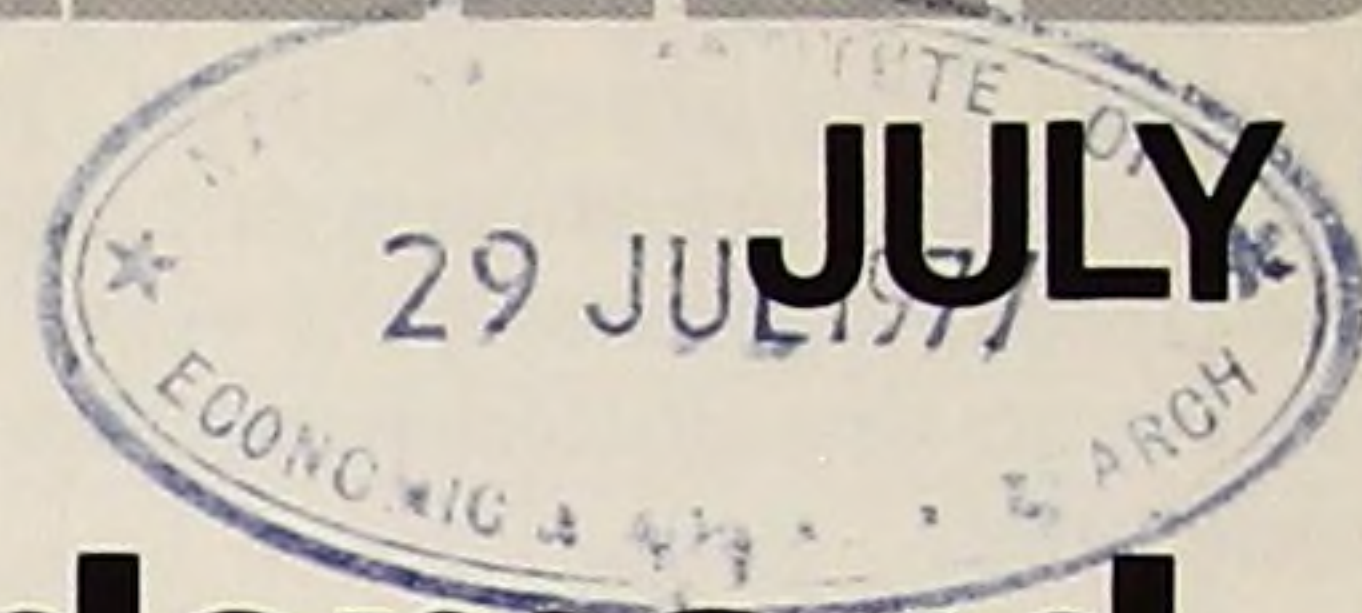


ENERGY TRENDS

A Statistical Bulletin

Cold spring stimulates demand

JULY 1977



Total Energy

Fall in first quarter domestic consumption

During the three month period March to May total inland energy consumption on a primary fuel input basis was 2.2 per cent higher than in the corresponding period of 1976. Both April and May were much colder than the comparable months last year and in the latter month demand for petroleum exceeded last year's level for the first time since January. After correction for temperature differences and seasonality, total energy consumption during the three month period narrowed slightly to 2 per cent above last year's level.

Provisional figures of the supply and use of fuels are now available for the first quarter of 1977. Measured on a thermal basis, total indigenous production of fuels was nearly 20 per cent higher than during the comparable quarter of last year, the bulk of the increase of 2.6 billion therms being almost wholly attributable to North Sea oil, although natural gas and primary electricity production rose by 3.9 and 15.6 per cent respectively while coal production declined by 5.5 per cent.

Energy consumption by final users during the quarter was 0.6 per cent more in total than a year ago. Electricity and petroleum consumption were higher than last year by 1.4 and 1.5 per cent respectively, coal consumption declined by 1.1 per cent while gas remained at virtually the same level as last year.

Total consumption by domestic consumers in the first quarter was 2.8 per cent lower than in the corresponding period of 1976 despite the on average colder conditions prevailing this year. There were however substantial variations in the weather patterns of the two periods with January very much colder than last year and February and March somewhat warmer. Of the individual fuels consumed in this sector only gas was in greater demand than a year ago, but the increase was less than $\frac{1}{2}$ per cent and the remaining fuels all declined by amounts ranging between 1 and 17 per cent.

In the remaining consuming sectors, the iron and steel industry used 3 per cent more energy in total and consumption by other industries was higher also, the 1.6 per cent increase in total consumption being largely due to increased use of coal and electricity. In the transport sector, dominated by petroleum, consumption rose by 3.4 per cent, two-thirds of the increase being attributable to higher deliveries of road transport fuels.

