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### Information and Notices

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I

(Information)

### **COMMISSION**

### THE COMMUNITY COAL MARKET IN 1976 AND FORECASTS FOR 1977

### I. SUMMARY SURVEY

### 1. The coal market in 1976

Against the background of an increase of around 5% in the Community's energy demand in 1976 over the previous year, coal's contribution to primary energy supplies remained proportionally about the same at between 19 and 20%, that of oil likewise at 55% and that of gas rose by 0.6 to 17% (Table 1). The total contribution of solid fuels was between 22 and 23% including lignite and peat, the same as the year before.

In 1976, coal consumption rose to 267 mtce (million tonnes of coal equivalent) compared to 252 mtce in 1975. However, there were contradictory developments: the requirements of the steel industry recovered by much less that had been expected, coal consumption for electricity generation far exceeded forecasts and reached its highest level since 1969, while the Community's coal industry pursued a policy of investment in productive capacity in spite of growing stocks of Community coal and/or rising coal imports from outside the Community.

Coal carbonized by cokeries decreased by 1.5 mtce against the previous year to 101.2 mtce in 1976. On the other hand, power stations consumed nearly 121 mtce compared to under 101 mtce in 1975. Other markets and uses in the Community absorbed around 45 mtce, about 4 mtce less than in 1975.

The drop in the quantity of coal carbonized by cokeries took place in the face of a recovery of coke consumption by the steel industry from 53.6 million tonnes in 1975 to close on 56 million tonnes in 1976. The reason is that coke production had substantially exceeded consumption during the previous year with the result that there had been a rapid build-up of coke stocks which continued in 1976, though at a reduced rate.

The spectacular increase in coal consumption for electricity generation was due to a combination of diverse causes. The most important of these were some measure of economic revival, relatively high fuel oil prices, a shortage of water for hydro-electric generation and governmental measures.

Community coal production in 1976 was about 228 mtce, a drop of 9 mtce from the previous year. The principal causes were some short-time working in Germany in response to market conditions and falling productivity in the UK.

Whereas in 1975, increases in costs of production were generally exceeded by rising receipts, the reverse was the case in 1976 except in Germany. However, the year witnessed a marked slowing down in cost escalation.

Contrary to forecasts, coal imports from third countries showed a further slight rise and exceeded 42 million tonnes in 1976. The most important reason was that a substantial proportion of the increase in power station coal consumption took place in member countries with no or an inadequate coal industry who obtained growing supplies of steam coal from third countries at substantially lower prices than would have been available from Community sources.

Although a repetition of last year's shortage of water for hydro-electric generation is unlikely, it is expected that coal consumption by power stations will be slightly higher than in 1976. The reasons are that other factors operating last year are of a more than transitory nature and will be reinforced by deliberate policies.

Contract prices for good quality coking coal from the world market have generally remained firm at about \$63 cif ARA in spite of the continuing world recession in the steel industry, although spot quantities at lower prices have been on offer during the year. As a result, the prices of German coking coal were not much out of line with the former.

Other coal consuming sectors must be expected to continue their contraction. Nevertheless, this might be temporarily halted during periods of vigorous economic revival leading to increased demand for coal and coke for general industrial purposes.

On the other hand, electricity undertakings have been able to import substantial quantities of third country power station coal at around \$ 30 to 33 cif ARA, with a tendency towards increases of about \$ 5 towards the end of the year. Although a substantial proportion of Community coal was competitive with oil, it could not generally compete with these prices.

Total Community coal production might reach 229 mtce, an increase of 1 mtce over that of last year. However, this is conditional on increased productivity in the UK.

With production at 228 mtce and imports at 42 mtce, total quantities of coal available, excluding stocks carried over, were 270 mtce in 1976, compared to consumption of about 267 mtce plus a small volume of exports to third countries. This is a big reduction in the excess of availability over requirements compared to the previous year to be put to stock, but a rise of five million tonnes in producers' coke stocks must also be taken into account.

A reversal of the downward drift in productivity in the UK coal industry is of great importance in view of that industry's leading position as a supplier of Community power station coal. A high proportion of UK coal output could remain competitive and thus provide an attractive fuel not confined to the British electricity generating industry.

### 2. The coal market outlook for 1977

Regarding coal imports from third countries, indications are that 1977 will witness a further slight rise to around 45 to 46 million tonnes. The largest increase will be to France followed by Denmark and Italy.

The uncertainties surrounding the progress of economic recovery in 1977, and in particular that of the steel industry, are reflected in the prospects for coal for 1977.

With production and imports totalling about 275 mtce against consumption and exports some 5 mtce below this figure, a further rise in coal stocks must be expected.

When the coal and coke balances for 1977 were calculated (see annex), an increase of two million tonnes of coke to 58 million tonnes representing 75 mtce of coal were assumed. However, by the date of going to press (31 March 1977) it has become apparent that this figure is too high and must be revised downward. This will be done in the usual autumn revision of the report.

The rising level of imports in the face of the difficulties of the Community's coal industry to dispose of its production is giving rise to concern. While an orderly development of coal imports, particularly where these replace oil for electricity generation, is desirable, it would be contrary to the Community's long-term interests if such a development led to a permanent reduction in the Community's primary energy production capacity.

### II. GENERAL ECONOMIC SITUATION AND OUTLOOK

(Table 2)

After dropping by 2·3% in 1975 as against the previous year, the Community's gross domestic product in real terms was some 4·5% higher in 1976 as a result of a modest rise in home demand. However, due largely to the situation in the investment goods industries, underused productive capacity decreased little in spite of a growth in industrial production of about 7%.

The incipient growth in the steel industry during the first half of the year was not maintained and was succeeded by new symptoms of recession. Likewise, the capital goods and building industries — apart from owner occupied housing — showed low levels of activity throughout 1976. Such industrial growth as there was has primarily been in durable consumer goods such as motor car production which was 17% above the previous year's level.

In the labour market, these developments have achieved no more than to slow down the deteriorating trend of the previous year. The number of fully unemployed remained high throughout the year and an earlier tendency towards a reduction of short-time working was reversed in the autumn. Average unemployment stood at around 4.6% in 1976 compared to 4% in 1975.

The rise in internal prices accelerated again during the second half of 1976 in spite of successful anti-inflationary measures in a growing number of member countries. The average rise in consumer prices in the Community exceeded 10%, having been 12.5% in 1975.

The Community's external balance of payments deteriorated in the autumn. The deficit for the whole year was of the order of 8·3 billion dollars in spite of persistent large surpluses by Germany and the Netherlands. This compared to a surplus for the Community of 1·5 billion dollars in 1975.

Prospects for 1977 are extremely uncertain. However, provided the stabilization policies in the deficit countries prove successful and economic trends in the surplus countries in and outside the Community do not weaken too greatly, it can be expected that the Community's gross domestic product will increase by about 3.5% in real terms in 1977.

### III. COAL DEMAND BY SECTORS

(Table 3)

### 1. Steel industry and other coke users

(Tables 4 to 7)

In 1975 the steel industry suffered its most severe world-wide recession in 30 years, followed by some recovery in 1976. However this proved to be weaker than appeared initially.

While steel production in 1976 showed an increase over the previous year in all member countries, this was below expectations except in Italy and the United Kingdom, but against this must be set substantial shortfalls in France, Germany, Belgium and Luxembourg. As a result, total steel production in 1976 was below 135 million tonnes, a rise of 10 million tonnes over the dismal 1975 figure but more than three million tonnes short of original forecasts.

Two reasons for this disappointing development stand out. In the first place, the revival in consumer demand in 1976 did not lead to a comparable rise in investment in capital goods. Secondly, the Community's exports of steel and capital goods fared less' well than those of some other countries, notably Japan.

Forecasts of steel production in the Community for 1977 are exceedingly cautious. Initially 138 to 139 million tonnes were mentioned but it has meanwhile become apparent that these figures and those in Tables 4, 6 and 7 must be revised downwards.

Since the substantial drop in specific coke consumption (Table 5) in 1975 as against the previous year due to relatively lower prices of fuel oil for injection into blast furnaces, there have been no very significant changes in this respect. For the Community as a whole, specific

coke consumption decreased by about 1% from 1975 to last year, and a comparable drop can again be expected for 1977.

In line with the foregoing, coke consumption by the iron and steel industry (Table 6) in 1976 was about 56 million tonnes.

As regards demand for coke by industries other than iron and steel (Table 7), this has been stable at around five million tonnes since 1975 and is likely to remain at about this level in 1977. On the other hand, its use for domestic heating continues to shrink and will probably be below six million tonnes in 1977.

Under coking coal Decision 73/287/ECSC, financial aids for Community coking coal would have progressively decreased from the current year onward. However, the Council has assented to a decision by the Commission to maintain the aids at their full level to 1979.

### 2. Power stations

(Tables 8A and 8B)

The unprecedented phenomenon of a decline in absolute terms in electricity requirements in some member countries in 1975 was reversed in 1976. As a Community average, the renewed rise amounted to 7%. This strongly suggests that the fall in 1975 was largely due to the severe recession that year, with energy economy measures playing only a minor part.

In 1976, nuclear generation was close on 8 TWh higher than the year before but due to shortage of water, hydraulic generation was nearly 17 TWh lower. To fill the gap and satisfy increased demand, conventional thermal generation rose by close on 87 TWh. By far the largest part of this increase was met by a 20% rise in coal consumption to 121 mtce in 1976 compared to a rise of about 5% in oil consumption and a stabilization in gas consumption.

The following have been the most important factors leading to increased solid fuel consumption for electricity generation in 1976:

- economic revival,
- relatively high fuel oil prices,
- shortage of water for hydro-electric generation,
- governmental measures.

The shortage of water for electricity generation, combined with a ceiling on oil consumption imposed by the

government, has played a particularly significant role in France, where it is reflected in an increase in coal-burn of nearly 60% from about 9.5 mtce in 1975 to 15 mtce in 1976.

Governmental intervention of legislation have been largely responsible for an increase of around 25% in coal consumption by Belgian and German power stations, in the latter from 26·3 mtce to nearly 34 mtce. However, it is arguable that a proportion of the German increase would, in any event, have taken place to satisfy rising electricity demand on the one hand and, on the other, to make up a loss of generating availability at a large nuclear power station.

In Belgium, the coal industry received additional subsidies to enable it to sell some of its lower grade surplus coking coal cheaply to electricity producers. In Germany, legislation has allowed electricity producers to pass on to consumers the higher costs resulting from the use of Community coal instead of other fuels.

As explained in Section VII dealing with intra-Community exchanges and coal imports, in the other member countries except the UK, Community coal benefited to only a limited extent from this recovery of the power station market.

