

DEPARTMENT OF ENERGY

ENERGY

TRENDS

A Statistical Bulletin

APRIL 1977

Consumption higher in fourth quarter

Total Energy**Gas gains more ground, in fourth quarter**

During the three month period December 1976 to February 1977, total inland energy consumption on a primary fuel input basis was just over 6 per cent higher than in the corresponding period of 1975/76. Much of the increase is attributable to the substantially colder weather, particularly in January. After adjustment for seasonal effects and temperature differences, total consumption was just under 4 per cent higher than in the comparable months a year ago.

Provisional figures of energy consumption by final users on a heat supplied basis during the 4th quarter of 1976 show that total consumption rose to 5.1 per cent above the level of the 4th quarter of 1975. The higher consumption was shared by all fuels but the increase in gas, which rose by 13.3 per cent, accounted for nearly two-thirds of the overall rise. Consumption was higher also in each of the individual consuming sectors, the largest increase being registered in the iron and steel industry where the rise of 15 per cent reflects the industry's improved level of output in that period. Consumption by manufacturing industries other than iron and steel rose by 2.6 per cent, a somewhat smaller rate of increase than the rise in total industrial output.

Energy consumption in the domestic sector in the 4th quarter of 1976 was higher by 6.6 per cent than in the corresponding period a year ago. The period as a whole was considerably colder and wetter than a year earlier and much of the increase is probably attributable to these conditions. Gas consumption rose by 12.1 per cent and accounted for four-fifths of the total increase in this sector.

Taking the year as a whole, final consumption of energy rose by 2.6 per cent in total. Coal fell by 6.1 per cent though other solid fuels rose by 3.8 per cent. Gas rose by 4 per cent and petroleum products by 2 per cent. Electricity was only 0.5 per cent above the level of 1975.

Coal**Productivity improves**

Deep-mined coal production during the 1st quarter of 1977 was 4 per cent lower than in the corresponding quarter of last year. Opencast output also declined to 6.4 per cent below the level of a year ago.

Total coal consumption during the period rose by 3.3 per cent with power station and coke ovens using 5.2 and 5.8 per cent more respectively. Industrial demand increased by 12.4 per cent but deliveries to all other final consuming sectors declined. At the end of March, stocks of coal, both distributed and undistributed, were lower in total by 1.7 million tons compared with a year ago.

Colliery manpower increased by over 1,000 men during March and productivity measured in terms of output per manshift rose to 45.8 cwt, the highest level for twelve months.

Gas**Industrial use rising**

Total gas sent out during the 1st quarter of 1977 was 3.6 per cent higher than in the corresponding period of 1976. During the two most recent months of the period however, send-out was slightly below last year's levels.

Total gas sales in 1976 were almost 14 thousand million therms,

an increase of 6.8 per cent on the previous year. Combined sales to the iron and steel industry and other industries rose by over 20 per cent which in volume terms represented over two-thirds of the increase in total gas sales during the year. Supplies to power stations were down by over a quarter during 1976, the decline being particularly apparent during the latter half of the year.

Electricity**Industrial consumption higher but domestic lower**

Electricity supplied during the three month period December to February was 6.5 per cent higher than in the comparable period a year ago although in February, which was substantially warmer than February 1976, electricity supplied fell below last year's level.

Total sales of electricity in 1976 were 1.3 per cent higher than in the previous year, the increase being wholly accounted for by the 4.7 per cent rise in sales during the 4th quarter. During the year as a whole, sales to the iron and steel industry and to other industries increased by 12.6 and 5.6 per cent respectively, but sales to domestic consumers fell by 4.7 per cent to the lowest level in this sector since 1971.

Sales to each sector were higher in the 4th quarter than in the corresponding period of 1975, but the small increase in the domestic sector was largely due to the adverse weather in that period.

The final table in *Energy Trends* shows details of electricity generated outside the public supply system, mainly by manufacturing industry. During 1976, generation in most sectors increased and although the figures are not precisely comparable with those for 1975, the overall picture indicates that industry's generation for its own use has risen by over 6 per cent, corresponding closely with increased purchases by industry from the public supply system.

Petroleum**Crude imports falling**

During the three month period December to February, North Sea crude oil accounted for a quarter of total refinery receipts.

Net arrivals of crude oil from overseas were nearly a fifth lower than in the corresponding period a year ago. Net trade (excluding bunkers) in petroleum products swung from a net arrival a year ago to a net shipment in the latest 3 month period.

Total inland deliveries of products during the period were 2.2 per cent higher than in the comparable period a year earlier, but the increase was concentrated wholly in the first two months of the period and in February total deliveries fell away to below last year's level.

