Attached is the provisional draft of part of the chapter on commodities to be included in the Annual Report. The sections distributed herewith deal with recent developments in Non-Ferrous Metals and Fuels. The text is subject to editorial changes and to minor factual modifications in the light of information which may be received later. It is intended to insert a summary table in the section on Non-Ferrous Metals.

Contracting parties wishing to make suggestions are asked to forward them to the secretariat before 5 September 1963.
Non-ferrous metals and ores

Movements in metal consumption - ferrous or non-ferrous - are generally a fair reflection of changes in industrial output. As mentioned earlier, industrial production in 1962 rose by 9 per cent in North America and at only half that rate in Western Europe; taking the metal consuming sector alone, the divergence was even more pronounced. For Japan, the increase of over 8 per cent in the manufacturing index for 1962 signified a definite slowing down on earlier years. Consumption of metals followed a rather similar pattern: most of the increase was accounted for by developments in North America, in particular the United States where higher demand, stimulated largely by the upsurge in motor-car output, led to an estimated consumption increase of more than 10 per cent. In Western Europe, the increase was far smaller, as slightly lower consumption in the Federal Republic of Germany, the United Kingdom and Belgium partially offset rises elsewhere, mainly in Italy, Sweden and France. Consumption in Japan rose more slowly than in 1961. As regards individual metals, the largest rise was recorded by aluminium (10 per cent), while consumption of copper made the smallest advance and that of tin receded slightly.

Following a period of little change in the overall position between 1960 and 1961, production of all major metals - with the exception of lead - expanded in 1962. The expansion was particularly marked for aluminium; tin made up most of the leeway resulting from the production decline of the preceding year. Thanks, however, to the high demand for metals in 1962, overall consumption showed a higher rate of growth than production, and commercial stocks of most metals were reduced. This was notably the case for lead, commercial stocks of which fell by one quarter, due to the lower level of output of the metal as well as to substantial acquisitions by the United States stockpile. The reduction in zinc stocks was comparatively less, about one sixth, and was confined to consumer stocks. Falling consumer stocks of tin and aluminium in the United States were the main factor behind the decline in world stocks of these metals. Copper was the main exception to the rule: with production outstripping consumption, producers in particular, but also consumers found themselves with growing quantities on their hands.

The somewhat brighter outlook in the supply-demand situation was not enough to pull up the general price level. Export prices of non-ferrous metals, as shown by the United Nations price index, in fact receded by 1 per cent between 1961 and 1962, to the lowest level since 1958. Lead and zinc continued their downward movement into 1962. Tin, after an improvement in 1961, began a downward slide in early 1962 which was halted only in the late summer. Prices of all three metals steadied in the later part of the year, and the improvement carried over into the first months of 1963. The copper price was held level throughout the year, largely with the help of producer intervention, while aluminium prices were out in the United Kingdom at the beginning of the year, and in the United States in December.

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1 This section includes a paragraph on iron ore.
Two main factors stood in the way of a fundamental improvement in the price situation: one was the uncertainty regarding supplies of metal from the Eastern Trading area to the rest of the world. The other factor was the existence, mainly in the United States, of large strategic stocks, a major part of which was declared redundant; the uncertainty as to the methods and rates of disposal of some of the excess metals added further weight to this factor. The situation was however largely improved thanks to the assurances given by the United States authorities that releases from the stockpile would not be allowed to disrupt the market. The refusal of the authorities in early 1963 to sell off tin as the prices offered were too low in relation to existing prices, was in many places regarded as proof of the sincerity of the assurances given, and instilled a measure of confidence into the market. The price question faces non-ferrous metals with a more long-term problem. It hinges on the wider possibilities of substitution which have been exposing metals to competition from one another and, to an increasing degree, from other materials such as plastics, glass, fibreglass, and certain steels. The price of a metal in relation to its potential substitutes may therefore have a decisive influence on its use.

The volume of world trade in the major non-ferrous metals rose by about 3 per cent in 1962, and therefore less than consumption. This partly reflected the running down of existing stocks. The largest relative rise, of 13 per cent, was recorded by aluminium; trade in lead is estimated to have been 6 per cent higher than in 1961. Copper exports remained at the previous year's level, and only a small advance was registered by tin, no doubt due to the switch in Nigeria's exports from concentrates to metal.

