

The energy situation in the Community

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(Report from the Commission to the Council)

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(The text of this report generally refers to the Community of Nine. However, various tables in the annexes provide data for the Community of Nine or Ten (including Greece) as indicated. All estimates for 1980 are preliminary and provisional).

SUMMARY

The estimated inland demand for energy at about 932 million tons of oil equivalent in 1980 showed a marked decline of 4.0% as compared with the previous year, reflecting principally the economic recession - GDP growth in the Community being estimated at only 1.3%. However, some part of the decline in demand can be attributed to efforts to reduce oil consumption and to promote energy savings. The demand for oil in particular fell back significantly by 7.6%; and natural gas consumption also declined by 1.4%. The demand for coal fell slightly. However, the supply of nuclear energy is estimated to have increased by about 15%, reflecting mainly the expansion of the French nuclear programme.

With the economic outlook for 1981 indicating even lower growth of 0.6% in the Community's GDP, total inland energy demand is expected to decline marginally. However, oil consumption is expected to fall by a further 2.7%, whilst natural gas demand is expected to remain at about the same level. A modest increase is anticipated for coal consumption, up by 1.2%. Again the supply of nuclear energy is expected to rise notably by over 20% as more nuclear plants come into operation.

Oil's share of total energy requirements (including bunkers) declined in 1980 to about 53% as compared with 55% in 1979; it is expected to fall further in 1981 to about 52%. The cost of net imports in 1980 was of the order of 105 billion* dollars against 75 billion dollars in 1979, and is expected to be higher in 1981, even if demand falls further.

OIL

(i) The world situation

The most important development affecting the oil industry in 1980 was the virtual cessation of exports from Iraq and Iran which followed the outbreak of war between the two countries on 26 September 1980.

The loss of 4 million barrels per day (M b/d), equivalent to 200 million tonnes per year (M t/y), has been partly compensated by additional production placed on the market by a number of other producing countries, by withdrawals from stocks, which were

* Billion in this report is equivalent to one thousand million.

exceptionally high at the beginning of October, and by a sustained and significant fall in consumption in almost all the industrialised countries.

The data available for the OECD countries (which represent nearly 80% of world consumption outside the centrally planned economies) suggest that their consumption fell in 1980 by about 120 million tonnes, or 2.4 million barrels per day, a decline of nearly 6%. This fall in demand, combined with a slight increase in OECD production and a lower stock-build than in 1979, led to a reduction of some 150 million tonnes (3 million barrels per day) in imports (Annex 2, Table 2).

OECD stocks rose during the first nine months of 1980 to reach an estimated 490 million tonnes by 1 October, equivalent to 95 days average consumption, compared to 430 million tonnes and 400 million tonnes at the same date in 1979 and 1978 respectively. Since October, stocks are estimated to have fallen, following the reduction in OPEC exports, at about twice the normal seasonal rate. The situation at the end of 1980 was still very uncertain and further stock withdrawals are to be expected particularly to rectify the regional imbalances which still remain.

Further price increases during 1980 brought the official price of 34° API Arabian Light, which now represents a minimum OPEC price, to 32 dollars per barrel as from 1 November. The progression was as follows:

<u>Effective date</u>	<u>Official price</u>
1 July 1979	\$18 per barrel
1 November 1979	\$24 per barrel
1 January 1980	\$26 per barrel
1 May 1980	\$28 per barrel
1 August 1980	\$30 per barrel
1 November 1980	\$32 per barrel

OPEC failed, however, to re-establish a uniform pricing system based on the official price of Arabian Light and, throughout the year, most other producers fixed their official prices at levels equivalent to between 2 and 7 dollars per barrel above it. The agreement made at Bali in December similarly permits Member States to align their prices upon a value for Arabian Light anywhere in the range of 32 and 36 dollars per barrel subject to an absolute ceiling of 41 dollars per barrel for the highest quality crude.

