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REPORT OF THE COMMISSION

THE MARKET FOR SOLID FUELS IN THE COMMUNITY
IN 1986 AND THE OUTLOOK FOR 1987

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**THE MARKET FOR SOLID FUELS IN THE COMMUNITY IN 1986
AND THE OUTLOOK FOR 1987**

I. INTRODUCTION AND SUMMARY

1. Article 46 of the ECSC Treaty provides that the Commission shall, in order to provide guidance on the course of action to be followed by all concerned and to determine its own course of action : conduct, in accordance with the provisions of this Treaty, "a continuous study of market and price trends".

One of the results of this study is the annual market report for solid fuels, submitted to the Consultative Committee of the ECSC. This report is usually released to the public in June/July and followed by a "Revision of the market report" issued during the fourth quarter of the year.

In addition, the study of developments in the market constitutes one of the instruments allowing the Commission to fulfil its task under the Council Recommendation for long-term Community energy policy objectives. This task is to review periodically progress made towards the role of solid fuels as defined in the Community objectives.

2. This report analyses the state of the Community solid fuels market in the year 1986, forecasts developments for 1987, and provides final reference data for 1985.

The data for 1985 and 1986 are those available in April 1987 for the Community of Twelve. The forecasts for 1987 were drawn up at the end of 1986 and the beginning of 1987.

The revision of the market report in mid-year will allow the new situation both in the general economy and in the energy field to be evaluated.

3. In 1986, economic activity in the Community continued to expand moderately. Real gross domestic product grew by approximately 2.5 %, mainly due to an expanding domestic market. However, due to weak foreign demand, economic growth is expected to slow down in 1987 to a rate of close to 2 %.
4. Oil prices fell dramatically, from an average of about 36 ECU per barrel in 1985 to less than 14 ECU per barrel in 1986. Falling oil prices drove down the price of other fuels such as gas and coal. Primary energy demand in the Community grew by 1,3 % in 1986 ; it could grow by about the same amount in 1987.

At present there is no shortage of any form of energy nor is there a shortage expected within the near future.

5. Developments in the solid fuels market of the Community of Twelve in 1986 were only to a minor extent influenced by the overall background of the oil price decline ; the time lag effect is important here and is expected to work through in 1987, as is shown in the following tables, which summarize the supply and demand for coal, lignite and peat in the Community of twelve :

<u>Coal</u>	<u>1985</u>	(million tonnes)		<u>% 1987/1986</u>
		<u>1986</u> Provisional	<u>1987</u> Revised Forecasts	
Resources :				
Production	223.6	233.9	229.3	- 2
Recoveries	7.4	7.2	4.8	- 33
Imports from third countries	98.1	95.1	92.4	- 3
	-----	-----	-----	-----
Total	329.1	336.2	326.5	- 3
Deliveries in the Community :				
To coking plants	81.4	78.1	72.8	- 7
To power stations	191.3	206.4	200.6	- 3
To others	57.2	48.0	48.3	0
Exports to third countries	2.8	2.1	1.8	- 14
	-----	-----	-----	-----
Total	332.7	334.6	323.5	- 3
 <u>Lignite and Peat</u>				
Resources :				
Production and Imports	176.7	182.4	189.8	+ 4
Deliveries :				
To briquetting plants	14.3	15.7	16.6	+ 6
To power stations	157.0	165.8	167.6	+ 1
To others (exports to third countries included)	4.3	4.7	5.8	+ 23
	-----	-----	-----	-----
Total	175.6	186.2	190.0	+ 2

6. The list prices of coal and coke undertakings in the Community remained generally stable in 1986, except in Belgium and the Netherlands where substantial price reductions were registered. Prices on the world coal market - which the Community's mines have to take significantly into account in sales policy - continued to decline, a trend which is also forecast for 1987. With the continued fall of the US dollar from mid-1985 on, the gap between the price of imported coal and the cost of production in the Community is becoming progressively greater.

Producers' stocks of hard coal and coke increased again in 1986, whereas they had been reduced in the two previous years. A further increase is expected in 1987.

7. In 1986, the share of solid fuels in gross internal energy consumption counted for 22.2 %, a 0,9 % decline compared to 1985. Sharper inter-fuel competition is the major reason for the stagnation in total solid fuels consumption in an environment of only moderately rising energy consumption.

II. ECONOMIC SITUATION AND PROSPECTS

Rapid shift from foreign to domestic demand

8. In 1986, economic activity in the Community continued to expand moderately. Real gross domestic product is estimated to have grown by approximately 2.5 %, which is about the same rate of growth as in 1985. Economic trends were dominated by the effects of large changes in energy prices and exchange rates. While the fall of oil prices gave a boost to real income and domestic demand, the depreciation of the dollar together with weak export markets, led to depressed exports. In fact, domestic demand at constant prices grew by about 3 3/4 %. Much of this acceleration is due to private consumption. While investment in equipment was affected later in the year by the gloomier outlook for external demand, the construction sector progressively recovered from the deep crisis of the preceding years (investment in construction 2 3/4 %).

In contrast to strong domestic demand, exports weakened sharply during the year. Not only did the oil exporting and highly indebted countries have to cut their imports drastically, but the continuous fall of the dollar exchange rate against the ECU led to a substantial deterioration in the Community's price competitiveness. Since import volumes rose strongly, the net contribution of trade volumes to economic growth in the Community was significantly negative.

9. Employment increased by about 900 000 jobs (+ 0.8 %) in 1986, mainly because of a significant growth of investments (1985 : + 9.2 % ; 1986 : + 4.5 %). While this is a clear acceleration compared to the preceding years, it has just been sufficient to prevent a further rise in the unemployment rate, which remained at the record level of about 12 % for the Community of Twelve.

Inflation, on the other hand, has fallen to a level unheard of for 20 years. The exchange rate and oil price developments combined to push the Community's import prices downwards, so that the average index of consumer prices went up by no more than 3.6 % in 1986. The fall in import prices also resulted in the current external balance of the Community yielding a surplus of around 1.1 % of GDP despite the adverse volume trends.

Economic growth in 1987 expected to slow down to a rate of about 2 %

10. The economic outlook for the Community until the end of 1987 is surrounded by major risks emanating from the international environment. The necessary correction of the US budget and external deficits continues to cast a shadow upon the world economy. Related to this, the exchange rate outlook is highly uncertain. Furthermore, the world debt problem has not yet been overcome. Last but not least, a disruption of world trade by protectionist moves would seriously affect the prospects for further economic growth. Assuming that neither of these adverse influences becomes dominant, economic growth in the Community may be expected to approach an annual rate of approximately 2 %. Again, the prospects for domestic demand are more positive : a rate of expansion of 3 % seems possible, with private consumption likely to remain buoyant. Because the rapid expansion of imports will thus be maintained, the Community continues to support world activity in a difficult period of international adjustment. By contrast, the prospects for the Member States' exports to third countries in 1987 are highly uncertain, and a fall in volume terms is likely. Thanks to dynamic import demand from Community partners, total exports - including intra-EC trade - may still grow modestly.
11. Despite a possible further rise in employment, the expected rate of economic growth will hardly be sufficient to reduce unemployment noticeably. The average inflation rate in the Community may be expected to decline still further, provided that the slowdown in domestic costs continues in those Member States where inflation has up to now been relatively high. This assumes that the convergence of inflation rates would keep on improving. The surplus in the Community's current external balance is likely to diminish in 1987.

III. DEVELOPMENTS ON THE COMMUNITY ENERGY MARKETS

Energy prices

Dramatic fall in energy prices

12. The average cost of the Community's crude oil imports in 1986 was slightly less than \$ 14.5 per barrel, little more than half the average for the previous year. Expressed in European currencies, the collapse in imported oil prices was even greater, because of the fall in the value of the dollar of more than 15 %. Average oil prices have fallen from 35.8 ECU per barrel in 1985 to less than 14 ECU per barrel in 1986.

The dramatic fall in crude oil prices has been partially offset by increased Government taxation of oil products. Only three countries - Germany, Luxemburg and Belgium - have left their oil product taxation completely unchanged. Even so, there have been sizeable falls in the prices of the main products. Consumer prices are estimated to have fallen on average by the following percentages in 1986 compared with 1985: motor gasoline 16 %; diesel oil 21 %; heating gasoil 34 %; residual fuel oil (RFO) (3.5 % sulphur) ex VAT 50 %.

13. Falling oil prices, and particularly gasoil and RFO have driven down the price of imported natural gas into the Community, although the effects were concentrated into the second half of 1986 because of the lagged indexation mechanisms used in most contracts. By the fourth quarter of 1986 the average price of natural gas imported into the Community was 45 % below the corresponding quarter of the previous year.

The price of imported coal (both steam and coking coal) has also fallen steadily and substantially, as will be discussed separately and in detail later in this report.

14. Following the latest OPEC agreement on production and prices of 20 December 1986, oil prices have firmed for the moment. It is difficult to predict prices for the year 1987 as a whole, but the Commission's latest short-term energy forecasts are based on the assumption that the average price for crude oil imports in 1987 will be around \$ 15-16, even if prices are rather higher in the early part of the year.

Energy demand and supply

(Tables 1 and 2)

Modest rise in primary demand

15. Against this background of falling energy prices and moderate economic expansion, primary energy demand in the Community grew by only 1.3 % in 1986, having grown by 3 % in the first three quarters of 1986 ; provisional data suggest that Community energy consumption fell by nearly 4 % in the last quarter of 1986. The weather was particularly mild in this period. Demand for oil products rose by around 2 %, but this figure is artificially inflated by a rise in consumer stocks of domestic heating oil which were not actually consumed during 1986. Natural gas demand, was virtually stagnant, growing only 1,2 % - the result of some temporary loss of business to RFO and also due to the very mild weather conditions in the latter half of 1986. Electricity demand grew by 2.3 % in 1986.
16. At the same time a further 10 GW of nuclear capacity were brought into commercial operation during 1986, increasing average nuclear output by a further 8 %, and nuclear accounted for nearly 34 % of total electricity production in the Community. Community oil production was sustained at a rate close to 150 mtoe, much the same level as in 1985. Because of the rise in oil consumption there was a slight increase in the Community's dependence on imported oil. Overall energy import dependence rose to 43.5 % compared with less than 42 % in 1985.
17. Despite the prospect of continuing low oil prices, it is unlikely that Community oil demand will grow in 1987 as quickly as in 1986. Total energy demand may grow between 1 and 2 % at most, compared with expected GDP growth of perhaps 2.1 %. Natural gas, whose prices are now much more competitive, should regain its lost share of interruptible business from fuel oil. Consumption of coal is not expected to increase in 1987. Some 11 GW of new nuclear capacity could also enter commercial operation during the course of 1987. Provided this plant comes on stream as forecast, nuclear could be producing about 35 % of the Community's electricity this year.
18. In the Community, as in other parts of the world, there is at present an ample supply of all kinds of energy with little danger of shortages or bottlenecks for the time being nor for the near future.

IV. DEMAND FOR SOLID FUELS

19. Demand by sector and country

(Table 3)

The total demand for hard coal went down slightly from 330 million tonnes in 1985 to 328 million tonnes in 1986 ; for 1987 a further slight decline to 322 million tonnes is forecast.

