

GLASGOW KELVIN COLLEGE
FINANCE AND RESOURCES COMMITTEE MEETING OF 29 NOVEMBER 2022
CAPITAL AND SUSTAINABILITY UPDATE
REPORT BY DIRECTOR OF CORPORATE SERVICES

1. Introduction

The purpose of this report is to provide an update to members in relation to various capital/estates matters and to also provide an update in relation to environmental related items.

2. Capital Planning/Expenditure for 2022/23

Capital planning for Academic Year 2022/23 is well underway with an allocation of £500,000. The deadline for this spend is 31 March 2023. Funds received have been allocated to essential/high priority items. The list of projects and any progress to date, which is routinely submitted to GCRB, in relation to these funds is provided in **Appendix 1** attached.

College/Region	Capital maintenance		
	Capital funding for backlog maintenance FY 2022-23	Capital funding for lifecycle maintenance FY 2022-23	Total capital funding for maintenance FY 2022-23
	£	£	£
City of Glasgow College	-	1,336,088	1,336,088
Glasgow Clyde College	2,089,284	946,678	3,035,962
Glasgow Kelvin College	500,000	598,873	1,098,873
Glasgow	2,589,284	2,881,639	5,470,923

3. Campus Re-investment Project

The first three strands of the Campus Re-investment Project are ongoing, with Student Zones and Curriculum Developments nearing completion, and good progress being made on the College Environment strand. The final strand is staff spaces, but funding has not yet been identified to progress this part of the project. It is expected that this will be delayed until 2023/24.

4. Other Estates Activity

Dilapidations within previously rented Blairtummock and Tradeston premises are currently being attended to with external contractors; the costs of this are £16k for Blairtummock and £5.5k for Tradeston.

5. Public Sector Climate Change Duties Report

Annual Compliance Reports

All public bodies listed in Schedule 1 of the 'Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Order 2015' as amended by the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020, are required to report annually on compliance with climate change duties established under S44 of the Climate Change (Scotland) Act 2009 and in accordance with Schedule 2 of the 2015 Order.

In response to the global climate emergency and Scotland's net zero by 2045 target and following public consultation in 2019, the 2020 Amendment Order set out additional annual reporting requirements with effect for reporting periods commencing on or after 1st April 2021.

All annual compliance reports must now also include:

- the College's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;
- where applicable, targets for reducing indirect emissions of greenhouse gases;
- how the College will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;
- how the College will publish, or otherwise make available, its progress to achieving its emissions reduction targets; and
- where applicable, what contribution the College has made to helping deliver Scotland's Climate Change Adaptation Programme.

The annual regulatory return is being worked on at the time of writing this report and will be submitted by the deadline of 30 November 2022.

College commitment to reducing carbon emissions

Glasgow Kelvin College is committed to minimising the negative impact its activities have on the environment. In session 2015/16 the College prepared its first 'Climate Change Action Plan (CCAP)' and reported on its environmental performance from session 2014/15 onwards as part of the Scottish Government Public Bodies Climate Change Duties Reporting. The College is fully compliant with the reporting requirements specified in the Climate Change (Scotland) Act 2009. It now has several years of carbon emissions data.

The College appointed an Environmental Sustainability Manager in June 2022. The Manager has drafted a new College 'Climate Change Action Plan' alongside an action plan for the College's commitment to the UN's 'Race to Zero' campaign. Both plans will form part of the PBCCDR submission.

Finance and Resource Committee members will receive sight of the full Public Bodies Climate Change Duties Report at their next meeting in February 2023. The College will publish this report on its website as per previous years, ensuring that the College complies in full with the requirements of the Climate Change (Scotland) Act 2009 including the reporting requirements.

6. Funding Activities

Glasgow Kelvin College has been actively pursuing funding opportunities that would allow the College to make progress in a variety of the environmental sustainability goals outlined in the Climate Change Action Plan and Race to Zero Action Plan.

6.1 Scottish Central Government Energy Efficiency Grant Scheme

Pre-capital funding has been awarded through the Scottish Central Government Energy Efficiency Grant Scheme to investigate renewable energy technology estates improvements at Springburn and Easterhouse campuses. The amount awarded is £34,800. This pre-capital investigative work will take place over the next four months, with all work completed by 31 March 2023.