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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 1976 issue of *Energy Trends* and on the first page of the August 1976 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 ³ gas	Nuclear electricity	Hydro- electricity	Total	Coal ¹	Petroleum ²	Natural ³ gas	Nuclear electricity	Hydro- electricity
	<i>Million tons of coal or coal equivalent</i>						<i>Million metric tonnes of oil or oil equivalent</i>					
1971	325.7	137.1	148.8	28.4	9.7	1.7	194.9	82.0	89.0	17.0	5.8	1.1
1972	332.7	120.5	159.6	40.3	10.5	1.8	198.8	72.0	95.4	24.0	6.3	1.1
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
1976 p	324.7	120.1	132.1	57.9	12.7	1.9	194.0	71.8	78.9	34.6	7.6	1.1
Per cent change	+1.5	+1.7	–1.7	+6.1	+17.8	–4.4	+1.5	+1.7	–1.7	+6.1	+17.8	–4.4
1975 Dec*	35.4	13.0	14.6	6.4	1.2	0.2	21.2	7.8	8.8	3.8	0.7	0.1
1976 Jan	28.2	9.9	10.6	6.4	1.0	0.3	16.9	5.9	6.4	3.8	0.6	0.2
Feb	30.7	11.5	11.8	6.2	1.0	0.2	18.4	6.9	7.1	3.7	0.6	0.1
Total	94.3	34.4	37.0	19.0	3.2	0.7	56.5	20.6	22.3	11.3	1.9	0.4
1976 Dec*	38.3	14.3	15.3	7.2	1.3	0.2	22.9	8.6	9.1	4.3	0.8	0.1
1977 Jan	30.9	11.0	11.4	7.3	1.1	0.1	18.5	6.5	6.9	4.3	0.7	0.1
Feb p	31.0	11.6	11.8	6.2	1.2	0.2	18.5	7.0	7.0	3.7	0.7	0.1
Total	100.2	36.9	38.5	20.7	3.6	0.5	59.9	22.1	23.0	12.3	2.2	0.3
Per cent change	+6.2	+7.4	+3.6	+8.5	+17.4	–26.7	+6.2	+7.4	+3.6	+8.5	+17.4	–26.7

Seasonally adjusted and temperature corrected⁴ (annual rates)

1975 Dec*	321.4	120.1	128.2	60.2	11.7	1.2	192.1	71.8	76.6	36.0	7.0	0.7
1976 Jan	319.7	123.7	124.9	58.8	10.5	1.8	191.1	73.9	74.7	35.1	6.3	1.1
Feb	334.2	126.7	134.0	61.0	10.6	1.9	199.8	75.8	80.1	36.5	6.3	1.1
Average	324.8	123.2	129.0	60.0	11.0	1.6	194.1	73.6	77.1	35.9	6.6	0.9
1976 Dec*	338.3	130.4	126.1	67.8	12.7	1.3	202.2	77.9	75.4	40.5	7.6	0.8
1977 Jan	330.2	124.3	127.6	65.0	12.2	1.1	197.3	74.3	76.3	38.8	7.3	0.6
Feb p	343.6	133.3	135.0	60.5	13.5	1.3	205.3	79.6	80.7	36.1	8.1	0.8
Average	337.4	129.4	129.3	64.7	12.8	1.2	201.7	77.3	77.3	38.7	7.7	0.7
Per cent change	+3.9	+5.0	+0.3	+7.8	+16.4	–21.4	+3.9	+5.0	+0.3	+7.8	+16.4	–21.4

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. Excluding gas flared or reinjected. 4. Only coal and petroleum are temperature corrected.