Spot prices, and premia applied by certain producers on term contracts, varied greatly during the year. Spot prices, which were as much as 10 dollars per barrel above official prices at times in the first quarter, had fallen sharply by the third quarter, with the result that average c.i.f. prices paid by some importing countries actually fell. In the fourth quarter, however, reduced supply forced premia and spot differentials sharply higher.

(ii) The Community situation

Inland oil consumption in the Community is estimated to have fallen by 7.6% in 1980 to 485 million tonnes (9.7 million b/d), 40

million tons (0.8 million b/d) below 1979 (Annex 2, Table 1). The level of oil demand in 1981 is very uncertain but on the assumption of even lower economic growth, it could be reduced further to about 472 million tons. However, depending on price movements, the severity of the winter and other factors, oil consumption may reach a higher level of around 490 million tons.

The trend in consumption in 1980 varied considerably among the Member States, depending mainly upon the scope for substituting other fuels for heavy fuel oil, from a slight increase in Italy to a fall of 15-20% in Denmark, where the switch to other energy forms, and particularly to coal, in power stations continues. Individual products also showed great differences; motor gasoline consumption increased slightly in the Community and in all Member States except Belgium and Denmark; gas/diesel and fuel oil demand fell sharply everywhere except in Italy.

The improvement in the external balance of products trade to near equilibrium in 1979 gave way to net Community imports of 12 million tons in January/August 1980. The commissioning of new export capacity overseas, particularly in Algeria, and the availability for several months on international markets of products at relatively low prices, were important factors. There were very marked shifts in the external trading position of certain Member States. Italy, a net exporter of 15 million tons in 1979,

imported a net 3 million tons in January/August 1980; Belgium by contrast increased her exports by 20% in the first eight months of 1980 to achieve a surplus of 6.5 million tons compared to 4 million tons for the whole of 1979.

Community refineries treated 10.5% less crude in January/August 1980 as a result of the fall in demand and the greater reliance on product imports; utilization of distillation capacity consequently fell to about 66% from 73% in 1979. In the last quarter, however, closure of refineries in Iran and Iraq led to an improvement in the Community trading balance and an increase in the loading of refineries.

Community indigenous crude oil production was little changed in 1980 and is expected to reach 95 million tons in 1981, representing 18% of Community supply (EUR-10). The increase in production is due, not to the commissioning of any major field, but principally to the installation of a third platform on the Ninian field and the lifting, following the completion of a natural gas pipeline, of restrictions imposed on Brent output to reduce flaring.

The combination of lower consumption and stock-build with higher indigenous production reduced net imports by the Community to an estimated 424 million tons in 1980, 10.8% below 1979's total of 475 million tons, and well below the agreed limit of 472 million tons. A further significant fall is possible in 1981 if

consumption proves to be at the lower end of the probable range. The cost of net imports in 1980 was of the order of 105 billion dollars against 75 billion dollars in 1979, and is expected to be higher in 1981, even if demand falls further.

In spite of its high dependence on imports from Iraq and Iran (about 12%), the Community has been able to cope during 1980 with the supply difficulties following the outbreak of war in the Middle East, thanks to the high level of stocks and the significant reduction in consumption. Forecasts for 1981 are rendered difficult by the many uncertainties that remain in the world oil situation. Further stock withdrawals will certainly be necessary, especially in the first quarter, to satisfy the estimated requirements of the Community.

By July 1980 average prices before tax in the Community for all products and based together had increased by about 50 dollars per ton, roughly in line with crude oil import prices, and thereafter changed little despite considerable, mainly seasonal, movements in the prices of individual products (Annex 2, Table 3). By contrast, spot prices rose sharply in the last quarter, following the outbreak of war in the Gulf (Annex 2, Table 4), to reach an average level of 25 dollars per ton higher than in July, but still below the level of December 1979.