6.2 Bike Shelter Funding

Funding for a second cycle shelter at Springburn looks to be awarded from Cycling Scotland; this is expected to be for the amount of £18,300. The College has been very pleased to note the large number of students and staff choosing to cycle to campuses, thereby reducing their carbon footprint. This second shelter should further promote sustainable travel and reduce the barriers to cycling.

6.3 Easterhouse Outdoor Gym

The Easterhouse Green learning space continues to be a priority for exploring future funding opportunities. It is the hope of the College that this green space will become a location where students and staff can enjoy wellness, ecological biodiversity, companionship, and learning.

Our Support for Learning students and staff are involved in the design, planning, development and ultimately usage of this space.

7. Climate Change Action Plan and Race to Zero Action Plan

In line with the Estates and Sustainability Strategy, the College has updated its Climate Change Action Plan and prepared a Race to Zero Action Plan; both have been shared with the Estates and Sustainability Working Group who has provided feedback on each of these documents.

The Climate Change Action Plan is an updated document from the College's 2015 Action Plan and has been organised around five 'Themes for Action'; Engagement & Education, Energy Carbon Management, Sustainable Procurement, Sustainable Travel, and Circular Economy. For each Theme, a list of Goals and Objectives has been created, with associated actions which set the framework for the College's response to the Climate Crisis. The objectives and actions have been set out in a series of tables, which should allow the College to quickly measure how it is progressing towards the proposed goals.

The Race to Zero Action Plan, similarly, proposes a series of actions, as well as the estimated cost, timescale, and potential carbon emission reduction of such action. The projects and initiatives in this Action Plan have been organised by emissions type (Scope 1, 2, and 3 emissions) and look to progress the College toward carbon neutrality.

The Climate Change Action Plan is attached as **Appendix 2** and Race to Zero Action Plan is attached as **Appendix 3**; both of these Action Plans have been reviewed by the Senior Management Team. These documents will serve to guide future environmental sustainability projects, initiatives, and actions of the College in the short and long term. Both of these plans will be placed on the College website.

8. Sustainability Questionnaire

Collaborating with the Project Manager of Environment and Sustainability at Glasgow Colleges Regional Board (GCRB), a questionnaire has been created and distributed to all College staff and students to gather their views on the environment and sustainability. This questionnaire was created as part of the College's participation in the Scottish Colleges' Commitment on the Climate Emergency, and it should provide valuable insight on the opinions and interests of the Glasgow Kelvin community surrounding environmental sustainability. Communication and cooperation between Glasgow Kelvin's Environmental Sustainability Manager and the GCRB's Project Manager of Environment and Sustainability is frequent and productive, with many events for 2023 being planned.

The results are due back on 30 November 2022 and the Finance and Resources Committee will be kept apprised accordingly.

9. APUC Sustainability Reporting – FNT2030's

The College has partnered with APUC to complete a series of strategic documents titled FNT 2030s (From Now to 2030). These working documents are intended to help the College map out and realise its sustainable procurement goals. The FNT 2030s include sustainable procurement objectives related to Energy, Construction, Furniture, Food, Labs, ICT, and Travel. These have been incorporated into the above-mentioned Climate Change Action Plan and Race to Zero Action Plan.

10. Staff Development & Partnership

A Panel Event, *Embedding Sustainability in the Curriculum*, was held as part of the November Staff Development Day. This panel event was designed to facilitate discussion and raise awareness of the environmental sustainability work of the Glasgow Kelvin teaching staff, hear from employers in industries that require green skills training, and to empower other lecturers to incorporate sustainable teaching into their own courses. It is the hope that this panel will initiate a dialogue and future learning opportunities for the College.

The Environmental Sustainability Manager, in partnership with the Organisational Development Lead, is working to offer and promote short sustainability courses for staff through the College Development Network and the WorkRite Training Program.

Environmental projects with multiple teaching staff have been developed as a result of the successful events offered during Glasgow Kelvin's Green Week.

- Planning a litter survey and awareness campaign with Employability students at Easterhouse.
- Future cycle maintenance classes for Sports students, with hopes for students to facilitate Led Rides at the College.
- East End weekly litter picks as part of community improvement project by Social Care students.

