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The Community coal market in 1979 and forecasts for 1980 1

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THE COMMUNITY COAL MARKET IN 1979 AND FORECASTS FOR 1980

I. SUMMARY SURVEY

1. The coal market in 1979

Developments in the Community's coal market in 1979 give reasons for guarded optimism. Coal consumption rose substantially, there was a marginal increase in coal production in the Community, no serious problems were encountered with regard to steeply rising imports from outside the Community, consumer stocks at the end of the year were at satisfactory levels while previously excessive producers' stocks of coke and coal had been substantially reduced. There were clear signs of an evolving pattern of the principal coal producing Member States absorbing the bulk of their own production to satisfy their requirements, while growing demand for coal in the other Member States is met through rising imports from outside the Community.

As shown in Table 1, internal demand for energy in the Community in 1979 is estimated to have been about 41 232 Petajoules (985 mtoe) (million tonnes of oil equivalent), representing a rise of 5.0 % on 1978. This increase was a reflection of economic growth represented by a rise in GDP of 3.3 %, slightly above that in 1978. However, had it not been for an unusually long period of cold weather during the early part of the year, the growth in energy demand would probably have been at a slightly lower rate than that of GDP (gross domestic product).

According to statistics available to date, the percentage share of oil in meeting internal energy demand in 1979 at 53.3 % was 1.2 % lower than in 1978 for the Community as a whole, although in Italy and the Netherlands the trend was the reverse, in the latter case oil compensating a drop in the share of natural gas. The percentage share of coal was 0.7 % higher at 19.4 %, while that of lignite at 2.8 % was 0.1 lower than the previous year (2.9 %).

Coal consumption in the Community (Table 3) in 1979 at about 308 million tonnes was nearly 21 million tonnes higher than in 1978. The principal motor behind this expansion was demand for electricity generation, up by about 17.5 million tonnes on the previous year, but improved performance by the steel industry also played a part. Consumption by other sectors totalling a little over 41 million tonnes was slightly lower than in 1978.

1979 saw a substantial improvement in levels of output of both pig iron and crude steel, continuing in the wake of the improvement of the year before. However, even at 140 million tonnes in 1979, crude steel production in 1979 was still some 10 % short of its level in 1974, the peak year of the decade. On the other hand, for complex reasons explained in the relevant section in this report, the increase of 5.6 % in steel output in 1979 was reflected in a 10.8 % rise in coke consumption.

Gross electricity production in all Member States in 1979 was substantially above the level of the year before, the average rise having been 4.9 %. Coal consumption rose to an unprecedented 178 million tonnes, with the United Kingdom registering by far the biggest growth but with notable increases also in Denmark, Germany and France. However, these rises did little to narrow the differences in coal consumption for electricity generation between different Member States; about 77 % of all hard coal used in power stations was burned in the United Kingdom and Germany, representing only a marginal reduction in their traditional preponderance. With lignite taken into account, this preponderance is even more marked.

The upward trend of coal consumption by general industry has been masked by industrial problems in the cement industry in one Member State giving rise to a slight overall drop. In effect, this is an expanding market with a growth potential over the coming years second only to that of electricity generation.

Coal consumption by the domestic heating market was about the same as last year. However, it might have been slightly higher had there not been supply difficulties for certain special qualities.

For the third year in succession, Community coal production in 1979 was within 1 % of 240 million tonnes (148 mtoe), but showing a slight upward trend for the first time since 1975. Planned closures of uneconomic pits in Belgium and France were compensated by increased output in Germany.

Underground manpower dropped slightly in 1979 but productivity rose sufficiently not to entail a drop in total output in the Community. Production costs rose roughly in line with inflation except in Germany where the increase was slightly lower. However, in spite of steeply rising oil prices, receipts by the Community's coal industry rose more slowly than costs.

Investment in coal production and preparation in 1979 continued at high levels in the United Kingdom and in Germany, particularly in the former.

Intra-Community exchanges of coal and coke have witnessed divergent developments, the former dropping while the latter rose. The principal reasons for these countervailing movements were rising demand for coke by the steel industry and changing sales policies by the German coal industry due to shrinking surplus stocks of coal.

Coal imports from outside the Community rose by some 29 % to about 58 million tonnes in 1979. Of these, about 30 million tonnes went to power stations and close on 24 million tonnes were coking coal. Poland has lost its leading position as the largest external supplier to the Community to South Africa, followed by the USA and Australia in third and fourth places, with deliveries from all other sources representing less than 8 %.

Exports of Community coal at about 1.8 million tonnes last year showed a serious drop compared to 1978, but coke exports of some 8.5 million tonnes represented a 12 % increase, with the US remaining the largest market. Some of the exported coke was produced from US coal imported into the Community for this specific purpose as a result of inadequate indigenous coking capacity.

The balance between stable production plus imports up about 13 million tonnes on the one hand and coal consumption nearly 21 million tonnes higher in 1979 than the previous year plus slightly larger exports on the other, has resulted in a very substantial reduction in previously overlarge German producers' coal and coke stocks. In fact, by the end of 1979, they represented no more than about six weeks' production, or 12 weeks' if the German national coal reserve is taken into account.

2. The coal market outlook for 1980

The slow-down in economic expansion experienced towards the end of last year is likely to become more pronounced in 1980, leading to very modest expansion in world trade, low growth of the Community's GDP and a rise in energy consumption of only around 1 %.

Although low economic growth will inevitably lead to a fall in steel production, the effect on coke consumption is expected to be moderate. Among the reasons are likely to be substantial rises in specific coke consumption on account of higher fuel oil prices.

After a number of years of rapid growth, coal consumption for electricity generation is expected to level off. While there will be increases in some Member States which have not traditionally been big users of coal in power stations, these will largely be offset by a drop in consumption in the United Kingdom. Although only marginal so far, such a trend towards a broader spread of coal-fired electricity generation throughout the Community is desirable.

After electricity generation, general industry represents the biggest potential field for conversion from oil to coal and an increase in consumption of 11.5 % to close on 20 million tonnes of coal and coke can be expected. Growing interest in this market is being shown by Member Governments and industry, and the Commission is currently devoting special attention to the potential of this field.

No important changes are likely in the traditional domestic heating market. However, renewed expansion of the use of coal in institutional premises and for district heating are probable during the next few years but are unlikely to have a significant impact in 1980.

Coal production in the Community in 1980 is expected to be marginally higher than last year as a result of contraction of output due to pit closures in some coalfields being compensated by higher output elsewhere.

The total of intra-Community exchanges this year is unlikely to differ markedly from 1979, but with a shift from coal to coke. On the other hand, imports from third countries are expected to rise further, mainly to supply power stations in France and in a number of non-coal-producing Member States.

The general picture this year is likely to continue to be that of German and British production covering

an overwhelming share of the home market which, in turn, will absorb the bulk of indigenous output, of no great changes in German intra-Community deliveries and of the Belgian and French coal industries enjoying a secure though shrinking share of

their home markets. Growth in demand for coal in these two countries and in the non-coal-producing Member States will be met largely through rising imports from outside the Community.

II. GENERAL ECONOMIC SITUATION AND OUTLOOK

(Table 2)

The modest revival in economic activity in the Community in 1978 continued in 1979. Last year, the Community's gross domestic product is estimated to have risen by about 3.3 %.

balance of payments moved from a large surplus in 1978 to a deficit in 1979, partly because of worsening terms of trade and partly through worsening performance with regard to volume.

However, by the end of 1979 symptoms of slower growth became evident, with the trend towards rising industrial production weakening noticeably and business expectations faltering. Consumer spending, which had grown strongly in the first half of the year, was less buoyant in the second half, but, on the other hand, investment was at a higher level during the second half of the year.

Total employment in the Community, which had started to move upwards in the second half of 1978, continued to rise in 1979. However, as the number of new entrants into the labour market was also increasing, the rate of unemployment changed little from 5.5 % in 1978 and remained fairly stable throughout the year.

The slow-down in growth towards the end of 1979 owes much to unfavourable international economic developments, particularly the very sharp oil price rises. Their effects included inflationary pressures and adverse developments in the Community's balance of payments.

The slow-down in the Community's economy is expected to become more pronounced in 1980, with very modest expansion in world trade and the Community's GDP growth probably at 1.2 %. Unemployment will resume its rise, further strong upward pressure on prices must be expected and the current balance of payments will be substantially in deficit. Problems with oil supplies or failure to minimize the economically depressive but inflationary effects of last year's oil price rises would darken prospects for 1980 still further.

Consumer price rises accelerated in 1979, averaging 9 % over the year, with divergences between Member States widening again. The Community's current

III. COAL DEMAND BY SECTORS

1. Steel industry

(Tables 4 to 7)

1979 saw a substantial improvement of output both of pig iron and crude steel. However, even at around

140 million tonnes crude steel production in 1979 was still far short of its level of nearly 156 million tonnes in 1974, the peak year of the decade. Whereas the growth in output in 1978 had largely been the result of increased exports to third countries, last year's rise was due to more buoyant demand within the Community.

By far the largest growth took place in Germany, but there were substantial rises in production also in Belgium/Luxembourg and in the United Kingdom. As steel production in those countries traditionally relies very heavily on pig iron, output of the latter at 98.5 million tonnes registered a rise of about 9.2% with consequent effects on coke use. Furthermore, due to an increase in specific coke consumption in most Member States resulting from rising fuel oil prices, coke consumption by the steel industry at 57.4 million tonnes was 10.8% higher in 1979 than in 1978 i.e. an increase of 5.6% in steel output was reflected in a 10.8% rise in coke consumption.

This relatively large increase in coke consumption, plus the fact that the German and Luxembourg steel industries rely almost exclusively on coke produced from German coal, has been an important factor in the substantial reduction in excess coal and coke stocks in Germany described in Section VIII.

However, due to the closure of a coal industry coke oven in the north of France, there has been a drop in French coal used for coke production. There was also a smaller drop in British coal. On balance, the total tonnage of Community coal used in cokeries in 1979 was about the same as the previous year, but there was a steep rise in third country coal, particularly from the US.

During the current year, steel production is expected to fall back by about 4% to between 134 and 135 million tonnes as a result of somewhat lower demand both within the Community and in export markets. Nevertheless, output will still be some 2 million tonnes above its level in 1978. Furthermore, as German and Belgian/Luxembourg production are forecast to remain relatively buoyant, output of pig iron at 93 million tonnes will remain some 3 million tonnes above its 1978 level.

As an additional factor, specific coke consumption is expected to go up further in Belgium, Germany and Luxembourg while remaining stable elsewhere. As an average for the Community as a whole, specific coke consumption is likely to rise by a further 5 to 513 kg this year, after having risen by 8 kg last year. As a result, blast furnace coke consumption during the current year is likely to be around 47.8 million tonnes, only 2.2 million tonnes below its 1979 figure. The combination of these circumstances can be expected to bring another quantitatively fairly satisfactory year for the German coking coal industry.

2. Power stations

(Tables 8 A, B, C, D)

Gross electricity production in all Member States of the Community in 1979 was substantially above that of the previous year; for the Community as a whole, production in 1979 was about 58 TWh or 4.9% higher than the year before. Growth was particularly marked in Denmark, Ireland, France and Germany in that order.

Nuclear generation was about 13 TWh higher, new nuclear plants being brought into service in France at Bugey (two units) and in Germany at Philippsburg. Slightly less favourable hydraulic conditions reduced output from that source by about 1 TWh, while geothermal generation remained virtually unchanged. As a result, of the total increase of some 58 TWh, about 46.5 TWh had to be provided through additional use of fossil fuels.

With lignite lacking the flexibility of an economically transportable fuel and usable only in specialized installations, most of the increase in solid fuel consumption was accounted for by hard coal, which rose by some 17.5 million tonnes or about 10.4% to 178 million tonnes. By far the largest increase, 10 million tonnes, was registered in the United Kingdom, but consumption in Denmark, Germany and France also rose by 1 million tonnes or more in each country.

However, in spite of this increase in solid fuel consumption, oil consumption for electricity generation in the Community as a whole was 2.2% higher last year than it had been in 1978, a rise to which four countries, Belgium, Ireland, Italy and the Netherlands contributed. The increase was particularly marked in the Netherlands where oil-burn has been progressively raised as a substitute for gas in electricity generation. For the Community as a whole, the proportion of oil used for conventional thermal electricity generation ranged from under 10% in Germany to nearly 80% in Italy.

