

DEPARTMENT OF ENERGY

ENERGY

TRENDS

A Statistical Bulletin

November 1976



Small Increase in Consumption

Total Energy

Most fuels above last year

Total inland energy consumption on a primary fuel input basis in the 3rd quarter of 1976 was nearly 3 per cent higher than in the corresponding period of last year. Of the component fuels petroleum remained at about last year's level but coal, natural gas and nuclear electricity consumption increased by 1½ per cent, 6½ per cent, and by over 40 per cent respectively.

The seasonally adjusted and temperature corrected series indicates that the trend in total consumption during the quarter, measured at an annual rate, was slightly higher than disclosed by the unadjusted figures. The same is true for the nine months of the year to end September during which period an average increase of 1½ per cent over 1975 levels is apparent. As can be seen from the accompanying chart, seasonally adjusted and temperature corrected total consumption this year has fallen below last year's levels only in January and April.

Coal

Decline in output and manpower

Deep-mined coal production during the three month period August to October was more than 2 million tons lower than in the corresponding period of 1975, a fall of over 8 per cent. Opencast output was nearly ½ million tons greater than last year, an increase of nearly 20 per cent.

Total inland consumption of coal during August–October was slightly lower than last year and whilst demand from all final user sectors continued to decline, coke oven consumption rose by over 10 per cent and power stations by over 1 per cent. Consumption at power stations in October was however lower than in October 1975, the first month-on-month decline since April.

Colliery manpower has been declining slowly and at the end of October there were 3,400 fewer men on colliery books than at the beginning of the year.

Gas

Recent fall in demand

Total gas sent out in the three month period August to October was marginally higher than in the corresponding period of 1975. In October however, which was substantially warmer than October 1975, gas sent out fell to about 5 per cent below last year's level.

Electricity

Larger share for coal

Total primary fuel used for generation in the three month period July to September was 1 per cent higher than in the corresponding period of 1975. Coal consumption increased by nearly 4½ per cent while in contrast the use of oil was lower by nearly a quarter. The share of coal in fossil fuel input rose to 82 per cent compared to 76 per cent a year ago.

As a result of the recent increase in nuclear capacity, the generation of nuclear electricity during this period, when translated into terms of coal equivalent input, was only slightly less than total oil consumption by all UK power stations. In England and Wales taken alone, the nuclear component exceeded the oil input.

Total electricity sent out during the period was over 3 per cent higher than in the corresponding period last year, a continuation of the recently observed trend.

Petroleum

Swing to lighter products

Total inland deliveries of petroleum products during the third quarter were about 1½ per cent higher than in the corresponding quarter of 1975. Deliveries of the lighter products such as motor spirit and naphtha were higher than last year, the latter increasing by nearly a quarter, while demand for most of the heavy products continued depressed.

Refinery throughput of crude and process oils during the period was only slightly lower than last year but, reflecting the pattern of deliveries, there was a marked swing in output from heavy products to the lighter fractions.

Value of fuel imports and exports

The final table this month shows the value of external trade in fuels. During the third quarter, imports of crude were nearly 35 per cent higher than in the same quarter a year ago.

Crude oil imports during the first nine months of the year in terms of value were 30 per cent higher than in the corresponding period of 1975 despite a reduction of 2 per cent in the volume of imports.

This Bulletin is prepared by the Economics and Statistics Division of the Department of Energy. Further copies of the Bulletin are available from Circulation Section (H), Central Office of Information (COI), Hercules Road, London SE1 7DU. Telephone: 01-928-2345.

Recipients should notify the COI of any change of address or of requirement.

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 ¹	Petroleum ²	Natural gas	Nuclear electricity	Hydro-electricity	Total	Coal ¹	Petroleum ²	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-Sept.	232.9	87.8	98.3	37.6	7.8	1.4	139.2	52.5	58.8	22.5	4.6	0.8
1976 Jan-Sept p	235.2	87.5	96.0	41.1	9.2	1.4	140.6	52.3	57.4	24.6	5.5	0.8
Per cent change	+1.0	–0.3	–2.2	+9.1	+18.3	–0.3	+1.0	–0.3	–2.2	+9.1	+18.3	–0.3
1975 July	19.2	7.4	8.3	2.8	0.6	0.1	11.5	4.5	5.0	1.6	0.4	–
Aug	17.8	6.7	7.7	2.6	0.7	0.1	10.6	4.0	4.5	1.6	0.4	0.1
Sept *	26.7	10.3	11.8	3.5	1.0	0.1	16.0	6.2	7.1	2.1	0.5	0.1
Total	63.7	24.4	27.8	8.9	2.3	0.3	38.1	14.7	16.6	5.3	1.3	0.2
1976 July	19.8	7.7	8.4	2.8	0.8	0.1	11.8	4.6	5.1	1.6	0.5	–
Aug	18.7	6.8	7.9	2.9	1.0	0.1	11.2	4.1	4.7	1.7	0.6	0.1
Sept * p	27.0	10.3	11.5	3.8	1.3	0.1	16.1	6.1	6.9	2.3	0.8	–
Total	65.5	24.8	27.8	9.5	3.1	0.3	39.1	14.8	16.7	5.6	1.9	0.1
Per cent change	+2.8	+1.5	+0.1	+6.4	+41.4	–32.6	+2.8	+1.5	+0.1	+6.4	+41.4	–32.6

