

Northern Powergrid
2016-17
Business Carbon Footprint

BCF Summary

Northern Powergrid total BCF (excluding contractors & losses) for the 2016/17 regulatory year was 23,286 tCO₂e, which was 3.5% lower than the target of 24,135 tCO₂e and 5.9% lower than the previous year out turn of 24,745 tCO₂e.

During the period we refurbished several of our depots and utilised low energy heating, lighting & air conditioning where practicable, reducing our building energy usage by 13%. Through enhanced work planning and the installation of vehicle telematics systems we have reduced our fleet fuel use by 7% and a corresponding reduction in business vehicle fuel use of 3%. We have also taken the opportunity to review travel requirements and have reduced our long haul air travel miles by 33% during the period.

Allocation and estimation methodologies

Data entry is in the form of base measurement and conversion factors. Such factors are the factors published by DEFRA in place on 31 March of the regulatory period being reported.

Where multiple conversion factors were required to calculate BCF within a particular category, e.g. due to use of both diesel and petrol vehicles, a weighted average of these factors has been entered.

BCF reporting boundary and apportionment factor

- All figures relate to the activities of the regulated business.
- Figures are attributed to each distribution business separately with the exception of corporate figures which are allocated on a 50:50 basis across each of the two distribution businesses.
- Business travel by bus, taxi and ferry have not been included as it believed not to be material.
- Refrigerant gas loss from air conditioning units has not been included. The amount is not believed to be material.
- Energy use at substations has been estimated.
- The company is audited on an annual basis to ensure compliance with the ISO 14064-1:2006 standard to which we are certified.

Commentary for each category of BCF

Building energy usage

- Data from electricity and gas bills relating to all the licensee's non-operational properties is collated by the facilities department. For non-half-hourly metered bills, the amount included is that billed in the quarter even if based on an estimated reading. A small number of buildings that are owned by a landlord are excluded. For gas the conversion factor for gross calorific value has been used.
- Own use at substations has been estimated for 2016/17. The figures have been built bottom up and estimated using typical values for a range of assets such as heating, lighting, battery chargers etc, rather than a direct or sample measurement.

Operational Transport

- The main source of fuel reported here is used by the company's fleet, and data is collected from company fuel card use. Figures are collated for petrol, diesel and LPG (when used).
- We also report volume of fuel stored onsite for use in forklifts and logistics HGV vehicles.
- Other usage of fuel includes that used by contractors for their fleet and generators. Data on contractors' usage is compiled from returns sent in response to a request. See comments under Contractors.

Business Transport

- Business transport - road
Data is collected from business miles claimed by staff monthly on their expense claim forms. The data is split between diesel and petrol according to the information provided on the claim forms. Corporate staff mileage is split 50:50 between licensees (to reflect the fact that such travel is undertaken on behalf of both licensees equally).
- Business transport – rail and air
Staff wishing to make a business journey by train or air must complete a "Request for Travel" form. Data from these forms is transferred to a spreadsheet where the mileage for each journey is calculated and then collated according to rail, domestic flights, short-haul international, and long-haul international. As mentioned above, figures relating to corporate staff are attributed 50:50 between licensees.

Fugitive Emissions

- These figures are the SF6 emissions from the network.

Fuel combustion

- This is the fuel used for generators by our contractors.

Losses

- This data stream uses the figures derived under the Balancing and Settlement Code arrangements and reported regularly to Ofgem.
- The volume of energy is converted in tonnes of carbon dioxide using the "Electricity – generation" (scope 2) factor provided by DEFRA.

Contractors

- Contractor figures are derived from actual returns provided by contractors utilised to undertake work on behalf of Northern Powergrid. No estimates have been made.

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Buildings energy usage

		Northeast	Yorkshire	Combined
Buildings - Electricity	tCO2e	1,297.89	1,484.83	2,782.73
Buildings - Other fuels	tCO2e	94.74	38.01	132.74
Substation Electricity	tCO2e	3,692.44	6,104.95	9,797.39
Total	tCO2e	5,085.07	7,627.79	12,712.86

Operational Transport (Own)

		Northeast	Yorkshire	Combined
Road	tCO2e	2,633.86	2,547.90	5,181.76
Rail	tCO2e	0	0	0
Sea	tCO2e	0	0	0
Air	tCO2e	0	0	0
Total	tCO2e	2,633.86	2,547.90	5,181.76

Operational Transport (Contractor)

		Northeast	Yorkshire	Combined
Road	tCO2e	20,041.48	11,939.52	31,981.00
Rail	tCO2e	0	0	0
Sea	tCO2e	0	0	0
Air	tCO2e	0	0	0
Total	tCO2e	20,041.48	11,939.52	31,981.00

Business Transport

		Northeast	Yorkshire	Combined
Road	tCO2e	1,278.35	1,322.18	2,600.53
Rail	tCO2e	18.54	21.11	39.64
Sea	tCO2e	0.00	0.00	0
Air	tCO2e	58.09	102.52	160.61
Total	tCO2e	1,354.97	1,445.81	2,800.78

Fugitive Emissions

		Northeast	Yorkshire	Combined
SF6	tCO2e	339.04	2,251.50	2,590.54
Gases Other	tCO2e	0	0	0
Total	tCO2e	339.04	2,251.50	2,590.54

Fuel Combustion

		Northeast	Yorkshire	Combined
Diesel	tCO2e	3,922.05	4,725.04	8,647.09
Gas Natural	tCO2e	0	0	0
Fuels Other	tCO2e	25.74	25.94	51.68
Total	tCO2e	3,947.80	4,750.98	8,698.78

Losses

		Northeast	Yorkshire	Combined
Losses	tCO2e	315,835.58	520,469.42	836,305.01

	Northeast	Yorkshire	Combined
Business Carbon Footprint	9,412.95	13,873.00	23,285.94
Business Carbon Footprint (Including Contractors)	33,402.22	30,563.50	63,965.72
Business Carbon Footprint (Including Contractors & Losses)	349,237.80	551,032.92	900,270.72