

**University of the Highlands and Islands**  
Carbon management programme  
**Carbon management plan 2011**





## University of the Highlands and Islands

<b>Policy reference</b>	<b>UHI CMP/001</b>
<b>Responsible committee and officer</b>	<b>Senior executive team [SET]</b>

### Carbon management plan [CMP] 2011

<b>Original author:</b>	Tim Skyrme
<b>Current revision author:</b> [if applicable]	Tim Skyrme

#### Version control

Version	Date	Author	Purpose/change	Policy review date
01	30 May 2011 [original]	Tim Skyrme [Facilities manager]	Initial draft	1 June 2012
02				
03				

#### Approval

Version	Date approved	Approving committee	Individuals/groups to be notified [if relevant]	Committee officer signature
01	7 June 2011	SET		
02	13 June 2011	ICC		

**Note** – approval should be sought from senior executive team [SET] for Executive Office policies and executive board [EB] for policies relating to academic partners.

#### Policy summary

<b>Overview</b> Why is the policy required?	Part 4 of the Climate Change [Scotland] Act 2009 places a duty on the university [as a public sector body in Scotland], to assist the Scottish Government in achieving their 2020 and 2050 CO <sub>2</sub> emission reduction targets.
<b>Purpose</b> What will it achieve?	The CMP is a comprehensive five year plan to deliver a 10% reduction in the university's CO <sub>2</sub> emissions by July 2015.
<b>Scope</b> Who does it apply too?	All UHI Executive Office staff.
<b>Consultation/notification</b> Highlight plans/dates	SET – 7 June 2011 ICC – 13 June 2011
<b>Implementation and monitoring</b> [including costs]	Detailed in section 5.
<b>Enforcement</b> Detail how the policy will be enforced and who will be responsible	Detailed in section 5.
<b>References</b> [highlight any advice received from external organisations]	The CMP has been written by utilising the resources issued by the Carbon Trust with certain content being adapted and modified by the university.

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## Foreword from the Principal & Vice-Chancellor, James Fraser

Climate change is a leading challenge of our age. Setting a leading example on climate change must, therefore, be part of the mission of any university, and indeed environmental development and sustainability is firmly embedded into our own strategic planning process.

We are developing centres of research excellence in environmental sciences, sustainable development, renewable energy and social policy. We are developing and encouraging social responsibility by embedding education about the environment and its sustainability into our courses and into the experience of our students. We must however lead by practice and example as well as by promoting environmental responsibility in our teaching process.



Accordingly as one of the original signatories of the Universities and Colleges Climate Commitment for Scotland [UCCCS], the University of the Highlands and Islands is committed to addressing the challenges of climate change and to investigating ways in which we can reduce CO<sub>2</sub> emissions. This carbon management plan is designed to help us to fulfil our commitment.

A handwritten signature in black ink, which appears to read "James M Fraser". The signature is written in a cursive style.

James Fraser  
Principal & Vice-Chancellor, University of the Highlands and Islands

## Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for all public bodies - it's all about getting your own house in order and leading by example. The Scottish and UK governments have identified the public sector as key to delivering carbon reduction across Scotland and the UK, in line with Kyoto commitments and the world-leading Scottish and UK Climate Change legislation.

The Carbon Trust's 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 University of the Highlands and Islands was selected to take part in this ambitious programme. The University of the Highlands and Islands partnered with the Carbon Trust in order to realise substantial carbon and cost savings. This Carbon Management Plan commits the organisation to a target of reducing CO<sub>2</sub> by 10% by 2015 and underpins potential financial savings to the organisation of around £19,343.

There are those that can and those that do. Public bodies can contribute significantly to reducing CO<sub>2</sub> emissions. The Carbon Trust is proud to support the University of the Highlands and Islands in the on-going implementation of its carbon management.



Paul Wedgwood  
Manager, Carbon Trust in Scotland



## Management summary

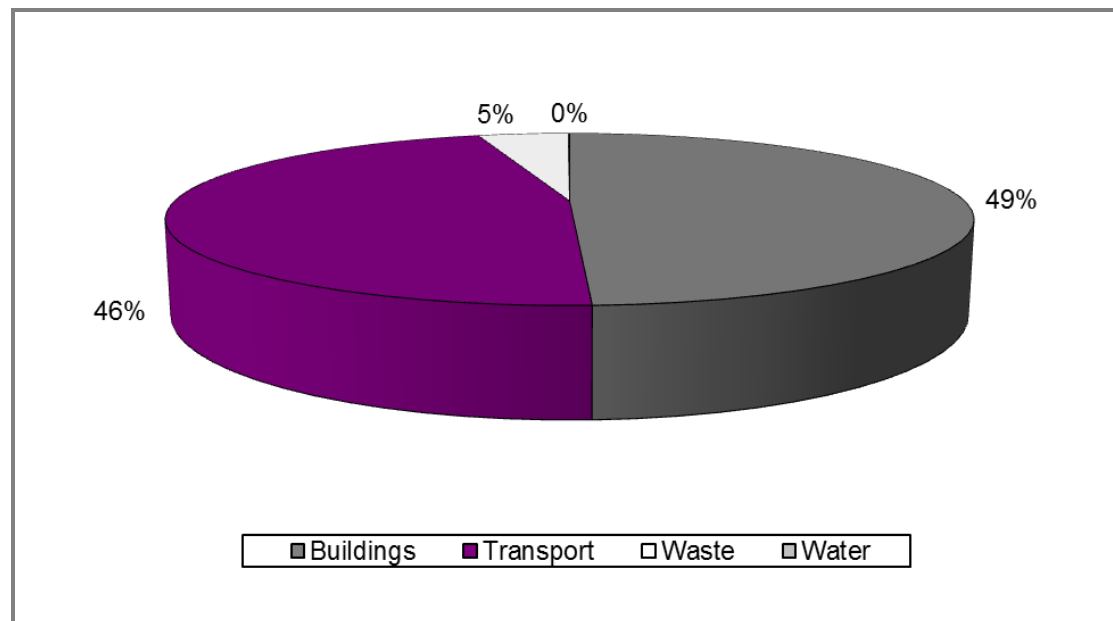
This carbon management plan [CMP] is the culmination of five months of work which has allowed the University of the Highlands and Islands to produce a comprehensive five year plan to deliver a 10% reduction in our CO<sub>2</sub> emissions by July 2015.

Such a reduction would result in a cost saving in the final year of at least £19,343 and a reduction of 45 tonnes of CO<sub>2</sub> emissions. However, as shown below, these figures could be significantly greater when comparing the difference between the business as usual and the target reduction scenarios.

Baseline figures were calculated using data taken from the university's financial/academic year August 2009 to July 2010, which in turn provided the starting point for all future measurement of CO<sub>2</sub> emission reductions. Figure 1 shows the headline figures for this period.

**Figure 1 - headline CO<sub>2</sub> emissions for August 2009 to July 2010**

	Total	Buildings	Transport	Waste	Water
<b>Baseline CO<sub>2</sub> emissions [tonnes]</b>	454	224	210	20	0



Collaborating with the Carbon Trust and producing this CMP shows the commitment of the university to reduce CO<sub>2</sub> emissions over the short to medium term and will require enthusiasm, commitment and investment if we are to achieve our CO<sub>2</sub> emission reduction target. The CMP is consistent with the university's mission and as well as providing savings through efficiencies and the improved use of resources, will help to meet the wider objectives of the Climate Change [Scotland] Act 2009. Part 4 of this act places a duty on the public sector to assist the Scottish Government in achieving their 2020 and 2050 CO<sub>2</sub> emission reduction targets.

The university supports the Scottish Government in meeting its long term targets and will therefore review this CMP towards the end of its lifetime with a view to creating a new CMP in order to contribute to its 2020 target.

Participation in the programme and the production of the CMP will also assist us in fulfilling the commitment we have already made under the Universities and Colleges Climate Commitment for Scotland [UCCCfS].

In addressing environmental risk and sustainability, the CMP also reinforces the university's health, safety and environmental policy and sustainable procurement strategy.

A carbon management team has been set up to manage and drive forward the CMP and a timetable has been set up for its implementation. In addition, the intention is to embed carbon management into the normal activities of the university over the next five years.



## 1 Introduction

The purpose of this carbon management plan [CMP] is to detail the university's strategy for reducing CO<sub>2</sub> emissions over the next five years as part of the Carbon Trust's carbon management programme [the programme].

