Local Authority Carbon Management Programme

Strategy and Implementation Plan (SIP) for Aberdeenshire Council

Date: March 2007

Version number: draft ah17d

Owner: Anne Laird

Approval:

Contents

Approvals

This document will be presented for approval at the Council's Policy and Resources Committee on 19 April 2007.

Foreword

Cutting carbon emissions as part of the fight against climate change should be a key priority for local authorities – it's all about getting your own house in order and leading by example. The UK government has identified the local authority sector as key to delivering carbon reduction across the UK inline with its Kyoto commitments and the Local Authority Carbon Management programme is designed in response to this. It assists councils like Aberdeenshire Council in saving money on energy and putting it to good use in other areas, whilst making a positive contribution to the environment by lowering their carbon emissions.

Aberdeenshire Council was selected in 2006, amidst strong competition, to take part in this ambitious programme. As one of the most proactive councils in the UK in responding to the risks that climate change presents Aberdeenshire has joined the 98 councils across the UK who have to date partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings.

This Carbon Management Strategy and Implementation Plan commits the Council to a target of reducing CO_2 by 20% by 2012 and underpins potential financial savings to the Council of £3,597,024.

There are those that can and those that do. Local authorities can contribute significantly to reducing CO_2 emissions. The Carbon Trust is very proud to support Aberdeenshire Council in their ongoing implementation of carbon management.

Richard Rugg
Public Sector Manager

1. Management summary

Aberdeenshire Council's Carbon Management Plan has been produced during a period of increased and sustained public interest in climate change. As work was being undertaken, the Stern report (The economics of climate change) indicated the links between our environment and the economy and the Intergovernmental Panel on Climate Control (IPCC) confirmed the link between human activity and climate change. The Carbon Management Plan builds on a long term goal contained in the Council's Sustainability Charter to significantly reduce its production of greenhouse gases by 2050 and comes at a time when all Councils in Scotland have recently signed up to the Scottish Climate Change Declaration (SCCD) (Appendix A). There has never been a more relevant time for the Council to endorse this plan than now.

During the production of this plan the Council's Scrutiny and Audit Committee reported on its investigations into Aberdeenshire Council's response to climate change. The report underlines the Council's commitment to understanding climate change and the implications for its area. It identifies what measures the authority could take to improve its environmental performance, including carbon management and accounting. One specific recommendation is that the Council commits itself to becoming carbon neutral in the short to medium term. So it is clear that this plan is just the beginning of sustained action to reduce carbon emissions.

The Council has committed to take a leading role in the issue of carbon management in Aberdeenshire. For several years funding has been committed to an energy efficiency team and excellent savings have been achieved through this. The Council has also been supportive of renewable energy projects and has successfully converted an oil boiler at Aboyne Academy to carbon neutral wood chip. Work has also progressed on the Council's own Travel Plan. But much work remains to be done and it is through this Carbon Management Plan, and subsequent versions, that targeted action will be carried forward.

It is recognised that making necessary changes will be challenging and will require continuing and strong leadership. Employees in all parts of the organisation need to be engaged in and recognise the role they can play to reduce carbon emissions . With around 14,000 employees the implementation will be a large task. However the Council is convinced of the need to do this and with some urgency. This plan shows how we can cut 20% from our baseline emissions over the next 5 years. It sets out how we plan to do this through a governance strategy and communications plan.

The Council is grateful to the Carbon Trust and its consultants, Impact Plus and ESD for guidance and support throughout the course of the Local Authority Carbon Management Programme. The Council recognises the hard work of the carbon management team representing all services who contributed to the production of this plan. Thanks also to our partner local authorities for their shared ideas and experiences. The Council looks forward to the implementation of the plan and to ongoing work to further reduce our carbon emissions in subsequent years.

Iain Gabriel, Director of Transportation and Infrastructure
Lead Sponsor for Local Authority Carbon Management Plan

Christine Gore Director of Planning and Environmental Services
Support Sponsor for Local Authority Carbon Management Plan

2. Introduction

Document Purpose

This document forms the main output of the Local Authority Carbon Management Programme that Aberdeenshire Council has undertaken, with guidance from the Carbon Trust and their partner organisations.

It outlines the steps which the project team consider necessary to achieve the reductions specified in the project plan.

This Strategic Implementation Plan (SIP) should also be seen in the context of the recent Scrutiny and Audit Committee (SAC) report "The Bigger Issue", as it provides a starting point for many of the themes covered and actions required by that report.

Outline project plans for the individual projects are included as an appendix to this document.

Background

Aberdeenshire Council undertook the Carbon Management Programme with the following objectives:

- achieve genuine reductions in carbon emissions
- raise awareness amongst employees and the general public
- embed carbon management into corporate policy and practice
- identify a specific person with responsibility for carbon management

and in the expectation of achieving the following benefits:

- Co-ordinated cross-functional examination of several existing initiatives
- Creation of self-financing energy efficiency funding mechanisms
- Identifiable long-term cost savings associated with improved environmental performance
- Formal Energy Accreditation of the Council by an external organisation
- Raised profile as community leader in energy efficiency

This SIP describes how the Council will achieve these objectives and benefits.

Approval

Approval by project sponsors	March 2007
Presented to Policy & Resources Committee	April 2007

Timescales

Approval	April 2007
First projects commence	May 2007
Early projects complete	August 2007
First annual review	April 2008
First review of full financial year	May 2009
Full savings achieved	2012

3. Carbon Management strategy

3.1 *Context and drivers*

3.1.1. External drivers

Climate change

There is now no significant doubt that climate change is happening, that the rate of change is increasing, and that the major contributor to this accelerating change is the increasing level of carbon dioxide (CO_2) emissions. Aberdeenshire Council acknowledges these facts and is committed to playing its part in mitigating climate change. At present Aberdeenshire Council, is directly responsible for the emission of **146,350** tonnes[1] of carbon in the course of carrying out its duties,.

Climate change knows no boundaries, political or geographical. It is an important issue at all levels of government, but particularly local government because we can directly influence so much. As stated by Ross Finnie, Scottish Minister for the Environment, in Scotland's Declaration on Climate Change "an effective response to climate change cannot be achieved by central government alone. Scotland's communities will be in the front line in responding to the impacts of climate change and also have a role in reducing emissions of greenhouse gases that are contributing to climate change."[2]
All the major political parties now acknowledge the importance of tackling climate change.

Rising energy costs

National increases in energy costs are having an impact on the Council's expenditure on fuel. This is indicated by Aberdeenshire's fuel bill for public properties, which stood at £5 million for 2004/5, and is expected to exceed £9 million in 2006/7. Recent reductions indicate fluctuations which reflect an unstable situation in the energy market.

Steps which reduce energy consumption carry with them financial benefits as well as reductions in carbon emissions.

Energy Security

Although in absolute terms remaining reserves of fossil fuels are sufficient for many years, those that are economically viable to extract are becoming increasingly concentrated in a few regions of the world. Extracting and transporting those fuels requires co-operation from several countries and depends on their ongoing political stability. Security of energy supplies has become a major issue in recent years, following price protests and in the light of international tension.

The UK is aspiring to become less dependent on other countries for its energy supplies. If we can obtain more of our energy from renewable sources, we will be less dependent on fossil fuels and therefore less reliant on factors outwith our control. There is an opportunity within the North East to become a renewable energy region and to be a leader in the field of renewable technologies for the future.

UK carbon reduction targets

UK has obligations under The Kyoto Protocol to cut emissions of greenhouse gases (the chief of which is carbon dioxide, CO_2) by 12.5% by 2012 (based on 1990 levels); the UK has committed to a 20% cut by 2010, with the aim of achieving a 60% reduction by 2050.
The Energy White Paper 2003 set a UK target of cutting CO_2 emissions by 60% by 2050, and states that local authorities are "pivotal" in delivering change by becoming more efficient, using new technologies, and influencing the community.

[1] As baseline data for 2005/06, includes commuting
[2] Climate change declaration January 2007

Climate Change Bill

In March 2007, the UK government introduced a climate change bill which will make the UK's long term goal a 60% reduction of carbon dioxide levels (from 1990 levels) a legally binding target.

Changing Our Ways: Scotland's Climate Change Programme (2006)

This is one of the main delivery programmes for *Choosing Our Future: Scotland's Sustainable Development Strategy (2005[3])* and details policy priorities and targets for Scotland, including:

- The domestic (UK) goal of a 20% cut in CO2 emission levels by 2010, as stated above. The aim is for Scotland's people to live in a low-carbon society; by 2050
- by 2010, 18% of electricity generation in Scotland should be from renewable sources, with 40% by 2020

Local Government in Scotland Act (2003)

The Local Government in Scotland Act (2003) [4] established three key priorities, powers and duties for local authorities to which the Council must adhere.

- a **Duty of Best Value** – to ensure continuous improvement in the delivery of services
- a **Duty of Community Planning** – to ensure long term commitment to effective partnership working with communities and between local authorities and other key bodies and organisations.
- a **Power to Advance Wellbeing** – to enable local authorities to work in a more innovative and creative way in responding to the needs of their communities

Scotland's Climate Change Programme summarised the national relevance of these three local authority priorities in relation to climate change and shows just how closely interrelated the Local Government in Scotland Act, the duty of Best Value, and Scotland's Sustainable Development Strategy are.

EU Directive on energy performance of buildings

On 1st May 2007 the new Technical Handbooks that provide guidance on achieving the standards set in the Building (Scotland) Regulations 2004 will come into force. These revisions include changes due to the EU Directive on the Energy Performance of Buildings (EUPBD) and will improve the carbon emissions from buildings.

General awareness and media coverage

The subjects of greenhouse gas emissions and climate change are now well embedded in public consciousness and are causing significant public concern. Individuals – employees, councillors and residents – have a genuine desire to do something about it, and there is a widespread political will to tackle this important issue. What is perhaps less well understood is the extent to which individuals can make a difference, and how much positive impact can be achieved by relatively minor actions. Among some sectors there is a view that the Council is not doing as much as they could to reduce their own emissions, although there is evidence that the local population have confidence in them ("The Bigger Issue"). As a publicly accountable user of significant amounts of energy, we must take action to reduce emissions and ensure that such action is visible. Once the Council has shown the positive effects of relatively straightforward actions, we will be in a better position to influence other organisations and the general public.

[3] http://www.scotland.gov.uk/Publications/2005/12/1493902/39032
[4] http://www.opsi.gov.uk/legislation/_omputer/acts2003/20030001.htm

Community Planning

A sustainable environment is one of the five themes of Aberdeenshire's Community Plan. This plan involves nine partners working together and in partnership with the community to raise awareness and improve levels of understanding, and to take appropriate actions.

This can be achieved through programmes such as the Carbon Trust work and the Scottish Climate Change Declaration. Both these programmes involve a variety of organisations so we can exploit this opportunity to share best practice.

Development in Aberdeenshire

Aberdeenshire is still experiencing a steady rate of development as people move into the area. Services and facilities are required to meet the needs of the growing population of outlying towns. In many cases the energy requirements of these developments mean that it will be difficult to reduce consumption, but by increasing efficiency and use of renewable energy, we can minimise increases of CO_2 emissions.

Nationally there is a drive to make all new housing developments carbon neutral and Aberdeenshire Council take the lead in promoting this concept in their own developments.

3.1.2. Internal drivers

Commitment to tackling climate change

Aberdeenshire Council's commitment to tackling climate change has been demonstrated in many ways, particularly by signing Scotland's Climate Change Declaration in January 2007.
However, such declarations have to be matched by action. Aberdeenshire's commitment to relevant action is demonstrated by various existing initiatives.

