	Fuels	All crude minerals
1973	130	189	173
1974	175	577	473
1975:			
First quarter	200	586	488
Second quarter	199	583	486
Third quarter	199	577	482
Fourth quarter	199	628	519
Annual average	200	588	494

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 9, September 1976, pp. xxi-xxii.

Table 33.—Analysis of export price indexes
(1970=100)

Year and quarter	Developed areas		Developing areas	
	Total minerals	Nonferrous base metals	Total minerals	Nonferrous base metals
1973	150	119	182	127
1974	274	149	555	160
1975:				
First quarter	309	129	559	114
Second quarter	302	126	560	110
Third quarter	293	123	557	108
Fourth quarter	301	123	607	103
Annual average	301	125	571	109

Source: United Nations. Monthly Bulletin of Statistics. V. 30, No. 9, September 1976, pp. xxi-xxii.

Table 34.—Leading world producers of bauxite
(Gross weight, thousand metric tons)

Country	1973	1974	1975 P
Australia	17,596	20,065	21,003
Jamaica	13,600	15,328	11,571
Guinea *	r 3,048	r 6,604	9,100
Surinam	7,110	r 6,706	e 4,928
U.S.S.R. e 1	4,300	4,300	4,400
Guyana	3,276	r e 3,251	e 3,251
Greece	r 2,748	2,783	3,244
Hungary	2,600	2,751	2,891
France	3,133	2,765	2,527
Yugoslavia	2,167	2,370	2,306
United States	1,909	1,980	1,806
India	1,292	1,113	1,270
Total	r 62,779	70,016	68,297
All others	r 7,605	8,067	6,823
Grand total	r 70,384	78,083	75,120

* Estimate. P Preliminary. r Revised.

1 Excludes nepheline syenite concentrates and alunite ore.

Table 35.—Leading world producers of aluminum
(Thousand metric tons)

Country	1973	1974	1975 P
United States	4,108	4,448	3,519
U.S.S.R. e	1,360	1,430	1,500
Japan	r 1,097	1,118	1,013
Canada	942	1,021	e 913
Germany, West	533	689	678
Norway	620	649	591
France	359	393	383
United Kingdom	252	294	308
Netherlands	190	252	261
Australia	207	219	214
Spain	162	191	210
Italy	184	212	190
Romania	141	187	190
Total	r 10,155	11,103	9,970
All others	r 1,968	2,069	2,072
Grand total	r 12,123	13,172	12,042

* Estimate. P Preliminary. r Revised.

Table 36.—Leading world producers of mine copper
(Copper content of ore, thousand metric tons)

Country	1973	1974	1975 P
United States 1	1,553	1,449	1,282
Chile	735	902	828
U.S.S.R. e 1,2	700	740	765
Canada 1	r 823	821	724
Zambia	707	698	677
Zaire	r 489	499	496
Poland	155	198	270
Philippines	221	225	227
Australia	220	251	218
Peru	r 203	212	179
South Africa, Republic of	176	179	179
Papua New Guinea	r 182	184	172
Total	r 6,169	6,358	6,017
All others	r 948	957	950
Grand total	r 7,117	7,315	6,967

* Estimate. P Preliminary. r Revised.

1 Recoverable.

2 Smelter production.

Table 37.—Leading world producers of gold
(Thousand troy ounces)

Country	1971	1972	1973	1974	1975 P
South Africa, Republic of	31,389	29,245	27,495	24,388	22,938
U.S.S.R.*	6,700	6,900	7,100	7,300	7,500
Canada	2,243	2,079	1,954	1,698	1,674
United States	1,495	1,449	1,176	1,127	1,052
Papua New Guinea	24	409	° 643	693	592
Rhodesia, Southern	502	° 502	° 500	° 500	° 550
Ghana	698	724	723	567	524
Australia	627	755	554	522	514
Philippines	637	607	572	536	502
Total	44,360	42,670	40,717	37,331	35,846
All others	2,135	2,048	2 285	2,310	2,791
Grand total	46,495	44,718	43,002	39,641	38,637

* Estimate. P Preliminary.

Table 38.—Leading world producers of iron ore, iron ore concentrates,
and iron ore agglomerates
(Thousand metric tons)

Country	1973	1974	1975 P
U.S.S.R.	° 216,104	225,000	233,000
Australia	° 84,828	96,688	97,652
United States	89,076	85,709	80,132
Brazil	° 50,506	73,955	71,724
China, People's Republic of °	56,000	° 60,000	65,000
France	° 54,238	54,264	49,652
Canada	° 50,213	49,976	46,868
India	° 35,562	35,485	41,297
Sweden	° 34,727	36,153	32,639
Liberia	23,542	23,785	27,163
Venezuela	23,110	26,424	24,772
South Africa, Republic of	10,955	11,553	12,298
Chile	° 9,466	10,271	11,049
Korea, North °	8,900	9,400	9,400
Mauritania	10,480	11,666	8,686
Total	° 757,707	810,329	811,332
All others	° 88,065	85,045	80,260
Grand total	° 845,772	895,374	891,592

* Estimate. P Preliminary. ° Revised.

Table 39.—Leading world producers of crude steel¹
(Thousand metric tons)

Country	1973	1974	1975 P
U.S.S.R.	° 131,454	136,000	141,000
United States	136,803	132,195	105,816
Japan	119,322	117,131	102,314
Germany, West	49,521	53,232	40,415
China, People's Republic of °	27,000	27,000	29,000
Italy	20,995	23,803	21,836
France	25,264	27,023	21,432
United Kingdom	26,649	22,426	20,200
Poland	14,067	14,565	15,007
Czechoslovakia	13,158	13,640	14,315
Canada	13,386	13,623	13,025
Belgium	° 15,527	16,230	11,587
Spain	° 10,808	11,646	11,488
Romania	8,161	8,840	9,400
Australia	7,684	7,755	7,814
Total	° 619,789	625,109	564,709
All others	° 77,684	82,269	81,707
Grand total	° 697,473	707,378	646,416

* Estimate. P Preliminary. ° Revised.

¹ Steel ingots and castings.

Table 40.—Leading world producers of mine lead
(Lead content of ore, thousand metric tons)

Country	1973	1974	1975 ^p
United States ¹	547	602	564
U.S.S.R. ^e	470	475	480
Australia	^r 403	375	407
Canada	388	320	^e 358
Peru ¹	^r 183	202	204
Mexico ¹	179	218	179
Yugoslavia	119	120	132
Bulgaria ^e	105	^r 110	112
China, People's Republic of ^e	100	100	100
Korea, North ^e	90	^r 100	100
Total	^r 2,584	2,622	2,636
All others	^r 901	854	802
Grand total	^r 3,485	3,476	3,438

^e Estimate. ^p Preliminary. ^r Revised.

¹ Recoverable.

Table 41.—Leading world producers of manganese ore
(Gross weight, thousand metric tons)

Country	1973	1974	1975 ^p
U.S.S.R.	8,245	8,500	8,800
South Africa, Republic of	4,176	4,745	5,769
Gabon	1,919	2,064	2,230
Brazil	^r 1,615	1,789	^e 1,630
Australia	1,522	1,522	1,555
India	^r 1,489	1,447	1,531
China, People's Republic of ^e	1,000	1,000	1,000
Mexico	364	403	428
Ghana	318	250	415
Zaire	334	288	309
Total	^r 20,982	22,008	23,667
All others	^r 765	735	732
Grand total	^r 21,747	22,743	24,399

^e Estimate. ^p Preliminary. ^r Revised.

Table 42.—Leading world producers of mine nickel
(Thousand metric tons)

Country	1971	1972	1973	1974	1975 ^p
Canada	267	235	244	269	245
U.S.S.R. ^e	120	125	135	145	152
New Caledonia	101	89	107	135	133
Australia	36	36	41	43	75
Cuba ^e	35	32	36	36	37
Dominican Republic	(¹)	17	30	31	31
Total	559	534	593	659	673
All others	80	78	117	132	145
Grand total	639	612	710	791	818

^e Estimate. ^p Preliminary.

¹ Less than ½ unit.

Table 43.—Leading world producers of mine tin
(Tin content of ore, metric tons)

Country	1973	1974	1975 ^p
Malaysia	72,262	68,124	64,864
U.S.S.R. ^e	29,000	29,500	30,000
Bolivia	^r 30,318	29,498	28,744
Indonesia	22,297	25,021	24,391
China, People's Republic of ^e	20,000	20,000	22,000
Thailand	20,921	20,339	16,406
Australia	^r 10,801	10,114	9,678
Nigeria	5,828	5,455	4,652
Total	^r 211,427	208,051	200,235
All others	^r 26,420	25,696	24,960
Grand total	^r 237,847	233,747	225,195

^e Estimate. ^p Preliminary. ^r Revised.

Table 44.—Leading world producers of mine zinc
(Zinc content of ore, thousand metric tons)

Country	1973	1974	1975 ^p
Canada	1,227	1,160	1,083
U.S.S.R. ^e	670	680	690
Australia	^r 480	456	^e 492
United States	434	453	426
Peru	^r 412	370	360
Japan	264	241	258
Mexico	271	263	229
Poland	210	200	216
Korea, North ^e	160	162	162
Germany, West	123	116	^e 116
Sweden	119	114	110
Yugoslavia	97	95	^e 101
China, People's Republic of ^e	100	100	100
Greenland	27	105	91
Spain	^r 87	85	84
Total	^r 4,681	4,600	4,518
All others	^r 1,029	1,099	1,045
Grand total	^r 5,710	5,699	5,563

^e Estimate. ^p Preliminary. ^r Revised.