The consumption in thermal power stations went up by 2 % in 1986 ; for 1987 a 1 % decline is expected. In the coking sector the decline in demand will continue. The third main hard coal market, "other industries", features after a decrease of 5 % in 1986 an increase of 14 % forecast for 1987. When we exclude however the increased coal burn in industrial power stations, this sector will experience a further 2 % decline in 1987 following a 13 % decrease in 1986. For the domestic sector a fall of 18 % in 1987 (after a slight increase in 1986) is forecast.

20. This rather stable development in total demand is however, the result of different trends in the Member States. In Belgium, France and Italy, demand fell in 1986 ; a further decline is expected for 1987. In the other Member States the growth in demand seen in 1986 will continue in 1987.

The reasons for this development will now be examined, sector by sector.

21. Cokemaking

(Tables 4 and 5)

Substantial decrease in demand:

Overall coke consumption fell from 62.6 million tonnes in 1985 to 54.6 million tonnes in 1986. This was due to a 10 % decrease of the demand from the steel industry, mainly as a result of a pig iron production reduced by 7 %, and a decrease in specific coke consumption. In "other industries" the decrease was 14 % whereas in the domestic sector it was as high as 48 %. The demand in the latter sector was strongly influenced by the mild weather and of course the fall of the oil price.

For 1987, a further decline of 4 % overall is forecast.

22. Deliveries of hard coal to coking plants totalled 78.9 million tonnes in 1986, a drop of 2.5 million tonnes or 3 % of the 81.4 million tonnes delivered in 1985. Forecasts for 1987 show a further drop of 6.1 million tonnes or 7.7 % to 72.8 million tonnes. This reduction will affect coal of national origin as well as coal from other Member States or third countries

23. Power stations

(Tables 6 A, 6 B and Annex)

In 1986 the power stations received 206 million tonnes of hard coal or nearly two-thirds of the hard coal demand in the Community. This figure is up 8 % on 1985, a year in which deliveries to power stations were hampered by the miners' strike in the United Kingdom. For 1987 a slight reduction to 201 million tonnes is expected.

24. The trend varies from Member State to Member State. Deliveries to power stations in Denmark, Greece, Italy and Luxembourg showed little variation. Deliveries increased in Germany, Spain, Ireland, the Netherlands, Portugal and the United Kingdom ; they decreased in Belgium and France due to a substantial shift to nuclear power generation as can be seen from the tables in the Annex. Forecasts for 1987 show another substantial drop in France (-35 %) and a drop in the United Kingdom, partially compensated by increases in Germany, Ireland, the Netherlands and Portugal.

25. Other industries

(Table 7)

The increase of hard coal and coke consumption in this sector in 1985, due in part to the efforts made in several countries to convert to coal did not continue in 1986. On the contrary, total consumption fell by 13 % to 19.9 million tonnes, despite the fact that in certain Member States increases from 3 to 129 % (Portugal) were realized.

Forecasts for 1987 show a further modest reduction in total consumption, in all Member States, Ireland and Portugal for coal, and Greece and Italy for coke, excluded.

The decrease is attributed mainly to the fall of oil and gas prices leading to a loss of interest for the conversion of industrial boilers to coal.

NB : The industrial uses of solid fuels considered here do not include consumption in power stations by undertakings producing their own electricity, or the undertakings' own use of steam from such power stations. If this consumption were included, the total would increase in 1987 as indicated in Table 3.

26. Domestic consumption

(Table 8)

The increase in consumption of hard coal, coke and patent fuels in 1985 could not be maintained in 1986. The decrease of oil and gas prices was strongly felt, in consequence deliveries in this sector dropped by 15 % to 26.2 million tonnes, coal and patent fuels from hard coal, lignite and peat put together.

The 1987 forecasts show a further 2 % reduction to 25.6 million tonnes.

27. Deliveries of lignite and peat

(Table 9)

Total deliveries of raw products as well as their breakdown by Member State, showed only slight variations between 1985 and 1986 ; for 1987, an increase of 2 % is forecast.

Deliveries of briquettes increased by 6 % in 1986 compared with 1985 ; in 1987 this level is likely to be maintained, partially because of the low temperature recorded during the first quarter of this year.

V. COMMUNITY PRODUCTION OF SOLID FUELS

28. Coal

(Table 10)

Coal production in the Community was 234 million tonnes in 1986, about 11 million tonnes more than in 1985. The difference is due to an increase in the United Kingdom (+ 14 million tonnes) by way of recovery from the miners' strike, whereas coal production in 1985 was still affected by the aftermath of the strike. The increase was partly compensated by reductions in all the other hard coal producing Member States

In 1987 stable or slightly reduced production levels should bring total output to 229 million tonnes.

29. Lignite and peat

Community lignite and peat production in 1986 was 179 million tonnes (1985 : 174 million tonnes). The forecast for 1987 show 187 million tonnes, with a significant increase in Ireland and Greece.

There is the likelihood of growth in the lignite and peat production capacity of the Community : commercial studies are being made of sizeable lignite deposits in a new location, Lough Neagh in Northern Ireland, which would be suitable for burning in local power stations and briquetting.

30. Coke

(Table 11, A and B)

Coke production capacity was 67 million tonnes in 1986, 1 million tonnes less than in 1985. For 1987 a further reduction of 4 % to 65.3 million tonnes is expected, mainly as a consequence of closures in Belgium, Germany and France.

Production of hard coke fell from 60.8 million tonnes in 1985 to 58.0 million tonnes in 1986 (4.6 %) ; a further decline to 54.4 million tonnes (6.3 %) is expected for 1987.

31. Personnel and productivity

(Table 12 A and B)

The reduction of the work force continued in 1986 and will continue in 1987. Productivity increased by 4 % between 1985 and 1986 ; a further slight increase is expected for 1987 due to continued efforts at all stages of coal mining.

As part of a sustained effort to improve productivity, 1986 saw a continued sun-down in jobs in the United Kingdom's coal industry, with reductions of about 28 000 leaving only about 108 000 on colliery books in March 1987. There were, however, good prospects (culminating eventually in government approval) for opening a new mine at Margram, South Wales, designed to produce 1.3 million tonnes a year of high-grade coking coal and employing 900 miners.

In Belgium, the government announced its plan for restructuring the industry in Spring 1987. This will involve the closure of unprofitable production in the Eastern part of Limbourg, with the loss of about half the present production of the area (6 million tonnes) and some 8 000 to 10 000 jobs.

32. State aids

Aids granted by Member States are the subject of a memorandum and can be summarized as follows :

	<u>Total aid</u>		<u>Aid per tonne</u>	
	<u>Million ECU</u>		<u>ECU</u>	
	<u>1985</u>	<u>1986</u> (country proposals)	<u>1985</u>	<u>1986</u> (country proposals)
Belgium	231.2	309.3	37.29	55.23
Germany	1 064.8	1 732.5	11.99	19.87
France	567.8	523.1	37.60	36.32
United Kingdom	281.4	226.9	3.10	2.17
Total	2 145.2	2 791.8	10.24	13.18

The figures, however, are of only limited value for the international comparison between Community countries taking into account different pricing practices and calorific values.

33. Trend in investment

(Table 13)

Investments in the extraction and preparation of hard coal showed a substantial increase in 1986 as compared with 1985. In 1987, however, they will return to the 1985 level, mainly due to the uncertainties resulting from the fall of the oil prices.

VI. PRICES FOR SOLID FUELS

34. In 1986 the US dollar continued to fall markedly in relation to Community currencies.

	<u>1 US \$</u>	<u>FB</u>	<u>DK</u>	<u>DM</u>	<u>FF</u>	<u>LIT</u>	<u>ESC</u>
a)	2.1.1986	50.06	8.92	2.45	7.52	1 671	157.75
b)	1.7.1986	44.62	8.10	2.18	6.97	1 499	148.75
c)	2.1.1987	39.95	7.26	1.92	6.35	1 337	144.60
	Variation en % (c/a)	- 20	- 19	- 22	- 16	- 20	- 8

	<u>1 US \$</u>	<u>FL</u>	<u>£</u>	<u>DR</u>	<u>PTA</u>	<u>£ IRL</u>	<u>ECU</u>
a)	2.1.1986	2.76	0.69	147.61	153.10	0.80	1.1262
b)	1.7.1986	2.46	0.65	139.69	139.25	0.72	1.0222
c)	2.1.1987	2.17	0.67	137.79	130.45	0.707	0.9240
	Variation en %	- 21	- 3	- 7	- 15	- 12	- 18

35. Development of list prices

(Table 14 A and B)

These tables show, for certain coalfields and coal types, the tax-free pithead price in national currencies and in US \$.

The few variations noted since 1st January 1986 can be summarized as follows. They are due partly to the decline of world market prices and partly to the success in cost control.

Belgium	:	Hard coal -4 to -24 % ; coke -7 to -27 % ;
Germany	:	Coke + 1 to + 3 % (one coalfield only) ;
France	:	Anthracite + 3 % ;
United Kingdom	:	No variations ;
Italy	:	No variations ;
Netherlands	:	Coke -18 to -25 %.

36. Development in the prices of imported coal

(Table 15)

a) Coking coal

The guide price (average price cif large Community ports of coking coals imported from the USA, Australia, Poland and Canada on medium to long-term contracts as provided directly by the importing undertakings) calculated for the Community continued to fall. Between the fourth quarter of 1985 and the fourth quarter of 1986 the reduction was 8.2 %, or US \$ 5.05 (\$ 56.85 instead of \$ 61.90).

Until 31 December 1986, this guide cif price is determined on the basis of a reference grade of coking coal with the characteristics: ash 6% (dry), moisture 5%, sulphur 1% (dry), volatile matter 24% (dry), screen size 0-30 mm. From 1 January 1987 on the guide cif price is determined on the basis of the reference grade : ash 7, (% (dry), moisture 8%, sulphur 0,8%, volatile matter 26% (dry), screen size 0-30mm. This reference grade corresponds to the present average quality of coking coal imported from third countries.

As a result of the fall of the US dollar, the guide price converted into national currency for the Community's coal producing and consumer countries showed a strong reduction ranging from 11 to 31 % with respect to the fourth quarter of 1985.

Guide price in national currencies (per tonne of 31.1 GJ, "old" reference grade)

<u>Reference date</u>	<u>US \$</u>	<u>DM</u>	<u>FB</u>	<u>FF</u>	<u>£</u>
4th quarter 1985	61.90	166	3 360	505	44
1st quarter 1986	61.90	152	3 100	466	43
2nd quarter 1986	58.20	136	2 780	417	40
3rd quarter 1986	57.10	125	2 550	358	37
4th quarter 1986	56.85	115	2 390	377	39
(1st quart. 1987) ²	56.65	109	2 260	359	38
Difference in %					
4th quarter 1986/ 4th quarter 1985	-8.2	-30.7	-28.9	-25.3	-11.4

<u>Reference date</u>	<u>FL</u>	<u>ESC</u>	<u>PTA</u>	<u>LIT</u>
4th quarter 1985	187	10 595	10 280	112 000
1st quarter 1986	171	9 765	9 475	103 000
2nd quarter 1986	153	8 820	8 520	92 000
3rd quarter 1986	140	8 490	7 950	86 000
4th quarter 1986	130	8 350	7 580	80 000
(1st quart. 1987) ²	123	8 190	7 390	75 000
Difference in %				
4th quarter 1986/ 4th quarter 1985	-30.5	-21.2	-26.3	-28.6

Guide price in national currencies (per tonne of 29.4 GJ, "new" reference grade)

<u>Reference date</u>	<u>US \$</u>	<u>DM</u>	<u>FB</u>	<u>FF</u>	<u>£</u>
1st quarter 1987	53.40	102	2 130	339	36
	<u>FL</u>	<u>ESC</u>	<u>PTA</u>	<u>LIT</u>	
1st quarter 1987	116	7 720	6 970	71 000	

37. b) Steam coal

The average price cif large Community ports of power-station coal imported from third countries decreased by about 9 %, from US \$ 52.45 at the end of 1985 to US \$ 45.85 in the fourth quarter of 1986 (per tonne of 29,3 GJ).