Scrutiny & Audit Committee investigation

Scrutiny & Audit Committee have concluded an investigation into the interrelationship between the Council's activities and climate change. A report, "The Bigger Issue", produced in February 2007, recommends the Council make a commitment to become a carbon neutral organisation in the short to medium term (by 2020). It also recommends dialogue with partner organisations to investigate the potential to make the region carbon neutral by 2030. This SIP will provide a first step towards achieving those recommendations.

Sustainability Charter

Aberdeenshire Council introduced the Sustainability Charter in 2004. This has the overarching theme of reducing greenhouse gases. The five key aims of the Charter are:

- Reduction of key resources usage
  - energy / water
  - travel
  - waste
- Raise awareness
- Sustainable purchasing policy
- Reducing global footprint
- Encouraging consultation

Kaizen on Corporate Plans

The recently established Kaizen on Corporate Plans aims to rationalise and prioritise the various levels of corporate plan. It is essential that this SIP should be at the highest level, and should therefore

influence all Council plans. Although this is an internal issue, Aberdeenshire Council is working jointly with Aberdeen City Council on a number of plans in terms of economic planning, community planning and environmental issues. It is therefore essential that our commitment to the SIP and the SCCD is established through this Kaizen exercise.

Waste Management Plan

Driven by EU legislation and funded by the Scottish Executive, the Waste Management Plan aims to reduce material going to landfill. This is being achieved by increasing the amount of waste that is recycled.

School Travel Plans

Owing to its scattered population, Aberdeenshire experiences a number of issues with school travel; for many there is simply no choice but to travel by motorised vehicle. Approximately 12,000 pupils travel to and from school by bus every day; in addition, taxis are used to transport a number of pupils individually. Subsequent versions of this plan will look to include figures for this additional travel once they have been confirmed.

A significant amount of effort has gone into each school formulating a School Travel Plan that minimises the environmental impact of school travel. This is compatible with the Council's efforts to reduce CO_2 emissions.

Employee Travel Plan

Work is in progress to formulate an employee travel plan that similarly minimises environmental impact. Aberdeenshire Council is looking at 'travel sacrifice plans', under which the cash sum to cover the cost of a travel season ticket or to buy a bicycle can be advanced to the employee, and a regular sum deducted each month to repay the loan, which is also tax-exempt. This incentive encourages employees to use a more sustainable method of transport, without incurring a significant initial outlay. Other areas for consideration include the promotion of car share schemes, national lift share day, cycle to work day etc..

Sustainable Purchasing Policy

The Council's Sustainable Purchasing Policy has now been in place for nearly two years. It is also compatible with efforts to reduce emissions caused directly and indirectly by the Council, and to consider the life cycle of individual products.

However, this Policy should be strengthened by encouraging a culture where the first question in a purchasing decision should be whether the item is genuinely essential. Routine replacement after a particular length of time should be discouraged.

Related to Purchasing Policy, we recommend that the Council liase more closely with other public bodies and local organisations to encourage re-use of items no longer required, rather than disposing of them to landfill.

Energy consumption reduction measures

The property service has a plan of action aimed at reducing energy consumption. As reported to Council's Policy and Resources Committee in November 2006, this plan includes a new energy awareness campaign with "Energy Champions". As the desired behavioural change is common to both programmes, this awareness campaign will be conducted in close collaboration with the carbon management awareness campaign.

3.2 *Vision*

The project team agreed the vision to be:

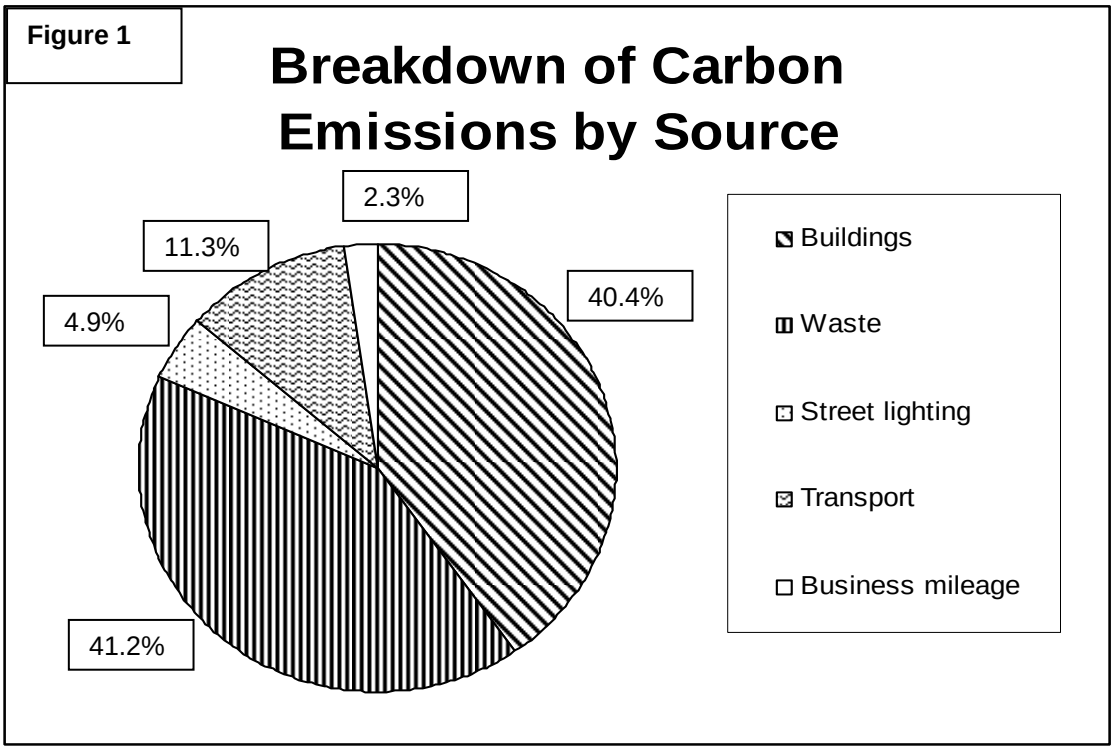
Aberdeenshire Council will work towards reducing its adverse impact on climate change by better understanding and managing activities under its control which emit carbon dioxide and other greenhouse gases.

By doing so, the Council aims to create a cleaner, greener, safer environment for all residents.

3.3 *Objectives and targets*

Figure 1 below shows the breakdown of carbon emissions by source, as established from the baseline data for year 2005/06. The largest proportion of carbon comes from our buildings, and collection and disposal of residents' waste.

Figure 1



In the light of this, the following targets have been established:

- overall reduction in CO_2 emissions of 20% by 2012
- an aspirational target to reduce CO_2 emissions by 30% by 2012

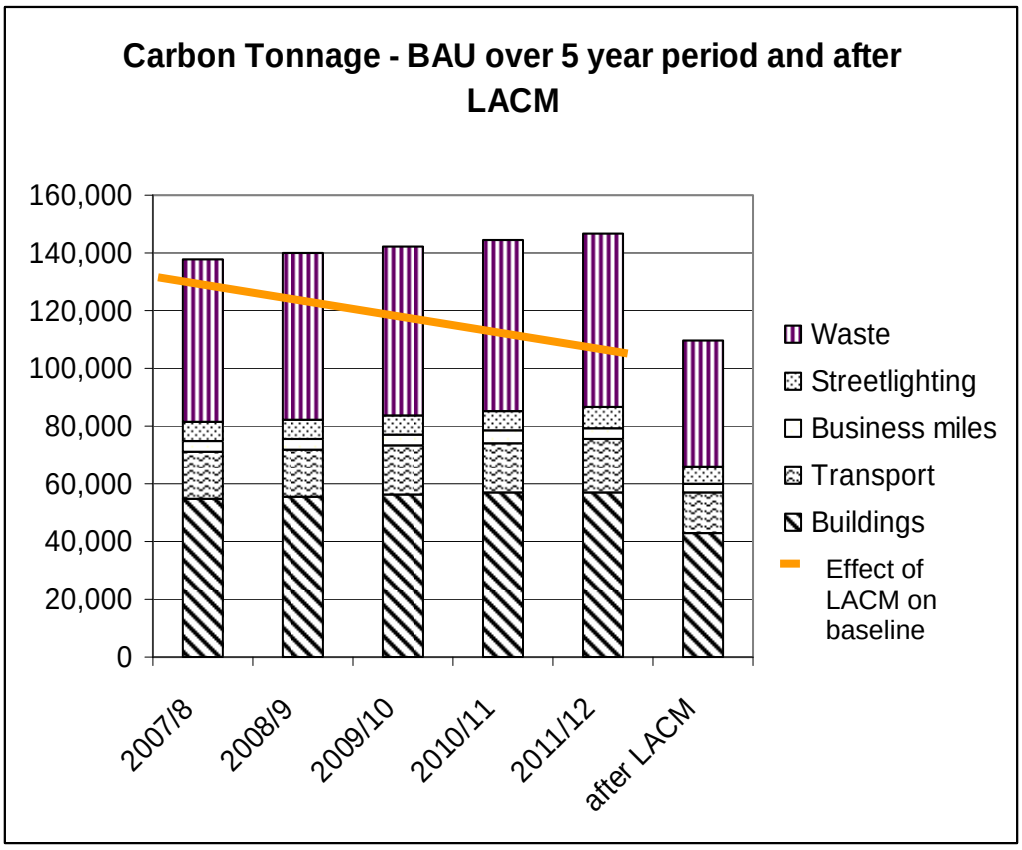
This 20% reduction arises from reductions as shown in Figure 2 below. This 20% figure includes 3% to be achieved by general awareness raising.

Figure 2: Current (2005) and projected (2012) Carbon emissions (tonnes) [5]

	2005	Reduction	**2012**
Buildings	54023	20%	43218
Street Lighting	6553	5%	6225
Transport	15088	10%	13579
Business Mileage	3058	6%	2875
Waste to landfill	55049	20%	44039
Sub total	**133771**	17.81%	**109936**
Awareness	109936	3%	106638
Total % Reduction	**133771**	**20.28%**	**106638**

Figure 3 below shows how carbon emissions will rise annually if no action is taken and business continues as usual (BAU), for the five year period of this plan, and the reduction expected in response to actions described in this SIP.

Figure 3



[5] Projections
Business as usual projections have been based on standard annual increases of between 1% and 5% (for figures refer to Appendix B)

3.4 ***Potential challenges***

Finance

One potential difficulty is the Council's financial structure, where benefits are evaluated purely in financial terms, and projects are assessed on their payback period. This means that projects whose benefits include carbon reductions are at a disadvantage if they are not the least expensive.

Fleet Services Vehicles

Although fleet services purchase and maintain the vehicles which the Council operate, responsibility for usage of the vehicles rests with the individual services. Fleet are to implement a Fleet Management System which will allow services to monitor the efficiency of their vehicle usage. This should highlight instances where vehicles are being under-utilised so the need for the vehicle can be reviewed, or more efficient methods of working may be employed. This will require cross working between services in terms of data input.

Perceptions

Although general awareness of environmental issues and the importance of reducing carbon emissions is increasing, there are still many people within the Council who would not perceive carbon as a critical issue, or who fail to realise the effects that can be achieved by small behavioural changes. There are currently conflicting theories, being presented in the media which is confusing to both employees and public.

These perceptions need to be addressed by targeted and sustained training and communications.

Organisational Culture Change

There are several types of cultural change which need to be encouraged; one example relates to business mileage.