NATURAL GAS

Preliminary estimates show that natural gas consumption in the Community in 1980 of about 170 Mtoe was marginally below the level of consumption in 1979. Nevertheless this represents an increase in the share of natural gas in primary energy to 18.2%. Despite milder weather conditions, consumption increased in Italy (5%), and fell only slightly in the Federal Republic of Germany. However, substantial falls in consumption are estimated for the Netherlands (-8%), the United Kingdom (-4%) and France (-4%). The severe recession in the UK had an adverse effect on demand. The French market was affected by a disruption of LNG shipments from Algeria.

The Netherlands accounted for about a half of the gas produced within the Community, and nearly 57% of this gas was delivered to other continental members of the Community. However, it is expected that these quantities will decline so that only about one half of Dutch production will be exported in 1981. Indeed the policy of a more selective utilization of the country's gas resources is reflected in the production figures, which continue to decline from their peak in 1976.

Production for the whole Community is estimated to be about 6% lower in 1980 than in 1979, despite a small increase in Italian production. Both the Federal Republic of Germany and the UK reported a decline in production, although their output is forecast to recover in 1981. Whilst accounting for less than 1%

of Community production, the output from the Irish Kinsale field has doubled and would make a significant contribution to Irish gas supplies.

Imports of natural gas from third countries continued to grow and now account for about one quarter of Community supplies. The proportion would have been higher had it not been for the reduction of LNG supplies to France from Algeria.

Norway remained the leading exporter of natural gas to the Community and accounted for about half the imports from third countries. The USSR supplied over a third of imports and Algeria and Libya accounted for the remainder. The major importing countries were the Federal Republic of Germany and the United Kingdom, whilst substantial quantities were also imported by France and Italy. Both the Netherlands and Belgium also took some Norwegian gas.

Final gas consumption for energy purposes showed varying trends as between the Member States. In particular, the UK reported a dramatic fall in industrial sales, reflecting the deepening recession, whilst domestic sales remained at virtually the same level. The trend of reduced sales in the industrial sector has been repeated in most countries, for example, with declining sales in the steel industry and partly explains the growing proportion of sales to domestic consumers. The quantities of gas consumed for electricity generation remain at an unsatisfactory high level, although there are considerable variations between the Member States.

Forecasts for 1981 indicate some further decline of production levels, although the UK anticipates a 5% increase in production. Consumption is expected to remain at about the same level in 1981. Imports of gas nevertheless are expected to increase, providing 27% of total requirements.

COAL

The consumption of coal in the Community in 1980 is estimated at some 309 million tonnes (190 Mtoe) and in 1981 at about 313 million tonnes (192 Mtoe) as compared with 310 million tonnes (191 Mtoe) in 1979. Moreover, the consumption of lignite and peat is estimated at 141 million tonnes in 1980 and 144 million tonnes in 1981 (29 Mtoe) as against 141 million tonnes in 1979.

The growth of consumption is more marked in the electricity generation sector (1979: 176 million tonnes; 1980: 181 million tonnes; 1981: 185 million tonnes); a slight decrease of consumption is taking place in the United Kingdom (at about 90 million tonnes) and a levelling in France (at about 25 million tonnes) whilst in the Federal Republic of Germany consumption could rise by 10% over two years and exceed 48 million tonnes (not including lignite).

The consumption of coke showed a slight decline; as compared with 68 million tonnes in 1979, it should reach 64 million tonnes in 1980 and remain at about this level in 1981. However, a slight growth of specific coke consumption in blast furnaces in 1981 could

offset a decline in the production of pig iron. For other consumption sectors as a whole, there are no significant changes to be noted.

Community production of coal in 1980 reached 243 million tonnes, a growth of 4 million tonnes as compared with 1979. This level of production may be maintained in 1981. Imports of coal from third countries reached some 72-74 million tonnes in 1980 as against 59 million tonnes in 1979 and could further increase in 1981.

Stocks of coal and coke in the Community have been run down very markedly in 1979 and at the beginning of 1980, but they have since been partly rebuilt.