Seasonally adjusted and temperature corrected³ (annual rates)

1975 Jan-Sept.	325.0	121.8	137.5	53.3	10.5	1.9	194.2	72.8	82.2	31.8	6.3	1.1
1976 Jan-Sept p	330.0	122.5	135.7	57.2	12.6	2.0	197.2	73.2	81.1	34.2	7.5	1.2
Per cent change	+1.5	+0.5	–1.3	+7.4	+20.2	+4.1	+1.5	+0.5	–1.3	+7.4	+20.2	+4.1
1975 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
Aug	311.6	118.9	130.0	49.9	10.4	2.4	186.2	71.1	77.7	29.8	6.2	1.4
Sept *	330.3	117.1	142.3	57.3	11.4	2.2	197.5	70.0	85.1	34.3	6.8	1.3
Average	320.8	117.8	137.0	53.3	10.6	2.1	191.7	70.4	81.9	31.8	6.3	1.3
1976 July	333.6	128.2	139.7	50.8	13.4	1.5	199.4	76.7	83.5	30.3	8.0	0.9
Aug	321.3	115.8	134.0	54.8	14.9	1.8	192.0	69.2	80.1	32.7	8.9	1.1
Sept * p	336.0	117.1	139.3	62.4	16.1	1.1	200.8	70.0	83.2	37.3	9.6	0.7
Average	330.7	120.1	137.8	56.5	14.9	1.4	197.7	71.8	82.3	33.8	8.9	0.9
Per cent change	+3.1	+2.0	+0.5	+6.1	+40.2	–31.1	+3.1	+2.0	+0.5	+6.1	+40.2	–31.1

