

# Dumfries and Galloway College

## Climate Change Action Plan

2015 - 2020



**Date:** October 2015

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## Foreword from the Principal



There are many challenges facing Scotland's colleges in the future and many uncertainties. However, we can be certain that colleges and universities have a key role to play in contributing to Scotland's long-term national targets in relation to climate change. A successful response recognises the need to conduct all of our activities in a more sustainable way. As a result the College as an organisation must effect change through our primary role as an educator and skills provider by addressing how our own activities impact upon the wider environment.

We have signed up to the Universities and Colleges Climate Commitment for Scotland and commit to publishing and implementing a five year plan, which identifies how we will secure a significant reduction in emissions from our business and operational activities. We also aim to embed sustainability into day to day activity and provide a positive role model for students, staff and the wider community. We see sustainability as an integral part of good institutional practice, producing resource and cost efficiencies which will enable us to build an economically and environmentally sustainable institution.

This Climate Change Action Plan (CCAP) illustrates a clear target and vision for carbon management and environmental education in Dumfries and Galloway College that will allow us as a College community to not only reduce our own carbon emissions but to highlight the importance of a sustainability ethos with our students, staff and local community. Each of us has a responsibility to play in achieving the objectives of this Plan, however if we meet that challenge we will be contributing to a cleaner, healthier and more sustainable future.

Carol Turnbull  
Principal & CEO  
Dumfries and Galloway College

## Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change must 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.

Dumfries and Galloway College was selected to take part in this ambitious programme. Dumfries and Galloway College partnered with the Carbon Trust in order to realise substantial carbon and cost savings. This Climate Change Action Plan commits the organisation to a target of reducing CO<sub>2</sub> by 20% by 31 December 2019, against a carbon emissions baseline year of 2014, and underpins potential cumulative financial savings to the organisation of around £280,000.

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 Dumfries and Galloway College in the on-going implementation of its carbon management.

A handwritten signature in blue ink, appearing to read 'Paul Wedgwood'.

Paul Wedgwood  
General Manager, Carbon Trust in Scotland

## Executive Summary

This Climate Change Action Plan (hereafter referred to as the Plan) is the culmination of a year's worth of work which has taken Dumfries and Galloway College from having carbon reduction as a College objective to the production of a comprehensive five year plan. The Plan emphasises the College's commitment to reducing carbon dioxide (CO<sub>2</sub>) emissions over the short to medium term. The Plan illustrates how savings will be made through efficiencies and improved use of resources in addition to helping meet the wider objectives of the Climate Change (Scotland) Act 2009. In particular this is a response to our duty in Part 4 of this Act to assist the Scottish Government in achieving their 2020 and 2050 CO<sub>2</sub> emission reduction targets. The Plan is consistent with the College aims and those of the Scottish Funding Council (SFC).

**The College has set a target for reducing carbon emissions by 20% by 31 December 2019.**

Such a reduction would result in cost savings by the end of the final year of approximately £280,000 together with an overall cumulative reduction of approximately 900 tonnes of CO<sub>2</sub> emissions against a business as usual scenario.

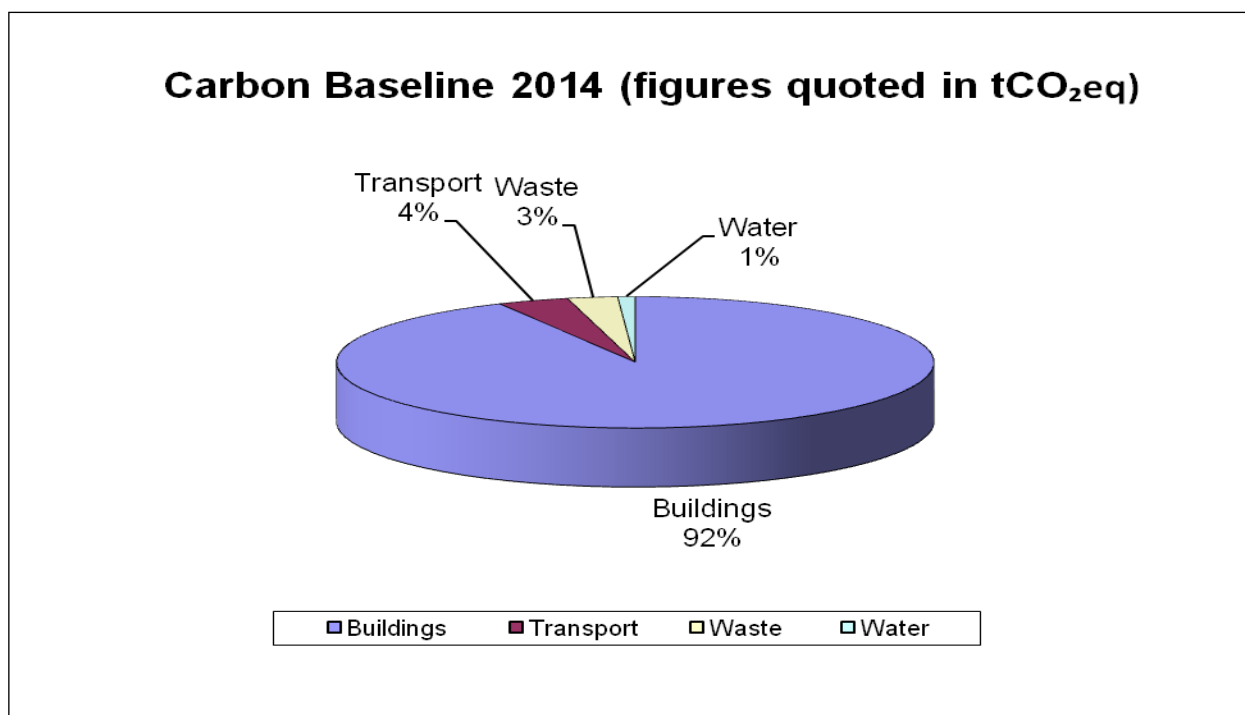
Information was compiled from the calendar year of 2014 to calculate baseline data as a starting point for CO<sub>2</sub> emissions and to provide a starting point for future measurement of reductions. Figure 1 shows the headline figures for the College for this initial baseline period.