Forecasts for the current year are mixed, with faster rises in electricity production expected in some Member States and slower growth in others, and a drop of some 2.3% expected in the United Kingdom. Overall, electricity production in the Community is expected to rise by some 47 TWh or about 4%.

Of this increase, 34.5 TWh should be represented by additional nuclear generation due primarily to new nuclear plants expected to be commissioned in France at Tricastin (two units), Gravelines and Dampierre.

Coal consumption is expected to increase by some 20 % in Denmark, 30 % in Italy and 70 % in the Netherlands. However, in absolute terms, the total of this extra consumption will only slightly exceed a likely drop of nearly 3 million tonnes in the United Kingdom. The agreement reached in March between the German coal and electricity generating industries progressively to raise Community coal consumption to 47.5 million tonnes by 1995 will not affect consumption during the current year, with the result that total coal consumption for electricity generation in the Community is likely to rise by only about 0.5 million tonnes.

In spite of this further slight rise in coal-burn, plus an expected increase of 1.7 % in lignite consumption, oil-burn for electricity generation is forecast to show further growth in all Member States except in Germany and the United Kingdom. Although not large in most Member States and adding up to a net increase of only about 1 % for the Community as a whole, the persisting growth in total oil consumption for electricity generation demonstrates the continuing need for effective measures to reverse this trend.

3. Various industries

(Table 9)

Next to electricity generation, general industry represents the biggest potential field for conversion from oil to coal.

However, this market raises exceptional statistical complications due to its diversity and very large number of individual units and to problems of definition. Table 9, the principal table dealing with consumption in various industries, includes coke but is otherwise based on a narrow definition. It excludes private electricity generation and most types of space heating.

Table 9 shows a contraction of the market by about 0.7 million tonnes or 3.6 % in 1979 compared to the

previous year, largely due to a drop of some 0.9 million tonnes in Belgium. The principal reasons for this were problems in the Belgian cement industry including a strike.

On the other hand, during the current year sales of coal and coke to general industry are expected to grow by over 2 million tonnes to not far short of 20 million tonnes. Increases are forecast for almost all Member States with the United Kingdom, France and Germany in the lead. In France and Germany this is the result mainly of reconversion to coal of cement manufacture, aided in the case of Germany by the country's annual coal import quota for third country coal having been raised from 5.5 to 6.6 million tonnes.

Nevertheless, the United Kingdom will still represent nearly 40 % of the whole market. This dominant position is due to the fact that, whereas in most Member States, the use of coal in general industry continues to be largely confined to a very limited range of processes, such as the manufacture of cement and bricks, it is employed in a much wider field in the United Kingdom.

The reasons why coal is used there to a so much larger extent than in other Member States are the availability of attractively priced indigenous coal and an efficient distribution system.

Furthermore, the existence in the United Kingdom of an equipment industry offering installations from coal storage through combustion to ash disposal which do not require much more space or labour nor create substantially more environmental disturbance than comparable oil-fired installations is of growing importance in fostering re-conversion from oil to coal. Another aspect of coal attracting increasing attention in general industry is the fact that in periods of uncertainty, additional quantities can be stocked on any site within the factory compound, whereas oil storage is limited by the capacity of available tanks.

4. Domestic sector

(Tables 10 A and 10 B)

Tables 10 A and 10 B show respectively fuels of high calorific value i.e. coal, peat fuel and coke

and those of low calorific value i.e. lignite briquettes and peat. The latter market is insignificant except in a few localities in Germany and Ireland.

Due to an overestimate in domestic coal deliveries in the United Kingdom for 1978 in last year's report, an impression of stabilization of this market over a number of years was created. In effect, it had contracted by about 1 million tonnes or 5 % to around 19 million tonnes.

This volume remained unchanged in spite of the cold weather during the early part of 1979 and of domestic heating oil supply problems combined with high oil prices. However, there has been a

slight shift as between Member States, namely a drop of about 10 % in France due, at least partly, to supply difficulties with anthracite from the USSR, and some growth in Germany and the United Kingdom.

Rising oil prices combined with the advent of compact fluidized-bed boilers and automated coal-handling equipment are expected to lead to renewed expansion of the use of coal for institutional premises and district heating during the present decade. However, with no comparable technological advances foreseeable for small installations and individual domestic heating, continuing contraction of this market appears inevitable. During the current year, its long-term downward drift is likely to persist in most Member States, with the notable exception of Ireland where demand shows an upward trend.

IV. COMMUNITY COAL PRODUCTION

1. Production statistics

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

For the third year in succession, Community coal production in 1979 has remained stable within 1 % of 240 million tonnes as a result of fairly small, mutually compensating changes in production levels in the coal producing Member States. In fact, it showed a slight upward trend for the first time since 1975, and in the case of Germany, since 1968.

Over the three year period 1977 to 1979, French output dropped by 2.7 to 18.6 million tonnes and Belgian output by 0.9 to 6.1 million tonnes. On the other hand, production in the United Kingdom moved up by 1 million tonnes from 1977 to 1978, but fell back again by about the same amount to 120.6 million tonnes last year. The development in Germany was the reverse — a drop of 1.2 million tonnes from 1977 to 1978 but a renewed rise of 3.1 million tonnes to reach 93.3 million tonnes last year.

The contractions in Belgium and France were primarily the result of planned pit closures. The divergent German and British developments, on the other

hand, had their origin in different sets of causes. In the case of Germany, production was deliberately adjusted, first downward and then upward, in response to market conditions, whereas the British development resulted directly from production-related factors — the introduction of a productivity bonus scheme in 1978 and, in 1979, the combination of severe weather and a road transport strike aggravated by industrial relations problems in the open-cast mining sector. In fact, deep mined output in the United Kingdom was practically unchanged from the previous year at 107 million tonnes.

The production level of about 240 million tonnes is expected to be maintained during the current year. Belgian and German output will be virtually unchanged from 1979, while a renewed rise in British coal production should largely balance an expected contraction of about 0.7 million tonnes in France.

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

Following a long-standing trend only briefly reversed during an occasional exceptional year, underground manpower has again dropped slightly in 1979, while productivity rose in France and Ger-

many and showed slight drops in Belgium and the United Kingdom. In Germany, the increase was 13 kg per underground man/hour, to a considerable extent resulting from the fact that, due to improved market conditions, available manpower was deployed in a more production-orientated manner.

During the current year, there are no reasons to expect substantial changes in recent trends in manpower or productivity, except that rises in productivity ranging from 1.8 to 2.9% are hoped for in all Member States.

2. Financial developments

(a) *Production costs and proceeds* (Table 15)

In 1979, production costs in the Community's coal industry rose to about the same extent as the previous year, with wages and prices of materials rising faster than productivity. However, these rises did not exceed rates of inflations and, in the case of Germany, were slightly lower.

Developments in 1980 are unlikely to differ greatly from those last year.

Receipts, on the other hand, have risen more slowly than costs. In spite of steeply rising oil prices, several factors have been the cause of weakness in the world coal market, affecting the prices obtainable for Community coal. These factors are continuing world-wide slackness in demand for coking coal and temporary surpluses of steam coal, their financial effects aggravated for the coal producing Member States by the decline of the US dollar in relation to their currencies.

Regardless of further developments in the oil market, present facilities for switching to coal for electricity generation and general industrial and space heating uses in the Community and elsewhere are inadequate to boost demand and, hence, world steam coal prices during the current year sufficiently to allow those for Community coal to be raised by more than the general level of inflation. In the case of coking coal, likely continuing weak demand by the steel industry creates an even more unfavourable situation. As a result, the deterioration in the financial position of the Community's coal industry in 1979 is unlikely to be reversed this year.

(b) *Financial intervention by Member States* (Table 16)

The trend of previous years for all coal producers in the Community to require rising government subsidies has continued in 1979 but the amount per tonne varies greatly between Member States. Table 16 shows that the subsidies needed by the Belgian coal industry are by far the largest, while those for the United Kingdom are at a comparatively modest level.

However, in comparing such figures it should be borne in mind that different levels of subsidies arise not only from varying production costs but are determined by the extent to which coal must be sold at prices aligned on the world market or, alternatively, benefit from a protected internal market. Thus, the German coal industry has such a market in the indigenous electricity generating industry which, in turn, can recoup any price disadvantage against fuel oil through a surcharge to consumers.

For the Community as a whole, the total of subsidies for current production in 1979 under Decisions 73/287/EEC and 76/528/EEC amounted to 2077 MEUA.

3. Developments in productive capacity

(a) *Investments in coal production and preparation* (Table 17)

In 1979, investment in coal production and preparation has remained at a high level in the United Kingdom and Germany. It continues to be particularly large in the former in connection with the development of a new coalfield at Selby.

The figures in Table 17 suggest a drop for 1980 except in France, but such forecasts are inevitably somewhat uncertain. However, taking account of inflation, even the slightly higher Community total for 1979 compared to the previous year represents a downward trend in real terms which will continue during the current year.

(b) *Pit closures* (Table 18)

Although the number of pits closed last year was only slightly smaller than in 1978, the impact of

these closures on the Community's productive capacity was only some 2.5 million tonnes compared to 5.5 million tonnes the previous year. The main difference was in Germany where two pit closures reduced capacity by 3.2 million tonnes in 1978, whereas there were no closures of pits of comparable capacity last year.

The principal feature during the current year is likely to be five further pit closures in the Nord/pas-de-Calais and Centre-Midi coalfields in France in line with the French government's plans. These

will reduce productive capacity by 1 million tonnes, plus a further 0.2 million tonnes resulting from the closure of two small pits in the south of Belgium, leaving only one pit to be closed in that area where production will cease in 1981.

Although the possibility of some pit closures in the United Kingdom cannot be excluded, no definite information was available at the time of going to press.

V. COAL PRICES

In view of the importance of fluctuating rates of exchange, the following list showing the movements of the US dollar in relation to the Community currencies will be helpful:

1 US dollar =	Bfrs	Dkr	DM	FF	Lit	Fl	£
2 January 1979	28.545	5.0225	1.8084	4.143	823.00	1.9525	0.4885
2 July 1979	29.49	5.2910	1.8417	4.268	829.00	2.0233	0.4572
3 January 1980	27.77	5.328	1.7055	4.005	799.40	1.888	0.4456
1 April 1980	31.53	6.101	1.9705	4.5385	911.50	2.1512	0.467

1. List price developments

(Tables 19 A and 19 B)

Tables 19 A and 19 B show listed pithead prices of different types of coal for certain coalfields, the former in national currencies and the latter in US dollars.

List prices for Community coal have continued to rise in 1979, the extent of these increases ranging from 8 to 52 %. However, expressed in US dollars for comparability, these price movements have affected the previous wide price differences between comparable coals from different coalfields to only a very limited extent. The coal price rises, all of them following in the wake of increases in the prices of other fuels, took the following form in the different Member States:

— *Belgium:*

two increases in 1979 ranging in total from 8 to 38 %, followed by rises ranging from 3 to 10 % on 1 January 1980;

— *Germany:*

an increase of 2 % at the beginning of 1979, followed by a rise of around 5 % on 1 September

and increases of 7 to 10 % in domestic coal at the beginning of 1980, followed by a further rise of about 11 %;

— *France:*

prices rose in three steps in 1979, by 6 to 16 % on 1 April, by 5 to 21 % on 1 September and by 8 to 12 % on 1 October, followed by further rises ranging from 2 to 15 % on 1 January 1980 and of between 7 and 17 % on 1 April 1980;

— *United Kingdom:*

increases ranging from 8 to 11 % on 1 March followed by further rises ranging from 6 to 14 % on 1 July 1979, and rises ranging from 15 to 20 % on 1 March 1980.

2. Coking coal

The average prices cif ARA for third country coking coal, the so-called indicative price calculated by the Commission, which had been stable at around \$ 61 to \$ 63 since 1975, rose to over \$ 66 in 1979. However, this increase was insufficient to compensate

the downward movement of the US dollar on the international exchanges with the result that in terms of Community currencies, particularly with respect to the German mark and sterling, there was a net drop in the indicative price in the course of 1979.

As a result, the subsidy rates for the production of Community coking coal had to be raised.

3. Steam coal

Unlike for coking coal, there is no indicative third country price for steam coal on which Community producers traditionally align their own.

In Germany, a surcharge passed to electricity consumer allows coal producers to charge prices fully covering their costs, while in Belgium and France, the system is one of alignment on competing fuels and government subsidies to the coal industry. On the other hand, a substantial proportion of coal produced in the United Kingdom has remained competitive with readily available alternatives, but some subsidies have, nevertheless, been necessary.

