

Northern Powergrid
2015-16
Business Carbon Footprint

BCF Summary

Northern Powergrid total BCF (excluding contractors & losses) for the 2015/16 regulatory year was 24,746 tCO₂e, which was 6.5% lower than the target of 26,481 tCO₂e and 6.3% lower than the previous year out turn of 26,418 tCO₂e – however, it should be noted that this was reported for the calendar year and not regulatory year.

A good start to 2016 with regard to fugitive emissions combined with lower fleet mileage in the latter half of 2015 (due to enhancements to geographic working patterns) has contributed to the reduced carbon footprint. During the period we also refurbished several of our depots and utilised low energy heating, lighting & air conditioning where practicable, reducing our building energy usage.

Allocation and estimation methodologies

All 2015 figures (April to December 2015) were calculated using the DEFRA conversion factors issued in June 2015. All 2016 figures (January to March 2016) were calculated using the DEFRA conversion factors issued in June 2016. This aligns our figures with those we input into the CEMARS reporting system.

Where multiple conversion factors have been required, weighted averages of the factors have been applied.

Contractor figures are derived for 80% from actual 2015 returns (provided by the contractor – 33 contractor returns from 41) and the remainder (20%) are the figures provided in 2014 by those contractors for whom 2015 figures are not available yet.

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 business.
- 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. This tests the management, reporting and verification of our greenhouse gas inventory.

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.
- Own use at substations has been estimated for 2015/16. The figures have

been built bottom up from the various components (heating, lighting, etc.), although the contribution of each component is an engineering judgement rather than a direct or sample measurement.

Operational Transport

- This is all fuel used by the company's fleet and data is collected from company fuel card use.
- We also report volume of fuel stored onsite to fill the forklifts and logistics HGV vehicles.

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" factor provided by DEFRA.

Contractors

Contractor figures for Operational Transport are derived for 80% from actual 2015 returns (provided by the contractor - 33 contractor returns from 41) and the remainder (20%) are the figures provided in 2014 by those contractors for who 2015 figures are not available yet.

Building energy usage

Own use at substations has been estimated for 2015/16. The figures have been built bottom up from the various components (heating, lighting, etc.), although the contribution of each component is an engineering judgement rather than a direct or sample measurement.

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Buildings energy usage

		Northeast	Yorkshire	Combined
Buildings - Electricity	tCO2e	1,447.89	1,622.23	3,070.12
Buildings - Other fuels	tCO2e	97.45	43.21	140.66
Substation Electricity	tCO2e	4,007.02	6,625.06	10,632.08
Total	tCO2e	5,552.36	8,290.50	13,842.86

Operational Transport (Own)

		Northeast	Yorkshire	Combined
Road	tCO2e	2,809.93	2,601.87	5,411.80
Rail	tCO2e	0	0	0
Sea	tCO2e	0	0	0
Air	tCO2e	0	0	0
Total	tCO2e	2,809.93	2,601.87	5,411.80

Operational Transport (Contractor)

		Northeast	Yorkshire	Combined
Road	tCO2e	6,012.88	7,898.52	13,911.40
Rail	tCO2e	0	0	0
Sea	tCO2e	0	0	0
Air	tCO2e	0	0	0
Total	tCO2e	6,012.88	7,898.52	13,911.40

Business Transport

		Northeast	Yorkshire	Combined
Road	tCO2e	1,356.86	1,339.44	2,696.30
Rail	tCO2e	20.07	26.28	46.36
Sea	tCO2e	0	0	0
Air	tCO2e	128.77	151.99	280.76
Total	tCO2e	1,505.71	1,517.72	3,023.42

Fugitive Emissions

		Northeast	Yorkshire	Combined
SF6	tCO2e	541.50	1,926.37	2,467.87
Gases Other	tCO2e	0	0	0
Total	tCO2e	541.50	1,926.37	2,467.87

Fuel Combustion

		Northeast	Yorkshire	Combined
Diesel	tCO2e	4,465.43	5,269.97	9,735.40
Gas Natural	tCO2e	0	0	0
Fuels Other	tCO2e	0	0	0
Total	tCO2e	4,465.43	5,269.97	9,735.40

Losses

		Northeast	Yorkshire	Combined
Losses	tCO2e	351,117.93	569,413.14	920,531.07

	Northeast	Yorkshire	Combined
Business Carbon Footprint	10,409.50	14,336.46	24,745.96
Business Carbon Footprint (Including Contractors)	20,887.81	27,504.95	48,392.76
Business Carbon Footprint (Including Contractors & Losses)	372,005.74	596,918.09	968,923.83