

## DEPARTMENT OF ENERGY

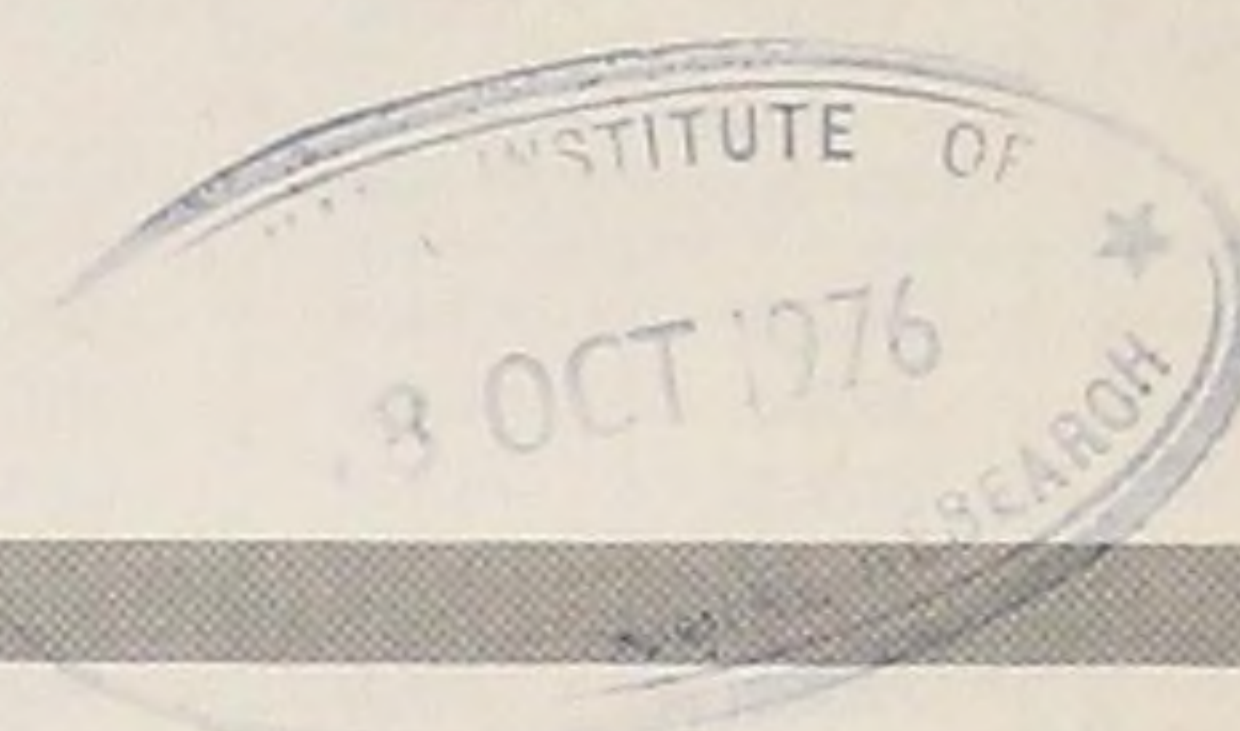
## ENERGY

## TRENDS

## A Statistical Bulletin

SEPTEMBER 1976

# Consumption up despite weather



## Total Energy

### Consumption slightly higher

Total inland energy consumption on a primary fuel input basis in the three month period May to July was about 1 per cent higher than in the corresponding period of 1975. Coal consumption was up by about 1½ per cent while in contrast, petroleum was down by nearly 1½ per cent. After temperature correction and seasonal adjustment, total energy consumption was up by over 3 per cent.

Rather surprisingly, while most of the country has experienced the worst drought in 200 years, rainfall in the catchment area of the North of Scotland Hydro Electric Board where most of the hydro electric capacity is located has been a little higher than average and supplies of hydro-electricity were as a result nearly a third higher than last year.

Natural gas consumption during the year to date was 9 per cent higher than in the comparable period of last year. However, almost the whole of the increase occurred in the first four months of the year and consumption in the very warm period May to July was only marginally greater than a year ago.

## Coal

### Overall consumption higher

Total consumption of coal during the three month period June to August was about 2½ per cent higher than in the corresponding period of 1975. Power station and coke oven use increased by about 7½ and 8½ per cent respectively, but in all other sectors the declining trend evident in recent months continued.

Coal stocks held at power stations rose by half a million tons during August and now total just under 20 million tons. Stocks at coke ovens followed the normal seasonal pattern in that sector and declined by nearly 400 thousand tons, NCB stocks fell by 300 thousand tons and there was an overall drop of 177 thousand tons during the month.

## Gas

### North Sea Offtake lower

During the period June to August total supplies of natural gas were about 3 per cent lower than in the corresponding period of 1975. Offtake from the North Sea was reduced by about 4½ per cent and although the use of imported Algerian methane increased by nearly a half, the quantity involved is very small in relation to total requirements. Gas sent out in the three months June to August was also down but by less than 2 per cent.

## Electricity

### Further Small Increase in demand

Total electricity supplied in the three months May to July was about 1½ per cent greater than in the corresponding period of last year. In the latest month of the period alone, the increase was nearly 3½ per cent and is a reflection of increasing demand by industrial consumers. The nuclear contribution, which was over a third higher than last year, is partly the result of additional supplies of electricity flowing from the first two public supply Advanced Gas Cooled Reactors. Although not yet fully operational, these stations have been producing electricity in pre-commissioning operations for several months.

## Petroleum

### Lighter products in demand

Total inland deliveries of petroleum products in the May to July period were about 1 per cent lower than in the corresponding period of last year. However, with the exception of the heavier products, fuel oil, gas/diesel oil and bitumen, all products were in greater demand than a year ago. Of the principal products, naphtha deliveries increased by over 8 per cent and indicate a substantial degree of increased activity in the petro-chemical industry.

Production of North Sea crude oil in July was lower than in the previous month because of work on modifications to production platforms. Nevertheless, production in the three month period May to July was nearly 2½ million tons and this is reflected in the fall of over 7 per cent in net arrivals of crude oil from overseas.

## Supplementary Data

### Fuel Prices

Data on the prices of fuels used by industry during the second quarter of 1976 are now available. For the first time since these series were introduced, a drop in price is shown by every fuel. This is probably partly a seasonal effect and partly a reflection of generally depressed demand earlier in the year.

This Bulletin is prepared by the Economics and Statistics Division of the Department of Energy. Further copies of the Bulletin may be obtained from:

Information Division, Department of Energy,  
Room 1674, Thames House South,  
Millbank, London SW1P 4QJ.

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 Table 1. Monthly figures relate to four week periods except where otherwise indicated.

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.

All figures relate to the United Kingdom unless otherwise indicated.

