

Glasgow Kelvin College

Board of Management – 3 December 2018

Public Sector Climate Change Duties Report

Report by Vice Principal – Finance & Corporate Services & Environmental Sustainability Officer

1. Introduction

Members will be aware that the Scottish Government now require all public bodies to submit a Climate Change Report on an annual basis. The purpose of this report is to provide members of the Board of Management with a copy of the College submission for academic session 2017/18 and provide a high level summary of its performance in respect of carbon emissions over the past three years.

This report has been considered in detail by the Financial Control Committee at its meeting on the 21st November 2018.

2. Climate Change Reporting

The College prepared its first Climate Change Action Plan (CCAP) in November 2015. This document calculated the carbon baseline for the College and set the carbon management priorities. The College now has a Sustainability and Estates Section on its website and the CCAP sits in there.

The College also submitted a Climate Change report in November 2015 to the Scottish Government, which was the pilot year for the Public Sector Climate Change reporting. This calculated the baseline carbon footprint for the College at 3,257 tonnes of CO₂ emissions for academic year 2014/15. The CCAP provides a full analysis of where these emissions arose from in that year, the majority of carbon produced by the College relates to gas and electricity usage at the campus buildings. Water, travel and vehicle fleet emissions are also calculated and contribute to the total.

Appendix 1 provides the College Climate Change Report for academic year 2017/18. This document has been submitted to the Scottish Government in advance of the deadline set.

The report indicates that measured carbon emissions have reduced overall by 1,462 tonnes CO₂ annually over the four years for which the College has calculated the data. This is a 45% annual reduction. The headline figures are that calculated carbon dioxide emissions have reduced each year:

Academic Year	Carbon Emissions
2014/15	3,257 tCO ₂
2015/16	2,617 tCO ₂
2016/17	1,874 tCO ₂
2017/18	1,795 tCO ₂

The main factors in the reduction in calculated annual emissions relate to the sale of City Campus in August 2016 and the conversion factor used to convert grid electricity from kwh to tonnes of CO2 has improved as the electricity grid has become less dependent upon carbon generating energy sources. The conversion factor is provided in the on-line reporting template and is not calculated by the College.

Other items of note are that the College is now reporting on waste collection and recycling. The new waste management contract required the contractor to provide this information. The report indicates that 72% of waste collected was recycled during the year.

The College is working on a more detailed analysis to inform its new Climate Change Action Plan which will be developed in the coming months. This will include new targets for carbon reduction and projects.

The report submitted to the Scottish Government lists all the drivers of carbon emissions the College is currently able to measure and report on. Energy and water are broken down by campus and reviewed in detail by the Sustainable Development Committee and the Estates management team. In addition the report highlights areas of good practise within the College and outlines 5 key priorities for the coming year as listed below:

- increase active travel and promote the active travel model developed by the College;
- audit and seek to embed sustainability in the curriculum;
- refresh the Climate Change Action Plan as part of the Carbon Management Strategy;
- further increase the profile of the Sustainable Development Committee and Sustainability Website; and
- install a new Building Management System which is intended to enable improved management of carbon emissions and building performance.

It is intended that the College will refresh its Climate Change Action Plan during session 2018/19 to establish new specific targets and projects going forward. These are, however, likely to be more modest in terms of carbon reduction in comparison with the reduction already achieved.

Appendix 2 provides recent presentation slides which seek to outline the College's wider approach to environmental sustainability and the range of projects underway.

In respect of College profile, the excellent achievement in winning a Green Gown award for the White Ribbon Campaign is a significant step in raising the College profile nationally in this regard.

3. Resource Implications

There are no resource implications associated with the contents of this report. Reduced emissions are an indicator that savings are being achieved in respect of utility costs. The Estates budget has been reduced accordingly in recent years.

4. Equality Impact

No negative impacts on people with protected characteristics have been identified as a consequence of this report. Addressing the Sustainable Development Goals, Corporate and Social Responsibility agenda and playing a leading role in the White Ribbon Campaign all contribute to promoting equality.

5. Risk

The medium to long term risks associated with Climate Change could be significant. These include the prospect of changed weather patterns, increased rain and extreme weather events which could all have an impact on the College Estate and the ability of staff and learners to attend work. Recent Estates related maintenance work to improve the resilience of campus buildings may help manage this situation to a degree.

6. Recommendations

Members of the Board of Management are recommended to:

- i) note the contents of this report and its appendices;
- ii) note the reduction in calculated Carbon emissions; and
- iii) note that the College has fulfilled its legislative obligation to report on its carbon emissions.

7. Further Information

Members may obtain further information relating to the contents of this report from James Gow, Vice Principal – Finance & Corporate Services, jgow@glasgowkelvin.ac.uk, Lisa Clark, Director of Corporate Services, lisaclark@glasgowkelvin.ac.uk, Anastasios Markopoulos, Environmental Sustainability Officer, amarkopoulos@glasgowkelvin.ac.uk or the Principal, asherry@glasgowkelvin.ac.uk.