The price of imported coal from third countries into the Community continues to rise. For coking coal, the average c.i.f. value rose from 65.3 dollars per tonne in 1979 to 70 dollars per tonne as at 1 October 1980 (+5%); for steam coal, the corresponding figures are 37.9 dollars per tonne and 52.2 dollars per tonne for the third quarter of 1980 (+38%). These figures do not include the supplementary costs arising from the delay of vessels in the congested ports and the rising price of bunker fuels. Imported coal maintains a considerable price advantage in relation to the costs of most Community production.

ELECTRICITY

(i) Electricity consumption

In 1980 net electricity consumption in the Community is estimated to have increased by only about 1% to some 1,200 TWh (Annex 4, Table 1).

During the first eight months of the year consumption was in fact lower in five Member States (Belgium, Denmark, Germany, Ireland and the United Kingdom) than in the corresponding period of 1979. In the latter part of the year adverse weather caused additional sales. The sharpest fall in consumption in 1980 was to be found in the United Kingdom where consumption is estimated to have fallen by about 3.5%.

In all Member States the depressed state of the economy was evident in the demand for electricity; sales to industry were significantly below earlier expectations; domestic use of electricity was in most countries not so severely affected but there was evidence of some growing saturation of electrical goods, the more rational use of energy and discouragement of demand owing to markedly higher tariffs.

The largest increases in electricity consumption in 1980 were in France (estimated at 5.3%, or 3% if sales to Eurodif are excluded) and Italy (4%).

In spite of the low forecasts for the growth of the Community economy in 1981, electricity consumption is expected to increase during the year by about 3-3.5%. Higher sales are anticipated in all Member States, except the United Kingdom where demand may prove to be similar to that in 1980.

(ii) Electricity production

Net production of electricity in the Community increased by about 1.5% in 1980 as compared with 1979 (Annex 4, Table 2). Production at oil-fired power stations was cut back sharply wherever practical,

owing to its high cost. In the first seven months of 1980 consumption of oil in public supply power stations was 12.5% less than in the corresponding period of 1979; this reflected the trend anticipated for 1980 as a whole.

Coal consumption in power stations increased by about 4%, and major increases in output from coal-fired plant took place in Denmark, Italy and the Netherlands. Use of natural gas in power stations is estimated to have fallen by about 8% from the 1979 level; output from plants using natural gas was reduced in all Member States except Ireland which had commissioned new gas-fired plant in 1979.

Hydro-electric plant in 1980 is estimated to have accounted for some 12% of electricity production, and was slightly higher than in 1979; if normal weather is experienced in 1981, a small reduction in hydro-electricity output can be anticipated.

The share of nuclear and solid fuels in energy inputs for electricity production reached nearly 63% in 1980 as compared with 60% in 1979 and is expected to rise further to about 64% in 1981 (Annex 4, Table 3).

(iii) Nuclear energy

During 1980 seven nuclear reactors were linked to the grid in France, increasing operating nuclear capacity within the Community as a whole from 26.2 GWe to 32.6 GWe. These new French pressurised water reactor plants, which are at Dampierre, Gravelines and Tricastin, have a net capacity of 6,420 MWe.

The economics of production of base-load electricity at nuclear power stations continued to be particularly favourable in comparison to costs at coal-fired stations and even more so to those at oil-fired power stations, where fuel costs rose to even higher levels. So the prospects for 1981 where new nuclear plant should be commissioned in France, Germany and the United Kingdom are encouraging.

Initial operation of nuclear plant in the Community in 1981 is expected:

- (i) in Germany, where a 1,230 MW pressurised water reactor is nearing completion at Grafenrheinfeld;
- (ii) in France, where additional pressurised water reactor units amounting to 7,220 MW net are due to be commissioned at Blayais, Dampierre, Gravelines, St-Laurent B and Tricastin;
- (iii) in the United Kingdom, where new advanced gas-cooled reactor plant at Dungeness B, Hartlepool and Heysham of up to some 2,450 MW net may be synchronised to the grid.

