

|                  |   |             |
|------------------|---|-------------|
| <b>Report to</b> | Sustainable development panel                         | <b>Item</b> |
|                  | 24 September 2014                                     |             |
| <b>Report of</b> | Executive head of strategy, people and neighbourhoods | <b>7</b>    |
| <b>Subject</b>   | Carbon Footprint report                               |             |

---

## **Purpose**

This report is for information.

## **Recommendation**

That the contents of the report are noted.

## **Corporate and service priorities**

The report helps to meet the corporate priority Value for money services and the service plan priority percentage reduction in CO2 emissions from local authority operations.

## **Financial implications**

None.

Ward/s: All wards

Cabinet member: Councillor Stonard – Environment and transport

## **Contact officers**

|   |               |
|---|---------------|
| Russell O'Keefe, Executive Head – People, Strategy, Democracy | 01603 212 908 |
|---|---------------|

|   |               |
|---|---------------|
| Richard Willson, Environmental Strategy Manager | 01603 212 312 |
|---|---------------|

|  |               |
|--|---------------|
| Claire Tullett, Environmental Strategy Officer | 01603 212 545 |
|--|---------------|

## **Background documents**

Department of Energy and Climate Change (DECC) annual carbon footprint report.

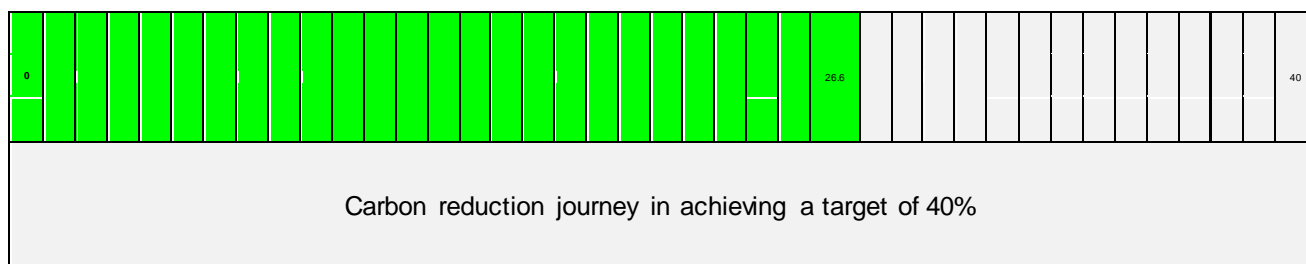
# Report

## Summary

1. In 2008/09 the council produced its first Carbon Management Plan and set a target to achieve a 30% reduction in carbon emissions by 2013/14 (using a 2006/07 baseline). In total over the 5 year period a reduction of 24% (29% when weather corrected) was achieved using previous conversion factors. Following the production of the council's second Carbon Management Plan this target has been re-set to achieve a total reduction of 40% in carbon emissions over the next 5 years (from the 2006/07 baseline).
2. The council's carbon reduction figures have been impacted by the re-baselining of our electricity data in line with the requirement of the Department for Environment, Food and Rural Affairs (Defra)/ Department of Energy and Climate Change (DECC) 2013 conversion factor. In accordance with the advice issued "*Our carbon footprint has been restated for all years in order to account for material changes to the conversion factors provided by Defra for company reporting purposes*". The restated data is given below. Further information is available here: <http://www.ukconversionfactorscarbonsmart.co.uk/> then follow the link to 'What's new in 2013'.
3. This report has been compiled in accordance with the guidelines set by the DECC. The requirements are that the council publish this report on its website using the standard template, dividing emissions into 3 categories. DECC have also requested that a link of this report be sent to them containing totals for all the scope 1, 2 and 3 emissions enabling them to collate all LA figures centrally.

4.

| GHG emission data for period 1 April 2013 to 31 March 2014 (restated) |           |           |           |           |            |            |            |
|---|-----------|-----------|-----------|-----------|------------|------------|------------|
| Global kg of CO <sub>2</sub> e  |           |           |           |           |            |            |            |
|   | 2013      | 2012      | 2011      | 2010      | 2009       | 2008       | 2007       |
| Scope 1   | 3,121,775 | 3,446,651 | 3,136,959 | 3,549,707 | 3,745,825  | 3,873,933  | 1,682,048  |
| Scope 2   | 3,478,538 | 3,644,381 | 3,774,122 | 3,972,326 | 4,311,715  | 4,691,648  | 6,603,828  |
| Scope 3   | 1,480,944 | 1,449,823 | 1,800,339 | 1,821,824 | 2,173,565  | 2,167,385  | 2,355,434  |
| Total gross emission  | 8,081,257 | 8,540,855 | 8,711,420 | 9,343,857 | 10,231,105 | 10,732,966 | 10,641,310 |
| Carbon offsets  | n/a       | n/a       | n/a       | n/a       | n/a        | n/a        | n/a        |
| Green tariff  | n/a       | n/a       | n/a       | n/a       | n/a        | n/a        | n/a        |
| Total annual net emissions  | 8,081,257 | 8,540,855 | 8,711,420 | 9,343,857 | 10,231,105 | 10,732,966 | 10,641,310 |



5. Using the re-baselined electricity data, a further 5.4% reduction in 2013/14 means that our progress in achieving our next carbon emissions reduction target stands at 26.6%.