Explanatory notes on the definitions and concepts used in the tables and on the relationship between some of the main series are given in the Supplement to the March issue of *Energy Trends* and on the first page of the August issue. Extra copies of that Supplement may be obtained from the Department of Energy.

### Symbols used in the tables

.. not available.  
 — nil or less than half the final digit shown.  
 \* five-week period.  
 p provisional.

# Total energy

TABLE 1. Inland energy consumption: primary fuel input basis

	Total	Coal <sup>1</sup>	Petroleum <sup>2</sup>	Natural gas	Nuclear electricity	Hydro-electricity	Total	Coal <sup>1</sup>	Petroleum <sup>2</sup>	Natural gas	Nuclear electricity	Hydro-electricity
	Million tons of coal or coal equivalent						Million metric tonnes of oil or oil equivalent					
1973	347.9	130.8	161.6	43.6	9.9	2.0	207.9	78.2	96.6	26.0	5.9	1.2
1974	332.2	116.0	150.1	52.1	11.9	2.1	198.6	69.3	89.7	31.2	7.1	1.3
1975	319.7	118.1	134.4	54.5	10.8	1.9	191.1	70.6	80.3	32.6	6.4	1.2
Per cent change	–3.8	+1.8	–10.5	+4.7	–9.7	–7.2	–3.8	+1.8	–10.5	+4.7	–9.7	–7.2
1975 Jan-July	188.4	70.8	78.8	31.5	6.2	1.1	112.6	42.3	47.1	18.8	3.7	0.7
1976 Jan-July p	189.5	70.5	76.6	34.3	6.9	1.2	113.3	42.1	45.8	20.5	4.2	0.7
Per cent change	+0.6	–0.5	–2.7	+9.0	+12.0	+8.7	+0.6	–0.5	–2.7	+9.0	+12.0	+8.7
1975 May	23.4	9.1	9.4	4.1	0.7	0.1	14.0	5.4	5.7	2.4	0.4	0.1
June*	25.2	9.9	11.4	3.1	0.7	0.1	15.0	5.9	6.8	1.8	0.5	—
July	19.2	7.4	8.3	2.8	0.6	0.1	11.5	4.5	5.0	1.6	0.4	—
Total	67.8	26.4	29.1	10.0	2.0	0.3	40.5	15.8	17.5	5.8	1.3	0.1
1976 May	23.2	9.0	9.0	4.2	0.9	0.1	13.8	5.3	5.4	2.5	0.5	0.1
June*	25.7	10.1	11.4	3.1	1.0	0.1	15.3	6.0	6.8	1.8	0.6	0.1
July p	19.7	7.7	8.4	2.7	0.8	0.1	11.8	4.6	5.1	1.6	0.5	—
Total	68.6	26.8	28.8	10.0	2.7	0.3	40.9	15.9	17.3	5.9	1.6	0.2
Per cent change	+1.1	+1.5	–1.3	+0.6	+30.4	+28.5	+1.1	+1.5	–1.3	+0.6	+30.4	+28.5

Seasonally adjusted and temperature corrected<sup>3</sup> (annual rates)

1975 Jan-July	325.9	123.0	137.6	53.1	10.4	1.8	194.8	73.5	82.3	31.7	6.2	1.1
1976 Jan-July p	330.1	124.2	135.4	56.6	11.7	2.2	197.3	74.2	80.9	33.9	7.0	1.3
Per cent change	+1.3	+1.0	–1.7	+6.7	+13.4	+20.5	+1.3	+1.0	–1.7	+6.7	+13.4	+20.5
1975 May	319.4	120.9	133.9	53.5	9.4	1.7	190.9	72.3	80.0	32.0	5.6	1.0
June*	319.5	117.8	138.7	51.7	9.8	1.5	190.9	70.4	82.8	30.9	5.9	0.9
July	317.9	117.3	137.4	51.6	9.9	1.7	190.0	70.1	82.1	30.9	5.9	1.0
Average	319.0	118.6	136.8	52.2	9.7	1.7	190.6	70.9	81.7	31.2	5.8	1.0
1976 May	323.5	121.4	133.2	54.4	12.1	2.4	193.3	72.6	79.6	32.5	7.2	1.4
June*	331.4	124.4	141.1	51.1	12.4	2.4	198.1	74.4	84.3	30.6	7.4	1.4
July p	332.9	128.2	139.6	50.2	13.4	1.5	198.9	76.6	83.4	30.0	8.0	0.9
Average	329.4	124.6	138.2	51.9	12.6	2.1	196.9	74.5	82.6	31.0	7.5	1.3
Per cent change	+3.3	+5.1	+1.0	–0.7	+29.6	+29.8	+3.3	+5.1	+1.0	–0.7	+29.6	+29.8

1. Consumption by fuel producers plus colliery disposals to final users, plus (for annual figures only) net foreign trade and stock change in other solid fuels. 2. Refinery throughput of crude oil plus net foreign trade and stock change in petroleum products less deliveries of non energy products. 3. Only coal and petroleum are temperature corrected.