The Environmental Sustainability Manager has begun capturing data regarding existing sustainability in the Glasgow Kelvin curriculum and will continue to work to gather the full scope of the exciting work that is already being done across the College.

11. Other Projects and Initiatives

Also being progressed is the updates and improvements to the Estates and Sustainability Webpage for the new Glasgow Kelvin website, promotion of sustainability via social media platforms, continued development of relationships with external groups and forums, and the continued support of the College's wellbeing initiative by promoting time in nature and green spaces. The College also continues to offer cycling events, made possible through the Shift grant awarded from Cycle UK. The most recent event was a cycle maintenance and repair class offered to staff and students.

12. Land at Springburn

Various meetings have taken place to progress this matter of the small parcel of amenity land where the Springburn Cycle Hub is situated and which, previously unbeknown to us, belongs to Hydepark Residents Association.

The College instructed an independent valuation of this land and the factor, on behalf of Hydepark Residents Association has done the same – both valuations have arrived at the same amount - £25,000. A provision has been made in the accounts for this purchase. Liaison is taking place with GCRB to ensure compliance with the Scottish Public Finance Manual.

Members of the Finance and Resources Committee will be kept apprised accordingly.

13. Resource Implications

As previously reported, there are resource implications in terms of progressing capital/estates works due to the ongoing negative impact of Covid-19, Brexit and also the war between Ukraine and Russia.

Securing goods/material and contractors has become very problematic, coupled with staff absences and materials costs/quotes escalating exponentially. Despite the aforementioned challenges, work has continued in the complex arena we are working in.

14. Impact on Students

There is no adverse impact on students as a consequence of anything within this report. Capital money will continue to be spent to ensure the campus buildings are in good order and carbon is reduced as far as possible with initiatives undertaken.

15. Equalities

There are no equality implications arising as a consequence of this report from a Glasgow Kelvin College viewpoint.

16. Risk and Assurance

Escalating materials and contractors' costs (that can change on an almost daily basis) means that budgeting for estates projects is very complicated. COVID/long COVID is also affecting contractors in terms of having staff available to work. There are also significant delays on materials arriving and the costs of these are escalating which makes planning very difficult indeed.

Tenders were prepared in conjunction with APUC for many of the projects listed in **Appendix 1**. Members should be aware that the tenders were late in being issued due to APUC staff absence/holidays. APUC advised against alerting other contractors to this possible capital work before the tender deadline date.

In relation to the tender exercise, no returns were made by the seven APUC Framework contractors invited to tender; neither did they attend the on-site meetings to view the proposed works. All of the aforementioned has resulted in a significant delay in the time available to complete these projects prior to 31 March 2023 deadline. There has also been a significant resource/time cost to undertake the aforementioned work.

Work will progress as much as possible with the capital plan as detailed in **Appendix 1**. Tenders have now recently been returned from contractors the College has used previously. These are being reviewed and contracts will be awarded.

Members of the Finance & Resources Committee will be kept apprised of developments with the capital plan and other ongoing sustainability works.

17. Data Protection

There are no direct data protection implications arising as a consequence of anything within this report.

18. Recommendations

It is recommended that members:

- i) note the content of this report and its appendix.

19. Further Information

Further information can be obtained from Lisa Clark, Director of Corporate Services - lisaclark@glasgowkelvin.ac.uk

**Lisa Clark
Glasgow Kelvin College
November 2022**

Appendix 1

Glasgow Kelvin College					
Project	Description	Status	Initial Budget (£'000)	Revised Forecast (£'000)	Spend to 31 Mar 23 (£'000)
Springburn Campus					
Refurbishment of remaining toilets.	Tender - LO1		50	42	
Redecoration of Student Common Room (water damage to ceiling & walls.)	Tender - LO1		20	18	1
Fast charging point for electric vans.	Tender – LO2		2.5	2.5	
Air ducting of ventilation systems - weather damaged.	Tender - LO1	Complete	10	5	5
Replacement of cracked/rusting panels on building. Subsidence/cracked floor - structural support required	Report pending.		50	161	
Clean of building to remove moss build-up.		Complete	15	2	2
Easterhouse Campus					
Clean & paint building exterior.	Tender - LO1		30	40	
Paint yellow lines for charging point & parking college vehicles.	Tender - LO1		3	3	
Fast charging point for electric vans.	Tender – LO2		2.5	2.5	
Install new toilets and showers.	Tender - LO1		40	61	
Replacement of worn carpets and painting of staff areas.	Tender - LO1		50	7	3

