

ENERGY TRENDS

A Statistical Bulletin

MAY 1978

Consumption lower despite cold weather



June
Millbank.

Total energy

Natural Gas growth continues

During the 1st quarter of 1978, total inland energy consumption measured on a primary fuel input basis was 0.3 per cent lower than in the comparable quarter of last year. Coal consumption declined by 2.4 million tonnes, or 6.6 per cent, but the remaining primary fuels were each higher than a year ago, with natural gas, up by 7.9 per cent, providing an additional 1.5 million tonnes in coal equivalent terms.

The 1st quarter as a whole was substantially colder than last year and after this is taken into account, the revised seasonally adjusted and temperature corrected series indicates that total consumption was 2.4 per cent below last year's level. Measured in this way, coal consumption was lower by 8.2 per cent and the increase in natural gas was five per cent, a little under two thirds of the growth rate indicated by the uncorrected series.

Coal

Improved productivity

Total inland coal consumption during the months February to April was 4.5 per cent lower than in the corresponding period of 1977, a fall in usage of nearly 1.6 million tonnes. Power station and coke oven consumption, down by 0.4 and 0.9 million tonnes respectively, and disposals of house coal for the domestic market, lower by nearly 0.3 million tonnes accounted for the major part of the decline. During the first four months of the year, productivity measured in output per manshift overall was 2.35 tonnes, an increase of 3.1 per cent on last year's level.

Gas

Cold weather pushes up demand

Total natural gas supplied into the system during the period February to April was 5.1 billion therms, 10.4 per cent higher

than in the comparable months of 1977. About eight per cent of the total comprised imported gas, most of this coming from the Norwegian sector of the Frigg gasfield.

Total gas sent out during the period was 10.6 per cent higher than in the same months last year but nearly half of the increase was attributable to the very much colder weather this year.

Electricity

Small increase in supply

Total electricity supplied during the 1st quarter of 1978 was 1.1 per cent higher than in the corresponding quarter last year, but the increase was confined to February which was very cold and electricity supplied in both January and March was below last year's levels. Fuel used during the quarter was 0.3 per cent up on last year. There was an increase in the use of all fuels except coal.

In recent months the industry has itself used less of its own generation; own use of electricity (including pumped storage) in the quarter was three per cent less than a year ago.

Petroleum

Growing supplies of North Sea crude

Total supply of crude oil during the 1st quarter of the year was 23.9 million tonnes; indigenous crude oil accounted for 11.1 million tonnes ie 46 per cent of the total.

Total refinery output of products was 0.8 per cent below last year's level with a continuing swing away from fuel oils and a consequent increase in output of lighter products notably motor spirit, naphtha and aviation turbine fuel, output of which rose by 4.6, 7.6 and 34 per cent respectively.

CHANGES IN MAY ENERGY TRENDS

Metrication of coal statistics

It has been the Department's practice to use the same units of measurement as those currently employed by the individual fuel industries; thus petroleum and oil equivalent statistics were metricated in March 1976. The coal industry commenced working in metric units in April 1978. Consequently all statistics published in future relating to weights of coal and coal equivalent will be quoted in metric terms (tonnes) and use of the statute ton is now discontinued in official publications of energy statistics. Energy Trends tables 1, 3, 4, 5, 6, 7 and 9 are affected by this latest change, and in these tables figures relating to past periods have been converted to ensure comparability. A similar procedure will be followed in future official publications containing energy statistics for the United Kingdom, and readers are advised to bear the changes in mind when using statistics published before May 1978. (The appropriate conversion factor is 1 statute ton = 1.016 tonne, or 1 tonne = 0.9842 statute ton.)

Seasonally adjusted and temperature corrected inland energy consumption (Table 1)

Up to now only the coal and petroleum components of this series have been corrected for deviations from normal temperatures. From this issue, temperature correction has been extended to the natural gas component and there are consequential changes to the total inland energy series.

The new natural gas series is based on a method of temperature correction developed by the British Gas Corporation.

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. These comparisons can be affected by calendar differences, especially during periods of rapid change. 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
<i>Million metric tonnes of coal or coal equivalent</i>						
1972	338.0	122.4	162.2	40.9	10.6	1.9
1973	353.5	133.0	164.2	44.2	10.1	2.0
1974	337.5	117.9	152.5	52.9	12.1	2.1
1975	324.8	120.0	136.5	55.4	10.9	2.0
1976	329.8	122.0	134.2	58.8	12.9	1.9
1977 p	338.4	122.7	136.6	62.8	14.3	2.0
Per cent change	+2.6	+0.6	+1.7	+6.8	+11.0	+7.2
1977 Jan	30.8	11.1	11.7	6.7	1.1	0.2
Feb	31.4	11.8	11.9	6.3	1.3	0.1
Mar*	36.1	13.2	14.0	7.0	1.7	0.2
Total	98.3	36.1	37.6	20.0	4.1	0.5
1978 Jan	30.1	9.8	11.7	7.1	1.3	0.2
Feb	31.9	11.3	12.1	7.0	1.4	0.1
Mar*p	36.0	12.6	14.2	7.4	1.5	0.3
Total	98.0	33.7	38.0	21.5	4.2	0.6
Per cent change	–0.3	–6.6	+1.7	+7.9	+2.6	+9.9
<i>Seasonally adjusted and temperature-corrected⁴ (annual rates)</i>						
1977 Jan	333.6	126.3	132.6	60.5	13.1	1.1
Feb	343.3	130.0	135.5	61.4	14.0	1.4
Mar*	337.1	125.5	133.4	61.7	14.4	2.1
Average	337.9	127.4	133.8	61.3	13.9	1.6
1978 Jan	329.5	115.3	133.7	64.0	15.1	1.4
Feb	330.0	117.2	134.7	61.5	15.1	1.5
Mar*p	330.0	118.0	129.6	66.8	13.3	2.3
Average	329.8	116.9	132.4	64.3	14.4	1.8
Per cent change	–2.4	–8.2	–1.1	+5.0	+3.8	+11.2