Average dollar prices cif ARA of steam coal for electricity generation have moved upward from around \$ 34 per tonne at the end of 1978 to the \$ 37 to \$ 38 region towards the end of 1979, but to draw any conclusions from this statistical rise of some 10 %, numerous factors must be taken into account.

In the first place, due to the weakness of the US dollar, increases expressed in EUA/TJ have been nearer 7 %. Secondly, movements in average prices are af-

ected by quantitative changes in the origin of imported coal due both to different fob prices and varying freight rates.

Thus, the fact that the steepest increase in steam coal imports originated in South Africa and that this is the largest external source of steam coal for the Community, has a strong statistical impact on average prices. Not only is South African coal the most attractively priced available fob, but, compared to some other countries of origin, the shorter shipping distance has lessened the impact of rising freight rates.

4. Outlook for 1980

Further rises in the prices of Community coal are to be expected in the course of the year.

On the other hand, the world economic outlook does not suggest any substantial movements in world coking coal prices. However, repercussions on freight rates of unpredictable political events might find a reflection in these.

As regards world steam coal prices, in the absence of presently unforeseeable circumstances, the quantitative forecasts of imports into the Community by countries of origin (Table 26), indicating slower growth in imports from South Africa and steeper rises in imports from elsewhere, suggest the likelihood of a more marked increase in the average cif price of imported steam coal during the current year than in 1979.

VI. COKE

1. Developments in coking capacity

(Table 21)

Having risen to some 91 million tonnes in the middle of the decade, coke oven coke production capacity had been reduced to 81.6 million tonnes by 1978 and had shrunk to just over 81 million tonnes last year. With coke production at slightly below 66 million tonnes, average utilization in 1979 was

thus about 80 %, an improvement of about 5 % on the previous year.

By far the largest contraction in coking capacity during the second half of the decade took place in the German coal industry, involving closures of colliery coke-ovens with a total capacity of some 5 million tonnes. Most of the remaining contraction during this period is accounted for by the closure of colliery coke-ovens in France, of steel industry coke-ovens

in the United Kingdom and of steel industry and independent cokeries in Belgium. In 1979, a coal industry cokery with a capacity of slightly over 0.5 million tonnes was closed in the Nord/Pas-de-Calais area of France and a steel industry cokery with a capacity of 0.4 million tonnes near Liège in Belgium.

The prospects for the current year are of a further drop of 0.6 million tonnes in the coking capacity of the French coal industry and of a similar drop in that of the Belgian steel industry. On the other hand, a rise in the capacity of the British steel industry's coke ovens of 1.7 million tonnes and a slight increase in the Netherlands will slightly raise capacity in the Community as a whole over last year's level.

The Commission will examine the question of coking capacity in the Community in the light of the current restructuring of the Community's steel industry. When replacing coke ovens about to reach obsolescence, the location of new installations should be determined in the light of overall demand in the Community as a whole to avoid both local over-capacity or supply difficulties.

2. Coke production and coke supplies to cokeries

(Tables 22 and 23)

After contracting for several years in response to low demand by the steel industry, the year 1979 wit-

nessed a renewed rise in coke production in all Member States to reach slightly over 67 million tonnes, representing an increase of 3 million tonnes or 4.7%. The largest rise amounting to 1.1 million tonnes took place in Germany, followed by Belgium and France with an increase of about 0.7 million tonnes each, while rises elsewhere remained modest.

In spite of the rise in production, stocks of coke at cokeries at the end of 1978 of 18.8 million tonnes had dropped to 10.1 million tonnes by the end of last year, most of this reduction being accounted for by lower stocks in Germany. This development was due to the combination of larger demand by the Community steel industry and exports to third countries.

Supplies of Community coal to cokeries at 65.8 million tonnes last year were the same as in 1978, but with a slight shift from intra-Community to indigenous supplies, represented by German intra-Community coal sales at a lower but coke sales at a higher level. On the other hand, deliveries of coking coal imported from outside the Community, mainly the US, rose by 26% to 21.3 million tonnes, but it should be noted that some of the additional coke production was re-exported to the US.

In view of current forecasts of steel production and coke exports and the coke stock situation, coke production during the current year is likely to be 1 million tonnes lower than in 1979, involving a drop of some 1.7 million tonnes in coal consumption by cokeries. In the light of coal import forecasts, this drop is likely to affect primarily Community coal.

VII. TRADE IN COAL AND COKE

1. Intra-Community trade

(Tables 24 and 25)

1979 has witnessed a significant drop in deliveries of coal from Germany, the principal supplier, to other Member States. The reductions in deliveries apply to most Community countries but have been particularly steep in the case of Belgium and France, reflecting the German coal industry's policy of reducing disposals at unremunerative prices aligned on the world market in view of stronger indigenous demand and contracting stocks.

On the other hand, German coke sales in 1979 were over 1.5 million tonnes or almost 40% higher than the previous year, while all intra-Community coke sales rose by about 35% to 6.9 million tonnes. The Luxembourg steel industry, which obtains its coke from outside the Grand-Duchy, has remained the largest market, with France a close second. An unexpected development has been a rise in coke imports into Belgium of some 0.7 million tonnes or 116%, coupled with a drop in coal imports from Germany of close on 0.6 million tonnes. The combination of two factors has caused this development: the closure of a cokery with an annual capacity of some 400 000 tonnes near Liège and the

employment of part of the remaining Belgian coking capacity to produce coke from coal imported from the US for re-export to that country.

Trends in intra-Community trade in coal for the current year suggest little change except for a further drop of some 1.2 million tonnes in German deliveries to France in further pursuit of the policy mentioned in the first paragraph.

On the other hand, the level of intra-Community trade in coke will probably rise by another 3 % to around 7.1 million tonnes due primarily to marginal increases in coke deliveries from the Netherlands and the United Kingdom.

2. Trade with third countries

(Tables 26 and 27)

As indicated in the autumn revision ⁽¹⁾ of last year's report ⁽²⁾, imports from third countries appeared to be running at a higher level than originally forecast. Indeed, at about 58.4 million tonnes they were some 15 % above original forecasts and not far short of 30 % above their total in 1978. However, as indicated below, net imports were some 12 million tonnes below this figure.

The rise of some 11 million tonnes was about equally distributed between steam coal for electricity generation and coking coal. The latter was due to some revival of demand by the Community's steel industry but is also reflected in coke requirements by third countries, particularly the US. In effect, something of the order of 1 million tonnes of coal were imported into the Community from the US in 1979 and subsequently re-exported there as coke.

The rise in imports to power station coal is shown as about 5.7 million tonnes in the form of deliveries to public power plants in Table 8 D, the figures in this table representing virtually all imported coal used for electricity production. The increase is spread over all 7 Member States with coal-fired generating capacity. It ranges from Italy and Denmark with about 1.3 million tonnes and 1.2 million tonnes respectively, through Belgium and France with

around 1 million tonnes to Germany with slightly under 0.6 million tonnes.

For comparison, it should be noted that the increase of some 5.5 to 6.0 million tonnes in imports of coal for electricity generation was accompanied by a rise of 5 million tonnes in deliveries of Community coal for this purpose.

Regarding countries of origin, the principal development in 1979 has been a recovery in imports from the US, which were exceptionally low in 1978 due to strikes in the coal-mining industry and on the railways. However, this recovery has not affected the leading position of Poland and South Africa, with the US occupying third place. In fact, for the first time ever, South Africa has moved into first place among external suppliers of coal to the Community. On the other hand, supply problems caused a fall of 11 % in imports from the USSR to a mere 2.9 million tonnes, principally of anthracite for the domestic heating market.

Coal exports to countries outside the Community in 1979 continued to be stable at about 2 million tonnes, with Germany as the principal supplier. In view of the high costs of Community coal production, an expansion of these exports is improbable.

On the other hand, coke exports at around 8 million tonnes have been at a much higher level than in 1978. The largest market, representing nearly 3 million tonnes, has been the US due to inadequate indigenous coking capacities resulting from the financial impact of environmental legislation on investment in coke ovens. Germany, using indigenous coal and exporting 5.5 million tonnes of coke in 1979, has been by far the largest exporter of coke to third countries.

Taking the overall balance between coal and the very small coke imports into the Community on the one hand, and coke and coal exports in 1979 on the other, the Community was a net importer of to the extent of 46.5 million tonnes, coke being reckoned at its coal equivalent compared to 33.5 million tonnes in 1978.

Prospects of trade with third countries in 1980 are of further large rises in coal imports and a drop in exports, particularly of coke from Germany. The latter will be the combined result of shrinking stocks and stable indigenous demand which provides a more remunerative market than overseas sales of coal.

⁽¹⁾ OJ No C 278, 7. 11. 1979.

⁽²⁾ OJ No C 120, 14. 5. 1979.

The forecast increase of about 12 % in imports of coal into the Community to close on 65 million tonnes during the current year will be due entirely to growing demand for steam-coal, while coking coal imports are expected to drop by about 1.5 million tonnes and quantities of other types will remain unchanged. Of the increase in steam-coal imports of some 8 million tonnes, the greater part will be for electricity generation, but a proportion will be used by industry, particularly for the manufacture of cement and bricks in works reconverted from oil to coal firing.

The largest rises in imports will be into Denmark and France, each accounting for some 2 million

tonnes but, in the case of the former representing an increase of close on 36 % against some 9 % in the case of France.

The four leading coal exporters into the Community — South Africa, Poland, the US and Australia in that order — are all forecast to increase their deliveries. However, in view of production and transport problems in Poland, coupled to internal demand and requirements by neighbouring countries, there is some doubt whether the projected increase in Polish deliveries to the Community of nearly 2 million tonnes can be achieved.

VIII. COAL AND COKE STOCKS

It should be noted that Table 28 giving provisional end of year figures of producers' coal and coke stocks is not strictly comparable with Tables 29, 30 A and 30 B giving stocks at power stations and colliery stocks broken down by type, treatment and areas at the end of September 1979, the latest available at the time of going to press.

1. Producers' coal and coke stocks

(Tables 28 and 29)

The contraction in excess German coal and coke stocks from their peak of 38.9 million tonnes (coke being reckoned at its coal equivalent) at the end of March 1978 to 31.7 million tonnes by the end of that year continued in 1979, with the result that stocks stood at 21.2 million tonnes at the end of 1979. As 11 million tonnes of this total constitutes the national coal reserve financed by the government, the 10 million tonnes of stocks carried by the German coal industry at the end of 1979 thus represented about six weeks' coal production, or 12 weeks' production with the national reserve taken into account, these production figures representing statistical averages derived from annual production theoretically spread evenly over 52 weeks.

Similar, though less dramatic, reductions in producers' stocks took place in France and the United Kingdom in the course of 1979, while Belgian stocks had already been drawn to their minimum operating levels in the course of 1978, coke playing only a minor role in producers' stocks in these three Member States. In terms of average weekly output, producers' stocks in France at the end of 1979 represented about 15 weeks' coal production and those in the United Kingdom a mere five weeks'; as shown in Table 29, a high proportion of these stocks consisted of part treated smalls, run of mine coal and slurry.

Taking coal and coke at its coal equivalent and including the German national reserve, total Community producers' stocks at the end of 1979 stood at under 40 million tonnes compared to 56.5 million tonnes a year earlier. This dramatic change was due to a number of separate factors. The most significant of these were substantial rises in consumption of indigenous coal for electricity generation in Germany and the United Kingdom, improved performance by the steel industry and a deliberate policy by the German coal industry to reduce excess stocks through sales of coal and coke within the Community and outside.

Although total Community producers' stocks will probably diminish further during the current year,

particularly those of coke in Germany, these movements are likely to be small compared to the contraction during the previous 18 months and uneven as between Member States. In fact, in the United Kingdom the combination of increased production, a mild winter and a steel industry strike of several months are likely to lead to a rise in producers' stocks.

2. Coal stocks at power stations

(Table 30)

Coal stocks at power stations at the end of September 1979, the latest figures available at the time of

going to press, ranged from 38 days average consumption in Italy, relying on coal for only a very small proportion of electricity generation, to 180 days in Denmark, the Member State which has made the greatest strides in converting its generating capacity from oil to coal since 1974. Among the coal producing Member States, stocks at power stations ranged from 50 to 70 days, but in their case a substantial proportion of pithead stocks form an additional reserve.

In terms of the Community's security of coal supplies for electricity generation, none of the stock changes since the previous year represent any significant difference.