**Table 1 - Headline CO<sub>2</sub> Emissions for 2014**

	TOTAL	Buildings	* Transport	Waste	Water	Fugitive
<b>Baseline CO<sub>2</sub> emissions (tonnes CO<sub>2</sub> equivalent)</b>	<b>1246 tCO<sub>2</sub>eq</b>	1128 tCO <sub>2</sub> eq	47 tCO <sub>2</sub> eq	33 tCO <sub>2</sub> eq	11.5 tCO <sub>2</sub> eq	26.5 tCO <sub>2</sub> eq

\*This is staff business travel and fleet vehicles only and does not include staff and student commuting to and from College

**Chart 1 – Carbon baseline for 2014**



The College will establish a Sustainability Committee, to oversee and drive forward the Plan. The Sustainability Committee will be led by the Director of OD and Facilities and will meet quarterly. .

The Plan will commence and be driven forward through:

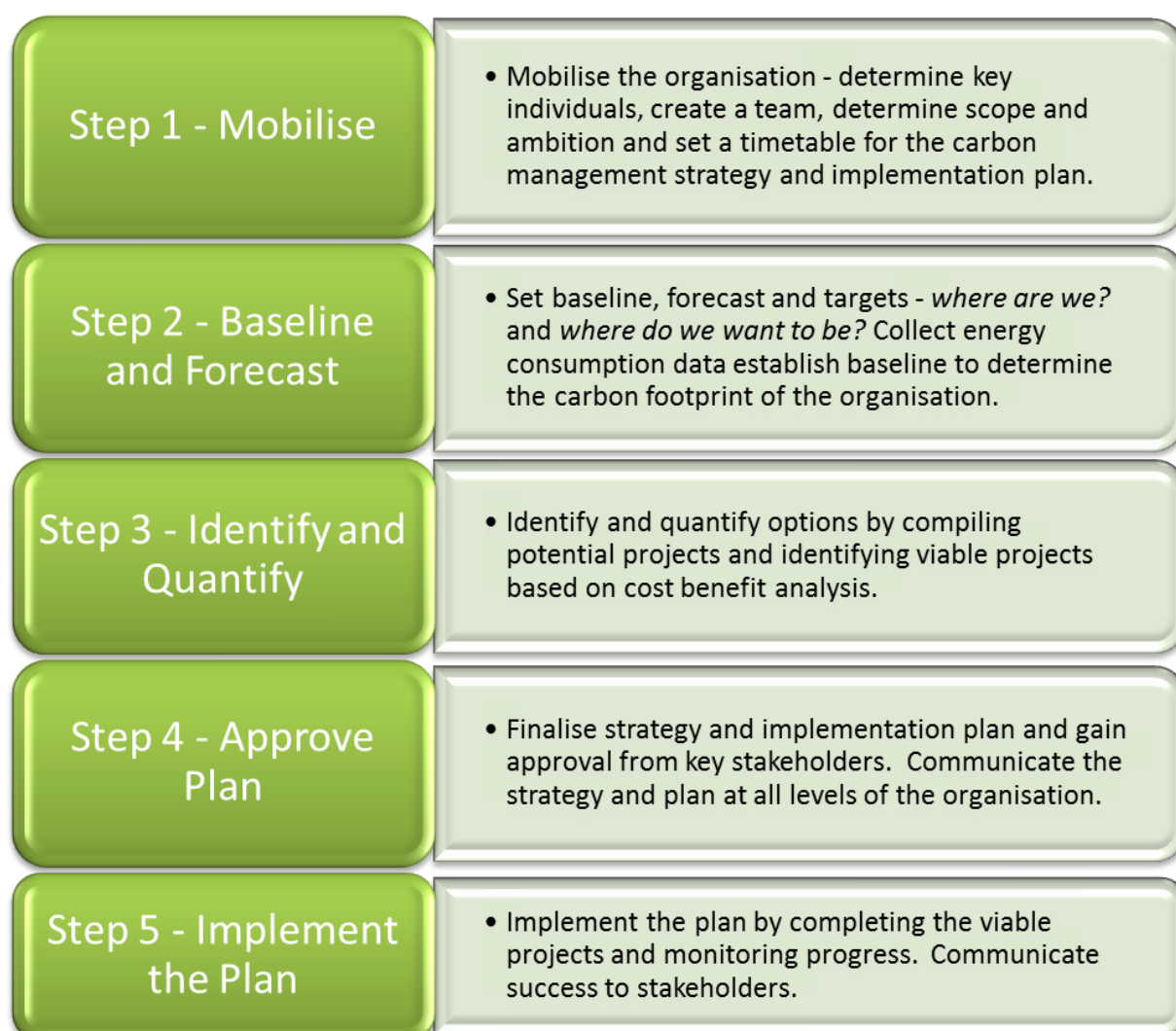
- The introduction of carbon reduction initiatives into all operational planning, delivery and day-to-day activities.
- A strong focus on education for sustainable development (ESD) in all curriculum areas.
- The introduction of a staff awareness carbon reduction and sustainability programme during the induction process and as part of continuous professional development.
- A cross college behaviour change and awareness campaign to raise carbon reduction, energy efficiency and sustainable development with our wider campus community.
- Seeking opportunities for joint initiatives with external partners.



