

ABERDEEN CITY COUNCIL

COMMITTEE: Full Council

DATE 24 March 2010

DIRECTOR: Gordon McIntosh

TITLE OF REPORT Aberdeen City Council's Carbon Management Plan 2010-2015

REPORT NUMBER: EPI/10/032

1. PURPOSE OF REPORT

The purpose of this report is to outline the risks and rewards of the Council's Carbon Management Plan (CMP) 2010-2015 and to seek approval for its adoption. It also seeks to request that a replacement Elected Member is selected for the North East of Scotland Climate Change Partnership.

2. RECOMMENDATION(S)

That the Committee:-

- a. agrees to the adoption of the Carbon Management Plan 2010-2015,
- b. agrees that the carbon impact is calculated as part of all future Capital Bids,
- c. agrees that the carbon impact is calculated for any works under the Repair and Replacement Budget,
- d. agrees in principle to the creation of a Carbon Investment Fund to be established to locally offset the affects of air and road travel, with a more detailed report to be sent to this Committee in September 2010,
- e. agrees to the appointment of an Elected Member to the North East of Scotland's Climate Change Partnership;
- f. agrees that an Elected Member along with Senior Officers and the CMP Project Leader attend the Carbon Trust's Carbon Management Programme Award to be held in Edinburgh in mid June 2010; and
- g. instructs the Head of Asset Management and Operations to prepare an Annual Progress Report to be presented to Enterprise, Planning and Infrastructure Committee.

3. FINANCIAL IMPLICATIONS

This overall plan has both revenue and capital implications. The targets of which will impact the prioritisation of future and current projects. The planned projects have the potential, as a minimum to save the Council significant funds in energy costs and 27,262 tonnes of Carbon dioxide (CO₂) over the next 5 years. Currently our Finance experts are quantifying these funds and their likely impact on future budgets. Under the Carbon Reduction Commitment (CRC) this could

save the Council a further £113,563 (based on the initial set price of £12 per tonne CO₂). Appendix A gives a breakdown of how the projects will be financed.

The Carbon Management Plan proposes carbon impact is taken into consideration when prioritising current and future capital investments. The introduction of the Carbon Reduction Commitment in April 2010 will allow for a current cost of carbon to be used as one of the measures to gauge the merit of Business Cases. Similarly it is proposed that all works carried out under the Repair and Replacement budget for Council buildings, vehicles and equipment, are evaluated for carbon / energy savings at the planning and evaluation stage. This will ensure the optimum solution is agreed rather than continuing to replace like for like. Such decisions need to be endorsed at a Corporate Management level. The risks of failing to do so could result in the Council paying more as part of the CRC.

As part of Council operations air travel is undertaken regularly. A Carbon Investment Fund similar to the Climate Funds established in Cities across the world would be used to finance small one-off carbon reducing projects within the Council, whilst offsetting the impact of our travel needs. A proposal is contained further within this report.

4. SERVICE & COMMUNITY IMPACT

This Plan supports the environmental and economic priorities within the City's Community Plan, the Council's Administration Policy, 'Vibrant, Dynamic and Forward Looking' which aims to minimise the impact of council activities on the environment including a target of being carbon neutral overall by 2020 and a commitment that all new council developments will be carbon neutral. The Single Outcome Agreement Outcome 14 aims to reduce both the City's carbon and ecological footprint which is one of the highest in the United Kingdom.

Both an Equalities & Human Rights Impact Assessment and Strategic Environmental Screening Assessment have been undertaken. The Strategic Environmental Assessment has only needed to be Pre-Screened. The Equalities Human Rights Impact Assessment show no adverse affects with the potential of providing affordable warmth and reducing inequalities for Council tenants. Both assessments are available to view on request.

5. OTHER IMPLICATIONS

The Climate Change Act (Scotland) 2009 and other European and UK legislation make it a requirement to address climate change and reduce carbon emissions. The Carbon Reduction Commitment and the Energy Performance of Buildings Directive (which includes Energy Performance Certificates) are some of the statutory requirements that place both financial and environmental pressure on the Council to achieve the required targets. The Council as a property owner and employer will need to consider how it deploys its property, equipment and employees in order to meet these targets. The CMP considers these aspects

and other environmental and health matters such as Air Quality in the projects that it proposes.