In 1977, electricity demand will probably increase by between 6 and 7% over 1976, but continuing uncertainties regarding the economic situation make this no more than a tentative figure.

It seems likely that coal consumption for electricity generation in 1977 will be of the order of 124 mtce. No quantitatively very significant changes are expected in any Member State although a probable rise of some 0.5 mtce in Italy represents an increase of nearly 44% for that country. In spite of prospects for hydro-electricity near average in France for 1977, coal consumption there may rise by a further 1 mtce over that of 1976, partly as a result of the ceiling on oil consumption imposed by the government. Likewise, it will probably be about 2 mtce above the 1976 level in the United Kingdom.

In 1976, lignite and peat consumption by power stations, mostly lignite in the Cologne/Aachen area of Germany, was about 35 mtce compared to 32 mtce the previous year. This development exceeded forecasts by close on two million tonnes, and consumption of the same order of magnitude is expected again for 1977.

To promote coal-fired electricity generation with a view to confining the growth in oil requirements for meeting rising electricity demand from conventional sources in the 1980's the Commission has proposed the provision of funds from the EEC budget towards the construction, modernization of conversion of coal-fired generating capacity totalling 30 GW.

### 3. Various industries

(Table 9)

The market for the industrial use of coal and coke outside the steel and electricity generating industries continues its tendency to contract although this does not exclude the possibility of an occasional slight revival in the train of an economic upturn. However, no significant reversal of this trend is foreseeable in the absence of substantial technical improvements in solid fuel handling and combustion equipment or of a drastic change in price relationships between solid fuels and hydrocarbons to compensate the greater convenience of the latter, particularly for small to medium users. The only member countries in which solid fuels still retain an industrial market of some significance are the United Kingdom, Germany, France and Belgium.

As in other fields, consumption at 16.6 million tonnes in 1976 fell short of original forecasts. The total expected for 1977 is likely to be of the same order of magnitude.

### 4. Domestic

(Table 10)

The market for domestic solid fuels continues to shrink. However, it remains important in the UK, Germany, France, Belgium and Ireland where consumption totalled about 35·2 mtce in 1976 out of 36 mtce for the whole Community. The contraction in domestic demand is less marked for patent fuels than for coal and coke and for lignite briquettes, due at least in part to various smoke emission regulations. In fact, patent fuel sales in the United Kingdom are presently stable at about 1·2 mtce, and may also have reached stability at around the same level in Germany. However, for the present, their largest market continues to be in France.

To an even greater extent than in general industry, the convenience of the use of oil, gas and electricity make these so attractive for domestic use compared to solid fuels that only great technical advances or extreme developments in their relative prices are likely to reverse current trends. Total consumption of solid fuels in 1977 is expected to be around 33.2 mtce.

### IV. COMMUNITY COAL PRODUCTION

### 1. Production statistics

Except for most German production, the producer countries' statistics generally show coal output on a tonnes by weight basis (t = t). To allow comparisons with statistics published in producer countries, the production figures in Table 11 are shown in t = t and for Germany additionally the national statistics in brackets.

(a) Quantitative analysis of output (Tables 11 and 12)

Community coal production in 1976 was about 248 million tonnes (228 mtce), a drop of nine million tonnes or 3.6% below 1975. At the beginning of 1976, production for the year had been forecast at about the same level as that for 1975 but this turned out to be over-optimistic.

The largest shortfall in production against forecasts was in the UK, where it exceeded seven million tonnes or near 6%, while in the other coal producing member countries the shortfall averaged 2%. The net drop in UK production against the previous year was over five million tonnes and would have been larger but for an increase of 1.5 million tonnes in opencast and small private licenced mine production.

In the case of Germany, short-time working in response to market conditions was the largest factor in the drop in production of about three million tonnes in 1976, whereas in the UK it was mainly connected with falling productivity. There had been virtually no change in total French coal production.

Current plans for Community coal output for 1977 are that this will be of the same order as that of 1976 and amount to around 248 million tonnes (229 mtce).

(b) Manpower and productivity (Tables 13 and 14)

The year 1976 has witnessed a reversal of the previous two years' trend of an increase in underground manpower. The drop has been slightly larger than expected, amounting to some 10 000 men or 3%.

This reduction in manpower has largely been brought about by not fully replacing natural wastage. By comparison, redundancies due to pit closures have played a very minor role.

Except in the case of Belgium, the development of productivity in 1976 differed considerably from what had been expected. In Germany, it rose by some 2.2% instead of dropping, in France it rose by only 0.9% instead of the ambitious target of an increase of 8.8%, while in the UK it dropped by 2.7% instead of rising by 3%.

In the case of France, the key to overall productivity underground lies in the performance of the Lorraine coalfield. Provided production there is not disrupted, the high levels of productivity achievable in this coalfield profoundly affect the statistical picture for French coal production as a whole. Unfortunately, production was disrupted in this coalfield in 1976 by a serious colliery accident at Merlebach.

The disappointing level of output per underground manshift in the UK has been due to more general causes. The principal of these is reckoned to have been the fact that the productivity incentive scheme in operation so dilutes rewards as to provide little stimulus for individual and team effort.

In the case of Belgium and Germany, productivity forecasts for 1977 are not greatly out of line with performance in 1976. On the other hand, the forecasts for France and the UK are for dramatic improvements over last year, the former based on the assumption of the Lorraine coalfield operating to its full potential and the latter on the introduction of an effective productivity incentive scheme during the second half of 1977.

### 2. Financial developments

(a) Production costs and trading receipts (Table 15)

Whereas in 1975, increases in costs of production per tonne were amply exceeded by rises in receipts per tonne in Belgium, Germany and the UK, the situation developed differently in 1976. During that year, the rise in revenue exceeded increases in costs only in Germany, whereas the reverse was the case in the three other coal producing member countries.

In the case of Belgium, the country with the widest differential between the evolution of costs and receipts per tonne, the situation resulted to a considerable extent from spot offers of American coking coal at highly attractive prices, taken up in preference to indigenous coal by the steel industry. In addition to their quantitative impact, these spot offers exerted heavy pressures on prices obtainable for Belgian coking coal, some of which was diverted into power stations at steam coal prices to avoid excessive stocking.

As during the previous two years, production costs per tonne in terms of national currencies rose at a faster rate in the UK in 1976 than in the other coal producing member countries. However, to compare costs at any given moment between member countries, the UK figures require adjustment in the light of the depreciation of sterling against the currencies of the other coal producers during this period. Nevertheless, the British coal industry's financial position was adversely affected by the downward drift in underground productivity since 1975.

Indications are that both the German and British coal industries have been operating at a profit in 1976, although in the UK, wide regional differences blur the realities underlying such national averages. However, both industries face financial problems in 1977. In Germany, these arise, at least in part, from growing producers' stocks of coal and coke, while in the UK, adverse factors are represented by pressures on costs of production resulting from improved underground workers' retirement conditions, coupled to the fact that an effective productivity incentive scheme which may be introduced can affect output during only part of the year.

(b) Financial interventions by Member States (Table 16)

In view of different policies pursued by member governments over the years in matters such as covering losses or the treatment of social charges or expenditure subsequent on pit closures in earlier years and resulting from the new formulation of the aid system for the Community as from 1976, no figures can be given for financial interventions by the member states in 1976 comparable to those for 1975.

A further complicating factor is the different systems under which the electricity generating industry uses competitively produced Community coal. These range from coal sold to the electricity undertakings at a competitive price, the coal producer being compensated

through subsidies, to coal sold at prices covering costs of production, with the electricity generating concern recouping itself by passing the extra costs to the consumer.

### 3. Developments in productive capacity

### (a) Investment (Table 17)

The figures for investment in 1976 highlight a problem common to many industries but particularly marked in deep coal mining. This is the need to make investment decisions on the basis of long-term assessments of the market and either to maintain these regardless of short-to medium-term market developments or to write them off at enormous loss.

The investment plans by the Community's coal industry formulated in 1974 and mentioned in the Commission's report on the general coal market situation for that year (OJ No C 116 of 1975) are reflected in a steady rise in investment expenditure from 324 million units of account in 1974 to 538 million units of account in 1975 to a peak of 596 million units of account in 1976. Although inflation has played a part in this increase, its effect on figures expressed in units of account is much less than on figures expressed in the national currencies of certain member states.

In 1976, the UK maintained its lead in investment relative to current output at 2.8 units of account per tonne, followed by Germany at 2.1 units of account per tonne and by France and Belgium at around 1.9 units of account per tonne. Current forecasts for 1977 are that these relationships will not change drastically in the UK and France but that reduced investment is to be expected in Germany and, particularly, in Belgium. How-

ever, it should be noted that the forecasts exclude investment not yet formally decided but which might, nevertheless, be initiated during the year.

The high level of investment in UK coal production mirrors the industry's faith in the possibility of exploiting its large, geologically favoured coal resources on terms which will continue to make it attractive to the power station market into the next decade and beyond.

On the other hand, investments in the German coal industry — mainly in the Ruhr, in France — largely in Lorraine — and in the Campine coalfield in Belgium are based primarily on the expectation of long-term demand for good coking coal at commensurate prices, with the prospects of the power station market playing a secondary role.

### (b) Pit closures (Table 18)

Pit closures rose from eight in 1975 to 11 in 1976. However, except for three pits in the Ruhr, they have all been small, averaging about 140 000 tonnes recent annual production.

On the other hand, the three mines in the Ruhr closed in 1976 represented total production of 3.7 million tonnes. However, two of these closures were matters of technical rationalization and will not entail a loss of productive capacity. The third pit, for which a substantial investment programme had been decided in 1975, was abandoned after a large roof-fall — this closure has resulted in lost productive capacity of 0.8 million tonnes a year.

No pit closures are presently planned in Germany for 1977. The only important closure in the Community currently known will be in the Nord/Pas-de-Calais coal-field of France and represents an annual loss of production of 0-7 million tonnes.

### V. COAL PRICES

### 1. Coal price developments

(Tables 19 and 20)

Since the large price increases in 1974, rises in the list prices of Community coals have been progressively slackening. In Germany, they remained stable throughout 1976.

Tables 19 and 20 show price movements of selected comparable qualities of coal from various Community

coalfields from January 1976 to January 1977, the first in national currencies and the second in US \$ to facilitate comparison with prices of other forms of energy.

As in previous years, the widest differences in prices of Community products apart from coke were between the UK and the other coal producing member countries. In 1976, British coal was again subject to the largest price increases, ranging from 13 to 22%. Prices of steam coals from the Lorraine coalfield were increased by 9%

and Belgian anthracite prices were increased by 3 to 10%. List prices of coking coal from the Nord/Pas-de-Calais coalfield were reduced respectively by 11 and 9%.