The programme has been established in order to support smaller organisations in the creation of a CMP by guiding them through the following five phases:

1. Develop a low carbon vision and set targets and objectives for reducing CO<sub>2</sub> emissions;
2. Use historical data to calculate baseline values for CO<sub>2</sub> emissions and their associated costs, and illustrate how these are likely to increase over the next five years if business continues as usual;
3. Identify, quantify and prioritise opportunities for reducing CO<sub>2</sub> emissions;
4. Establish how such opportunities will be resourced and financed, and
5. Develop and implement a carbon management plan.

The baseline year chosen for the CMP is August 2009 to July 2010, with the commitment being to reduce CO<sub>2</sub> emissions from our operations by 10% by July 2015.

As the key output from the university's participation in the programme, the CMP documents exactly how the university will reduce the CO<sub>2</sub> emissions it currently produces as the result of:

- Electricity, gas and water consumed by owned buildings;
- Operating owned/leased vehicles;
- Business travel, and
- Waste produced by owned buildings.

Outside the scope of the CMP are all CO<sub>2</sub> emissions produced by:

- Electricity, gas and water consumption from rented or leased buildings;
- Waste produced by rented or leased buildings, and
- Staff commuter travel.

The CO<sub>2</sub> emissions embedded within the goods or services procured by the university are also outside the scope of the CMP, however the university has focused on sustainability within its current procurement strategy.

The university recognises that its participation in the programme and the production of the CMP will require the allocation of time and resources but will be invaluable in integrating CO<sub>2</sub> emission reduction targets into our existing strategic planning process.

Participation in the programme and the production of the CMP will also assist us in fulfilling the commitment we have already made under the Universities and Colleges Climate Commitment for Scotland [UCCCfS].



## 2 Carbon management strategy

This section puts the university's carbon management strategy into context in terms of the local, national and international drivers for carbon management. In response to these drivers, the university has developed a low carbon vision which focuses on four strategic themes and sets targets and objectives for reducing its CO<sub>2</sub> emissions.

### 2.1 Context and drivers for carbon management

Climate change is a real threat to our planet and immediate action is required if we are to reduce its projected impact. In response to the threat of climate change, the Kyoto protocol was adopted in 2005 and is an international agreement linked to the United Nations Framework Convention on Climate Change [UNFCCC]. The major feature of the Kyoto protocol is that it sets binding targets for industrialised countries and the European Community for reducing CO<sub>2</sub> emissions.

As a member of the European Community, the UK government has legislated for a reduction in CO<sub>2</sub> emissions through a number of statutory provisions.

A key statutory provision is the UK's Carbon Reduction Commitment [recently renamed the CRC Energy Efficiency Scheme] which is a mandatory carbon trading scheme and covers both public and private sector organisations. The aim of the CRC is to reduce the level of emissions currently produced by the larger 'low energy-intensive' organisations by approximately 1.2 million tonnes of CO<sub>2</sub> per year by 2020. As a climate change bill commitment, the scheme is aiming for an 80% reduction in CO<sub>2</sub> emissions by 2050. This scheme works in tandem with the existing European Union emissions trading scheme and Climate Change Agreements.

Furthermore, the UK Climate Change Act 2008 has put in place mandatory targets for a reduction in emissions of at least 80% by 2050 and at least 34% by 2020, against a 1990 baseline. Similarly, the Climate Change [Scotland] Act 2009 has put in place mandatory targets for a reduction in emissions of at least 80% by 2050 and at least 42% by 2020. Part 4 of this act places duties relating to climate change on the public sector as the reduction of CO<sub>2</sub> emissions across this sector is seen as being integral to meeting the targets set by both the UK and Scottish governments.

In 2007 this led all of Scotland's 32 local authorities to sign up to Scotland's Climate Change Declaration. The declaration acknowledged the reality and importance of climate change and signatories committed themselves to:

- Mitigating their impact on climate change through reducing CO<sub>2</sub> emissions;
- Taking steps to adapt to the unavoidable impacts of a changing climate, and
- Working in partnership with their communities to respond to climate change.

The declaration echoed the UK government's view that Scottish local authorities play a key role in providing a collective response to the challenge of climate change, and publicly demonstrated their commitment to action. By 2010 50 of Scotland's universities and colleges had followed suit and publicly declared their intention to address the challenges of climate change and reduce CO<sub>2</sub> emissions by signing the Universities and Colleges Climate Commitment for Scotland [UCCCfS]. As one of the original signatories of the UCCCfS the University of the Highlands and Islands is committed to addressing the challenges of climate change and to investigating ways in which it can reduce CO<sub>2</sub> emissions.

In addition to fulfilling its statutory duty and addressing the challenges of climate change, by reducing CO<sub>2</sub> the university may also achieve operational benefits. The Stern review on the economics of climate change in 2006 reported that climate change presents the greatest risk of market failure and recommends investing 1-3% of gross domestic product [GDP] annually to avert 20% losses per annum within a decade. However, the university has an opportunity to avert such losses. Reducing electricity, gas and water usage; waste production and travel requirements will naturally reduce operational overheads and save costs. Whereas, by responding to growing social and customer sensitivity regarding CO<sub>2</sub> emissions, the university may also be able to increase income.

## **2.2 Current carbon management measures**

### 2.2.1 Health, safety and environmental policy

A policy has been established in recognition of the university's moral, legal and economic duty to ensure that, so far as is reasonably practicable, it adequately controls the health, safety and environmental risks arising from its work activities. An integrated approach to the management of such risks not only follows industry best practice but also demonstrates how a single action may control a number of risks. For example, given the health, safety and environmental risks associated with driving at work the university's policy is that it should be avoided and instead staff are advised to assess the practicality of alternative means of achieving the required objectives, including the use of public transport, telephone or video-conferencing, electronic communication, or the use of local representatives.

### 2.2.2 Sustainable procurement strategy

The university has developed a sustainable procurement strategy which ensures that it is able to achieve best value for money whilst furthering the economic, environmental, social and cultural development and sustainability of the region.

A sustainable procurement strategy will allow the university to meet its needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the university, but also to society and the economy, whilst minimising damage to the environment.

### 2.2.3 Universities that Count

The university is working in partnership with the Environmental Association for Universities and Colleges [EAUC] who are the principal body for promoting sustainability in the further and higher education sector in the UK. The university recently joined EAUC's Universities that Count [UtC] discussion network and are also a member of the UtC 'operations' advisory panel.

#### 2.2.4 Learning, teaching and research

Many of the university's courses are delivered through distance and on-line learning which allows students to study without having to attend regular classes at one of the main university campuses. In addition, the university is continually developing courses and research areas which address environmental sustainability and development. Courses include:

- Countryside and environmental management;
- Developing low carbon communities;
- Energy engineering;
- Environmental science;
- Environment and sustainability studies;
- Managing sustainable mountain development;
- Managing sustainable rural development;
- Renewable energy systems;
- Sustainable energy solutions;
- Sustainable forest management, and
- Sustainable rural development.

Energy is a core research theme at the university, and the Energy Research Group [ERG] has been established to provide strategic direction and practical support to the energy research activities undertaken across the academic partnership.

The university's research is promoted through various research centres and academic departments which include established research in environmental science, marine science, renewable energy and sustainability, and various developing research environments. These include:

- The Centre for Mountain Studies [CMS] which aims to be recognised globally as a centre of excellence on issues relating to sustainable development in mountain regions through its research, consulting, teaching, and outreach;
- The Environmental Research Institute [ERI] which addresses contemporary environmental issues and advance understanding in the sustainable use of the earth's natural resources through research excellence and innovative scientific leadership;
- The NAFC Marine Centre which carries out a wide range of activities related to the fisheries and maritime industries, including training and education, research and development, environmental and quality monitoring, and advice and management, and
- Greenspace Research Ltd, based at Lews Castle College UHI, which is a research development and commercialisation project focused on reducing CO<sub>2</sub> emissions in the building industry.

#### 2.2.5 Video-conferencing

There are approximately 150 video-conferencing units in use across the university's network with more than 5,000 multi-site video-conferences and many other locally dialled point-to-point calls taking place each year. This makes the university one of the biggest users of video-conferencing in the UK and our staff work closely with the manufacturers in developing and testing new equipment and facilities in order to continuously develop and improve the service.



### 2.2.6 Energy performance rating – Ness Walk

The Energy Performance of Buildings [Scotland] Regulations 2008 require all public sector buildings with a total useful floor area of over 1,000m<sup>2</sup>, to show an energy performance certificate [EPC] in a prominent place, clearly visible to the public. As a result, an EPC was produced for Ness Walk by BRE Scotland on 12<sup>th</sup> December 2008. The EPC is displayed on the health, safety and environmental notice board in the staff room at Ness Walk and confirms that the building's current energy performance rating is E+.

Included within the EPC are recommendations for the cost-effective improvement of the energy performance of the building and were these to be applied, the building's energy performance could potentially be rated as D. Some of these recommendations are included in section 4.