Glasgow Kelvin College					
Project	Description	Status	Initial Budget (£'000)	Revised Forecast (£'000)	Spend to 31 Mar 23 (£'000)
East End Campus					
Fast charging point for electric vans.	Tender – LO2		2.5	2.5	
Main Entrance – replace main door entranceway.	Contract awarded – direct award		69.5	54	
Student Common Room - refurbishment.	Tender - LO1		25	3	
Redecoration of interior common areas.	Tender - LO1		50	44	
Project Management			50	50	12
Total			500	500	23

Glasgow Kelvin College



Climate Change Action Plan 2023

Contents

Executive Summary

Introduction

Background

Glasgow Kelvin College Project Management & Governance

Global & Legislative Context

Glasgow Kelvin College Carbon Footprint

Themes for Action

Theme 1: Engagement & Education

Theme 2: Energy Carbon Management

Theme 3: Sustainable Procurement

Theme 4: Sustainable Travel

Theme 5: Circular Economy

Appendix A: Energy Conservation Project List

Executive Summary

To be added

Introduction

As the world faces a Climate Emergency, institutions of learning such as colleges and universities have a responsibility to take a leadership role in decarbonisation of campuses, model sustainable practices and policies, and equip learners with the skills and knowledge to be successful in a changing world. Glasgow Kelvin College has been a leader in community development and engagement. To ensure a just transition, where all members of the Glasgow community are equipped to deal with the impacts of climate change, Glasgow Kelvin College is in a unique position to build more resilient communities and residents. As a Further Education institution, the College's Climate Change Action Plan (CCAP) includes multiple commitments to increase Green Job training, deliver a comprehensive climate literacy curriculum, and support behavioural and societal change. Glasgow Kelvin is committed to reducing greenhouse gas emissions towards achieving Net Zero, as well as providing support for those being affected by the climate transition.

The aim of this document is to map out Glasgow Kelvin College's interim and longer-term strategies to reduce our climate impact and to address the implications of the already changing climate. To achieve this plan, specific actions, and targets, outlined below, will need to be realised in the short and long term.

Background

This Climate Change Action Plan is updated from the 2015 Glasgow Kelvin College CCAP, which identified emission reduction targets in-line with those that the Scottish Government had at the time. Those targets were a reduction from 2015 levels by 42% by 2020 and 80% by 2050. Since the drafting of the 2015 CCAP, the world, and Scotland in particular, has realised the true urgency of the climate emergency, and revised carbon reduction targets in response. Glasgow Kelvin, as detailed in this CCAP reflects that realisation and strives for a more ambitious and diverse response to climate change.

Glasgow Kelvin College is committed to delivering on the UN Sustainable Development Goals and Environmental Sustainability. It recognises the role it can play in contributing to making the world a better place for future generations through both managing its own impact on the environment and, more importantly, ensuring that the College has a positive impact on the behaviour and attitudes of its students and others it engages with throughout their lives and careers.

Glasgow Kelvin College's Strategy document notes the following priorities:

Address our Climate Emergency – Act, Educate & Engage - We will pursue an ambitious agenda on climate change by:

- Ensuring estate development, maintenance and operations continually strive to reduce carbon footprint.
- Working to eliminate or mitigate against any potential negative environmental impact of our future investment in technology.
- Continuing to be proactive in supporting climate change initiatives and participate in the implementation of the Climate Change Action Plan by contributing to the achievement of Glasgow City, Scottish Government, UK Government and UN Sustainable Development targets and goals.
- Supporting Glasgow's Green Deal - Working with local communities and industry towards Glasgow Net Zero by 2030. Bringing together current education and skills, community engagement, and student experience strengths to become a centre of excellence for "green" education.
- Working together to help our students, communities and industry partners accelerate the transition to a sustainable world.
- Supporting access by promoting safe, sustainable, accessible and affordable travel.
- Ensuring that our procurement and supply chain contribute to our drive towards a sustainable world.