Due to of the remoteness of the area, it has been deemed necessary for many employees to have vehicles to carry out their day-to-day duties. This means that people attend meetings because it is easy for them to do so, instead of questioning whether there is a different way of achieving the required result. People should be encouraged to consider

- do I need to go?
- do I need to take the car?
- can we do it some other way?

Single Status has brought about a review of the Essential Car User (ECU) scheme whereby there appears to be an incentive to maximise the mileage incurred; in terms of car allowance payments. This is contrary to attempts to reduce carbon emissions, and will need careful management if reduction of business miles is to be achieved.

It is generally accepted that people can and do change their behaviour to progressively use public transport more; if they rely less on their car for work-related transport, they will probably also rely less on it for commuting to work. Availability of pool cars at main Council offices would provide alternative means of transport to individual ownership.

There are many other aspects of cultural change which need to be considered. These will be addressed in the communications activities associated with this plan.

Availability of technology to allow more flexible working

New technologies do allow for alternative practices such as home working (NOMAD project), and video conferencing. There is a perception within the Council that these technologies do not work, when in fact the majority of the problems are caused by user unfamiliarity rather than technical failure.

However, in encouraging home-working the Council needs to be mindful of the possibility of simply transferring carbon emissions to private households; for example, if people working at home use their

own heating and lighting, this is probably in addition to energy already being used to heat and light shared offices.

3.5 ***Strategy, Monitoring and Review***

The SIP will relate to the five-year period 2007 to 2012. Progress will be monitored constantly, with routine management reporting on a quarterly basis and annual reports being submitted to Policy & Resources Committee alongside reports on the Sustainability Charter.

In 2012 a further review should be conducted to ensure that all the effective measures remain in place and to consider what further improvements are required in order to meet the recommendations of the SAC's 'The Bigger Issue' report.

4. Emissions baseline and projections

4.1 *Scope*

The data which we have used has been presented by each service, to include their full remit. The properties listed in the buildings section include public buildings, such as schools, libraries and leisure facilities, and also includes care homes and day centres. Offices are included, as are depots and other work surroundings which Council employees use as their work bases.

There is no provision in this document for carbon emissions from Council housing stock. Whilst the Council is working to improve the levels of insulation and efficiency of heating systems in Council stock, the emissions arising from the houses are attributed to individual residents and are therefore not included as a target for reduction in this plan.

The data for transport includes all Aberdeenshire Council fleet vehicles, from cars to refuse trucks and everything in between, fleet vehicles are those which belong to Aberdeenshire Council and are used in the course of work carried out by the Council.

Figures for street lighting include street lighting in both residential areas and for highways, including bollards and signs.

The tonnage for waste does not include the transport figures for collecting this material, as this is accounted for under 'transport'. This carbon figure is purely based on the tonnage of waste material collected from residential properties (this does not include materials which are recycled).

Figures for commuting are based on a survey undertaken in October 2006; this produced a 4% return sample and explored the different modes of transport which employees used to travel to their workplace. The survey was based on employees whose main work base is Woodhill House, and employees who regularly visit this location. Therefore it must be recognised that this may not give a full picture of employees at all locations and their methods of commuting to work.

Baseline

Figure 4 shows the baseline data, established on information for the period 2005/06. The financial costs cover expenditure on fuel.

Figure 4

Service Area	*Current Cost in £*	*Current Carbon Emissions (tonnes)*
Buildings	*£9,064,356**	*54,023*
Transport	*£7,038,909*	*15,088*
Street Lighting	*£859,973*	*6,553*
Waste		*55,049*
Commuting		*12,579***
Business Miles	*£3,753,651*	*3058*

**based on 2006/7 fuel prices*
***based on a 4% return sample*

Past actions and achievements

The Sustainability Charter has been effective in a number of areas and has undoubtedly raised the profile of environmental issues within the organisation. Aberdeenshire Council was one of the first local authorities to employ a Strategic Environmental Assessment (SEA) officer. Aberdeenshire Council also have a Sustainability Co-ordinator, this post was created almost two years ago. Due to the changes in legislation and the changes in attitude towards environmental issues, this was a visionary step.

Aberdeenshire Council recently took part in a three year pilot project with Aberdeen City and supported by the World Wildlife Fund (WWF), Scottish Executive (SE) and others to calculate the ecological

footprint[6] of the North East and work out ways of reducing it. The project identified the main contributers to the North East footprint to be of the North East of Scotland. The main contributors to the North East Scotland's Global Footprint are:

- Built Environment and Energy
- Food and Drink
- Travel

Prior to the results of this project, Aberdeenshire Council had in place a Principal Energy Management Engineer, a Travel Planning Officer, and a School Travel Planning Officer, who were already working to meet the aims of the Sustainability Charter.

Scottish Climate Change Declaration

In January 2007 Aberdeenshire Council signed up to the Scottish Climate Change Declaration, which requires commitment to take actions to reduce carbon emissions. Such actions are to be recorded and monitored on a regular basis. This SIP will form the basis of action.

Key points of the Climate Change Declaration are:

- Scotland's Climate Change Declaration has initially been prepared for Scottish local government, but is worded to enable others to consider signing.
- It fulfils a commitment in Scotland's Climate Change Programme.
- The Declaration commits the signatory authority to specific actions on climate change
- Actions aimed at both mitigation and adaptation are included.
- The Declaration was developed by a partnership of twelve agencies.
- The Declaration has been fully endorsed by COSLA[7]

Energy Management in Buildings

The Council continues to implement energy efficiency measures that reduce energy consumption and costs. In 2006 it is estimated that energy efficiency measures implemented through the Central Energy Efficiency Fund (CEEF) saved 3.3 million kWh. This equates to 1,300 tonnes of CO_2 per year. Recent measures that have been carried out include

- Replacement of tungsten lamps with low energy lamps in various schools and offices
- Upgrading lighting to high efficiency lighting in Woodhill House, Peterhead Academy sport hall and Peterhead academy pool.
- Installing swimming pool covers in Inverurie, Huntly, Westhill, Fraserburgh, Mackie, Ellon and Banchory Academies and Anna Ritchie Primary School
- Replacing old motors with high efficiency variable speed motors in Ellon Academy and Woodhill House.
- Installing timers for vending machines in various schools and offices
- Installing pipe insulation in various properties
- Altering ventilation systems to allow more use of fresh air for 'free cooling' in Woodhill House

[6]The Global Footprint is a tool that measures the area of land and sea, in terms of global hectares, used to provide water, energy, food and materials required to support people's lifestyles, as well as absorb waste. Such a tool helps to judge how sustainable lifestyles are an what changes are needed now and in the future to reduce global impact. (North East Scotland Global Footprint Reduction Report, Aberdeen City Council/Aberdeenshire Council/WWF, 2007)

[7] Scottish Climate Change Declaration

Employee and Business Travel

A Travel Planning Officer is in post and is involved in determining the travel patterns of employees both in commuting to their workplace and for business travel. Work previously carried out has resulted in the introduction of cycle lockers at the Council's main office buildings, and the development of two car share databases, one for Aberdeenshire Council employees and one for Aberdeenshire residents.

Uptake of these options has been limited, but an estimated 20 tonnes of carbon have already been saved, and there is clear potential to increase this.

Business miles for 2005/06 stand at 9,956,792. This is an area which the Council can influence and there are financial incentives to Aberdeenshire Council in ensuring that we cut carbon emissions. The current target is to reduce business miles by 6% to the period to 2012, saving an estimated 183 tonnes of carbon over that period.

Fleet Services Vehicles

The vehicles which are owned and serviced by fleet management are used by individual services, however fleet management have looked at different types of vehicles and can supply information on the efficiency and availability of those and their suitability to their expected usage.

Procurement

The procurement service is currently introducing a comprehensive procurement strategy, which will result in a greater control over the process including more purchases being bought under contract. These contracts will ensure that suppliers provide goods from sustainable sources and reduce the travel distance which goods have to make to reach the end user. For example our school dinners service uses beef, pork and lamb which has been reared and slaughtered in the northeast. The new system will incorporate an electronic procurement system, which will ensure the contracted suppliers are used.

Due to purchasing legislation, tenders for goods and services above a value of £144k must be opened out to all potential suppliers within the EU, there are also many specialised pieces of equipment which are available from only a limited number of suppliers.

Waste

The waste service has changed the collection service which is provided to the public. A funding award was achieved from the Scottish Executive as the result of a bid for funding over a 17 year period. The service which is now provided is designed to help residents reduce the amount of waste they produce by only collecting the residual waste bin once every two weeks while collecting materials for recycling on alternate weeks. Although there is a similar amount of mileage travelled for the collection of materials from households, a reduced amount of material is now sent to landfill.

Recycling almost always uses less energy than manufacturing from new, but consideration should also be given to the transport implications of recycling. Emissions involved in this activity are incurred by organisations outside the Council, so this is difficult to monitor.

Street lighting

In the last few years a number of measures have been taken to reduce the carbon emissions produced from streetlights. These have included the reduction in the wattage of lamps both in new housing schemes, and on footpaths. The design of lights has been optimised to ensure that lower wattage lamps can be used without reducing the amount of light given out. It is easier to stipulate the use of more carbon efficient specifications on new fittings for streetlights in new housing schemes, than to retrofit existing lighting. In new housing schemes electronic control gear and lower wattage lighting are specified in order to reduce emissions.

Use of Renewables

The Council is investigating the use of renewables on Council buildings where feasible. One example is the replacement of an oil-fired heating system with a new biomass boiler unit at Aboyne Academy. The potential savings over a five-year period have been estimated at 2,500 tonnes of CO_2. In addition a number of feasibility studies have been completed to consider the potential for renewable energy production at four Council properties.

5. Carbon Management Implementation Plan

The main areas of focus for action will be on buildings, transport, street lighting, and business travel. There are some actions relating to the use of catering disposables, commuting and waste. Although Aberdeenshire Council does not have direct control over people's choice of transport for commuting, there is an opportunity to influence choices.

5.1 ***Shortlisted actions and emission reduction opportunities***

Following on from the opportunities workshop a number of projects were identified which we believe will allow the Council to reduce carbon emissions in the course of its business. These vary in their duration, costs and effectiveness, as outlined below.
Details of all projects can be found in appendix C

Long term enablement projects (EN)

- SIP becomes a primary document within the Council hierarchy of policies, plans and procedures which results from the Kaizen on Corporate Plans
- SIP becomes Aberdeenshire Council's core programme of work for the Climate Change Declaration
- An additional employee dedicated to the project to ensure that the actions are driven forward
- Review of capital funding application form to include greenhouse gas emissions as a principle for consideration
- Awareness-raising and training programme for new councillors
- Examine possible use of renewable energy in Council properties
- Ensure review of Purchasing Policy includes full consideration of life-cycle carbon emissions analysis.
- Awareness raising campaign for employees, working with other public sector bodies
- Set up carbon accounting group across relevant services
- Waste and recycling: examine current methods of transportation for recyclate materials.

No- and low-cost emissions reduction projects (LC)

- Establish programme of annual reviews and monitoring
- Appointment of energy champions
- Coverage of individuals roles and responsibilities in induction training and employee development and review scheme (EDRS)
- Employees suggestion scheme
- Business Mileage
- Change from "Green Energy" to standard tariff with Climate Change Levy
- Set up process to monitor use of energy in Council's 79 properties which have Buildings Energy Management Systems
- Awareness raising campaign, working within the organisation and with other public service bodies.
- Stop using polystyrene cups at Woodhill House
- Catering Disposables

Direct emissions reduction actions requiring investment (DA)

- Renewables projects
- Street lighting
- Develop the fleet management systems
- Reduce business mileage

Financial and carbon savings for all of these projects are given in section 5.