Aluminium

World consumption of aluminium (excluding the Eastern Trading area) which formerly had consistently lagged behind production, accelerated in 1962 and rose by 10 per cent, compared with an average annual rise of 8 per cent during the preceding decade. Consumption in the Eastern Trading area, after expanding vigorously over a period of years is estimated to have levelled off in 1962. The quantity of aluminium consumed in the world as a whole thus reached nearly 5 million tons in 1962, outpacing production by about 150 thousand tons. Most of the world increase in that year was caused by higher demand in the United States (+16 per cent), especially in the building, vehicle and packaging sectors. Consumption in Western Europe progressed by 6 per cent, without, however, regaining the ground lost a year earlier. Most countries participated in the increase; France in particular recorded a significant rise, while consumption in the United Kingdom and the Federal Republic of Germany remained virtually steady. Following the rapid expansion in 1961, consumption in Japan, reflecting the restrictive economic policy introduced by the Government at the end of that year, slowed down in 1962, leaving an excess of production for export. Consumption in Australia, where general import restrictions were being relaxed, resumed an upward trend. Some growth was also achieved in Latin American consumption.
The rise in world production (excluding the USSR and mainland China), by over 320,000 tons or 9 per cent, was also mainly accounted for by the United States, which reversing the decline of 1961 by a substantially higher use of capacity, contributed 170,000 tons to the total increment. Production in Western Europe continued to expand; total output in 1962 was 9 per cent above the previous year's level. There was, however, a pronounced slowing down in the rate of growth of French production and an actual decline in Italy. On the other hand, production in Norway, where hydro-energy is inexpensive and abundant, rose by 20 per cent, so that Norway replaced Federal Germany as the second largest producer in Western Europe after France. Among the smaller producers, Austria and Spain increased output by about one tenth. In Asia, Japan registered an increase of 12 per cent and India and Taiwan also reported raised production.

World trade in aluminium rose by about 13 per cent in 1962, almost regaining the ground lost a year earlier. Imports showed a sharp rise in the United States and increased in most European countries. Exports from Canada rose by nearly one fifth, largely due to the United States, but partly also to Western Europe. Exports from the United States to Western Europe and to a number of other destinations rose; for the first time since 1954, however, the United States imported aluminium from Japan. In Europe exports from Norway were higher, fell by 13 per cent from France and remained unchanged in the case of the United Kingdom.

While the improvement in demand led to some reduction of stocks, it failed to be reflected in the level of prices. The main problem overhanging the market was the continued existence of unused capacity; in spite of fuller use in 1962, the average degree of utilization in the world outside the Eastern Trading area was estimated to be around 85 per cent of installed capacity. The situation of over-capacity leading to stiffer competition was answered by attempts to reduce production costs through the introduction of technological improvements as well as through further vertical integration. Two other factors that influenced the market situation, although probably to a lesser degree, were the continued existence of about 600,000 tons of excess stocks of aluminium in the United States Government stockpile, 125,000 tons of which the Government announced would gradually be sold off; and the uncertainty surrounding supplies from the Eastern Trading area, small but growing quantities of which are being offered in Western Europe substantially below international posted prices.

The highly competitive situation was reflected in a price cut in the United Kingdom in early 1962, and in the United States which followed suit in December, bringing its price down into line with the world price. The lower price of aluminium might well have a beneficial effect on the level of consumption. The upsurge in the quantities of aluminium consumed in the course of the last two decades is in no small measure due to the relative and absolute fall in its price. Although, having previously encroached on steel, aluminium is now again facing increased competition from stainless steel as well as much materials as plastics or fibreglass, its lowered price is giving it relative advantage over steel (reinforced by the recent rise in steel prices) and over copper.
Copper

A marked slowing down occurred in world consumption of refined copper, which rose by only 2 per cent in 1962 compared with an average of 7 per cent in the two preceding years. The increase in 1962 was largely concentrated in North America where, after a setback in 1960, demand continued to grow strongly, although some impetus was lost in the course of 1962. Increases were also reported in the Eastern Trading area and in Australia. Consumption in Western Europe was however lower than in 1961, declines having taken place in the Federal Republic of Germany and the United Kingdom, the two largest consumers. In Japan, consumption suffered a severe setback.