Table 45.—Leading world producers of hydraulic cement
(Thousand metric tons)

Country	1973	1974	1975 ^p
U.S.S.R.	109,500	115,000	122,000
Japan	78,118	73,108	65,519
United States	79,445	75,195	63,251
Italy	36,312	36,309	34,235
Germany, West	^r 41,011	35,977	33,516
China, People's Republic of ^e	25,000	^r 25,000	30,000
France	30,713	32,469	29,249
Spain (including Canary Islands)	^r 22,368	23,664	23,976
Poland	15,548	16,765	18,552
United Kingdom	19,986	17,781	16,896
Brazil	13,398	14,920	^e 16,700
India	15,006	14,263	16,234
Romania	9,848	11,195	^e 12,000
Mexico	9,787	10,595	11,612
Turkey	^r 8,946	10,234	10,740
Germany, East	9,548	10,092	10,656
Korea, Republic of	8,175	8,842	10,129
Total	^r 532,709	531,409	525,265
All others	^r 169,226	172,558	179,073
Grand total	^r 701,935	703,967	695,338

^e Estimate. ^p Preliminary. ^r Revised.

Table 46.—Leading world producers of diamond ¹
(Thousand carats)

Country	1971	1972	1973	1974	1975 ^p
Zaire -----	12,743	13,390	12,940	13,611	12,810
U.S.S.R.* -----	8,800	9,200	9,500	9,500	9,700
South Africa, Republic of -----	7,031	7,395	7,565	7,510	7,295
Botswana -----	822	2,403	2,416	2,718	2,414
Ghana -----	2,562	2,659	2,307	2,572	2,328
South-West Africa, Territory of -----	1,648	1,596	1,600	1,570	1,748
Total -----	33,606	36,643	36,328	37,481	36,295
All others -----	7,761	7,167	6,739	7,041	4,831
Grand total -----	41,367	43,810	43,067	44,522	41,126

* Estimate. ^p Preliminary.

¹ Gem and industrial grades, undifferentiated.

Table 47.—Leading world producers of nitrogen fertilizer compounds ¹
(Thousand metric tons of contained nitrogen)

Country	1973	1974	1975 ^p
United States -----	8,433	9,158	8,621
U.S.S.R. -----	6,551	7,241	7,856
China, People's Republic of * -----	^r 2,020	^r 2,570	2,840
Japan -----	^r 2,199	2,138	2,341
France -----	^r 1,477	1,642	1,694
Germany, West -----	1,471	1,473	1,574
Poland -----	^r 1,148	1,365	1,458
Netherlands -----	^r 1,217	1,201	1,289
India -----	1,054	1,050	1,187
Italy -----	^r 1,045	1,129	1,131
Romania -----	874	854	980
United Kingdom -----	751	756	885
Total -----	^r 28,240	30,577	31,856
All others -----	^r 9,603	9,895	10,332
Grand total -----	^r 37,843	40,472	42,189

* Estimate. ^p Preliminary. ^r Revised.

¹ Year ending June 30 of that stated.

Table 48.—Leading world producers of phosphate rock ¹
(Thousand metric tons)

Country	1973	1974	1975 ^p
United States -----	38,226	41,446	44,285
U.S.S.R.* ² -----	21,250	^r 22,505	24,120
Morocco -----	17,077	19,721	13,548
Tunisia -----	^r 3,474	3,826	3,488
China, People's Republic of * -----	3,000	3,000	3,400
Spanish Sahara -----	696	2,386	2,682
Total -----	^r 83,723	92,884	91,523
All others -----	^r 15,028	17,955	16,125
Grand total -----	^r 98,751	110,839	107,648

* Estimate. ^p Preliminary. ^r Revised.

¹ Includes output of all major crude mineral sources of phosphate.

² Includes material described as sedimentary rock in Soviet sources.

Table 49.—Leading world producers of marketable potash
(Thousand metric tons K₂O equivalent)

Country	1973	1974	1975 [†]
U.S.S.R. -----	[†] 5,633	5,917	6,050
Canada -----	4,454	5,776	4,850
Germany, East -----	2,556	2,864	[°] 2,900
Germany, West -----	2,548	2,620	2,372
United States -----	2,361	2,315	2,269
France -----	2,263	2,276	1,892
Total -----	[†] 19,815	21,768	24,333
All others -----	1,960	1,988	2,031
Grand total -----	[†] 21,775	23,756	22,364

[°] Estimate. [†] Preliminary. [†] Revised.

Table 50.—Leading world producers of salt
(Thousand metric tons)

Country	1973	1974	1975 [†]
United States (including Puerto Rico) -----	39,862	42,243	37,245
China, People's Republic of [°] -----	[†] 20,000	[†] 25,000	30,000
U.S.S.R. [°] -----	12,200	12,500	13,000
Germany, West -----	10,201	11,320	8,440
United Kingdom -----	[†] 10,518	8,421	[°] 8,400
India -----	[†] 6,864	5,916	[°] 6,400
Mexico -----	4,319	5,470	[°] 6,900
France -----	6,371	6,272	5,538
Canada -----	5,048	5,447	5,156
Australia -----	[†] 4,116	4,935	[°] 5,000
Italy -----	4,872	4,894	4,411
Romania -----	3,296	3,923	3,831
Poland -----	[†] 3,078	3,295	3,513
Netherlands -----	3,044	3,387	2,690
Germany, East -----	2,286	2,338	[°] 2,400
Spain -----	[†] 2,197	2,257	[°] 2,300
Brazil -----	1,855	1,552	[°] 1,500
Bahamas -----	1,121	1,027	1,232
Argentina -----	699	956	1,151
Japan -----	1,015	1,115	1,012
Colombia -----	[†] 1,330	875	925
Total -----	[†] 144,292	153,143	150,146
All others -----	[†] 10,410	11,649	11,862
Grand total -----	[†] 154,702	164,792	162,008

[°] Estimate. [†] Preliminary. [†] Revised.

Table 51.—Leading world producers of sulfur¹
(Thousand metric tons of contained sulfur)

Country	1973				1974				1975 ^p			
	Native	From pyrite	By- product	Total	Native	From pyrite	By- product	Total	Native	From pyrite	By- product	Total
United States	2,727	215	3,153	11,095	2,827	165	3,410	11,602	2,736	242	3,872	11,440
U.S.R. ^e	2,300	3,500	1,350	7,650	2,400	3,600	1,900	7,900	2,500	3,700	2,000	8,200
Canada	—	12	3,216	8,127	—	24	7,842	7,866	—	9	7,538	7,547
Poland	3,545	—	236	3,801	3,093	—	230	4,373	3,471	—	230	5,041
Japan	16	569	2,182	2,767	16	395	2,386	2,808	16	539	1,865	2,420
Mexico	2,1,608	—	64	1,672	2,323	—	64	2,387	2,164	—	91	2,255
France	—	—	1,356	1,856	—	—	1,946	1,946	—	—	1,921	1,921
Spain	—	1,113	113	1,226	—	1,308	113	1,421	—	1,310	113	1,423
China, People's Republic of	130	900	120	1,150	130	900	120	1,150	130	900	120	1,150
Finland	123	357	376	856	100	340	386	826	100	340	438	878
Italy	80	778	310	1,168	61	473	311	845	43	500	295	838
Iraq	2,395	—	140	535	2,610	—	140	750	2,650	—	140	790
Germany, West	—	192	354	546	—	214	487	701	—	215	487	736
Iran	21	—	595	616	20	—	605	625	20	—	487	507
Australia	—	117	364	481	—	107	349	456	—	108	362	470
Total	15,945	7,753	19,348	43,546	17,780	7,527	20,349	45,656	17,710	7,863	20,043	45,616
All others	183	2,662	1,802	4,647	152	2,494	1,835	4,481	149	2,329	1,829	4,307
Grand total	16,128	10,415	21,650	48,193	17,932	10,021	22,184	50,137	17,859	10,192	21,872	49,923

^e Estimate. ^p Preliminary.

¹ This table includes all recorded production of sulfur, regardless of its origin or of the form in which it is recovered. Thus it includes elemental sulfur, whether mined by conventional methods or by the Frasch process, as well as elemental sulfur and the sulfur content of compounds such as H₂S, SO₂, and H₂SO₄ recovered as a principal product of pyrite mining and as a byproduct of the recovery of crude oil and natural gas, and as a byproduct of oil refining, coal treatment, and metals smelting and/or refining.

² Entirely Frasch-process sulfur.

³ Includes Frasch-process sulfur as follows, in thousand metric tons: Poland: 1973—2,975, 1974—3,274, 1975—3,817; total of individually listed countries and grand total: 1973—12,706, 1974—14,234, 1975—13,967. Balance is mined elemental sulfur.