	Total	Coal ¹	Petroleum ²	Natural ³ gas	Nuclear electricity	Hydro-electricity
<i>Million metric tonnes of oil or oil equivalent</i>						
1972	198.8	72.0	95.4	24.0	6.3	1.1
1973	207.9	78.2	96.6	26.0	5.9	1.2
1974	198.6	69.3	89.7	31.2	7.1	1.3
1975	191.1	70.6	80.3	32.6	6.4	1.2
1976	194.0	71.8	78.9	34.6	7.6	1.1
1977 p	199.0	72.2	80.3	36.9	8.4	1.2
Per cent change	+2.6	+0.6	+1.7	+6.8	+11.0	+7.2
1977 Jan	18.1	6.5	6.9	3.9	0.7	0.1
Feb	18.5	7.0	7.0	3.7	0.7	0.1
Mar*	21.2	7.8	8.2	4.1	1.0	0.1
Total	57.8	21.3	22.1	11.7	2.4	0.3
1978 Jan	17.7	5.8	6.8	4.2	0.8	0.1
Feb	18.8	6.6	7.2	4.1	0.8	0.1
Mar*p	21.2	7.4	8.3	4.4	0.9	0.2
Total	57.7	19.8	22.3	12.7	2.5	0.4
Per cent change	–0.3	–6.6	–1.7	+7.9	+2.6	+9.9

- 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.
- Refinery throughput of crude oil, plus net foreign trade and stock change in petroleum products, less deliveries of non-energy products.
- Excluding gas flared, or reinjected.
- Coal, petroleum (and natural gas from 1973) are temperature corrected.