## 1 Introduction

Dumfries and Galloway College is committed to improving environmental performance, raising the profile of sustainability education and reducing its impact upon contributing to climate change. The staff, students, campus partners and wider community have the right to expect, that the College as a responsible institution, acts positively to promote behaviour change and reduce the impact upon the environment.

Dumfries and Galloway College has recognised the need for a co-ordinated approach to carbon management, education for sustainable development and global citizenship. In order to achieve this the College has not only scrutinised the estates and campus management but have also aligned this with curriculum development to produce the Climate Change Action Plan. This Plan has five stages which will determine the baseline data and which sets the agenda for five years of carbon reduction measures and sustainability education.



This Plan provides the structure and details of the projects that will help the College achieve the target of a 20% reduction in carbon emissions by 31 December 2019.

## 2 Carbon Management Strategies

Dumfries and Galloway College is committed to promoting environmental issues as an integral part of operational activities in order to demonstrate the aim of continual improvement and innovation in best environmental practices and education.

### 2.1 Context and Drivers for Carbon Management

Man-made carbon dioxide (CO<sub>2</sub>) and other greenhouse gas emissions (GHG), also referred to as carbon emissions, are believed by the UK government and the majority of the scientific community to be a major cause of the increase in average global temperatures since the Industrial Revolution. Although some scepticism remains the evidence is very strong and the Precautionary Principle has persuaded successive governments to commit to reducing emissions. Increasing GHG emissions from the use of fossil fuels is the major contributory cause of man-made climate change. Carbon dioxide is one of a basket of six GHGs, and is created primarily by the burning of fossil fuels. As demand for fuel and energy increases globally so does the amount of CO<sub>2</sub> and other GHG emissions released into the atmosphere. The term carbon emissions will be used in this plan to describe all GHG emissions, from the basket of six, generated by the College's activities.

### 2.2 Climate Change (Scotland) Act (2009) and Climate Change Act (2008)

Scotland's net emissions of CO<sub>2</sub> in 2005 were over 54 million tonnes, approximately 0.2% of the World's CO<sub>2</sub> emissions. Scotland has 0.08% of the world's population and therefore proportionately produces higher carbon emissions per capita. The Scottish Government has sought to address this in the Climate Change (Scotland) Act (2009) which outlines national GHG emissions reduction targets. These targets are a mandatory 80% reduction in GHG emission levels (from a 1990 baseline level) by 2050 with an interim reduction level of at 42% by 2020. The UK Government has also committed to similar carbon reduction targets. Significant carbon savings will be required across all sectors in the UK including from Further and Higher Education Institutions.

### 2.3 Universities and Colleges Climate Commitment for Scotland (UCCCfS)

Dumfries and Galloway College is a signatory of the UCCCfS which commits Scotland's Universities and Colleges to address the challenge of climate change and reduce their carbon footprints accordingly. Signatories commit to producing and publishing a five year Climate Change Action Plan (CCAP) which includes measurable targets and timescales to implement and achieve carbon reduction from all business operations and activities.

### 2.4 Low Carbon and Sustainability Vision

Dumfries and Galloway College is committed to achieving continuous improvement in our environmental and sustainability performance by minimising our impact upon climate change and by educating our staff and students about sustainable development.

As well as striving for a reduced carbon future, we shall endeavour to deliver a more sustainable future by ensuring our staff, students and wider community have the knowledge, understanding, skills and values to live more sustainable lives. This will be achieved by embedding carbon reduction measures and education for sustainable development into all aspects of our planning process, delivery and day-to-day activities. At a national level we will also continue to share our expertise in sustainability education with the wider college community across Scotland. This is achieved through staff involvement in joint events with organisations such as EAUC and the College Development Network.

**The College firmly believes that the Climate Change Action Plan will enable us to deliver this vision.**



## 2.5 Strategic Themes

There are two primary objectives of the Plan:

- to achieve a reduction in carbon emissions by integrating carbon management within the culture of the organisation, and
- to embed education for sustainable development (ESD) across the college curriculum, campus and ethos.

In order to achieve these objectives, the College's strategy and implementation plan will need to address the following specific areas.

### Working Practices

Carbon management will be a key theme in all operational practices to ensure that sustainability is embedded in all activity including:

- General maintenance
- All college buildings energy (electricity and space heating) use
- Fleet vehicles
- Waste disposal
- Water management
- Fugitive emissions from air conditioning and refrigeration
- Procurement
- Policy and legislation

### Travel

Staff and student business travel will be evaluated to ensure it is as energy efficient as possible.

### Raising Awareness and Behaviour Change

Work will continue and expand across both College campuses to raise awareness wherever possible of climate change, energy use and sustainability.

### Education for Sustainable Development (ESD)

The aim is to continue to be sector leading in ESD and to continue to progress ESD within the College. The College's existing ESD programme has raised the profile of the College's commitment to ESD and has been recognised as sector leading by Education Scotland. The ESD programme has been shortlisted twice by the Environmental Association for Universities and Colleges Green Gown Awards in 2012 and 2014 and nominated for a SQA Star Award in 2014. College ESD materials have also been shared with the wider Scottish college community and are used by other colleges, these materials can be obtained at:

[http://www.eauc.org.uk/ucccfcs/education\\_for\\_sustainable\\_development\\_workbooks](http://www.eauc.org.uk/ucccfcs/education_for_sustainable_development_workbooks)

## 2.6 Targets and Objectives

Dumfries and Galloway College's overall target for carbon reduction is to achieve:

- at least a 20% reduction in overall carbon emissions by the end of calendar year 2019 (compared against the baseline year of 2014), with
- an interim target of at least a 9% reduction in emissions by the end of calendar year 2016.