## Energy: Total inland consumption (primary fuel input basis)<sup>1</sup>

Million tons  
coal equivalent

Million tonnes  
oil equivalent

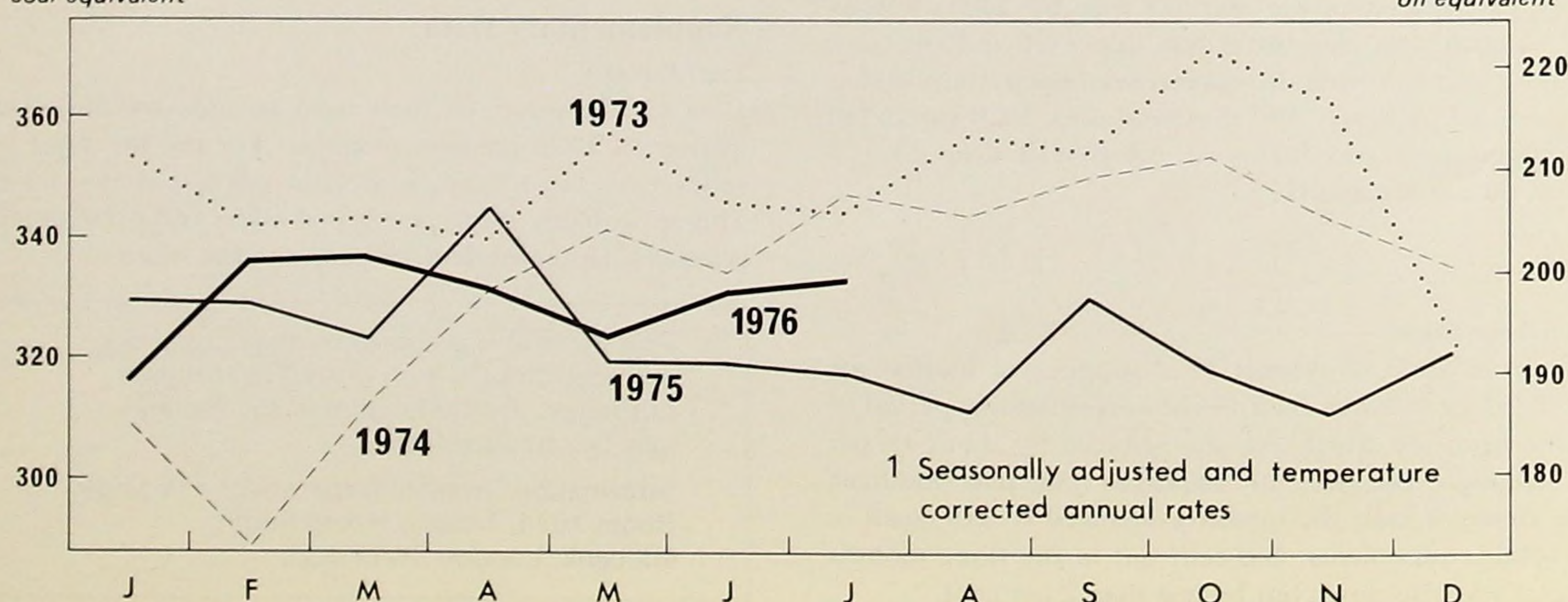


TABLE 2. Supply and use of fuels

Million therms

	1974	1975	Per cent change	1974				1975				1976p	Per <sup>1</sup> cent change
				1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	
PRIMARY FUELS AND EQUIVALENTS:													
Production of primary fuels													
Coal	27,245	31,430	+15.4	4,069	7,797	7,024	8,355	8,482	7,904	6,602	8,442	7,941	−6.4
Petroleum <sup>2</sup>	174	665	(+)	53	39	31	51	56	57	137	415	564	(+)
Natural gas	13,040	13,578	+4.1	3,950	2,844	2,279	3,967	4,193	2,980	2,191	4,214	4,774	+13.9
Primary electricity	3,279	2,982	−9.1	1,014	741	657	867	944	617	580	841	932	−1.3
Total	43,738	48,655	+11.2	9,086	11,421	9,991	13,240	13,675	11,558	9,510	13,912	14,211	+3.9
Arrivals. Petroleum <sup>3</sup>	54,067	44,216	−18.2	13,975	14,398	12,300	13,394	11,378	11,200	10,521	11,117	10,967	−3.6
Other	1,171	1,616	+38.0	273	286	289	323	389	417	380	430	325	−16.5
Shipments	7,628	7,243	−5.0	1,340	2,007	2,230	2,051	1,730	1,638	1,993	1,882	1,724	−0.3
Bunkers	1,954	1,418	−27.4	477	528	499	450	375	345	354	344	354	−5.6
Stock change <sup>4</sup>	−119	−1,123	..	+2,229	−2,440	−617	+709	+1,282	−1,313	−1,174	+82	+1,270	..
Non energy use	5,233	4,106	−21.5	1,366	1,415	1,306	1,146	1,055	956	960	1,135	1,132	+7.3
Statistical difference <sup>5</sup>	−203	−176	..	−219	+66	−41	−9	−168	+17	−13	−12	+91	..
Total primary <sup>6</sup> energy input	83,839	80,421	−4.1	22,161	19,781	17,887	24,010	23,396	18,940	15,917	22,168	23,654	+1.1
Conversion losses etc. <sup>7</sup>	25,550	24,547	−3.9	6,599	5,913	5,446	7,592	6,995	5,693	4,954	6,905	6,864	−1.9
FINAL CONSUMPTION BY USER:													
Iron and steel industry													
Coal	99	72	−27.3	23	34	16	26	25	18	10	19	5	−80.0
Other solid fuel <sup>8</sup>	2,681	2,374	−11.5	574	716	718	673	746	575	482	571	614	−17.7
Other coal-derived fuels <sup>9</sup>	374	372	−0.5	76	102	92	104	107	97	76	92	99	−7.5
Gas <sup>10</sup>	395	371	−6.1	110	102	86	97	101	91	79	100	108	+6.9
Electricity	345	344	−0.3	81	87	84	93	94	84	75	91	100	+6.4
Petroleum	1,648	1,357	−17.7	484	366	347	451	449	334	244	330	354	−21.2
Total	5,542	4,890	−11.8	1,348	1,407	1,343	1,444	1,522	1,199	966	1,203	1,280	−15.9
Other industries													
Coal	2,795	2,458	−12.1	514	802	733	746	660	613	528	657	564	−14.5
Other solid fuel <sup>8</sup>	193	164	−15.0	47	42	53	51	47	47	40	30	41	−12.8
Other coal-derived fuels <sup>9</sup>	63	78	+23.8	10	18	18	17	17	23	22	16	17	—
Gas <sup>10</sup>	4,692	4,701	+0.2	1,230	1,148	1,041	1,273	1,295	1,091	1,007	1,308	1,457	+12.5
Electricity	2,247	2,234	−0.6	503	573	553	618	589	542	510	593	619	+5.1
Petroleum	8,264	7,426	−10.1	2,451	1,879	1,567	2,367	2,140	1,770	1,299	2,217	2,269	+6.0
Total	18,254	17,061	−6.5	4,755	4,462	3,965	5,072	4,748	4,086	3,406	4,821	4,967	+4.6
Transport sector													
Coal	24	19	−20.8	7	5	4	8	6	3	3	7	7	+16.7
Electricity	92	99	+7.6	21	23	23	25	26	25	23	25	27	+3.8
Petroleum	12,295	12,143	−1.2	2,744	3,126	3,289	3,136	2,771	3,104	3,225	3,043	2,894	+4.4
Total	12,411	12,261	−1.2	2,772	3,154	3,316	3,169	2,803	3,132	3,251	3,075	2,928	+4.5
Domestic sector													
Coal	3,957	3,381	−14.6	775	1,070	952	1,160	1,013	903	699	766	932	−8.0
Other solid fuel <sup>8</sup>	1,102	962	−12.7	233	290	282	297	270	231	260	201	284	+5.2
Gas <sup>10</sup>	5,384	5,891	+9.4	1,979	1,011	696	1,698	2,329	1,119	615	1,828	2,403	+3.2
Electricity	3,161	3,035	−4.0	1,036	674	536	915	1,037	678	484	836	987	−4.8
Petroleum	1,482	1,434	−3.2	514	279	188	501	473	306	194	461	518	+9.5
Total	15,086	14,703	−2.5	4,537	3,324	2,654	4,571	5,122	3,237	2,252	4,092	5,124	—
Other final users <sup>11</sup>													
Coal	669	490	−26.8	189	142	125	213	129	123	78	160	172	+33.3
Other solid fuel <sup>8</sup>	276	219	−20.7	74	72	65	65	64	49	63	43	55	−14.1
Gas <sup>10</sup>	1,269	1,347	+6.1	433	276	173	387	472	310	171	394	570	+20.8
Electricity	1,447	1,548	+7.0	362	323	307	455	460	347	302	439	479	+4.1
Petroleum	3,335	3,355	+0.6	1,092	708	493	1,042	1,081	764	474	1,036	1,215	+12.4
Total	6,996	6,959	−0.5	2,150	1,521	1,163	2,162	2,206	1,593	1,088	2,072	2,491	+12.9
Total final users	58,289	55,874	−4.1	15,562	13,868	12,441	16,418	16,401	13,247	10,963	15,263	16,790	+2.4
FINAL CONSUMPTION BY FUEL:													
Coal	7,544	6,420	−14.9	1,508	2,053	1,830	2,153	1,833	1,660	1,318	1,609	1,680	−8.3
Other solid fuel <sup>8</sup>	4,252	3,719	−12.5	928	1,120	1,118	1,086	1,127	902	845	845	994	−11.8
Other coal-derived fuels <sup>9</sup>	437	450	+3.0	86	120	110	121	124	120	98	108	116	−6.5
Gas <sup>10</sup>	11,740	12,310	+4.9	3,752	2,537	1,996	3,455	4,197	2,611	1,872	3,630	4,538	+8.1
Electricity	7,292	7,260	−0.4	2,003	1,680	1,503	2,106	2,206	1,676	1,394	1,984	2,212	+0.3
Petroleum	27,024	25,715	−4.8	7,285	6,358	5,884	7,497	6,914	6,278	5,436	7,087	7,250	+4.9
Total all fuels	58,289	55,874	−4.1	15,562	13,868	12,441	16,418	16,401	13,247	10,963	15,263	16,790	+2.4