The price of comparable Community coals was between US \$ 85 and US \$ 110 at the beginning of 1986 and between US \$ 87 and US \$ 120 in the fourth quarter of 1986 for a tonne of 29.3 gigajoules.

¹ Specifications and trend since 1970 : see Table 15.

² for comparison only; price based on reference grade in application until 31 December 1986.

Average price for imported steam coal (in national currencies per tonne of 29.3 GJ)

<u>Reference date</u>	<u>US \$</u>	<u>DM</u>	<u>FB</u>	<u>FF</u>	<u>FL</u>
4th quarter 1985	52.45	136.15	2 763	415.27	153.35
1st quarter 1986	50.20	118.22	2 418	362.87	133.42
2nd quarter 1986	49.35	113.18	2 311	355.98	127.48
3rd quarter 1986	47.80	100.21	2 066	324.70	112.99
4th quarter 1986	45.85	92.57	1 923	302.84	104.61
Difference in %					
4th quarter 1986/ 4th quarter 1985	-12.6	-32.0	-30.4	-27.1	-31.8

<u>Reference date</u>	<u>LIT</u>	<u>£</u>	<u>DRA</u>	<u>PTA</u>	<u>ESC</u>
4th quarter 1985	92 198	36.28	7 581	8 581	8 864
1st quarter 1986	80 504	35.28	7 231	7 426	7 710
2nd quarter 1986	77 319	33.23	7 074	7 158	7 475
3rd quarter 1986	68 943	31.71	6 510	6 499	7 013
4th quarter 1986	64 060	32.04	6 313	6 191	6 798
Difference in %					
4th quarter 1986/ 4th quarter 1985	-30.5	-11.7	-16.7	-27.9	-23.3

The relevant data concerning imports of steam coal into the Community are communicated via the Member States governments. The information has to be forwarded by the national administration within 80 days after the end of each quarter (Decisions 77/707/ECSC and 85/161/ECSC).

38. Household coal prices

(Table 16)

This table shows the changes in the price of coal delivered to the consumer for anthracite (and coke in Italy) between 1 July 1985 and 1 July 1986. These changes differ according to country, varying between + 13 % in Germany and - 8 % in Ireland.

39. Comparative prices of different fuels

The essential details of the recent development of energy prices in the Community are described in the introductory part of the present report (see § 12). The following survey compares, on the basis of the Community average, the prices of coal with those of the main alternative energies for thermal applications. It is based on an abstract of the Energy Price Bulletin that the Commission publishes every six months. At the time when the present report was prepared, the data for 1st January 1987 were only partly available; the remainder of the information will be published in July in No 1/1987 of the Bulletin.

Electric power generation
(Imported fuel cif)

	Crude oil		Steam coal	
	<u>\$/bbl</u>	<u>ECU/GJ</u>	<u>\$/tonne</u>	<u>ECU/GJ</u>
1. Trim. 1986	20.56	3.95	44.88	1.85
2. Trim. 1986	12.74	2.36	43.60	1.74
3. Trim. 1986	11.88	1.98	42.45	1.59
4. Trim. 1986	13.40	2.18		

Industrial uses
(Price without VAT in ECU/GJ)

	<u>Hard coal</u>	<u>Heavy fuel oil</u>	<u>Natural gas</u>	<u>Electricity</u>
		(HFO)	(418 600 GJ/y)	(24 GWh/y)
1 7.1985	3.73	5.35	-	-
1.1.1986	3.55	5.-	6.24	16.30
1 7.1986	3.38	2.72	5.-*	15.62
1.1.1987		3.12		

Domestic use
(all taxes included in ECU/GJ)

	<u>Hard coal</u>	<u>Gasoil for heating</u>	<u>Natural gas</u>	<u>Electricity</u>
			(125.6 GJ/y)	(13 000 kWh/y)
1 7.1985	8.21	10.30	-	-
1.1.1986	8.57	9.53	9.45	20.14
1 7.1986	8.30	5.98	7.50*	19.87
1.1.1987		7.54		

(*) Estimates

As can be seen the price advantage of coal over competing oil products was rapidly vanishing in all three areas of application.

VII. TRADE IN SOLID FUELS

40. World coal trade and production

(Table 17)

Developments in the international coal market during 1986 were influenced by the general background of the oil price decline, the only moderate economic growth rates in the key coal importing regions and the decline in raw steel production both in Europe and Japan.

World coal trade decreased by 1 % to a total trade volume of 338 million tonnes. For the first time ever, trade in steam coal exceeded coking coal trade in the world market.

The weakening of demand, the growth in exports from relative newcomers on the market such as Colombia and China, rising competition from oil, all in the framework of sustained over-supply, have put further pressure on prices and consequently on the rate of return from coal exports.

World coal trade counted for 10 % of total world coal production, which in itself increased again to 3.2 billion tonnes (+ 2 %), but at a slower rate than in the previous years.

Growth effects for world coal trade came exclusively from the Latin American region and from countries in South-East Asia, which compensated for the decline in demand from Japan and Europe. Consequently, seaborne coal trade remained with 274 million tonnes virtually stable at the 1985 level. The intra area trade volume declined again in importance.

For 1987, a further, more substantial decline in world coal trade is expected. The underlying reasons are stagnating world steel demand, trends in specific coal use and economic growth rates at the 1986 level.

41. Trade with third countries

Imports (table 18)

Community imports from third countries amounted to 95 million tonnes or a drop of 3 million tonnes compared to 1985. The main reasons were the deterioration in raw steel demand, and the increase in nuclear capacity in electricity generation particularly in France; the reduction in coal imports in the United Kingdom due to the increase in indigenous production following the miners strike is another factor.

Italy remained the major importer of non-Community coal in the EC of Twelve, with a share of 20 %, followed by France, Denmark and the Netherlands.

Amongst suppliers the share of Australia increased sharply, while supplies from South Africa and Poland decreased significantly, owing in the case of South Africa to import restrictions imposed by some Member States, and in the case of Poland to reduced availability of coal for export to Western countries. Colombia and China, two relative newcomers, made substantial inroads in the markets. Australia, which overtook South Africa in volume terms became the second supplier to the Community after the United States.

42. For 1987, a level of approximately 92 million tonnes of coal imports is forecast. Sources of supply should not differ from those in 1986, but a further decline in South African supplies is expected for the reason indicated above ; the growth in exports from Colombia and China may reduce somewhat the share of the traditional suppliers.

43. Intra-Community trade

(Tables 19 and 20)

After a peak around the year 1982, when a difficult supply situation in third countries obliged coal consumers in the Community to rely on the secure supply and flexibility of the Community's producers, a decline in trade both of coal and coke is continuing. This drop is mainly due to the decline of pig iron production in the central Community steel regions of Lorraine and Luxembourg which are by tradition supplied with coking coal and/or coke from Germany.

The following table summarizes the evolution of trade for the period 1985 to 1987 :

	(in million tonnes)				
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1986/1985</u>	<u>1987/1986</u>
Hard coal	13.1	12.0	10.8	- 8.4 %	- 10 %
Coke	5.9	5.2	5.1	- 11.1 %	- 4.3 %

VIII. STOCKS

(Table 21)

44. Producers' stocks of hard coal did not vary much in the period covered by this report. They went up from 26.1 million tonnes at the end of 1985 to 27.2 million tonnes at the end of 1986, representing 39 calendar days of production. A stock of 27.4 million tonnes is forecast for the end of 1987.

45. Coke stocks went up by 67 % from 3.86 million tonnes at the end of 1985 to 6.46 million tonnes at the end of 1986, representing 40 calendar days of production. For 1987 a further increase to 8.6 million tonnes is forecast.

IX. CONCLUSIONS

46. The consequences of the fall both of the oil price and the dollar exchange rates for the market of solid fuels, although by far not negligible, have at least for the year 1986 and with regard to the forecast for 1987, been less dramatic than would have been expected: deliveries to power plants which count for about two third of the total have remained rather stable. The main reason for this is the long term commitment of utilities to burn Community coal. The decrease of coal input to coking plants was, above all, influenced by the steel slump. "Other Industries" and "Domestic" were the areas really hit by the fall both in the oil price and the dollar rate.

The drop from 23.1 % in 1985 to 22 % in 1987 in the share of solid fuels in the Community's gross internal energy consumption obviously is not in line with the "New energy policy objectives for 1995". This alarming development is to be brought to the attention of Member States so that corrective actions can be taken in good time.

X. COMMUNITY ACTIONS RELATING TO SOLID FUELS

47. - The Commission extended up to 30 June 1986 the application of Decision n° 528/76/ECSC regarding the Community system of measures taken by the Member States to assist the coal-mining industry³.
- The representatives of the governments, meeting in the Council, modified Decision 77/707/ECSC regarding the Community's surveillance of hard coal imports originating from third countries⁴.
- The Commission decided a new system establishing Community rules for State aid to the coal industry (Coal aid scheme)⁵.
- The Council adopted a resolution concerning the new Community Energy Objectives for 1995⁶. These include an increase in the share of solid fuels in energy consumption and the continued restructuring of Community production.

³ Decision 3501/85/ECSC of 11.12.1985, OJ N° L 335 of 13.12.1985, p.8

⁴ Decision 85/161/ECSC of 26.2.1985, OJ N° L 63 of 2.3.1985, p.20

⁵ Decision 2064/86/ECSC of 30.6.1986. OJ N° L 177 of 1.7.1986, p. 1, and implementing decision 2645/86/ECSC of 30.7.1986, OJ N° L 242 of 27.8.1986. p. 1.

⁶ Document COM(85)245 of 28.5.1985 (New Community Energy Objectives)

48. Research and development

- In 1986, in the framework of ECSC research, aids totalling 22.4 MECU were granted to projects concerning mining technology and coal upgrading.
- Under the Community programme for energy demonstration projects, aids were granted to projects for the liquefaction and gasification of solid fuels (18 MECU) and the substitution of hydrocarbons (15 MECU).
- In the framework of the third non-nuclear energy R & D programme (1985-1988), aids of 17.5 MECU have so far been granted to projects concerning the use of solid fuels

A major aim of the above mentioned research, development and demonstration programmes is to encourage the more widespread use of coal and other solid fuels (lignite and peat), especially in the general industry sector, as an alternative to oil and gas by making it possible to utilize the former more efficiently and conveniently. The programmes also place strong emphasis on the environmentally acceptable use of solid fuels and, in this respect, are also particularly relevant to large-scale electricity generation.

Technical progress in the field of solid fuel technology will be reviewed at a conference on "Coal in the heat market" in Berlin on 22 and 23 June 1987.