JG/AM
November 2018
Glasgow Kelvin College

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PART 1: PROFILE OF REPORTING BODY**1(a) Name of reporting body**

Glasgow Kelvin College

1(b) Type of body

Educational Institutions

1(c) Highest number of full-time equivalent staff in the body during the report year

466

1(d) Metrics used by the body

Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.

Metric	Unit	Value	Comments
Floor area	m2	31867	18715 Springburn Campus, 4771 Easterhouse Campus, 6459 East End Campus, 1922 West End Campus
Number of full-time students	number FTS	5465	Full Time: 3020 Part Time: 16501

1(e) Overall budget of the body

Specify approximate £/annum for the report year.

Budget **Budget Comments**

31397000 £22m Staff Costs

1(f) Report year

Specify the report year.

Report Year **Report Year Comments**

Academic

1(g) Context

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

Glasgow Kelvin College is an FE institution based in Glasgow. A significant part of the reduction in CO2 has been as a result of the planned closure and sale of the College's City Campus in August 2016, which has reduced both the College's physical capacity and green house gas emissions.

The College also reduced further in size in terms of learners enrolled and staff employed during 2016/17.

During the academic year 2017/18, the College enrolled 14,500 full and part time learners, 91% of whom reside in the Glasgow area.

The College seeks to manage its own impact on the environment and a number of its teaching and learning programmes incorporate climate change and environmental sustainability related topics, particularly in the Science, Construction and Engineering departments.

The College publishes an annual report and context statement which describe the full range of activities, mission statement and vision of Glasgow Kelvin College in detail.

The College also operates a Sustainable Development Committee who meet at least 3 times over the course of the academic year to review all actions related to Environmental Sustainability.

An Estates and Sustainability Strategy is also prepared by the College's Estates and Sustainability Department, which focuses on key actions to be taken that relate to reducing the environmental impact of the College buildings.

Additionally, the College Board meet to discuss and review proposals for climate change action.

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PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY

2(a) How is climate change governed in the body?

Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements.

The Board of Management are responsible for oversight of the strategic direction of the College and set the Strategic Plan. Corporate and Social Responsibility (CSR) is an important priority for the Board and the College reports in detail on its activities which contribute to the CSR agenda and have a positive impact on the communities served by the College. The College prepared its first integrated Climate Change Action Plan and Estates Strategy in 2015 and has successfully implemented this over the past two years. The targets set in that document which were to reduce carbon emissions by 25% over two years have been exceeded. Additionally, the College has developed a Capital Investment Plan which specifically allocates resource to the Sustainable Development Committee who are tasked with improving the overall environmental performance of the College overall.

In respect of governance, responsibility for oversight of Capital Investment in Estates and ICT is delegated to the Financial Control Committee (FCC). The FCC review the Capital Investment Plan, Climate Change Action Plan, ICT Strategy and Estates Strategy prior to consideration by the Board of Management.

The Board are committed to addressing Climate Change and sustainability more widely, this is demonstrated by:

2(b) How is climate change action managed and embedded by the body?

Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, departmental heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body (JPEG, PNG, PDF, DOC)

The Principal has overall responsibility for the management of the College. The Vice Principal - Finance & Corporate Services has overall responsibility for Climate Change and Climate Change Reporting. The Director of Corporate Services chairs the Sustainable Development Committee which meets 3 times per year and line manages the Head of Facilities and Environmental Sustainability (who has operational responsibility for the College Estate, Estate team and vehicle fleet). The College has recently appointed a Project and Sustainability Officer who is responsible for developing student and staff engagement with the issue of environmental sustainability through a range of activities e.g. environmental campaigns and events, managing projects aimed at improving active travel and sustainable practises, applying for grant funding and seeking to raise the profile of sustainability at the College through internal and external communications and applications for awards.

The Capital Investment Plan allocates £35k per year to the Sustainable Development Committee. It is then up to the Committee to recommend how this funding is invested in projects which will improve the College's performance in respect of environmental sustainability. This is in addition to other investments which either aim to improve environmental performance as a primary target or include energy consumption and / or waste reduction as part of the project.

The VP, Director and Head of Facilities and Environmental Sustainability have strategic and operational responsibility for Environmental Sustainability. The VP also has responsibility for Procurement, ICT and Finance which helps ensure sustainability is embedded within other key corporate processes, procedures and strategies.

2(c) Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?

Provide a brief summary of objectives if they exist.

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Objective	Doc Name	Doc Link
Working Sustainably & Transparently: -Manage College Resources to deliver financial security and long term sustainability -Utilise the College Estate effectively and efficiently	Strategic Plan	https://www.glasgowkelvin.ac.uk/wp-content/uploads/2018/07/Strategic-Plan-2018-21.pdf
The Risk Management Strategy outlines how the College manages and considers risk, how it identifies internal/external or environmental risks that it faces, evaluates these risks and mitigates them as appropriate.	Risk Management Strategy	https://www.glasgowkelvin.ac.uk/wp-content/uploads/2018/10/Plan-Risk-Management-Strategy.pdf

2(d) Does the body have a climate change plan or strategy?