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)¹

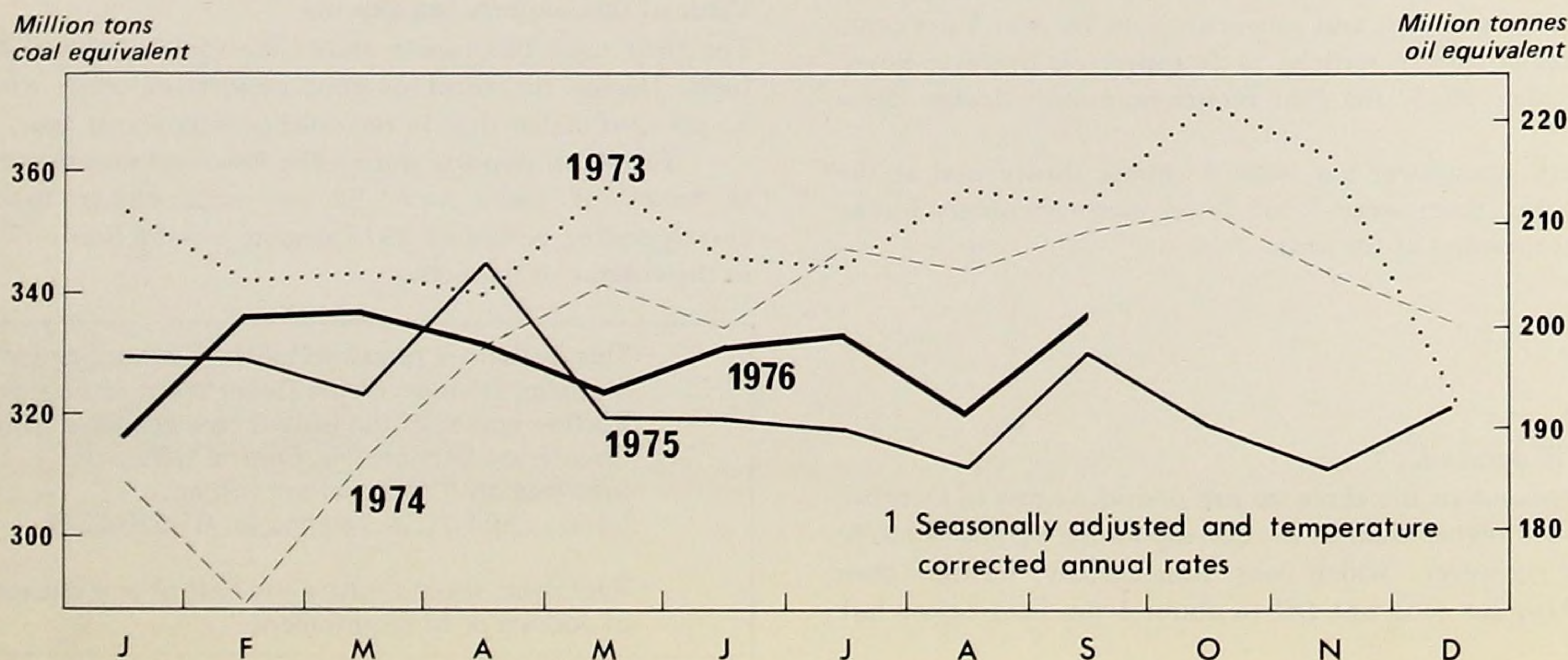


TABLE 2. Supply and use of fuels

Million therms

	1974	1975	Per cent change	1974			1975				1976p		Per ¹ cent change
				2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	
PRIMARY FUELS AND EQUIVALENTS:													
Production of primary fuels													
Coal	27,245	31,430	+15.4	7,797	7,024	8,355	8,482	7,904	6,602	8,442	7,941	7,672	-2.9
Petroleum ²	174	665	(+)	39	31	51	56	57	137	415	564	1,003	(+)
Natural gas	13,040	13,578	+4.1	2,844	2,279	3,967	4,193	2,980	2,191	4,214	4,772	3,065	+2.9
Primary electricity	3,279	2,982	-9.1	741	657	867	944	617	580	841	925	779	+26.3
Total	43,738	48,655	+11.2	11,421	9,991	13,240	13,675	11,558	9,510	13,912	14,202	12,519	+8.3
Arrivals. Petroleum ³	54,067	44,216	-18.2	14,398	12,300	13,394	11,378	11,200	10,521	11,117	10,967	10,924	-2.5
Other	1,171	1,616	+38.0	286	289	323	389	417	380	430	326	311	-25.4
Shipments	7,628	7,243	-5.0	2,007	2,230	2,051	1,730	1,638	1,993	1,882	1,724	2,044	+24.8
Bunkers	1,954	1,418	-27.4	528	499	450	375	345	354	344	372	346	+0.3
Stock change ⁴	-119	-1,123	..	-2,440	-617	+709	+1,282	-1,313	-1,174	+82	+1,325	-1,486	..
Non energy use	5,233	4,106	-21.5	1,415	1,306	1,146	1,055	956	960	1,135	1,132	1,111	+16.2
Statistical difference ⁵	-203	-176	..	+66	-41	-9	-168	+17	-13	-12	+109	-2	..
Total primary ⁶ energy input	83,839	80,421	-4.1	19,781	17,887	24,010	23,396	18,940	15,917	22,168	23,701	18,765	-0.9
Conversion losses etc. ⁷	25,550	24,547	-3.9	5,913	5,446	7,592	6,995	5,693	4,954	6,905	6,911	5,637	-1.0
FINAL CONSUMPTION BY USER:													
Iron and steel industry													
Coal	99	72	-27.3	34	16	26	25	18	10	19	23	15	-16.7
Other solid fuel ⁸	2,681	2,374	-11.5	716	718	673	746	575	482	571	617	703	+22.3
Other coal-derived fuels ⁹	374	372	-0.5	102	92	104	107	97	76	92	98	109	+12.4
Gas ¹⁰	395	371	-6.1	102	86	97	101	91	79	100	108	112	+23.1
Electricity	345	344	-0.3	87	84	93	94	84	75	91	100	95	+13.1
Petroleum	1,648	1,357	-17.7	366	347	451	449	334	244	330	354	306	-8.4
Total	5,542	4,890	-11.8	1,407	1,343	1,444	1,522	1,199	966	1,203	1,300	1,340	+11.8
Other industries													
Coal	2,795	2,458	-12.1	802	733	746	660	613	528	657	547	564	-8.0
Other solid fuel ⁸	193	164	-15.0	42	53	51	47	47	40	30	38	23	-51.1
Other coal-derived fuels ⁹	63	78	+23.8	18	18	17	17	23	22	16	18	27	+17.4
