

Report to Sustainable development panel
26 September 2012
Report of Executive head of strategy, people and democracy
Subject Carbon management programme update

Item

8

Purpose

To provide an update on the progress with the council's carbon management programme.

Recommendation

To consider the report.

Corporate and service priorities

The report helps to meet the corporate priority "Value for money services" and the service plan priority "% reduction in CO₂ emissions from LA operations".

Financial implications

The Carbon Management Programme has delivered a 20.14% reduction in carbon emissions which equates to a saving in our utility and transport fuel costs. This figure is estimated to be approximately an £500, 000 saving over the 4 years of the programme.

Ward/s: All wards

Cabinet member: Councillor Bremner – Environment and development

Contact officers

Russell O'Keefe – Executive Head of Strategy, people & democracy 01603 212908

Richard Willson – Environmental strategy manager 01603 212312

Background documents

Norwich City Council Carbon Footprint Report 2012.

<http://www.norwich.gov.uk/Environment/EcolIssues/documents/Carbonfootprintreport2012.pdf>

Norwich City Council Environmental Strategy 2011-2014

<http://www.norwich.gov.uk/Environment/Ecolssues/Documents/EnvironmentalStrategy.pdf>

SD Paper. Update Carbon Management Programme. 28th March 2012

<http://www.norwich.gov.uk/CommitteeMeetings/Sustainable%20development%20panel/Document%20Library/10/REPSustainableDP08UpdateOnCarbonManagementAndEnvironmentStrategy20120328.pdf>

Report

1. The forth baseline of the authorities energy consumption has been completed as required by the *Environmental Strategy 2011-2014* and via the previous national indicator NI185 (CO₂ for LA activities). The return requires that the environmental strategy team records electricity, gas and transport data (including contractors) enabling the council to measure carbon performance.
2. The data confirms a 3.7% reduction in overall carbon emissions from Norwich City council which equates to a 355.55 tone reduction in carbon emissions for the year 11/12. This means that the council has achieved an overall reduction of 20.14% in carbon emissions in the four years of the carbon management programme.