Coal

Foreign trade pattern reversed

Deep-mined coal production during the first half of 1977 was 3.4 per cent lower than in the corresponding period last year, while opencast production rose by 4.8 per cent. Imports of coal were nearly halved while exports, in contrast, rose by nearly two-thirds to just over 1 million tons, a reversal of last year's foreign trade pattern.

Total inland consumption of coal during the period rose by 3.3 per cent to just under 65 million tons. Power stations used $42\frac{1}{2}$ million tons, 7.4 per cent more than in the corresponding period last year, and colliery disposals to industry rose by 3.3 per cent.

Gas

Big jump in 2nd quarter send out

Total gas sent out during the April-June quarter of 1977 was over 10

per cent higher than in the corresponding quarter of 1976. Each month of the quarter was appreciably cooler than last year and in June, which was particularly cold, gas sent out was nearly 20 per cent higher than a year ago.

Sales of gas during the first quarter of the year were 2.8 per cent lower in total than in the comparable period of 1976. Power station use of gas was halved and after this is taken into account total sales were little changed from last year's levels. There was a small increase in the volume of sales to the domestic sector and the iron and steel industry but these were largely offset by marginally lower sales to other industrial consumers and the commercial and public administration sector.

Electricity

Domestic consumers use less in 1st quarter

Total electricity supplied during the March to May period was 2.7 per cent higher than in the corresponding period last year. Total fuel used for generation rose similarly by 2.5 per cent.

Sales of electricity in the first quarter of 1977 were 1.4 per cent higher than in the first quarter of last year. Purchases by domestic consumers fell by 2.1 per cent but the remaining consuming sectors each increased their demand. Sales to the iron and steel industry and to other industries taken together rose by 4.2 per cent and a slightly smaller increase, 4.1 per cent, was registered by other consumers.

The final table this month shows details of electricity generated outside the public supply system, mainly by manufacturing industry. During the first quarter of 1977, total generation was 3.3 per cent lower than in the corresponding period last year. About half the decline was attributable to lower output from the nuclear power stations of British Nuclear Fuels Ltd which fell by 16 per cent, mainly as a result of the stoppage at their plants during January and February.

Petroleum

Heating Oils in demand

Total inland deliveries of products during the three month period March to May were 0.5 per cent higher than in the corresponding period of 1976. The increase was concentrated in the last month of the period when the demand for heating oils was stimulated by the colder weather. This was particularly evident with gas/diesel oils, deliveries of which were nearly a fifth higher than a year previously. Transport fuels continued in greater demand and deliveries of motor spirit, derv and aviation turbine fuel rose by 2.1, 3.6 and 3.4 per cent respectively.

Correction

Energy information card "United Kingdom Energy Statistics, 1977" issued with June "Energy Trends". At foot of chart after "255" and "425" delete "million".

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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>					
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	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
1976 Jan-May	143.7	52.6	56.9	28.1	5.1	1.0	85.9	31.4	34.0	16.8	3.1	0.6
1977 Jan-May p	148.3	54.8	56.9	29.6	6.1	0.9	88.6	32.7	34.0	17.7	3.7	0.5
Per cent change	+3.2	+4.2	+0.1	+5.4	+18.9	–12.9	+3.2	+4.2	+0.1	+5.4	+18.9	–12.9
1976 Mar*	35.8	13.2	14.6	6.5	1.3	0.2	21.4	7.9	8.8	3.9	0.7	0.1
Apr	26.0	9.0	10.8	5.0	1.0	0.2	15.5	5.4	6.4	3.0	0.6	0.1
May	23.0	9.0	9.0	4.0	0.9	0.1	13.7	5.4	5.3	2.4	0.5	0.1
Total	84.8	31.2	34.4	15.5	3.2	0.5	50.6	18.7	20.5	9.3	1.8	0.3
1977 Mar*	34.8	13.0	13.7	6.2	1.6	0.3	20.8	7.8	8.2	3.7	1.0	0.1
Apr	27.2	9.9	10.5	5.5	1.1	0.2	16.2	5.9	6.2	3.3	0.7	0.1
May p	24.7	9.4	9.6	4.6	1.0	0.1	14.8	5.6	5.8	2.7	0.6	0.1
Total	86.7	32.3	33.8	16.3	3.7	0.6	51.8	19.3	20.2	9.7	2.3	0.3
Per cent change	+2.2	+3.4	–1.7	+5.1	+18.2	+8.6	+2.2	+3.4	–1.7	+5.1	+18.2	+8.6

Seasonally adjusted and temperature corrected⁴ (annual rates)

