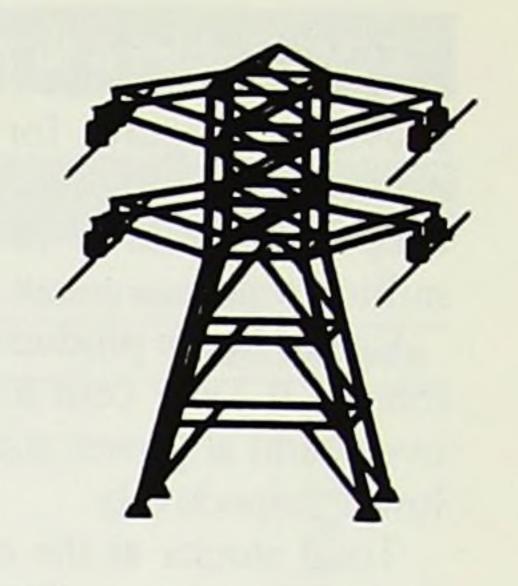


# ENERGY



A Statistical Bulletin from the Department of Energy

# FEBRUARY 1992

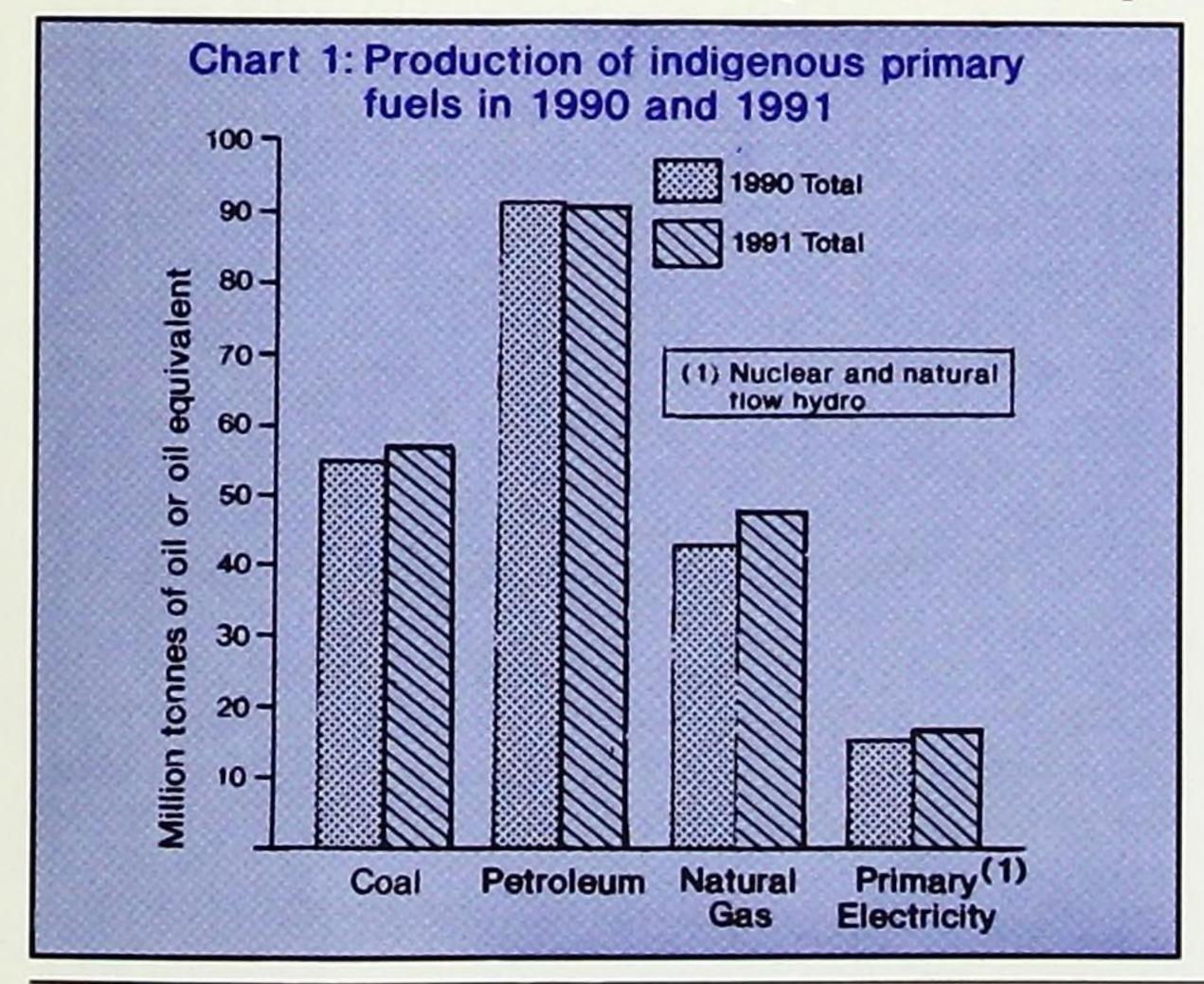
# **MAIN POINTS**

- \* Energy production in 1991 was three per cent higher than in 1990.
- \* Primary energy consumption in 1991 was two per cent higher than in 1990, but about the same after temperature correction.
- ★ Whilst offshore exploration and appraisal well drilling activity in 1991 was 17 per cent below 1990 levels, it remained at an historically high level.
- ★ In 1991, the UK had a financial surplus in fuel trade worth £104 million.
- \* An article on domestic heating is included on the back page of this issue.

# TOTAL ENERGY PRODUCTION (Table 1)

Production of indigenous primary fuels in 1991 was equivalent to 211.4 million tonnes of oil, three per cent more than in 1990. Production of natural gas, nuclear electricity and coal rose by 11.4 per cent, 5.6 per cent and 1.8 per cent respectively. Although total oil production in 1991 was marginally below that in 1990, the trend at the end of the year was one of improvement with production in the second half of the year 15.7 per cent higher than in the first half of 1991 when production levels were affected by safety work in the North Sea.

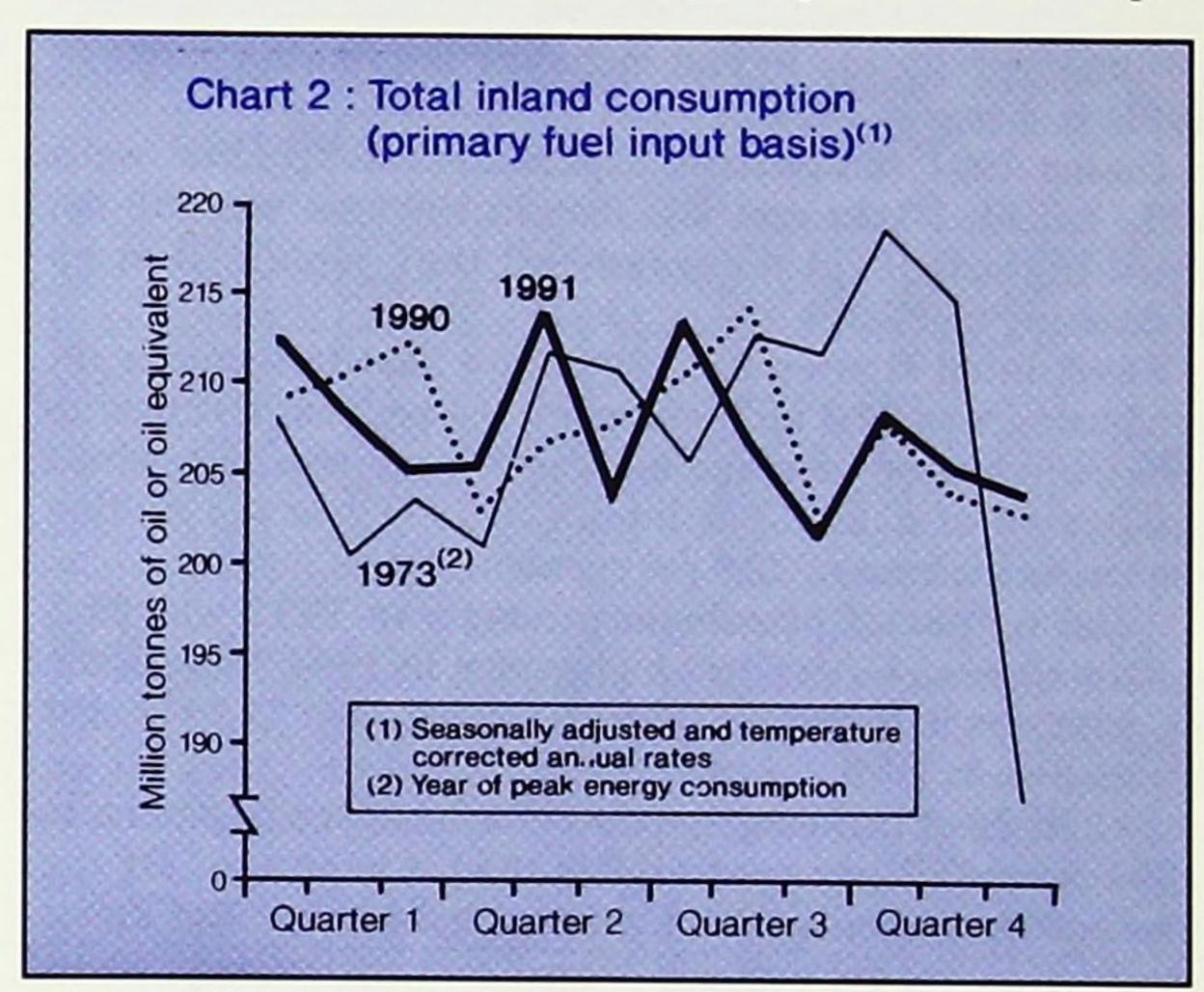
Production of indigenous primary fuels in the fourth quarter of 1991, at 58.1 million tonnes of oil equivalent, was 7.4 per



Production of natural gas, coal and nuclear electricity rose by 7.5 per cent, 2.3 per cent and 0.3 per cent respectively. Total petroleum production was 25.2 million tonnes, 11.6 per cent more than in the fourth quarter of 1990.

# TOTAL ENERGY CONSUMPTION (Table 2)

Total inland energy consumption, on a primary fuel input basis in 1991 was equivalent to 206.7 million tonnes of oil, 2.1 per cent more than in 1990. Consumption of natural gas and nuclear electricity increased by 7.7 per cent and 5.6 per



cent respectively, whilst that of petroleum and coal fell by 1.1 per cent and 0.7 per cent. The average temperature over the year was 0.7 centigrade degrees lower than in 1990, giving total consumption on a seasonally adjusted and temperature corrected basis 0.4 per cent lower than in 1990. Hence, consumption of coal, petroleum and natural gas decreased by 2.2 per cent, 1.4 per cent and 0.3 per cent respectively.

Consumption of primary fuels in the fourth quarter of 1991 was equivalent to 56.2 million tonnes of oil, 2.3 per cent more than in the corresponding period of 1990. Consumption of petroleum, natural gas and nuclear electricity rose by 6.1 per cent, 4.2 per cent and 0.2 per cent respectively, whilst coal consumption decreased by 2.8 per cent. The average temperature during the fourth quarter of 1991 was nearly one centigrade degree lower than the corresponding quarter of 1990, making total consumption on a seasonally adjusted and temperature corrected basis 0.4 per cent higher than in the fourth quarter of 1990. On this basis, consumption of petroleum, nuclear electricity and natural gas increased by 5.3 per cent, 0.8 per cent and 0.6 per cent respectively, whilst that of coal decreased by 4.5 per cent.

Continued on next page

### COAL (Tables 4 to 7)

Provisional figures for 1991 show that total coal production was 96.1 million tonnes, 1.8 per cent more than in 1990, with deep-mined coal at 73.4 million tonnes and opencast at 18.6 million tonnes.

Use of home produced and imported coal was 107.5 million tonnes, 0.7 per cent less than in 1990. Consumption at coke ovens and at power stations was 7.8 per cent and 0.6 per cent lower respectively.

Total stocks at the end of 1991 were 43.1 million tonnes, 5.6 million tonnes higher than a year ago. Stocks at power stations were 3.6 million tonnes higher and stocks at collieries 2.8 million tonnes higher. Stocks at the end of 1991 were higher than for any year since 1983.

Overall productivity in British Coal's mines was 13.0 per cent higher in 1991 compared to 1990. This compares to increases in the previous four years of 4.6 per cent, 9.1 per cent, 10.6 per cent and 14.0 per cent respectively.

### GAS (Tables 8 and 9)

Provisional data for 1991 show that 20,974 million therms of gas were sent out, 8.2 per cent more than in 1990. Imported supplies were 11.3 per cent of the total, compared to 14.1 per cent a year earlier.

### PETROLEUM (Tables 10 to 16)

Drilling activity (up to and including the fourth quarter of 1991) is shown in Table 10.

During 1991 186 offshore exploration and appraisal wells were drilled, 17 per cent less than in 1990 but was still the third highest level recorded and thus remained at an historically high level.

Provisional figures for 1991 show that indigenous oil production was 91.3 million tonnes, 0.4 per cent less than in 1990. Production of crude oil was 1.3 per cent less whilst production of natural gas liquids in 1991 was 4.4 million tonnes, an increase of 22.8 per cent on 1990.

Total output of petroleum products in 1991 was 85.5 million tonnes, 3.9 per cent higher than in 1990. Most of the increase was in shipments (exports) which were 14.9 per cent higher than in 1990.

Deliveries of petroleum products for inland consumption in 1991 were 0.7 per cent higher than a year ago. Of the transport fuels, deliveries of aviation turbine fuel and motor spirit fell by 6.2 per cent and 1.2 per cent respectively, whilst those of DERV increased by 0.3 per cent. The largest increases were for standard domestic burning oil (up 16.8 per cent) and naphtha and middle distillate feedstock (up 12.1 per cent). Deliveries of petroleum products in the fourth quarter were 9.5 per cent higher than in the fourth quarter of 1990, mainly as a result of increased fuel oil deliveries (up 47.7 per cent) particularly to power stations. These increases largely reflected the higher prices prevailing in the fourth quarter of 1990 following the Iraqi invasion of Kuwait.

Stocks of petroleum products increased during December 1991, and were 7.2 per cent higher than in December 1990. Stocks of crude oil and refinery process oils fell during December but were 3.7 per cent higher than a year earlier.

## ELECTRICITY (Tables 17 to 22)

Electricity supplied by the major generating companies in 1991 as a whole was 0.7 per cent higher than a year earlier. The supply from conventional steam stations fell by 0.5 per cent, but that from nuclear stations rose by 6.4 per cent. When imports and electricity available from other UK sources are included, total electricity available through the public distribution system rose by 2.5 per cent when compared with 1990.

Fuel used by the major generating companies in 1991 as a

whole fell by 0.9 per cent compared to 1990. Oil consumption in 1991 was 14.4 per cent less than in 1990. The reductions in the use of coal and oil in 1991 was partly offset by an increase in generation from nuclear sources.

