

# COMMISSION OF THE EUROPEAN COMMUNITIES

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## THE MARKET FOR SOLID FUELS IN THE COMMUNITY

IN 1988 AND THE OUTLOOK FOR 1989

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Revision of the report of the Commission of 10 March 1989  
Doc SEC (89) 280, updated on 17 April 1989

CONTENTS<sup>1</sup>.

|       |  |    |
|-------|--|----|
| I.    | INTRODUCTION AND SUMMARY .....                     | 3  |
| II.   | ECONOMIC SITUATION AND PROSPECTS .....             | 6  |
| III.  | DEVELOPMENTS ON THE COMMUNITY ENERGY MARKETS ..... | 6  |
| IV.   | DEMAND FOR SOLID FUELS .....                       | 7  |
| V.    | COMMUNITY PRODUCTION OF SOLID FUELS .....          | 9  |
| VI.   | SOLID FUEL PRICES .....                            | 10 |
| VII.  | TRADE IN SOLID FUELS .....                         | 13 |
| VIII. | STOCKS .....                                       | 15 |
| IX.   | CONCLUSIONS .....                                  | 15 |

List of Tables

|            |   |
|------------|---|
| Table 10 : | Hard coal production by area            |
| Table 18 : | Hard coal from third countries          |
| Table 21 : | Producer's stocks of hard coal and coke |
| Table 22 : | Hard coal balance-sheet for 1989        |
| Table 23 : | Coke balance sheet for 1989             |
| Table 24 : | Lignite and peat balance-sheet for 1989 |
| Table A :  | Guide prices for imported coking coal   |
| Table B :  | Prices of imported steam coal           |

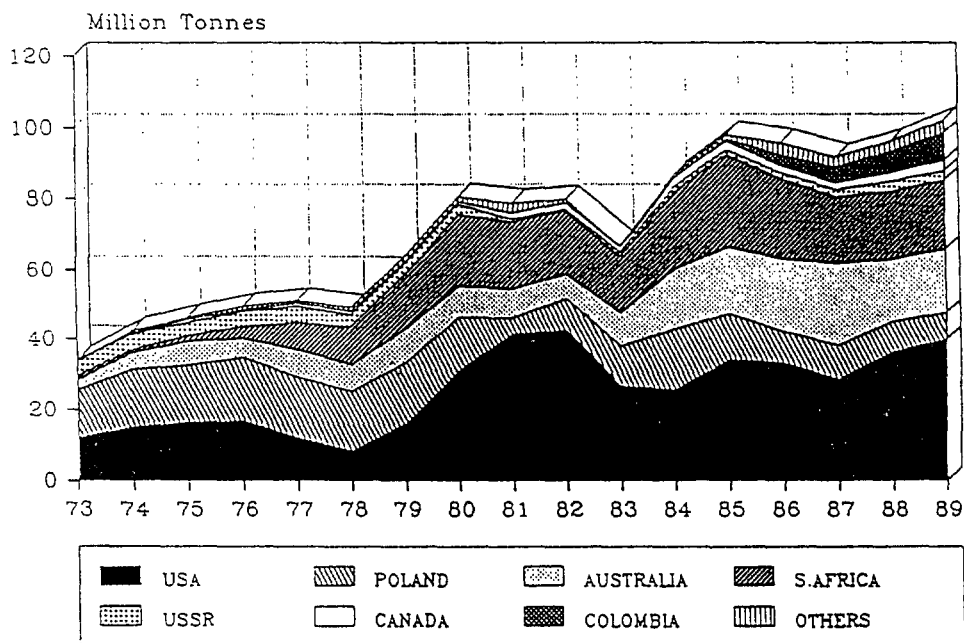
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1. The numbering of the chapters of this document and the annexed tables is identical to that of the Commission's report of 10 March 1989, updated on 17 April 1989

1. INTRODUCTION AND SUMMARY

1. This document represents the revision of the annual report on "The market for solid fuels in the Community in 1988 and the outlook for 1989". The main figures and trends as at the beginning of the second half of 1989 are the subject of this document, which was drawn up taking into account the conclusions of the meeting of the coal experts of the national administrations held on 11 July 1989.
2. The following table summarises the supply and demand for solid fuels in the Community. In addition, the following graph shows the development of resources and deliveries of hard coal.

HARD COAL IMPORTED FROM THIRD COUNTRIES



|   | (million tonnes) |                     |                                 |                 |
|---|------------------|---------------------|---------------------------------|-----------------|
|   | <u>1987</u>      | <u>1988</u>         | <u>1989</u>                     | % 1989/<br>1988 |
|   | Outturn          | Outturn<br>20.07.89 | Revised<br>Forecast<br>20.07.89 |                 |
| <b><u>Coal</u></b>                                |                  |                     |                                 |                 |
| <b><u>Resources</u></b>                           |                  |                     |                                 |                 |
| - Production                                      | 221.7            | 214.3               | 210.4                           | - 1.3           |
| - Recoveries                                      | 5.0              | 4.7                 | 4.3                             | - 8.5           |
| - Imports from third countries                    | <u>91.7</u>      | <u>96.1</u>         | <u>102.3</u>                    | <u>+ 6.4</u>    |
| Total   | 318.4            | 315.1               | 317.0                           | + 0.6           |
| <b><u>Deliveries</u></b>                          |                  |                     |                                 |                 |
| - To coking plants                                | 71.7             | 69.7                | 68.9                            | - 1.1           |
| - To power stations                               | 200.8            | 198.7               | 193.7                           | - 2.5           |
| - To others                                       | 47.3             | 48.2                | 46.3                            | - 3.9           |
| - Exports to third countries                      | <u>1.7</u>       | <u>1.4</u>          | <u>0.9</u>                      | <u>- 35.7</u>   |
| Total   | 321.5            | 318.0               | 309.8                           | - 2.6           |
| <b><u>Lignite et Peat</u></b>                     |                  |                     |                                 |                 |
| <b><u>Resources</u></b>                           |                  |                     |                                 |                 |
| - Production and Imports                          | 180.7            | 181.3               | 186.1                           | + 2.6           |
| <b><u>Deliveries</u></b>                          |                  |                     |                                 |                 |
| - To briquetting plants                           | 18.4             | 16.3                | 18.0                            | + 10.4          |
| - To power stations                               | 156.3            | 161.9               | 164.0                           | + 1.3           |
| - To others (exports to third countries included) | <u>3.2</u>       | <u>4.4</u>          | <u>2.9</u>                      | <u>- 34.1</u>   |
| Total   | 177.9            | 182.6               | 184.9                           | + 1.3           |
| <b><u>Coke</u></b>                                |                  |                     |                                 |                 |
| <b><u>Resources:</u></b>                          |                  |                     |                                 |                 |
| - Production                                      | 54.0             | 52.0                | 51.9                            | - 0.2           |
| - Imports from third countries                    | <u>0.9</u>       | <u>1.9</u>          | <u>1.1</u>                      | <u>- 42.1</u>   |
| Total   | 54.9             | 53.9                | 53.0                            | - 1.7           |
| <b><u>Deliveries</u></b>                          |                  |                     |                                 |                 |
| - To steel industry                               | 44.9             | 48.2                | 47.7                            | - 1.0           |
| - Other deliveries into the Community             | 7.1              | 5.9                 | 5.8                             | - 1.7           |
| - Export to third countries                       | <u>1.1</u>       | <u>1.4</u>          | <u>1.8</u>                      | <u>+ 28.6</u>   |
| Total   | 53.1             | 55.5                | 55.3                            | - 0.4           |

3. According to current forecasts, production of hard coal in the Community should again decline by 3.9 Mlot as compared to the final figures for the previous year, or - 1.3%. Recoveries should also decline by 0.4 Mlot or - 8.5%, whereas imports of hard coal from third countries should exceed the 100 Mlot mark and reach the figure of 102.3 Mlot, i.e. a 6.4% increase as compared to the previous year. Total hard coal resources are expected to rise by 0.6% from 315.1 Mlot in 1988 to reach 317.0 Mlot in 1989.