5.2 ***Implementation plan summary***

Long term enablement actions

Project Number	Project	Action Plans	Timescale for initial action	Timescale for completion	Who/ Depen-dencies	Cost & payback period	Carbon savings
EN01	SIP/Carbon Management becomes a primary document/aim within the Council hierarchy of policies, plans and procedures which results from the Kaizen on Corporate Plans	Raise with Kaizen on Corporate Plans	April 2007	September 2007	Alan Campbell (Planning)	nil	contribute towards savings achieved by awareness raising
EN02	SIP becomes Aberdeenshire Council's core programme of work for the Scottish Climate Change Declaration (SCCD)	Complete SIP with consideration of requirements of SCCD	April 2007	September 2007	Anne Laird	nil	contribute towards savings achieved by awareness raising
EN03	Additional employee (part-time) dedicated to the project to ensure that the actions are driven forward, specifically: • Carbon Co-ordinator	Document responsibilities that require additional employee.	April 2007	ongoing	Debbie Burroughs/ Irina Birnie	£20,000 p.a.	essential to secure 20% reduction overall
EN04	Review Capital Funding application form to include greenhouse gas emissions as a principle for consideration	Discuss with Finance	March 2007	September 2007	Anne Laird	employee time (existing employees)	contribute towards 20% reduction overall

Long term enablement actions (continued)

EN05	Awareness-raising and training programme for new councillors	Establish current sustainability content of training programme; review and enhance as required.	May 2007	ongoing	Kate Connor	employee time (existing employees)	contribute towards 20% reduction overall
EN06	Examine possible use of renewable energy in Council properties.	Use feasibility studies to ascertain financial viability at various locations.	March 2007	2009	Brian Smith	employee time (existing employees) £20,000 across 4 years for feasibility studies	contribute towards 20% reduction overall for buildings
EN07	Ensure review of Purchasing Policy includes full consideration of life-cycle carbon emissions analysis.	Working with Aberdeen City Council on joint purchasing policy.	July 2007	ongoing	Craig Innes	employee time (existing employees)	contribute towards 20% reduction overall
EN08	Awareness raising campaign:	Work with other public sector bodies and internal services to produce materials, training plan and general awareness raising campaign regarding carbon emissions reduction	March 2007	June 2007 and ongoing	Hilary Quick	£20,000 p.a.	essential for 3% overall savings from awareness raising; essential for effectiveness of all projects
EN09	Set up carbon accounting group across relevant services to build knowledge and pilot the use of carbon accounting.	Set up group.	June 2007	December 2007 and ongoing	Charles Armstrong	employee time (existing employees)	contribute towards 20% reduction overall and ongoing

EN10	Waste and recycling: examine locations and methods of transport for carbon emission reductions opportunities	Initiate examination; make recommendations	June 2007	December 2007		employee time (existing employees)	

No- and low-cost emissions reduction projects

Project Number	Project	Action Plans	Timescale for initial action	Target timescale for project completion	Who/ Dependencies	Capital cost & Payback period	Financial/ Carbon savings
LC01	Establish programme of annual reviews and monitoring	Save baseline data establish method for obtaining and comparing annual data	March 2008	2012	Carbon Co-ordinator	as above	contribute towards 20% reduction overall
LC02	Appointment of energy champions	Invite volunteers Train volunteers Implement Energy Champions scheme	March 2007	September 2007	Kevin McDonald	£20,000 (CEEF grant) over 3 years	£100,000 over 3 years. Contributes to 3% achieved by awareness raising.
LC03	Induction training and EDRS	Discuss with Personnel options for including carbon reduction measures in Induction training and EDRS; include familiarisation with technology such as video-conferencing.	June 2007	2008	Kate Connor	employee time (existing employees) materials costs included in awareness raising	contributes to 3% overall achieved by awareness raising.
LC04	Employee suggestion scheme	Discuss with scheme co-ordinator potential for enhancing scheme to include section with focus on carbon	June 2007	December 2007	Carbon Co-ordinator	employee time (existing employees)	depends on suggestions raised.
LC05	Reduce business mileage	Review annual business mileage with each service taking responsibility to reduce their annual mileage	June 2007	2012	Directors of service	employee time (existing employees)	183 tonnes over 5 years

LC06	Change from "Green Energy" to standard tariff with Climate Change Levy*[8]	Approach energy company	June 2007	September 2007	Brian Smith	nil	(see note below)
LC07	Set up process to monitor use of energy in Council's 79 properties that have BEMS. Recommend energy efficiency improvements.	Confirm recruitment	September 2007	ongoing	Brian Smith	employee time (existing employees) (recruitment underway)	part of 20% overall for buildings
LC08	General awareness raising campaign	Produce posters, stickers etc.; liaise with other public sector organisations; liaise internally with Energy Manager.	June 2007	ongoing	Hilary Quick	as above	as above
LC09	Stop using polystyrene cups at Woodhill House	Contract due to be renewed in 18 months so consider alternative, ie reusable crockery, or compostable disposables	June 2007	August 2007	Mike Hearnden	33% increase on current costs – will be passed on to customers (employees)	
LC10	Catering Disposables	There are 72 product lines for which alternatives would have to be found. Discussions with suppliers	June 2007	December 2008	Mike Hearnden	Any additional costs would be found from Education budget.	

[8] Money from Climate Change Levy (CCL) is used for measures that will reduce greenhouse gas emissions. It is a more "green" option than simply purchasing "green" electricity, because generating companies already have to produce 30% "green" energy. Therefore our purchase of it has no beneficial effect in terms of reducing carbon emissions involved in electricity generation

Direct emissions reduction actions requiring investment

Project Number	Project	Action Plans	Timescale for initial action	Target timescale for project completion	Who/ Dependencies	Capital Cost & payback period	Carbon Savings
DA01	Renewables project	Discuss with E&R and Finance to secure funding for renewables on a number of Aberdeenshire Council sites: ◆ Stonehaven Swimming Pools ◆ Macduff Marine Aquarium ◆ Mearns Academy ◆ Woodhill House	June 2007	2009	Kevin McDonald	£367,000 50% of which estimate from grant; payback approx. 10 years on each.	520 tonnes over 5 years
DA02	Street lighting	◆ Replace lamps with lower wattage ◆ Introduce electronic switching gear ◆ reduce duration for lights on	February 2007	2012	Brian Strachan Replacement programme	Total £46k p.a.. payback period approx. 15 years	178 tonnes over 5 years
DA03	Fleet Management systems	Implement computerised system; services input their own data; reporting results to services	June 2007	March 2008	Ian Paisley Time commitment from services to input data	unknown (bespoke programming of fleet management system); already funded from existing budget	unknown but expected to make more efficient use of existing fleet
DA04	Business mileage	Examine feasibility of providing shuttle buses between Council offices, how service could run.	June 2007	December 2007	Andrew Stewart	Feasibility study to identify actual costs; contributes to 6% Saving which equates	Contributes to 183 tonnes over 5 years;

						to £1.1M over 5 years	
DA05	Business mileage	Examine feasibility of providing pool cars at key locations.	January 2008	May 2008	Andrew Stewart	Feasibility study to identify actual costs. Saving which equates to £1.1M over 5 years	Contributes to 183 tonnes over 5 years;

Projects already completed:

- Procurement services are actively looking to promote the purchase of locally manufactured products and local suppliers within the legal constraints of the tendering process. Through the use of carefully worded tender specification, that does not in anyway discriminate or restrict competition, locally produced goods may be sourced within EU tender legislation.

- Aboyne Academy biomass boiler installed and commissioned February 2007, saving approx. 500 tonnes CO_2 p.a.. Already funded.

- Waste and Recycling: in 2006 service provision changed to incorporate kerbside recyclate collections. This should result in a reduction in the amount of waste going to landfill as shown in the baseline figures in section 3.

6. Finance

6.1 ***Finance Enablement Project***

- Monitor current Chartered Institute of Public Finance and Accountancy (CIPFA) developments in relation to sustainability
- Social cost of carbon – monitoring current research and debate
- Progress the incorporation of environmental factors into financial and investment decision making including: in conjunction with the capital plan group a review of investment decision procedures (capital project form) to incorporate environmental issues
- Examine the reporting of environmental performance of the organisation alongside financial performance.

6.2 ***Implementation Plan Financing***

Introduction

This section documents the costs, savings and funding of the projects contained in this plan. The effective management of carbon should generate both economic and environmental benefits, therefore this section also considers attributing a financial value to the environmental impact of the projects.

The projects detailed in this plan fall into 3 categories:

- Minimal/zero cost enablement projects
- Those projects that currently fall within the financial plans of the Authority
- Those projects that will require further funding – (and therefore a decision)

Appendix D of this report details these.

Revenue Costs

A number of the enablement projects will have ongoing revenue costs; these are summarised as follows (For details see appendix D, Revenue costs)

Capital Costs

A number of the projects detailed in this plan will require capital investments. As already highlighted, above (EN4) some concerns exist that current evaluation procedures regarding investment decisions do not reflect fully the environmental impact of projects.

The table below details the projects where financial implications have been identified and funding will come from a combination of existing funding and new bids. A number of projects still require to identify firm costs, and funding the review of investment decision making will impact these evaluations. (for details see appendix D Capital costs)

Financial Savings

The reduction of carbon emissions is likely to generate financial savings, which have been identified on a project by project basis.

An incentive scheme whereby budget holders could retain an element of the net savings made in certain services to help achieve the plans objectives. A review of the feasibility of this proposal will form part of the finance enablement project.

Social Cost of Carbon

The social cost of carbon (SCC) is the estimate of the cost of climate change damages—the net effects of impacts on economies and societies of long term trends in climate conditions, including extreme events, related to anthropogenic emission of greenhouse gases. This concept can be used to promote the consideration of greenhouse gas emissions in policies and decision making.

The detail as to how this might be incorporated into public sector accounting is a matter of ongoing research and public debate with far ranging implications, which will continue to monitored by the Authority. However for illustrative purposes within this document a cost of £70 per tonne of carbon has been applied.[9]

6.3 *Reporting and Decision Making*

Within Aberdeenshire Council, current procedures for applying for capital funding require completion of an assessment form, which does not take into account the principle of reducing greenhouse gas emissions. It is intended that this be reviewed as part of a wider process of review of the capital funding scheme, and general capacity building around green accounting in-house.

Figure 5

Summary of predicted costs and savings

Financial Savings					
Service Area	***2005/06 Carbon Tonnes***	***2005/06 Annual Cost***	***2011/12 Carbon Tonnes***	***2011/12 % Reduction***	***2011/12 Anticipated savings over 5 year period at 05/06 prices***
Buildings	**54,023**	**9,064,356**	**43,218**	**20%**	**1,812,938**
Street lighting	**6,553**	**859,973**	**6,225**	**5%**	**43,045**
Transport	**15,088**	**7,038,909**	**13,579**	**10%**	**703,984**
Business Mileage	**3,058**	**3,753,651**	**2875**	**6%**	**224,630**
Waste	**55,049**	**4,062,061**	**44039**	**20%**	**812,427**
Awareness			**-4013**	**3%**	
Total	**133,771**	**24,778,950**	**105,923**		**3,597,024**

[9] January 2002, a Government Economic Service working paper 'Estimating the Social Cost of Carbon Emissions' was published as a joint Defra-Treasury publication

7. Stakeholder management and communications

7.1 *Stakeholder management*

The main stakeholders were identified as part of the project launch:

- Council members
- Project sponsors
- Heads of service
- Other Council managers and employees
- Residents

It is particularly important that we should engage with new councillors elected in May 2007, and to gain their support for the programme.