Energy: Total inland consumption (primary fuel input basis)¹

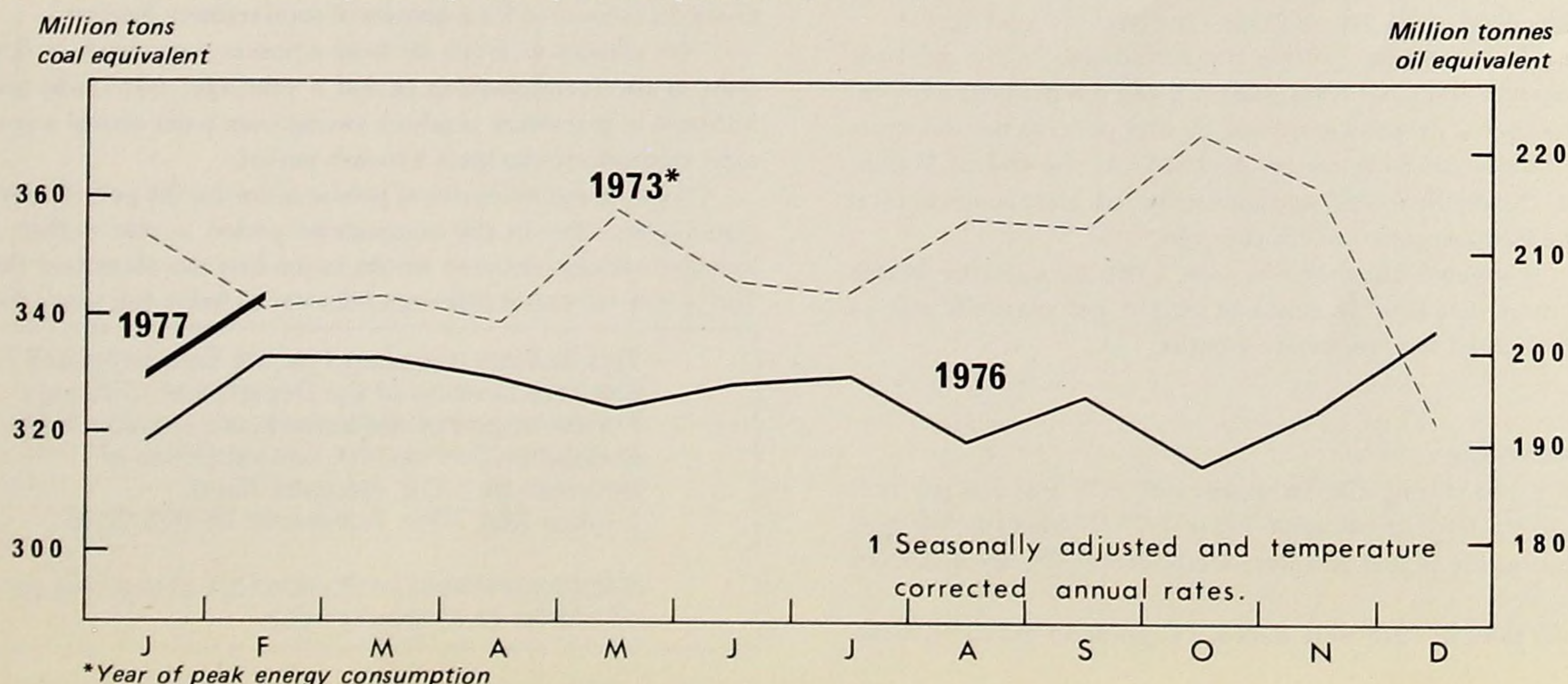


TABLE 2. Supply and use of fuels

Million therms

				1974	1975				1976p				Per ¹
	1975	1976 p	Per cent change	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	cent change
PRIMARY FUELS AND EQUIVALENTS:													
Production of primary fuels													
Coal ²	31,430	30,122	-4.2	8,355	8,482	7,904	6,602	8,442	7,941	7,672	6,420	8,089	-4.2
Petroleum ³	665	5,121	(+)	51	56	57	137	415	564	1,003	1,311	2,243	(+)
Natural gas ³	13,578	14,373	+5.9	3,967	4,193	2,980	2,191	4,214	4,727	2,962	2,173	4,511	+7.0
Primary electricity	2,982	3,401	+14.1	867	944	617	580	841	925	779	767	930	+10.6
Total	48,655	53,017	+9.0	13,240	13,675	11,558	9,510	13,912	14,157	12,416	10,671	15,773	+13.4
Arrivals. Petroleum ⁴	44,216	43,070	-2.6	13,394	11,378	11,200	10,521	11,117	10,967	10,924	10,137	11,042	-0.7
Other	1,616	1,096	-32.2	323	389	417	380	430	325	310	252	209	-51.4
Shipments	7,243	9,065	+25.2	2,051	1,730	1,638	1,993	1,882	1,724	2,044	2,479	2,818	+49.7
Bunkers	1,418	1,469	+3.6	450	375	345	354	344	372	346	381	370	+7.6
Stock change ⁵													
Solid fuels	-2,576	-660	..	+104	+103	-1,085	-891	-703	+323	-859	-401	+277	..
Crude petroleum	+475	+521	..	+256	+425	-248	+220	+78	+353	-196	-25	+389	..
Petroleum products	+978	-336	..	+349	+754	+20	-503	+707	+649	-431	-367	-187	..
Non energy use	4,106	4,442	+8.2	1,146	1,055	956	960	1,135	1,132	1,111	1,159	1,040	-8.4
Statistical difference ⁶	-176	-149	..	-9	-168	+17	-13	-12	110	-10	-17	-232	..
Total primary ⁷ energy input	80,421	81,583	+1.4	24,010	23,396	18,940	15,917	22,168	23,656	18,653	16,231	23,043	+3.9
Conversion losses etc. ⁸	24,547	24,275	-1.1	7,592	6,995	5,693	4,954	6,905	6,865	5,532	4,872	7,006	+1.5
FINAL CONSUMPTION BY USER:													
Iron and steel industry													
Coal	72	67	-7.0	26	25	18	10	19	23	15	9	20	+5.3
Other solid fuel ⁹	2,374	2,664	+12.2	673	746	575	482	571	617	703	655	689	+20.7
Other coal-derived fuels ¹⁰	372	406	+9.1	104	107	97	76	92	98	109	98	101	+9.8
Gas ¹¹	371	438	+18.1	97	101	91	79	100	108	112	99	119	+19.0
Electricity	344	394	+14.5	93	94	84	75	91	100	95	90	109	+19.8
Petroleum	1,357	1,280	-5.7	451	449	334	244	330	354	306	273	347	+5.2
Total	4,890	5,249	+7.3	1,444	1,522	1,199	966	1,203	1,300	1,340	1,224	1,385	+15.1
Other industries													
Coal	2,458	2,277	-7.4	746	660	613	528	657	547	564	470	696	+5.9