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

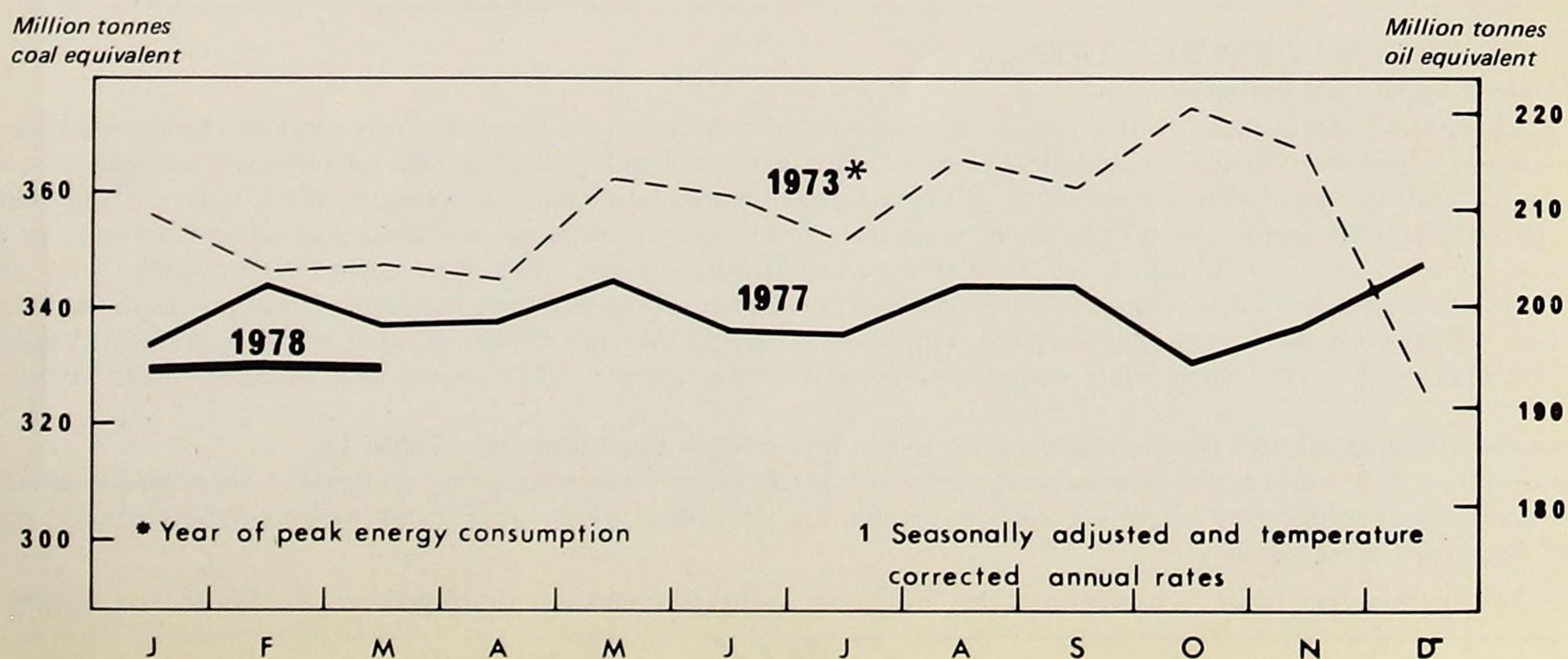


TABLE 2. Supply and use of fuels

Million therms

			Per cent change	1975	1976				1977 p				Per ¹ cent change
	1976	1977 p		4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	
PRIMARY FUELS AND EQUIVALENTS:													
Production of primary fuels													
Coal	30,166	29,737	−1.4	8,442	8,006	7,635	6,378	8,147	7,568	7,538	6,463	8,168	+0.3
Petroleum ²	5,206	16,326	(+)	415	574	1,020	1,335	2,277	3,295	4,209	4,341	4,481	(+)
Natural gas ³	14,379	14,976	+4.2	4,214	4,727	2,962	2,173	4,517	4,910	3,450	2,483	4,133	−8.5
Primary electricity	3,411	3,761	+10.3	841	926	786	770	929	1,070	877	852	962	+3.6
Total	53,162	64,800	+21.9	13,912	14,233	12,403	10,656	15,870	16,843	16,074	14,139	17,744	+11.8
Arrivals. Petroleum ⁴	43,174	35,723	−17.3	11,117	10,992	10,949	10,160	11,073	9,613	9,114	8,251	8,745	−21.0
Other	1,183	1,353	+14.4	430	351	336	270	226	193	197	366	597	(+)
Shipments	9,176	13,827	+50.7	1,882	1,745	2,068	2,507	2,856	2,973	3,649	3,885	3,320	+16.2
Bunkers	1,468	1,163	−20.8	344	371	346	381	370	316	303	293	251	−32.2
Stock change ⁵													
Solid fuels	−634	+231	..	−703	+312	−820	−388	+262	+1,247	−386	−194	−436	..
Crude petroleum	−378	+459	..	+78	+354	−196	−25	−511	+159	−231	+252	+279	..
Petroleum products	+240	+423	..	+707	+648	−431	−367	+390	+560	−222	−314	+399	..
Non-energy use	4,448	4,199	−5.6	1,135	1,138	1,111	1,159	1,040	929	1,116	1,119	1,035	−0.5
Statistical difference ⁶	+54	−170	..	−12	+58	−23	−2	+21	−260	+173	−55	−28	..
Total primary ⁷ energy input	81,709	83,630	+2.4	22,168	23,694	18,693	16,257	23,065	24,137	19,651	17,148	22,694	−1.6
Conversion losses etc. ⁸	24,380	25,098	+2.9	6,905	6,913	5,596	4,905	6,966	7,262	5,846	5,245	6,745	−3.2
FINAL CONSUMPTION BY USER													
Iron and steel industry													
Coal	66	65	−1.5	19	23	14	9	20	23	15	9	18	−10.0
Other solid fuel ⁹	2,723	2,363	−13.2	571	631	719	670	703	655	584	593	531	−24.5
Other coal-derived fuels ¹⁰	401	367	−8.5	92	98	109	97	97	95	90	97	85	−12.4
Gas ¹¹	438	485	+10.7	100	108	112	99	119	128	125	113	119	—
Electricity	395	382	−3.3	91	100	96	90	109	102	94	90	96	−11.9
Petroleum	1,279	1,203	−5.9	330	354	306	273	346	351	285	256	311	−10.1
Total	5,302	4,865	−8.2	1,203	1,314	1,356	1,238	1,394	1,354	1,193	1,158	1,160	−16.8
Other industries													
Coal	2,277	2,294	+0.7	657	547	564	470	696	617	530	483	664	−4.6
Other solid fuel ⁹	126	160	+27.0	30	38	24	27	37	39	39	36	46	+24.3
Other coal-derived fuels ¹⁰	76	57	−25.0	16	13	23	25	15	17	17	14	9	−40.0
Gas ¹¹	5,241	5,459	+4.2	1,308	1,456	1,236	1,083	1,466	1,431	1,373	1,171	1,484	+1.2
Electricity	2,364	2,410	+1.9	592	617	563	546	638	646	598	557	609	−4.5
Petroleum	7,441	7,555	+1.5	2,224	2,255	1,696	1,400	2,090	2,254	1,783	1,437	2,081	−0.4
Total	17,525	17,935	+2.3	4,827	4,926	4,106	3,551	4,942	5,004	4,340	3,698	4,893	−1.0
Transport sector													
Coal and other solid fuel	21	19	−9.5	7	7	4	2	8	6	4	2	7	−12.5
Electricity	98	102	+4.1	25	26	24	22	26	27	26	24	25	−3.8
Petroleum	12,597	12,933	+2.7	3,043	2,889	3,198	3,333	3,177	2,988	3,218	3,421	3,306	+4.1
Total	12,716	13,054	+2.7	3,075	2,922	3,226	3,357	3,211	3,021	3,248	3,447	3,338	+4.0
Domestic sector													
Coal	3,143	3,235	+2.9	766	932	765	634	812	851	774	704	906	+11.6
Other solid fuel ⁹	869	860	−1.0	201	277	196	208	188	231	208	228	193	+2.7
Gas ¹¹	6,194	6,587	+6.3	1,828	2,403	1,055	686	2,050	2,412	1,370	770	2,035	−0.7
Electricity	2,905	2,932	+0.9	838	993	585	464	863	972	638	511	811	−6.0
Petroleum	1,435	1,435	—	461	519	268	176	472	514	291	201	429	−9.1
Total	14,546	15,049	+3.5	4,094	5,124	2,869	2,168	4,385	4,980	3,281	2,414	4,374	−0.3
Other final users ¹²													
Coal	516	543	+5.2	160	172	113	73	158	166	118	82	177	+12.0
Other solid fuel ⁹	166	175	+5.4	43	51	44	37	34	52	39	48	36	+5.9
Gas ¹¹	1,521	1,587	+4.3	394	571	317	169	464	561	380	180	466	+0.4
Electricity	1,596	1,692	+6.0	437	478	345	308	465	497	386	345	464	−0.2
Petroleum	3,441	3,632	+5.6	1,028	1,223	721	451	1,046	1,240	820	531	1,041	−0.5
Total	7,240	7,629	+5.4	2,062	2,495	1,540	1,038	2,167	2,516	1,743	1,186	2,184	+0.8
Total final users	57,329	58,532	+2.1	15,261	16,781	13,097	11,352	16,099	16,875	13,805	11,903	15,949	−0.9
FINAL CONSUMPTION BY FUEL													
Coal	6,022	6,156	+2.2	1,609	1,681	1,460	1,188	1,693	1,663	1,441	1,280	1,772	+4.7
Other solid fuel ⁹	3,885	3,558	−8.4	845	997	983	942	963	977	870	905	806	−16.3
Other coal-derived fuels ¹⁰	477	424	−11.1	108	111	132	122	112	112	107	111	94	−16.1
Gas ¹¹	13,394	14,118	+5.4	3,630	4,538	2,720	2,037	4,099	4,532	3,248	2,234	4,104	+0.1
Electricity	7,358	7,518	+2.2	1,983	2,214	1,613	1,430	2,101	2,244	1,742	1,527	2,005	−4.6
Petroleum	26,193	26,758	+2.2	7,086	7,240	6,189	5,633	7,131	7,347	6,397	5,846	7,168	+0.5
Total all fuels	57,329	58,532	+2.1	15,261	16,781	13,097	11,352	16,099	16,875	13,805	11,903	15,949	−0.9