Gas ¹⁰	4,692	4,701	+0.2	1,148	1,041	1,273	1,295	1,091	1,007	1,308	1,457	1,236	+13.3
Electricity	2,247	2,234	-0.6	573	553	618	589	542	510	593	619	563	+3.9
Petroleum	8,264	7,426	-10.1	1,879	1,567	2,367	2,140	1,770	1,299	2,217	2,268	1,711	-3.3
Total	18,254	17,061	-6.5	4,462	3,965	5,072	4,748	4,086	3,406	4,821	4,947	4,124	+0.9
Transport sector													
Coal	24	19	-20.8	5	4	8	6	3	3	7	7	4	+33.3
Electricity	92	99	+7.6	23	23	25	26	25	23	25	27	24	-4.0
Petroleum	12,295	12,143	-1.2	3,126	3,289	3,136	2,771	3,104	3,225	3,043	2,894	3,201	+3.1
Total	12,411	12,261	-1.2	3,154	3,316	3,169	2,803	3,132	3,251	3,075	2,928	3,229	+3.1
Domestic sector													
Coal	3,957	3,381	-14.6	1,070	952	1,160	1,013	903	699	766	932	764	-15.4
Other solid fuel ⁸	1,102	962	-12.7	290	282	297	270	231	260	201	284	202	-12.6
Gas ¹⁰	5,384	5,891	+9.4	1,011	696	1,698	2,329	1,119	615	1,828	2,403	1,055	-5.7
Electricity	3,161	3,035	-4.0	674	536	915	1,037	678	484	836	987	596	-12.0
Petroleum	1,482	1,434	-3.2	279	188	501	473	306	194	461	518	268	-12.4
Total	15,086	14,703	-2.5	3,324	2,654	4,571	5,122	3,237	2,252	4,092	5,124	2,885	-10.9
Other final users ¹¹													
Coal	669	490	-26.8	142	125	213	129	123	78	160	172	112	-8.9
Other solid fuel ⁸	276	219	-20.7	72	65	65	64	49	63	43	55	47	-4.1
Gas ¹⁰	1,269	1,347	+6.1	276	173	387	472	310	171	394	570	319	+2.9
Electricity	1,447	1,548	+7.0	323	307	455	460	347	302	439	479	350	+0.9
Petroleum	3,335	3,355	+0.6	708	493	1,042	1,081	764	474	1,036	1,215	722	-5.5
Total	6,996	6,959	-0.5	1,521	1,163	2,162	2,206	1,593	1,088	2,072	2,491	1,550	-2.7
Total final users	58,289	55,874	-4.1	13,868	12,441	16,418	16,401	13,247	10,963	15,263	16,790	13,128	-0.9
FINAL CONSUMPTION BY FUEL:													
Coal	7,544	6,420	-14.9	2,053	1,830	2,153	1,833	1,660	1,318	1,609	1,681	1,459	-12.1
Other solid fuel ⁸	4,252	3,719	-12.5	1,120	1,118	1,086	1,127	902	845	845	994	975	+8.1
Other coal-derived fuels ⁹	437	450	+3.0	120	110	121	124	120	98	108	116	136	+13.3
Gas ¹⁰	11,740	12,310	+4.9	2,537	1,996	3,455	4,197	2,611	1,872	3,630	4,538	2,722	+4.3
Electricity	7,292	7,260	-0.4	1,680	1,503	2,106	2,206	1,676	1,394	1,984	2,212	1,628	-2.9
Petroleum	27,024	25,715	-4.8	6,358	5,884	7,497	6,914	6,278	5,436	7,087	7,249	6,208	-1.1
Total all fuels	58,289	55,874	-4.1	13,868	12,441	16,418	16,401	13,247	10,963	15,263	16,790	13,128	-0.9