A planned preventative maintenance [PPM] regime also ensures that a plant is operating as efficiently as possible and that the building is in a good state of repair.

### 2.2.7 Recycling

The university already recycles a substantial amount of its waste, including:

- Aluminium cans;
- Batteries;
- Cardboard;
- Confidential and non-confidential paper;
- Fluorescent light bulbs, lamps and tubes;
- Glass;
- Mobile phones;
- Office furniture;
- Photocopier toners and printer ink cartridges;
- Plastics, and
- Waste electrical and electronic equipment.

### 2.2.8 Cycle to work scheme

The university encourages staff to own a bicycle and cycle to work by participating in a cycle to work scheme and providing staff with bicycle lockers and shower facilities. The university's travel and subsistence policy also allows staff to claim mileage for cycle journeys that are undertaken for business purposes.

## 2.3 Our low carbon vision

**The University of the Highlands and Islands is committed to addressing the challenges of climate change and to investigating ways in which we can reduce CO<sub>2</sub> emissions.**

**We aim to show leadership on environmental development and sustainability issues by reducing our own CO<sub>2</sub> emissions and firmly believe that our carbon management plan will allow us to realise our low carbon vision.**

## 2.4 Strategic themes

In order to achieve our low carbon vision we will focus on the following four strategic themes:

### 2.4.1 Plan

Environmental development and sustainability is firmly embedded into our strategic planning process and carbon management will be included within the forthcoming revision of our strategic plan.

We will review existing policies to ensure that they are aligned with our low carbon vision. In addition, we will ensure that carbon management is viewed as being equal in status to other strategic commitments and statutory duties.

### 2.4.2 Act

We will allocate the necessary time and resources that are required to take direct action to reduce the university's CO<sub>2</sub> emissions.

The university will reduce the CO<sub>2</sub> emissions it currently produces as the result of electricity, gas and water consumed by owned buildings; operating owned/leased vehicles; business travel and waste produced by owned buildings. See section 2.5 for specific CO<sub>2</sub> emission reduction targets and objectives.

### 2.4.3 Communicate

We will implement a communications plan to ensure that staff are made aware of and kept up to date on our progress towards our low carbon vision. Staff will be reminded of their collective responsibility to address the challenges of climate change and the fact that by far the most effective way in which to do this is for all staff to take direct action to reduce the university's CO<sub>2</sub> emissions.

Staff will also be made aware of our low carbon vision during induction, with appropriate information and updates available on an on-going basis via the staff pages of the university's intranet and our electronic employee newsletter [EchO].

#### 2.4.4 Review

The university seeks to continually improve its carbon management performance which will be subject to periodical review. This will ensure that we remain compliant with the relevant statutory provisions and that we are able to meet our CO<sub>2</sub> emission reduction target.

Reviewing our carbon management performance will depend on obtaining accurate and timely management information [MI], and the university will ensure that the relevant systems and processes are in place in order to provide this.

### 2.5 Targets and objectives

The university's long-term carbon management strategy is to assist the Scottish Government in achieving their 2020 and 2050 CO<sub>2</sub> emission reduction targets. However for the short to medium-term the university has developed its own CO<sub>2</sub> emission reduction target.

**The University of the Highlands and Islands will reduce CO<sub>2</sub> emissions from our operations by 10% by July 2015 from 2009/10 levels.**

In order to achieve our overall CO<sub>2</sub> emission reduction target the following specific targets and objectives have been set:

#### 2.5.1 Electricity, gas and water<sup>1</sup> consumed by owned buildings

- Reduce electricity consumed by 14%
- Reduce gas consumed by 18%

#### 2.5.2 Business travel

- Reduce domestic flights by 10%
- Reduce car journeys by 5%

#### 2.5.3 Waste produced by owned buildings

- Reduce waste to landfill by 67%

Although the above specific targets and objectives have been set, the university remains flexible in how we actually achieve our overall CO<sub>2</sub> emission reduction target. For example our ability to achieve our business travel reduction target depends greatly on other organisations, in particular other public bodies, giving due consideration to the practicality of using video-conferencing. This will reduce the need for our staff to travel long distances to meetings which are an essential part of our day-to-day operations. We will support any organisation wishing to implement video-conferencing and offer them the opportunity to benefit for our knowledge and experience in using this technology.

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<sup>1</sup> No reduction targets have been set for water consumption. However we will continue to monitor water usage in order to identify possible reduction opportunities.



### 3 Emissions baseline and projections

This section provides details of the CO<sub>2</sub> emissions within the scope of the CMP. It also provides baseline and projected figures for these CO<sub>2</sub> emissions and their associated costs.

#### 3.1 Scope

Within the scope of the CMP are all CO<sub>2</sub> emissions produced by the buildings and transport utilised by the university, but not the embedded emissions in the goods or services procured. Specifically this includes CO<sub>2</sub> emissions produced by:

- Electricity, gas and water consumption from owned buildings;
- Owned/leased vehicles;
- Business travel, and
- Waste produced by owned buildings.

Outside the scope of the CMP are all CO<sub>2</sub> emissions produced by:

- Electricity, gas and water consumption from rented or leased buildings;
- Waste produced by rented or leased buildings;
- Staff commuter emissions, and
- The CO<sub>2</sub> emissions embedded within the goods or services procured by the university.

#### 3.2 Baseline

**The University of the Highlands and Islands baseline CO<sub>2</sub> emissions are 454 tonnes, which cost the university £193,431 to produce.**

The baseline figures shown in figure 2 are for the university's financial/academic year August 2009 to July 2010 i.e. the year prior to the beginning of the CMP. The figures show our baseline CO<sub>2</sub> emissions for the 'in scope' activities listed in section 3.1. These figures also allow us to determine the costs associated with creating this CO<sub>2</sub> and these costs are also shown in figure 2. As the costs associated with transport are difficult to calculate exactly, the Carbon Trust's carbon assessment tool has been utilised to estimate this cost. All other costs are actual costs taken from Aptos [the university's financial reporting tool] for the financial/academic year August 2009 to July 2010.

**Figure 2 – summary table of CO<sub>2</sub> emissions and associated costs for the financial year August 2009 to July 2010.**

	Total	Buildings	Transport	Waste	Water
<b>Baseline CO<sub>2</sub> emissions [tonnes]</b>	454	224	210	20	0
<b>Baseline Cost [£]</b>	193,431	32,353	151,351	1,845	7,882



In order to identify, quantify and prioritise opportunities for reducing CO<sub>2</sub> emissions, it is vital to identify where the greatest savings may be made and to target these areas accordingly. Figure 3 shows that the majority of the university's CO<sub>2</sub> emissions are produced [almost equally] by our buildings and our transport.

**Figure 3 – break-down of CO<sub>2</sub> emissions by activity**

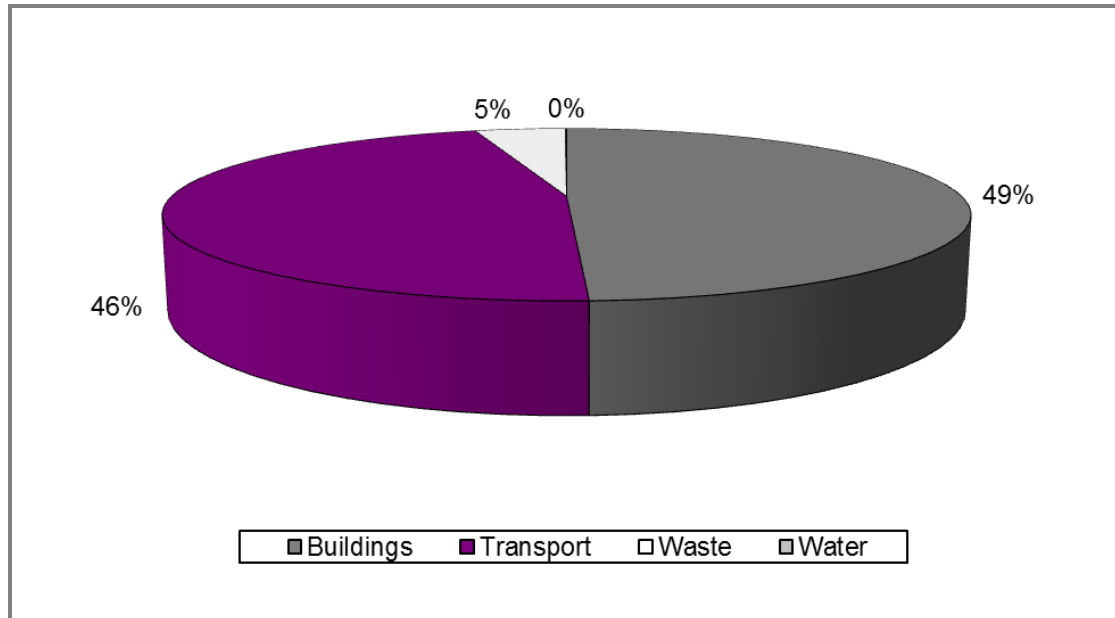


Figure 4 provides a breakdown of the CO<sub>2</sub> emissions produced by our buildings by fuel type.