Other solid fuel ⁹	164	128	-22.0	51	47	47	40	30	38	23	28	39	+30.0
Other coal-derived fuels ¹⁰	78	77	-1.3	17	17	23	22	16	18	27	17	15	-6.3
Gas ¹¹	4,701	5,242	+11.5	1,273	1,295	1,091	1,007	1,308	1,457	1,236	1,083	1,466	+12.1
Electricity	2,234	2,360	+5.6	618	589	542	510	593	619	563	544	634	+6.9
Petroleum	7,426	7,478	+0.7	2,367	2,140	1,770	1,299	2,217	2,268	1,708	1,404	2,098	-5.4
Total	17,061	17,562	+2.9	5,072	4,748	4,086	3,406	4,821	4,947	4,121	3,546	4,948	+2.6
Transport sector													
Coal	19	20	+5.3	8	6	3	3	7	7	4	2	7	-
Electricity	99	100	+1.0	25	26	25	23	25	27	24	23	26	+4.0
Petroleum	12,143	12,597	+3.7	3,136	2,771	3,104	3,225	3,043	2,889	3,198	3,333	3,177	+4.4
Total	12,261	12,717	+3.7	3,169	2,803	3,132	3,251	3,075	2,923	3,226	3,358	3,210	+4.4
Domestic sector													
Coal	3,381	3,143	-7.0	1,160	1,013	903	699	766	932	765	634	812	+6.0
Other solid fuel ⁹	962	892	-7.3	297	270	231	260	201	284	202	213	193	-4.0
Gas ¹¹	5,891	6,194	+5.1	1,698	2,329	1,119	615	1,828	2,403	1,054	686	2,050	+12.1
Electricity	3,035	2,894	-4.6	915	1,037	678	484	836	987	596	469	842	+0.7
Petroleum	1,434	1,429	-0.3	501	473	306	194	461	519	268	176	466	+1.1
Total	14,703	14,552	-1.0	4,571	5,122	3,237	2,252	4,092	5,125	2,885	2,178	4,363	+6.6
Other final users ¹²													
Coal	490	520	+6.1	213	129	123	78	160	172	112	73	163	+1.9
Other solid fuel ⁹	219	178	-18.7	65	64	49	63	43	55	47	40	36	-16.3
Gas ¹¹	1,347	1,543	+14.6	387	472	310	171	394	570	320	177	477	+21.1
Electricity	1,548	1,545	-0.2	455	460	347	302	439	479	350	310	406	-7.5
Petroleum	3,355	3,442	+2.6	1,042	1,081	764	474	1,036	1,220	720	453	1,047	+1.1
Total	6,959	7,228	+3.9	2,162	2,206	1,593	1,088	2,072	2,496	1,549	1,053	2,131	+2.8
Total final users	55,874	57,308	+2.6	16,418	16,401	13,247	10,963	15,263	16,791	13,121	11,359	16,037	+5.1
FINAL CONSUMPTION BY FUEL:													
Coal	6,420	6,027	-6.1	2,153	1,833	1,660	1,318	1,609	1,681	1,460	1,188	1,698	+5.5
Other solid fuel ⁹	3,719	3,862	+3.8	1,086	1,127	902	845	845	994	975	936	957	+13.3
Other coal-derived fuels ¹⁰	450	483	+7.3	121	124	120	98	108	116	136	115	116	+7.4
Gas ¹¹	12,310	13,417	+9.0	3,455	4,197	2,611	1,872	3,630	4,538	2,722	2,045	4,112	+13.3
Electricity	7,260	7,293	+0.5	2,106	2,206	1,676	1,394	1,984	2,212	1,628	1,436	2,017	+1.7
Petroleum	25,715	26,226	+2.0	7,497	6,914	6,278	5,436	7,087	7,250	6,200	6,639	7,137	+0.7
Total all fuels	55,874	57,308	+2.6	16,418	16,401	13,247	10,963	15,263	16,791	13,121	11,359	16,037	+5.1