# **FOREIGN TRADE (Table 24)**

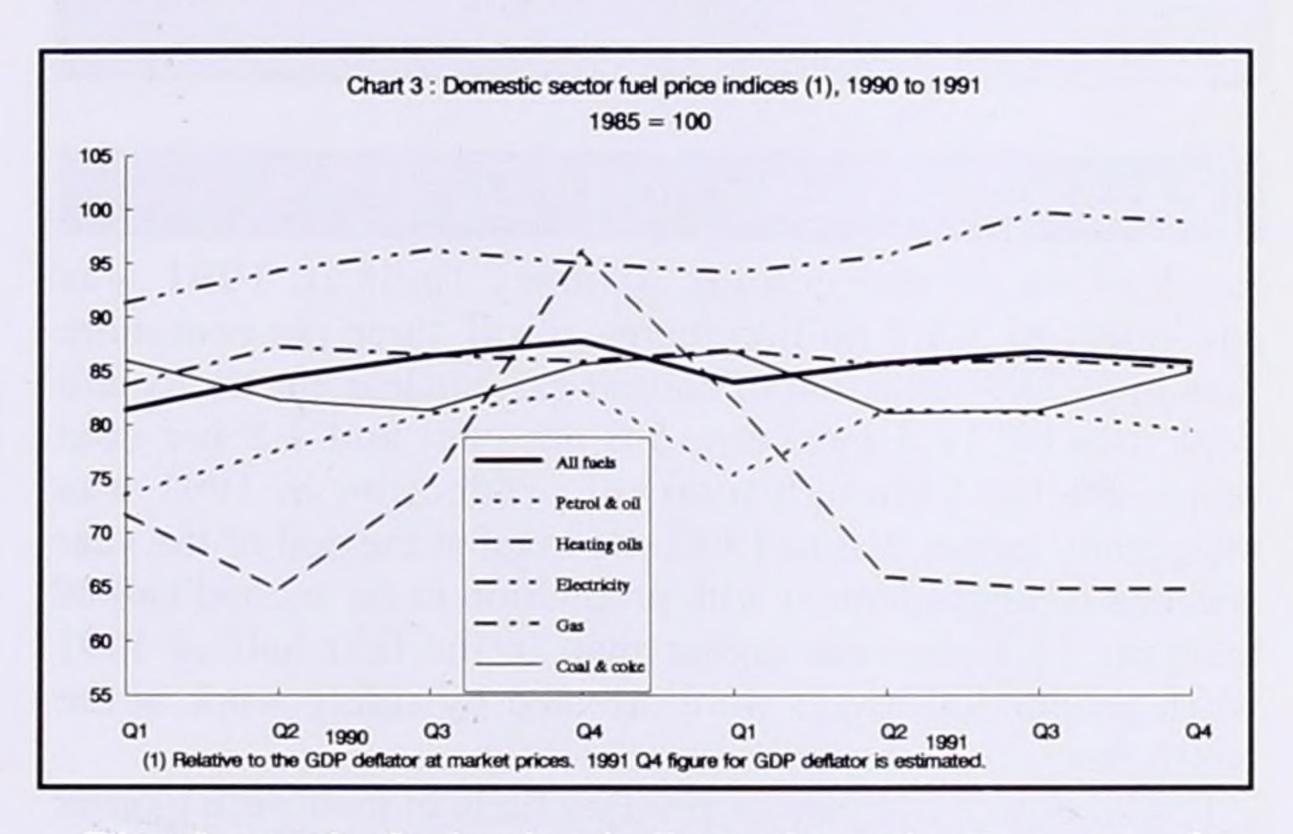
Provisional data for 1991 as a whole show that imports of fuels fell, in value terms, by 4.6 per cent, compared with 1990, whilst the value of exports fell by 7.8 per cent. For 1991 as a whole there were net exports of fuels, in value terms, of £104 million. Oil production in the first half of 1991 was reduced as a result of safety work in the North Sea; production improved in the second half of the year, resulting in net exports of fuels in the second half of the year worth £349 million. This compared with with net imports of £246 million in the first half of the year.

In volume terms imports in 1991 were 4.3 per cent higher than in 1990, whilst exports were 0.2 per cent lower. However, for 1991 the United Kingdom was a net importer of fuels, with a shortfall equivalent to 13.8 million tonnes of oil. In the second half of the year the shortfall was 3.9 million tonnes, compared with 9.7 million tonnes in the first half.

# PRICES (Tables 25 to 29)

Table 25, on prices of fuels purchased by manufacturing industry, shows additional prices for gas purchases from this issue. Average prices are now being shown for the three different types of supply —firm contract, interruptible contract and tariff — with data given from the beginning of 1989.

Domestic sector fuel price indices for 1991 as a whole, and for the fourth quarter of 1991 are shown in Table 28. Movements in recent quarters are illustrated in Chart 3.



The domestic fuel price indices show that current price index for fuel and light rose by a provisional 8 per cent between 1990 and 1991. The index for petrol and oil rose by 8 per cent as did the all fuels index. The indices for electricity, gas, and coal and coke rose by 10 per cent, 7 per cent and 6 per cent respectively. The index for heating oils fell by 4 per cent. There was an estimated 7 per cent increase in the GDP (market prices) deflator. Hence, the deflated index for all fuels rose by one per cent. The deflated petrol and oil index rose by one per cent and that for fuel and light also rose by one per cent. The deflated index for electricity rose by three per cent, whilst those for gas and coal and coke showed no change from 1990 levels. The deflated index for heating oils fell by 10 per cent.

Between mid-November and mid-December 1991, the prices of 4 star and unleaded motor spirit and DERV all showed significant decreases compared with mid-December. The prices of standard grade burning oil and gas oil fell by about 1p per litre.

The crude oil price index shows that the average cost of crude oil acquired by refineries in December fell by a provisional 10 per cent from the November level.

# TOTAL ENERGY

# TABLE 1. Indigenous production of primary fuels

Million tonnes of oil or oil equivalent

					Prima	ary electricity
	Total	Coal <sup>1</sup>	Petroleum <sup>23</sup>	Natural gas <sup>4</sup>	Nuclear	Natural flow hydro
1986 1987 1988 1989 1990 1991 p Per cent change	243.5 238.4 229.7 206.4 205.3 211.4 +3.0	63.6 61.4 61.1 59.5 55.5 56.5 +1.8	127.0 123.3 114.5 91.8 91.6 91.3 -0.4	39.0 40.8 39.3 38.3 42.5 47.3 +11.4	12.56 11.67 13.45 15.35 14.19 15.0 +5.6	1.41 1.23 1.42 1.38 1.53 1.37 -10.0
1990 Oct Nov Dec*	16.8 r 17.7 19.6	4.6 r 4.8 4.3	8.0 7.3 7.3	3.0 4.3 6.4	1.02 1.27 1.51	0.15 0.12 0.14
Total	54.1	13.7	22.6	13.6	3.80	0.42
1991 Oct Nov Dec* p	18.2 r 18.7 21.2	4.7 r 4.7 r 4.6	8.7 8.1 8.5	3.4 4.7 6.5	1.26 1.12 r 1.43	0.13 0.16 0.19
Total	58.1	14.0	25.2	14.7	3.81	0.48
Per cent change	+7.4	+2.3	+11.6	+7.5	+0.3	+14.6

<sup>1.</sup> Includes an estimate for slurry, etc recovered and disposed of otherwise than by the British Coal Corporation (BCC). 2. Calendar months. 3. Crude oil, offshore and land, plus condensates and petroleum gases derived at onshore treatment plants. 4. Including colliery methane. Excluding gas flared or re-injected.

# TABLE 2. Inland energy consumption: primary fuel input basis

Million tonnes of oil or oil equivalent

					Pr	imary electri	city					Pi	rimary elect	ricity
	Total	Coal <sup>12</sup>	Petroleum <sup>3</sup>	Natural gas <sup>4</sup>	Nuclear	Natural flow hydro <sup>5</sup>	Net imports	Total	Coal <sup>12</sup>	Petroleum <sup>3</sup>	Natural gas <sup>4</sup>	Nuclear	Natural flo hydro <sup>5</sup>	w Net imports
	Unadjust	ed <sup>6</sup>						Seasonally	adjusted and	temperature corre	ected (annua	alised rates) <sup>a</sup>		
1986 1987	197.2	66.8	66.2	49.2 50.5	12.56	1.41	1.02	193.1	65.1 67.2	65.1 63.5	48.0 49.6	12.56	1.41	1.02
1988 1989 1990 1991 p	200.1 200.2 202.5 206.7	65.9 63.6 63.7 63.2	68.3 69.5 71.3 70.5	47.9 47.4 49.0 52.7	13.45 15.35 14.19 14.99	1.42 1.38 1.53 1.37	3.08 3.03 2.87 3.94	201.9 204.9 209.2 208.3	65.9 64.5 64.9 63.5	68.3 70.2 73.2 72.2	49.7 50.5 52.4 52.3	13.45 15.35 14.19 14.99	1.42 1.38 1.53 1.37	3.08 3.03 2.87 3.94
Per cent change	+2.1	-0.7	-1.1	+7.7	+5.6	-10.0	+37.3	-0.4	-2.2	-1.4	-0.3	+5.6		+37.3
1990 Oct Nov Dec*	14.8 17.3 23.0	5.0 5.4 6.9	4.9 5.3 6.7	3.3 4.9 7.3	1.02 1.27 1.51	0.15 0.12 0.14	0.32 0.32 0.40	208.0 204.4 202.9	69.7 62.5 63.8	66.4 66.5 64.8	52.2 52.0 52.9	14.01 17.56 15.60	1.58 1.57 1.55	4.11 4.14 4.16
Total Average	55.0	17.3	16.9	15.5	3.80	0.42	1.03	205.1	65.4	65.9	52.4	15.73	1.57	4.13
1991 Oct Nov Dec* p	15.7 17.7 22.8	4.8 5.3 6.6	5.5 5.6 6.9	3.7 5.3 7.2	1.26 1.12 1.43	0.13 0.16 0.19	0.31 0.32 0.40	208.5 205.2 203.8	63.8 61.2 62.3	71.3 70.0 66.8	50.7 53.1 54.3	17.29 15.50 14.77	1.31 1.34 1.37	4.09 4.13 4.14
Total Average	56.2	16.8	18.0	16.2	3.81	0.48	1.03	205.8	62.5	69.4	52.7	15.85	1.34	4.12
Per cent change	+2.3	-2.8	+6.1	+4.2	+0.2	+14.7	-0.4	+0.4	-4.5	+5.3	+0.6	+0.8	-14.4	-0.4

<sup>1.</sup> Consumption by fuel producers plus disposals (including imports) to final users, plus (for annual unadjusted figures only) net foreign trade and stock change in other solid fuels. 2. See Technical Note on Statistical Calendar in June 1990 edition. 3. Inland deliveries for energy use plus refinery fuel and losses minus the differences between deliveries and actual consumption at power stations and gas works. 4. Including non-energy use and excluding gas flared or re-injected. 5. Excludes generation from pumped storage stations. 6. Not seasonally adjusted or temperature corrected. 7. Coal, petroleum and natural gas are temperature corrected. 8. For hydro the estimated annual out-turn.

### **NOTES TO TABLES**

Figures for the latest periods and the corresponding averages or totals are provisional and are liable to subsequent revision.

The figures have not been adjusted for temperature or seasonal factors except where noted in Tables 2 and 27. Due to rounding the sum of the constituent items may not equal the totals.

Percentage changes relate to the corresponding period a year ago. They are calculated from unrounded figures but are shown only as (+) or (-) when the percentage change is very large. These comparisons can be affected by calendar differences.

Monthly figures relate to four week periods except where otherwise indicated. Figures in the Petroleum section relate to calendar months.

All figures relate to the United Kingdom unless otherwise indicated.

Approximate conversion factors are shown after Table 23. Definitions and abbreviations are shown below Table 29.

### Symbols used in the tables

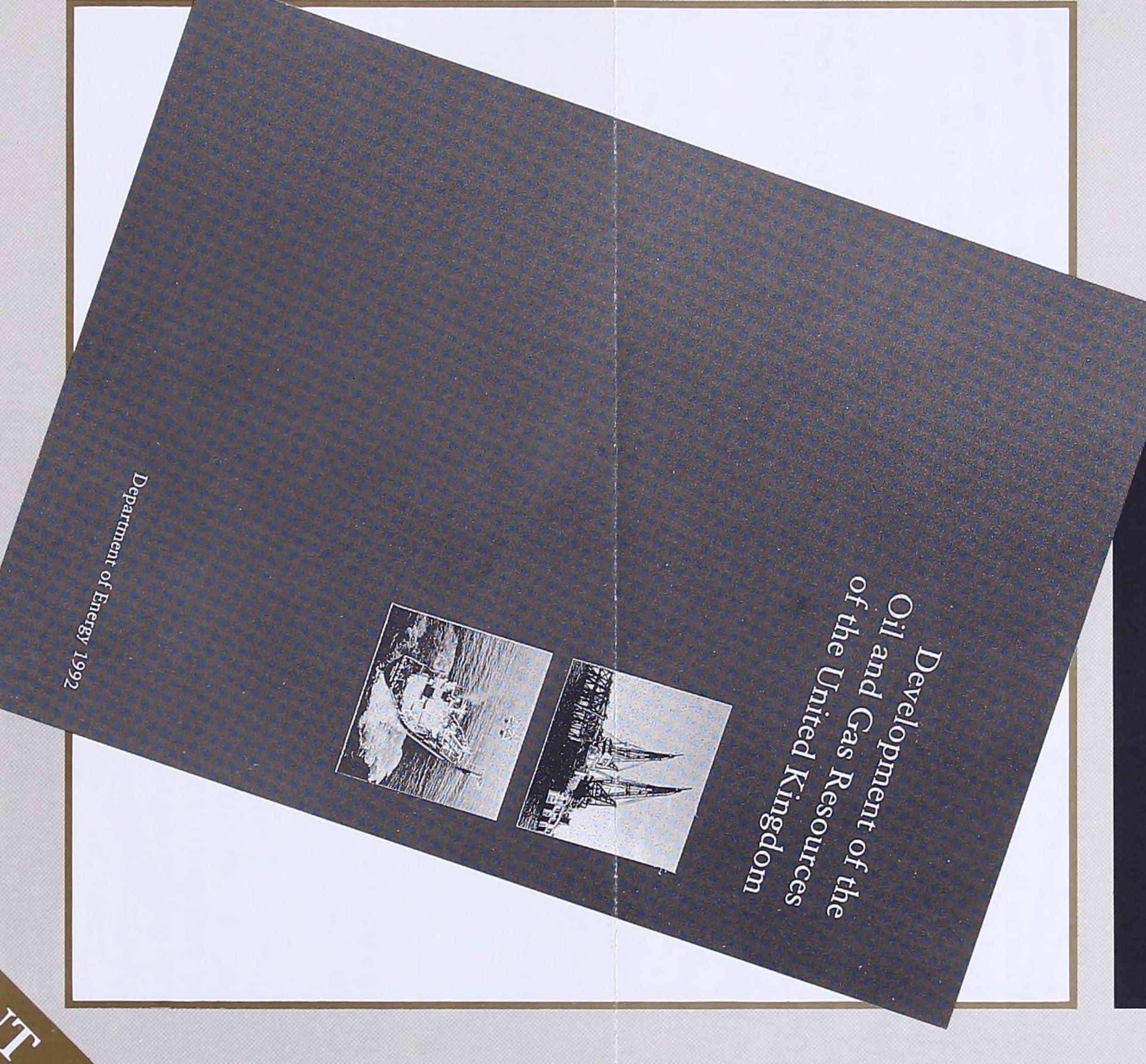
- . . not available
- Nil or less than half the final digit shown
- \* five-week period
- p provisional
- r revised
- e estimated; totals of which the figures form a constituent part are therefore partly estimated.

