

The Moray Council Carbon Management Programme

Carbon Management Plan (CMP)



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Foreword from The Moray Council

The Moray Council is proud of Moray's unique and high quality environment. The Council is also committed to reducing the impacts of Climate Change within Moray and elsewhere. The Council looks forward to being involved in and supporting the Carbon Management Programme. It will not only help the environment in Moray and beyond, but also help the Council to manage and limit its spending on energy and scarce resources.

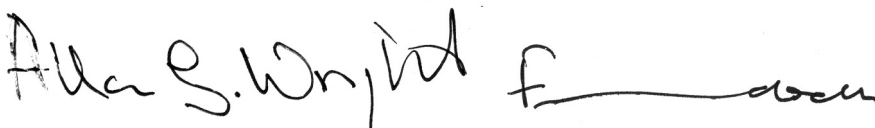
In the Council we already have an excellent record of innovative 'green' projects, and Moray's residents and businesses have shown their keenness to embrace new environmental technologies. Our staff are the driving force in a wide range of sustainable development projects ranging from reducing energy consumption by changing how we use electricity and heat, to installing new technology in buildings, equipment and vehicles.

Our journey towards reducing carbon emissions will be helped by our involvement in and commitment to the Carbon Management Programme. As part of this Programme and the Partnership with Scottish Councils and public bodies, the wealth of experience and enthusiasm available will help us to achieve our target of reducing the Council's carbon emissions by 30% by 2014. The Programme also helps us to achieve and support other Council priorities in the Community Plan, Single Outcome Agreement and Corporate Plan.

The approach to Moray Council's Carbon Management Programme has been to use the skills and commitment of staff from across the Council's departments. Members of the Carbon Management Team have come up with the ideas and projects that will help achieve that 30% carbon emission reduction. The projects which have been selected for this Programme have the support of the Councillors, Managers and the Team, but achieving them will depend on all of us playing our part. Many staff share an interest in tackling Climate Change, environmental issues and reducing carbon emissions. By working together across the Council, we can all play our part, and we will all benefit from the results of this Programme.

- Our objective is clear – 'reduce carbon emissions by 2014'
- We have our projects to achieve this – they are set out in this Programme.
- How we achieve our objective and projects? – we share and use our interests and commitment through involvement as individuals or project teams.

We are proud to give our support to the Carbon Management Programme



Cllr Allan Wright
Depute Convener

Cllr Fiona Murdoch
Chair of the Greener Strategic Group

Foreword from the Carbon Trust

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 public sector as key to delivering carbon reduction across the UK in line with its Kyoto commitments and the Public Sector Carbon Management programme is designed in response to this. It assists organisations 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.

The Moray Council was selected in 2008, amidst strong competition, to take part in this ambitious programme. The Moray Council partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings. This Carbon Management Plan commits the organisation to a target of reducing CO₂ by 30% by 2014 and underpins potential financial savings to the organisation of around £1.8 million

There are those that can and those that do. Public sector organisations can contribute significantly to reducing CO₂ emissions. The Carbon Trust is very proud to support The Moray Council in their ongoing implementation of carbon management.



Richard Rugg
Head of Public Sector, Carbon Trust

Management Summary

The Moray Council has prepared this Carbon Management Programme as one of a range of initiatives to deal with climate change and the best use of resources. It is generally accepted that climate change is happening and that carbon emissions are a contributory factor.

In Scotland, it is expected that there will be an increase in extreme weather events, Moray has experienced some of these in recent years and localised flooding has caused significant damage and cost to residents, businesses, and other organisations.

Reducing greenhouse gas emissions is associated with reducing the use of energy and minimising the use of resources. These are major concerns for the council, not only for environmental reasons but also for managing council budgets, which has a direct impact on the level of services that can be provided.

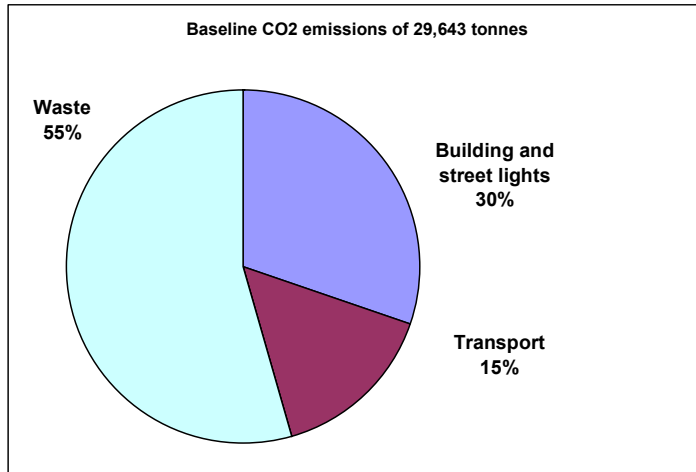
Staff and councillors have a direct involvement in the Carbon Management Programme. When at work, everyone is part of the council's use of energy, ranging from lighting, using computers or other equipment, to reducing waste or increasing recycling. Carbon management at work has the same aims as it would at home, namely to reduce the use of energy and fuel, to reduce the use of resources, and spend less money, which can then be saved or spent on other things.

Climate change and carbon management are not just issues for Moray and the Moray Council. At international level there are joint government agreements while closer to home the Scottish Government has a Climate Change Bill which has a target of reducing carbon emissions by 80% by 2050. All Scottish councils have signed the Scottish Climate Change Declaration and there are other initiatives and legislation advising or requiring the council to agree strategies and targets for climate change and carbon management. Within that wider framework the council has set a target, in the Carbon Management Programme, of reducing its carbon emissions by 30% by 2014.