1. Per cent change on the corresponding period of the previous year. 2. Crude petroleum and natural gas liquids. 3. Excluding gas flared or reinjected. 4. Crude petroleum, process oils and petroleum products. 5. Stock fall (+) stock rise (-). 6. Supply greater than recorded demand (-). 7. 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. 8. Losses in conversion and distribution and used by fuel industries. 9. Coke and other manufactured solid fuels. 10. Coke oven gas, creosote/pitch mixtures and other liquid fuels derived from coal. 11. Natural gas supplied direct, and town gas. 12. 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
1971	148,603	147,081	134,322	10,498	+1,522	4,174	2,652	11,045	4,734
1972	123,125	119,927	107,390	10,261	+3,198	4,919	1,721	10,244	22,400
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	9,035	+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
1976 p	123,224	121,845	108,523	11,755	+1,379	2,792	1,413	12,150	1,140
Per cent change	-4.9	-3.8	-6.1	+14.7	-51.7	-44.2	-34.2	+0.4	(+)
1976 Jan	8,528	8,428	7,670	658	+100	200	100	2,180	33
Feb	10,973	10,747	9,660	940	+226	322	96	—	155
Mar*	13,307	13,160	11,830	1,183	+147	281	134	—	62
Total	32,808	32,335	29,160	2,781	+473	803	330	2,180	250
1977 Jan	7,472	7,285	6,638	608	+187	277	90	2,619	78
Feb	10,314	10,407	9,453	856	-93	106	199	—	51
Mar p*	12,931	13,099	11,900	1,139	-168	48	216	—	71
Total	30,717	30,791	27,991	2,603	-74	431	505	2,619	200
Per cent change	-6.4	-4.8	-4.0	-6.4	(-)	-46.3	+53.0	+20.1	-20.0

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 ⁷	Other ⁸
								House Coal ⁶		
1971	138,705	1,556	71,696	23,182	1,826	4,406	15,581	15,366	1,621	3,471
1972	120,945	1,383	65,611	20,152	566	4,475	11,478	12,569	1,756	2,955
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
1976 p	121,665	1,115	76,589	19,095	8	3,351	8,828	9,377	1,289	2,013
Per cent change	+1.1	-8.5	+4.4	+1.7	-11.1	-16.2	-7.4	-4.7	-19.9	+5.0
1976 Jan	9,881	85	6,660	1,369	1	284	580	618	106	178
Feb	11,510	115	7,740	1,395	1	295	732	886	109	237
Mar *	13,188	138	8,321	1,822	1	367	834	1,316	131	258
Total	34,579	338	22,721	4,586	3	946	2,146	2,820	346	673
1977 Jan	10,970	74	7,711	1,479	1	213	602	645	71	174
Feb	11,656	98	7,729	1,516	1	227	826	913	112	234
Mar p*	13,097	126	8,453	1,855	1	286	984	1,014	137	241
Total	35,723	298	23,893	4,850	3	726	2,412	2,572	320	649
Per cent change	+3.3	-11.8	+5.2	+5.8	-3.8	-23.3	+12.4	-8.8	-7.5	-3.6

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
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
1976 p	32,592	22,102	19,288	2,642	2	170	10,490	9,148	1,342
1976 Jan	29,743	18,865	16,416	2,207	2	240	10,878	9,264	1,614
Feb	29,274	18,420	15,776	2,403	1	240	10,854	9,351	1,503
Mar	29,405	18,470	15,738	2,491	1	240	10,935	9,549	1,386
1977 Jan	29,081	18,918	16,463	2,292	3	160	10,163	8,919	1,244
Feb	27,791	18,150	15,644	2,344	2	160	9,641	8,568	1,073
Mar p	27,704	18,112	15,586	2,354	2	170	9,592	8,539	1,053
Absolute change:									
In latest month	-87	-38	-58	+10	—	+10	-49	-29	-20
On a year ago	-1,701	-358	-152	-137	+1	-70	-1,343	-1,010	-333

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			Cwt.
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	
1976 p	241	192	17,061	21,239	17.4	3.7	13.7	43.81	152.59	
1976 Jan	245	194	1,069	1,554	15.9	3.3	12.6	44.88	155.89	
Feb	244	194	1,252	1,821	19.9	4.4	15.5	46.33	158.17	
Mar *	244	194	1,442	1,934	21.6	4.3	17.3	46.20	156.44	
1977 Jan	241	191	1,412	1,607	18.0	3.6	14.4	43.09	153.85	
Feb	241	192	2,066	1,841	19.4	4.1	15.3	45.16	155.77	
Mar p*	242	192	3,386	2,364	19.7	4.3	15.4	45.80	158.78	