Although both production cutbacks aimed at stabilizing prices, and strikes, have acted as a brake on the growth of output, supply still outstripped demand. World production of refined copper rose by 3 per cent as it had in 1961; in contrast to the earlier year, it was now growing a little faster than consumption which had slowed down. The rise in output at the mining and smelting stage was higher still, estimated at some 7 per cent. Production in the United States and Chile rose substantially; in Australia a decline in 1961 was followed by a strong upsurge in 1962. Production declined sharply in Peru and also in Northern Rhodesia. Canada's production of refined copper declined for the second year in succession, while that of France and the Federal Republic of Germany resumed its upward trend after an interruption in 1961. The expansion in Japan's output of primary metal continued, although 1962 brought some slowing down; a fall in secondary production reduced the total quantity of metal produced below the 1961 level.

The failure of demand to grow at the rate of earlier years led to an accumulation of new stocks in nearly all major producing countries, in particular Northern Rhodesia and the United Kingdom. The fact that market prices of copper remained relatively stable in 1962 was again in large measure due to re-purchases by producers, while voluntary production cutbacks by them and the mildly increased demand could also claim some credit.

The value of copper traded internationally remained practically unchanged between 1961 and 1962. The rise in United States consumption led to a reduction in exports so that the country once again became a net importer. Imports into Japan, mainly in the form of concentrates, registered a rise; those of the United Kingdom were maintained at the volume to which they had declined in 1961, while net imports into the EEC were smaller than a year earlier. The drop in United States exports by one quarter and a 14 per cent decline in those from Canada were largely responsible for a shortfall in exports from the industrial areas as a whole, which was however about offset by a slight overall increase in the volume of exports from the non-industrial areas. The increase was mainly accounted for by Chile which exported 5 per cent more in 1962, and by a strong, but only partial, recovery from the 1961 setback in the, albeit smaller, exports from Mexico. Exports from Northern Rhodesia failed to reach the level of a year earlier, and those from Peru, after sharp rises in the two preceding years, registered a fall in 1962. The average export price of copper in 1962 showed an improvement of about 2 per cent over the preceding year without however regaining the level of 1960.
Tin

Consumption of primary tin metal failed to reach the previous year's level in 1962 after having already undergone a decline of 4,500 tons in 1961. The 1961 decline had, however, coincided with a 6,000 ton shortfall in output of the metal. In 1962, output recovered most of the ground lost, reaching 146,000 tons, so that, with consumption having receded to 160,000 tons, the gap between the two levels was at its narrowest since 1958, when consumption had first outpaced current output of metal. It was, however, not the size of the gap, but the magnitude of non-commercial stocks and the uncertainty surrounding their disposal that were the dominating features of the tin market.

Mining production, in contrast to the fluctuations in smelting, has grown steadily from the 1958 low. In 1962 it reached 145,000 tons, 6,000 tons above a year earlier; all major producers with the exception of Indonesia contributed to the higher output. Indonesian output has in fact been showing a downward trend for some years, but it is hoped to raise production to an annual 35,000 tons (twice the present level) as part of the 8-year development plan. A raising of the efficiency of mines is also envisaged in Bolivia.

The outstanding feature in smelting developments was the emergence of Nigeria as a major producer of metal: from 630 tons in 1961, the first (incomplete) year of operation, production reached 8,200 tons in 1962 and represented the largest single contribution to the rise in world production. Tied to this development was the fall, from 24,800 tons in 1961 to 19,000 tons in 1962, in the production of the United Kingdom, which had formerly smelted all Nigeria's concentrates. The 47 per cent rise in the joint output in Belgium, the Netherlands and the Federal Republic of Germany failed to offset the drop in the United Kingdom, leaving the Western European total about 1,000 tons below the 1961 total. United States production again fell off sharply, reaching 5,600 tons as against a peak output of 13,700 tons in 1960. Among the developing countries, Bolivia showed no change, while metal output in the Federation of Malaya, rising by about 4 per cent in 1962, amounted to 83,000 tons, compared to 46,000 tons three years earlier. Increased imports of concentrates, in particular from Indonesia, supplemented domestic Malayan supplies.