Table 52.—Leading world producers of coal (all grades)
(Million metric tons)

Country	1973			1974			1975 ^p		
	Lignite	Bituminous and anthracite	Total	Lignite	Bituminous and anthracite	Total	Lignite	Bituminous and anthracite	Total
U.S.S.R.	157	511	668	161	523	684	166	535	701
United States	13	r 531	r 544	14	537	551	18	568	586
China, People's Republic of *	(1)	430	430	(1)	450	450	(1)	470	470
Germany, East	246	1	247	243	1	244	247	1	248
Germany, West	119	97	216	126	95	221	123	92	215
Poland	39	187	196	40	162	202	40	172	212
United Kingdom	81	r 150	r 150	82	108	109	86	129	129
Czechoslovakia	81	r 98	r 109	82	98	110	86	123	114
India	2	r 78	r 81	3	84	87	3	95	98
Australia	25	61	86	27	63	90	28	67	95
South Africa, Republic of	(1)	62	62	(1)	66	66	(1)	69	69
Korea, North	32	37	37	33	39	39	35	40	40
Yugoslavia	r 17	r 8	33	1	1	34	1	1	36
Romania	26	(2)	25	19	8	27	21	8	29
Bulgaria	3	26	26	24	(2)	24	27	(2)	27
France	23	3	29	3	23	26	3	22	25
Hungary	23	3	26	23	3	26	22	3	25
Canada	4	17	21	3	17	20	3	21	24
Total	r 788	r 2,178	r 2,966	801	2,209	3,010	822	2,321	3,143
All others	r 31	r 87	r 118	33	93	126	38	96	134
Grand total	819	r 2,265	r 3,084	834	2,302	3,136	860	2,417	3,277

* Estimate. ^p Preliminary. ^r Revised.

¹ Output small, included under "Bituminous and anthracite."

² Less than ½ unit.

Table 53.—Leading world producers of marketed natural gas
(Billion cubic feet)

Country	1973	1974	1975 ^p
United States -----	22,648	21,601	20,109
U.S.S.R. -----	^r 8,346	9,201	10,206
Netherlands -----	2,495	2,957	3,208
Canada -----	3,119	3,046	3,076
China, People's Republic of ^e -----	950	1,200	1,400
United Kingdom -----	1,018	1,230	1,208
Romania -----	^r 980	1,012	954
Iran -----	702	787	771
Germany, West -----	706	713	639
Mexico -----	542	561	584
Italy -----	541	540	514
Venezuela -----	460	476	450
Libya -----	385	345	383
Germany, East -----	248	273	280
Argentina -----	238	256	272
Total -----	^r 43,378	44,198	44,054
All others -----	^r 2,750	2,973	3,153
Grand total -----	^r 46,128	47,171	47,207

^e Estimate. ^p Preliminary. ^r Revised.

Table 54.—Leading world producers of natural gas liquids ¹
(Million 42-gallon barrels)

Country	1971	1972	1973	1974	1975 ^p
United States -----	618	638	634	616	595
Canada -----	87	110	118	114	112
U.S.S.R. ^e -----	62	67	79	83	90
Saudi Arabia -----	^e 13	20	35	49	^e 48
Mexico -----	21	24	27	28	33
Venezuela -----	26	31	34	31	29
Total -----	827	890	927	921	907
All others -----	68	94	116	113	117
Grand total -----	895	984	1,043	1,034	1,024

^e Estimate. ^p Preliminary.

¹ Includes propane, butane, natural gasoline, and all other condensable products derived from the production of natural gas.

Table 55.—Leading world producers of crude oil
(Million 42-gallon barrels)

Country	1973	1974	1975 ^p
U.S.S.R	3,094	3,374	3,609
United States	3,361	3,203	3,052
Saudi Arabia	2,773	3,096	2,583
Iran	2,139	2,198	1,953
Venezuela	1,229	1,086	856
Iraq	737	721	826
Kuwait	1,102	930	762
Nigeria	750	823	652
United Arab Emirates	559	616	618
China, People's Republic of	365	474	572
Libya	794	555	551
Canada	648	617	521
Indonesia	489	502	477
Algeria	401	368	351
Mexico	191	238	294
Qatar	208	189	159
Australia	142	140	149
Argentina	154	151	144
Oman	107	106	124
Romania	107	108	109
Egypt	60	54	84
Gabon	55	74	82
Total	^r 19,465	19,623	18,528
All others	^r 903	915	970
Grand total	20,368	20,538	19,498

^p Preliminary. ^r Revised.

Table 56.—Leading world producers of refined oil
(Million 42-gallon barrels)

Country	1971	1972	1973	1974	1975 ^p
United States ¹	4,644	4,909	5,144	5,019	5,091
U.S.S.R	2,336	2,520	2,728	2,814	2,925
Japan	1,370	1,498	1,742	1,701	1,616
France	802	889	1,002	950	809
Italy	892	926	975	905	740
Germany, West	801	811	859	850	726
United Kingdom	767	793	843	820	690
Canada	507	564	614	646	624
Netherlands	454	519	544	479	423
China, People's Republic of ²	240	280	310	372	391
Brazil	194	239	286	296	330
Spain (including Canary Islands)	260	276	321	332	317
Venezuela	455	412	475	446	317
Iran	209	204	214	230	261
Mexico	184	197	211	236	249
Netherlands Antilles	285	281	317	282	221
Belgium	221	269	269	221	214
Australia	185	181	206	207	209
India	142	143	150	148	161
Argentina	175	169	172	170	153
Saudi Arabia ²	217	225	225	234	158
Kuwait ²	161	141	142	133	144
Total	15,501	16,446	17,749	17,491	16,763
All others	2,349	2,319	2,861	2,939	2,942
Grand total	17,850	18,765	20,610	20,430	19,705

^e Estimate. ^p Preliminary.

¹ Including Puerto Rico and the Virgin Islands.

² Including the country's share of production from the Kuwait-Saudi Arabia Partitioned Zone.

Table 57.—Major world trade in
(Thousand)

Source country	1974 production by country ²	1974 exports by source country ²	Austria	Canada	France	West Ger- many
Bauxite:						
Australia	20,065	NA	--	--	368	2,361
Dominican Republic	1,210	1,210	--	--	--	--
France	2,938	114	--	--	XX	104
Ghana	363	398	--	--	--	99
Greece	3,004	1,457	--	--	130	105
Guinea	7,605	NA	--	988	408	469
Guyana	3,267	2,162	--	1,273	67	225
Haiti	649	⁸ 793	--	--	--	48
Hungary	2,751	559	--	--	--	--
India	1,113	18	--	--	--	--
Indonesia	1,161	1,261	--	--	--	--
Jamaica	15,328	8,000	--	--	--	130
Malaysia	1,143	815	--	--	--	--
Sierra Leone	672	NA	--	352	--	323
Surinam	6,853	NA	--	355	17	35
United States	1,981	16	--	35	--	6
Yugoslavia	2,370	1,611	--	--	--	416
Other and not specified	6,615	NA	32	38	22	19
Total	79,088	NA	32	3,041	1,012	4,340
Alumina:						
Australia	4,896	⁷ 4,706	--	385	--	139
Canada	1,209	30	--	XX	1	(⁵)
France	1,281	391	⁸ (⁵)	(⁵)	XX	4
Germany, West	1,307	369	⁸ 9	93	7	XX
Greece	494	NA	--	--	--	--
Guinea	⁶ 665	⁶ 610	--	--	--	42
Guyana	321	⁶ 300	--	24	--	--
Hungary	⁶ 693	626	⁸ 96	--	--	--
Jamaica	2,871	2,816	--	166	--	24
Japan	1,801	79	--	--	--	--
Surinam	⁶ 1,430	⁹ 1,280	--	11	--	146
United States	6,885	670	--	204	2	3
Yugoslavia	⁶ 300	8	--	--	--	1
Other and not specified	4,719	NA	¹⁰ 93	1	4	142
Total	28,872	NA	198	884	14	501

⁶ Estimate. NA Not available. XX Not applicable.

¹ Data presented are compiled from import statistics of countries listed as recipient countries unless otherwise specified and, as such, are incomplete, but are believed to account for the overwhelming share of total world movement of bauxite and alumina.

² Unless otherwise specified, figures are those reported in latest country chapter of Volume III, Minerals Yearbook. Data on bauxite production are on dry equivalent basis for a number of countries, and as such may be reported on a different basis from bauxite exports, which almost universally are on a gross weight basis and which are obtained from official trade statistics of the listed countries. Data on alumina production are generally for output prior to calcination, while data on alumina exports, also from official trade statistics, include aluminum hydroxide and thus may not be exactly comparable.

bauxite and alumina in 1974¹

metric tons)

Recipient country ³									
Italy	Japan	Nether- lands	Norway	Spain	Sweden	United King- dom	United States ⁴	U.S.S.R.	Selected others
1,439	3,155	--	--	1	48	(⁵)	--	--	188
--	--	--	--	1	--	--	1,304	--	--
--	--	--	--	20	--	223	--	--	11
--	9	137	5	42	34	55	--	503	16
251	--	--	--	--	--	--	1,276	253	--
16	55	4	1	57	9	--	616	--	21
--	--	--	--	--	--	--	595	--	--
--	8	--	--	--	--	--	--	--	--
--	1,293	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	7,891	--	--
--	780	--	--	--	--	--	--	--	--
--	3	--	--	--	--	--	--	--	--
--	--	--	--	9	--	4	2,856	--	--
--	--	--	--	--	--	--	XX	--	--
174	--	--	--	--	--	--	--	664	--
68	8	--	1	2	6	42	--	203	29
1,949	5,311	141	7	132	97	324	14,538	1,623	265
18	633	--	76	--	--	--	1,998	--	148
--	(⁵)	--	(⁵)	1	(⁵)	--	18	--	--
28	1	184	27	84	(⁵)	2	9	--	7
10	1	66	5	4	36	6	5	--	28
--	--	78	--	68	--	--	--	--	--
--	--	--	87	159	--	--	--	--	107
--	--	--	38	--	11	55	9	82	--
--	--	--	--	--	--	--	--	323	6
--	--	--	594	79	109	452	819	143	--
--	XX	--	--	(⁵)	--	--	(⁵)	--	--
--	--	201	289	--	23	--	429	--	--
4	7	1	168	(⁵)	6	6	XX	85	1
--	--	--	--	--	--	--	595	--	--
7	5	1	4	5	3	82	3	253	15
67	647	531	1,288	400	188	603	3,290	886	312

³ Countries selected are most of the world's significant aluminum producers that depend upon imports of bauxite and/or alumina for a significant share of their raw material requirements, plus a few minor countries for which data are readily available. Data are official import statistics of recipient countries.

