

Fuel Mix Disclosure – proposed methodology change for residuals

Introduction

The Department for Business, Energy and Industrial Strategy (BEIS) publishes the annual ‘fuel mix disclosure data table’ as defined in The Electricity (Fuel Mix Disclosure) Regulations 2005. Electricity suppliers in Great Britain are required to use this table to calculate the fuel mix for the residual portion for which they do not hold generator declarations or Renewable Energy Guarantee of Origin (REGOs). The tables and methodology documents are available at:

www.gov.uk/government/collections/fuel-mix-disclosure-data-tables.

Key points

- The proposed method expands the survey pool from the six largest to the ten largest suppliers.
- Under the proposed method all renewable generation for which REGOs are held would be deducted to reduce double counting.
- Compared to the current method, the 2016/17 renewables percentage in the residual fuel mix would fall from 29.4 per cent to 18.0 per cent.

Issues

The current BEIS methodology calculates the residual mix from data supplied by the six largest electricity suppliers; however, the electricity market has changed since the methodology was developed and the portion of the market covered has decreased. In 2005 the suppliers surveyed supplied 92 per cent of UK electricity; this had fallen to 75 per cent in 2016 as smaller suppliers entered the market. The generation mix also shifted significantly with renewables’ share increasing from 4 per cent in 2005 to 25 per cent in 2016.

- 1) The fall in coverage of the survey makes the sample less representative, increasing the margin of error.
- 2) Under the current method renewable electricity supplied by companies other than the six largest can be double counted. For example, a small supplier may hold REGOs to cover half of its supply and be required to use the published residual mix for the remainder. As its REGOs are already included in the residual mix this portion would be double counted.

GB Fuel Mix Methodology – current method

- 1) Data requests are sent to the six largest electricity suppliers¹ requesting the following:

Supply for which REGOs or Generator Declarations held, by fuel (all MWh)	
Coal	
Natural Gas	
Nuclear	
Renewable	
Other	
Total for which REGOs or generator declarations are held	
Residual (supply for which REGOs or generator declarations are not held)	
Total supplied	
Total purchased for supply (inc. loss factor) (MWh) calculated by BEIS ²	

¹ npower, E.on, British Gas, EDF Energy, SSE and Scottish Power.

² Total purchased for supply (inc. loss factor) (MWh) is calculated for each major energy supplier and aggregated as a total for all major energy suppliers as follows:

*(Total non-renewable supplied for which REGOs or generator declaration held * loss factor) + Total supplied by renewables for which REGOs or generator declaration held*

- 2) The data returns are then aggregated to give the total amount of electricity supplied by fuel source for which REGOs or generator declarations are held.
- 3) The total UK fuel mix is calculated on a financial year basis using BEIS’s published statistics. Data for the UK are published in Table 5.1 of our quarterly publication, Energy Trends (the version used in the 2016/17 fuel mix was Energy Trends June 2017). The tables can be found here: www.gov.uk/government/statistics/electricity-section-5-energy-trends
- 4) The UK data are then converted to cover Great Britain only³.
- 5) Imported electricity is also allocated to a fuel type using fuel mix data for France, Netherlands and Ireland, sourced from Eurostat.
- 6) The data are expressed as a percentage of the total supply in Great Britain. Each percentage is multiplied by the ‘Total purchased for supply (incl. loss factor)’ to give the total electricity supplied for each fuel source. The difference between this and the actual figures reported by the major electricity suppliers gives the GB residual fuel mix, which is then expressed in percentage terms.

GB Fuel Mix Methodology – proposed changes

- 1) The ten largest suppliers will be surveyed, expanding the pool from the top six currently surveyed. This increases the coverage from 75 per cent to around 90 per cent of GB electricity supplied.
- 2) The electricity supply represented by all redeemed REGOs will be deducted from the renewables residual. This will reduce double counting of renewables.
- 3) Imports in the residual mix will be accounted for using EU Guarantees of Origin (GoOs) recognised by Ofgem, non-EU GoOs claimed by suppliers, and other generator declarations. The remainder will be ascribed in accordance with the European residual mix figures published by AIB⁴.
- 4) Exported REGOs will be accounted for in the residual calculation. Whilst current volumes are low, this will help future-proof the methodology.

Table 1: Residual fuel mix 2016/17 – current method vs proposed method

Energy source	Current method (%)	Proposed method (%)
Coal	13.5	14.7
Natural Gas	41.4	48.0
Nuclear	11.3	14.5
Renewables	29.4	18.0
Other Fuels	4.4	4.8

Source: BEIS

User feedback

We welcome all feedback from users on these proposals. If you have any comments or queries, please contact Stephen Ashcroft or Matt Laycock using the contact details below by 28th February 2018. We plan to update the methodology document at the end of March 2018 before the next residual mix is published in August 2018.

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³ The Northern Ireland Fuel Mix comes from monthly returns sent in by electricity companies based in Northern Ireland.

⁴ www.aib-net.org/facts/european_residual_mix