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 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 tonnes

	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
1974	112,132	110,451	99,992	9,231	+1,681	3,546	1,865	10,518	16,253
1975	131,583	128,682	117,411	10,414	+2,901	5,083	2,182	12,300	352
1976	125,201	123,800	110,264	11,944	+1,401	2,837	1,436	12,345	1,157
1977 p	122,623	122,150	107,123	13,551	+473	2,414	1,941	12,457	814
Per cent change	-2.1	-1.3	-2.8	+13.5	-66.2	-14.9	+35.2	+0.9	-29.6
1977 Jan-Apr	40,949	41,048	37,132	3,616	-99	560	659	3,521	250
1978 Jan-Apr p	41,788	41,602	36,925	4,127	+186	842	656	3,652	429
Per cent change	+2.0	+1.3	-0.6	+14.1		+50.4	-0.5	+3.7	+71.6
1977 Feb	10,479	10,574	9,605	869	-95	108	203	—	52
Mar*	13,146	13,316	12,091	1,165	-170	49	219	—	72
Apr	9,734	9,755	8,691	964	-21	125	146	860	46
Total	33,359	33,645	30,387	2,998	-286	282	568	860	170
1978 Feb	10,773	10,769	9,576	993	+4	166	162	—	85
Mar*	13,543	13,538	12,002	1,361	+5	210	205	162	92
Apr p	9,913	9,892	8,692	1,075	+21	153	132	876	198
Total	34,229	34,199	30,270	3,429	+30	529	499	1,038	375
Per cent change	+2.6	+1.6	-0.4	+14.4		+87.6	-12.1	+20.7	(+)

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 only.

TABLE 4. Inland consumption of coal

Thousand tonnes

	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	
1974	117,887	1,256	67,025	18,461	107	3,788	11,077	11,981	1,687	2,505
1975	122,216	1,238	74,569	19,085	10	4,063	9,685	9,915	1,703	1,948
1976	123,603	1,132	77,818	19,401	8	3,405	8,970	9,450	1,374	2,045
1977 p	123,978	1,124	79,956	17,406	7	3,166	9,033	9,635	1,502	2,149
Per cent change	+0.3	-0.7	+2.7	-10.3	-12.5	-7.0	+0.7	+2.0	+9.3	+5.1
1977 Jan-Apr	46,122	398	30,814	6,206	3	974	3,130	3,326	443	828
1978 Jan-Apr p	43,254	392	29,601	4,936	2	988	3,088	2,943	479	825
Per cent change	-6.2	-1.5	-3.9	-20.5	-33.3	+1.4	-1.3	-11.5	+8.1	-0.4
1977 Feb	11,775	100	7,848	1,479	1	231	839	920	121	236
Mar*	13,223	128	8,540	1,858	1	284	999	1,021	148	244
Apr	10,006	96	6,590	1,390	1	244	679	734	99	173
Total	35,004	324	22,978	4,727	3	759	2,517	2,675	368	653
1978 Feb	11,285	101	7,819	1,166	1	248	882	717	116	235
Mar*	12,605	127	8,373	1,446	1	275	973	974	159	277
Apr p	9,537	92	6,424	1,188	—	221	645	691	108	168
Total	33,427	320	22,616	3,800	2	744	2,500	2,382	383	680
Per cent change	-4.5	-1.2	-1.6	-19.6	-33.3	-2.0	-0.7	-11.0	+4.1	+4.1