Steel industry activity remained at a high rate during the first half year of 1989 : for the first five months production of crude steel in the Community was up to 4.6% as compared to the same period of 1988. The outlook for the second half year, however, is more uncertain. Nevertheless coal deliveries to coking plants in 1989 are likely to drop by 0.8 Mlot or - 1.1%. Coke deliveries should also decrease slightly from 54.1 Mlot last year to 53.5 Mlot in 1989. Both in 1988 and 1989 coke deliveries exceed significantly resources. Stocks will therefore have to continue playing their buffer role fully.

As against what the first forecasts for 1989 had indicated, deliveries of coal to power plants should recede by 5 Mlot this year as compared to 1988, or - 2.5%, and this notwithstanding a generally poor contribution from hydroelectricity. The exceptionally mild weather during the recent winter and significantly higher availability of electricity from nuclear origin seem to be the main reasons for this development. Moreover, certain countries are using more natural gas in the production of electricity. So far as lignite and peat are concerned, notwithstanding the lack of recent figures from one producing country, both production (+4.8 Mlot or + 2.6%) and deliveries (+2.3 Mlot or 1.3%) are expected to rise. This expansion remains however largely concentrated in Greece.

4. With the exception of a few isolated increases, list prices of the Community coal and coke producers remained generally unchanged during the first half of 1989.

The indicative price for imported coking coal was again slightly higher for the first quarter of this year; as compared to the same quarter of the previous year it went up by US\$ 3.55/t or + 6.9%. For steam coal also the firming up tendency of prices, especially for low sulphur qualities, was confirmed. Owing to the appreciation of the US\$ with regard to the European currencies during the first quarter of 1989, the rise of coal prices expressed in national currencies is significantly more pronounced.

5. Since total coal supplies are on the rise and deliveries are down, stocks at the end of 1989 should be distinctly higher than at the same period of the previous year. Although more precise figures are lacking for one producing country, it can be estimated that more than half of the stocks increase will be at pit-head of the mines, especially in the United Kingdom. On the other hand, stocks of coke at the end of 1989 should again drop by about 2.8 Mlot, after having decreased already by 2.3 Mlot at the end of 1988.

## II. ECONOMIC SITUATION AND PROSPECTS

6. The analysis of economic developments in 1988 and 1989 presented earlier this year, has proved generally true. The present situation is better than that experienced for many years. The prospects for this year are fairly good with economic growth expected to be slightly higher than forecast at the beginning of this year (3 1/4 instead of 3% after 3.6% in 1988). However, inflation seems to be a more severe problem than feared earlier this year; it is expected to increase from 3.6% in 1988 to nearly 5% this year.

## III. DEVELOPMENTS ON THE COMMUNITY ENERGY MARKET

### 7. Energy Prices

With the experience of the first half of 1989, the forecast of a higher oil price in 1989 compared with 1988 can be confirmed; in dollar terms the increase might be some 15% resulting in a price for crude oil imports of about 17.2 USD/t. In accordance with the forecast at the beginning of this year, the oil price increase on an ECU-basis should be even more marked.

However, the price for natural gas last year did not follow the falling oil prices, as had been estimated, but remained more or less stable. This year in turn it is expected to rise to a smaller extent than the price of oil.

8. World coal prices have been increasing over the past nearly two years. This upward movement could be accelerated by the coal strikes in some producing countries this summer. It is yet unclear whether a price increase on account of these strikes is sustainable. Considering production costs in certain exporting countries, however, there could be still some scope for a sustained price increase.

### Energy demand and supply

9. Despite a favourable economic situation energy consumption in 1988 increased (+ 0.3%), owing to very mild weather conditions. With the mild winter 1988/89 and in spite of good economic performance, particularly in industry (eg. steel, chemical industry) the forecast for energy requirements in 1989 has to be revised downward (+2.3% instead of 3%). If there is no return to "normal" weather conditions the following winter, an even lower energy demand may be expected.

The share of oil in energy consumption should decrease and the share of natural gas increase, as had been forecast at the beginning of this year. Continuing its trend over the last years, the contribution of nuclear energy is expected to increase substantially in 1989. Its share in both total energy demand and electricity production could grow considerably. This year for the first time, nuclear energy should generate as much electricity as is produced by burning solid fuels; it is even possible that nuclear may take a slightly higher share.

10. Total consumption of solid fuels last year, on the other hand, has to be revised downwards, mainly on account of nearly stable stocks at power stations. Thus, the share of solid fuels in total energy requirements did not remain stable at 21.7%, as had been estimated, but dropped considerably to reach only 21.2% last year. This share might go on falling to 20.9% in 1989. Hence, it is becoming more and more uncertain that the Community energy objective for 1995 of increasing the share of solid fuels beyond the 1986 value will be achieved.

#### IV. DEMAND FOR SOLID FUELS

11. Final figures for total hard coal deliveries in 1988 are slightly higher (+ 1 Mlot) than those set out in the report of 17 April 1989. Revised forecasts for 1989, on the other hand, are lower by 2 Mlot. Total deliveries in 1989 should be down by 8.2 Mlot as compared to 1988, coming after consecutive drops of 3.5 Mlot between 1987 and 1988, and 14.7 Mlot between 1986 and 1987. The 1989 deliveries decrease is largely concentrated in the UK (- 4.3 Mlot), and to a lesser extent in Germany (- 2.9 Mlot) and in France (- 1.4 Mlot).

#### Steel- and coke-making

12. After a very satisfying first half year in steel-making, prospects for the second half seem to indicate a certain subsiding of activity. Nevertheless, total crude steel production for 1989 is expected to reach 137 Mlot, i.e. very close to the 1988 figure. Deliveries of coke to the steel industry have been revised upwards by more than 1.7 Mlot. They will nevertheless remain inferior by 0.5 Mlot to the final figure for 1988, which was itself up by 1.2 Mlot with regard to the previous figures, given at the beginning of this year.
13. Deliveries of coal to coking plants in 1989 will be down by 0.8 Mlot as compared to the previous year. They had nevertheless to be revised upwards by more than 2.3 Mlot as compared to initial 1989 forecasts; the deliveries for 1988 had to be only slightly corrected (+0.4 Mlot).

### Power stations

14. According to information currently available, total coal deliveries to public and industrial power stations amounted to 198.7 Mlot in 1988 as compared to 200.8 Mlot in 1987. The forecast for 1989 had again to be reduced to 193.7 Mlot, mainly because of lower deliveries to UK (-5 Mlot) and Danish (- 1.3 Mlot) power plants. On the other hand deliveries to Spanish and French power stations are now expected to be markedly higher than initially foreseen. In the other Member States variations are much less significant.

In 1988, effective coal consumption in the power stations was only slightly higher than coal deliveries (+ 0.3 Mlot). In 1987, power stations had withdrawn 2 Mlot of coal from their stocks. Forecasts of stock levels at the end of 1989 have not been communicated to the Commission by all Member States.