1. Per cent change on the corresponding period of the previous year. 2. Crude petroleum and natural gas liquids. 3. Crude petroleum, process oils and petroleum products. 4. Stock fall (+) stock rise (-). 5. Supply greater than recorded demand (-). 6. Thermal equivalent of total inland energy consumption in Table 1. A more detailed analysis of the annual figures is shown in the Digest of United Kingdom Energy Statistics 1976 Tables 8 and 10. 7. Losses in conversion and distribution and used by fuel industries. 8. Coke and other manufactured solid fuels. 9. Coke oven gas, creosote/pitch mixtures and other liquid fuels derived from coal. 10. Natural gas supplied direct, and town gas. 11. Mainly public administration, commerce and agriculture.

# Coal

TABLE 3. Supply

Thousand tons

	Net inland supply	Production			Net Imports	Imports <sup>2</sup>	Exports <sup>2</sup>	Tonnage lost (deep-mined) <sup>3</sup>	
		Total <sup>1</sup>	Deep-mined	Opencast				Recognised holidays and rest days	Disputes
1973	128,904	129,906	118,140	9,964	-1,002	1,649	2,651	10,313	5,569
1974	110,362	108,707	98,413	9,085	+1,655	3,491	1,836	10,352	15,996
1975	129,505	126,650	115,557	10,249	+2,855	5,003	2,148	12,105	347
Per cent change	+17.3	+16.5	+17.4	+12.8	+72.5	+43.3	+17.0	+16.9	(-)
1975 Jan-Aug	82,698	81,023	74,176	6,509	+1,675	3,289	1,614	9,491	237
1976 Jan-Aug p	79,359	78,040	69,372	7,585	+1,319	2,173	854	10,204	550
Per cent change	-4.0	-3.7	-6.5	+16.5	-21.3	-33.9	-47.1	+7.5	(+)
1975 June*	11,076	10,842	9,793	999	+234	372	138	2,138	35
July	8,965	8,710	7,927	744	+255	415	160	1,611	34
Aug	6,670	6,393	5,687	667	+277	323	46	3,578	14
Total	26,711	25,945	23,407	2,410	+766	1,110	344	7,327	83
1976 June*	10,743	10,616	9,257	1,162	+127	224	97	2,116	31
July	8,515	8,413	7,394	901	+102	276	174	1,585	35
Aug p	6,619	6,452	5,385	919	+167	236	69	3,438	135
Total	25,877	25,481	22,036	2,982	+396	736	340	7,139	201
Per cent change	-3.1	-1.8	-5.9	+23.7	-48.3	-33.7	-1.2	-2.6	(+)

1. Includes an estimate for slurry, etc., recovered and disposed of otherwise than by the National Coal Board.

2. As recorded in the "Overseas Trade Statistics of the United Kingdom". 3. NCB mines only.

TABLE 4. Inland consumption of coal

Thousand tons

	Total inland consumption	Fuel producers					Final users <sup>1</sup>			
		Primary	Secondary				Colliery disposals			
		Collieries	Power stations <sup>2</sup>	Coke ovens	Gas works	Other <sup>3</sup> conversion industries	Industry <sup>4</sup>	Domestic <sup>5</sup>		Other <sup>8</sup>
								House Coal <sup>6</sup>	Other <sup>7</sup>	
1973	131,288	1,359	75,628	21,543	504	3,550	11,890	12,519	1,755	2,540
1974	116,043	1,236	65,967	18,169	105	3,728	10,902	11,848	1,623	2,465
1975	120,303	1,218	73,391	18,783	9	3,999	9,532	9,844	1,609	1,918
Per cent change	+3.7	-1.5	+11.3	+3.4	-91.4	+8.4	-12.6	-16.9	-0.9	-22.2
1975 Jan-Aug	77,507	793	46,442	12,682	7	2,539	6,129	6,689	1,081	1,145
1976 Jan-Aug p	77,284	720	48,321	12,417	5	2,318	5,331	6,105	815	1,252
Per cent change	-0.3	-9.2	+4.0	-2.1	-28.6	-8.7	-13.0	-8.7	-24.6	+9.3
1975 June*	9,895	92	5,598	1,771	-	382	894	908	114	136
July	7,456	77	4,253	1,351	1	289	644	638	116	87
Aug	6,716	55	3,927	1,322	-	288	527	458	67	72
Total	24,067	224	13,778	4,444	1	959	2,065	2,004	297	295
1976 June*	10,137	91	6,058	1,865	-	346	778	768	102	129
July	7,730	68	4,585	1,470	1	241	619	567	111	68
Aug p	6,841	47	4,145	1,488	-	223	386	417	62	73
Total	24,708	206	14,788	4,823	1	810	1,783	1,752	275	270
Per cent change	+2.7	-8.0	+7.3	+8.6	-	-15.5	-13.7	-12.6	-7.4	-8.5

1. Disposals by collieries and opencast sites. 2. Public supply and railway and transport power stations. 3. Low temperature carbonisation & patent fuel plants. 4. Prior to October 1973 the figures relate to actual consumption. 5. Prior to April 1973 the figures relate to merchants' disposals to the domestic market. 6. Including miners' coal. 7. Anthracite, dry steam coal and imported naturally smokeless fuels. 8. Mainly public administration & commerce.