### 2. Coking coal

The medium price cif ARA for third country coking coal, the so-called indicative price calculated by the Commission, reached a peak of \$ 63.80 per tonne in October 1975. Since then it has remained practically unchanged around \$ 63 for a total quantity of about 14 million tonnes.

However, some importers have been able to secure coking coal in the spot market at cif prices of around \$50. Combined with other signs of weakness in the market, these imports exerted disproportionate pressures on the sales and prices of certain Community coals.

### 3. Steam coal

Electricity generating undertakings have been able to import third country steam coal at cif prices of around \$ 30 to \$ 33 per tonne of coal equivalent throughout most of 1976, but with a tendency to a rise of up to \$ 5 at the end of the year. This price level limited the possi-

bility of disposing of Community steam coal at a distance from the pithead and, above all, on an intra-Community basis.

Prices of heavy fuel oil and gas, which generally form part of alignment calculations for the sale of indigenous coal to the electricity generating industry, were substantially above those of third country coal. However, the difference in operating costs between the fuels narrows the effective price difference.

### 4. Domestic solid fuels

The price situation in this sector changed little in 1976. While supplies of inexpensive Community products continue to shrink as they tend to be uneconomic to produce, the more expensive solid fuels are challenged in their market by supplies from third countries and by other forms of energy.

### 5. Outlook for 1977

The market is subject to conflicting tendencies; nevertheless some upward price adjustments in different sectors seem possible.

### VI. COKE

### 1. Development of coking capacity

(Table 21)

In line with a long-standing trend of shifting coke production from the coal industry and independent producers to the steel industry, the coking capacity of the latter rose by 1.8 million tonnes or some 4% to 46.6 million tonnes in 1976. Additional steel industry coking capacity ranging from 0.6 million tonnes to 0.8 million tonnes came into operation in Germany, Italy and the UK that year, but there were slight reductions in the coking capacities of the Belgian and French steel industries.

On the other hand, in spite of the extremely difficult market conditions for coke, the increased capacity of the steel industry was not matched by closure of coke ovens belonging to the coal industry and independent producers. In fact, the capacity of these two groups combined fell by a mere 0.4 million tonnes.

The same general tendency will continue in 1977. However, the rise in the steel industry's coking capacity will be smaller and largely confined to the UK. On the other hand, two cokeries belonging to Ruhrkohle are scheduled for closure this year and a cokery in the Nord/Pas-de-Calais area was closed down at the end of 1976. Total Community coking capacity will remain virtually unchanged at 92 million tonnes per annum.

### 2. Coke production and coal supplies to cokeries

(Tables 22 and 23)

Two factors combine to make coke production highly inelastic in response to demand: the technical impossibility of extinguishing and then relighting coke batteries without largely rebuilding them and the fact that coke is less liable to loose its desired metallurgical properties during storage than coal.

As a result, variations in demand are reflected to a very much greater extent in fluctuating coke stocks than in coke production. In fact, this dropped by little more than six million tonnes from the steel industry boom year of 1974 to 1976, in spite of a drop in coke consumption by that industry of some 12 million tonnes during the same period.

However, this difference between the fall in total demand and the combined coke production of all producers does not reflect the full scale of the difficulties of the Community's coking coal industry in 1976. As far as possible, the steel industry attempts to maintain its own coking facilities in full operation during periods of low levels of activity and reduce coke purchases from other sources, thereby giving rise to disproportionate increases in the coal industry's coke stocks. In fact,

these rose from 2.4 million tonnes at the end of 1974 to 16 million tonnes at the end of 1976.

Furthermore, whereas the Community coal industry's coke ovens are supplied from its own coal production, those of the steel industry rely to a large and growing extent on third country coking coal. During periods of recession there is thus an inbuilt tendency for the steel industry's consumption of coke made from Community coal to be reduced more severely than of coke made from third country coal.

Production of coke in 1977 is likely to be slightly below that of the previous year and is expected to be around 75 million tonnes.

### VII. TRADE IN COAL AND COKE

### 1. Intra-Community trade

(Tables 24 and 25)

This trade is primarily a matter of deliveries of German coking coal and coke for use by the Belgian, French, Italian, Luxembourg and Netherlands steel industries. In addition, supplies of electricity coal from the Saar area of Germany to power stations across the French border in Lorraine and of British coal to other Community countries, also mainly for electricity generation, have some importance.

The serious recession in the Community's steel industry in 1975 resulted in a severe slump in deliveries of German coking coal and, particularly, of coke to other Community countries — the special reasons for the latter are explained in Section VI (2) above. Indications early in 1976 suggested a turn-round that year but these hopes were destroyed by the extremely disappointing performance of the steel industry during the second half of 1976, aggravated by availability from the US of spot quantities of coking coal at highly attractive prices.

The decrease in intra-Community trade in coal of about 1.5 million tonnes from 1975 to 1976 was primarily due to a drop in deliveries from Germany, mainly from the Saar to France of some 0.9 million tonnes, and from the Ruhr to the Netherlands of 0.2 million tonnes. One-third of the former resulted from the reduction of deliveries to French power stations due to the expiry of contracts — these were not renewed on account of price in spite of the fact that consumption by the French electricity generating industry in 1976 was far above that of the previous year.

The remainder of the drop in sales of German coal to these two countries, as of decreases in German coke sales of over 0.3 million tonnes are the combined result of low demand by the steel industry and of increased coal imports from third countries. Compared to 1974, deliveries of German coke to other Community countries had shrunk by 3.2 million tonnes or nearly 40% in 1976.

While the decrease in intra-Community deliveries of coking coal and coke was, at least in some measure, a symptom of the continued depressed state of the steel industry in 1976, intra-Community trade in electricity coal also dropped in spite of the 20% increase in coal consumption for electricity generation explained in Section III (2). The root cause lay in the relatively high costs of production of much Community coal compared to that available from third countries, combined with the fact that support measures for indigenous coal, where they exist, exert little influence on intra-Community deliveries of power station coal.

### 2. Imports from third countries

(Tables 26 and 27)

Contrary to expectations, 1976 did not see a reversal of the rising import trend registered during the previous two years. Total imports from third countries in 1976 amounted to about 42·2 million tonnes, compared to 41·1 million tonnes the year before and to about 30 million tonnes in 1973. Imports are expected to rise further in 1977 to between 45 and 46 million tonnes.

Third country imports of coal destined for power stations underwent some complex developments in 1976.

As the table shows, there have been increases in France, Italy and the Netherlands in line with these countries' greater call on coal-fired electricity generation. In the case of France, some quantities of third country coal ordered by the UK electricity generating industry in 1974 and stored in other member countries in 1975, were transferred to French power stations in 1976.

The drop in third country imports of power station coal into Denmark, Germany and the UK likewise requires comment. In the case of Denmark, after a period of heavy stock building, this largely ceased in 1976. In Germany, new legislation in favour of Community coal was instrumental in effecting a switch to this, while in the case of the UK, third country imports had been swollen in 1975 through the execution of contracts made during the coal strike the previous year.

In spite of some very attractively priced US coal available on the spot market, total imports from that coun-

try have continued to remain behind those from Poland which has maintained first place among the Community's external supplies of coal. In part, this position is connected with credits extended, in one form or another, by several Community countries for the purchase of capital goods for Polish industry on the understanding that these would at least partially be repaid through deliveries of coal.

Since 1975, the USSR has lost its previous position as the Community's third largest external supplier of coal. The reasons are the stagnant or contracting markets for Russian coal, primarily in the general industrial and domestic sectors.

For the past two years, third place amongst the Community's external suppliers has been occupied by Australia but this position is likely to be taken by South Africa in 1977. Imports of power station coal from that country doubled from 1·7 million tonnes in 1975 to 3·4 million tonnes in 1976 and are likely very nearly to double again next year.

### VIII. COAL AND COKE STOCKS

(Tables 28 and 29)

The usual consolidated table of the Community coal producers' stocks of coal and coke oven coke has been supplemented by separate tables showing respectively stocks of coal and coke.

In addition, in view of the rising importance of coal for electricity generation and of its place as a factor of diversification and security in the Community's primary energy supplies, a new table has been introduced showing coal stocks at power stations. This table gives end of year stocks and indicates how many days average consumption during the past year these represent.

There is no independent yardstick by which to measure a satisfactory level of stocks. However, in the light of the uncertainties in the energy market which have surfaced since 1973, it appears prudent to carry larger stocks of coal and coke, in particular the former, than were considered desirable during the previous 20 years.

### 1. Producers' coal and coke stocks

(Table 28)

Compared to 1975 when producers' coal stocks in the Community as a whole more than doubled, their rise in 1976 was less steep having been of the order of 6%.

However, movements in producers' stocks were spread very unevenly among member countries. While they changed little in the UK and dropped by some 20% in France, they rose by over 25% in Germany and by some 40% in Belgium. The basic factor underlying these differences was the weakness of the market for coking coal in contrast to buoyant coal demand for electricity generation.

This factor is further underlined by the growth in producers' unsold supplies of coke by close on 40% to some 18 million tonnes. Of these, some 12.8 million tonnes lay with German producers at the end of the year, a rise of about 50% in 12 months.

Although, as in the case of coal stocks, the increase in unsold supplies of coke in 1976 was much smaller than it had been the previous year, it was large both by comparison to annual coke production and to the rise in coal stocks. The reasons for this are explained in Sections III (2) and VI (2).

To lighten the financial burdens imposed on the German coal industry of carrying large stocks, the government has taken over financial responsibility for some of these as a federal reserve. At the end of 1976, this amounted to some 5.2 million tonnes of coal and three million tonnes of coke. However, for statistical purposes, these continue to be treated as producers' stocks.

Furthermore, the Commission has submitted a proposal to the Council to finance up to 30% of the cost of half the producers' coal and coke stocks up to a maximum of 20 million tonnes from the Community budget.

### 2. Coal stocks at power stations

(Table 29)

In 1975 the Council agreed to a Regulation requiring both oil and coal-fired power stations to carry 30 days supplies of their respective fuels.

However, Table 29 shows that much larger stocks are usual and demonstrates the very different stocking policies pursued by the electricity generating industries

in various member countries ranging from two months supplies in Germany to a year's supplies carried in Denmark. In part, the different policies are determined by whether the power station's coal supplies are mined close by or have to be shipped over long distances.

As absolute quantities, the UK power station stocks of some 19 million tonnes are by far the largest, but in terms of average daily consumption, they lie about in the middle of the various member countries. Of these stocks, approximately one-third is financed by the coal industry.