1976 Jan-May	328.2	122.5	133.3	58.9	11.3	2.2	196.2	73.2	79.7	35.2	6.8	1.3
1977 Jan-May p	335.5	125.3	133.4	61.0	13.6	2.2	200.5	74.9	79.7	36.5	8.1	1.3
Per cent change	+2.2	+2.3	+0.1	+3.7	+20.1	–1.7	+2.2	+2.3	+0.1	+3.7	+20.1	–1.7
1976 Mar*	332.9	123.0	135.3	61.5	11.1	2.0	199.0	73.5	80.9	36.8	6.6	1.2
Apr	329.1	118.7	137.8	57.6	12.1	2.9	196.6	71.0	82.3	34.4	7.2	1.7
May	323.9	120.5	134.0	54.8	12.2	2.4	193.6	72.0	80.1	32.7	7.3	1.5
Average	329.0	120.9	135.7	58.2	11.8	2.4	196.6	72.3	81.1	34.8	7.0	1.4
1977 Mar*	331.3	124.8	131.6	58.3	14.3	2.3	198.0	74.6	78.6	34.8	8.6	1.4
Apr	335.6	124.1	133.2	62.0	13.5	2.8	200.5	74.2	79.6	37.0	8.0	1.7
May p	340.8	121.5	140.7	61.1	14.1	3.4	203.7	72.6	84.1	36.5	8.5	2.0
Average	335.5	123.5	134.9	60.3	14.0	2.8	200.5	73.8	80.6	36.0	8.4	1.7
Per cent change	+2.0	+2.2	–0.6	+3.5	+19.1	+13.6	+2.0	+2.2	–0.6	+3.5	+19.1	+13.6