Production of electricity at nuclear stations in the Community should thus increase by about 21% from 147 TWh in 1980 to 179 TWh in 1981.

Nuclear energy's share of total primary energy requirements increased to 4.6% in 1980 and is expected to reach 5.6% in 1981.

NUCLEAR FUELS

In view of the relatively slow nuclear development in most of the Member States of the Community, the requirements for natural uranium resulting from contracts for enrichment services go well beyond the real needs of the reactors.

On the supply side, new possibilities of supply in Australia, Canada and the United States may be added to existing resources (and often are assured by long-term contracts).

The excess of supply in relation to demand reduces the risks of supply interruptions and evidence of this is shown by the fall in spot prices. This is important for the Community which depends on imports for 80% of its uranium requirements. Nevertheless, prices paid within the Community for term contracts remain firm.

Contractual activity is practically limited to the natural uranium sector.

In the enrichment field, the Community partners have used the flexibility of the contractual arrangements to reduce their commitments with respect to their suppliers. At the same time, some are engaged in negotiations envisaging the cessation of enrichment services outside the Community.

The dependence on third countries for low enriched uranium has fallen yearly with the coming into operation of Community installations, but the Community remains dependent on the United States for the whole of its highly enriched uranium.

Table 1: Inland consumption of primary energy¹ in the Community (EUR-9)

	1978 ²		1979 ²		1980 ³ Estimates		1981 ³ Forecasts	
	M toe	%	M toe	%	M toe	%	M toe	%
Hard coal	175.5	19.0	191.6	19.7	190.0	20.4	192.0	20.6
Lignite	26.8	2.9	29.0	3.0	29.0	3.1	29.6	3.2
Oil	512.7	55.4	525.0	54.1	485.0	52.0	472.0	50.8
Natural gas	160.6	17.4	172.4	17.8	170.0	18.3	170.0	18.3
Nuclear energy	33.9	3.7	37.2	3.8	42.8	4.6	51.9	5.6
Hydro, geothermal and others	14.9	1.6	15.1	1.6	15.1	1.6	14.1	1.5
TOTAL	924.5	100.0	970.3	100.0	931.9	100.0	929.6	100.0

¹Final energy balances (according to Eurostat methodology)

²Source: Statistical Office of the European Communities, Luxembourg

³Source: Commission Services

Table 1a: Inland consumption of primary energy¹ in the Community (EUR-10)²

	1978 ³		1979 ³		1980 ⁴ Estimates		1981 ⁴ Forecasts	
	M toe	%	M toe	%	M toe	%	M toe	%
Hard coal	175.7	18.7	192.1	19.5	190.6	20.1	193.0	20.4
Lignite	29.9	3.2	32.1	3.2	32.3	3.4	33.1	3.5
Oil	524.0	55.8	536.5	54.4	496.7	52.4	483.9	51.1
Natural gas	160.6	17.1	172.4	17.5	170.0	17.9	170.0	18.0
Nuclear energy	33.9	3.6	37.2	3.8	42.8	4.6	51.9	5.5
Hydro, geothermal and others	15.2	1.6	15.4	1.6	15.4	1.6	14.4	1.5
TOTAL	939.3	100.0	985.7	100.0	947.8	100.0	946.3	100.0

¹Final energy balances (according to Eurostat methodology)

²Including Greece

³Source: Statistical Office of the European Communities, Luxembourg

⁴Source: Commission Services

Table 2: Percentage variation in GDP and energy consumption (EUR-9)