This equates to a reduction of around 900 tonnes carbon dioxide equivalent and a cost saving of around £280,000 over the period to the end of 2019, against a business as usual scenario.

The Plan provides a quantified list of measures which are capable of achieving the College target. Details of the College's emissions and baseline projections can be found in appendix A.

#### Quantified savings and benefits:

	2015	2016	2017	2018	2019
<b>Annual cost saving (£)</b>	<b>15,725</b>	<b>33,467</b>	<b>53,432</b>	<b>75,845</b>	<b>100,954</b>
<b>Annual CO<sub>2</sub> saving (tCO<sub>2</sub> eq)</b>	<b>63</b>	<b>124</b>	<b>182</b>	<b>239</b>	<b>293</b>
<b>% of target achieved</b>	<b>4%</b>	<b>9%</b>	<b>13%</b>	<b>16%</b>	<b>20%</b>

#### Unquantified benefits:

As well as the carbon and cost savings identified in this Plan, embedding sustainable carbon reduction measures and education for sustainable development will help achieve the following outcomes:

- Help to ensure compliance with climate change legislation.
- Prove the College's commitment to being an environmentally sustainable institution.
- Maintain the College's reputation as sector leading in ESD advancement in the Scottish college education sector.
- Comply with the sustainability requirements of the Procurement Reform Bill.
- Accreditation of the National Union of Student's Responsible Futures Scheme.

## 3 Implementation

### 3.1 Financing

The capital cost of financing the Plan over the next 5 years is estimated to be £30,000 per annum sourced from the College's capital budget. In addition to finance from the College's capital budget, the Sustainability Committee will look at alternative sources of funding including:

- **Resource Efficient Scotland:** potential grant funding

### 3.2 Governance for Implementation

In order for carbon reduction to be effective, there needs to be a strategy embedded within the organisation that underpins its policies, practices and operations. This Plan will act as a benchmark for the sustainability of the College in the future, and will be reviewed and referred to regularly as the need arises.

The reduction target set out within the Plan will be considered in the event of any future capital developments and budget constraints in order to ensure the target is met.

### **3.3 Resource commitment**

The Plan will create a need for monitoring and assessing of the initiatives and their success to date. This will be done on a bi-annual basis and will also allow for revision of the plan in line with the College's ongoing achievements and challenges. These plans have been initiated during a time of construction in the Dumfries Campus for the training kitchen and restaurant, and there will be increased energy requirements once these are operational. Due to this there is an element of flexibility in the reduction figures aimed for which may increase once new energy usage is fully determined.

### **3.4 Programme Management of the Plan**

- The College will establish a Sustainability Committee to oversee drive forward the Plan, ensuring that the workload and responsibility does not lie solely with any one person.

### **3.4 Implementing the Initiatives**

The Sustainability Committee, will focus on the operational aspects of carbon and energy reductions and embedding ESD within the College curriculum by identifying, quantifying and delivering cost effective projects and monitoring their impact.

Membership of the Sustainability Committee will comprise of:

- A curriculum representative from each Faculty, including a representative from the Stranraer Campus
- The Student Association President and/or the Student Association Sustainability Officers, with student representation from both Campus
- At least two representatives from College support staff, including at least one representative from the Stranraer Campus
- A representative from the College catering supplier

The Sustainability Committee will have responsibility for monitoring and revising the plan, developing and implementing new initiatives on a regular basis.

## Appendix A

### Emissions Baseline and Projections

The first step in developing a Climate Change Action Plan is to determine the organisation's current emissions, or carbon footprint, facilitating the setting of a realistic reduction target. The resources to be included, or the Scope, in the footprint must be decided, as well as determining the Boundaries of the carbon footprint, at the outset. The Scope and Boundaries of the carbon footprint will be determined by the extent of the estate, goods and services, staff and student travel and influence on education and behaviour change over which the College has operational control, direct or indirect influence and the availability of good quality data.

The next stage in setting carbon reduction targets is the estimation of projected emissions and costs if no action were taken (known as Business As Usual or BAU) in conjunction with determination of potential savings with the implementation of carbon management projects identified as achievable and fundable.

Projections for a range of future scenarios can be evaluated. The "gap" between the future BAU emissions and the projected emissions with carbon management projects implemented is known as the Value at Stake (Section 3.3 Projections and Value at Stake). The College's target emissions reduction will be based on this difference.

#### 1. Scope

The scope of emissions sources considered in measuring the emissions baseline is as follows:

All years mentioned within this Plan are calendar years. When measuring the College's 2014 baseline, the following were taken into account:

- Heating
- Lighting
- Power (electricity)
- Fleet transport
- Business transport (excluding hire cars)
- Water use in the campus buildings
- Waste from the campus buildings
- Fugitive emissions in the campus buildings from air conditioning and refrigeration units

Heating is by gas at the Dumfries campus and electricity at the Stranraer campus. Lighting and power are from mains electricity.

Fleet transport consists of all the college fleet cars, minibuses and vans at both campuses, used by the College for its staff/student activities.

Business transport includes travel in essential user's own cars, air travel, train travel, bus travel and ferry travel carried out by staff engaged in out-of-College activities. It does not include hire car use as these are Scope 3 emissions from sources not owned or controlled by the College.

Employee and student transport to the College by car is not included, as there is no available analysis at present. This is likely to be too difficult to quantify for the student body due to the changing nature of the student numbers and the rural nature of the College.