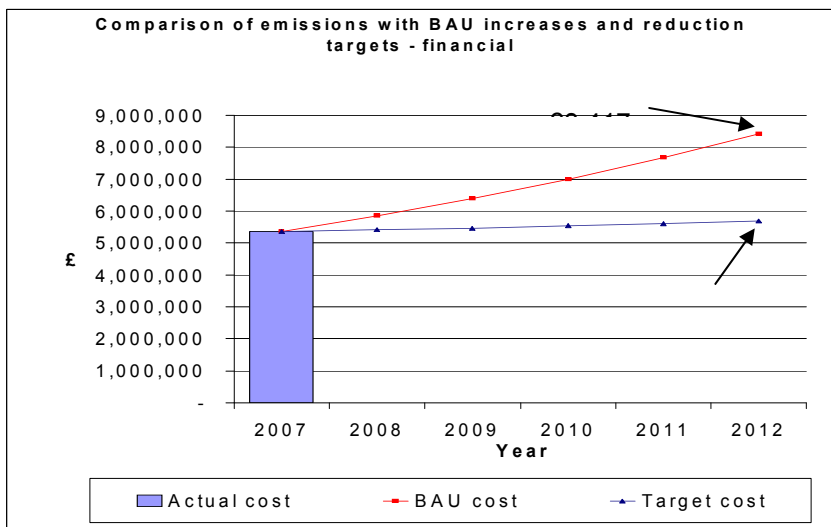
The Carbon Management Plan links with a number of other actions currently being undertaken by the council, including the Scottish Climate Change Declaration and Carbon Reduction Commitment. Within the council itself there are close links between the current Designing Better Services project and the efficiency savings that can be realised through the carbon management projects. The council has also made a commitment to reduce Moray's carbon footprint. The council has an opportunity to lead by example and encourage its community planning partners and the wider public to take action to reduce carbon dioxide emissions.

The Carbon Management Programme concentrates on key emitters within the council's services which include energy consumption in council-owned non-domestic buildings and schools, energy consumption in street lighting, fuel consumption within the council's fleet and business miles travelled. The baseline figures also include municipal waste for the whole of Moray and this has a significant impact on the baseline figures.

The Council’s baseline emissions for baseline year 2007 is as follows:



As well as calculating the Council’s baseline emissions, the value at stake in undertaking the projects and the potential cost savings associated with action are compelling.



£5,690,044

The following projects have been identified to reduce the council’s carbon dioxide emissions and represent a comprehensive package of measures covering various aspects of the council’s emissions, addressing both technological and change management challenges:

- Awareness raising and behavioural change campaigns
- Heating controls
- Vehicle utilisation
- Green fleet review

Travel planning
Promotion of video and teleconferencing and renewable technologies
Server virtualisation
Procurement of multifunctional devices
100% kerbside recycling and composting food waste
Adoption of BREEAM standards
Voltage optimisation

The implementation of the majority of these projects over the course of this five-year plan would require an investment of just under £590,000 that should amount to financial savings of £1.6 million. The package of measures identified will also reduce the council's carbon dioxide emissions by almost 9000 tonnes.

The Moray Council has been highly ambitious from the beginning, deciding to aspire to 30% reduction and include all of Moray's waste. This challenging target can be reached through the implementation of all of the identified projects but there are significant levels of capital and revenue expenditure involved in excess of £6 million - £5 million of which would be spent on the waste projects. The decision to address waste at a strategic level was based on the strong belief that this is something the council can influence and on the basis that it has a strong track record in successful delivery of waste initiatives.

It is accepted that the primary focus of the waste projects has not been to reduce emissions or identify cost savings but to meet impending Government targets for recycling and reduce the volume of waste to landfill.

Ultimately, the timely implementation of all of these projects has a significant role to play in reducing the council's emissions and Moray's carbon footprint in line with Community Planning Single Outcome Agreement objectives.

1 Introduction

The purpose of this document is to provide a robust 5-year framework for the delivery of a variety of projects to achieve a 30% reduction in carbon dioxide emissions. A significant amount of work has been ongoing over several months across various services in the Council in order to establish the Council's baseline emissions. Workshops have been held to identify projects to reduce emissions, these include behavioural change and awareness raising campaigns, promotion of renewable technologies, installation of heating controls and increased use of green IT. Business cases have been developed for all of the identified projects these consider the financial viability and carbon savings associated with the projects. An important element of the plan in terms of its success is the effective and timely implementation of the projects on the ground.

Alongside these projects the Council is also seeking to embed carbon management into its corporate plans, policies and day to day business to ensure it becomes a consideration in decision making across the Council. The Moray Council has already demonstrated its commitment to the environment and emissions reductions through the implementation of an extensive waste minimisation programme currently exceeding Scottish Government targets for recycling. The Council has developed an innovative pilot project to run its fleet vehicle on used cooking oil from schools. As part of the carbon management plan it is hoped to expand on work in both these areas.

2 Carbon Management Strategy

2.1 Context and drivers for Carbon Management

There is now little doubt that climate change is occurring and man-made emissions are a significant contributory factor. In Scotland there is expected to be an increase in the number of extreme rainfall and storm events. Flood events within Moray have shown the destructive potential of extreme weather on communities.

Scotland's net emissions of carbon dioxide in 2005 were over 54 million tonnes, approximately 0.2% of the World's carbon dioxide emissions. Put in context Scotland has 0.08% of the World's population and therefore produces a much greater average amount of carbon dioxide in proportion to its population. The Scottish Government has sought to address this in the creation of a Scottish Climate Change Bill that seeks to create mandatory targets to reduce emissions by 80% by 2050.

Alongside the Climate Change Bill there are other legislative measures that require local authorities to reduce emissions including the Carbon reduction Commitment (CRC) and Energy Performance in Buildings Directive (EPBD). Beyond legislative requirements, energy prices have been particularly volatile and have increased significantly, this has resulted in attractive cost savings associated with cutting carbon emissions.

The successful implementation of the carbon management plan will assist in meeting the Community Planning Partnerships Single Outcome Agreement (SOA) objectives. One of the commitments within the SOA is to reduce Moray's carbon footprint. Furthermore, the Carbon Management Plan will also link directly to the Council's commitment to prepare a Climate Change Action Plan as it meets 5 of the 7 objectives of the Declaration.

