



Department for Energy Security & Net Zero

Fuel Mix Disclosure Data Table

The information below constitutes the 'fuel mix disclosure data table' as defined in The Electricity (Fuel Mix Disclosure) Regulations 2005. The data are for the disclosure period 01/04/2021 – 31/03/2022.

See related documents for Electricity (Fuel Mix Disclosure) Regulations 2005 issued by the Department for Energy Security & Net Zero and, under 'External Links', guidance from Ofgem about Fuel Mix Disclosure(*).

1. Transmission and distribution loss factor 2021/22 (not to be applied to embedded generation)

1.1036

For 2022/23, as the timing of the current publication in August is after the REGO long stop date we are publishing an indicative estimate to aid with planning.

The **transmission and distribution loss factor for 2022/23** is estimated to be around **1.102**.

Since 2021/22, this estimated loss factor is calculated using a revised methodology to better reflect the changes in the electricity system since the original loss factor calculation was developed. The principal change is that the new calculation does not deduct renewables from the supply and consumption sides of the equation.

The transmission and distribution loss factor is calculated using the annual Department for Energy Security & Net Zero publication Digest of UK Energy Statistics (DUKES) tables 5.1 and 5.2, published at the end of July each year. The revised calculation is as follows:

$$\text{Loss factor} = [\text{Supply}] / [\text{Consumption}]$$

Where Supply is calculated using data from DUKES table 5.1 and 5.2 (public distribution system column) as follows:

$$\text{Supply} = \text{total supply (table 5.2)} - \text{transfers (table 5.2)} - \text{pumped storage (table 5.2)} - \text{electricity generation (table 5.2)}$$

Consumption is calculated using data from DUKES tables 5.1 and 5.2 (public distribution system column):

$$\text{Consumption} = \text{total consumption (table 5.2)} + \text{energy industry use (table 5.2)} - \text{pumped storage (table 5.2)} - \text{electricity generation (table 5.2)} - \text{transfers} * 95\% \text{ (to account for losses, table 5.2)}$$

2. Residual Fuel mix (relevant to Paragraph 10 of the Regulations)

Energy Source	%
Coal	9.0
Natural Gas	73.8
Nuclear	6.9
Renewables	2.7
Other Fuels	7.6

3. Environmental impact (relevant to Paragraph 11 of the Regulations)

Carbon Dioxide Emissions estimate for UK generation mix, by fuel⁽¹⁾	
Energy Source	g/kWh
Coal	1002
Natural Gas	372
Nuclear	0
Renewables	0
Other	795
Overall average	198

(1) Data relates only to generator emissions in the operational phase and does not include emissions related to the fuel supply chain or maintenance activities.

High-level radioactive waste

0.007 g/kWh

4. UK fuel mix in 2021/22 (for comparison)

Energy Source	%
Coal	3.8
Natural Gas	38.5
Nuclear	16.1
Renewables	38.7
Other	2.9

(2) The UK fuel mix here is on an electricity supplied basis, including an estimated allocation for imports using the European Attribute Mix. The period covered is April 2021 to March 2022.

() Note that under the new licences introduced on 1 August 2007, Fuel Mix Disclosure is supply licence condition 21 in place of licence condition 30A quoted in the Guidelines.*