In the Community as a whole, total coal stocks at power stations rose by under 2% in 1976, compared to a rise in coal consumption of 20%. However, very different developments in coal consumption and in stocks in the member countries do not permit the general conclusion to be drawn that there has been a deterioration in the security of the Community's power station coal supply position.

On the other hand, it should be borne in mind that the number of day's supplies carried at power stations shown in Table 29 refers to consumption in 1976, a year well below maximum potential industrial activity and free from serious disturbances in the energy market. A brisk upturn in the economy or substantial dislocation in the Community's energy supply pattern could lead to higher utilization of coal-fired generating capacity in which case the stocks would be consumed at a considerably faster rate than indicated in the table.

TABLE 1 Shares of the various forms of primary energy in gross internal energy consumption  $\inf_{\left(\text{in \%}\right)}$ 

1975	Coal and equivalent	Brown coal and equivalent	Oil and equivalent	Natural gas	Primary electricity	Other fuels	Total
Belgium	22.9	_	53.2	20:3	3.5	0.1	100.0
Denmark	12.3		86.5	_	1.2	_	100.0
Germany (FR)	19.7	10.1	51.2	14.4	4.3	0.3	100.0
France	15.4	0.5	63.6	9.5	10-9	0.1	100-0
Ireland	7.3	13.2	77-4	-	2·1	Michaeles	100.0
Italy	6.2	0.3	70.2	14.6	8.5	0.2	100.0
Luxembourg	44.0	0.4	29.4	8.0	18.2		100.0
Netherlands	4.1		40.2	5 <b>4</b> ·5	1.2	<del></del>	100.0
United Kingdom	35.7		44.4	15:7	4.2	_	100-0
Community	19-6	3.0	55.0	16-4	5.8	0.2	100-0
1976 (provisional)							
Belgium	22.3	_	54.4	19:9	3.3	0.1	100-0
Denmark	14.0		85·1	_	0.9	_	100.0
Germany (FR)	20.0	9.3	52.4	14.3	3.7	0.3	100.0
France	15.9	0.5	65.3	9.9	8-4	_	100.0
Ireland	6.5	14.7	76-2	_	2.6	_	100.0
Italy	6.2	0.3	69-6	16.6	7.1	0.2	100.0
Luxembourg	33.1	0.2	44.8	7.2	14.7	_	100.0
Netherlands	4.8	_	39-2	54.5	1.1	0.4	100-0
United Kingdom	35.9		42.7	16-6	4.8		100-0
Community	19.7	2.9	55·1	17:0	5.1	0.2	100.0

TABLE 2

A. Gross domestic product in terms of volume (% variation compared with previous year)

	1975 (actual)	1976 (provisional)	1977 (forecasts)
Belgium	- 2.0	+ 3.5	+ 3.0
Denmark	- 1.0	+ 4.8	+ 2.0
Germany (FR)	- 3.5	+ 5.4	+ 5.0
France	- 1.3	+ 5.0	+ 3.0
Ireland	- 0.5	+ 3.5	+ 3.5
Italy	- 3.7	+ 5.8	+ 2.0
Luxembourg	- 7.7	+ 2.9	+ 3.0
Netherlands	- 0.9	+ 3.6	+ 4.0
United Kingdom	- 1.3	+ 0.9	+ 1.5
Community	- 2.2	+ 4:3	+ 3.5

### B. Trend of industrial production (% variation compared with the previous year)

	1975 (actual)	1976 (provisional)	1977 (forecasts)
Belgium	- 9.8	+ 9.0	+ 3.0
Denmark	- 4.0	+ 4.5	+ 3.0
Germany (FR)	- 6.2	+ 6.8	+ 6.5
France	- 7.2	+ 8.8	+ 2.5
Ireland	- 6.2	+ 12.0	+ 6.0
Italy	- 8.9	+ 11.5	+ 3.5
Luxembourg	- 21.9	+ 6.4	+ 6.0
Netherlands	- 4.5	+ 7.3	+ 5.5
United Kingdom	- 4.9	+ 1.8	+ 4.5
Community	- 6.6	+ 7-1	+ 4.5

TABLE 3

Community's coal consumption by sector

(in 1 000 tonnes of coal equivalent)

				•	, ,
	1975 (actual)	(estimates)	1977 (forecasts)	1976/1975 %	1977/1976 %
Coke-ovens	102 755	101 230	99 700	- 1.5	- 1.5
Thermal power stations	100 601	120 887	124 277	+ 20.2	+ 2.8
Iron and steel industry	2 673	2 700	2905	+ 1.0	+ 7.6
Other industries	12 672	11 640	12 625	- 8.1	+ 8.5
Domestic heating	22 881	20 731	19 125	- 9.4	- 7.7
Briquettes	6 204	5 2 5 0	5 045	- 15.4	- 3.9
Gasworks	1826	1 370	1 265	- 25.0	- 7.7
Consumption for production	2 489	2 725	2825	+ 9.5	+ 3.7
Others	186	250	235	+ 34.4	- 0.6
Total	252 287	266 783	268 002	+ 5.7	+ 0.5
		J	L	L	

TABLE 4

Pig iron production

(in 1 000 tonnes) 1976 (estimates) 1977 (forecasts) 1976/1975 1977/1976 % 1975 (actual) Belgium 9 180 9 9 6 1 10 275 8.5 + 3.2 Denmark Germany (FR) 30 074 31 849 33 350 5.9 + 4.7 France 19 000 17 921 19 027 6.2- 0.1 Ireland Italy  $11\,696$ 11412 $12\,500$ 2.56.9 Luxembourg 38893 756 4 125 3.4 + 9.8 Netherlands  $3\,970$  $4\,265$ 7.4 4 300 + 0.8 United Kingdom  $12\,138$ 14 090 14 750 + 4.7 + 16.1 88 584 Community 94 644 98 300 + 6.8 + 3.9

(in kilograms per tonne) (actual) (estimates) (forecasts) Belgium Germany (FR) France Italy Luxembourg Netherlands United Kingdom

	,	r	T		(in 1 000 tonnes)
	1975 (actual)	1976 (estimates)	1977 (forecasts)	1976/1975 %	1977/1976 %
Belgium	5 721	6 160	6 325	+ 7.7	+ 2.7
Denmark	29	40	40	+ 38.0	_
Germany (FR)	17 8 63	18 500	19 000	+ 3.6	+ 2.7
France	10 580	11 000	10 935	+ 4.0	- 0.6
Ireland	-	10	10	_	_
Italy	6 277	6 390	6 870	+ 1.8	+ 7.5
Luxembourg	2 343	2 175	2 235	- 7.2	+ 2.8
Netherland	2 081	2 065	2 150	- 0.8	+ 4.1
United Kingdom	8 703	9 590	10 130	+ 10.2	+ 5.6
Community	53 59%	55 930	57 695	+ 4.4	+ 3.2
Detail:					
Input in blast furnaces	46 264	48 460	49 615	+ 4.7	+ 2.4
Sintering	6 926	6 9 1 5	7 560	- 0.2	+ 9.3
Others	407	555	530	+ 36.3	<b>- 4</b> ⋅5

TABLE 7

Community coke-oven coke consumption by sector

		<b>Y</b>		(1	in 1 000 tonnes)
	1975 (actual)	1976 (estimates)	1977 (forecasts)	1976/1975 %	1977/1976 %
Iron and steel industry	53 597	55 940	57 695	+ 4.4	+ 3·1
Other industries	4 852	5 002	4 977	+ 3·1	- 0.5
Domestic heating	6 554	6 303	5 873	- 3.8	- 6.8
Others	1 1 1 1 9	850	770	- 24.0	- 9.4
Total	66 122	68 095	69 315	+ 3.0	+ 1.8

TABLE 8 A

Nett electricity production

		19 ( <b>act</b>	975 t <b>ual)</b>	(estim	76 nates)	(forec	77 casts)
		TWh	%	TWh	%	TWh	%
Belgium							
Thermal		32.2	82.6	35.0	78.1	35.2	75.2
Hydraulic		0.4	1.0	0.3	0.7	0.5	1.1
Nuclear		6.4	16.4	9.5	21.2	11.1	23.7
Geothermal		_	_	_		_	
	Total	39.0	100.0	44.8	100.0	46.8	100-0
Denmark							
		17.0	100.0	10.6	00.0	00.6	1000
Thermal		17.6	100.0	19.6	99.9	20.6	100-0
Hydraulic Nuclear			_	-	0.1	_	_
Nuclear Geothermal		_		_	_	_	
Geomermai		_				_	
	Total	17.6	100.0	19-6	100-0	20.6	100-0
Germany (FR)							
Thermal		246.7	87.0	279.0	88.9	275.3	83·1
Hydraulic ,		16.8	5.9	12.5	4.0	17.7	5.3
Nuclear		20.2	7.1	22.4	7.1	38.3	11.6
Geothermal		_	_		_	_	_
	Total	283.7	100.0	313-9	100.0	331.3	100-0
France							
Thermal		101.2	56.7	131-1	67.3	124-1	59.5
Hydraulic		59.9	33.6	48.7	25·0	60.2	28.9
Nuclear		17·4	9.7	15.0	7.7	24.3	11.6
Geothermal		_	_	-		240	
	Total	178.5	100.0	194.8	100.0	208.6	100.0
7 1 7		•					
Ireland		0.0	00.4		00.0		00 =
Thermal		6.6	90.4	7.3	89.3	7.4	89.2
Hydraulic		0.7	9.6	0.9	10.7	0.9	10.8
Nuclear		_	_	—			
Geothermal	Total	- 7⋅3	100.0	- 8·2	100.0	8.3	- 100·0

-			75 :ual)	19 (estin		(forec	77 :asts)
		TWh	%	TWh	%	TWh	%
Italy							
Thermal		92.6	65.7	108.7	69-9	114-4	69:0
Hydraulic		42.4	30.1	40.9	26.3	42.5	25.7
Nuclear		-3.6	2.6	3.6	2.3	6.3	3.8
Geothermal		2:3	1.6	2.4	1.5	2.5	1.5
	Total	140.9	100.0	155-6	100.0	165:7	100-0
Luxembourg							
-	ĺ	0.0	64.9	1.0	05.5	1.0	50.0
Thermal		0.9	64.3	1.0	65.5	1.0	52.6
Hydraulic Nuclear		0.5	35.7	0.5	34.5	0.9	47.4
Nuclear Geothermal				_	_	_	_
Geothermai						_	_
	Total	1.4	100-0	1.5	100.0	1.9	100.0
Netherlands							
Thermal		48.5	93-8	52.0	93.4	54.9	94.3
Hydraulic			_	_	_	_	_
Nuclear		3.2	6.2	3.7	6.6	3.3	5.7
Geothermal		_	_	_	_	_	_
	Total	51.7	100-0	55.7	100-0	58.2	100-0
United Kingdom							
Thermal	İ	000.7	07.7	001.0	00.0	0050	0.4.6
Hydraulic		222.7	87.7	221.8	86.0	225.0	84.6
Nuclear		4·9 26·5	1.9 10.4	5·1 31·2	2·0 12·0	5.0 36.0	1·9 13·5
Geothermal		20·3 —	10.4	51.2	12.0	30.0	13·3 —
	Total	254:1	100.0	258·1	100-0	266-0	100-0
Community							
Community		<b>F</b> 000 00		05			
Thermal	į	768-9	79.0	855.5	81.3	857-9	77.5
Hydraulic		125.7	12.9	108.9	10.4	127.7	11.5
Nuclear		77:3	7.9	85.3	8.1	119.3	10.8
Geothermal		2.3	0.2	2.4	0.2	2.5	0.2
	Total	974.3	100.0	1052·1	100.0	1 107-4	100.0