TABLE 1

**Gross internal energy consumption
Community**

	1985 Actual		1986 Estimates		1987 Forecasts	
	10 ⁶ toe	%	10 ⁶ toe	%	10 ⁶ toe	%(1)
Solid fuels	238	23.1	230	22.2	230	22.0
Oil	463	45.0	466	45.1	460-470	44.5
Natural gas	185	18.0	187	18.1	190	18.2
Nuclear energy	124	12.0	132	12.8	140	13.4
Other	19	1.9	19	1.8	20	1.9
Total	1 029	100.0	1 034	100.0	1 040 - 1 050	100.0

(1) Calculated as middle of the range.

TABLE 2

Shares of the various forms of energy in gross internal consumption of energy by country in 1986

Provisional

(million toe)

	Solid fuels	Petroleum products	Natural gas	Nuclear	Other	Total
Belgium %	19.8	43.2	14.8	21.8	0.4	100.0
Denmark %	38.4	55.2	5.7	-	0.7	100.0
Germany %	30.1	42.5	15.5	10.9	1.0	100.0
Spain %	25.4	53.7	3.6	14.0	3.3	100.0
France %	10.0	43.0	12.5	32.8	1.7	100.0
Greece %	35.5	61.6	0.6	-	2.3	100.0
Ireland %	33.1	50.8	15.2	-	0.9	100.0
Italy %	9.8	61.0	21.7	1.8	5.7	100.0
Luxemburg %	42.6	36.8	9.8	-	10.8	100.0
Netherlands %	9.0	35.5	53.3	1.7	0.5	100.0
Portugal %	10.7	80.2	-	-	9.1	100.0
United Kingdom %	32.4	36.2	23.5	7.6	0.3	100.0
Total 1986 %	22.2	45.1	18.1	12.8	1.8	100.0
Total 1987 %	22.0	44.5	18.2	13.4	1.9	100.0

TABLE 3

Community hard coal consumption by sector and by Member State

(Million tonnes)

	COMMUNITY				
	1985 Actual	1986 Estimates	1987 Forecasts	1986/1985 % Difference	1987/1986 % Difference
A) SECTOR					
- Thermal power stations	191.3	194.3	192.1	+ 2	- 1
- Coke ovens	81.4	78.1	72.8	- 4	- 7
- Iron and steel industry	2.2	2.3	2.8	+ 5	+ 22
- Other industries	31.5	29.9	34.2	- 5	+ 14
- Domestic sector	18.1	18.5	15.1	+ 2.2	- 18
- Patent fuel plants	3.6	3.2	3.3	- 11	+ 3
- Own consumption at mines	1.1	1.0	0.8	- 9	- 20
- Gasworks and others	0.2	0.2	0.4	-	+100
Statistical difference	+ 0.5	-	-	-	-
Total	329.9	327.5	321.5	- 1	- 2
B) COUNTRY					
Belgium	15.6	13.7	13.6	- 12	- 1
Denmark	12.7	12.6	12.6	- 1	-
Germany	89.8	89.6	88.0	-	- 2
Spain	24.2	27.2	28.9	+ 12	+ 6
France	35.1	29.9	26.1	- 15	- 13
Greece	1.5	1.9	2.0	+ 27	+ 5
Ireland	1.6	2.0	2.8	+ 25	+ 40
Italy	21.7	21.3	20.5	- 2	- 4
Luxemburg	0.2	0.2	0.2	-	-
Netherlands	10.5	10.5	11.3	-	+ 8
Portugal	1.6	2.1	2.5	+ 31	+ 19
United Kingdom	115.4	116.5	113.0	+ 1	- 3
COMMUNITY	329.9	327.5	321.5	- 1	- 2

TABLE 4

Coke consumption by sector

('000 tonnes)

	COMMUNITY				
	1985 Actual	1986 Estimates	1987 Forecasts	% Difference	
				1986/1985	1986/1985
A) <u>Sector</u>					
Iron and steel industry	53 500	48 100	46 495	- 10	- 3
Other industries	3 500	3 025	2 890	- 14	- 4
Domestic sector	4 300	2 215	2 035	- 48	- 8
Others	1 269	1 285	1 215	+ 1	- 5
Total	62 569	54 625	52 635	- 13	- 4
B) <u>Country</u>					
Belgium	5 750	4 900	5 000	- 15	+ 2
Denmark	71	75	75	+ 6	-
Germany	21 707	18 400	16 800	- 15	- 9
Spain	3 591	3 250	3 230	- 9	- 1
France	10 348	9 220	9 180	- 11	-
Greece	55	40	45	- 27	+ 12
Ireland	7	5	5	- 29	-
Italy	7 266	6 710	6 650	- 8	- 1
Luxembourg	1 889	1 700	1 605	- 10	- 6
Netherlands	2 462	2 425	2 425	- 2	-
Portugal	428	300	320	- 30	+ 7
United Kingdom	8 995	7 600	7 300	- 16	- 4
COMMUNITY	62 569	54 625	52 635	- 13	- 4

TABLE 5

Deliveries of hard coal to coking plants

('000 tonnes)

1985 : Actual 1986 : Estimates 1987 : Forecasts		National hard coal	Hard coal from other ECSC countries	Total ECSC hard coal	Hard coal from third countries	Total supplies
Belgium	1985	3 109	929	4 038	3 619	7 657
	1986	2 900	650	3 550	3 050	6 600
	1987	2 870	630	3 500	3 100	6 600
Germany	1985	29 547	84	29 631	-	29 631
	1986	29 615	33	29 648	-	29 648
	1987	26 540	60	26 600	-	26 600
Spain	1985	909	-	909	4 169	5 078
	1986	960	-	960	3 340	4 300
	1987	980	-	980	3 075	4 055
France	1985	3 218	2 048	5 266	6 321	11 587
	1986	3 300	1 800	5 100	5 700	10 800
	1987	3 400	1 500	4 900	5 100	10 000
Italy	1985	20	1 714	1 734	8 249	9 983
	1986	20	1 800	1 820	7 880	9 700
	1987	20	1 850	1 870	7 690	9 560
Netherlands	1985	-	482	482	3 630	4 112
	1986	-	420	420	3 680	4 100
	1987	-	430	430	3 670	4 100
Portugal	1985	-	-	-	370	370
	1986	-	-	-	300	300
	1987	-	-	-	390	390
United Kingdom	1985	6 118	-	6 118	6 911	13 029
	1986	6 100	-	6 100	7 400	13 500
	1987	6 150	-	6 150	5 350	11 500
Community	1985	42 921	5 257	48 178	33 269	81 447
	1986	42 895	4 703	47 598	31 350	78 948
	1987	39 960	4 470	44 430	28 375	72 805

TABLE 6 A

Deliveries of hard coal to power stations

('000 tonnes)

1985 : Actual 1986 : Estimates 1987 : Forecasts	Public power stations					Private genera- ting plants		Total	
	Natio- nal hard coal	Hard coal from ECSC coun- tries	Total ECSC hard coal	Hard coal from third coun- tries	Total public power sta- tions	Collie- ries	Other indus- tries		
Belgium	1985	2 943	-	2 943	2 092	5 035	335	-	5 320
	1986	2 900	-	2 900	1 400	4 300	325	-	4 625
	1987	2 900	-	2 900	1 400	4 300	325	-	4 625
Denmark	1985	-	1 222	1 222	10 233	11 455	-	-	11 455
	1986	-	1 050	1 050	10 250	11 300	-	-	11 300
	1987	-	1 050	1 050	10 250	11 300	-	-	11 300
Germany	1985	36 132	339	36 471	1 677	38 148	2 650	5 500	46 298
	1986	38 110	390	38 500	5 700	44 200	2 700	5 700	52 600
	1987	38 570	380	38 950	5 800	44 750	2 650	5 600	53 000
Spain	1985	13 777	-	13 777	1 631	15 408	-	-	15 408
	1986	19 205	-	19 205	2 000	21 205	-	-	21 205
	1987	18 800	-	18 800	1 800	20 600	-	-	20 600
France	1985	1 503	387	1 890	5 197	7 087	7 000	160	14 247
	1986	1 450	450	1 900	4 200	8 100	6 000	120	12 220
	1987	1 420	420	1 840	2 160	4 000	3 800	120	7 920
Greece	1985	-	-	-	-	-	-	-	-
	1986	-	-	-	400	400	-	-	400
	1987	-	-	-	300	300	-	-	300
Ireland	1985	-	58	58	-	58	-	-	58
	1986	-	655	655	-	655	-	-	655
	1987	-	670	670	530	1 200	-	-	1 200
Italy	1985	-	-	-	9 171	9 171	-	-	9 171
	1986	-	-	-	9 500	9 500	-	-	9 500
	1987	-	-	-	9 500	9 500	-	-	9 500
Luxem- bourg	1985	-	-	-	-	-	-	-	-
	1986	-	-	-	-	-	-	25	25
	1987	-	-	-	-	-	-	25	25
Nether- lands	1985	126	70	196	4 407	4 603	-	250	4 853
	1986	-	130	130	4 970	5 100	-	300	5 400
	1987	-	150	150	5 850	6 000	-	300	6 300
Portugal	1985	184	65	249	697	946	-	-	946
	1986	195	70	265	935	1 200	-	-	1 200
	1987	200	80	280	1 120	1 400	-	-	1 400
United Kingdom	1985	80 765	37	80 802	527	81 329	40	2 150	83 519
	1986	83 300	-	83 300	1 500	84 800	35	2 400	87 235
	1987	80 500	-	80 500	1 500	82 000	40	2 400	84 440
Commu- nity	1985	135 430	2 178	137 608	35 632	173 240	10 025	8 060	191 325
	1986	145 160	2 745	147 905	40 855	188 760	9 060	8 545	206 365
	1987	142 390	2 750	145 140	40 210	185 350	6 815	8 445	200 610

TABLE 6 B

**Consumption of solid fuels in power stations
(including colliery power plants and other private generators)**

	(in million tonnes)				
	1985	1986	1987	% Difference	
				1986/1985	1987/1986
<u>Belgium</u>					
Hard coal	5.3	4.6	4.6	- 13	-
<u>Denmark</u>					
Hard coal	11.5	11.3	11.3	- 2	-
<u>Germany</u>					
Hard coal	46.3	52.6	53.0	+ 14	+ 1
Black lignite	2.6	3.0	3.0	+ 15	-
Brown coal	102.7	109.0	108.0	+ 6	- 1
<u>Spain</u>					
Hard coal	15.4	21.2	20.6	+ 38	- 3
Brown coal	17.5	17.0	16.2	- 3	- 5
<u>France</u>					
Hard coal	14.2	12.2	7.9	- 14	- 35
Black lignite	1.6	1.3	1.3	- 19	-
Brown coal	0.6	0.4	0.3	- 33	- 25
<u>Greece</u>					
Hard coal	-	0.4	0.3	-	- 25
Brown coal	34.4	29.0	31.0	- 16	+ 7
<u>Ireland</u>					
Hard coal	0.1	0.6	1.2	+500	+100
Peat	3.9	3.6	3.7	- 8	+ 3
<u>Italy</u>					
Hard coal	9.2	9.5	9.5	+ 3	-
Brown coal	1.8	1.7	1.7	- 6	-
<u>Netherlands</u>					
Hard coal	4.9	5.4	6.3	+ 10	+ 17
<u>Portugal</u>					
Hard coal	0.9	1.2	1.4	+ 33	+ 17
<u>United Kingdom</u>					
Hard coal	83.5	87.2	84.4	+ 4	- 3
<u>Community</u>					
Hard coal	191.3	206.2	200.5	+ 8	- 3
Black lignite	4.2	4.3	4.3	+ 2	-
Brown coal	160.9	157.1	157.2	- 2	-