1. Disposals by collieries and opencast sites. 2. Public supply and railway and transport power stations. 3. Low temperature carbonisation and patent fuel plants. 4. Prior to October 1973 the figures related 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 and commerce.

TABLE 5. Stocks of coal¹ at end of period. Great Britain

Thousand tonnes

	Total	Distributed					Undistributed		
		Total distributed stocks	Power stations	Coke ovens	Gas works	Other	Total undistributed stocks	Collieries	Opencast sites and central stocking grounds
1972	30,459	19,350	17,060	1,920	51	319	11,109	7,679	3,430
1973	27,885	17,035	14,770	1,968	27	270	10,850	7,650	3,200
1974	21,806	15,827	13,629	1,851	3	344	5,979	4,009	1,970
1975	31,157	20,540	17,951	2,333	2	254	10,617	8,908	1,709
1976	33,115	22,457	19,598	2,684	2	173	10,658	9,295	1,363
1977 p	31,534	21,704	19,128	2,368	2	206	9,830	8,290	1,540
1977 Feb	28,267	18,471	15,895	2,403	2	171	9,796	8,706	1,090
Mar	27,898	18,392	15,836	2,357	2	197	9,506	8,432	1,074
Apr	27,932	18,028	15,519	2,322	2	185	9,904	8,750	1,154
1978 Feb	28,850	18,967	16,726	2,073	2	166	9,883	8,332	1,551
Mar	29,673	19,424	17,381	1,875	2	166	10,249	8,655	1,594
Apr p	30,048	19,270	17,313	1,776	1	180	10,778	9,118	1,660
Absolute change: in latest month	+375	-154	-68	-99	-1	+14	+529	+463	+66
On a year ago	+2,116	+1,242	+1,794	-546	-1	-5	+874	+368	+506

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									
1972	266	210	13,255	26,114	16.6	3.9	12.7	2.21	7.33	
1973	245	193	17,402	37,961	18.0	4.1	13.9	2.29	7.62	
1974	246	194	26,436	25,133	16.3	4.1	12.2	2.18	7.56	
1975	245	194	21,347	22,451	16.2	4.0	12.2	2.28	7.92	
1976	241	192	17,061	21,239	17.4	3.7	13.7	2.23	7.75	
1977 p	239	189	29,361	31,647	17.6	3.9	13.7	2.18	7.77	
1977 Jan-Apr	242 ⁽⁴⁾	192 ⁽⁴⁾	9,805	7,717	18.9	4.1	14.8	2.28	7.96	
1978 Jan-Apr p	239 ⁽⁴⁾	190 ⁽⁴⁾	8,588	7,532	18.7	4.5	14.2	2.35	8.70	
Per cent change	-1.2	-1.0	-12.4	-2.4				+3.1	+9.3	
1977 Feb	241	192	2,066	1,841	19.4	4.1	15.3	2.29	7.91	
Mar*	242	192	3,386	2,364	19.7	4.3	15.4	2.33	8.07	
Apr	243	193	2,941	1,905	18.5	4.5	14.0	2.26	7.97	
1978 Feb	239	189	2,180	1,876	20.0	4.8	15.2	2.34	8.50	
Mar*	239	190	2,620	2,124	19.9	4.9	15.0	2.38	8.88	
Apr p	240	190	2,421	1,922	17.3	4.6	12.7	2.30	8.62	

1. At end of period. 2. The definition was changed from 1973. 3. Excluding capital working and tip coal. 4. Average number during the period.

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 ³	Total	Town gas	Natural ⁴ gas for direct supply
		Indigenous	Imported ²					
	Million therms			Thousand tonnes		Million therms		
1974	13,102	12,861	241	107	1,276	13,451	1,598	11,853
1975	13,692	13,367	325	9	588	13,822	752	13,070
1976	14,420	14,030	390	8	245	14,445	226	14,219
1977 p	15,373	14,734	639	7	166	15,323	75	15,248
Per cent change	+6.6	+5.0	+63.8	-5.3	-32.2	+6.1	-66.8	+7.2
1977 Jan-Apr	6,264	6,185	79	3	71	6,268	42	6,226
1978 Jan-Apr p	6,839	6,281	558	2	115	6,858	15	6,843
Per cent change	+9.2	+1.6	(+)	-29.3	+62.0	+9.4	-64.3	+9.9
1977 Feb	1,550	1,526	24	1	18	1,553	11	1,542
Mar*	1,779	1,756	23	1	15	1,783	11	1,772
Apr	1,289	1,281	8	1	10	1,288	8	1,280
Total	4,618	4,563	55	3	43	4,624	30	4,594
1978 Feb	1,785	1,646	139	1	51	1,798	4	1,794
Mar*	1,871	1,733	138	1	21	1,871	4	1,867
Apr p	1,443	1,312	131	—	12	1,443	3	1,440
Total	5,099	4,691	408	2	84	5,112	11	5,101
Per cent change	+10.4	+2.8	(+)	-28.3	+95.3	+10.6	-63.3	+11.0