Glasgow Kelvin College Project Management & Governance

The College operates an Estates and Sustainability Working Group. This Committee will oversee the CCAP and will consider other relevant matters within the terms of its remit. The Committee is chaired by the Director of Corporate Services and includes representation from across the College including teaching staff, support staff, student representatives and senior management. The Committee meets a minimum of twice per year and reports to the Senior Management Team. The CCAP, as well as reports on progress against the targets, will be approved and considered by the Board of Management and/or one of its standing committees.

The CCAP will be fully integrated with the College Estates and Sustainability Strategy and will form an important aspect of the College operational and strategic planning processes.

The Committee will also ensure that there is an appropriate link between the CCAP and curriculum development.

The Global & Legislative Context

In 2017, Glasgow Kelvin College was the third College in Scotland to join the United Nations Sustainable Development Goals Accord and has since signed on to commit to the Race to Net Zero. Both these commitments influence this CCAP and our actions in the future. The College is fully compliant with the reporting requirements specified in the Climate Change (Scotland) Act 2019, reporting its environmental performance annually through the Public Sector Climate Change Duties Report.

This action plan also aligns with aspects of the Further Education Climate Action Roadmap, whose themes are Leadership and Governance, Learning and Teaching, Estates and Operations, Partnerships, and Data Sharing. This Roadmap, commissioned by the Climate Commission for UK Higher and Further Education, offers an approach designed to meet the commitments to the Scottish Colleges Statement of Commitment on the Climate Emergency. Furthermore, the contributions of Glasgow Kelvin College will help deliver upon Scotland's Climate Change Adaptation Programme.

Glasgow Kelvin College Carbon Footprint

The College has made significant progress in the years since the 2015 CCAP was published, as demonstrated in Table 1 below. In 2014/15, Glasgow Kelvin's carbon footprint, as reported in the Public Sector Climate Change Duties Report, was calculated at 3,257 tCO₂e. The most recent calculation, of the 2020/21 academic year, had our footprint reduced to 1,591 tCO₂e, a 57% reduction. While the 2020/21 estimate is laudable, this CCAP will use the 2018/19 academic year data as the baseline data from which to measure reductions. Due to the COVID Pandemic, and the extended disruption to day-to-day activities, it is thought that the last year of data prior to the Pandemic would serve as the most accurate footprint baseline from which to measure our progress.

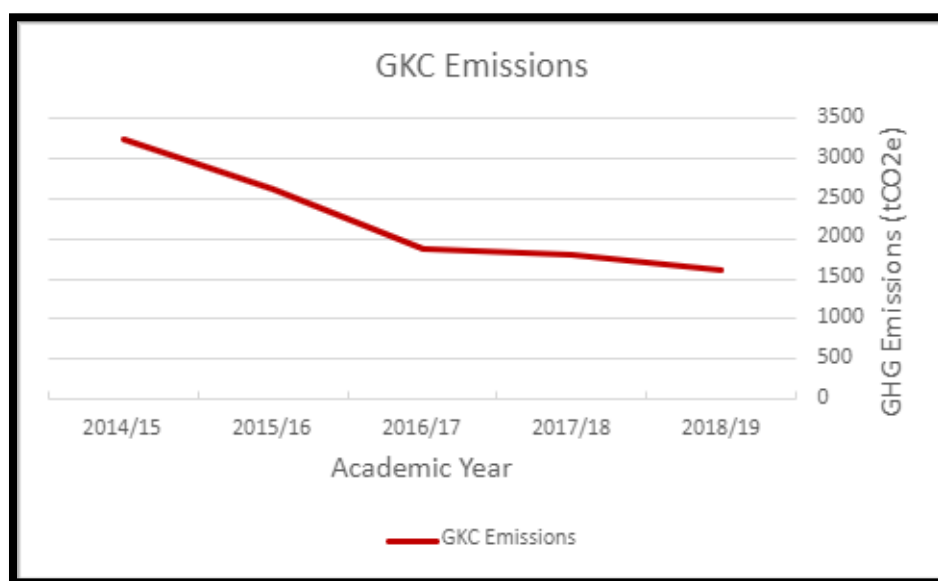


Table 1: Overall GKC Greenhouse Gas Emissions, as measured in Tonnes CO₂ emitted, from the baseline data of 2014/15 through 2018/19.