7.2 *Communications Plan*

The programme of communications activities associated with the Carbon Management Plan will be based on the projects communication plan which formed part of the initial project plan. This will be managed by the Carbon Co-ordinator, with assistance one day a week, for devising and delivery of awareness and training events.

The communications work will use a number of existing groups to channel information and awareness raising both internally and working with other organisations. The Sustainability Officers Working Group (SOWG) and the Sustainability Working Group (SWG) are existing internal groups, while the Community Plan Environmental Theme Forum focuses on working together with other organisations and agencies to achieve sustainability and raising awareness in a wider community context. This will form a future part of the programme as Aberdeenshire Council works towards being carbon neutral.[10].

The Sustainability Co-ordinator is actively involved with a local Public Sector Carbon Management Group, which was set up in December 2006 after individuals identified an opportunity due to common objectives. This initial discussion brought together representatives from the Aberdeen City Council, Aberdeenshire Council, the Carbon Trust, NHS Grampian and Grampian Police. Also to be included are other “blue light” organisations and local Universities.

Subsequent discussion has identified scope to expand further and has also sought to clarify the outcomes anticipated. The focus initially will be to pool resource among the interested parties, engaging also with the Carbon Trust in an effort to initiate an energy awareness campaign, based on common ideals. The participating organisations envisage that the joint working will allow all parties to achieve best effect for minimum expenditure.

[10] SAC Report ‘The Bigger Issue’

Outline plan of communications activities

Stakeholder Group	Issues, Message & Means	Timetable
Councillors – especially those newly elected	Raise awareness of importance of CO_2 emissions, what we can and should do.	May – June 2007 ongoing at intervals thereafter
Council employees at all levels	Regular showing of film "An Inconvenient Truth", posters, stickers, awareness-raising through various existing internal channels. Enhance existing sustainability training & corporate induction. Improve awareness of technological alternatives such as video-conferencing and home working opportunities.	May 2007 onwards
Heads of services	Identify, discuss & resolve conflicting objectives	May – September 2007
Council employees at all levels	Publicity campaigns to improve awareness of public transport options Create awareness of impact of individual's actions Endeavour to create behavioural change eg. In commuting, office energy use etc	May – November 2007 and ongoing campaigns
Residents	Improve awareness & understanding of effectiveness of individual efforts. Endeavour to create behavioural change	October 2007 onwards

8. SIP governance, ownership and management

This section summarises the governance arrangements for managing and monitoring the implementation of Aberdeenshire Carbon Management Plan. It highlights roles and responsibilities, reporting arrangements and the frequency at which the plan will be updated.

8.1 *Main roles and responsibilities*

Central to successful implementation of the Carbon Management Plan is the need for clear ownership of each of the activities needed to keep the plan operational. Key people responsible for the Carbon Management Plan are as follows:

- The political sponsor for Carbon Management Plan is Chair of the Sustainability Working Group (and of the Council's Scrutiny and Audit Committee).
- At Director level, the lead person for Carbon Management Plan is the Director of Transportation and Infrastructure, with the Director of Planning and Environmental Services as support.
- Line management responsibility for the carbon co-ordinator rests with the Head of Planning Policy and Environment.
- At an operational level, day-to-day responsibility for implementation, monitoring and periodically reviewing the Council wide management Plan will rest with a Carbon Coordinator (to be appointed)
- Individual services will be accountable to the Carbon Coordinator through a Carbon Management Group. (see figure 6)

8.2 *Risks and issues management*

The Local Authority Carbon Management Plan has had the full support of the Council from its inception. Recent completion of the SACs report into the Council's response to climate change provides a positive opportunity on which to build further carbon reduction strategies into the future, both within the Council and throughout the Aberdeenshire area.

Risk management will be the responsibility of the Local Authority Carbon Management group together with the Directors and political sponsor.

The Carbon Co-ordinator will be responsible for drawing up risk management issues, and making recommendations on mitigation/minimisation measures. Identified risks and detailed mitigation measures will be submitted to the Directors and the sponsor for approval and action.

The risk log will be updated as new risks arise, and reviewed annually as part of the overall Implementation Plan review. Note that figure 7 is not exhaustive, but covers what are considered to be the key risks, with initial proposals only as countermeasures.

It is proposed that a 'lessons learned' log be kept by the Carbon Co-ordinator in relation to all the following issues (at least), in order to inform ongoing carbon management within Aberdeenshire Council.

Figure 6: Local Authority Carbon Management Group and Responsibility Table

Activity	Service	Executive/Member representation	LACM Group
Carbon Management Policy (overall direction)	Corporate	Chair of SWG & Directors Carbon coordinator	
Finance	Finance	Corporate Finance Manager	
Buildings			
Property : Energy conservation	T & I		Engineering Services Manager
Renewables	T & I		Industry Sector Manager
Planning gain	Law & Admin		Planning gain coordinator
Transport			
Employee travel: Commuting Business	T&I	Directors of each service	Travel Planning Officer
Vehicle fleet	T&I		Fleet Manager
Street Lighting	T&I		Strategy/Lighting Officer
Procurement			
Catering:disposables			Operations support co-ordinator, catering
Property	T&I		Head of Property
General		Purchasing	Purchasing Manager
Community Planning	Chief Executive		Policy Officer (Community Planning)
Waste	P&ES		Waste Strategy Officer Waste Minimisation Officer

Figure 7 Risk Log

Ref	Description of risk	Probability (H/M/L)	Impact (H/M/L)	Countermeasure
R1	Failure to progress	L	H	Ensure identified Plan in Service Plans
R2	Failure to secure capital finance to fund actions	M	H	Ensure capital funding application. form is reviewed to award points for C savings
R3	Failure of projects to deliver projected savings *(NB: If due to energy cost fluctuation this is a whole organisation risk, and no specific counter measures are advised for the SIP)*	M	H	Examine reasons in each case and recommend specific changes. Carry out detailed analysis of savings proposed for each project and build in appropriate flexibility.
R4	Financial measures are not established to allow savings to be reclaimed	M	M	Reconsider ring- fencing savings to originating budgets *or* to a cross-Council carbon mgt budget
R5	Inadequate monitoring and measuring of carbon savings	M	M	Ensure adequate employee resource to research and progress.
R6	Key project officer leaves or is long-term absent	L	M	Require 3 months' notice; identify substitute to cover if necessary

8.3 ***Benefits management***

The Local Authority Carbon Management process provides an opportunity to communicate with partners and the community, the steps that the Council is taking in respect of managing in-house emissions. This will in turn raise awareness of climate change issues within the organisation the community.

Cost benefits arising from the implementation of the Plan will be reported to the Policy and Resources Committee twice yearly.

8.4 ***Reporting and evaluation***

It is proposed that each individual nominated on the Carbon Management Group as identified in figure 6 report regularly on the following from within their own service:

- Measuring Consumption
- Updating emissions data

The LACM group representative themselves may be the person responsible the above, or they may have supporting employees

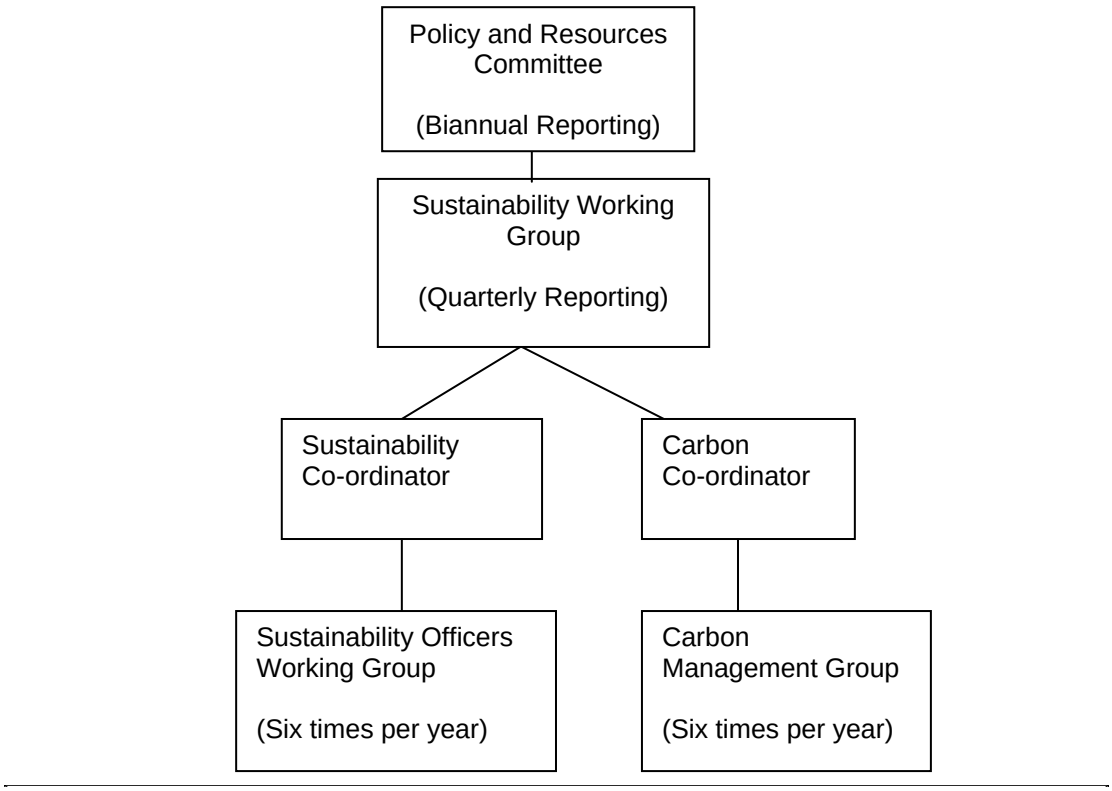
8.5 ***Reporting Mechanisms***

The existing SOWG meets on average 4-6 times per year, reporting to the SWG; the latter comprises elected members, officers and co-opted representatives from a number of external bodies.

The SWG meets quarterly, two of these meetings being expanded to form the Environmental Theme Forum of the Community Plan, and bringing in additional external parties.

In addition to the SOWG continuing as usual, a Local Authority Carbon Management Group will meet 4-6 times per year, reporting to the Sustainability Working Group through a Carbon Co-ordinator. (Figure 8)

Figure 8: Carbon Management Reporting Structure



Each service will be required to report on their consumptions/emissions data to meetings of the Carbon Management Group, this can be in the form of a report if the person is not available to attend.

Issues of carbon management will be reported twice yearly to the Policy and Resources Committee, and targets and objectives within the SIP reviewed annually in accordance with the Council's commitments.