**Figure 4 – break-down of CO<sub>2</sub> emissions produced by buildings by fuel type**

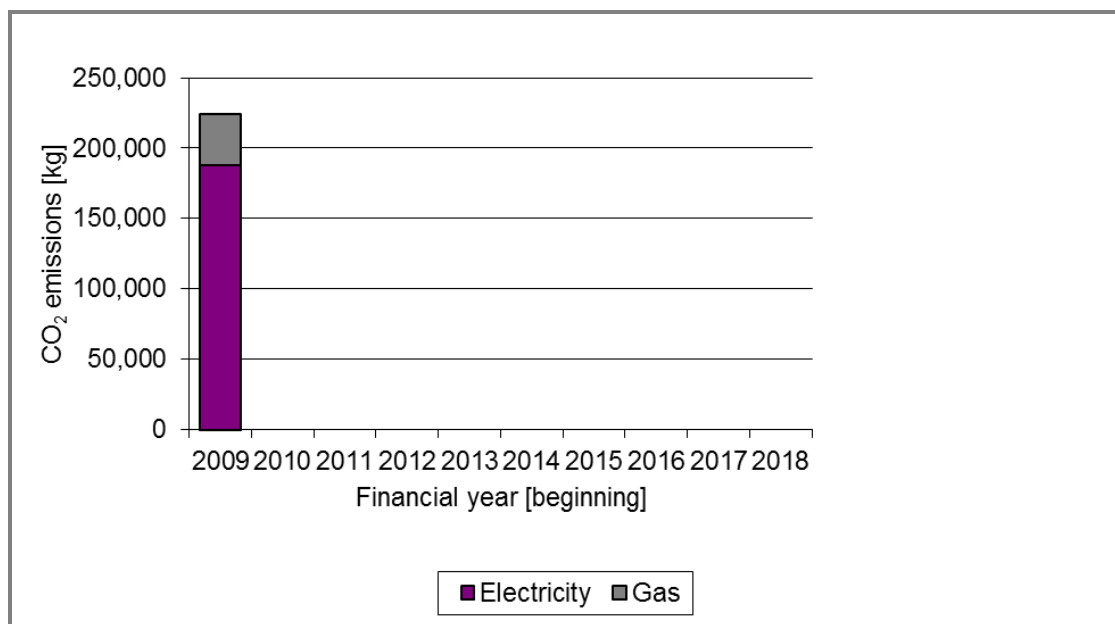
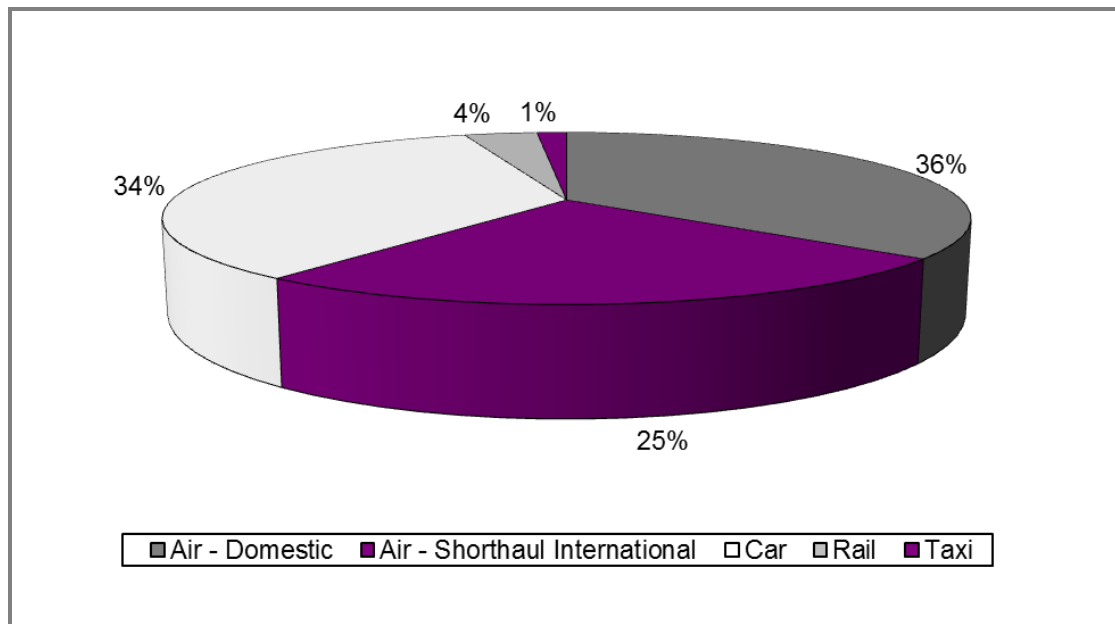


Figure 5 provides a breakdown of the CO<sub>2</sub> emissions produced by our transport by journey type.

**Figure 5 – break-down of CO<sub>2</sub> emissions by journey type**



### 3.3 Projections and value at stake

Projections and value at stake figures are used to highlight the difference between the business as usual [BaU] scenario and the target of reducing our CO<sub>2</sub> emissions by 10% by July 2015.

**The cumulative value at stake over the five years of this carbon management plan for the University of the Highlands and Islands is 164 tonnes of CO<sub>2</sub> emissions.**

Figure 6 below shows the predicted CO<sub>2</sub> emissions over the period from our baseline year of August 2009 to July 2010 over the lifetime of the CMP and beyond. It shows both BaU and targeted CO<sub>2</sub> emissions. Figures for BaU growth are shown as the red line and indicate an expected 0.7% year-on-year increase. These figures are taken from the Carbon Trust's carbon assessment tool. The university's target to reduce our CO<sub>2</sub> emissions is shown as the blue line. This linear decline requires the introduction of constant year-on-year CO<sub>2</sub> emission reductions if the CMP is to be successful. Close monitoring and management of our targets and objectives for reducing CO<sub>2</sub> emissions will be required if annual targets are to be met.

The difference between the BaU and target figures gives the overall 'value at stake'.

**Figure 6 - predicted BaU and target CO<sub>2</sub> emissions**

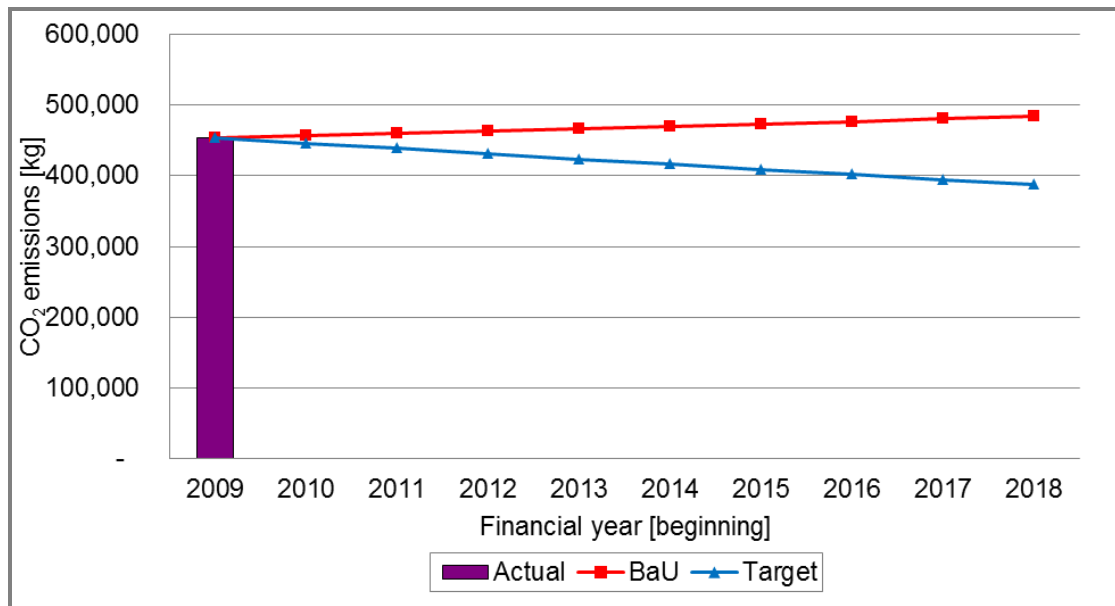


Figure 7 provides a break-down of value at stake in terms of CO<sub>2</sub> emissions with buildings and transport each making up almost half of the value at stake.