	1979-1978	1980-1979 (estimates)	1981-1980 (forecasts)
Gross Domestic Product	+ 3.4	+ 1.3	+ 0.6
Energy inland consumption of which:	+ 4.9	- 4.0	- 0.3
- Oil	+ 2.4	- 7.6	- 2.7
- Solid fuels	+ 9.0	- 0.7	+ 1.2
- Natural gas	+ 7.4	- 1.4	-
- Nuclear energy	+ 9.7	+15.0	+21.3
- Hydro, geothermal and others	+ 1.3	-	- 6.6

Table 3: Energy supply in the Community (EUR-9)

(M toe)	1978 ¹		1979 ¹		1980 (estimates)		1981 (forecasts)	
	Production	Net imports ²	Production	Net imports ²	Production	Net imports ²	Production	Net imports ²
Solid fuels	174.9	25.0	177.1	33.3	180.5	45.0	181.0	50.0
Oil	64.1*	472.1	89.3*	474.7	90.0	423.5	95.0	403.5
Natural gas	133.1	29.7	137.5	36.2	129.0	41.0	124.0	46.0
Primary electricity, etc.	47.7	1.1	50.9	1.4	56.7	1.2	65.0	1.0
TOTAL	419.8	527.9	454.7	545.6	456.2	510.7	465.0	500.5

¹Source: Statistical Office of the European Communities²Imports minus exports

*Including primary petroleum products

Table 3a: Energy supply in the Community (EUR-10)³

(M toe)	1978 ¹		1979 ¹		1980 (estimates)		1981 (forecasts)	
	Production	Net imports ²	Production	Net imports ²	Production	Net imports ²	Production	Net imports ²
Solid fuels	177.9	25.2	180.2	33.8	183.8	45.6	184.5	51.0
Oil	64.1*	484.2	89.3*	487.7	90.0	437.2	95.5	415.9
Natural gas	133.1	29.7	137.5	36.2	129.0	41.0	124.0	46.0
Primary electricity, etc.	48.0	1.1	51.1	1.4	56.9	1.2	65.3	1.0
TOTAL	423.1	540.2	458.1	559.1	459.7	525.0	469.3	513.9

¹Source: Statistical Office of the European Communities²Imports minus exports³Including Greece

*Including primary petroleum products

Table 1: Oil consumption, production and imports (EUR-9)

(Millions of tons)	1979	1979/80 %	1980 (estimates)	1980/81 %	1981
<u>Consumption</u>					
<u>Inland*</u>	525.0	- 7.6	485.0	- 2.7	472.0
<u>Bunkers</u>	26.5	-	26.5	-	26.5
<u>Total</u>	551.5	- 7.3	511.5	- 2.5	498.5
<u>Production</u>	87.3	+ 3.0	90.0	+ 5.6	95.0
<u>Stock change</u>	+10.5		+ 2.0		
<u>Net imports</u>	474.7	-10.8	423.5	- 4.7	403.5

*Including refining fuel and loss

Table 1a: Oil consumption, production and imports (EUR-10)

(Millions of tons)	1979	1979/80 %	1980 (estimates)	1980/81 %	1981
<u>Consumption</u>					
<u>Inland*</u>	536.5	- 7.4	496.7	- 2.7	483.3
<u>Bunkers</u>	27.5	-	27.5	-	27.5
<u>Total</u>	564.0	- 7.1	524.2	- 2.6	510.8
<u>Production</u>	87.3	+ 3.0	90.0	+ 6.1	95.5
<u>Stock change</u>	+11.0		+ 2.0		-
<u>Net imports</u>	487.7	-10.6	436.2	- 4.8	415.3

