

North Norfolk District Council

Carbon Footprint Report 2009-10

GHG emissions data for period 1 April 2009 to 31 March 2010	
	Global tonnes of CO₂e
Scope 1	983.4
Scope 2	1,536.8
Scope 3	1,262.6
Total gross emissions	3,782.8
Carbon Offsets	0.0
Green Tariff	0.0
Total annual net emissions	3,782.8

1. Company Information

North Norfolk District Council is a local authority based in the East of England.

2. Reporting period

The reporting period covered by this period was 1st April 2009 – 31st March 2010.

3. Changes in emissions

The figure of 3,783 Global tonnes of CO₂e is a 2.8% reduction on the previous year.

The following is an outline of sources of change in emissions from the previous year:

Main emission reductions

- 1) *Splash Leisure Centre*: An emission reduction was seen, partly because the CHP (Combined Heat & Power) unit was in full operation this year following technical problems the previous year, and partly following installation of 4 variable speed drives and other energy efficiency improvements.
- 2) *Victory Leisure Centre*: The reduction in emissions is likely due to installation of 2 variable speed drives.
- 3) *Fakenham Connect*: Reductions may be due to incorrect estimated meter readings last year.
- 4) *Business mileage*: This may have resulted from a reduction in incoming work for some departments e.g. reduced planning applications leading to fewer site visits, and/or natural reductions following recent attention to staff mileage claims.

- 5) *Head Office*: Emission reductions have resulted from energy efficiency improvements and the staff energy campaign.

Main emission increases

- 6) *Fakenham Leisure Centre*: Unknown small increase.
- 7) *Fleet & machinery*: Unknown small increase.
- 8) *Miscellaneous Electricity*: This increase most likely results from more complete data collection of the 'miscellaneous buildings' owned by the council (e.g. public toilets), rather than any increase in actual consumption.
- 9) *North Norfolk Information Centre*: This increase results from the NNIC having been open for a full year. Although there is a corresponding decrease from closure of the old Cromer TIC, the NNIC uses electricity for heating rather than gas, which has a higher emission factor.
- 10) *Refuse & Grounds Maintenance*: This increase is at least partly due to increased collection of data. This year's data includes services relating to car parks, which were not included in last year's data, thus resulting in an apparent increase in emissions.

4. Measuring and Reporting Approach

All information is stored and processed in Microsoft Excel spreadsheets. Reporting will be on an annual basis, using the DEFRA/DECC method (based on GHGProtocol) as specified herein. Internal reporting on carbon reduction targets will be using the NI 185 (Defra) method.

The following scopes are included in the footprint:

Scope 1

Process Emissions (owned buildings)

- Data obtained from utility bills (kWh)

Process Emissions (contractor-operated buildings)

- Data obtained from contractor's energy records (kWh)

Fuel use (owned vehicles)

- Data obtained from fuel invoices (litres)

Scope 2

Electricity emissions (own buildings)

- Data obtained from utility bills (kWh)

Electricity emissions (contractor-operated buildings)

- Data obtained from contractor's energy records (kWh)

Scope 3

Business Travel (grey fleet and contractor)

- Data taken from officer and member business mileage claim forms (km)
- Data taken from contractor business mileage records (km)

Public Transport

- Data taken from officer and member business mileage claim forms (km)
- Data for train journeys taken from rail account invoices (km)

Fuel use in contractor vehicles

- Data obtained from contractor fuel records (litres)

5. Organisational Boundary

The approach chosen to identify the operations we have collected data from was based on the original guidance for the National Indicator 185, which stated that:

“The indicator is to include all CO₂ emissions from the delivery of local authority functions. In terms of the meaning of the word in legislation "function" covers both the duties and powers of an authority. It covers all an authority's own operations and outsourced services. Even if the services are being provided by an external body (e.g. a private company) they remain the function of the authority... the definition of a local authority's function includes outsourced services (e.g. a private company, third sector organisation), as they remain a function of the authority. CO₂ emissions arising from the buildings and transported related to these outsourced services should be measured and included in the authorities return.”

Following an assessment of the main outsourced services associated with the Council's functions, Leisure Centres and Street Services (Waste Collection, Grounds Maintenance and Street Cleansing) were included. This is because these are the largest contracted services and are on long-term contracts with the council which allows for ease of data collection. No other contractors' emissions have been included in the organisation boundary.