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

Million tons
coal equivalent

Million tonnes
oil equivalent

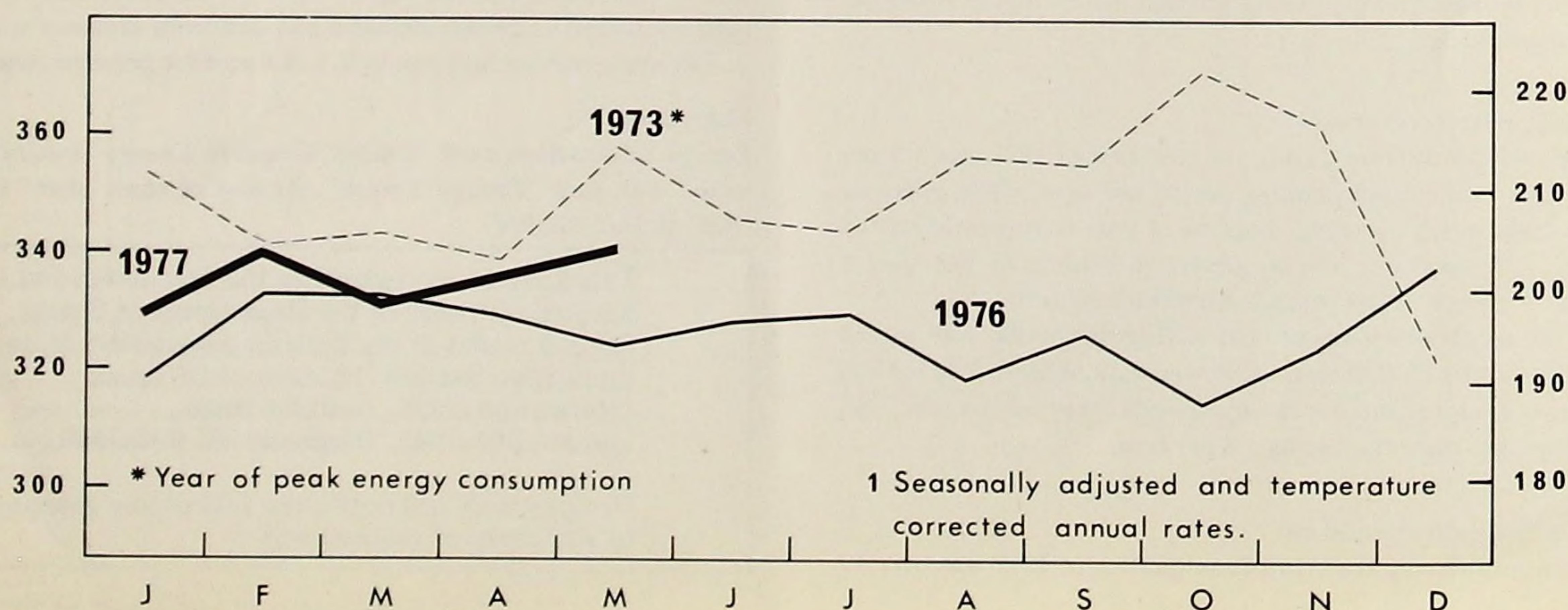


TABLE 2. Supply and use of fuels

Million therms

	1975	1976	Per cent change	1975					1976				1977p	Per ¹ 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	31,430	30,166	-4.0	8,482	7,904	6,602	8,442	8,006	7,635	6,378	8,147	7,567	-5.5	
Petroleum ²	665	5,206	(+)	56	57	137	415	574	1,020	1,335	2,277	3,301	(+)	
Natural gas ³	13,578	14,379	+5.9	4,193	2,980	2,191	4,214	4,727	2,962	2,173	4,517	4,910	+3.9	
Primary electricity	2,982	3,411	+14.4	944	617	580	841	926	786	770	929	1,070	+15.6	
Total	48,655	53,162	+9.3	13,675	11,558	9,510	13,912	14,233	12,403	10,656	15,870	16,848	+18.4	
Arrivals. Petroleum ⁴	44,216	43,174	-2.4	11,378	11,200	10,521	11,117	10,992	10,949	10,160	11,073	9,611	-12.6	
Other	1,616	1,183	-26.8	389	417	380	430	351	336	270	226	193	-45.0	
Shipments	7,243	9,176	+26.7	1,730	1,638	1,993	1,882	1,745	2,068	2,507	2,856	3,103	+77.8	
Bunkers	1,418	1,468	+3.5	375	345	354	344	371	346	381	370	319	-14.0	
Stock change ⁵														
Solid fuels	-2,576	-634	..	+103	-1,085	-891	-703	+312	-820	-388	+262	+1,193	..	
Crude petroleum	+475	-378	..	+425	-248	+220	+78	+354	-196	-25	-511	+375	..	
Petroleum products	+978	+240	..	+754	+20	-503	+707	+648	-431	-367	+390	+560	..	
Non energy use	4,106	4,448	+8.3	1,055	956	960	1,135	1,138	1,111	1,159	1,040	929	-18.4	
Statistical difference ⁶	-176	+54	..	-168	+17	-13	-12	+58	-23	-2	+21	-301	..	
Total primary ⁷ energy input	80,421	81,709	+1.6	23,396	18,940	15,917	22,168	23,694	18,693	16,257	23,065	24,128	+1.8	
Conversion losses etc. ⁸	24,545	24,380	-0.7	6,995	5,693	4,954	6,905	6,913	5,596	4,905	6,966	7,254	+4.9	
FINAL CONSUMPTION BY USER:														
Iron and steel industry														
Coal	72	66	-8.3	25	18	10	19	23	14	9	20	23	-	
Other solid fuel ⁹	2,374	2,723	+14.7	746	575	482	571	631	719	670	703	655	+3.8	
Other coal-derived fuels ¹⁰	372	401	+7.8	107	97	76	92	98	109	97	97	95	-3.1	
Gas ¹¹	371	438	+18.1	101	91	79	100	108	112	99	119	128	+18.5	
Electricity	344	395	+14.8	94	84	75	91	100	96	90	109	102	+2.0	
Petroleum	1,357	1,279	-5.7	449	334	244	330	354	306	273	346	351	-0.8	
Total	4,890	5,302	+8.4	1,522	1,199	966	1,203	1,314	1,356	1,238	1,394	1,354	+3.0	
Other industries														
Coal	2,458	2,277	-7.4	660	613	528	657	547	564	470	696	617	+12.8	
Other solid fuel ⁹	164	126	-23.2	47	47	40	30	38	24	27	37	39	+2.6	
Other coal-derived fuels ¹⁰	78	76	-2.6	17	23	22	16	13	23	25	15	17	+30.8	
Gas ¹¹	4,701	5,241	+11.5	1,295	1,091	1,007	1,308	1,456	1,236	1,083	1,466	1,431	-1.7	
Electricity	2,228	2,364	+6.1	588	540	508	592	617	563	546	638	646	+4.7	
Petroleum	7,434	7,441	+0.1	2,140	1,770	1,300	2,224	2,255	1,696	1,400	2,090	2,256	-	
Total	17,063	17,525	+2.7	4,747	4,084	3,405	4,827	4,926	4,106	3,551	4,942	5,006	+1.6	
Transport sector														
Coal and other solid fuel	19	21	+10.5	6	3	3	7	7	4	2	8	6	-14.3	
Electricity	99	98	+1.0	26	25	23	25	26	24	22	26	27	+3.8	
Petroleum	12,143	12,597	+3.7	2,771	3,104	3,225	3,043	2,889	3,198	3,333	3,177	2,988	+3.4	
Total	12,261	12,716	+3.7	2,803	3,132	3,251	3,075	2,922	3,226	3,357	3,211	3,021	+3.4	
Domestic sector														
Coal	3,381	3,143	-7.0	1,013	903	699	766	932	765	634	812	851	-8.7	
Other solid fuel ⁹	962	869	-9.7	270	231	260	201	277	196	208	188	231	-16.6	
Gas ¹¹	5,891	6,194	+5.1	2,329	1,119	615	1,828	2,403	1,055	686	2,050	2,412	+0.4	
Electricity	3,045	2,905	-4.6	1,041	681	485	838	993	585	464	863	972	-2.1	
Petroleum	1,434	1,435	-0.1	473	306	194	461	519	268	176	472	513	-1.2	
Total	14,713	14,546	-1.1	5,126	3,240	2,253	4,094	5,124	2,869	2,168	4,385	4,979	-2.8	
Other final users ¹²														
Coal	490	516	+5.3	129	123	78	160	172	113	73	158	165	-4.1	
Other solid fuel ⁹	219	166	-24.2	64	49	63	43	51	44	37	34	52	+2.0	
Gas ¹¹	1,347	1,521	+12.9	472	310	171	394	571	317	169	464	561	-1.8	
Electricity	1,546	1,596	+3.2	462	347	300	437	478	345	308	465	497	+4.0	
Petroleum	3,347	3,441	+2.8	1,081	764	474	1,028	1,223	721	451	1,046	1,239	+1.3	
Total	6,949	7,240	+4.2	2,208	1,593	1,086	2,062	2,495	1,540	1,038	2,167	2,514	+0.8	
Total final users	55,876	57,329	+2.6	16,406	13,248	10,961	15,261	16,781	13,097	11,352	16,099	16,874	+0.6	
FINAL CONSUMPTION BY FUEL:														
Coal	6,420	6,022	-6.2	1,833	1,660	1,318	1,609	1,681	1,460	1,188	1,693	1,662	-1.1	
Other solid fuel ⁹	3,719	3,885	+4.5	1,127	902	845	845	997	983	942	963	977	-2.0	
Other coal-derived fuels ¹⁰	450	477	+6.0	124	120	98	108	111	132	122	112	112	+0.9	
Gas ¹¹	12,310	13,394	+8.8	4,197	2,611	1,872	3,630	4,538	2,720	2,037	4,090	4,532	-0.1	
Electricity	7,262	7,358	+1.3	2,211	1,677	1,391	1,983	2,214	1,613	1,430	2,101	2,244	+1.4	
Petroleum	25,715	26,193	+1.9	6,914	6,278	5,437	7,086	7,240	6,189	5,633	7,131	7,347	+1.5	
Total all fuels	55,876	57,329	+2.6	16,406	13,248	10,961	15,261	16,781	13,097	11,352	16,099	16,874	+0.6	