Climatic conditions this year were exceptionally mild, while hydroelectricity availabilities in most countries were down and general industrial activity remained quite satisfactory. In France, coal burning thermal power stations had to increase production at the end of 1988 to offset the production losses due to strikes in the nuclear power plants. The coal stocks that were thereby consumed will have to be replaced in the course of this year. In Spain, too, coal stocks at the power stations, which had increased significantly last year, owing to firm purchase commitments of indigenous coal coupled to much higher availabilities of hydroelectric power, should go down in 1989 because of insufficient contribution from hydroelectricity.

### 15. Other industries, domestic consumption and other utilisation

According to the last figures communicated to the Member countries, deliveries to those various sectors amounted to 48.2 Mlot in 1988, and forecasts for 1989 are presently 46.3 Mlot. Deliveries of coal to the steel industry for blast-furnace injection in replacement of coke were finally lower by 0.3 Mlot in 1988 than the initial figures appearing in the report of 17 April 1989. The new forecasts for 1989 on the other hand are higher by 0.2 Mlot and should amount to 4.5 Mlot.

Deliveries to the various other industries in 1989 will be down by 1.1 Mlot as compared to last year. The figures for 1988 had to be corrected downwards (- 0.3 Mlot) as was the case for 1989 (- 0.7 Mlot) and this notwithstanding a strong rate of industrial activity in general and of cement-plants in particular. The above downward corrections are essentially due to the UK and Italy, whereas France has revised its figures upwards.



As far as domestic consumption and district heating is concerned, 1988 figures were corrected downwards by 0.6 Mlot while 1989 forecasts were revised upwards by 0.4 Mlot, mainly owing to the UK, the other Member States being more inclined to revise their figures downwards. From one year to the other deliveries to domestic consumers, district heating plants and patent-fuel producers should drop by 0.6 Mlot or - 4.3%. The decline of this sector therefore continues, albeit at a much slower pace than the previous years. In France in particular a reconversion to coal of certain district heating plants is forecast.

#### V. COMMUNITY PRODUCTION OF SOLID FUELS

16. Coal production in the Community in 1988 was higher by 1.5 Mlot than the initial figures of early 1989 and amounted to 214.3 Mlot, down by 7.4 Mlot (-3.3%) as compared to 1987. Forecasts for 1989 have also been revised upwards and stand now at 210.4 Mlot (-1.3% as compared to the previous year). Both corrections are due to higher production in the UK, practically stable from one year to the other, whereas it is slightly down in the other countries.

Belgian authorities have decided to halt extraction completely in the Kempen area as from end 1992 at the latest; initially it was foreseen that production would continue at least until 1996. Table 10 annexed gives a survey of Community coal production by areas.

Production of lignite and peat for 1988 has been revised upwards to 179.3 Mlot instead of 177.5 Mlot, and 1989 forecasts downwards to 184 Mlot instead of 189.7 Mlot. These figures are however provisional as the latest forecasts from one producing country are still missing. It already appears however that production of lignite and peat in 1989 will be down in Spain as compared to the previous year, while it will go up in Greece, in France and in Ireland, where extraction methods have been improved.

VI. SOLID FUEL PRICES

17. Community Coal

There were only a few changes in list-prices for Community coal and coke during the first half of this year. In Germany some producers applied limited price increases, ranging from +2.2% to 3.2%, essentially to coking coal and blast-furnace coke. In France, there were a few slight price reductions and an increase for coke for domestic use. In the Netherlands blast furnace coke went up by 5 guilders a tonne (+1.9%).

Average prices for 1988 supplies of Community coal to the power stations of coal producing countries are now available, although certain of these figures are still provisional. The following table shows these prices in US\$ and in national currencies :

|                       | B     | D      | E      | F      | UK    | Average |
|-----------------------|-------|--------|--------|--------|-------|---------|
| US\$/tce              | 59.24 | 155.29 | 105.22 | 50.25  | 89.18 | 101.81  |
| National currency/tec | 2176  | 272.43 | 12244  | 299.05 | 50.11 |         |

The significant variations between the above prices from one country to another reflect essentially the differences between the systems of intervention in favour of national coal production, where these exist.

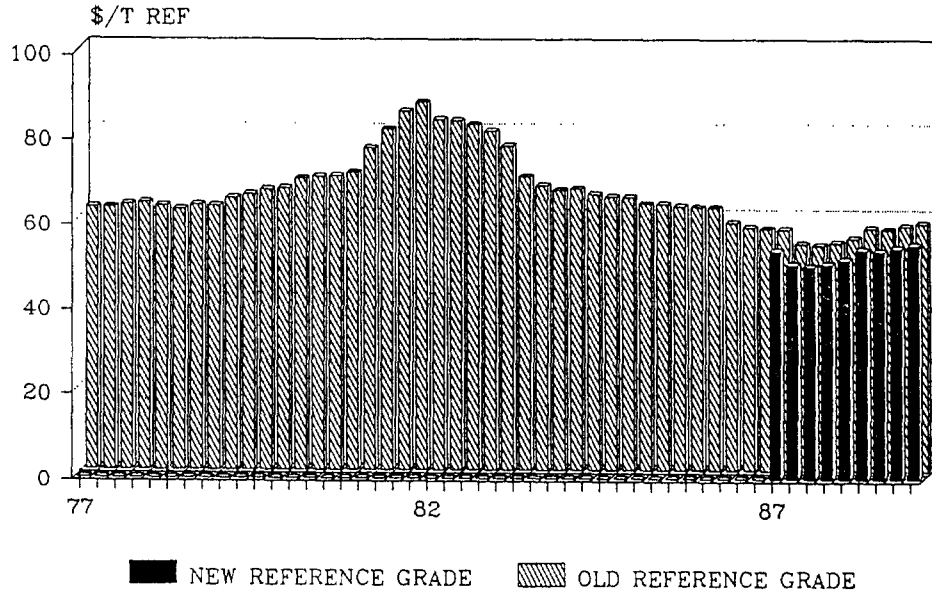
18. Imported coking coal

The development of the indicative price (cif/major Community ports) in US\$ since the first quarter of 1988 is given below :

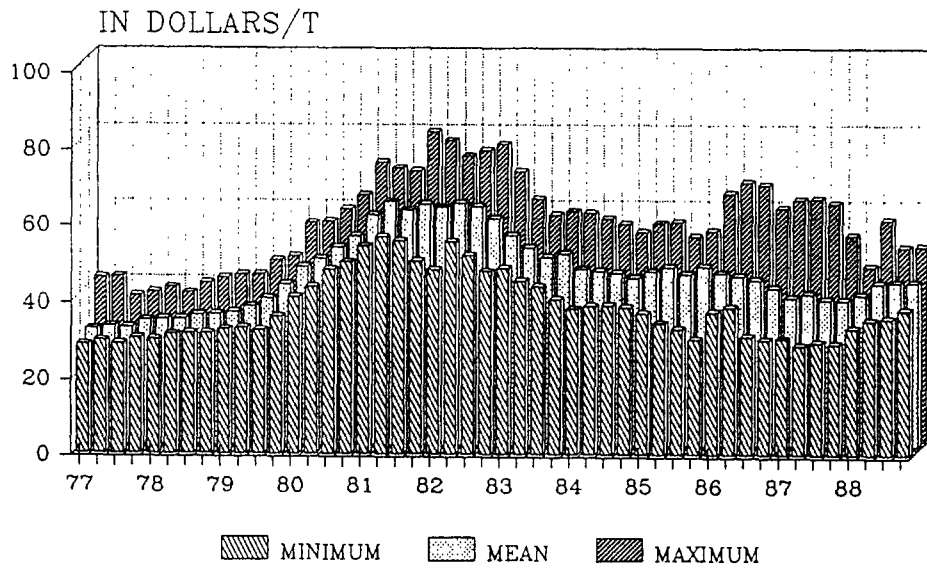
|                  |      |  |
|------------------|------|--|
| 1st quarter 1988 | US\$ | 51.30  |
| 2nd quarter 1988 | US\$ | 53.70  |
| 3rd quarter 1988 | US\$ | 53.45  |
| 4th quarter 1988 | US\$ | 54.15  |
| 1st quarter 1989 | US\$ | 54.85 or + 6.9% as compared<br>to the same quarter of 1988 |