TABLE 5. Stocks of coal<sup>1</sup> at end of period: Great Britain

Thousand tons

	Total	Distributed					Undistributed		
		Total distributed stocks	Power stations	Coke ovens	Gas works	Other	Total undistributed stocks	Collieries	Opencast sites and central stocking grounds
1970	18,729	11,627	9,575	1,434	276	342	7,102	5,266	1,836
1971	28,211	17,982	15,712	1,777	72	421	10,229	6,973	3,256
1972	29,979	19,045	16,791	1,890	50	314	10,934	7,558	3,376
1973	27,445	16,766	14,537	1,937	27	265	10,679	7,529	3,150
1974	21,462	15,577	13,414	1,822	3	338	5,885	3,946	1,939
1975	30,666	20,216	17,668	2,296	2	250	10,450	8,767	1,683
1975 June	25,300	18,885	16,371	2,242	2	270	6,415	4,906	1,509
July	26,768	20,169	17,662	2,209	2	296	6,599	5,135	1,464
Aug	26,923	20,041	17,931	1,870	1	239	6,882	5,354	1,528
1976 June	32,566	21,192	18,410	2,541	1	240	11,374	9,824	1,550
July	33,382	22,358	19,450	2,667	-	240	11,024	9,475	1,549
Aug p	33,205	22,482	19,955	2,286	1	240	10,723	9,105	1,618
Absolute change: In latest month	-177	+124	+505	-381	-	-	-301	-370	+69
On a year ago	+6,282	+2,441	+2,024	+416	-	+1	+3,841	+3,751	+90

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

TABLE 6. Colliery manpower and productivity at NCB mines

	Wage earners on colliery books <sup>1</sup>		Recruitment	Wastage	Absence percentage <sup>2</sup>			Average output per manshift <sup>3</sup>	
	Total	Underground			Total	Voluntary	Involuntary	Overall	At the face
	Thousands	Number	Per cent	Cwt.					
1970	283	221	25,109	41,581	19.8	4.5	15.3	44.10	141.80
1971	279	218	28,010	32,309	18.1	4.4	13.7	43.94	143.08
1972	266	210	13,255	26,114	16.6	3.9	12.7	43.60	144.35
1973	245	193	17,402	37,961	18.0	4.1	13.9	45.00	150.00
1974	246	194	26,436	25,133	16.3	4.1	12.2	42.83	..
1975	245	194	21,347	22,451	16.2	4.0	12.2	44.92	155.85
1975 June*	249	197	1,352	2,274	14.9	3.3	11.6	43.48	154.99
July	248	196	593	1,957	15.3	3.6	11.7	42.06	149.32
Aug	248	196	2,042	1,609	14.5	3.3	11.2	39.37	147.56
1976 June*	243	193	1,573	2,012	15.4	3.1	12.3	42.56	151.29
July	242	192	999	1,777	16.3	3.4	12.9	40.62	144.14
Aug p	242	192	1,807	1,347	14.9	2.9	12.0	39.12	148.98

1. At end of period. 2. The definition was changed from 1973. 3. Excluding capital working and tip coal.

## Gas

TABLE 7. Sources of supply and send-out by the public gas supply system

	Natural gas supply			Other primary fuel used		Gas sent out		
	Total into system	Source <sup>1</sup>		Coal	Oil <sup>2</sup>	Total	Town gas	Natural gas for direct supply
		Indigenous	Imported					
	Million therms			Thousand tons		Million therms		
1973	10,916	10,639	277	503	2,286	11,620	2,434	9,186
1974	13,102	12,861	241	105	1,256	13,451	1,598	11,853
1975	13,692	13,367	325	9	579	13,822	752	13,070
Per cent change	+4.5	+3.9	+35.0	(-)	-53.9	+2.8	-53.0	+10.3
1975 Jan-Aug	8,561	8,373	188	7	482	8,654	582	8,072
1976 Jan-Aug p	9,092	8,804	288	5	163	9,104	180	8,924
Per cent change	+6.2	+5.1	+53.2	-27.6	-66.2	+5.2	-69.1	+10.6
1975 June *	927	898	29	—	24	922	44	878
July	641	626	15	—	13	636	24	612
Aug	590	572	18	—	18	583	20	563
Total	2,158	2,096	62	—	55	2,141	88	2,053
1976 June *	897	868	29	1	9	896	11	885
July	596	571	25	—	9	612	6	606
Aug p	597	560	37	—	10	597	6	591
Total	2,090	1,999	91	1	28	2,105	23	2,082
Per cent change	-3.2	-4.6	+46.8	+9.1	-49.1	-1.7	-73.9	+1.4

1. Figures differ from production and imports respectively because of stock changes and small quantities not entering the public supply system.

2. Mainly naphtha (LDF), liquid petroleum gases and refinery gases.

TABLE 8. Sales of gas by the public supply system

Million therms

	Total	Power stations <sup>1</sup>	Iron and steel industry	Other industries	Domestic	Other <sup>2</sup>
1970	5,780	60	244	1,172	3,542	762
1971	7,520	263	343	2,118	3,930	866
1972	9,787	630	437	3,215	4,509	996
1973	10,729	285	396	4,150	4,815	1,083
1974	12,668	985	395	4,635	5,384	1,269
1975	13,112	858	371	4,645	5,891	1,347
Per cent change	+3.5	-12.9	-6.1	+0.2	+9.4	+6.1
1974 1st quarter	4,092	355	110	1,215	1,979	433
2nd quarter	2,742	221	102	1,132	1,011	276
3rd quarter	2,181	198	86	1,028	696	173
4th quarter	3,653	211	97	1,260	1,698	387
1975 1st quarter	4,390	207	101	1,281	2,329	472
2nd quarter	2,798	200	91	1,078	1,119	310
3rd quarter	2,067	208	79	994	615	171
4th quarter	3,857	243	100	1,292	1,828	394
1976 1st quarter p	4,765	240	108	1,444	2,403	570
Per cent change	+8.5	+15.9	+6.9	+12.7	+3.2	+20.8