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 1977 Tables 8 and 11. 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
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
1976	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-Jun	64,225	63,175	56,593	5,765	+1,050	1,661	611	5,181	381
1977 Jan-Jun p	61,095	61,225	54,691	6,042	-130	871	1,001	5,798	426
Per cent change	-4.9	-3.1	-3.4	+4.8	(-)	-47.6	+63.8	+11.9	+12.1
1976 Apr	9,829	9,680	8,717	825	+149	248	99	840	34
May	10,833	10,544	9,459	997	+289	387	98	46	66
Jun *	10,743	10,616	9,257	1,162	+127	224	97	2,116	31
Total	31,405	30,840	27,433	2,984	+565	859	294	3,002	131
1977 Apr	9,580	9,601	8,554	949	-21	123	144	846	43
May	10,393	10,409	9,236	1,104	-16	156	172	73	92
Jun p *	10,408	10,423	8,909	1,386	-15	164	179	2,260	90
Total	30,381	30,433	26,699	3,439	-52	443	495	3,179	225
Per cent change	-3.3	-1.3	-2.7	+15.2	(-)	-48.4	68.4	+5.9	+71.8

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		
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	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-Jun	62,712	604	39,591	9,458	4	1,854	4,326	5,121	643	1,111
1977 Jan-Jun p	64,797	600	42,528	9,086	4	1,478	4,467	4,889	633	1,112
Per cent change	+3.3	-0.7	+7.4	-3.9	+4.8	-20.3	+3.3	-4.5	-1.6	+0.1
1976 Apr	9,009	87	5,477	1,501	1	279	643	758	96	167
May	8,987	88	5,336	1,506	-	283	759	775	98	142
Jun *	10,137	90	6,058	1,865	-	346	779	768	102	129
Total	28,133	265	16,871	4,872	1	908	2,181	2,301	296	438
1977 Apr	9,850	94	6,486	1,369	1	240	668	729	92	171
May	9,371	102	5,964	1,326	-	236	684	802	108	149
Jun p *	10,023	106	6,237	1,652	1	283	703	786	112	143
Total	29,244	302	18,687	4,347	2	759	2,055	2,317	312	463
Per cent change	+3.9	+14.0	+10.8	-10.8	+18.8	-16.4	-5.8	+0.7	+5.4	+5.7