This confirms the reversal of the downward trend which lasted uninterruptedly from mid-1982 to the third quarter of 1987. The upward trend is likely to continue in the near future, the recent strikes in certain North American mines having resulted in a more or less temporary reduction of supplies.

### GUIDE CIF PRICE FOR COKING COAL IMPORTED FROM THIRD COUNTRIES



### MEAN CIF PRICES OF STEAM COAL IMPORTED FROM THIRD COUNTRIES



19. The average annual price for steam coal imported into the Community, which had again decreased by 10.6% from 1986 to 1987, also went up in 1988 and reached US\$ 46.45/tce, which corresponds to an increase of US\$ 3.40 or 7.9% as compared to the average annual price for 1987 (US\$ 43.05). In 1988 the average lower calorific value increased slightly to 26.345 GJ/t up from 26.276 GJ/t in 1987.

Calculated in tce and by country of origin, average annual prices (cif/community ports) for 1988 are as follows :

|                                     | US\$/tce | LCV GJ/t |
|-------------------------------------|----------|----------|
| USA                                 | 53.53    | 27.253   |
| Australia                           | 45.34    | 25.962   |
| South Africa                        | 42.05    | 25.535   |
| Poland                              | 47.21    | 26.779   |
| Colombia                            | 40.57    | 26.118   |
| China                               | 45.19    | 25.687   |
| Others (Canada, USSR,<br>Venezuela) | 44.40    | 26.209   |

Both for coking coal and steam coal, the price increase expressed in national currencies is significantly higher, the US\$ having shown a marked, although irregular, appreciation since the beginning of 1989.

20. Prices for imported steam coal regularly published by the Commission on the basis of notifications by Member States (Decisions 77/707/ECSC and 85/161/ECSC) are on average higher for coal imported under long term contracts (more than one year) than for contracts of less than one year. In the first case they were in 1988 of US\$ 47.87/tce and in the second of US\$ 44.29/tce. The non-specialised press often publishes "spot" prices expressed in t = t, which are apparently lower than those published by the Commission. In 1988, 60% of steam coal imports were covered by long term contracts and 40% by contracts running for less than one year.

## VIII. TRADE IN SOLID FUELS

### 21. World Trade and Production

The estimates made at the beginning of this year of last year's coal production (3.5 billion tonnes) and trade (368 Mlot) turn out to be generally correct. For 1989 a rather moderate growth of coal trade (+7 Mlot) had been predicted. On the one hand, due to the good performance of national economies and especially the still continuing boom in steel production, this forecast should be revised upwards to some extent; on the other hand, however, with the coal strikes this summer in various parts of the world, an opposite tendency has to be taken into account. Therefore, it seems to be fairly safe not to change the projection for this year, indicating a moderate growth of world coal trade.

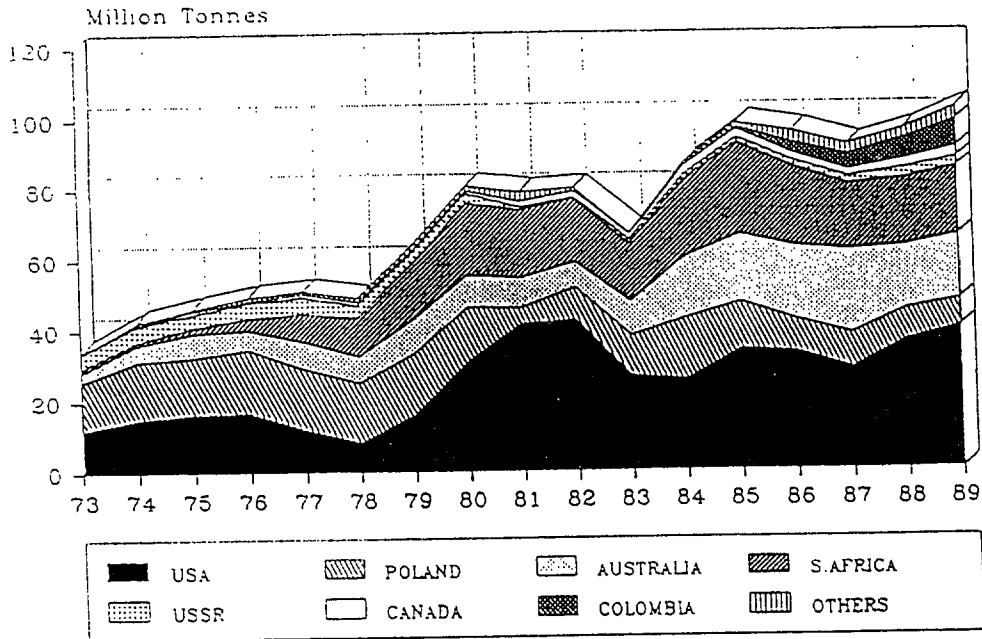
### 22. Imports from third countries

Early this year imports had been expected to remain practically stable as compared to 1988. After the mid-year revision, it now appears that import figures for 1988 have to be corrected downwards by - 1.9 Mlot to 96.1 Mlot, and that in 1989 imports will pass the 100 Mlot mark and reach an all-time high of 102.3 Mlot (+4 Mlot).

The increase of imports from one year to the other is due mainly to France (+2.6 Mlot), Italy (+1.4 Mlot), Spain (+1.3 Mlot), Portugal (+0.9 Mlot) and Denmark (+0.7 Mlot). German imports are forecast to decline by 1.5 million tonnes. As only Portugal, Spain, Italy and the Netherlands expect an increase in total coal deliveries, the import volume growth of the other countries seem either to have to compensate for lower national production or to bring stocks back to the approximate levels of end 1987.

There are no significant changes in the structure of Community imports from one year to the other. Colombia confirmed its role as major supplier of steam-coal to the Community and its deliveries will already reach 7.8 Mlot (+1.7 Mlot), whereas China (1.7 Mlot) still plays a minor role. The USA will account for the major share of the Community's increased imports : +3.7 Mlot reaching thereby 40 Mlot or 39.1% of all imported coal. Imports from Canada are also on the rise by 0.8 Mlot to reach 3.1 Mlot, as are those from "other countries" : up by 0.8 Mlot to 2 Mlot. Australia (18.2 Mlot) or (+0.3 Mlot) and South Africa (19.2 Mlot) seem to be contented to maintain the status quo while they concentrate on the markets of the newly industrialised countries of South-East Asia and of Japan. Poland will supply no more than 7.7 Mlot, down by 1 Mlot, and its market share consequently drops from one year to the other. In 1989, imports will represent 32.2% of total Community resources as against 30.5% in 1988 and a mere 11% in 1973.