1. Public supply power stations only. 2. Public administration & commerce.

# Electricity

TABLE 9. Fuel used and electricity generated by the public supply system

	Primary fuel used						Electricity generated			Own <sup>5</sup> use	Electricity supplied	Total <sup>6</sup> electricity available
	Total <sup>1</sup>	Coal <sup>2</sup>	Oil <sup>2 3</sup>	Natural gas	Nuclear electricity	Hydro electricity	Total <sup>4</sup>	By steam plant				
								Nuclear	Other			
	Million tons of coal or coal equivalent						TWh					
United Kingdom												
1973	114.68	75.57	28.04	1.13	8.22	1.66	258.80	23.66	229.91	18.43	240.37	244.76
1974	110.49	65.97	28.51	3.86	10.28	1.81	250.47	29.40	215.73	18.07	232.40	236.68
1975	108.97	73.39	21.14	3.37	9.29	1.64	251.28	26.51	219.74	18.10	233.18	237.01
Per cent change	-1.4	+11.3	-25.9	-12.7	-9.6	-9.4	+0.3	-9.8	+1.9	+0.2	+0.3	+0.1
1975 Jan-July	64.05	42.51	13.27	1.86	5.36	0.98	148.04	15.34	129.77	10.53	137.51	139.76
1976 Jan-July p	63.08	44.18	9.97	1.69	6.11	1.11	147.69	17.65	126.83	10.93	136.76	138.88
Per cent change	-1.5	+3.9	-24.8	-9.5	+14.0	+14.4	-0.2	+15.1	-2.3	+3.8	-0.5	-0.6
1975 May	7.67	5.29	1.48	0.25	0.57	0.07	17.77	1.65	15.85	1.26	16.51	16.76
June*	8.21	5.60	1.57	0.32	0.66	0.05	19.04	1.92	16.86	1.43	17.61	17.89
July	6.24	4.25	1.15	0.26	0.51	0.05	14.26	1.46	12.61	1.13	13.13	13.39
Total	22.12	15.14	4.20	0.83	1.74	0.17	51.07	5.03	45.32	3.82	47.25	48.04
1976 May	7.59	5.34	1.22	0.17	0.76	0.10	17.86	2.25	15.30	1.34	16.52	16.81
June*	8.30	6.05	1.08	0.18	0.87	0.12	19.42	2.55	16.52	1.50	17.92	18.17
July p	6.36	4.58	0.86	0.12	0.74	0.06	14.79	2.12	12.42	1.22	13.57	13.76
Total	22.25	15.97	3.16	0.47	2.37	0.28	52.07	6.92	44.24	4.06	48.01	48.74
Per cent change	+0.6	+5.5	-24.8	-43.4	+36.2	+64.7	+2.0	+37.6	-2.4	+6.3	+1.6	+1.5
England and Wales												
1973	99.43	67.14	23.56	1.13	7.45	0.09	225.24	21.42	202.18	16.24	209.00	212.72
1974	96.09	58.63	24.00	3.86	9.43	0.12	218.85	26.93	190.43	15.90	202.95	205.55
1975	94.62	64.67	17.95	3.37	8.40	0.09	219.24	23.94	194.35	15.31	203.93	205.30
Per cent change	-1.5	+10.3	-25.2	-12.7	-10.9	-25.0	+0.2	-11.1	+2.1	-3.6	+0.5	-0.1
1975 Jan-July	55.64	37.43	11.39	1.86	4.83	0.06	129.29	13.81	114.87	8.98	120.31	121.10
1976 Jan-July p	54.65	39.09	8.33	1.69	5.48	0.05	128.59	15.72	112.46	9.14	119.45	120.30
Per cent change	-1.8	+4.4	-26.9	-9.1	+13.5	-16.1	-0.6	+13.8	-2.1	+1.8	-0.7	-0.7
1975 May	6.67	4.64	1.27	0.25	0.50	—	15.52	1.44	14.00	1.08	14.44	14.56
June*	7.11	4.88	1.33	0.32	0.57	—	16.59	1.66	14.85	1.20	15.39	15.48
July	5.51	3.79	0.99	0.26	0.45	—	12.60	1.28	11.29	0.91	11.69	11.79
Total	19.29	13.31	3.59	0.83	1.52	—	44.71	4.38	40.14	3.19	41.52	41.83
1976 May	6.58	4.69	1.03	0.17	0.69	—	15.58	2.02	13.53	1.14	14.44	14.56
June*	7.20	5.42	0.87	0.18	0.73	—	16.91	2.13	14.74	1.25	15.66	15.73
July p	5.63	4.16	0.71	0.12	0.64	—	13.09	1.85	11.21	1.00	12.09	12.16
Total	19.41	14.27	2.61	0.47	2.06	—	45.58	6.00	39.48	3.39	42.19	42.45
Per cent change	+0.6	+7.2	-27.3	-43.4	+35.5	-33.3	+1.9	+37.0	-1.6	+6.3	+1.6	+1.5

1. Including coke. 2. Including quantities used in the production of steam for sale. 3. Including oil used in gas turbine and diesel plant and for lighting up coal fired boilers. 4. Including generation by gas turbine, diesel and hydro-electric plant. 5. Used on works and for pumping at pumped storage stations. 6. Includes net imports and purchases from outside sources mainly UKAEA and British Nuclear Fuels Ltd. The England and Wales figures include net exchanges with Scotland.

TABLE 10. Sales of electricity by the public supply system

GWh

	Total	Iron and steel industry	Other industries	Domestic	Other <sup>1</sup>
1970	197,751	12,004	67,573	77,038	41,136
1971	203,433	10,837	69,337	80,674	42,585
1972	210,417	10,774	68,967	86,889	43,787
1973	225,267	11,646	75,327	91,299	46,995
1974	218,552	11,292	70,967	92,626	43,667
1975	217,765	11,164	70,916	88,938	46,747
Per cent change	-0.4	-1.1	-0.1	-4.0	+7.1
1974 1st quarter	59,654	2,668	15,755	30,356	10,875
2nd quarter	50,594	2,871	18,169	19,759	9,795
3rd quarter	45,295	2,727	17,522	15,707	9,339
4th quarter	63,009	3,026	19,521	26,804	13,658
1975 1st quarter	65,993	3,103	18,643	30,389	13,858
2nd quarter	50,309	2,732	17,225	19,855	10,497
3rd quarter	42,009	2,407	16,215	14,194	9,193
4th quarter	59,454	2,922	18,833	24,500	13,199
1976 1st quarter p	66,099	3,199	19,578	28,906	14,416
Per cent change	+0.2	+3.1	+5.0	-4.9	+4.0