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 ²	Exports ²	Tonnage lost (deep-mined) ³	
		Total ¹	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-Oct	105,615	103,342	94,438	8,370	+2,273	4,149	1,876	10,671	293
1976 Jan Oct p	100,119	98,789	87,821	9,688	+1,330	2,462	1,132	11,575	1,012
Per cent change	-5.2	-4.4	-7.0	+15.7	-41.5	-40.7	-39.7	+8.5	(+)
1976 Aug	6,670	6,393	5,687	667	+277	323	46	3,578	14
Sept *	11,794	11,483	10,423	1,011	+311	451	140	1,155	37
Oct	11,124	10,836	9,839	850	+288	417	129	25	19
Total	29,588	28,712	25,949	2,528	+876	1,191	315	4,758	70
1976 Aug	6,619	6,452	5,385	919	+167	236	69	3,438	135
Sept *	10,844	10,900	9,495	1,257	-56	92	148	1,337	325
Oct p	9,916	9,849	8,954	846	+67	197	130	34	137
Total	27,379	27,201	23,834	3,022	+178	525	347	4,809	597
Per cent change	-7.5	-5.3	-8.2	+19.5	-79.7	-55.9	+10.2	+1.1	(+)

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 ¹			
		Primary	Secondary				Colliery disposals			
		Collieries	Power stations ²	Coke ovens	Gas works	Other ³ conversion industries	Industry ⁴	Domestic ⁵		Other ⁸
								House Coal ⁶	Other ⁷	
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-Oct	97,307	985	58,374	15,691	8	3,307	7,797	8,339	1,346	1,460
1976 Jan-Oct p	96,894	888	60,213	15,710	6	2,861	6,916	7,693	1,051	1,556
Per cent change	-0.4	-9.8	+3.2	+0.1	-25.0	-13.5	-11.3	-7.7	-21.9	+6.6
1975 Aug	6,716	55	3,927	1,322	-	288	527	458	67	72
Sept *	10,313	101	6,048	1,642	-	429	857	961	130	145
Oct	9,487	91	5,884	1,367	1	339	811	689	135	170
Total	26,516	247	15,859	4,331	1	1,056	2,195	2,108	332	387
1976 Aug	6,827	47	4,163	1,470	-	208	387	417	62	73
Sept * p	10,287	82	6,120	1,847	-	305	799	862	130	142
Oct p	9,332	86	5,761	1,461	1	244	785	726	106	162
Total	26,446	215	16,044	4,778	1	757	1,971	2,005	298	377
Per cent change	-0.3	-13.0	+1.2	+10.3	-	-28.3	-10.2	-4.9	-10.2	-2.6

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 coal¹ 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 Aug	26,923	20,041	17,931	1,870	1	239	6,882	5,354	1,528
Sept	28,376	20,191	18,058	1,894	1	238	8,185	6,542	1,643
Oct	29,971	20,730	18,359	2,135	1	235	9,241	7,555	1,686
1976 Aug	33,185	22,462	19,955	2,266	1	240	10,723	9,105	1,618
Sept	33,741	23,208	20,785	2,182	1	240	10,533	8,916	1,617
Oct p	34,360	23,751	21,185	2,365	1	200	10,609	9,135	1,474
Absolute change:									
In latest month	+619	+543	+400	+183	-	-40	+76	+219	-143
On a year ago	+4,389	+3,021	+2,826	+230	-	-35	+1,368	+1,580	-212

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 ¹		Recruitment	Wastage	Absence percentage ²			Average output per manshift ³	
		Total	Underground			Total	Voluntary	Involuntary	Overall	At the face
		Thousands		Number	Per cent					
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	Aug	248	196	2,042	1,609	14.5	3.3	11.2	39.37	147.56
	Sept *	248	196	1,589	2,043	16.5	3.9	12.6	42.85	147.92
	Oct	247	195	1,014	1,655	17.5	4.0	13.5	46.24	156.60
1976	Aug	242	192	1,807	1,347	14.9	2.9	12.0	39.12	148.98
	Sept *	242	192	1,987	2,060	17.2	3.8	13.4	41.09	143.77
	Oct p	242	192	1,451	1,884	17.9	3.9	14.0	43.29	149.36

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 ¹		Coal	Oil ²	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-Oct	10,560	10,298	262	8	523	10,657	655	10,002
1976 Jan-Oct p	11,068	10,730	338	6	193	11,097	201	10,896
Per cent change	+4.8	+4.2	+29.0	-25.0	-63.1	+4.1	-69.3	+8.9
1975 Aug	590	572	18	—	18	583	20	563
Sept *	949	908	41	—	22	951	34	917
Oct	1,050	1,017	33	1	19	1,052	38	1,014
Total	2,589	2,497	92	1	59	2,586	92	2,494
1976 Aug	597	560	37	—	10	604	6	598
Sept p*	979	946	33	1	15	991	10	981
Oct p	997	980	17	—	15	1,003	11	992
Total	2,573	2,486	87	1	40	2,598	27	2,571
Per cent change	-0.6	-0.4	-5.4	—	-31.7	+0.5	-70.7	+3.1

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 ¹	Iron and steel industry	Other industries	Domestic	Other ²
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 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
2nd quarter p	2,865	158	112	1,221	1,055	319
Per cent change	+2.4	-21.0	+23.1	+13.3	-5.7	+2.9