1. Figures differ from production and imports respectively because of stock changes and small quantities not entering the public supply system.
 2. Includes imports from the Norwegian sector of the Frigg gasfield. 3. Mainly naphtha (LDF), liquefied petroleum gases (LPG) and refinery gases.
 4. Includes Substitute Natural Gas (SNG).

TABLE 8. Sales of gas by the public supply system

	Total	Power stations ¹	Iron and steel industry	Other industries	Domestic	Other ²
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
1977	14,579	519	485	5,398	6,590	1,587
Per cent change	+4.2	-21.6	+10.7	+4.2	+6.4	+4.3
1975 4th quarter	3,857	243	100	1,292	1,828	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	4,634	118	128	1,414	2,413	561
2nd quarter	3,317	82	125	1,359	1,371	380
3rd quarter	2,372	153	113	1,155	771	180
4th quarter	4,256	166	119	1,470	2,035	466
Per cent change	+0.9	+24.8	—	+1.2	-0.7	+0.4

1. Public supply and transport power stations. 2. Public administration and 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 tonnes of coal or coal equivalent						TWh					
United Kingdom												
1972	111.12	66.30	31.75	2.52	9.03	1.49	242.75	25.30	212.20	18.05	224.70	229.23
1973	116.52	76.78	28.49	1.15	8.35	1.69	258.80	23.66	229.89	18.43	240.37	244.76
1974	112.26	67.03	28.97	3.92	10.44	1.84	250.47	29.40	215.70	18.07	232.40	236.68
1975	110.72	74.57	21.48	3.42	9.44	1.67	251.26	26.52	219.69	18.02	233.24	237.30
1976	110.51	77.82	17.05	2.55	11.40	1.64	254.92	32.42	217.50	19.16	235.76	239.47
1977 p	113.98	79.56	17.98	1.76	12.88	1.73	262.04	36.42	220.06	19.56	242.48	246.02
Per cent change	+3.1	+2.2	+5.5	-31.0	+13.0	+5.5	+2.8	+12.3	+1.2	+2.1	+2.9	+2.7
1977 Jan	11.27	8.07	1.91	0.13	1.02	0.13	25.78	2.90	22.40	1.84	23.94	24.24
Feb	10.68	7.77	1.47	0.13	1.17	0.14	24.62	3.29	20.88	1.81	22.81	23.06
Mar*	12.13	8.39	1.86	0.13	1.51	0.24	28.33	4.24	23.40	2.09	26.24	26.58
Total	34.08	24.23	5.24	0.39	3.70	0.51	78.73	10.43	66.68	5.74	72.99	73.88
1978 Jan	10.93	7.52	1.83	0.23	1.16	0.18	25.22	3.25	21.46	1.78	23.44	23.78
Feb	11.24	7.74	1.98	0.16	1.21	0.14	26.09	3.39	22.28	1.82	24.27	24.64
Mar* p	12.01	8.05	2.08	0.19	1.43	0.25	28.07	4.01	23.40	1.97	26.10	26.51
Total	34.18	23.31	5.89	0.58	3.80	0.57	79.38	10.65	67.14	5.57	73.81	74.93
Per cent change	+0.3	-3.8	+12.4	+48.7	+2.7	+11.8	+0.8	+2.1	+0.7	-3.0	+1.1	+1.4
England and Wales												
1972	97.16	59.14	27.17	2.52	8.21	0.09	212.91	23.01	187.95	15.71	197.20	200.24
1973	101.03	68.22	23.94	1.15	7.57	0.09	225.24	21.42	202.18	16.24	209.00	212.72
1974	97.63	59.57	24.39	3.92	9.58	0.12	218.85	26.93	190.43	15.89	202.96	205.55
1975	96.14	65.71	18.24	3.42	8.53	0.09	219.25	23.94	194.33	15.32	203.93	206.39
1976	95.80	69.06	14.06	2.55	10.00	0.08	222.12	28.30	193.11	15.94	206.18	207.62
1977 p	98.34	70.59	14.93	1.76	10.88	0.11	226.99	30.71	195.10	16.26	210.73	213.19
Per cent change	+2.7	+2.2	+6.2	-31.0	+8.8	+37.5	+2.2	+8.5	+1.0	+2.0	+2.2	+2.7
1977 Jan	9.72	7.05	1.61	0.13	0.91	0.01	22.31	2.57	19.62	1.53	20.78	20.98
Feb	9.21	6.87	1.19	0.13	1.00	0.02	21.30	2.81	18.40	1.49	19.81	19.82
Mar*	10.44	7.51	1.52	0.13	1.26	0.01	24.47	3.55	20.81	1.74	22.73	22.93
Total	29.37	21.43	4.32	0.39	3.17	0.04	68.08	8.93	58.83	4.76	63.32	63.73
1978 Jan	9.39	6.66	1.50	0.23	0.98	0.01	21.78	2.76	18.94	1.49	20.29	20.61
Feb	9.68	6.83	1.60	0.16	1.07	0.01	22.53	2.99	19.46	1.52	21.01	21.31
Mar* p	10.32	7.13	1.71	0.19	1.26	0.01	24.30	3.53	20.67	1.69	22.61	22.89
Total	29.39	20.62	4.81	0.58	3.31	0.03	68.61	9.28	59.07	4.70	63.91	64.81
Per cent change	+0.1	-3.8	+11.3	+48.7	+4.4	-25.0	+0.8	+3.9	+0.4	-1.3	+0.9	+1.7