**Figure 7 – break-down of value at stake in terms of CO<sub>2</sub> emissions**

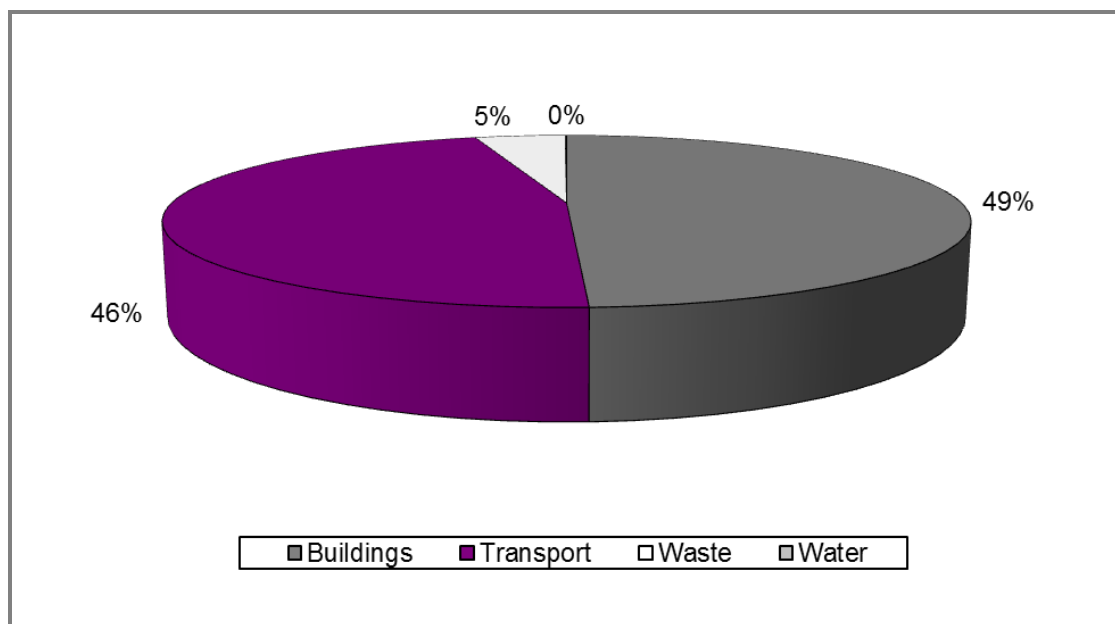


Figure 8 below shows the predicted costs over the period from our baseline year of August 2009 to July 2010 to the end of our five year plan. It shows both BaU and targeted costs. Figures for BaU growth are shown as the red line and indicate an expected 8.4% year-on-year increase. This figure is taken from the Carbon Trust who assumes an inflationary rise in CO<sub>2</sub> emission costs of 7.7%, together with a 0.7% rise in CO<sub>2</sub> emissions year-on-year. The university's target is shown as the blue line and is based on CO<sub>2</sub> emissions rather than costs.

The difference between the BaU and target figures gives the overall 'value at stake'. This financial 'value at stake' is of key interest to the university as it demonstrates that were the university to implement no CO<sub>2</sub> emission reduction initiatives we would have to find an additional £32,893 in order to maintain a 'stand still' position by July 2015 - this highlights the financial benefits of implementing CO<sub>2</sub> emission reduction initiatives.

In addition, figure 8 shows that the five year cumulative financial 'value at stake' to the university is £89,660 and in facing future budget reductions it makes sound financial sense to ensure that CO<sub>2</sub> emission reduction initiatives become a priority for the university.

**Figure 8 - predicted BaU and target costs**

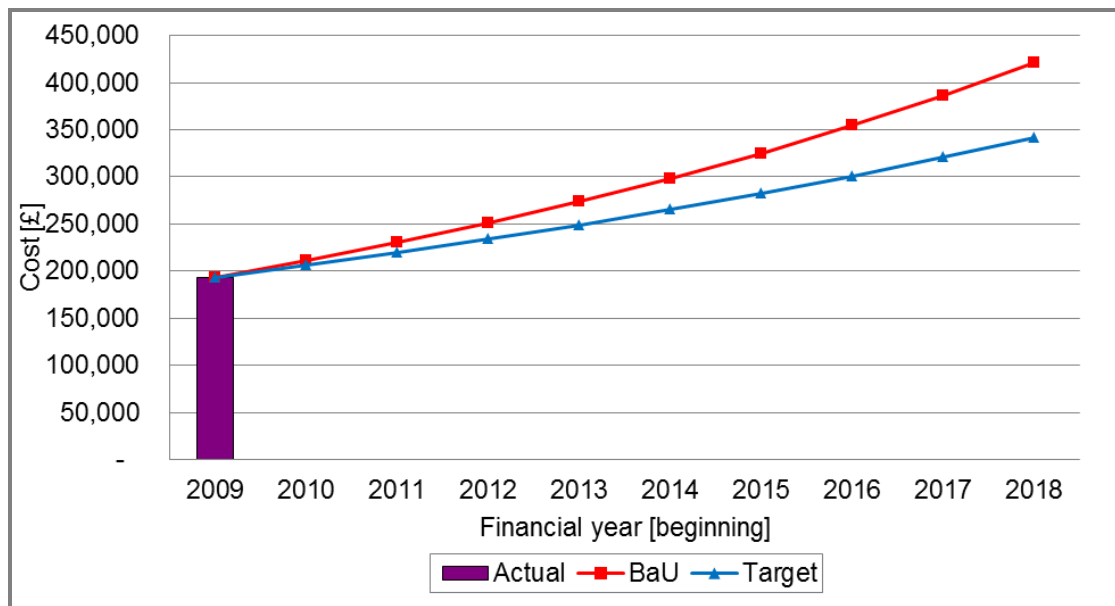
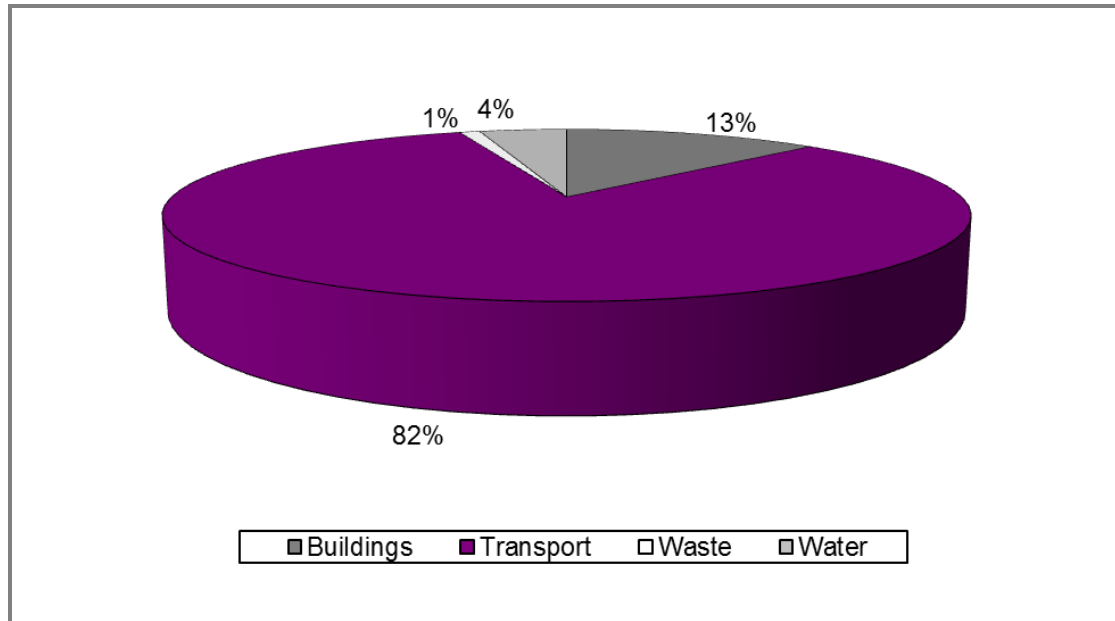


Figure 9 provides important information as it shows how transport costs make up over three-quarters of our financial 'value at stake' despite, as figure 3 shows, transport contributing to just under half of our CO<sub>2</sub> emissions. It would therefore be of financial benefit to the university to make transport reductions a higher priority than our CO<sub>2</sub> emissions information suggests. However prioritising transport reductions would depend greatly on the feasibility of such measures.