1. Mainly commerce, public administration & agriculture

# Petroleum

TABLE 11. Production, arrivals and shipments<sup>1</sup>

Thousand tonnes

	Crude Petroleum							Petroleum products			
	Gross <sup>2</sup> Indigenous Production	Refinery Receipts				Arrivals <sup>4,5</sup>	Shipments <sup>4,5</sup>	Arrivals <sup>4</sup>	Shipments <sup>4</sup>	Net Arrivals	Bunkers <sup>6</sup>
		Total	Indigenous <sup>2</sup>	Net arrivals	Other <sup>3</sup>						
1973	373	114,032	235	+112,237	1,560	115,472	3,235	17,808	16,681	+1,127	5,499
1974	410	113,478	250	+111,418	1,810	112,822	1,404	14,256	14,396	-140	4,759
1975	1,564	92,273	1,156	+ 89,842	1,275	91,366	1,524	12,461	13,664	-1,203	3,444
Per cent change	(+)	-18.7	(+)	-19.3	-29.5	-19.0	+8.6	-12.6	-5.1	(+)	-27.6
1975 Jan-July	362	54,579	254	+53,633	692	54,364	731	7,140	7,413	-273	2,010
1976 Jan-July p	4,429	55,960	4,259	+51,019	682	52,524	1,506	6,951	8,494	-1,543	2,010
Per cent change	(+)	+2.5	(+)	-4.9	-1.4	-3.4	(+)	-2.6	+14.6	(+)	-
1975 May	35	7,780	24	+ 7,648	108	7,732	84	699	1,192	-493	287
June	60	8,150	32	+ 8,003	115	8,174	171	887	1,074	-187	250
July	95	7,692	95	+ 7,483	114	7,588	105	859	1,283	-424	265
Total	190	23,622	151	+ 23,134	337	23,494	360	2,445	3,549	-1104	802
1976 May p	766	8,494	769	+ 7,619	106	7,890	271	991	1,266	-282	300
June p	942	7,767	921	+ 6,808	38	6,999	191	820	1,225	-420	232
July p	752	7,758	713	+ 7,009	36	7,349	340	845	1,446	-601	302
Total	2,460	24,019	2,403	+ 21,436	180	22,238	802	2,656	3,937	-1303	834
Per cent change	(+)	+1.7	(+)	-7.3	-46.6	-5.3	(+)	+8.6	+10.9	+18.0	+4.0

1. Calendar months. 2. Including natural gas liquids (condensates). 3. Mainly recycled products. 4. Foreign trade as recorded by the Petroleum Industry and may differ from figures published in *Overseas Trade Statistics*. 5. Including process (partly refined) oils. 6. International bunkers.

TABLE 12. Refinery throughput and output of petroleum products<sup>1</sup>

Thousand tonnes

	Through- put of crude and process oils	Refinery use		Total output of petrol- eum prod- ucts <sup>2</sup>	Gases		Naphtha (LDF)	Motor spirit	Kerosene		Gas/ diesel oil	Fuel oil	Lubri- cating oils	Bitumen
		Fuel	Losses		Butane and propane	Other petro- leum			Aviation turbine fuel	Burning oil <sup>3</sup>				
1973	114,338	7,053	1,331	105,954	1,655	394	6,607	14,842	4,550	2,717	27,853	42,026	1,477	2,225
1974	111,217	6,946	1,211	103,060	1,602	272	6,448	14,520	4,475	2,564	27,641	40,022	1,455	2,129
1975	93,579	6,031	901	86,647	1,447	151	3,968	13,940	3,959	2,299	23,324	32,711	1,141	2,099
Per cent change	-15.9	-13.2	-25.6	-15.9	-9.7	-44.4	-38.5	-4.0	-11.5	-10.4	-15.6	-18.3	-21.6	-1.4
1975 Jan-July	54,576	3,515	531	50,530	868	87	2,240	8,126	2,325	1,323	13,352	19,413	674	1,255
1976 Jan-July p	56,020	3,679	658	51,683	908	94	2,529	8,624	2,357	1,407	14,264	18,335	723	1,173
Per cent change	+2.6	+4.7	+24.0	+2.3	+4.6	+8.0	+12.9	+6.1	+1.3	+6.4	+6.8	-5.6	+7.3	-6.5
1975 May	8,100	516	70	7,514	138	9	308	1,304	353	162	2,085	2,729	90	204
June	7,482	521	15	6,946	124	9	216	1,268	320	134	1,989	2,477	69	203
July	7,273	476	81	6,716	106	10	255	1,169	384	106	1,773	2,511	88	216
Total	22,855	1,513	166	21,176	368	28	779	3,741	1,057	402	5,847	7,717	247	623
1976 May	8,051	503	118	7,430	119	10	311	1,272	341	139	2,082	2,677	87	196
June	7,953	505	111	7,337	106	12	405	1,294	365	146	1,923	2,607	99	180
July p	7,447	507	104	6,836	109	15	219	1,312	377	96	1,877	2,381	108	180
Total	23,451	1,515	333	21,603	334	37	935	3,878	1,083	381	5,882	7,665	294	556
Per cent change	+2.6	+0.1	(+)	+2.0	-9.2	+32.1	+20.0	+3.7	+2.5	-5.2	+0.6	-0.7	+29.5	-10.8

1. Calendar months. 2. Including output of products not shown separately, namely, aviation spirit, wide-cut gasoline, industrial and white spirits, paraffin wax and miscellaneous products. 3. Including vaporising oil.

TABLE 13. Deliveries of petroleum products for inland consumption<sup>1</sup>

Thousand tonnes

	Total <sup>2, 3</sup>	Butane <sup>4</sup> and propane	Naphtha (LDF) <sup>5</sup>	Motor spirit	Kerosene				Gas/diesel oil		Fuel oil	Lubri- cating oils	Bitumen
					Aviation turbine fuel	Burning oil							
						Premier	Standard						
							Domestic	Other <sup>6</sup>	Derv fuel	Other			
1973	99,344	1,600	8,373	16,927	4,202	778	1,931	501	5,658	15,100	39,447	1,185	2,458
1974	92,342	1,414	7,700	16,484	3,690	603	1,770	436	5,518	13,581	36,810	1,045	2,241
1975	81,667	1,275	5,116	16,125	3,834	538	1,707	400	5,414	13,050	30,470	992	2,089
Per cent change	-11.6	-9.9	-33.6	-2.2	+3.9	-10.8	-3.5	-8.2	-1.9	-3.9	-17.4	-5.1	-6.7
1975 Jan-July	48,307	756	2,968	9,232	2,191	296	993	228	3,142	7,666	18,640	575	1,263
1976 Jan-July p	47,100	773	3,066	9,641	2,302	325	995	228	3,235	7,689	16,638	579	1,153
Per cent change	-2.5	+2.3	+3.3	+4.4	+5.1	+9.7	+0.2	-	+3.0	+0.3	-10.7	+0.7	-8.7
1975 May	6,294	101	367	1,418	334	16	103	28	453	912	2,244	83	188
June	5,818	92	352	1,353	347	10	85	24	447	759	2,007	80	217
July	5,613	84	346	1,490	394	4	64	22	454	656	1,768	86	201
Total	17,725	277	1,065	4,261	1,075	30	252	74	1,354	2,327	6,019	249	606
1976 May	6,021	102	397	1,363	350	17	94	27	445	870	2,052	82	169
June	5,825	99	367	1,476	362	9	89	25	476	730	1,857	86	190
July p	5,679	92	391	1,533	399	9	76	24	462	649	1,699	94	175
Total	17,525	293	1,155	4,372	1,111	35	259	76	1,383	2,249	5,608	262	534
Per cent change	-1.1	+5.7	+8.4	+2.6	+3.3	+10.7	+2.9	+1.8	+2.2	-3.3	-6.8	+5.3	-11.7