The average number of employees employed over the calendar year of 2014 was approximately 300. This is the figure used in all calculations and references to the number of employees.

## 2. Carbon Baseline

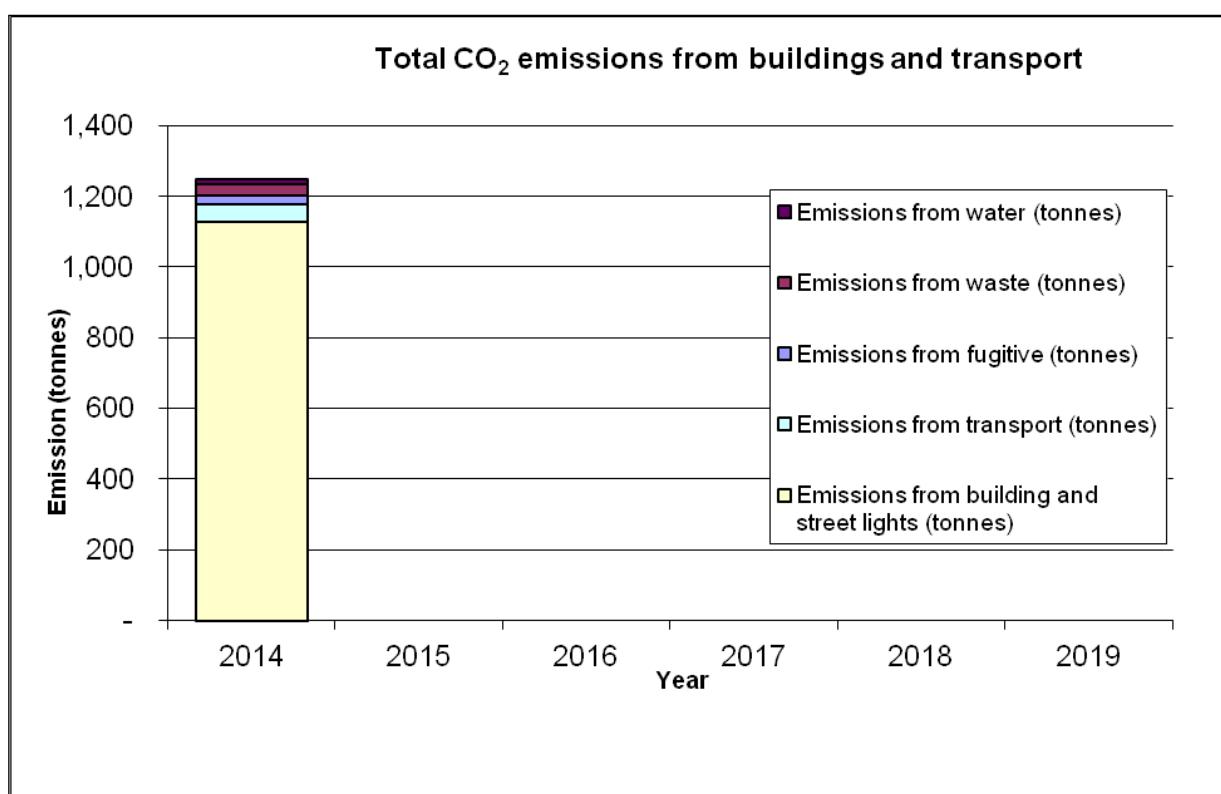
The carbon footprint of the College for 2014 was 1246 tonnes CO<sub>2</sub> equivalent. This is the total emissions for the Dumfries and the Stranraer campuses. The baseline data was calculated using information from the calendar year 2014. The emission factors used are those advised by DEFRA/DECC.

The following table summarises the 2014 Dumfries and Galloway College carbon baseline and provides an estimate of associated costs. The graph shows total tonnes of carbon emissions for the baseline year. This graph will be updated each year. The information clearly illustrates that the majority of the College's carbon emissions are produced by buildings use.

**Table 2 – Summary table of emissions for baseline year 2014**

	Total	Buildings (Gas & Electricity)	Transport	Waste, Water and Fugitive
Baseline CO <sub>2</sub> emissions (tonnes)	1246	1128	47	71
Baseline Cost (£)	£286,416	£ 213,665	£29,815	£42,936

**Graph 1 – Total carbon emissions from buildings and transport for 2014**



We will need to recalculate these figures after the hospitality suite (training kitchen and restaurant) has been operational for one year to determine the increase in CO<sub>2</sub> emissions.

The following table provides a summary of how data was sourced. This methodology will be refined in future years for more accurate reporting.

**Table 2.2 – Data Source Summary**

<b>Data</b>	<b>Data Source</b>
<b>Buildings</b>	Gas (Total Gas & Power) and electricity (EDF Energy) bills for both campuses.
<b>Transport</b>	Staff travel was calculated using expenses claims forms. The calculations used the DEFRA/DECC factor for an average car.  Fleet car data is held by Estates. Some of the fleet cars have recently been replaced and this should impact positively on emissions in future years. Check statement with Elaine
<b>Waste</b>	Quantity data (tonnes, cubic yards and litres) was supplied by contractors for all waste collected and billed for.  Waste is segregated accordingly and includes all paper/card, plastic bottles, food, scrap metal, wood and general waste (active and inert).
<b>Water</b>	Invoice data was used for metered water where available (Business Stream) at both the Dumfries and Stranraer campuses.
<b>Fugitive Emissions</b>	Current emissions data is from calculations by the Crichton Carbon Centre in 2008. There have been no significant changes to air conditioning or refrigeration since this was last calculated.