When considering the greenhouse gases attributed to Glasgow Kelvin by emission source (as seen in Table 2), natural gas and grid electricity contribute the vast majority of CO₂. In the 2019/20 academic year, 92.5% of the measured CO₂ emissions were derived from the direct consumption of energy used to run the College Estate. Therefore, for the College to meet its commitment to Net Zero, and to achieve the goals proposed in the CCAP, significant investment in renewable energy technologies will be required. The extent of this investment will be determined by funding opportunities available to the College.

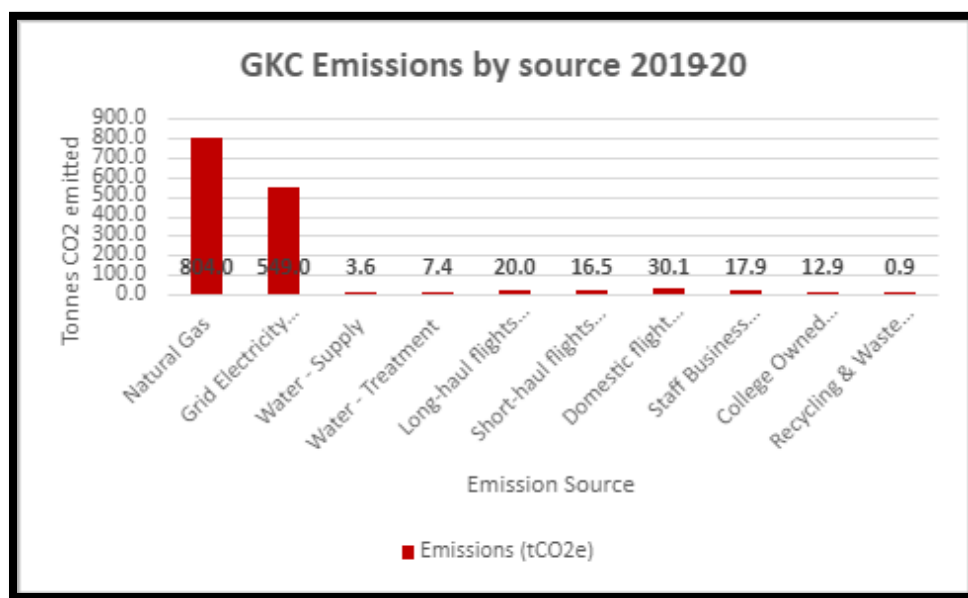


Table 2: GKC emissions by source, as measured in 2019/20.

Themes for Action

Glasgow Kelvin College has identified five Themes, which require a combination of both immediate and long-term action to achieve the goals proposed in this Climate Change Action Plan.

For each Theme, a list of Goals & Objectives has been created, with associated actions which set the framework for the College's response to the Climate Crisis. These Objectives and Actions have been set out in a series of tables.

Theme 1: Engagement & Education

We must ensure that the Climate Crisis and Ecological Emergency is placed at the heart of what we do as a college, which is 'Transforming Lives through Education'. As a Further Education institution, all that we strive to achieve must be to the benefit of our students and their futures. To that end, behavioural changes regarding environmental sustainability, as well as the critical task of preparing students for the climate realities they will face are of paramount importance.

Glasgow Kelvin College is well placed to become a leader in comprehensive sustainable education and Green Job skills training. Climate change and sustainability teaching and learning already exist in the curriculum. The college will initially assess and establish a baseline of relevant activity and sustainability views among the College staff and students. This plan proposes to expand on existing programmes and engage widely with internal stakeholders.

