

Executive 16th March 2010

Report of the Assistant Director: Planning and Sustainable Development

10:10 Campaign and Sustainability Update

Summary

- 1. This report responds to the council motion of October 2009 on the national 10:10 Campaign and sets out how City of York Council (CYC) will look to achieve a 10 per cent reduction in CO₂ emissions in 2010 as required by the Campaign.
- 2. The report also provides information updates on some of the major projects being carried out across York, within the Sustainability Team of CYC, including; the Climate Change Framework and Action Plan, Renewable Energy Viability Study for York, and Green Streets Challenge.

10:10 Campaign

- In October 2009 Full Council passed a motion signing up to the national 10:10 Campaign and requiring officers to bring a paper to Executive setting out how CYC will meet the campaign requirement to reduce carbon dioxide emissions from council operations by 10 percent in 2010.
- 4. The overall aim of the Campaign is for people, business, education and organisations to reduce their CO₂ emissions by 10 per cent over the course of 2010. Further information can be found at www.1010uk.org.
- 5. For CYC this means reducing CO₂ emissions by approximately 1,220 tonnes between 1st April 2010 and 31st March 2011. The emission reduction is based on 2008/09 figures. A definitive emission reduction total will not be known until June 2010, when NI185 data is submitted to DEFRA.
- 6. The 10 per cent reduction target excludes schools and outsourced services. Therefore CYC's emission reductions will come principally from buildings (excluding schools), transport, street lighting and staff travel.
- 7. Through the Council's Carbon Management Programme (CMP) projects are being identified to enable a 25 per cent reduction in CO₂

emissions by 2013. A number of these projects will also contribute to the 10 per cent reduction target allocated to the Campaign. To date over 1,100 tonnes of carbon dioxide have been saved through the CMP.

8. Table 1 sets out the proposed projects which will contribute to a 10 per cent reduction in 2010/11.

Table 1: Breakdown of 10:10 Campaign projects

1. Mercury lanterns replacement*

Project description

1,300 mercury vapour lanterns will be replaced with modern alternatives. On completion, all mercury vapour lanterns will have been removed from the City.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Highway infrastructure	120	132,000	21,242 / year	Funding allocated in 2010/11 Capital Programme

2. 250 watt to 150 watt lantern conversions*

Project description

50 250 watt lanterns will be replaced with 150 watt white light examples. The project will build on the work undertaken in 2009/10 which installed 50 such lanterns in the city centre.

Lead E department	stimated CO ₂ savings (<i>t</i>)	Estimated cost (£)	Financial savings (£)	Funding secured?
Highway infrastructure	12	17,500	2,080 / year	Funding allocated in 2010/11 Capital Programme

3. Solar bollards*

Project description

The project involves disconnecting 50 bollards/signs from the mains electricity supply and using solar panels to provide the power needed to operate them.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Highway infrastructure	11	25,000	2,000 / year	Funding allocated in 2010/11 Capital Programme

4. LED lanterns*

Project description

50 lanterns will be replaced with LED alternatives. The project builds on a trial which took place during 2009/10 with 10 LED lanterns in the South Bank area of the city.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Highway infrastructure	2	25,000	427 / year	Funding allocated in 2010/11 Capital Programme

5. Sodium to fluorescent lantern conversion*

Project description

Approximately 2,675 sodium lanterns will be replaced with fluorescent alternatives.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?	
Highway	118	250,000	n/a	Funding	
infrastructure				allocated in	l
				2010/11	l
				Capital	l
				Programme	l

6. powerPerfector voltage optimisers

Project description

powerPerfector is a voltage power optimiser, giving energy, cost and carbon savings by efficiently optimising a site's supply voltage. By optimising the voltage, electrical equipment runs more efficiently and consumes less energy. The project will install one device in the workshops at the EcoDepot.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Energy team	18	16,901	3,388 / year	Funding
				obtained from
				Salix Finance

7. Staff awareness, training visits and turn heating down

Project description

Smart meters have been installed in a number of Council buildings. The installation of new meters will help in monitoring and inform staff on site of how well their improvement measures are working:

- bespoke training and building audits in carbon reduction;
- league tables and target setting for energy reduction in Council buildings; and.
- traffic light switches label all switches so people know what they are and if they can be switched off. Posters to be displayed in offices so it is clear what equipment is to be left on.