At present the Council is currently undertaking a "Designing Better Services" project to identify efficiency savings, most of the proposals identified as part Carbon Management have significant

efficiency savings associated with them and accordingly there is a synergy between Designing Better Services and the Carbon Management Programme.

2.2 Our low carbon vision

The Moray Council strives to lead by example in its carbon emission reductions and inspire others to take action by:

Implementing a targeted package of effective projects to realise emissions and efficiency savings.
Share best practice and work in partnership with our Community Planning Partners to find local solutions and realise large savings.

2.3 Strategic themes

This plan focuses on the key carbon dioxide emitters within the Council's control, these have been identified as transport, waste, street lighting and energy in buildings.

There are two distinct types of projects included within the plan and these can be characterised as technological changes i.e. heating, lighting controls, use of renewables and green IT. The other is change management whereby the carbon management is embedded into the Council's policies, procedures, change habits and raise awareness. Significant savings can be made through a well received awareness campaign designed promote a culture change across the whole of the Council.

2.4 Targets and objectives

The Moray Council will reduce the CO₂ emissions from its activities by 30% from the 2007 baseline, by April 2014

In order to achieve the above target the Council requires to save 8,892 tonnes of carbon dioxide over 5 years. In the first year of the programme it is intended to meet approximately 10% of this target by implementing a package of measures. It should be noted that these projects should result in savings year on year over the course of the 5-year plan and therefore account of nearly 50% of all savings across the five-year term. The projects identified for the first year include a focussed awareness raising campaign and creation of a Green Champions Network by early 2010. This action will be supplemented by a rolling programme of energy efficiency projects for example installation of heating controls, loft insulation and voltage optimisation. A significant proportion of the emission reductions in year 1 are dependent on financial backing being given to the Speyside High School biomass project. The Council is part financing this with £200,000 from capital funds, currently alternative funding is being sought from the Climate Challenge Fund, Scottish Community and Householder Renewables Initiative (SCHRI) and the Scottish Rural Development Fund (SRDF)

In the medium to long term the plan has identified a number of projects including server virtualisation, vehicle utilisation, 100% kerbside recycling and composting of food waste. The waste projects have a significant contribution in terms of carbon savings however they also require high levels of investment. If all the projects are on time over the five-year project the Council could exceed its' 30% target. This is viewed as a built in contingency in the event that projects are not taken forward. It is accepted that over the five year span of the plan projects may not receive funding whilst new projects will be identified and the plan must have the flexibility to reflect this. For the above reasons the projects within the plan will be refreshed on an annual basis to reflect changes in Council priorities and keep pace with any technological advances.

3 Emissions Baseline and Projections

3.1 Scope

The emissions sources for the baseline have been taken from the energy used in street lighting and council buildings, fleet fuel consumption and business mileage claims from staff and the volume of waste sent to landfill. The following sources were excluded from the data gathering exercise, as a present they did not provide sufficiently useful data:

- water consumption and waste water (insufficient accurate data)
- staff commuting data (insufficient accurate data)
- business miles travelled by hire car (data not available)
- business miles travelled by other transport methods.
- council housing (energy usage not controlled by The Moray Council)

3.2 Baseline

The baseline data is for the financial year 2007/08. The data was collected from the following sources:

- Lighting Area Engineer Lighting
- Buildings (non-domestic) Energy Officer
- Travel Fleet Services Manager
School Travel Co-ordinator
Finance Officer
- Waste Waste Management Officer

The following emission factors were used to convert the data into carbon and carbon dioxide figures.

Table 1: Buildings and lighting

Emission factors		
Energy type	Factor (kg CO₂/kWh gross)	Reference
Electricity (grid)	0.523	http://www.defra.gov.uk/environment/business/envrp/pdf/conversion-factors.pdf - Annex 3
Natural gas	0.185	http://www.defra.gov.uk/environment/business/envrp/pdf/conversion-factors.pdf - Annex 1
Gas oil	0.251	http://www.defra.gov.uk/environment/business/envrp/pdf/conversion-factors.pdf - Annex 1

It should be noted that the majority of electricity used in council buildings come from renewable energy sources and therefore does not contribute to the carbon dioxide emissions in this plan. If, in the future, the Council did not purchase its electricity from renewable sources then the carbon dioxide emissions from building would increase significantly. Furthermore, not every council building was included in the baseline calculation as the consumption data for many smaller sites was either unavailable or incomplete. These buildings will be included in future years, as the data becomes available. In taking account of the above it is expected that the baseline in all likelihood will increase as data collection improves and other sources of emissions are included for example the Council's housing stock and commuting figures.

Table 2: Transport

Fuel or vehicle type	Units	CO₂ factor (kg/unit specified)	Reference
Diesel	Litres	2.63	Http://www.defra.gov.uk/environment/business/envrp/pdf/conversion-factors.pdf - Annex 6
Average petrol car	Km	0.21	Http://www.defra.gov.uk/environment/business/envrp/pdf/conversion-factors.pdf - Annex 6