TABLE 1

Shares of the various forms of primary energy in gross internal energy consumption

	1978		1979		1980	
	PJ	%	PJ	%	PJ	%
Hard coal	7 329.7	18.7	8 020.4	19.4	7 995.3	19.3
Lignite	1 121.8	2.9	1 167.9	2.8	1 167.9	2.8
Oil	21 415.7	54.5	21 993.2	53.3	21 641.6	52.4
Natural gas	6 726.9	17.1	7 233.4	17.5	7 451.1	18.0
Nuclear energy	1 193.0	3.0	1 310.2	3.2	1 632.5	4.0
Others	1 477.6	3.8	1 507.0	3.5	1 431.6	3.5
Total	39 264.7	100.0	41 232.1	100.0	41 320.0	100.0

TABLE 2

Gross domestic product in real terms

(% variation compared with previous year)

	1978 (actual)	1979 (provisional)	1980 (forecast)
Belgium	2.6	3.0	1.9
Denmark	0.9	3.1	-0.3
Germany (FR)	3.2	4.4	2.1
France	3.3	3.4	2.1
Ireland	6.1	3.2	1.4
Italy	2.6	4.9	2.0
Luxembourg	4.5	2.7	1.8
Netherlands	2.4	2.3	1.0
United Kingdom	3.3	0.2	-2.5
Community	3.0	3.3	1.2

Source: Doc. COM(80) 100 final.

TABLE 3
Community coal consumption by sector and by Member States

(million tonnes t = t)

	1978 (actual)	1979 (estimate)	1980 (forecast)	1979/78 %	1980/79 %
A.					
Power stations	160.4	177.9	178.4	+ 10.4	+ 0.3
Coke ovens	83.0	87.1	85.4	+ 4.9	- 2.0
Iron and steel industry	2.1	2.2	2.1	+ 5.2	- 7.0
Other industries	13.9	13.3	15.5	- 4.3	+ 16.2
Domestic heating	19.3	19.1	18.7	- 0.7	- 2.3
Patent fuel plants	4.9	4.9	4.7	—	- 4.8
Own consumption at mines	2.2	1.9	1.9	- 10.4	- 2.6
Gasworks and others	2.1	2.1	1.6	—	- 22.9
Statistical difference	- 0.4	—	—	—	—
Total	287.4	308.6	308.2	+ 7.4	- 0.1
B.					
Belgium	16.6	17.1	16.9	+ 3.2	- 1.3
Denmark	5.6	6.8	8.1	+ 22.0	+ 18.8
Germany (FR)	81.9	86.7	87.5	+ 5.9	+ 0.8
France	44.2	47.3	45.8	+ 6.8	- 3.0
Ireland	0.8	1.1	1.1	—	—
Italy	12.1	13.3	14.1	+ 9.7	+ 5.7
Luxembourg	0.5	0.4	0.4	- 12.0	- 20.0
Netherlands	5.0	5.1	6.0	+ 2.4	+ 17.2
United Kingdom	120.6	130.6	128.4	+ 8.3	- 1.8
Total	287.4	308.6	308.2	+ 7.4	- 0.1

TABLE 4
Steel and pig iron production

(1 000 tonnes)

	1978 (actual)	1979 (provisional)	1980 (forecast)	1979/78 %	1980/79 %
A. STEEL					
Belgium/Luxembourg	17 391	18 391	18 400	+ 5.8	—
Denmark	863	805	830	- 6.7	+ 3.1
Germany (FR)	41 253	46 033	44 000	+11.6	- 4.4
France	22 837	23 337	22 000	+ 2.2	- 5.7
Ireland	68	72	70	+ 5.9	- 2.8
Italy	24 283	23 995	23 200	- 1.2	- 3.3
Netherlands	5 583	5 804	5 500	+ 4.0	- 5.2
United Kingdom ⁽¹⁾	20 302	21 571	20 400	+ 6.3	- 5.4
Community	132 580	140 013	134 400	+ 5.6	- 4.0
B. PIG IRON					
Belgium/Luxembourg	13 927	14 659	14 510	+ 5.3	- 1.0
Germany (FR)	30 148	35 170	32 600	+16.7	- 7.3
France	18 497	19 405	18 200	+ 4.9	- 6.2
Italy	11 405	11 386	10 900	- 0.2	- 4.2
Netherlands	4 613	4 813	4 510	+ 4.3	- 6.3
United Kingdom ⁽¹⁾	11 600	13 097	12 430	+12.9	- 5.1
Community	90 190	98 530	93 150	+ 9.2	- 5.5

⁽¹⁾ 1980 figures for the UK do not take into account the strike at the beginning of the year.

TABLE 5
Coke rates or specific coke input in blast furnaces

(kg/tonne)

	1978 (actual)	1979 (provisional)	1980 (forecasts)
Belgium	519	545	550
Germany (FR)	486	490	500
France	491	509	509
Italy	479	480	480
Luxembourg	489	505	530
Netherlands	430	430	430
United Kingdom	577	575	575
Community	500	508	513

TABLE 6
Consumption of coke oven coke in the iron and steel industry

(1 000 tonnes)

	1978 (actual)	1979 (estimates)	1980 (forecasts)	1979/78 %	1980/79 %
Belgium	6 102	6 630	6 510	+ 8.6	- 1.8
Denmark	33	35	35	+ 6.1	—
Germany (FR)	17 008	20 050	19 000	+17.9	- 5.2
France	10 187	10 910	10 265	+ 7.1	- 5.9
Ireland	10	10	10	—	—
Italy	6 299	6 300	6 055	—	- 3.9
Luxembourg	1 958	2 200	2 370	+12.4	+ 7.7
Netherlands	2 163	2 290	2 160	+ 5.9	- 5.7
United Kingdom	8 060	9 000	8 500	+11.7	- 5.6
Community	51 820	57 425	54 905	+10.8	- 4.4
<i>Used in:</i>					
blast furnaces	45 004	50 015	47 805	+11.1	- 4.4
sintering	6 544	6 905	6 620	+ 4.8	- 3.5
others	271	505	480	+86.3	- 5.0

TABLE 7
Community coke consumption by sector

(1 000 tonnes)

	1978 (actual)	1979 (provisional)	1980 (forecasts)	1979/78 (%)	1980/79 (%)
Iron and steel industry	51 820	57 425	54 905	+10.8	- 4.4
Other industries	4 581	4 513	4 403	- 1.5	- 2.4
Domestic heating	4 885	5 005	4 749	+ 2.4	- 5.1
Others	1 178	1 194	1 168	+ 1.3	- 2.2
Total	62 464	68 137	65 225	+ 9.1	- 4.3

TABLE 8 A
Gross electricity generation
Breakdown by energy sources

	Production generated TWh			Breakdown in %			% change	
	(actual)	(estimates)	(forecast)	(actual)	(estimates)	(forecast)		
	1978	1979	1980	1978	1979	1980	1979/78	1980/79
Belgium	50.8	52.2	55.4	4.3	4.2	4.3	+ 2.7	+ 6.1
Denmark	20.8	22.2	25.5	1.8	1.8	2.0	+ 6.7	+ 15.0
Germany (FR)	353.4	373.0	388.0	29.8	29.9	30.0	+ 5.5	+ 4.0
France	226.7	241.0	260.8	19.1	19.4	20.2	+ 6.3	+ 8.2
Ireland	10.0	11.0	11.6	0.8	0.9	0.9	+ 10.3	+ 5.5
Italy	175.0	180.7	190.5	14.7	14.5	14.7	+ 3.2	+ 5.4
Luxembourg	1.4	1.3	1.4	0.1	0.1	0.1	- 3.1	+ 1.8
Netherlands	61.6	64.7	66.8	5.2	5.2	5.2	+ 5.1	+ 3.2
United Kingdom	287.6	299.6	292.7	24.2	24.0	22.6	+ 4.1	- 2.3
Total	1 187.4	1 245.7	1 292.7	100.0	100.0	100.0	+ 4.9	+ 3.8
Hydroelectric total	142.6	141.5	136.5	12.5	11.4	10.6	- 0.8	- 3.5
— natural flow	136.7	134.5	128.4	12.0	10.8	10.0	- 1.5	- 4.6
— pumped storage	5.9	7.0	8.1	0.5	0.6	0.6	+ 18.6	+ 15.7
Geothermal	2.5	2.5	2.6	0.2	0.2	0.2	+ 0.2	+ 4.0
Nuclear	124.6	137.5	172.0	10.3	11.0	13.3	+ 10.3	+ 25.1
Conventional thermal total	917.7	964.2	981.6	77.0	77.4	75.9	+ 5.1	+ 1.8
— coal	377.3	416.4	426.0	31.5	33.4	32.9	+ 10.4	+ 2.3
— lignite and peat	96.3	98.2	100.3	7.9	7.9	7.8	+ 2.0	+ 2.1
— oil products	285.2	290.1	295.4	24.1	23.3	22.8	+ 1.7	+ 1.8
— natural gas	132.4	132.3	132.5	11.2	10.6	10.2	- 0.1	+ 0.2
— derived gases	19.7	20.2	20.2	1.7	1.6	1.6	+ 2.5	- 0.2
— other fuels	6.8	7.0	7.2	0.6	0.6	0.6	+ 2.9	+ 3.6

TABLE 8 B

Fuel consumption by conventional power plants and coverage of requirements in %

(in Petajoules (10¹⁵) LCV)

	1978 (actual)		1979 (estimates)		1980 (forecasts) ⁽¹⁾		change in %	
	PJ	%	PJ	%	PJ	%	1979/78	1980/79 ⁽¹⁾
<i>Belgium</i>								
Coal	102.5	27.9	111.6	28.6			+ 8.9	
Lignite	—	—	—	—			—	
Oil products	164.7	44.9	166.2	42.5			+ 0.9	
Natural gas	65.9	17.9	80.8	20.7			+22.7	
Others	34.0	9.3	32.1	8.2			- 5.6	
Total	367.1	100.0	390.7	100.0			+ 6.4	
<i>Denmark</i>								
Coals	122.0	57.2	153.7	66.2			+23.9	
Oil products	91.3	42.8	78.4	33.8			-15.1	
Total	213.3	100.0	232.1	100.0			+ 8.8	
<i>Germany (FR)</i>								
Coal	1 004.3	34.3	1 097.1	35.7			+ 9.2	
Lignite	926.4	31.7	951.0	31.0			+ 2.7	
Oil products	297.0	10.1	272.4	8.9			- 8.2	
Natural gas	583.1	19.9	622.5	20.3			+ 6.8	
Others	116.6	4.0	125.7	4.1			+ 7.8	
Total	2 927.5	100.0	3 068.7	100.0			+ 4.8	
<i>France</i>								
Coal	515.3	44.4	574.5	46.5			+11.5	
Lignite	29.2	2.5	30.5	2.5			+ 4.6	
Oil products	502.2	43.2	494.9	40.1			- 1.5	
Natural gas	55.1	4.7	73.1	5.9			+32.8	
Others	60.4	5.2	61.5	5.0			+ 1.8	
Total	1 162.2	100.0	1 234.5	100.0			+ 6.2	
<i>Ireland</i>								
Coal	0.7	0.7	1.0	1.0			+41.4	
Peat	28.2	29.6	26.0	24.6			- 7.9	
Oil products	66.5	69.7	70.6	66.9			+ 6.2	
Natural gas	—	—	7.9	7.5			—	
Total	95.4	100.0	105.6	100.0			+10.6	

⁽¹⁾ Figures are not yet available.