TABLE 7

**Hard coal and coke consumption in other industries
(excluding power stations)**

('000 tonnes)

	1985 Actual	1986 Estimates	1987 Forecasts	% Difference	
				1986/1985	1987/1986
A) <u>Hard coal</u>					
Belgium	823	1 015	1 000	+ 23	- 1
Denmark	525	500	500	- 5	-
Germany	3 580	3 500	3 400	- 2	- 3
Spain	3 120	2 800	2 600	- 10	- 7
France	4 890	3 700	3 700	- 24	-
Greece	1 333	1 400	1 400	+ 5	-
Ireland	333	382	433	+ 15	+ 13
Italy	1 800	1 430	1 400	- 21	- 2
Luxembourg	117	120	120	+ 2	-
Netherlands	1 005	500	500	- 50	-
Portugal	233	535	719	+129	+ 34
United Kingdom	5 217	4 000	3 700	- 23	- 7
Community	22 976	19 882	19 472	- 13	- 2
B) <u>Coke</u>					
Belgium	207	190	190	- 8	-
Denmark	33	35	35	+ 6	-
Germany	1 341	1 250	1 100	- 7	- 12
Spain	120	125	125	+ 4	-
France	779	800	800	+ 3	-
Greece	19	20	25	+ 5	+ 25
Ireland	-	-	-	-	-
Italy	425	370	380	- 13	+ 3
Luxembourg	-	-	-	-	-
Netherlands	228	200	200	- 12	-
Portugal	199	180	180	- 9	-
United Kingdom	356	300	300	- 16	-
Community	3 707	3 470	3 335	- 6	- 4

TABLE 8

Deliveries of solid fuels to the domestic sector

('000 tonnes)

1985 : Actual 1986 : Estimates 1987 : Forecasts	B	DK	DE	SP	F	GR	IRL	IT	LUX	NL	P	UK	EUR
A. Hard coal, patent fuels and coke													
Hard coal 1985	1 368	688	1 323	624	2 324	7	1 194	170	3	43	5	10 315	18 064
1986	1 315	600	1 230	1 400	2 460	5	1 123	110	3	40	5	7 300	15 591
1987	1 315	690	1 130	1 380	2 460	5	1 200	60	3	40	5	6 800	15 088
Patent fuels 1985	152	-	818	16	1 463	-	9	-	1	7	-	687	3 153
1986	100	-	730	10	1 380	-	-	-	1	-	-	1 100	3 321
1987	100	-	680	10	1 300	-	-	-	1	-	-	1 100	3 191
Coke 1985	81	33	1 236	2	322	4	-	125	3	-	-	2 413	4 219
1986	60	25	1 140	-	200	-	-	140	2	-	-	650	2 217
1987	60	25	1 090	-	180	-	-	120	2	-	-	560	2 037
Total 1985	1 601	721	3 377	642	4 109	11	1 203	295	7	50	5	13 415	25 436
1986	1 475	625	3 100	1 410	4 040	5	1 123	250	6	40	5	9 050	21 129
1987	1 475	715	2 900	1 390	3 940	5	1 200	180	6	40	5	8 460	20 316
% 1986/1985	- 8	- 13	- 8	+ 119	- 2	- 54	- 6	- 15	- 14	- 20	-	- 32	- 17
B. Lignite briquettes, peat and peat briquettes													
1985	97	40	2 872 (1)	139	132	55	1 880 (2)	30	39	19	-	-	5 303
1986	50	40	2 595	130	120	60	1 983	30	25	20	-	-	5 073
1987	80	40	2 595	135	150	60	2 141	30	25	20	-	-	5 276

(1) Of which a small quantity of raw products

(2) Peat : raw product and briquettes

TABLE 9

Deliveries of lignite and peat by sector and by Member State

(in Mio tonnes)

	RAW PRODUCTS											
	Power stations			Briquetting plants			Others			Total		
	1985	1986	1987	1985	1986	1987	1985	1986	1987	1985	1986	1987
Belgium	-	-	-	-	-	-	0.2	0.2	-	0.2	0.2	-
Denmark	-	-	-	-	-	-	-	-	-	-	-	-
Germany	97.3	106.8	107.3	13.0	13.7	14.5	1.1	1.3	1.3	111.4	121.8	123.1
Spain	14.3	16.2	16.2	-	-	-	0.2	-	-	14.5	16.2	16.2
France	2.2	2.3	1.6	-	-	-	0.1	0.2	0.4	2.3	2.5	2.0
Greece	30.9	35.0	37.0	0.3	0.3	0.7	1.5	2.0	2.3	32.7	37.3	40.0
Ireland	2.4	2.6	3.7	1.0	1.2	1.4	1.1	1.2	1.7	4.5	5.0	6.8
Italy	1.9	1.9	1.9	-	-	-	0.1	-	-	2.0	1.9	1.9
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-
Community	149.0	164.8	167.7	14.3	15.2	16.6	4.3	4.9	5.7	167.6	184.9	190.0

TABLE 10

Hard coal production by areas

('000 tonnes)

	1985 Actual	1986 Provisional	1987 Forecasts
Belgium	6 212	5 590	5 850
Ruhr	70 146	68 806	67 000
Aachen	5 011	4 993	4 800
Ibbenbüren	2 423	2 360	2 200
Saar + Kleinzechen	11 269	10 967	11 000
Germany	88 849	87 126	85 000
Central Asturiana	4 944	4 997	4 720
Bierzo, Villablino, Narcea	6 164	6 125	5 460
Leon, Este, Palencia	2 529	2 534	2 400
Sur	2 454	2 479	2 370
Aragon, Cataluna, Balears	6 279	5 823	5 650
Spain(*)	22 370	21 958	20 600
Nord-Pas-de-Calais	2 386	1 722	..
Lorraine	9 815	9 897	..
Centre-Midi	2 923	2 775	..
France	15 124	14 394	12 550
Ireland	57	72	50
Portugal	238	212	250
Scotland	3 554	3 667	..
Northern	7 457	10 117	..
Yorkshire	19 935	27 103	..
North-West	8 869	9 845	..
Midlands-Kent	29 639	31 176	..
South Wales	4 910	6 584	..
Opencast	14 466	14 277	..
Licensed mines	1 920	1 866	..
United Kingdom	90 750	104 635	105 000
Community	223 600	233 987	229 300

* Including black lignite

TABLE 11 A

**Coking
1985 - 1987**

(Mio t per annum)

	Coke production capacity	Hard coal consumption	Coke production	% difference compared with the previous year
1985 (Actual)				
Belgium	6.7	7.7	5.9	+ 2
Germany	24.0	29.6	22.8	- 6
Spain	4.0	5.1	3.4	-
France	9.8	11.5	8.7	- 3
Italy	10.5	10.0	7.4	- 1
Netherlands	3.0	4.1	3.0	-
Portugal	0.3	0.4	0.3	-
United Kingdom	9.8	13.0	9.3	+ 4
Community	68.1	81.4	60.8	- 2
1986 (Provisional)				
Belgium	6.7	6.5	5.2	-
Germany	24.7	29.6	22.7	+ 3
Spain	4.0	4.3	3.1	-
France	9.2	10.8	8.2	- 6
Italy	10.3	9.7	7.2	- 2
Netherlands	3.0	4.1	2.8	-
Portugal	0.3	0.3	0.3	-
United Kingdom	8.9	13.5	8.5	- 9
Community	67.1	78.8	58.0	- 1
1987 (Forecasts)				
Belgium	6.0	6.6	5.0	- 10
Germany	24.3	26.6	20.5	- 2
Spain	4.0	4.0	3.0	-
France	8.5	10.0	7.8	- 8
Italy	10.3	9.6	7.0	-
Netherlands	3.0	4.1	2.7	-
Portugal	0.3	0.4	0.3	-
United Kingdom	8.9	11.5	8.1	-
Community	65.3	72.8	54.4	- 3

TABLE 11 B

Capacity distribution

('000 tonnes)

	1985	1986	1987
Colliery plants	23.2	23.2	22.4
Iron and steel industries	41.8	40.8	39.8
Independent	3.1	3.1	3.1
Total	68.1	67.1	65.3

TABLE 12 A

**Personnel employed underground
(yearly average)**

('000)

	1985 Actual	1986 Provisional	1987 Forecasts
Belgium	14.0	13.3	12.7
Germany	109.3	107.1	103.3
Spain	38.0	38.0	36.9
France	21.0	18.5	17.5
Portugal	0.8	0.8	0.8
United Kingdom	132.2	108.4	104.0
Ireland	0.3	0.3	0.3
Community	315.6	286.4	275.5

TABLE 12 B

Output per man/hour underground

(kg per man/hour)

	1985 Actual	1986 Provisional	1987 Forecasts
Belgium	314	321	325
Germany	593	602	600
Spain	273	281	310
France	392	427	400
Portugal
United Kingdom	408	512	495
Community	449	500	470

TABLE 13

**Investments in the coal industry
(Coal extraction and preparation)**

(million ECU)

	1985 Actual	1986 Estimates	1987 Forecasts
Belgium	42.6	62.5	10.5
Germany	308.2	552.4	302.7
Spain
France	84.9	76.1	78.0
Portugal
United Kingdom	881.2	1 098.4	908.6
Community	1 316.9	1 789.4	1 299.8

TABLE 14 A

Pre-tax pithead list-prices for Community coal on 1 January 1986, 1 July 1986 and 1 January 1987

Category	Type	Date	(US \$ (1) (2))											Minimum price	Maximum price	Difference %
			Ruhr	Aachen	Saar	Belgium	Nord	Lorraine	South Wales	Scotland	South Yorkshire	Oviedo	Leon			
Anthracite	Nuts 3 20/30 mm	1.1.86	159.59	-	-	-	173.54	-	153.62	-	-	-	111.04	111.04	173.54	56.3
		1.7.86	179.36	-	-	-	192.79	-	163.08	-	-	-	122.08	122.08	192.79	57.9
		1.1.87	203.65	-	-	-	211.50	-	158.21	-	-	-	130.32	130.32	211.50	62.3
Lean coal	Nuts 3 20/30 mm	1.1.86	-	153.47	-	-	-	-	126.52	-	-	-	104.51	104.51	153.47	46.8
		1.7.86	-	172.48	-	-	-	-	134.31	-	-	-	114.90	114.90	172.48	50.1
		1.1.87	-	195.83	-	-	-	-	130.30	-	-	-	122.65	122.65	195.83	59.7
Semi-bituminous	Nuts 4 10/20 mm	1.1.86	128.16	148.16	-	-	-	-	-	-	-	-	-	128.16	148.16	15.6
		1.7.86	144.04	166.51	-	-	-	-	-	-	-	-	-	144.04	166.51	15.6
		1.1.87	163.54	189.06	-	-	-	-	-	-	-	-	-	163.54	189.06	15.6
Long flame	Nuts 2 30/50 mm	1.1.86	113.47	-	132.65	103.88	-	90.03	-	96.81	95.94	104.91	-	90.03	132.65	47.3
		1.7.86	127.52	-	149.08	112.06	-	97.19	-	102.77	101.85	115.34	-	97.19	149.08	53.4
		1.1.87	144.79	-	169.27	125.16	-	106.61	-	99.70	98.81	123.12	-	98.81	169.27	71.3
Long flame	Nuts 5 6/10 mm	1.1.86	113.47	-	-	94.89	-	(3) 89.10	-	96.67	93.91	-	-	89.10	113.47	27.4
		1.7.86	127.52	-	-	97.49	-	(4) 96.18	-	102.62	99.69	-	-	96.18	127.52	32.6
		1.1.87	144.79	-	-	108.89	-	(5) 105.51	-	99.55	96.72	-	-	96.72	144.79	49.7
Coking coal	Medium or high volatile	1.1.86	107.55	122.45	124.49	78.91	-	85.24	93.91	-	-	-	-	78.91	124.49	57.8
		1.7.86	120.87	137.61	139.91	86.28	-	92.02	99.69	-	-	-	-	86.28	139.91	62.2
		1.1.87	137.24	156.25	158.85	96.37	-	100.94	96.72	-	-	-	-	96.37	158.85	64.8
Coke	Blast furnace > 40 mm	1.1.86	156.33	174.69	168.57	123.35	145.61	141.62	143.48	141.88	141.01	-	-	123.35	174.69	41.6
		1.7.86	175.69	196.33	189.45	138.39	157.19	152.89	150.62	150.62	150.62	-	-	138.39	196.33	41.9
		1.1.87	199.48	222.92	215.10	154.57	172.44	167.72	146.12	146.12	146.12	-	-	146.12	222.92	52.6