TABLE 3. Supply and											Willion (	herms
			Per	1989		1	990			1991p		
	1989	1990	cent change	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd	Per'
PRIMARY FUELS AND EQUIV	ALENTS				quarter	900,10,	quarter	quarter	quarter	quarter	quarter	cnang
Production of primary fuels												
Coal	24,492	22,798	-6.9	6,332	5,939	5,740	5,572	5,545 r	5,770 r	5,927	5,352	-3.9
Petroleum Natural gas²	39,972		-0.8	10,934	10,527	10,416	9,074	9,819	10,108	8,258 r	10,215	+12.6
Primary electricity	16,341 6,491	18,042 6,145	+10.4 -5.3	5,305 1,566	6,064	3,711	2,421	5,846	7,111 r	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2,423	+0.1
Total	87,296		-0.5	24,137	1,739 24,269	1,400 21,267	1,359	1,647	1,898	1,402	1,522	-12.0
Arrivals, Petroleum <sup>3</sup>	25,520		+7.9	6,847	7,348	6,964	18,426 7,245	22,857 5,987	24,887 r 6,820 r	19,920 r 7,807 r		+5.9
Other	8,771	8,163	-6.9	2,290	2,019	1,930	1,757	2,455	2,742 r	2,394	7,125 2,137	-1.7 +21.6
Shipments Marine Bunkers	29,710 1,002	32,090 1,058	+8.0 +5.6	8,278 227	8,797 r 249	8,298 287	7,185 276	7,820 246	7,614 246	7,478 r 291	8,530 283	+18.7 -2.5
Stock changes <sup>4</sup>									210	201	200	-2.5
Solid fuels	-707	+391		+544	+1,185	-583	-562	+349	+377 r	-829	-972	
Crude Petroleum Petroleum products	-417 -107	+196		+55	-324	+190	-57	+387	-369 r	+175	+129	
Natural gas	-107 -52	-68 +46		-52 +22	+77	-120	-148	+123	-160	+108	-120	
Non-energy use	4,298	3,968	7.7		+33	-50	-59	+120	+289	-300	-114	
Statistical difference <sup>5</sup>	-444	-3	-7.7	1,115 -934	1,075 +495	951 –240	1,027 -15	917 –234	986 r –629 r	1,081 r -73 r	1,114 -132	+8.5
Total primary energy input <sup>6</sup>	94 940	95.000		00.004	24.224							
Conversion losses etc.7	84,849	85,968	+1.3	23,291	24,981	19,822	18,099	23,061	25,716 r	20,347 r	17,775	-1.8
Final energy	25,799	26,457	+2.6	6,983	7,782	6,123	5,798	6,746	7,481 r	6,190 r	5,750	-0.8
consumption <sup>8</sup>	59,050	59,511	+0.8	16,308	17,199	13,699	12,301	16,315	18,235 r	14,157 r	12,025	-2.2
FINAL CONSUMPTION BY US	ER <sup>8</sup>											
Iron and steel industry												
Coal	5	4	-20.0	1	1	1	1	1	1	4		
Other solid fuel <sup>9</sup>	1,815	1,690	-6.9	431	440	429	404	417	430	425	376	-6.9
Coke oven gas Gas <sup>10</sup>	269	270	+0.4	67	67	67	67	67	65	64	63	-6.0
Electricity	471 281	465 268	-1.3	130	132	116	94	123	128	109 r	75	-20.2
Petroleum	351	322	-4.6 -8.3	69 80	70 78	69 95	64 98	66 50	70 63	69	64	-
Total	3,192	3,019	-5.4	779						75	73	-25.5
Other industries	0,132	3,013	-5.4	779	788	777	728	724	757	743 r	651	-10.6
Coal	1,917	1,938 r	+1.1	486	531	506	445	AEE		440 -	440	
Other solid fuel <sup>9</sup>	97	88	-9.3	23	23	22	19	455 23	555 16	448 r	410	-7.9
Coke oven gas	27	19	-29.6	7	7	6	3	3	7	6	12	-36.8
Gas <sup>10</sup>	5,075	5,233	+3.1	1,448	1,583	1,152 r	1,006 r	1,493 r	1,574	1,167 r	954	-5.2
Electricity Petroleum	2,772 3,400	2,830 3,209	+2.1 -5.6	703	716	701	676	738	725 r	658 r	669	-1.1
Total	13,285	13,317r		892	909	786	725	790	967 r	808	715	-1.4
Fransport sector	10,200	13,3171	+0.2	3,559	3,769 r	3,172 r	2,873 r	3,501 r	3,844 r	3,093 r	2,763	-3.8
Coal and other solid fuel	1	1	_									
Electricity <sup>11</sup>	108	199	+84.3	28	53	48	47	51	54	51	47	
Petroleum	18,727	19,126	+2.1	4,709	4,617	4,856	4,968	4,687	4,406	4,708	4,969	+1.7
Total	18,836	19,326	+2.6	4,737	4,670	4,904	5,015	4,738	4,461	4,759		
Domestic sector				-,,	.,0.0	1,001	0,010	4,700	4,401	4,759	5,016	
Coal	1,642	1,363 r	-17.0	398	376	361	306	320	533	414-	070	00.5
Other solid fuel <sup>9</sup>	418	398	-4.8	94	108	105	100	85	108	414 r 106	378 93	+23.5 -7.0
Gas <sup>10</sup> Electricity	9,914	10,189	+2.8	3,305	3,742	1,827	1,098	3,523	4,393	2,253 r	996	-9.3
Petroleum	3,148 951	3,200 989	+1.7	916 294	967 303	688	608	937	1,050	749	608	+0.1
Total	16,073	16,139 r	+0.4	5,007	5,496	203	217	267	339	228	200	-7.9
Other final users <sup>12</sup>	, 0,0.0	10,1001	70.4	3,007	3,490	3,184	2,329	5,138	6,423	3,749 r	2,275	-2.2
Coal	277	315 r	+13.7	84	105	79	56	76	90	63	54	10
Other solid fuel <sup>9</sup>	108	108	_	26	28	31	27	22	24	23	14	−1.8 −48.1
Gas <sup>10</sup> Electricity	2,919	2,983	+2.2	933	1,106	580	340	957	1,344 r	714 r	329	-3.2
Petroleum	2,577 1,784	2,552 1,750	-1.0 -1.9	708 475	709 528	579 393	573 360	691	728	616	584	+1.9
Total	7,665	7,710r	+0.6	2,226	2,476	1,662	1,356	2 214	2.750 -	395	339	-5.8
Total final users		59,511r	+0.8	16,308	17,199	13,699	12,301	16,315	2,750 r	1,812r	1,320	-2.7
NAL CONSUMPTION BY FUEL®				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	. 5,555	12,001	10,010	18,235 r	14,157 r	12,205	-2.2
Coal	3,842	3,619r	-5.8	969	1,021	947	807	858	1,180	926 r	0.40	.45
Other solid fuel <sup>9</sup>	2,438	2,285	-6.3	574	599	586	548	547	578	561	843 495	+4.5 -9.7
Coke oven gas	295	289	-2.0	74	74	73	71	71	72	70	66	-8.5
Gas <sup>10</sup> Electricity		18,870	+2.7	5,816	6,563	3,676	2,540	6,095	7,439 r	4,243 r	2,354	-7.3
Petroleum	8,886 25,209	9,051 25,397	+1.9 +0.7	2,424 6,450	2,515	2,085	1,968	2,483	2,627 r	2,142 r	1,972	+0.2
			,		6,435	6,333	6,368	6,262	6,339 r	6,215	6,295	-1.1
Total all fuels	59,050	59,511 r	+0.8	16,308	17,199	13,699	12,301	16,315	18,235 r	14,157 r	12,025	-2.2

<sup>1.</sup> Crude petroleum and natural gas liquids. Annual data include extended well-test production. 2. Excluding gas flared or re-injected. 3. Crude petroleum, process oils and petroleum products. 4. Stock fall (+) and stock rise (-). 5. Supply greater than recorded demand (—). 6. Thermal equivalent of total inland energy consumption in Table 2. A more detailed analysis of the 1990 figures is shown in the Digest of United Kingdom Energy Statistics 1991 Tables 4 and 5. Losses in conversion and distribution and used by fuel industries. 8. Deliveries, except for natural gas, electricity and iron and steel industry use of solid fuels. 9. Coke and other manufactured solid fuels. 10. Includes colliery methane. Also includes non-energy use of natural gas. 11. Data prior to 1st quarter 1990 relates to use for traction only. From 1st quarter 1990, data includes use in transport-related premises, eg. airports, warehouses, etc. 12. Mainly public administration, commerce and agriculture.

From the Department of Energy
the Essential
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the UK's Oil and Gas
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Development of the Oil and Gas Resources of the United Kingdom ('The Brown Book')



1992 Edition Published Apri

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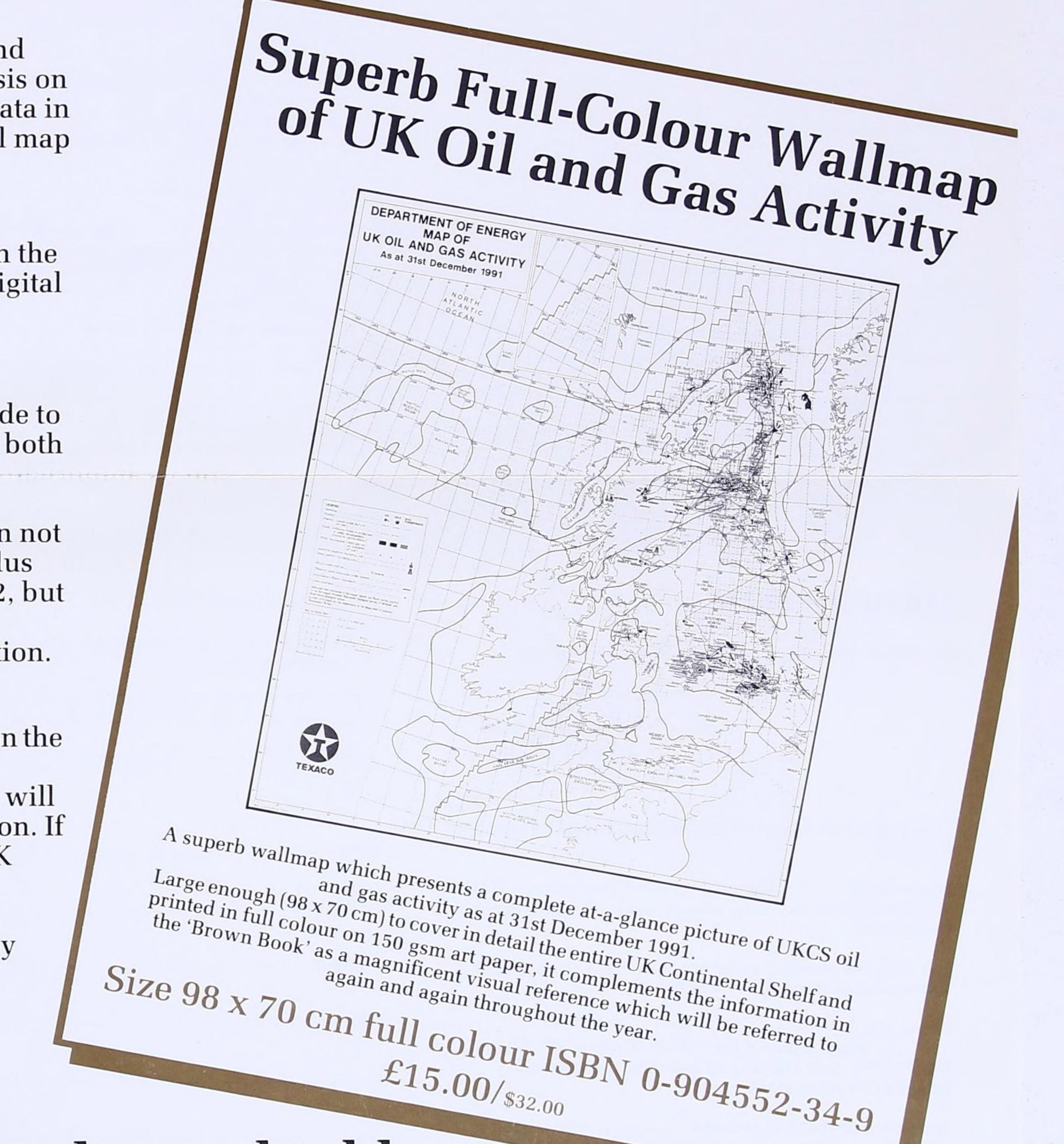
Enlarged A4 format – making use of this increasingly popular international specification to improve the presentation of text, maps, tables and diagrams.

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# TABLE 4. Coal production, foreign trade and deep-mined tonnage lost

Thousand tonnes

		Production					Tonnage lost (	deep-mined)25
	Total <sup>12</sup>	Total <sup>12</sup> Deep-mined Opencast imports Imports <sup>3</sup>		Shipments*	Recognised holidays and rest days	Disputes		
1986 1987 1988 1989 1990 1991 p Per cent change	108,099 104,533 104,066 101,135 94,397 96,127 +1.8	90,366 85,957 83,762 79,628 72,899 73,357 +0.6	14,275 15,786 17,899 18,657 18,134 18,603 +2.6	+7,877 +7,428 +9,864 +10,088 +12,250 +17,862	10,554 9,781 11,685 12,137 14,783 19,490 +31.8	2,677 2,353 1,822 2,049 2,533 1,628 -35.7	9,643 9,799 9,153 7,593 4,557 3,467 -23.9	893 1,724 3,633 506 410 269 -34.4
1990 Oct Nov Dec*	7,858 8,078 7,294	6,140 6,328 5,781	1,535 1,552 1,451	+1,372 +1,182 +1,667	1,515 1,346 1,855	143 164 188	10 0 1,456	14 14 2
Total	23,230	18,249	4,538	+4,222	4,717	495	1,466	29
1991 Oct Nov Dec* p	7,962 r 7,912 r 7,887	5,931 r 6,052 5,965	1,688 r 1,542 r 1,474	+1,332 +1,576 +1,357	1,451 1,647 1,503	120 71 146	10 0 911	70 17 1
Total	23,761	17,949	4,705	+4,265	4,601	336	921	87
Per cent change	+2.3	-1.6	+3.7		-2.4	-32.1	-37.2	(+)

<sup>1.</sup> Includes an estimate for slurry, etc., recovered and disposed of otherwise than by BCC. 2. See the Technical Note on Statistical Calendar in December 1991 edition. 3. As recorded in the Overseas Trade Statistics of the United Kingdom (OTS). 4. Shipments as recorded by BCC; the figures may differ from those published in OTS. 5. BCC only.