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 ⁵ use	Electricity supplied	Total ⁶ electricity available
	Total ¹	Coal ²	Oil ^{2 3}	Natural gas	Nuclear electricity	Hydro electricity	Total ⁴	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	229.89	18.43	240.37	244.76
1974	110.49	65.97	28.51	3.86	10.28	1.81	250.47	29.40	215.70	18.07	232.40	236.68
1975	108.97	73.39	21.14	3.37	9.29	1.64	251.26	26.52	219.69	18.02	233.24	237.26
Per cent change	-1.4	+11.3	-25.9	-12.7	-9.6	-9.4	+0.3	-9.8	+1.8	-0.3	+0.4	+0.2
1975 Jan-Sept	78.71	52.49	15.83	2.42	6.69	1.18	181.55	19.12	158.82	13.16	168.39	171.26
1976 Jan-Sept p	77.81	54.46	11.96	2.04	8.10	1.22	182.41	23.41	155.31	13.80	168.61	171.32
Per cent change	-1.2	+3.7	-24.4	-15.7	+21.1	+3.5	+0.5	+22.4	-2.2	+4.9	+0.1	(+0.0)
1975 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
Aug	5.89	3.93	1.05	0.27	0.55	0.08	13.51	1.58	11.67	1.09	12.42	12.70
Sept p*	8.77	6.05	1.51	0.29	0.77	0.13	20.01	2.20	17.38	1.56	18.45	18.80
Total	20.90	14.23	3.71	0.82	1.83	0.26	47.78	5.24	41.66	3.78	44.00	44.89
1976 July	6.38	4.58	0.88	0.12	0.74	0.06	14.81	2.12	12.44	1.23	13.58	13.78
Aug	5.95	4.16	0.72	0.16	0.85	0.06	14.10	2.45	11.43	1.21	12.89	13.14
Sept * p	8.77	6.12	1.25	0.20	1.15	0.05	20.60	3.31	17.04	1.66	18.94	19.26
Total	21.10	14.86	2.85	0.48	2.74	0.17	49.51	7.88	40.91	4.10	45.41	46.18
Per cent change	+1.0	+4.4	-23.2	-41.5	+49.7	-34.6	+3.6	+50.4	-1.8	+8.5	+3.2	+2.9
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	219.25	23.94	194.33	15.32	203.93	206.39
Per cent change	-1.5	+10.3	-25.2	-12.7	-10.9	-25.0	+0.2	-11.1	+2.0	-3.6	+0.5	+0.4
1975 Jan-Sept	68.38	46.25	13.51	2.42	6.04	0.06	158.51	17.25	140.55	11.17	147.34	148.43
1976 Jan-Sept p	67.44	48.26	9.90	2.04	7.16	0.05	158.86	20.60	137.77	11.49	147.37	148.56
Per cent change	-1.4	+4.3	-26.7	-15.7	+18.6	-14.8	+0.2	+19.4	-2.0	+2.9	(+0.0)	+0.1
1975 July	5.51	3.79	0.99	0.26	0.45	—	12.60	1.28	11.29	0.91	11.69	11.79
Aug	5.15	3.48	0.87	0.27	0.52	—	11.87	1.48	10.35	0.91	10.96	11.07
Sept *	7.59	5.34	1.25	0.29	0.69	—	17.35	1.96	15.33	1.27	16.08	16.26
Total	18.25	12.61	3.11	0.82	1.66	—	41.82	4.72	36.97	3.09	38.73	39.12
1976 July	5.63	4.16	0.71	0.12	0.64	—	13.09	1.85	11.21	1.00	12.09	12.16
Aug	5.19	3.74	0.56	0.16	0.73	—	12.38	2.10	10.24	1.00	11.38	11.47
Sept * p	7.61	5.42	1.02	0.20	0.97	—	17.90	2.78	15.08	1.35	16.55	16.77
Total	18.43	13.32	2.29	0.48	2.34	—	43.37	6.73	36.53	3.35	40.02	40.40
Per cent change	+1.0	+5.6	-26.4	-41.5	+41.0	-14.3	+3.7	+42.6	-1.2	+8.4	+3.3	+3.3

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 ¹
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 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
2nd quarter p	48,978	3,062	17,874	17,475	10,567
Per cent change	-2.6	+12.1	+3.8	-12.0	+0.7