**Figure 9 – break-down of value at stake in terms of costs**

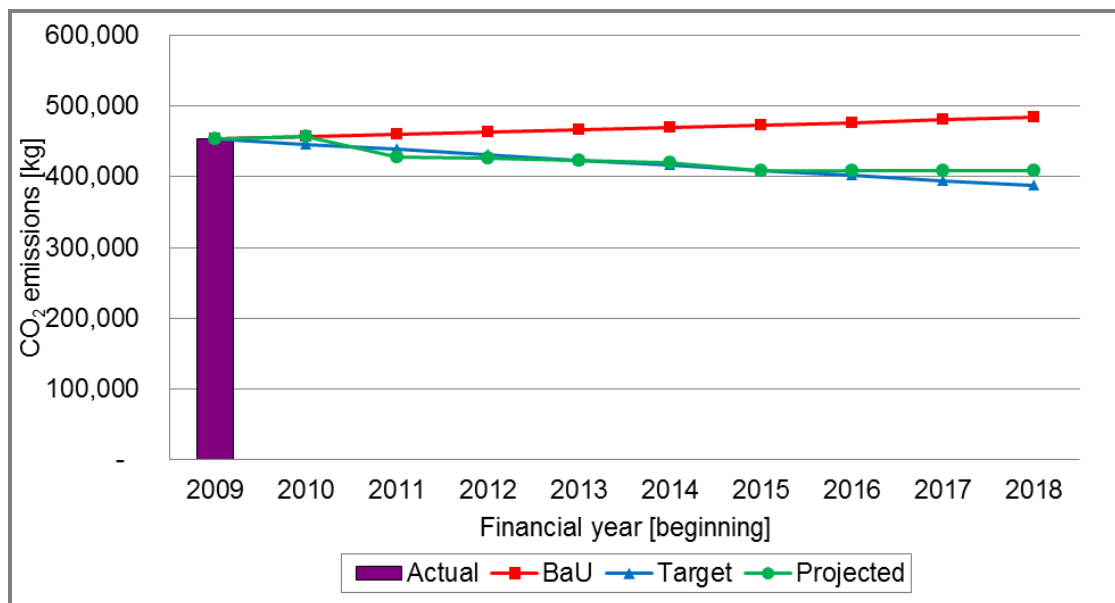


#### 4 Carbon management projects

This section contains a summary of future projects which will help us meet our CO<sub>2</sub> emission reduction targets over the lifetime of the CMP. As the document shall be 'live', further projects will be added over the lifetime of the CMP.

Figure 10 below shows the projected CO<sub>2</sub> emissions following the implementation of the planned projects as detailed in section 4.1.

**Figure 10 - projected CO<sub>2</sub> emissions**





#### 4.1 Planned projects

Reference	Project	Lead	Funded	Cost		Annual saving		Pay back	% of Target	Year
				Capital	Operational	Financial	CO <sub>2</sub>			
UHI-CMP-001	Replace lighting with T5	Facilities manager	Yes	£4,617	N/A	£526	3	10 years	8	2011 to 2012
UHI-CMP-002	Loft insulation	Facilities manager	Yes	£500	N/A	£855	5	Immediate	10	2010 to 2011
UHI-CMP-003	Waste management	Facilities manager	Yes	N/A	£1,923	£1,236	13	None	30	2011 to 2012
UHI-CMP-004	Sustainable travel - flights	SET	No	N/A	N/A	£8,144	7	Immediate	17	2010 to 2015
UHI-CMP-005	Sustainable travel - car	SET	No	N/A	N/A	£1,416	4	Immediate	8	2010 to 2015
UHI-CMP-006	Estate reduction	Facilities manager	No	N/A	N/A	£798	24	Immediate	52	2011 to 2012

A definition of each planned project is contained in appendix I.

#### 4.2 Future projects

Reference	Project	Lead	Data requirements	Resource requirements	Potential impact	Next steps
UHI-CMP-007	Server room heat recovery	Facilities manager	N/A	Funding [unknown]	Unknown	Establish cost of installation
UHI-CMP-008	Secondary glazing	Facilities manager	N/A	Funding [~£28K]	9 tonnes CO <sub>2</sub>	Establish source of funding

## 5 Implementation

The CMP will be implemented from June 2011, however most planned projects will not be implemented until the start of the new financial/academic year in August 2011.

**The CMP will benefit the University of the Highlands and Islands by adverting energy and travel costs of £84,918 by July 2015 - with average year on year costs of £16,984 being adverted as a result of implementing the CMP.**

### 5.1 Financing

The financial constraints placed upon the university mean that the financing of capital and operational costs will be met by re-allocating funds from existing budgets.

#### 5.1.1 Assumptions

- The CMP shall be self-financing; with projects either being funded from existing budgets within the same financial/academic year or have no cost attached, for example, a reduction in travel;
- It is assumed that energy costs will rise significantly above inflation over the lifetime of the CMP;
- The university purchases energy as part of a category A contract in collaboration with Procurement Scotland. This energy is not sourced from renewable sources, however we are contractually bound to continue with this arrangement and therefore, it is assumed that there will be no change to this arrangement over the lifetime of the CMP;
- The accuracy of certain figures quoted within the CMP depend upon calculations provided by the Carbon Trust, and
- The accuracy of actual cost and mileage figures relating to travel depend on a one month sample taken from invoices paid in September 2009 being an accurate representation of an average month's travel. These figures were multiplied by a factor a twelve in order to provide figures for the year August 2009 to July 2010.

#### 5.1.2 Benefits/savings – quantified and un-quantified

The quantified benefits are as detailed in section 5.5, however the un-quantified benefits may be described as:

- Meeting the requirements of the Climate Change [Scotland] Act 2009;
- Fulfilling the commitment we have made under the UCCCfS;
- Demonstrating our commitment to addressing the challenges of climate change to our staff, students, the public and other stakeholders;
- Widening our appeal to potential staff;
- Widening our appeal to potential students, and
- Increasing income by responding to growing social and customer sensitivity regarding CO<sub>2</sub> emissions.



## 5.2 Risks and issues

The university has considered and evaluated the risks and issues which need to be considered in relation to the CMP. We have looked at the probability and carried out an impact assessment to identify the necessary risks and the subsequent actions which can be taken to mitigate them. We have prioritised these risks and identified the actions which must be taken throughout the implementation of the CMP. The table below highlights these risks:

Description	Impact	Prob'y	Mitigating actions
1 The project leader [PL] has insufficient time, resulting in tasks slipping and the CMP not being implemented on schedule	H	M	<ul style="list-style-type: none"> <li>Resource for PL to be supported by line management, and</li> <li>Ensure a deputy PL is engaged from the start.</li> </ul>
2 There is insufficient funding for the CMP	H	M	<ul style="list-style-type: none"> <li>Value at stake figures should be presented as soon as possible to SET.</li> </ul>
3 Project sponsor [PS] has insufficient time or inclination to be involved with the CMP	H	M	<ul style="list-style-type: none"> <li>Meet with PS to discuss role;</li> <li>Ensure CMP review meetings are in PS's calendar, and</li> <li>Seek Carbon Trust support, if required.</li> </ul>
4 Key parts of the university do not actively participate in the CMP	M	M	<ul style="list-style-type: none"> <li>PS to engage formally with SET;</li> <li>PL seeks experience of similar functions from alumni, and</li> <li>Seek Carbon Trust support, if required.</li> </ul>

### Key:

Description:	A text description of the potential problem [or the existing problem in the case of an issue] and what the result would be
Impact:	A subjective evaluation of the scale of the impact of the risk, should it happen - high [H], medium [M] or low [L]
Probability:	A subjective evaluation of how likely the risk is to occur - high [H], medium [M] or low [L], or I if it is a current issue
Mitigating actions:	Who will take what action and by when, to manage the risk

These risks will be recorded in the form of a risk register which will be reviewed every six months during the carbon management team meetings. A blank risk register is contained in appendix II. As the document shall be 'live', risks will be continually assessed over the lifetime of the CMP.

### 5.3 Embedding carbon management

In order to benchmark and develop targets for embedding carbon management across the organisational structure of the university, we have made use of the Carbon Trust's carbon management embedding matrix.

Figure 11 below shows our current position as the red boxes and our targeted position as the green boxes.