### **3. Projections and Value at Stake**

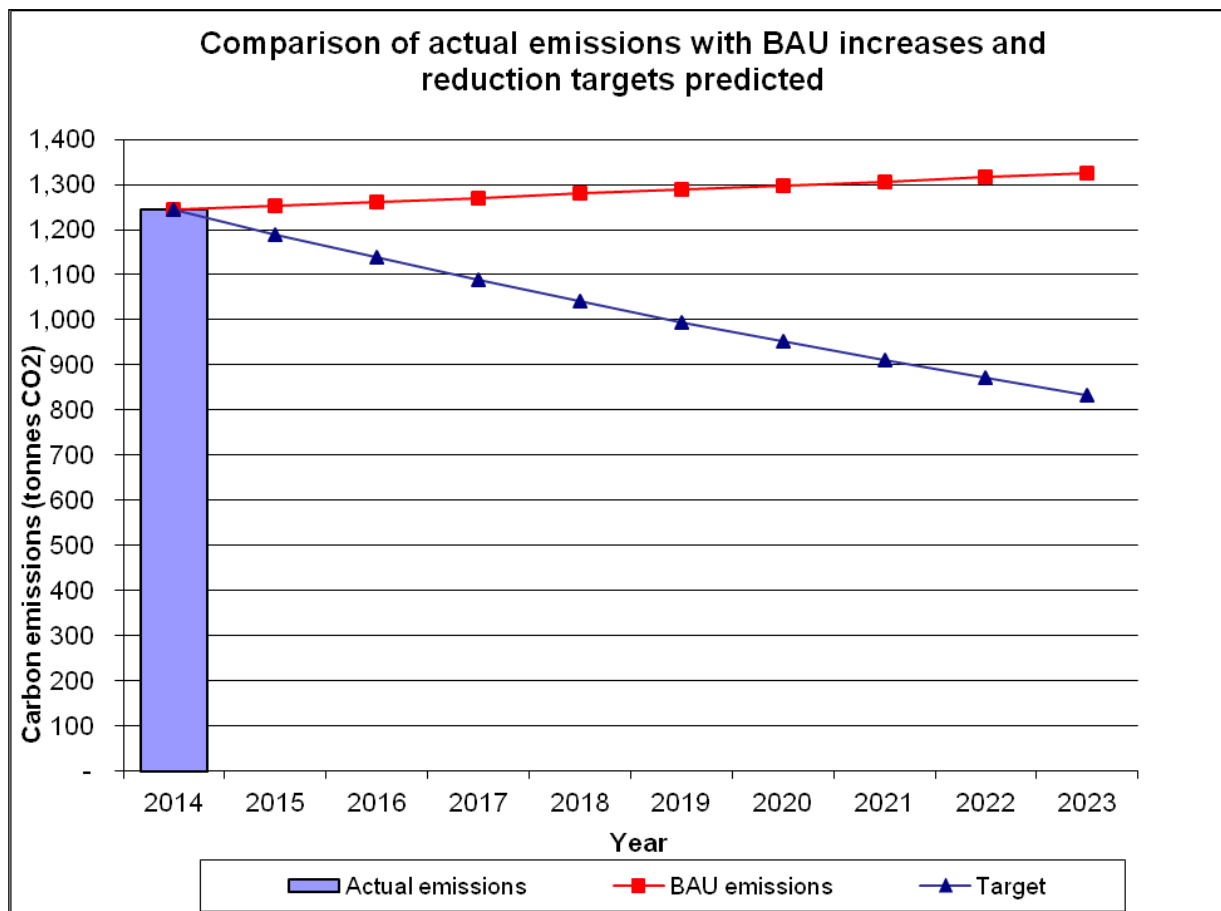
#### **Carbon Value at Stake**

Value at stake is simply 'the cost of doing nothing'. It may be defined as the differences in emissions and costs between the 'business as usual' (BAU) and the 'reduced emissions scenario' (RES). These benefits and costs, when determined in monetary terms, take into consideration both the impact of rising costs of energy and the intended reduction in consumption through the RES.

The BAU scenario is the projection of changes in emissions and costs over the lifetime of the plan where it is assumed that no action is taken by the College. BAU carbon emissions are illustrated below; projections have been calculated using recognised DTI figures predicting an annual increase of 0.7% rise in consumption figures under normal growth conditions.