Goals & Objectives	Actions
Gather the College's views on sustainability	Utilize focus groups & develop surveys to gather staff and student views on sustainability, with the goal of 70% representation.
Deliver Environmental Sustainability Training to staff & students (and community).	Create Environmental Sustainability Module with goal of 90% participation by year 2025. Future Action: Work with Glasgow Kelvin's partners to expand Sustainability Training to at least 6 community partner groups.
Publish and promote Glasgow Kelvin College's sustainability ambitions.	Update the College's sustainability webpage to make net zero target & intermediate objectives visible to internal & external stakeholders. Utilize digital media to promote sustainable learning, projects, and initiatives.
Raise awareness of college staff & students of Climate Crisis & sustainability choices.	Environmental Sustainability Manager facilitates at least one Staff Training, Student Orientation, and multiple Campus Green Events per year.
Increase biodiversity of campuses for staff, student, and community learning & engagement.	Expand impact and use of East End Community Garden & develop Green Learning Spaces on other campuses.
Incorporate sustainability into Glasgow Kelvin College's curriculum.	Audit climate change and environmental sustainability related learning in existing curriculum. Create a course-specific library of resources (articles, lesson & project ideas, films, and competitions) available to all faculties. ES Manager offers suggestions of where and how Education for Sustainable Development can be embedded throughout curriculum.
Establish Green Academy	Campus-wide collaboration to create course of study specifically targeted at preparing students for Green Job Market. Annual Green Job Career Fair

Theme 2: Energy Carbon Management

Through emission management, we will decrease greenhouse gas emissions. This is the most critical area for action in progressing towards our goal of Net Zero emissions. Approaching net zero emissions will require significant investment and innovation. Reaching our goals will necessitate commitment by Glasgow Kelvin towards renewable energy estates projects, as well as training as to how to minimize our consumption based on data obtained through energy audits. The project list will be assessed and expanded regularly as new renewable technologies, carbon reduction measures, and funding opportunities are identified.

Goals & Objectives	Actions
Implement estates updates to reduce GHG emissions and save on energy costs.	Realise energy conservation projects identified on project list (Appendix A). Apply for support from Scottish Central Government Energy Efficiency Grant Scheme.
Reduce water usage and costs.	Monitor water use and develop water reduction plan.
Harness digital technology to reduce energy use.	Improve baseline information and usage data, and support staff training of data interpretation and response to BEMS.
Refurbish existing buildings and design new buildings to minimize environmental impact.	Embed Climate Change Action Plan targets into estates strategy to ensure any building refurbishment work has sustainable outcomes in mind.
Improve space efficiency.	Foster collaborative working spaces with hybrid working practices in mind.
Reduce our IT carbon footprint.	Develop and implement a timed power shutdown of student and staff IT campus devices. Investigate and implement other power-saving innovations.

Theme 3: Sustainable Procurement

Responsible and sustainable procurement can have far-reaching effects on combatting climate change and reducing emissions. With increased attention being paid to Scope 3 sources of GHG emissions, it is critical for the College to evaluate its existing procurement practices and strive for ambitious improvements in considering the environmental impact when sourcing good and services.

Goals & Objectives	Actions
Create and report sustainable procurement goals aligned with Glasgow Kelvin and APUC priorities.	Collaborate with internal stakeholders, APUC College representative and ES Manager to create FNT2030 (From Now To 2030) sustainability frameworks related to: Furniture, Construction, Food, Labs, Travel, and Energy
Measure and assess carbon emissions due to procurement.	Create scorecard to evaluate suppliers to the College on their emissions and sustainability practices.
Achieve Zero Waste Events	Initiate feasibility study, then create action plan and list of vendors to achieve zero waste events on campus.
Comply with emerging reporting legislation.	Develop measurement and reporting mechanisms for Scope 3 Sources (which include contractor emissions, procurement and supply chain, and business accommodations)
Enhance procurement activities by collaborating and sharing knowledge with other FE/HE institutions.	Develop relationship with APUC Sustainability Manager, and procurement teams at other Colleges.
Reductions via reduced waste in supply chain	Explore refurbished products and ask suppliers about products that can be serviced and repaired as opposed to replaced.

Theme 4: Sustainable Travel

Behind gas and electricity emissions, the emissions associated with travel at Glasgow Kelvin are the next largest producers of GHGs. This includes flights as well as staff travel by car, taxi, rail, or bus. While the solution is simple in theory, enabling sustainable travel can be difficult to achieve as an institution, as much of the emissions are due to staff choices and behaviours. However, the College aims to reduce the carbon footprint of estate vehicles and transport and will provide support for staff behaviour changes around travel.