TABLE 8 B
(cont'd)(in Petajoules (10¹⁵) LCV)

	1978 (actual)		1979 (estimates)		1980 (forecasts) (1)		% change	
	PJ	%	PJ	%	PJ	%	1979/78	1980/79 (1)
<i>Italy</i>								
Coal	52.9	4.8	95.4	8.2			+ 80.4	
Lignite	12.6	1.1	13.8	1.2			+ 10.0	
Oil products	891.5	81.7	920.9	79.2			+ 3.3	
Natural gas	97.1	8.9	95.4	8.2			- 1.7	
Others	38.2	3.5	37.5	3.2			- 1.8	
Total	1 092.3	100.0	1 163.1	100.0			+ 6.5	
<i>Luxembourg</i>								
Coal	—	—	—	—			+ 8.7	
Oil products	2.5	17.3	1.9	14.7			- 21.2	
Natural gas	5.6	39.6	4.8	36.7			- 14.5	
Others	6.1	43.1	6.3	48.6			+ 3.3	
Total	14.3	100.0	13.1	100.0			- 0.8	
<i>Netherlands</i>								
Coal	45.2	8.5	31.5	5.6			- 30.3	
Oil products	95.3	17.9	200.3	35.7			+ 110.0	
Natural gas	360.0	67.7	294.0	52.5			- 18.3	
Others	31.5	5.9	34.5	6.2			+ 9.5	
Total	532.0	100.0	560.3	100.0			+ 5.3	
<i>United Kingdom</i>								
Coal	1 893.3	75.6	2 074.5	78.7			+ 9.6	
Oil products	544.3	21.7	508.1	19.2			- 6.6	
Natural gas	42.4	1.7	33.3	1.3			- 21.5	
Others	24.6	1.0	22.0	0.8			- 10.4	
Total	2 504.6	100.0	2 637.9	100.0			+ 5.3	
<i>Community</i>								
Coal	3 736.4	41.9	4 139.3	44.0	4 214.3	44.2	+ 10.8	+ 1.8
Peat/Lignite	996.4	11.2	1 021.4	10.9	1 038.7	10.9	+ 2.5	+ 1.7
Oil products	2 655.2	29.8	2 713.8	28.8	2 745.0	28.8	+ 2.2	+ 1.1
Natural gas	1 209.2	13.6	1 211.9	12.9	1 214.9	12.7	+ 0.2	+ 0.2
Others	311.5	3.5	319.5	3.4	320.5	3.4	+ 2.6	+ 0.3
Total	8 908.7	100.0	9 406.0	100.0	9 533.3	100.0	+ 5.6	+ 1.4

(1) Figures not yet available.

TABLE 8 C
Consumption of solid fuels in power plants
 (including autoproducers)

	1978 (actual)	1979 (provisional)	1980 (forecasts)	1979/78 %	1980/79 %
<i>(million tonnes)</i>					
<i>Belgium</i>					
Coal	4.7	5.2	5.3	+11.0	+ 1.9
<i>Denmark</i>					
Coal	4.9	5.9	7.1	+19.8	+20.3
<i>Germany (FR)</i>					
Coal	40.6	44.0	44.1	+ 8.4	+ 0.2
Black lignite	1.5	1.5	1.5	+ 6.7	+ 1.4
Lignite	113.4	121.2	122.9		
<i>France</i>					
Coal	22.9	25.0	25.0	+ 9.5	—
Black Lignite	1.2	1.2	1.2	+14.7	+ 7.5
Lignite	1.2	1.5	1.7		
<i>Ireland</i>					
Coal	—	—	—	—	—
Peat	3.0	3.0	3.2	- 0.8	+ 6.6
<i>Italy</i>					
Coal	2.1	3.3	4.2	+56.0	+30.0
Lignite	1.9	2.0	2.0	+ 7.3	—
<i>Netherlands</i>					
Coal	1.7	1.4	2.3	-21.0	+69.1
<i>United Kingdom</i>					
Coal	83.4	93.0	90.3	+11.5	- 3.0
<i>Community</i>					
Coal	160.4	177.9	178.4	+10.4	+ 0.3
Black lignite	2.7	2.7	2.7	—	—
Peat and lignite	119.5	127.7	129.8	+ 6.8	+ 1.7

TABLE 8 D

Coal supplies to public power plants

(This table does not include colliery power plants or autoproducers — 1979 figures are estimates)

(1 000 tonnes)

		National coal	Coal from other ECSC countries	Total ECSC coal	Coal from third countries	Total Supplies
<i>Belgium</i>	1977	3 453	222	3 675	421	4 096
	1978	3 372	304	3 676	704	4 380
	1979	2 540	560	3 100	1 750	4 850
<i>Denmark</i>	1977	—	1 001	1 001	3 625	4 626
	1978	—	1 080	1 080	4 286	5 366
	1979	—	800	800	5 500	6 300
<i>Germany (FR) ⁽¹⁾</i>	1977	24 964	605	25 569	4 231	29 800
	1978	27 258	631	27 889	4 599	32 488
	1979	28 765	890	29 655	5 170	34 825
<i>France</i>	1977	3 368	1 692	5 060	9 925	14 985
	1978	3 143	3 178	6 321	10 290	16 611
	1979	3 345	2 700	6 045	11 255	17 300
<i>Italy</i>	1977	—	—	—	1 802	1 802
	1978	—	46	46	1 927	1 973
	1979	—	50	50	3 250	3 300
<i>Netherlands</i>	1977	16	292	308	1 157	1 465
	1978	—	387	387	1 119	1 506
	1979	—	540	540	1 860	1 400
<i>United Kingdom</i>	1977	78 790	221	79 011	475	79 486
	1978	80 964	54	81 018	697	81 715
	1979	85 430	70	85 500	1 500	87 000
<i>Community</i>	1977	110 591	4 033	114 624	21 636	136 260
	1978	114 737	5 680	120 417	23 622	144 039
	1979	120 080	5 610	125 690	29 285	154 975

⁽¹⁾ Including 'Bergbauverbundkraftwerke'.

NB: 1977/1978 — actual; 1979 — estimates.

TABLE 9
 Coal and coke-oven coke consumption in general industry ⁽¹⁾
 (excluding power plants)

(1 000 tonnes)

	1978 (actual)	1979 (estimates)	1980 (forecasts)	1979/78 %	1980/79 %
Belgium	2 708	1 796	2 130	- 33.7	+ 18.6
Denmark	795	825	915	+ 3.8	+ 10.9
Germany (FR)	4 308	4 350	4 800	+ 1.0	+ 10.3
France	2 469	2 700	3 250	+ 9.4	+ 20.4
Ireland	36	40	40	+ 11.1	—
Italy	849	635	610	- 25.2	- 4.0
Luxembourg	1	2	3	—	—
Netherlands	263	310	360	+ 17.9	+ 16.1
United Kingdom	7 048	7 150	7 750	+ 1.4	+ 8.4
Community	18 477	17 808	19 858	- 3.6	+ 11.5

⁽¹⁾ Coke-oven coke assigned a value of unity.

TABLE 10 A

Deliveries of coal, patent fuel and coke for domestic heating

(including issues to workers)

(1 000 tonnes)

		1978 (actual)	1979 (estimates)	1980 (forecast)	1979/78 %	1980/79 %
<i>Belgium</i>	Coal	1 636	1 597	1 645	- 2.4	+ 3.0
	Patent fuel	201	200	220	- 0.5	+10.0
	Coke	20	26	25	+ 30.0	- 3.8
	Total	1 857	1 823	1 890	+ 0.7	+ 0.8
<i>Denmark</i>	Coal	14	20	20	+ 42.9	—
	Coke	28	30	30	+ 7.1	—
	Total	42	50	50	+ 19.0	—
<i>Germany (FR)</i>	Coal	1 369	1 360	1 250	- 0.7	- 8.1
	Patent fuel	1 032	1 050	1 000	+ 1.7	- 4.8
	Coke	1 727	1 925	1 750	+ 11.5	- 9.1
	Total	4 128	4 335	4 000	+ 5.0	- 7.7
<i>France</i>	Coal	3 031	2 630	2 570	- 13.2	- 2.3
	Patent fuel	2 416	2 250	2 250	- 6.9	—
	Coke	297	260	230	- 12.4	-11.5
	Total	5 744	5 140	5 050	- 10.5	- 1.8
<i>Ireland</i>	Coal	725	970	970	+ 33.8	—
	Coke	4	4	4	—	—
	Total	729	974	974	+ 33.6	—
<i>Italy</i>	Coal	150	150	135	—	-10.0
	Patent fuel	10	10	10	—	—
	Coke	196	250	250	+ 27.6	—
	Total	356	410	395	+ 15.2	- 3.7
<i>Luxembourg</i>	Coal	6	5	5	- 16.7	—
	Patent fuel	1	1	1	—	—
	Coke	1	2	2	+100.0	—
	Total	8	8	8	—	—
<i>Netherlands</i>	Coal	117	100	100	- 14.5	—
	Patent fuel	4	4	4	—	—
	Coke	6	8	8	+ 33.3	—
	Total	127	112	112	- 11.8	—
<i>United Kingdom</i>	Coal	12 195	12 300	12 000	+ 0.9	- 2.4
	Patent fuel	1 000	1 000	900	—	-10.0
	Coke	2 602	2 500	2 450	- 3.9	- 2.0
	Total	15 797	15 800	15 350	—	- 2.8
<i>Community</i>	Coal	19 243	19 132	18 695	- 0.7	- 2.3
	Patent fuel	4 664	4 515	4 385	- 3.2	- 2.9
	Coke	4 881	5 005	4 749	+ 2.4	- 5.1
	Total	28 788	28 652	27 829	- 0.5	- 2.9

TABLE 10 B

Deliveries of peat and lignite for domestic heating

(1 000 tonnes)

	1978 (actual)	1979 (estimates)	1980 (forecasts)	Difference in %	
				1979/78	1980/79
<i>Belgium</i>					
Lignite briquettes	20	20	20	—	—
<i>Denmark</i>					
Lignite briquettes	15	15	15	—	—
<i>Germany (FR)</i>					
Lignite briquettes	3 168	3 000	2 800	- 5.3	- 6.6
<i>France</i>					
Lignite briquettes	157	155	155	- 1.3	—
Black lignite	67	65	65	- 3.0	—
<i>Ireland</i>					
Peat	504	500	500	- 0.8	—
Peat briquettes	323	320	320	- 0.9	—
<i>Italy</i>					
Lignite	40	40	40	—	—
Black lignite	20	30	20	+ 50.0	- 33.3
<i>Luxembourg</i>					
Lignite briquettes	36	35	35	- 2.8	—
<i>Netherlands</i>					
Lignite briquettes	9	7	5	- 23.3	- 29.5
<i>United Kingdom</i>					
Lignite briquettes	—	—	—	—	—
Community	4 359	4 187	3 975	- 4.0	- 5.1

NB: Average calorific value of these fuels:

Peat	13 800 kJ/kg
Peat briquettes	18 640 kJ/kg
Lignite briquettes	20 000 kJ/kg
Black lignite	
— French	18 750 kJ/kg
— Italian	19 500 kJ/kg

TABLE 11
Hard coal production by areas

	<i>(1 000 tonnes)</i>		
	1978 (actual)	1979 (provisional)	1980 (forecasts)
Campine	5 963	5 613	6 000
Sud	627	511	320
<i>Belgium</i>	6 590	6 124	6 320
Ruhr	72 701	75 236	75 000
Aachen	5 300	5 334	5 400
Niedersachsen	2 431	2 333	2 300
Saar	9 277	9 888	10 300
Kleinzechen	395	486	500
<i>Germany (FR)</i>	90 104	93 277	93 500
<i>(National series)</i>	(83 541)	(85 800)	(86 000)
Nord/Pas-de-Calais	5 974	5 386	4 500
Lorraine	9 764	9 595	9 650
Centre-Midi	3 953	3 630	3 600
<i>France</i>	19 690	18 611	17 750
<i>Ireland</i>	32	60	60
Scotland	8 200	8 080	..
North	13 104	13 562	..
Yorkshire	30 622	31 013	..
North West	11 045	10 978	..
Midlands/Kent	36 251	35 731	..
South Wales	7 751	7 785	..
Licensed mines and opencast	14 722	13 447	..
<i>United Kingdom</i>	121 695	120 596	123 500
<i>Community</i>	238 111	238 668	241 130

TABLE 12

Hard coal production in Terajoules ⁽¹⁾

		<i>(10¹² Joules)</i>	
	10 ³ tonnes	Tj	kJ/kg
<i>1978 (actual)</i>			
Belgium	6 590	177	26 920
Germany (FR)	90 104	2 495	27 690
France	19 690	510	25 880
Ireland	32	1	21 160
United Kingdom	121 695	2 952	24 260
Community	238 111	6 135	25 760
<i>1979 (provisional)</i>			
Belgium	6 124	165	26 940
Germany (FR)	93 277	2 583	27 690
France	18 611	480	25 790
Ireland	60	1	21 160
United Kingdom	120 596	2 933	24 320
Community	238 668	6 162	25 820

⁽¹⁾ 1 Terajoule = 34·12 tec or 23·89 tep.