### HARD COAL IMPORTED FROM THIRD COUNTRIES



### 23. Intra-Community Trade

Intra-Community trade in coal finally reached 8.7 Miot in 1988, i.e. 0.7 Miot less than indicated earlier this year. Forecasts for 1989 have been revised upwards by 1 Miot, so that Intra-community trade in coal will reach 8.1 Miot, which equals 2.6% of total Community coal resources. The revision of internal coke trade figures added 0.3 Miot to earlier figures for 1988, and 0.4 Miot for 1989 : the total volume of internal coke trade will practically remain constant at 4 Miot. Germany remains both for coal and coke, by far the largest supplier of the other Member States, followed by the Netherlands and the UK. Belgium and France also supply limited quantities to their partners. Internal coke trade accounts for 8% of total resources both in 1988 and 1989.

## VIII. STOCKS

24. Certain Member States, among them major coal producers, have not yet communicated detailed forecasts with regard to expected stock volumes at the end of 1989, and so the Commission is hard put to it to make valid estimates for the Community as a whole. In 1988, Community coal stocks at the mines increased, and fell slightly at power stations and coking plants. As a whole, according to the "coal balance sheet" they had decreased by 2.8 Mlot. In 1989 total deliveries will be lower than total resources; stocks should therefore rise markedly. This seems to be especially the case for the UK where the increase in stocks at the mines should account for more than half of total stock increase at the Community level. This is probably connected with the expected drop in deliveries to British power stations of 4.2 Mlot from one year to the next. Fundamental policy options with regard to production and supplies, in the run-up privatisation of the electricity sector in that country, seem to be involved.

The favourable conjuncture in the steel industry caused coke stocks at the coking plants to fall by 2.4 Mlot in 1988. For 1989 a new decrease of stocks at Community level by 2 Mlot is expected. All Member States except Germany expect minimal stock level changes, whereas the latter country foresees a fall by 2.9 Mlot. The national coke reserve will thereby be practically depleted. The difference between the figures for the Community as a whole and for Germany alone is due to the fact that the twelve Member States forecast imports from their partners to reach 4.2 Mlot, whereas they expect to supply them with 4.8 Mlot. As in the case of coal it is not completely possible to bring the figures for imports and exports into line.

## IX. CONCLUSION

25. The comparison between figures for 1988 and 1989 after a six-month interval shows that only minor corrections have to be made for coal. In 1988, production was slightly higher but imports were lower; total Community resources had to be corrected downwards by 1.4 Mlot. Deliveries were 1.1 Mlot higher and so stocks decreased more than initially foreseen. For 1989, internal resources (production + recoveries) are also expected to be slightly above the level (+0.4 mlot) initially foreseen this year; imports should increase by 3.8 Mlot but deliveries fall by 2.1 Mlot. Stocks should therefore be higher than forecast earlier this year.

Coke resources and deliveries on the other hand were both higher by about 1 Mlot in 1988; corrections for 1989 were even more significant both as regards resources (+1.8 Mlot) and deliveries (+2 Mlot), owing to the ongoing favourable level of activity in the steel industry.

As regards lignite and peat, the Commission has not been able to make valid corrections, one of the producing countries having omitted to communicate recent data.

As opposed to the earlier forecasts, deliveries of coal to power plants will again be lower in 1989 than last year owing apparently to new options with regard to production and supplies in the UK, Denmark and Germany. The slightly positive developments in most other countries cannot compensate for these losses, notwithstanding generally poor hydroelectric resources and a favourable rate of industrial activity. The winter was exceptionally mild and the production of electricity of nuclear origin should again increase markedly in 1989 (+9.2% according to forecasts), before going on to a more modest progression rate in 1990. The share of natural gas in the production of classic thermal electricity is also rising.

During the first six months of this year, steel making activity remained at a high level. Total coal consumption by the coking plants and the steel industry will, according to present forecasts, drop by only 0.8%, whereas earlier this year a fall of 4.3% as compared to 1988 was still feared.

The decline in deliveries to the other industries is more noticeable; a fall of 4.4% is now expected in 1989 as compared to 1988, whereas initially only 2.7% was foreseen. This trend is common to all Member States.

Finally, deliveries to domestic users and district heating plants continue to decline, but at a slower pace than was the case recently, and this notwithstanding very mild climatic conditions.

Intra-community trade in coal also continues its regular regression and does not represent more than 2.6% of total resources in 1989. Imports from third countries on the other hand will pass the 100 Mlot mark and account for 32.3% of the Community's resources. The USA confirm their role as leader, taking a 39.1% share of Community imports. Canada and Colombia have the highest growth rates : respectively +36.3 and 27.2% from one year to the next. Poland's share continues to decrease regularly.

Prices of imported coking coal have witnessed a continuous rise since the fourth quarter of 1987. Imported steam coal has followed this trend with some delay. These price increases when converted into national currencies are generally markedly higher owing to the appreciation of the US\$ with regard to the ECU since early 1988.



TABLE 10

HARD COAL PRODUCTION BY AREA  
10-Jul-89

(1000 t)

|                              | 1987   | 1988   | 1989   |
|------------------------------|--------|--------|--------|
| KEMPEN                       | 4357   | 2487   | 2255   |
| BELGIUM                      | 4357   | 2487   | 2255   |
| RUHR                         | 63873  | 61862  | 60470  |
| AACHEN                       | 4979   | 4748   | 4060   |
| IBBENBUREN                   | 2361   | 2361   | 2140   |
| SAAR + KLEINZECHEN           | 11167  | 10348  | 10330  |
| (RF)GERMANY                  | 82380  | 79319  | 77000  |
| CENTRAL ASTURIANA            | 4340   | 4531   | 4550   |
| BIERZO, VILLABLINO, NARCEA   | 5684   | 5405   | 5300   |
| NORTE LEON, PALENCIA         | 2407   | 2272   | 2200   |
| SUR                          | 1922   | 1777   | 1900   |
| ARAGON, CATALUNA, BALEARES   | 4860   | 4691   | 4250   |
| SPAIN                        | 19213  | 18676  | 18200  |
| NORD-PAS-DE-CALAIS           | 1354   | 1132   | 637    |
| LORRAINE                     | 9901   | 8960   | 9000   |
| CENTRE-MIDI                  | 2435   | 2050   | 1863   |
| FRANCE                       | 13690  | 12142  | 11500  |
| IRELAND                      | 45     | 45     | 72     |
| ITALY                        | 0      | 49     | 110    |
| PORTUGAL                     | 254    | 230    | 230    |
| SCOTLAND                     | 2937   | 1951   |        |
| NORTHERN                     | 10368  | 10349  |        |
| YORKSHIRE                    | 27302  | 27197  |        |
| NORTH-WESTERN                | 10210  | 9438   |        |
| MIDLANDS-KENT                | 28430  | 28487  |        |
| SOUTH WALES                  | 5855   | 4816   |        |
| NCB OPENCAST                 | 14631  | 17914  |        |
| LICENSED MINES + UNSPECIFIED | 1911   | 1234   |        |
| UNITED KINGDOM               | 101644 | 101386 | 101000 |
| E U R 1 2                    | 221583 | 214334 | 210367 |

