

Report of the Assistant Director: Property Services

Carbon and Energy Management Plan - update

Summary

1. This report provides an update for members with regard to the Carbon Management programme and current Energy initiatives.
2. Display Energy Certificates have been received and are now clearly visible to the public in 51 of our buildings. This equates to around 82% of the council's major buildings and compares favourably with compliance across the country of around 60%.
3. Completed projects such as the recycling of waste in schools has contributed a saving of 477 tonnes of carbon and the completed Yearsley Pool refurbishment saved 230 tonnes of carbon towards the council's annual target for 2013.
4. Ongoing projects have the potential to save around 3100 tonnes per annum, of particular note are York High and Oaklands (904), Joseph Rowntree School (250), the council HQ (800) and recycling waste in offices (113)
5. New projects emanating from ICT relating to the replacement of 1100 computers with low energy, thin Clients and 200 eco PC's and the replacement of monitors will generate savings of around 256 tonnes
6. The appointment of a Data Analyst and Sustainability Projects Officer to the team and the planned investment in smart metering for our major buildings will contribute to improved information and greater progress with these important initiatives and programmes.
7. The report also provides a proposed action plan for behavioural change within the council. This will include the new staff awareness campaign 2009/10 - 'Save Us'

Background

8. In April 2007 City of York Council (CYC) was selected for the Local Authority Carbon Management Programme. This one year programme, run by the Carbon Trust, created the City of York Carbon Management Programme Strategy and Implementation Plan (CMP SIP) which was presented and approved by the Executive in April 2008 and set the target *'The City of York Council will reduce its CO₂ emissions*

by 25% on 2006/07 baseline by 2013' (excluding housing). Over the CMP SIP five-year period, CYC will need to save approximately 5800 tonnes of carbon (this equates to approximately 1160 tonnes of carbon per annum being saved).

9. A report was submitted to the Executive in March 2009 to provide an update on the Carbon Management Programme (CMP). The report also outlined completed projects and identified future projects to be implemented. It also explained the forthcoming Carbon Reduction Commitment (CRC).
10. In response to that report Members noted the good progress that has been made to date.
11. Members noted that a full progress report, with forecasted potential carbon savings over the remaining 4 years, project plans and timetables for implementation would be supplied to the Executive once a full year of energy data was available. The appointment of a Data Analyst and Sustainability Projects Officer is in progress.
12. Members acknowledged the creation of a CRC internal officer group that will investigate CRC and create a proposal for managing it by October 2009.

Update

13. This update will focus upon
 - a. the receipt of DISPLAY certificates for council buildings
 - b. progress on the agreed programme
 - c. identified new projects from across the directorates

