

## A.1 Estimated average gross calorific values of fuels

	GJ per tonne		GJ per tonne
Coal:		Renewable sources:	
All consumers (weighted average) (1)	26.9	Domestic wood (2)	10.0
Power stations (1)	26.1	Industrial wood (3)	11.9
Coke ovens (1)	30.5	Straw	15.0
Low temperature carbonisation plants and manufactured fuel plants	31.0	Poultry litter	8.8
Collieries	30.1	Meat and bone	18.6
Agriculture	28.0	General industrial waste	16.0
Iron and steel	30.4	Hospital waste	14.0
Other industries (weighted average)	26.8	Municipal solid waste (4)	9.5
Non-ferrous metals	25.3	Refuse derived waste (4)	18.5
Food, beverages and tobacco	30.5	Short rotation coppice (5)	10.6
Chemicals	27.8	Tyres	32.0
Textiles, clothing, leather etc.	29.9	Petroleum:	
Pulp, paper, printing etc.	28.8	Crude oil (weighted average)	45.7
Mineral products	27.9	Petroleum products (weighted average)	45.9
Engineering (mechanical and electrical engineering and vehicles)	30.6	Ethane	50.7
Other industries	28.3	Butane and propane (LPG)	49.4
		Light distillate feedstock for gasworks	47.2
		Aviation spirit and wide cut gasoline	47.3
		Aviation turbine fuel	46.2
Domestic		Motor spirit	47.1
House coal	31.0	Burning oil	46.2
Anthracite and dry steam coal	33.8	Gas/diesel oil (DERV)	45.6
Other consumers	30.0	Fuel oil	43.6
Imported coal (weighted average)	27.6	Power station oil	43.6
Exports (weighted average)	31.6	Non-fuel products (notional value)	43.2
			MJ per cubic metre
Coke (including low temperature carbonisation cokes)	29.8	Natural gas (6)	39.6
Coke breeze	24.8	Coke oven gas	18.0
Other manufactured solid fuel	31.1	Blast furnace gas	3.0
		Landfill gas	38.6
		Sewage gas	38.6

(1) Applicable to UK consumption - based on calorific value for home produced coal plus imports and, for "All consumers" net of exports.

(2) Based on a 50 per cent moisture content.

(3) Average figure covering a range of possible feedstock.

(4) Average figure based on survey returns.

(5) On an "as received" basis. On a "dry" basis 18.6 GJ per tonne.

(6) The gross calorific value of natural gas can also be expressed as 10.992 kWh per cubic metre. This value represents the average calorific value seen for gas when extracted. At this point it contains not just methane, but also some other hydrocarbon gases (ethane, butane, propane). These gases are removed before the gas enters the National Transmission System for sale to final consumers. As such, this calorific value will differ from that readers will see quoted on their gas bills.

Note: The above estimated average gross calorific values apply only to the year 2003. For calorific values of fuels in earlier years see Table A.2 and previous issues of this Digest. See the notes in Chapter 1, paragraph 1.52 regarding net calorific values. The calorific values for coal other than imported coal are based on estimates provided by the main coal producers, but with some exceptions as noted on Table A.2. The calorific values for petroleum products have been calculated using the method described in Chapter 1, paragraph 1.27. The calorific values for coke oven gas and blast furnace gas are provided by the Iron and Steel Statistics Bureau (ISSB).

Data reported in this Digest in 'thousand tonnes of oil equivalent' have been prepared on the basis of 1 tonne of oil equivalent having an energy content of 41.868 gigajoules (GJ), (1 GJ = 9.478 therms) - see notes in Chapter 1, paragraphs 1.24 to 1.26.