TABLE 18

## Hard Coal from Third Countries

(million tonnes)

|                              | 1987<br>Actual | 1988<br>Actual | 1989<br>Forecasts |
|------------------------------|----------------|----------------|-------------------|
| A) By country of destination |                |                |                   |
| Belgium                      | 7.5            | 9.4            | 9.2               |
| Denmark                      | 10.9           | 9.7            | 10.4              |
| Germany                      | 7.7            | 6.8            | 5.3               |
| Spain                        | 8.8            | 8.7            | 10.0              |
| France                       | 11.1           | 10.3           | 12.9              |
| Greece                       | 1.8            | 1.5            | 1.6               |
| Ireland                      | 2.4            | 2.9            | 2.9               |
| Italy                        | 18.2           | 18.7           | 20.1              |
| Luxemburg                    | 0.1            | 0.1            | 0.1               |
| Netherlands                  | 12.4           | 13.9           | 14.1              |
| Portugal                     | 2.2            | 2.8            | 3.7               |
| United Kingdom               | 8.6            | 11.3           | 12.0              |
| Community                    | 91.7           | 96.1           | 102.3             |
| B) By country of origin      |                |                |                   |
| USA                          | 28.7           | 36.3           | 40.0              |
| Canada                       | 1.8            | 2.3            | 3.1               |
| Australia                    | 23.7           | 17.9           | 18.2              |
| South Africa                 | 18.7           | 19.0           | 19.1              |
| Poland                       | 9.5            | 8.8            | 7.7               |
| USSR                         | 1.8            | 2.7            | 2.7               |
| China                        | 1.4            | 1.7            | 1.7               |
| Colombia                     | 4.6            | 6.2            | 7.8               |
| Others                       | 1.5            | 1.2            | 2.0               |
| Community                    | 91.7           | 96.1           | 102.3             |

TABLE 21

Producer's stocks of hard coal and coke  
(at the end of the year)

('tonnes)

|                | 1987                     | 1988 Actual    |   | 1989 Forecasts |   |
|----------------|--------------------------|----------------|---|----------------|---|
|                | Actual<br>1000<br>tonnes | 1000<br>tonnes | Number of:<br>calendar<br>days<br>covered | 1000<br>tonnes | Number of:<br>calendar<br>days<br>covered |
| 1. Coal        |                          |                |   |                |   |
| -----          |                          |                |   |                |   |
| Belgium        | 462                      | 144            | 21  | 144            | 23  |
| Germany        | 18010                    | 18925          | 87  | 18868          | 89  |
| Spain          | 1790                     | 1600           | 31  | 1600           | 32  |
| France         | 3923                     | 3576           | 107                                       | NA             | -   |
| Ireland        | 20                       | 20             | 162                                       | 20             | 101                                       |
| Portugal       | 9                        | 7              | 11  | 0              | -   |
| United Kingdom | 6142                     | 7332           | 26  | 11600          | 42  |
| -----          |                          |                |   |                |   |
| Community      | 30356                    | 31604          | 54  | NA             | NA  |
| 2. Coke        |                          |                |   |                |   |
| -----          |                          |                |   |                |   |
| Belgium        | 64                       | 59             | 4   | 59             | 4   |
| Germany (1)    | 8504                     | 6851           | 136                                       | 4101           | 163                                       |
| Spain          | 144                      | 130            | 17  | 130            | 16  |
| France         | 516                      | 383            | 19  | NA             | -   |
| Greece         | 22                       | 20             | -   | 20             | -   |
| Italy          | 388                      | 213            | 12  | 201            | 11  |
| Netherlands    | 35                       | 40             | 5   | NA             | -   |
| Portugal       | 19                       | 10             | 14  | 12             | 16  |
| United Kingdom | 633                      | 200            | 9   | NA             | -   |
| -----          |                          |                |   |                |   |
| Community      | 10325                    | 7906           | 216                                       | NA             | NA  |

(1) Including the national reserve.

For 1989, the national reserve of coke represents the position  
at the end of May 1989

NA : not available

19-Jul-89

('000 TONNES)

|   | BELGIQUE | DANMARK | DEUTSCH-<br>LAND | ESPANA | FRANCE | HELLAS | IRELAND | ITALIA | LUXEM-<br>BOURG | NEDER-<br>LAND | PORTUGAL | UNITED<br>KINGDOM | EUR - 12 |
|---|----------|---------|------------------|--------|--------|--------|---------|--------|-----------------|----------------|----------|-------------------|----------|
| 1. PRODUCTION (t=t)   | 2255     | 0       | 77000            | 18200  | 11500  | 0      | 72      | 110    | 0               | 0              | 230      | 101000            | 210367   |
| 2. RECOVERIES   | 1050     | 0       | 450              | 200    | 645    | 0      | 0       | 0      | 0               | 0              | 0        | 2000              | 4345     |
| 3. ARRIVALS FROM ECSC COUNTRIES                             | 1407     | 500     | 650              | 30     | 1700   | 0      | 361     | 1010   | 36              | 1300           | 150      | 1000              | (8144)   |
| 4. IMPORTS FROM THIRD COUNTRIES                             | 9168     | 10450   | 5300             | 10030  | 12890  | 1600   | 2890    | 20100  | 130             | 14100          | 3655     | 12000             | 102313   |
| 5. AVAILABILITIES (1+2+3+4)                                 | 13880    | 10950   | 83400            | 28460  | 26735  | 1600   | 3323    | 21220  | 166             | 15400          | 4035     | 116000            | 317025   |
| 6. INTERNAL DELIVERIES                                      |          |         |                  |        |        |        |         |        |                 |                |          |                   |          |
| A. COLLIERY POWER STATIONS                                  | 290      | 0       | 1550             | 0      | 4150   | 0      | 0       | 0      | 0               | 0              | 0        | 0                 | 5990     |
| B. PUBLIC POWER STATIONS                                    | 4300     | 10000   | 40750            | 20850  | 4000   | -      | 1777    | 10100  | 0               | 8000           | 2650     | 80000             | 182427   |
| C. COKE OVENS   | 7000     | 0       | 23700            | 3700   | 9800   | -      | 0       | 9220   | 0               | 4100           | 374      | 11000             | 68894    |
| D. STEEL INDUSTRY   | 250      | 0       | 1600             | 310    | 1400   | 100    | 0       | 0      | 45              | 605            | 0        | 200 *             | 4510     |
| (OF WHICH POWER STATIONS)                                   | (-)      | (-)     | (100)            | (-)    | (40)   | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | NA                | (140)    |
| E. OTHER INDUSTRIES   | 785      | 500     | 8200             | 2500   | 4400   | 1400   | 486     | 800    | 120             | 200            | 860      | 7800 *            | 28051    |
| (OF WHICH POWER STATIONS)                                   | (-)      | (-)     | (5100)           | (-)    | (-)    | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | NA                | (5100)   |
| F. DOMESTIC SECTOR  | 680      | 500     | 450              | 900    | 1500   | -      | 871     | -      | 1               | -              | -        | 6000              | 10902    |
| G. MISCELLANEOUS (TOTAL) OF                                 | 25       | (-)     | 2000             | 200    | 850    | -      | 10      | 580    | -               | 465            | 2        | 4000              | 8132     |
| WHICH :   |          |         |                  |        |        |        |         |        |                 |                |          |                   |          |
| 1. ISSUES TO WORKERS  | (5)      | (-)     | (100)            | (200)  | (40)   | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (800)             | (1145)   |
| 2. PATENT FUEL  | (5)      | (-)     | (620)            | (-)    | (650)  | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (2000)            | (3275)   |
| 3. OWN CONSUMPTION  | (15)     | (-)     | (100)            | (-)    | (160)  | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (200)             | (475)    |
| 4. GASMWORKS  | (-)      | (-)     | (-)              | (-)    | (-)    | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (-)               | (-)      |
| 5. RAILWAYS   | (-)      | (-)     | (100)            | (-)    | (-)    | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (-)               | (100)    |
| 6. OTHERS   | (-)      | (-)     | (1080)           | (-)    | (-)    | (-)    | (10)    | (580)  | (-)             | (465)          | (2)      | (1000)            | (3137)   |
| 7. TOTAL INTERNAL DELIVERIES (6)                            | 13330    | 11000   | 78250            | 28460  | 26100  | 1500   | 3144    | 20700  | 166             | 13370          | 3886     | 109000            | 308906   |
| 8. DELIVERIES TO ECSC                                       | 425      | 0       | 4900             | 0      | 575 *  | 0      | 46      | 0      | 0               | 1770           | 0        | 1500              | (9216)   |
| 9. EXPORTS TO NON MEMBER<br>COUNTRIES                       | 125      | 0       | 200              | 0      | 225 *  | 100    | 2       | 0      | 0               | 260            | 0        | 0                 | 912      |
| 10. TOTAL DELIVERIES (7+8+9)                                | 13880    | 11000   | 83350            | 28460  | 26900  | 1600   | 3192    | 20700  | 166             | 15400          | 3886     | 110500            | 309818   |
| 11. MOVEMENTS OF PRODUCERS' AND<br>IMPORTERS' STOCKS (5-10) | 0        | -50     | 50               | -      | -165   | -      | 131     | 520    | -               | -              | 149      | 5500              | 7207     |