The reduced world level of primary tin consumption was largely a result of drastic shrinkages in the Federal Republic of Germany and Denmark (reportedly connected with a falling off in high-grade alloy exports) and a decline in Japanese consumption which a substantial rise in North America and increases in the United Kingdom and France failed to offset. With world consumption nevertheless still running above output, stocks could again be reduced; the reduction was however almost entirely due to a running down of consumer stocks in the United States. To the 4,000 ton reduction in world commercial stocks should be added a reduction in governmental stockpiles of about 4,700 tons resulting from releases in the United States, Canada and Italy.
Largely reflecting the uncertainty as regards releases from strategic stockpiles, tin prices suffered a fall during 1962 which, in London, amounted to about £100 or 10 per cent. Fluctuating in the early part of the year, prices took a definite downward turn in mid-April until July when they entered the new lower range established by the International Tin Council in the preceding January. It was only after the United States authorities announced on 24 August that releases from the strategic stockpile would be limited to 200 long tons per week that prices rallied, boosted temporarily in October/November by developments in the international political situation. The announcement by the United States of a one-year programme for the disposal of strategic stocks in the commercial market on the basis of weekly competitive bidding for quantities not exceeding about 200 long tons, with the Government reserving the right to accept only bids which are reasonably consistent with prevailing market prices, led to a firming of prices in spring 1963. Further support to prices was given by increased purchases by the USSR and Eastern European countries.

The lower level of world trade in concentrates largely reflected the withdrawal of Nigeria from this market; shipments from the Congo (Leopoldville) probably also underwent a reduction. Exports from Bolivia and Thailand registered quantity increases of about 6 and 8 per cent respectively. The major features on the import side - apart from the disappearance of United Kingdom imports from Nigeria - were the fall in United States imports and the rise in those of Malaya-Singapore. These changes directly affected Indonesian exports which more than gained in the latter market what they had lost in the former. World exports in tin metal were only marginally up in 1962, exports from Nigeria and an increase in those from the Federation of Malaya having offset lower sales by the industrial countries as a whole. Most of the new exports of Nigerian metal took the place of the concentrates formerly imported into the United Kingdom. The expanding United States market absorbed the remainder, and took increased quantities from Malaya, Bolivia and Belgium, while imports from the United Kingdom and Portugal underwent drastic cuts. In marked contrast to the improvement in United States absorption, imports into continental Western Europe suffered a severe setback caused by sharp drops in Danish and Federal German takings, affecting all suppliers, mainly the United Kingdom, the Netherlands, Belgium and among the non-industrial countries, Malaya and Indonesia. Increased imports were registered in France and in the United Kingdom.

Lead

The expansion in world consumption of lead continued in 1962; after a second successive rise by nearly 4 per cent, the total quantity of the refined metal consumed reached about 2.4 million tons. Over one half of the rise was due to the United States where consumption, stimulated by demand for accumulators in the motor industry, surpassed the 1961 level by 50,000 tons, or 6 per cent.

1 Excluding the Eastern Trading area.
In Western Europe lead seemed to stand up well to competition from plastics for cable-sheathing, but there was only a slight improvement in overall consumption. In Japan, the high level reached in 1961 after several years of rapid expansion was maintained in 1962. Although voluntary efforts at restraining the growth in output were hampered because of the large number of producers and have met with little success, they were helped by other forces: low prices made operations unprofitable in the lower-grade mines, a number of which, in particular in Europe, were forced to close down, while in the United States a prolonged strike was mainly responsible for a decline in production. The decline there, by 11 per cent, thus coincided with one of 7 per cent in Western Europe, and it was mainly an upsurge in output in Australia after the removal of voluntary restrictions, and a rise in Canada that reversed the decline in world mining output of the previous year into a 4 per cent increase in 1962. In contrast to the expansion in mining, there was a substantial decline - by 80,000 tons - in world output of refined lead, which, at 2.3 million tons, remained some 100 thousand tons below consumption. Output in Western Europe having remained unchanged from the previous year, the decline was due to a 12 per cent fall in North American output which was only partly offset by the strong recovery in Australian production.

World trade in ores remained slightly below the level of 1961, a small rise in Western European imports being more than offset by a fall in Japan's imports from the exceptional level of the preceding year, and by somewhat lower takings by the United States. Shipments of ore from the Latin American countries and from Canada failed to reach the levels of 1961 but substantially higher quantities were exported by Australia and South Africa. The volume of trade in metal, on the other hand, was nearly 7 per cent higher than in 1961, contrasting with lower production. Net imports into the EEC countries rose by about 18 per cent while imports into the United Kingdom and the United States remained virtually unchanged. The increase in world exports was due largely to the vigorous expansion in Australian shipments, while those from the main exporters in Latin America and Africa showed a decline. Exports from Canada, however, rose once again, reflecting increased purchases by the United States.