 $TABLE\ 8\ B$  Fuel consumption by conventional power plants and coverage of requirements in %

			975 t <b>ual)</b>		)76 mates)	(fored	77 casts)	% in	crease
		1 000 tce	%	1 000 tce	%	1 000 tce	%	1976/1975	1977/1976
Belgium									
Coal		2 211	19.4	2 758	22.2	2 735	22.5	+ 24.7	- 0.8
Lignite Oil products		5 031	44.2	5 4 2 6	43.6	4 868	_ 40·1	+ 7.9	- 10·3
Natural gas		3 205	28.2	3 252	26.2	3 425	28.2	+ 1.5	+ 5:3
Other fuels		938	8.2	990	8.0	1 124	9.2	+ 5.5	+ 13.3
	Total	11 385	100-0	12 426	100.0	12 152	100.0	+ 9.1	- 2.2
Denmark									
Coal		2 284	35.9	3 356	47.2	3 560	47.4	+ 46.9	+ 6.1
Lignite Oil products Natural gas		4 087	64·1	3 751	52.8	3 944	52·6	- 82	+ 5.2
Other fuels		_		_					
	Total	6 371	100.0	7 107	100.0	7 504	100.0	+ 11.6	+ 5.6
Germany (FR)									
Coal		26 345	29.5	33 915	34.4	33 500	33.3	+ 28.7,	- 1.2
Lignite		29 955	33.6	32 907	33-3	32 900	32.8	+ 9.8	
Oil products		9 526	10.7	9 9 9 4	10.1	10 700	10.6	+ 4.9	+ 7.0
Natural gas		18 378	20.6	17 349	17-6	18 400	18.3	- 5.6	+ 6.1
Other fuels		4 994	5.6	4 543	4.6	5 000	5.0	- 9.0	+ 10.1
	Total	89 198	100.0	98 708	. 100-0	100 500	100.0	+ 10-7	+ 1.8
France									
Coal		9 481	28.5	15 014	34.3	16 120	3 <b>8</b> ·3	+ 58.4	+ 7.4
Lignite		970	2.9	1 251	2.9	1 130	2.7	+ 29.0	- 9.6
Oil products		16 812	50-6	21 520	49.2	18 530	44·()	+ 280	- 13:9
Natural gas		3 640	11.0	3410	7.8	3 605	8.6	- 6.3	+ 5.7
Other fuels		2 343	7.0	2 545	5.8	2 715	6.4	+ 86	+ 6.7
and the second s	Total	33 246	100.0	43 740	100-0	42 100	100.0	+ 31.6	- 4.7
Ireland									
Coal		37	1.4	38	1.3	38	1.3	+ 2.7	_
Peat		843	32·1	966	33.5	960	32.6	+ 14.6	- 0.6
Oil products		1 744	66.5	1 881	65.2	1 947	66.1	+ 7.9	+ 3.5
Natural gas		_	_	-	_	-	-	_	
Other fuels		_	-	_	-	-	_	_	_
	Total	2 624	100.0	2 885	100.0	2 945	100.0	+ 9.9	+ 2.1

		19 (act	75 ual)		76 nates)	19 (fore	77 casts)	% inc	crease
		1 000 tce	%	1 000 tce	%	1 000 tce	%	1976/1975	1977/1976
Italy									
Coal Lignite Oil products Natural gas Other fuels	Total	616 486 25 920 2 434 1 513 30 969	2·0 1·6 83·7 7·8 4·9 100·0	1 210 463 28 140 4 500 1 717 36 030	3·3 1·3 78·1 12·5 4·8 100·0	1 743 529 28 707 4 757 1 564 37 300	4·7 1·4 77·0 12·7 4·2 100·0	+ 96·4 - 4·7 + 8·6 + 84·9 + 13·5 + 16·3	+ 44·0 + 14·2 + 2·0 + 5·7 - 8·9 + 3·5
Luxembourg									
Coal Lignite Oil products Natural gas Other fuels	Total	10 - 117 101 225 453	2·2 - 25·8 22·3 49·7 100·0	98 190 176 465	0·2 - 21·1 40·9 37·8 100·0	11 - 143 114 231 449	2·2 - 28·7 22·8 46·3 100·0	- - 16·2 + 88·1 - 21·8 + 2·6	- + 45·9 - 66·7 + 31·2 + 7·3
Netherlands									
Coal Lignite Oil products Natural gas Other fuels	Total	160 - 1187 14089 912 16348	1·0 - 7·3 86·1 5·6 100·0	1 010  1 588 13 879 818 17 295	5·8 - 9·2 80·3 4·7 100·0	1 030 - 1 600 14 620 900 18 150	5·7 - 8·8 80·5 5·0 100·0	+ 531·3 - + 33·8 - 1·5 - 10·3 + 5·8	+ 2·0 - + 0·8 + 5·3 + 10·0 + 5·0
United Kingdom									
Coal Lignite Oil products Natural gas Other fuels	Total	59 457 - 20 489 3 130 704 83 780	71·0 - 24·5 3·7 0·8 100·0	63 585 - 16 806 2 694 560 83 645	76·0 - 20·1 3·2 0·7 100·0	65 540  16 340 1 920 700 84 500	77-6 - 19-3 2-3 0-8 100-0	+ 69 - 180 - 139 - 205 - 02	+ 30 - - 2·7 - 28·7 + 25·0 + 1·1
Community									
Coal Lignite Oil products Natural gas Other fuels	Total	100 601 32 254 84 913 44 977 11 629 274 374	36·7 11·8 30·9 16·4 4·2 100·0	120 887 35 587 89 204 45 274 11 349 302 301	40·00 11·8 29·5 15·0 3·7 100·0	124 277 35 519 86 779 46 841 12 234 305 650	40.7 11.6 28.4 15.3 4.0	+ 20·2 + 10·3 + 5·1 + 0·7 - 2·4 + 10·2	+ 2·8 - 0·2 - 2·7 + 3·5 + 7·8 + 1·1

TABLE 9

Coal and coke-oven coke consumption in various industries (1)

(not including power stations)

						(in 1 000 tonnes)
		1975 (actual)	1976 (estimates)	1977 (forecasts)	1976/1975 %	1977/1976 %
Belgium		1 150	1 000	1 055	- 3.0	+ 5.5
Denmark		547	515	510	- 5.8	- 1.0
Germany (FR)		3 572	3 250	3 400	- 9.0	+ 4.6
France		2 547	2 500	2 500	- 1.9	_
Ireland		60	60	60	_	-
Italy		725	775	790	+ 6.9	+ 1.9
Luxembourg		1	2	4	-	_
Netherlands		247	290	265	+ 17.4	- 8.6
United Kingdom		8 282	8 250	9 020	- 0.4	+ 9.3
*						
(	Community	17 131	16 642	17 604	- 2.8	+ 5.8

<sup>(1)</sup> Coke-oven coke assigned a value of unity.

TABLE 10 Deliveries of solid fuels for domestic heating (including issues to mineworkers)

					nnes of coal equiva
	1975 (actual)	1976 (estimate)	1977 (forecasts)	1976/1975 %	1977/1976
Belgium	2.5	2.1	2.0	- 15.3	- 7:5
of which: coal	2.0	1.8	1.7	- 9.9	- 7.7
patent fuel	0.4	0.2	0.2	- 32.6	- 16.0
coke	0.1	0.1	0.1		- 40.0 (
Denmark	0.1	0.1	0.1		- 5.0
Germany (FR)	10.4	9:4	8.4	- 9.6	- 9.4
of which: coal	3.0	2.7	2:5	- 10.4	- 5.7
patent fuel	1.4	1.2	1.2	- 7.0	+ 1.5
coke	3·1	2.8	2.4	- 7.4	- 14.0
lignite and briquettes	2.9	2.7	2.3	- 8.9	- 13.3
France	6.7	6.3	5.8	- 6.9	– 7·1
of which: coal	3.4	3.4	3.2	- 2.0	- 6.5
patent fuel	2.8	2.4	2.2	- 13:3	- 7.8
coke	0.3	0.3	0.3	- 3.0	- 6.2
lignite and briquettes	0.2	0.2	0.2	- 11.2	- 10.5
Ireland	1.0	0.9	0.9		
of which: coal and coke	0.6	0.5	0.5		- 6.5 (
peat and briquettes	()-4	0.4	0.4		- `
Italy	0.6	0.5	0.4	- 16.6	- 12·1
of which: coal and patent fuel	- 0:3	0.3	0.2	- 16.6	- 24·0
coke	0.3	0.2	0.2	- 4.2	_
Luxembourg	0.1	_	_	- 7.5	- 10.2
Netherlands	0.2	0.1	0.1	-17.5	- 23·3
United Kingdom	17:9	16:5	15·3	- 7·8	- 7.0
of which: coal	13.4	12.0	11.0	- 10.7	- 8.3
patent fuel	1.2	1.2	1.2	_	_
coke	3:3	3.3	3·1	_	- 4.5
Community	39.5	36.0	33•2	- 8.8	- 7.6
of which: Coal	22.9	20.7	19·1	- 9.5	- 7.7
patent fuel	5.8	5.1	4.9	- 12·5	- 4.0
coke	7.1	6.9	6.3	- 3.3	8.0
lignite and peat	3.6	3.3	2.9	- 8.2	- 11:5

(1) Variation 1977/75.

NB: Difference due to rounding off.