\* Commission Forecasts

n.a. not available

TABLE 23  
COKE BALANCE SHEET 1989

RETURNS JUNE 1989

19-Jul-89

('000 T)

|  | BELGIQUE | DANMARK | DEUTSCH-<br>LAND | ESPAÑA | FRANCE | HELLAS | IRELAND | ITALIA | LUXEM-<br>BOURG | NEDER-<br>LAND | PORTUGAL | UNITED<br>KINGDOM* | EUR - 12 |
|--|----------|---------|------------------|--------|--------|--------|---------|--------|-----------------|----------------|----------|--------------------|----------|
| 1. PRODUCTION  | 5300     | 0       | 18300            | 2900   | 7300   | -      | -       | 6709   | -               | 2900           | 280      | 8200               | 51889    |
| 2. RECEIPTS FROM ECSC COUNTRIES                      | 410      | 40      | 400              | 70     | 1270   | 20     | 6       | 120    | 1410            | 200            | 14       | 300                | (4260)   |
| 3. IMPORTS FROM THIRD COUNTRIES                      | 190      | 10      | 250              | 130    | 210    | 30     | -       | -      | 40              | 200            | -        | -                  | 1060     |
| 4. AVAILABILITIES (1+2+3)                            | 5900     | 50      | 18950            | 3100   | 8780   | 50     | 6       | 6829   | 1450            | 3300           | 294      | 8500               | 52949    |
| 5. INLAND DELIVERIES                                 |          |         |                  |        |        |        |         |        |                 |                |          |                    |          |
| A. STEEL INDUSTRY                                    | 5000     | 0       | 16100            | 2750   | 7500   | 30     | -       | 6139   | 1450            | 2100           | 270      | 6400               | 47739    |
| B. OTHER INDUSTRIES                                  | 130      | 25      | 900              | 350    | 630    | 20     | 6       | 424    | -               | 150            | 20       | 150                | 2805     |
| C. DOMESTIC SECTOR                                   | 10       | 25      | 350              | -      | 160    | 0      | 0       | -      | -               | -              | -        | 1500               | 2045     |
| D. MISCELLANEOUS OF WHICH                            | 10       | 0       | 650              | -      | -      | -      | -       | 110    | -               | 50             | 2        | 50                 | 872      |
| - ISSUES TO WORKERS                                  | (10)     | (-)     | (370)            | (-)    | (-)    | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (-)                | (380)    |
| - OWN CONSUMPTION                                    | (-)      | (-)     | (10)             | (-)    | (-)    | (-)    | (-)     | (-)    | (-)             | (-)            | (-)      | (-)                | (10)     |
| - OTHERS   | (-)      | (-)     | (270)            | (-)    | (-)    | (-)    | (-)     | (110)  | (-)             | (50)           | (2)      | (50)               | (482)    |
| 6. TOTAL INLAND DELIVERIES (5)                       | 5150     | 50      | 18000            | 3100   | 8290   | 50     | 6       | 6673   | 1450            | 2300           | 292      | 8100               | 53461    |
| 7. DELIVERIES TO ECSC COUNTRIES                      | 690      | 0       | 2500             | -      | 300 *  | -      | -       | 40     | -               | 900            | -        | 350                | (4780)   |
| 8. EXPORTS TO THIRD COUNTRIES                        | 60       | 0       | 1300             | -      | 200 *  | -      | -       | 128    | -               | 100            | -        | 50                 | 1838     |
| 9. TOTAL DELIVERIES (6+7+8)                          | 5900     | 50      | 21800            | 3100   | 8790   | 50     | 6       | 6841   | 1450            | 3300           | 292      | 8500               | 55299    |
| 10. STOCK MOVEMENT AT PRODUCTION<br>AND IMPORT (4-9) | -        | 0       | -2850**          | 0      | -10    | -      | -       | -12    | -               | -              | 2        | -                  | -2350    |

\* Commission Forecasts

\*\* Including repurchases of 1,850,000 tonnes from the National Kohlereserve

TABLE 24

RETURNS JUNE 1989

LIGNITE AND PEAT BALANCE SHEET FOR 1989

19-Jul-89

('000 TONS)

|                                      | BELGIQUE | DANMARK | DEUTSCH-<br>LAND (a) | ESPANA | FRANCE | HELLAS | IRELAND | ITALIA | LUXEM-<br>BOURG | NEDER-<br>LAND | PORTUGAL | UNITED<br>KINGDOM | EUR - 12 |
|--------------------------------------|----------|---------|----------------------|--------|--------|--------|---------|--------|-----------------|----------------|----------|-------------------|----------|
| <b>A. RAW PRODUCT</b>                |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| - AVAILABILITIES :                   |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| PRODUCTION                           | -        | -       | 110000               | 11000  | 2200   | 52500  | 6698    | 1600   | -               | -              | -        | -                 | 183998   |
| IMPORTS                              | -        | -       | 2000                 | -      | 50     | -      | 8       | 22     | -               | -              | -        | -                 | 2080     |
| TOTAL :                              | -        | -       | 112000               | 11000  | 2250   | 52500  | 6706    | 1622   | -               | -              | -        | -                 | 186078   |
| - UTILIZATION :                      |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| BRICQUETTING PLANTS                  | -        | -       | 15500                | -      | -      | 500    | 2000    | -      | -               | -              | -        | -                 | 18000    |
| POWER STATIONS                       | -        | -       | 95000                | 11000  | 1800   | 51000  | 3570    | 1600   | -               | -              | -        | -                 | 163970   |
| OTHERS                               | -        | -       | 1500                 | -      | 295    | 1000   | 128     | 22     | -               | -              | -        | -                 | 2945     |
| <b>B. BRICQUETTES</b>                |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| - AVAILABILITIES :                   |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| PRODUCTION                           | -        | -       | 4815                 | -      | -      | 120    | -       | -      | -               | -              | -        | -                 | 4935     |
| ARRIVAL FROM ECSC COUNTRIES          | 275      | -       | -                    | -      | 60     | -      | -       | 120    | 22              | -              | -        | -                 | 477      |
| IMPORTS FROM NON-MEMBER<br>COUNTRIES | 5        | 15      | 1130                 | -      | 10     | -      | -       | -      | -               | -              | -        | -                 | 1160     |
| TOTAL :                              | 280      | 15      | 5945                 | -      | 70     | 120    | -       | 120    | 22              | -              | -        | -                 | 6572     |
| - UTILIZATION :                      |          |         |                      |        |        |        |         |        |                 |                |          |                   |          |
| POWER STATIONS                       | -        | -       | 610                  | -      | -      | -      | -       | 120    | -               | -              | -        | -                 | 730      |
| INDUSTRY                             | 250      | -       | 2750                 | -      | -      | 60     | -       | -      | 4               | -              | -        | -                 | 3064     |
| DOMESTIC                             | 30       | 15      | 1815                 | -      | 70     | 60     | -       | -      | 18              | -              | -        | -                 | 2008     |
| SHIPMENTS TO OTHER ECSC<br>COUNTRIES | -        | -       | 635                  | -      | -      | -      | -       | -      | -               | -              | -        | -                 | 635      |
| EXPORTS TO NON-MEMBER<br>COUNTRIES   | -        | -       | 135                  | -      | -      | -      | -       | -      | -               | -              | -        | -                 | 135      |

