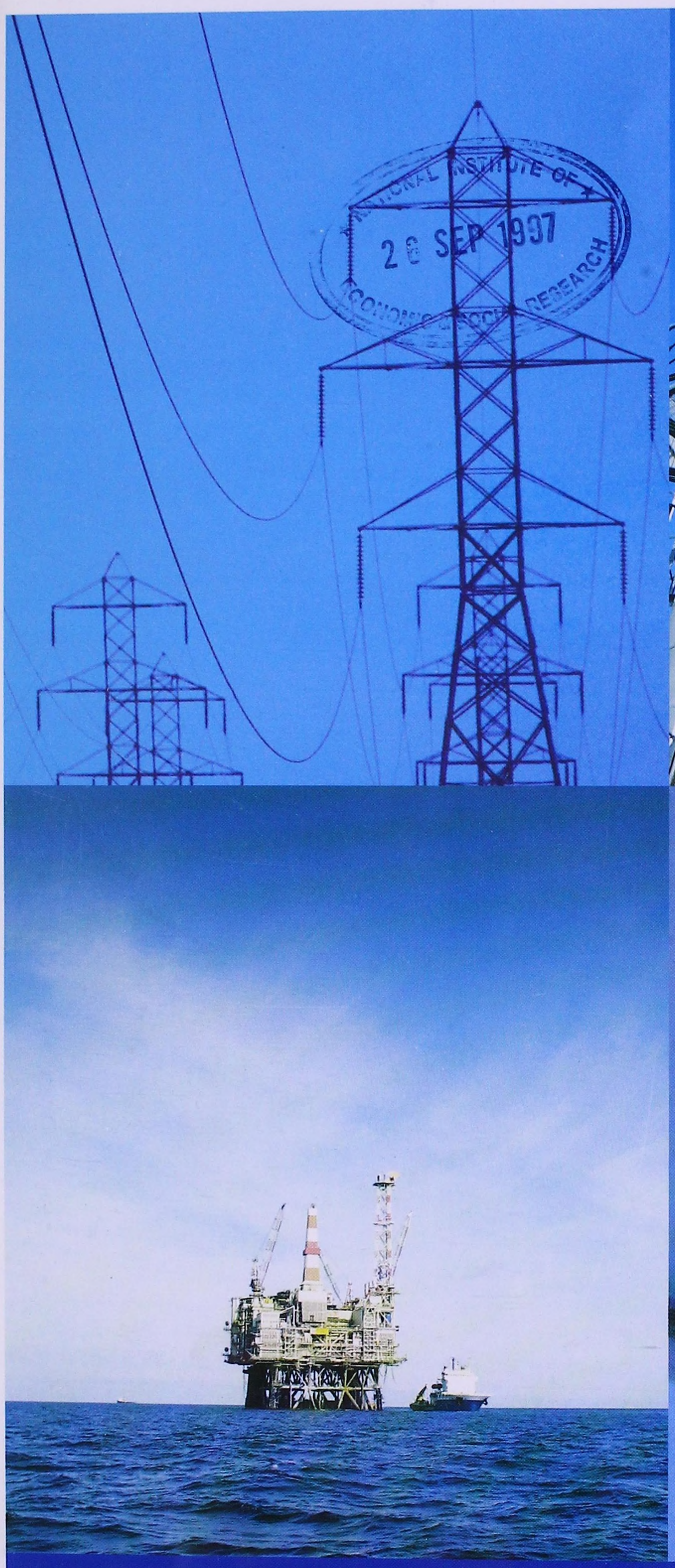
ENERGY trends

A monthly statistical bulletin from the Department of Trade & Industry

SEPTEMBER 1997



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dti
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EXPLANATORY NOTES

GENERAL

More detailed notes on the methodology used to compile the figures and data sources are included in the annual Digest of United Kingdom Energy Statistics.

NOTES TO TABLES

- 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 Tables 2 and 28. Due to rounding the sum of the constituent items may not equal the totals.
- 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.
- Monthly figures relate to four week periods except where otherwise indicated. Figures in the Gas and Petroleum sections relate to calendar months.
- All figures relate to the United Kingdom unless otherwise indicated.

ABBREVIATIONS

CCGT	-	Combined Cycle Gas Turbine
LDF	-	Light distillate feedstock
OTS	-	Overseas Trade Statistics of the United Kingdom
UKAEA	-	United Kingdom Atomic Energy Authority
BNF	-	British Nuclear Fuels plc
GDP	-	Gross domestic product
NGLs	-	Natural gas liquids
UKCS	-	United Kingdom Continental Shelf
VAT	-	Value added tax

SYMBOLS USED IN THE TABLES

..	not available.
-	nil or less than half the final digit shown.
*	five-week period.
p	provisional.
r	revised; where a column or row shows 'r' at the beginning, most, but not necessarily all, of the data have been revised.
e	estimated; totals of which the figures form a constituent part are therefore partly estimated.

CONVERSION FACTORS

1 tonne of UK crude oil	=	7.55 barrels
1 gallon (UK)	=	4.54609 litres
1 kilowatt (kW)	=	1,000 watts
1 megawatt (MW)	=	1,000 kilowatts
1 gigawatt (GW)	=	1,000 megawatts
1 terawatt (TW)	=	1,000 gigawatts
1 petawatt (PW)	=	1,000 terawatts

All conversion of fuels from original units to units of energy is carried out on the basis of the gross calorific value of the fuel. More detailed information on conversion factors and calorific values is given in the Digest of UK Energy Statistics.

CONVERSION MATRIX

To convert from the units on the left hand side to the units across the top multiply by the values in the table.

	To: *multiply*	Thousand toe	Terajoules	Gigawatt hours	Million therms
From:	Thousand tonne of oil equivalent	1	41.87	11.63	0.3968
	Terajoules (TJ)	0.02388	1	0.2778	0.009478
	Gigawatt hours (GWh)	0.08598	3.6	1	0.03412
	Million therms	2.52	105.5	29.31	1

GENERATION OF ELECTRICITY

All companies whose prime purpose is the generation of electricity are included under the heading "Major Power Producers". They are :

Anglian Power Generation, Barking Power Ltd., Coolkeeragh Power Ltd., Corby Power Ltd., Derwent Cogeneration Ltd., Eastern Merchant Generation Ltd., Elm Energy & Recycling (UK) Ltd., Fellside Heat and Power Ltd., Fibrogen Ltd., Fibropower Ltd., First Hydro Ltd., Hydro-Electric, Keadby Generation Ltd., Lakeland Power Ltd., Magnox Electric Plc, Medway Power Ltd., Midlands Power (UK) Ltd., National Power, NIGEN, Nuclear Electric, Peterborough Power Ltd., PowerGen, Premier Power Ltd., Regional Power Generators Ltd., Scottish Nuclear, Scottish Power, South East London Combined Heat & Power Ltd., South Western Electricity, Teesside Power Ltd.

The term "Other Generators" is used for companies who produce electricity as part of their manufacturing or other commercial activities, but whose main business is not electricity generation. Because in most cases the majority of this electricity is used by the businesses themselves the term "autogenerators" is sometimes used to describe "Other Generators". Electricity consumed by industry and commerce from its own generation is included as part of final consumption, in line with the practice in international energy statistics.

SECTORIAL BREAKDOWNS

The categories for final consumption by user are defined by the Standard Industrial Classification 1992, as follows :

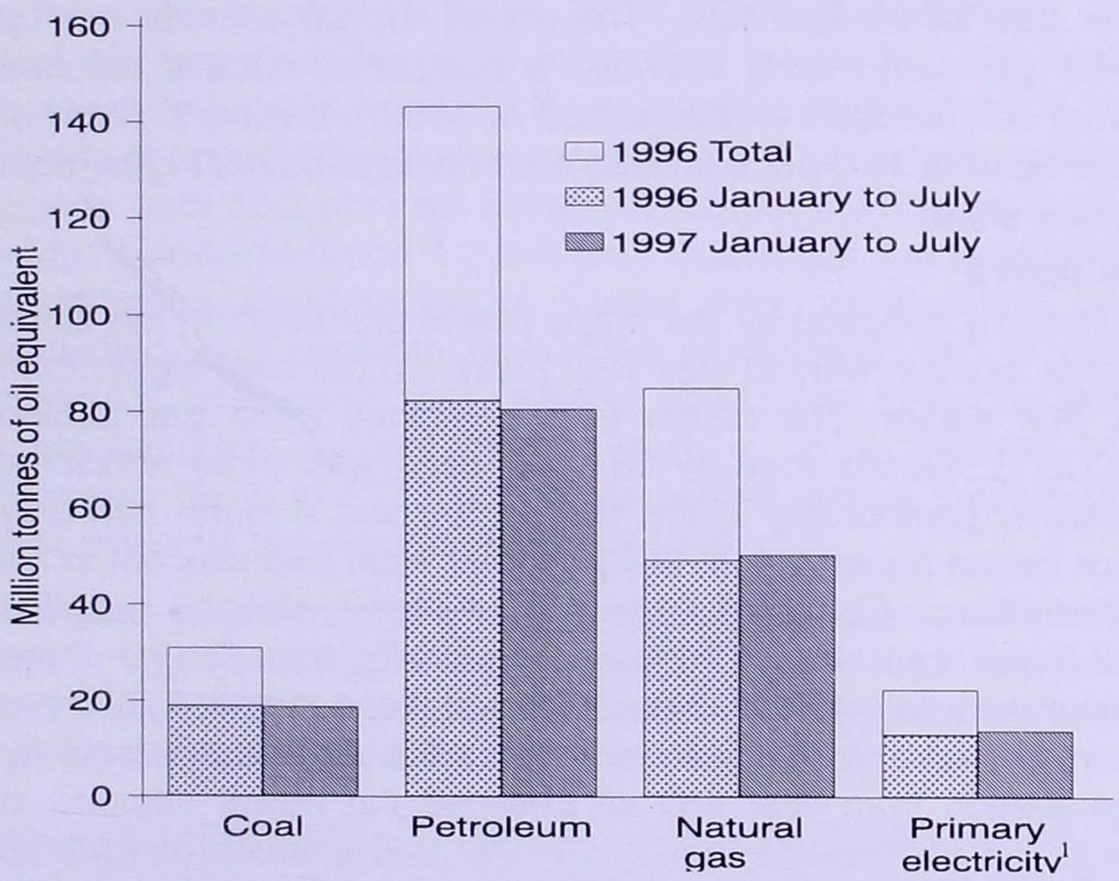
Fuel producers	10-12, 23, 40	Other final users	
		Agriculture	01, 02, 05
Final consumers:		Commercial	50-52, 55, 64-67, 70-74
Iron and steel	27, *excluding* 27.4, 27.53 and 27.54	Public administration	75, 80, 85
Other industry	13, 20, 25, 36, 37, 41	Other services	90-93, 99
Transport	60-63	Domestic	Not covered by SIC 1992

MAIN POINTS

* *Energy production in the three months to July 1997 was 1½ per cent lower than a year earlier, increases in gas and nuclear electricity being more than offset by reductions in oil production.*
* *Primary energy consumption in the three months to July 1997 after temperature correction and seasonal adjustment, was 5 per cent higher than a year earlier. Gas consumption increased by 21½ per cent, but coal consumption fell by 13½ per cent.*
* *Coal stocks at the end of July 1997 were over 7 million tonnes higher than their recent low point 6 months earlier.*
* *The UK had a net surplus of just over £600 million in trade in fuels in the second quarter of 1997, £130 million lower than the same period a year ago, with net exports of crude oil and petroleum products amounting to £0.9 billion down by £140 million on a year ago.*
* *Average industrial prices for electricity fell by 10 per cent in real terms between the second quarter of 1996 and the second quarter of 1997. On the same basis gas prices rose by 2 per cent, whilst overall industrial fuel prices were down by 8 per cent.*
* *Crude oil prices have fallen throughout the first half of 1997 contributing to a 9½ per cent real term fall in the industrial price for heavy fuel oil between quarter 2 1996 and quarter 2 1997.*
* *An article on recent developments in transport fuels is featured on pages 20 to 24 of this issue.*

TOTAL ENERGY PRODUCTION (Table 1)

Chart 1: Production of indigenous primary fuels



1 Nuclear and natural flow hydro.

Indigenous production of primary fuels in the three months to July 1997 at 62.5 million tonnes of oil equivalent, was 1.5 per cent lower than in the corresponding period a year ago. Production of natural gas and nuclear electricity rose by 7.0 per cent and 10.7 per cent respectively, compared with the same period a year earlier. Oil production fell by 7.4 per cent, whilst coal production remained unchanged.

TOTAL ENERGY CONSUMPTION (Table 2)

Total inland energy consumption, on a primary fuel input basis in the three months to July 1997 was 49.2 million tonnes of oil equivalent, 0.5 per cent higher than in the corresponding quarter a year ago. Consumption of coal and petroleum fell by 16.6 per cent and 3.6 per cent respectively, while natural gas consumption rose by 14.4 per cent.

The average temperature during the period was 1.1 degrees celsius warmer than a year ago, and total energy consumption, on a seasonally adjusted and temperature corrected basis, was 5.0 per cent higher than in the same period a year earlier. On this basis, consumption of natural gas rose by 21.7 per cent, whilst consumption of petroleum and coal fell by 2.6 per cent and 13.7 per cent respectively.

COAL AND OTHER SOLID FUELS (Tables 4 to 7)

Production and imports

Provisional figures for the three month period, May to July 1997 show that coal production (including an estimate for slurry) was unchanged from the corresponding period a year earlier at 12.5 million tonnes. Deep mined production was down 5.9 per cent but opencast production was up 14.0 per cent. Imports of coal were 2.2 per cent lower than a year earlier with 4.5 million tonnes imported during the three month period.

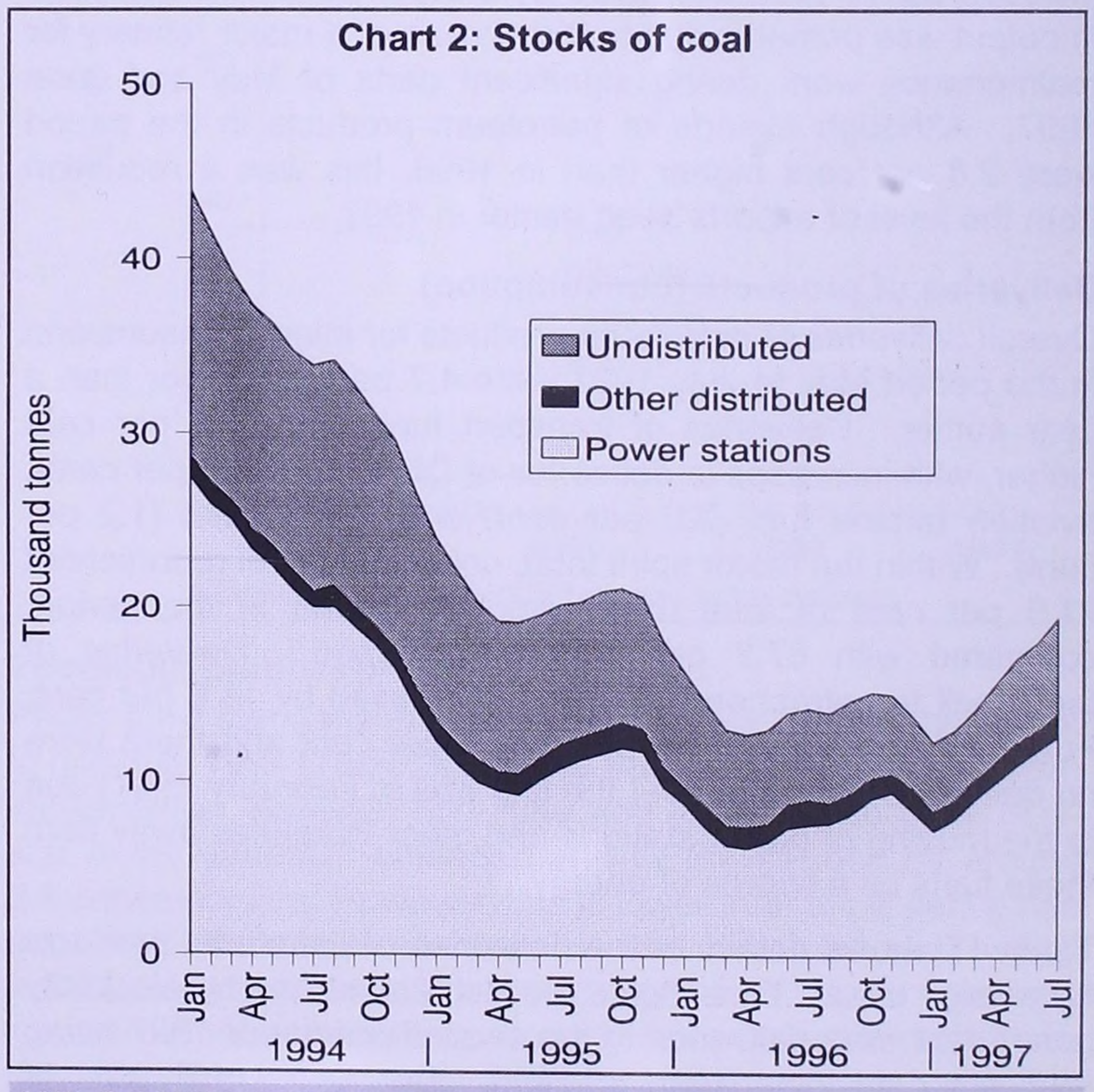
Consumption

Use of home produced and imported coal in the period from May to July 1997 was 12.8 million tonnes. This is 16.9 per cent lower than in the corresponding period of 1996. Consumption by electricity generators, who accounted for 69 per cent of total coal use in the period, fell by 22.5 per cent. Disposals to the industrial sector were down 15.4 per cent on a year earlier while disposals to the domestic sector were up 31.9 per cent, mainly because domestic sector disposals in June and July 1996 were particularly low.

Stocks

Coal stocks rose in July by 1.4 million tonnes to stand at 19.5 million tonnes, 5.3 million tonnes higher than at the end of July 1996, and 7.2 million tonnes higher than at the end of January 1997. Stocks of coal tend to rise in the summer when there is less demand for electricity and gas fired and nuclear power stations are mainly used to meet the load. However, the recent rises in coal stocks are more than just seasonal increases. The amount of coal used by coal fired stations in the year to July 1997 was 7.6 million tonnes less than in the year to July 1996. Stocks of coal held by electricity generators have increased by 5.1 million tonnes in the last 12 months. Recent trends in coal stocks are shown in Chart 2.

Chart 2: Stocks of coal



UK CONTINENTAL SHELF (Table 8 to 10)

Drilling activity

Drilling figures for the second quarter of 1997 indicate a fall of 22.7 per cent in the number of offshore exploration and appraisal wells started, compared with the same period last year. The first half year has seen an overall rise of 1.8 per cent.

The number of offshore development wells started in the second quarter decreased by 17.3 per cent and the first quarter saw a decrease of 7.6 per cent compared with the same periods last year.

Value of income and investment in UKCS oil and gas production

The latest figures for the second quarter of 1997 show a decline of 13.6 per cent in total income from oil and gas production and an increase of 6.0 per cent in operating costs while exploration expenditure rose 51.5 per cent compared with this period last year. Gross trading profits were down 19.3 per cent and capital investment was up 8.5 per cent.

GAS (Tables 11 and 12)

Production

Provisional data for the period May to July 1997 show that indigenous production of natural gas increased by 7.2 per cent compared to the same period a year earlier. Exports of gas increased by 16.8 per cent while imports fell by 27.1 per cent. Indigenous sources accounted for 98.2 per cent of gas available for consumption in the UK in the period May to July 1997. Gas output from the inland transmission system into the local distribution network was 7.5 per cent higher than a year ago. The increases in gas production and output reflect increasing demand for gas used in electricity generation

PETROLEUM (Tables 13 to 17)

Production and refining

Comparing May to July 1997 with the same period a year ago, total indigenous UK production of crude oil and NGLs decreased by 7.4 per cent, whilst exports of crude oil and NGLs fell by 18.4 per cent. These decreases are primarily due to annual maintenance programs being carried out on a significant proportion of fields during May and June 1997, and production problems at two of the UK's largest oil fields during June 1997.

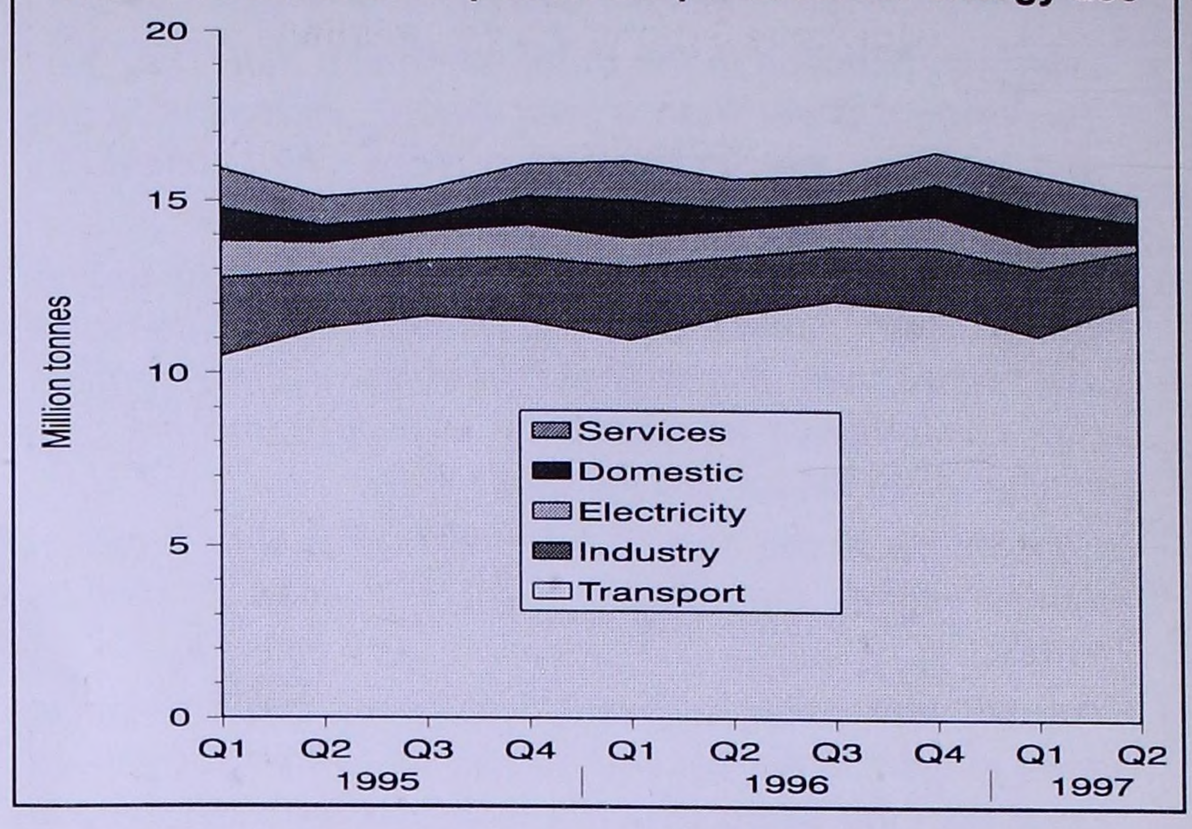
Total refinery output was 2.1 per cent lower than in 1996, with decreases in the output of motor spirit and aviation turbine fuel (6.4 and 6.5 per cent respectively). Gas/diesel oil (which includes DERV fuel) increased by 0.3 per cent. The decrease in output was primarily due to the closure of a major refinery for maintenance work during significant parts of May and June 1997. Although exports of petroleum products in the period were 2.8 per cent higher than in 1996, this was a reduction from the level of exports seen earlier in 1997.