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	32,592	22,102	19,288	2,642	2	170	10,490	9,148	1,342
1976 Apr	30,247	19,034	16,298	2,495	1	240	11,213	9,827	1,386
May	31,966	20,440	17,572	2,627	1	240	11,526	10,065	1,461
Jun	32,566	21,192	18,410	2,541	1	240	11,374	9,824	1,550
1977 Apr	27,497	17,731	15,274	2,285	2	170	9,766	8,612	1,154
May	28,279	18,807	16,273	2,353	1	180	9,472	8,267	1,205
Jun p	28,762	19,484	17,066	2,237	1	180	9,278	7,879	1,399
Absolute change:									
In latest month	+483	+677	+793	-116	-	-	-194	-388	+194
On a year ago	-3,804	-1,708	-1,344	-304	-	-60	-2,096	-1,945	-151

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	Number		Total	Voluntary	Involuntary	Overall	At the face
	Thousands				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	241	192	17,061	21,239	17.4	3.7	13.7	43.81	152.59
1976 Apr	243	194	1,110	1,668	17.7	4.3	13.4	44.59	152.88
May	243	193	1,422	1,496	15.1	3.2	11.9	45.44	156.20
Jun *	243	193	1,573	2,012	15.4	3.1	12.3	42.56	151.29
1977 Apr	243	193	2,941	1,906	18.5	4.5	14.0	44.48	156.84
May	244	194	2,850	2,076	16.2	3.3	12.9	44.97	158.47
Jun p *	244	194	2,821	3,002	16.0	3.1	12.9	41.72	153.45

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		
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-Jun	7,900	7,673	227	4	144	7,895	168	7,727
1977 Jan-Jun p	8,396	8,260	136	4	85	8,381	55	8,326
Per cent change	+6.3	+7.7	-40.1	+4.8	-41.0	+6.2	-67.3	+7.8
1976 Apr	1,197	1,157	40	1	17	1,198	23	1,175
May	1,001	968	33	—	16	995	16	979
Jun *	897	868	29	—	9	896	11	885
Total	3,095	2,993	102	1	42	3,089	50	3,039
1977 Apr	1,289	1,281	8	1	9	1,288	8	1,280
May p	1,062	1,039	23	—	8	1,049	6	1,043
Jun p *	1,069	1,036	33	1	6	1,064	6	1,058
Total	3,420	3,356	64	2	23	3,401	20	3,381
Per cent change	+10.5	+12.1	-37.3	+6.3	-45.2	+10.1	-60.0	+11.3

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	13,997	662	438	5,182	6,194	1,521
Per cent change	+6.8	-22.8	+18.1	+11.6	+5.1	+12.9
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	4,765	240	108	1,443	2,403	571
2nd quarter	2,865	160	112	1,221	1,055	317
3rd quarter	2,149	129	99	1,066	686	169
4th quarter	4,218	133	119	1,452	2,050	464
1977 1st quarter p	4,633	118	128	1,414	2,412	561
Per cent change	-2.8	-50.8	+18.5	-2.0	+0.4	-1.8