If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.

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Climate Change Action Plan and Estates Strategy - <https://www.glasgowkelvin.ac.uk/estates-sustainability/>

2(e) Does the body have any plans or strategies covering the following areas that include climate change?

Provide the name of any such document and the timeframe covered.

Topic area	Name of document	Link	Time period	Comments
Adaptation	Estates and Sustainability Strategy	https://www.glasgowkelvin.ac.uk/estates-sustainability/	2015/16- 2020/21	The Estates and Sustainability Strategy and associated capital investment plan continue
Business travel	Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/e	2015/16- 2020/21	The international strategy seeks to provide a
Staff Travel	Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/e	2015/16- 2020/21	The College is developing its cycling
Energy efficiency	Estates and Sustainability Strategy	https://www.glasgowkelvin.ac.uk/e	2015/16- 2020/21	The College is currently in the planning and
Fleet transport	Estates and Sustainability Strategy and Capital Investment Plan	https://www.glasgowkelvin.ac.uk/estates-sustainability/	2015/16- 2020/21	The College is operating 2 electric vehicles which have replaced 2 diesel vans; and is
Information and communication technology	ICT Technical Services Strategy	https://www.glasgowkelvin.ac.uk/wp-content/uploads/2018/10/Plan-	2016/17- 2021/22	Investment in video conferencing facilities and renewal of hardware should contribute
Renewable energy	Estates and Sustainability Strategy; and Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/estates-sustainability/	2015/16- 2020/21	The College will be prioritising the maintenance of existing assets, which
Sustainable/renewable heat	Estates and Sustainability Strategy; and Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/estates-sustainability/	2015/16- 2020/21	The College is currently investigating options for upgrading the existing Biomass system,
Waste management	Estates and Sustainability Strategy; and Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/estates-sustainability/	2015/16- 2020/21	The College has carried forward its most recent waste management contract. Data provided has indicated the environmental benefits (with respect to carbon emissions)
Water and sewerage	Health and Safety Policy Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/e	2015/16- 2020/21	Work undertaken with Anglian Water (Wave)

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Land Use	Estates and Sustainability Strategy; and Climate Change Action Plan	https://www.glasgowkelvin.ac.uk/e-states-sustainability/	2015/16- 2020/21	The College has been successful in securing Scottish Landfill Community Funding to help
Other (state topic area covered in comments)				

2(f) What are the body's top 5 priorities for climate change governance, management and strategy for the year ahead?

Provide a brief summary of the body's areas and activities of focus for the year ahead.

1. Increase the Active Travel modal share of the College. Taking this drive forward will involve the promotion and use of eBikes purchased using the secured Energy Saving Trust grant funding;
2. Conduct an audit of current Education for Sustainable Development in the College curriculum. Allocate specific responsibility to a senior member of teaching staff to carry out this process, and to embed sustainability in teaching and learning at the College;
3. Develop a Carbon Management Plan and a Climate Change Adaptation Strategy to further improve carbon footprint reporting, identification of climate change risks, and subsequent mitigation strategies. Both of these documents will be supported by the integration of an upgraded Building Environmental Management System. In parallel, the Climate Change Action Plan and Estates and Sustainability Strategy will be refreshed;
4. Increase the profile of the College's Sustainable Development Committee and activate Sustainability website;
5. Installation of upgraded Building Environmental Management System. The new system will be installed across three of the College's campuses, enhancing monitoring and reporting of energy and resource consumption, fault notification, control of indoor environmental conditions, and building performance.

2(g) Has the body used the Climate Change Assessment Tool(a) or equivalent tool to self-assess its capability / performance?

If yes, please provide details of the key findings and resultant action taken.

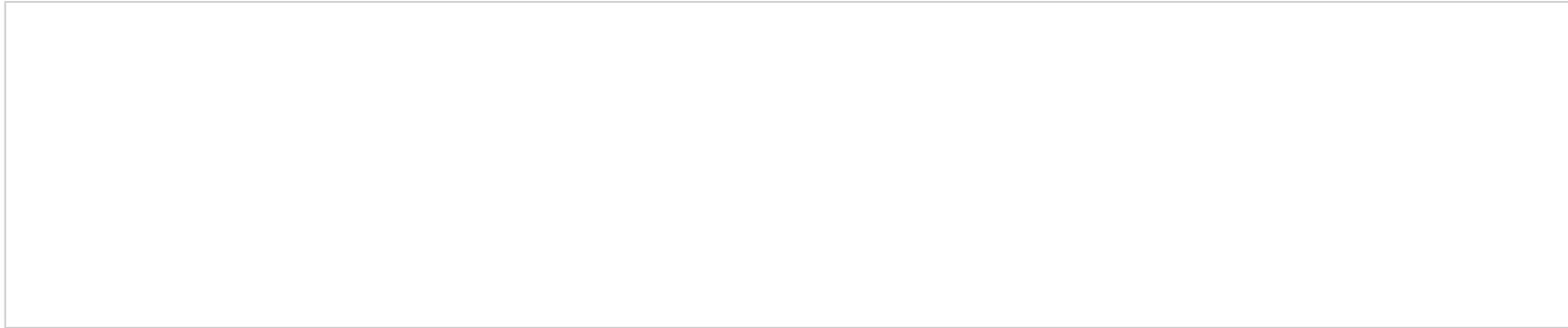
The College has recently used the Climate Change Assessment Tool (CCAT) to self-assess its current strategy and planning in relation to Climate Change. The key findings in the resulting CCAT action plan included:

- developing a Carbon Management Plan;
- developing and implementing a Climate Change Adaptation Strategy; and
- enhancing engagement with staff across the College to promote positive behaviour change and to raise climate change awareness.

2(h) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

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PART 3: EMISSIONS, TARGETS AND PROJECTS

3a Emissions from start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint /management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1 & 2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b)). If data is not available for any year from the start of the year which is used as a baseline to the end of the report year, provide an explanation in the comments column.

(a) No information is required on the effect of the body on emissions which are not from its estate and operations.

Reference Year	Year	Scope1	Scope2	Scope3	Total	Units	Comments
Baseline carbon footprint	2014/15	1237	1913	107	3257	tCO2e	
Year 1 carbon footprint	2015/16	1132	1369	116	2617	tCO2e	
Year 2 carbon footprint	2016/17	754	1021	99	1874	tCO2e	
Year 3 carbon footprint	2017/18	826	837	132	1795	tCO2e	

3b Breakdown of emission sources

Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If, for any such category of emission source, it is not possible to provide a simple emission factor(a) leave the field for the emission factor blank and provide the total emissions for that category of emission source in the 'Emissions' column.

Total	Comments – reason for difference between Q3a & 3b.	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO2e)	Comments
1795.1		Natural Gas	Scope 1	4482891	kWh	0.18396	kg CO2e/kWh	824.7	
		Grid Electricity (generation)	Scope 2	2955331	kWh	0.28307	kg CO2e/kWh	836.6	
		Biomass (Wood Pellets)	Scope 1	20	tonnes	70.47328	kg CO2e/tonne	1.4	
		Average Car - Unknown Fuel	Scope 3	90940	km	0.18064	kg CO2e/km	16.4	
		Van - Average (up to 3.5	Scope 3	76938	km	0.2568	kg CO2e/km	19.8	
		Water - Supply	Scope 3	16705.3	m3	0.344	kg CO2e/m3	5.8	
		Water - Treatment	Scope 3	15870	m3	0.708	kg CO2e/m3	11.2	
		Taxi (black cab)	Scope 3	6402	passenger km	0.2142	kg CO2e/passenger	1.4	
		Long-haul flights (Economy	Scope 3	292028	passenger km	0.16279	kg CO2e/passenger	47.5	
		Short-haul flights (Economy	Scope 3	169791	passenger km	0.1597	kg CO2e/passenger	27.1	
		Domestic flight (average	Scope 3	1139	passenger km	0.29832	kg CO2e/passenger	0.3	
		Rail (National rail)	Scope 3	3567	passenger km	0.04424	kg CO2e/passenger	0.2	
		Mixed recycling	Scope 3	35.75	tonnes	21.3842	kg CO2e/tonne	0.8	
		Organic Food & Drink AD	Scope 3	10.9	tonnes	21.3842	kg CO2e/tonne	0.2	
		Construction (Average)	Scope 3	143.11	tonnes	1.37	kg CO2e/tonne	0.2	
		Refuse Municipal /Commercial	Scope 3	72.45	tonnes	21.3842	kg CO2e/tonne	1.6	

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3c Generation, consumption and export of renewable energy

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

Technology	Renewable Electricity		Renewable Heat		Comments
	Total consumed by the organisation (kWh)	Total exported (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	
Biomass			96000	0	Biomass system is used to provide space heating and Domestic Hot Water (DHW).

3d Targets

List all of the body's targets of relevance to its climate change duties. Where applicable, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included.

Name of Target	Type of Target	Target	Units	Boundary/scope of Target	Progress against	Year used as	Baseline figure	Units of baseline	Target completion	Comments
Reduction of energy	annual	5	total % reduction	All energy use		2017/18	7438222	kWh	2019/20	- Baseline value is sum of Electricity and
Increase Staff e-Bike	annual	5	% increase	Staff travel		2017/18	240	passenger	2019/20	Monitoring of staff travel between

3e Estimated total annual carbon savings from all projects implemented by the body in the report year

Total	Emissions Source	Total estimated annual carbon savings (tCO2e)	Comments
23.5	Electricity	0	Unknown
	Natural gas	0	Unknown
	Other heating fuels	18.5	Biomass boiler was operational during the
	Waste	0	Unknown
	Water and sewerage	0	Unknown
	Business Travel	0	Unknown
	Fleet transport	5	Combined mileage of two electric vehicles is
	Other (specify in comments)	0	Unknown

3f Detail the top 10 carbon reduction projects to be carried out by the body in the report year

Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.