(a) Figures of the Coal Report of 17.04.1989

TABLE A  
Guide price (cif Community ports)  
Imported coking coal

| Quarter                 | US-Dollar | DM     | bfrs | FF     | hfl    | Lit    | L     | pta   | Esc   |
|-------------------------|-----------|--------|------|--------|--------|--------|-------|-------|-------|
| I/87 ("old" ref.) (1)   | 56.65     | 108.67 | 2263 | 359.93 | 122.78 | 76.741 | 37.90 | 7.390 | 8.192 |
| ("new" ref.) (2)        | 53.40     | 102.44 | 2133 | 339.28 | 115.74 | 71.396 | 36.73 | 6.966 | 7.722 |
| II/87 ("old" ref.) (1)  | 53.20     | 96.69  | 2002 | 321.73 | 109.13 | 68.894 | 33.20 | 6.788 | 7.485 |
| ("new" ref.) (2)        | 50.10     | 91.06  | 1885 | 302.98 | 102.78 | 64.880 | 31.26 | 6.393 | 7.049 |
| III/87 ("old" ref.) (1) | 52.85     | 96.33  | 1998 | 321.33 | 108.45 | 69.775 | 32.60 | 6.670 | 7.543 |
| ("new" ref.) (2)        | 49.75     | 90.68  | 1881 | 302.48 | 102.09 | 66.682 | 30.69 | 6.278 | 7.101 |
| IV/87 ("old" ref.) (1)  | 53.40     | 98.44  | 2043 | 327.77 | 110.76 | 71.027 | 32.90 | 6.531 | 7.751 |
| ("new" ref.) (2)        | 50.30     | 92.73  | 1925 | 308.74 | 104.22 | 66.904 | 30.99 | 6.162 | 7.301 |
| I/88 ("old" ref.) (1)   | 54.45     | 86.11  | 1803 | 291.42 | 96.87  | 63.502 | 29.01 | 5.881 | 7.076 |
| ("new" ref.) (2)        | 51.30     | 81.13  | 1699 | 274.56 | 91.27  | 59.829 | 27.33 | 5.540 | 6.667 |
| II/88 ("old" ref.) (1)  | 57.05     | 94.93  | 1987 | 322.02 | 106.56 | 70.428 | 30.29 | 6.336 | 7.759 |
| ("new" ref.) (2)        | 53.70     | 89.35  | 1870 | 303.11 | 100.30 | 66.293 | 28.96 | 5.964 | 7.304 |
| III/88 ("old" ref.) (1) | 56.70     | 103    | 2175 | 348    | 108    | 76.696 | 33    | 6.428 | 7.850 |
| ("new" ref.) (2)        | 53.45     | 97     | 2050 | 328    | 102    | 72.300 | 31    | 6.060 | 7.400 |
| IV/88 ("old" ref.) (1)  | 57.50     | 107    | 2246 | 365    | 121    | 79.852 | 34    | 7.093 | 8.824 |
| ("new" ref.) (2)        | 54.15     | 101    | 2115 | 344    | 114    | 75.200 | 32    | 6.680 | 8.310 |
| I/89 ("old" ref.) (1)   | 58.25     | 108    | 2257 | 366    | 122    | 79.002 | 33    | 6.731 | 8.853 |
| ("new" ref.) (2)        | 54.85     | 101    | 2125 | 345    | 115    | 74.391 | 31    | 6.338 | 8.336 |

- (1) "Old" reference grade in application till 31 December 1986 : 31.1 GJ/tonne, ash 6 % (dry), moisture 5 %, sulphur 1 % (dry), volatile matter 24 % (dry), screen size 0-30 mm (given for comparison only)
- (2) "New" reference grade in application from 1 January 1987 : 29.4 GJ/tonne, ash 7.5 % (dry), moisture 8 %, sulphur 0.8 % (dry), volatile matter 26 % (dry), screen size 0-30 mm.

TABLE B  
Price of steam coal imported into the Community  
Price per tonne of 29.3 GJ

| Quarter | US-Dollar | DM | bfrc | FF | hfl. | Lit. | L | pta. | Esc. |
|---------|-----------|----|------|----|------|------|---|------|------|
|---------|-----------|----|------|----|------|------|---|------|------|

|                     |       |       |       |        |       |        |       |       |       |
|---------------------|-------|-------|-------|--------|-------|--------|-------|-------|-------|
| I/87                | 43.22 | 80.16 | 1.663 | 266.49 | 90.60 | 56.632 | 28.38 | 5.591 | 6.157 |
| II/87               | 44.00 | 79.68 | 1.662 | 265.72 | 89.87 | 57.083 | 26.94 | 5.577 | 6.189 |
| III/87              | 42.50 | 77.81 | 1.615 | 259.57 | 87.62 | 56.341 | 26.26 | 5.297 | 6.101 |
| IV/87               | 42.60 | 73.80 | 1.541 | 249.30 | 83.04 | 54.069 | 24.70 | 4.933 | 5.925 |
| Year 1987 (average) | 43.05 | 77.80 | 1.616 | 260.06 | 87.67 | 55.992 | 26.54 | 5.343 | 6.088 |

|                     |       |       |       |        |       |        |       |       |       |
|---------------------|-------|-------|-------|--------|-------|--------|-------|-------|-------|
| I/88                | 43.85 | 72.55 | 1.517 | 245.19 | 81.51 | 54.166 | 24.35 | 4.917 | 5.940 |
| II/88               | 47.20 | 79.75 | 1.668 | 270.28 | 89.43 | 59.817 | 26.37 | 5.290 | 6.515 |
| III/88              | 47.10 | 86.48 | 1.807 | 290.69 | 97.53 | 65.213 | 27.98 | 5.757 | 6.960 |
| IV/88               | 47.30 | 83.88 | 1.758 | 286.41 | 94.61 | 62.237 | 26.41 | 5.498 | 6.941 |
| Year 1988 (average) | 46.45 | 82.98 | 1.705 | 276.40 | 91.71 | 60.389 | 26.10 | 5.405 | 6.680 |