Appendix A:

Insert a copy of the Scottish Climate Change Declaration here

Appendix B: Business as Usual figures

Business as Usual figures						
	% Increase	2007/08	2008/09	2009/10	2010/11	2011/12
Buildings	1%	55,109	55,660	56,217	56,779	57,347
Transport	3%	16,007	16,487	16,982	17,491	18,016
Business Miles	5%	3,371	3,540	3,717	3,903	4,098
Street Lighting	1%	6,685	6,752	6,819	6,887	6,956
Waste	1.5%	56,713	57,564	58,427	59,303	60,193

Appendix C: Individual Projects – Action Plans

Project / Action EN08 **Project Name: Communications Project** **Project Leader: Hilary Quick**	
Description and notes	Broad-ranging communications project to raise awareness of various opportunities for employees to reduce energy consumption and therefore carbon emissions. Materials are to be produced including posters, stickers, display banners for use in Council offices and potentially later at public events.
Quantified costs and benefits	• £20,000 per annum for 5 years • Essential for 3% reduction in energy consumption over 5 years • Cost savings of at least 3% from baseline figure; savings will be greater if energy prices continue to rise.
Resources	• Funding is to be secured from existing service budgets together with contribution from corporate training budget (50%). Committee to agree final funding detail. • Management to be through the Carbon Co-ordinator supported by an additional employee for one day a week
Ownership and accountability	The project will be managed by an employee appointed purely with this responsibility (Carbon Reduction Co-ordinator).
Ensuring success	• Collaboration with other public sector bodies to ensure best practice is followed and activities are cost effective • Principal risks: effectiveness of each phase, funding support from individual services. • Risk mitigation by regular reviews during and after each phase; also sharing experience with other public sector organisations.
Performance / success measure	General increased awareness amongst employees, and gradual culture change within the organisation.
Timing	Ongoing
Sources of information and guidance	Public sector partners, Personnel and ICT, materials from relevant communications courses attended eg ESD, Carbon Trust

Project / Action EN10 **Project Name: Waste and Recycling** **Project Leader: Waste minimisation officer**	
Description and notes	To explore opportunities to reduce carbon emissions caused either by transporting or processing of waste materials for recycling or disposal. The Council will review its existing reprocessor and disposal contracts as appropriate and consider carbon emissions when selecting new contractors. Equipment used for processing should be considered on its energy efficiency. Also to consider the mode of transport used and investigate alternative methods such as transport using alternative fuels, rail transport, etc and where road haulage is used ensuring backhaul of loads.
Quantified costs and benefits	The initial phase of the project will entail evaluation of opportunities and identify any investment and operational costs. Evaluation will need to start with a review of how best to calculate emissions levels or other benefits As no baseline currently exists for carbon emissions caused by transport and processing of waste it would not be possible to identify any savings.
Resources	To be identified following an analysis of individual opportunities. Employees to take this on as part of their existing duties.
Ownership and accountability	Ensure that employees who are involved in these contracts are aware of the goal of carbon reduction. Build carbon reduction objective into individual EDRS (see project LC03)
Ensuring success	Regular team meeting updates on progress, and EDRS
Performance / success measure	There are difficulties as current logistics do not necessarily allow for alternative modes of transport. Also, the availability of reprocessors is limited in the UK and there are many factors that must be considered not least the stability and reliability of the reprocessor or contractor. Waste minimisation will make an implicit contribution to this project as there will then be less waste to transport and process.
Timing	Ongoing, as there are constant changes and opportunities in the industry that will require investigation as they arise.
Sources of information and guidance	

Project / Action LC02 **Project Name: Energy Awareness Campaign & Energy Champions** **Project Leader: Kevin McDonald**	
Description and notes	As approved by the Policy And Resources Committee in November 2006, an energy awareness campaign will be launched, with volunteer energy champions being appointed.
Quantified costs and benefits	• The projects will require a funding commitment of upwards of £20,000 being made available
Resources	• Energy Management Team • Funding can be up to 10% from Central Energy Efficiency Fund (CEEF) • Energy Champions will be existing employees; need to allocate time to carry out energy awareness work
Ownership and accountability	• Lead – Principal Energy Engineer (Kevin McDonald) • Team – Energy Management Team
Ensuring success	• Sufficient champions volunteer • Energy champions report progress • Monitor building energy use on M&T system • Member and management support
Performance / success measure	Review the reductions against expectations by M&T reporting
Timing	Start April 2007 Continue for 1 to 3 years
Sources of information and guidance	http://ceef.energy-efficiency.org/

Project / Action LC02 **Project Name: Central Energy Efficiency Fund (CEEF)** **Project Leader: Kevin McDonald**	
Description and notes	Funding used for energy saving measures with paybacks of less than 5 years.
Quantified costs and benefits	• The projects will require to meet CEEF funding criteria • Paybacks must be less than 5 years • As more and more 'easy hit' projects are identified and carried out opportunities may reduce years
Resources	• Funding: None – costs are paid back to the fund from the service • Energy Management Team • Funding in place
Ownership and accountability	• Lead – Principal Energy Engineer • Team – Energy Management Team
Ensuring success	• Traditional tried and tested energy saving measures eg CEEF Funded swimming pool covers, use of low energy bulbs (see section 1.3 page16) • Paybacks must be less than 5 years • Monitor building on M&T system
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	Ongoing spend on energy efficiency measures
Sources of information and guidance	http://ceef.energy-efficiency.org/

Project / Action LC03 **Project Name: Carbon Awareness as part of Employee Development and Review Scheme** **Project Leader:Overall - Carbon Coordinator** **Service level - Directors**	
Description and notes	Consideration of carbon management is to become a key part of individual Employee Development and Review Scheme (EDRS). The objective is to raise awareness with all levels of employees about the issues surrounding climate change and carbon emissions at an individual level. Targets in the carbon management programme can be discussed and actions targeted within each Service. Training needs in respect of reduction targets can also be identified (eg efficient driver training) and included in the Service Training Plan.
Quantified costs and benefits	Costs are not quantifiable. Implications are mainly that of employees time to understand and discuss the relevance to each employee/team and to feedback potential actions. Benefits are part of 3% saving expected to come through general awareness raising.
Resources	No additional finance will be required but employees time will be involved in attending meetings and discussing the issue at EDRS reviews.
Ownership and accountability	EDRS is required to be carried out on an annual (or for some employees on a 3 yearly) basis. Consideration of the Carbon Management Plan could be built into this discussion with proposals generated on how services and individuals can contribute to the carbon reduction. Each Director could be made responsible for reporting on the outcome at Chief Officer level. A level of knowledge would be required by employees who carry out the EDRS. This potentially includes employees down to team leader level. This could be implemented as part of a cascade of knowledge from Chief Executive's management team down service management teams. The Communications Plan suggests a hierarchy of communications throughout Council employees starting with Chief Officers and Heads of Service. The system could be piloted within these employee groups following these meetings and thereafter cascaded downwards. Ownership at an individual service level should rest with the Directors of each service with advice on EDRS from Personnel.
Ensuring success	Service outcomes reported at Chief Executive's Management Team annually as part of report on Carbon Management Plan.
Performance / success measure	Report to CEMT should include percentage of employees briefed, summary of issues raised, targeting of actions in the service as a result. Achievement of 3% overall reduction rate through awareness raising.
Timing	The Communications Plan suggests a hierarchy of communications with Council employees starting with Chief Officers and Heads of Service. The system could be piloted within these employee groups following these meetings and thereafter cascaded downwards as EDRS is rolled out in the financial year 2007/08.
Sources of information and guidance	Carbon Co-ordinator to produce briefing package for line managers

Project / Action LC04 **Project Name: Carbon Awareness as part of Employee Suggestion Scheme** **Project Leader:Overall - Carbon Co-ordinator**	
Description and notes	Encourage employees to submit innovative ideas to reducing carbon emissions through the Employee Suggestion Scheme.
Quantified costs and benefits	Costs are expected to be negligible. Benefits are part of 3% saving expected to come through general awareness raising.
Resources	No additional finance will be required but employees time will be involved in assessing suggestions relating to energy saving and emissions reduction.
Ownership and accountability	Carbon Co-ordinator to instigate and monitor involvement levels.
Ensuring success	Promote awareness of category in suggestion scheme. Can not ensure success in this area, but consider additional incentives.
Performance / success measure	Reporting as part of existing reporting of suggestion scheme
Timing	Discussion with suggestion scheme co-ordinator – June 2007, aiming for implementation by September 2007.
Sources of information and guidance	

Project / Action LC05 **Project Name: Encouraging use of Video Conferencing (VC)** **Project Leader: Andrew Stewart, Travel Planning Officer**	
Description and notes	The Council has state-of-the-art video conferencing facilities – including a bridge which allows VC with more than one location – purchased by travel planning. Under the EU SustAccess programme, we have also funded free VC facilities etc in Huntly and Peterhead. A leaflet has been prepared and distributed to a few locations but knowledge and use of VC equipment is still low.
Quantified costs and benefits	• Financial investment, operational costs • The video conferencing equipment has already been purchased and IT hot spots in Huntly and Peterhead already exist. Promotional material for video conferencing also exists. Some additional costs might arise if the support arrangements for video conferencing are found to not meet users' needs. At present it would possibly be difficult to access someone quickly to assist with any queries or difficulties. • Emissions reduction • It is not possible to forecast precise emissions reductions. However, people using VC could log the miles they would have done as part of an incentive programme. This would allow us to calculate the actual carbon savings for each meeting using VC. • Financial savings • These should be directly proportional to the amount of miles unclaimed as a result of using VC. Forecasting this at present is not possible as currently use of VC relies entirely on voluntary behaviour change. • Avoidance of travel costs and CO_2 emissions will be most significant for the long journeys this is likely to displace. • Payback period • The facilities already exist so greater use should result in an immediate saving.
Resources	• The VC equipment and promotional leaflet already exist. Travel Planning budget would fund extra publicity work, incentives etc. • Management time will be taken up encouraging and enforcing use of VC where it is an appropriate alternative to car use. (This could be offset by reduction in time spent traveling)
Ownership and accountability	• the individuals **responsible** for delivery or decision making will be : Andrew Stewart, Travel Planning Officer, Peter MacCallum, Transportation Manager, Ewan Wallace, Head of Transportation and Chief Executive Management Team and Chris Clelland, ICT. • the individuals **accountable** for delivery or decision making and responsible for approval / sign-off are as above. • the individuals to be **consulted** in decision making are as above. • the individuals to be **informed** of actions, decisions or progress are as above.
Ensuring success	• Raising awareness of the VC facilities is a priority for the

	Travel Planning Officer. An incentive programme is being considered and ICT are updating the users' manual. Taster sessions may provide encouragement. Getting people aware and willing to try it once are key steps towards increasing use of VC. • Perceptions must be changed so employees immediately think of VC as a more convenient option than attending a meeting. • Principal risks include the equipment failing or falling into disrepair. If the support for users were felt to be inadequate they would be reluctant to use what is described as simple, but is nevertheless unfamiliar technology. • Possible risk that managers or colleagues perceive VC as a way of avoiding a meeting, rather than as a valuable and valid alternative way of conducting the business. Link with general awareness raising campaign • Main means of risk mitigation include clear ownership of equipment support, clear user information, greatly increased awareness and an incentive programme to encourage people to try it out.
Performance / success measure	It could be possible when booking VC facilities to ask people about the journey they would have made. This could be recorded and totalled giving some measurement of financial and emissions savings.
Timing	No timed plan at present.
Sources of information and guidance	A great deal of information is available on Travel Planning generally and this includes best practice on promoting VC and other alternatives to car use. Asking for feedback from the people using VC and listening to the doubts of people not ready to try VC should be considered.

