

## North Norfolk District Council

### Carbon Footprint Report 2010-11

GHG emissions data for period 1 April 2010 to 31 March 2011	
	<i>Global tonnes of CO<sub>2</sub>e</i>
Scope 1	1,005.7
Scope 2	1,565.9
Scope 3	1,209.1
Total gross emissions	3,780.8
Carbon Offsets	0.0
Green Tariff	0.0
Total annual net emissions	3,780.8

#### **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 2010 – 31st March 2011.

#### **3. Changes in emissions**

The figure of 3,780 Global tonnes of CO<sub>2</sub>e is a 0.1% 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. This may have been due to installation of a number of carbon emission reducing measures such as variable speed drives, voltage optimisation and other energy efficiency improvements. This was despite an increase in use of the leisure centres.
- 2) *Fakenham Leisure Centre*: As above
- 3) *Head Office*: Emission reductions have resulted from energy efficiency improvements and the staff energy campaign.
- 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 potential reduction in miles driven due to reductions in workforce.

#### **Main emission increases**

- 1) *Fakenham Connect*: Due to an electricity meter having not been read for a significant period of time, billing for consumption from previous years led to a massive increase in carbon emissions for this site, adding roughly 3% to the total NNDC carbon footprint.
- 2) *Victory Leisure Centre*: Increase in emissions for unknown reasons, potentially due to increased use of the leisure centre.
- 3) *Gas – all sites*: A relatively cold year (2418 Degree Days in 2010-11 compared to 2261 in 2009-10) is likely to have led to an increase in gas consumption at most sites.

#### **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 CO<sub>2</sub> 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. CO<sub>2</sub> 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

<b>Scope 1 - Direct Emissions (e.g. onsite fuel consumption; gas/vehicles)</b>	<b>CO<sub>2</sub></b>	<b>CH<sub>4</sub></b>	<b>N<sub>2</sub>O</b>	<b>Total Direct GHG</b>	<b>Total Indirect GHG</b>	<b>Grand Total GHG</b>
Gas from buildings - kWh	951682.3	1390.1	566.3	953638.7	92619.8	1046258.5
Fuel in fleet vehicles - litres diesel	51044.3	29.0	564.3	51637.5	9792.2	61429.7
Fuel in fleet vehicles - litres petrol	425.8	0.9	2.9	429.5	76.0	505.6
<b>TOTAL SCOPE 1</b>	<b>1003152.4</b>	<b>1419.9</b>	<b>1133.5</b>	<b>1005705.8</b>	<b>102488.0</b>	<b>1108193.8</b>
<b>Scope 2 - Energy Indirect</b>	<b>CO<sub>2</sub></b>	<b>CH<sub>4</sub></b>	<b>N<sub>2</sub>O</b>	<b>Total Direct GHG</b>	<b>Total Indirect GHG</b>	<b>Grand Total GHG</b>
Electricity in buildings - kWh	1555569.7	689.3	9679.2	1565966.9	206365.7	1772332.7
<b>TOTAL SCOPE 2</b>	<b>1555569.7</b>	<b>689.3</b>	<b>9679.2</b>	<b>1565966.9</b>	<b>206365.7</b>	<b>1772332.7</b>
<b>Scope 3 - Other indirect (e.g. business travel)</b>	<b>CO<sub>2</sub></b>	<b>CH<sub>4</sub></b>	<b>N<sub>2</sub>O</b>	<b>Total Direct GHG</b>	<b>Total Indirect GHG</b>	<b>Grand Total GHG</b>
Business Travel - Small Petrol Car	16364.2	17.0	90.8	16472.0	2921.5	19393.5
Business Travel - Medium Petrol Car	34563.9	29.0	154.4	34747.3	6170.9	40918.1
Business Travel - Large Petrol Car	6013.5	3.6	19.3	6036.4	1073.7	7110.1
Business Travel - Small Diesel Car	9956.3	3.4	113.8	10073.5	1909.9	11983.4
Business Travel - Medium Diesel Car	15418.2	4.3	141.4	15563.9	2958.1	18521.9
Business Travel - Large Diesel Car	13995.6	2.9	94.6	14093.1	2685.0	16778.1
Business travel - Average Car (Unknown Fuel)	1738.4	1.2	10.2	1749.7	315.4	2065.1
Rail - national rail	5054.8	5.7	288.7	5349.2	813.1	6162.3
Rail - underground	40.3	0.0	0.2	40.6	5.4	46.0
Bus	45.3	0.1	0.4	45.7	8.7	54.4
Air - domestic	0.0	0.0	0.0	0.0	0.0	0.0
Air - short haul international	0.0	0.0	0.0	0.0	0.0	0.0
Taxi (Medium diesel car, from 1.7 to 2.0 litre)	182.9	0.0	1.4	184.4	21.2	205.6
Fuel in refuse collection vehicles - litres diesel	1092027.9	620.2	12072.5	1104720.6	209491.7	1314212.4
<b>TOTAL SCOPE 3</b>	<b>1195401.3</b>	<b>687.3</b>	<b>12987.9</b>	<b>1209076.4</b>	<b>228374.5</b>	<b>1437451.0</b>

**TOTAL GHG EMISSIONS (kg) = 3780749.2**

## **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 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](http://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 CO<sub>2</sub> emissions of 33% by 2014, from a 2008/9 baseline, as set out in the NNDC Carbon Management Plan. 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 CO<sub>2</sub>.

## **9. Intensity Measurement**

No intensity measurement has been used, as this is generally more relevant for private sector business who wish to compare CO<sub>2</sub>/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 CO<sub>2</sub> 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.