⁴ Includes the Virgin Islands.

⁵ Less than 1/2 unit.

⁶ Data for year ending September 30, 1974.

⁷ Australian Bureau of Statistics. Minerals and Mineral Products.

⁸ Data represent export statistics of source country.

⁹ World Mining. June 25, 1975.

¹⁰ Figure represents difference between reported detail and reported total.

Table 58.—Major world trade in iron ores, concentrates, and agglomerates (excluding roasted pyrite) ¹ in 1974
(Thousand metric tons)

Source country	Recorded total exports of source country ²	Recorded imports of principal recipient country ³						
		Canada	United States	Belgium-Luxembourg	Czechoslovakia ⁴	France	West Germany	Italy
Algeria	2,913	--	263	--	244	17	212	464
Angola	55,600	--	--	--	(⁴)	455	1,335	--
Australia	88,591	--	648	2,212	(⁴)	1,613	4,780	2,234
Brazil	59,439	536	6,877	1,643	474	4,090	11,980	3,267
Canada	37,448	XX	20,018	--	(⁴)	655	3,976	1,998
Chile	3,390	--	301	--	(⁴)	XX	3,675	--
France	19,833	--	--	13,534	624	XX	563	--
India	35,549	--	2,774	1,964	(⁴)	2,077	9,745	101
Liberia	25,592	--	--	--	(⁴)	2,452	1,516	1,198
Malaysia	157	--	--	1,316	(⁴)	55	1,462	--
Mauritania	10,301	--	--	--	(⁴)	354	1,167	104
Norway ⁷	2,810	--	1,829	--	(⁴)	--	--	--
Peru	6,800	--	15	--	(⁴)	--	710	--
Philippines	1,121	--	--	--	(⁴)	--	475	246
Sierra Leone	51,454	--	1	--	(⁴)	20	1,056	--
South Africa, Republic of	2,894	32	--	--	(⁴)	479	185	--
Spain	2,962	--	--	--	(⁴)	--	--	--
Swaziland	2,481	--	--	8,875	547	2,664	10,586	--
Sweden ⁷	33,105	103	370	--	11,825	33	45	1,675
U.S.S.R.	128	--	128	--	(⁴)	598	2,711	1,836
United States	43,300	1,663	XX	--	(⁴)	122	275	--
Venezuela	2,360	--	15,625	--	(⁴)	138	502	947
Other countries	25,850	--	123	3,885	271	--	--	--
Origin unreported	XX	--	43	--	(⁴)	--	--	--
Total	418,963	2,334	48,800	33,429	13,985	15,822	57,720	18,055

Source country	Recorded total exports of source country ²	Recorded imports of principal recipient country ³					Recorded total imports
		Poland ⁴	Romania ⁴	United Kingdom ⁴	Other Europe ⁹	Japan	
Algeria	--	(⁴)	(⁴)	(⁴)	83	2,799	1,020
Angola	--	(⁴)	(⁴)	123	97	--	5,072
Australia	--	(⁴)	(⁴)	792	1,736	67,881	82,664
Brazil	1,613	(⁴)	828	3,141	3,149	10,523	57,564
Canada	600	(⁴)	(⁴)	4,292	630	4,504	36,693
Chile	--	(⁴)	(⁴)	(⁴)	--	8,571	8,872
France	(¹²)	(⁴)	(⁴)	(⁴)	(¹²)	--	17,209

India	1,595	13,338	13,134	(4)	701	861	17,369	536	20,874
Liberia	---	(4)	(4)	(4)	(4)	---	1,315	---	24,843
Malaysia	305	(4)	(4)	(4)	1,533	708	84	29	113
Mauritania	---	(4)	(4)	(4)	1,074	281	2,187	---	11,215
Norway ⁷	---	(4)	(4)	(4)	(4)	---	66	---	2,938
Philippines	---	(4)	(4)	(4)	(4)	---	5,960	175	13
Sierra Leone	318	(4)	(4)	(4)	(4)	---	1,636	8	9,612
South Africa, Republic of	302	(4)	(4)	(4)	58	---	1,018	---	1,659
Spain	---	(4)	(4)	(4)	227	36	2,313	(12)	2,046
Swaziland	---	(4)	(4)	(4)	(4)	---	3	---	3,148
Sweden ⁷	1,855	13,246	(4)	(4)	3,925	1,856	1,925	---	2,110
U.S.S.R.	---	13,11,389	(4)	(4)	1,091	5,384	987	---	83,043
United States	---	(4)	(4)	(4)	(4)	22	342	---	43,222
Venezuela	197	(4)	(4)	(4)	1,728	896	---	(12)	2,072
Other countries	276	(4)	(4)	(4)	(4)	119	3,471	40	23,591
Origin unreported	---	784	(4)	(4)	990	1,620	---	1	14 4,952
Total	7,061	15,609	10,002	19,675	17,311	141,951	1,577	1,237	408,673

⁶ Estimate.

⁷ XX Not applicable.

¹ Disparities between recorded total exports of source countries and recorded total imports of recipient countries from each listed source country are generally due to (1) time lag between shipment and receipt, and (2) the fact that the latter totals are incomplete, representing only the imports of the nations listed in the column heads and in footnotes 9, 10, and 11.

² Unless otherwise specified, data are compiled from official export statistics of listed recipient countries.

³ Official import statistics for Czechoslovakia, Poland, Romania, and the United Kingdom do not fully distribute total imports by country of origin, and therefore do not clearly indicate whether these nations received shipments from any of the source countries where this footnote has been entered.

⁴ Exports not available. Production reported in lieu of exports as all or nearly all output is exported.

⁵ Official mineral statistics publication of source country rather than official trade returns.

⁶ In previous editions of this table, import figures for various recipient countries were adjusted to account for Swedish ores shipped through Narvik, Norway, and erroneously credited to Norway by such recipient countries. No such adjustment is necessary for 1974.

⁷ Summation of (1) recorded exports of the following countries, with export quantity following country name in thousand metric tons: Austria—1; Belgium—2,238; and Tunisia—526; together with (2) apparent exports (as measured by imports of trading partner countries) with apparent export quantity following, country name in thousand metric tons, and trading partner countries listed in parentheses: Indonesia—372 (Japanese imports only); North Korea—305 (Japanese imports only); Panama—24 (Mexican imports only); and Poland—10 (West German imports only). In addition to the foregoing list of countries, Mexico, Monaco, Switzerland, the United Kingdom, and Yugoslavia recorded iron ore exports, but each of these nations individually exported less than 500 tons.

⁸ Includes the following countries with recorded total imports of each following the country name in thousand metric tons: Austria—2,800; Bulgaria—2,396; Denmark—less than $\frac{1}{2}$ unit; Finland—1,133; East Germany—2,807; Greece—1,025; Norway—1,308; Portugal—10; Spain—5,280; Sweden—82; Switzerland—39; and Yugoslavia—431.

⁹ Includes the following countries with recorded total imports of each following the country name in thousand metric tons: Australia—28; Republic of Korea—1,395; Malaysia—less than $\frac{1}{2}$ unit; Singapore—10; and Taiwan—144.

¹⁰ Includes the following countries with recorded total imports of each following the country name in thousand metric tons: Argentina—1,200; Brazil—less than $\frac{1}{2}$ unit; Mexico—37; and Venezuela—less than $\frac{1}{2}$ unit.

¹¹ Less than $\frac{1}{2}$ unit.

¹² Official export statistics of source country.

¹³ Includes the following reported source countries with total quantity credited to each following the country name in thousand metric tons: Belgium—Luxembourg—47; Czechoslovakia—74; Denmark—4; Finland—8; Gabon—58; West Germany—16; Greenland—10; Hong Kong—180; Indonesia—372; Iran—1; Italy—14; Japan—40; Papua New Guinea—49; North Korea—305; Republic of Korea—83; Morocco—362; Mozambique—141; Netherlands—2; New Zealand—2,409; Nigeria—2; Panama—300; People's Republic of China—less than $\frac{1}{2}$ unit; Poland—1; Portugal—337; Thailand—29; Tunisia—113; and United Kingdom—less than $\frac{1}{2}$ unit.

¹⁴ Quarterly Bulletin of Steel Statistics for Europe. No. 1, 1975.