Project / Action LC09 **Project Name: Stop Using Polystyrene Cups at Woodhill House** **Project Leader: T & I Catering Manager, Mike Hearnden & Facilities Manager, Mark Baker**	
Description and notes	The coffee bars at Woodhill House stop the use of standard polystyrene cups replace them with a hard wall polystyrene cup that is suitable for recycling through "Save-a-Cup" scheme. Cups may be purchased either through Whitemyres Warehouse or the Catering Disposables contractor, Bunzl., Save-a Cup will uplift waste cups on agreed frequency free of charge on condition that only their waste sacks are used. Repeat at water fountain points. Contract with "Save-a-Cup" to manage the timely uplift & recycling of used cups.
Quantified costs and benefits	• Financial investment, operational costs The cost of the implementation of the project is subject to the cost of the new cups, cup holders, the numbers & sizes of the recycling Beca Bins, the number of plastic storage sleeves that hold the used cups within the bins, the bulk recycling bin if required, the recycling sacks that Save- a-Cup insist must be used • Personnel The management of the ordering of supplies, the washing of the cup holders, & the emptying & cleaning of the bins within the coffee bars would become part of the duties of the catering employees. Mark Baker to identify who would be responsible for the emptying & cleaning of the bins sited at the water fountains • Start up costs Cup holders & cups to be sourced & prices identified through the Catering Disposables contract with Bunzl. Save-a-Cup to supply – Beca Bin 100 @ £26.99 Beca Bin 500 @ £54.99 Plastic Sleeves (200) @ £9.10 Bulk Bin – holds 8 sacks of 1500 waste cups - @ £250.00 Beca Bin Cleaning Mop (10) @ £3.60 Drawstring Recycling Sacks (260) @ £7.00 **Operational costs – Cups & sacks** Emissions reduction - Current polystyrene cup goes to landfill Hard wall polystyrene cup is suitable for recycling & reuse Financial savings - None Payback period - None
Resources	Project leaders to identify the availability of funding. Note that this will be a long term project with substantial demands on time.
Ownership and accountability	• Mike Hearnden & Mark Baker will be **responsible** for delivery or decision making; • Mike Hearnden & Mark Baker will be **accountable** for delivery or decision making and responsible for approval / sign-off; • Irene Wilson of Procurement Services will be **consulted** in decision making;

	• Irene Wilson of Procurement Services will be **informed** of actions, decisions or progress
Ensuring success	• Save a Cup is a dependable company with sufficient resources to manage this project • Risks include a possible lack of commitment to drive forward the project, and a lack of resources ie personnel/financial. Also, possibility of insufficient quantity of recycled cups to justify collection from England. • Risk mitigation methods will include ensuring management and political commitment at all levels.
Performance / success measure	Mike Hearnden & Mark Baker to identify
Timing	Mike Hearnden and Mark Baker to determine timescale.
Sources of information and guidance	Irene Wilson, Procurement Services

Project / Action LC10 **Project Name: Catering Disposables** **Project Leader: Ian Sandison of T & I Catering**	
Description and notes	Across the range of products listed (72 lines) in the Catering Disposables contract look at alternative products that can be produced and disposed of in a more environmental friendly manner ie. recycled & reused, industrially composted.
Quantified costs and benefits	It is difficult to gauge the financial implications as the range of current products is large and until suitable alternative products are identified & costed no figure can be attributed to the project. The availability & cost of collection and industrial composting is likely to be considerable. • Ongoing purchases of alternative products & associated disposal costs can only be identified once the project is underway and current product volumes are addressed. Generally biodegradable products incur cost increases of 33%. • Biodegradable & recyclable/reusable products reduce volumes of polystyrene & plastic products currently going to landfill sites • Financial savings n/a • Payback period n/a
Resources	T & I Catering Manager, Mike Hearnden to identify funding and resources. Demand on management resources is likely to be substantial due to the long term nature of the project
Ownership and accountability	• T & I Catering Manager, Mike Hearnden will be **responsible** for delivery and decision making; • T & I Catering Manager, Mike Hearnden will be **accountable** for delivery and decision making and responsible for approval / sign-off; • Irene Wilson of Procurement Services will be **consulted** in decision making • Irene Wilson of Procurement Services will be **informed** of actions, decisions or progress
Ensuring success	Risks include a lack of commitment to drive forward the project, lack of resources ie personnel/financial Risk mitigation to include regular reviews of progress, and resources, ensuring political and employee commitment.
Performance / success measure	Need to establish “as is” to enable measurable criteria to be agreed
Timing	To be confirmed
Sources of information and guidance	Irene Wilson, Procurement Services manages this contract

Project / Action DA01 **Project Name: Woodhill House wind turbines** **Project Leader: Kevin McDonald**	
Description and notes	Install six 1.5 kW wind turbines as identified in feasibility studies carried out in 2006.
Quantified costs and benefits	• Approximate Capital Cost £47,000 • The projects will require a funding commitment with up to 50% of the costs being sought from grants. • Financial Savings of £1,700 per annum • CO2 reduction over 5 years 175 Tonnes
Resources	• Energy Management Team • Capital funding and grants required
Ownership and accountability	• Lead – Principal Energy Engineer • Team – Energy Management Team
Ensuring success	• Capital bid for funding needs to be successful • Monitor building on Monitoring and Targeting (M&T) system • Planning could be a risk area for the more visual renewable options such as wind turbines.
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	July 2007 for 1-2 years duration
Sources of information and guidance	Renewable Energy Feasibility Study

Project / Action DA01 **Project Name: Stonehaven Leisure Centre & Outdoor Pool** **Project Leader: Kevin McDonald**	
Description and notes	Install solar thermal water heating as identified in feasibility studies carried out in 2006.
Quantified costs and benefits	• Approximate Capital Cost £220,000 • The projects will require a funding commitment with up to 50% of the costs being sought from grants. • Roof condition survey required • Financial Savings of £10,000 per annum • CO2 reduction over 5 years 280 Tonnes
Resources	• Energy Management Team • Capital funding and grants required
Ownership and accountability	• Lead – Principal Energy Engineer • Team – Energy Management Team
Ensuring success	• Capital bid for funding • Monitor building on Monitoring and Targeting (M&T) system • Time scale 1 to 2 years
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	July 2007
Sources of information and guidance	Renewable Energy Feasibility Study

Project / Action DA01 **Project Name: Macduff Marine Aquarium** **Project Leader: Kevin McDonald**	
Description and notes	Install 15kW wind turbine as identified in feasibility studies carried out in 2006.
Quantified costs and benefits	• Approximate Capital Cost £65,000 • The projects will require a funding commitment with up to 50% of the costs being sought from grants. • Financial Savings of £3,224 per annum • CO2 reduction over 5 years 45 Tonnes
Resources	• Energy Management Team • Capital funding and grants required
Ownership and accountability	• Lead – Principal Energy Engineer • Team – Energy Management Team
Ensuring success	• Capital bid for funding • Monitor building on Monitoring and Targeting (M&T) system
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	July 2007 for 1-2 years
Sources of information and guidance	Renewable Energy Feasibility Study

Project / Action DA01 **Project Name: Mearns Academy** **Project Leader: Kevin McDonald**	
Description and notes	Install 5kW wind turbine as identified in feasibility studies carried out in 2006.
Quantified costs and benefits	• Approximate Capital Cost £35,000 • The projects will require a funding commitment with up to 50% of the costs being sought from grants. • Financial Savings of £1,350 per annum • CO2 reduction over 5 years 20 Tonnes
Resources	• Energy Management Team • Capital funding and grants required
Ownership and accountability	• Lead – Principal Energy Engineer • Team – Energy Management Team
Ensuring success	• Capital bid for funding • Monitor building on M&T system
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	July 2007 for 1-2 years
Sources of information and guidance	Renewable Energy Feasibility Study

Project / Action DA02 **Project Name: Street Lights on For less time** **Project Leader: Brian Strachan**	
Description and notes	We currently work on the figure of 3912 hours per annum for all street lighting and illuminated signage stock. To gain a reduction in burning hours, guidance would have to be sought on the potential impact of the change. • Our current Photo electric cells are designed to switch at 70 lux on and 35 lux off, a ratio of 2:1. They switch on when natural light level falls to 70 lux and off again when daylight comes in and reaches 35 lux. These levels are widely used and photo cells designed to switch at different levels may be available but further investigation would be required. • If available, the new photo cells could be installed as part of general maintenance, when the old ones fail. They may not be widely available and could therefore cost more. • This would be a long term project as Photo cells have a relatively long life, say 6 to10 years so it would take some time to replace all 3000 no. of them (estimated). • We would require the agreement of our host electricity supplier and accurate record keeping would be essential to ensure we get the maximum benefit from this exercise.
Quantified costs and benefits	• £60,000 over 10 years • 160 tonnes at the end of a 10 year programme • £3000 per annum • 20 years
Resources	• Funding from existing budgets • Management: minimal demand on management resources • Funding availability to be confirmed.
Ownership and accountability	T & I Operations - Brian Strachan, Strategy/Lighting Officer
Ensuring success	• Known key success factors include reduced carbon emissions and electricity consumption. • Principal risks: lack of political support and possible health and safety considerations in the community. • Main means of risk mitigation
Performance / success measure	Based on reductions of 100 hours per annum (2.5%) over the 5 years, a minimum of 80 tonnes of carbon reduction can be expected.
Timing	To be confirmed.
Sources of information and guidance	

Project / Action DA02 **Project Name: Replacement of Street Lights** **Project Leader: Brian Strachan**	
Description and notes	We have some footpaths that are illuminated by 100w lamps. The proposal is to replace these units with ones of lesser wattage, 42w, this also gives us white light. We only have a restricted number of these units that would be suitable for replacement with reduced wattage units. • Replace selected 100w units on remote footpaths with 42w PL-T. • A trial was carried out this year and the proposal would be to extend this to include all footpaths that fall into this category and are suitable for the replacement.
Quantified costs and benefits	• £15,000 per annum, for a period of 5 Years. • 282 tonnes at the end of a 5 year programme • £11,000 per annum • 7 years
Resources	• Funding: from existing budget, with possible contribution from spend to save budget. • Management: minimal demand on management resources
Ownership and accountability	T & I Operations – Brian strachan, Strategy/Lighting Officer
Ensuring success	• Known key success factors: carbon reductions at source • Principal risks: no major risks identified
Performance / success measure	Replacement of an average of 100 units over each of the 5 years, with a 42 w units (down from 100w) could yield a saving a 56 tonnes of carbon.
Timing	Ongoing with a target of approx 100 unit over each of the five years.
Sources of information and guidance	Completion of a successful trial at Westhill in 2006.

Project / Action DA02 **Project Name: Use of Electronic Control gear for Street Lighting** **Project Leader:- Brain Strachan**	
Description and notes	Discharge lighting, the type used for street lighting, is now available with electronic control gear. There are benefits in both lamp life and reduced energy consumption. A 70 watt rated lamp for instance, actually consumes 84 w including control gear losses, with electronic gear this reduces to around 79w. • Ensure that all new installations are specified for use of electronic control gear. • In all new housing developments, the developer is responsible for the installation of the lighting. Instructions to go out with all designs specifying electronic gear. The additional cost will therefore be borne by the developer. • Propose that all new lanterns installed in upgrading of existing lighting schemes are specified with electronic gear. • There is a premium to pay initially for this electronic gear, an additional 45%, approx of lantern cost.
Quantified costs and benefits	• £25,000 per annum investment required. • 8.4 tonnes carbon saved per annum • £1,640 financial savings per annum • 15 years payback period
Resources	• Funding: existing and spend to save • Management: minimal demand on management resources
Ownership and accountability	T & I Operations, Brian Strachan, Strategy/Lighting Officer
Ensuring success	• Principal risks: **Financial**
Performance / success measure	
Timing	
Sources of information and guidance	Successful trials have been completed at various locations in Aberdeenshire.