(1) Dollar exchange rate

	DM	FB	FF	£	PTA
2.1.1986	2.45 100	50.06 100	7.52 100	0.69 100	153.10 100
1.7.1986	2.18 89	44.62 89	6.966 93	0.65 94	139.25 91
2.1.1987	1.92 78	39.95 80	6.35 84	0.67 97	130.45 85

(2) Prices are not adjusted for quality differences

(3) Power stations : 113.06/107.85 \$/t

(4) Power stations : 111.25/116.42 \$/t

(5) Power stations : 122.05/127.72 \$/t

TABLE 14 B

Pre-tax pithead list-prices for Community coal on 1 January 1986, 1 July 1986 and 1 January 1987

(in national currencies)

Category	Type	Date	Ruhr DM	Aachen DM	Saar DM	Belgium FB	Nord FF	Lorraine FF	South Wales £	Scotland £	South Yorkshire £	Oviedo Pta	Leon Pta
Anthracite	Nuts 3 20/30 mm	1.1.86	391.00	-	-	-	1 305.00	-	106.00	-	-	-	17 000
		1.7.86	391.00	-	-	-	1 343.00	-	106.00	-	-	-	17 000
		1.1.87	391.00	-	-	-	1 343.00	-	106.00	-	-	-	17 000
Lean coal	Nuts 3 20/30 mm	1.1.86	-	376.00	-	-	-	-	87.30	-	-	-	16 000
		1.7.86	-	376.00	-	-	-	-	87.30	-	-	-	16 000
		1.1.87	-	376.00	-	-	-	-	87.30	-	-	-	16 000
Semi-bituminous	Nuts 4 10/20 mm	1.1.86	314.00	363.00	-	-	-	-	-	-	-	-	-
		1.7.86	314.00	363.00	-	-	-	-	-	-	-	-	-
		1.1.87	314.00	363.00	-	-	-	-	-	-	-	-	-
Long flame	Nuts 2 30/50 mm	1.1.86	278.00	-	325.00	5 200.00	-	677.00	-	66.80	66.20	16 061	-
		1.7.86	278.00	-	325.00	5 000.00	-	677.00	-	66.80	66.20	16 061	-
		1.1.87	278.00	-	325.00	5 000.00	-	677.00	-	66.80	66.20	16 061	-
Long flame	Nuts 5 6/10 mm	1.1.86	278.00	-	-	4 750.00	-	(2) 670.00	-	66.70	64.80	-	-
		1.7.86	278.00	-	-	4 350.00	-	(3) 670.00	-	66.70	64.80	-	-
		1.1.87	278.00	-	-	4 350.00	-	(4) 670.00	-	66.70	64.80	-	-
Coking coal	Medium or high volatile	1.1.86	263.50	300.00	305.00	3 950.00	-	641.00	64.80	-	-	-	-
		1.7.86	263.50	300.00	305.00	3 850.00	-	641.00	64.80	-	-	-	-
		1.1.87	263.50	300.00	305.00	3 850.00	-	641.00	64.80	-	-	-	-
Coke	Blast furnace > 40 mm	1.1.86	383.00	428.00	413.00	(1) 175.00	1 095.00	1 065.00	99.00	97.90	97.30	-	-
		1.7.86	383.00	428.00	413.00	6 175.00	1 095.00	1 065.00	97.90	97.90	97.30	-	-
		1.1.87	383.00	428.00	413.00	6 175.00	1 095.00	1 065.00	97.90	97.90	97.30	-	-

(1) Carcoke

(2) Power stations : 775.00/811.00 FF/t

(3) Power stations : 775.00/811.00 FF/t

(4) Power stations : 777.00/811.00 FF/t

TABLE 15

Average cif prices for coal imported from third countries

	First quarter 1985	Second quarter 1985	Third quarter 1985	Fourth quarter 1985	First quarter 1986	Second quarter 1986	Third quarter 1986	Fourth quarter 1986
(US \$)								
A) Steam coal (1) PCI (Kj/kg)	25 932	25 847	25 798	26 886	26 097	26 086	26 325	26 159
per tonne (t = t)	45.30	46.30	44.60	46.50	44.85	44.05	43.10	41.05
per tonne = 29.3 GJ	51.00	52.35	50.60	52.45	50.20	49.35	47.80	45.85
B) Coking coal (2) PCI (KJ/kg)	31 124	31 124	31 124	31 124	31 124	31 124	31 124	31 124
per standard tonne (3) (4)	62.75	62.70	62.15	61.90	61.90	58.20	57.10	56.85
per tonne = 29.3 GJ	59.10	59.05	58.50	58.30	58.30	54.80	53.75	53.55
Ratio B : A, per tonne = 29.3 GJ	116 %	113 %	116 %	111 %	116 %	111 %	112 %	117 %

(1) As per quarterly reports from the Member States (Decision 86/161/ECSC of 26 February 1985 modifying the Decision 77/707/ECSC of 7 November 1977).

(2) Guide price (Decision 73/287/ECSC of 25 July 1973), reference date : beginning of quarter.

(3) Specifications of the standard quality : ashes 6 %, water 5 %, volatile matters 2 %.

(4) Trends of the mean value : at the first of January of each year :

1970 17.50	1974 31.90	1978 62.10	1982 82.45	1986 61.90
1971 23.90	1975 59.55	1979 63.95	1983 76.25	1986 56.85 (1.10)
1972 23.65	1976 62.75	1980 68.50	1984 66.20	
1973 26.05	1977 61.65	1981 75.70	1985 62.75	

TABLE 16

**Delivered prices for domestic coal
(including taxes)**

	(Ecu/tce)		
	1 July 1985	1 July 1986	+/- %
Belgium	237.92	257.73	+ 8.3
France	299.52	319.28	+ 6.6
Germany	226.02	256.18	+ 13.3
Ireland	198.19	181.86	- 8.2
Italy	299.51	302.04	+ 0.8
Netherlands	272.81	296.21	+ 8.6
Spain	-	141.62	
United Kingdom	227.35	212.30	- 6.6

TABLE 17

World coal production and trade

(Mio tonnes)

I. WORLD TRADE BY COUNTRY AND REGION	1984	1985	1986 (1)	1987 (2)
Imports in Japan	88	94	92	89
Community imports from third countries	86	98	95	92
Imports in other countries	68	81	87	89
Sub-total coal sea-borne trade(a)	242	273	274	270
Coking coal	129	139	138	134
Others	113	134	136	136
Intra-Community coal trade	15	13	12	11
Intra-Comecon trade (3)	39	38	38	37
United States trade	20	15	14	13
Sub-total coal regional trade(b)	74	66	64	61
Total : coal world trade (c) (c) = (a) + (b)	316	339	338	331
Coking coal	161	176	166	161
Others	155	169	171	170
Difference from year to year (%)	+ 18 %	+ 7 %	+ 0 %	- 2 %
II. WORLD PRODUCTION OF COAL	1984	1985	1986 (1)	
Western Europe (EUR)	176 (174)	218 (217)	234 (233)	
North America (United States) (Canada)	783 (750) (32)	776 (741) (34)	782 (747) (35)	
USSR	555	552	564	
China	736	815	835	
Poland	191	192	192	
South Africa	162	169	176	
Australia	125	133	136	
India	145	148	152	
Japan	17	16	16	
Latin America	25	28	29	
Rest of the world	128	165	147	
Total world production of coal(d)	3 043	3 212	3 263	
III. SEA-BORNE TRADE OF COAL IN % OF WORLD PRODUCTION (a):(d)	8 %	8.4 %	8.4 %	

(1) Estimates

(2) Forecasts

(3) Countries with centrally planned economy (Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, USSR)

TABLE 18

Hard coal from third countries

(million tonnes)

	1985 Actual	1986 Provisional	1987 Forecasts
A) <u>By country of destination</u>			
Belgium	6.8	6.8	6.2
Denmark	11.4	11.1	11.5
Germany	9.1	9.3	9.0
Spain	8.3	8.1	8.1
France	15.2	13.9	10.9
Greece	2.0	2.0	2.1
Ireland	1.3	1.8	2.1
Italy	20.3	18.8	19.1
Luxembourg	0.1	0.2	0.1
Netherlands	11.0	11.6	12.1
Portugal	1.2	1.7	2.0
United Kingdom	11.4	9.8	9.2
Community	98.1	95.1	92.4
B) <u>By country of origin</u>			
USA	34.0	34.0	33.2
Canada	2.1	1.9	1.5
Australia	19.4	20.9	22.2
South Africa	25.9	22.2	16.7
Poland	13.6	8.3	10.3
USSR	1.3	1.9	1.2
Others	1.8	5.9	7.3
Community	98.1	95.1	92.4
C) <u>By sector of consumption</u>			
Coal destined to public power stations	42.3	40.9	40.2
Coal destined to coke ovens	33.1	31.0	28.4
Anthracite and low volatile	3.4	3.9	3.5
Other coals	19.3	19.3	20.3
Community	98.1	95.1	92.4

TABLE 19

Trend of intra-Community trade in hard coal
(1985 - 1987)