Table 3: Waste

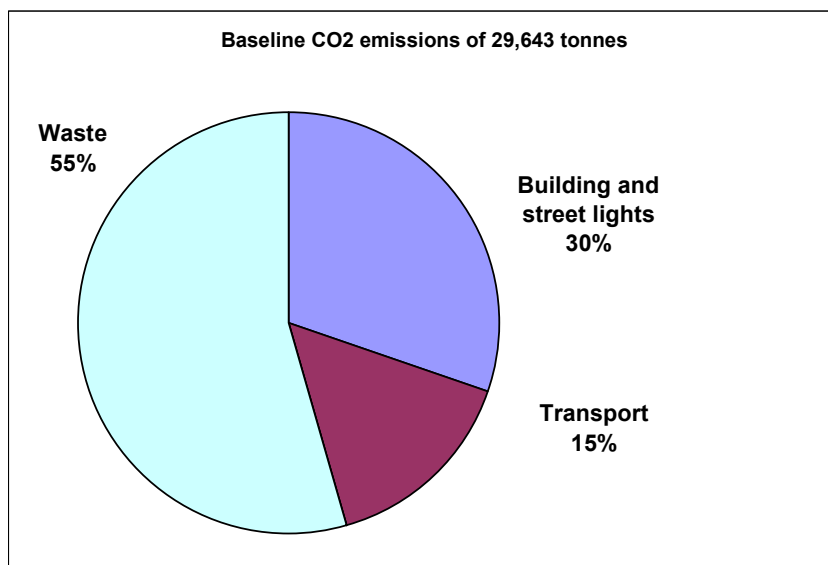
Emission type	Factor	CO₂ units	Cost (£/unit)	Reference
Waste – Landfill (BLG m ³ /hr)	68300	KgCO ₂ /BLG m ³ /hr		Information provided by The Carbon Trust

Data was collected from across the various Council services and after applying the appropriate conversion factors the Council's baseline emissions for 2007 were calculated as 29,643 tonnes. A detailed breakdown of emissions from source is shown in Table 4. Figure 1 shows the percentage breakdown of emissions.

Table 4: Summary of emissions for baseline year 2007

	Total	Buildings and street lights	Transport	Waste and Water
Baseline CO₂ emissions (tonnes)	29,643	8,974	4,558	16,111
Baseline Cost (£)	£5,368,296	£2,406,092	£2,962,201	£ -

Figure 1: Summary of emissions for baseline year 2007



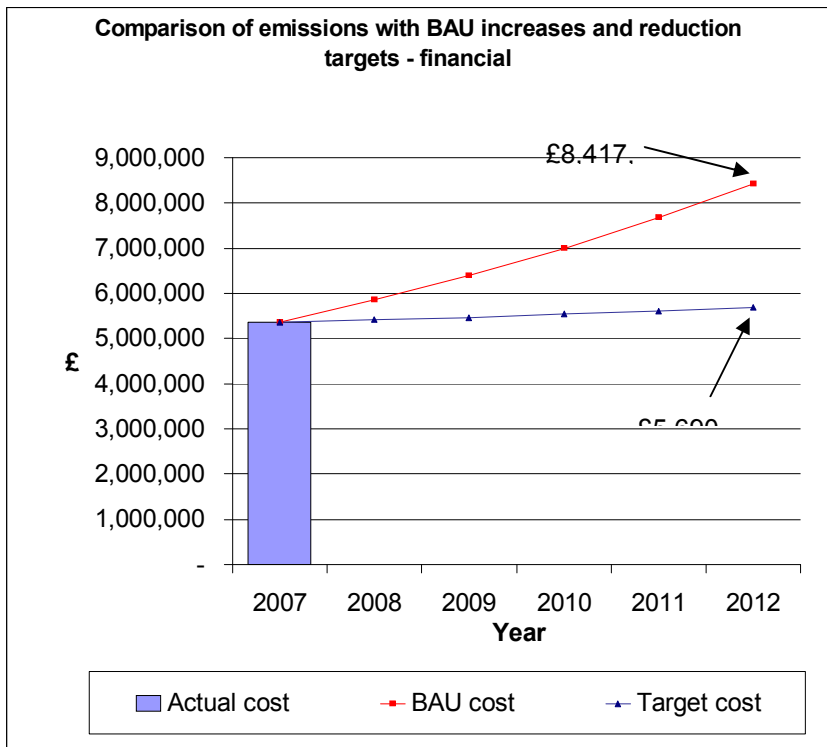
3.3 Projections and Value at Stake

The following section tries to estimate the cost to the Council if it continues in a business as usual manner. The Business as Usual (BaU) projection in Figure 2 shows the estimated rise in energy costs and energy demand per annum and demonstrates that modest increases in energy consumption when combined with increases in energy prices will have a significant impact on the Council's energy spend.

The following assumptions have been made when calculating the projections.

- BaU; Increase in energy demand for buildings and lighting; 0.7%, source DTI/DBERR EP68
- BaU; Increase in mileage for Fleet and business travel; 0.7%, source DTI/DBERR EP68
- BaU; Increase in waste to landfill; 0.7%, source DTI/DBERR EP68
- BaU; Increase in electricity costs; 15%, source The Carbon Trust
- BaU; Increase in all other fuels; 6%, source The Carbon

Figure 2: Financial summary of Business as Usual and reduction target



The 'Business as Usual' scenario based on the 'cost of not doing this programme' shows current costs of £5,368,296 could rise significantly to £8,417,147 by 2012. However by successfully instigating this programme will see the costs rise to £5,690,044 an increase of £321,748.

4 Carbon Management Projects

In order to reach the target of a 30% reduction in emissions over 5 years, 13 projects have been identified. The projects have not been confined to one specific area or department, for example, not just energy saving projects instigated by the Energy Officer, instead a wide range of carbon saving projects have been developed. The projects have been separated into categories including existing projects, funded projects and short, medium and long term projects. The following tables show the costs and savings associated with each project alongside the carbon dioxide savings. A summary of the business case for each project is in Appendix C by of this plan.