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Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
Building Energy Management System		2019/20	Actual			5	Natural Gas	16	1340		- A 2% target reduction in consumption has been set.
Building Energy Management System		2019/20	Actual			5	Grid Electricity	17	5900		- A 2% target reduction in consumption has been set.

3g Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the report year				
If the emissions increased or decreased due to any such factor in the report year, provide an estimate of the amount and direction.				
Total	Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
3	Estate changes			
	Service provision			
	Staff numbers			
	Other (specify in		3 Increase	Increase in scope 3 emissions as emissions

3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead			
Total	Source	Saving	Comments
175	Electricity	50	The College expects to see a reduction in
	Natural gas	50	Same as comment above.
	Other heating fuels	60	Optimisation of existing Biomass system
	Waste	10	The College plans to increase the emissions
	Water and sewerage		
	Business Travel		
	Fleet transport	5	Continue to utilise existing electric vehicle
	Other (specify in comments)		

3i Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the year ahead	

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If the emissions are likely to increase or decrease due to any such factor in the year ahead, provide an estimate of the amount and direction.				
Total	Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
	0 Estate changes			
	Service provision			
	Staff numbers			
	Other (specify in			

3j Total carbon reduction project savings since the start of the year which the body uses as a baseline for its carbon footprint	
If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").	
Total	Comments
23.5	

3k Supporting information and best practice
Provide any other relevant supporting information and any examples of best practice by the body in relation to its emissions, targets and projects.
The College won a Green Gown award for its White Ribbon Campaign in Autumn 2018. This project seeks to encourage males to challenge gender based violence towards women. The College cycling project was also nominated for an award.

PART 4: ADAPTATION

4(a) Has the body assessed current and future climate-related risks?

If yes, provide a reference or link to any such risk assessment(s).

Improving existing greenspaces to improve biodiversity of surrounding natural environment and to provide engaging outdoor teaching and learning environments for outdoor teaching and learning.

Improving health and wellbeing of students, staff and the local community through increased uptake of active travel.

4(b) What arrangements does the body have in place to manage climate-related risks?

Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.

The College employs the Estates and Sustainability Strategy and the Climate Change Action Plan only. Environmental Impact is included in the College Risk Register.

The Capital Investment Plan does target resource on dealing with water ingress and drainage issues but does not specifically address the potential impact of increased rainfall and groundwater levels as a consequence of climate change.

4(c) What action has the body taken to adapt to climate change?

Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action.

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A pilot reusable cups initiative is being trialled at the College with the aim of tackling the single-use plastic waste problem.

Staff and Student Engagement Activities have been run during Climate Week and Recycle Week Scotland. This form of engagement continues to take place at the College in partnership with the Student Association, the Project and Sustainability Officer and the Campus Cycling Officer.

Development of Sustainability focused website which is to go live during this academic year.

Audit of existing College curriculum to be carried out in order to identify Education for Sustainable Development exists.

4(d) Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?					
<p>If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1,B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year. If it is not responsible for delivering any policy or proposal under a particular objective enter "N/A" in the 'Delivery progress made' column for that objective.</p> <p>(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.</p>					
Objective	Objective	Theme	Policy / Proposal reference	Delivery progress made	Comments
Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment			
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment			

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Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment			
Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks			
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks			
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	B3	Buildings and infrastructure networks			
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society			
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society			
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	S3	Society			

4(e) What arrangements does the body have in place to review current and future climate risks?

Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

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The Climate Change Action Plan and Estates Strategy will be refreshed in the 2018/19 academic session and will seek to take into account future climate change risk. The College does not have staffing or financial resources available to address this in more detail.

Further Climate Change Adaptation planning will be included in the planned Carbon Management Plan and Climate Change Adaptation Strategy documents - to be produced by the Project and Sustainability Officer.

4(f) What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?

Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).

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With the introduction of the new Building Energy Management System, the College's capacity to monitor and report on the impact of any adaptation strategies implemented will greatly increase.

4(g) What are the body's top 5 priorities for the year ahead in relation to climate change adaptation?

Provide a summary of the areas and activities of focus for the year ahead.

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- Continue to maintain College estate and to address water ingress challenges;
- Scheduled reporting on Carbon Emissions originating from College Estate; and creation of the following documents:
 - Active Travel Strategy;
 - Climate Change Adaptation Strategy
 - Carbon Management Plan; and
 - Audit of College's existing delivery of Education for Sustainable Development.

4(h) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to adaptation.

Implementation and raising awareness of Sustainable Development Goals to students and staff through a number of continuing and recently started campaigns e.g. White Ribbon Scotland campaign, the College's Active Travel programme, and introduction of a pilot reusable cup scheme.