Deliveries of products (consumption)

Overall deliveries of petroleum products for inland consumption in the period May to July 1997 were 4.7 per cent lower than a year earlier. Deliveries of transport fuels were 2.5 per cent higher, with increases in deliveries of DERV fuel (4.1 per cent), aviation turbine fuel (3.2 per cent) and motor spirit (1.2 per cent). Within the motor spirit total, unleaded petrol represented 71.5 per cent of total motor spirit deliveries in the period, compared with 67.2 per cent a year ago. Deliveries of feedstock to petrochemical plants decreased by 18.6 per cent. Fuel oil deliveries decreased by 42.3 per cent and there were no deliveries of orimulsion (the last was in February 1997) due to the moving of power stations and other industries away from these fuels as a source of energy.

Table 17 shows details of the deliveries of petroleum products for energy uses. This shows the decreased use by electricity generators, with deliveries in the second quarter of 1997 being 69.5 per cent lower than in 1996. Decreased deliveries of products to other industries, domestic uses and the commercial sector (down 11.1, 7.3 and 12.2 per cent respectively) were offset to some extent by increased transport uses (up 4.2 per cent). Total deliveries of products for energy uses were thus 2.8 per cent lower than a year earlier. Chart 3 shows recent movements in the data.

Chart 3: Deliveries of petroleum products for energy use



Stocks

During the month of July 1997 total stocks of petroleum decreased by 0.6 per cent, with stocks of crude oil and refinery process oils decreasing by 1.9 per cent and stocks of petroleum products increasing by 0.4 per cent. Thus at the end of July 1997, total stocks of petroleum were 3.3 per cent higher than at the end of July 1996, with stocks of crude oil and refinery process oils being 0.8 per cent higher while stocks of petroleum products were 5.3 per cent higher.

ELECTRICITY (Tables 18 to 23)

Fuel use

Fuel used by the major power producers in the three months to July 1997 was 0.2 per cent lower than in the three months to July 1996. Coal use was 23.5 per cent down on a year earlier. The volume of gas used was 35.2 per cent higher than a year earlier and gas' share of fuel used for generation reached 30 per cent for the first time. The use of nuclear sources was up 14.1 per cent mainly because a number of nuclear reactors were not available in this period of 1996. Nuclear's share of fuel used at 36.0 per cent was 4 percentage points higher than coal's share.

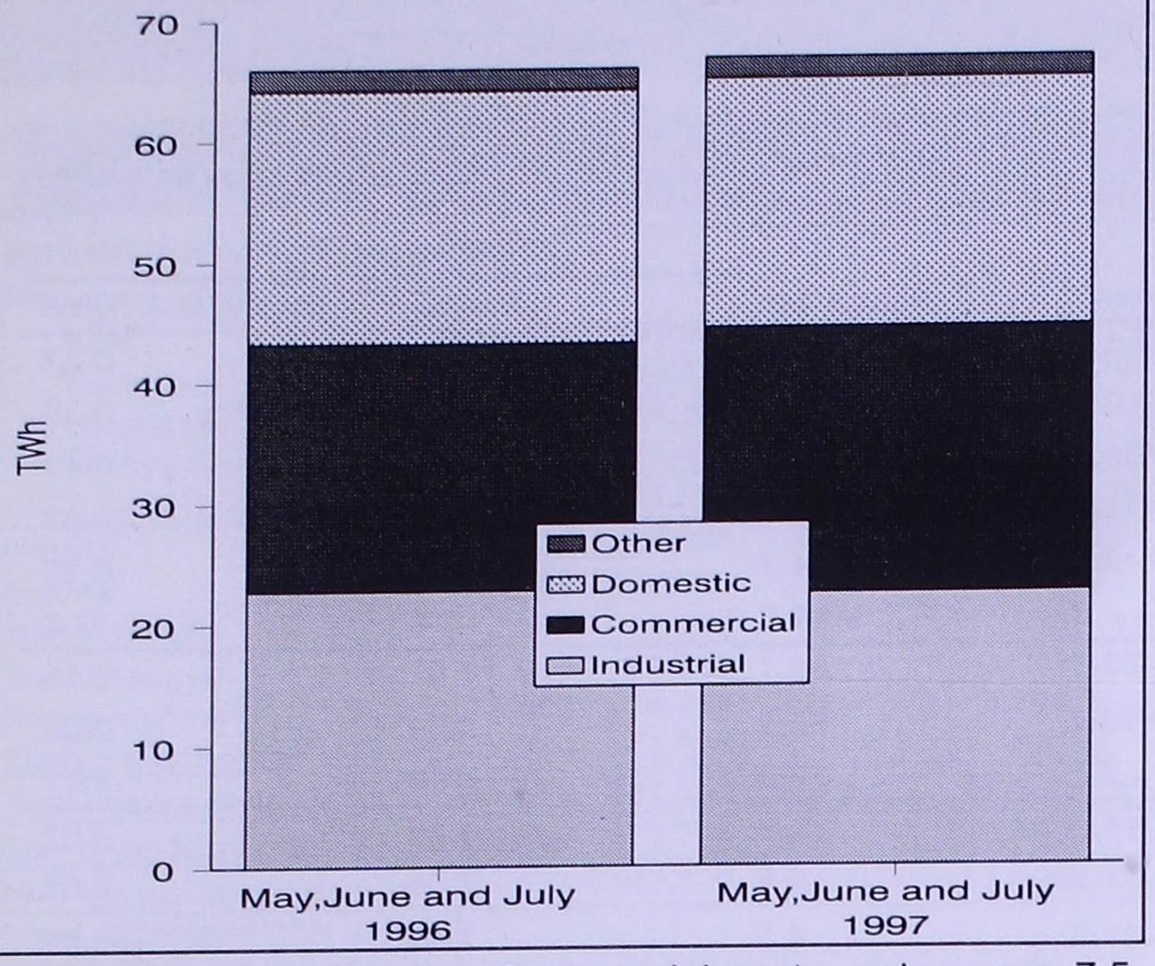
Supplied

Electricity supplied by the major power producers in the latest three months (May to July 1997) was 1.6 per cent higher than a year earlier. The supply from combined cycle gas turbine (CCGT) stations rose by 36.8 per cent, with three additional stations contributing to the 1997 figure and a fourth had only just begun generating in this period of 1996 and was not in full production. Coal-fired conventional steam stations supplied 22.5 per cent (5½ TWh) less electricity than in the three months to July 1996, while oil fired stations supplied 62.0 per cent (½ TWh) less. This overstates the decline in electricity generation from coal and oil because the power stations at both Didcot (one unit from June 1996 and another from March 1997) and Ballylumford (from October 1996) began to burn gas in some of their generating sets. They are now included in the other conventional steam category as mixed fired stations. However, other conventional steam stations still supplied 20.1 per cent (1 TWh) less electricity than in the corresponding period a year earlier because of maintenance at some mixed fired stations and the shut down of the oil/Orimulsion station at Ince. Nuclear stations supplied 14.1 per cent (2½ TWh) more electricity in the May to July period of 1997 than a year earlier. When electricity available from other UK sources (up 1.9 per cent on a year earlier) and net imports (6.9 per cent lower than a year ago) are included, total electricity available through the public distribution system was 1.1 per cent higher than a year earlier.

Sales

In the three months to July 1997, sales of electricity through the public distribution system were provisionally 1.3 per cent.

Chart 4: Electricity sales - most recent 3 months compared with same 3 months a year earlier



higher than a year earlier. Commercial sector sales were 7.5 per cent higher but sales to industrial customers fell by 1.5 per cent and those to domestic customers by 1.3 per cent. When estimates of electricity available from other generators are included, total consumption of electricity during the May to July period of 1997 was also 1.3 per cent higher than a year earlier. Chart 4 shows how in the May to July period, sales of electricity divide evenly between the domestic, industrial and commercial sectors but that commercial sales have increased in size over the last 12 months.

FOREIGN TRADE (Table 25)

Provisional figures for the second quarter of 1997 show that, in value terms, total imports of fuels were 9.9 per cent lower than in the same quarter of 1996. A 17.5 per cent increase in electricity imports being more than offset by an 30.5 per cent decrease in petroleum products, mostly due to a reduction in imports of fuel oil (due to decreased demand) and motor spirit. Exports were 12.2 per cent lower, with crude oil and petroleum products down 14.6 and 7.2 percent respectively due to annual maintenance work having a greater then usual effect on production, and separate production problems in two of the largest UK oil fields in June. Overall, the United Kingdom was a net exporter of fuels, with a surplus on a Balance of Payments basis of £730 million, compared with a surplus of £871 million in the second quarter of 1996.

In volume terms imports of fuel in the second quarter of 1997 were 2.6 per cent higher than a year ago, whilst exports were 3.1 per cent lower. Overall, the United Kingdom had a trade surplus in fuels equal to 5.8 million tonnes of oil equivalent.

PRICES (Tables 26 to 30)

Industrial

Provisional data for the second quarter of 1997 are presented in this issue from the survey of fuel prices paid by manufacturing industry (Table 26). Prices are presented in cash terms. The key price changes have been in electricity, where a combination of the reduction in the Fossil Fuel Levy and lower demand avoiding the need for maximum demand charges for large users, have led to significant falls, and in oil products, where falling crude oil prices have led to reductions. Electricity prices between the first and second quarters of 1997 have fallen by 13.9 per cent for large users (i.e. those consuming more than 8,800 MWh per year) whilst prices for small users (i.e. those consuming less than 880 MWh) and medium users (consuming 880 to 8,800 MWh) have fallen by 8.9 and 7.5 per cent respectively. Prices paid for heavy fuel oil and gas oil have fallen sharply in Q2 1997 and now are around levels seen in Q1 1996. Large heavy fuel oil users (i.e. consuming more than 4,900 tonnes per year) have seen prices fall by 11.9 per cent in the latest quarter whilst average gas oil prices have fallen by 9.7 per cent since Q1 1997. Gas prices fell by 1.5 and 0.9 per cent for small and large users respectively between Q1 and Q2 1997, possibly reflecting a return to seasonal prices. However, gas prices, apart from small users where more users are moving to lower priced firm gas, are now higher than in Q2 1996. Coal prices have remained flat between Q1 1997 and Q2 1997.

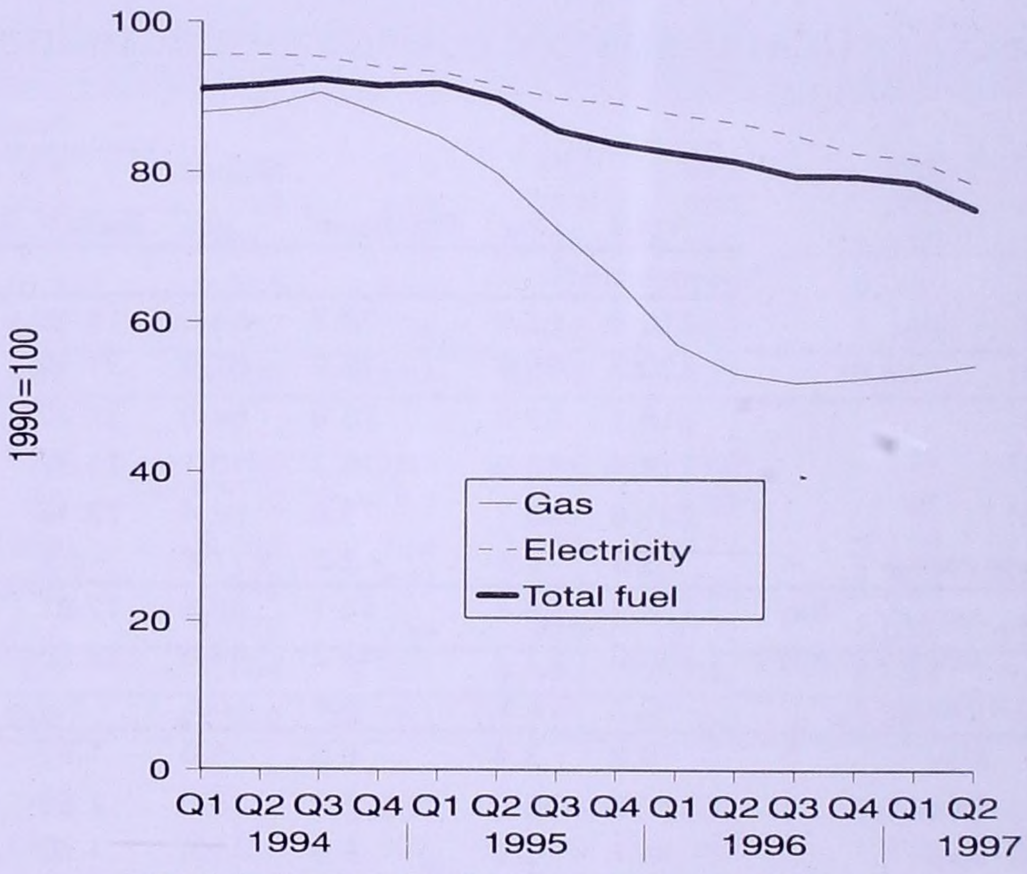
Table 27 shows fuel prices paid by major power producers. It shows that whilst the price of coal remained flat in the second quarter of 1997, gas and oil prices fell sharply. Oil prices are down by 12.0 per cent since Q1 1997 whilst the 13.7 per cent fall in gas prices reflects companies taking advantage of short-term contracts to buy cheaper gas.

Data from energy suppliers are given in Table 28 in index form. These show that the average price for all fuels combined fell by 11.7 per cent in real terms between the first and second quarter of 1997. (Some of this fall is seasonal as the seasonally adjusted fall is 4.5 per cent). The main forces behind the fall were electricity which fell by 14.5 per cent and heavy fuel oil which was 10.6 per cent lower than in Q1 1997, gas prices fell by 2.7 per cent. Seasonally adjusted prices show a real 1.9 per cent rise for gas and a 4.3 per cent fall for electricity during the quarter. In the second quarter of 1997 average heavy fuel oil and electricity prices have fallen by 9.6 and 9.8 per cent respectively in real terms since Q2 1996, whilst gas prices have risen by 1.9 per cent. Coal prices have fallen by 4.0 per cent on the same basis.

Domestic

Average domestic fuel prices (Table 29), fell in real terms for all fuels in the year to quarter 2 1997. Electricity prices fell by 6 per cent, gas by 2.6 per cent and coal by 0.9 per cent. Heating oil prices fell by 2.6 per cent reflecting lower crude oil prices.

Chart 5: Seasonally adjusted fuel prices for the industrial sector in real terms[1]



1 Deflated using the GDP market price deflator.

Petroleum product prices

Prices for 4 star, unleaded petrol and DERV rose in the month to mid-July 1997 (Table 30) as the Budget duty increases were implemented. Between mid-June and mid-July the price of 4-star petrol, premium unleaded and DERV all rose by around 2.8 pence per litre. However, this is lower than the 4 pence rise that the full budget increase would have caused, which indicates companies still had old stocks and were relatively reluctant to raise prices in a strongly competitive market. Since July 1996 4 star prices have risen by 14.6 per cent, unleaded by 15.4 per cent and DERV by 14.9 per cent . The crude oil price index (which is calculated in sterling terms) showed that the average cost of crude oil acquired by refineries in July 1997 was virtually unchanged from June, but 14.4 per cent lower than in July 1996.

TOTAL ENERGY

TABLE 1. Indigenous production of primary fuels

Million tonnes of oil equivalent

		Total	Coal[1]	Petroleum[2,3]	Natural gas[4]	Primary electricity: Nuclear	Primary electricity: Natural flow hydro[5]
1992		226.5	52.1	103.7	51.8	18.45	0.47
1993		235.3	42.3	110.3	60.9	21.49	0.39
1994		257.0	30.6	139.8	65.0	21.22	0.47
1995		270.3	33.6	143.6	71.2	21.36	0.49
1996		282.0	31.7	143.1	84.7	22.12	0.33
Per cent change		*+4.3*	*-5.8*	*-0.3*	*+19.0*	*+3.6*	*-32.2*
1996	January - July	163.2	18.9	82.2	49.1	12.81	0.15
1997	January - July p	163.3	18.8	80.4	50.2	13.86	0.06
Per cent change		*+0.1*	*-0.4*	*-2.3*	*+2.3*	*+8.2*	*-59.1*
1996	May	22.0	2.5	11.9	5.8	1.82	0.02
	June*	21.7	2.9	11.2	5.5	2.05	0.02
	July	19.8	2.4	11.8	4.1	1.42	0.01
Total		63.5	7.9	34.9	15.4	5.30	0.05
1997	May	20.6	2.5	10.6	5.5r	1.93	0.02
	June*	21.3r	2.8	10.0r	6.3r	2.19	0.02
	July p	20.6	2.5	11.7	4.6	1.75	0.02
Total		62.5	7.9	32.3	16.4	5.87	0.06
Per cent change		*-1.5*	-	*-7.4*	*+7.0*	*+10.7*	*+9.3*

1. Includes solid renewable sources (wood, straw and waste), and an estimate for slurry.
2. Calendar months.
3. Crude oil, offshore and land, plus condensates and petroleum gases derived at onshore treatment plants.
4. Includes colliery methane, landfill gas and sewage gas. Excludes gas flared or re-injected.
5. Includes generation at wind stations.

TABLE 2. Inland energy consumption: primary fuel input basis

Million tonnes of oil equivalent

		Unadjusted[5] Total	Coal[1]	Petroleum[2]	Natural gas[3]	Primary electricity: Nuclear	Primary electricity: Natural flow hydro[4]	Net imports	*Seasonally adjusted and temperature corrected*[6,7] *(annualised rates)* Total	Coal	Petroleum	Natural gas	Primary electricity: Nuclear	Primary electricity: Natural flow hydro	Net imports
1992		216.8r	63.6	78.3	54.5r	18.45	0.47	1.44	219.8	64.6	78.8	56.1	18.33	0.49	1.44
1993		220.3	55.6	78.9	62.5	21.49	0.39	1.44	221.5	55.8	79.2	63.4	21.37	0.40	1.44
1994		218.1	52.2	78.0	64.8	21.22	0.47	1.45	222.3	53.0	78.8	67.3	21.21	0.48	1.45
1995		219.5r	49.9r	76.2	70.1r	21.37	0.49	1.40	224.2	50.9	77.3	72.7	21.40	0.48	1.40
1996		231.6	46.7	78.6	82.4	22.12	0.33	1.44	229.9	46.5	78.2	81.3	22.03	0.34	1.43
Per cent change		*+5.5*	*-6.5*	*+3.2*	*+17.6*	*+3.5*	*-32.2*	*+2.4*	*+2.6*	*-8.6*	*+1.3*	*+11.8*	*+2.9*	*-28.5*	*+2.3*
1996	January - July	135.3	28.4	44.7	48.5	12.81	0.15	0.86	229.1	48.2	77.5	79.6	22.12	0.25	1.46
1997	January - July p	130.3	23.7	43.2	48.8	13.86	0.06	0.80	233.1	42.1	76.4	88.8	24.05	0.35	1.36
Per cent change		*-3.7*	*-16.6*	*-3.4*	*+0.6*	*+8.2*	*-59.1*	*-6.9*	*+1.7*	*-12.6*	*-1.4*	*+11.7*	*+8.7*	*+36.8*	*-6.9*
1996	May	16.9	3.4	6.0	5.6	1.82	0.02	0.11	230.6	46.4	79.3	79.5	23.70	0.32	1.36
	June*	17.9	3.6	7.1	5.0	2.05	0.02	0.14	224.7	46.2	76.4	77.2	22.87	0.32	1.70
	July	14.1	3.1	5.9	3.6	1.42	0.01	0.11	231.4	47.3	79.5	82.5	20.48	0.27	1.38
Total		49.0	10.1	18.9	14.2	5.30	0.05	0.37	228.9	46.7	78.4	79.7	22.35	0.30	1.48
1997	May	15.5r	2.6	5.6	5.3r	1.93	0.02	0.11	229.9r	40.2	76.6r	86.4r	25.04	0.37	1.32
	June*	19.2r	3.2	7.1r	6.4r	2.19	0.02	0.13	245.1r	42.2r	78.4r	98.2r	24.42	0.30	1.50
	July p	14.5	2.5	5.5	4.6	1.75	0.02	0.11	245.8	38.4	74.2	106.4	25.20	0.36	1.29
Total		49.2	8.4	18.2	16.3	5.87	0.06	0.34	240.3	40.3	76.4	97.0	24.89	0.34	1.37
Per cent change		*+0.5*	*-16.6*	*-3.6*	*+14.4*	*+10.7*	*+9.3*	*-7.2*	*+5.0*	*-13.7*	*-2.6*	*+21.7*	*+11.4*	*+11.5*	*-7.2*

1. Includes solid renewable sources (wood, straw and waste), and net foreign trade and stock changes in other solid fuels.
2. Inland deliveries for energy use, plus refinery fuel and losses, minus the differences between deliveries and actual consumption at power stations.
3. Includes gas used during production, colliery methane, landfill gas and sewage gas. Excludes gas flared or re-injected and non-energy use of gas.
4. Includes generation at wind stations. Excludes generation from pumped storage stations.
5. Not seasonally adjusted or temperature corrected.
6. Coal, petroleum and natural gas are temperature corrected.
7. Figures revised following modification of methodology and use of updated adjustment factors. For further details see Digest of United Kingdom Energy Statistics 1997, paragraphs 1.46 - 1.47.