4.1 Existing projects

Ref	Project	Lead	Cost			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'c e	Fin	CO ₂			
TMC - 001	Awareness raising & behavioural change	Planning Officer		£15,000		£46,490	168t	< 1 yr	8.2	2009
TMC - 002	Heating controls	Energy Officer	£116,665			£23,626	128t	4.9 yrs	6.3	2009
TMC - 012	Voltage optimisation	Energy Officer	£21,345			£6,667	38.3t	3.4 yrs	1.9	2009
	Loft insulation	Energy Officer	£16,829			£6386	39.8t	2.7 yrs	2	2008

4.2 Planned / funded projects

Ref	Project	Lead	Cost			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'c e	Fin	CO ₂			
TMC - 006	Green fleet review	Fleet Services Manager	£25,000			£42,000	120t	< 1 yr	5.9	2009
TMC - 007	Increased use of video conferencing	ICT	Nil			£200 per mtg	0.072t per mtg	<1 yr	3.5	2009
TMC - 008	Printer rationalisation & multifunctional devices	ICT	£13,500			£15,600	7t	<1 yr	0.3	2009
TMC - 009	Server virtualisation	ICT	£132,000			£10,000	86t	5.2 yrs	4.2	2010
TMC - 011	Vehicle Utilisation	Fleet Services Manager	£50,000			£42,000	120t	<1 yr	5.9	2010
TMC - 013	Embed carbon management into all corporate policies and plans	Head of Dev Services	Nil	£1k		N/k	N/k	N/k	N/k	2009

There are many projects planned for the coming year, primarily in terms of awareness raising with well worked up Green IT and energy efficiency projects. The funding for the energy saving projects will come from the 'Spend to Save' and Central Energy Efficiency Fund (CEEF) budgets. Funding is discussed in more detail in Section 5 – Carbon Management Plan Financing.

4.3 Near term projects

Ref	Project	Lead	Cost			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'ce	Fin	CO ₂			
TMC – 003	Increased use of renewable technologies (retrofit & new builds)	Educ Services	£358,171	£38,700		£55,050	439t	6.5 yrs	21.5	2009
TMC – 005	Roll out of workplace travel plans	School Travel Co-Ord	External Funding	Existing Staffing			54t	Nil		2009

4.4 Medium to long term projects

Ref	Project	Lead	Cost			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'ce	Fin	CO ₂			
TMC – 004	100% kerbside recycling and collection of food waste	Waste Officer	£4.43M	£682K		150K	980t	N/k	48	2011
TMC – 010	Adoption of BREAAAM standards for refurbishment and new builds.	Planning Officer	% of build cost from 0.8% to 5.7%			£22k	138t	N/k	6.8	N/k

Note: The savings estimated for TMC – 010 are based on the current costs of an average secondary school and projected onto a new build school of similar size.

There are many projects still to be evaluated and have feasibility studies carried out, including Variable Speed Drive and Air Handling Units at Sports and Leisure Centres. A 'Reserve List' of projects has been made and these projects will be included in the programme as they progress. The 'Reserve List' will include many of the rolling programme of energy saving projects as well as any other carbon reduction project identified as we progress through this programme. Currently the list contains:

Loft insulation upgrades at schools and offices.

Computer software to switch off computers at a designated time.

Computer hardware to ensure that peripherals are switched off when the computer is switched off.

Voltage reduction and optimisation equipment to be fitted to larger consuming buildings.

Building Energy Management Systems (BEMS) to be fitted to larger consumer buildings. (6 primary schools identified for this project – to be carried out over summer 2009).

Heating control systems to be fitted to medium sized users (not suitable for BEMS).

Thermostatic Radiator Valves (TRVs) to be fitted to radiators as required.

Improved lighting and controls to be fitted at various locations.

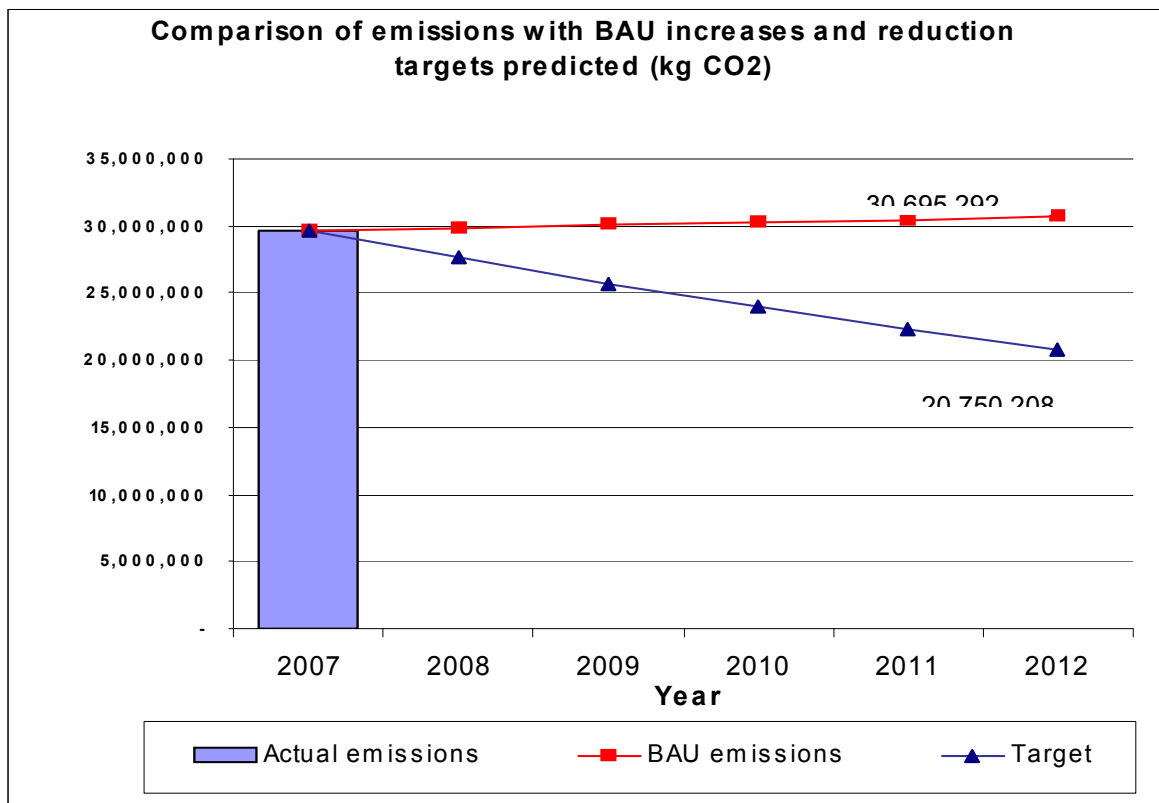
Improve insulation in boiler houses and pipework.