A programme of training is to be established for key staff and will include:

- building managers and caretakers general awareness training, correct setting of controls and making use of monitoring information;
- building users general awareness and good housekeeping;
- procurement staff awareness of long-term energy costs when purchasing equipment, including the use of lifetime costings; and,
- architects and design staff training in low energy building design and integration of renewable energy technologies into building design.

A programme of disseminating clear advice to building users will be developed via a network of Energy Champions. This will include:

- switching off computers when not in use and enabling energy management software:
- using energy save options on photocopiers and other office equipment;
- switching off lights in empty rooms or when daylight provides sufficient light;
- · correct use of thermostats for heating and air conditioning;
- closing windows and external doors in winter; and,
- purchasing energy efficient goods.

The maximum recommended temperature for heating offices is 19°C. The turning the heating down project involves ensuring that all Council buildings are heated to a maximum temperature of 19°C. Doing so will ensure less energy is used.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Energy &	300	0	5,000 / year	Yes
sustainability				

8. Oaklands Sports Centre

Project description

The existing Oaklands Sports Centre has been extended to incorporate a new swimming pool replacing Edmund Wilson swimming pool which has closed. The carbon savings associated with Oaklands Sports Centre come from the use of biomass as the main fuel for heating.

Lead department	Estimated CO ₂ savings (t)	Estimated cost (£)	Financial savings (£)	Funding secured?
Property services	349	n/a	No saving – 10,000 cost	Yes. £10,000 cost is as a result of the fuel for the biomass boiler, which is more expensive than gas at present
		Total	carbon savings	930

^{*}Initial projects and costs. The Council is working with its contractors to evaluate the largest carbon savings whilst benefiting from increased purchasing power in the market.

- 9. Appendix 1 contains a more detailed breakdown of the above table.
- 10. Unfortunately the above only identifies projects that will deliver 930 tonnes of saving in 2010/11. This is 290 tonnes below the anticipated 1,220 tonnes target.
- 11. However, officers continue to explore a number of other projects to deliver the savings necessary to bridge this gap. Experience with CMP projects shows that estimated CO₂ savings and actual CO₂ savings can vary for a number of operational reasons. These potential projects for possible inclusion in 10:10 (and CMP) are:
 - Webaspx route optimisation software to allow efficiencies (carbon and financial) to be made in the refuse vehicles' collection rounds;
 - Printer/photocopier rationalisation programme as part of More for York;
 - Power configuration software for all newly purchased PCs;
 - Projects arising from the Green Fleet Review;
 - Transport behaviour change in partnership with Human Resources and Development and Transport teams, e.g. public transport policy, promotion of walking, cycling and public transport; and,
 - Reduction in business mileage. Based on assumptions it may be possible to make approximately 100 tonnes of carbon savings from a 2.5 per cent reduction in business mileage. One possible method to reduce business mileage could be through route optimisation for certain service areas. This is a potential way of undertaking such work without affecting service delivery.

- 12. Joining 10:10 is not just about reducing CYC's own emissions: it's about becoming part of a national drive to reduce the entire country's carbon footprint. As such, an important part of the 10:10 commitment is spreading the word and seeking to get other people and organisations involved. CYC will develop a 10:10 communication campaign by May 2010 and promote and invite staff, residents and other organisations across York to take part in the campaign.
- 13. A further report will be prepared for the Executive Member for City Strategy when projects in paragraph 11 are confirmed.