As a result of the divergent movements in consumption and production, demand exceeded supply of new metal: producers' stocks of refined lead dropped from 362 thousand tons at the end of 1961 to 281 thousand tons at the end of 1962, a level similar to that of about three years previously. By far the larger reduction occurred in the United States, and was partly assisted by strikes and by acquisitions by the stockpile.

In spite of these developments, the downward trend of lead prices, which had begun in early 1957 after stockpiling in the United States had ceased, continued almost uninterrupted, well into 1962. In August the London price stood at its lowest in a number of years, at £50 per long ton. Since then, the narrowing of the gap between demand and supply has made prices firmer.
Zinc

Zinc, too, seems to be finding a better balance between total supply and demand. In 1960, world consumption and production of zinc were equal, and both rose by about 5.5 per cent in the following year. In 1962 both slowed down, but the movements were no longer parallel. Production rose by just over 3 per cent, to 2.65 million tons and was thus slightly outpaced by consumption which, rising by almost 4 per cent, reached 2.67 million tons. The rise in world consumption was almost entirely due to an expansion of demand by 9 per cent in North America, while demand for zinc in Western Europe actually remained below the level of 1961. Among developing countries, India and Australia registered notable advances in consumption.

In contrast to the slowed-down growth of metal production, the rate of expansion in mining doubled in 1962: output rose by 6 per cent, compared to 3 per cent a year earlier. The chief increases occurred in Canada, the United States, Japan and Australia, while production in most European countries remained below the previous year's level. Production of the metal followed a similar regional pattern, a shortfall in Europe (especially in Belgium) being more than offset by sharp relative rises in Japan and Australia, and by a substantial increase in North American production.

The excess demand seems to have been met from stocks held by consumers, so that producers' stocks, which between the end of 1960 and that of 1961 had become reduced by 15 thousand tons to some 260 thousand tons, were still at that level at the end of 1962, representing about one tenth of annual output.

In international trade in zinc ores, a reduction by about 13 per cent occurred in imports into Western Europe, France being the only country to register a substantial rise; exports from the area were marginally smaller than in 1961. Imports into the United States rose by some 6 per cent between 1961 and 1962, but the quota remained unfilled in either year. Exports from Canada increased by over 21 per cent, and those from South Africa rose sharply, but this movement was more than offset by the combined shortfall in Mexico, Peru and Australia.

The three last-named countries, however, all increased their exports of zinc metal by substantial amounts, Australia in fact doubling its shipments between 1961 and 1962 from 47 thousand to 94 thousand tons. In the same period, Rhodesia's exports grew by over one half. There was on the other hand only a marginal rise in exports from Canada, and a decline in total exports from Western Europe, mainly on account of Belgium. As a result of the lower exports and a slight increase in total imports, Western Europe's net imports showed a rise of some 14 per cent in 1962, increases being recorded in Belgium (largely from Eastern Europe), Italy and Sweden, while the United Kingdom took

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1 Excluding the countries of the Eastern Trading area.
11 per cent less than in 1961, sharply reducing its purchases from the USSR.
United States imports of zinc rose from 114 thousand to 122 thousand tons,
without filling the quota; during the same period exports were substantially reduced.

In spite of the improving statistical position, free market prices in London tended to decline for most of the year until some improvement occurred in the last quarter. The existence of large strategic stockpiles, the major part of which is considered to be in excess of actual needs, continues to subject the price level to a weakening influence, only partly mitigated by the knowledge that no metal would be released from the pile if this risked disrupting the market. Another factor tending to keep the price level low are imports into Western Europe, but also into Asian countries, from the Eastern Trading area. These have become substantial in recent years, and, although shipments from the USSR in 1962 were smaller than in the previous year, sharp increases from Bulgaria and other countries made the total quantity from the area larger. Lastly, the prospects of a slowing down in consumption as well as the absence of restrictions on output at present and the difficulty of effectively introducing them in view of the large number of countries involved - as is also the case with lead - seem to indicate that a small excess of production over consumption might again be expected in the future.

Iron ore

The volume of world trade in iron ore is estimated to have been about 6 per cent higher in 1962 than in 1961. This rate is substantially higher than that of the preceding period, when trade expanded by only some 2 per cent. The higher figure in 1962 is however entirely due to the strong recovery in United States imports which were more than one third higher than in 1961, and thus wiped out that year's setback. Japan's imports increased by 10 per cent, but this marked a slowing down compared to the 40 per cent increase of the preceding year. Imports into the EEC remained below the level of 1961; those into the United Kingdom were about 12 per cent lower, nearly all suppliers sharing in the decline.

