

Report of the Director of City Strategy

Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for the city – Update Dec. 2007.

Summary

1. The purpose of this report is to provide an interim or update of the Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for the city. Executive endorsed the strategy in September 2007 and this report provides additional information requested at that time. This report needs to be considered alongside the report by Head of Property Services entitled Carbon Management, Energy and Sustainability – funding mechanism.

Background

2. In September 2007 Executive endorsed the Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for York which contained the target of reducing carbon emissions from council activities by 25% by 2013 on 2006/07 baseline and a proposal for a Climate Change Strategy for the city. In endorsing this the Executive requested that a further report be brought back to Executive in December that should:

(i) address the following issues:

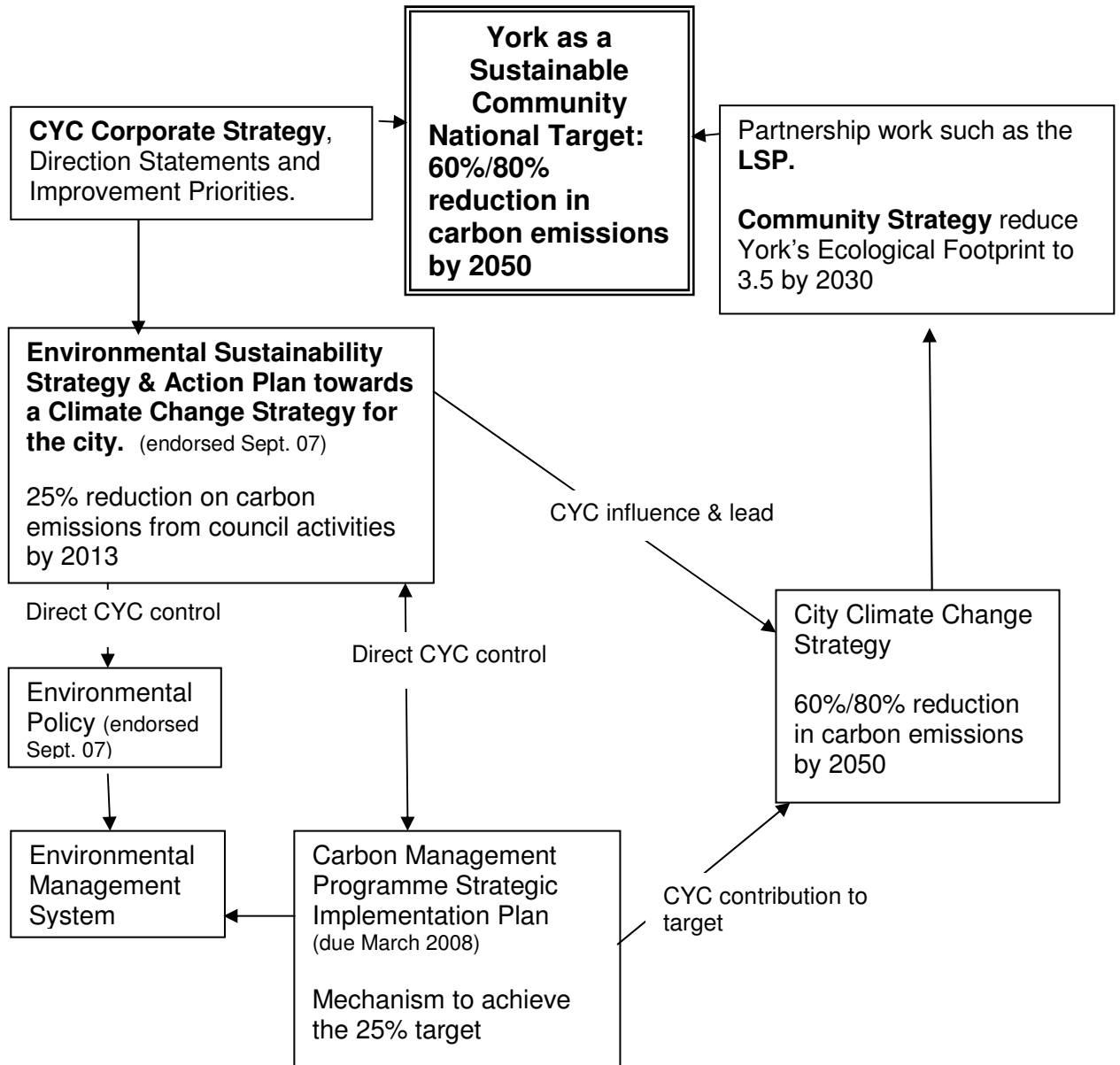
- a) required actions;
- b) possible milestones;
- c) practicality;
- d) costs and resourcing streams;