In order to build upon the CO<sub>2</sub> reduction commitment which the university has already made and further embed carbon management across the organisation we will address the following issues that are not otherwise contained within the CMP:

- Carbon management will be included in the next revision of the university's strategic plan.
- The CMP will be subject to continual review and monitoring, to ensure that its objectives and targets remain relevant and take account of developments and changes in the organisation, technology, Scottish Government targets, legislation, etc.
- The allocation of time and resources will be subject to continual review and monitoring to ensure that are sufficient to allow the university to achieve its CO<sub>2</sub> emission reduction targets. In addition sources of investment specifically aimed at CO<sub>2</sub> emission reduction projects will be investigated.
- Our present management information [MI] systems afford a reasonable amount of analyses; however there is scope for greatly improving how we collect MI data relating to travel to ensure that it is sufficiently detailed, accurate and reliable.
- Evidence from other organisations suggests that running carbon management awareness campaigns may produce 10% savings if staff follow good housekeeping procedures on a sustained basis. Therefore, it is proposed to introduce a long-term awareness-raising campaign, and through a planned approach to communication, to encourage a culture change throughout the university and embed good carbon management practices. A communications plan is contained in appendix III, and
- There are already a number of policies and strategies in place that relate to environmental development and sustainability. Although these policies and strategies are not contradictory, there is scope to ensure that they are aligned more comprehensively. This will enable all stakeholders to take control of their activities and reduce their impact on the environment.



Figure 11 - carbon management embedding matrix

	CORPORATE STRATEGY	PROGRAMME MANAGEMENT	RESPONSIBILITY	DATA MANAGEMENT	COMMUNICATION & TRAINING	FINANCE & INVESTMENT	POLICY ALIGNMENT
5	CO <sub>2</sub> reduction commitment in corporate strategy Top level targets set for CO <sub>2</sub> reduction Climate change strategy reviewed annually	Sponsor reviews progress and removes blockages through regular programme boards Progress against targets routinely reported to cabinet/SMT	CM integrated in to responsibilities of department heads cabinet/SMT regularly updated Staff engaged through green champion network	Annual collation of CO <sub>2</sub> emissions for: o buildings o street lighting o transport o waste Data internally reviewed	All staff given formalised CO <sub>2</sub> reduction training Joint CM communications with key partners Staff awareness tested through surveys	Coordinated financing for CO <sub>2</sub> reduction projects via programme board Finances committed 1yr ahead Some external financing	Comprehensive review of policies complete Lower level policies reviewed locally Unpopular changes being considered
4	CO <sub>2</sub> reduction vision clearly stated and published Climate change strategy endorsed by cabinet and publicised with staff	Core team regularly review CM progress: o actions o profile & targets o new opportunities	An individual provides full time focus for CO <sub>2</sub> reduction and coordination across the organisation Senior sponsor actively engaged	Collation of CO <sub>2</sub> emissions for limited scope i.e. buildings only	Environmental/energy group(s) given ad hoc training o communications	of CO <sub>2</sub> reduction is developing, but finance remains ad-hoc Some centralised resource allocated Finance representation on	All high level and some mid-level policies reviewed, irregularly Substantial changes made, showing CO <sub>2</sub> savings
3	Draft climate change policy Climate change references in other strategies	Ad hoc reviews of CM actions progress	CO <sub>2</sub> reduction a part-time responsibility of a few department champions	No CO <sub>2</sub> emissions data compiled Energy data compiled on a regular basis	Regular awareness campaigns Staff given CM information on ad-hoc basis	Ad hoc financing for CO <sub>2</sub> reduction projects	Partial review of key, high level policies Some financial quick wins made
2	No policy No climate change reference	No CM monitoring	No recognised CO <sub>2</sub> reduction responsibility	No CO <sub>2</sub> emissions data compiled Estimated billing	No communication or training	No specific funding for CO <sub>2</sub> reduction projects	No alignment of policies for CO <sub>2</sub> reduction
1							



## 5.4 Governance

In order to ensure that there is effective and on-going ownership of the CMP, it is important to define a governance structure. Therefore, the university will adopt the following structure for management accountability:

### 5.4.1 The project board

The senior management team [SET] will act as the project board and have responsibility for the strategic direction and implementation of the CMP.

### 5.4.2 The carbon management team

The carbon management team will be convened by the project leader and will meet every six months. The project leader will report on any significant progress during fortnightly project review meetings held with the project sponsor. The project sponsor will report on progress during monthly SET meetings

In addition, the carbon management team's remit will be to:

- Review and update the CMP on an annual basis;
- Monitor and report progress against the CMP;
- Monitor and report CO<sub>2</sub> emissions;
- Review and update the risk register on a six-monthly basis, and
- Develop internal and external communication plans.

Role	Name and position in the organisation	Contact details
Project sponsor	Martin Wright Director of marketing, communications and planning	01463 279221 <a href="mailto:martin.wright@uhi.ac.uk">martin.wright@uhi.ac.uk</a>
Project leader	Tim Skyrme Facilities manager	01463 279 240 <a href="mailto:tim.skyrme@uhi.ac.uk">tim.skyrme@uhi.ac.uk</a>
Deputy project leader	Fiona Forbes PA to director of marketing, communications and planning	01463 279345 <a href="mailto:fiona.forbes@uhi.ac.uk">fiona.forbes@uhi.ac.uk</a>
Service representatives	Alison Hay Communications and external relations manager	01463 279206 <a href="mailto:alison.hay@uhi.ac.uk">alison.hay@uhi.ac.uk</a>
	Jem Taylor Head of strategy and development	01463 279322 <a href="mailto:jem.taylor@uhi.ac.uk">jem.taylor@uhi.ac.uk</a>
	Lorraine Maclennan Accountant	01463 279254 <a href="mailto:lorraine.maclennan@uhi.ac.uk">lorraine.maclennan@uhi.ac.uk</a>

#### 5.4.3 Succession planning for key roles

The university is committed to delivering the CMP, which is a formal deliverable to the Carbon Trust. Therefore, the key roles listed in section 5.3.2 relate to posts rather than individuals and as such the duties shall be incumbent upon the post holders rather than with individual personnel.

#### 5.4.4 Key stakeholder groups or individuals

The key to the success of the CMP will be effective engagement with staff and other stakeholders. Everyone will have a role to play in reducing CO<sub>2</sub> emissions, and only by working together will we meet our target.

The key stakeholders in the university who can shape and change culture and awareness are the:

- Board of governors;
- Principal & vice chancellor;
- Secretary;
- Senior management team [SET];
- Senior academic team [SAT];
- Facilities and front of house team;
- Marketing, communications and planning department;
- Corporate finance department;
- Learning and information services [LIS] department;
- Personnel department;
- Finance and general purposes committee [FGPC];
- Information and consultation committee [ICC], and
- University of the Highlands and Islands student association [UHISA].



## Appendix I – definition of projects

<b>Reference</b>	UHI-CMP-001
<b>Project</b>	Replace lighting with T5
<b>Owner [person]</b>	Tim Skyrme, Facilities manager
<b>Department/team</b>	Facilities and front of house team
<b>Description</b>	<p>There are currently 190 no. T8 fluorescent tubes in use at Ness Walk which are connected to 170 no. high frequency and 20 no. switch start fitting</p> <p>By utilising ME-T5 adapters the current fitting can be converted so as to accommodate T5 high efficiency fluorescent tubes which will reduce electricity consumed at Ness Walk by 2%</p>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £463 per annum</li> <li>▪ Payback period: 10 years</li> <li>▪ CO<sub>2</sub> emissions reduction: 3 tonnes per annum</li> <li>▪ 8% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ Capital cost: £4,617 to be funded in FY 2011 to 2012</li> <li>▪ Source of funding: Facilities and front of house budget</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: internal management support</li> <li>▪ Installation by university approved external contractor</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Project deliverable backed by Carbon Trust</li> <li>▪ Proven technology</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of electricity consumption before and after installation with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	Installation to be undertaken 2011 to 2012
<b>Notes</b>	N/A



<b>Reference</b>	UHI-CMP-002
<b>Project</b>	Loft insulation
<b>Owner [person]</b>	Tim Skyrme, Facilities manager
<b>Department/team</b>	Facilities and front of house team
<b>Description</b>	<p>The current loft insulation in use at Ness Walk is in good condition and to the required specification</p> <p>However, following various maintenance work the insulation has been moved, therefore creating gaps</p> <p>The insulation will be re-laid and additional insulation installed as necessary which will reduce gas consumed at Ness Walk by 13%</p>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £750 per annum</li> <li>▪ Payback period: immediate</li> <li>▪ CO<sub>2</sub> emissions reduction: 5 tonnes per annum</li> <li>▪ 10% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ Capital cost: £500 to be funded in FY 2010 to 2011</li> <li>▪ Source of funding: Facilities and front of house budget</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: internal management support</li> <li>▪ Installation by university approved external contractor</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Project deliverable backed by Carbon Trust</li> <li>▪ Proven technology</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of gas consumption before and after installation with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	Installation to be undertaken 2010 to 2011
<b>Notes</b>	N/A