Exports from Canada rose by 50 per cent after the previous year's decline, with a large share of the increment going to Japan. Sweden's exports, linked as they are to Western Europe, receded by 4 per cent, and there was no change in those from France. Among the main Latin American suppliers, there were both substantial gains and declines. Brazil's exports were nearly one quarter higher compared to 1961, scoring a sharp increase both in the United States and, alone among the exporters in its region, also in shipments to the EEC. Total exports from Chile expanded by more than one third, partly due to higher takings in the United States. This market on the other hand absorbed little more from Venezuela and only one half the quantity from Peru compared to the previous year; total iron ore exports from both these countries were below the 1961 level. A number of suppliers benefited from the continued expansion of demand in Japan; these included Canada, the Philippines and India. The quantities shipped by Malaya, Japan's largest single supplier, were slightly larger than in 1961, while those from Peru were much the same.
Prices showed hardly any change in trade within Western Europe, while in the United States prices for domestic ores after a long period of stability came down by 7 per cent in early 1962, and a slight decline occurred in the price (f.o.b.) of imports from Venezuela.
A faster rate of industrial expansion in North America and cold weather in Europe as well as Asia jointly contributed to an acceleration of the growth in world fuel consumption in 1962. Thus while in North America the demand rise centred on fuel for energy, in Western Europe and Japan, both of whose economies were experiencing a period of slowing down, the call for fuel for heating purposes outweighed the slackening of industrial demand. World consumption of both coal and petroleum recorded a higher rate of increase in 1962 than in 1961, and both registered a higher production. With supplies plentiful, the export price index of fuels has remained stationary since the beginning of 1961.

Petroleum

World production of crude oil reached a record total of over 1,200 million tons in 1962, 91 million tons above that of the previous year. This represented an 8 per cent rise, compared to 6 per cent in 1961, and to an annual average of some 7 per cent during the preceding decade. The increases were widely spread, with a handful of exceptions. Output in the United States was $\frac{5}{8}$ million tons higher, but this constituted a relative increase of only $\frac{1}{2}$ per cent; its share in 1962 world output thus fell to below 30 per cent compared with 50 per cent ten years earlier. Canadian output, stimulated by government policy, rose by about 15 per cent for the second year in succession. In Latin America, the rate of expansion doubled to $8\frac{1}{2}$ per cent. In Venezuela the rate rose to over 9 per cent, while an even higher rate was achieved by Argentina where output had already nearly doubled between 1959 and 1961. Mexico kept up its expansion of 7 per cent for the second year running. Thanks to off-shore operations, output in Trinidad continued to grow. The only major exceptions were Brazil, where labour disputes interrupted a growing output, and Columbia, whose old fields are gradually being depleted, but where the downward trend was reversed towards the end of 1962 when new fields came into operation. Output in the Middle East rose by $9\frac{1}{2}$ per cent in 1962 to 311 million tons, nearly three times the output ten years earlier. The increase came mainly from the three largest producers, Kuwait, Saudi Arabia and Iran, but note must be made of the fast-developing supplies from the newer sources, the Kuwait-Saudi Arabia neutral zone and Abu Dhabi. On the other hand, Iraq's output remained unchanged. Production in Africa, which had soared from 10 million tons in 1960 to 20 million in 1961, reached 35 million in 1962, thanks to rapid expansion in Algeria (where output in the three successive years was 9 million, 16 million and 20 million tons), Nigeria (1, 2, and 3 million tons) and particularly in Libya where operations had begun only at the end of 1961, and production exceeded 9 million tons in 1962. A discovery of a new oil field led to higher production in Angola. In Asia, the bulk of the increase came from Indonesia; a sharp rise in India brought the country's total output to nearly 1 million tons. Of the Western European increase of 1.2 million tons, one half was accounted for by the at present still protected Federal German industry, while France and the Netherlands contributed most of the remaining increase. Production in the USSR recorded an increase of 12 per cent over 1961.
World consumption of petroleum and products outside the Eastern Trading area is estimated to have risen by 7½ per cent in 1962. In the United States, consumption rose by about 4 per cent on the previous year, and thus about three times as fast as production of crudes. Much of the increased demand was met by higher imports and from higher output of natural gas liquids. Imports of crudes into the United States in fact rose by 8 per cent, leading to some rise in stocks. The major part of the increment in imports was supplied by Canada, where consumption was lagging, but shipments from Venezuela were also higher, and Libyan crudes were imported for the first time. Deliveries from Libya about equalled the sharp cut in imports from Iraq; imports from most other countries also remained below the 1961 level. A new United States import policy, which came into effect at the beginning of 1963, limits the volume of crude oil and products (except residual fuel oils) imported into the country east of the Rockies to 12.2 per cent of the preceding year's production of crude oil and natural gas products in the region. Canada and Mexico enjoy a favoured position in the United States vis-à-vis other outside suppliers inasmuch as their overland exports are not being restricted, although they are, on the other hand, comprised in the 12.2 per cent limitation. The aim of this measure is to stimulate the oil industry in the area, and to give it a greater stake in future increases in domestic demand.