and (ii), in producing a refined strategy officers were requested to clearly show:

- e) enablers indicating the percentage of the total target that each will achieve;

- f) further detail on the “City” (Local Strategic Partnership) component of the strategy;
- g) a consultation, resident education and public engagement programme

3. The diagram below seeks to explain where the Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for the city sits with in the city’s aim of a Sustainable Community and within the councils priorities:



Consultation

4. The updates on the Environmental Sustainability Strategy mentioned above were presented to Corporate Management Team in November 2007.
5. The Carbon Management programme has incorporates extensive consultation with officers of all council directorates. See paragraph 8.
6. The Environment Partnership has participated in the proposal for the production of a Climate Change Strategy for the city.

Options

7. This is an update report and as such does not contain any options for consideration. It is proposed that the additional information requested by the Executive in September will be dealt with in two parts.
 - A. The activities taking place as part of the Carbon Management Programme provides the information to deal with the first part of the requested information, (i) a) to d) and (ii) e).
 - B. The activities by the Local Strategic Partnership and the York Environment Partnership to produce a Climate Change Strategy for the City provides information relating to parts (ii) f) and g) of the resolution in September.

Analysis

A. The Carbon Management Programme.

8. The Carbon Management Programme is led by the Sustainability Team with a Board made up of an Elected Member, a senior officer, and financial manager. In addition an officer steering group containing representative from all directorates has identified baseline data of the council's current CO₂ emission. In addition this group convened an opportunities workshop in October, involving 25 officer and elected members to identify potential projects to reduce the council's emissions. This opportunities workshop has formed the basis for the projects presented below.
9. The following list of projects has been agreed with resources and funding allocated. The percentage saving is on the baseline established by the Carbon Management Programme of a total 28,850 tCO₂.

Activity	Tonnes of CO ₂ saving	% saving from baseline	Cost (£000)	Saving/payback
HASS Decent Homes Programme (DHP) improvements in council owned housing stock:				
DHP render 11 blocks of flats: <i>improving thermal insulation of 110 properties.</i>	84 tCO ₂	0.3%	£480	Implementation by

Activity	Tonnes of CO2 saving	% saving from baseline	Cost (£000)	Saving/payback
				2010
DHP tenants choice heating programme: <i>replacing 644 properties with A rated energy efficient boilers</i>	564 tCO ₂	2%	£1,490	
DHP heating only programme: <i>replacing all 2,700 council owned homes with A rated energy efficient boilers</i>	2,361 tCO ₂	8.2%	6,240	Benefits gained in reducing tenants energy bills.
DHP roofing and loft insulation: <i>Reroofing, insulation and top up insulation to 844 properties</i>	174 tCO ₂	0.6%	2,330	This is a significant step to reduce fuel poverty.
TOTAL CO₂ saving from Decent Homes Programme: 11%				
Property Services large scale building programmes:				
Hungate Office Accommodation: <i>Significant energy efficiency and renewable energy measures within the design and operation of the building.</i>	2,244 tCO ₂	7.8%	To be determined	
York High School: <i>Significant energy efficiency measures within the design and operation of the building</i>	430 tCO ₂	1.5%	£290	Fuel use is from lower carbon, but not necessarily cheaper sources
Danesgate: <i>An example of sustainable building including design and use of materials, solar thermal system, biomass boiler, passive ventilation and rainwater harvesting, energy efficient lighting.</i>	102 tCO ₂	0.4%	£70	
Other building programmes including: <i>Acomb Library (biomass boiler), EcoDepot (PV energy generation), Joseph Rowntree School energy efficiency improvements</i>	124 tCO ₂	0.4%	Acomb library and EcoDepot have completed their build and are now presenting us with revenue savings. Jo Ro school costings being identified	
TOTAL CO₂ saving from large scale building programmes: 10%				
Integrated transport project:				