The College has also recently been awarded a Green Gown Award at the prestigious Environmental Association for Universities and Colleges ceremony, for its continued engagement with students on issues relating to the Sustainable Development Goals. This achievement is helping to raise the profile of the College's sustainability initiatives, and has also resulted in entry to the International Green Gown Awards next year.

In addition, the College's Glasgow Kelvin Velocity Cycle Hub has been nominated for an award at the Education Buildings Scotland Award ceremony. This nomination recognises the work being done to encourage uptake of cycling at the College, and its delivery in an innovative teaching and learning space.

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PART 5: PROCUREMENT

5(a) How have procurement policies contributed to compliance with climate change duties?

Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.

The College recently revised its Procurement Strategy and supporting policies and procedures. These now include significant sections which relate to sustainability and are available on the Procurement section of the web site:

<http://www.glasgowkelvin.ac.uk/procurement/>

Procurement at the College is managed in partnership with APUC who use the Sustain Framework to asses and evaluate key suppliers. The College seeks to use APUC negotiated contracts and frameworks wherever possible.

5(b) How has procurement activity contributed to compliance with climate change duties?

Provide information relating to how procurement activity by the body has contributed to its compliance with climate changes duties.

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Renewal of the Waste Management contract was the main procurement related project delivered in 2017/18. The new contracts requires the provider of waste services to report on waste and its destination - landfill, recycling etc.

Energy efficient replacement boilers were also procured for the Easterhouse Campus and energy efficient hand driers at Springburn to reduce hand towel consumption and waste. Tender opportunities above £50k include a sustainability assessment as part of the tender evaluation criteria.

5(c) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to procurement.

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APUC representatives are invited to attend scheduled Sustainability Development Committee meetings.

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PART 6: VALIDATION AND DECLARATION

6(a) Internal validation process

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

Reporting is validated by the Sustainability Development Committee members, including the Head of Estates and Sustainability Department and the College's Vice Principal.

6(b) Peer validation process

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

Peer validation process involved sharing of reporting at Environmental Association for Universities and Colleges (EAUC) led institutional meetings.

6(c) External validation process

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

A budget does not exist for this process.

6(d) No validation process

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

The information in this report has been compiled from supplier invoices, reports from suppliers, and the College finance and expenses system. The College believes it has calculated figures correctly within a reasonable margin of error. It has engaged proactively with the Public Sector Climate Change reporting process but has no financial resources to undertake further validation activity.

6e - Declaration

I confirm that the information in this report is accurate and provides a fair representation of the body's performance in relation to climate change.

Name	Role in the body	Date
James Gow	Vice Principal	2018-11-14

RECOMMENDED – WIDER INFLUENCE

Q1 Historic Emissions (Local Authorities only)

Please indicate emission amounts and unit of measurement (e.g. tCO2e) and years. Please provide information on the following components using data from the links provided below. Please use (1) as the default unless targets and actions relate to (2).

(1) UK local and regional CO2 emissions: **subset dataset** (emissions within the scope of influence of local authorities);

(2) UK local and regional CO2 emissions: **full dataset**;

Select the default target dataset

Table 1a - Subset

Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Units	Comments

Table 1b - Full

Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Units	Comments

Sector	Description	Type of Target (units)	Baseline	Start year	Target	Target / Saving in	Latest Year	Comments

Q2b) Does the Organisation have an overall mission statement, strategies, plans or policies outlining ambition to influence emissions beyond your corporate boundaries? If so, please detail this in the box below.

Q3) Policies and Actions to Reduce Emissions

Sector	Start year for policy / action implementation	Year that the policy / action will be fully implemented	Annual CO2 saving once fully implemented (tCO2)	Latest Year measured	Saving in latest year measured (tCO2)	Status	Metric / indicators for monitoring progress	Delivery Role	During project / policy design and implementation, has ISM or an equivalent behaviour change tool been used?	Please give further details of this behaviour change activity	Value of Investment (£)	Ongoing Costs (£/year)	Primary Funding Source for Implementation of Policy / Action	Comments

Please provide any detail on data sources or limitations relating to the information provided in Table 3

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Q4) Partnership Working, Communication and Capacity Building. Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below.									
Key Action Type	Description	Action	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Partnership Working	Working in partnership with numerous organisations	Partnership working of climate change or sustainability	Lead			Thenue Housing Association West of Scotland Housing Association	Glasgow City Council Glasgow Life Scottish Cycling Free Wheel North Bike for Good	- Community Engagement events - Community Gardening group	
Communications	Website Engagement events and campaigns	Awareness Raising	Lead					Online information source to raise awareness of events taking place at the College, and	
Capacity Building (ie. staff training and development initiatives)	eBike	Skills/Capacity Building	Lead					- Intercampus eBike travel	
Education	Education for Sustainable Development (ESD) audit	Skills/Capacity Building	Lead					- Feedback from Staff outlining existing ESD in the curriculum.	