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
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
1977 p	225,660	12,293	76,403	85,899	51,065
Per cent change	+2.2	-2.5	+1.9	+0.9	+6.1
1975 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
2nd quarter p	52,346	3,050 ²	18,916 ²	18,686	11,694
3rd quarter p	46,030	2,907 ²	17,718 ²	14,966	10,439
4th quarter p	60,119	3,068 ²	19,324 ²	23,759	13,968
Per cent change	-4.5	-11.1	-4.4	-6.1	-0.3

1. Mainly commerce, public administration and agriculture. 2. Contains a small degree of estimation.

Petroleum

TABLE 11. Production, arrivals and shipments¹

Thousand tonnes

	Crude Petroleum						Petroleum products				
	Gross ² Indigenous Production	Supply				Arrivals ^{4,5}	Shipments ^{4,5}	Arrivals ⁴	Shipments ⁴	Net Arrivals	Bunkers ⁶
		Total	Indigenous ²	Net arrivals	Other ³						
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	12,036	98,384	11,511	+86,181	692	90,466	4,285	10,422	15,726	-5,304	3,569
1977 p	37,879	92,260	37,540	+54,038	682	70,697	16,659	12,716	13,928	-1,212	2,829
Per cent change	(+)	-6.2	(+)	-37.3	-1.4	-21.9	(+)	+22.0	-11.4	(-)	-20.7
1977 Jan	2,236	7,694	2,083	+5,640	-29	6,463	823	1,252	1,253	-1	248
Feb	2,410	7,777	2,373	+5,389	15	6,289	900	944	1,278	-334	253
Mar	3,018	8,125	2,643	+5,422	60	6,547	1,125	1,022	1,119	-97	264
Total	7,664	23,596	7,099	+16,451	46	19,299	2,848	3,218	3,650	-432	765
1978 Jan	3,723	8,243	3,628	+4,553	62	6,052	1,499	1,115	849	+266	215
Feb	3,610	8,278	3,599	+4,585	94	6,121	1,536	1,129	696	+433	200
Mar p	3,683	7,342	3,863	+3,417	62	5,347	1,930	1,051	1,044	+7	262
Total	11,016	23,863	11,090	+12,555	218	17,520	4,965	3,295	2,589	+706	677
Per cent change	+43.7	+1.1	+56.2	-23.7	(+)	-9.2	+74.3	+2.4	-29.1	~	-11.5

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			Naphtha (LDF)	Motor spirit	Kerosene		Gas/ diesel oil	Fuel oil	Lubri- cating oils	Bitumen
					Gases				Aviation turbine fuel	Burning oil ³				
					Butane and propane	Other petro- leum								
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	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
1977 p	93,615	6,238	1,039	86,338	1,539	142	4,488	14,805	4,004	2,462	23,476	30,481	1,380	1,882
Per cent change	-4.3	-1.6	-10.3	-4.4	-2.3	-10.1	-2.1	-2.8	-3.8	+0.2	-3.0	-6.8	+5.3	-0.8
1977 Jan	8,145	536	93	7,516	131	13	403	1,153	233	301	2,001	2,899	116	97
Feb	7,982	470	92	7,420	122	9	398	1,075	189	257	2,001	2,890	118	122
Mar	8,410	515	80	7,815	148	12	363	1,313	174	215	2,169	2,892	105	182
Total	24,537	1,521	265	22,751	401	34	1,164	3,541	796	773	6,171	8,681	339	401
1978 Jan	8,391	574	56	7,761	146	11	421	1,287	354	336	2,080	2,816	85	112
Feb	7,527	515	137	6,875	127	12	370	1,149	341	266	1,897	2,432	67	102
Mar p	8,558	567	57	7,934	145	12	462	1,268	369	293	2,232	2,744	106	183
Total	24,476	1,656	250	22,570	418	35	1,253	3,704	1,064	895	6,209	7,992	258	397
Per cent change	-0.2	+8.9	-5.4	-0.8	+4.3	+2.6	+7.6	+4.6	+33.7	+15.6	+0.6	-7.9	-23.8	-0.9