Table 59.—Major world trade in unrefined and refined unwrought copper in 1974¹
(Thousand metric tons)

Source	Destination							
	Belgium-Luxembourg	Brazil	People's Republic of China	Czechoslovakia	France	West Germany	Italy	Japan
Belgium-Luxembourg ----	XX	--	--	--	112	61	--	--
Canada -----	6	3	9	--	14	27	6	3
Chile -----	8	11	--	--	19	94	52	129
Germany, West -----	22	9	(²)	--	16	XX	4	--
Peru ³ -----	13	--	34	--	(²)	12	--	7
U.S.S.R. -----	4	(²)	--	39	17	12	2	16
United Kingdom -----	1	1	5	--	5	14	19	2
United States -----	3	22	--	--	17	11	24	4
Yugoslavia -----	--	--	15	--	3	2	6	--
Zaire ³ -----	239	--	--	--	47	22	74	16
Zambia -----	12	27	18	--	64	92	78	137
Other ⁴ -----	17	2	34	--	15	43	10	(²)
Total -----	325	75	115	39	329	390	275	314
								Total
	Netherlands	Spain	Sweden	Switzerland	United Kingdom	United States	Other and unspecified	
Belgium-Luxembourg ----	21	--	--	--	27	--	68	289
Canada -----	2	2	7	3	92	105	5	284
Chile -----	--	8	16	--	69	51	⁵ 146	603
Germany, West -----	6	8	1	8	38	5	23	140
Peru ³ -----	3	--	--	--	3	86	15	173
U.S.S.R. -----	38	(²)	10	--	10	--	⁶ 100	248
United Kingdom -----	3	4	3	(²)	XX	3	11	71
United States -----	4	(²)	1	(²)	14	XX	17	117
Yugoslavia -----	--	--	--	(²)	2	43	1	72
Zaire ³ -----	14	--	--	--	12	--	27	451
Zambia -----	5	8	8	11	153	3	⁷ 56	672
Other ⁴ -----	109	1	5	4	13	84	60	397
Total -----	205	31	51	26	433	380	529	3,517

XX Not applicable.

¹ Unless otherwise specified, data are compiled from export statistics for countries listed as sources.

² Less than ½ unit.

³ World Bureau of Metal Statistics. World Metal Statistics. V. 30, No. 3, 1977.

⁴ Includes the following countries (total exports in thousand tons in parentheses following names): Australia (NA); Austria (11); Denmark (2); Finland (12); France (14); Italy (10); Japan (280); the Netherlands (23); New Zealand (less than ½ unit); Norway (34); Spain (7); and Switzerland (5).

⁵ Includes 25,942 tons to Argentina.

⁶ Includes 33,128 tons to Hungary and 9,289 tons to Romania.

⁷ Includes 20,514 tons to India.

Table 60.—Major world trade in lead ores and concentrates¹
(Thousand metric tons of contained metal unless otherwise specified)

Destination	Exporting region							Origin not re- ported by continent	Total
	North America	Latin America ²	Western Europe ³	Eastern Europe ⁴	Africa	Asia	Oceania		
1974									
United States	14.5	53.5	--	--	--	--	17.5	--	85.5
Western Europe:									
Belgium-Luxembourg ⁵	NA	22.0	30.1	7.1	14.5	NA	NA	14.3	88.0
France	29.0	4.7	51.4	--	30.4	--	--	.6	116.1
Germany, West	28.9	8.0	46.9	3.5	15.1	1.4	--	--	103.8
United Kingdom	9.5	9.5	.6	--	.9	--	14.3	7.9	42.7
Total	67.4	44.2	129.0	10.6	60.9	1.4	14.3	22.8	350.6
Japan	96.3	27.2	--	--	--	10.4	6.7	.1	140.7
Grand total	178.2	124.9	129.0	10.6	60.9	11.8	38.5	22.9	576.8
1975									
United States	26.3	32.8	5.9	--	--	--	14.4	--	79.4
Western Europe:									
Belgium-Luxembourg ⁵	12.1	19.5	12.7	NA	6.8	NA	NA	18.2	69.3
France ⁷	13.9	1.0	20.6	--	6.7	--	--	--	42.2
Germany, West	44.4	8.2	44.5	3.2	17.3	.9	.3	--	118.8
United Kingdom	14.9	4.9	1.0	--	1.4	--	4.2	8.1	29.5
Total	85.3	33.6	78.8	3.2	32.2	.9	4.5	21.3	259.8
Japan	74.1	26.0	--	--	--	12.2	6.2	--	118.5
Grand total	185.7	92.4	84.7	3.2	32.2	13.1	25.1	21.3	457.0

¹ Revised. NA Not available.

² Imports by countries other than those listed are believed to be generally smaller than those by listed countries.

³ Includes Mexico.

⁴ Includes Yugoslavia.

⁵ Includes Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R.

⁶ Gross weight of ore.

⁷ January through October only.

January through June only.

Source: Monthly Bulletin of the International Lead and Zinc Study Group. Lead and Zinc Statistics, V. 16, No. 4, 1976, p. 24.

Table 61.—Major world trade in steel ingots
(Thousand)

Exporting area and country	North America			Europe		
	Canada	United States	Latin America ²	EEC	EFTA	Other market economy countries
North America:						
Canada ⁶ -----	XX	1,348.8	146.5	107.0	1.3	10.9
United States -----	1,414.9	XX	2,105.6	393.3	117.6	104.3
Total -----	1,414.9	1,348.8	2,252.1	500.3	118.9	115.2
Europe:						
Market economy countries:						
EEC:						
Belgium-Luxembourg ----	152.0	1,305.0	757.0	10,711.0	900.0	263.0
Denmark -----	(7)	1.5	4.0	101.0	179.9	14.1
France -----	126.6	1,138.5	299.4	4,630.4	914.7	450.6
Germany, West ⁸ -----	247.0	2,003.1	1,280.2	8,782.0	2,230.2	1,077.5
Italy -----	5.1	301.0	326.4	1,011.4	232.1	272.0
Netherlands ⁹ -----	4.6	529.2	72.6	2,721.5	517.7	109.1
United Kingdom -----	177.1	546.9	221.3	827.9	346.0	300.3
Subtotal -----	712.4	5,825.2	2,960.9	28,785.2	5,320.6	2,486.6
EFTA:						
Austria -----	6.0	23.2	16.5	898.0	236.5	102.8
Norway -----	.3	10.1	12.4	343.3	146.8	62.5
Portugal -----	.4	.5	3.7	2.2	.5	.2
Sweden -----	24.1	112.8	61.6	1,082.1	260.6	215.5
Switzerland -----	2.2	2.1	1.9	86.1	63.0	10.5
Subtotal -----	33.0	148.7	96.1	2,411.7	707.4	391.5
Other:						
Finland -----	.2	7.6	(7)	143.4	244.2	--
Greece ⁶ -----	--	49.6	12.0	34.7	.1	230.7
Spain -----	2.1	64.6	58.0	309.4	29.4	15.7
Yugoslavia -----	--	27.5	9.1	89.4	17.0	16.8
Subtotal -----	2.3	149.3	79.1	576.9	290.7	263.2
Centrally planned economy countries:						
Bulgaria -----	--	--	40.9	224.7	25.3	109.4
Czechoslovakia -----	89.2	24.8	14.2	536.3	150.7	422.5
Germany, East ¹⁰ -----	--	1.0	--	120.3	22.8	77.6
Hungary -----	(7)	(7)	8.0	148.0	129.0	226.0
Poland -----	17.0	156.0	30.7	162.5	121.4	130.6
Romania ¹⁰ -----	3.8	5.0	--	190.4	19.9	57.3
U.S.S.R. -----	--	--	232.0	12.3	6.8	387.6
Subtotal -----	110.0	186.8	325.8	1,394.5	475.9	1,411.0
Total -----	857.7	6,310.0	3,461.9	33,168.3	6,794.6	4,552.3
Africa: South Africa, Republic of ⁶ -----	8.0	23.2	38.0	74.2	.4	2.2
South Asia and Far East:						
India ¹¹ -----	.6	12.1	(7)	13.7	.3	.5
Japan -----	918.8	5,790.6	4,360.9	1,053.7	661.7	811.0
Total -----	919.4	5,802.7	4,360.9	1,067.4	662.0	811.5
Oceania: Australia ^{6 12} -----	2.3	21.4	53.5	250.9	.2	.1
Grand total -----	3,202.3	13,506.1	10,166.4	35,061.1	7,576.1	5,481.3

XX Not applicable.

¹ Because some countries do not report destination for a portion of exports (see unallocated column), figures given for distribution of those countries' exports by continental area are not exactly correct. However, such unallocated quantities are sizable only in the case of some of the centrally planned economy countries and the Republic of South Africa.

² All Western Hemisphere areas except the United States and Canada.

³ Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R.
⁴ Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, the People's Democratic Republic of Yemen, Syria, the United Arab Emirates, Turkey, and the Yemen Arab Republic.