6. REPORT

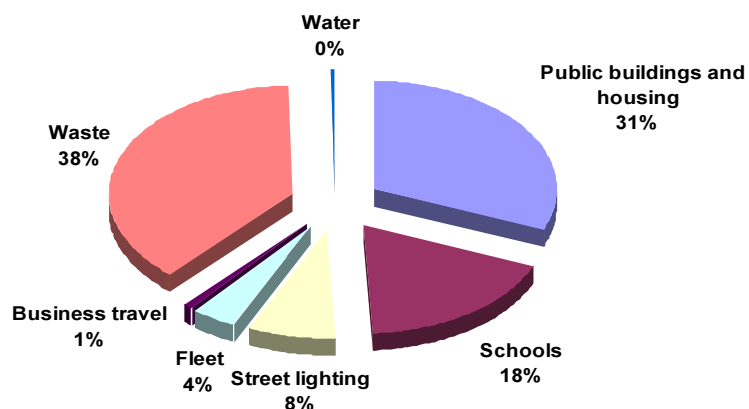
- 6.1 Aberdeen City Council is committed to tackling climate change and was one of the first authorities in the UK to participate in the Local Authority Carbon Management Programme (LACMP) with the Carbon Trust. The work for that Carbon Management Plan 2004-2008 was mainly developed by consultants but the Council achieved a CO₂ reduction of 31% by 2006 surpassing the set target of a 10% reduction by 2010. In order to meet the Council's continued carbon reduction obligations it has been agreed that a new plan is required, which has been aligned to the Council's budget process.
- 6.2 The Council is participating in LACMP for the second time. The work has been undertaken by officers across the Council. The programme provided officers with support and guidance to help them accurately measure carbon emissions and identify opportunities to make carbon emissions savings. This enabled the project group to identify an accurate, up to date picture of the Council's carbon emissions. A Project Leader was selected to lead an 'in-house' project team. This has been internally sponsored and overall leadership has come from the CMP Strategy Group chaired by the Chief Executive.
- 6.3 The result is a detailed Draft Carbon Management Plan (See Attached) which will allow the Council to continually reduce its CO₂ emissions in forthcoming years whilst creating tangible financial benefits. In establishing a Carbon Management programme the Council has set a new target to reduce the Council's CO₂ emissions. Using the financial year 2008/2009 the Council aims to make CO₂ emission reductions of -
- 23% by 2015 and
 - 42% by 2020.
- Thereafter, reduce the Council's CO₂ emissions year on year in line with national legislation. The Council's proposed Carbon Management Plan (CMP) is required to be signed by 31 March 2010.
- 6.4 Both the Scottish and UK Governments want local authorities to display leadership in achieving their Climate Change objectives. The Council's actions must contribute in achieving the goal to reduce CO₂ emissions by 80% by 2050 as set out in both the Climate Change (Scotland) Act 2009 and the UK Climate Change Act 2008.
- 6.5 There are a number of legislative drivers for local authorities such as Energy Performance Certificates (EPC) for buildings. This is a legal requirement where buildings with public access and a total useful floor area of over 1,000m² must display an EPC which shows the building's energy efficiency rating on a scale from A – G. The Carbon Reduction Commitment (CRC) is a mandatory "cap & trade" emissions trading scheme for organisations whose total electricity consumption is greater

than 6,000MWh or approximately £500k. All electricity and fuel emissions are covered except emissions from domestic buildings and street lighting. As of this year, 2010, poorly performing Local Authorities will be penalised depending on their position in a CRC league table.

6.6 The Councils annual CO₂ emissions for 2008-2009 was calculated at 118 530 tonnes. The following emissions sources have been included in the programme scope:

- Council fleet;
- Council housing stock - 59 multi-storey blocks, consisting of approximately 4,500 flats;
- Energy consumption in council buildings including buildings used by arms length organisations such as Sport Aberdeen Ltd, Aberdeen Performing Arts and the 3Rs Public Private Partnership project;
- Information & Communication Technology (ICT);
- Street lighting: including traffic signals and illuminated street signs (electricity);
- Staff business travel;
- Waste (both internal and domestic); and
- Water consumption and disposal.