TABLE 13

Personnel employed underground

(yearly average in 1 000s)

	1978 (actual)	1979 (pro- visional)	1980 (forecast)	Changes 1979/78		Changes 1980/79	
				1 000	%	1 000	%
Belgium	17.6	17.1	16.4	-0.5	-2.8	- 0.7	-4.1
Germany (FR)	121.0	119.1	117.0	-1.9	-1.6	- 2.1	-1.8
France	35.7	33.0	30.0	-2.7	-7.6	- 3.0	-9.1
United Kingdom	188.0	184.0	179.0	-4.0	-2.1	- 5.0	-2.7
Community ⁽¹⁾	362.7	353.6	342.8	-9.1	-2.6	-10.8	-3.1

⁽¹⁾ Including 0.4 in Ireland.

TABLE 14

Output per man/hour

	kg/man/hour			% change	
	1978 (actual)	1979 (provisional)	1980 (forecast)	1979/78	1980/79
Belgium	281	276	281	-1.8	+1.8
Germany (FR)	533	546	557	+2.4	+2.0
France	332	337	345	+1.5	+2.4
United Kingdom	376	374	385	-0.5	+2.9

TABLE 15

Production costs and revenue per tonne

(% variation according to data supplied in national currencies)

	Production costs		Revenue	
	1978/77 (actual)	1979/78 (provisional)	1978/77 (actual)	1979/78 (provisional)
Belgium	+ 6.3	+ 7.0	- 0.2	- 4.5
Germany (FR)	+ 4.0	+ 3.0	+ 6.7	+ 3.5
France	+ 12.4	+ 11.5	+ 5.4	+ 9.0
United Kingdom	+ 17.2	+ 17.0	+ 8.8	+ 15.0

TABLE 16

State aids to the coal industry

(Direct and indirect aids)

(EUA/tonne produced)

	Direct aids ⁽¹⁾		Indirect aids		Total	
	1978	1979 ⁽²⁾	1978	1979 ⁽²⁾	1978	1979 ⁽²⁾
Belgium	33.82	42.07	2.64	2.92	36.46	44.99
Germany (FR)	9.43	10.95	0.10	0.10	9.53	11.05
France	24.09	24.66	0.30	0.35	24.39	25.01
United Kingdom	1.56	..	—	..	1.56	..
Community	36.32	..	0.14	..	36.46	..

⁽¹⁾ Including coking coal aids.⁽²⁾ Provisional.

TABLE 17

Investments in coal production and preparation*(million EUA)*

	1978 Actual	1979 Estimates	1980 ⁽¹⁾ Forecasts
Belgium	19.9	30.8	—
Germany (FR)	210.1	309.8	235.7
France	48.6	41.5	42.2
United Kingdom	699.4	623.3	603.0
Community	978.0	1 005.4	880.9

⁽¹⁾ Excluding investments not formally decided or engaged.

TABLE 18

Pit closures

	1979		1980	
	Number	Previous year output (1 000 tonnes)	Number	Previous year output (1 000 tonnes)
<i>Belgium</i>				
— Sud	1	116	2	181
<i>Germany (FR)</i>				
— Ruhr	1	790	—	—
— Niedersachsen	1	— ⁽¹⁾	—	—
Total	2	790	—	—
<i>France</i>				
— Nord/Pas-de-Calais	1	299	2	686
— Lorraine	1	476	—	—
— Centre-Midi	—	—	3	396
Total	2	775	5	1 082
<i>United Kingdom</i>				
— Northern	1	77	..	..
— Yorkshire	2	448	..	..
— North Western	1	178	..	..
— South Wales	1	109	..	..
Total	5	812	..	..
Community	10	2 493	7	1 263

⁽¹⁾ Without a reduction in production.

TABLE 19 A
Listed pithead prices for Community coal at 1 July 1979 and 15 January and 1 April 1980

Category	Type	Date	Ruhr DM	Aachen DM	Saar DM	Belgium Bfrs	Nord FF	Lorraine FF	South Wales £	Scotland £	South Yorkshire £
Anthracite	Nuts 3 20/30 mm	1. 7. 1979	241.00	—	—	4 300	562.00	—	51.10	—	—
		15. 1. 1980	277.00	—	—	4 900	670.00	—	51.10	—	—
		1. 4. 1980	283.00	—	—	4 900	752.00	—	59.80	—	—
Lean coal	Nuts 3 20/30 mm	1. 7. 1979	231.00	229.25	—	4 150	—	—	43.60	—	—
		15. 1. 1980	242.00	263.00	—	4 750	—	—	43.60	—	—
		1. 4. 1980	266.00	263.00	—	4 750	—	—	52.00	—	—
Semi-bituminous	Nuts 4 10/20 mm	1. 7. 1979	185.50	210.00	—	—	—	—	—	—	—
		15. 1. 1980	196.50	241.00	—	—	—	—	—	—	—
		1. 4. 1980	229.50	241.00	—	—	—	—	—	—	—
Long flame	Nuts 2 30/50 mm	1. 7. 1979	173.00	—	196.00	2 800	—	315.00	—	38.50	34.30
		15. 1. 1980	183.00	—	206.00	3 050	—	395.00	—	38.50	34.30
		1. 4. 1980	210.50	—	224.00	3 050	—	434.00	—	46.70	41.60
Long flame	Nuts 5 6/10 mm	1. 7. 1979	175.00	—	193.00	2 700	—	277.00 ⁽²⁾	—	37.40	32.00
		15. 1. 1980	185.00	—	204.00	2 850	—	381.00 ⁽³⁾	—	37.40	32.00
		1. 4. 1980	210.50	—	—	2 850	—	419.00 ⁽⁴⁾	—	44.90	37.90
Coking coal	Medium or high volatile	1. 7. 1979	179.00	188.00	194.50	2 500	340.00	321.00	43.70	42.40	38.00
		15. 1. 1980	187.00	197.00	204.00	2 650	—	385.00	43.70	42.40	38.00
		1. 4. 1980	207.50	216.00	221.00	2 650	—	385.00	50.60	47.50	42.90
Coke	Blast furnace 40 mm	1. 7. 1979	279.00	277.00	303.00	3 650 ⁽¹⁾	510.00	535.00	79.50	78.50	78.00
		15. 1. 1980	292.00	291.00	315.00	3 850	550.00	562.00	87.50	86.40	85.80
		1. 4. 1980	324.50	319.00	345.00	3 850	583.00	613.00	87.50	86.40	85.80

(1) Carcoke.

(2) Power stations: 300.00 to 315.00 FF.

(3) Power stations: 410.00 to 428.00 FF.

(4) Power stations: 300.00 to 315.00 FF.

TABLE 19 B
Listed pithead prices for Community coal at 1 July 1979, 15 January and 1 April 1980

(US \$ (1)(2))

Category	Type	Date	Ruhr	Aachen	Saar	Belgium	Nord	Lorraine	South Wales	Scotland	South Yorks	Lowest price	Highest price	Difference
Anthracite	Nuts 3 20/30 mm	1. 7. 1979	130.86	—	—	145.81	131.68	—	111.77	—	—	111.77	145.81	30.5
		15. 1. 1980	162.42	—	—	176.45	167.29	—	114.68	—	—	114.67	176.45	53.9
		1. 4. 1980	143.02	—	—	154.62	164.98	—	127.72	—	—	127.72	164.98	29.2
Lean coal	Nuts 3 20/30 mm	1. 7. 1979	125.43	124.48	—	140.73	—	—	95.36	—	—	95.36	140.73	47.6
		15. 1. 1980	141.89	154.21	—	171.05	—	—	97.84	—	—	97.84	171.05	74.8
		1. 4. 1980	134.42	132.91	—	149.89	—	—	111.06	—	—	111.06	149.89	35.0
Semi-bituminous	Nuts 4 10/20 mm	1. 7. 1979	100.72	114.02	—	—	—	—	—	—	—	100.72	114.02	13.2
		15. 1. 1980	115.22	141.31	—	—	—	—	—	—	—	115.22	141.31	22.6
		1. 4. 1980	115.98	121.79	—	—	—	—	—	—	—	115.98	121.79	5.0
Long flame	Nuts 2 30/50 mm	1. 7. 1979	93.93	—	106.42	94.95	—	73.81	—	84.21	75.02	73.81	106.42	44.2
		15. 1. 1980	107.30	—	120.79	109.83	—	98.63	—	86.39	76.97	76.97	120.79	56.9
		1. 4. 1980	106.38	—	113.20	96.24	—	95.22	—	99.74	88.85	88.85	113.20	27.4
Long flame	Nuts 5 6/10 mm	1. 7. 1979	95.02	—	104.79	91.56	—	64.90 (1)	—	81.80	69.99	64.90	104.79	61.5
		15. 1. 1980	108.47	—	119.61	102.63	—	95.13 (2)	—	83.93	71.81	69.99	119.61	70.9
		1. 4. 1980	106.38	—	—	89.93	—	91.93 (3)	—	95.90	80.95	80.95	106.38	31.4
Coking coal	Medium or high volatile	1. 7. 1979	97.19	102.08	105.34	84.77	79.66	75.21	95.58	92.74	77.43	75.21	105.34	40.1
		15. 1. 1980	109.65	115.51	119.61	95.43	—	96.13	98.06	95.15	79.44	79.44	119.61	50.6
		1. 4. 1980	104.86	109.16	111.68	83.62	—	84.47	108.07	101.45	—	—	83.62	111.68	33.6
Coke	Blast furnace 40 mm	1. 7. 1979	151.49	150.40	164.52	123.77	119.49	125.35	173.88	171.70	171.70	119.49	173.88	45.5
		15. 1. 1980	171.21	170.62	184.70	138.64	137.33	140.32	196.36	193.88	192.54	137.33	196.35	43.0
		1. 4. 1980	163.99	161.21	174.35	121.49	127.91	134.49	186.89	184.54	183.26	121.49	186.89	53.8

(1) Dollar exchange rate: DM Index Bfrs Index FF Index £ Index
 2. 7. 1979 1.8417 100 29.49 100 4.268 100 0.4572 100
 3. 1. 1980 1.7055 93 27.77 94 4.005 94 0.4456 97
 1. 4. 1980 1.9788 107 31.69 107 4.558 107 0.4682 102

(2) Prices are not adjusted for quality differences.

(3) Power stations: 70.29 to 73.81 \$/tonne.

(4) Power stations: 102.37 to 106.87 \$/tonne.

(5) Power stations: 89.95 to 93.90 \$/tonne.

TABLE 20

Average cif prices for steam coal imported from third countries as reported by the Member States

(average price per quarter)

	1/77	1/78	1/79	11/79	111/79
In EUA/TJ ⁽¹⁾ ⁽²⁾					
Maximum	1 455	1 249	1 105	1 215	1 251
Average	1 046	1 054	1 020	1 083	1 096
Minimum	1 010	978	953	994	951
In \$/tonne					
Maximum	41.3	38.9	40.0	42.1	45.8
Average	30.4	33.1	34.9	36.3	38.3
Minimum	28.6	30.0	32.7	33.1	32.4

⁽¹⁾ 1 Terajoule = 34.12 tec or 23.89 tep.⁽²⁾ Rounded up to nearest whole figure.

TABLE 21

Coke-oven coke production capacity

(million tonnes)

	Belgium	Germany (FR)	France	Italy	Netherlands	United Kingdom	Community
<i>1978 (actual)</i>							
Colliery plants	—	22.4	6.0	—	—	4.1	32.5
Iron and steel industry	7.3	9.1	6.7	9.0	2.4	8.5	43.0
Independent	—	—	—	2.6	0.5	3.0	6.1
Total	7.3	31.5	12.7	11.6	2.9	15.6	81.6
(of which coastal coking plants)	(1.5)	(0.4)	(4.2)	(11.6)	(2.9)	(. .)	(. .)
<i>1979 (provisional)</i>							
Colliery plants	—	22.4	5.9	—	—	3.7	32.0
Iron and steel industry	6.9	9.1	6.5	9.0	2.4	9.1	43.0
Independent	—	—	—	2.6	0.5	3.0 ⁽¹⁾	6.1
Total	6.9	31.5	12.4	11.6	2.9	15.8	81.1
(of which coastal coking plants)	(1.5)	(0.4)	(4.2)	(11.6)	(2.9)	(. .)	(. .)
<i>1980 (forecasts)</i>							
Colliery plants	—	22.4	5.3	—	—	3.6	31.3
Iron and steel industry	6.6	9.1	6.3	9.0	2.5	10.8	44.3
Independent	—	—	—	2.6	0.5	3.0 ⁽¹⁾	6.1
Total	6.6	31.5	11.6	11.6	3.0	17.4	81.7
(of which coastal coking plants)	(1.5)	(0.4)	(4.2)	(11.6)	(3.0)	(. .)	(. .)