⁵ The People's Republic of China, North Korea, and North Vietnam; Mongolia is included under other market economy South Asia and Far East owing to its inseparability from this group in source.

and semimanufactures in 1974, by area

metric tons)

Destination ¹								
Centrally planned economy coun- tries ³	Africa	Near East ⁴	South Asia and Far East			Oceania	Unallo- cated	Total
			Japan	Other market economy countries	Centrally planned economy coun- tries ⁵			
15.8	44.7	51.6	0.2	34.9	0.5	14.8	0.7	1,777.7
49.3	255.6	264.6	10.9	563.7	1.1	62.6	--	5,343.5
65.1	300.3	316.2	11.1	598.6	1.6	77.4	.7	7,121.2
1,356.0	515.0	521.0	1.0	96.0	16.0	15.0	--	16,608.0
1.7	3.2	4.7	(⁷)	3.2	(⁷)	(⁷)	.2	313.5
562.5	838.5	581.7	.7	104.7	13.6	29.8	.1	9,691.8
3,447.7	958.4	1,301.4	4.1	483.4	471.2	38.2	--	22,324.4
966.6	799.5	753.8	.1	52.7	13.5	5.7	9.8	4,749.7
94.3	102.2	150.5	.4	30.2	1.3	1.3	18.9	4,353.8
117.5	210.9	226.3	4.1	255.6	21.9	93.9	--	3,349.7
6,546.3	3,427.7	3,539.4	10.4	1,025.8	537.5	183.9	29.0	61,390.9
338.3	9.4	73.4	.6	6.1	3.2	3.7	5.1	1,722.8
2.4	3.8	3.2	.1	2.4	--	(⁷)	--	587.3
--	9.9	.7	--	2.0	--	.5	.2	20.8
168.8	44.3	11.2	4.4	19.9	12.4	12.1	--	2,029.8
10.3	5.3	26.9	(⁷)	.5	(⁷)	(⁷)	--	208.8
519.8	72.7	115.4	5.1	30.9	15.6	16.3	5.3	4,569.5
23.6	(⁷)	26.2	(⁷)	2.0	.1	--	.1	447.4
13.6	46.4	53.0	--	--	--	--	.2	440.3
167.4	43.3	78.5	(⁷)	--	25.3	.1	6.0	799.8
371.5	4.6	96.0	--	6.0	13.9	--	.1	651.9
576.1	94.3	253.7	(⁷)	8.0	39.3	.1	6.4	2,339.4
237.6	9.0	130.1	--	28.0	5.6	--	--	810.6
1,401.7	22.5	302.9	--	22.1	57.3	--	--	3,044.2
--	--	--	--	--	--	--	3,868.3	4,090.0
218.0	15.0	101.0	--	41.0	11.0	--	--	897.0
743.2	7.4	33.7	.8	25.2	40.9	--	.2	1,469.6
--	--	4.7	--	--	--	--	1,229.9	1,511.0
5,249.6	53.5	273.1	--	110.3	93.4	--	470.4	6,889.0
7,850.1	107.4	845.5	.8	226.6	208.2	--	5,568.8	18,711.4
15,492.3	3,702.1	4,754.0	16.3	1,291.3	800.6	200.3	5,609.5	87,011.2
--	--	82.2	(⁷)	14.6	--	2.2	366.6	611.6
5.5	10.1	83.1	(⁷)	47.7	--	3.0	.1	176.7
1,589.6	1,354.7	3,541.5	XX	7,824.7	3,044.1	1,251.0	17.6	32,219.9
1,595.1	1,364.8	3,624.6	(⁷)	7,872.4	3,044.1	1,254.0	17.7	32,396.6
20.0	10.8	19.8	247.4	358.0	24.7	229.1	--	1,238.2
17,172.5	5,378.0	8,796.8	274.8	10,134.9	3,871.0	1,763.0	5,994.5	128,378.8

⁶ Data exclude exports of wheels, tires, and axles.⁷ Less than ½ unit.⁸ Excludes exports to East Germany.⁹ Excludes exports to Belgium-Luxembourg.¹⁰ The distribution is composed of partial figures derived from import data of major trading partner countries as reported by United Nations, 1974 World Trade Annual, v. 3, Walker and Co., New York, 1975. The total is taken from United Nations, Quarterly Bulletin of Steel Statistics for Europe, v. 26, No. 4, 1976.¹¹ Data are for year ending Mar. 31, 1974.¹² Data are for year ending June 30, 1974.

Table 62.—World trade in
(Gross weight,

Destination	Angola	Australia	Brazil	People's Republic of China	Gabon	Ghana	India
Argentina ³	NA	NA	58,929	NA	NA	NA	NA
Belgium-Luxembourg	53,983	--	--	--	--	--	--
Brazil	--	--	--	--	7,594	--	--
Bulgaria ³	NA	NA	NA	NA	NA	NA	26,146
Canada	--	--	31,086	--	36,611	--	--
Czechoslovakia ³	NA	NA	37,998	NA	NA	NA	32,131
France	--	53,567	4,712	--	719,497	12,720	--
Germany, East ³	NA	NA	NA	NA	NA	NA	NA
Germany, West	2,160	204,610	142,162	870	⁴ 25,100	--	--
Italy	--	--	17,983	908	153,187	--	--
Japan	300	652,488	42,667	56,728	⁴ 137,343	54,176	844,891
Korea, North ³	NA	NA	NA	NA	NA	NA	9,400
Korea, Republic of	--	22,029	--	--	--	NA	13,552
Netherlands	NA	NA	(⁵)	NA	NA	NA	NA
Norway	28,537	70,509	207,127	--	⁴ 292,901	89,179	--
Poland	NA	NA	NA	NA	NA	NA	NA
Singapore	--	--	--	--	--	4,923	--
Spain	--	26,438	61,060	536	64,981	39,846	--
Sweden	--	--	--	--	958	--	20
Taiwan	--	6,753	--	--	--	--	7,878
United Kingdom	--	--	108,849	--	⁴ 69,452	43,988	--
United States	--	211,786	420,719	--	274,451	8,936	--
Yugoslavia	--	--	--	--	18,000	--	--
Other ⁶	--	9,391	17,064	2,611	⁴ 3,346	2,371	--
Total recorded imports ⁷	84,980	1,257,571	1,150,356	61,653	1,803,421	256,144	934,018
Total recorded exports ⁸	NA	NA	1,493,170	NA	⁹ 2,103,634	NA	1,034,603

NA Not available. XX Not applicable.

¹ Compiled from official import statistics of the listed destination countries except where otherwise indicated.² Includes the following countries except as indicated by footnote 10 (with total quantities credited to each in parentheses, following the country name, in metric tons): Austria (20), Belgium-Luxembourg (19,565), Botswana (14,352), Bulgaria (249), Fiji (645), France (6,179), West Germany (2,232), Greece (4,264), Hong Kong (20), Hungary (3,176), Indonesia (14,717), Israel (20), Japan (2,549), Malagasy Republic (1), Netherlands (6,816), New Hebrides (37,882), Philippines (1,607), Poland (20), Portugal (6,183), Romania (44,372), Singapore (1,747), Spain (505), Sweden (24,422), Taiwan (5), Thailand (13,885), Turkey (3,060), United Kingdom (1,313), United States (36,345), and Yugoslavia (3,818).³ Data compiled from export statistics of source countries.⁴ Includes material reported as originating in Congo (Brazzaville), but believed to have originated in Gabon, as follows, in metric tons: West Germany—25,100; Japan—20,369; Norway—65,530; United Kingdom—14,215; and India (included in other)—2,776.⁵ Import statistics of the Netherlands include a substantial quantity of material originating from

manganese ore in 1974¹
metric tons)

Source							
Malaysia	Mexico	Morocco	Republic of South Africa	U.S.S.R.	Zaire	Other ²	Unspec- ified
NA	NA	NA	NA	NA	NA	NA	58,929
--	--	--	210,159	--	59,143	150	82,715
--	500	--	--	--	--	3,459	496,150
NA	NA	NA	NA	130,000	NA	NA	11,553
--	221	--	11,974	3,200	9,473	32,538	156,146
NA	NA	3,063	NA	329,000	NA	NA	125,103
--	25,600	34,475	569,294	1,100	--	6,233	402,192
NA	NA	3,000	NA	150,000	NA	NA	1,428,444
--	--	9,926	422,905	10,539	4,014	5,934	153,000
--	--	8,020	118,361	--	150	9,463	828,397
86,477	93,727	651	1,684,670	143,478	11,698	98,379	308,072
NA	NA	NA	NA	21,000	NA	NA	3,907,673
16,755	--	--	--	--	--	2,122	30,400
NA	NA	(⁵)	NA	NA	NA	836	54,458
--	--	--	238,068	73,569	29,154	--	68,919
NA	NA	³ 1,837	NA	³ 495,000	NA	NA	4,003
--	2	--	--	--	--	2	1,033,047
--	--	10,600	155,677	--	15,046	9,911	556,000
--	--	--	--	34,797	--	2,093	4,932
--	--	--	50	--	--	14,204	8
--	--	8,860	134,179	--	--	9,795	2
--	35,399	46,457	66,771	--	46,813	--	28,885
--	--	--	--	29,118	12,446	14,612	13,331
--	--	280	89	14,622	--	64,620	388,454
103,232	155,449	127,169	3,612,197	1,435,423	187,937	274,351	--
107,664	264,695	164,940	NA	1,500,000	NA	¹⁰ 495,502	535
							11,674,000
							XX
							XX

unreported sources; the bulk of this material is believed to have originated from Brazil and Morocco on the basis of export statistics of those nations.

⁶ Includes the following countries reporting imports (with total imports in parentheses, following the country name, in metric tons): Australia (1,906), Austria (898), Denmark (2,768), Finland (29,652), Greece (22,709), Hong Kong (680), Hungary (14,614), India (2,776), Iran (615, for year beginning March 21, 1974), Ireland (35), Kenya (535), Malaysia (1,179), Mexico (24,382), Morocco (177), Philippines (2,433), Portugal (508), Thailand (8,292), and Venezuela (145).

⁷ Sum of figures listed for individual destinations, including those items covered by footnote 3.

⁸ Actual recorded exports of listed source countries from official trade returns unless otherwise specified.

⁹ Exports reported in source other than official trade returns.

¹⁰ Includes the following countries (quantities in parentheses, following country name, in metric tons): Belgium-Luxembourg (202,382), Denmark (139), France (2,211), West Germany (1,294), Greece (7,624), Hungary (15,173), Italy (82), Japan (4,887), Netherlands (33,553), Norway (1,831), Philippines (2,127), Portugal (3,680), Romania (54,800), Spain (144), Sweden (849), Thailand (18,780), United Kingdom (138,302), and United States (202,382).