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 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		
1971	6,977	6,660	317	1,770	2,547	8,061	4,069	3,992
1972	10,071	9,775	296	559	2,170	10,614	3,415	7,199
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
1976	14,420	14,030	390	8	241	14,445	226	14,219
Per cent change	+5.3	+5.0	+20.0	-11.1	-58.4	+4.5	-69.9	+8.8
1976 Jan	1,383	1,348	35	1	30	1,377	39	1,338
Feb	1,621	1,581	40	1	41	1,625	41	1,584
Mar *	1,801	1,750	51	1	31	1,804	39	1,765
Total	4,805	4,679	126	3	102	4,806	119	4,687
1977 Jan	1,647	1,623	24	1	28	1,644	12	1,632
Feb p	1,550	1,526	24	1	18	1,553	11	1,542
Mar p*	1,779	1,756	23	1	15	1,783	11	1,772
Total	4,976	4,905	71	3	61	4,980	34	4,946
Per cent change	+3.6	+4.8	-43.7	+4.0	-40.2	+3.6	-71.4	+5.5

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
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
1976 p	13,997	640	438	5,182	6,194	1,543
Per cent change	+6.8	-25.4	+18.1	+11.6	+5.1	+14.6
1974 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	1,823	394
1976 1st quarter p	4,765	240	108	1,443	2,403	571
2nd quarter p	2,865	158	112	1,221	1,055	319
3rd quarter p	2,149	122	99	1,066	686	176
4th quarter p	4,218	120	119	1,452	2,050	477
Per cent change	+9.4	-50.6	+19.0	+12.4	+12.5	+21.1

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

Electricity

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

	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												
1971	105.95	71.18	24.16	1.05	8.05	1.45	235.74	23.21	207.81	17.74	218.00	222.37
1972	109.37	65.25	31.25	2.48	8.89	1.47	242.75	25.30	212.20	18.05	224.70	229.23
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
1976 p	108.76	76.59	16.78	2.51	11.22	1.61	254.92	32.42	217.52	19.17	235.75	239.38
Per cent change	-0.2	+4.4	-20.6	-25.4	+20.8	-2.0	+1.5	+22.2	-1.0	+6.4	+1.1	+0.9
1975 Dec*	12.44	8.57	2.26	0.39	1.05	0.16	28.98	2.99	25.48	2.01	26.97	27.38
1976 Jan	9.58	6.66	1.51	0.34	0.83	0.24	22.36	2.38	19.33	1.62	20.74	21.08
Feb	10.85	7.74	1.75	0.29	0.85	0.21	25.26	2.46	22.23	1.76	23.50	23.84
Total	32.87	22.97	5.52	1.02	2.73	0.61	76.60	7.83	67.04	5.39	71.21	72.30
1976 Dec*	13.40	9.63	2.23	0.16	1.22	0.15	31.33	3.51	27.27	2.28	29.05	29.43
1977 Jan	11.09	7.94	1.88	0.13	1.00	0.13	25.78	2.90	22.40	1.84	23.94	24.23
Feb p	10.52	7.65	1.45	0.13	1.15	0.14	24.64	3.29	20.91	1.80	22.84	23.08
Total	35.01	25.22	5.56	0.42	3.37	0.42	81.75	9.70	70.58	5.92	75.83	76.74
Per cent change	+6.5	+9.8	+0.7	-58.8	+23.4	-31.1	+6.7	+23.9	+5.3	+9.8	+6.5	+6.1
England and Wales												
1971	93.40	64.95	20.07	1.05	7.19	0.08	208.07	20.68	186.14	15.33	192.74	195.13
1972	95.63	58.21	26.74	2.48	8.08	0.09	212.91	23.01	187.95	15.71	197.20	200.24
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
1976 p	94.29	67.97	13.84	2.51	9.84	0.08	222.12	28.30	193.11	15.95	206.17	207.62
Per cent change	-0.4	+5.1	-22.9	-25.4	+17.2	-11.4	+1.3	+18.2	-0.6	+4.1	+1.1	+0.6
1975 Dec*	10.76	7.50	1.89	0.39	0.96	0.01	25.18	2.71	22.37	1.68	23.50	23.64
1976 Jan	8.23	5.86	1.25	0.34	0.76	0.02	19.32	2.16	17.07	1.35	17.97	18.16
Feb	9.37	6.81	1.47	0.29	0.78	0.01	21.91	2.24	19.60	1.49	20.42	20.65
Total	28.36	20.17	4.61	1.02	2.50	0.04	66.41	7.11	59.04	4.52	61.89	62.45
1976 Dec*	11.59	8.49	1.83	0.16	1.09	0.01	27.22	3.14	23.97	1.88	25.34	25.36
1977 Jan	9.56	6.94	1.58	0.13	0.89	0.01	22.31	2.57	19.62	1.53	20.78	20.98
Feb p	9.06	6.76	1.17	0.13	0.98	0.02	21.30	2.81	18.40	1.49	19.81	19.82
Total	30.21	22.19	4.58	0.42	2.96	0.04	70.83	8.52	61.99	4.90	65.93	66.16
Per cent change	+6.5	+10.0	-0.7	-58.8	+18.4	+2.6	+6.7	+19.8	+5.0	+8.4	+6.5	+5.9