⁽¹⁾ Including LTC.

TABLE 22
Coke-oven coke

(1 000 tonnes)

	Coal deliveries to coking plants	Consumption of coal in cok- ing plants	Production of coke-oven coke	
			1 000 tonnes	Variation in % versus the previous year
<i>1978 (actual)</i>				
Belgium	7 221	7 403	5 747	+ 3.2
Germany (FR)	32 758	32 739	25 593	- 5.9
France	12 985	13 034	10 682	- 0.8
Italy	10 066	9 779	7 315	- 4.7
Netherlands	3 271	3 283	2 401	- 4.0
United Kingdom	16 338	16 721	12 394	- 12.7
Community	82 579	82 959	64 132	- 6.0
<i>1979 (estimates)</i>				
Belgium	8 468	8 468	6 440	+ 12.0
Germany (FR)	33 900	33 900	26 697	+ 4.3
France	14 500	14 500	11 400	+ 6.7
Italy	9 650	9 650	7 450	+ 1.8
Netherlands	3 540	3 540	2 550	+ 6.2
United Kingdom	17 000	17 000	12 600	- 1.7
Community	87 058	87 058	67 137	+ 4.7
<i>1980 (forecasts)</i>				
Belgium	7 900	7 900	6 120	- 5.0
Germany (FR)	34 700	34 700	27 000	+ 1.1
France	12 600	12 600	10 250	- 10.1
Italy	9 500	9 500	7 200	- 3.4
Netherlands	3 450	3 450	2 700	+ 5.9
United Kingdom	17 220	17 200	12 975	+ 3.0
Community	85 370	85 370	66 245	- 1.3

TABLE 23

Coal supplies to coke ovens

(1 000 tonnes)

	National coal	Coal from other ECSC countries	Total ECSC coal	Coal from third countries	Total supplies
<i>Belgium</i>					
1977	3 732	1 344	5 076	2 268	7 344
1978	3 821	1 806	5 627	1 726	7 353
1979	3 973	1 395	5 368	3 100	8 468
<i>Germany (FR)</i>					
1977	34 787	185	34 972	82	35 054
1978	32 631	100	32 731	27	32 758
1979	33 480	140	33 620	280	33 900
<i>France</i>					
1977	6 288	3 550	9 838	4 037	13 875
1978	5 721	3 362	9 083	3 943	13 026
1979	5 450	3 800	9 250	5 250	14 500
<i>Italy</i>					
1977	—	2 110	2 110	8 066	10 176
1978	—	2 568	2 568	7 719	10 287
1979	—	2 100	2 100	7 550	9 650
<i>Netherlands</i>					
1977	—	571	571	2 675	3 246
1978	—	801	801	2 292	3 093
1979	—	640	640	2 900	3 540
<i>United Kingdom</i>					
1977	17 938	145	18 083	933	19 016
1978	14 794	198	14 992	1 142	16 134
1979	14 700	100	14 800	2 200	17 000
<i>Community</i>					
1977	62 745	7 905	70 650	18 061	88 711
1978	56 967	8 835	65 802	16 849	82 651
1979	57 603	8 175	65 778	21 280	87 058

NB: 1977-1978 — actual; 1979 — estimates.

TABLE 24

Trend of intra-Community trade in coal

(1 000 tonnes)

To \ From										Total
	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	
<i>Belgium</i>										
1978	—	—	4 067	69	—	—	—	2	153	4 291
1979	—	—	3 420	65	—	—	—	—	240	3 725
1980	—	—	3 270	60	—	—	—	—	190	3 520
<i>Denmark</i>										
1978	—	—	928	—	—	—	—	—	131	1 059
1979	—	—	580	—	—	—	—	50	180	810
1980	—	—	750	—	—	—	—	—	150	900
<i>Germany (FR)</i>										
1978	104	—	—	298	2	—	—	—	604	1 008
1979	150	—	—	350	—	—	—	—	800	1 300
1980	200	—	—	250	—	—	—	—	650	1 100
<i>France</i>										
1978	79	—	6 600	—	—	—	—	—	892	7 571
1979	70	—	6 740	—	—	—	—	—	790	7 600
1980	75	—	5 495	—	—	—	—	—	600	6 170
<i>Ireland</i>										
1978	11	—	11	—	—	—	—	—	200	222
1979	—	—	—	—	—	—	—	—	200	200
1980	—	—	—	—	—	—	—	—	200	200
<i>Italy</i>										
1978	—	—	2 534	21	—	—	—	—	52	2 607
1979	5	—	2 155	20	—	—	—	—	20	2 200
1980	10	—	2 350	20	—	—	—	—	20	2 400
<i>Luxembourg</i>										
1978	8	—	299	—	—	—	—	—	13	320
1979	20	—	120	40	—	—	—	—	—	180
1980	—	—	160	40	—	—	—	—	—	200
<i>Netherlands</i>										
1978	10	—	1 258	4	1	—	—	—	169	1 442
1979	—	—	1 160	10	—	—	—	—	180	1 350
1980	—	—	1 040	10	—	—	—	—	200	1 250
<i>United Kingdom</i>										
1978	17	—	260	1	53	—	—	2	—	333
1979	—	—	375	—	—	—	—	—	—	375
1980	—	—	350	—	—	—	—	—	—	350
<i>Total deliveries</i>										
1978	229	—	15 957	393	55	—	—	4	2 214	18 853
1979	245	—	14 550	485	—	—	—	50	2 410	17 740
1980	285	—	13 415	380	—	—	—	—	2 010	16 090

TABLE 25

Trend of intra-Community trade in coke-oven coke

(1 000 tonnes)

To \ From										Total
	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	
<i>Belgium</i>										
1978	—	—	253	112	—	—	—	207	38	610
1979	—	—	965	130	—	—	—	165	40	1 300
1980	—	—	1 050	100	—	—	—	100	50	1 300
<i>Denmark</i>										
1978	—	—	41	65	—	—	—	—	7	113
1979	—	—	25	60	—	—	—	—	15	100
1980	—	—	30	60	—	—	—	—	20	110
<i>Germany (FR)</i>										
1978	27	8	—	72	—	—	—	144	127	378
1979	90	—	—	160	—	—	—	150	100	500
1980	60	—	—	200	—	—	—	150	90	500
<i>France</i>										
1978	93	—	1 494	—	—	21	—	108	—	1 716
1979	170	—	1 940	—	—	20	—	115	—	2 245
1980	125	—	1 965	—	—	15	—	320	60	2 485
<i>Ireland</i>										
1978	—	—	—	—	—	—	—	—	10	10
1979	—	—	—	—	—	—	—	—	10	10
1980	—	—	—	—	—	—	—	—	10	10
<i>Italy</i>										
1978	—	—	23	65	—	—	—	—	—	88
1979	—	—	120	70	—	—	—	—	—	190
1980	—	—	125	75	—	—	—	—	—	200
<i>Luxembourg</i>										
1978	78	—	1 795	29	—	—	—	4	12	1 917
1979	5	—	2 065	—	—	—	—	—	—	2 070
1980	5	—	2 170	—	—	—	—	—	—	2 175
<i>Netherlands</i>										
1978	1	—	181	24	—	—	—	—	16	224
1979	5	—	390	30	—	—	—	—	15	440
1980	10	—	235	40	—	—	—	—	15	300
<i>United Kingdom</i>										
1978	1	—	13	1	—	—	—	—	—	15
1979	—	—	10	10	—	—	—	—	—	20
1980	—	—	5	5	—	—	—	—	—	10
<i>Total</i>										
1978	200	8	3 800	368	—	21	—	463	210	5 071
1979	270	—	5 515	460	—	20	—	430	180	6 875
1980	200	—	5 580	480	—	15	—	570	245	7 090

TABLE 26
Imports of coal from third countries

	<i>(million tonnes)</i>		
	1978 (actual)	1979 (provisional)	1980 (forecasts)
<i>A. By country of destination</i>			
Belgium	2.7	5.9	5.6
Denmark	5.0	6.7	8.9
Germany (FR)	5.7	6.9	6.5
France	15.9	19.5	21.3
Ireland	0.6	0.8	0.8
Italy	9.8	11.1	11.7
Luxembourg	0.2	0.2	0.2
Netherlands	3.4	3.8	4.7
United Kingdom	2.0	4.0	5.7
Community	45.3	59.0	65.4
<i>B. By country of origin</i>			
USA	7.5	14.7	14.2
Canada	0.9	0.8	0.9
Australia	6.8	8.1	10.2
South Africa	10.7	15.9	16.6
Poland	15.3	15.2	19.8
USSR	3.3	2.8	2.8
Others	0.8	1.5	0.9
Total	45.3	59.0	65.4
<i>C. By sector of consumption</i>			
Steam coal	24.5	30.5	38.0
Coking coal	17.2	24.0	22.7
Others	3.6	4.5	4.7
Total	45.3	59.0	65.4

TABLE 27
Imports of coal from third countries — 1979
 (Provisional figures)

(1 000 tonnes)

	USA	Canada	Australia	South Africa	Poland	USSR	Others	Total
Belgium	2 523	56	276	1 889	686	364	88	5 882
Denmark	177	134	608	2 290	2 963	462	55	6 689
Germany (FR)	1 768	511	622	1 052	2 392	210	331	6 886
France	3 350	73	2 407	8 377	4 457	736	92	19 492
Ireland	50	—	—	10	790	—	—	850
Italy	4 234	—	1 006	1 911	2 450	925	565	11 091
Luxembourg	17	—	—	139	—	18	—	174
Netherlands	1 519	—	1 026	219	805	7	268	3 844
United Kingdom	1 031	—	2 164	38	658	65	91	4 047
Community	14 669	774	8 109	15 925	15 201	2 787	1 490	58 955

TABLE 28
Community producers' stocks
 A. *Stocks of coal*

(1 000 tonnes)

	End of 1978 (actual)	End of 1979 (provisional)	End of 1980 (forecast)	Difference	
				1979/78	1980/79
Belgium	265	155	310	- 110	+ 155
Germany (FR) ⁽¹⁾	13 831	12 600	12 885	- 1 231	+ 285
France	4 826	3 940	4 710	- 886	+ 770
Ireland	30	30	30	—	—
United Kingdom	13 110	9 700	9 350	- 3 410	- 350
Community ⁽²⁾	32 071	26 425	27 285	- 5 646	+ 860

⁽¹⁾ Including 'Notgemeinschaft'.

⁽²⁾ Including 9 in Italy.

B. *Stocks of coke-oven coke**(1 000 tonnes)*

	End of 1978 (actual)	End of 1979 (provisional)	End of 1980 (forecast)	Difference	
				1979/78	1980/79
Belgium	87	130	130	+ 43	—
Germany (FR) (1)	13 735	6 619	5 144	-7 116	-1 475
France	1 194	1 000	1 000	- 194	—
Italy	487	400	400	- 87	—
Netherlands	35	25	25	- 10	—
United Kingdom	3 285	1 950	1 950	-1 335	—
Community	18 823	10 124	8 649	-8 699	-1 475

C. *Stocks of coke and coke-oven coke**(1 000 tonnes)*

	End of 1978 (actual)	End of 1979 (provisional)	End of 1980 (forecast)	Difference	
				1979/78	1980/79
Belgium	378	324	479	- 54	+ 155
Germany (FR) (1)	31 687	21 204	19 572	-10 483	-3 632
France	6 378	5 240	6 010	- 1 138	+ 770
Ireland	30	30	30	—	—
Italy	642	520	520	- 122	—
Netherlands	45	32	32	- 13	—
United Kingdom	17 380	12 235	11 885	- 5 145	- 350
Community	56 540	39 585	38 528	-16 955	-1 057

(1) Including 'Notgemeinschaft'.