TABLE 11 Hard coal production by areas

(in 1 000 tonnes, t = t)

			(in 1 000 tonnes, t
	1975 (actual)	1976 (provisional)	1977 (forecasts)
Campine	5 972	6112	6 325
Sud 1	1 507	1 126	925
BELGIUM	7 479	7 238	7 250
Ruhr	81 760	79 021	77 400
Aachen .	6 0 1 7	5 674	5 690
Niedersachsen	2011	2 007	2 330
Saar	8 975	9 295	9 200
Kleinzechen	396	329	360
GERMANY (FR)	99 161	96 326	94 980
National series	(92 393)	(89 269)	(87 800)
Nord/Pas-de-Calais	7 715	7 318	6 530
Lorraine	10 021	9 9 7 0	10 000
Centre-Midi	4 678	4 563	4 270
FRANCE	22 414	21 851	20 800
IRELAND	48	50	50
Scotland	9 945	9 433	
North East	14 940	13 402	٠.
Yorkshire	32 766	31 024	
North West	12390	11 564	٠.
Midlands	37258	36 258	• •
South Wales	8 752	8 001	
Kent	730	(2)	
Licensed mines	625 }		
Opencast	10 413∫	12 522	
UNITED KINGDOM	127 819	122 204	125 000
COMMUNITY(1) t = t	256 923	247 669	248 080
National series	(250 153)	(240 612)	(240 900)

<sup>(1)</sup> Difference due to rounding off. (2) Kent: included in the Midlands.

TABLE 12

Hard coal production

(in 1 000 tonnes of coal equivalent)

				(171	1 000 tonnes of	coat equivatent)
		1975	1976	1977	Chang	ge in %
		(actual)	(provisional)	(forecasts)	1976/1975	1977/1976
Belgium		6 788	6 530	6 580	- 3.8	+ 0.8
Germany (FR)		93 688	90 700	89 750	- 3.2	- 1:0
France		20 439	20 000	18 970	- 2·1	- 51
Ireland		48	50	50	+ 4.2	_
United Kingdom		116 005	110 300	113 500	- 4.9	+ 2.9
	Community	236 970	227 580	228 850	- 4.0	+ 0.6

 $\label{eq:table 13} \textbf{Average number of miners working below ground}$ 

(in 1 000's)

				Difference	1976/1975	Difference	1977/1976
	1975 (actual)	1976 (provisional)	1977 (forecasts)	1 000 men	Ýo	1 000 men	%
Belgium	18.7	17.7	16.6	- 1.0	- 5.4	- 1.1	- 6.2
Germany (FR)	109.8	105.8	102.5	- 4.0	- 3.6	- 3.3	- 3·1
France	40.5	38.0	35.5	- 2.5	- 6.2	- 2.5	- 6.6
Ireland	0.3	0.3	0.3	_	_	_	_
United Kingdom	172.7	169.8	166.5	- 2.9	- 1.7	- 3:3	- 2.0
Community	342.0	331-6	321-4	- 10.4	- 3·1	- 10.2	- 3·1

TABLE 14

Output per underground manshift

		kg per ma <b>n</b> shi	ft	Chan	ge in %
	1975 (actual)	1976 (estimates)	1977 (forecasts)	1976/1975	1977/1976
Belgium	2 426	2 524	2665	+ 4.0	+ 5.6
Germany (FR)	4 062	4 151	4 230	+ 2.2	+ 1.9
France	2 761	2 785	3 100	+ 0.9	+ 11.3
United Kingdom	3 493	3 400	3 565	- 2.7	+ 4.9

TABLE 15

Production costs and revenue per tonne
(% variations according to data supplied in national currencies)

	Produc	tion costs	Rev	venue	
	1975/1974	1976/1975 (provisional)	1975/1974	1976/1975 (provisional)	
Belgium	+ 28.2	+ 11.5	+ 44·1	- 0.1	
Germany (FR)	+ 17.6	+ 6.8	+ 21.5	+ 9.4	
France	+ 27.3	+ 9.5	+ 26.7	+ 6.6	
United Kingdom	+ 30.2	+ 28.6	+ 47.9	+ 23.0	

TABLE 16

State aids to the coal industry
(Direct and indirect aids)

(in u.a. per tonne produced)

Direct aids (1) Indirect aids Total 1975 1975 1975 1976 1976 1976 Belgium 16.451.281.72 17.73 Germany (FR) 2.18 2.17 0.09 0.20 2.27 2.37 France 6.33 6.99 0.16 0.23 6.497.22 United Kingdom 0.11 0.28 0.11 0.28 Community 1.94 0.09 0.15 2.03

<sup>(1)</sup> Including aids in respect of coking coal.

TABLE 17

Investments in coal production and preparation

(in millions EUA)

			(in millions EUA)
	1975 (actual)	1976 (estimates)	1977 (forecasts) (1)
	7.6	14·1	1.8
	161-4	203.5	139•3
	27.7	41.3	45.4
	340-9	337.4	308.4
			, , , , , , , , , , , , , , , , , , , ,
Total	537-6	596-3	494.9
	Total	7.6 161.4 27.7 340.9	7.6 14·1 161·4 203·5 27·7 41·3 340·9 337·4

<sup>(1)</sup> Excluding investments not formally decided or engaged.

TABLE 18

Pit closures

		19	976	19	77
		Number	1975 output (1 000 tonnes)	Number	1975 output (1 000 tonnes)
Belgium (South)		2	247	2	310
Germany (FR)					
– Ruhr		3	3 660	-	_
France					
- NPC		2	464	1	709
United Kingdom					
- Scottish		1	91		
– North East		1	201		
- South Wales		2	112		
	Total UK	4	404		
	Community	11	4 775	3 (1)	1 019 (1)

 $<sup>(\ ^{1})</sup>$  Total excluding United Kingdom.

TABLE 19

Listed pithead prices for Community coal at 15 January 1976, 1 April 1976 and 15 January 1977

										(in national	(in national currency per tonne)
Category	Туре	• Date	Ruhr DM	Aachen DM	Saar DM	Belgium Bfrs	Nord FF	Lothringen FF	South Wales ${\cal E}$	Scottish ${\cal E}$	North Yorkshire ${\cal E}$
Anthracite	Nuts 3 20/30 mm 34 – 14"	15. 1. 1976 1. 4. 1976 15. 1. 1977	219-00 219-00 219-00	111		3 125 3 125 3 450	351·00 381·00 381·00		29-77 34-20 34-20		
Lean coal	Nuts 3 20/30 mm 3/4 – 11/4"	15. 1. 1976 1. 4. 1976 15. 1. 1977	211.00 211.00 211.00	205-00 205-00 205-00		2 970 2 970 3 350			25-39 29-13 29-13		
Semi-bituminous	Nuts 4 10/20 mm 0 - ¾"	15. 1. 1976 1. 4. 1976 15. 1. 1977	167-00 167-00 167-00	181.00 181.00 181.00		2 390 2 390 —			18-80	1	111
Long flame	Nuts 2 30/50 mm 1½-3/s"	15. 1. 1976 1. 4. 1976 15. 1. 1977	155·50 155·50 155·50		176-00 176-00 176-00	2 450 2 450 2 450		216.00 235.00 235.00	19·39	22·54 26·08 26·08	1949 22·05 22·05
Long flame	Nuts 5 6/10 mm 0 - 1"	15. 1. 1976 1. 4. 1976 15. 1. 1977	157·50 157·50 157·50		173-00 173-00 173-00	2 450 2 450 2 450		$192.00 (2) \\ 209.00 (3) \\ 209.00 (3)$		20-96 25-10 25-10	17.52 19.98 19.98
Coking coal	Medium or high volatile(*)	15. 1. 1976 1. 4. 1976 15. 1. 1977	165·50 165·50 165·50	167·50 167·50 167·50	180-00 (4) 180-00 180-00	2 350 2 350 2 050	360-00 320-00 320-00	310-00 ( <sup>4</sup> ) 338-00 338-00	27·17 ( <sup>4</sup> ) 33·27 33·27	23·43 ( <sup>4</sup> ) 27·07 27·07	21·26 ( <sup>4</sup> ) 25·10 25·10
Coke	Blast furnace $> \frac{1}{2}$ $> 40 \text{ mm}$	15. 1. 1976 1. 4. 1976 15. 1. 1977	258-00 258-00 258-00	257-00 257-00 257-00	286-00 286-00 286-00	3 700 (1) 3 850 3 850	530-00 480-00 480-00	461-00 502-00 502-00	48.87 57.23 57.23	47.88 56.25 56.25	47·39 55·76 55·76

(1) Zeebrugge large graded coke. (2) Power stations: 232:90 to 241:56. (3) Power stations: 254:00 to 264:00. (4) High volatile.

TABLE 20

Listed pithead prices for Community coal at 15 January 1976, 1 April 1976 and 15 January 1977

													(in \$ pe	(in \$ per tonne) (1) (2)
	Type	Date	Ruhr	Aachen	Saar	Belgium	Nord	Lothringen	South Wales	Scottish	North Yorkshire	Lowest	Highest	Difference
20°,	Nuts 3 20/30 mm 3/4 - 1 <sup>1</sup> / <sub>4</sub> "	15.1.1976 1.4.1976 15.1.1977	83:52 86:73 93:58	1 1 1		79-05 80-34 96-55	78·37 81·47 77·36	1 1 1	60-23 64-96 58-36		[ ] !	60-23 64-96 58-36	83.52 86.73 96.55	39 34 65
ZXX	Nuts 3 $20/30 \text{ mm}$ $3/_4 - 1^1/_4$ "	15.1.1976 1.4.1976 15.1.1977	80-47 83-56 90-16	78·18 81·19 87·60		75·13 76·35 93·75	111	1   1	51·37 55·33 49·71			51·37 55·33 49·71	80-47 83-56 93-75	57 51 89
2-0	Nuts 4 10/20 mm $0 - \sqrt{4}$	15.1.1976 1.4.1976 15.1.1977	63-69 66-14 71-36	69-03 71-68 77-34		60.46			38.04		111	38-04 61-44 71-36	69-03 71-68 77-34	81 17 8
Zer	Nuts 2 30/50 mm 11/4-3/8"	15.1.1976 1.4.1976 15.1.1977	59·31 61·58 66·44		67-12 69-70 75-20	61.98 62.99 68.57		48-23 50-25 47-72	39·23 —	45.61 +9.54 +4.50	39-43 41-88 37-62	39-23 41-88 37-62	67-12 69-70 75-20	71 66 100
2,95	$\begin{aligned} \mathbf{Nuts} \ 5 \\ 6/10 \ \mathrm{mm} \\ 0-1 \end{aligned}$	15.1.1976 1.4.1976 15.1.1977	60-07 62-38 67-30		65-98 68-52 73-92	61.98 62.99 68.57	111	$\begin{array}{c} 42.87(4) \\ 44.69(5) \\ 42.44(6) \end{array}$	111	42-41 47-68 42-83	35-45 37-95 34-09	35-45 37-95 34-09	65-98 68-52 73-92	86 81 117
242	Medium or high volatile	15.1.1976 1.4.1976 15.1.1977	63·12 65·54 70·72	63.88 66.34 71.57	68-65( <sup>3</sup> ) 71-29 76-91	5945 6043 5737	80-38 68-43 64-98	69-21(3) 72-28 68-23	54-97(3) 63-20 56-77	47-41(3) 51-42 46-19	43·02(3) 47·68 42·83	43.02 47.68 42.83	80-38 72-28 76-91	87 52 80
1	Blast furnace $> \frac{1}{2}$ /2 $> 40$ mm	15.1.1976 1.4.1976 15.1.1977	98:39 102:18 110:24	98-01 101-78 109-82	109-07 113-27 122-21	93·60 98·98 107·75	118:33 102:64 97:46	102-93 107-35 101-93	96·88 108·71 97·65	98-88 106-85 95-98	95.88 105.92 95.14	93-60 98-98 95-14	118·33 113·27 122·21	26 14 28
(1) Dollar exchange rate DM 2. 1. 1975 2.622 1. 4. 1976 2.34 (2) Prices are not adjusted for quilly from power stations: 52.00 to (3) For power stations: 52.00 to (4) For power stations: 52.00 to (5) For power stations: 52.00 to (6) For power stations: 52.00 to (7) For power stations: 52.00 to (9) For power stations: 52.00 to (9) For power stations: 51.58 to (9)	Dollar exchange rate DM Index 2. 1. 1975 2.62.2 100 1. 4. 1976 2.52.5 96 4. 1. 1977 2.34 89 Prices are not adjusted for quality differences. High volatile. For power stations: 52-00 to 53-93 \$/tonne. For power stations: 54-31 to 56-45 \$/tonne. For power stations: 51-58 to 53-61 \$/tonne.	<b>Bfrs</b> 39-53 38-89 35-73	Index 100 98 90	FF 4 479 4 676 4 924	Index 100 104 110	£ 0.49 0.52 0.58	Index 100 106 118							