OTHER NOTABLE REPORTABLE ACTIVITY

Q5) Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below.

Key Action Type	Key Action Description	Organisation's Project Role	Impacts	Comments
Biodiversity	Redevelopment of a disused greenspace at the	Lead		
Other	Student led projects to implement sustainability related	Lead		
Other	Awards	Lead		

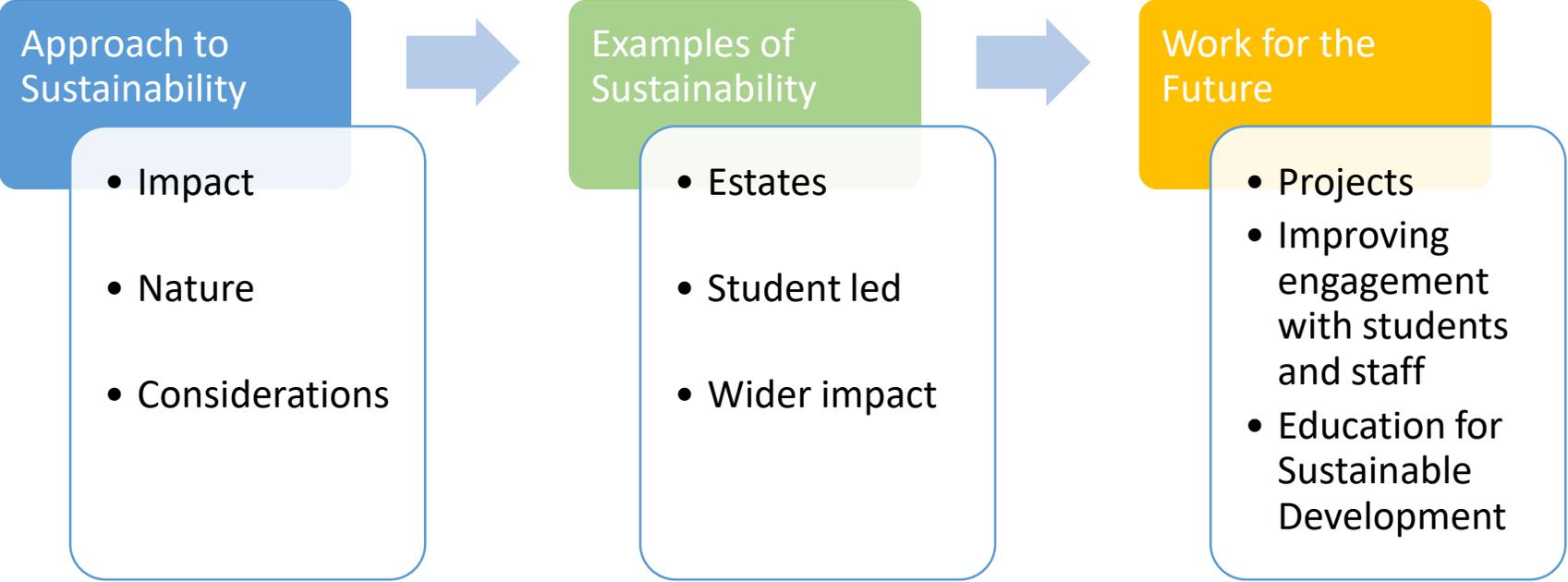
Q6) Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template