TABLE 29 A

Breakdown of coal stocks

(Total colliery stocks at the end of September 1979)

A. By group and by area

(1 000 tonnes)

	Groups I-II	Groups V-VI	Groups III-VI-VII	Total
<i>Belgium</i>				
Campine	—	58	—	58
Basin Sud	19	—	—	19
Total	19	58	—	77
<i>Germany (FR)</i>				
Ruhr	226	4 244	69	4 539
Saar	3	144	809	956
Aachen	161	45	403	609
Niedersachsen	620	—	—	620
Total	1 010	4 433	1 281	6 724
+ 'Notgemeinschaft'	—	—	—	7 275
Total				13 999
<i>France</i>				
Nord/Pas-de-Calais	737	424	4	1 165
Lorraine	—	1 665	—	1 665
Centre-Midi	369	390	594	1 353
Total	1 106	2 479	598	4 183
<i>Ireland</i>				
	—	—	30	30
<i>United Kingdom</i>				
Scotland	—	47	120	167
Northern	—	2 438	162	2 600
Yorkshire	—	417	763	1 180
North Western	—	436	81	517
Midlands	—	29	863	892
South Wales	1 513	283	1 571	3 367
Opencast	832	352	917	2 101
Total	2 345	4 002	4 477	10 824
Community	4 480	10 972	6 386	21 838

TABLE 29 B

Breakdown of coal stocks

(Total colliery stocks at the end of September 1979)

*B. By group and by preparation**(1 000 tonnes)*

	Large and graded	Smalls washed	Untreated smalls and fines	Part-treated smalls	Run of mine	Slurry	Total
<i>Belgium</i>							
Groups I + II	4	3	—	1	—	11	19
Groups V - VI	14	35	3	6	—	—	58
Others	—	—	—	—	—	—	—
Total	18	38	3	7	—	11	77
<i>Germany (FR)</i>							
Groups I + II	71	239	2	688	—	10	1 010
Groups V - VI	122	1 692	3	2 357	—	259	4 433
Others	147	222	75	187	—	650	1 281
Total	340	2 153	80	3 232	—	919	6 724
+ 'Notgemeinschaft'							7 275
Total							13 999
<i>France</i>							
Groups I + II	76	260	118	411	3	238	1 106
Groups V - VI	354	369	341	688	1	726	2 479
Others	29	36	239	187	—	107	598
Total	459	665	698	1 286	4	1 071	4 183
<i>Ireland III - IV - VII</i>							
	—	—	—	—	30	—	30
<i>United Kingdom</i>							
Groups I + II	13	641	754	16	921	—	2 345
Groups V - VI	165	2 170	574	141	952	—	4 002
Others	277	971	1 718	310	1 201	—	4 477
Total	455	3 782	3 046	467	3 074	—	10 824
<i>Community</i>							
Groups I + II	164	1 143	874	1 116	924	259	4 480
Groups V - VI	655	4 266	921	3 192	953	985	10 972
Others	453	1 229	2 032	684	1 231	757	6 386
Total	1 272	6 638	3 827	4 992	3 108	2 001	21 838

TABLE 30
Stocks of coal at power stations
 (End of September 1979)

	30. 9. 1978 (1 000 tonnes)	30. 9. 1979		Difference 1979/1978 (1 000 tonnes)
		1 000 tonnes	Days	
Belgium	863	752	56	- 111
Denmark	2 477	2 915	180	+ 438
Germany (FR)	6 086	6 100	50	+ 14
France	5 837	4 780	70	- 1 057
Ireland	—	—	—	—
Italy	935	350	38	- 585
Luxembourg	—	—	—	—
Netherlands	300	300	80	—
United Kingdom	20 422	15 726	62	- 4 696
Community	36 920	30 923	64	- 5 997

Balance of supply and demand: hard coal, 1980

(1 000 tonnes)

	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Community
1. Production (t=t) (national series)	6 320	—	93 500 (86 000)	17 750	60	—	—	—	123 500	241 130
2. Recoveries	2 050	—	600	1 800	—	—	—	—	1 500	5 950
3. Receipts from other ECSC countries	3 520	900	1 100	6 170	200	2 400	200	1 250	350	(16 090)
4. Imports from third countries	5 555	8 900	6 500	21 300	850	11 690	150	4 740	5 700	65 385
5. Total availabilities	17 445	9 800	101 700	47 020	1 110	14 090	350	5 990	131 050	312 465
6. Inland demand:										
(a) power stations at mines	350	—	11 300	7 300	—	—	—	—	200	19 150
(b) public power stations	4 900	8 400	28 100	17 500	60	4 250	5	2 300	88 000	153 515
(c) Coking plants	7 900	—	34 700	12 600	—	9 500	—	3 450	17 220	85 370
(d) iron and steel industry (of which power stations)	120	—	1 500	1 450	—	15	340	—	200	3 625
(e) other industries (of which power stations)	(—)	(—)	(1 200)	(250)	(—)	(—)	(—)	(—)	(100)	(1 550)
(f) other industries (of which power stations)	1 900	870	6 600	2 150	35	160	—	140	9 600	21 455
(f) domestic heating	(—)	(—)	(4 000)	(—)	(—)	(—)	(—)	(—)	(2 800)	(6 800)
(g) miscellaneous:	1 630	20	1 000	2 450	970	135	5	100	10 200	16 510
1. issues to workers	15	—	250	120	—	—	—	—	1 800	2 185
2. patent fuel plants	105	—	1 500	1 950	—	10	—	—	1 100	4 665
3. own consumption at mines	10	—	300	280	—	—	—	—	800	1 390
4. gasworks	—	90	500	—	45	—	—	—	—	635
5. railways	5	—	100	20	—	20	—	—	40	185
6. others	—	—	800	—	—	—	—	—	—	800
Total	16 935	9 380	86 650	45 820	1 110	14 090	250	5 990	129 160	309 485
7. Deliveries to other ECSC countries	285	—	13 415	380	—	—	—	—	2 010	(16 090)
8. Exports to third countries	70	—	1 350	50	—	—	—	—	230	1 700
9. Total requirements	17 290	9 380	101 415	46 250	1 110	14 090	350	5 990	131 400	311 185
10. Producers' stocks (beginning)	155	..	12 600	3 940	30	—	—	—	9 700	26 425
11. Additions/withdrawals from stocks	+ 155	(+ 420)	+ 285	+ 770	—	—	—	—	- 350	+ 860
12. Producers' stocks (end)	310	..	12 885	4 710	30	—	—	—	9 350	27 285

Coal — Intra-Community exchanges 1980

(1 000 tonnes)

To	From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Total receipts
Belgium	—	—	—	3 270	60	—	—	—	—	190	3 520
Denmark	—	—	—	750	—	—	—	—	—	150	900
Germany (FR)	200	—	—	—	250	—	—	—	—	650	1 100
France	75	—	—	5 495	—	—	—	—	—	600	6 170
Ireland	—	—	—	—	—	—	—	—	—	200	200
Italy	10	—	—	2 350	20	—	—	—	—	20	2 400
Luxembourg	—	—	—	160	40	—	—	—	—	—	200
Netherlands	—	—	—	1 040	10	—	—	—	—	200	1 250
United Kingdom	—	—	—	350	—	—	—	—	—	—	350
	Total deliveries	285	—	13 415	380	—	—	—	—	2 010	16 090

Balance of supply and demand: coke, 1980

(1 000 tonnes)

	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Community
1. Production — Coke-oven coke	6 120	—	27 000	10 250	—	7 200	—	2 700	12 975	66 245
— gas coke	—	60	375	—	35	—	—	—	—	470
Total	6 120	60	27 375	10 250	35	7 200	—	2 700	12 975	66 715
2. Receipts from other ECSC countries	1 300	110	500	2 485	10	200	2 175	300	10	(7 090)
3. Imports from third countries	50	—	400	—	—	—	200	100	—	750
4. Total availabilities	7 470	170	28 275	12 735	45	7 400	2 375	3 100	12 985	67 465
5. Inland demand										
(a) iron and steel industry	6 510	35	19 000	10 265	10	6 055	2 370	2 160	8 500	54 905
(b) other industries	230	45	1 400	1 100	5	450	3	220	950	4 403
(c) domestic users	20	30	1 150	100	4	240	2	8	2 450	4 004
(d) miscellaneous										
— issues to workers	5	—	600	130	—	10	—	—	—	745
— own consumption	5	10	250	350	1	50	—	2	240	908
— others	—	—	250	10	—	—	—	—	—	260
Total	6 770	120	22 650	11 955	20	6 805	2 375	2 390	12 140	65 225
6. Deliveries to other ECSC countries	200	—	5 580	480	—	15	—	570	245	(7 090)
7. Exports to third countries	500	50	1 520	300	25	580	—	140	600	3 715
8. Total requirements	7 470	170	29 750	12 735	45	7 400	2 375	3 100	12 985	68 940
9. Producers' stocks (beginning)	130	—	6 619	1 000	—	400	—	25	1 950	10 124
10. Additions/withdrawals from stocks	—	—	—	—	—	—	—	—	—	—
11. Producers' stocks (end)	130	—	5 144	1 000	—	400	—	25	1 950	8 649

Coke-oven coke — Intra-Community exchanges 1980

(1 000 tonnes)

To	From	Belgium	Denmark	Germany (FR)	France	Ireland	Italy	Luxembourg	Netherlands	United Kingdom	Total receipts
Belgium	—	—	—	1 050	100	—	—	—	100	50	1 300
Denmark	—	—	—	30	60	—	—	—	—	20	110
Germany (FR)	60	—	—	—	200	—	—	—	150	90	500
France	125	—	—	1 965	—	—	15	—	320	60	2 485
Ireland	—	—	—	—	—	—	—	—	—	10	10
Italy	—	—	—	125	75	—	—	—	—	—	200
Luxembourg	5	—	—	2 170	—	—	—	—	—	—	2 175
Netherlands	10	—	—	235	40	—	—	—	—	15	300
United Kingdom	—	—	—	5	5	—	—	—	—	—	10
Total deliveries		200	—	5 580	480	—	15	—	570	245	7 090

EURONORMS

The Commission of the European Communities (ECSC) has published the following new EURONORMS in German, English, French, Italian and Dutch. The EURONORMS which are available up to the present in English are indicated by an asterisk (*). Sales prices valid from 1 July 1976.

			<i>Price in £</i>
(*) EURONORM	3-79	Brinell hardness test for steel — second edition	1.30
(*) EURONORM	4-79	Rockwell hardness test for steel (Scales A, C, B, F) — second edition	1.30
(*) EURONORM	5-79	Vickers hardness test for steel — second edition	1.40
(*) EURONORM	18-79	Selection and preparation of samples and test pieces for steel and iron and steel products — second edition	2.00
(*) EURONORM	82-79	Steel for the reinforcement of concrete with an improved bonding action — Dimensions, Mass, Tolerances — General requirements (Sheet 1 — Sheet 2)	1.80
(*) EURONORM	95-79	Heat resisting steels — Quality requirements	2.70
(*) EURONORM	96-79	Tool steels — Quality requirements	4.00
(*) EURONORM	132-79	Cold-rolled steel strip for springs — Quality requirements	1.80
(*) EURONORM	133-79	Round wire rod in non-alloy and alloy steel for the manufacture of wire for covered electrodes, for gas-shielded arc welding and for submerged arc welding — Quality standard	1.00
(*) EURONORM	138-79	Prestressing steels	3.75
(*) EURONORM	141-79	Austenitic stainless steel plate and strip for application at low temperature — Technical conditions of delivery	2.40
(*) EURONORM	142-79	Continuous hot-dip zinc coated unalloyed mild steel sheet and coil for cold forming — Quality standard	2.00
(*) EURONORM	143-79	Continuous hot-dip zinc coated unalloyed mild steel sheet and coil for cold forming — Tolerances on dimensions and shape	1.30
(*) EURONORM	144-79	Round wire rod in stainless and heat resisting steel intended for the production of welding consumables — Quality standard	0.80
(*) EURONORM	147-79	Continuous hot-dip zinc-coated unalloyed steel sheet and coil with specified minimum yield strengths for structural purposes — Quality standard	1.80
(*) EURONORM	148-79	Continuous hot-dip zinc-coated unalloyed steel sheet and coil with specified minimum yield strengths for structural purposes — Tolerances on dimensions and shape	1.20

The following is a list of all the EURONORMS so far published:

(*)	Information circular No 1	Standard samples for the chemical analysis of iron and steel products, second edition (1974)	1-85
	EURONORM 1-55	Fontes et ferro-alliages	1-35
	EURONORM 2-57	Essai de traction pour l'acier	0-85
	EURONORM 3-55	Essai de dureté Brinell pour l'acier	0-60
	EURONORM 4-55	Essai de dureté Rockwell, échelles B et C pour l'acier	0-60
	EURONORM 5-55	Essai de dureté Vickers pour l'acier	0-60
	EURONORM 6-55	Essai de pliage pour l'acier	0-60
	EURONORM 7-55	Essai de résilience Charpy pour l'acier	0-60
	EURONORM 8-55	Valeurs de conversion approximatives de la durée et la résistance à la traction de l'acier	0-60
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