Activity	Tonnes of CO ₂ saving	% saving from baseline	Cost (£000)	Saving/payback
A corporate project designed to increase efficiency and reduce overall spend on contracted transport for HASS and LCCS clients. To be achieved through improved fleet vehicle utilisation, improved partnership working as well as ensuring contracted transport maximises environmental efficiency and minimises required journeys.	43 tCO ₂	0.1%	588	Total project saving: £1.2m over 30 months.
Staff behaviour change campaigns:				
'Switch Off' campaign: Identifying volunteer energy champions across the authority to increase efficiency energy use. This includes initial energy audits, and assigning responsibilities within teams to 'switch off' unnecessary appliances.	1,250 tCO ₂	5%	Minor	Up to £150,000 energy savings per annum
CYC organisational waste recycling:				
Office waste recycling pilot: <i>A pilot is underway within the EcoDepot to increase the amount of office waste recycled. All waste bins replaced with recycling bins for paper, cans, glass, plastic and cardboard. This pilot is being developed for a full council roll out.</i>	288 tCO ₂	1%		
TOTAL % SAVING FROM COMMITTED ACTIVITIES: 26%				

HOUSEHOLD WASTE COLLECTION: the Carbon Management Programme is not including household waste directly within its scope of activity. However there are significant carbon savings to be made from diverting waste from landfill, therefore this additional information is provided here.				
Household waste collection: <i>Current recycling rates are approaching 42%, diverting 42,280 tonnes waste from landfill. Waste to landfill has a significant carbon emission which is being reduced through significant recycling activities. Within the context of this update paper, household waste is managed through the appropriate and relevant waste strategy.</i>	18,899 tCO ₂ saved by recycling & composting household waste	42% recycling rate of total household waste arising		

10. The following list of projects is further options for action with no agreed resources or funding allocated. The percentage saving is on the baseline established by the Carbon Management Programme of a total 28,850 tCO₂.

Further Option Activities	Tonnes CO2 saving	% saving from baseline	Cost £000	Saving/ payback
HASS Housing improvements in council owned stock:				
Tenants choice renewable energy: <i>To include the following as part of Tenants Choice upgrades: solar hot water, ground source heat pumps or PV panels.</i> <i>Figures are per house</i>	315kg – 2 tCO ₂	Installing 280 houses per year with split of technologies: 1% per annum	Between £4,000 and £12,000 per technology	Between £40 and £140 tenant fuel bill reduction
Building improvements:				
Voltage adapters: <i>Install voltage power optimisers to efficiently optimise a site's supply voltage</i>	430 tCO ₂	1.8%	£250	£74,500 . 3.5 yr payback
Heating controls: <i>To upgrade, check correct operation and settings for building controls within council buildings</i>	182 tCO ₂	0.6% per annum	£30	£16,000 per annum. 2 yr payback
Insulation: <i>Rolling programme of cavity wall, draught proofing and roof insulation in older buildings</i>	250 tCO ₂	0.8% per annum	£200	£22,000 annum. 9 yr payback
Energy management systems: <i>Replace obsolete energy management systems installed in the late 1980's</i>	200 tCO ₂	0.7% per annum	£200	£32,000 per annum. 7 yr payback
Transport measures:				
Introduce lower carbon fuel, develop efficient driver training, ensure regular vehicle maintenance:	200 tCO ₂	1% estimate	Further research required	research required
10% reduction in staff mileage:	22 tCO ₂	0.01%	Further research required	research required