TABLE 21 Coke-oven-coke production capacity

					+		(in millions tonnes
	Belgium	Germany (FR)	France	Italy	Netherlands	United Kingdom	Community
1975				,			
Colliery coke ovens		26.9	7.6		_	4-7	39.2
Iron and steel industry coke ovens	7.9	8.9	6.9	8.4	2.4	10·3	44.8
Independent coke ovens	0.4			2.6	0.6	3.4 (1)	7.0
Total	8.3	35.8	14.5	11.0	3.0	18.4	91.0
of which coastal coking plants	1.5.	0.5	4.0	11.0	3.0		••
1976							
Colliery coke ovens		26.9	7.5	_		4.8	39.2
Iron and steel industry coke ovens	7-7	9.6	6.7	9.0	2.5	11:1	46.6
Independent coke ovens	0.4	_	_	2.6	0.6	3·0 ( <sup>1</sup> )	6.6
Total	8.1	36.5	14.2	11.6	3·1	18.9	92.4
of which coastal coking plants	1.5	0.5	4.0	11.6	3·1		
1977							
Colliery coke ovens	_	25.8	7.0		_	4.8	37-6
Iron and steel industry coke ovens	7.8	9.6	6.7	9.0	2.5	12.2	47.8
Independent coke ovens	0.4		_	2.6	0.6	3.0 (1)	6.6
Total	8.2	35.4	13·7	11.6	3.1	20.0	92.0
of which coastal coking plants	1.5	0.5	4.0	11.6	3.1		

(1) Including LTC.

TABLE 22 Coke-oven coke

				Production of	(in 1 000 tonne coke-oven coke
		Coal deliveries to coking plants	Consumption of coal in coking plants	1 000 tonnes	Variation in % versus previous year
1975 (actual)					
Belgium		7 401	7 346	5728	- 289
Germany (FR)		44 589	44 555	34 818	- 04
France		14 838	14 831	11 445	- 6.8
Italy		10 996	10 996	8115	- 53
Netherlands		3 646	3 398	2680	_
United Kingdom		21 673	21 629	15 859	+ 0.5
	Community	103 143	102 755	78 645	- 4.4
1976 (estimated)					
Belgium		8 300	8 300	6400	+ 11.7
Germany (FR)		41 100	41 050	32 050	- 8.0
France		14 900	14 700	11 275	- 1.5
Italy		10 515	10 500	8 0 5 0	- 08
Netherlands		3 520	3 430	2700	_
United Kingdom		23 250	23 250	15 750	- 0.7
	Community	101 585	101 230	76 225	— 3·1
1977 (forecasts)					
Belgium		8 325	8 250	6 350	- 0.8
Germany (FR)		39 400	39 200	30 600	- 4.5
France		14 500	14 300	11 000	- 2.4
Italy		11 150	11 050	8 500	+ 56
Netherlands		3 650	3 500	2750	+ 1.8
United Kingdom		23 400	23 400	16 000	+ 1.6
	Community	100 425	99 700	75 200	— 1·4

TABLE 23

Coal supplies to coke ovens

			·	<u></u>	(in 1 000 tonnes,
	National coal	Coal from other ECSC countries	Total ECSC coal	Coal from third countries	Total supplies
Belgium					
1974	4 762	2 382	7 144	3 311	10 455
1975	4 052	1 837	5 889	1 704	7 593
1976	3 650	2 050	5 700	2 600	8 300
Germany (FR)					
1974	45 068	3	45 071	61	45 132
1975	44 327	229	44 556	33	44 589
1976	40 820	160	40 980	120	41 100
France					
1974	7 328	4 083	11 411	3 877	15 288
1975	6 806	3 720	10 526	4 4 1 0	14 936
1976	7 080	3 320	10 400	4 500	14 900
Italy					
1974		3 249	3 249	8 638	11 887
1975		2 800	2 800	8 333	11 133
1976		2 800	2 800	7 715	10 515
Netherlands					
1974	37	737	774	2 680	3 454
1975	_	893	893	2777	3 670
1976	_	760	760	2 760	3 520
United Kingdom					
1974	20 409	49	20 458	831	21 289
1975	21 287	15	21 302	690	21 992
1976	21 955	45	22 000	1 250	23 250
Community			,		
1974	77 604	10 503	88 107	19 398	107 505
1975	76 472	9 494	85 966	17 947	103 913
1976	73 505	9 135	82 640	18 945	101 585
NB: 1976 (estimates).	•	<b>L</b>			

TABLE 24

Trend of intra-Community trade in coal

(in 1 000 tonne								1 000 tonnes)		
From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxem- bourg	Netherlands	United Kingdom	Total receipts
Belgium 1975 1976 1977		 	3 373 3 450 3 410	98 90 100		 		3 -	350 200 260	3 824 3 740 3 770
1077			0110	100				-	200	
Denmark 1975		_	1		_		_		11	12
1976 1977	_	_ _	10	_ _	_ _ *	_ _	_	_ _	10 100	10 110
Germany (FR)										
1975 1976 1977	266 200 200	_ _ _	<u> </u>	317 400 340	 	  	_ _ _	212 20 —	401 580 560	1 196 1 200 1 100
France										
1975 1976 1977	174 70 80		5 511 4 600 4 560	_ _ _	_ _ _	_ _ _	_ _ _	9 -	795 430 270	6 489 5 100 4 910
Ireland										
1975 1976 1977	_ _ _		7 — —	<u> </u>	_ _ _	 		_ _ _	184 200 220	191 200 220
Italy										
1975 1976 1977	_ _ _	  	3 027 2 950 3 005	23 30 25	_ _ _		_ _ _	_ _ _	18 20 20	3 068 3 000 3 050
Luxembourg										
1975 1976 1977	32 15 —		403 490 590	20 20 5	_ _ _		_ _ _	_ _ _	22 15 —	477 540 595
Netherlands										
1975 1976 1977	28 20 20	:	1 055 850 875	3 10 5	_ _ _	_ _ _	_ _ _	_ _ _	116 100 300	1 202 980 1 200
United Kingdom										
1975 1976 1977	8 5 —	- - -	41 245 90	_ _ _	46 25 10	<u> </u>	_  	36 — —		131 275 100
Total deliveries										
1975 1976 1977	508 310 300	_ _ _	13 418 12 585 12 540	461 550 475	46 25 10	_ _ _		260 20 —	1 897 1 555 1 730	16 590 15 045 15 055

NB: 1975 (actual). 1976 (estimates). 1977 (forecasts)

 $\label{eq:table 25} \mbox{TABLE 25}$  Trend of intra-Community trade in coke

(in 1 000 tonnes)

(in 1 000 tonnes								1 000 tonnes)		
From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxem- bourg	Netherlands	United Kingdom	Total receipts
Belgium										
1975 1976 1977	  	  	173 250 280	179 100 100	 	_ _ _	 	178 140 120	64 65 60	594 555 560
Denmark										
1975 1976 1977	_ _ _		22 25 10	62 30 30		_ _ _	_ _ _	2 - -	19 25 40	105 80 80
Germany (FR)										
1975 1976 1977	48 70 60	6 10 10	 	129 195 155	14 — —	25 — —	_ _ _	75 75 75	205 100 100	502 450 400
France										
1975 1976 1977	89 90 70	_ _ _	2 267 2 240 2 335		 	41 70 70	 	338 300 325	35 — —	2 770 2 700 2 800
1975 1976 1977	_ _ _	_ _ _	  -	_ _ _	_ _ _	_ _ _	_ _ _	_ _ _	7 10 10	7 10 10
Italy										
1975 1976 1977	_ _ _	_ _ _	41 45 75	59 — —	_ _ _	_ _ _	_  _	_ _ _	21 — —	121 45 45
Luxembourg										
1975 1976 1977	84 90 90		2 231 2 040 2 090	15 20 30	  	_ _ _	_ _ _	2 - -	_ _ _	2 332 2 150 2 210
Netherlands										
1975 1976 1977	15 50 10	_ _ _	346 165 210	10 15 20		<u> </u>	 	 	47 — —	418 230 240
United Kingdom										
1975 1976 1977	_ _ _	_ _ _	_ _ _	  	_ _ _	<u>-</u>	  	_ _ _	_ _ _	_ _ _
Total deliveries										
1975 1976 1977	236 300 230	6 10 10	5 080 4 765 5 000	454 360 335	14 — —	66 70 70		595 515 520	398 200 210	6 849 6 220 6 375

NB: 1975 (actual). 1976 (estimates). 1977 (forecasts).