Climate Change Update

- As part of the Sustainable Community Strategy, the CYC and the Without Walls Partnership are committed to creating a Sustainable City.
- 15. The Without Walls Partnership are also committed to combating and adapting to Climate Change. They are finalising a draft Climate Change (CC) Framework and Action Plan by April 2010.
- 16. To date the CC Framework and Action Plan have been drafted and circulated to members of the Environment Partnership Board and Climate Change subgroup seeking to set targets and actions agreed with Partners across the City.
- 17. Currently the Climate Change Subgroup of the Environment Partnership Board, and supported by the Sustainability Team, are finalising the Framework and Action Plan. The drafts will be presented to the Without Walls Board and CYC Executive from April 2010. Public consultation will also follow in the summer. It is envisaged that the documents will be officially launched and implemented from September 2010. To date consultation has been internal across CYC and through the Without Walls Partnership. A communication plan will also accompany the drafts.
- 18. A briefing paper summarising the Framework and Action Plan can be found in Appendix 2.
- 19. It is likely that the Framework and Action Plan will look to meet the national Climate Change Act 2008 targets. This act legally binds the UK to at least a 80 per cent reduction in greenhouse gas emissions by 2050. Figure 1 illustrates what these targets mean for York's emission reduction (based on the most up to date data available for York from Department for Energy and Climate Change (DECC).

600,000

400,000

300,000

200,000

100,000

Transport CO2 (t)

Transport CO2 (t)

Figure 1: Actual and projected carbon emissions, per sector, for York in line with the national 80 per cent reduction target by 2050

Source: DECC, 2009

- 20. However, following the Full Council motion (approved on 3rd December 2009) this Framework and Action plan will now need to reference the Council's commitment to the Covenants of Mayors and the Friends of the Earth 'Get Serious' campaign. These commit the City to a 40 per cent reduction in carbon emissions by 2020. Officers are investigating how such a target can be met in York and what resources are needed to support this work.
- 21. In September 2009 CYC's Sustainability Team held a 'Working Together to Tackle Climate Change Event'. Part of this event began to investigate and identify future threats and opportunities associated to climate change. Using regional projected climate data, key impacts, consequences and suggested future action that will allow York to adapt and prepare for a changing climate were all discussed. This work is now being followed up with relevant officers across CYC (the main areas are flood risk, risk to buildings, staff, residents, essential infrastructure and services). This work will fed into the CC Framework and Action Plan.
- 22. To support this work, and essential to meeting requirements of national indicator 188 (NI 188 adapting to climate change), a local climate impact profile is also to be carried out to identify York's current and past vulnerability to weather related events, including extreme weather events such as heavy rainfall. This work will help York to risk assess and see the areas that it needs to address to better prepare the City for a changing climate in the future. The Profile will also fed into the CC Framework and Action Plan.
- 23. NI 188 is currently ranked as red as CYC failed to meet level 1 of the NI 188 criteria. However, an action plan to achieve NI 188 level 1 by April 2010 is in place. This should see CYC back on track with meeting the LAA target of level 1 for 2009/10.

Renewable Energy Viability Study

- 24. In June 2009 City Strategy DMT approved the commissioning of a Renewable Energy Viability Study. This study will support the LDF's Core Strategy and its evidence base for renewable energy and carbon dioxide reduction targets.
- 25. The Study will be completed by April 2010 and will identify local viability and potential for renewable and low-carbon technologies in York. It will also illustrate the potential such technologies will have in meeting York's regional renewable energy target. A full report will be taken to LDF working group, DMT, CMT and Executive once this study is in a completed draft format.
- 26. Good progress has been made on this study meetings between the consultant team and CYC officers have seen initial stages of the work programme complete.
- 27. This study will also be used to generate suitable projects across the City as part of the CC Framework and Action Plan. It will also support the work of the Green Jobs Task Force by highlighting the potential for the creation of renewable energy related jobs/sectors in York.
- 28. Based on the results, the study will inform the policy approach taken to renewable energy and energy efficiency in the LDF Core Strategy and all subsequent LDF documents, including the Allocation DPD and the two Area Action Plans. In addition it will also be incorporated into Supplementary Planning Documents and will have a direct influence over the development control process.

Sustainable City Community Projects

Green Streets Challenge

- 29. As requested by the Executive Member for City Strategy, this update covers the Green Streets Challenge, one of the Without Walls Local Area Agreement Delivery Grant funded projects.
- 30. This project is led by the Stockholm Environment Institute (SEI) on behalf of the Environment Partnership Board (EPB) (of the Without Walls Partnership). Regular progress updates have been presented to the EPB, most recently in January 2010.
- 31. This project calculated the carbon footprint for York's neighbourhoods and used this data to then identify the areas in the City where there was a high potential to help homes reduce their carbon footprint by 10 per cent.
- 32. To date the carbon footprint for York has been published by the SEI. A full copy of this report and its findings is available at: http://sei-international.org/?p=publications&task=view&pid=1312.