**Graph 2 – Comparison of emissions from business as usual against a reduced emissions scenario**



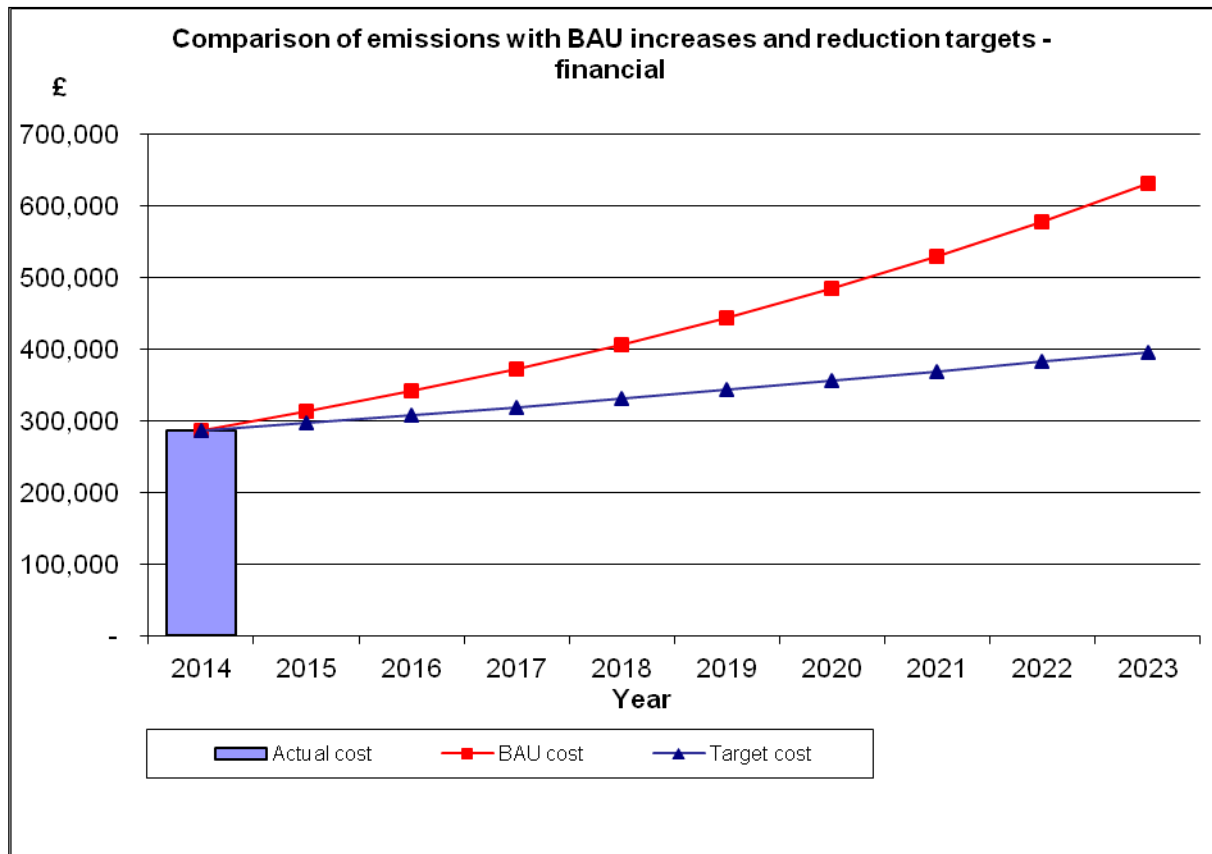
The target reduction line assumes a 20% decrease in overall carbon emissions by the end of 2019 which means emissions would reduce from 1246 tonnes CO<sub>2</sub> equivalent in 2014 to 995 tonnes CO<sub>2</sub> equivalent by the end of 2019. This would mean an overall cumulative saving of approximately 900 tonnes CO<sub>2</sub> by the end of 2019 against a BAU scenario. If this trajectory is continued the College would achieve an overall emissions reduction of 33% by 2023.

### Financial Value at Stake

The cost implications of non-implementation are clearly illustrated below. A growth increase in consumption as detailed above and the volatility of utility costs will create a substantial financial burden on the College. Projections use recognised Carbon Trust data indicating a potential 8.4% annual increase in costs. The graph demonstrates that under a BAU scenario costs could increase by £157,490 per annum by the end of 2019.

It should be noted that under the RES of a 20% reduction in overall emissions will substantially reduce costs in comparison to a BAU scenario with the potential for an estimated cumulative saving of nearly £280,000 during the five year implementation period of this Climate Change Action Plan.

**Graph 3 – Comparison of costs from business as usual against a reduced emissions scenario**



## Appendix B

### Carbon Management Projects

**To achieve the aim of reducing carbon emissions by 20% against the 2014 baseline, the College needs to save 900 tonnes of CO<sub>2</sub> equivalent by the end of 2019 against a BAU scenario.**

A number of carbon saving projects have been identified. Some of these are low cost high gain projects, while others are low cost, low gain. Many projects are based around raising awareness and education as this is the area where the College believes the greatest gains can be achieved. As the largest College building, the Dumfries Campus, is a relatively new building (8 years old), it was designed and built to be as energy efficient as possible. Taking this into account there is limited scope for large scale energy reduction initiatives. All of the projects will help reduce the College's carbon footprint, and all are important as contributors towards sustainability for the College.

#### 1. Existing Established Initiatives

##### 1.1 Education for Sustainable Development (ESD)

ESD Initiatives	Responsible	Next Stage
ESD Workbooks for Introduction to Sustainability, Construction, Hairdressing, Beauty and Health and Social Studies	Curriculum Leaders	Continue to promote and implement these further in the curriculum.
SCQF Credit Rating for Introduction to Sustainability	Quality Manager	Credit rate further ESD learning and teaching materials
Raising awareness and behaviour change	Student Association	Consider extracurricular workshops and awareness events for the academic year 2015/16.

Costs for the College's existing ESD programme have not been quantified as they have been included within existing staffing budgets.

##### 1.2 Responsible Futures

The Student Association is taking part in a National Union of Students (NUS) pilot scheme called Responsible Futures. The vision for Responsible Futures is of a desirable, externally assessed accreditation mark for a whole-institution approach to environmental sustainability and social responsibility, spanning the formal and informal curriculum, applicable to both Further and Higher education. Social responsibility refers to the duty that institutions have towards wider society in relation to ethics, wellbeing, social justice, global citizenship and moral responsibility.

The whole-institution approach is by the College and the Student Association working together in partnership. One of the audited requirements of the scheme is that there is a working group, comprised of College representatives and students, which helps drive the scheme forward. The Sustainability Committee that would be responsible for overseeing the Climate Change Action Plan would be appropriate to meet this requirement.