<b>Reference</b>	UHI-CMP-003
<b>Project</b>	Waste management
<b>Owner [person]</b>	Tim Skyrme, Facilities manager
<b>Department/team</b>	Facilities and front of house team
<b>Description</b>	<p>The university already recycles a substantial amount of its waste, however by implementing a waste management system we will reduce waste to landfill produced by owned buildings by 67%</p> <p>This will involve substituting general waste bins with recycling bins throughout the offices and providing staff with central recycling points at key locations</p>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £0 per annum</li> <li>▪ Payback period: none</li> <li>▪ CO<sub>2</sub> emissions reduction: 13 tonnes per annum</li> <li>▪ 13% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ Operational cost: £1,923 per annum to be funded in FY 2011 to 2012 and onwards</li> <li>▪ Source of funding: Facilities and front of house budget</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: internal management support and staff support</li> <li>▪ Managed by university approved external contractor</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Staff already accustomed to recycling</li> <li>▪ Maintenance of active campaign</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of volume of waste to landfill before and after implementation with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	To be implemented in 2011 to 2012, and to continue onwards
<b>Notes</b>	N/A



<b>Reference</b>	UHI-CMP-004
<b>Project</b>	Sustainable travel - flights
<b>Owner [person]</b>	SET
<b>Department/team</b>	All
<b>Description</b>	In order to reduce the number of domestic flights taken by 10%, staff will be advised to assess the practicality of alternative means of achieving the required objectives, including the use of rail journeys, telephone or video-conferencing, electronic communication, or the use of local representatives.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £8,144 per annum</li> <li>▪ Payback period: immediate</li> <li>▪ CO<sub>2</sub> emissions reduction: 7 tonnes per annum</li> <li>▪ 17% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ None required</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: internal management support and staff support</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Staff already accustomed to using video-conferencing</li> <li>▪ Maintenance of active campaign</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of number of flights and distance travelled after implementation with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	To be implemented in 2011 to 2012, and to continue onwards
<b>Notes</b>	N/A



<b>Reference</b>	UHI-CMP-005
<b>Project</b>	Sustainable travel - car
<b>Owner [person]</b>	SET
<b>Department/team</b>	All
<b>Description</b>	In order to reduce the number of car journeys made by 5%, staff will be advised to assess the practicality of alternative means of achieving the required objectives, including the use of public transport, telephone or video-conferencing, electronic communication, or the use of local representatives
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £1,416 per annum</li> <li>▪ Payback period: immediate</li> <li>▪ CO<sub>2</sub> emissions reduction: 4 tonnes per annum</li> <li>▪ 8% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ None required</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: Internal management support and staff support</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Staff already accustomed to using video-conferencing</li> <li>▪ Maintenance of active campaign</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of number of car journeys and distance travelled after implementation with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	To be implemented in 2011 to 2012, and to continue onwards
<b>Notes</b>	N/A



<b>Reference</b>	UHI-CMP-006
<b>Project</b>	Estate reduction
<b>Owner [person]</b>	Tim Skyrme, Facilities manager
<b>Department/team</b>	Facilities and front of house team
<b>Description</b>	<p>As a result of organisational changes the university will move its staff from Jubilee Lodge to Ness Walk without any net increase in occupancy.</p> <p>Jubilee Lodge will therefore be leased to an external organisation.</p>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Financial savings: £798 per annum</li> <li>▪ Payback period: immediate</li> <li>▪ CO<sub>2</sub> emissions reduction: 24 tonnes per annum</li> <li>▪ 52% of target</li> </ul>
<b>Funding</b>	<ul style="list-style-type: none"> <li>▪ None required</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>▪ Management resource: Internal management support and staff support</li> </ul>
<b>Ensuring success</b>	<ul style="list-style-type: none"> <li>▪ Ensure sufficient space is identified in Ness Walk</li> <li>▪ Principal risks: none identified</li> </ul>
<b>Measuring success</b>	Measurement of electricity and gas consumption before and after move to Ness Walk with resulting cost savings and CO <sub>2</sub> emissions reduction
<b>Timing</b>	To be implemented in 2011 to 2012, and to continue onwards
<b>Notes</b>	N/A



## Appendix II – risk register

Risk no.	Risk descriptor	Root cause	Implications	Owner	Rating [likelihood x impact]	Description of existing mitigation/ controls	Assessment of mitigation/ controls	Trend	Further action	Person responsible Action timescale	Residual risk
1											
2											
3											
4											



## Appendix III – communications plan

**Strategic Goal:** To detail the university's strategy for reducing CO<sub>2</sub> emissions over the next five years as part of the Carbon Trust's carbon management programme.

**Communication Aim:** To launch the university's carbon management plan [CMP].

### Communication Objectives:

- To inform all staff about the university's CMP and where to find it, and
- To highlight the main features of the CMP.

### Key messages:

- The CMP was approved by senior management team [SET] on 7 June 2011 and information and consultation committee [ICC] on 13 June 2011;
- The CMP is endorsed by Carbon Trust and representatives from the university attended the carbon management graduation event in Edinburgh on 22 June 2011;
- The CMP is available on the staff intranet;
- As all staff have a role to play in reducing CO<sub>2</sub> emissions they should ensure that they have read and understood the CMP;
- How staff should assist the university in reducing CO<sub>2</sub> emissions;
- For any questions, queries or to discuss any matter relating to carbon management contact Tim Skyrme, and
- Highlight main features of the CMP.

### Main features:

- Details exactly how the university will reduce CO<sub>2</sub> emissions from our operations by 10% by July 2015 from 2009/10;
- Shows the commitment of the university to reduce CO<sub>2</sub> emissions over the short to medium term;
- Consistent with the university's mission;
- Provides savings through efficiencies and the improved use of resources;
- Helps to meet the wider objectives of the Climate Change [Scotland] Act 2009 and fulfils the university's obligation under part 4 of this act;
- Supports the Scottish Government in meeting its 2020 and 2050 CO<sub>2</sub> emission reduction targets;
- Assists the university in fulfilling the commitment already made under the Universities and Colleges Climate Commitment for Scotland [UCCCfS];
- In addressing environmental risk and sustainability, the CMP reinforces the university's health, safety and environmental policy and sustainable procurement strategy, and
- Details how carbon management will be embedded into the normal activities of the university over the next five years.



When	Method	Audience	Communicator	Message	Notes
July 2011	Put CMP on staff intranet	All staff	Tim Skyrme	N/A	N/A
July 2011	Article in Echo	All staff	Tim Skyrme Susan Szymborski	<ul style="list-style-type: none"> <li>Representatives from the university attended the carbon management graduation event in Edinburgh on 22 June 2011;</li> <li>CMP launched today;</li> <li>Available on staff intranet;</li> <li>Staff role in reducing CO<sub>2</sub> emissions;</li> <li>Contact Tim Skyrme with any questions, queries or to discuss any matter relating to carbon management, and Main features.</li> </ul>	Statement from Carbon Trust required
On-going	Staff inductions	All staff	Tim Skyrme	<ul style="list-style-type: none"> <li>Available on staff intranet;</li> <li>Staff role in reducing CO<sub>2</sub> emissions;</li> <li>Contact Tim Skyrme with any questions, queries or to discuss any matter relating to carbon management, and Main features.</li> </ul>	N/A
TBC	Staff meeting	All staff	Tim Skyrme	<ul style="list-style-type: none"> <li>Available on staff intranet;</li> <li>Staff role in reducing CO<sub>2</sub> emissions;</li> <li>Contact Tim Skyrme with any questions, queries or to discuss any matter relating to carbon management, and Main features.</li> </ul>	N/A
August 2011 to October 2011	Poster on HS&E notice boards Article in Echo	All staff	Tim Skyrme Susan Szymborski	<p><b>Waste produced by owned buildings</b></p> <p>Highlights this particular aspect of the CMP and what the role staff can play in reducing CO<sub>2</sub> emissions.</p>	Provide baseline and target figures
November 2011 to January 2012	Poster on HS&E notice boards Article in Echo	All staff	Tim Skyrme Susan Szymborski	<p><b>Business travel</b></p> <p>Highlights this particular aspect of the CMP and what the role staff can play in reducing CO<sub>2</sub> emissions.</p>	Provide baseline and target figures
February 2012 to April 2012	Poster on HS&E notice boards Article in Echo	All staff	Tim Skyrme Susan Szymborski	<p><b>Electricity, gas and water consumed by owned buildings</b></p> <p>Highlights this particular aspect of the CMP and what the role staff can play in reducing CO<sub>2</sub> emissions.</p>	Provide baseline and target figures