TABLE 3. **Supply and use of fuels**

Thousand tonnes of oil equivalent

	1995	1996	Per cent change	1995 2nd quarter	1995 3rd quarter	1995 4th quarter	1996 1st quarter	1996 2nd quarter	1996 3rd quarter	1996 4th quarter	1997 p 1st quarter	Per cent change
PRIMARY FUELS AND EQUIVALENTS												
Production of primary fuels												
Coal[1]	33,623	31,686	*-5.8*	8,393	8,327	8,851	8,509	7,997	7,265	7,915	8,552	*+0.5*
Petroleum[2]	143,617	143,116	*-0.3*	32,744	35,828	38,026	35,929	34,532	34,554	38,101	37,096	*+3.2*
Natural gas[3,4]	71,186	84,718	*+19.0*	14,602	10,894	21,976	27,474	17,486	13,917	25,841	27,260	*-0.8*
Primary electricity[5]	21,856	22,452	*+2.7*	5,443	5,386	5,804	5,705	5,438	4,988	6,321	5,845	*+2.5*
Total[6]	270,290	281,982	*+4.3*	61,183	60,437	74,659	77,619	65,456	60,726	78,181	78,755	*+1.5*
Imports	78,356	80,645	*+2.9*	19,504	20,476	19,616	19,348	21,053	19,738	20,506	20,477	*+5.8*
Exports	118,350	116,537	*-1.5*	27,325	29,820	31,026	29,749	29,022	28,321	29,446	28,110	*-5.5*
Marine bunkers	2,596	2,806	*+8.1*	683	658	678	610	675	793	729	644	*+5.6*
Stock changes[7]	+7,074	+1,736		+1,022	-1,779	+2,672	+3,587	-248	-1,646	+43	-904	
Non-energy use[8]	15,006	14,791	*-1.4*	3,790	3,608	3,776	3,609	3,625	3,758	3,798	3,606	*-0.1*
Statistical difference[9]	-314	+1,369		-372	+361	-935	+2,013	-223	+943	-1,364	-1,900	
Total primary energy input[10]	219,455	231,598	*+5.5*	49,539	45,410	60,532	68,599	52,717	46,890	63,392	64,069	*-6.6*
Conversion losses etc.[11]	68,782	70,798	*+2.9*	15,933	15,056	18,533	20,680	15,950	14,568	19,599	18,581	*-10.2*
Final energy consumption[12]	150,673	160,800	*+6.7*	33,606	30,353	41,999	47,919	36,767	32,321	43,793	45,487	*-5.1*
FINAL CONSUMPTION BY USER												
Iron and steel industry												
Coal	44	83	*+90.1*	13	17	13	23	27	14	19	11	*-50.4*
Other solid fuel[13]	3,572	3,805	*+6.5*	933	893	867	901	966	918	1,020	962	*+6.7*
Coke oven gas	563	623	*+10.8*	141	141	141	156	156	156	156	173	*+10.7*
Gas	1,779	1,889	*+6.1*	465	398	411	495	459	379	555	452	*-8.7*
Electricity	847	905	*+6.8*	216	199	212	235	231	213	226	235	-
Petroleum	916	770	*-16.0*	189	235	258	199	206	200	164	195	*-2.1*
Total	7,722	8,075	*+4.6*	1,957	1,883	1,901	2,009	2,045	1,880	2,141	2,028	*+0.9*
Other industries												
Coal	3,040	2,410	*-20.7*	830	692	719	612	600	489	709	645	*+5.4*
Other solid fuel[1,13]	269	382	*+41.7*	62	65	66	71	108	96	106	147	*(+)*
Coke oven gas	14	20	*+48.7*	3	3	3	5	5	5	5	7	*+48.1*
Gas[4]	10,259	11,732	*+14.4*	2,179	2,052	3,214	2,850	2,140	2,502	4,240	3,001	*+5.3*
Electricity	7,745	7,964	*+2.8*	1,833	1,818	2,081	2,118	1,885	1,957	2,003	1,927	*-9.0*
Petroleum	7,017	7,005	*-0.2*	1,614	1,494	1,743	2,101	1,618	1,463	1,823	1,958	*-6.8*
Total	28,344	29,513	*+4.1*	6,522	6,125	7,827	7,757	6,358	6,512	8,887	7,685	*-0.9*
Transport												
Electricity[14]	636	639	*+0.3*	162	149	159	165	162	151	161	180	*+9.4*
Petroleum	49,946	51,968	*+4.0*	12,549	12,955	12,769	12,074	13,060	13,556	13,279	12,390	*+2.6*
Total[15]	50,584	52,608	*+4.0*	12,712	13,104	12,928	12,239	13,222	13,707	13,440	12,571	*+2.7*
Domestic sector												
Coal	2,078	2,084	*+0.3*	488	510	566	631	475	357	622	868	*+37.6*
Other solid fuel[1,13]	781	877	*+12.2*	216	193	172	219	248	217	193	205	*-6.0*
Gas	28,037	32,322	*+15.3*	4,716	2,650	9,121	13,814	6,190	3,169	9,150	11,670	*-15.5*
Electricity	8,790	9,246	*+5.2*	1,880	1,649	2,517	2,916	1,972	1,730	2,628	2,701	*-7.4*
Petroleum	3,015	3,540	*+17.4*	562	474	908	1,227	694	590	1,029	1,165	*-5.1*
Total[6]	42,711	48,079	*+12.6*	7,865	5,478	13,287	18,809	9,582	6,065	13,623	16,611	*-11.7*
Other final users[16]												
Coal	362	422	*+16.7*	41	37	70	183	105	46	88	121	*-34.0*
Other solid fuel[1,13]	160	173	*+7.7*	40	45	36	38	53	44	37	45	*+16.5*
Gas[4]	9,505	10,372	*+9.1*	1,895	1,140	2,964	3,759	2,708	1,428	2,477	3,116	*-17.1*
Electricity	7,260	7,533	*+3.8*	1,675	1,678	1,968	2,049	1,727	1,729	2,028	2,232	*+9.0*
Petroleum	4,026	4,025	-	899	864	1,018	1,075	968	910	1,072	1,079	*+0.3*
Total	21,313	22,525	*+5.7*	4,551	3,764	6,056	7,105	5,561	4,157	5,702	6,593	*-7.2*
Total final consumption	150,673	160,800	*+6.7*	33,606	30,353	41,999	47,919	36,767	32,321	43,793	45,487	*-5.1*
FINAL CONSUMPTION BY FUEL												
Coal	5,523	4,999	*-9.5*	1,372	1,256	1,368	1,449	1,207	906	1,437	1,646	*+13.6*
Other solid fuel[1,13]	4,783	5,236	*+9.5*	1,250	1,196	1,141	1,229	1,375	1,275	1,357	1,359	*+10.6*
Coke oven gas	576	644	*+11.7*	144	144	144	161	161	161	161	180	*+11.9*
Gas[4,15]	49,582	56,317	*+13.6*	9,256	6,240	15,710	20,919	11,498	7,477	16,422	18,239	*-12.8*
Electricity	25,279	26,286	*+4.0*	5,767	5,493	6,937	7,483	5,977	5,780	7,047	7,276	*-2.8*
Petroleum	64,921	67,309	*+3.7*	15,813	16,023	16,696	16,676	16,547	16,719	17,367	16,786	*+0.7*
Total all fuels[6]	150,673	160,800	*+6.7*	33,606	30,353	41,999	47,919	36,767	32,321	43,793	45,487	*-5.1*

1. Includes solid renewable sources (wood, straw, waste etc).
2. Crude petroleum and natural gas liquids. Annual data includes extended well-test production.
3. Excludes gas flared or re-injected.
4. Includes landfill gas and sewage gas. Excludes non energy use of gas.
5. Nuclear, natural flow hydro and generation at wind stations.
6. Includes small amounts of solar and geothermal heat.
7. Stock fall (+) or stock rise (-).
8. Petroleum and natural gas.
9. Recorded demand minus supply.
10. More detailed analyses of the 1995 and 1996 figures are given in the Digest of UK Energy Statistics 1997.
11. Losses in conversion and distribution, and use by fuel industries.
12. Measured as deliveries, except for natural gas and electricity, and for solid fuels used by the iron and steel industry.
13. Coke and other manufactured solid fuels.
14. Includes use in transport-related premises, eg. airports, warehouses.
15. Includes small quantities of gas used for road transport.
16. Mainly public administration, commerce and agriculture.

COAL & OTHER SOLID FUELS

TABLE 4. Coal production and foreign trade

Thousand tonnes

		Production					
		Total[1]	Deep-mined	Opencast	Net imports	Imports[2]	Exports
1992		84,493	65,800	18,187	+19,366	20,339	973
1993		68,199	50,457	17,006	+17,286	18,400	1,114
1994		48,971	31,854	16,804	+13,852	15,088	1,236
1995		53,037	35,150	16,369	+15,037	15,896	859
1996		50,197	32,223	16,315	+16,811	17,799	988
Per cent change		*-5.4*	*-8.3*	*-0.3*	*+11.8*	*+12.0*	*+15.1*
1996	January - July	29,943	19,444	9,540	+9,777	10,271	494
1997	January - July p	29,814	18,866	10,121	+12,151 e	12,869 e	718 e
Per cent change		*-0.4*	*-3.0*	*+6.1*	*+24.3*	*+25.3*	*+45.3*
1996	May	3,995	2,581	1,277	+1,347	1,409	62
	June*	4,687	3,031	1,497	+1,612	1,671	58
	July	3,792r	2,486r	1,168r	+1,556	1,603	47
Total		12,473	8,098	3,942	+4,516	4,683	167
1997	May	4,002	2,410	1,479	+1,306	1,385	80
	June*	4,479	2,720	1,628	+1,774	1,852	78
	July p	3,987	2,491	1,386	+1,258 e	1,341 e	83 e
Total		12,468	7,621	4,494	+4,337	4,579	241
Per cent change		-	*-5.9*	*+14.0*	*-4.0*	*-2.2*	*+44.6*

1. Includes an estimate for slurry.
2. In 1993 import figures include an additional estimate for recorded trade. In other years figures are as recorded in the Overseas Trade Statistics of the United Kingdom (OTS) except that import and export figures for recent months are estimated on the basis of information available for extra-EC trade until monthly statistics for intra-EC trade become available from HM Customs and Excise.

TABLE 5. Inland coal use

Thousand tonnes

			Fuel producers' consumption				Final users (disposals by collieries and opencast sites)		
			Primary	Secondary					
		Total	Collieries	Electricity generators	Coke ovens	Other conversion industries[1]	Industry[2]	Domestic[2]	Other[3]
1992		100,580	79	78,469	9,031	1,319	6,581	4,156	945
1993		86,727	48	66,106	8,479	1,329	5,300	4,638	826
1994		81,783	22	62,406	8,595	1,190	4,948	3,901	721
1995		76,948	8	59,588	8,664	982	4,493	2,690	523
1996		71,403	8	54,893	8,635	946	3,639	2,705	577
Per cent change		*-7.2*	*-5.4*	*-7.9*	*-0.3*	*-3.7*	*-19.0*	*+0.6*	*+10.4*
1996	January - July	43,327	5	33,700	4,980	556	2,110	1,560	416
1997	January - July p	35,983	4	26,090	5,081	520	1,993	2,053	240
Per cent change		*-17.0*	*-4.7*	*-22.6*	*+2.0*	*-6.5*	*-5.6*	*+31.6*	*-42.2*
1996	May	5,129	1	3,788	671	82	313	216	58
	June*	5,526	-	4,052	838	94	319	187	36
	July	4,696r	-	3,531r	658	84	274r	128r	21r
Total		15,351	1	11,370r	2,168	259	906r	531r	115r
1997	May	3,979	-	2,718	678	68	249	248	18
	June*	4,915	1	3,399	849	78	294	279	15
	July p	3,861	-	2,692	688	74	224	174	9
Total		12,755	1	8,810	2,215	220	766	701	42
Per cent change		*-16.9*	*+5.5*	*-22.5*	*+2.2*	*-15.2*	*-15.4*	*+31.9*	*-63.3*

1. Low temperature carbonisation and patent fuel plants.
2. Includes estimates of imports.
3. Public adminstration, commerce and agriculture.

TABLE 6. **Stocks of coal at end of period**

Thousand tonnes

			Distribution				
		Total[1]	Total distributed stocks	Electricity generators[2]	Coke ovens	Other	Total undistributed stocks
1992		47,207	33,493	32,173	1,271	49	13,714
1993		45,860	29,872	28,579	1,218	75	15,989
1994		26,572	15,301	14,102	1,098	101	11,271
1995		17,820	10,716	9,677	961	77	7,104
1996		13,772	9,619	8,362	1,228	29	4,153
1996	May	12,962	7,601	6,561	989	50	5,362
	June*	13,947	8,717	7,393	1,278	46	5,230
	July	14,202r	8,977r	7,578r	1,345	54	5,224r
1997	May	17,110	12,279	10,999	1,253	26	4,831
	June*	18,031	13,005	11,846	1,134	26	5,026
	July p	19,452	13,952	12,660	1,261	31	5,500
Absolute change:							
in latest month		*+1,421*	*+947*	*+814*	*+127*	*+6*	*+474*
on a year ago		*+5,251*	*+4,975*	*+5,082*	*-84*	*-23*	*+275*

1. Excluding distributed stocks held in merchants' yards, etc., mainly for the domestic market, and stocks held by the industrial sector.
2. Coal-fired power stations belonging to major power producers (see inside front cover).

TABLE 7. **Other solid fuel production, foreign trade and use**

Thousand tonnes

		Coke and breeze						Other manufactured solid fuels[1]				
				Consumption						Consumption		
		Production	Net imports[2]	Iron and steel industry[3]	Other industry[4,5]	Domestic[5]	Total use	Production	Net imports[2]	Domestic	Industry[4]	Total use
1992		6,528	+305	6,115	515	395	7,025	1,056	+55	1,068	21	1,089
1993		6,093	+514	5,928	546	285	6,760	1,111	+9	1,127	33r	1,160r
1994		6,202	+218	6,168	428	150	6,746	1,034	-27	904	69	973
1995		6,228	+509	6,225	348	178	6,751	841	-58	708	63	771
1996		6,222	+988	6,611	525	230	7,366	862	-41	815	54	868r
Per cent change		*-0.1*	*+94.3*	*+6.2*	*+51.0*	*+29.0*	*+9.1*	*+2.6*	*-29.4*	*+15.2*	*-14.3*	*+12.6*
1995	2nd quarter	1,573	+68	1,616	84	45	1,746	216	-5	207	14	221
	3rd quarter	1,570	+263	1,556	82	66	1,704	183	-16	158	17	175
	4th quarter	1,535	+160	1,517	88	27	1,632	259	-15	154	14	168
1996	1st quarter	1,536	+47	1,583	95	37	1,715	184	-17	218	12	230
	2nd quarter	1,568	+419	1,685	152	98	1,935	238	-11	220	14	234
	3rd quarter	1,562	+275	1,601	131	64	1,797	220	-8	195	13	208
	4th quarter	1,556	+247	1,742	146	31	1,919	220	-5	183	15	198
1997	1st quarter	1,564	+319r	1,688	142r	59r	1,889r	223	-1	187	15	202
	2nd quarter p	1,566	+221	1,692	168	28	1,888	197	-32	169	14	183
Per cent change		*-0.1*	*-47.2*	*+0.4*	*+10.2*	*-71.2*	*-2.4*	*-17.0*	*(+)*	*-23.2*	*-*	*-21.9*

1. These include Homefire, Ancit, Phurnacite and fuel produced by low temperature carbonisation.
2. The latest quarter's import figures are estimated. They will be revised when the intra-EC trade data becomes available from HM Customs and Excise.
3. Includes an estimate of iron foundries' consumption.
4. Includes own use by fuel producers.
5. Includes an estimate of imports.

UK CONTINENTAL SHELF

TABLE 8. **Drilling activity**[1]

Number of wells started

		Offshore				Onshore	
		Exploration	Appraisal	Exploration & Appraisal	Development[2]	Exploration & Appraisal	Development
1992		74	57	131	167	6	8
1993		51	59	110	162	2	9
1994		62	37	99	202	3	13
1995		60	38	98	244	2	19
1996		77	35	112	265	7	28
Per cent change		*+28.3*	*-7.9*	*+14.3*	*+8.6*	*(+)*	*+47.4*
1995	2nd quarter	19	14	33	52	-	3
	3rd quarter	11	12	23	54	-	5
	4th quarter	19	6	25	66	2	6
1996	1st quarter	21	10	31	66	3	4
	2nd quarter	15	7	22	81	2	12
	3rd quarter	19	9	28	52	-	7
	4th quarter	22	9	31	62	2	4
1997	1st quarter	22	15	37	61	1	7
	2nd quarter p	10	7	17	67	3	8
Per cent change		*-33.3*	-	*-22.7*	*-17.3*		

1. Including sidetracked wells.
2. Development wells are production and appraisal wells drilled after development approval has been granted.

TABLE 9. **Value of, and investment in, UKCS oil and gas production**

£ million

		Total income[1]	Operating costs	Exploration expenditure	Gross trading profits (net of stock appreciation)	Percentage contribution to GDP[2]	Capital investment	Percentage contribution to industrial investment[3]
1992		12,237	3,316	1,508	6,847	1.5	5,420	22
1993		13,841	3,661	1,213	8,111	1.7	4,664	20
1994		15,941	3,876	939	9,709	2.0	3,547	16
1995		17,829	3,913	1,085	10,949	2.1	4,228	18
1996		20,998	3,981	1,097	14,373	2.5	4,375	18
Per cent change		*+17.8*	*+1.7*	*+1.1*	*+31.3*		*+3.5*	
1995	2nd quarter	4,119	1,015	249	2,313	1.8	1,055	19
	3rd quarter	3,829	979	232	2,174	1.7	1,200	19
	4th quarter	4,989	1,005	384	3,152	2.3	1,072	16
1996	1st quarter	5,382	944	297	3,794	2.7	943	15
	2nd quarter	4,685	980	242	3,056	2.1	1,178	22
	3rd quarter	4,719	953	279	3,086	2.1	1,175	20
	4th quarter	6,212	1,104	278	4,437	2.9	1,078	16
1997	1st quarter	5,528r	978	285	4,038r	2.6	956	16
	2nd quarter p	4,047	1,039	367	2,465	1.7	1,144	..
Per cent change		*-13.6*	*+6.0*	*+51.5*	*-19.3*		*-2.9*	

1. Including sales of crude oil, NGLs and natural gas plus other income associated with oil and gas production.
2. GDP at factor cost.
3. Investment by energy, water supply and the manufacturing sectors.

TABLE 10. Indicative tariff rates offered in the UKCS for the handling of oil and gas

	Tariff rate (pence/thousand cubic feet)			Annual Capacity[1]	Number of years	Start date	Conditions the tariff allows for:
	Processing	Transport	Bundled services				
Gas systems							
1 Eagles			45.0	Large	12	1998	b e f g h n
2 Fulmar processing and export system			65.0	Small	-	1997	a b e f g h l n o
3 Sage	67.0			Large	20	1998	b f g h j k l m
4 Caister Murdoch system			39.5	Large	12	1998	c e f g h n
5 Theddlethorpe gas terminal	16.1			Small	-	1998	b f g h
6 Gannet processing and Segal systems			45.0	Large	11	1999	a b e f g h l n o
7 Frigg Transportation System (UK)			40.0	Small	6	1998	a b c f g
8 Sage	67.0			Small	6	1998	b c d f g
Oil systems	(pounds sterling/barrel)						
9 Ninian platform		0.10		Large	15	1997	c
10 Brae-Forties pipeline		0.50		Small	6	1998	b
11 Scott	2.20-2.60			Large	more than 5	1998	d e g h n o
12 Fulmar processing and export system	0.75			Small	-	1997	a b e f g h l n o
13 Fulmar processing and export system		1.25		Small	-	1997	a b e f g h l n o
14 Gannet processing and export systems			4.80	Large	11	1999	a b d e g h

1. Small annual capacity is less than 7.5 billion cubic foot of gas or 0.5 million tonnes of oil.

Additional comments on the conditions applying to the above indicative tariffs

Gas systems

1. No comments.
2. Additional cost of £35/tonne NGLs. Terms include a payment to compensate for production and drilling deferral. Requesting party is given right to drill 3 wells from Fulmar platform using the Fulmar drilling rig.
3. No comments.
4. No comments.
5. Price quoted at 15p/mmJ. Number of years required not specified. (N.B. figure printed in June issue was wrong by a factor of 10).
6. Additional £34/tonne NGL processing and delivery. Capital expenses included in oil tarif. Segal includes Fulmar gas line, Flags, St Fergus and Mosmorran.
7. Capacity offered on a reasonable endeavours basis with a banking arrangement.
8. Subject to a minimum flowrate of blended gases in Sage of 90 mmcfd.

Oil systems

9. No comments.
10. Third party pipeline liquids will be delivered into the Brae System via third party pipeline access.
11. Equal priority. Capital expense recovered through tariff. £2.40/barrel for the first 21 million barrels, £2.20/barrel for all volumes between 21 and 28 million barrels, £2.60/barrel for all volumes over 28 million barrels.
12. Final price will include share of operating costs. Terms include a payment to compensate for production and drilling deferral. Requesting party is given right to drill 3 wells from Fulmar platform using the Fulmar drilling rig.
13. Final price will include share of opex on export system. To WYE piece on J Block Spurline. Terms include a payment to compensate for production and drilling deferral. Requesting party is given right to drill 3 wells from Fulmar platform using the Fulmar drilling rig.
14. Bundled tariff includes capital expenses and deferral of equity oil and gas production. It does not included Norpipe transportation charges.

a - Priority rights
b - Send or pay
c - Annual charge
d - New capital expense
e - Processing offshore
f - Processing onshore
g - NGLs
h - Water
i - Salt
j - Sulphur
k - CO_2
l - H_2S
m - N_2
n - Compression
o - Other

The above table records the indicative tariffs offered in recent months for transportation and/or processing of offshore hydrocarbon resources, from wellhead to terminal or part thereof. The services on offer can be either processing (e.g. 'cleaning' or compression of the hydrocarbons), transport of the hydrocarbons, or a combination of the two, where the price is dependant on the 'bundling' of the services on offer. The prices themselves are not firm prices, but an indication of the type of price that could be expected by someone seeking a similar service from that system.

Prices will vary according to a large number of factors. Some of these are reflected in the main table. These include the date from which the services are required, the length of the contract, the volume of hydrocarbons involved (whether large or small), and the various types of processing involved. Other variables to take into consideration are whether the customer will have priority rights to use the services, whether they will be expected to pay even if the services booked are not utilised, and whether new infrastructure will be required (such as additional lengths of pipeline, new receiving facilities, etc.) to accommodate the customer's hydrocarbons. In some cases comments have been provided to give a more accurate picture of the conditions under which the indicative tariff has been made.

The above table appears monthly in Energy Trends. Sometimes only a small number of indicative tariffs will be reported in the month, in which case entries from the previous month will be re-printed.

Enquiries regarding the publication of tariff rates should be directed to Mrs Mary Duff at room 2.H.4, Department of Trade and Industry, 1 Victoria Street, London SW1H 0ET (Tel: 0171 215 5262).

GAS

TABLE 11. **Natural gas production and supply**

GWh

	Upstream gas industry						Downstream gas industry				
		Less			*Plus*			*Less*			
	Gross gas production[1]	Producers own use[2]	Exports[3]	Stock change and other net losses[4 5]	Imports	Gas available at terminals[6]	Gas input into transmission system[7]	Operators own use[8]	Stock changes[9]	Metering differences[10]	Gas output from transmission system[11]
1992	597,854	38,505	620	+698	61,255	619,286	620,388	2,651	+4,065	-6,249	619,921
1993	703,166	40,669	6,824	+623	48,528	703,578	700,337	2,930	-950	-693	699,050
1994	750,860	48,260	9,557	+1,980	33,053	724,116	727,350	3,090	-3,067	2,495	724,832
1995	822,726	49,249	11,232	+4,278	19,457	777,424	778,638	3,311	-9,927	7,771	777,483
1996	979,440	55,656	14,944	+5,763	19,804	922,881	926,799r	4,576	+3,632	10,519	908,072
Per cent change	*+19.0*	*+13.0*	*+33.0*		*+1.8*	*+18.7*	*+19.0*	*+38.2*			*+16.8*
1996 January - July	570,892	32,368	11,074	+2,778	14,873	643,647	538,880	2,801	-7,365	6,666	643,139
1997 January - July p	584,407	37,823	12,757	+4,375	12,537	660,995	665,057	3,250	+1,784	6,117	653,906
Per cent change	*+2.4*	*+16.9*	*+15.2*		*-15.7*	*+2.7*	*+23.4*	*+16.0*			*+1.7*
1996 May	73,737	4,588	1,885	+557	1,893	68,600	68,662	289	-203	1,115	67,461
June	50,964	4,011	1,337	+390	1,062	46,288	46,146	142	+2,242	997	42,765
July	50,939	4,173	719	+323	1,274	46,998	47,147	83	+3,038	746	43,280
Total	175,640	12,772	3,941	+1,270	4,229	161,886	161,955	514	+5,077	2,858	153,506
1997 May	69,185r	4,024r	1,769	+391	1,200	64,201r	64,478r	177	+95	575	63,631r
June	62,136	4,005	1,319	+349	1,068	57,531	57,411	145	+4,043	259	52,964
July p	56,896	4,137	1,514	+900	814	51,159	54,242	160	+4,921	676	48,485
Total	188,217	12,166	4,602	+1,640	3,082	172,891	176,131	482	+9,059	1,510	165,080
Per cent change	*+7.2*	*-4.7*	*+16.8*		*-27.1*	*+6.8*	*+8.8*	*-6.2*			*+7.5*

1. Includes waste and producers own use, but excludes gas flared.
2. Gas used for drilling, production and pumping operations.
3. Includes exports direct from the UKCS as well as others carried out by the downstream gas industry from the national transmission system.
4. Stock changes are changes in the volume of gas held within the UKCS pipeline system. Net losses include waste through venting of gas as well as losses due to pipeline leakage.
5. Includes the effect of the different methods of measurement of gas volumes used at various points along the production and transmission process. More detail on the reasons for these differences is given in the Digest of United Kingdom Energy Statistics 1997, Chapter 5, paragraphs 5.56 to 5.58 and Table 53.
6. Gas available at terminals for consumption in the UK as recorded by the terminal operators.
7. Gas received as reported by the pipeline operators. This differs from gas available atterminals due to different methods for calculating the volumes of gas involved being used by the terminal and pipeline operators. Pipeline operators include Transco, who run the national pipeline network, and other pipelines that take North Sea gas supplies direct to consumers.
8. Gas consumed by pipeline operators in pumping operations and on their own sites, offices etc.
9. Stocks of gas held in specific storage sites, either as liquefied natural gas, pumped into salt cavities or stored by pumping the gas back into an offshore field.
10. When the volume of gas output from the transmission is calculated, although the calorific value of gas varies fro day-to-day, when recording the gas supplied to customers a single calorific value is used. This is the lowest of the range of calorific values for the actual gas being supplied, resulting in a loss of gas in energy terms.
11. Including public gas supply, direct supplies by North Sea producers, third party supplies and stock changes. These figures differ from those for total consumption in Table 2 which include producers and operators own use of gas excluded in this table.