1. Mainly commerce, public administration & agriculture

Petroleum

TABLE 11. Production, arrivals and shipments¹

Thousand tonnes

	Crude Petroleum						Petroleum products				
	Gross ² Indigenous Production	Refinery Receipts				Arrivals ^{4,5}	Shipments ^{4,5}	Arrivals ⁴	Shipments ⁴	Net Arrivals	Bunkers ⁶
		Total	Indigenous ²	Net arrivals	Other ³						
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-Sept	589	69,556	430	+ 68,213	913	69,132	919	8,617	10,192	-1,575	2,604
1976 Jan-Sept p	6,752	71,398	6,428	+ 64,309	661	66,800	2,491	8,216	11,231	-3,015	2,658
Per cent change	(+)	+2.6	(+)	-5.8	-27.6	-3.4	(+)	-4.7	+10.2	+91.4	+2.1
1975 July	95	7,692	95	+ 7,483	114	7,588	105	859	1,283	-424	265
Aug	118	7,433	117	+ 7,232	84	7,328	96	740	1,536	-796	290
Sept	109	7,546	60	+ 7,349	137	7,441	92	737	1,243	-506	303
Total	322	22,671	272	+ 22,064	335	22,357	293	2,336	4,062	-1,726	858
1976 July	752	7,758	713	+ 7,009	36	7,349	340	845	1,446	-601	305
Aug	1,076	7,882	974	+ 6,907	1	7,311	404	729	1,114	-385	340
Sept p	1,247	7,557	1,196	+ 6,383	-22	6,964	581	536	1,624	-1,088	270
Total	3,075	23,197	2,883	+ 20,299	15	21,624	1,325	2,110	4,184	-2,074	915
Per cent change	(+)	+2.3	(+)	-8.0	(-)	-3.3	(+)	-9.7	+3.0	+20.1	+56.3

1. Calendar months. 2. Including natural gas liquids (condensates). 3. Mainly recycled products. 4. Foreign trade (excluding direct exports from the U.K. Continental Shelf) 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 products¹

Thousand tonnes

	Through- put of crude and process oils	Refinery use		Total output of petrol- eum prod- ucts ²	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 ³				
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-Sept	70,492	4,493	690	65,309	1,086	109	2,839	10,597	3,175	1,577	17,372	24,936	858	1,599
1976 Jan-Sept p	71,711	4,739	778	66,194	1,147	123	3,265	11,282	3,162	1,687	18,056	23,443	954	1,480
Per cent change	+1.7	+5.5	+12.8	+1.4	+5.5	+13.3	+15.0	+6.5	-0.4	+7.0	+3.9	-6.0	+11.2	-7.4
1975 July	7,273	476	81	6,716	106	10	255	1,169	384	106	1,773	2,511	88	216
Aug	8,351	505	94	7,752	106	9	338	1,300	451	112	2,086	2,934	104	176
Sept	7,564	472	65	7,027	113	12	261	1,171	399	142	1,934	2,589	80	167
Total	23,188	1,453	240	21,495	325	31	854	3,640	1,234	360	5,793	8,034	272	559
1976 July	7,447	507	104	6,836	109	15	219	1,312	377	96	1,877	2,381	108	180
Aug	7,508	532	93	6,883	115	15	338	1,363	395	130	1,828	2,270	107	152
Sept p	8,183	527	27	7,629	124	14	399	1,296	411	150	1,963	2,838	124	155
Total	23,138	1,566	224	21,348	348	44	956	3,971	1,183	376	5,668	7,489	339	487
Per cent change	-0.2	+7.8	-6.8	-0.7	+7.0	+42.1	+11.9	+9.1	-4.1	+4.4	-2.2	-6.8	+24.2	-13.0

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 consumption¹

Thousand tonnes

	Total ^{2, 3}	Butane ⁴ and propane	Naphtha (LDF) ⁵	Motor spirit	Kerosene				Gas/diesel oil		Fuel oil	Lubri- cating oils	Bitumen
					Aviation turbine fuel	Burning oil							
						Premier	Standard		Derv fuel	Other			
							Domestic	Other ⁶					
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-Sept	59,605	938	3,749	12,073	2,936	328	1,182	284	3,997	9,145	22,168	734	1,610
1976 Jan-Sept p	58,589	956	4,071	12,597	3,090	353	1,145	272	4,135	9,093	20,046	745	1,470
Per cent change	-1.7	+1.9	+8.6	+4.3	+5.2	+7.8	-3.1	-4.3	+3.5	-0.6	-9.6	+1.5	-8.7
1975 July	5,613	84	346	1,490	394	4	64	22	454	656	1,768	86	201
Aug	5,128	82	421	1,427	368	5	55	18	393	628	1,454	74	161
Sept	6,170	100	360	1,413	377	27	134	38	463	852	2,074	85	186
Total	16,911	266	1,127	4,330	1,139	36	253	78	1,310	2,136	5,296	245	548
1976 July	5,718	88	439	1,534	399	9	80	25	465	657	1,679	93	174
Aug	5,400	87	499	1,494	400	5	45	18	416	578	1,554	78	151
Sept p	6,059	99	459	1,461	388	23	101	25	481	820	1,882	89	167
Total	17,177	274	1,397	4,489	1,187	37	226	68	1,362	2,055	5,115	260	492
Per cent change	+1.6	+3.0	+23.9	+3.7	+4.1	+4.5	-10.4	-12.6	+4.0	-3.8	-3.4	+6.1	-10.2