# TABLE 5. Inland coal use

Thousand tonnes

				Fuel produce	rs (consumption	on)		Final users (di	enocale by	
			Primary		Secondary			collieries and op		
				Dawar	Oaka	Other <sup>3</sup>		Domestic		
		Total¹	Collieries	Power stations <sup>2</sup>	stations²         ovens         in           82,652         11,122           86,176         10,859           82,465         10,902           80,633         10,792           82,555         10,852           82,021         10,011	1,959 2,052 2,006 1,717 1,544 1,501 -2.7	8,170 7,986 8,083 7,514 7,356 7,004 -4.8	House coal <sup>45</sup>	Other	Other <sup>7</sup>
1986 1987 1988 1989 1990 1991 p	115,89 111,49 107,58 108,25 107,49	114,234 115,894 111,498 107,581 108,256 107,492 -0.7	306 235 196 146 117 119 +1.5	86,176 82,465 80,633 82,555				6,989 5,685 5,112 4,344 3,372 3,953 +17.2	1,537 1,475 1,469 1,368 1,250 1,744 +39.5	1,500 1,425 1,265 1,066 1,211 1,139 -5.9
1990	Oct Nov Dec*	8,505 9,131 11,694	12 4 14	6,575 7,208 9,403	839 822 1,000	118 114 119	503 584 641	279 192 284	107 114 106	73 93 127
Total		29,330	30	23,185	2,660	351	1,728	755	327	293
1991	Oct Nov Dec*	8,143 r 9,073 r 11,302	9 10 r 16	6,151 7,237 9,107	766 r 755 r 919	117 112 127	528 r 515 602	323 r 189 r 235	160 143 r 160	91 114 137
Total		28,519	35	22,494	2,439	355	1,645	746	463	342
Per ce	ent change	-2.8	+15.7	-3.0	-8.3	+1.3	-4.8	-1.1	+41.5	+16.6

<sup>1.</sup> See the Technical Note on Statistical Calendar in December 1991 edition. 2. Coal-fired power stations belonging to major electricity generating companies (see definitions below Table 29). 3. Low temperature carbonisation and patent fuel plants. 4. Includes estimated proportion of total imports. 5. Including miners' coal. 6. Anthracite, dry steam coal and imported naturally smokeless fuels. 7. Includes public administration and commerce.

# TABLE 6. Stocks of coal at end of period: Great Britain

Thousand tonnes

			Distrib	uted			Undistributed	
	Total	Total distributed stocks	Power	Coke	Other	Total undistributed stocks	Collieries	Opencast
1986	38,481	29,776	27,983	1,619	175	8,704	5,996	2,708
1987	33,157	27,015	25,292	1,550	173	6,142	4,903	1,239
1988	35,999	28,667	27,004	1,512	150	7,332	5,621	1,710
1989	39,083	29,030	27,351	1,566	113	10,053	6,872	3,182
1990	37,553	28,540	26,905	1,564	70	9,013	5,980	3,033
1991 p	43,129	32,151	30,456	1,631	65	10,977	8,764	2,214
1990 Oct	39,948	31,257	29,583	1,612	62	8,691	5,348	3,343
Nov	40,342	31,145	29,351	1,722	71	9,198	5,942	3,256
Dec*	37,553	28,540	26,905	1,564	70	9,013	5,980	3,033
1991 Oct	44,662	33,459	31,831	1,578	50	11,203	8,676	2,527
Nov	44,975	33,544	31,805	1,673	65	11,431	9,030	2,402
Dec* p	43,129	32,151	30,456	1,631	65	10,977	8,764	2,214
Absolute change: in latest month on a year ago	-1,846 +5,576	-1,392 +3,612	-1,349 +3,551	-43 +66	-1 -6	-454 +1,964	-266 +2,784	-188 -819

<sup>1.</sup> Excluding distributed stocks held in merchants' yards, etc., mainly for the domestic market, and stocks held by the industrial sector.

# TABLE 7. Colliery manpower and productivity at BCC mines

			Wage earners on				sence percentag	e	Average outp	ut per mans	hift worked
				books						Un	derground
		Total <sup>1</sup>	Underground <sup>2</sup>	Recruitment	Wastage	Total	Voluntary <sup>2</sup>	Involuntary <sup>3</sup>	Overall	Total	Production <sup>5</sup>
		Thousands		Number			Per cent		Tonne		
1986 1987 1988 1989 1990 1991 p Per cent change	119 102 86 66 59 49 <sup>7</sup> -17.0	98 85 72 56 50 42 <sup>7</sup> -16.1	1,401 2,514 625 761 712 1,098 +54.2	30,617 19,067 17,061 20,509 7,279 11,228 +54.3	10.8 10.1 <sup>6</sup> 9.1 <sup>6</sup> 8.8 <sup>6</sup> 8.3 <sup>6</sup> 7.8 <sup>6</sup>	3.6 3.5 3.1 3.1 3.0 2.8	7.2 6.6 <sup>6</sup> 6.0 <sup>6</sup> 5.7 <sup>6</sup> 5.3 <sup>6</sup> 5.0 <sup>6</sup>	3.15 3.59 3.97 4.33 4.53 5.11 +13.0	3.92 4.42 4.85 5.21 5.40 6.08 +12.6	13.82 15.81 18.25 20.41 21.86 24.66 +12.8	
1990	Oct Nov Dec*	61 60 59	52 51 50	94 49 168	551 753 844	9.0 8.6 7.3	3.0 2.9 2.8	5.9 5.7 4.5	4.83 4.84 4.35	5.72 5.73 5.20	22.99 23.34 22.13
1991	Oct Nov Dec* p	53 51 49	45 44 42	68 32 15	1,123 2,206 1,501	8.2 7.8 6.7	2.8 2.7 2.7	5.4 5.8 4.0	5.30 5.35 5.09	6.28 6.33 6.04	25.25 26.93 26.93

<sup>1.</sup> At the end of period. 2. Absence for which no reason has been given (ie excludes absence through industrial disputes). 3. Absence mainly for sickness or injury. 4. Saleable deep-mined revenue coal. 5. Output from production faces divided by production manshifts. 6. From July 1987 the priority given to sickness over holidays when recording the causes of non-deployment has been reversed. This will tend to reduce the calculated absence percentage, particularly during the summer months. 7. Average numbers during 1991 were as follows: Total 55 thousand (–12.5 per cent compared with 1990). Underground 47 thousand (–11.9 per cent compared with 1990).

# GAS

# TABLE 8. Sources of supply and gas sent out

			Natural gas supply					
	Coo		Source					
	Gas input <sup>1,2</sup>	Indigenous	Imported	Indigenous	Imported			
		Million therms	Aillion therms		Percentage of total			
1986 1987 1988 1989 1990 1991 p Per cent change	19,871 20,319 19,211 18,976 19,404 21,257 +9.5	15,188 15,904 15,314 15,095 16,674 18,845 e +13.0 e	4,683 4,416 3,897 3,882 2,730 2,413 e -11.6 e	76.4 78.3 79.7 79.5 85.9 88.7	23.6 21.7 20.3 20.5 14.1 11.3	19,370 19,935 18,783 18,748 19,382 20,974 +8.2		
1990 Oct Nov Dec*	1,316 1,947 r 2,890	1,165 1,716 r 2,592	151 231 298	88.5 88.1 89.7	11.5 11.9 10.3	1,307 1,952 r 2,980		
Total	6,153	5,473	680	88.9	11.1	6,239		
1991 Oct Nov Dec* p	1,510 2,113 2,870	1,349 1,893 e 2,630 e	161 220 e 240 e	89.3 88.2 e 91.6 e	10.7 11.8 e 8.4 e	1,453 2,082 2,882		
Total	6,493	5,872 e	621 e	90.4 e	9.6 e	6,417		
Per cent change	+5.5	+7.3 e	-8.7e			+2.9		

<sup>1.</sup> Figures include third party carriage gas. 2. Figures differ from **Gas sent out** because of stock changes and the inclusion of small quantities of Substitute natural gas and Town gas in **Gas sent out**. They include gas put to storage, but to avoid double counting, exclude gas withdrawn from storage to the system. The figures also differ from total consumption (expressed in oil equivalent in Table 2) because they exclude producers' own use and losses.

		Total¹	Power stations <sup>2</sup>	Iron and steel industry	Other industries	Domestic	Other <sup>3</sup>
1986	ent change	18,497	75	419	4,853	10,242	2,908
1987		19,373	79	468	5,335	10,500	2,990
1988		18,639	83	449	4,856	10,254	2,996
1989		18,349	82	471	4,964	9,914	2,919
1990		18,832	86	465	5,108	10,189	2,983
Per c		+2.6	+4.9	-1.3	+2.9	+2.8	+2.2
1989	3rd quarter	2,346	19	98	960	962	308
	4th quarter	5,805	21	130	1,417	3,305	933
1990	1st quarter	6,558	22	132	1,556	3,742	1,106
	2nd quarter	3,666	22	116	1,122	1,827	580
	3rd quarter	2,525	21	94	973	1,098	340
	4th quarter	6,082	22	123	1,457	3,523	957
1991	1st quarter	7,415 r	22	128	1,528 r	4,393	1,344
	2nd quarter	4,211	21	109	1,114	2,253	714
	3rd quarter	2,357	19	75	937	996	329
Per ce	ent change	-6.7	-9.5	-20.2	-3.7	-9.3	-3.2

<sup>1.</sup> Includes sales to the non-tariff sector by independent gas suppliers. 2. Power stations belonging to major generating companies (see definitions below Table 29) and transport undertakings. 3. Public administration, commerce and agriculture.

# PETROLEUM

## TABLE 10. Drilling Activity<sup>1</sup>

Number of wells started

+44.8

			Offshore		Onsh	ore
	Exploration	Appraisal	Exploration & appraisal	Development <sup>2</sup>	Exploration & appraisal	Development <sup>2</sup>
1986	77	46	123	96	55	13
1987	75	72	147	138	38	2
1988	93	84	177	166	19	30
1989	94	89	183	154	17	28
1990	159	65	224	124	13	23
1991 Per cent change	107	79	186	144	11	3
	-32.7%	+21.5%	-17%	+16.1%	-15.4%	-87%
1990 1st quarter	21	15	36	33	4	8
2nd quarter	35	17	52	37	3	7
3rd quarter	52	22	74	26	5	5
4th quarter	51	11	62	28	1	3
1991 1st quarter	36 r	20 r	56 r	32 r	2	2
2nd quarter	28	23 r	51 r	37 r	3	_
3rd quarter	22 r	16 r	38 r	37 r	2	
4th quarter	21	20	41	38	4	1
Per cent change	-58.8%	+81.8%	-33.9%	+35.7%	(+)	-66.7%

<sup>1.</sup> Including sidetracked wells. 2. Development wells are production and appraisal wells drilled after development approval has been granted.

	Total income <sup>1</sup>	Operating costs	Exploration expenditure	Gross trading profits² (net of stock appreciation)	Percentage contribution to GDP <sup>3</sup>	Capital investment	Percentage contribution to industrial investment
986	11,947	2,144	1,039	8,202	2.5	2,574	16
987	12,610	2,107	816	9,510	2.7	2,041	12
988	10,387	2,061	1,129	6,884	1.7	2,136	11
989	10,344	2,330	1,182	6,583	1.5	2,705	12
990	12,024	2,908	1,637	7,040	1.5	3,528	14
er cent change	+16.2	+24.8	+38.5	+6.9		+30.4	
90 1st quarter	3,252	641	287	2,240	2.0	764	12
2nd quarter	2,439	713	385	1,293	1.1	899	15
3rd quarter	2,706	708	425	1,306	1.1	960	16
4th quarter	3,627	846	541	2,201	1.8	906	14
91 1st quarter	3,196	722	422	2,034	1.7	1,022	17
2nd quarter	2,656	891	516	1,076	0.9	1,171	20
3rd quarter	2,739	812	480	1,323	1.1	1,390	23
			4.0.0			110	

<sup>1.</sup> Includes sales of crude oil, NGLs and natural gas plus other income associated with oil and gas production. 2. Gross trading profits are equal to income *less* operating costs, *less* exploration expenditure *less* other expenses (not shown in the table) and are calculated net of stock appreciation. 3. GDP at factor cost. 4. Energy, water supply and the manufacturing sector (inclusive of leasing).

+12.9

+1.3

TABLE 12. Indigenous production, I	refinery receipts, arrivals and shipments	
Indigenous production <sup>1</sup>	Refinery receipts	

+14.7

+1.2

Per cent change

			Indigenous production		Refi	inery rece	eipts				Foreign to	rade <sup>6</sup>		
									oil and GLs	Proce	ess oils	Petr	roleum prod	ucts
		Total	Crude oil	NGLs <sup>2</sup>	Indigenous	Other <sup>4</sup>	Net foreign arrivals <sup>5</sup>	Arrivals	Shipments	Arrivals	Shipments	Arrivals	Shipments	Bunkers <sup>7</sup>
		N	fillion tonn	es					Thousan	d tonnes				
1986		127.0	121.2	5.8	38,780	1,006	39,880	30,844	83,660	10,365 9,827	1,316 883	11,767 8,570	17,726 17,056	2,091 1,668
1987 1988		123.3 114.4	117.6 109.4	5.7 5.0	38,794 40,582	939 730	40,630 42,613	31,713 34,495	80,273 70,274	9,777	1,658	9,219	17,176	1,831
1989 1990		91.6 91.6	87.2 88.0	3.6	39.585 37,754	904 916	48,351 51,065	38,676 42,074	49,328 54,131	10,824 10,636	1,134 1,769	9,479	17,873 18,002	2,396 2,538
1991	ent change	91.3 -0.4	86.8 -1.3	4.4 +22.8	36,254 -4.0	772 -15.7	55,498 +8.7	45,478 +8.1	52,565 <i>-2.9</i>	11,284 +6.1	1,237 -30.1	9,728 -11.6	20,677 +14.9	2,618 +3.2
1990	Oct	8.0	7.8	0.2	2,956	-14	3,187	2,954	4,745 3,799	672 700	439 66	1,047 777	1,378 1,653	202 196
	Nov	7.3 7.3	7.1 7.0	0.2	3,480 3,110	146 -5	3,595 3,956	2,961 3,147	4,484	1,014	196	540	1,590	192
Total		22.6	21.9	0.7	9,546	127	10,738	9,061	13,029	2,387	701	2,364	4,621	589
1991	Oct	8.7	8.2	0.5	3,829	81	4,260	3,213	4,538	1,174	123	759	1,988	248
	Nov Dec p	8.1 8.5	7.6 8.0	0.5 0.5	3,118 2,670	31 85	4,478 4,818	3,676 4,272	4,495 5,505	985 707	178 161	940 812	1,794 1,991	198
Total		25.2	23.8	1.4	9,616	197	13,556	11,161	14,537	2,865	462	2,511	5,773	659
Per ce	ent change	+11.5	+8.7	(+)	+0.7	+55.1	+26.2	+23.2	+11.6	+20.0	-34.1	+6.2	+24.9	+11.9

<sup>1.</sup> Includes for convenience offshore and land production. 2. Condensates and petroleum gases derived at onshore treatment plants. 3. Crude oil plus NGLs.