TABLE 12. **Natural gas consumption**[1,2]

GWh

		Total	Electricity generators[2]	Iron and steel industry	Other industries	Domestic	Other[3]
1992		598,755	17,894	13,908	136,981	330,100	99,872
1993		672,953	81,778	15,577	136,517	340,162	98,919
1994		712,590	114,574	20,327	146,843	329,710	101,136
1995		755,615	145,790	20,689	153,207	326,010	109,920
1996		877,721	190,691	21,961	169,293	375,841	119,935
Per cent change		*+16.2*	*+30.8*	*+6.1*	*+10.5*	*+15.3*	*+9.1*
1995	1st quarter	256,245	34,506	5,876	41,399	134,293	40,171
	2nd quarter	147,731	31,891	5,411	33,510	54,841	22,078
	3rd quarter	115,106	34,137	4,624	31,933	30,818	13,594
	4th quarter	236,535	45,256	4,779	46,365	106,058	34,077
1996	1st quarter	299,121	47,869	5,757	41,325	160,624	43,546
	2nd quarter	183,434	41,999	5,338	32,794	71,981	31,322
	3rd quarter	141,105	46,280	4,408	37,141	36,844	16,432
	4th quarter	254,058	54,542	6,457	58,032	106,392	28,635
1997	1st quarter p	280,263	61,146	5,258	42,103	135,694	36,062
Per cent change		*-6.3*	*+27.7*	*-8.7*	*+1.9*	*-15.5*	*-17.2*

1. Gas consumption is generally less than gas transmitted (Table 11) on an annual basis because of own use and losses in transmission.
2. Major power producers and auto generators (see inside front cover).
3. Public administration, commerce and agriculture.

PETROLEUM

TABLE 13. Indigenous production, refinery receipts, imports and exports

	Indigenous production[1]			Refinery receipts			Foreign trade[6,7]						
							Crude oil and NGLs		Process oils		Petroleum products		
	Total	Crude oil	NGLs[2]	Indigenous[3]	Other[4]	Net foreign imports[5]	Imports	Exports	Imports	Exports	Imports	Exports	Bunkers[8]
	Million tonnes			*Thousand tonnes*									
1992	94.3	89.2	5.1	35,472	832	56,485	46,753	54,779	10,930	1,198	10,567	21,899	2,546
1993	100.2	94.0	6.2	36,680	852	59,868	50,601	60,556	11,100	1,834	10,064	24,890	2,478
1994	126.9	119.0	7.9	42,174	427	51,170	42,898	77,899	10,198	1,926	10,441	24,644	2,313
1995	130.3	121.8	8.5	44,872	1,110	47,590	40,920	78,337	7,703	1,350	9,878	24,418	2,465
1996	129.8	121.8	8.1	47,029	997	48,275	41,896	76,406	8,203	1,824	9,230	26,018	2,664
Per cent change	*-0.4*	-	*-5.5*	*+4.8*	*-10.2*	*+1.4*	*+2.4*	*-2.5*	*+6.5*	*+35.1*	*-6.6*	*+6.6*	*+8.1*
1996 January - July	74.6	70.5	4.7	26,788	668	28,990	24,941	45,574	4,925	1,075	5,242	14,816	1,484
1997 January - July p	72.9	68.4	4.5	25,934	342	29,517	25,497	39,282	4,966	935	4,317	15,947	1,658
Per cent change	*-2.3*	*-3.0*	*-3.5*	*-3.2*	*-48.8*	*+1.8*	*+2.2*	*-13.8*	*+0.8*	*-13.0*	*-17.6*	*+7.6*	*+11.7*
1996 May	10.8	10.2	0.7	2,998	59	4,876	4,205	6,812	760	249	516	2,059	251
June	10.1	9.7	0.6	3,511	108	4,283	3,714	6,308	617	47	746	2,417	203
July	10.7	10.0	0.6	4,012	174	4,760	3,997	6,711	763	42	698	2,558	265
Total	31.6	29.9	1.9	10,521	341	13,919	11,916	19,831	2,140	338	1,960	7,034	719
1997 May	9.6	9.1	0.6	3,324	-18	4,430	3,905	5,383	641	105	534	2,338	269
June	9.0	8.5	0.5	3,239	59	4,628	3,856	5,252	782	9	541	1,913	255
July p	10.6	10.0	0.6	3,458	95	4,890	4,309	5,555	637	55	492	2,980	271
Total	29.3	27.6	1.7	10,021	136	13,948	12,070	16,190	2,060	169	1,567	7,231	795
Per cent change	*-7.4*	*-7.8*	*-9.9*	*-4.8*	*-60.1*	*+0.2*	*+1.3*	*-18.4*	*-3.7*	*-50.0*	*-20.1*	*+2.8*	*+10.6*

1. Includes for convenience offshore and land production.
2. Condensates and petroleum gases derived at onshore treatment plants.
3. Crude oil plus Natural gas liquids (NGLs).
4. Mainly recycled products (backflows to refineries).
5. Total arrivals less refinery shipments of crude oil, NGLs and process oils (ie partly refined oils).
6. Foreign trade recorded by the Petroleum Industry and may differ from figures published in the Overseas Trade Statistics.
7. 1996 data are subject to further revision as additional information on imports and exports of petroleum porducts becomes available.
8. International marine bunkers.

TABLE 14. Stocks of petroleum[1] at end of period

Thousand tonnes

	Crude oil and refinery process oil				Petroleum products					Total stocks		
	Refineries[2]	Terminals[3]	Offshore[4]	Total[5]	Light distiillates[6]	Kerosene & gas/diesel[7]	Fuel oils[8]	Other products[9]	Total products	Net bilaterals[10]	Stocks in UK[11]	Total stocks
1992	5,699	1,178	482	7,359	2,502	2,716	3,488	1,394	10,100	1,964	15,494	17,459
1993	5,573	1,642	457	7,672	2,734	2,906	3,346	1,419	10,406	2,024	- 16,053	18,077
1994	5,402	1,720	428	7,650	2,515	2,650	2,884	1,464	9,513	1,543	15,620	17,163
1995	5,075	1,003	588	6,741	2,482	2,444	2,974	1,611	9,511	1,534	14,718	16,252
1996	4,970	1,461	521	6,996	2,509	2,534	2,962	1,441	9,447	1,527	14,915	16,442
Per cent change	*-2.1*	*+45.7*	*-11.4*	*+3.8*	*+1.1*	*+3.7*	*-0.4*	*-10.6*	*-0.7*	*-0.5*	*+1.3*	*+1.2*
1996 May	5,309	1,346	579	7,297r	2,279	2,220	3,087	1,446	9,029	1,750r	14,576	16,326r
June	5,292	1,162	400	6,917r	2,328	2,334	2,976	1,524	9,163	1,750r	14,330	16,080r
1996 July	5,430	1,329	440	7,242	2,166	2,177	2,944	1,449	8,736	1,553	14,425	15,977
1997 May	5,522	1,045	591r	7,198r	2,269	2,480	2,929	1,470	9,150r	1,472	14,874r	16,346r
June	5,353	1,410	638	7,441	2,285	2,399	2,949	1,527	9,159	1,472	15,126	16,599
July p	5,175	1,367	600	7,301	2,347	2,287	3,120	1,441	9,195	1,765	14,732	16,497
Per cent change	*-4.7*	*+2.9*	*+36.4*	*+0.8*	*+8.4*	*+5.1*	*+6.0*	*-0.6*	*+5.3*	*+13.7*	*+2.1*	*+3.3*

1. Stocks held at refineries, terminals and power stations. Stocks in the wholesale distribution system and certain stocks at offshore fields (UK Continental Shelf [UKCS]), and others held under approved bilateral agreements are also included.
2. Stocks of crude oil, NGLs and process oil at UK refineries.
3. Stocks of crude oil and NGLs at UKCS pipeline terminals.
4. Stocks of crude oil in tanks and partially loaded tankers at offshore fields (UKCS).
5. From April 1994 includes process oils held under approved bilateral agreements.
6. Motor spirit and aviation spirit.
7. Aviation turbine fuel, burning oil, gas oil, DERV fuel, middle distillate feedstock (mdf) and marine diesel oil.
8. Including Orimulsion.
9. Ethane, propane, butane, other petroleum gases, naphtha (ldf), industrial and white spirits, bitumen, petroleum wax, lubricating oil, petroleum coke and miscellaneous products.
10. The difference between stocks held abroad for UK use under approved bilateral agreements and the equivalent stocks held in the UK for foreign use.
11. Stocks held in the national territory or elsewhere on the UKCS.

TABLE 15. **Refinery throughput and output of petroleum products**

Thousand tonnes

	Throughput of crude and process oil	Refinery use: Fuel	Refinery use: Losses/ (gains)	Total[1] output of petroleum products	Gases: Butane and propane	Gases: Other petro-leum	Naphtha (LDF)	Motor spirit	Kerosene: Aviation turbine fuel	Kerosene: Burning oil	Gas/ diesel oil	Fuel oil	Lubricating oils	Bitumen
1992	92,334	6,080	471	85,783	1,583	172	3,040	27,980	7,681	2,450	25,649	12,388	1,163	2,336
1993	96,274	6,383	308	89,584	1,575	162	2,696	28,394	8,341	2,707	27,361	13,183	1,264	2,450
1994	93,162	6,256	261	86,644	1,605	132	2,794	27,562	7,697	2,967	27,137	11,378	1,296	2,569
1995	92,743	6,481	129	86,133	1,815	133	2,711	27,254	7,837	2,924	27,169	10,969	1,261	2,459
1996	96,660	6,622	151	89,885	1,828	144	2,824	28,046	8,305	3,510	28,903	11,479	1,111	2,189
Per cent change	*+4.2*	*+2.2*	*+17.1*	*+4.4*	*+0.7*	*+8.3*	*+4.2*	*+2.9*	*+6.0*	*+20.0*	*+6.4*	*+4.6*	*-11.9*	*-11.0*
1996 January - July	55,491	3,811	160	51,520	1,095	79	1,655	15,922	4,848	2,078	16,253	6,790	639	1,249
1997 January - July p	55,683	3,757	47	51,887	1,159	72	1,731	15,915	4,902	1,902	16,640	6,754	697	1,311
Per cent change	*+0.3*	*-1.4*	*-70.6*	*+0.7*	*+5.8*	*-8.9*	*+4.6*	-	*+1.1*	*-8.5*	*+2.4*	*-0.5*	*+9.1*	*+5.0*
1996 May	8,200	545	29	7,626	170	10	241	2,360	789	257	2,419	961	96	202
June	8,104	539	-3	7,568	175	11	236	2,388	734	232	2,359	1,032	81	200
July	8,525	556	33	7,936	176	14	238	2,561	830	192	2,458	1,043	60	234
Total	24,829	1,640	59	23,130	521	35	715	7,309	2,353	681	7,236	3,036	237	636
1997 May	7,891	512	15	7,364	165	8	279	2,243	678	252	2,304	1,033	111	204
June	7,731	515	45	7,171	166	10	223	2,241	740	185	2,275	926	92	232
July p	8,664	561	-11	8,114	191	10	246	2,359	782	243	2,681	1,129	110	229
Total	24,286	1,588	49	22,649	522	28	748	6,843	2,200	680	7,260	3,088	313	665
Per cent change	*-2.2*	*-3.2*	*-16.9*	*-2.1*	*+0.2*	*-20.0*	*+4.6*	*-6.4*	*-6.5*	*-0.1*	*+0.3*	*+1.7*	*+32.1*	*+4.6*

1. Including aviation spirit, wide cut gasoline industrial and white spirit, petroleum wax and miscellaneous products.

TABLE 16. **Deliveries of petroleum products for inland consumption[1,2]**

Thousand tonnes

	Total[1,2,3]	Butane[4] and propane	Naphtha (LDF)[5] and middle distillate feedstock	Motor Spirit: Total	Motor Spirit: of which Unleaded	Kerosene: Aviation turbine fuel	Kerosene: Burning oil: Premier	Kerosene: Burning oil: Standard domestic	Gas/diesel oil: Derv fuel	Gas/diesel oil: Other	Fuel oil[6]	Orimulsion	Bitumen	Lubricating oils
1992	75,472	1,890	3,965	24,044	11,268	6,666	39	1,875	11,132	7,871	10,195	1,286	2,555	788
1993	75,790	1,992	3,777	23,766	12,503	7,106	35	2,002	11,806	7,782	9,355	1,416	2,523	806
1994	74,957	2,486	3,525	22,843	13,162	7,284	29	2,029	12,914	7,491	8,048	1,227	2,595	795
1995	73,695	2,500	3,531	21,953	13,831	7,660	26	2,075	13,457	7,227	6,709	1,266	2,420	895
####	75,391	2,501	3,666	22,409	15,231	8,049	39	2,512	14,365	7,631	5,976	878	2,146	864
Per cent change	*+2.3*	-	*+3.8*	*+2.1*	*+10.1*	*+5.1*	*+50.0*	*+21.1*	*+6.7*	*+5.6*	*-10.9*	*-30.6*	*-11.3*	*-3.5*
1996 January - July	43,578	1,492	2,012	12,912	8,678	4,547	21	1,474	8,251	4,542	3,507	539	1,254	510
1997 January - July p	41,769	1,401	1,478	13,023	9,216	4,736	18	1,413	8,664	4,312	2,363	182	1,253	515
Per cent change	*-4.2*	*-6.1*	*-26.5*	*+0.9*	*+6.2*	*+4.2*	*-14.3*	*-4.1*	*+5.0*	*-5.1*	*-32.6*	*-66.2*	*-0.1*	*+1.0*
1996 May	6,305	221	269	1,957	1,316	698	1	175	1,241	589	475	80	198	77
June	5,895	209	235	1,819	1,225	719	0	101	1,161	514	462	110	200	69
July	6,260	200	269	1,964	1,318	781	1	119	1,258	562	403	80	201	77
Total	18,460	630	773	5,740	3,859	2,198	2	395	3,660	1,665	1,340	270	599	223
1997 May	5,829r	185r	196	1,959	1,388	716	1	146	1,252	546	282	0	187	76
June	5,892	185	227	1,922	1,372	757	1	117	1,324	516	274	0	197	74
July p	5,879	203	206	1,926	1,392	796	1	118	1,235	552	217	0	217	73
Total	17,600	573	629	5,807	4,152	2,269	3	381	3,811	1,614	773	0	601	223
Per cent change	*-4.7*	*-9.0*	*-18.6*	*+1.2*	*+7.6*	*+3.2*	*+50.0*	*-3.5*	*+4.1*	*-3.1*	*-42.3*	*-100.0*	*+0.3*	-

1. Including other petroleum gases, aviation spirit, industrial and white spirits, petroleum wax, non-domestic standard burning oil and miscellaneous products.
2. 1996 data are subject to futher revision as additional information on imports of petroleum products contributes to deliveries.
3. Excluding refinery fuel.
4. Including amounts for petro-chemicals.
5. Now mainly for petro-chemical feedstock.
6. Excludes Orimulsion.

TABLE 17. **Deliveries of petroleum products for inland consumption: energy uses[1]**

Thousand tonnes

	Total	Electricity[2] generators	Gas works	Iron and steel[2] industry	Other[2] industries	Transport[3]	Domestic	Other[4]
1992	64,839	6,405	42	678	7,136	43,788	2,579	4,211
1993	65,065	5,522	44	855	7,207	44,568	2,713	4,156
1994	63,779	3,831	50	892	7,465	44,830	2,701	4,010
1995	62,374	3,669	47	881	6,512	44,818	2,696	3,751
1996	64,092	3,316	50	737	6,436	46,642	3,167	3,744
Per cent change	*+2.8*	*-9.6*	*+6.4*	*-16.3*	*-1.2*	*+4.1*	*+17.5*	*-0.2*
1995 2nd quarter	15,090	826	9	182	1,472	11,259	504	838
3rd quarter	15,315	842	8	226	1,384	11,625	426	804
4th quarter	16,039	948	14	248	1,614	11,458	810	947
1996 1st quarter	16,164	839	16	189	1,922	10,949	1,098	1,151
2nd quarter	15,648	766	11	199	1,514	11,683	620	855
3rd quarter	15,773	779	8	192	1,336	12,130	528	800
4th quarter	16,507	932	15	157	1,664	11,880	921	938
1997 1st quarter	15,797	662	18	182	1,768	11,119	1,047	1,002
2nd quarter p	15,214	234	7	126	1,346	12,176	575	751
Per cent change	*-2.8*	*-69.5*	*-36.4*	*-36.7*	*-11.1*	*+4.2*	*-7.3*	*-12.2*

1. 1996 data are subject to further revision as additional information on imports of petroleum products, which contributes to deliveries for energy uses becomes available.
2. For coverage of electricity generators see inside front cover .
3. Includes coastal shipping and fishing.
4. Mainly public administration, commerce and agriculture.

ELECTRICITY

TABLE 18. Fuel used in electricity generation

Million tonnes of oil equivalent

	Major power producers[1]				Other generators				All generating companies						
	Coal	Nuclear	Other[2]	Total	Coal	Nuclear	Other[2]	Total	Coal	Oil	Gas	Nuclear	Hydro	Other	Total[3]
1992	46.0	17.5	6.4	69.8	1.0	1.0	4.8	6.7	46.9	8.1	1.5	18.5	0.5	1.1	76.6
1993	38.3	20.2	11.0	69.5	1.3	1.3	3.2	5.8	39.6	5.8	7.0	21.5	0.4	1.0	75.3
1994	35.9	20.1	13.1	69.1	1.2	1.2	2.3	4.7	37.1	4.1	9.9	21.2	0.4	1.1	73.7
1995	35.0	20.4	15.0	70.4	1.1	1.0	2.7	4.8	36.2	3.6	12.5	21.4	0.5	1.1	75.3
1996	31.9	21.1	18.6	71.6	1.0	1.0	2.9	4.8	32.9	3.5	16.4	22.1	0.3	1.3	76.4
Per cent change	*-9.0*	*+3.8*	*23.9*	*+1.7*	*-11.5*	*-2.3*	*+4.8*	*-0.5*	*-9.2*	*-3.3*	*+30.8*	*+3.5*	*-36.9*	*12.4*	*+1.6*
1995 2nd quarter	7.7	5.1	3.2	16.1	0.3	0.2	0.8	1.3	8.0	0.8	2.8	5.3	0.1	0.3	17.3
3rd quarter	7.1	5.1	3.3	15.5	0.2	0.2	0.6	1.0	7.3	0.7	2.9	5.3	0.1	0.2	16.5
4th quarter	9.1	5.4	4.6	19.1	0.3	0.3	0.6	1.2	9.4	0.9	3.9	5.7	0.1	0.3	20.3
1996 1st quarter	10.5	5.3	4.7	20.6	0.3	0.3	0.8	1.3	10.8	1.1	4.1	5.6	0.1	0.3	21.9
2nd quarter	7.0	5.3	4.1	16.4	0.2	0.2	0.7	1.1	7.3	0.7	3.7	5.5	0.1	0.3	17.6
3rd quarter	6.4	4.7	4.5	15.6	0.2	0.2	0.6	1.1	6.6	0.8	4.0	4.9	0.0	0.3	16.7
4th quarter	7.9	5.9	5.2	19.0	0.3	0.3	0.8	1.3	8.2	0.8	4.6	6.1	0.1	0.4	20.3
1997 1st quarter	8.2	5.9	5.7	19.8	0.3	0.3	0.7	1.2	8.5	0.6	5.3	6.2	0.1	0.3	21.0
2nd quarter p	5.3	5.7	5.0	16.0	0.3	0.2	0.7	1.1	5.5	0.3	5.0	6.0	0.1	0.3	17.1
Per cent change	*-25.3*	*+8.2*	*21.8*	*-2.8*	*+8.2*	*+4.5*	*-4.4*	*-0.1*	*-24.2*	*-58.7*	*+35.7*	*+8.0*	*+33.8*	*-8.3*	*-2.6*

1. See definitions inside front cover; Humber Power Ltd and Indian Queens Power Ltd should additionally be included in the list of major power producers.
2. Oil, including oil used in gas turbine and diesel plant or for lighting up coal fired boilers, and Orimulsion, hydro, gas, wind and refuse derived fuel.
3. Does **not** include imports of electricity from France.

TABLE 19. Fuel used in electricity generation by major producers[1]

Million tonnes of oil equivalent

	Total[2]	Coal[3]	Oil[3,4]	Gas[5]	Nuclear	Hydro
1992	69.83	45.96	4.96	1.00	17.50	0.39
1993	69.47	38.26	4.41	6.27	20.17	0.30
1994	69.05	35.89	3.58	9.08	20.05	0.37
1995	70.41	35.02	3.11	11.44	20.37	0.34
1996	71.61	31.86	2.99	15.19	21.14	0.25
Per cent change	*+1.7*	*-9.0*	*-3.8*	*+32.8*	*+3.8*	*-26.9*
1996 January - July	41.67	19.58	1.77	8.20	11.91	0.12
1997 January - July p	40.54	15.00	0.85	11.10	13.32	0.20
Per cent change	*-2.7*	*-23.4*	*-51.8*	*+35.5*	*+11.9*	*+67.4*
1996 May	5.19	2.20	0.21	1.05	1.71	0.02
June*	5.87	2.34	0.26	1.31	1.93	0.02
July	4.67	2.02	0.19	1.13	1.31	0.01
Total	15.72	6.55	0.66	3.48	4.95	0.04
1997 May	4.98	1.54	0.06	1.50	1.85	0.02
June*	5.92	1.95	0.11	1.73	2.11	0.02
July p	4.78	1.53	0.07	1.47	1.69	0.01
Total	15.68	5.01	0.24	4.71	5.65	0.04
Per cent change	*-0.2*	*-23.5*	*-63.3*	*+35.2*	*+14.1*	*+12.2*

1. See definitions inside front cover.
2. Including wind power, and refuse derived fuel and other renewables.
3. Including quantities used in the production of steam for sale.
4. Including oil used in gas turbine and diesel plant or for lighting up coal fired boilers, and Orimulsion.
5. Including sour gas, refinery gas, etc.