*Including refining fuel and loss

Source: Eurostat (IEA for Greece) and Commission estimates

**Table 2: EUR-10, USA, Japan and total OECD:
Estimated oil consumption, production and imports 1979-81**

(Millions of tons)	1979	1979/80 %	1980 (estimates)	1980/81 %	1981
Consumption					
EUR-10	564.0	- 7.1	524.2	- 2.6	510.8
USA	884.5	- 7.4	818.9	-	817.9
Japan	264.8	- 5.4	250.7	-	249.9
Other OECD	289.3	-	290.9	+ 2.7	298.9
Total OECD	2002.6	- 5.9	1884.7	- 0.4	1877.5
Production					
EUR-10	87.3	+ 3.0	90.0	+ 6.1	95.5
USA	484.0	-	486.0	- 2.3	475.0
Japan	0.5	-	0.5	-	0.5
Other OECD	131.2	+ 6.3	139.4	-	139.3
Total OECD	703.0	+ 1.8	715.9	- 0.8	710.3
Stock changes					
EUR-10	+11.0		+ 2.0		
USA	+11.2		+ 4.9		
Japan	+ 7.0		+ 0.9		
Other OECD	+ 3.7		+ 6.8		
Total OECD	+32.9		+14.6		
Imports (net)					
EUR-10	487.7	-10.6	436.2		
USA	411.7	-18.0	337.8		
Japan	271.3	- 7.4	251.1		
Other OECD	161.8	-	158.3		
Total OECD	1332.5	-11.2	1183.4		
				Net import requirement (incl. stock changes)	
				EUR-10	415.3
				USA	342.9
				Japan	249.4
				Other OECD	159.6
				Total OECD	1167.2

Sources: EEC: Eurostat and Commission estimates
 Other countries: IEA/GB(80) 63 - Secretariat estimates based on
 information available at 3 November 1980

Table 3: Average EEC consumer prices excluding taxes

	\$/tonne			
	12/1979	7/1980	12/1980	Index 12/1980 (12/79 = 100)
Premium motor gasoline	390	483	460	118
Domestic heating oil (gasoil)	300	370	357	119
Residual fuel 3% S	168	191	213	127
Average all products*	247	301	299	121

*Estimated for yield of Arabian Light 34° API on atmospheric distillation

Table 3a: Average barge prices f.o.b. Rotterdam

	\$/tonne			
	12/1979	7/1980	12/1980	Index 12/1980 (12/79 = 100)
Premium motor gasoline	419.50	361.51	377	90
Regular motor gasoline	404.50	351.51	357	88
Naphtha	393.50	298.63	328	83
Jet kerosene	419.00	337.84	364	87
Gasoil	348.50	305.58	294	84
Residual fuel	192.50	168.90	229	119
Average*	279	240	265	95

*Estimated for yield on atmospheric distillation of Arabian Light. The increase in prices is somewhat less during 1980 if the average is weighted according to the pattern of consumption in the Community

ANNEX 2 (cont.)

Table 4: Average CIF prices of crude oil imported into Member States

\$/tonne

		B	DK	D	F	IRL	I	NL	UK	EEC
1978	Q 3	100.55	100.95	102.55	104.70	102.15	97.60	101.45	101.20	101.55
	Q 4	104.65	104.40	105.30	106.45	104.10	99.70	103.80	103.75	104.05
1979	Q 1	110.25	113.40	113.40	111.30	111.00	107.20	112.60	111.40	111.10
	Q 2	124.90	136.50	139.30	128.35	124.90	125.35	130.20	133.65	131.10
	Q 3	150.75	168.15	167.65	159.90	151.20	156.10	161.85	163.35	161.50
	Q 4	168.53	185.63	192.08	181.35	173.33	173.40	181.50	180.38	181.50
1980	Q 1	209.85	239.40	239.25	229.73	214.05	221.25	226.50	230.85	229.20
	Q 2	228.53	249.60	251.33	242.85	233.25	234.00	240.45	-	242.03
	Q 3		253.69	257.87	249.53	235.61	241.05	248.84	251.56	249.94

Table 4a: CIF costs crude oil (basis: fourth quarter 1978 = 100)
Indices calculated on the basis of the value converted into national currencies