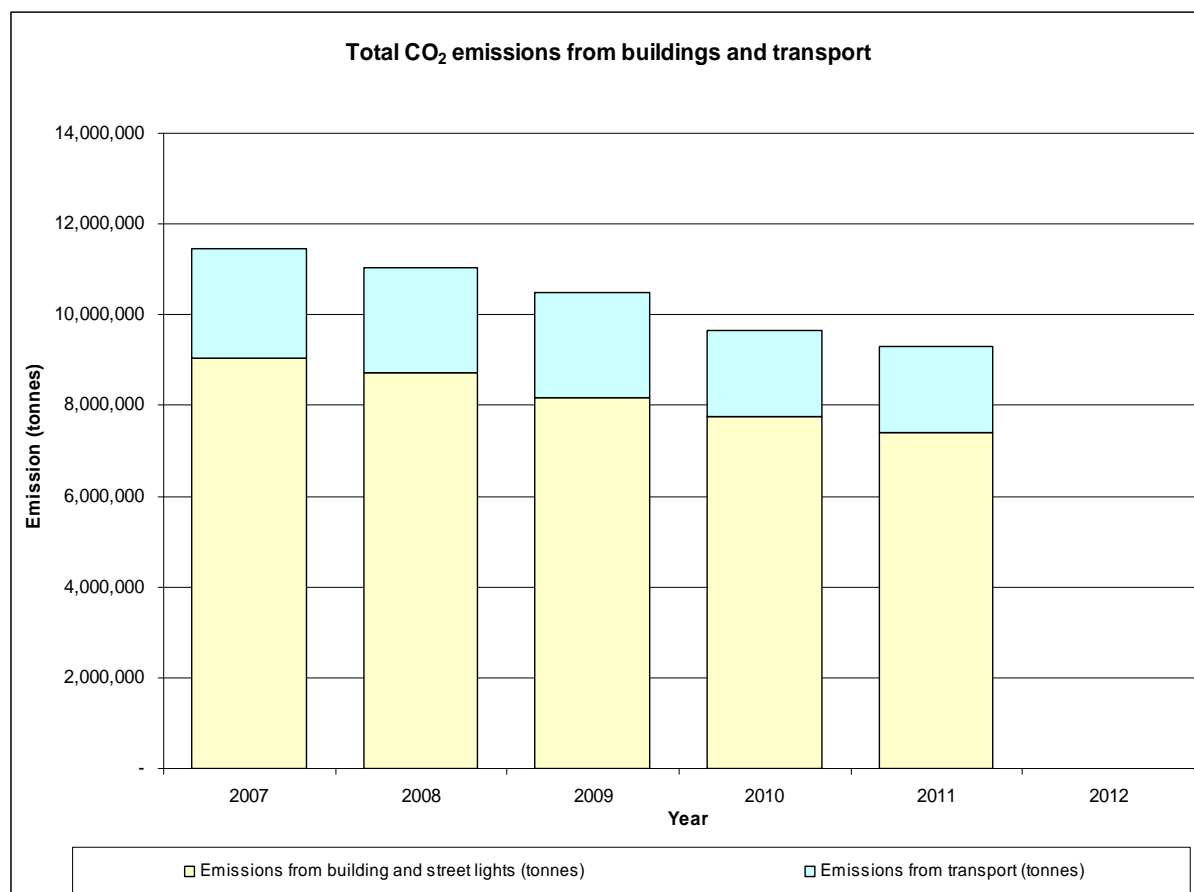
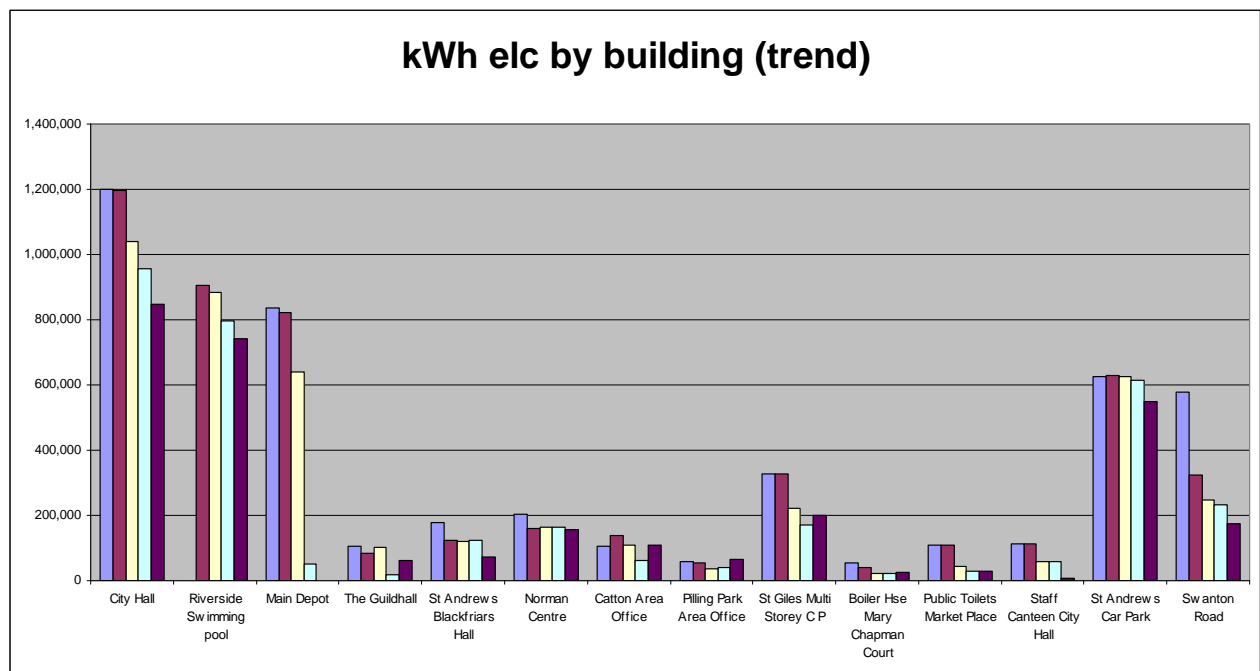


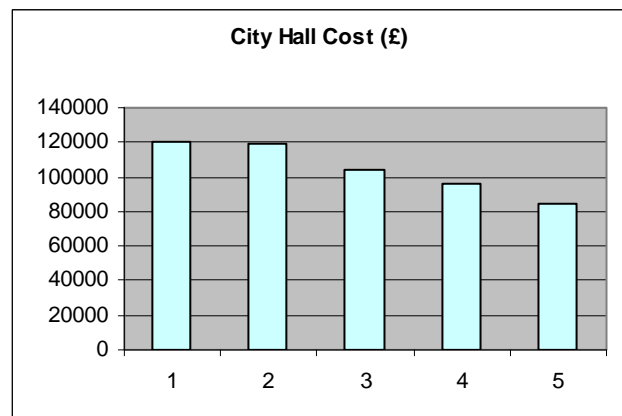
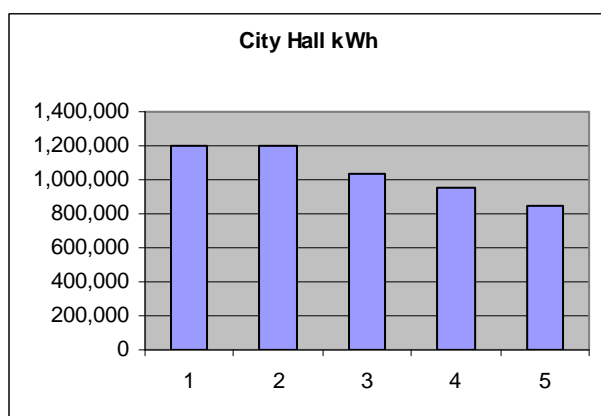
Fig. 1 Total CO₂ emissions from LA operations (2007 Baseline)