- 33. As part of phase II of this project, SEI have identified areas in Holgate and Micklegate wards that have a high potential to reduce their carbon footprint through energy saving measure and smarter/sustainable lifestyle and transport choices.
- 34. In these chosen wards, 500 homes have been contacted and invited to take the Green Streets Challenge. From January 2010 June 2010 homes taking part will aim to reduce their carbon footprint by 10 per cent. Residents are offered expert advice and access to a Green Street Mentor (through SEI), plus a carbon footprint action plan from SEI.
- 35. CYC staff are also part of the planned expert advice package, including Recycling, Transport and Sustainability officers. The Energy Saving Trust advice centre are also offering expert advice. CYC Officers will be required to assist SEI from February 2010 with this advice and guidance.
- 36. So far 5 community events have been undertaken and total of 102 Residents have been recruited on the doorstop.
- 37. Three additional teams have also joined the challenge. These include a Church team at St Edwards the Confessor Church in Dringhouses (14), Park Grove Primary School (4-10) and Heworth Primary School (10).
- 38. In January 2010 the Challenge started fully. A pledge party was held for all the participants by SEI. Over the next 6 months participating homes will try to reduce their footprint. A prize is to be offered to winner(s).
- 39. On March 2nd an Eco-evening will be held for all green team members to attend and receive advice on energy saving and composting.
- 40. Two updates are attached as Appendix 3.

Options

- 41. This report presents the project proposals which set out how CYC is working to meet the 10:10 commitment and also provides an update on other sustainability projects across the City.
- 42. Executive are asked to endorse the 10:10 projects highlighted in the table and note the proposals for identifying additional projects and the preferred reporting mechanism of regular updates through the Executive Member for City Strategy.
- 43. Executive are also asked to note the good progress being made with other sustainability projects and the need for officer engagement with the Without Walls Green Streets project.

Corporate Priorities

- 44. The projects outlined above relate to the priority to reduce the environmental impacts of Council activities. The 10:10 Campaign will help to reduce CO₂ emissions from our buildings, street lighting, transport and staff travel working towards a 10 per cent reduction within a year and support a 25 per cent reduction by 2013 as required by the Carbon Management Programme (CMP).
- 45. The projects are necessarily in accordance with the Sustainable Community Strategy.

Implications

- 46. **Financial**: There are no finance implications.
- 47. **Human Resources (HR)**: There are no HR implications.
- 48. **Equalities**: There are no equalities implications.
- 49. **Legal**: There are no legal implications.
- 50. **Crime and Disorder**: There are no crime and disorder implications.
- 51. **Information Technology (IT)**: There are no IT implications.
- 52. **Property**: Due to the lack of resources (officer time) available to implement projects for the 10:10 campaign within transport, property are delivering a greater proportion of the projects which will deliver reductions. This may present a capacity issue for property.
- 53. **Other**: There are no other implications.

Risk Management

54. Risk - Sustainability Officers and other CYC Officers have competing demands on their time which may result in one or more of the projects identified above not being delivered within the timescales set out in this paper. To ensure this does not happen rigorous project planning/performance management measures should be put in place and regular updates provided.

Recommendations

55. Executive are asked to endorse the 10:10 projects and the preferred reporting mechanism of regular updates through the Executive Member for City Strategy.

56. Executive are asked to note the good progress being made with other sustainability projects and offer engagement with the Without Walls Green Streets project.

Contact Details

Author:

David Warburton
Design, Conservation and
Sustainable Development

Chief Officer Responsible for the report:

Michael Slater Assistant Director

Tel: (01904) 551330

Tel: (01904) 551666

Report Approved	tick	Date	Insert Date

Specialist Implications Officer(s)

None.

Wards Affected: List wards or tick box to indicate all Micklegate and Holgate for one section of the report

All tick

For further information please contact the author of the report

Annex:

- 1 10:10 Project Breakdown
- 2 York's Climate Change Framework and Action Plan
- 3 York Green Street Challenge Update
- 4 Draft Outline Communication Plan