Inland consumption of products in Western Europe rose by an unprecedented 30 million tons in 1962 to a total exceeding 215 million. This overall increase of 16½ per cent compares with an average annual increase in the period 1950-60 of just under 13 per cent. The 1962 figure comprises increases of 21 per cent in the EEC (Federal Republic of Germany: 29 per cent), about 12 per cent in the United Kingdom, and 10 per cent in Scandinavia. The higher demand in Western Europe was reflected in increased imports: net imports of crude oil amounted to 208 million tons, an increase of nearly 10 per cent (compared, however, to increases of 16 per cent in each of the two preceding years). While the traditional exporters in the Middle East supplied the major share (some 140 million tons) of total requirements, a large part of the extra demand was met by imports from Algeria and Libya, which rose to 30 million tons in 1962 from 16 million in the preceding year. Imports from the Eastern Trading area (including products, mostly black oils) amounted to 22 million tons, 12 per cent over the 1961 figure. The bulk of the supplies originated in the USSR, the main increments going to Italy, the Federal Republic of Germany, Sweden and Finland, while a steep rise was recorded in the United Kingdom. Imports of Venezuelan petroleum and products expanded significantly, by about 20 per cent. The rise in Western Europe's trade in products was particularly notable, net imports, at 29 million tons in 1962, having reached a level one half above that of the previous year. These imports consisted almost exclusively of black oils, demand for which had risen sharply and had to be met from the output of overseas refineries.

Consumption of petroleum products in Japan rose by over one fifth between 1961 and 1962, but this represented a slowing down compared to the rate of 25 per cent in 1961 and of 43 per cent in 1960. Refining capacity, following an expansion of 44 per cent in 1961, was raised by a further 14 per cent in the course of 1962. With domestic crudes supplying less than 2 per cent
of Japan's growing needs, imports increased by 18 per cent. The Middle East accounted for over four fifths of Japan's imports of crudes; South-East Asia (mainly Indonesia) supplied 11 per cent, while the share of the USSR was 6 per cent, somewhat less than in the previous year. Imports of products increased by 12 per cent over the previous year, and again consisted largely of fuel oils mainly from the United States, the USSR, Venezuela and the Middle East. It may be noted that petroleum has now come to represent the largest item on Japan's import bill, with a share of nearly 15 per cent. The expansion of refining capacity in a number of non-industrial countries contributed to a higher rate of increase in crude oil imports into the primary producing areas in 1961 and 1962, when the rates were 8 and 7 per cent respectively. Countries with higher imports in 1962 included Australia, Brazil, India and South Africa.

The volume of world petroleum exports was in 1962 about one tenth larger than a year earlier, with the main increases coming from the Middle East (except for the stagnating Iraqi exports), the USSR and Venezuela, complemented by rises in shipments from Algeria to Europe, and from Canada to the United States. A feature of note was the large expansion of Venezuelan exports to Europe compared to the growth in shipments to North and Latin America. This gives an indication of the structural changes taking place in Venezuela's exports: Western Europe is gaining prominence, its share in the total having risen from 20 per cent in 1960 to 26 per cent in 1962, while that of the Western hemisphere has in the same period declined from 76 to 70 per cent.