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					
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	80,291	1,330	5,404	16,879	3,989	576	1,686	372	5,594	12,984	27,825	1,011	1,867
1977 p	81,918	1,320	5,179	17,336	4,165	559	1,677	391	5,711	13,914	27,772	1,029	1,847
Per cent change	+2.0	−0.8	−4.2	+2.7	+4.4	−3.0	−0.5	−5.3	+2.1	+7.2	−0.2	+1.8	−1.1
1977 Jan	7,773	131	528	1,203	296	105	205	40	420	1,573	2,996	81	98
Feb	7,073	125	380	1,260	277	73	188	37	453	1,410	2,584	84	124
Mar	7,722	130	479	1,462	325	63	195	40	531	1,496	2,624	95	186
Total	22,568	386	1,387	3,925	898	241	588	117	1,404	4,479	8,204	260	408
1978 Jan	7,740	135	443	1,369	307	92	199	44	466	1,540	2,835	86	102
Feb	7,283	124	465	1,191	243	99	196	49	437	1,493	2,693	77	105
Mar p	7,803	123	491	1,528	359	60	189	40	484	1,447	2,709	85	170
Total	22,826	382	1,399	4,088	909	251	584	133	1,387	4,480	8,237	248	377
Per cent change	+1.1	−1.0	+1.0	+4.2	+1.2	+4.5	−0.7	+13.6	−1.1	+0.0	+0.4	−4.3	−7.6

1. Calendar months. 2. Including other petroleum gases, aviation spirit, wide-cut gasoline, industrial and white spirits, and paraffin wax. 3. Excluding refinery fuel (and miscellaneous products prior to 1978). 4. Including very small amounts for petro-chemicals. 5. Now mainly for petro-chemical feed-stock. 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
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	13,345	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
1977 p	73,043	10,875	292	2,938	17,701	29,359	3,263	8,615
Per cent change	+2.2	+4.2	-20.1	-6.1	+1.2	+2.7	-0.2	+5.3
1976 Dec	7,295	1,260	30	284	1,843	2,391	473	1,014
1977 Jan	6,987	1,193	32	302	1,891	2,093	430	1,046
Feb	6,428	922	34	271	1,739	2,163	370	929
Total	20,710	3,375	96	857	5,473	6,647	1,273	2,989
1977 Dec	7,266	1,293	36	241	1,797	2,514	410	975
1978 Jan	7,016	1,095	34	261	1,903	2,320	412	991
Feb p	6,558	1,116	35	264	1,738	2,050	413	942
Total	20,840	3,504	105	766	5,438	6,884	1,235	2,908
Per cent change	+0.6	+3.8	+9.1	-10.6	-0.6	+3.6	-3.0	-2.7

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
1977 Feb	20.1	83	0.97
Mar	19.4	87	0.81
Apr	18.8	93	0.75
1978 Feb	19.4	81	1.03
Mar	17.9	80	1.03
Apr p	18.5	89	0.99

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 tonnes coal equiv.	Million tonnes oil equiv.	Million therms	TWh electrical energy	TWh electricity generated
Million tonnes coal equivalent	1	1.7	0.004	0.135 ¹	0.500 ²
Million tonnes oil equivalent	0.60	1	0.00235	0.0800 ¹	0.280 ²
Million therms	250	425	1	34.0	115
TWh electrical energy	7.35	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 fuel shown.
The *Digest of UK Energy Statistics 1976* gives more detailed factors.

SUPPLEMENTARY DATA

Value of fuel imports and exports

£ million

	Imports (c.i.f.)					Electricity	Total	Exports (f.o.b.)				
	Coal	Other solid fuel ²	Natural gas	Petroleum				Coal	Other solid fuel ²	Petroleum ³	Electricity	Total
				Crude	Refined ³							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
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	3,856.3	701.9	0.4	4,636.0	20.8	46.9	701.0	—	768.7
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
1976	82.7	9.0	20.3	4,585.8	954.1	—	5,651.9	30.6	47.7	1,175.4	1.1	1,254.8
1977	78.1	11.5	43.2	4,094.1	1,001.6	—	5,228.5	43.7	45.6	1,977.4	—	2,066.7
Per cent change	-5.5	+27.9	(+)	-10.7	+5.0	—	-7.5	+42.7	-4.4	+68.2	(-)	+64.7
1976 1st quarter	19.7	2.3	6.2	1,096.7	244.4	—	1,369.3	6.5	11.8	222.9	—	241.2
2nd quarter	25.6	1.8	4.4	1,107.3	247.8	—	1,386.9	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
4th quarter	18.7	2.2	4.5	1,238.3	231.6	—	1,495.3	9.6	12.9	380.7	0.7	403.9
1977 1st quarter	15.3	2.3	3.4	1,173.1	254.1	—	1,448.2	11.3	13.8	454.9	—	480.0
2nd quarter	14.4	3.2	3.8	1,099.4	263.9	—	1,384.7	11.3	12.1	498.2	—	521.6
3rd quarter	27.6	3.1	4.4	923.7	236.1	—	1,194.9	11.6	10.1	586.2	—	607.9
4th quarter	20.8	2.9	31.6	897.9	247.5	—	1,200.7	9.5	9.6	438.1	—	457.2
1978 1st quarter	21.5	2.1	49.9	970.1	268.0	—	1,311.6	11.7	10.3	452.2	—	474.2
Per cent change	+40.9	-9.2	(+)	-17.3	+5.5	—	-9.4	+4.3	-26.0	-0.6	—	-1.2

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.