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
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
1976 p	220,532	12,576	74,914	84,802	48,240
Per cent change	+1.3	+12.6	+5.6	-4.7	+3.2
1974 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
3rd quarter p	43,235	2,866	17,253	13,745	9,371
4th quarter p	62,220	3,449	20,209	24,676	13,886
Per cent change	+4.7	+18.0	+7.3	+0.7	+5.2

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						
1971	212	107,031	138	+106,167	726	107,736	1,569	19,071	16,948	+2,123	5,655
1972	333	105,641	226	+104,148	1,267	107,706	3,558	20,440	15,775	+4,665	5,225
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
1976 p	12,036	98,384	11,511	+86,181	692	90,466	4,285	10,422	15,726	-5,304	3,569
Per cent change	(+)	+6.6	(+)	-4.1	-45.7	-1.0	(+)	-16.4	+15.1	(+)	+3.2
1975 Dec	394	7,919	345	+7,460	114	7,598	138	1,488	1,094	+394	315
1976 Jan	355	7,703	372	+7,219	112	7,469	250	825	986	-161	311
Feb	435	8,088	385	+7,575	128	7,737	162	1,078	1,126	-48	295
Total	1,184	23,710	1,102	+22,254	354	22,804	550	3,391	3,206	+185	921
1976 Dec p	1,989	8,995	1,821	+7,156	18	7,855	699	1,028	1,544	-516	336
1977 Jan p	2,244	7,694	2,083	+5,640	-29	6,463	823	1,204	1,250	-46	253
Feb p	2,410	7,777	2,373	+5,389	15	6,289	900	918	1,258	-340	255
Total	6,643	24,466	6,277	+18,185	4	20,607	2,422	3,150	4,052	-902	844
Per cent change	(+)	+3.2	(+)	-18.3	(--)	-9.6	(+)	-7.1	+26.3	(-)	-9.4

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 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				
1971	105,342	6,184	913	98,245	1,236	284	5,728	12,522	3,707	2,540	24,455	43,173	1,429	2,094
1972	106,980	6,420	1,192	99,368	1,463	369	5,728	13,632	4,180	2,649	25,536	41,002	1,333	2,004
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
1976 p	97,784	6,342	1,158	90,284	1,575	158	4,583	15,232	4,163	2,458	24,198	32,696	1,310	1,897
Per cent change	+4.5	+5.2	+28.5	+4.2	+8.8	+4.4	+15.5	+9.3	+5.2	+6.9	+3.7	−0.0	+14.8	−9.6
1975 Dec	8,158	544	63	7,551	142	15	376	1,216	305	248	2,097	2,797	65	144
1976 Jan	8,400	559	60	7,781	157	15	402	1,178	310	262	2,147	2,943	94	121
Feb	7,637	522	110	7,005	141	15	435	1,128	268	283	1,961	2,336	107	162
Total	24,195	1,625	233	22,337	440	45	1,213	3,522	883	793	6,205	8,076	266	427
1976 Dec	8,833	561	184	8,088	151	13	485	1,298	292	292	2,105	3,081	120	108
1977 Jan	8,145	536	93	7,516	131	13	403	1,153	233	301	2,001	2,899	116	97
Feb p	7,982	470	92	7,420	122	9	398	1,075	289	257	2,001	2,890	118	122
Total	24,960	1,567	369	23,024	404	35	1,286	3,526	814	850	6,107	8,870	354	327
Per cent change	+3.2	−3.6	+59.1	+3.1	−8.0	−23.8	+6.1	+0.1	−7.8	+7.2	−1.6	+9.8	+33.0	−23.4