Exports of petroleum and products from the Eastern Trading area have not kept up their rate of expansion. In 1962 they rose by about 2 million tons, or 7 per cent, as against rises of 6-7 million tons in each of the three preceding years. The total quantity exported in 1962, amounting to 33 million tons, of which about 30 million came from the USSR and most of the remainder from Rumania, represented 3 per cent of the supplies of the rest of the world, as in earlier years. The higher trade with Western Europe included increases to all EEC countries except the Netherlands. Exports to several other countries in Western Europe have shown appreciable gains, but exports to Japan, after surging from a negligible quantity in 1958 to over 3 million tons in 1961, receded marginally in 1962. The Eastern Trading area's interest in expanding its petroleum exports to industrial countries lies in its needs to import larger quantities of capital goods; there have, for instance, been discussions about the possibility of the USSR increasing oil sales to Sweden and the United Kingdom in return for shipbuilding orders. Exports of the area's petroleum to the non-industrial countries as a whole remained unchanged in 1962, in spite of increases in India and several African countries.

Coal

World exports of solid fuels rose by 6 per cent in volume in 1962, about twice the rate of a year earlier, reaching an estimated total of 131 million tons.
Imports of hard coal into the countries of Western Europe (including intra-trade) rose by nearly 6 million tons to 62 million tons. Apart from the United Kingdom, whose shipments to other countries of the area were down by one tenth, supplies from all major sources rose as compared to 1961. Imports from the United States amounted to 16.4 million tons, compared to 13.7 million in the preceding year, nearly all the increment being taken up by the EEC whose imports from that source showed a 21 per cent rise; the trebled imports of Spain and Portugal accounted for the rest, while imports of most other countries from the United States declined. Western Europe's imports from Poland and the USSR were respectively 14 and 11 per cent higher than in 1961. While increases occurred to most destinations, the most notable was the 25 per cent growth in EEC shipments to the EEC which included an increase of 40 per cent to Italy, the largest customer. The latter country also took increased quantities from South Africa. Roughly one half of Western Europe's total imports were thus covered from outside sources, with 27 per cent of the 1962 total being supplied by the United States (compared to 24 per cent in 1961), and 22 per cent, as in the previous year, by Poland, the USSR and Czechoslovakia. On the export side one may note a decline in United Kingdom deliveries, due to cuts in takings by the Scandinavian countries and Ireland, which even a rise by more than one quarter in shipments to the EEC area, and resumed exports to Spain, failed to offset. In spite of the changed situation arising from Britain's non-accession to the European Economic Community, the United Kingdom coal industry is aiming at doubling its exports to 10 million tons a year in the course of the next years, on the basis of higher productivity in the mines and improved transportation methods.

Imports into Japan continued their upward movement. Having recovered by the end of 1959 from the setback resulting from the recession of a year earlier, they recorded rises in 1960 and 1961 of 69 and 35 per cent respectively. Although coal imports in 1962 reached a new record figure of 12 million tons, this meant a drop in the rate of increase to 7 per cent. The differences in the individual rates achieved by suppliers led to further changes in their shares in the market. The United States remains the chief source, but the only marginal advance in 1962 reduced its share of the market to barely above one half, as against 72 per cent in 1962. Australia's shipments, after a five-fold increase between 1959 and 1961, expanded by 12 per cent in 1962, covering nearly one quarter of Japan's import requirements compared to one tenth three years earlier. Imports from the USSR doubled between 1961 and 1962, raising their share to 10 per cent, while those from mainland China, which in 1957 amounted to half a million tons, have virtually ceased. Canada and North Viet-Nam increased their shares between 1959 and 1962.

World production of coal\(^1\), after virtually no change in the two preceding years, rose by less than 3 per cent, to about 1,900 million tons in 1962.

\(^1\)Excluding mainland China; including coal equivalent of brown coal and lignite.
Output of hard coal increased by 4 per cent in the United States and by almost this proportion in the United Kingdom. All the major continental producers in Western Europe registered a decline or no change in output compared to 1961, so that for Western Europe as a whole the increase amounted to less than 1 per cent. In Eastern Europe, the combined hard coal production of Poland and Czechoslovakia was 3 per cent, and that of the USSR 1 ½ per cent higher than in 1961. With demand in Western Europe running at an unexpectedly high level and no expansion in output, increased imports had to be supplemented from stocks which by the end of the year became exceptionally low. Although the cold weather gave rise to serious transport problems, supplies were generally adequate and pithead prices remained stable. The need for restocking will no doubt lead to higher imports during 1963 and may exert some upward pressure on prices.