Figure One shows a breakdown of the Council's carbon emission's baseline. Public Buildings and Housing emit the most carbon dioxide a total of 31%, with Schools emitting 18%. This comes to a total of 49% of total emissions. This is followed by the Council's Waste Management activities which come to a total of 38% of total emissions.



Emission Source	Tonnes CO ₂
Public buildings and housing	36851.75
Schools	21411.62
Street lighting	9131.232

Fleet	4767.184
Business travel	980.635
Waste	45207.79
Water	180.331
Total	118530.5

Figure 1: Carbon emissions broken down by sector

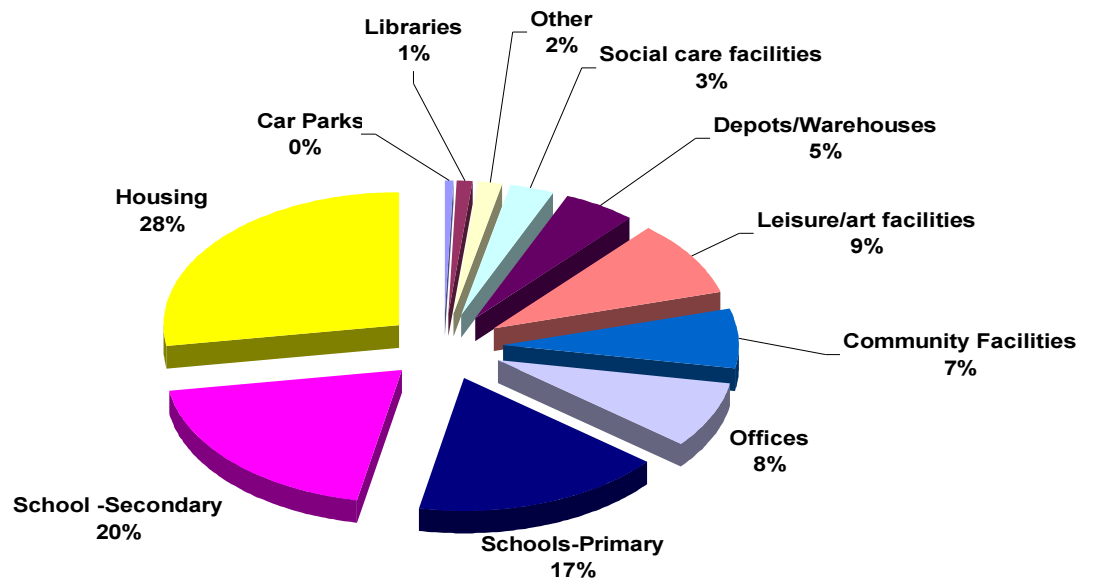


Figure 2: Building Emissions broken down by building type

The emissions from Public Buildings, Housing, and Schools (a total of 49%) can be broken down further. Schools make up 37% of these emissions¹, Housing 28% with remainder of Council buildings making up 35%. This suggests that if Council buildings, Schools and Housing emissions are addressed significant savings and carbon reductions can be made to advance the Scottish Government's and Council's carbon reduction targets.

6.7 Using 2008/09 as the baseline of 118,530.5 tonnes it is possible to calculate the amount of CO₂ produced from Council activities over the next 5 years if the proposed projects are not implemented. The projected CO₂ emissions would rise to 124,462 tonnes CO₂ by 2015. If carbon emission are reduced 23% by 2015, the tonnage would be approximately 91,268.48 tonnes with a potential financial saving of £2 million.