1. Calendar months. 2. Including other petroleum gases, aviation spirit, wide-cut gasoline, industrial & white spirits, and paraffin wax.

3. Excluding refinery fuel and miscellaneous products. 4. Including very small amounts for petro-chemicals. 5. Now mainly for petrochemical feedstock.

6. Including vaporising oil.

TABLE 14. Inland deliveries of petroleum products used for energy<sup>1, 2</sup>

Thousand tonnes

	Total	Power <sup>3</sup> Stations	Gas Works	Iron and steel industry	Other Industries	Transport <sup>4</sup>	Domestic	Other <sup>5</sup>
1973	88,196	16,993	2,355	4,995	22,045	28,971	3,812	9,025
1974	81,547	17,240	1,339	4,019	19,695	27,930	3,378	7,946
1975	73,385	13,345	693	3,309	17,251	27,582	3,270	7,935
Per cent change	-10.0	-22.6	-48.2	-17.7	-12.4	-1.2	-3.2	-0.1
1975 Jan-June	38,600	7,515	453	1,910	9,225	13,347	1,779	4,371
1975 Jan-June p	37,160	5,569	227	1,611	9,435	13,839	1,878	4,601
Per cent change	-3.7	-25.9	-49.9	-15.7	+2.3	+3.7	+5.6	+5.3
1975 Apr	6,817	1,232	59	332	1,674	2,340	104	1,076
May	5,645	932	42	251	1,291	2,392	186	551
June	5,162	885	44	231	1,132	2,317	150	403
Total	17,624	3,049	145	814	4,097	7,049	440	2,030
1976 Apr	6,288	920	50	277	1,545	2,433	377	686
May p	5,333	743	17	238	1,294	2,333	172	536
June p	5,137	656	17	233	1,173	2,505	150	403
Total	16,758	2,319	84	748	4,012	7,271	699	1,625
Per cent change	-4.9	-23.9	-42.1	-8.1	-2.1	+3.1	+58.9	+20.0

1. Calendar months. 2. Excludes non-energy products and non-energy use of naphtha (LDF).

3. Public supply, railway and transport power stations. 4. Including fishing, coastal and inland shipping.

5. Mainly public administration, commerce and agriculture.

TABLE 15. Stocks of petroleum at end of month

	Held by oil companies <sup>1</sup>		Power stations <sup>2</sup>
	Million tonnes	Estimated days' supply <sup>3</sup>	Million tonnes
1975 June	23.0	115	0.87
July	23.5	110	0.93
Aug	24.1	103	0.89
1976 June	20.4	99	0.89
July	20.8	94	0.99
Aug p	21.6	88	1.00

1. Stocks of petroleum products plus the product equivalent of crude and process oils held at refineries, and products in the wholesale distribution system. 2. Fuel oil held at main oil burning stations in Great Britain.

3. Latest three months calculated on forecast deliveries for the ensuing months. Figures for earlier period calculated on actual deliveries.

## APPROXIMATE CONVERSION FACTORS

(last digit rounded to nought or five)

To convert from one fuel to another, multiply by the factor shown

To \ From	Million tons coal equiv.	Million tonnes oil equiv.	Million therms	TWh Electrical energy	TWh Electricity generated
Million tons coal equivalent	1	1.65	0.00390	0.135 <sup>1</sup>	0.500 <sup>2</sup>
Million tonnes oil equivalent	0.600	1	0.00235	0.0800 <sup>1</sup>	0.280 <sup>2</sup>
Million therms	255	425	1	34.0	115
TWh Electrical energy	7.45	12.5	0.0295	1	..
TWh Electricity generated	2.00 <sup>3</sup>	3.60 <sup>3</sup>	0.00880 <sup>3</sup>	..	1

1. The amount of fuel (average grade) equivalent to 1 TWh of energy.

2. The amount of primary fuel (power station grade) to generate 1 TWh.

3. The amount of electricity generated by one million units of the fuel shown.

The *Digest of UK Energy Statistics 1976* gives more detailed factors.

## SUPPLEMENTARY DATA

Prices of fuels used by Industry<sup>1</sup>

	Invoiced to large industrial consumers <sup>2</sup>					Realised in new and renewed medium size contracts <sup>3</sup>	
	Coal	Heavy Fuel Oil	Gas Oil	Gas	Electricity	Heavy Fuel Oil	Gas Oil
	£ per ton			Pence per therm	Pence per KWh	£ per ton	
1974 1st quarter	8.5	23.6	43.2	2.64	0.855	34.7	52.8
2nd quarter	9.1	33.4	50.6	2.78	0.854	34.2	54.3
3rd quarter	9.8	32.8	51.8	3.03	0.924	33.8	53.1
4th quarter	11.8	33.4	51.6	3.44	1.095	40.7	58.2
1975 1st quarter	13.3	38.8	55.0	2.65	1.179	41.1	59.4
2nd quarter	15.1	38.2	54.2	4.15	1.178	40.6	55.5
3rd quarter	14.9	37.5	50.7	4.43	1.249	39.4	54.0
4th quarter	15.6	38.7	53.9	4.84	1.354	46.4	70.3
1976 1st quarter	17.4	42.1	64.0	5.73	1.453	45.7	70.8
2nd quarter	16.5	41.5	62.1	5.64	1.444	44.4	69.5

1. Prices for oil products include hydrocarbon oil duty.

2. Derived from the volume and value of all purchases invoiced during each quarter, by a panel of about 800 large users of fuel in manufacturing industry (excluding iron and steel).

3. Derived from prices reported by the ten main oil marketing companies and relate to average net prices realised on medium sized new contracts or contracts which are renewed at a changed price. The coverage may extend beyond manufacturing industry and may include for example larger commercial users.