Table 63.—Major world trade in lead bullion and refined lead ¹
(Thousand metric tons of contained metal)

Destination	Exporting region							Origin not re-ported by con-tinent	Total ⁵
	North America	Latin America ²	Western Europe ³	Eastern Europe ⁴	Africa	Asia	Oceania		
1974									
United States	36.4	62.1	r 3.2	--	--	2.4	3.0	0.3	r 107.4
Western Europe:									
France ⁶	1.9	.4	29.9	.5	.4	--	--	.1	33.2
Germany, West	5.8	.7	72.8	.8	1.0	13.4	19.2	.1	113.8
Netherlands ⁷	1.9	11.4	6.9	--	--	2.6	7.7	--	29.5
Switzerland	1.1	3.6	16.2	--	--	--	1.4	--	22.3
United Kingdom	30.2	--	--	--	4.8	--	167.1	9.7	211.8
Other	r 1.3	--	r 81.2	--	r 3.9	--	--	--	r 23.4
Total	r 41.2	16.1	r 144.0	1.3	r 10.1	16.0	195.4	9.9	r 434.0
Japan	r 8.8	4.4	--	--	8.7	4.3	7.4	--	r 28.6
Grand total	r 86.4	82.6	r 147.2	1.3	r 13.8	22.7	205.8	10.2	r 570.0
1975									
United States	27.4	45.2	16.8	--	1.0	.1	--	.6	91.1
Western Europe:									
France ⁶	--	--	27.6	.6	.7	--	--	.3	29.2
Germany, West	2.3	--	64.7	.4	.5	32.3	16.5	--	116.7
Netherlands	--	2.2	24.2	.2	--	3.0	11.7	.2	41.5
Switzerland	3.8	1.0	8.3	--	--	.9	.6	--	14.6
United Kingdom	41.3	--	--	--	--	.1	153.7	4.1	199.2
Other	1.3	--	15.3	--	2.9	--	--	--	19.5
Total	48.7	3.2	140.1	1.2	4.1	36.3	182.5	4.6	420.7
Japan	2.3	5.6	--	--	1.8	9.2	1.5	--	20.4
Grand total	78.4	54.0	156.9	1.2	6.9	45.6	184.0	5.2	532.2

^r Revised.

¹ Imports of countries other than those listed are generally small individually (except for Eastern European nations listed in footnote 4) but in aggregate apparently total about 125,000 tons per year. Total lead imports by Eastern European countries, including trade between countries of this group, apparently total 70,000 tons or more per year.

² Includes Mexico.

³ Includes Yugoslavia.

⁴ Includes Bulgaria, Czechoslovakia, East Germany, Poland, and the U.S.S.R.

⁵ Reported totals.

⁶ January through September for 1974 and January through June for 1975.

⁷ January through October.

Source: Monthly Bulletin of the International Lead and Zinc Study Group. Lead and Zinc Statistics. V. 15, No. 5, May 1975, p. 24; and V. 16, No. 5, May 1976, p. 24.

Table 64.—Major world trade in zinc ores and concentrates¹
(Thousand metric tons of contained metal unless otherwise specified)

Destination	Exporting region							Origin not reported by continent	Total
	North America	Latin America ²	Western Europe ³	Eastern Europe ⁴	Africa	Asia	Oceania		
1974									
United States	147.4	49.8	3.4	--	--	12.1	5.1	--	217.8
Western Europe:									
Belgium-Luxembourg ^{5 6}	279.4	NA	100.0	NA	NA	NA	34.6	r 124.9	r 538.9
France ⁶	57.0	55.0	81.0	--	r 24.6	9.7	(⁷)	1.8	r 229.1
Germany, West	163.5	33.9	r 79.7	r .8	r 25.9	4.4	r 4.4	--	r 312.6
United Kingdom	r 13.7	r 88.4	9.3	--	4.0	4.6	35.8	3.9	109.7
Other ⁸	22.1	11.5	80.8	--	1.9	--	64.4	--	180.7
Total	r 535.7	r 138.8	r 350.8	r .8	r 56.4	18.7	139.2	r 130.6	r 1,371.0
Japan	r 245.7	r 190.5	--	--	5.6	57.0	101.9	2.0	602.7
Grand total	r 928.8	r 379.1	r 354.2	r .8	r 62.0	87.8	246.2	r 132.6	r 2,191.5
1975									
United States	89.5	32.7	.3	--	--	5.3	3.7	--	131.5
Western Europe:									
Belgium-Luxembourg ^{5 9}	358.5	NA	36.8	NA	NA	NA	NA	134.4	529.7
France ¹⁰	16.8	34.9	30.5	--	9.7	3.0	0.9	--	95.8
Germany, West	109.6	34.0	74.6	.6	34.6	7.2	2.5	--	263.1
United Kingdom	2.6	20.9	4.4	--	.9	--	12.5	3.7	45.0
Other ^{9 11}	64.1	11.1	67.2	--	--	--	61.6	--	204.0
Total	551.6	100.9	213.5	.6	45.2	10.2	77.5	138.1	1,187.6
Japan	142.6	166.4	--	--	--	54.0	76.8	.8	446.6
Grand total	789.7	300.0	213.8	.6	45.2	69.5	158.0	138.9	1,715.7

¹ Revised. NA Not available.² Imports by countries other than those listed as destinations are believed to be generally smaller than those by listed countries.³ Includes Mexico.⁴ Includes Yugoslavia.⁵ Includes Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Romania, and the U.S.S.R.⁶ Gross weight of ore.⁷ January through September only.⁸ Revised to none.⁹ Consists of the Netherlands and Norway. Norway data are gross weight of ore.¹⁰ January through October only.¹¹ January through June only.¹² Data for the Netherlands are January through October only.

Source: Monthly Bulletin of the International Lead and Zinc Study Group. Lead and Zinc Statistics. V. 15, No. 4, April 1975, p. 26; and V. 16, No. 4, April 1976, p. 26.

Table 65.—Major world trade in refined zinc
(Thousand metric tons)

Destination	Exporting region						
	North America ¹	Latin America ²	Western Europe ³	Eastern Europe ³	Africa	Asia	Oceania
1974							
United States	245.1	49.5	81.1	8.6	20.5	47.8	35.3
Western Europe:							
Denmark	(⁵)	r 1	11.3	.1	1.3	.3	--
France	2.4	3.9	40.0	6.9	.4	3.6	--
Germany, West	.7	2.4	81.0	3.6	--	1.4	.5
Netherlands	.4	.2	13.2	1.7	.2	1.2	.1
Sweden	.3	.3	33.5	.5	--	.4	--
Switzerland	.2	.2	17.3	3.4	2.5	1.6	--
United Kingdom	30.6	--	129.8	9.0	2.4	2.4	13.9
Total	r 34.6	r 7.1	326.1	25.2	6.8	10.9	14.5
Japan	5.0	--	.6	6.0	--	11.7	.5
Grand total	r 284.7	r 56.6	407.8	39.8	27.3	70.4	50.3
1975							
United States	164.8	33.3	105.0	.4	14.0	6.5	20.8
Western Europe:							
Denmark	--	--	11.0	--	--	--	--
France ⁶	.6	2.5	17.0	2.7	.2	5.5	--
Germany, West	2.3	2.3	65.3	2.4	1.2	5.3	--
Netherlands	--	.6	20.1	.8	2.4	1.2	--
Sweden	--	1.1	36.1	4.6	.5	.4	--
Switzerland	.7	.1	12.9	.5	1.2	1.3	--
United Kingdom	60.2	.5	96.1	7.8	8.5	1.1	17.2
Total	63.8	7.1	258.5	18.8	9.0	14.8	17.2
Japan	2.9	2.4	--	1.6	--	19.1	.3
Grand total	231.5	42.8	363.5	20.8	23.0	40.4	38.3

r Revised.

¹ Includes Mexico.² Includes Yugoslavia.³ Includes Bulgaria, East Germany, Poland, the U.S.S.R., and unspecified other countries.⁴ Reported totals.⁵ Revised to none.⁶ January through June only.

Table 66.—World movement of solid fuels in 1973 and 1974¹
(Thousand metric tons of standard coal equivalent)

Source	Destination							Unspe- cified ⁸	World ⁹		
	Market economy countries					Centrally planned econ- omy coun- tries of Europe ⁷					
	North America ²	Carbi- bean America ³	Other America ⁴	Western Europe ⁵	Africa		Near East			Oceania ⁶	
1973											
Market economy countries:											
North America ²	16,215	415	2,550	13,315	--	--	28,240	40	280	15	61,075
Western Europe ⁵	850	155	100	30,875	295	--	(10)	--	755	605	33,745
Africa	--	--	--	1,130	570	250	870	10	--	105	2,065
Far East	--	145	170	--	--	--	--	35	--	40	1,260
Oceania ⁶	--	5	--	2,840	--	--	25,790	30	--	5	23,670
Centrally planned economy countries ⁷	40	110	330	29,705	700	--	4,665	--	41,390	715	77,685
Total ⁹	17,105	830	3,150	77,865	1,565	--	59,815	115	42,425	1,485	204,545
1974											
Market economy countries:											
North America ²	13,995	535	2,190	15,195	10	--	35,060	25	150	5	67,130
Western Europe ⁵	2,635	--	35	33,885	160	--	--	--	775	450	38,060
Africa	5	--	--	985	540	--	245	--	--	115	1,840
Far East	--	130	225	--	--	--	790	5	--	--	1,150
Oceania ⁶	--	--	40	4,750	--	--	24,300	40	50	110	23,570
Centrally planned economy countries ⁷	440	120	745	35,690	890	--	5,710	--	40,980	430	84,960
Total ⁹	17,075	785	3,235	90,455	1,600	--	66,105	70	41,905	1,110	222,730

¹ Revised.

