

WEST DUNBARTONSHIRE COUNCIL

Report by the Chief Executive

Corporate & Efficient Governance Committee – 25th November 2009

Subject: Carbon Management Plan

1. Purpose

- 1.1** The purpose of this report is to provide information on and seek approval for the Carbon Management Plan (CMP).

2. Background

- 2.1** West Dunbartonshire Council embarked upon the Local Authority Carbon Management (LACM) Programme in May 2008. This government-funded programme is managed by the Carbon Trust who provide councils with technical and change management support and guidance to help them realise carbon (CO₂) emissions savings.
- 2.2** The primary focus of the work is to reduce emissions under the control of the local authority such as those from buildings, vehicle fleets, street lighting and waste disposal.
- 2.3** As part of the Programme, a carbon reduction target for the Authority was agreed – to reduce emissions by one third (from a baseline year of 2006/07) by 2015. It should be borne in mind that the Scottish Government has agreed a target of reducing emissions by 80% by 2050 (interim target 42% by 2020).
- 2.4** WDC has obligations to reduce carbon emissions under the Carbon Reduction Commitment (CRC). The CRC is a new mandatory emission trading scheme, launching in April 2010, with the aim of reducing the amount of carbon dioxide emitted in the UK. Under this scheme, organisations have to purchase ‘allowances’ for every tonne of carbon they emit. The cost of allowances has initially been set at £12/tonne. Revenue from the sale of allowances is ‘recycled’ back to participants as an incentive to reduce emissions - this recycling payment is based on the progress an organisation makes in reducing its carbon emissions, and can include an additional bonus based on the level of emissions reduction. This essentially means, if WDC successfully reduces carbon emissions year on year the recycling payment would cover the investment in allowances. However, if WDC fails to reduce emissions it would fail to recover the full cost of allowances so in effect would be paying extra for the amount of energy used. Based on current energy consumption, it is anticipated the cost of allowances in the first three years would be as follows (2010/11 is a monitoring period):

Year	Cost
2010/11	n/a
2011/12	£334,980
2012/13	£337,320

- 2.5** The CMP outlines West Dunbartonshire Council's carbon baseline and opportunities for carbon reduction; and provides an indication of the potential cost of implementing carbon reduction opportunities and the savings (financial and CO₂) which could be achieved.
- 2.6** The Programme complements work on Best Value work streams, particularly the Efficient Government and Customer First agendas. While carbon reduction is at the core of the Programme, it has identified potential efficiency opportunities in terms of spending on energy, fuel and water, and waste disposal costs which will be monitored and reported annually in the Efficiency Statement. The Programme also contributes to delivering objectives in the SOA and complements projects to be undertaken through the Fairer Scotland Fund.

3. Main Issues

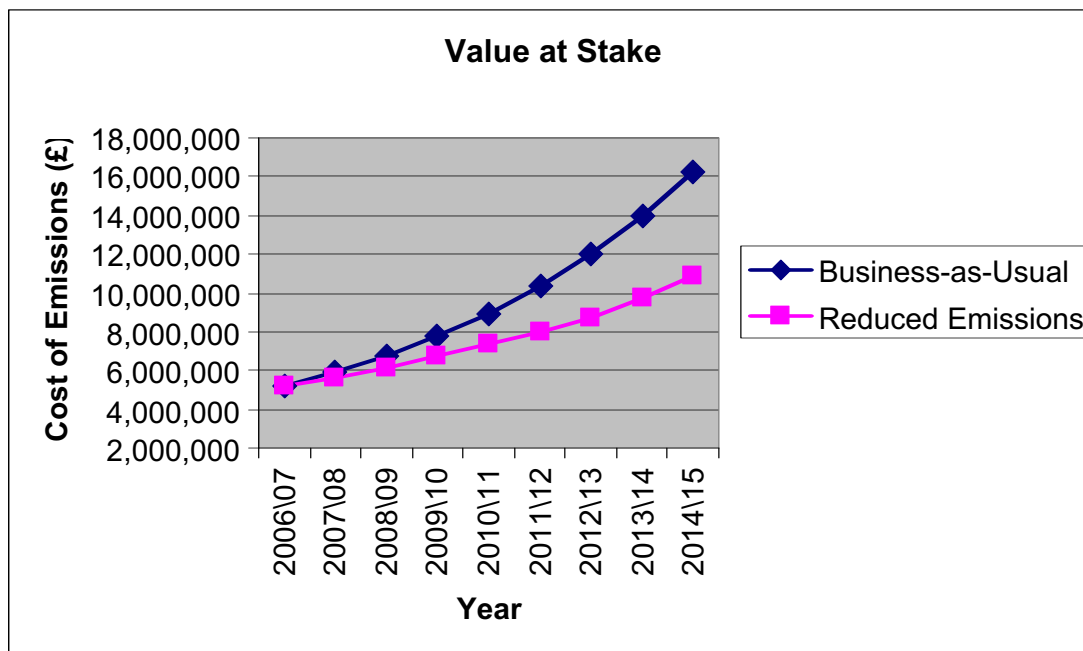
Baseline

- 3.1** 2006/07 is the baseline year. A baseline was estimated by collating information on energy and water consumption, fuel consumption, and waste collected. In that year, WDC carbon emissions totalled 34,271 tonnes at a cost to WDC of £5,195,599 (cost of energy, fuel, landfill tax and gate fee, water supply and waste water treatment). Energy accounts for 84% of the baseline, transport 10%, and waste and water 6%.