1. Public supply and transport power stations. 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												
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	237.30
1976	108.76	76.59	16.78	2.51	11.22	1.61	254.92	32.42	217.50	19.16	235.76	239.47
Per cent change	-0.2	+4.4	-20.6	-25.4	+20.8	-2.0	+1.5	+22.2	-1.0	+6.3	+1.1	+0.9
1976 Jan-May	48.41	33.53	8.04	1.38	4.49	0.94	113.48	12.98	97.89	8.21	105.27	106.96
1977 Jan-May p	50.27	35.87	7.54	0.47	5.57	0.79	118.06	15.95	99.67	8.62	109.44	110.80
Per cent change	+3.8	+7.0	-6.2	-66.0	+24.0	-15.5	+4.0	+22.9	+1.8	+5.0	+4.0	+3.6
1976 Mar*	12.09	8.32	2.12	0.32	1.12	0.21	28.44	3.23	24.60	2.04	26.40	26.80
Apr	8.29	5.48	1.44	0.26	0.93	0.18	19.56	2.65	16.43	1.44	18.12	18.43
May	7.60	5.34	1.22	0.17	0.77	0.10	17.86	2.25	15.30	1.34	16.52	16.80
Total	27.98	19.14	4.78	0.75	2.82	0.49	65.86	8.13	56.33	4.82	61.04	62.03
1977 Mar*	11.94	8.26	1.83	0.13	1.48	0.23	28.33	4.24	23.40	2.09	26.24	26.57
Apr	8.77	6.33	1.27	—	1.02	0.15	20.59	2.92	17.24	1.49	19.10	19.37
May p	7.96	5.71	1.11	0.08	0.91	0.14	18.73	2.59	15.75	1.37	17.36	17.57
Total	28.67	20.30	4.21	0.21	3.41	0.52	67.65	9.75	56.39	4.95	62.70	63.51
Per cent change	+2.5	+6.1	-11.9	-72.1	+20.9	+7.0	+2.7	+19.9	+0.1	+2.7	+2.7	+2.4
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	15.89	202.96	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	94.29	67.97	13.84	2.51	9.84	0.08	222.12	28.30	193.11	15.94	206.18	207.62
Per cent change	-0.4	+5.1	-22.9	-25.4	+17.2	-11.4	+1.3	+18.2	-0.6	+4.0	+1.1	+0.6
1976 Jan-May	41.81	29.51	6.75	1.38	4.09	0.05	98.58	11.74	86.52	6.88	91.70	92.43
1977 Jan-May p	43.34	31.88	6.19	0.47	4.72	0.05	102.20	13.49	88.23	7.19	95.01	95.76
Per cent change	+3.7	+8.0	-8.3	-66.0	+15.4	+22.7	+3.7	+14.9	+2.0	+4.5	+3.6	+3.6
1976 Mar*	10.47	7.33	1.78	0.32	1.03	0.01	24.75	2.95	21.72	1.71	23.04	23.14
Apr	7.16	4.83	1.22	0.26	0.84	0.01	17.04	2.38	14.60	1.22	15.82	15.92
May	6.58	4.69	1.03	0.17	0.69	—	15.58	2.02	13.53	1.14	14.44	14.56
Total	24.21	16.85	4.03	0.75	2.56	0.02	57.37	7.35	49.85	4.07	53.30	53.62
1977 Mar*	10.27	7.39	1.50	0.13	1.24	0.01	24.47	3.55	20.81	1.74	22.73	22.93
Apr	7.55	5.61	1.03	—	0.90	0.01	17.82	2.55	15.19	1.28	16.54	16.78
May p	6.89	5.17	0.92	0.08	0.71	0.01	16.30	2.01	14.22	1.15	15.15	15.25
Total	24.71	18.17	3.45	0.21	2.85	0.03	58.59	8.11	50.22	4.17	54.42	54.96
Per cent change	+2.1	+7.8	-14.4	-72.1	+11.3	+38.9	+2.1	+10.3	+0.7	+2.5	+2.1	+2.5

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 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	217,924	11,164	70,854	89,214	46,692
1976	220,841	12,607	74,986	85,117	48,131
Per cent change	+1.3	+12.9	+5.8	-4.6	+3.1
1975 1st quarter	66,040	3,103	18,601	30,511	13,825
2nd quarter	50,344	2,732	17,196	19,940	10,476
3rd quarter	42,042	2,407	16,219	14,218	9,198
4th quarter	59,498	2,922	18,838	24,545	13,193
1976 1st quarter	66,235	3,208	19,559	29,089	14,379
2nd quarter	48,537	3,071	17,910	17,148	10,408
3rd quarter	43,112	2,875	17,314	13,584	9,339
4th quarter	62,957	3,453	20,203	25,296	14,005
1977 1st quarter p	67,165	3,268	20,445	28,488	14,964
Per cent change	+1.4	+1.9	+4.5	-2.1	+4.1

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
1976	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
1976 Jan-May	2,739	40,435	2,625	+37,202	608	38,177	975	5,286	5,826	-540	1,472
1977 Jan-May p	14,085	39,996	13,798	+26,059	139	31,731	5,672	5,113	5,960	-847	1,267
Per cent change	(+)	-1.1	(+)	-30.0	(-)	-16.9	(+)	-3.3	+2.3	+56.8	-13.9
1976 Mar	536	7,656	480	+7,030	146	7,134	104	1,462	1,091	+371	297
Apr	646	8,495	619	+7,760	116	7,947	187	929	1,353	-424	270
May	767	8,494	769	+7,619	106	7,890	271	992	1,269	-277	298
Total	1,949	24,645	1,868	22,409	368	22,971	562	3,383	3,713	-330	865
1977 Mar	3,018	8,125	2,643	+5,422	60	6,547	1,125	1,022	1,119	-97	267
Apr	2,920	7,612	2,947	+4,634	31	5,706	1,072	800	1,080	-280	240
May p	3,495	8,786	3,751	+4,973	62	6,725	1,752	1,114	1,254	-140	251
Total	9,433	24,523	9,341	15,029	153	18,978	3,949	2,936	3,453	-517	758
Per cent change	(+)	-0.5	(+)	-32.9	(-)	-17.4	(+)	-13.2	-7.0	+96.7	-12.4