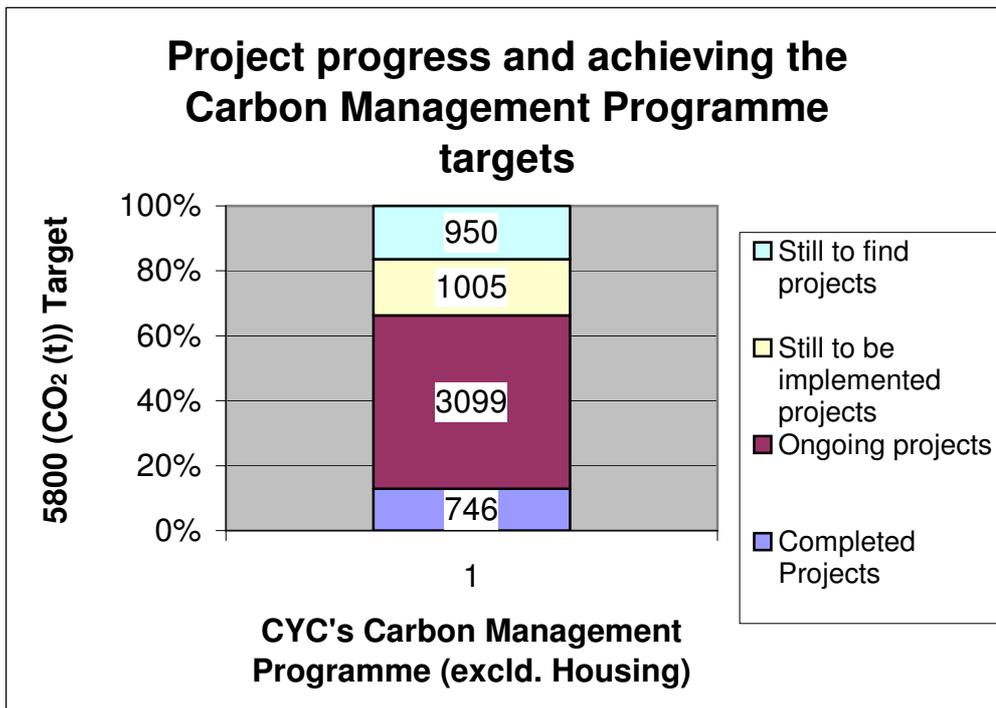
Display

14. Display Energy Certificates (DECs) show the actual energy usage of a building (the Operational Rating) and help the public see the level of energy efficiency for a building. This is based on the energy consumption of the building as recorded by gas, electricity and other meters. The DEC should be clearly displayed at all times and clearly visible to the public.
15. A DEC is always accompanied by an Advisory Report that lists cost effective measures to improve the energy rating of the building. An action plan will be developed for all properties from that report, and subject to available resources will be prioritized and implemented.
16. Display Energy Certificates are only required for buildings with a total useable floor area over 1,000m² that are occupied by a public authority and institution providing a public service to a large number of persons. The DECs are valid for one year. The accompanying Advisory Report is valid for seven years.
17. The requirement for Display Energy Certificates came into effect on 1 October 2008.
18. The attached annex A lists all of the properties and their DISPLAY ratings.

- 19. The attached annex B provides an example of a DISPLAY certificate.
- 20. The attached annex C provides an example of an Advisory report

Progress on the agreed programme

- 21. The bid has been made for £250k SALIX loan to match the £250k already provided for within the council’s capital programme. If successful we should receive the loan in 4 instalments over a two year period.
- 22. Progress on the Carbon Management programme is scheduled in annex D



23.

Identified new projects from across the directorates

- 24. The attached annex E schedules all of the new projects that will contribute to both energy savings and carbon reductions.
- 25. Metering, Monitoring and Targeting using Smart Meters
- 26. Smart metering is a new technology to provide relatively low cost meters that can be read automatically and which output energy consumption data. The data can be accessed and manipulated via the internet. Significant energy savings through deploying smart meters, using the data for energy management and reducing the organisation’s carbon footprint can be achieved.
- 27. City of York Council’s current electricity provider Npower have provided a modification to our existing energy contract for installation of smart meters. The smart meters will cost £89 per meter per year. For the entire portfolio the total cost would be approx £26,000 per year.

28. New contracts are to be let in November for the supply of energy for a five-year period. The need for smart metering is being written into those contracts and the costs will be spread over the five years and be included as a marginal addition to the quarterly tariffs and bills.
29. In effectively using the smart meters through our network of Energy Champions City of York would save as a minimum 3% of electricity consumption. Effective monitoring of energy use is the key to identifying target sites for improved energy efficiency, quickly spotting sudden increases in energy use on particular sites, and verifying whether actions taken are successful. Monitoring also provides an essential accompaniment to energy training by providing feedback to building users on whether they are achieving their targets for energy savings.
30. Further advantages include:
 - a. A maintenance free automated meter reading system on all our sites (If it breaks the supplier will fix it at no additional cost to us)
 - b. Our end users would get energy consumptions available on line through the web (what you see on the screen will match the energy bill exactly)
 - c. It would eliminate estimated readings
 - d. It would be advantageous for the Carbon Reduction Commitment (CRC)
 - e. A minimum 3% reduction in Energy consumption is estimated with savings of:
 - i. £41,000 per annum (based 2007/08 energy prices)
 - ii. 190 tonnes per annum (Carbon Savings)
31. The smart-metering as an initiative would be even more beneficial if run in parallel with a campaign to change behaviour within the council.
32. Consultation is ongoing with building users, particularly schools, before final implementation.

Action Plan for Behavioural Change

33. It needs to be recognised that there is no cheap technical fix that can be used to slash energy costs for an organisation like the City York Council. Reducing electrical use for lighting in buildings, for example, requires major investment in new light fittings and controls.
34. This is one reason why energy management actions – such as persuading building occupants to switch the lights off when not needed – are of such value.
35. It should be also noted that this action plan would prove most effective and measurable once the proposed Data Analyst is in post.
36. A target has been established to make a saving of £75,000 in energy spend (5% of energy spend in the central CYC buildings not including Schools) in 2009/10.