<sup>4.</sup> Mainly recycled products (backflows to refineries). 5. Total arrivals less refinery shipments of crude oil, NGL's and process oils (ie partly refined oils).

<sup>6.</sup> Foreign trade recorded by the Petroleum Industry and may differ from figures published in the OTS. 7. International marine bunkers.

		Th	Refin	ery use		Gas	ses	_		Kerc	sene				
		Throughput of crude and process oil	Fuel	Losses/ (gains)	Total <sup>1</sup> output of petroleum products	Butane and propane	Other petro-leum	Naphtha (LDF)	Motor spirit	Aviation turbine fuel	Burning oil	Gas/ diesel oil	Fuel	Lubricating oils	Bitumen
1986		80,155	5,404	662	74,089	1,328	93	2,652	23,360	5,813	2,147	22,409	12,523	909	1,887.
1987		80,449	5,216	577	74,656	1,422	52	2,014	24,680	6,063	2,270	21,424	12,797	886	2,056
1988		85,662	5,484	340	79,837	1,580	68	1,856	26,409	6,725	2,289	23,925	12,495	970	2,295
1989		87,699	5,816	491	81,392	1,569	90	2,073	27,237	7,092	2,344	23,292	13,020	1,050	2,393
1990		88,692	5,838	568	82,286	1,514	106	2,139	26,724	7,541	2,309	23,402	13,805	974	2,454
1991	)	92,001	6,058	467	85,476	1,664	134	2,515	27,793	7,037	2,446	26,057	13,205	973	2,302
Per ce	ent change	+3.7	+3.8	-17.8	+3.9	+9.9	+26.4	+17.6	+4.0	-6.7	+5.9	+11.3	-4.3	-0.1	-6.2
1990	Oct	6,519	420	25	6,073	89	7	199	1,878	677	218	1,724	875	79	219
	Nov	7,308	482	20	6,806	111	6	198	2,253	637	202	1,954	1,048	80	198
	Dec	7,223	527	-9	6,706	114	5	231	2,027	508	240	2,138	1,087	83	163
Total		21,050	1,430	34	19,586	315	18	628	6,158	1,822	660	5,815	3,010	241	580
1991	Oct	7,759	518	11	7,230	125	13	216	2,435	540	243	2,190	1,077	78	202
	Nov	7,331	480	48	6,803	108	4	227	2,260	569	224	2,087	934	68	207
	Dec p	8,192	537	37	7,619	172	13	281	2,438	534	295	2,374	1,137	96	161
Total		23,282	1,534	96	21,651	405	31	723	7,132	1,643	762	6,652	3,148	242	569
Per ce	nt change	+10.6	+7.3	(+)	+10.5	+28.6	+72.2	+15.1	+15.8	-9.8	+15.5	+14.4	+4.6	+0.4	-1.9

<sup>1.</sup> Including aviation spirit, wide-cut gasoline, industrial and white spirit, petroleum wax and miscellaneous products.

				Naphtha <sup>4</sup>		or Spirit		Kerosene						
			Butane <sup>3</sup>	(LDF) and Middle		of	Aviation	Burn	ing oil	Gas/	diesel oil		Lubri-	
		Total12	and	distillate feedstock	Total	which Unleaded	turbine	Premier	Standard domestic	Derv fuel	Other	Fuel	cating	Bitume
1986 1987		69,227	1,885	3,786	21,470 22,184	_	5,497 5,815	114	1,418	7,866 8,469	9,241	12,514	803 828	2,019
1988 1989 1990		72,317 73,028 73,943	1,969	3,866 3,932 3,477	23,249 23,924 24,312	258 4,648 8,255	6,200 6,564 6,589	68 55 41	1,415 1,417 1,526	9,370 10,118 10,652	8,456 8,323 8,046	11,865 11,125 11,997	849 839 822	2,342 2,423 2,491
<b>1991</b> Per c	ent change	74,449 +0.7	1,887 -4.2	3,898 +12.1	24,021 -1.2	9,868 +19.5	6,179 <i>–6.2</i>	46 +12.2	1,782 +16.8	10,687 +0.3	8,026 <i>-0.2</i>	12,297 +2.5	762 -7.3	2,514 +0.9
1990	Oct Nov Dec	5,693 5,900 5,677	189 194 178	190 273 326	2,041 2,023 1,951	767 761 725	563 467 475	2 4 6	85 134 199	906 938 807	626 703 733	629 740 667	78 64 55	262 219 129
Total		17,270	560	788	6,015	2,253	1,505	12	418	2,652	2,062	2,036	197	609
1991	Oct Nov Dec p	6,494 6,201 6,212	147	319 351 317	2,088 1,981 2,010	896 857 867	559 505 462	4 5 5	165 171 222	987 927 832	676 708 681	978 894 1,136	69 70 52	250 222 128
Total		18,907	450	987	6,079	2,621	1,527	14	557	2,745	2,066	3,008	191	600
Per ce	ent change	+9.5	-19.6	+25.3	+1.1	+16.3	+1.5	+16.7	+33.3	+3.5	+0.2	+47.7	-3.0	-1.5

<sup>1.</sup> Including other petroleum gases, aviation spirit, wide-cut gasoline, industrial and white spirits, petroleum wax, non-domestic standard burning oil and miscellaneous products. 2. Excluding refinery fuel. 3. Including amounts for petro-chemicals. 4. Now mainly for petro-chemical feedstock. Prior to the September 1986 issue of Energy Trends, Middle distillate feedstock was included in the Gas/diesel oil (other) column.

TABLE 15. <b>Delive</b>	ries of petroleu	m product	s for inland	d consumptio	n: energy u	ses 1	Thousa	and tonnes
	Total	Power <sup>2</sup> stations	Gas works	Iron and Steel industry	Other	Transport <sup>3</sup>	Domestic	Other <sup>4</sup>
1986 1987 1988 1989	59,864 58,298 62,317 63,146	5,665 4,497 5,155 5,332	164 86 59 52	693 628 824 851	9,000 7,995 8,807 8,032	36,665 38,220 40,621 42,535	2,317 2,211 2,183 2,141	5,360 4,661 4,666 4,204
1990 Per cent change	64,774 +2.6	6,557 +23.0	52	781 -8.2	7,583 -5.6	43,454	2,229	4,117
1990 Jan-Nov 1991 Jan-Nov Per cent change	59,754 59,181 -1.0	6,332 5,845 -7.7	46 44 -4.3	743 670 –9.8	6,904 7,265 +5.2	40,061 39,400 -1.6	1,962 2,181 +11.2	3,705 3,777 +1.9
1990 Sep Oct Nov	4,843 4,969 5,158	303 264 306	4 4 6	99 49 36	504 541 641	3,514 3,669 3,586	147 139 196	273 304 386
Total	14,969	872	14	184	1,686	10,769	482	963
1991 Sep Oct Nov p	5,135 5,600 5,354	479 465 389	3 4 4	73 74 74	516 672 696	3,626 3,817 3,585	173 225 229	265 344 377
Total	16,090	1,333	10	222	1,884	11,028	627	986
Per cent change	+7.5	+52.9	-28.6	+20.7	+11.7	+2.4	+30.1	+2.4

<sup>1.</sup> Excludes non-energy use. 2. Major generating companies (see definitions below Table 29) and transport power stations. 3. Includes coastal shipping and fishing. 4. Mainly public administration, commerce and agriculture.

	Crude o	il and refine	ry process	oil		Petro	leum prod	ducts		T	otal Stock	s
	Refineries <sup>2</sup>	Terminals <sup>3</sup>	Offshore <sup>4</sup>	Total	Light <sup>5</sup> distillates	Kerosene & gas/diesel6	Fuel oil	Other products7	Total	Net bilaterals	Stocks in UK <sup>9</sup>	Total
1986	5,852	1,201	556	7,609	2,421	3,078	3,888	1,370	10,757	1,265	17,101	18,366
1987	5,433	1,809	653	7,895	2,513	3,017	3,603	1,380	10,513	1,549	16,859	18,408
1988	4,927	1,030	670	6,687 <sup>10</sup>	2,878	3,139	3,396	1,353	10,766	1,854	15,599	17,453
1989	5,464	1,456	473	7,393	2,445	3,333	3,552	1,291	10,621	1,751	16,263	18,014
1990	5,484	982	424	6,890	2,424	3,039	3,206	1,224	9,892	1,539	15,243	16,782
1991 p	5,379	1,383	381	7,143	2,614	3,048	3,576	1,367	10,605	1,728	16,020	17,748
Per cent change	-1.9	+40.8	-10.1	+3.7	+7.8	+0.3	+11.5	+11.7	+7.2	+12.3	+5.1	+5.8
1990 Oct	5,817	1,058	476	7,351	2,688	3,034	3,469	1,297	10,488	1,501	16,338	17,839
Nov	5,723	1,009	632	7,364	2,598	3,011	3,407	1,271	10,287	1,501	16,150	17,651
Dec	5,484	982	424	6,890	2,424	3,039	3,206	1,224	9,892	1,539	15,243	16,782
1991 Oct	5,892	1,131	540	7,563	2,711	2,768	3,628	1,352	10,459	1,728	16,294	18,022
Nov	6,006	1,376	525	7,907	2,599	2,958	3,500	1,239	10,297	1,728	16,476	18,204
Dec p	5,379	1,383	381	7,143	2,614	3,048	3,576	1,367	10,605	1,728	16,020	17,748
Per cent change	-1.9	+40.8	-10.1	+3.7	+7.8	+0.3	+11.5	+11.7	+7.2	+12.3	+5.1	+5.8

<sup>1.</sup> Stocks held at refineries, terminals and power stations. Stocks in the wholesale distribution system and certain stocks at offshore fields (UK Continental Shelf [UKCS]), and others held under approved bilateral agreements are also included. 2. Stocks of crude oil, NGLs and process oil at UK refineries. 3. Stocks of crude oil and NGLs at UKCS pipeline terminals. 4. Stocks of crude oil in tanks and partially loaded tankers at offshore fields (UKCS). 5. Motor spirit and aviation spirit. 6. Aviation turbine fuel, burning oil, gas oil, Derv fuel, middle distillate feedstock (mdf) and marine diesel oil. 7. Ethane, propane, butane, other petroleum gases, naphtha (ldf), industrial and white spirits, bitumen, petroleum wax, lubricating oil, petroleum coke and miscellaneous products. 8. The difference between stocks held abroad for UK use under approved bilateral agreements and the equivalent stocks held in the UK for foreign use. 9. Stocks held in the national territory or elsewhere on the UKCS. 10. Includes 60 thousand tonnes held under approved bilateral agreements.

# ELECTRICITY

TABLE 17	Electricity	generation,	supply	and availability
I ABLE 17	Electricity	generation,	supply	and availability

TWh

		jor generatir companies	ng		er genera companie				All generating companies		
	Electricity generation	Own use <sup>2</sup>	Electricity supplied (net)	Electricity	Own use <sup>2</sup>	Electricity supplied (net)	Electricity	Own use <sup>2</sup>	Electricity supplied (net)	Net imports	Electricity available
986 987 988 989 990 Per cent change	282.26 282.74 288.51 292.90 298.50 +1.9	21.10 20.85 21.58 21.18 20.52 -3.1	261.16 261.90 266.93 271.71 277.98 +2.3	18.81 19.37 19.59 20.93 20.48 -2.1	1.50 1.56 1.50 1.62 1.67 +2.6	17.32 17.81 18.09 19.31 18.82 -2.5	301.07 302.11 308.10 313.83 318.98 +1.6	22.60 22.40 23.09 22.81 22.19 -2.7	278.48 279.71 285.02 291.02 296.80 +2.0	4.26 11.64 12.83 12.63 11.94 -5.4	282.73 291.34 297.85 303.65 308.74 +1.7
990 1st quarter 2nd quarter 3rd quarter 4th quarter	86.96 67.86 63.27 80.41	5.95 4.68 4.46 5.43	81.01 63.18 58.81 74.98	5.71 4.86 4.60 5.31	0.46 0.40 0.38 0.43	5.25 4.47 4.22 4.88	92.67 72.72 67.87 85.72	6.41 5.08 4.84 5.86	86.26 67.64 63.03 79.86	3.54 4.10 4.31	86.26 71.18 67.13 84.17
2nd quarter 3rd quarter p Per cent change	86.98 69.77 e 62.39 e -1.4		80.96 65.07 58.07 -1.3	5.57 4.96 4.59 -0.1	0.45 0.41 0.38 +2.0	5.12 4.56 4.21 -0.3	92.55 74.74 66.99 -1.3	6.47 5.11 4.71 -2.7	86.08 69.63 62.28 -1.2	4.29 3.72 4.11 +0.3	90.37 73.35 66.38 -1.1

<sup>1.</sup> See definitions below Table 29. 2. Used in works and for pumping at pumped storage stations.