ESTIMATED % SAVINGS FOR OPTIONAL ACTIVITIES: 5.9% per annum

B. Climate Change Strategy for the city.

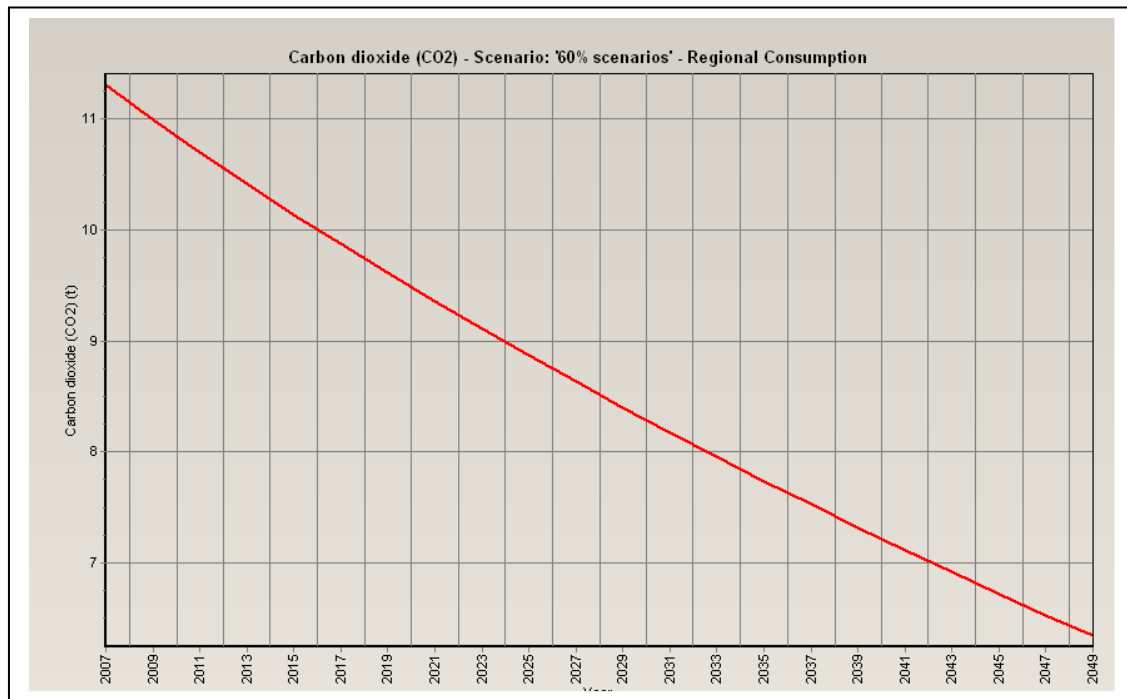
- The recently formed York Environment Partnership of the Local Strategic Partnership proposed the scope and procedure for preparation of a Climate Change Strategy for York. This was agreed by the LSP Without Walls Board on the 21st November and a copy of the amended report is attached as Annex A. It is intended to produce the Climate Change Strategy through the active participation of the LSP partnerships as it is clearly recognised that the council can not do this alone, although has an important leadership role and the activities above make a clear contribution to the city tackling climate change. The scope and process for the production of the strategy has been set, but clearly identified

activities have not. The strategy is to be produced through participative working with each partnership responsible for the identification and implementation of action. Therefore it is impossible to identify what these may be until that process has taken place.