TABLE 20. Electricity generation, supply and availability

TWh

	Major power producers[1]			Other generators			All generating companies				
	Electricity generation	Own use[2]	Electricity supplied (net)	Electricity generation	Own use[2]	Electricity supplied (net)	Electricity generation	Own use[2]	Electricity supplied (net)	Net imports	Electricity available
1992	300.18	20.74	279.44	20.86	1.75	19.11	321.02	22.49	298.53	16.69	315.24
1993	300.51	19.34	281.17	22.59	1.90	20.69	323.10	21.24	301.87	16.72	318.58
1994	302.81	17.97	284.84	22.59	1.58	21.01	325.40	19.55	305.85	16.89	322.73
1995	310.29	18.08	292.21	23.75	1.59	22.16	334.05	19.67	314.37	16.31	330.69
1996	323.16	18.50	304.66	24.21	1.66	22.55	347.37	20.16	327.21	16.68	343.89
Per cent change	*+4.1*	*+2.3*	*+4.3*	*+1.9*	*+4.5*	*+1.7*	*+4.0*	*+2.5*	*+4.1*	*+2.2*	*+4.0*
1995 2nd quarter	70.63	4.28	66.35	5.73	0.48r	5.25r	76.36	4.76	71.60r	4.03	75.63r
3rd quarter	67.65	4.24	63.41	5.40	0.39r	5.01r	73.05	4.64	68.42r	4.27	72.69r
4th quarter	84.72	4.96	79.76	6.28	0.25r	6.03	91.00	5.20	85.79	3.65	89.44
1996 1st quarter	92.78	5.41	87.37	6.47	0.51r	5.96r	99.25	5.92	93.34r	4.28	97.61r
2nd quarter	73.70	4.26	69.43	5.83	0.49r	5.33	79.53	4.76	74.77r	4.30	79.07r
3rd quarter	70.49	4.06	66.44	5.49	0.35r	5.14r	75.99	4.41	71.58r	4.03	75.61r
4th quarter	86.18	4.77	81.41	6.42	0.31r	6.11r	92.60	5.08	87.52r	4.07	91.59r
1997 1st quarter	90.38	5.06	85.32	5.92	0.31	5.61	96.30	5.37	90.92	4.27r	95.19r
2nd quarter	73.26	4.27	68.99	5.52	0.43	5.09	78.78	4.70	74.08	4.06	78.14
Per cent change	*-0.6*	*+0.1*	*-0.6*	*-5.2*	*-12.5*	*-4.5*	*-0.9*	*-1.2*	*-0.9*	*-5.7*	*-1.2*

1. See definitions inside front cover; Humber Power Ltd and Indian Queens Power Ltd should additionally be included in the list of major power producers.
2. Used in works and for pumping at pumped storage stations.

TABLE 21. **Electricity supplied by other generating companies**

GWh

		Electricity supplied (net) Total	Industry: Total industry	Nuclear power stations[1]	Petroleum refineries	Iron and steel	Chemicals	Engineering and other metal trades	Food, drink and tobacco	Paper, printing and stationery	Other[2,3]	Transport undertakings
1992		19,112	18,465	2,866	2,728	1,790	3,828	3,699	678	998	1,879	647
1993		20,693	19,934	4,141	2,754	1,752	4,156	3,461	725	1,253	1,692	759
1994		21,007	20,301	3,550	2,932	1,693	4,258	3,620	771	1,300	2,177	706
1995		22,163	21,352	2,955	3,150	2,032	4,342	4,243	908	1,763	1,959	811
1996		22,550	21,702	2,949	3,215	2,116	4,583	4,135	890	2,110	1,704	848
Per cent change		*+1.7*	*+1.6*	*-0.2*	*+2.1*	*+4.1*	*+5.6*	*-2.5*	*-1.9*	*+19.7*	*-13.0*	*+4.5*
1995	2nd quarter	5,245	5,040	664	760	528	1,074	897	154	461	502	205
	3rd quarter	5,005	4,824	725	789	488	998	819	121	467	417	181
	4th quarter	6,030	5,834	796	816	498	1,088	1,449	288	387	512	196
1996	1st quarter	5,963	5,761	820	807	479	1,255	1,059	341	539	461	202
	2nd quarter	5,335	5,138	642	791	494	1,157	893	154	562	445	196
	3rd quarter	5,142	4,923	706	797	556	1,043	791	117	553	359	219
	4th quarter	6,110	5,880	781	820	587	1,129	1,392	278	456	438	230
1997	1st quarter	5,607	5,412	770	690	509	1,022	1,214	242	432	533	195
	2nd quarter p	5,092	4,919	673	715	492	1,109	903	127	478	422	172
Per cent change		*-4.5*	*-4.3*	*+4.8*	*-9.6*	*-0.4*	*-4.2*	*+1.1*	*-17.6*	*-14.9*	*-5.2*	*-12.3*

1. Generated by UKAEA and British Nuclear Fuels (BNF) for the public electricity supply system. The UKAEA has ceased to contribute with the closure of its power station in 1994.
2. Including water-works and companies within the service sector.
3. Includes electricity supplied from renewable sources that cannot be attributed to any of the other industrial groups.

TABLE 22. **Electricity production and availability from the public supply system[1]**

TWh

		Electricity supplied (net) by type of plant: Electricity generated	Own use[2]	Conventional steam plant: Total conventional steam	Coal[3]	Oil	Other conventional steam[4]	CCGT[5]	Nuclear	Hydro[6]	Other[7]	Net imports	Purchases from other sources (net)[8,9]	Total Electricity available[9]
1992		300.18	20.74	279.44	205.90	169.56	10.46	25.87	2.96	66.27	3.96	0.35	16.69	5.27	301.40
1993		300.51	19.34	281.17	178.31	144.03	8.30	25.97	22.61	76.84	2.95	0.46	16.72	7.31	305.20
1994		302.81	17.97	284.84	167.29	137.80	6.21	23.28	36.82	76.41	3.63	0.69	16.89	7.40	309.12
1995		310.29	18.08	292.21	162.08	132.96	4.35	24.77	48.52	77.64	3.27	0.69	16.31	6.14	314.66
1996		323.16	18.50	304.66	153.17	120.06	3.90	29.21	65.60	82.87	1.84	1.17	16.68	6.20	327.53
Per cent change		*+4.1*	*+2.3*	*+4.3*	*-5.5*	*-9.7*	*-10.3*	*+17.9*	*+35.2*	*+6.7*	*-43.8*	*70.2*	*+2.3*	*+0.9*	*+4.1*
1996	January - July	187.61	10.88	176.73	92.12	74.61	2.66	14.86	36.33	46.70	0.74	0.84	9.91	3.55	190.20
1997	January - July p	185.89	10.67	175.23	71.86	55.92	0.84	15.10	49.13	52.20	1.47	0.57	9.58	3.58	188.38
Per cent change		*-0.9*	*-1.9*	*-0.9*	*-22.0*	*-25.1*	*-68.3*	*+1.6*	*+35.3*	*+11.8*	*+97.9*	*-32.5*	*-3.4*	*+0.6*	*-1.0*
1996	May	23.38	1.34	22.04	10.43	8.44	0.27	1.72	4.69	6.69	0.13	0.10	1.31	0.44	23.79
	June*	26.17	1.53	24.64	11.14	8.71	0.38	2.05	5.75	7.56	0.10	0.09	1.64	0.50	26.79
	July	21.13	1.20	19.93	9.92	7.61	0.28	2.03	4.79	5.14	0.00	0.07	1.33	0.42	21.68
Total		70.68	4.07	66.61	31.49	24.75	0.93	5.81	15.23	19.39	0.24	0.26	4.29	1.37	72.27
1997	May	22.81	1.32	21.49	7.59	5.81	0.11	1.67	6.45	7.24	0.15	0.06	1.28	0.47	23.24
	June*	26.83	1.60	25.23	8.86	7.35	0.14	1.37	7.93	8.28	0.07	0.09	1.46	0.53	27.22
	July p	22.25	1.33	20.92	7.73	6.03	0.11	1.60	6.46	6.61	0.04	0.07	1.25	0.40	22.57
Total		71.89	4.25	67.64	24.19	19.19	0.35	4.64	20.84	22.12	0.26	0.23	4.00	1.40	73.03
Per cent change		*+1.7*	*+4.3*	*+1.6*	*-23.2*	*-22.5*	*-62.0*	*-20.1*	*+36.8*	*+14.1*	*+9.5*	*-11.0*	*-6.9*	*+1.9*	*+1.1*

1. Electricity generated by major power producers (see definitions inside front cover) and available through the grid in England and Wales and from distribution companies in Scotland and Northern Ireland.
2. Used in works and for pumping at pumped storage stations.
3. Including Slurry.
4. Mixed and dual fired including sour gas and Orimulsion.
5. Combined Cycle Gas Turbine Stations.
6. Natural flow and net supply by pumped storage stations.
7. Including diesel and oil engines, gas turbines and wind power.
8. Purchases from the UKAEA, BNF and other generators.
9. Net of supplies direct from generators to final consumers.

In the August issue of Energy Trends the wrong table was included in place of Table 22, but a loose correction slip was inserted in most copies at the time of dispatch. DTI apologises for the inconvenience this may have caused.

TABLE 23. **Fuel used in electricity generation**

Million tonnes of oil equivalent

	Public distribution system							Other generators			All electricity suppliers		
			Sales of electricity to consumers										
	Electricity available	Transmission distribution and other losses[1]	Total[2]	Industrial[3]	Commercial[4]	Domestic	Other[5]	Electricity available[6]	Losses and statistical differences	Consumption of electricity[7]	Electricity available	Losses and statistical differences	Consumption of electricity
1992	301.40	22.97	278.43	92.84	77.89	99.48	8.22	13.84	0.82	13.02	315.24	23.79	291.45
1993	305.20	22.20	283.00	94.59	79.89	100.46	8.07	13.38	0.64	12.75	318.58	22.84	295.75
1994	309.12	29.10	280.03	91.79	77.96	101.41	8.86	13.61	1.85	11.76	322.73	30.95	291.78
1995	314.66	27.05	287.61	92.73	83.71	102.21	8.96	16.02	1.01	14.62	330.68	28.45	302.23
1996	327.53	28.66	298.88	94.59	87.35	107.51	9.42	16.35	0.94	15.41	343.89	29.60	314.29
Per cent change	*+4.1*	*+5.9*	*+3.9*	*+2.0*	*+4.3*	*+5.2*	*+5.2*	*+2.1*	*-6.7*	*+5.4*	*+4.0*	*+4.0*	*+4.0*
1996 January July	190.20	17.23	172.97	54.63	50.04	62.80	5.51	9.23	0.48	8.75	199.43	17.70	181.73
1997 January July p	188.38	16.24	172.14	53.43	53.57	59.93	5.21	9.11	0.46	8.65	197.49	16.70	180.79
Per cent change	*-1.0*	*-5.7*	*-0.5*	*-2.2*	*+7.1*	*-4.6*	*-5.4*	*-1.3*	*-4.5*	*-1.2*	*-1.0*	*-5.7*	*-0.5*
1996 May	23.79	2.58	21.22	7.01	6.36	7.27	0.57	1.20	0.05	1.16	25.00	2.62	22.37
June*	26.79	2.17	24.62	8.62	7.66	7.68	0.67	1.54	0.09	1.45	28.33	2.26	26.07
July	21.68	1.61	20.08	7.18	6.42	5.96	0.52	1.17	0.12	1.04	22.85	1.73	21.12
Total	72.27	6.36	65.91	22.81	20.43	20.92	1.76	3.91	0.26	3.65	76.18	6.62	69.56
1997 May	23.24	1.43r	21.82r	7.38r	6.98r	6.92	0.54	1.18	0.08	1.10	24.42	1.50r	22.92r
June*	27.22	1.70r	25.52r	8.58r	8.44r	7.83r	0.67r	1.56	0.07	1.50	28.78	1.77r	27.02r
July p	22.57	3.13	19.44	6.49	6.56	5.89	0.50	1.21	0.11	1.11	23.78	3.24	20.54
Total	73.03	6.26	66.77	22.46	21.97	20.64	1.71	3.96	0.25	3.70	76.99	6.51	70.48
Per cent change	*+1.1*	*-1.5*	*+1.3*	*-1.5*	*+7.5*	*-1.3*	*-2.7*	*+1.1*	*-4.1*	*+1.5*	*+1.1*	*-1.6*	*+1.3*

1. Losses on the grid system and local netwoks and other differences between data collected on sales and data collected on availability. The increases in losses and statistical differences in 1994 reflect the temporary reduction in data quality accompanying the metering and billing procedures that followed the reduction of the franchise limit from 1MW to 100kW in April 1994.
2. The allocation of sales between the four constituent sectors is highly provisional and subject to change over the next two months.
3. Manufacturing industry, construction, energy and water supply industries.
4. Commercial premises, transport and other service sector consumers.
5. Agriculture, public lighting and combined domestic/commercial premises.
6. Net electricity supplied less transfers to the public distribution system.
7. The majority of this consumption is by the industrial and fuel sectors (89% in 1996).

TEMPERATURES

TABLE 24. **Average temperatures and deviations from the long term mean**[1]

Degrees Celsius

	Long term mean	Average daily temperature			Deviation from the long term mean		
	1961 to 1990	1995	1996	1997	1995	1996	1997
Statistical month[2]							
January	3.8	5.4	5.2	2.4	+1.6	+1.4	-1.4
February	4.0	6.3	2.6	6.1	+2.3	-1.4	+2.1
March*	5.4	5.6	3.7	8.3	+0.2	-1.7	+2.9
April	7.6	8.2	8.6	8.5	+0.6	+1.0	+0.9
May	10.2	10.1	8.3	11.2	-0.1	-1.9	+1.0
June*	13.4	13.1	14.0	13.9	-0.3	+0.6	+0.5
July	15.7	17.9	16.1	16.6	+2.2	+0.4	+0.9
August	15.9	19.8	17.5		+3.9	+1.6	
September*	14.0	15.5	13.9		+1.5	-0.1	
October	11.1	13.3	12.2		+2.2	+1.1	
November	7.6	9.1	7.4		+1.5	-0.2	
December*	4.9	5.6	3.9		+0.7	-1.0	
Year[3]	9.5	10.8	9.4		+1.3	-0.1	
Calendar month							
January	3.9	4.9	4.8	2.9	+1.0	+0.9	-1.0
February	3.9	6.7	3.1	6.9	+2.8	-0.8	+3.0
March	5.7	5.6	4.6	8.4	-0.1	-1.1	+2.7
April	7.8	8.9	8.7	9.1	+1.1	+0.9	+1.3
May	10.9	11.6	9.3	11.5	+0.7	-1.6	+0.6
June	13.9	14.0	14.4	14.0	+0.1	+0.5	+0.1
July	15.8	18.4	16.4	16.9	+2.6	+0.6	+1.1
August	15.6	18.9	16.7		+3.3	+1.1	
September	13.5	13.8	13.7		+0.3	+0.2	
October	10.6	13.2	11.8		+2.6	+1.2	
November	6.6	8.1	6.2		+1.5	-0.4	
December	4.7	2.8	3.5		-1.9	-1.2	
Year	9.5	10.6	9.5		+1.1	-0.1	

1. Based on data provided by the Meteorological Office. Information on the methodology used is given in footnotes to Table 11 of the Digest of UK Energy Statistics 1997.
2. Months with 4 or 5 weeks. Months marked * contain 5 weeks.
3. Weighted average (based on 52 weeks).

FOREIGN TRADE

TABLE 25. Imports and exports of fuels and related materials[1]

		Coal and other solid fuel	Petroleum: Crude	Petroleum: Products	Natural gas	Electricity	Total	Coal and other solid fuel	Petroleum: Crude	Petroleum: Products[2]	Natural gas	Electricity	Total	Total fob[3]
		Quantity - million tonnes of oil equivalent						*Value - £ million*						
IMPORTS (cif):														
1992		14.2	51.3	22.3	5.5	1.4	94.7	744	3,745	1,711	397	369	6,965	6,620
1993		13.0	53.6	21.8	4.3	1.4	94.2	731	4,078	1,766	327	426	7,328	6,997
1994		10.8	46.7	20.9	3.0	1.5	82.9	598	3,241	1,689	231	388	6,148	5,810
1995		11.5	44.1	17.4	1.3	1.4	75.7	601	3,236	1,542	105	408	5,892	5,571
1996		12.7	44.8	17.8	1.4	1.4	78.2	694	4,035	1,822	117	391	7,059	6,648
Per cent change		*+10.8*	*+1.7*	*+2.2*	*+2.9*	*+1.5*	*+3.2*	*+15.4*	*24.7*	*+18.2*	*+11.7*	*-4.3*	*+19.8*	*+19.3*
1995	3rd quarter	2.8	12.1	4.8	0.3	0.4	20.3	151	856	408	24	76	1,515	1,449
	4th quarter	3.1	11.4	3.4	0.2	0.3	18.5	168	831	340	19	95	1,453	1,345
1996	1st quarter	2.9	10.8	4.5	0.5	0.4	19.0	165	883	431	39	112	1,631	1,525
	2nd quarter	3.3	11.5	4.7	0.4	0.4	20.3	189	1,027	480	37	83	1,816	1,707
	3rd quarter	3.0	11.7	4.3	0.2	0.4	19.5	159	1,028	408	21	94	1,709	1,602
	4th quarter	3.5	10.9	4.3	0.2	0.3	19.3	181	1,098	504	19	101	1,903	1,814
1997	1st quarter	4.3	10.0	3.9	0.4	0.4	19.0	208	902	368	32	118	1,627	1,534
	2nd quarter	3.6	12.9	3.7	0.4	0.3	20.9	181	996	334	28	98	1,637	1,526
Per cent change		*+8.3*	*12.0*	*-22.2*	*-17.3*	*-5.6*	*+2.6*	*-4.1*	*-2.9*	*-30.5*	*-25.8*	*+17.5*	*-9.9*	*-10.6*
EXPORTS (fob):														
1992		0.8	58.6	26.1	-	-	85.5	63	4,413	2,401	2	-	6,879	6,879
1993		1.0	67.0	30.9	0.6	-	99.5	73	5,147	3,149	28	-	8,397	8,397
1994		1.2	86.0	30.1	1.0	-	118.3	75	6,095	2,776	45	-	8,991	8,991
1995		0.9	86.4	25.7	0.9	-	113.9	70	6,428	2,621	54	-	9,174	9,174
1996		1.0	84.0	28.0	1.4	-	114.3	82	7,485	3,289	65	2	10,923	10,923
Per cent change		*+7.7*	*-2.8*	*+9.0*	*43.6*	-	*+0.3*	*+16.4*	*16.4*	*+25.5*	*+20.2*	-	*+19.1*	*+19.1*
1995	3rd quarter	0.2	20.8	5.7	0.2	-	27.0	16	1,486	565	14	-	2,081	2,081
	4th quarter	0.3	21.5	6.8	0.3	-	28.8	21	1,617	713	13	-	2,365	2,365
1996	1st quarter	0.3	21.9	6.4	0.3	-	29.0	21	1,806	738	17	-	2,582	2,582
	2nd quarter	0.2	19.9	6.9	0.4	-	27.5	17	1,749	791	20	-	2,578	2,578
	3rd quarter	0.2	20.2	7.3	0.2	-	27.8	18	1,758	825	12	1	2,613	2,613
	4th quarter	0.3	22.0	7.4	0.3	-	30.0	26	2,171	935	17	1	3,150	3,150
1997	1st quarter	0.3	20.0	6.5	0.4	-	27.2	26	1,877	787	20	-	2,710	2,710
	2nd quarter	0.2	19.2	6.7	0.5	-	26.6	17	1,494	735	19	-	2,265	2,265
Per cent change		*+0.6*	*-3.4*	*-2.6*	*+4.2*	-	*-3.1*	*+0.8*	*-14.6*	*-7.2*	*-3.0*	-	*-12.2*	*-12.2*
NET EXPORTS:														
1992		-13.4	7.3	3.8	-5.5	-1.4	-9.2	-681	668	690	-395	-369	-87	258
1993		-12.0	13.4	9.1	-3.7	-1.4	5.3	-658	1,069	1,383	-299	-426	1,069	1,400
1994		-9.7	39.3	9.2	-2.1	-1.5	35.4	-523	2,853	1,087	-185	-388	2,843	3,181
1995		-10.6	42.4	8.2	-0.4	-1.4	38.2	-531	3,192	1,080	-51	-408	3,281	3,602
1996		-11.8	39.2	10.1	-	-1.4	36.1	-612	3,450	1,467	-52	-389	3,863	4,274
1995	3rd quarter	-2.6	8.8	0.9	-0.1	-0.4	6.6	-136	630	157	-10	-76	565	631
	4th quarter	-2.9	10.2	3.4	-	-0.3	10.3	-147	787	373	-6	-95	912	1,020
1996	1st quarter	-2.7	11.1	1.9	-0.1	-0.4	9.9	-144	924	307	-23	-112	952	1,058
	2nd quarter	-3.1	8.4	2.2	-	-0.4	7.1	-172	723	311	-18	-83	762	871
	3rd quarter	-2.8	8.5	3.0	-	-0.4	8.3	-141	730	417	-9	-94	904	1,011
	4th quarter	-3.2	11.1	3.1	0.1	-0.3	10.7	-155	1,073	431	-2	-100	1,246	1,335
1997	1st quarter	-4.0	9.9	2.6	-	-0.4	8.2	-182	975	419	-12	-117	1,083	1,176
	2nd quarter	-3.4	6.4	3.1	0.1	-0.3	5.8	-164	497	401	-9	-98	627	738

1. The figures generally correspond to those published under SITC section 3 of the OTS. They do however include some unpublished revisions and additional amendments. The quantity figures differ from those in Table 3, which are partly based on other sources of information.
2. SITC divisions 334, 335, 342, 344, plus Orimulsion from division 278.
3. 'Free on board'- imports adjusted to exclude estimated costs of insurance, freight etc.

NOTE ON SIZEBANDS USED IN TABLE 25

For coal, heavy fuel oil, gas oil, electricity and gas prices are shown in table 25 for various sizes of consumers. These sizebands are defined in terms of the approximate annual purchases by the consumers within them. These are shown below.

	Range of annual purchases of which:				
Fuel	**Large**	**Extra large**	**Moderately large**	**Medium**	**Small**
	Greater than	**Greater than**			**Less than**
Coal (tonnes)	7,600	n/a	n/a	760 to 7,600	760
Heavy fuel oil (tonnes)	4,900	15,000	4,900 to 15,000	490 to 4,900	490
Gas oil (tonnes)	175	n/a	n/a	35 to 175	35
Electricity (thousand kWh)	8,800	150,000	8,800 to 150,000	880 to 8,800	880
Gas* (thousand kWh)	8,800	n/a	n/a	1,500 to 8,800	1,500

* Respondents purchasing more than one type of supply (tariff, firm contract and interruptible contract) are treated as separate entities in respect of each type of supply.