² Data based on the general trade system; lignite and lignite briquets and coke are reduced to standard coal equivalent (SCE) before inclusion; bunker loadings are excluded.

³ Bermuda, Canada, Greenland, St. Pierre, and the United States.

⁴ Mexico, all areas of Central America, all islands of the Caribbean, Colombia, and Venezuela.

⁵ All South America except Colombia and Venezuela.

⁶ All market economy nations of Europe, and includes Yugoslavia.

⁷ Refers entirely to Australia.

⁸ The centrally planned nations of Europe and Asia.

⁹ As reported in source.

¹⁰ Totals reported in source; detail does not add to listed totals as shown due to (1) inclusion of quantities shipped to or received from areas not listed separately or not identified in original sources, and/or (2) rounding.

¹¹ Revised to none.

Source: United Nations. World Energy Supplies 1950-74. Statistical Papers, ser. J, No. 19, New York, 1976, pp. 162-165.

Table 67.—World movement of natural gas in 1973 and 1974, by country¹
(Billion cubic feet)

Importing country	Exporting country					United States	Others ²	Total
	Afghani- stan	Algeria	Canada	Iran	Libya			
1973								
Argentina	--	--	--	--	--	--	57	55
Austria	--	--	--	--	--	--	--	58
Belgium-Luxembourg	--	--	--	--	--	343	--	344
Canada	--	XX	--	--	--	--	15	15
Czechoslovakia	--	--	--	--	--	292	83	83
France	--	3 4 56	--	--	--	--	29	5 348
Germany, East	--	--	--	--	--	659	12	29
Germany, West	--	--	--	--	--	--	--	671
Hungary	--	--	--	--	--	--	--	7
Italy	--	--	--	--	3 4 76	--	--	4 76
Japan	--	--	--	--	--	--	--	3 4 54
Malaysia (Sarawak)	--	--	--	--	--	--	48	4 102
Mexico	--	--	--	--	--	--	14	5
Poland	--	--	--	--	--	--	60	14
Spain	--	--	--	--	3 4 86	--	--	60
Switzerland	--	--	--	--	--	--	--	4 63
U.S.S.R.	97	3 4 31	--	307	--	--	XX	7
United Kingdom	--	3	1,028	--	--	--	XX	404
United States ³	--	--	--	--	--	--	--	31
Total	97	3 4 90	1,028	307	3 4 139	1,294	241	2 1,033
1974								
Argentina	--	--	--	--	--	--	74	55
Austria	--	--	--	--	--	--	--	77
Belgium-Luxembourg	--	--	--	--	--	410	11	3 411
Bulgaria	--	--	XX	--	--	--	13	13
Canada	--	--	--	--	--	--	114	114
Czechoslovakia	--	--	--	--	--	--	16	16
Finland	--	--	--	--	--	345	102	5 410
France	--	3 4 65	--	--	--	--	76	102
Germany, East	--	--	--	--	--	868	--	944
Germany, West	--	--	--	--	--	--	--	7
Hungary	--	--	--	--	3 4 72	68	28	5 168
Italy	--	--	--	--	--	--	--	3 4 131
Japan	--	--	--	--	--	--	--	5
Malaysia (Sarawak)	--	--	--	--	--	--	--	14
Mexico	--	--	--	--	--	--	75	14
Poland	--	--	--	--	55	--	--	4 55
Spain	--	--	--	--	--	--	--	47
Switzerland	--	--	--	321	--	--	XX	47
U.S.S.R.	101	3 4 25	--	--	--	--	--	422
United Kingdom	--	--	959	--	--	--	--	25
United States ⁶	--	--	--	--	--	--	XX	959
Total	101	3 4 90	959	321	3 4 127	1,691	496	5 249
						5 77		5 4,111

* Estimate. XX Not applicable.

¹ Compiled from official export statistics of source country unless otherwise specified.

² Includes the following countries with quantities in billion cubic feet and destinations as noted: 1973: Bolivia—55, all to Argentina; Brunei—59, including 54 to Japan and 5 to Malaysia (Sarawak); France—4, including 1 to Belgium-Luxembourg and 3 to Switzerland; West Germany—5, including 1 to Austria and 4 to Switzerland; Mexico—2, all to the United States; and Romania—7, all to Hungary; 1974: Bolivia—56, all to Argentina; Brunei—136, including 131 to Japan and 5 (estimated) to Malaysia (Sarawak); France—4, including 1 to Belgium-Luxembourg and 3 to Switzerland; West Germany—47, including 3 to Austria and 44 to Switzerland; Mexico—less than $\frac{1}{2}$ unit, all to the United States; and Romania—7, all to Hungary.

³ Data from import statistics of recipient country.

⁴ Liquefied natural gas.

⁵ Includes, in part, liquefied natural gas as indicated by footnotes in detail.

⁶ Data from the U.S. Federal Power Commission, rather than official foreign trade statistics.

⁷ Less than $\frac{1}{2}$ unit.

Table 68.—World movement of crude petroleum in 1973 and 1974¹
(Thousand metric tons)

Source ²	Destination								
	Market economy countries						Centrally planned economy countries of Europe	World	
	North America	Caribbean America	Other America	Western Europe	Africa	Near East			Far East
1973									
Market economy countries:									
North America	r 51,230	r 58,080	4,140	40	--	--	30	--	r 51,300
Caribbean America	r 44,360	5,800	2,670	r 13,360	--	--	460	--	r 120,350
Other America	2,870	--	--	900	--	--	--	--	r 12,240
Western Europe	--	--	--	r 4,870	--	--	--	--	r 4,870
Africa	--	--	--	--	--	--	--	--	--
Near East	r 48,810	23,710	2,940	r 180,010	r 4,870	100	7,110	--	r 6,040
Far East	49,120	39,370	r 32,370	r 483,900	25,760	r 27,810	271,470	13,070	r 273,590
Oceania	10,080	r 1,670	--	490	--	r 51,830	--	80	r 64,150
Centrally planned economy countries of Europe	--	--	--	10	--	r 220	(³)	--	r 50
Total	206,470	r 134,370	r 42,120	r 709,580	r 32,240	r 28,280	r 333,360	r 13,150	r 87,530
1974									
Market economy countries:									
North America	40,350	130	8,550	10,520	--	--	400	--	40,480
Caribbean America	39,600	46,080	2,690	1,190	--	--	--	--	100,160
Other America	2,730	5,010	--	3,260	20	--	--	--	11,620
Western Europe	40	--	--	--	--	--	--	--	8,320
Africa	51,230	19,330	4,770	156,480	5,920	330	8,650	--	248,190
Near East	67,530	42,870	31,890	499,520	26,630	28,440	266,590	12,760	987,200
Far East	13,990	4,790	--	--	--	--	43,680	750	63,210
Oceania	--	--	--	--	--	170	--	--	10
Centrally planned economy countries of Europe	--	5,350	190	18,060	1,030	--	5,050	--	55,530
Total	215,470	123,560	43,100	689,030	33,500	28,940	324,370	13,510	67,990
									1,539,570

r Revised.

¹ Data are based on general trade system.

² For details on countries included in each area, see footnotes to table 66.

³ Revised to none.

Source: United Nations. World Energy Supplies 1950-74. Statistical Papers, ser. J, No. 19, New York, 1976, pp. 223-237.

Table 69.—Refined petroleum fuel trade in 1973 and 1974, by continental area ¹

(Million metric tons)

Continental area ²	Exports		Imports		Bunkers	
	1973	1974	1973	1974	1973	1974
Market economy countries:						
North America -----	13.65	11.51	148.09	125.43	19.93	19.61
Caribbean America -----	137.73	135.29	18.83	17.94	17.25	16.56
Other America -----	.38	.71	3.69	3.27	1.91	2.01
Western Europe -----	117.55	99.07	131.45	119.37	52.17	45.02
Africa -----	6.20	5.96	10.51	10.67	7.44	7.04
Near East -----	56.75	53.51	3.47	4.49	23.55	23.86
Far East -----	28.76	26.04	45.66	42.22	34.75	37.35
Oceania -----	2.89	2.50	6.91	7.46	5.36	5.15
Centrally planned economy countries:						
Asia -----	.18	.22	1.44	1.81	NA	NA
Europe -----	38.23	41.33	6.19	5.69	3.55	3.55
Total ³ -----	402.31	376.14	376.25	338.34	165.92	160.65

NA Not available.

¹ Figures given are for fuel commodities only, excluding lubricants and other refinery products not normally used as energy sources. Apparent discrepancies between export, import, and bunker totals evidently result from quantities of material en route at yearend, from incomplete data, and from differing practices from country to country in the method of reporting bunkering materials.

² Continental areas are the same as those used in table 66 except that Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the U.S.S.R. are reported under the group term "Centrally planned Europe," while the People's Republic of China, North Korea, Mongolia, and North Vietnam are reported under the group term "Centrally planned Asia."

³ Reported totals; may differ from sum of detail because of rounding.

Source: United Nations. World Energy Supplies 1950-74. Statistical Paper, ser. J, No. 19, New York, 1976, pp. 280-335.