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^{1, 2}

Thousand tonnes

	Total	Power ³ Stations	Gas Works	Iron and steel industry	Other Industries	Transport ⁴	Domestic	Other ⁵
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-Aug	48,021	8,903	521	2,266	11,057	18,237	1,991	5,046
1976 Jan-Aug p	46,585	6,818	263	2,030	11,341	18,877	2,017	5,239
Per cent change	-3.0	-23.4	-49.5	-10.4	+2.6	+3.5	+1.3	+3.8
1975 June	5,162	885	44	230	1,132	2,317	150	404
July	4,965	801	34	174	970	2,526	111	349
Aug	4,456	586	34	182	862	2,364	102	326
Total	14,583	2,272	112	586	2,964	7,207	363	1,079
1976 June	5,135	656	17	234	1,178	2,497	150	403
July	4,947	658	16	212	1,017	2,574	133	337
Aug p	4,609	593	16	206	931	2,481	88	294
Total	14,691	1,907	49	652	3,126	7,552	371	1,034
Per cent change	+0.7	-16.1	-56.3	+11.3	+5.5	+4.8	+2.2	-4.2

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 ¹		Power stations ²
	Million tonnes	Estimated days' supply ³	Million tonnes
1975 Aug	24.1	103	0.89
Sept	23.8	97	0.98
Oct	22.4	91	0.93
1976 Aug	21.7	89	1.00
Sept	21.8	86	0.98
Oct p	22.3	86	0.98

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 ¹	0.500 ²
Million tonnes oil equivalent	0.600	1	0.00235	0.0800 ¹	0.280 ²
Million therms	255	425	1	34.0	115
TWh Electrical energy	7.45	12.5	0.0295	1	..
TWh Electricity generated	2.00 ³	3.60 ³	0.00880 ³	..	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

Value of fuel imports and exports (¹)

£ million

	Imports (c.i.f.)							Exports (f.o.b.)				
	Coal	Other solid fuel ²	Natural gas	Petroleum		Electricity	Total	Coal	Other solid fuel ²	Petroleum ³	Electricity	Total
				Crude	Refined ³							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1970	0.9	2.7	10.6	711.8	217.2	1.6	944.8	17.5	13.3	175.9	—	206.7
1971	39.2	8.2	10.4	955.7	232.7	0.4	1,246.6	13.2	11.6	211.5	—	236.3
1972	48.9	11.3	9.4	947.0	223.2	1.7	1,241.5	9.7	9.2	219.7	—	238.6
1973	21.3	7.9	9.4	1,336.3	348.3	0.4	1,723.6	15.2	13.8	341.0	—	370.0
1974	62.1	7.2	8.1	3,852.4	696.7	0.4	4,626.9	20.8	46.9	700.0	—	767.7
1975	105.6	7.8	13.9	3,462.9	718.6	1.1	4,309.9	36.1	54.6	722.9	0.1	813.7
Per cent change	+70.2	+7.2	+71.7	-10.1	+3.1	(+)	-6.9	+73.5	+16.4	+3.3	(+)	+6.0
1974 3rd quarter	16.3	1.8	2.1	925.7	171.7	—	1,117.6	5.6	15.7	188.1	—	209.4
4th quarter	20.1	1.3	2.3	1,020.9	186.4	—	1,231.0	9.6	18.8	180.8	—	209.2
1975 1st quarter	24.9	1.7	3.9	874.5	187.6	1.0	1,093.6	13.0	19.2	169.0	—	201.2
2nd quarter	27.0	1.8	2.5	834.8	144.0	0.1	1,010.2	8.7	13.0	151.9	0.1	173.7
3rd quarter	23.7	2.1	3.5	847.8	156.9	—	1,034.0	6.3	9.9	197.9	—	214.1
4th quarter	30.0	2.2	4.0	905.8	230.1	—	1,172.1	8.1	12.5	204.1	—	224.7
1976 1st quarter	19.7	2.3	6.7	1,096.7	243.9	—	1,369.3	6.5	11.8	222.9	—	241.2
2nd quarter	25.6	1.9	4.4	1,107.3	247.8	—	1,387.0	6.0	11.6	247.2	0.3	265.1
3rd quarter	18.7	2.7	5.2	1,143.5	230.3	—	1,400.4	8.5	11.4	324.6	0.1	344.6
Per cent change	-20.8	+23.4	+46.5	+34.9	+46.7	—	+35.4	+36.1	+15.7	+64.0	(+)	+61.0

1. The figures correspond to those published in Section 3 of the "Overseas Trade Statistics".
 2. Including coke, breeze, briquettes and pitch. 3. Including liquefied gases other than natural gas and petroleum products not used as fuel, e.g., lubricants.