Value at Stake

- 3.2** If no action is taken to reduce consumption of energy, water and fuel and reduce waste, we can expect emissions to increase annually. The CMP also takes into account projected cost increases and the impact this will have if current levels of consumption continue. This is illustrated graphically below - the 'business as usual' line represents the annually increasing carbon costs if no action is taken to reduce emissions which would see these costs soar to £16,237,592. If, however, action is taken to reduce emissions by one third by 2014/15, the carbon cost will reduce dramatically – represented by the 'reduced emissions' line, maintaining these costs at £10,879,187. This potential saving can be described as the 'value at stake', which values £5,358,405 in 2014/15.

In other words, by implementing the efficiency projects identified by this programme, there is the opportunity to reduce growing pressure on revenue budgets by keeping budget increases to a minimum.



Opportunities

- 3.3 A number of efficiency projects have been identified which have the potential to reduce consumption, thereby containing costs and reducing carbon emissions.
- 3.4 A significant level of investment would be required to implement the CMP and achieve the potential savings it can offer. This is in essence 'spending to save' as each project offers opportunity to reduce costs associated with the consumption of energy, water, fuel, and waste disposal.
- 3.5 As energy consumption is the most significant element of the baseline in terms of emissions and cost, the majority of projects relate to reducing energy consumption. A full list of the projects can be found in Appendix B which illustrates the average percentage efficiency savings that can be achieved by implementing each project, for example, insulating a building can reduce its energy consumption by 20%; installing thermostatic radiator valves to control temperature in a building can reduce its energy consumption by 5%. Appendix B also lists the projects relating to transport, waste, and water and the estimated savings which could be achieved by implementing these projects.
- 3.6 The following table provides an illustrative guide to total cost of implementing these projects as well as the potential efficiency savings and reduction in carbon emissions. It should be noted that in Year 2 on, the only projects

taken into account are an ongoing programme of energy projects which would take a number of years to be implemented and an annual cost associated with a transport project. The costs are all capital costs.

	Year 1 2009/10	Year 2 2010/11	Year 3 2011/12	Year 4 2012/13	Year 5 2013/14	Year 6 2014/15	
Business-as-usual carbon 'cost' (£)	7,770,970	8,948,403	10,338,129	11,981,490	13,928,114	16,237,592	
Annual Saving which could be achieved by implementing CMP (£)	782,274	1,007,527	1,137,144	1,269,947	1,406,822	1,548,875	7,152,589
Required Investment (£)	984,500	476,720	481,487	486,302	491,165	496,077	3,416,251
Annual CO2 saving (tonnes)	2,376	2,376	3,995	5,614	7,233	8,852	

3.7 Projects have been prioritised to achieve the greatest possible savings based on cost, deliverability, and potential carbon reduction. Available funding would initially be focused on those projects which will offer the greatest efficiency saving.

3.8 In order to meet the financial cost of implementing these projects, a bid has been made to the Spend-to-Save budget, monies will be utilised from the Central Energy Efficiency Fund, and it has been agreed (by CMT) to spend up to £10,000 on awareness raising (a fundamental element of the Plan). A bid has also been made to the capital programme for 2010/11 and 2011/12. Funds will be sought from external sources wherever possible to meet the remaining shortfall in funding, for example, the Low Carbon Buildings Programme, the Carbon Trust. Most external sources of funding will require the funds to be matched by the council. Failure to attract funding will slow the pace of change.

3.9 As illustrated in the above table, a considerable level of investment is required in order to implement the projects identified in the CMP. It is anticipated that growth budget bids will be submitted as part of the service planning process to fund particular projects.

4. Personnel Issues

4.1 In general, projects will be implemented with existing staffing resources. In some cases, this Plan builds on work which is already being undertaken by services. As the majority of projects relate to energy management, it is anticipated that additional resource will be required in the energy management team in order to effectively implement and monitor a number of projects. The energy efficiency savings generated by additional resourcing would more than cover the associated employee costs. A business case for this additional resource is currently being prepared.

5. Financial Implications

- 5.1** As detailed in Section 3, investment on this project will result in a reduction in energy, water and fuel consumption and a reduction in the amount of waste produced for disposal at landfill. The savings generated from this reduced consumption will reduce pressure on future revenue budgets.
- 5.2** Implementation of the projects outlined in the Plan will require capital investment. Other external sources of funding will be utilised wherever possible but these sources only offer limited opportunity for funding.

6. Risk Analysis

- 6.1** If the Plan is not approved, the council risks facing steep challenges in future to reduce emissions in line with forthcoming legislation including the Carbon Reduction Commitment in 2010 and the Climate Change Bill which has set a target of reducing emissions by 80% by 2050. There is also a significant risk of an increasing adverse impact on revenue budgets.

7. Conclusions & Officers' Recommendations

- 7.1** The Carbon Management Plan outlines opportunities to reduce the council's carbon emissions. The Council made a commitment to do so by signing up to Scotland's Climate Change Declaration.
- 7.2** Implementing the projects identified in the Plan will also offer significant financial savings and minimise future revenue burdens as the projects will cut consumption of energy, water and fuel, and reduce waste production.
- 7.3** It is recommended that the Committee approve the Carbon Management Plan.
- 7.4** It is recommended the Committee note that budget bids relating to the implementation of the Carbon Management Plan will require to be considered as part of the capital budget commitment in future years.
- 7.5** It is recommended the Committee agree that annual carbon management performance monitoring reports are submitted to the appropriate Committee.

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Date: 4 November 2009

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Appendices: Appendix A: Carbon Management Plan
Appendix B: Carbon Management Plan Project List

Background Papers: None

Wards Affected: n/a