37. Investment provision of £40,000 has been budgeted for in 2009/10.
38. The proposed action plan for saving and investment is attached at Annex F.

Staff awareness campaign 2009/10 – “Save Us”

39. The CMP Core Team have devised an internal communication campaign for 2009/10 to raise awareness amongst staff and to encourage them help the authority to reduce it's energy consumption and carbon footprint. A **'Save Us'** strap-line is being developed with accompanying marketing materials such as promotional stickers and posters. A major article was published in News In Depth in July, and will be followed by regular articles (and online updates) at frequent intervals across the year. Future articles will also focus on schemes that are already saving carbon across different directorates. The council's new intranet will also be used to hold and share information on the carbon management programme for all staff. The Sustainability Officer and Energy Manager will also be doing walkabouts in major buildings, and encouraging staff to support the campaign. Campaign stickers, posters and advice will also be issued through these events which are starting in the Guildhall and 9 St Leonard's Place.
40. In addition to this communication campaign, consumption data will also be collated in sites where meters are already installed, and this will enable the council to measure the success of, and to promote further, actions to reduce the building's energy consumption and carbon footprint. Once all 300 sites have on-site metering, internal performance league tables and incentives will be available to help the council continue to reduce consumption and carbon emissions.
41. Building managers will also be receiving an energy toolkit and will be invited to attend an 'energy saving' workshop.
42. Senior managers will be attending a 'Tackling Climate Change' event in September 2009.
43. The Core Team will continue to hold workshops to identify further carbon saving projects across the council.

Consultation

44. The Executive approved the Carbon Management Programme Strategy an Implementation Plan in April 2008. This progress paper has been created by the senior officer/members Carbon Management Board

Options

45. This is an update paper only.

Financial Implications

46. City of York Council's current electricity provider Npower have provided a modification to our existing energy contract for installation of smart meters. The smart meters will

cost £89 per meter per year. For the entire portfolio the total cost would be approx £26,000 per year.

47. This £89 per year will need to be paid by devolved account holders' budget from 2010/11 onwards. Therefore details of these changes will need to be consulted upon and notified to all schools and other affected budget holders.
48. Under the Carbon Reduction Commitment (CRC) (as mentioned in the April Executive Update paper on the Carbon Management Programme) CYC will need accurate energy data from all sites in order to comply with this mandatory legislation. It is therefore essential that the council installs and utilises smart meters.

Corporate Priorities

49. The CMP meets the following corporate and partnership objectives.
 - a. 'Without Walls' – the Sustainable Community Strategy which provides the sustainable framework for York;
 - b. 'Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for the City' – *The City of York Council will reduce its CO₂ emissions by 25% on 2006/07 baseline by 2013*.
 - c. Contributes to achieving a 'Sustainable City'

Implications

50. **Financial** none other than those referred to and included in the report.
51. **Human Resources (HR):** none
52. **Equalities:** none
53. **Legal :** none
54. **Crime and Disorder :** none
55. **Information Technology (IT):** none
56. **Property :** included in this report

Risk Management

57. Without the use of energy meters CYC will not have accurate data to forecast and manage the forthcoming CRC and could face annual financial penalties. The Carbon and Energy Management Plan is at the heart of the council's response to the Use of Resources Assessment for 2008/09 as part of the Comprehensive Area Assessment (CAA) and demonstrates how we are effectively managing our use of natural resources. Ineffective plans and progress may affect the auditor's judgement when scoring the relevant Key Lines of Enquiry (KLOE) within the assessment for future years. Conversely good performance and clear outcomes and impacts will have a positive effect on overall Use of Resources and CAA performance.

Recommendations

58. Members are asked to note the progress to date of the CMP.

Reason: To be fully aware of the coordinated approach CYC is taking in order to manage carbon emissions from council activities.

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Report Approved



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Wards Affected:

All



For further information please contact the author of the report

Annexes:

A - lists all of the properties and their DISPLAY ratings.

B - provides an example of a DISPLAY certificate.

C - provides an example of an Advisory report

D - progress on the Carbon Management programme

E - schedules all of the new projects that will contribute to both energy savings and carbon reductions.

F - The proposed action plan for saving and investment