### TABLE 18. Electricity supplied by other generating companies<sup>1</sup>

GWh

						Industry					
	Total	Total	Nuclear power stations <sup>2</sup>	Petroleum refineries	Iron and steel	Chemicals	Engineering and other metal trades	Food, drink and tobacco	Paper, printing and stationery	Other <sup>3</sup>	Transport under- takings
<b>Electricity supp</b>	lied (net)										
1986 1987 1988 1989 1990 Per cent change	17,316 17,809 18,089 19,305 18,817 -2.5	16,708 17,217 17,447 18,680 18,162 -2.8	4,359 4,257 3,942 4,290 3,700 -13.8	1,798 1,742 2,014 2,539 2,468 -2.8	1,239 1,452 1,653 1,743 1,668 -4.3	4,197 4,457 4,327 4,044 4,218 +4.3	3,356 3,497 3,466 3,821 3,929 +2.8	452 431 462 534 597 +11.8	769 807 928 990 866 -12.5	538 574 655 720 717 -0.4	607 592 642 626 655 +4.7
1990 1st quarte 2nd quarte 3rd quarte 4th quarte	er 4,467 er 4,223	5,079 4,303 4,064 4,716	1,248 820 795 837	637 561 618 651	439 411 397 420	1,142 1,061 963 1,052	1,041 980 849 1,059	145 76 80 297	230 217 192 227	197 177 170 173	167 164 159 165
1991 1st quarte 2nd quarte 3rd quarte Per cent change	er 4,555	4,950 4,396 4,056 -0.2	1,211 963 667 -16.1	633 563 629 +1.8	416 468 415 +4.5	1,100 950 956 -0.7	1,040 967 892 +5.1	150 87 85 +6.3	238 233 211 +9.9	162 164 201 +18.2	167 159 153 -3.8

<sup>1.</sup>Excludes electricity generated by commerce, public administration, etc. Industrial groupings are based on the Standard Industrial Classification 1980.

2. Generated by UKAEA and British Nuclear Fuels (BNF) for the public electricity supply system. 3. Including water-works and energy supply companies other than major generating companies (see definitions below Table 29).

				Electricit	y supplied	d (net)				
					By type	of plant			Purchases	
	Electricity Generated	Own Use <sup>2</sup>	Total	Conventional steam plant <sup>3</sup>	Nuclear	Hydro <sup>4</sup>	Other	Net Imports	from other sources (net)67	Total electricity available <sup>7</sup>
1986 1987 1988 1989 1990 1991 p Per cent change	282.26 282.74 288.51 292.89 298.50 300.37 +0.6	21.10 20.85 21.58 21.18 20.52 20.45 -0.3	261.16 261.90 266.93 271.71 277.98 279.92 +0.7	209.98 214.84 211.50 208.68 218.96 217.95 -0.5	47.48 43.95 51.70 59.31 54.96 58.50 +6.4	3.22 2.66 3.30 3.23 3.65 3.16 -13.4	0.48 0.45 0.43 0.50 0.41 0.31 -23.4	4.26 11.64 12.83 12.63 11.94 16.41 +37.4	5.46 5.58 5.40 6.49 5.90 6.78 +14.9	270.88 279.12 285.16 290.84 295.82 303.11 +2.5
1990 Oct Nov Dec*	22.40 25.28 32.72	1.52 1.72 2.19	20.88 23.57 30.53	16.43 18.21 24.36	4.05 5.03 5.81	0.38 0.29 0.32	0.03 0.03 0.04	1.32 1.33 1.66	0.42 0.47 0.60	22.62 25.36 32.80
Total	80.40	5.43	74.98	59.00	14.89	0.99	0.10	4.31	1.49	80.77
1991 Oct Nov Dec* p	23.08 e 25.69 e 32.45 e	1.53 e 1.70 e 2.17 e	21.56 23.98 30.28	16.15 19.08 24.14	5.04 4.47 5.63	0.35 0.41 0.49	0.02 0.03 0.03	1.31 1.32 1.66	0.40 0.45 0.73	23.27 25.76 32.67
Total	81.22	5.40	75.82	59.37	15.13	1.25	0.07	4.29	1.58	81.70
Per cent change	+1.0	-0.5	+1.1	+0.6	+1.6	+25.5	-28.3	-0.4	+6.3	+1.1

<sup>1.</sup> Electricity generated by major generating companies (see definitions below Table 29) and available through the grid in England and Wales and from distribution companies in Scotland and Northern Ireland. 2. Used in works and for pumping at pumped storage stations. 3. Coal, oil (including Orimulsion) and mixed or dual fired (including gas). 4. Natural flow and net supply by pumped storage stations. 5. Including diesel and oil engines, gas turbines and wind power. 6. Purchases from the UKAEA, BNF and other generators. 7. Net of supplies direct from generators to final consumers.

			generating mpanies¹				generating panies <sup>1</sup>					generati ompanie		
	Coal	Nuclear	Other <sup>2</sup>	Total	Coal	Nuclear	Other <sup>2, 3</sup>	Total	Coal	Nuclear	Other <sup>2, 3</sup>	Total	Net Imports	Total incl. imports
1986 1987	48.6 50.7	11.4 10.6	7.4 5.9	67.4 67.1		1.2	0.4			12.6 11.7			1.0 2.8	
1988 1989	48.5 47.4	12.4 14.2	6.7 6.7	67.6 68.4		1.1	0.4			13.5 15.4		:	3.1	
1990 Per cent change	48.6 +2.5	13.2 -7.3	8.0 +19.4	69.8 +2.1	1.2	1.0 <i>-13.7</i>	3.1	5.3	49.7	14.2 -13.7	11.1	75.1	2.9 -5.4	78.0
1990 1st quarter 2nd quarter 3rd quarter 4th quarter	14.4 10.2 10.3 13.6	3.6 3.1 3.0 3.6	2.6 2.4 1.5 1.5	20.6 15.7 14.8 18.7	0.3 e 0.3 e 0.2 e 0.3 e	0.3 0.2 0.2 0.2	0.8 e 0.7 e 0.7 e 0.8 e	1.5 e 1.2 e 1.2 e 1.4 e	14.7 10.5 10.5 13.9	3.9 3.3 3.2 3.8	3.4 3.1 2.2 2.3	22.1 16.9 16.0 20.1	0.9 1.0 1.0	22.1 17.8 17.0 21.1
1991 1st quarter 2nd quarter 3rd quarter p Per cent change	14.0 11.3 9.7 -6.0	4.0 3.0 3.4 +13.4	1.9 1.8 1.4 -4.0	20.0 16.1 14.5 -1.9	0.3 0.3 0.3 +7.1	0.3 0.3 0.2 -16.1	0.9 0.8 0.7 +1.0	1.5 1.4 1.2 -1.0	14.4 11.6 9.9 -5.7	4.3 3.2 3.6 +11.4	2.8 2.6 2.2 -2.4	21.5 17.4 15.7 -1.8	1.0 0.9 1.0 +0.3	22.5 18.3 16.7 -1.7

<sup>1.</sup> See definitions below Table 29. 2. Oil, including oil used in gas turbine and diesel plant or for lighting up coal fired boilers, and Orimulsion, hydro, gas, wind and refuse derived fuel. 3. Prior to 1990 other fuels used by other generating companies only includes hydro for industrial undertakings and gas used by transport undertakings.

TABLE 21. Fuel us	ed in electricity g	eneration by m	najor generating	companies <sup>1</sup>	Million tonnes of c	oil or oil equivalent
	Total <sup>2</sup>	Coal³	Oil³4	Gas <sup>5</sup>	Nuclear	Hydro
1986	67.36	48.62	6.08	_	11.40	1.25 1.06
1987 1988	67.12 67.59	50.70 48.51	4.81 5.39	_	10.55 12.41	1.27
1989 1990	68.38 69.80 r 69.20	47.39 48.56 48.25	5.52 6.69 5.73		14.24 13.20 14.05	1.22 1.34 1.17
1991 p Per cent change	-0.9	-0.6	-14.4		+6.4	-13.1
1990 Oct Nov Dec*	5.27 5.87 7.57	3.87 4.24 5.53	0.29 0.31 0.52	• • • • • • • • • • • • • • • • • • • •	0.97 1.21 1.40	0.14 0.11 0.12
Total	18.70	13.64	1.12		3.58	0.36
1991 Oct Nov Dec* p	5.30 5.91 7.44	3.62 4.26 5.36	0.35 0.44 0.56	• • • • • • • • • • • • • • • • • • • •	1.21 1.07 1.35	0.12 0.14 0.17
Total	18.64	13.23	1.34		3.63	0.43
Per cent change	-0.3	-3.0	+19.8		+1.6	+17.6

<sup>1.</sup> See definitions below Table 29. 2. Including wind power and refuse derived fuel. 3. Including quantities used in the production of steam for sale.4. Including oil used in gas turbine and diesel plant or for lighting up coal fired boilers, and Orimulsion. 5. Including sour gas, refinery gas, etc. From April 1990, figures are not available for reasons of confidentiality but are included in total fuel used.

			P	ublic dis	tribution sy	stem			0	ther generato	rs	All	electricity sup	pliers
		Electricity available	Transmission distribution and other losses <sup>2</sup>			ectricity to co		Other	Electricity available <sup>6</sup>	Losses and statistical differences	Consumption of electricity <sup>7</sup>	Electricity	Losses and statistical differences	Consumption of electricity
1986 1987 1988 1989 1990 Per ce	ent change	270.88 279.12 285.16 290.84 295.82 +1.7	22.96 23.40 24.12	248.09 256.19 261.79 266.72 271.94 +2.0	90.77 94.13 96.26 98.10	61.44 64.18 67.31 70.29 71.64 +1.9	91.83 93.25 92.36 92.27 93.79 +1.7	7.86 7.98 7.99 7.90 8.41 +6.5	11.86 12.23 12.69 12.81 12.92 +0.8	0.10 -0.06 0.13 0.05	11.76 12.23 12.75 12.68 12.87 +1.5	282.73 291.34 297.85 303.65 308.74 +1.7	22.91 22.96 23.34 24.25 23.93	259.82 268.39 274.51 279.40 284.81 +1.9
1990	1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	82.37 68.29 64.38 80.77	6.90 5.48 5.17 6.32	75.47 62.81 59.22 74.46	24.96 24.42 23.38 25.36	19.86 16.38 16.20 19.19	28.33 20.16 17.82 27.49	2.32 1.85 1.83 2.41	3.89 2.89 2.75 3.39	0.02 e 0.01 e 0.01 e 0.01 e	3.87 2.88 2.74 3.38	86.26 71.18 67.13 84.17	6.92 5.49 5.18 6.33	79.34 65.69 61.95 77.83
1991	1st Quarter 2nd Quarter 3rd Quarter p	87.14 70.69 63.59	8.36 6.19 4.26	78.79 64.50 59.33	25.25 23.18	20.56 17.60 16.44	30.78 21.94 17.83	2.20 1.78 1.93	3.23 2.66 2.80	0.01 e 0.01 e 0.01 e	3.22 2.65 2.79	90.37 73.35 66.38	8.37 6.20 4.27	82.00 67.14 62.12
Per ce	ent change	-1.2	-17.6	+0.2	-1.0	+1.5	_	+5.6	+1.9	_	+1.8	-1.1	-17.6	+0.3

<sup>1.</sup> Until 1st quarter 1990 some electricity suppliers provided sales figures on a sales billed rather than a sales sent out basis. The quarterly pattern of sales from 2nd quarter 1990 onwards may therefore have changed. 2. Losses on the grid system and local networks and other differences between data collected on sales and data collected on availability. 3. Manufacturing industry, construction, energy and water supply industries. 4. Commercial premises, transport and other service sector consumers. 5. Agriculture, public lighting and combined domestic/commercial premises. 6. Net electricity supplied less transfers to the public distribution system. 7. The majority of this consumption is by businesses in the industrial sector (95% in 1990).

# TEMPERATURES

TABLE 23. Avera	ge temperatures and o	leviations fro	m the long	g term mean			Degrees celsius
	Long term mean	Avei	rage daily tempe	rature	Deviatio	n from the long	g term mean
	1951 to 1980	1989	1990	1991	1989	1990	1991
Statistical month <sup>2</sup>					-		
lanuary	3.7	6.7	5.9	4.1	+3.0	+2.2	+0.5
ebruary	3.9	6.3	6.2	1.4	+2.4	+2.3	-2.5
March*	5.6	5.9	8.1	7.7	+0.3	+2.5	+2.1
April	7.9	7.0	7.3	8.2	-0.9	-0.6	+0.3
May	10.7	10.1	12.0	10.4	-0.6	+1.3	-0.3
lune*	13.8	13.9	13.3	12.1	+0.1	-0.5	-1.7
luly	15.7	16.4	16.1	17.0	+0.7	+0.4	+1.3
lugust	15.8	17.0	17.7	17.4	+1.2	+1.9	+1.6
September*	14.0	14.8	13.8	15.6	+0.8	-0.2	+1.6
October	11.0	11.9	12.7	10.5	+0.9	+1.7	-0.5
lovember	7.5	9.1	7.8	7.1	+1.6	+0.3	-0.4
ecember*	5.1	4.4	5.1	5.6	-0.7	_	+0.5
Calendar month							
lanuary	3.7	6.1	6.3	3.7	+2.4	+2.6	
ebruary	3.9	5.8	7.0	2.4	+1.9	+3.1	-1.5
March	5.7	7.0	8.0	7.9	+1.3	+2.3	+2.2
pril	8.1	6.1	7.7	8.1	-2.0	-0.4	
lay	11.2	12.5	12.1	11.0	+1.3	+0.9	-0.2
une	14.2	14.0	13.3	12.2	-0.2	-0.9	-2.0
uly	15.9	17.4	16.3	17.3	+1.5	+0.4	+1.4
ugust	15.7	16.1	17.6	17.2	+0.4	+1.9	+1.5
eptember	13.7	14.1	13.1	14.8	+0.4	-0.6	+1.1
ctober	10.7	11.5	12.0	10.4	+0.8	+1.3	-0.3
ovember	6.6	6.4	7.2	7.0	-0.2	+0.6	+0.4
December	4.8	4.5	5.1	5.0	-0.3	+0.3	+0.2

<sup>1.</sup> Based on data provided by the Meteorological Office. Information on the methodology used is given in Table 1 of the Digest of UK Energy Statistics 1991. 2. Months with 4 or 5 weeks. Months marked \* contain 5 weeks.

### STANDARD CONVERSION FACTORS AND APPROXIMATE EQUIVALENTS<sup>1</sup>

1 tonne of oil	=	1.7 tonnes of coal	1 kiloWatt (kW)	=	1,000 Watts
	=	425 therms	1 MegaWatt (MW)	=	1,000 kiloWatts
1 therm	=	29.3071 kiloWatt hours (kWh)	1 GigaWatt (GW)	=	1,000 MegaWatts
1 Gigajoule (GJ)	=	9.4781 therms	1 TeraWatt (TW)	=	1,000 GigaWatts
1 tonne of UK crude oil	=	7.55 barrels	1 PetaWatt (PW)	=	1,000 TeraWatts
1 gallon (UK)	=	4.54609 litres			

<sup>1.</sup> More detailed information on conversion factors, approximate equivalents, and calorific values of fuels, is given on pages 111 and 112 of the Digest of UK Energy Statistics 1991.