5. Operational Scopes

Scope 1 - Direct Emissions (e.g. onsite fuel consumption; gas/vehicles)	CO ₂	CH ₄	N ₂ O	Total Direct GHG	Total Indirect GHG	Grand Total GHG
	Gas from buildings - kWh	931006.3	1359.9	554.0	932920.2	90607.5
Fuel in fleet vehicles - litres diesel	49594.9	28.2	548.3	50171.3	9514.2	59685.5
Fuel in fleet vehicles - litres petrol	302.2	0.6	2.0	304.9	54.0	358.8
TOTAL SCOPE 1	980903.4	1388.6	1104.3	983396.4	100175.6	1083572.0
Scope 2 - Energy Indirect	CO ₂	CH ₄	N ₂ O	Total Direct GHG	Total Indirect GHG	Grand Total GHG
Electricity in buildings - kWh	1526604.7	676.5	9499.0	1536808.3	202523.2	1739331.5
TOTAL SCOPE 2	1526604.7	676.5	9499.0	1536808.3	202523.2	1739331.5
Scope 3 - Other indirect (e.g. business travel)	CO ₂	CH ₄	N ₂ O	Total Direct GHG	Total Indirect GHG	Grand Total GHG
Business Travel - Small Petrol Car	18778.1	19.5	104.2	18901.9	3352.4	22254.3
Business Travel - Medium Petrol Car	42655.6	35.7	190.6	42881.9	7615.5	50497.5
Business Travel - Large Petrol Car	9140.4	5.5	29.3	9175.2	1631.9	10807.1
Business Travel - Small Diesel Car	8625.4	3.0	98.6	8727.0	1654.6	10381.6
Business Travel - Medium Diesel Car	27231.9	7.5	249.8	27489.2	5224.6	32713.8
Business Travel - Large Diesel Car	16532.2	3.4	111.8	16647.4	3171.6	19819.0
Business travel - Average Car (Unknown Fuel)	0.0	0.0	0.0	0.0	0.0	0.0
Rail - national rail	4245.9	4.8	242.5	4493.2	683.0	5176.2
Rail - underground	42.1	0.0	0.2	42.4	5.7	48.0
Bus	109.8	0.1	0.9	110.8	21.1	131.9
Air - domestic	0.0	0.0	0.0	0.0	0.0	0.0
Air - short haul international	59.9	0.0	0.6	60.5	11.1	71.6
Taxi (Medium diesel car, from 1.7 to 2.0 litre)	162.1	0.0	1.3	163.4	18.8	182.2
Fuel in refuse collection vehicles - litres diesel	1120896.1	636.6	12391.7	1133924.4	215029.7	1348954.1
TOTAL SCOPE 3	1248479.6	716.2	13421.5	1262617.3	238420.1	1501037.4
TOTAL GHG EMISSIONS (kg) =				3782822.0		

5.1 Exclusions

There is one specific exclusion from Scope 1. Emissions from air conditioning and refrigeration units have been excluded, due to difficulty of data collection.

There are no specific exclusions from Scope 2.

'Total Indirect GHGs' from Scopes 1, 2 and 3 as shown in column 6 of the above table have not been included in the total figure, because these are discretionary and do not result directly from the Council's operations.

5.2 Calculation Method & Assumptions Made

- All calculations are carried out using the 'Defra/DECC Conversion Factors for Company Reporting' spreadsheet.
- Public transport journeys are based on journey distances from www.transportdirect.info.
- For journeys with underground travel, all journeys are given a value of 8km, as an average distance for a tube journey.
- For rail journeys with no destination available, average journey length is estimated based on distance of known rail journeys for which a claim has been made.
- Taxi journeys within London are given a distance of 4 miles (8 Miles return).
- Travel by contractors is measured from fuel use/mileage data only, and includes no data for business travel or public transport.
- Miles are converted into kilometres by multiplying by 1.61
- Business mileage claims are split into 6 standard categories (Small Petrol Car, Medium Petrol Car, Large Petrol Car, Small Diesel Car, Medium Diesel Car, Large Diesel Car) based on information provided with staff travel claims, and emissions calculated based on standard factors for each.
- For business mileage where the car category is not known, an Average Car (unknown fuel) category is used.
- Some bills are missing from financial records. For quarterly bills we have taken one bill reading from the first quarter and multiplied by 4 to estimate an annual reading. For monthly bills the same is done but multiplied by 12 instead of 4. Where more than one bill is available, an annual figure has been found by taking the average of readings for all months for which there is data, and using this as an indicative figure for the months where data is missing.
- In order to simplify data collection and analysis, some stationary emissions sources are grouped. A 'miscellaneous electricity' spreadsheet is maintained which includes small sites such as street lighting, public conveniences, and other small buildings and facilities owned powering and lighting of public areas and facilities owned by NNDC. Some of these sites are unmetered, and in these cases an estimate of kWh consumption is made by dividing the amount charged by an average cost per kWh (9p/kWh).

- Billing periods for some bills are not for calendar months, and for these the closest billing dates to the reporting period are chosen.
- Some utility bills are estimated by the utility company. In this case the estimated figure is considered to be accurate as long as no other reliable data is available.
- No weather correction has been factored into Gas consumption data.

6. Geographical breakdown

NNDC has no operations outside of the UK, and thus a geographical breakdown is not provided.

7. Base Year

The base year for emissions is 1st April 2008 – 31st March 2009. No base year recalculation policy has been considered to date, as the Council's functions are likely to remain constant. A recalculation of the base year may be carried out if any major change in service provision takes place.

8. Target

The target for reduction is an overall (i.e. all scopes) reduction in CO₂ emissions of 33% by 2014, from a 2008/9 baseline. This target will be measured using the emissions factors required for reporting on National Indicator 185, and equates to a total reduction of 1,267 tonnes of CO₂.

9. Intensity Measurement

No intensity measurement has been used, as this is generally more relevant for private sector business who wish to compare CO₂/turnover.

10. External Assurance Statement

No external assurance has been carried out. However the original NI 185 data set was audited in March 2010. No external assurance statement is provided.

11. Carbon Offsetting

No carbon offsetting was carried out by NNDC.

12. Green Tariffs

No reduction in CO₂ from Green Tariffs is sought.

13. Electricity Generation

There was no electricity generation from owned or controlled sources.

14. Heat Generation

There was no heat generation from owned or controlled sources.