¹ Secondary Schools 20% and Primary Schools 17%

Table 1: Proposed Projects as detailed in the Draft Carbon Management Plan

Project	CO₂ Reduction (tonnes)	% of reduction target
1 Methane capture	3,500.0	12.8
2 Awareness Raising / Training	2,913.2	10.7
3 Building rationalisation	2,665.0	9.8
4 Food waste collections	2,011.0	7.4
5 3Rs Schools Project	1,873.0	6.9
6 Waste recycling centres	1,788.0	6.6
7 Alternative weekly collections	1,247.0	4.6
8 Extension of CHP network	1,040.0	3.8
9 Street lighting replacement	886.2	3.3
10 Duthie Park biomass	698.0	2.6
11 Conversion of 2 oil heated schools to renewables	390.1	1.4
12 Fleet Projects	563.2	2.1
Other Quantified Projects	1945.9	7.1
Target = 27,262.02 tonnes CO₂	21,520.6	79.12

The greatest carbon savings are attributed to waste and building related projects, most of which already exist. It is vital that the existing projects are realised, in order to advance these savings. The building rationalisation project includes moving offices from St Nicholas House and Summerhill to Marischal College. This calculation omits any additional energy efficiency initiatives that may be undertaken with the construction.

- 6.8 This Council has made efforts to ensure carbon is reduced in its projects, developments and as part of its activities. This is demonstrated through projects such as the 3Rs, Sustainable Procurement, Combined Heat and Power Plants, Marischal College and many other initiatives. The Carbon Management Plan includes many of the Council's current projects and has quantified the value of these and proposed projects in terms of financial and carbon savings. The Council will have to consider if it will make up the carbon shortfall from focussing on additional building and waste projects where the biggest impacts can be made. The Council has a raft of Environmental Policies, Partnerships, and Commitments that enable these projects but this Plan articulates the detailed actions, risks and rewards.
- 6.9 As part of this task it has been noted that there is often a call to offset carbon emissions associated with the Council's air travel. Municipalities and Cities like The Hague have set up their own off setting funds which are used to contribute to local projects. It is suggested that as a way to encourage alternatives to road and air travel, the Council may consider a 10% surcharge contribution towards an Aberdeen City Council Carbon Investment Fund. These funds can be used to finance small carbon saving initiatives across the Council. If the initiative was agreeable, officers could work up a more detailed proposal to be presented to this Committee in September 2010.

- 6.10 This Council has made a variety of Commitments aimed to reduce carbon and address Global Climate Change (See Appendix B). On 21 May 2008 the Council agreed to become a member of the North East Scotland Climate Change Partnership (See Appendix B) and appointed an appropriate Councillor to represent Council interests in this group with officer support. The Partnership's purpose is to work together to address the implications of climate change in the North East. This is achieved through joint working with the potential to share strategies such as Climate Change Adaptation.
- 6.11 Membership consists of a range of public and large private sector organisations such as the two Universities, Aberdeenshire Council, the Chamber of Commerce, the Forestry Commission, NHS Grampian, the Fire Service and the Police. As a result of the Council's structural changes the appointed member no-longer holds the Climate Change remit. It benefits the Council having Elected Member representation in this partnership.
- 6.12 Active participation as a Partnership member supports the Council's Commitment to addressing climate change and carbon management. In particular fellow participants in the 2010 Carbon Management Programme and previous programmes are also members of the Partnership. This allows for joint learning and collaboration in Carbon Management and addressing Climate Change. Jointly beneficial research and initiatives can be and have been undertaken.
- 6.13 The Partnership appoints a new Chairperson annually. Currently the Chair and Secretariat are held by Aberdeenshire Council. Should at some point Aberdeen City Council wish to consider taking up the Chair, there is currently adequate secretariat support to support this within current budgets.
- 6.14 The Carbon Trust will celebrate along with participants on the 2010 Alumni, to which this Council is one, the completion of the Carbon Management Programme with a special award in Edinburgh in mid June 2010. This is a high-profile event and it would be appropriate for Project Leader, Project Support, Project Sponsor and an Elected Member to attend.

7. REPORT AUTHOR DETAILS

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8. BACKGROUND PAPERS

- **Appendix A:** Breakdown of Funding Sources
- **Appendix B:** Aberdeen City Council Climate Change Commitments
- Equalities Human Rights Impact Assessment Aberdeen City Council CMP 2010-2015
- Strategic Environmental Assessment Screening Report – Aberdeen City Council CMP 2010-2015