PRICES

TABLE 26. Prices of fuels purchased by manufacturing industry in Great Britain[1]

Fuel	Size of consumer	1995 1st quarter	1995 2nd quarter	1995 3rd quarter	1995 4th quarter	1996 1st quarter	1996 2nd quarter	1996 3rd quarter	1996 4th quarter	1997 1st quarter	1997 2nd quarter p
COAL	Small	2.33	2.23	2.07	2.12	2.15	2.07	2.19	2.09	2.09r	2.08
(£per GJ)	Medium	1.92	1.91	1.89	1.89	1.90	1.82	1.80	1.71	1.69r	1.66
	Large	1.33	1.34	1.29	1.21	1.25	1.24	1.23	1.23	1.24	1.24
All consumers:	Average	1.42	1.43	1.38	1.31	1.35	1.33	1.32	1.30	1.31	1.31
	10% decile[2]	1.45	1.44	1.52	1.43	1.48	1.46	1.42	1.44	1.44	1.44
	median[2]	2.15	1.92	1.89	1.87	1.85	1.86	1.85	1.86	1.83r	1.86
	90% decile[2]	2.76	2.68	2.57	2.65	2.75	2.63	2.37	2.49	2.46	2.47
HEAVY FUEL OIL	Small	97.9	96.1	89.9	93.6	101.8	106.0	102.7	110.2	110.0r	102.8
(£ per tonne)[3]	Medium	93.5	92.8	86.2	87.4	98.5	97.6	95.3	102.1	101.4r	92.2
	Large	85.6	88.1	76.7	77.3	86.8	90.7	86.1	100.2	92.9r	81.8
Of which:	Extra large	82.9	86.2	73.5	72.8	83.6	87.7	83.0	99.4	90.6	79.8
	Moderately large	90.5	91.7	82.5	85.5	92.7	96.3	91.7	101.6	97.1r	85.6
All consumers:	Average	89.9	90.8	81.7	83.0	92.8	95.1	91.5	102.2	98.1r	88.2
	10% decile[2]	85.0	86.3	79.8	81.9	91.7	88.0	87.0	98.4	89.5r	82.9
	median2	97.3	95.2	87.4	90.3	101.8	101.9	100.9	106.3	104.7r	94.9
	90% decile[2]	105.6	104.6	104.8	111.2	121.3	125.0	113.5	127.5	120.8	112.1
GAS OIL	Small	154.1	153.4	149.8	157.0	164.7	171.0	172.9	186.0	184.9r	168.5
(£ per tonne)[3]	Medium	142.0	142.6	145.0	150.3	156.9	161.2	163.5	177.9	176.4r	160.5
	Large	126.5	131.0	130.5	137.3	149.8	152.3	156.7	171.9	168.1r	151.3
All consumers:	Average	129.5	133.3	133.1	139.7	151.2	154.1	158.1	173.1	169.7r	153.2
	10% decile[2]	126.5	129.7	128.9	131.0	139.7	140.6	140.6	152.1	154.6r	143.0
	median[2]	140.6	142.3	140.9	147.0	161.7	163.7	165.1	183.3	177.7r	159.4
	90% decile[2]	162.3	164.1	161.7	167.7	175.7	184.2	190.7	200.0	197.9r	184.7
ELECTRICITY	Small	6.51	5.88	5.97	6.36	6.34	5.84	5.93	6.08	6.12r	5.58
(Pence per kWh)	Medium	5.00	4.44	4.39	4.83	4.83	4.49	4.43	4.52	4.49r	4.15
	Large	3.83	3.43	3.39	3.67	3.80	3.32	3.31	3.55	3.59r	3.09
Of which:	Extra large	3.34	2.97	2.89	3.14	3.35	2.86	2.85	3.12	3.25r	2.66
	Moderately large	4.21	3.78	3.77	4.08	4.15	3.68	3.66	3.88	3.86r	3.43
All consumers:	Average	4.28	3.83	3.79	4.12	4.21	3.76	3.74	3.94	3.96	3.50
	10% decile[2]	4.38	4.01	4.07	4.32	4.35	4.04	4.01	4.16	4.19r	3.73
	median[2]	6.15	5.59	5.65	5.98	5.92	5.45	5.53	5.61	5.66r	5.14
	90% decile[2]	8.63	7.31	7.41	8.23	7.93	7.09	7.23	7.63	7.75r	6.81
GAS	Small	1.143	1.109	1.146	1.038	0.960	0.949	0.960	0.882	0.886	0.873
(Pence per kWh)[4]	Medium	0.930	0.925	0.821	0.758	0.673	0.664	0.639	0.654	0.688r	0.674
	Large	0.739	0.666	0.584	0.564	0.451	0.427	0.420	0.432	0.455r	0.451
All consumers:[5]	Average	0.784	0.703	0.613	0.600	0.494	0.455	0.437	0.462	0.496r	0.483
	Firm	0.889	0.807	0.740	0.714	0.546	0.504	0.480	0.507	0.567r	0.563
	Interruptible	0.668	0.602	0.505	0.503	0.433	0.409	0.402	0.417	0.428r	0.424
	Tariff	1.315	1.305	1.377	1.330	1.373	1.298	1.393	1.334	1.345r	1.294
	10% decile[2]	0.848	0.824	0.708	0.601	0.542	0.516	0.495	0.510	0.517	0.510
	median[2]	1.073	1.066	1.058	0.980	0.883	0.815	0.786	0.790	0.809r	0.805
	90% decile[2]	1.477	1.513	1.520	1.496	1.434	1.449	1.425	1.441	1.370r	1.315
MEDIUM FUEL OIL (£ per tonne)[3]											
All consumers:	Average6	95.5	98.0	86.3	91.0	98.4	101.3	89.9	104.5	98.7r	86.2
LIQUEFIED PETROLEUM GASES (£ per tonne)											
All consumers:	Average[6]	147.4	155.4	139.2	144.9	154.5	151.0	148.1	172.9	197.4r	171.1
HARD COKE (£ per tonne)[7]											
All consumers:	Average[6]	105.5	107.6	116.8	119.6	128.5	128.5	122.9	125.6	121.3	117.6

1. Average prices paid (exclusive of VAT) by respondents to a Department of Trade and Industry survey of some 1,200 manufacturing sites. The average price for each size of consumer is obtained by dividing the total quantity of purchases, for each fuel, into their total value. Prices vary widely around the average values shown (see footnote 2). Purchases of fuels used as raw materials in manufacturing are excluded. For further details, see the annual "Digest of United Kingdom Energy Statistics" (SO).
2. The 10% decile is the point within the complete range of prices below which the bottom 10% of those prices fall. Similarly the 90% decile is the point above which the top 10% of prices occur. The median in the midway point. Thus, these values show the spread of prices paid. The deciles and the median are calculated by giving equal 'weight' to each purchaser, whereas the average prices, for each size-band and all consumers are given 'weight' according to the quantity purchased.
3. Oil product prices include hydrocarbon oil duty. From the first quarter of 1997 the rates per tonne are £19.59 for Heavy Fuel Oil, £20.10 for Medium Fuel Oil and £ 29.30 for Gas Oil.
4. Covers all supplies of natural gas including, for example, those purchased direct from onshore/offshore gas fields. Respondents purchasing more than one type of supply (tariff, firm contract and interruptible contract) are treated as separate entities in respect of each type of supply.
5. Prices by type of supply cover consumers of all sizes.
6. No further details of prices can be given to the small number of respondents purchasing this fuel.
7. Excludes breeze and blast furnace supplies.

TABLE 27. Average prices of fuels purchased by the major UK power producers[1] and of gas at UK delivery points[2]

		Major power producers[1]			Natural gas at UK delivery points[8]	
		Coal[3]	Oil[4,5]	Natural gas[6,7]	Including levy[9]	Excluding levy[9]
		£ per tonne	£ per tonne	pence per kWh	pence per kWh	pence per kWh
1992		45.84	57.76	..	0.595	0.549
1993		42.44	55.91	0.706	0.556	0.523
1994		36.35	67.90	0.667	0.588	0.564
1995		35.11	81.12	0.643	0.584	0.561
1996		35.22	84.15	0.628	0.592	0.571
1995	2nd quarter	37.12	79.89	0.665	0.603	0.577
	3rd quarter	35.41	77.75	0.606	0.618	0.590
	4th quarter	35.14	77.45	0.636	0.593	0.571
1996	1st quarter	35.45	85.12	0.686	0.582	0.559
	2nd quarter	36.02	79.69	0.578	0.567	0.548
	3rd quarter	35.25	80.05	0.568	0.591	0.573
	4th quarter	34.41	88.98	0.665	0.620	0.597
1997	1st quarter	33.77	90.86	0.707	0.618r	0.593r
	2nd quarter p	33.53	79.99	0.610	0.560	0.541

1. See definitons inside front cover; Humber Power Ltd and Indian Queens Power Ltd should additionally be included in the list of major power producers.
2. The series represents gas supplied by UKCS licensees to the UK (i.e exports are excluded) and gas imported from the Norwegian sector of the continental shelf.
3. Includes slurry.
4. Includes oil for burning, for gas turbines and for internal combustion engines (other than for use in road vehicles). Excludes any natural gas liquids burnt at Peterhead power station.
5. Includes hydrocarbon oil duty.
6. Prior to 1993 gas prices are not available for reasons of confidentiality.
7. Includes sour gas.
8. A quarterly series consistent with the annual series is available back to quarter two 1987. An article describing this series was published in *Energy Trends* in November 1996.
9. The levy is the Goverment's tax on indigenous supplies introduced in 1981.

TABLE 28. Fuel price indices for the industrial sector[1]

1990 = 100

		Unadjusted					*Seasonally adjusted*			
		Coal[2]	Heavy fuel oil[2]	Gas[3]	Electricity[3]	Total fuel	Gas[3]	Electricity[3]	Total fuel	
		Current fuel price index numbers								
1992		99.8	84.5	104.5	109.0	104.2				
1993		93.6	90.1	102.7	114.2	107.6				
1994		92.5	97.4	103.6	110.1	106.3				
1995		86.8	113.8	90.4	109.1	105.1				
1996		82.6	125.7	66.1	105.3	99.5				
Per cent change		*-4.9*	*+10.4*	*-26.8*	*-3.5*	*-5.3*				
1995	2nd quarter	89.0	119.2	94.2	104.2	103.7	95.3r	109.4r	107.2r	
	3rd quarter	86.1	107.3	82.7	100.9	97.6	86.4r	107.4r	102.3r	
	4th quarter	81.7	108.9	79.9	112.9	104.5	79.2r	107.6	101.1	
1996	1st quarter	83.8	121.9	72.3	113.6	105.4	69.7r	107.1r	100.8r	
	2nd quarter	82.7	124.9	64.4	100.8	96.3	65.2r	106.0r	99.7r	
	3rd quarter	82.2	120.1	61.7	98.4	93.6	64.2r	104.8r	98.0	
	4th quarter	81.2	134.2	66.2	107.7	102.2	65.3r	102.7	98.9	
1997	1st quarter	81.6	128.8	68.7	108.6	102.5	66.4r	102.1r	98.0	
	2nd quarter p	81.4	115.8	67.3	93.2	90.9	68.1	98.2	94.0	
Per cent change		*-1.6*	*-7.3*	*+4.5*	*-7.5*	*-5.7*	*+4.5*	*-7.4*	*-5.7*	
		Fuel price index numbers relative to the GDP deflator								GDP deflator[4]
1992		89.5	75.8	93.8	97.9	93.6				111.4
1993		81.4	78.3	89.3	99.3	93.6				115.0
1994		79.2	83.4	88.7	94.2	90.9				116.9
1995		72.5	95.0	75.4	91.0	87.7				119.8
1996		66.9	101.8	53.6	85.3	80.6				123.4
Per cent change		*-7.7*	*+7.2*	*-29.0*	*-6.3*	*-8.1*				*+3.0*
1995	2nd quarter	74.4	99.7	78.8	87.1	86.7	79.7	91.5r	89.6r	119.6
	3rd quarter	71.9	89.6	69.1	84.3	81.5	72.2r	89.6	85.4r	119.8
	4th quarter	67.6	90.1	66.1	93.4	86.4	65.5r	89.0	83.6	120.9
1996	1st quarter	68.5	99.6	59.1	92.8	86.1	57.0r	87.5r	82.4r	122.4
	2nd quarter	67.4	101.9	52.5	82.2	78.6	53.2	86.5r	81.3r	122.6
	3rd quarter	66.5	97.2	49.9	79.7	75.7	52.0r	84.8r	79.3	123.6
	4th quarter	65.1	107.5	53.0	86.3	81.9	52.4r	82.3	79.3	124.8
1997	1st quarter	65.2r	103.0r	55.0	86.8r	81.9r	53.1r	81.6r	78.3	125.1
	2nd quarter p	64.7	92.1	53.5	74.2	72.3	54.1	78.1	74.8	125.7
Per cent change		*-4.0*	*-9.6*	*+1.9*	*-9.8*	*-8.0*	*+1.9*	*-9.7*	*-8.0*	*+2.5*

1. Index numbers shown represent the average for the period specified. VAT is excluded.
2. Indices based on a survey of the prices of fuels delivered to industrial consumers in Great Britain only as shown in Table 26.
3. Indices based on the average unit value of sales to industrial consumers.
4. GDP deflator at market prices and seasonally adjusted.

TABLE 29. **Fuel price indices for the domestic sector**[1,2]

1990 = 100

		Coal and coke	Gas	Electricity	Heating oils[3]	Fuel and light	Petrol and oil	Fuel, light petrol and oil
		Current fuel price index numbers						
1992		110.5	106.8	115.8	84.7	110.3	110.5	110.4
1993		111.1	102.7	115.4	89.9	108.9	119.3	113.4
1994		118.2	108.9	119.2	90.0	113.7	124.8	118.7
1995		120.2	112.5	120.8	89.9	116.1	131.2	122.9
1996		121.4	112.7	120.3	99.1	116.4	137.8	126.3
Per cent change		*+1.0*	*+0.2*	*-0.4*	*+10.1*	*+0.3*	*+5.1*	*+2.8*
1995	2nd quarter	119.0	112.7	120.7	89.7	116.0	132.3	123.4
	3rd quarter	118.2	112.7	120.9	89.8	116.1	131.9	123.2
	4th quarter	121.7	112.7	120.7	90.9	116.2	130.7	122.7
1996	1st quarter	122.5	112.7	120.6	95.3	116.4	134.5	124.8
	2nd quarter	119.7	112.7	121.0	95.3	116.5	134.5	124.8
	3rd quarter	119.3	112.6	121.0	97.5	116.6	136.8	125.9
	4th quarter	124.1	112.6	118.6	108.2	115.9	145.6	129.6
1997	1st quarter	124.6	112.6	117.1	103.6	114.9	147.6	130.8
	2nd quarter p	121.6	112.6	116.7	95.1	114.1	146.2	129.8
Per cent change		*+1.6*	*-0.1*	*-3.6*	*-0.1*	*-2.1*	*+8.8*	*+4.0*
		Fuel price index numbers relative to the GDP deflator						GDP deflator[4]
1992		99.2	95.9	103.9	76.0	99.0	99.2	99.1	111.4
1993		96.6	89.3	100.3	78.2	94.7	103.7	98.6	115.0
1994		101.1	93.1	102.0	77.0	97.2	106.7	101.5	116.9
1995		100.4	93.9	100.9	75.1	96.9	109.5	102.6	119.8
1996		98.4	91.3	97.5	80.3	94.3	111.7	102.3	123.4
Per cent change		*-2.0*	*-2.8*	*-3.3*	*+6.9*	*-2.7*	*+2.0*	*-0.2*	*+3.0*
1995	2nd quarter	99.5	94.3	101.0	75.0	97.0	110.6	103.2	119.6
	3rd quarter	98.6	94.1	100.9	75.0	96.9	110.1	102.8	119.8
	4th quarter	100.7	93.2	99.9	75.2	96.1	108.1	101.5	120.9
1996	1st quarter	100.1	92.1	98.5	77.8	95.1	109.9	102.0	122.4
	2nd quarter	97.7	91.9	98.7	77.7	95.1	109.7	101.8	122.6
	3rd quarter	96.5	91.1	97.9	78.9	94.3	110.7	101.9	123.6
	4th quarter	99.4	90.3	95.0	86.7	92.8	116.7	103.9	124.8
1997	1st quarter	99.6	90.0	93.6	82.8	91.9	118.0	104.6	125.1
	2nd quarter p	96.8r	89.5r	92.8r	75.7r	90.8r	116.3r	103.2r	125.7r
Per cent change		*-0.9 r*	*-2.6 r*	*-6.0 r*	*-2.6 r*	*-4.5 r*	*+6.1 r*	*+1.4 r*	*+2.5 r*

1. Index numbers shown represent the average for the period specified.
2. Figures from the 2nd quarter of 1994 for coal and coke, gas, electricity and heating oils include VAT at 8 per cent.
3. Bottled gas and oil fuel.
4. GDP deflator (market prices, seasonally adjusted).

TABLE 30. **Typical retail prices of petroleum products and a crude oil price index**[1]

		Motor spirit[1]						
		4 star	Super unleaded	Premium unleaded	Derv[1]	Standard grade burning oil[1,2]	Gas oil[1,3]	Crude oil acquired by refineries[4]
		Pence per litre						*1990 = 100*
1992	January	46.93	45.57	43.43	43.19	12.47	12.02	79.7
1993	January	51.27	49.76	47.13	47.05	14.10	13.52	98.7
1994	January	55.50	54.48	50.83	51.72	12.94	12.72	72.0
1995	January	59.11	58.00	53.44	54.13	13.32	13.93	83.7
1996	January	61.97	61.26	55.93	57.43	15.38	15.86	96.1
1996	May	60.28	62.92	55.13	56.23	15.26	15.78	103.8
	June	59.64	62.89	54.67	55.60	14.45	15.05	97.4
	July	59.49	62.89	54.34	55.22	14.63	15.43	101.3
	August	61.51	65.26	56.77	57.62	14.93	15.52	105.7
	September	63.04	66.64	58.24	58.79	17.05	17.51	113.6
	October	63.71	66.78	58.78	60.67	17.99	18.71	120.4
	November	64.26	67.34	59.25	60.85	16.79	17.62	110.0
	December	66.33	69.58	61.25	62.59	17.02	17.88	114.7
	January	65.46	69.24	61.09	62.02	17.13	18.14	113.8
	February	65.44	68.95	60.16	61.38	15.96	17.01	106.2
	March	64.24	68.17	58.97	60.33	14.62	15.40	96.3
	April	64.59	68.65	59.24	60.22	14.21	15.18	86.0
	May	64.91	68.98	59.41	60.30	13.94	15.44	90.9
	June	65.39	69.37	59.86	60.60	13.77	14.88	87.0r
	July p	68.20	72.68	62.69	63.44	13.25	14.61	86.7

1. These estimates are generally representative of prices paid on or about the 15th of the month. Estimates are based on information provided by oil marketing companies until December 1994. From January 1995 data from super/hypermarket chains have been included.
2. These estimates are for deliveries of up to 1,000 litres; such deliveries attract 8 per cent VAT from 1 April 1994.
3. These estimates are for deliveries of 2,000 to 5,000 litres; such deliveries attract 8 percent VAT from 1 April 1994.
4. Price index for supplies received by refineries in the UK from both indigenous and imported sources. It represents the average for the month calculated in sterling on a cif basis.

Recent Developments in Transport Fuels

Introduction

This article is a summary of historical trends in the production and consumption of transport fuels in the UK. Data are taken from the UK Petroleum Industry Association (UKPIA) system where data are collected on the inland operations of the UK oil industry (i.e. information on the supply, refining and distribution of oil in the UK). This information is supplemented whenever necessary to allow for complete coverage within the statistics, with separate exercises carried out on special topics (for example, on sales carried out by supermarket and hypermarket retail stores). The article starts with a summary of general changes over the past three decades, followed by more detailed discussion of the changes seen in the use of fuels in the individual transport sectors, with the emphasis on recent trends.

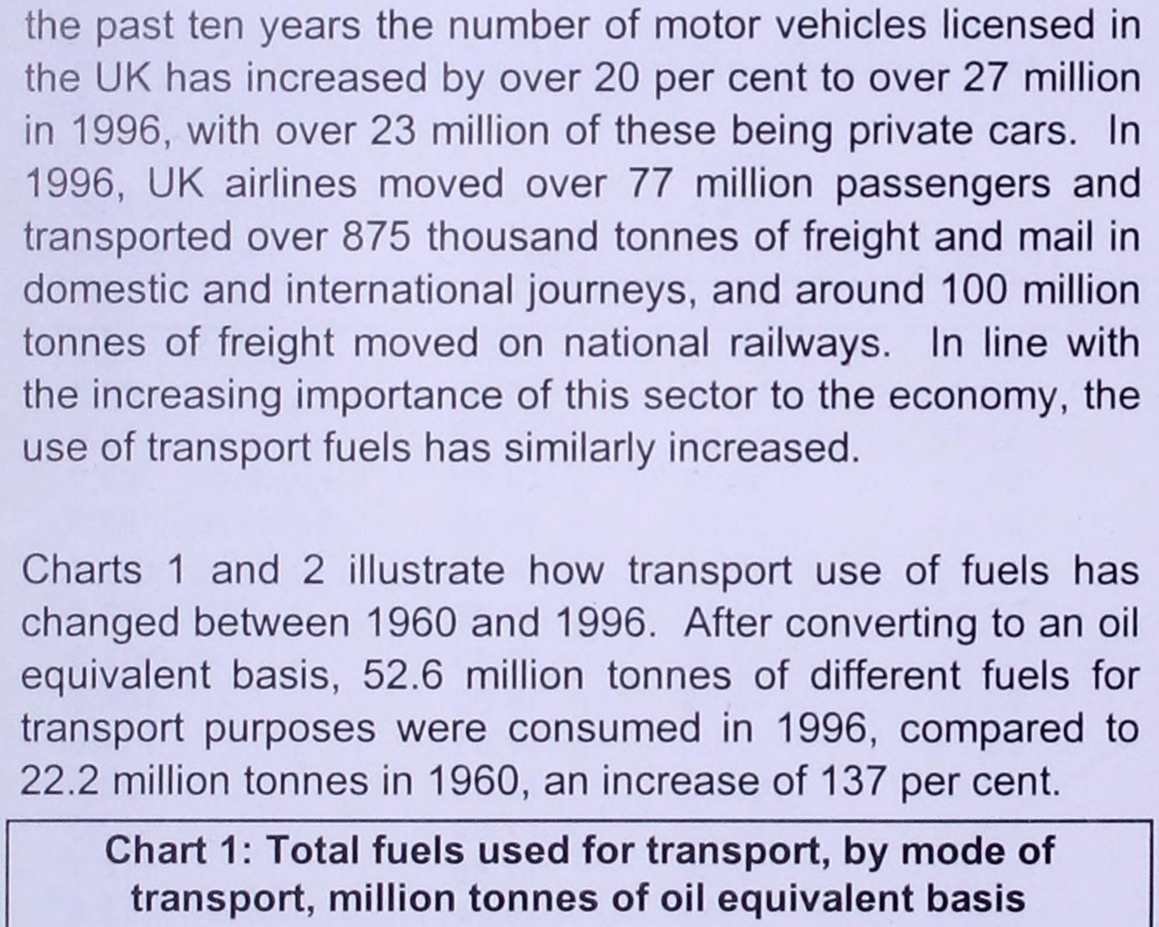
The emphasis in the article is on the use of petroleum based fuels for transport purposes. Whilst other fuels such as electricity and liquefied gases are being used for transport purposes, use is relatively small or restricted to trials at the current time for the latter. Some information is given in the article on known trends in the use of these other fuels, as well as some comparative data.