Project / Action DA04 **Project Name: Shuttle Buses between offices** **Project Leader: Andrew Stewart, Travel Planning Officer**	
Description and notes	Using shuttle bus services to run people between various offices e.g. Woodhill / Gordon House / Cape House / Viewmount, displacing individual car trips. We would have to run the shuttle bus service alongside the car-sharing initiative to complement this (provide a back-up and fill in gaps when shuttles are not running). The shuttle service would need a booking system to ensure there is no over-allocation of seats – the service would need to be reliable as well as regular, perhaps serving remote distances once each day (e.g. Woodhill to Cape House once in early am; to return in evening and vice versa) and shorter distances 2-3 times each day (e.g. Woodhill to Gordon House 3 times each day, with returns) This could be a hard one to sell so we would really need to make it attractive, convenient and reliable to convince potential users.
Quantified costs and benefits	Currently no costs are available for providing such services, and no one was available at time of writing to cost possible shuttle services. It would depend whether a large, medium or small vehicle was required, how often and at what times of day. • Emissions reduction Until a pilot can be carried out at one office location it is not possible to say what emissions reduction could be achieved. This would depend on the vehicle required. Equally each office location is unique and the results of one pilot might not be transferable to others. • Financial savings It is not possible at this stage to predict what the financial savings, if any, may be. However, if car use for business was restricted where a shuttle bus is provided and this was enforced, there is a potential to make financial savings. However, as there is no current breakdown of business mileage for each area or office location it is possible that running the shuttle bus could be expensive and used by only a few people. • Payback period This would be clearer once costs have been gathered and research carried out on the likely uptake of such a service.
Resources	• Funding: Internal, external sources of funds, investment criteria to be met The cost should be borne by a revenue budget created for employees shuttle buses, with funding coming from the budget for business travel expenses. Cost of service could be partially offset by: (a) If the shuttle were well used, travelling expenses to individual employees would be lower. (b) Gain in the time cost – employees as passengers on a bus

	can make use of their time to get on with work, prepare meetings, check email (if have blackberry) etc compared to driving where full attention SHOULD be on the road. Another option,maybe would be Spend to Save funding Approval has not yet been sought for this initiative; this would need senior management approval before we could start considering options • Management: demand on management resources If shuttle buses were piloted Area Managers would need to be involved in the design of the scheme and perhaps in some way enforce the use of the shuttle bus over single occupancy car use. Finance would need to be involved to discuss the savings, gather information on current mileage claims for the area being piloted. • How /when decision on funding will be made (or if it has how it is being resourced) A decision would follow costing the use of shuttle buses, some research around likely take up and then presenting this information to senior management.
Ownership and accountability	Individual responsibilities need to be defined for championing the project, creating the business case, obtaining consents or approvals, and managing the project through to completion and measurement of benefits. • the individuals **responsible** for delivery and decision making are, Andrew Stewart, Travel Planning Officer, Peter MacCallum, Transportation Manager, Ewan Wallace, Head of Transportation. • the individuals **accountable** for delivery and decision making and responsible for approval / sign-off; As above. • the individuals to be **consulted** in decision making; the bus operators would require to be involved from the start. There may be difficulties for the Council in subsidising a shuttle service alongside existing commercial routes. Heads of Service, Chief Executive Management Team, Area Managers, Finance, possibly Trade Unions (they support Travel Plans) and employees. • the individuals to be **informed** of actions, decisions and progress are Andrew Stewart, Travel Planning Officer, Ewan Wallace, Head of Transportation, Chief Executive Management Team, Members, Area Managers, Finance.
Ensuring success	• Reasonable steps should be taken by managers to ensure employees use shuttle buses, where their car is not necessary for business mileage. • Principal risks: sufficient resources would be required to maintain a contract with a bus operator. If reliant entirely on voluntary use a shuttle bus service runs the risk of quickly becoming expensive and unsustainable. • Colleagues in the Public Transport Unit expressed doubts about the effectiveness of putting on a shuttle service. The suggestion was that such distances, as exist between our Area offices, do not lend themselves to “shuttle” services. Also that where existing commercial routes have been adjusted to stop by our offices it would be difficult to justify

	funding further services and be seen as anti-competitive. It is felt that a feasibility study might find that the necessary vehicle might be a taxi and that this could at times be running one person and therefore be more expensive than paying mileage for car use. • Risk mitigation measurements include management enforcement of sustainable alternatives to car use for business mileage. Establishing the level of demand with appropriate level of shuttle service. Measurement of success would require Finance to provide data on business mileage claimed by employees in a specific area or location. Any reductions could then be monitored as part of a pilot project..
Performance / success measure	It is not possible at this stage to give indicators, these would be set once pilot was underway.
Timing	To be determined.
Sources of information and guidance	Consulting area managers, employees and bus operators. Discussing the proposal with other local authorities where they have provided shuttle buses.

Project / Action DA05 **Project Name: Pool Cars** **Project Leader: Andrew Stewart, Travel Planning Officer**	
Description and notes	The provision of pool cars at key office locations
Quantified costs and benefits	The cost should be borne by a revenue budget created for employees shuttle buses, with funding coming from the budget for business travel expenses. Cost of service could be partially offset if pool cars were well used, as travelling expenses to individual employees would be lower. If a robust business case could be made, Spend to Save funding may be an option This would need senior management approval before being progressed further. Aberdeen City Council provide an electric pool car. A request has been made for some indication of how much this costs. • Emissions reduction – An initial pilot project is recommended at one office location. • Financial savings It is not possible at this stage to predict financial savings. However, if pool car use were a requirement for business, there would be a potential to make savings. As there is no current breakdown of business mileage for each area or office location it is possible that running the pool car could be expensive and used by only a few people. • Payback period Insufficient data available to calculate this.
Resources	• Funding could come from the business mileage budget however this has still to be explored. • Promoting the use of a potential pool car will require management input. • There is currently no timeframe for this project.
Ownership and accountability	• the individuals **responsible** for delivery and decision making; Andrew Stewart, Travel Planning Officer, Ewan Wallace, Head of Transportation, Chief Executive Management Team, Members, Area Managers, Finance. • the individuals **accountable** for delivery and decision making and responsible for approval / sign-off; Andrew Stewart, Travel Planning Officer, Ewan Wallace, Head of Transportation, Chief Executive Management Team, Members, Area Managers, Finance. • the individuals to be **consulted** in decision making; Andrew Stewart, Travel Planning Officer, Ewan Wallace, Head of Transportation, Chief Executive Management Team, Members, Area Managers, Finance. • the individuals to be **informed** of actions, decisions and progress: Andrew Stewart, Travel Planning Officer, Ewan Wallace, Head of Transportation, Chief Executive Management Team, Members, Area Managers, Finance.
Ensuring success	Practical difficulties with this proposal, may include the cost of a car, together with maintenance, insurance, fuel, tax etc this may not prove financially viable. • Preferred vehicles would include alternatives to petrol engine

	cars. These however, may have limited use in a large rural area such as Aberdeenshire. This would need researched further. • A pilot project would help to minimise risk, as would discussion with local authorities and businesses who have tried using pool cars.
Performance / success measure	These would need to be set once a pilot was underway.
Timing	There is currently no time frame for this project.
Sources of information and guidance	Review of current literature on successful pool car schemes.

Project / Action - Projects already completed ***Project Name:* Increase the Use of Locally Sourced Material** ***Project Leader: Irene Wilson***	
Description and notes	Procurement Services actively look to promote locally manufactured products and local suppliers within the legal constraints of the tendering process. Contracts with a value of over £144,371 are subject to EU tender legislation. Through carefully worded tender specification, that does not in anyway discriminate or restrict competition, locally produced goods may be sourced within EU tender legislation.
Quantified costs and benefits	• Financial investment, operational costs Additional costs may be incurred, for purchase of locally sourced goods • Emissions reduction Opportunities across all Council procurement Because of the diverse nature of the Council's procurement requirements no figure can be set • Financial savings Opportunities across all Council procurement Because of the diverse nature of the Council's procurement requirements no figure can be set • Payback period Because of the diverse nature of the Council's procurement requirements no figure can be set
Resources	• Management: demand on management resources No specific addtional funding required or management resources required.
Ownership and accountability	Individual services procuring goods and services must work in conjunction with procurement services to ensure correct specification
Ensuring success	As above
Performance / success measure	To be addressed by Craig Innes, Procurement Manager
Timing	Various ongoing
Sources of information and guidance	Craig Innes, Procurement Manager

Project / Action – Projects already completed **Project Name: Aboyne Academy – Biomass Boiler** **Project Leader: Kevin McDonald**	
Description and notes	Boiler replacement with new Biomass Unit. New boiler to cater for 85% of the annual heating demand.
Quantified costs and benefits	• CO2 reduction over 5 years 3000 Tonnes • Savings of £20,000 per annum
Resources	• Energy Management Team • Capital funding £200,000 • Grant funding from SCHRI (£100,000 and CEP (£109,000)
Ownership and accountability	• Lead – Property • Team – Energy Management Team
Ensuring success	• Capital bid for funding • Monitor building on M&T system
Performance / success measure	Review the reductions match expectations by M&T reporting
Timing	March 2007
Sources of information and guidance	

Appendix D - Revenue Costs

Revenue Costs						
Project Number	**Project**	***07/08 Revenue Costs £000s***	***08/09 Revenue Costs £000s***	***09/10 Revenue Costs £000s***	***10/11 Revenue Costs £000s***	***11/12 Revenue Costs £000s***
EN03	**Additional employee (part-time) dedicated to the project to ensure that the actions are driven forward specifically (Carbon Co-ordinator)**	**17.5**	**17.5**	**17.5**	**17.5**	**17.5**
EN06	**Examine possible use of renewable energy in Council properties**	**5**	**5**	**5**	**5**	
EN08	**Awareness raising campaign**	**20**	**20**	**20**	**20**	**20**
LC02	**Appointment of Energy Champions**	**6.7**	**6.7**	**6.7**		
DA02	**Street Lighting**	**46**	**46**	**46**	**46**	
DA04	**Business Mileage (shuttle bus)**	**100**	**100**	**100**	**100**	**100**
	Total	**195.2**	**195.2**	**195.2**	**188.5**	**137.5**

Capital Costs						
Project Number	**Project**	***07/08 Capital Costs £000s***	***08/09 Capital Costs £000s***	***09/10 Capital Costs £000s***	***10/11 Capital Costs £000s***	***11/12 Capital Costs £000s***
DA01	**Renewables Projects**	**367**				**367**
	Total	**367**				**367**

Glossary:

Single Status:

EDRS:	Employee Development and Review Scheme
ECU	Essential Car User
SIP:	Strategic Implementation Plan (this document)
SAC:	Scrutiny and Audit Committee (Aberdeenshire Council)
CCL	Climate Change Levy. Part of a range of measures designed to help the UK meet its legally binding commitment to reduce greenhouse gas emissions. It is chargeable on the industrial and commercial supply of taxable commodities for lighting, heating and power by consumers in industry, commerce, agriculture, public administration and other services.
SCCD	Scottish Climate Change Declaration.
BEMS	Building Energy Management System
LACM	Local Authority Carbon Management Plan
LGSA	Local Government Services Association
CIPFA	Chartered Institute of Public Finance and Accountancy
IPCC	Intergovernmental Panel on Climate Control
ESD	Energy for Sustainable Development
P & R	Aberdeenshire Council Policy and Resources Committee
BAU	Business as Usual
SEA	Strategic Environmental Assessment
CEEF	Central Energy Efficiency Fund
SCC	Social Cost of Carbon

References:

North East Scotland Global Footprint Reduction Report, Aberdeen City Council/Aberdeenshire Council/WWF 2007