Sustainability at
Glasgow Kelvin College



Contents



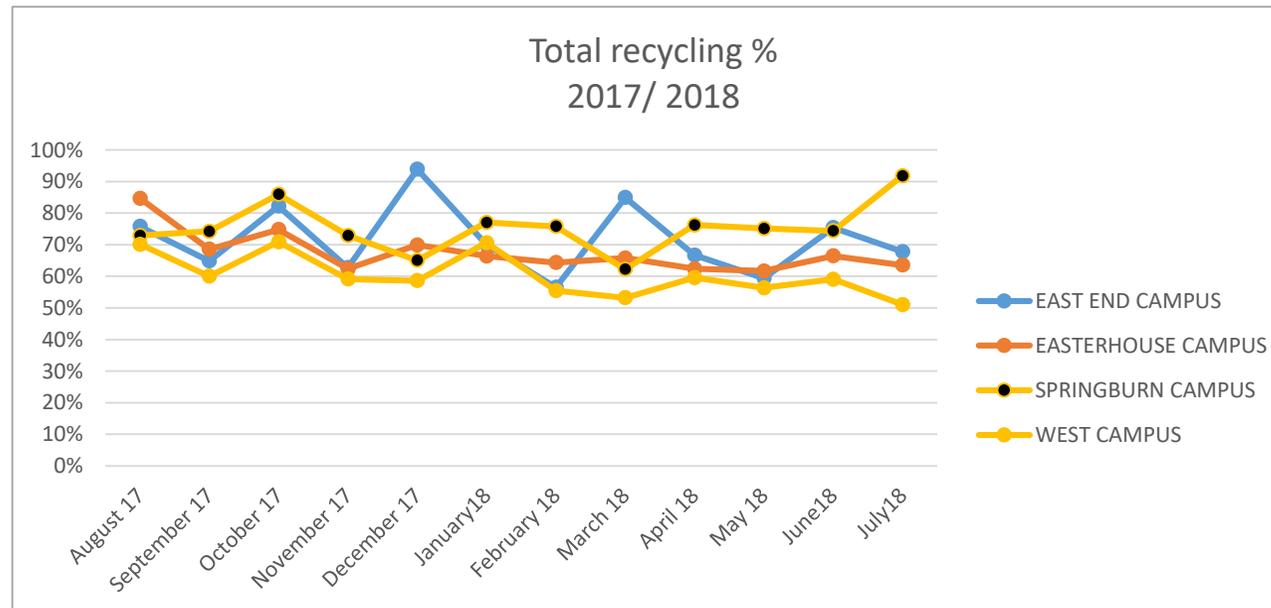
Approach to Sustainability at GKC

- Following an initial baseline climate change report in 2014/15, the College has achieved a reduction in emissions for subsequent years.
 - Reduced size of the College Estate
 - Decarbonisation of the grid
 - Decreased of emissions in areas including Gas and Electricity consumption, Travel, and Water usage
- Holistic approach taken to address both **Environmental** and **Social** Sustainability at the College.
 - Aligned with the Strategic Objectives of the College, the Glasgow Regional context, and the anticipated environmental change.

Ref. Year	Year	Scope1	Scope2	Scope3	Total Emissions tCO2e	Savings tCO2e	% Change in tCO2e (Baseline report as reference)
Baseline Report	2014/15	1237	1913	107	3257		
Y1 CO2 Footprint	2015/16	1132.2	1369.2	115.5	2616.9	640.1	-19.7
Y2 CO2 Footprint	2016/17	753.1	1021.3	99.0	1873.3	1383.7	-42.5
Y3 CO2 Footprint	2017/18	to	be	completed			

Examples of Sustainability

- **Waste Management – Partnership with WTC**
 - Existing since 2016, where recycling levels were below 40% at each campus
 - Increase in number of items recycled, including items from Construction and Engineering departments
 - Science department added more recently for recycling of Glass



Examples of Sustainability

- **Active Water Management**
 - Minimisation of water waste
 - Savings of £13,000 per annum (starting in 2016/17)
 - 2.2tCO₂e savings in emissions



- **EVs – further investment being reviewed by GCC as part of ULEV funding**
 - ~6000miles travelled by each van \cong 5.4tCO₂e saving compared to diesel van

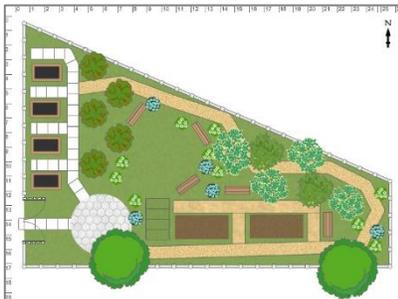




Examples of Sustainability

- **Student entrepreneurship – ‘Back to the Furniture’**
 - Project set up at West End campus by students
 - Sale of upcycled furniture at ‘pop-up-shops’
 - Partnership set up with local furniture reuse organisation ‘Re-connect’

- **East End Community Garden**
 - Project taking place at East End campus
 - Funding secured from 2 Scottish Landfill Community Fund bodies
 - Garden to be developed and run in partnership with local community groups, residents, and students and staff.
 - Support given from local housing associations





Examples of Sustainability

- **Glasgow Kelvin Velocity**

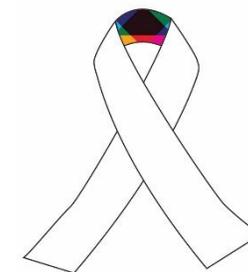
- New Campus Cycling Officer – development of activities
- Continuing to develop partnership work with local community groups, Bike for Good, and Glasgow Life.
- Recognition at this years Green Gown Awards and Education Buildings Scotland Awards



GLASGOW KELVIN
VELOCITY

- **White Ribbon Campaign**

- First college in Scotland to be awarded with White Ribbon status
- Continuing to work to engage students and staff with campaign and training of new speakers
- Recognition at this years Green Gown Awards





Work for the Future

- Continue to work on improving engagement with Students and Staff on the issues of Waste Management and Recycling
 - Sustainability website in development
- Education for Sustainable Development
 - Preparation of introductory workshop to be delivered to Staff during Climate Week 2018
- Continue to promote Active Travel
 - Improving Access between Springburn Campus and nearby railway station
 - Investigating installation of NextBike docking station at Springburn and West End Campus
 - Develop partnerships with local community groups and organisations
- Installation of integrated Building Management System
 - Improve energy monitoring
 - Enhance control of existing systems