In the future further renewable energy projects will be investigated, these will qualify for funding from CEEF budgets and “Spend to Save” as well as attracting external funding from the Low Carbon Buildings Fund. The Council will always where possible draw down external funding to maximise Council budgets and all projects will be passed to the Council’s External Funding section to identify potential funding opportunities. In terms of waste beyond the implementation of 100% kerbside recycling and food composting the Council has long term plans to look at a heat from waste plant within Moray.

4.5 Projected achievement towards target

The Business as Usual (BaU) projection estimates that current emissions of 29,643 tonnes (29,643,155 kg) may rise to 30,695 tonnes (30,695,292 kg) by 2012 based on 2007 assumptions. This is an increase of 1,052 tonnes (1,052,137kg). The successful implementation of this programme could see the emissions fall to 20,750 tonnes (20,750,208 kg), a decrease of 8,893 tonnes (8,892,947kg). The difference between the BaU emissions and the Target emissions by 2012 would be 9,945 tonnes (9,945,084kg). This is shown in Figure 3.

Figure 3: Comparison of Emissions with BAU increases and predicted reduction targets



The timely implementation of all the projects identified will exceed the 30% target, however, there will be projects that fail to materialise due to circumstances beyond the council's control. Replacement projects will have to be identified to fill the gaps and for this reason opportunities workshops will be held on an annual basis to refresh the projects within the plan. The projects identified at this time will provide a stable base to reduce carbon output and future projects will build upon this.

5 Carbon Management Plan Financing

The implementation of all of these projects over the course of the five-year plan would require an investment of over £6 million. It is anticipated that this will result in financial savings of £ 1.8 million and reduce the Council's carbon dioxide by 30% that equates to almost 9000 tonnes of carbon dioxide.

These headline figures can be broken down further. To achieve a 20% reduction in emissions equating to 6000 tonnes of carbon dioxide the Council would require to invest £930, 000 to achieve savings of £1.8 million. This would mean financing all of the projects with the exception of 100% kerbside recycling and the composting of food waste.

A more challenging target of 30% could be reached through the implementation of the waste projects but there are significant levels of capital and revenue expenditure involved in excess of £5 million. The primary focus of these projects has not been to reduce emissions or identify cost savings but to meet impending Government targets for recycling and reduce the volume of waste to landfill.

The majority of the carbon management projects identified do yield financial savings for the Council. In terms of the energy efficiency projects identified the Central Energy Efficiency Fund (CEEF) and the Council's "Spend to Save" budget are the main funding mechanisms. In order to meet CEEF and Spend to Save criteria the projects identified must have a payback of less than 5 years and 7.5 years for renewable projects.

A number of the projects identified (travel plans and green fleet review) are supported by Government Funded agencies including the Energy Savings and the Carbon Trust itself. The Council will wherever possible try to fully utilise the expertise of such agencies to support existing and future projects. The Council has allocated £200,000 of capital funding to the Speyside biomass project and currently alternative funding is being sought from the Climate Challenge Fund, Scottish Community and Householder Renewables Initiative (SCHRI) and the Scottish Rural Development Fund (SRDF).

5.1 Assumptions

The business cases have been developed based in 2007/08 energy prices and these have already increased significantly and accordingly the cost savings identified may have been underestimated and projects may recoup any initial financial investment more quickly than expected.

5.2 Benefits / savings – quantified and un-quantified

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Annual cost saving	Nil	£156,219	£346,219	£388,219	£388,219	£388,219
Annual CO ₂ saving	Nil	888t	1094t	2414t	2414t	2414t
% of target achieved	Nil	10%	12%	27%	27%	27%

5.3 Financial costs and sources of funding

Figures in £ 1000's	2009/10	2010/11	2011/12	2012/13	2013/14
Annual costs:					
Total annual capital cost	£829,510	£3904,400	£54,400	£54,400	£29,400
Total annual revenue cost	£38,700	£545,900	£545,900	£545,900	£545,900
Total costs	£868,210	£4,450,300	£600,300	£600,300	£575,300
Committed funding:					
Committed annual capital	£668,339	£3,850,000	£0.00	£0.00	£0.00
Committed annual revenue	£0	£0	£0.00	£0.00	£0.00
Total funded	£668,339	£3,850,000	£0.00	£0.00	£0.00
Unallocated funding					
Unallocated annual capital	£161,171	£54,400	£54,400	£54,400	£29,400
Unallocated annual revenue	£38,700	£545,900	£545,900	£545,900	£545,900
Total unfunded	£199,871	£600,300	£600,300	£600,300	£575,300

6 Actions to Embed Carbon Management in Your Organisation

At the start of the carbon management programme in April 2008 the Carbon Trust asked the Council to evaluate how carbon management was embedded within the organisation. It was concluded that the Council has little engagement with the concept of carbon management and occupied the lower rankings of the Carbon Trusts “Carbon Management Matrix – Embedding” scoring 1 out of a possible 5. The assessment demonstrated that in terms of where we are now, the Council has no climate change or carbon management policies in place at present and there is no recognised carbon reduction responsibility. The lack of data collection in terms of carbon emissions and internal reporting mechanism to monitor progress was also highlighted.

After evaluating the Council's current situation and assessing where we need to be in the next 5 years, the following improvements are required. In the forthcoming months and years the Council will need to embed carbon management into its corporate strategies. The Council has committed to reduce Moray's carbon footprint and this is listed as an objective within the Community Planning Single Outcome Agreement (SOA). In order to monitor progress towards achieving the targets mechanisms need to be put in place from April 2009 onwards to collect data and report progress to senior management on at least an annual basis. This is dealt with in more detail in sections 6.3 and 7.5 of this plan.