		('000 tonnes)												
To \ From														
	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	United Kingdom	EUR	
Belgium	1985	■	-	2 095	-	25	-	-	-	-	176	-	39	2 335
	1986	■	-	1 450	-	20	-	-	-	80	-	60	1 610	
	1987	■	-	1 390	-	20	-	-	-	80	-	50	1 540	
Denmark	1985	4	■	12	2	1	-	-	-	23	-	1 311	1 353	
	1986	-	■	-	-	-	-	-	-	-	-	1 200	1 200	
	1987	-	■	-	-	-	-	-	-	-	-	1 200	1 200	
Germany	1985	420	-	■	-	430	-	-	3	78	-	195	1 126	
	1986	300	-	■	-	450	-	-	-	50	-	300	1 100	
	1987	300	-	■	-	450	-	-	-	50	-	300	1 100	
Spain	1985	7	-	2	■	-	-	-	-	-	56	5	70	
	1986	10	-	-	■	-	-	-	-	-	-	5	15	
	1987	10	-	-	■	-	-	-	-	-	-	10	20	
France	1985	283	-	2 989	-	■	-	-	-	-	-	242	3 514	
	1986	210	-	2 490	-	■	-	-	-	-	-	500	3 200	
	1987	100	-	2 350	-	■	-	-	-	-	-	400	2 850	
Greece	1985	-	-	-	-	-	■	-	-	-	-	61	61	
	1986	-	-	-	-	-	■	-	-	-	-	-	-	
	1987	-	-	-	-	-	■	-	-	-	-	-	-	
Ireland	1985	8	-	55	-	88	-	■	-	31	-	392	574	
	1986	10	-	50	-	60	-	■	-	5	-	580	705	
	1987	5	-	65	-	65	-	■	-	15	-	580	730	
Italy	1985	1	-	1 755	-	19	-	-	■	-	-	3	1 778	
	1986	5	-	1 530	-	15	-	-	■	-	-	-	1 550	
	1987	-	-	1 440	-	-	-	-	■	-	-	-	1 440	
Luxembourg	1985	15	-	33	-	-	-	-	■	16	-	-	64	
	1986	30	-	5	-	-	-	-	■	5	-	-	40	
	1987	30	-	5	-	-	-	-	■	-	-	-	35	
Netherlands	1985	118	-	632	-	-	-	-	-	■	-	10	760	
	1986	275	-	800	-	-	-	-	-	■	-	125	1 200	
	1987	275	-	345	-	-	-	-	-	■	-	125	745	
Portugal	1985	57	-	1	-	-	-	-	-	8	■	111	177	
	1986	20	-	5	5	-	-	-	-	-	■	225	255	
	1987	20	-	5	5	-	-	-	-	-	■	280	310	
United Kingdom	1985	166	1	755	-	28	-	8	-	307	-	■	1 265	
	1986	100	-	600	-	-	-	-	-	400	-	■	1 100	
	1987	100	-	400	-	-	-	10	-	300	-	■	810	
COMMUNITY	1985	1 079	1	8 329	2	591	-	8	3	639	56	2 369	13 077	
	1986	960	-	6 930	5	545	-	-	-	540	-	2 935	11 975	
	1987	840	-	6 000	5	535	-	10	-	445	-	2 945	10 780	

TABLE 20
Trend of intra-Community trade in coke
(1985 - 1987)

From \ To		('000 tonnes)											
		Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	United Kingdom
Belgium	1985	■	-	168	-	50	-	-	-	-	-	112	511
	1986	■	-	140	-	50	-	-	-	-	-	75	465
	1987	■	-	150	-	40	-	-	-	-	-	75	490
Denmark	1985	12	■	16	-	25	-	-	-	-	7	5	65
	1986	15	■	15	-	25	-	-	-	-	-	10	65
	1987	15	■	15	-	25	-	-	-	-	-	10	65
Germany	1985	235	-	■	-	223	-	-	-	-	123	125	706
	1986	200	-	■	-	100	-	-	-	-	100	150	550
	1987	200	-	■	-	100	-	-	-	-	100	130	530
Spain	1985	1	-	11	■	43	-	-	2	-	-	2	59
	1986	20	-	30	■	10	-	-	-	-	-	-	60
	1987	10	-	40	■	-	-	-	-	-	-	-	50
France	1985	331	-	1 298	-	■	-	-	-	-	382	39	2 050
	1986	220	-	1 230	-	■	-	-	-	-	250	-	1 700
	1987	200	-	1 200	-	■	-	-	-	-	250	-	1 650
Greece	1985	-	-	-	-	2	■	-	11	-	-	-	13
	1986	-	-	-	-	5	■	-	5	-	-	-	10
	1987	-	-	-	-	-	■	-	5	-	-	-	5
Ireland	1985	-	-	-	-	-	-	■	-	-	-	7	7
	1986	-	-	-	-	-	-	■	-	-	-	5	5
	1987	-	-	-	-	-	-	■	-	-	-	5	5
Italy	1985	14	-	36	-	64	-	-	■	-	2	-	116
	1986	10	-	10	-	40	-	-	■	-	-	-	60
	1987	10	-	5	-	35	-	-	■	-	-	-	50
Luxembourg	1985	127	-	1 639	-	3	-	-	-	■	-	-	1 769
	1986	190	-	1 435	-	5	-	-	-	■	5	-	1 635
	1987	185	-	1 345	-	5	-	-	-	■	-	-	1 535
Netherlands	1985	30	-	222	-	3	-	-	-	-	■	97	352
	1986	25	-	300	-	25	-	-	-	-	■	250	600
	1987	25	-	300	-	25	-	-	-	-	■	250	600
Portugal	1985	-	-	9	1	4	-	-	-	-	30	■	33
	1986	-	-	10	-	10	-	-	-	-	30	■	30
	1987	-	-	10	-	10	-	-	-	-	30	■	30
United Kingdom	1985	28	-	91	-	34	-	-	-	-	1	■	158
	1986	-	-	-	-	-	-	-	-	-	-	■	-
	1987	-	-	-	-	-	-	-	-	-	-	■	-
COMMUNITY	1985	778	-	3 490	1	451	-	-	17	-	726	420	5 883
	1986	680	-	3 170	-	270	-	-	5	-	585	520	5 230
	1987	645	-	3 065	-	240	-	-	5	-	605	500	5 060

TABLE 21

**Producers' stocks of hard coal and coke
(at the end of the year)**

	('000 tonnes)					
	1985 Actual	1986 Estimates		1987 Fore- casts	Difference (1)	
		1 000 tonnes	Number of calendar days covered		1986/ 1985	1987/ 1986
1. Coal						
Belgium	528	661	42	690	+ 133	+ 29
Germany (2)	10 763	11 151	47	12 495	+ 388	+ 1 344
Spain (3)	1 386	2 009	28	547	+ 623	- 1 462
France	4 008	4 351	114	4 600	+ 343	+ 249
Ireland	30	30	214	30	-	-
Portugal	4	2	-	5	- 2	+ 3
United Kingdom	9 331	8 976	30	9 000	- 355	+ 24
Community	26 050	27 180	41	27 367	+ 1 130	+ 187
2. Coke						
Belgium	78	100	7	100	+ 22	-
Germany (2)	1 907	4 259	68	6 425	+ 2 352	+ 2 166
Spain	197	213	26	190	+ 16	- 23
France	289	522	23	520	+ 233	- 2
Greece	21	20	-	20	- 1	-
Italy	245	348	15	250	+ 103	- 98
Netherands	15	61	20	20	+ 46	- 41
Portugal	17	29	36	17	+ 12	- 12
United Kingdom	1 043	403	17	1 050	- 640	+ 647
Community	3 812	5 955	38	8 592	+ 2 143	+ 2 637

(1) + = increase in stocks; - = withdrawal from stocks.

(2) Excluding the national reserve (7 195 hard coal and 2 977 coke end 1985
6 675 hard coal and 2 776 coke end 1986).

(3) Including black lignite.

TABLE 2
Hard coal balance sheet for 1967

	Belgium	Germany	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	United Kingdom	E.P.
1. Production (t = t)	5 850	-	85 000	20 600	12 550	-	50	-	-	-	250	105 000	229 300
2. Recoveries	1 150	-	300	370	950	-	-	-	-	-	-	2 000	4 770
3. Arrivals from ECSC countries	1 540	1 200	1 100	20	2 550	-	730	1 440	35	745	310	810	(10 780)
4. Imports from non-member countries	6 170	11 500	9 000	8 100	10 950	2 100	2 070	19 080	140	12 100	2 020	9 200	92 430
5. Availabilities (1+2+3+4)	14 710	12 700	95 400	29 090	27 300	2 100	2 850	20 520	175	12 845	2 580	117 010	326 500
6. Internal deliveries													
a) colliery power stations	325	-	2 650	-	3 800	-	-	-	-	-	-	-	6 675
b) public power stations	4 300	11 300	44 750	20 600	4 000	300	1 200	9 500	-	6 000	1 400	82 000	185 350
c) coke ovens	6 600	-	26 600	4 055	10 000	-	-	9 560	-	4 100	390	11 500	72 805
d) steel industry	20	-	1 200	230	820	100	-	-	52	250	-	100	2 772
(of which power stations)	(-)	(-)	(300)	(-)	(120)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(420)
e) other industries	1 000	500	8 700	2 600	3 700	1 600	435	1 400	120	800	719	9 200	30 774
(of which power stations)	(-)	(-)	(5 300)	(-)	(-)	(-)	(-)	(-)	(-)	(300)	(-)	(-)	(5 600)
f) domestic sector	1 300	690	1 000	1 180	2 400	5	1 200	50	3	40	5	5 500	13 383
g) miscellaneous (total)	45	150	3 100	275	1 410	-	-	-	-	110	1	4 700	9 791
of which:													
1. issues to workers	(15)	(-)	(130)	(200)	(60)	(-)	(-)	(-)	(-)	(-)	(-)	(1 300)	(1 705)
2. patent fuel	(20)	(-)	(1 100)	(20)	(1 150)	(-)	(-)	(-)	(-)	(-)	(-)	(1 000)	(3 290)
3. own consumption	(10)	(-)	(270)	(50)	(200)	(-)	(-)	(-)	(-)	(-)	(-)	(300)	(830)
4. gasworks	(-)	(-)	(220)	(3)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	-	(223)
5. railways	(-)	(-)	(200)	(2)	(-)	(-)	(-)	(-)	(-)	(-)	(1)	-	(203)
6. other	(-)	(150)	(1 180)	(-)	(-)	(-)	(-)	(-)	(-)	(110)	(-)	(2 100)	(3 540)
7. Total internal deliveries (6)	13 590	12 640	88 000	28 940	26 130	2 005	2 835	20 520	175	11 300	2 515	113 000	321 650
8. Deliveries to ECSC countries	840	-	6 000	5	535	-	10	-	-	445	-	2 945	(10 780)
9. Exports to non-member countries	145	60	300	-	-	100	-	-	-	800	-	400	1 805
10. Total deliveries (7+8+9)	14 575	12 700	94 300	28 945	26 665	2 105	2 845	20 520	175	12 545	2 515	116 345	323 455
11. Movement of producers' and importers' stocks (5 to 10)	+135	-	+1 100	+145	+635	-5	+5	-	-	+300	+65	+665	+3 045

TABLE 23

Coke balance sheet for 1987

('000 tonnes)

