

Report to Sustainable development panel
23 September 2015
Report of Executive head of regeneration and development
Subject Carbon Footprint report

Item

5

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 Bremner – Environmental strategy

Contact officers

Dave Moorcroft, Executive Head – Regeneration and Development 01603 212226

Richard Willson, Environmental Strategy Manager 01603 212312

Claire Tullett, Environmental Strategy Officer 01603 212545

Background documents

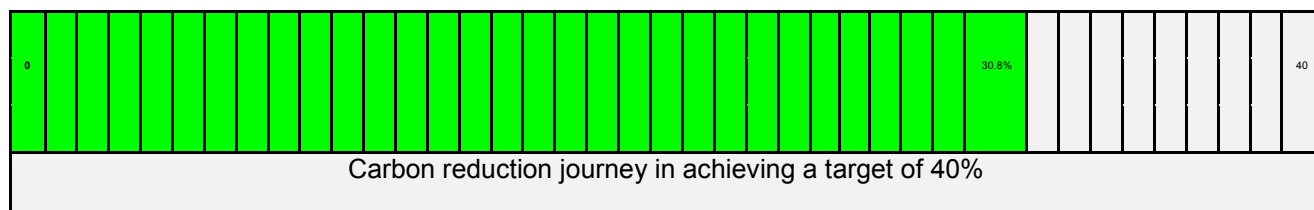
None

Report

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. In 2013/14 the council's carbon reduction figures were negatively 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. However, this year, using the 2014 DEFRA conversion factors, Norwich City Council has made an additional 4.2% reduction in its carbon emissions taking the total reduction to 30.8% saving against its ambitious target of 40% by 2019.
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 ² e							
	2014	2013	2012	2011	2010	2009	2008	2007
Scope 1	2,640,453	3,121,775	3,446,651	3,136,959	3,549,707	3,745,825	3,873,933	1,682,048
Scope 2	3,836,556	3,478,538	3,644,381	3,774,122	3,972,326	4,311,715	4,691,648	6,603,828
Scope 3	1,261,406	1,480,944	1,449,823	1,800,339	1,821,824	2,173,565	2,167,385	2,355,434
Total gross emission	7,738,416	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	n/a
Green tariff	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total annual net emission	7,738,416	8,081,257	8,540,855	8,711,420	9,343,857	10,231,105	10,732,966	10,641,310



Company information

5. Norwich city council is a local authority based in the east of England.

Reporting period

6. The reporting period is 1 April 2014 to 31 March 2015.

Change in emissions

7. The figure of 7,738,416 Global kg of CO₂e is a 4.2% reduction on the previous year.
The following is an outline of sources of change in emissions from the previous year:

Main emission reductions:

- Lower emissions from sheltered housing assets through additional insulation, boiler upgrades and building rationalisation
- Reduction in pool car use by staff
- A mild winter in 2014/15 meant that less gas was required for heating assets

Main emission increases:

- Increase in contractor electricity use
- Increase in contractor diesel use
- Impact of the 11% increase in the UK electricity GHG conversion factor this year

Measuring and reporting approach

8. 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.

9. 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

10. 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. 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. CO₂ emissions arising from the buildings and transported related to these outsourced services should be measured and included in the authorities return.”

11. 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

12.

Scope 1 - Direct emissions (e.g. onsite fuel consumption; gas/vehicles)	CO₂ (kg)	Exclusions and %
Gas from buildings (council) – kwh	2,605,114	n/a
Gas from buildings (contractors) – kwh	30,506	n/a
Fuel in fleet vehicles (council) - litres diesel	2,330	n/a
Fuel in fleet vehicles (council) – litres petrol	2,503	
TOTAL SCOPE 1	2,640,453	n/a
Scope 2 - Energy Indirect	CO₂ (kg)	Exclusions and %
Electricity in buildings (council) – kWh	3,617,165	n/a
Electricity in buildings (contractor) – kwh	219,391	n/a
TOTAL SCOPE 2	3,836,556	n/a
Scope 3 - Other indirect (e.g. business travel)	CO₂ (kg)	Exclusions and %
Grey fleet eg private cars	18,402	n/a
Taxis	2,114	n/a
Flights	2,272	n/a
Trains	1,972	n/a
Contractors vehicle use	1,236,646	n/a
TOTAL SCOPE 3	1,261,406	n/a
Grand total (CO₂ (kg))		
	7,738,415	

Geographical breakdown

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

Base year

14. The base year for emissions is January to December 2007.

Target

15. The target for reduction in overall (i.e. all scopes) CO₂ emissions has been re-set to 40%, from a 2007 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.

16. This target will be measured using the emissions factors required for reporting on the old National Indicator 185.

Intensity measurement

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

External assurance statement

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

Carbon offsetting

19. No carbon offsetting was carried out.

Green tariffs

20. Norwich City Council has signed up to a Green tariff through electricity supplier, Scottish and Southern Electricity. However, no reduction in CO₂ is applicable as the SSE tariff does not comply with strict Ofgem Green Supply Guidelines which would enable the council to claim the CO₂ reduction.

Electricity generation

21. Solar Photo Voltaic (pv) cells were installed on the roof of City Hall in late March 2012. During the period 1 April 2014 to 31 March 2015 the pv cells have produced 19,365 kwh of electricity, this is lower than hoped due to continuing essential maintenance work being carried out on the roof. However, this work is now complete and the installation is fully operation.

Heat generation

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

Opportunities in 2015-16

23. In 2014 the council 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. In addition to this we have recently published the 2015-2020 Environmental Strategy which further details our ambitious plans to reduce the both the council's and the city's energy consumption and carbon emissions over this period. A copy of this strategy can be found at www.norwich.gov.uk

24. On completion of this report 30.8% of the 40% target has been achieved. 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:

- Variable Speed Drives at Riverside Leisure Centre
- Riverside Leisure Centre – replacement of poolside light fittings with LED fittings
- Car park lighting upgrades to LED lighting
- Further insulation work at Sheltered Housing schemes
- Trial of Burner Management systems – various assets

25. In addition to this the council has created a ring-fenced Eco-Investment fund for carbon reduction projects which fall outside of the scope of Salix funding.

Source/reference

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