6.1 Corporate Strategy – embedding CO₂ saving across your organisation

The Carbon Management Plan (CMP) is associated with other Council initiatives such as Scotland's Climate Change Declaration, Single Outcome Agreement and Designing Better Services. The plan is one of a number of projects that are cross-cutting and affect all Council Services and staff and will not only co-ordinate current actions but will influence future strategies, use of resources and activities. This will require raising the awareness of Climate Change, carbon emission reductions and the benefits accruing to the Council, staff, Moray's communities and the environment. The aims will be to obtain the support and participation of staff to achieve its carbon emission targets, and to embed principles of carbon reduction into the Council's decision making, its strategies, budgets and activities.

6.2 Responsibility – being clear that saving CO₂ is everyone's job

In order to be successful carbon management has to be everyone's responsibility and cannot be left exclusively the Project Sponsor and Project Leaders to be accountable for action. Staff and senior management need to be fully engaged in the process and made aware of their roles. It is proposed to set up a Green Champions Network across the Council that is endorsed by high level senior officials. This will be linked to the proposed extensive awareness raising campaign to try and raise staff knowledge and enthusiasm for the topic. It is also proposed to include carbon management alongside wider environmental issues as part of the induction that is delivered to all new Moray Council staff.

6.3 Data Management – measuring the difference, measuring the benefit

Data will be collated and used to provide essential information for the instigation of carbon saving projects. Collecting the data in a central baseline programme will provide benchmarks and historical data to enable projects to be assessed.

The introduction of 'smart meters' will remove the estimated electricity and gas reads at many sites providing more accurate consumption figures collected on an annual basis. The inclusion of commuting figures and business travel by other means (rail, air, public transport, etc) will provide a more accurate account of the Council's transport footprint.

All projects will be reported to senior management showing energy and carbon reductions as well as projected financial savings. Staff will be made aware of the ongoing projects and reductions through awareness briefings, posters and articles in the staff magazine. This will help to raise their awareness of the projects and the implications of their energy/fuel use.

6.4 Communication and Training – ensuring everyone is aware

An effective and inclusive communication strategy and training programme is essential to make the wide range of staff aware of their environmental responsibility as an employee and what they can do to reduce emissions. Awareness raising and actions that stimulate behavioural change have a significant role to play in achieving reduction targets. This is especially pertinent when considering that the baseline data has highlighted that 75% of total energy consumption is accounted for by the Council's stock of school buildings.

The main platform for delivery is the roll out an extensive awareness raising campaign to all staff across the Council and this will commence with a staff survey in early 2009 to gauge attitudes and appetite for the creation of the Green Champions Network. In order to assess success energy data will be collected before and after campaigns to monitor effectiveness. It is intended to add carbon management to the half day induction for all new staff and cover areas such as green travel, energy efficiency and recycling and produce a pack for employees with simple rules to follow. The training of janitorial, cleaning and teaching staff is considered a priority in reducing energy consumption. The Council's internal communications and Personnel section will assist in communicating with staff via the staff magazine, payslip, team briefs, email and internet. At a recent employee conference a session "How big are your feet?" was dedicated to carbon management and it is intended to continue to have carbon management on the agenda of any future employee conferences.

The Carbon Management Programme will be launched to all staff in April with a feature article in the Council's "Connect" magazine and an information sheet circulated for display (see Appendix D) in a prominent position in all Council Buildings.

6.5 Policy Alignment – saving CO₂ across your operations

To allow effective embedding of carbon management it has to be reflected in policy at a strategic level. This is the most challenging aspect of the plan and essential to the prolonged success of the programme. Appropriate embedding will also maximise the cost savings and carbon dioxide reductions that can be achieved. The Council has come some way to embed carbon management and key principles associated with it as follows.

The Community Planning Partnership Single Outcome Agreement which sets out the Council's strategic priorities now makes specific reference to the Carbon Management Plan. This document has been endorsed at the most senior level of the Council and by senior officials of the Council's Community Planning Partners including NHS Grampian, Highlands and Islands Enterprise, Moray College.

Through the Carbon Management Plan the Council has agreed in principle to the adoption of BREEAM standards putting more emphasis on the whole life costing of buildings and the long term running cost associated with them. This is a significant shift away from capital spending on new buildings that has traditionally been based on the up front build costs. A PPP project for two new schools in Moray has required the buildings meet the BREEAM excellent standard.

In terms of Procurement the Council will attempt to influence Scotland Excel and Procurement Scotland to build energy efficiency into all sectoral and national contracts. The Council's procurement team is delivering a sustainable procurement module to all authorised and approved procurers that will include carbon management and consideration of whole life cycle of products and services.