# FOREIGN TRADE

### TABLE 24. Imports and exports of fuels and related materials<sup>1</sup> Petroleum Petroleum Coal and Coal and Natural Total other other Natural Electricity Products<sup>2</sup> Total fob3 solid fuel gas Crude Total solid fuel Electricity Crude Products<sup>2</sup> gas Value – £ million Quantity - Million tonnes of oil or oil equivalent IMPORTS: (cif) 1,320 80 6377 2,080 5,983 2,440 456 74.9 6.3 24.2 11.1 1986 32.2 1.0 878 242 6,094 5,818 2,703 1880 390 5.9 72.9 1987 33.1 20.8 10.2 268 5,022 692 1,546 4,675 2,044 7.5 3.1 74.0 32.8 21.4 1988 615 1,889 305 6,400 3,079 6,071 513 7.5 21.7 8.9 77.8 36.3 1989 519r 225 7,864 r 2,427 r 7,358 4,033 r 630 8.9 43.7 r 87.1 r 24.8 r 6.6 r 1990 472 343 7,502 2,080 7,064 734 3,887 90.8 11.7 45.8 23.7 5.6 4.0 1991 p +52.4 -9.1-4.6-14.3-4.0 -3.6+4.3 +16.5+4.7 -4.2-14.0+31.9 Per cent change 26 2,028 187 594 1,912 137 1,084 1.9 12.2 6.4 2.5 0.3 23.2 1990 1st quarter 123 61 1,636 836 448 1,530 21.8 11.5 5.6 1.5 0.8 168 2nd quarter 63 94 612 1,721 1.8 9.8 6.9 1.0 20.6 130 824 1,611 3rd quarter 76 94 2,398 771 ,262 2,287 20.9 195 2.9 9.9 5.7 1.3 1.0 4th quarter 85 583 r 162 r 2,000 r 1,874 r 988 r 204 r 5.5 22.8 3.2 11.1 r 2.0 1.0 1991 1st quarter p 76 r 1,797 r 479 r 130 934 r 1,704 r 11.8r 23.0 r 170 2.8 6.0 r 1.4 0.9 2nd quarter p 76 84 1,842 r 518 r 1,742 r 985 r 2.9 22.9 r 178 11.7 0.9 6.4 r 3rd quarter p 98 979 499 103 1,862 r 1,744 182 2.8 5.8 22.1 11.2 1.3 4th quarter +28.9 +9.6 -22.4-22.4-27.0-23.7+5.8 -6.7-3.5-5.0-0.5+13.3+1.1Per cent change EXPORTS: (fob) 8,670 8,670 6,281 2,199 81.9 105.4 190 2.4 21.1 1986 8,767 1,893 8,767 6,765 1.6 101.5 109 80.6 19.2 1987 6,257 6,257 4,515 1,646 91.2 96 70.5 19.4 1988 6,172 6,172 2,039 1.5 49.2 20.5 71.2 109 4,024 1989 7,771 25 7,771 2,455 5,172 1.6 119 54.2 21.0 0.3 77.1 1990 2,630 7,168 7,168 77.0 98 4,440 23.4 52.3 1991 p -7.8-9.2+7.1 (-)-7.8-0.2-14.2-3.6+11.4 -20.4(--)Per cent change 657 25 2,056 2,056 5.7 21.4 36 1,340 0.5 15.0 0.3 1990 1st quarter 533 1,641 1,641 5.1 20.1 28 1,080 14.5 0.4 2nd quarter 1,732 1,732 26 520 11.7 5.0 17.0 1,186 0.4 3rd quarter 2,341 2,341 746 1,566 18.6 0.4 13.0 5.2 4th quarter 1,703 r 1,703 r 4.8 18.0 25 1,058 619 r 0.3 12.9 1st quarter p ,629 r 24 962 644 r 1,629 r 6.1 17.8 0.3 11.3 2nd quarter p 639 r ,818 r 1,818 r 19.7 1,159 r 13.5 3rd quarter p 1,261 727 2,017 2,017 6.6 0.3 14.6 4th quarter -13.8-2.5-13.8+12.5 +26.9 +16.1 -19.5-10.3Per cent change **NET EXPORTS:** 2,687 2,294 30.5 -2673,841 120 -1,320-80 1986 -3.949.7 -3.2-11.1-1.0-878 -2422,673 2,949 28.6 -2814,061 -4.2 47.5 -1.6-10.2-2.81987 17.9 -3762,471 100 -692 -2681,235 1,582 -6.2 37.6 -2.2-9.1-3.11988 101 -8.9 945 -615 -305-228 -6.0 12.9 -1.2-3.4-6.6-403 146 1989 413 -519 r $-10.0 \, r$ 1,139 r 32 -200 -6.6 r -511 -93 r -7.310.6 r -3.8 r -2.91990 553 550 -472 104 6.5 -5.6-13.8-636 -343-334-0.3-4.0-10.41991 p 144 256 63 -1872.8 -0.7-2.5-1.9-102-1 -1.41990 1st quarter 85 111 3.0 -1.50.7 -140244 -123-1.9-0.8-0.5-61 2nd quarter 1.9 362 -92 121 -1.9-1.1-1.0-3.6-103-94 -63 -1.43rd quarter 54 -25 -57-3.1-0.5-1.3-1.0-2.3-165304 -94 -76-2.54th quarter -171 r 1.9 -0.7-2.0-1.0-4.8-175 r36 r -160-85 –297 r 70 r -2.91991 1st quarter p -4.928 r –75 r -2.5-0.60.5 r -1.4-146165 r -130-168 r -0.9 $-77 \, r$ 2nd quarter p -15876 r 1.8 -0.5 r -0.9 -1.0-3.3174 r 121 -76-30 -2.6-84 3rd quarter p 273 -1.30.8 -0.6-153282 155 -2.53.4 -1.0228 -103-98 4th quarter p

<sup>1.</sup> The figures generally correspond to those published in Section 3 of the OTS. They may differ from figures shown elsewhere in Energy Trends, which come from other sources. Figures for crude oil from 1988, natural gas prior to 1986 and electricity from 1990 may include unpublished revisions. 2. Prior to 1988 the figures correspond to items 334, 335 and 341 (excluding natural gas imports) of the Standard International Trade Classification (S.I.T.C.) (Revision 2) and include liquefied gases other than natural gas and petroleum products not used as fuel, e.g. lubricants. For 1988 and 1989 they correspond to items 334, 335, 342, 343 (excluding imports of natural gas) and 344 of S.I.T.C. (Rev.3). 3. Value of imports adjusted to exclude the cost of freight, insurance etc.

# PRICES

TABLE 25. Prices of fuels purchased by manufacturing industry in Great Britain<sup>1</sup>

			1989			19	90			1991	
Fuel	Size of Consumer	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter p
COAL (£ per GJ)	Small	2.44	2.42	2.30	2.44	2.35	2.46	2.41	2.39	2.35	2.32
	Medium	1.79	1.80	1.95	2.02	1.91	1.98	1.99	2.04	2.02	1.97
All concumore	Large	1.47	1.47	1.54	1.55	1.52	1.55	1.52	1.55	1.48	1.49
All consumers —	average	1.54	1.53	1.61	1.62	1.58	1.62	1.59	1.63	1.56	1.57
	10% decile <sup>2</sup> median <sup>2</sup>	1.42	1.43	1.52	1.46	1.48	1.52	1.57	1.56	1.49	1.47
	90% decile <sup>2</sup>	2.30 2.66	2.28 2.56	2.28 2.58	2.34	2.26	2.20	2.24	2.26	2.29	2.19
HEAVY FLIEL OIL (Constant					2.67	2.49	2.53	2.54	2.52	2.69	2.48
HEAVY FUEL OIL (£ per ton		79.7	85.6	85.0	82.5	72.1	88.1	99.3	78.8	68.6	70.2
	Medium	72.5	74.9	81.2	80.5	70.0	72.7	92.3	76.7	63.6	65.3
	Of which:	68.4	66.7	79.2	75.5	64.0	63.9	86.1	72.7	58.5	60.9
	Extra large	65.6	64.1	77.0	71.9	61.1	60.1	96.0	74.0	F7.0	50.5
Mod	derately large	73.5	71.4	83.2	82.1	61.1 69.3	63.1 65.5	86.0 86.4	71.3	57.3	59.5
All consumers —	average	71.3	72.0	80.7	78.2	67.2	70.1	90.0	75.3 74.9	60.8 61.6	63.4
	10% decile <sup>2</sup>	65.3	69.2	72.6	73.1	61.0	59.4	81.8	64.2	58.7	63.6
	median <sup>2</sup>	72.5	74.1	83.4	80.8	70.0	76.1	93.0	79.5	65.0	64.7
	90% decile <sup>2</sup>	81.5	85.6	93.4	93.0	90.7	97.8	113.4	97.0	80.4	83.1
GAS OIL (£ per tonne)3	Small	132.5	135.3	153.1	156.8	142.1	159.9		14/2/2017		
(-  - ( - (( - ((	Medium	122.9	127.5	144.1	143.9	133.8	147.6	193.1 184.3	188.4 176.7	154.3	150.3
	Large	115.2	117.7	136.6	134.2	119.4	144.0	177.5	163.7	150.5 137.9	148.1 138.6
All consumers —	average	116.8	119.6	138.1	136.2	122.1	144.9	178.9	166.3	140.2	140.3
	10% decile <sup>2</sup>	109.2	109.9	123.8	123.4	113.1	118.9	157.0	145.2	126.7	129.6
	median <sup>2</sup>	123.1	127.3	146.7	149.6	133.8	151.7	187.8	176.7	146.3	144.8
	90% decile <sup>2</sup>	145.2	149.2	167.3	176.3	159.8	200.9	212.3	205.2	183.0	171.5
ELECTRICITY (Pence per K	Wh) Small	4.93	5.04	6.26	6.46	5.45	5.67	6.74	6.74	6.19	
	Medium	4.19	4.20	4.94	4.88	4.04	4.08	4.66	4.58	4.28	6.35 4.34
	Large	3.28	3.17	3.51	3.54	3.12	3.11	3.22	3.23	3.22	3.28
	Of which:					02	0	0.22	0.20	0.22	0.20
	Extra large	2.88	2.61	2.82	2.86	2.74	2.74	2.77	2.83	2.96	3.03
	derately large	3.60	3.59	4.05	4.06	3.41	3.39	3.57	3.55	3.42	3.48
All consumers —	average	3.61	3.54	4.03	4.05	3.49	3.50	3.79	3.78	3.66	3.73
_	10% decile <sup>2</sup>	3.90	3.92	4.39	4.41	3.58	3.60	3.92	3.91	3.67	3.75
	median <sup>2</sup>	4.80	4.64	5.90	5.89	5.20	5.36	6.35	6.30	5.76	5.91
	90% decile <sup>2</sup>	6.06	6.29	7.43	7.28	6.38	7.04	8.00	8.07	7.23	7.50
GAS (Pence per therm)⁴	Small	35.41	35.25	35.19	35.16	36.24	36.70	37.95	39.76	39.48	41.31
	Medium	27.48	26.96	29.01	29.09	29.49	27.51	29.90	30.67	30.44	26.44
A.II.	Large	20.00	20.21	20.59	21.21	20.46	20.89	21.03	21.68	20.56	19.37
All consumers —	average	21.51	21.24	22.20	23.05	21.84	21.99	22.78	23.94	22.23	20.43
	Firm <sup>5</sup>	27.02	26.54	28.74	28.83	27.11	26.54	28.80	29.24	26.96	24.93
	Interruptible <sup>5</sup>	16.64	17.00	17.31	18.27	18.49	18.78	18.55	18.78	18.19	17.69
	Tariff <sup>5</sup>	32.67	36.23	36.20	38.32	38.49	41.87	41.43	42.77	42.70	44.92
	10% decile <sup>2</sup>	26.74	25.85	27.39	27.10	26.57	25.38	26.60	26.63	24.87	23.74
	median² 90% decile²	34.25	33.92	34.00	33.99	33.49	34.50	36.34	38.52	37.31	39.44
		39.93	40.94	40.53	40.64	43.19	45.54	44.40	44.68	45.62	49.13
MEDIUM FUEL OIL (£ per to		74.5	70.0								
All consumers —	average⁵	74.5	73.3	85.4	82.0	73.1	73.4	100.2	91.8	81.2	73.7
LIQUEFIED PETROLEUM G											
All consumers –	average⁵	113.3	118.1	117.9	129.8	121.2	119.4	172.3	194.9	147.9	128.1
HARD COKE (£ per tonne)6											
All consumers –	average⁵	92.0	94.3	106.7	104.3	108.4	105.8	101.0	103.7	100.4	106.4
Realised in new and renew	ed contracts										
HEAVY FUEL OIL (£ per ton	ne) <sup>37</sup>	95.3	100.9	112.3	103.4	72.2	91.3	108.6	107.2	65.4	62.7
GAS OIL (£ per tonne)37		131.7	140.8	165.0	144.3	123.3	170.2	189.0	164.3	131.3	142.0
							,,,,,,,				

<sup>1.</sup> Average prices paid by respondents (exclusive of VAT) to a Department of Energy survey of some 1,200 manufacturing sites. The average price for each size of consumer is obtained by dividing the total quantity of purchases, for each fuel, into their total value. Prices vary widely around the average values shown (see footnote 2). Purchases of fuels used as raw materials in manufacturing are excluded. For further details, see the annual "Digest of United Kingdom Energy Statistics". 2. The 10% decile is the point within the complete range of prices below which the bottom 10% of those prices fall. Similarly the 90% decile is the point above which the top 10% of the prices occur. The median is the midway point. Thus, these values show the spread of prices paid. The deciles and the median are calculated by giving equal 'weight' to each purchaser, whereas the average prices, for each size-band and all consumers are given 'weight' according to the quantity purchased. 3. Oil product prices include hydrocarbon oil duty. 4. Covers all supplies of natural gas including, for example, those purchased direct from onshore/offshore gas fields. Respondents purchasing more than one type of supply (tariff, firm contract and interruptible contract) are treated as separate entities in respect of each type of supply. 5. Prices by type of supply cover consumers of all sizes. First quarter 1989 data, in pence per therm, are: Firm—28.53, Interruptible—16.49, Tariff—32.92. Data prior to 1989 are not available. 6. No further details of prices can be given owing to the small number of respondents purchasing this fuel. 7. Excludes breeze and blast furnace supplies. 8. Derived from prices reported by nine main oil marketing companies and relate to average net prices realised on medium sixed new contracts or contracts renewed at a changed price.

# Notes to users of Table 25

The review of the survey from which the prices in the above table are derived has now been completed. Copies of the review can be obtained from Margaret Gibbs, Room 3.3.13, 1 Palace Street, London SW1E 5HE (Telephone 071-238 3566).