Further detail about the Responsible Futures scheme can be found here:

<http://sustainability.unioncloud.org/responsible-futures/about>

## 2. Projects: Initiated, Planned and Proposed

The College recognises that in order to achieve the emission reductions and cost savings proposed in this Plan, the following elements need to be in place:

- An organised framework within the College that is sufficiently robust to support the financing, delivery and monitoring of carbon reduction and education for sustainable development projects.
- Clearly identified responsibility and accountability for delivery against targets.
- Identification of a range of suitable realistic carbon reduction and behaviour change projects across a range of relevant areas; this list must be regularly reviewed and flexible to adapt to emerging needs and opportunities for funding.

In this section, the term 'projects' will be applied to a full range of interventions that contribute to emissions reductions, education for sustainable development, raising awareness and behaviour change. Projects will range from traditional 'carbon management' measures such as reducing energy from lighting, which are generally easy to predict and quantify cost and emissions savings. However, other projects will also include interventions with staff and students to raise awareness of climate change and energy savings and curriculum related projects to ensure the College's sustainability ethos is fully embedded.

The following tables will outline the range of projects that have been initiated or are currently being considered. The projects are at various stages from being implemented, in planning or considered for the future. Full costings and savings are not yet available for all projects, particularly long term projects, however this is normal with living documents where new projects will be considered and added over the duration of the plan. Moving forward, potential projects will be considered and agreed by the Sustainability Committee. Projects are split into four areas, initiated projects, projects that could be introduced immediately, projects that will be implemented over the medium term and longer term projects.

### 2.1 Initiated Projects

A number of projects are already in place as part of on-going works and initiatives as detailed below (E). These projects are largely low cost, high gain projects to kick start the Plan. Where the cost is £0, this means there is no additional outlay for materials or capital, however there will be generally associated staffs cost which will need to be quantified.

Ref	Project	Cost (£)	When	Status
E1	Low flow taps in beauty salons at Dumfries Campus.	1200	Aug 2015	Initiated
E2	Food waste and sustainability awareness	50	Ongoing 2015	Initiated
E3	Plastic bottle greenhouse	170	Sept 2015	Initiated
E4	Business Stream to audit the campus on water consumption and leakage detection	0	2015	Initiated
E5	Promotion of video conferencing between campuses	0	Oct 2015	Initiated

## 2.2 Immediate Term Projects

By Immediate Term Projects (IT) we mean projects that will be fully implemented and/or completed between now and the end of 2016. These projects have been quantified where applicable, and it is hoped through educating staff, students and other building users about sustainability, that behaviour change across the College will lead significantly to the interim reduction of 9% emissions savings. These IT projects are largely low cost, high gain projects. Where the cost is £0, this means there is no additional outlay for materials or capital. The only costs will be existing associated staff costs.

Ref	Project	Cost (£)	When	Status
IT1	Lighting sensors in library and canteen	10,000	2015/16	Planned
IT2	Water awareness campaign – toilet flushing	150 approx	2015/16	Proposed
IT3	Energy awareness workshops	300 approx	2015/16	Proposed
IT4	Sustainability induction programme for new staff, either online or as induction pack for new staff using materials already developed in College	0	2015/16	Proposed
IT5	Waste audit	0	2015/16	Planned
IT6	Fleet vehicles and business travel audit	0	2015/16	Planned
IT7	College bike promotion and sustainable travel awareness	0	2015/16	Planned
IT8	Staff switch off campaign, including training for cleaning staff	0	2015/16	Planned
IT9	All of the Business Stream suggestions <ul style="list-style-type: none"> <li>• Retrofit push taps</li> <li>• Install tap aerators and in-line flow restrictors</li> <li>• Change shower heads to aerated ones</li> </ul>	3000	2015/16	Proposed
IT10	Evaluate sensors to utilise natural day lighting where appropriate	3000	2015/16	Planned
IT11	Waste and recycling awareness	150 approx	2015/16	Proposed
IT12	Solar panel feed in tariff display unit on public display	3000 approx	2015/16	Proposed
IT13	Wildflower meadow at back of college as carbon offsetting projects	2000 approx	2015/16	Proposed
IT14	Explore zone control audit of heating and air conditioning	3000	2015/16	Proposed
IT15	Low flow taps in hairdressing salons.	600	2015/16	Planned
IT16	Low flow taps in beauty salons at Stranraer.	600	2015/16	Planned

### 2.3 Medium Term Projects

Medium Term (MT) projects will be compiled as the Plan develops and decisions are made about projects that will be implemented. By MT we mean projects that will be started by 2017 with an aim to being completed by the end of academic session 2017/2018. Below are potential projects moving forward. Agreed projects will be quantified for the first annual review of the Plan by the end of 2015.

Ref	Project	Cost (£)	When	Status
MT1	Low flow/aerated taps fitted throughout the entire campus	TBC	2016/17	Proposed
MT2	Passive vents system review	TBC	2017	Proposed
MT3	Continued raising awareness and behaviour change workshops	TBC	Ongoing	Proposed
MT4	Complete college lighting sensors review	TBC	2017/18	Proposed
MT5	Changing lights in the library to low energy units.	TBC	2016/17	Planned

### 2.4 Long Term Projects

Long Term (LT) projects will be compiled as the Plan develops and decisions are made about projects that will be implemented. By LT we mean projects that will be implemented during 2018 and 2019, with an aim to being completed by the end of 2019. The following advises of potential projects moving forward. Agreed projects will be quantified nearer to implementation.

Ref	Project	Cost (£)	When	Status
LT1	Consider electric cars and installation of charging stations once the technology is suitable	TBC	2019	Proposed
LT2	Heating system to be replaced at Stranraer	TBC	2018	Proposed
LT3	Installation of central control system for air conditioning and heating systems	TBC	2017/18	Proposed
LT4	Curriculum ESD audit	0	2016/17	Proposed