Summary

Transport service industries such as road and rail freight operations, and industries associated with transport, such as the manufacture of motor vehicles, make a significant contribution towards the UK economy. They are implicitly involved in all of the UK's trade with other countries as well as with virtually all commercial operations within the UK. In the past ten years the number of motor vehicles licensed in the UK has increased by over 20 per cent to over 27 million in 1996, with over 23 million of these being private cars. In 1996, UK airlines moved over 77 million passengers and transported over 875 thousand tonnes of freight and mail in domestic and international journeys, and around 100 million tonnes of freight moved on national railways. In line with the increasing importance of this sector to the economy, the use of transport fuels has similarly increased.

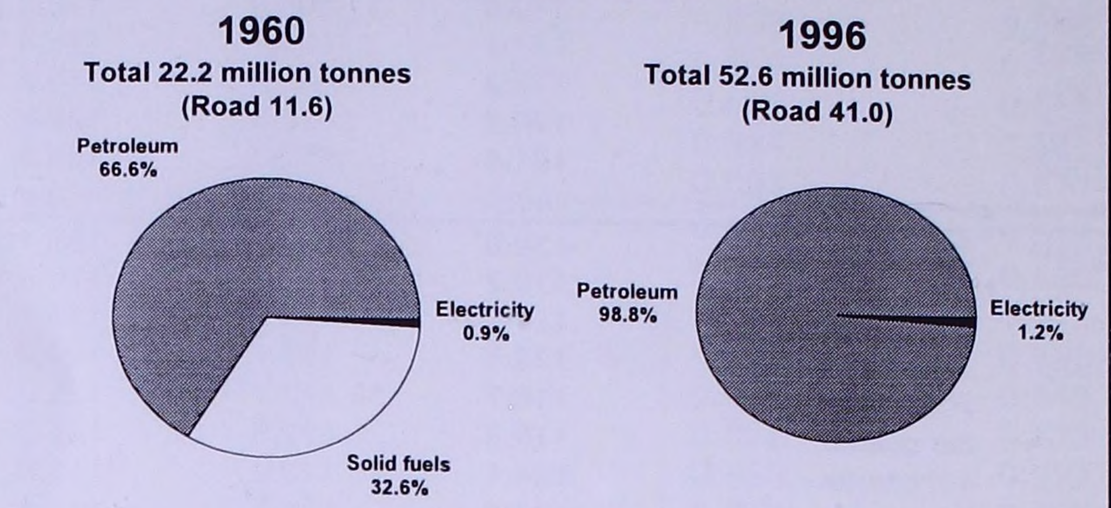
Charts 1 and 2 illustrate how transport use of fuels has changed between 1960 and 1996. After converting to an oil equivalent basis, 52.6 million tonnes of different fuels for transport purposes were consumed in 1996, compared to 22.2 million tonnes in 1960, an increase of 137 per cent.

Chart 1: Total fuels used for transport, by mode of transport, million tonnes of oil equivalent basis



Source: DTI

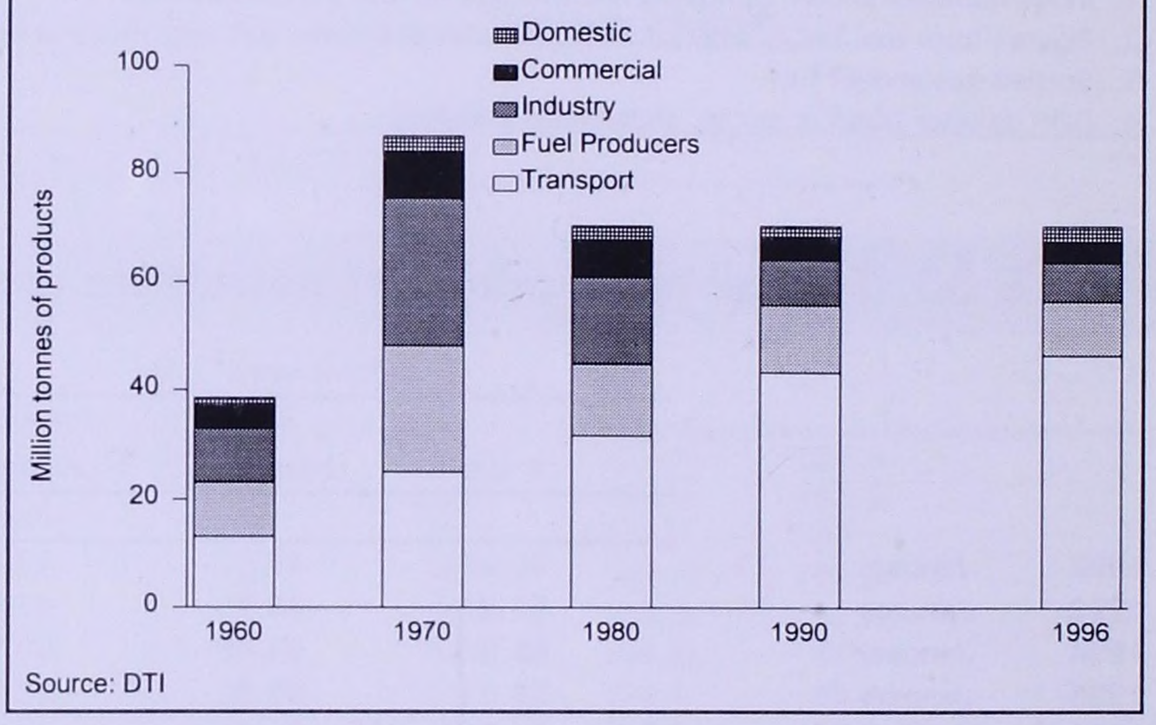
Chart 2: Total fuels used for transport, by type of fuel, million tonnes of oil equivalent basis



Source: DTI

Whilst in absolute volume terms fuels used for road transport have increased most significantly, the increase in the use for air transport is also significant. Chart 3 summarizes the trends in total deliveries of petroleum products for all energy uses broken down by broad sector of use. Use by the transport industry has increased from 46 per cent of total energy uses of petroleum in 1960 to 76 per cent in 1996. 46.6 million tonnes of petroleum products were consumed by the transport industry in 1996, compared with 13.4 million tonnes in 1960.

Chart 3: Use of petroleum products for energy by main sector, million tonnes



Source: DTI

Refinery activity and production of transport fuels

Refinery activity in the UK expanded during the 1970s to allow the development of extra motor spirit production capacity. This took place in anticipation of an increase in demand and at a time when there was a prolonged period of high crude oil and petroleum product prices, and thus higher refining margins, which would make such expansion profitable for companies. For much of the 1960s actual total output from UK refineries was at lower levels than demand for petroleum products in the UK. There was a large increase in the capacity of the UK refining industry in reaction to the perception of an increasing market for products, both in the UK and in the rest of the world, during the 1970s.

However, there were several factors later in the 1970s that worked to reduce demand for petroleum products. Firstly, in 1973 and again in 1979 there were two large price increases for crude oil. As well as directly reducing demand due to the high prices for products that these resulted in, the

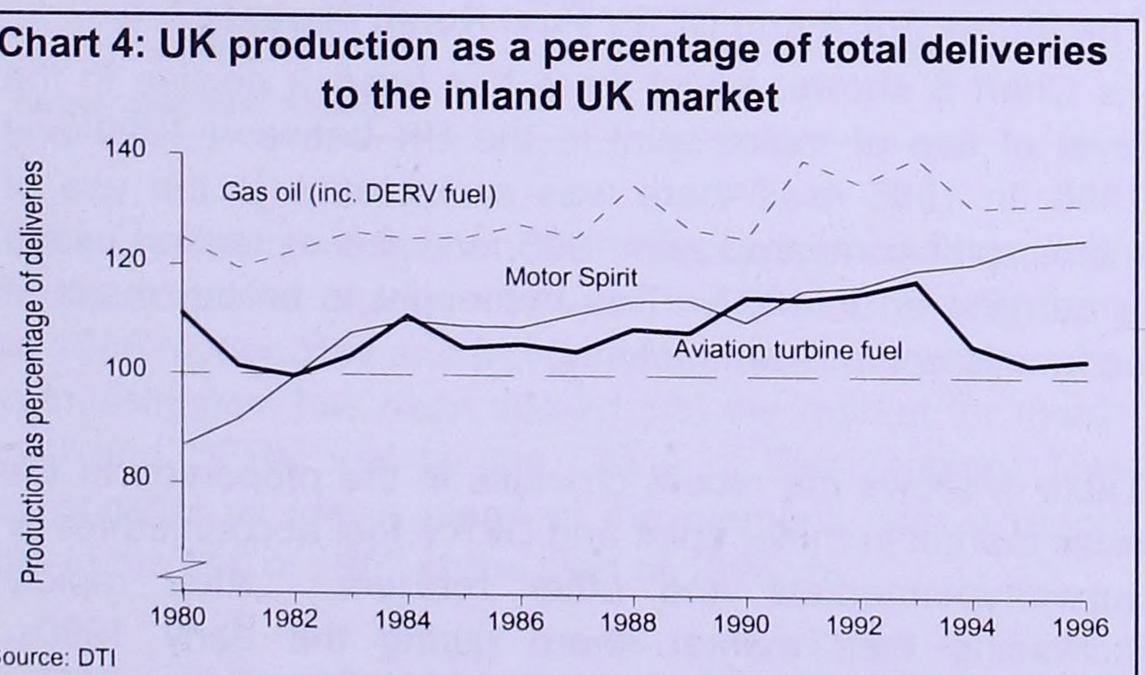
price rises themselves were also a major cause of the second factor, the economic recession that then took place in the late 1970s and early 1980s, which also worked to reduce demand for petroleum products. Thirdly, through the 1970s increasing supplies of gas from the North Sea became available, which started to replace fuel oil as the energy source for many commercial and industrial uses (for example, space heating purposes). All three factors worked to reduce demand for petroleum products at a time when the UK refining industry had made significant investments in increasing their capacity. Finally, this occurred at a time when industrial restructuring was changing the nature of demand.

This surplus in refining capacity still exists and has had the effect of reducing refinery profit margins through a reduction in the spot market prices for the products, particularly for motor spirit. Even now, product demand is only forecast to grow relatively slowly, so refining profit margins are unlikely to improve in the short term unless there is a further reduction in refining capacity.

In common with most European refiners, refiners in the UK have undertaken rationalization plans to reduce costs and improve margins, and further rationalization is expected. An example of this is the pan-European merger of BP and Mobil's downstream oil businesses and the failed merger of Elf and Gulf oil companies. Contrasting with the demand in the UK for motor spirit declining slightly during the 1990s (and expected to be broadly flat in years to come), demand for aviation and DERV fuels has continued to increase and is expected to continue to do so in the future. As both of these fuels are produced from similar parts of the refining process, it is unlikely that UK refiners will be able to meet future UK demand without investment in this particular type of production capacity.

The current situation in the UK refining industry is that the UK is self-sufficient in transport fuels, in that it produces enough to satisfy current UK inland demand. Chart 4 compares the level of UK demand with the total level of output from UK refineries for motor spirit, aviation turbine fuel and gas/diesel oil, of which DERV fuel for transport uses forms a significant part. Whilst separate details are not available on the production of and trade in DERV fuel to allow an accurate assessment to be made, estimates indicate that around 95 per cent of UK demand is met by UK production.

Chart 4: UK production as a percentage of total deliveries to the inland UK market



Source: DTI

Road transport

The major fuels used for road transport purposes are motor spirit and DERV fuel, more commonly referred to as petrol and diesel. Whilst other fuels are used, these two form the major source of energy used for transporting goods and people within the UK, and are dealt with in more detail below.

Historically, electricity has been widely used for transport purposes, primarily for public transport, with vehicles such as trams and trolley-buses being common in most cities. The use of these vehicles diminished before 1950 such that the use of electricity for road transport purposes is now limited almost entirely to battery-powered vehicles. These vehicles tend to be used for either limited loads or over limited distances. Their uses include delivering milk or as transport vehicles within large manufacturing or warehousing sites. As stated earlier, it is difficult to separately identify the use of electricity for the purposes of charging up these vehicles from other uses of electricity within the companies.

The use of electricity for public transport has not entirely discontinued. The most significant current usage is for rail transport, which is dealt with separately in this article. Apart from the continued use of trams in areas such as holiday resorts, there has been renewed interest in re-introducing them into urban areas. New tram systems are now operating in Manchester and Sheffield, with another being built in Croydon. This means of transport is seen as having, at least in its final manifestation, less adverse environmental impact than other options, not forgetting that there is an impact from the generation of the electricity for these systems.

Other petroleum based products used for transport purposes are liquefied petroleum gases (LPGs - propane and butane). Vehicles can be converted to run on LPG and they are also used to fuel vehicles such as fork-lift trucks. As with electricity, their general use for road transport is limited. Their advantage is that they generally produce very low emissions when used.

There is increasing interest in developing the use of natural gas as an energy source for road transport. This is related to the fact that it is a readily available source of fuel in terms of the UK having significant supplies available from the North Sea. Also, as with LPGs, combustion of natural gas produces relatively few waste products. As such, it is proving an attractive fuel as it allows progress to be made in achieving reductions for environmental emissions. However, there are problems in using natural gas. For example, for practical purposes it needs to be stored as a liquid. This involves a special tank to cope with the significant pressures and low temperatures necessary to keep natural gas in a liquid state. This not only has cost implications for the vehicles concerned and for any refueling stations, but also has implications for payload, passenger space and safety.

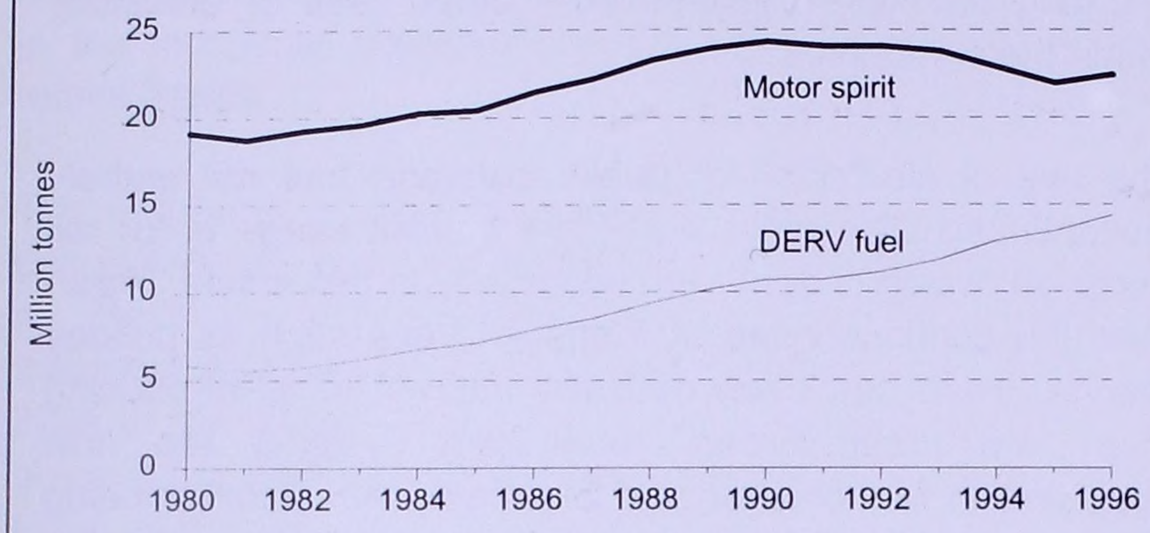
Having said this, there are currently several trials in the UK of the use of natural gas as a transport fuel. For example, Edinburgh City Council has adapted several vehicles to operate with natural gas. Added to this, in recent Budgets the Government has encouraged development by reducing the rate of duty applicable on gas when used as a road fuel from 33.14 pence per kilogram in November 1994 to the

current level of 21.13 pence per kilogram. Equivalent rates of duty for unleaded and leaded petrol are 53.65 and 61.38 pence per kilogram respectively, and 47.61 pence per kilogram for DERV fuel.

Motor spirit and DERV fuel

Chart 5 shows the long-term pattern of change in the amount of these two transport fuels delivered to the internal UK market. From 1960 to 1990, the amount of motor spirit consumed in the UK increased three-fold, from 7.7 million tonnes to 24.3 million tonnes. In the same period, DERV fuel use increased four-fold, from 2.6 million tonnes to 10.7 million tonnes. Since 1990, there has been a slight decline in use of motor spirit while the use of DERV fuel has continued to increase.

Chart 5: Deliveries to the UK inland market



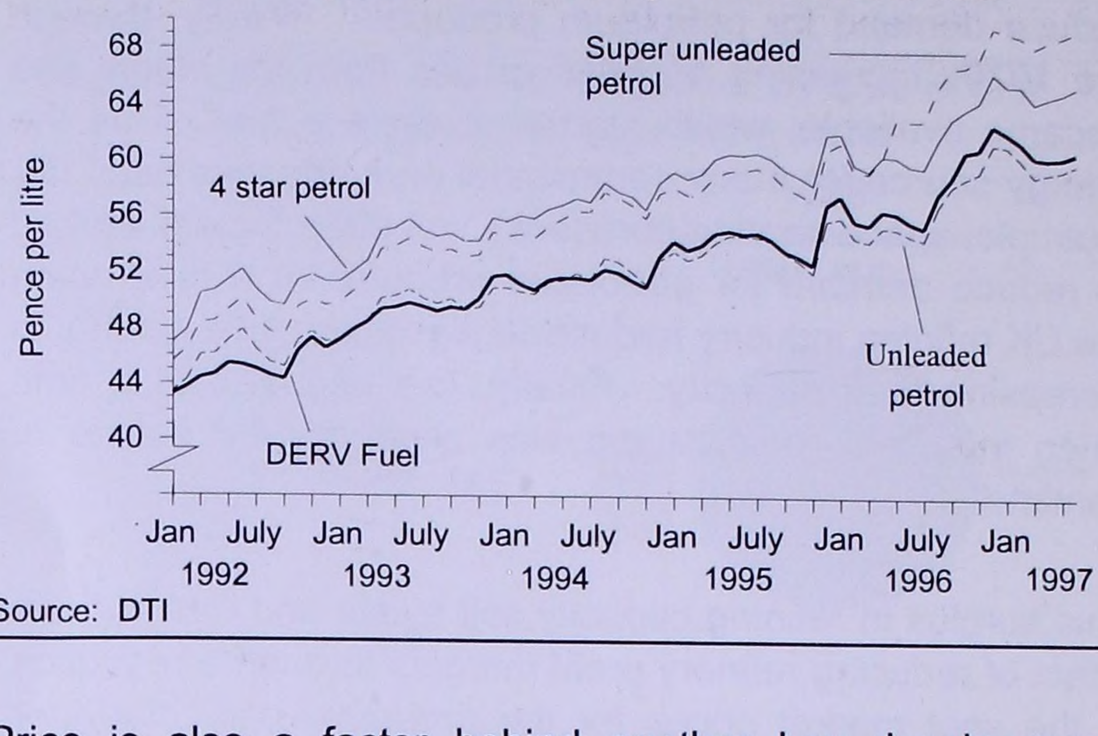
Source: DTI

Several factors are behind the differing trends seen for motor spirit and DERV fuel. There has been an increase in the number of diesel-engined vehicles in use in the UK. Improved technology resulted in vehicles with performance and characteristics that are more acceptable to the motorist. While diesel vehicles have also been priced at levels comparable with their petrol equivalents, they deliver better miles per gallon. In the National Travel Survey for 1993 to 1995 carried out by the Department for the Environment, Transport and the Regions, diesel-engined cars averaged 41 miles per gallon of fuel, compared with 30 miles per gallon for petrol-engined cars.

In addition, during the early 1990s (though less so now) there was a significant price differential between DERV fuel and motor spirit prices. For example, in 1990, a typical retail price for a litre of 4-star petrol would have been 44.87 pence, compared with 40.48 pence for a litre of DERV fuel, representing a 10 per cent saving. This difference was seen at a time when fuel prices were rising as the Gulf crisis had an adverse effect on world markets, increasing the attraction that the efficiency gains of diesel vehicles had for the customer.

Chart 6 illustrates the difference in price seen between the various grades of motor spirit and DERV fuel between 1992 and 1997. The relatively low price for unleaded petrol during the early 1990s (primarily due to a beneficial rate of duty) was a factor in its increased take-up by consumers in the UK, and the mandatory fitting of catalytic converters to new vehicles has sustained the upwards trend. It is significant that in recent years the price of premium grade unleaded petrol (the grade of unleaded petrol most commonly purchased) has been below the price of DERV fuel. An article on petrol and DERV fuel prices, including a comparison of international prices, will be published in the November 1997 edition of Energy Trends.

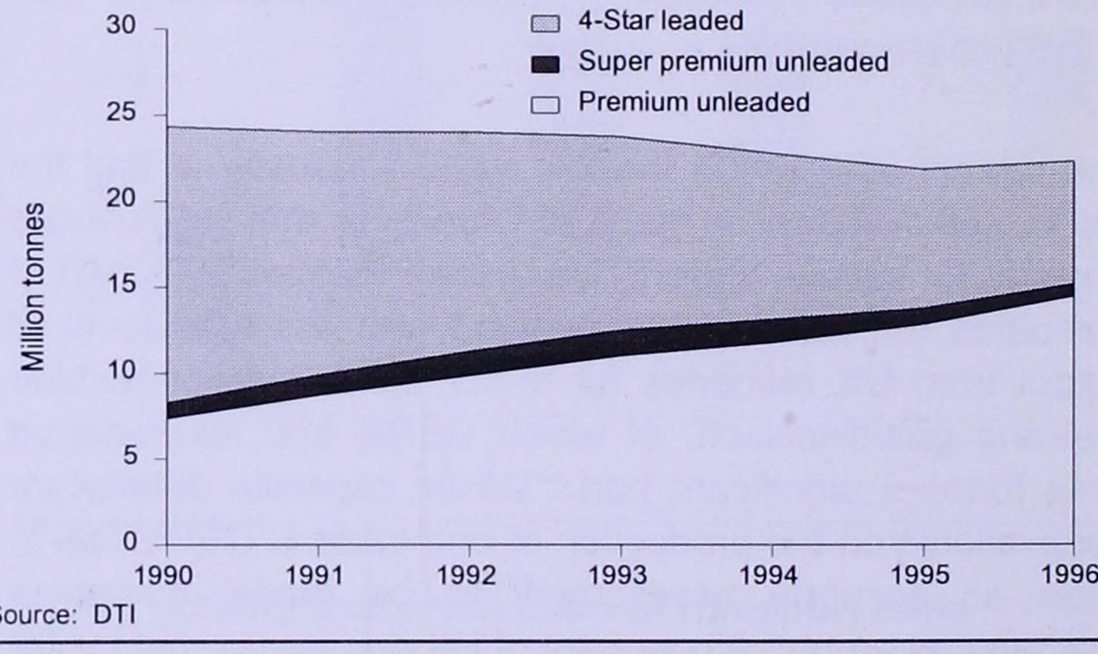
Chart 6: UK prices of motor spirit and DERV fuel



Source: DTI

Price is also a factor behind another key development during the 1990s, the growth in the sales of unleaded motor spirit. Chart 7 shows the trend in recent years for the total deliveries into the UK market for the two grades of unleaded fuel, premium grade and super premium unleaded (produced to a higher specification than premium unleaded so as to give improved performance). Premium unleaded is the most common grade used. Deliveries of super premium unleaded have been declining in recent years. One reason is the continued high price of this fuel compared to premium unleaded petrol, as shown in Chart 6. Super premium unleaded fuel retails at a higher price than any other transport fuel, mainly because of a higher rate of duty, currently 8 per cent higher than premium unleaded after recent tax changes. It has also suffered from public concern at the end of 1995 related to worries over the potential harmful effects of the benzene naturally present in the fuel.