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 pro- ducts 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
1976	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
1976 Jan-May	40,620	2,667	444	37,509	693	67	1,905	6,017	1,614	1,166	10,464	13,347	516	813
1977 Jan-May p	40,367	2,535	477	37,355	641	60	1,882	6,038	1,522	1,138	10,219	13,833	544	725
Per cent change	-0.6	-4.9	+7.4	-0.4	-7.5	-9.5	-1.2	+0.3	-5.7	-2.4	-2.3	+3.6	+5.4	-10.8
1976 Mar	8,241	548	82	7,611	139	16	385	1,207	362	262	2,142	2,607	124	176
Apr	8,291	535	74	7,682	137	11	373	1,232	333	220	2,132	2,784	104	158
May	8,051	503	118	7,430	119	10	311	1,272	341	139	2,082	2,677	87	196
Total	24,583	1,586	274	22,723	395	37	1,069	3,711	1,036	621	6,356	8,068	315	530
1977 Mar	8,410	515	80	7,815	148	12	363	1,313	274	215	2,169	2,892	105	182
Apr	8,066	497	115	7,454	130	16	352	1,266	346	201	2,044	2,676	99	156
May p	7,766	518	98	7,150	110	10	366	1,231	380	164	2,003	2,478	106	169
Total	24,242	1,530	293	22,419	388	38	1,081	3,810	1,000	580	6,216	8,046	310	507
Per cent change	-1.4	-3.6	+6.4	-1.3	-2.0	+6.4	+1.2	+2.7	-3.5	-6.5	-2.2	-0.3	-1.4	-4.4

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						
							Domestic	Other ⁶					
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	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
1976 Jan-May	35,586	582	2,307	6,632	1,542	307	836	173	2,297	6,309	13,076	399	788
1977 Jan-May p	35,985	614	2,283	6,759	1,569	323	869	180	2,350	6,801	12,640	434	716
Per cent change	+1.1	+5.6	-1.1	+1.9	+1.8	+5.2	+3.9	+4.4	+2.3	+7.8	-3.3	+8.7	-9.1
1976 Mar	7,978	129	471	1,384	308	77	212	41	501	1,506	2,998	84	189
Apr	7,050	111	509	1,461	306	43	154	32	478	1,174	2,478	84	154
May	6,017	102	397	1,363	350	17	95	26	445	870	2,051	82	169
Total	21,045	342	1,377	4,208	964	137	461	99	1,424	3,550	7,527	250	512
1977 Mar	7,722	130	479	1,462	325	63	195	40	531	1,496	2,624	95	185
Apr	6,869	117	429	1,419	274	55	175	35	474	1,287	2,286	81	138
May p	6,550	111	468	1,415	398	28	106	28	473	1,035	2,150	94	171
Total	21,141	358	1,376	4,296	997	146	476	103	1,478	3,818	7,060	270	494
Per cent change	+0.5	+4.7	-0.1	+2.1	+3.4	+6.4	+3.0	+3.7	+3.6	+7.6	-6.2	+7.6	-3.5

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
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
1976	71,473	10,441	366	3,128	17,487	28,599	3,269	8,183
Per cent change	-2.6	-21.8	-47.3	-5.5	+1.4	+3.7	-0.0	+3.1
1976 Jan-Apr	26,564	4,167	197	1,140	6,906	8,994	1,480	3,680
1977 Jan-Apr p	26,440	3,791	117	1,088	7,023	9,133	1,499	3,789
Per cent change	-0.5	-9.0	-40.5	-4.5	+1.7	+1.5	+1.3	+3.0
1976 Feb	6,670	1,047	45	284	1,804	2,093	417	980
Mar	7,185	1,147	46	317	1,855	2,376	416	1,028
Apr	6,273	920	51	276	1,526	2,431	290	779
Total	20,128	3,114	142	877	5,185	6,900	1,123	2,787
1977 Feb	6,428	922	34	271	1,739	2,163	370	929
Mar	6,888	898	32	283	1,810	2,531	370	964
Apr p	6,135	777	19	232	1,581	2,347	329	850
Total	19,451	2,597	85	786	5,130	7,041	1,069	2,743
Per cent change	-3.4	-16.6	-40.1	-10.4	-1.0	+2.0	-4.9	-1.6

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 Apr	19.2	97	0.81
May	20.2	105	0.82
Jun	20.8	105	0.88
1977 Apr	19.0	94	0.75
May	19.6	100	0.77
Jun p	20.3	101	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

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

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 power stations ²	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	21,978	21,288	1,706	3,362	496	269	3,736	8,398	423	2,249	649	690
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	+0.1
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	5,958	5,770	480	852	100	74	1,098	2,263	115	599	189	188
2nd quarter	5,252	5,083	409	856	78	63	834	2,019	105	567	152	169
3rd quarter	4,954	4,793	367	790	72	58	812	1,982	96	479	137	161
4th quarter	5,814	5,642	450	864	246	74	992	2,134	107	604	171	172
1977 1st quarter p	5,760	5,577	503	882	136	69	922	2,162	108	625	170	183
Per cent change	-3.3	-3.3	+4.8	+3.5	+36.0	-6.8	-16.0	-4.5	-6.1	+4.3	-10.1	-2.7

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.