12. At this stage in the development of a Climate Change Strategy for York it is possible to suggest some scenarios relating to common issue areas for all LSP partnerships that will need to be addressed to achieve a 60% reduction in carbon emissions by 2050. (This target has been set by the Government as the level required to respond to climate change; strong support is lobbying a more realistic figure of 80%). The table below offers some scenarios of what life may look like for the residents of York to work towards achieving a 60% reduction lifestyle. It is worth noting these measures, significant though they seem, still only take us to a 50% reduction. Even stronger measures are required to achieve the 60% and even 80% target, for which developing environmental technologies will play a part.
- We need to consider alternative forms of transport to reduce the average car mileage of each person in the city
 - We all need to reduce the amount of food we buy (we currently throw away almost a third). Reducing our meat and dairy intake has a significant reduction on our carbon footprint.
 - We need to reduce our consumption of goods such as clothes, shoes, DIY equipment, etc.
 - We need to increase our energy efficiency within our homes, and look to supply and generate our energy from renewable sources and technologies.

Issue	Suggestions to reduce our Carbon footprint from 11.5 tonnes to 6 tonnes per person (50% reduction)
Food	Reduce our general food consumption by 25%. Reduce our meat and dairy consumption by 50%. (NB Up to 30% of the food we buy is thrown away as waste)
Transport	Reduce our car mileage to 3,000 miles per year from an average 8,000. Reduce our international flights by 90%. An 80% reduction would need to move to non fossil based transport
Housing	Reduce our fossil based electricity and heating usage by 60%. This would include a combination of energy efficiency and renewable fuel sources.
Goods & Services	Reduce our consumption of consumables by 20%. This includes items such as clothing, footwear, beauty products, household DIY equipment.

The table below illustrates the rate of change required to work towards the 60% target.



13. The information is purely provided to show the areas of activity that will need to come forward but clearly it will be a combination of a number of actions covering all the main issues.

14. One of the key outcomes for the Climate Change Strategy will be a resident consultation, education and public engagement programme. The Strategy will clearly need to include well developed communication activities and the audience for these will be different for each partnership and whilst the key messages will be the same the delivery will be different. So again it is impossible to give an identified list of actions for this area. However there are already examples of council activity in this area, for example the public engagement programme around waste minimisation and the 'Doing your bit' section of the council website www.york.gov.uk/environment/Sustainability/Agenda21/Doing_your_bit/ . Clearly this area of action will need to look further a field for other good practice such as the website of the Mayor of New York which provide 10 tips to reduce a residents environmental impact <http://www.nyc.gov/html/planyc2030/html/greenyc/greenyc.shtml> .

Corporate Priorities

15. This update to the Sustainability and Climate Change Strategy and Action Plan meets the following corporate and partnership objectives:
 - 'Without Walls' - the Community Strategy which provides the sustainable framework for York ;
 - Corporate Direction Statement 'We will seek to place environmental sustainability at the heart of everything we do.'
 - Corporate Improvement Priority of; 'Reduce the environmental impact of council activities and encourage, empower and promote others to do the same.'
 - Executive sign up to the Nottingham Declaration on Climate Change

Implications

16.

- **Financial** – There are no financial implications
- **Human Resources (HR)** – There are no HR implications.
- **Equalities** – There are no equalities implications.
- **Legal** – There are no legal implications.
- **Crime and Disorder** – There are no crime and disorder implications.
- **Information Technology (IT)** – There are no IT implications.
- **Property** – There are no property implications.
- **Other** – None.

Risk Management

17. In compliance with the Councils risk management strategy. There are no risks associated with the recommendations of this report.

Recommendations

18. Members are asked to note the report and that the Carbon Management Programme Strategic Implementation Plan (SIP) will be brought to Executive in March 2008.

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Report Approved

Date 4th December 2007

Specialist Implications Officer(s) None

Wards Affected: All

All

For further information please contact the author of the report

Background Papers: Report to and minutes of Executive 11th September 2007 – Environmental Sustainability Strategy and Action Plan towards a Climate Change Strategy for the city. Report to and minutes of Executive 20th April 2004 – Draft Environmental Policy and update on preliminary review of the Environmental Management System.

Annexes:

- A. Delivering a Climate Change Strategy for York.