	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Portugal	United Kingdom	EUR
1. Production	5 000	-	20 500	3 000	7 800	-	-	6 950	-	2 750	290	8 100	54 390
2. Receipts from ECSC Countries	490	65	530	50	1 650	5	5	50	1 535	600	80	-	(5 060)
3. Imports from third countries	160	10	370	180	200	40	-	-	72	75	-	-	1 107
4. Availabilities (1+2+3)	5 650	75	21 400	3 230	9 550	45	5	7 000	1 607	3 425	370	8 100	55 497
5. Inland deliveries													
a) Steel industry	4 750	-	14 300	3 080	7 900	20	-	6 150	1 605	2 200	290	6 200	46 495
b) Other industries	190	35	1 100	-	800	25	5	380	-	25	30	300	2 890
c) Domestic sector	45	25	550	-	180	-	-	120	2	-	-	560	1 482
d) Miscellaneous of which	15	15	850	150	300	-	-	-	-	200	-	240	1 770
- issues to workers	(15)	(-)	(540)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(555)
- own consumption	(-)	(-)	(210)	(150)	(300)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(660)
- other	(-)	(15)	(100)	(-)	(-)	(-)	(-)	(-)	(-)	(200)	(-)	(240)	(555)
6. Total inland deliveries (5)	5 000	75	16 800	3 230	9 180	45	5	6 650	1 607	2 425	320	7 300	52 637
7. Deliveries to ECSC countries	645	-	3 065	-	240	-	-	5	-	605	-	500	(5 060)
8. Exports to third countries	40	-	700	-	100	-	-	345	-	50	-	300	1 535
9. Total deliveries (6+7+8)	5 865	75	20 565	3 230	9 520	45	5	7 000	1 607	3 080	320	8 100	54 172
10. Stock movement at production and import (4 to 9)	-35	-	+835	-	+130	-	-	-	-	+345	+50	-	+1 325

50

TABLE 24

Lignite and peat balance sheet for 1987

(in 1 000 tonnes)

	B	DK	DE	SP	F	GR	IRL	IT	LUX	NL	P	UK	EUR
A. Raw product													
- <u>Availabilities :</u>													
Production	-	-	120 000	16 200	2 000	40 000	6 745	1 800	-	-	-	-	186 745
Imports	-	-	3 000	-	-	-	-	80	-	-	-	-	3 080
Total :	-	-	123 000	16 200	2 000	40 000	6 745	1 880	-	-	-	-	189 825
- <u>Utilization :</u>													
Briquetting plants	-	-	14 500	-	-	700	1 365	-	-	-	-	-	16 565
Power Stations	-	-	107 300	16 200	1 600	37 000	3 650	1 850	-	-	-	-	167 600
Other	-	-	1 200	-	400	2 300	1 660	30	-	-	-	-	5 590
B. Briquettes													
- <u>Availabilities :</u>													
Production	-	-	4 000	-	-	60	-	-	-	-	-	-	4 060
Arrival from ECSC countries	315	10	-	-	130	-	30	-	25	20	-	-	530
Imports from non-Member countries	40	30	1 115	-	20	-	-	-	-	-	-	-	1 205
Total :	355	40	5 115	-	150	60	30	-	25	20	-	-	5 795
- <u>Utilization :</u>													
Power Stations	-	-	1 000	-	-	-	-	-	-	-	-	-	1 000
Industry	275	-	990	-	-	-	-	-	-	-	-	-	1 265
Domestic	80	40	2 595	-	150	60	30	-	25	20	-	-	3 000
Shipments to other ECSC countries	-	-	350	-	-	-	-	-	-	-	-	-	350
Exports to non-Member countries	-	-	180	-	-	-	-	-	-	-	-	-	180

ELECTRICITY GENERATION 1985 - 1986 - 1987

BREAKDOWN BY COUNTRY AND ENERGY SOURCES

C O M M U N I T Y

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	181044	I	175525	I	183110
GEOTHERMAL	I	2552	I	2800	I	2800
NUCLEAR	I	456166	I	491496	I	530300
THERMAL	I	847154	I	852136	I	852970
- HARD COAL	I	432124	I	458022	I	460580
- LIGNITE	I	122989	I	117300	I	117400
- OIL PRODUCTS	I	164031	I	152966	I	156205
- NATURAL GAS	I	99176	I	95744	I	91845
- DERIV. GAS	I	21623	I	10793	I	20020
- OTHERS	I	7211	I	7311	I	6920
T O T A L	I	1486916	I	1521757	I	1569180

Sources : 1985 Eurostat

G E R M A N Y

GWH	1985	1986	1987
HYDROELECTRIC	17351	18300	18000
GEOTHERMAL	-	-	-
NUCLEAR	119461	112900	120000
THERMAL	247564	251100	251950
- HARD COAL	120094	126000	129150
- LIGNITE	82867	78200	76200
- OIL PRODUCTS	9470	11360	12000
- NATURAL GAS	23229	23720	23500
- DERIV. GAS	7822	7800	7500
- OTHERS	4082	4020	3600
T O T A L	384376	382300	399950

Sources : 1985 Eurostat
 1986 UNICEDE

BELGIUM

UNIT	1985	1986	1987
HYDROELECTRIC	1334	1385	1400
GEOHERMAL	-	-	-
NUCLEAR	32692	37096	38500
THERMAL	20158	16946	16910
- HARD COAL	11623	10902	11360
- LIGNITE	-	-	-
- OIL PRODUCTS	3459	2346	1200
- NATURAL GAS	2149	874	1700
- DERIV. GAS	2631	2373	2250
- OTHERS	296	451	400
TOTAL	54184	55427	56810

Source: 1985 1986 F.P.E.

D E N M A R K

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	90	I	110	I	110
GEO THERMAL	I	-	I	-	I	-
NUCLEAR	I	-	I	-	I	-
THERMAL	I	27120	I	26890	I	27740
- HARD COAL	I	25468	I	24690	I	26000
- LIGNITE	I	-	I	-	I	-
- OIL PRODUCTS	I	1346	I	1500	I	1500
- NATURAL GAS	I	297	I	300	I	240
- DERIV. GAS	I	-	I	-	I	-
- OTHERS	I	9	I	-	I	-
T O T A L	I	27210	I	26600	I	27850

Sources : 1985 Eurostat
 1986 Own estimated

S P A I N

SWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	32757	I	26800	I	32000
GEOTHERMAL	I	-	I	-	I	-
NUCLEAR	I	26768	I	35700	I	25000
THERMAL	I	61640	I	59800	I	60200
- HARD COAL	I	32449	I	31420	I	32270
- LIGNITE	I	18416	I	18500	I	18500
- OIL PRODUCTS	I	7593	I	6800	I	6600
- NATURAL GAS	I	1917	I	2000	I	1800
- DERIV. GAS	I	736	I	550	I	500
- OTHERS	I	529	I	530	I	530
TOTAL	I	121165	I	122300	I	127200

Sources : 1985 Eurostat
 1986 UNIFEDE +

F R A N C E

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	63414	I	64000	I	65500
GEOHERMAL	I	-	I	-	I	-
NUCLEAR	I	213097	I	241400	I	264000
THERMAL	I	52059	I	40400	I	32500
- HARD COAL	I	34800	I	26900	I	20100
- LIGNITE	I	2897	I	2000	I	2000
- OIL PRODUCTS	I	6765	I	5200	I	4900
- NATURAL GAS	I	2957	I	1900	I	1500
- DERIV. GAS	I	3848	I	3600	I	3300
- OTHERS	I	792	I	800	I	800
T O T A L	I	328560	I	345800	I	362000

Sources : 1985 Eurostat
 1986 UNIPED + Own estimated

G R E E C E

GWH	1985	1986	1987
HYDROELECTRIC	2792	3000	3200
GEOHERMAL	-	-	-
NUCLEAR	-	-	-
THERMAL	22945	23000	24100
- HARD COAL	727	750	1200
- LIGNITE	15427	16000	17500
- OIL PRODUCTS	6790	6250	5400
- NATURAL GAS	-	-	-
- DERIV. GAS	-	-	-
- OTHERS	-	-	-
TOTAL	25737	26000	27300

Sources : 1985 Eurostat
 1986 UNIFEDE

I R E L A N D

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	1168	I	1200	I	1200
GEOTHERMAL	I	-	I	-	I	-
NUCLEAR	I	-	I	-	I	-
THERMAL	I	10318	I	10640	I	11120
- HARD COAL	I	98	I	1700	I	3500
- LIGNITE	I	2212	I	1400	I	2000
- OIL PRODUCTS	I	2264	I	4000	I	4320
- NATURAL GAS	I	5744	I	3540	I	1300
- DERIV. GAS	I	-	I	-	I	-
- OTHERS	I	-	I	-	I	-
T O T A L	I	11486	I	11840	I	12320

Sources : 1985 Eurostat
 1986 UNIPED +

I T A L Y

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	44056	I	43900	I	44300
GEOTHERMAL	I	2548	I	2600	I	2800
NUCLEAR	I	6717	I	8400	I	8400
THERMAL	I	122933	I	127500	I	137300
- HARD COAL	I	23795	I	24700	I	26000
- LIGNITE	I	1170	I	1200	I	1200
- OIL PRODUCTS	I	71338	I	75380	I	83600
- NATURAL GAS	I	23182	I	22750	I	23000
- DERIV. GAS	I	2973	I	3000	I	3000
- OTHERS	I	475	I	470	I	500
T O T A L	I	176254	I	182400	I	192700

Sources : 1985 Eurostat
 1986 UNIPED

L U X E M B O U R G

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	484	I	530	I	500
GEOTHERMAL	I	-	I	-	I	-
NUCLEAR	I	-	I	-	I	-
THERMAL	I	412	I	460	I	450
- HARD COAL	I	37	I	50	I	50
- LIGNITE	I	-	I	-	I	-
- OIL PRODUCTS	I	23	I	40	I	35
- NATURAL GAS	I	4	I	10	I	5
- DERIV. GAS	I	314	I	320	I	320
- OTHERS	I	34	I	40	I	40
T O T A L	I	896	I	990	I	950

Sources : 1985 Eurostat
 1986 UNIPED -

NETHERLANDS

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	3	I	-	I	-
GEOTHERMAL	I	-	I	-	I	-
NUCLEAR	I	3674	I	4000	I	4000
THERMAL	I	56865	I	60400	I	61000
- HARD COAL	I	14320	I	15600	I	18200
- LIGNITE	I	-	I	-	I	-
- OIL PRODUCTS	I	2926	I	3200	I	3000
- NATURAL GAS	I	36959	I	39150	I	37300
- DERIV. GAS	I	2227	I	2000	I	2000
- OTHERS	I	433	I	450	I	500
TOTAL	I	60542	I	64400	I	65000

Sources : 1985 Eurostat
 1986 UNIPED +

P O R T U G A L

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	10814	I	9300	I	10000
GEOHERMAL	I	4	I	4	I	4
NUCLEAR	I	-	I	-	I	-
THERMAL	I	7763	I	10900	I	10800
- HARD COAL	I	856	I	2510	I	3750
- LIGNITE	I	-	I	-	I	-
- OIL PRODUCTS	I	6300	I	7790	I	6450
- NATURAL GAS	I	-	I	-	I	-
- DERIV. GAS	I	46	I	50	I	50
- OTHERS	I	561	I	550	I	550
T O T A L	I	18581	I	20200	I	20800

Sources : 1985 Eurostat
 1986 Own estimated

UNITED KINGDOM

GWH	I	1985	I	1986	I	1987
HYDROELECTRIC	I	6781	I	7000	I	7000
GEOTHERMAL	I	-	I	-	I	-
NUCLEAR	I	53767	I	52000	I	60400
THERMAL	I	217317	I	224500	I	218900
- HARD COAL	I	167857	I	192800	I	189000
- LIGNITE	I	-	I	-	I	-
- OIL PRODUCTS	I	45686	I	29100	I	27300
- NATURAL GAS	I	2738	I	1500	I	1500
- DERIV. GAS	I	1097	I	1100	I	1100
- OTHERS	I	-	I	-	I	-
TOTAL	I	277925	I	283500	I	286300

Sources : 1985 Eurostat
 1986 UNIFEDE + Own estimated