TABLE 26

Imports of coal from third countries
(in million tonnes)

A. By country of destination

	1975 (actual)	1976 (provisional)	1977 (forecasts)
Belgium and Luxembourg	2.4	3.5	3.1
Denmark	4·1	3.6	4.4
Germany (FR)	5.8	5.0	5.2
France	10.9	13.5	16.6
Ireland	0.5	0.4	0.4
Italy	9.6	9.4	10.1
Netherlands	2.8	3.8	3.6
United Kingdom	5.0	3.0	2:3
Community	41.1	42.2	45.7

### B. By country of origin

	1975 (actual)	1976 (provisional)	1977 (forecasts)
USA	13.8	14.2	13·1
Poland	14.6	15·1	17.6
USSR	3.7	3.8	3.4
Australia	5.8	4.6	4.3
South Africa	1.7	3.4	6.2
Others	1.5	1·1	1.1
Total	41.1	42.2	45.7

### C. By sector of consumption

		1973	1974 (actual)	1975	1976 (provisional)
Coking coal		17.0	19-4	17.7	19.1
Steam coal		8.0	11.7	17.8	1,8.8
Others		4.9	6.9	5.6	4.3
Т	Γotal	29.9	38.0	41·1	42.2

 $\label{eq:TABLE 27} TABLE\ 27$  Imports of coal from third countries – 1976

	γ	T		·	·	(	in million tonnes)
	USA	Poland	USSR	Australia	South Africa	Others	Total (1)
Belgium	2.1	0.3	0.3	0.3	0.3	0.2	3.5
Denmark	_	3.0	0.4	_	_	0.1	3.6
Germany (FR)	2.0	2.0	0.3	0.1	0.5	0.1	5.0
France	3.2	5.4	1.5	1.1	2.2	0.1	13.5
Ireland	_	0.4		_		_	0.4
Italy	3.8	2.9	1.3	1.1	0.4	_	9.4
Netherlands	2.2	1.0	_	0.5		0.1	3.8
United Kingdom	0.9	0.1		1.5	_	0.5	3.0
Community	14.2	15·1	3.8	4.6	3.4	1·1	42.2

NB: Difference due to rounding off. Provisional figures.

TABLE 28 Community producers' stocks

(in 1000 tonnes)

A. Stocks of coal at the end of:

		1975	1976	1977	Difference		
		(actual)	(provisional)	(forecasts)	1976/1975	1977/1976	
Belgium		806	1 120	1 120	+ 314	_	
Germany (FR)		9 290	11 645 (1)	13 355 (¹)	+ 2 355	+ 1 710	
France		5 494	4 4 1 6	3241	-1078	- 1 175	
Ireland		31	30	30	- 1	_	
United Kingdom		10 617	10 658	12 633	+ 41	+ 1 975	
	Community (4)	26 238	27 878 (3)	30 388 (3)	+ 1 631	+ 2 510	

### B. Stocks of coke-oven coke at the end of:

		1975	1976	1977	Differ	ence
		(actual)	(provisional)	(forecasts)	1976/1975	1977/1976
Belgium		115	90	90	- 25	_
Germany (FR)		8 2 1 7	12 779 (2)	14 779 (2)	+ 4 562	+ 2000
France		1 131	1 497	1 692	+ 366	+ 195
Italy		1 073	900	825	- 173	- 75
Netherlands		22	35	65	+ 13	+ 30
United Kingdom		2 439	3 025	3 025	+ 586	_
	Community (4)	12 997	18 326	20 476	+ 5 329	+ 2 150

<sup>(1)</sup> Including 5 178 of 'Notgemeinschaft' (2) Including 2 977 of 'Notgemeinschaft' (3) Including nine in Italy. (4) Differences due to rounding off.

### C. Stocks of coal and coke-oven coke, value in terms of coal equivalent for coke at the end of:

	1975	1976	1977	Diffe	rence
	(actual)	(provisional)	(forecasts)	1976/1975	1977/1976
Belgium	955	1 237	1 237	+ '282	_
Germany (FR)	19 972	28 258	32 568	+ 8 286	+ 4 310
France	6 964	6 362	5 440	- 602	- 922
Ireland	31	30	30	- 1	_
Italy	1 395	1 179	1 079	- 216	- 100
Netherlands	29	45	85	+ 16	+ 40
United Kingdom	13 788	14 591	16 566	+ 803	+ 1975
C	ommunity 43 134	51 702	57 005	+ 8 568	+ 5 303

TABLE 29 Stocks of coal at power stations

(in 1 000 tonnes)

	1974	1975	1976 (es	stimates)	Difference		
At the end of:	(actual)	(actual)	1 000 tonnes	days	1975/1974	1976/1975	
Belgium	520	579	550	65	+ 59	- 29	
Denmark	1 889	2711	3 000	350	+ 822	+ 289	
Germany (FR)	5 679	6 195	5 200	63	+ 516	- 995	
France	3 036	3 728	4 000	120	+ 692	+ 272	
Ireland	_	_	_	_	_	_	
Italy	410	729	450	130	+ 319	- 279	
Netherlands	276	215	250	73	- 61	+ 35	
United Kingdom	13 629	17 951	19 290	90	+ 4 322	+ 1 339	
Community	25 439	32 108	32 740	82	+ 6 669	+ 632	

# Balance of supply and demand: hard coal, 1977

								<i>(i)</i>	n 1 000 tonnes	(in 1 000 tonnes – national series)
	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg Netherlands	Netherlands	United Kingdom	Community
<ol> <li>Production</li> <li>Correction for recoveries</li> <li>Imports from third countries</li> <li>Receipts from other ECSC countries</li> </ol>	7 250 700 3 120 3 770	 4 350 110	87 800 + 6300 5200 1 100	20 800 + 1 600 16 590 4 910	50 — 395 220	 10 100 3 050	  17 595	_ _ 3 595 1 200		240 900 + 10 200 45 667 (15 055)
5. Total availabilities	14 840	4 460	100 400	43 900	665	13 150	612	4 795	129 000	296 767
6. Inland demand:  (a) power stations at mines (b) public power stations	320	3800	9 500	7 000	- 50	1500	- 5	1 000	200	17 020 125 805
	8 325 200 (-) 815 (-) 1 600	(-) 500 + 40	39 400 1 400 (1 000) 6 000 (4 000) 1 000	14 500 1 800 (300) 1 300 (-) 3 000	1   (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)	$ \begin{array}{c} 11150 \\ 30 \\ (-) \\ 190 \\ (-) \\ (-) \\ 150 \end{array} $	600 ( 2 ( ) 2 ( ) 2 ( )	3 650 - (-) (-) 100	23 400 375 (200) 8 720 (1 000) 9 000	100 425 4 405 (1 500) 17 627 (5 000) 15 395
	80 145 25 — 5 — 14515		400 1400 500 1100 150 1100 84950	150 2 200 400 - - - 44 550		50  80  13150			2 000 1 250 900 - - - 125 095	2 630 5 045 1 825 1 265 235 1 100 292 777
7. Exports to third countries 8. Deliveries to other ECSC countries 9. Total requirements	25 300 · 14 540	4 460	1 200 12 540 98 690	50 475 45 075	10	_  13150	_  612	5 — 4 795	200 1 730 127 025	1480 (15 055) 294 257
<ul><li>10. Producer's stocks (beginning)</li><li>11. Additions to/withdrawal</li><li>12. Producer's stocks (end)</li></ul>	1120		11 645 + 1 710 13 355	4416 - 1175 3241	30	6 -		1	10 658 + 1 975 12 633	27 878 + 2 510 30 388

Hard coal - intra-Community exchanges, 1977

					mind Comming Commings, 1577	(C) (S)				(in 1 000 tonnes)	
From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Total receipts	
Belgium	l		3410	100	l	I	I	l	260	3770	
Denmark			10		_		I	l	100	110	
Germany (FR)	200		-	340	_	I	1	l	560	1100	<u>,                                     </u>
France	80	l	4 560		l	_	I	1	270	4 910	
Ireland	l		I		l	l	l		220	220	
Italy	l	l	3 005	25	I		I		20	3 050	
Luxembourg	l		590	5	I		1		1	. 595	
Netherlands	20	-	875	5		ı	l	1	300	1 200	
United Kingdom	l		06		10	l	l			100	
Total deliveries	300	l	12 540	475	10	l	ı	I	1 730	15 055	
											_

Balance of supply and demand: coke-oven coke, 1977

	4									(in 1 000 tonnes)
	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Luxembourg Netherlands	United	Community
1. Production	6350	1	30 600	11 000	1	8 500	1	2 750	16 000	75 200
2. Imports from third countries	40	10	800		1	25	30	1	I	905
3. Receipts from other ECSC countries	260	80	400	2 800	10	75	2210	240	ı	(6 375)
4. Total availabilities	6 950	96	31 800	13 800	10	8 600	2 240	2 990	16 000	76 105
5. Inland demand:										
(a) iron and steel industry	6350	40	19 000	11 000	10	0069	2 235	2150	10 130	57815
(b) other industries	240	10	1 400	1 200	-	009	2	225	1 300	4 977
(c) domestic users	45	30	1100	150	I	250	က	5	3150	4 733
(d) miscellaneous:	-		200	071		ų				098
- Issues to workers - own consumption	3		00%	320	1	20.	1	ı	006	022
- others	•		200	10	1	3 1	1	1	70	280
Total	6 650	80	22 600	12 820	10	7 805	2 2 4 0	2 380	14 850	69 435
6. Exports to third countries	70		2 200	450		800	l	09	940	4 520
7. Deliveries to other ECSC countries	230	10	2000	335		70		520	210	(6375)
8. Total requirements	6 950	06	29 800	13 605	10	8675	2 240	2 960	16 000	73 955
9. Producers' stocks (beginning)	06	1	12 779	1 497	1	006	1	35	3 025	18 326
10. Addition/withdrawal from producers' stock		1	+ 2000	+ 195	ı	- 75		+ 30	I	+ 2150
11. Producers' stocks (end)	06	I	14 779	1 692		825	l	65	3 0 2 5	20476

Coke-oven coke - intra-Community exchanges, 1977

										(in 1 000 tonnes)
From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Total receipts
Belgium	I		280	100	-	1	1	120	09	560
Denmark	l		10	30	_	_	1		40	80
Germany (FR)	09	10	l	155		_	1	75	100	400
France	70	l	2 335		l	20	l	325	I	2 800
Ireland		_		-		-			10	10
Italy	1	-	75			_	-	_	l	75
Luxembourg	06		2 090	30	l		1			2210
Netherlands	10	. ;	210	20	l	I	l	-		240
United Kingdom	I	l	I	I	I	1	l	l	I	ı
Total deliveries	230	10	5 000	335		20	1	520	210	6375

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