## Company information

6. Norwich City Council is a local authority based in the east of England.

## **Reporting period**

7. The reporting period is 1 April 2013 to 31 March 2014.

## **Changes in emissions**

8. The figure of 8,081,257 Global kg of CO<sub>2</sub>e is a 5.4% reduction on the previous year. The following is an outline of sources of change in emissions from the previous year:

Main emission reductions:

- Server Virtualisation
- Energy efficient air conditioning in the server room
- More energy efficient IT equipment for all staff
- A mild winter in 2013/14 meant that less gas was required for heating assets

Main emission increases:

- More rigorous reporting of contractor fuel use has resulted in an increase over previous years

## **Measuring and reporting approach**

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

10. 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)

### **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)

## Organisational boundary

11. 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. 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 (eg 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.”

12. Following an assessment of the main outsourced services associated with the Council’s functions, leisure centres and street services and housing support services were included.

## Operational scopes and emissions

13.

| <b>Scope 1 - Direct emissions (e.g. onsite fuel consumption; gas/vehicles)</b> | <b>CO<sub>2</sub> (kg)</b> | <b>Exclusions and %</b> |
|--|----------------------------|-------------------------|
| Gas from buildings (council) – kwh   | 3,002,618                  | n/a                     |
| Gas from buildings (contractors) – kwh   | 31,779                     | n/a                     |
| Fuel in fleet vehicles (council) - litres diesel                               | 44,071                     | n/a                     |
| Fuel in fleet vehicles (council) – litres petrol                               | 43,307                     |                         |
| <b>TOTAL SCOPE 1</b>   | <b>3,121,775</b>           | n/a                     |
| <b>Scope 2 - Energy Indirect</b>   | <b>CO<sub>2</sub> (kg)</b> | <b>Exclusions and %</b> |
| Electricity in buildings (council) – kWh                                       | 3,317,250                  | n/a                     |
| Electricity in buildings (contractor) – kwh                                    | 161,287                    | n/a                     |
| <b>TOTAL SCOPE 2</b>   | <b>3,478,537</b>           | n/a                     |
| <b>Scope 3 - Other indirect (e.g. business travel)</b>                         | <b>CO<sub>2</sub> (kg)</b> | <b>Exclusions and %</b> |
| Grey fleet eg private cars   | 18,007                     | n/a                     |
| Taxis  | 2,073                      | n/a                     |
| Flights  | 9,399                      | n/a                     |
| Trains   | 465                        | n/a                     |
| Contractors vehicle use  | 1,451,000                  | n/a                     |
| <b>TOTAL SCOPE 3</b>   | <b>1,480,944</b>           | n/a                     |
| <b>Grand total (CO<sub>2</sub> (kg))</b>                                       |                            |                         |
|  | <b>8,081,257</b>           |                         |

## Geographical breakdown

14. All operations occur within the city council boundary except for contractor/staff transport related activities

## **Base year**

15. The base year for emissions is January to December 2007. This year's carbon emissions report concludes a 5 year carbon management programme.

## **Target**

16. The target for reduction in overall (i.e. all scopes) CO<sub>2</sub> emissions has been re-set to 40%, from a 2006/07 baseline following the completion of the first phase of the council's carbon management plan. This target exceeds the national target of a 34% reduction in carbon emissions by 2020.
17. This target will be measured using the emissions factors required for reporting on the old National Indicator 185.

## **Intensity measurement**

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

## **External assurance statement**

19. PWC audit carried out in 2009. The process was considered to be sound.

## **Carbon offsetting**

20. No carbon offsetting was carried out.

## **Green tariffs**

21. Norwich City Council has signed up to a Green tariff through electricity supplier, Scottish and Southern Electricity. However, no reduction in CO<sub>2</sub> is applicable as the SSE tariff does not comply with strict Ofgem Green Supply Guidelines which would enable the council to claim the CO<sub>2</sub> reduction.

## **Electricity generation**

22. Solar Photo Voltaic (pv) cells were installed on the roof of City Hall in late March 2012. During the period 1 April 2012 to 31 March 2014 the pv cells have produced 57938 kwh of electricity, despite having been offline for part of this time due to essential maintenance work being carried out on the roof.

## **Heat generation**

23. There was no heat generation from owned or controlled sources.

## **Opportunities in 2014-15**

24. The council has recently produced the second phase of its Carbon Management Plan. The plan details opportunities across our assets and services where we can further reduce energy consumption. Given the new Defra/ DECC methodology we will be further reviewing the Carbon Management Plan targets.

25. On completion of this report 26.6% of the 40% target has been achieved so far. It is expected that emissions will reduce even further in 2015-16 with the recent installation and commissioning of the following Salix loan funded projects within the council's assets:

- Completion of the Server Virtualisation project.
- Completion of the City Hall – Server room cooling project.
- Riverside Leisure Centre – replacement of poolside light fittings with LED fittings
- Refurbishment of community hall – Norman Centre – using more efficient heating and LED
- Car park lighting upgrades to LED lighting
- Insulation work at Sheltered Housing schemes
- Trial of Burner Management systems – various assets
- Trial of variable-speed drives – various assets