Chart 7: UK deliveries of motor spirit by type



Source: DTI

The Motor Spirit and DERV Fuel Retail Markets

As Chart 5 shows, whilst there has been a decline in the level of use of motor spirit in the UK between 1990 and 1996, in 1996 itself there was an increase in the use of motor spirit compared with 1995, and this increased usage is carrying on in 1997. This is thought to be the result of economic upturn seen recently.

Table 1 shows the recent changes in the proportion of the retail market in motor spirit and DERV fuel accounted for by super/hypermarkets and other retailers. After rapidly increasing their market share during the early 1990s, progress has slowed recently. Of the 78 per cent of the motor spirit retail market in 1996 accounted for by retailers other than super/hypermarkets, some 65 to 70 per cent is estimated to be accounted for by companies that are UK-

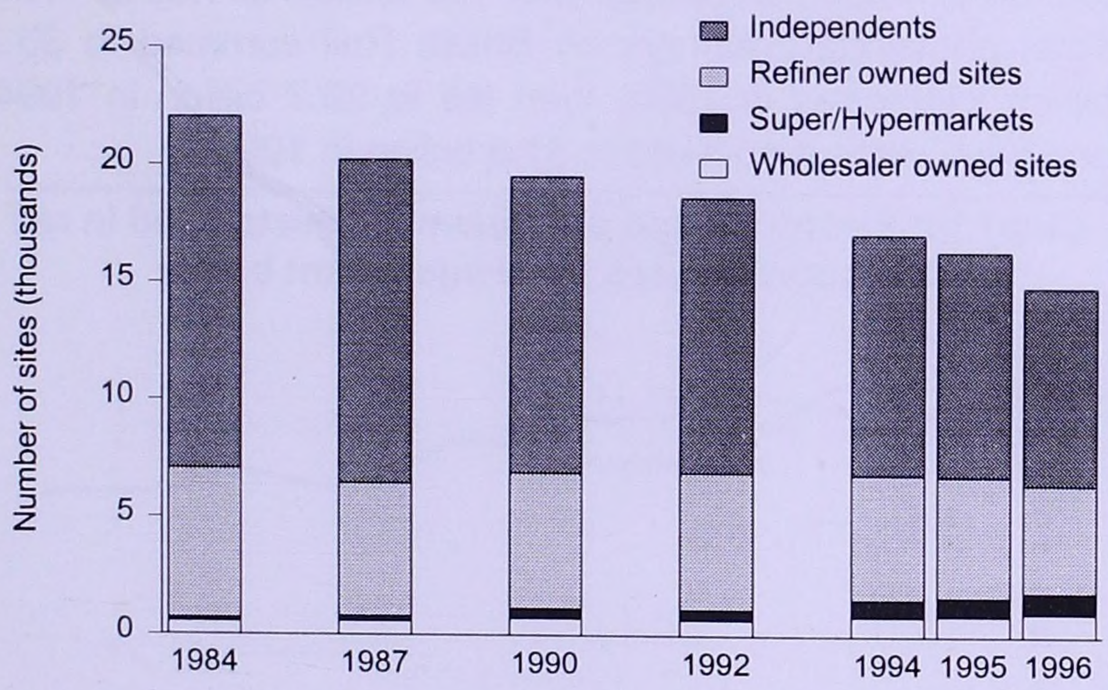
based refiners of fuel, (for example, BP, Esso, Shell, Texaco, etc.), with the remainder being accounted for by other companies acting solely as retailers in the UK or companies with refining facilities in other countries with a presence in the UK retail market.

Table 1: Super/Hypermarket share of UK Retail Deliveries
(Share of total UK deliveries given in brackets)

	Motor Spirit		DERV Fuel	
1990	8	(8)	--	--
1991	11	(10)	2	(1)
1992	13	(13)	3	(1)
1993	15	(15)	7	(2)
1994	18	(18)	11	(4)
1995	22	(22)	15	(5)
1996	22	(21)	15	(6)
1997 Q1	22	(22)	16	(6)
1997 Q2	21	(21)	16	(6)

The increased competition in the retail market in recent years has led to falling profit margins. Whilst companies such as the major oil companies and the super/hypermarket chains can rely on a high volume of sales to maintain their level of profits, smaller oil companies and the independent retail sector have been put under great pressure. Chart 8 details the changes in the number of sites retailing motor spirit in the UK over recent years. Between 1990 and 1996, the total number of retail sites in the UK decreased by nearly a quarter, from 19,465 to 14,748 sites. Within this total change, the number of independent retail sites decreased by a third while refiner owned sites decreased by a fifth. Contrasting this, although they are smaller in size than these two categories of retail site, the number of super/hypermarket sites nearly doubled in size while wholesaler owned sites increased by 40 per cent.

Chart 8: Numbers of Petrol retail sites in the UK



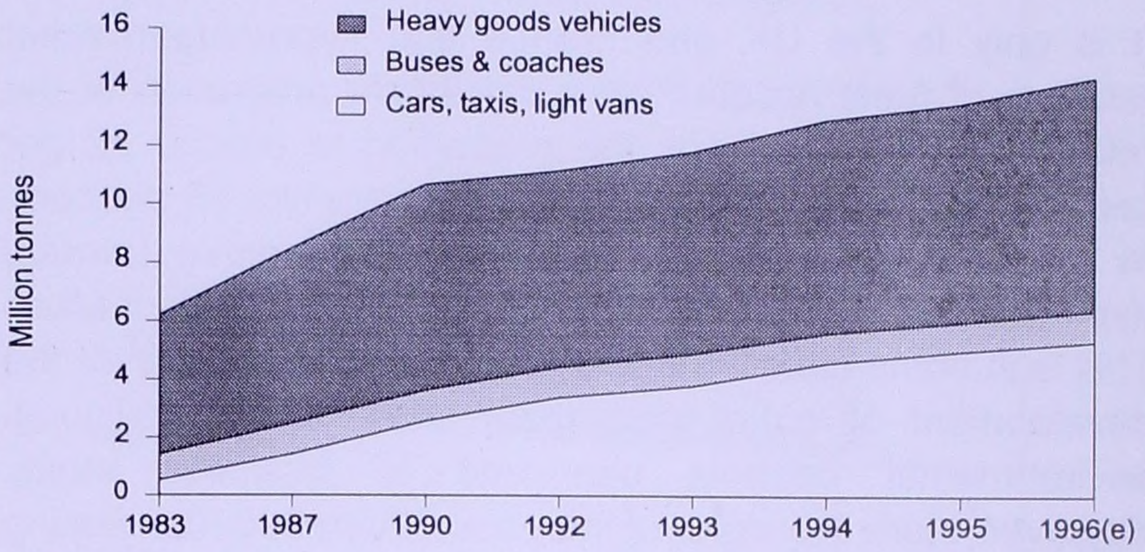
Source: Petroleum Review

This increased pressure on the independent retail market, and as part of a regular review of the market arising from the 1988 Monopolies and Mergers inquiry, are reasons why an investigation has been started into the market for motor spirit and DERV fuel by the Office of Fair Trading. This investigation is taking place at the moment, with a report due at the end of 1997 or the start of 1998.

In 1996 only 8 per cent of the UK's total motor spirit supplies were imported (1.7 million tonnes), with 92 per cent produced by UK refineries. The UK is also a net exporter of motor spirit: UK refineries exported 8.1 million tonnes in 1996. The major export markets are the USA (42 per cent of total exports in 1996), Ireland (9 per cent), the Netherlands (8 per cent), France (7 per cent), and other EU countries (15 per cent). Similar details are not available for DERV fuel, due to insufficient detail being available on the trade in fuel. However, roughly 95 per cent of the UK's DERV fuel supplies in 1996 was produced by UK refineries. It is worth noting that overall, the UK's net exports of petroleum products benefited the UK Balance of Payments by £1.5 billion in 1996.

Chart 9 breaks down the total uses of DERV fuel by type of vehicle. Increased consumption by cars between 1990 and 1996 accounts for three-quarters of the total increase in consumption of DERV fuel during the period. Similar analysis for the use of motor spirit shows that cars, taxis and light vans account for 98 per cent of total usage in the UK.

Chart 9: DERV Fuel use in the UK by type of vehicle

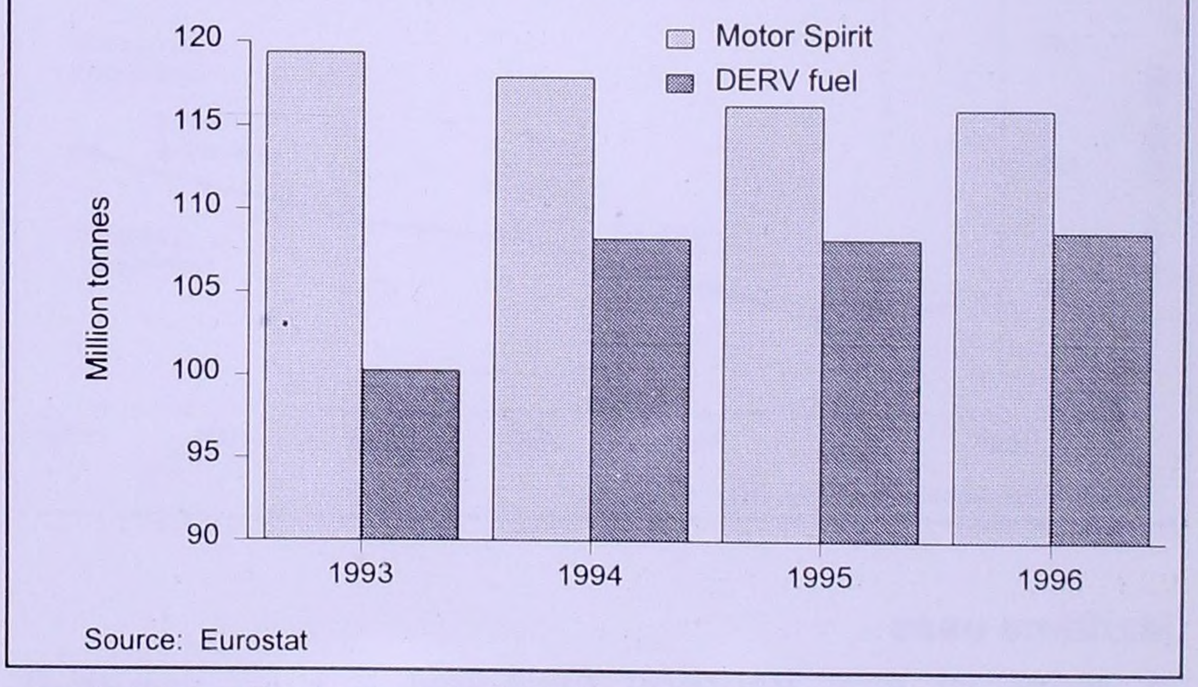


Source: DTI

International comparison

Trends in the deliveries of motor spirit within the rest of the European Community show that other European countries are also seeing a move towards lower consumption of motor spirit. Chart 10 shows the pattern of consumption of motor spirit and DERV fuel for the 15 EU countries for 1993 to 1996. These show the same pattern as seen in the UK of a slight decline in the consumption of motor spirit in recent years, along with the increase in DERV fuel consumption. It is noteworthy that five countries taken together, Germany, Italy, France, Spain and the UK, account for 80 per cent of motor spirit consumed in the EU in 1996, and 79 per cent of DERV fuel.

Chart 10: Total inland deliveries of motor spirit and DERV fuel in the EU, million tonnes

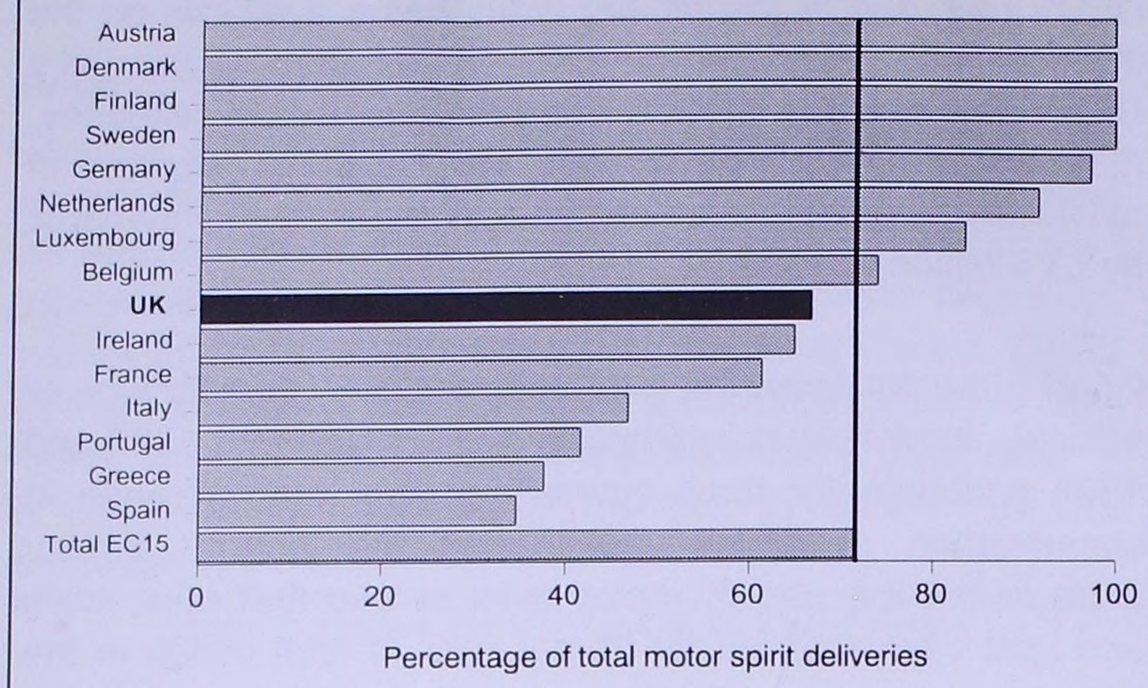


Source: Eurostat

As in the UK, there has also been a move towards the increased use of unleaded motor spirit in the EU. Chart 11 shows the proportion of total motor spirit sales in each member state accounted for by unleaded fuel in 1996. The

UK at 68 per cent is slightly below the overall EU average of 72 per cent.

Chart 11: Unleaded motor spirit deliveries as a percentage of total motor spirit deliveries in the EU



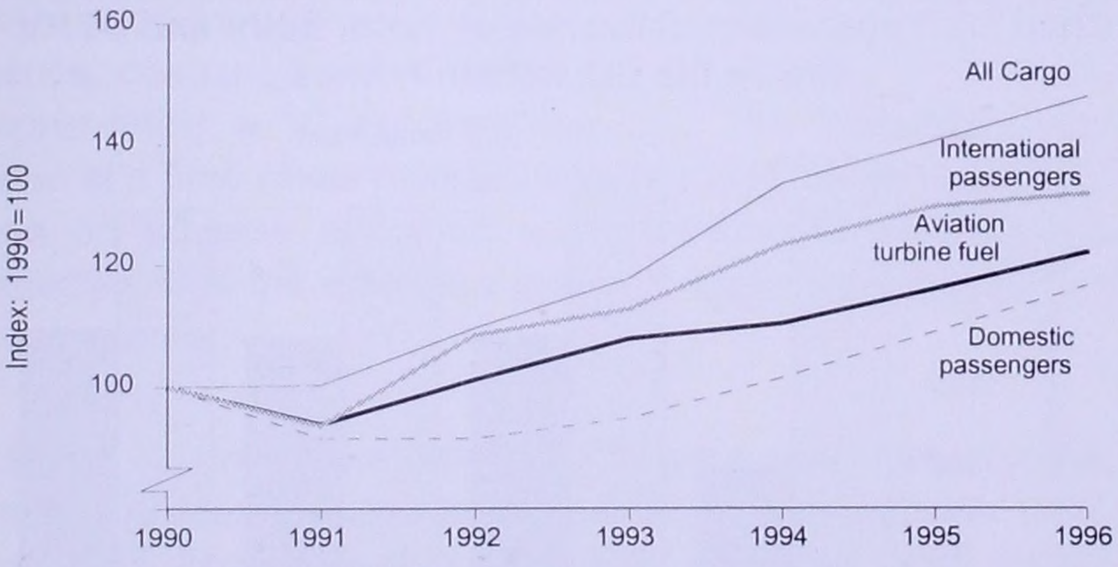
Source: Eurostat

It is only in the UK and France that hyper/supermarket retailers of fuels account for a significant proportion of the retail market. In the UK the proportion is around 22 per cent, while in France the proportion is more like 50 per cent. In many EU countries there is no strong move towards hypermarkets increasing their share of the retail market. This is in some cases due to tight planning controls over the development of out-of-town retail sites, where additional environmental controls can add to business costs. However, there are signs of increased interest in developing this type of retail outlets in Spain, Portugal and Ireland, and there are signs in Belgium that, after a decline from a 15 per cent market share in the 1980s, hypermarkets are starting to regain market share.

Air Transport

One of the major growth areas in the use of transport fuels has been in the aviation sector. There has been a significant increase in the past few decades in the numbers of passengers traveling by air and the amount of freight being moved. This trend has continued in the 1990s, with increases seen in terms of international usage and domestic usage. Chart 12 illustrates these changes.

Chart 12: Comparison of air passenger and cargo traffic and aviation turbine fuel deliveries in the UK

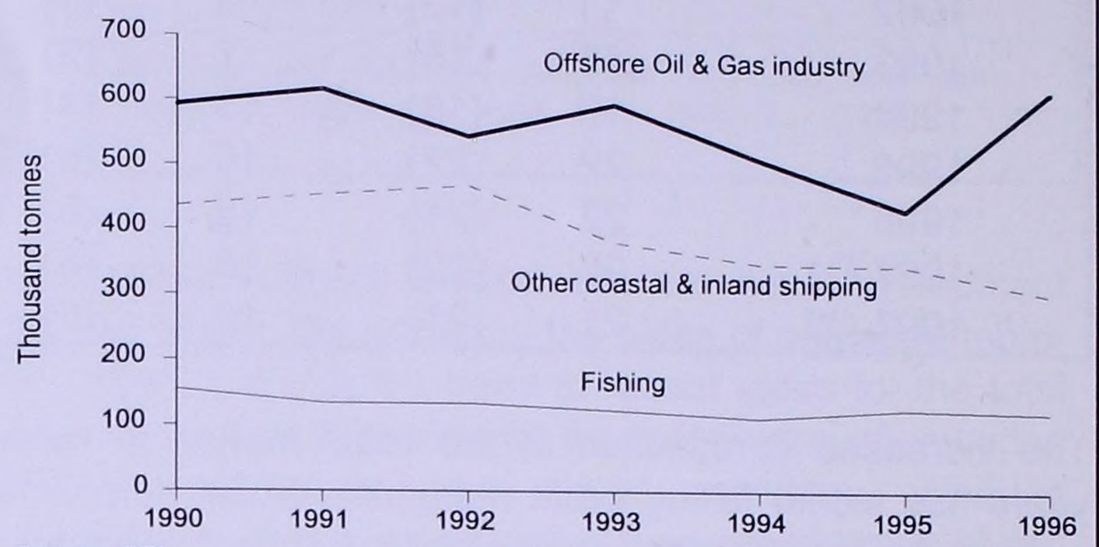


Source: Civil Aviation Authority, DTI

Maritime uses

In terms of total transport fuels use this represents a relatively small proportion, but it is still an important user of transport fuels, mainly gas/diesel fuel. There are two types of supply in the UK. Firstly, around 1.2 million tonnes of gas/diesel oil were supplied to marine bunkers in 1996. This is fuel destined for use in international transport, and thus not necessarily used by UK vessels. More accurate information is available on separate supplies for inland uses such as for fishing vessels, for vessels involved in oil exploration and production, and other coastal and inland vessels. Chart 13 shows the level of use of gas/diesel oil by these main sectors. Use by the fishing industry and other coastal vessels is relatively constant, with the main variable factor being the usage by the oil industry. The current high usage in 1996 reflects a period of increased exploration and development activity in the UK's oil and gas industry.

Chart 13: UK marine uses of gas/diesel oil as a transport fuel

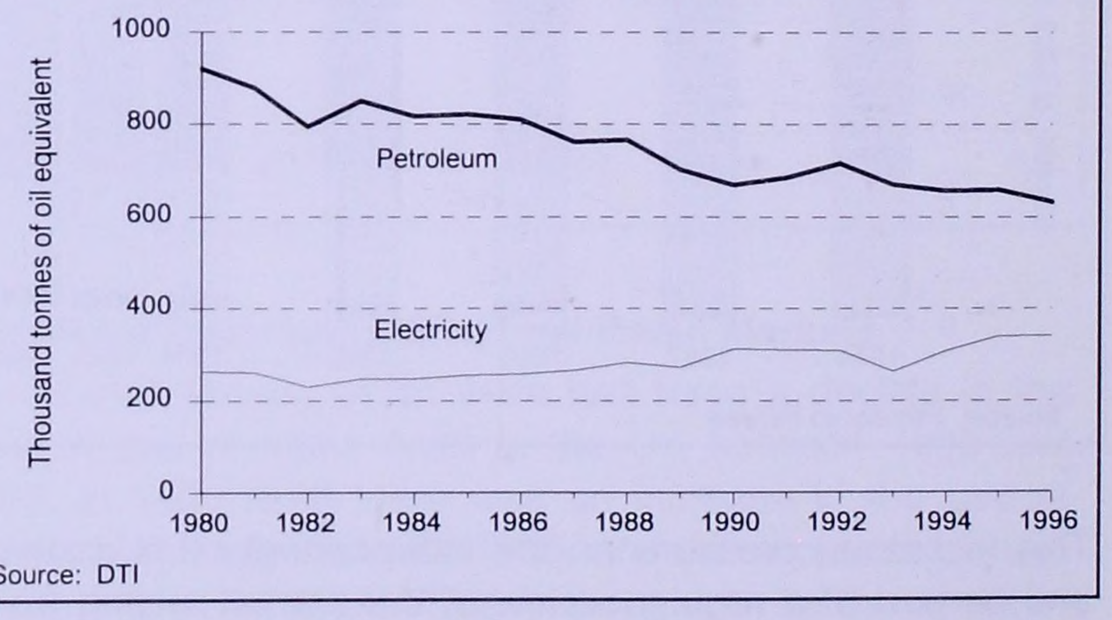


Source: DTI

Rail Transport

With the decline during the 1960s in the use of coal and other solid fuels in the rail industry, there are currently two main fuels used for rail transport: gas/diesel oil and electricity. Chart 14 shows the recent amounts of each fuel used by the rail industry in the UK, after conversion onto a similar basis. During the period there has been a steady decline in the use of gas/diesel oil by railways, with an increasing use of electricity. This is partly evidence of the effect of electrification programs on railways, but it is also a measure of the reduction in importance of the railway industry in the UK. In 1990, British Rail moved 138 million tonnes of freight, compared with 100 million tonnes in 1996. Total passenger journeys on British Rail summed to 33.2 billion kilometres in 1990, then fell to 28.7 billion in 1994, and have since recovered to 31.8 billion in 1996.

Chart 14: Electricity and petroleum products used in rail transport (tonnes of oil equivalent basis)



Source: DTI

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Top right: BP Exploration - Wytch Farm Project, Dorset Gathering centres at Wytch Heath.
Bottom left: Production platform in BP's Magnus oilfield north-east of Shetland.

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