3. NI185 is an important mechanism for the council to document its energy consumption profile. It is completed annually by the environmental strategy team over a 8-10 week period in May/ June and July and co-ordinated on a regional basis allowing authorities in Norfolk to compare and contrast performance, providing the public with a valuable indicator of local performance in regards to carbon reduction. This information is published on our web pages in the “Eco Issues” section.
4. On a practical level the energy consumption also provides baseline information which feeds delivery of projects in the carbon management programme. Many of these projects are funded by the SALIX fund – a pot of money secured by the environmental management team to deliver energy efficiency savings. Utilisation of

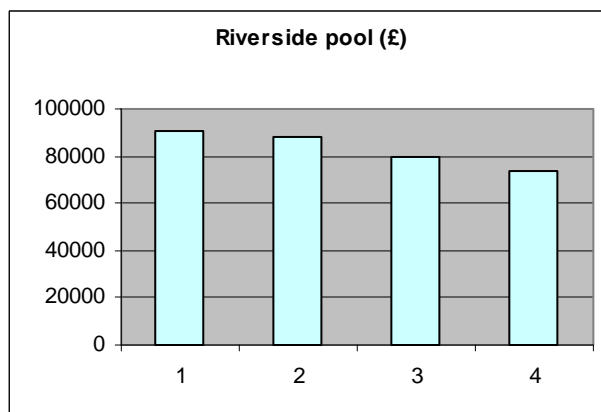
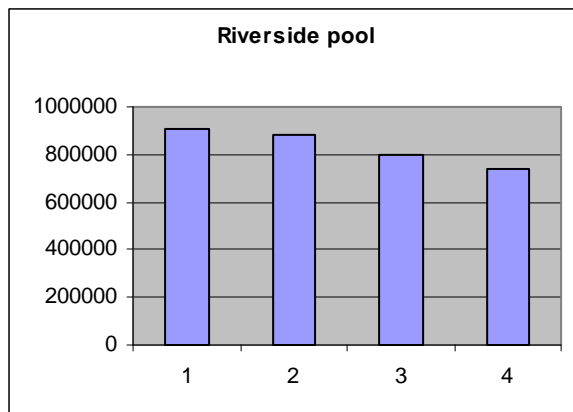
the funding is very much dependent on having evidence of asset performance (currently gathered as part of the NI185 return) allowing the team to determine project funding viability. Below is an example of our trending analysis work for electrical consumption. Trending our electrical consumption allows the authority to ensure savings are being achieved for SALIX projects, but also monitors use which could highlight possible issues with our plant equipment.



5. Further evidence of performance is provided via the Council's compliance with the DEC (Display Energy Certificate) requirements. A DEC is required annually for public buildings and those occupied by public authorities which have a total useful area greater than 1000m² and provide a public service to a large number of people. The council has three qualifying buildings. These are City Hall, St Andrew's and Blackfriars Halls and the Norman Centre.
6. Performance across these assets has improved. Our DEC for City Hall has fallen to 77 from a score of 89 in 2011 (Annex 1 DEC of City Hall). This is a 29.3% reduction in electrical use from the 2007 baseline, saving over £35,000 per year. This fall does not include the Solar PV project as this was completed in April 2012 (Annex 2 Contains PV report).



7. Other noticeable improvements include our Riverside Leisure Centre which has now achieved an 18.1% reduction in electrical use which equates to a £16,383 saving. Although our operator pays the bills, the environmental strategy team has worked with them to enable a significant reduction in carbon emissions which are included as part of our annual carbon auditing. The projects completed include a new floating cover (to replace the liquid cover which was under performing) and voltage reduction works.



8. For the year 2012/13 the council is proposing to develop further SALIX project including new eco cooling of our ICT rooms, ICT server virtualisation work and LED lighting at Riverside swimming pool.
9. In addition to the authorities work on reducing our electrical and gas consumption the environmental strategy team has been working on ways to reduce the emissions arising from our transport. Within our contracts new working methods such as route optimisation and better stock control systems on work vehicles are ensuring that our services are being delivered effectively and efficiently.
10. The council has also completed a fleet review by working with the Energy Saving Trust and have started to implement its recommendations. Our new fleet, due in October will include 4 electric cars as well as new efficient vehicles, which will have live telemetry to monitor use and inform the authority about their operational use as well as the way they are being driven. The authority now has pool bikes and has trained a number of officers to cycle safely. These are a great alternative for short journeys within the City. Finally the authority has completed a travel to work survey for its staff which will be used in conjunction with the EST report to refresh the councils travel plans.