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					
1971	91,520	1,196	7,623	14,964	3,667	713	1,369	532	5,186	12,569	39,395	1,148	2,208
1972	97,700	1,455	7,391	15,899	3,929	778	1,663	528	5,254	15,113	41,307	1,113	2,203
1973	99,344	1,600	8,373	16,927	4,202	788	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
1976 p	80,291	1,330	5,404	16,879	3,989	576	1,686	372	5,594	12,984	27,825	1,011	1,867
Per cent change	-1.7	+4.3	+5.6	+4.7	+4.0	+7.1	-1.3	-7.2	+3.3	-0.5	-8.7	+1.9	-10.6
1975 Dec	7,731	117	466	1,338	279	98	212	40	437	1,428	3,039	84	128
1976 Jan	7,131	119	458	1,221	299	77	169	34	429	1,324	2,728	77	130
Feb	7,410	121	473	1,203	279	94	205	40	443	1,436	2,821	72	145
Total	22,272	357	1,397	3,762	857	269	586	114	1,309	4,188	8,588	233	403
1976 Dec	7,936	134	413	1,447	284	113	232	42	467	1,530	3,031	84	99
1977 Jan	7,741	131	528	1,203	296	105	205	40	420	1,573	2,996	81	98
Feb p	7,090	125	379	1,261	277	72	201	36	452	1,398	2,604	87	123
Total	22,767	390	1,320	3,911	857	290	638	118	1,339	4,501	8,631	252	320
Per cent change	+2.2	+9.2	-5.6	+4.0	-0.1	+8.2	+9.1	+2.8	+2.2	+7.5	+0.5	+7.9	-20.5

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
1971	81,863	15,058	2,706	5,292	21,068	26,043	3,015	8,681
1972	87,788	19,039	2,249	5,044	21,899	27,152	3,485	8,920
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	13,326	693	3,309	17,251	27,582	3,270	7,954
1976 p	71,473	10,441	366	3,128	17,487	28,599	3,269	8,183
Per cent change	-2.6	-21.6	-47.3	-5.5	+1.4	+3.7	-0.0	+2.9
1975 Nov	6,352	1,095	47	271	1,658	2,169	318	794
Dec	7,017	1,323	47	265	1,764	2,237	429	952
1976 Jan	6,434	1,053	54	263	1,721	2,094	356	893
Total	19,803	3,471	148	799	5,143	6,500	1,103	2,639
1976 Nov	6,471	914	25	301	1,722	2,323	330	856
Dec	7,295	1,260	30	284	1,843	2,391	473	1,014
1977 Jan p	6,987	1,193	32	302	1,892	2,092	430	1,046
Total	20,753	3,367	87	887	5,457	6,806	1,233	2,916
Per cent change	+4.8	-3.0	-41.4	+11.0	+6.1	+4.7	+11.8	+10.5

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
1976 Jan	20.9	81	0.91
Feb	20.4	85	0.98
Mar	19.3	90	0.89
1977 Jan	20.6	80	0.90
Feb	19.6	81	0.97
Mar p	19.4	88	0.81

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

From \ To	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

Electricity generated outside the public electricity supply system in Great Britain (¹)

GWh

	Total	Industry										Transport undertakings
		Total Industry	Iron and Steel	Engineering and other metal trades	Food drink and tobacco	Coal mining	Chemical and allied trades		Textiles, leather and clothing	Paper, printing and stationery	Other industries (including gas and water works)	
							Nuclear ² power stations	Others ³				
1971	20,597	19,920	2,728	1,344	410	293	4,339	6,987	535	2,671	613	677
1972	20,727	20,034	2,587	1,320	409	323	4,098	7,408	458	2,786	645	693
1973	22,995	22,292	2,707	2,716	458	309	4,339	7,859	498	2,763	643	703
1974	22,588	21,939	2,180	3,139	521	251	4,222	7,904	450	2,598	674	649
1975	20,741	20,052	1,660	3,319	435	297	3,820	7,305	406	2,137	673	689
1976 p	21,977	21,288	1,706	3,362	496	269	3,736	8,398	423	2,249	649	689
Per cent change	+6.0	+6.2	+2.8	+1.3	+14.0	-9.4	-2.2	+15.0	+4.2	+5.2	-3.6	-0.0
1974 4th quarter	5,585	5,419	536	806	221	81	894	1,976	84	646	175	166
1975 1st quarter	5,777	5,599	586	873	110	83	1,088	1,998	106	570	185	178
2nd quarter	4,852	4,683	369	825	61	71	828	1,738	104	525	162	169
3rd quarter	4,586	4,423	294	802	67	64	829	1,670	98	453	146	163
4th quarter	5,526	5,347	411	819	197	79	1,075	1,899	98	589	180	179
1976 1st quarter p	5,957	5,770	480	852	100	74	1,098	2,263	115	599	189	187
2nd quarter p	5,252	5,083	409	856	78	63	834	2,019	105	567	152	169
3rd quarter p	4,954	4,793	367	790	72	58	812	1,982	96	479	137	161
4th quarter p	5,814	5,642	450	864	246	74	992	2,134	107	604	171	172
Per cent change	+5.2	+5.5	+9.5	+5.5	+24.9	-6.3	-7.7	+12.4	+9.2	+2.5	-5.0	-3.9

1. Excludes electricity generated by commerce, public administration etc. 2. Generated by UKAEA and British Nuclear Fuels Ltd. for the public electricity supply system. 3. Including production by the oil refining industry.