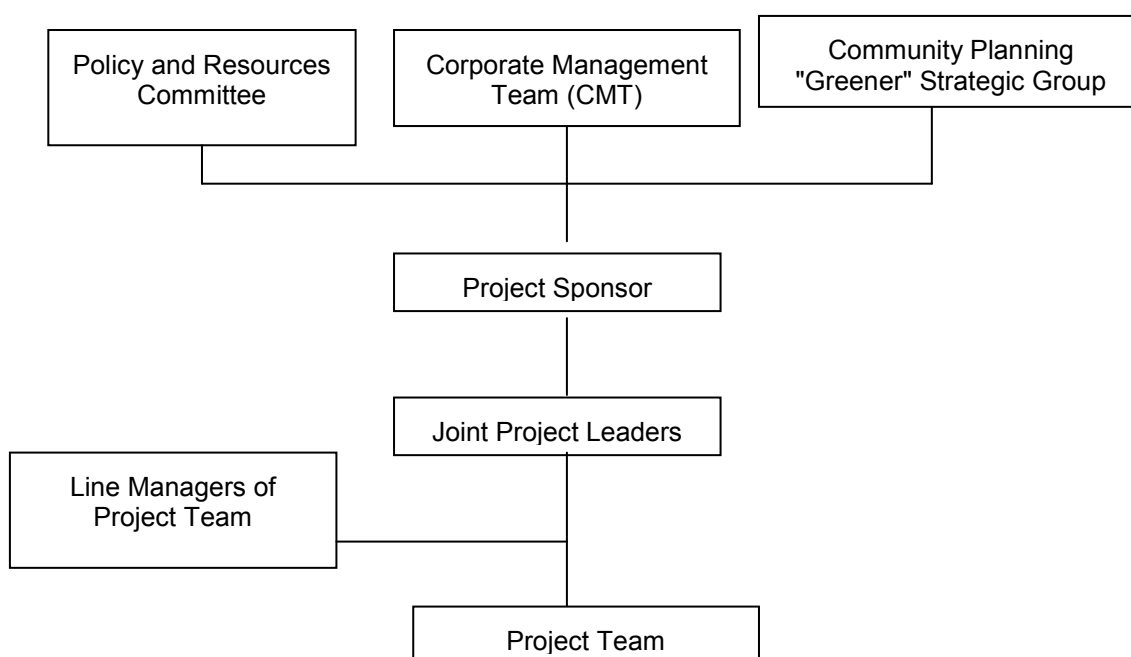
Through the Moray Development Plan the Council is requiring all large-scale developments to demonstrate a 15% reduction in carbon dioxide emissions beyond the 2007 Building Standards through the use of Low and Zero Carbon (LZC) technologies.

7 Programme Management of the CM Programme

In order for the carbon management programme to be successful good governance is essential. The Corporate Management Team and Project Sponsor operate at a strategic level and have been closely involved in the background work and preparation of this plan. Commitment at a corporate level has important role to play in the successful implementation and delivery of the plan and overcoming potential obstacles. The Council as an organisation needs to take on responsibility for carbon management and act to realise the full benefits associated with the plan. The programme only begins with the preparation of the plan and this means ensuring there is effective staff engagement and the core team continues to work together through the various stages of implementation.

7.1 The Programme Board – strategic ownership and oversight

Governance of Carbon Management Programme within Moray Council



Note: (Vertical lines represent main lines of oversight/decision making and groups and to be kept informed/engaged in the process).

The diagram above shows the proposed governance for the 5-year programme. It is intended that the programme board will consist of the Corporate Management Team that represents all of the services involved in the programme. This group is chaired by the Chief Executive of the Council and meets on a monthly basis to discuss strategic issues across the Council. The board will be updated on progress towards targets and the status of projects and made aware of any barriers to progress as required. Reports will be produced by the Project Leader and referred to the board through the Project Sponsor. The reporting regime to support the governance of the project is dealt within section 7.5.

7.2 The Carbon Management Team – delivering the projects

In order to implement the projects identified in this plan a project team will need to be assembled. The membership of this team will include the joint project leaders and the lead officers from key services (e.g. IT, fleet services and waste) identified to deliver the projects. The joint project leaders will then provide the link between the project team and programme board. It is intended that the team will concentrate primarily on the implementation of the rolling programme of projects, discuss mechanisms to record progress and monitor and evaluate success.

There are three key roles that require to be fulfilled to facilitate project implementation these are performance and monitoring, supervision of project implementation and to assist delivery. It is anticipated that the two joint project leaders (Energy Officer and Planning Officer) supported by energy office technical staff would fulfil these and the Project Sponsor address strategic issues and serious impediments. The project team will need to meet regularly, it is proposed to meet on a monthly basis with dates agreed w a key requirement of success is to keep the team focused and together.

7.3 Succession planning for key role

The roles of project sponsor and project leader are critical and consideration needs to be given to the impact to the programme if individuals leave posts. At present the programme has joint project leaders in the form of a Planning Officer and Energy Officer, this reduces the impact of any departure and it is unlikely that both will leave at the same time. The loss of an Energy Officer would have a more significant impact as it is intended that all data collation, monitoring and reporting would be the remit of this officer. The Council's Project Sponsor is from within the Development Services Section which is relatively unaffected by Carbon Management, it is likely that this position could be filled by Senior Management post within Direct Services that has responsibility for fleet, waste and street lighting.

7.4 Ongoing stakeholder management

There are a number of key individuals who require to be kept informed and fully engaged in the Carbon Management Programme in order for it to be a success. The stakeholder communication plan from the project plan has been updated to reflect what is require in terms of ongoing communication with staff, senior management, elected members and community planning partners.

7.5 Annual progress review

The progress towards emission reductions and efficiency savings will be reported on at least an annual basis. It is intended that data will be collected from the relevant Council services on a quarterly basis and responsibility reporting will rest with the Project Leaders and where possible and be incorporated into existing reporting regimes. In terms of reporting mechanisms the Council will modify the template within the CMPR. The Programme Board will be made aware of progress on a quarterly basis with a report detailing carbon dioxide savings made from the baseline and financial savings. This will then be compiled into an annual report to be referred to the Council's Policy and Resources Committee. A draft of reporting template is shown in Table 5. In order to keep the programme fresh the baseline data will be reviewed and a further opportunities workshop will be scheduled for early 2010. This mechanism should ensure that the plan reflects projects that are being progressed and is aligned to the Council's priorities. The Carbon Trust will also be updated on progress towards targets on an annual basis.

Table 5: Draft reporting template for Policy and Resource Committee.

Corporate Reduction Target 2009-2010	CO ₂ baseline emissions 2009-2010 (tonne)	Reduction target (tonne)	% of target
Reduce CO ₂ emissions by 6%	29,643	1,779	23%

Emissions (tCO ₂)	2007	2008	2009	2010	2011	2012
Buildings and street lighting	8973					
Transport - Fleet	3621					
Transport - Staff Travel	937					
Waste	16111					