TABLE 26. Average prices of fuels purchased by the major UK electricity generating companies¹ and by British Gas

		Major electricity generating companie	es¹	British Gas
	Coal <sup>2</sup>	Oil <sup>3</sup>	Gas <sup>4</sup>	Natural gas⁵
	£ per tonne	£ per tonne	pence per therm	pence per therm
1986 1987 1988 1989 1990	46.23 43.76 47.11 45.81 43.77	79.60 74.63 54.58 61.19 54.82	26.85 21.54 17.88 19.49	15.32 1986/ 14.00 1987/ 14.66 1988/ 15.48 1989/ 16.85 1990/
1990 1st quarter 2nd quarter 3rd quarter 4th quarter	44.60 42.72 43.55 44.21	63.20 41.56 51.96 84.04		15.50 16.20 15.33 17.97
1991 1st quarter 2nd quarter 3rd quarter p	42.18 43.12 42.61	63.71 56.12 r 52.21 r		18.20 18.17 18.10

<sup>1.</sup> See definitions below Table 29. 2. Includes slurry. 3. Includes oil for burning, for gas turbines and for internal combustion engines (other than for use in road vehicles). Excludes any natural gas liquids burnt at Peterhead power station. 4. From 1990 gas prices are not available for reasons of confidentiality. 5. Quarterly figures are estimates. The prices exclude the Government's levy on indigenous supplies. The Gas Levy Act 1981 imposed this with effect from 1 April 1980. Including this levy, the average prices were as follows:

	pence per thern
1986/87	17.85
1987/88	16.37
1988/89	16.67
1989/90	17.26
1990/91	18.19

TABLE 27. Fuel	price indices f	or the indust	rial sector	1					1985	=100
	Coal <sup>2</sup>	Heavy fuel oil <sup>2</sup>	Ga	as³	Elect	ricity³	Tota	l fuel		
	Current fu	el price index nu	mbers							
1986 1987 1988 1989 1990 Per cent change	95 91 81 79 81 +3	48 51 38 41 45 +9		87 82 78 76 77 +2	10	01 98 03 11		83 81 78 81 82 +2		
			Not seasonally adjusted	Seasonally	Not seasonally adjusted	Seasonally	Not seasonally adjusted	Seasonally adjusted		
1990 1st quarter 2nd quarter 3rd quarter 4th quarter	82 80 82 81	46 40 41 53	80 77 72 79	76 77 76 78	121 104 103 115	114 107 108 109	88 78 77 87	84 80 80 84		
991 1st quarter 2nd quarter 3rd quarter Per cent change	82 79 79 -4	44 36 38 -9	85 79 71 <i>-2</i>	81 79 75 <i>-2</i>	115 110 110 +7	111 114 116 +7	86 80 78 +2	84 82 82 +2		
	Fuel price in	ndex numbers rel	ative to the G	DP deflat	or				GDP deflator	PPI <sup>5</sup>
986 987 988 989 990 Per cent change	92 84 70 64 62 -4	46 47 33 33 34 +2		84 76 68 61 58 -5		98 90 89 90 84 -6		80 75 67 66 63 –5	104 109 116 124 132 +7	94 97 102 107 107 -1
			Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted		
990 1st quarter 2nd quarter 3rd quarter 4th quarter	64 62 62 60	36 30 31 39	62 59 54 58	59 59 57 58	94 80 77 85	89 82 81 81	68 60 58 64	65 61 60 62	129 130 133 135	108 108 106 105
991 1st quarter 2nd quarter 3rd quarter Per cent change	60 56 56	32 26 26 -15	62 56 50	59 56 53	84 78 77	82 81 81	63 57 55	61 58 58 -5	136 141 142 +7	104 107 105

<sup>1.</sup> Index numbers shown represent the average for the period specified. VAT is excluded. 2. Indices based on a survey of the prices of fuels delivered to industrial consumers in Great Britain only as shown in Table 25. 3. Indices based on the average unit value of sales to industrial consumers. 4. GDP deflator at market prices and seasonally adjusted. 5. PPI of materials.

# Note on fuel price indices (Tables 27 and 28)

Since February 1990 both the domestic and industrial fuel price index numbers have been shown relative to the gross domestic product (GDP) deflator, which has been used as an indicator of how prices in general have moved. The previous index numbers, with domestic price indices shown relative to the RPI excluding fuels, and the industrial price indices relative to the PPI of materials, have now been discontinued. The two comparators (the RPI excluding fuels and the PPI of materials) are still published in the tables so that users can calculate the old indices if they wish. More accurate figures can be obtained on request from Margaret Gibbs, Room 3.3.13, 1 Palace Street, London SW1E 5HE. (Telephone 071-238 3566).

	Coal and coke	Gas	Electricity	Heating oils <sup>2</sup>	Fuel and light	Petrol and oil	Fuel, light, petrol and oil		
	Current fuel pr	ice index num	nbers						
1986 1987 1988 1989 1990 1991 p Per cent change	103 104 105 107 111 118 +6	102 101 102 106 113 121 +7	102 107 115 124 137 +10	86 80 72 78 102 98	101 101 103 109 118 127	87 88 87 93 104 112	95 96 97 103 112 121		
1990 2nd quarter 3rd quarter 4th quarter	107 108 116	114 115 116	123 128 128	84 100 130	+8 116 120 123	101 108 112	+8 110 115 119		
1991 1st quarter 2nd quarter 3rd quarter 4th quarter p Per cent change	118 114 116 122 +6	119 121 123 123 +6	128 135 142 142 +11	112 93 92 93 –28	123 125 129 130 +6	103 115 115 114 +2	114 121 123 123 +4		
	Fuel price inde	x numbers re	lative to the GDP	deflator				GDP deflator <sup>3</sup>	RPI (excl. fuels)

	Fuel price index	numbers relat	tive to the GDP o	leflator				GDP deflator <sup>3</sup>	RPI (excl. fuels) <sup>4</sup>
1986	100	98	99	83	98	84	92	104	104
1987	96	93	94	73	93	81	88	109	109
1988	91	88	93	62	89	75	83	116	115
1989	86	86	93	63	88	75	83	124	124
1990	84	86	94	77	89	79	85	132	135
1991 p	83	86	97	69	90	79	86	141	143
Per cent change		_	+3	-10	+1	+1	+1	+7	+6
1990 2nd quarter 3rd quarter 4th quarter	82 81 86	87 87 86	94 96 95	65 75 96	89 90 91	78 81 83	84 86 88	130 133 135	135 137 139
1991 1st quarter 2nd quarter 3rd quarter	87 81 81	87 86 86	94 96 100	82 66 65	90 89 91	75 81 81	84 86 87	136 141 142	140 143 143
Per cent change	85 -1	85 -1	99 +4	65 <i>–33</i>	90 -1	79 -4	86 -2	144 +6	145 +4

1. Index numbers shown represent the average for the period specified. 2. Bottled gas and oil fuel. 3. GDP deflator (market prices, seasonally adjusted). The GDP deflator for the fourth quarter of 1991 has been estimated using the change in the RPI (all items).4. RPI (all items other than fuels).

# TABLE 29. Typical retail prices of petroleum products and a crude oil price index

			Motor spirit <sup>1</sup>		Derv¹	Standard Grade	Gas oil14	Crude oil acquired
		2 star	4 star	Unleaded <sup>2</sup>		burning Oil <sup>13</sup>		by refineries5
				Pence p	er litre			1985 = 100
1986	January	40.81	41.63	_	41.13	19.48	19.47	82.0
1987	January	37.57	38.42		35.00	13.52	14.70	50.7
1988	January	35.98	36.79		33.94	11.97	12.29	44.8
1989	January	36.36	37.14	36.02	34.17	11.41	11.15	41.8
1990	January		40.92	38.37	39.21	15.45	15.46	57.5
1990	August		46.82	43.89	40.26	15.39	14.93	57.1
	September		50.64	47.71	42.67	18.31	16.94	70.6
	October		51.45	48.52	45.85	23.91	19.66	84.3
	November		47.53	44.55	44.52	20.64	18.11	84.1
	December		44.28	41.29	43.70	17.67	17.35	76.3
1991	January		45.13	42.14	43.31	17.52	17.13	65.9
	February		43.62	40.61	43.19	16.68	15.39	58.6
	March		44.56	41.53	40.18	13.54	13.40	53.0
	April		49.03	45.41	43.41	12.49	12.16	51.6
	May		50.16	46.64	43.64	13.15	12.91	54.6
	June		50.04	46.53	43.64	13.38	13.05	51.8
	July		50.65	47.08	44.26	13.67	12.97	52.8
	August		50.23	46.71	44.17	13.33	12.71	53.6
	September		50.11	46.58	44.24	13.64	13.01	55.9
	October		49.99	46.48	45.10	14.18	13.66	56.4
	November		49.69	46.18	46.05	14.33	14.25	58.1
	December		48.39	44.86	44.50	13.43	13.16	52.4 p

These approximate estimates are generally representative of prices paid on or about the 15th of the month. Estimates are based on information provided by oil marketing companies. The January 1989 price for unleaded motor spirit is based on information from fewer companies and is therefore less reliable than the other estimates given. 2. Price for premium unleaded with minimum octane rating of 95. 3. These estimates are for deliveries of up to 1,000 litres; such deliveries are zero rated for VAT. 4. These estimates are for deliveries of 2,000 to 5,000 litres; such deliveries are zero rated for VAT. 5. Price index for supplies received by refineries in the UK from both indigenous and imported sources. It represents the average for the month calculated in sterling on a cif basis.

### **DEFINITIONS AND ABBREVIATIONS**

National Power, PowerGen, Nuclear Electric, National Grid Company, ScottishPower, Hydro-Electric, Scottish Major generating companies — Nuclear, Northern Ireland Electricity, Midlands Electricity and South Western Electricity.

Other generating companies — Industrial establishments, including those in the energy sector (other than major generating companies), and transport undertakings generating 1 Gigawatt hour or more a year.

BCC	<del></del> -	British Coal Corporation	BNF	_	British Nuclear Fuels plc
CHP	-	Combined heat and power	GDP	_	Gross domestic product
LDF	_	Light distillate feedstock	NGL	_	Natural gas liquids
OTS	_	Overseas Trade Statistics of the United Kingdom	RPI	_	Retail prices index

PPI Producer price index United Kingdom Continental Shelf UKCS United Kingdom Atomic Energy Authority UKAEA

VAT Value added tax

# Supplement: Domestic energy consumption on space and water heating

In the financial year 1990-1 approximately 83% of the 17.1 billion therms of energy consumed in the domestic sector was used for space and water heating. (Space heating 60%, water heating 23%). A significant proportion of the energy used for water heating was supplied via hot water cylinders connected to central heating boilers. The market shares for each fuel used in space and water heating are shown in Table 1.

Table 1. Domestic energy consumption on space and water heating, 1990-91

	Gas	Oil	Coal and other solid fuels	Electricity	Total
Billion therms	10.0	1.0	1.9	1.2	14.1
Percentage	70.9	7.1	13.5	8.5	100

Approximately 70% of the 14.1 billion therms of energy used in space and water heating was consumed in the last two (coldest) quarters of the financial year.

### Central heating

In March 1991 approximating 16.8 million homes (75%) in Great Britain used central heating systems. The breakdown by type of fuel is shown in Table 2.

Table 2. Homes with central heating systems by fuel type in March 1991.

	Gas	Solid fuel	Electricity	Oil/Bottled gas	Communal	Total
Number of homes (millions)	12.6	1.2	2.0	0.9	0.2	16.8
Percentage of all homes with central heating	75.1	7.2	11.9	4.8	1.2	100

Approximately three quarters of the central heating systems installed in Great Britain were gas fired (40% wall hung, 27% floor standing, 25% back boilers and 7% warm air systems). Storage heaters accounted for 63% of the electrical systems, the balance comprising a mixture of direct and storage systems. Most of the solid fuel installations appear to comprise room heaters or open fires; boilers account for only about 20%.

### Trends in the market for central heating installation

Between 1970 and 1991 the market for central heating has risen from 34% to over 77% of all homes in Great Britain. (See details in Table 3). This is equivalent to an average compound rate of growth of 5% per annum. (The rate of growth has slackened in recent years as the market approaches saturation). Practically all the increase in the market for central heating has been absorbed by gas fired installations which rose from 19.6% of homes in 1970 to 58.2% of homes in 1991. This expansion has been associated with the discovery, development and marketing of natural gas in Great Britain.

Ownership of central heating tends to be higher amongst owner occupiers (82%) than council tenants (71%); the lowest level of ownership (54%) is amongst private tenants.

Table 3. Percentage of homes using each fuel for heating

				Pe	ercentage
	1970	1980	1984	1988	1991
Homes using central heating					
Solid fuel	4.8	6.8	6.8	6.7	5.6
Gas	19.6	38.4	45.2	53.1	58.2
Electricity					
Storage	3.4	4.3	4.0	4.6	5.8
Mixed	1.1	1.3	0.4	1.1	1.4
Direct	1.8	2.0	2.7	1.8	2.0
Oil (1)	3.3	4.0	2.8	2.9	3.4
Communal	1.3	1.0	1.0	1.3	0.9
TOTAL	34.0	57.9	63.0	71.5	77.3
Homes using fires/heaters		400	0.0		
Solid fuel	20.5	10.9	8.9	5.3	4.1
Gas	29.1	20.7	21.6	18.6	14.8
Electricity	12.6	8.1	5.5	3.7	3.1
Paraffin (1)	2.5	1.5	1.1	0.8	0.6
Other	0.0	1.0	0.0	0.0	0.0
TOTAL	64.7	42.1	37.0	28.5	22.7
All homes					
Solid fuel	25.3	17.7	15.7	12.0	9.7
Gas	48.7	59.1	66.8	71.8	73.0
	18.9	15.7	12.7	11.2	12.3
Electricity			3.9		
Oil (1)	5.8	5.5		3.7	4.1
Other	1.3	2.0	1.0	1.3	0.9
TOTAL	100.0	100.0	100.0	100.0	100.0

(1) Including liquefied petroleum gas

Source: General Household Survey (1970 and 1980), G and A Home Audit (1984 to 1991)

### Sales of gas central heating boilers

In 1991 approximately 750,000 boilers were sold for new and replacement central heating installations. Conventional boilers accounted for around 570,000 units and combi boilers for 180,000 units. Sales of condensing boilers are still relatively small but in recent months suppliers have noticed an increase in interest.

### Data collection

G & A Audit is a continuous quarterly survey of households in Great Britain covering consumer acquisitions of high value goods and services. Each year with data collection in early April, the Home Heating Survey forms part of the main G & A Audit Survey. The total sample used for Home Heating consists of 28,000 households. In any single year 21,000 households are replaced by new additions. The Survey covers main and secondary forms of heating appliance and fuels used over the most recent two winters (October to March). The Survey has a multi-layered sample located in 750 sample points. The data from approximately half of the 28,000 sample is collected by personal interview, (all of whom are new additions to the Survey) the remainder by self-completion. Weighting techniques are applied to the sample to gross up to the known total household population for Great Britain.

Enquiries about the data in, or subscriptions to, this bulletin should be addressed to: Economics & Statistics Division, (attention: David Clark) Room 3.3.26, Department of Energy, 1 Palace Street, London SW1E 5HE (tel: 071-238 3606). Suggestions about changes to the content or scope of the bulletin should be sent to the same address, (attention Mike Ward).

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