Display Energy Certificate

How efficiently is this building being used?



HM Government

Norwich City Council
Norwich City Council
City Hall, St. Peters Street
NORWICH
NR2 1NH

Certificate Reference Number:
0596-0385-9410-3800-3203

This certificate indicates how much energy is being used to operate this building. The operational rating is based on meter readings of all the energy actually used in the building. It is compared to a benchmark that represents performance indicative of all buildings of this type. There is more advice on how to interpret this information on the Government's website www.communities.gov.uk/epbd.

Energy Performance Operational Rating

This tells you how efficiently energy has been used in the building. The numbers do not represent actual units of energy consumed; they represent comparative energy efficiency. 100 would be typical for this kind of building.

More energy efficient

A 0-25

B 26-50

C 51-75

D 76-100

77

..... 100 would be typical

E 101-125

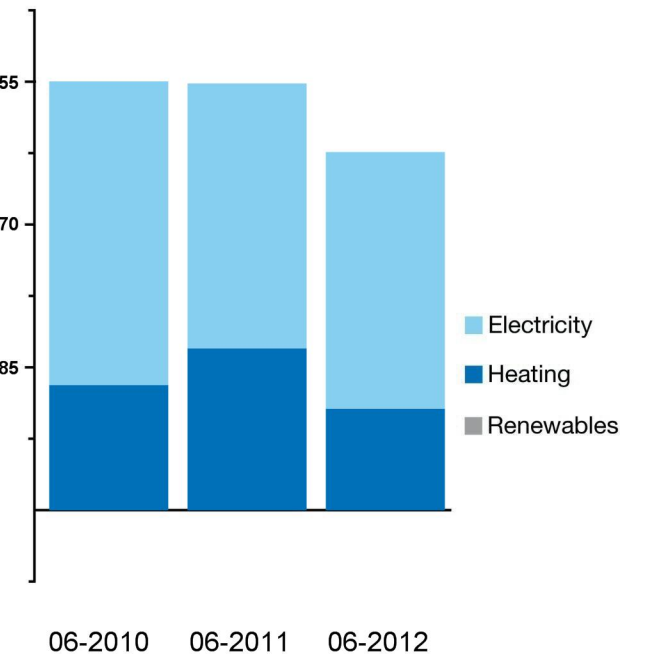
F 126-150

G Over 150

Less energy efficient

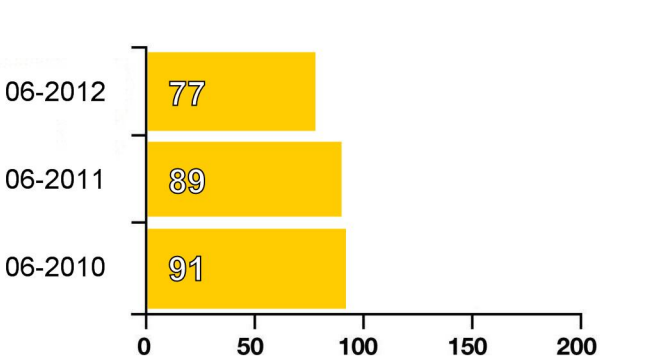
Total CO₂ Emissions

This tells you how much carbon dioxide the building emits. It shows tonnes per year of CO₂.



Previous Operational Ratings

This tells you how efficiently energy has been used in this building over the last three accounting periods



Technical information

This tells you technical information about how energy is used in this building. Consumption data based on actual meter readings.

Main heating fuel: Natural Gas
Building Environment: Heating and Natural Ventilation
Total useful floor area (m²): 12386.29
Asset Rating: Not available.

	Heating	Electricity
Annual Energy Use (kWh/m ² /year)	84	75
Typical Energy Use (kWh/m ² /year)	117	95
Energy from renewables	0%	0%

Administrative information

This is a Display Energy Certificate as defined in SI 2007/991 as amended.

Assessment Software: DCLG, ORCalc, v3.6.2
Property Reference: 369853450000
Assessor Name: Miss Sandra Kass
Assessor Number: EES/004704
Accreditation Scheme: Elmhurst Energy Systems
Employer/Trading Name: Kass & Beard Building Consultancy
Employer/Trading Address: 39 Church Lanes, Fakenham, NR21 9DG
Issue Date: 08-08-2012
Nominated Date: 29-06-2012
Valid Until: 28-06-2013
Related Party Disclosure: Not related to the occupier

Recommendations for improving the energy efficiency of the building are contained in the accompanying Advisory Report.