		B	DK	D	F	IRL	I	NL	UK	EEC
1979	Q 2	122.00	134.60	132.70	122.60	118.50	126.70	127.30	122.80	126.40
	Q 3	141.64	161.84	154.93	147.90	139.00	153.60	153.10	139.40	149.45
	Q 4	155.55	180.45	172.65	164.22	156.84	171.48	168.45	159.35	166.99
1980	Q 1	194.88	243.62	215.05	208.11	186.67	219.90	209.53	195.87	209.42
	Q 2	214.43	258.76	231.01	223.40	216.60	239.98	226.68	208.68	227.22
	Q 3		262.39	234.78	228.80	216.93	249.07	232.11	206.02	231.01

Table 1: Summary of coal supply situation in the Community (EUR-9)

(M t)

	Production	Imports	Exports	± Change % (c)	Gross inland consumption
1979: Coal	238.7	59.0	1.8	+14.5	310.4
Coke	67.3	1.0	8.4	+ 8.2	68.2
Lignite + peat	137.9	1.6	-	+ 1.5	141.0
1980: Coal (a)	243.0	72.0	1.2	- 4.3	309.5
Coke	66.4	1.0	4.1	+ 0.5	63.8
Lignite + peat	140.0	1.5	-		140.5
1981: Coal (b)	242.3	78.3	1.0	- 6.2	313.4
Coke	66.0	0.5	2.5	-	64.0
Lignite + peat	142.0	1.5	-	-	143.5

(a) Provisional data

(b) Forecasts

(c) Including statistical variations, products from recuperation and production of small mines

Table 2: CIF price of Community coal imports

(\$/m t)

Date	Coking coal	Quarter	Steam coal
1979: 1 January	64.95	I	34.9
1 April	64.85	II	36.3
1 July	66.05	III	38.3
1 October	66.30	IV	42
1980: 1 January	68.50	I	46.4
1 April	69	II	48.5
1 July	69.20	III	52.2*
1 October	69.95	IV	

*Estimate

Table 1: Net consumption of electrical energy (including losses)

(TWh)	
Year	EUR-9
1979	1 186.3
1980	1 200.6
1981	1 242.8
Variations:	
1980/79	+ 1.2%
1981/80	+ 3.5%

Table 2: Net production of electrical energy

EUR-9	Total	Share by energy source								
		Hydro-electric	Geo-thermal	Nuclear	Conven. thermal	Coal	Lignite	Petrol. products	Natural gas	Deriv. gas & others
Net production:		TWh				TWh				
1979	1179.0	140.7	2.4	127.6	908.3	383.6	92.4	276.7	127.0	28.6
1980	1196.3	143.1	2.5	147.3	903.3	404.2	95.2	257.9	117.2	28.8
1981	1242.4	136.4	2.7	179.3	924.1	412.3	98.5	265.8	118.1	29.4
Variations:		%				%				
1980/79	+ 1.5	+ 1.7	+ 4.0	+15.5	- 0.5	+ 5.4	+ 3.0	- 6.8	- 7.7	+ 0.2
1981/80	+ 3.9	- 4.7	+ 8.0	+21.7	+ 2.3	+ 2.0	+ 3.4	+ 3.1	+ 0.7	+ 1.9
Share in total:		%				%				
1979	100	12.0	0.2	10.8	77.0	32.5	7.8	23.5	10.8	2.4
1980	100	12.0	0.2	12.3	75.5	33.8	8.0	21.5	9.8	2.4
1981	100	11.0	0.2	14.4	74.4	33.2	7.9	21.4	9.5	2.4

Table 3: Share of nuclear and solid fuels in energy inputs for electricity production

%	EUR-9	D	F	I	NL	B	L	UK	IRL	DK
1979	60.1	72.6	56.0	11.9	13.5	51.7	43.7	81.5	25.3	62.8
1980	62.8	74.3	60.7	14.2	19.5	52.6	44.6	85.7	22.4	79.0
1981	63.9	74.0	66.3	15.8	23.6	56.3	43.7	85.5	22.9	79.8

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