Goals & Objectives	Actions
Increase utilisation of campus electric vehicles for transportation needs.	Installation of electric vehicle charging stations on all four campuses. Increase fleet of electric vehicles.
Decrease emissions due to staff transportation.	Promote utilisation of the College's cycle resources to increase active travel to and from campuses. Incentivise use of public transportation or active travel. Map safe cycle and walking routes around campuses.
Decrease emissions related to business travel.	Further improve IT platforms and promote hybrid working and remote attendance of conferences and workshops. Create a policy to prioritise lower-emission transport options for business travel.

Theme 5: Circular Economy

Part of the response to the climate emergency involves reducing our consumption of goods, by extending the lifespan of assets, reusing and repurposing items, and minimizing the amount of material that ends up in the landfill. Glasgow Kelvin has numerous examples of ways in which it supports the circular economy, including donating wood shavings from our Construction courses to a horse centre, donating IT products through Re-Tek, and working with community partner programmes to find new homes for gently used office furniture and equipment. Because the more widespread resources supporting the circular economy are still being established and becoming mainstream, the College foresees much growth and additional goals being added to this Theme in the coming years.

Goals & Objectives	Actions
Promote the circular economy	Deliver an event at the College, in collaboration with community partners, to teach and promote the value of a circular economy.
Reduce Food waste	Create composting sites on all campuses with community gardens or Cookery courses. Incorporate Food Waste lesson into Cookery curriculum.
Improve ease of upcycling and reuse of assets on campus and with community partners.	Create Glasgow Kelvin asset reuse portal to allow for upcycling and decrease waste. Partner with community organisations and programs to donate used assets.

Glasgow Kelvin College



Race to Zero Action Plan

Introduction

Glasgow Kelvin College is happy to participate in the Race to Zero campaign, pledging our commitment to carbon neutrality in the Spring of 2022. The aim of this document is to map out Glasgow Kelvin College's interim and longer-term strategies to reduce our climate impact and to address the implications of the already changing climate. To achieve this plan, specific actions, and targets, outlined below, will need to be realised in the short and long term.

Glasgow Kelvin College's projected route to carbon neutrality is divided into categories by Scope 1, 2, and 3 emissions. The College has used the 2018/19 academic year emissions data as the baseline data from which to measure reductions. Due to the COVID Pandemic, and the extended disruption to day-to-day activities, it is thought that the last year of data prior to the Pandemic would serve as the most accurate footprint baseline from which to measure our progress. It is important to note, however, that the College continued to investigate and implement carbon-reducing estates updates and policies throughout the Pandemic, when feasible.

Scope 1

Scope 1 emissions include the Green House Gas (GHG) emissions that result from the day-to-day operations of the Campus Estate. This is a significant source of emissions, and include emissions related to building on-site heating and college vehicle use.

Source of Carbon Emission	Baseline tCO ₂ e	Proposed Actions	Time-scale	Cost*	tCO ₂ e savings
Gas: Campus Heating Systems	790	Replacement of 1-2 gas boilers with renewable heating alternative (Springburn campus) *	3-5 yr	£500,000 - £2M	30-60% decrease (SB)
		Installation of PV Panels for under-floor heating *	3-10 yr	£500,000 - £1M	10% decrease
		Estate Staff training in BEMS data analysis, interpretation, and response to maximize heating efficiency	1-2 yr	0 - £5,000	10-20% decrease
		Gas Boiler Replacements with renewable alternative throughout 4 College Campuses*	5- 20 yr	£1-5 M	80- 100% decrease
Transport: Campus Vehicle Fleet	16.5	Installation of EV chargers at each campus to increase use of College EVs	1 - 5 yr	£10,000- 50,000	5 –10% decrease
		Renew lease of current EVs & purchase EVs to replace remaining diesel vehicles	3-10 yr	£50,000- £2M	70- 90% decrease

*Feasibility dependent on funding support from sources such as Scottish Central Government Energy Efficiency Grant Scheme.

Scope 2

Scope 2 emissions are those GHG emissions which are indirectly attributable to Glasgow Kelvin College. These include purchased energy. It is the hope of the College that our journey to Net Zero will be aided by further decarbonisation of the energy grid.

Source of Carbon Emission	Baseline tCO ₂ e	Proposed Action	Time-scale	Cost	tCO ₂ e savings
Purchased Electricity Use	701	Installation of PV Panels to minimize reliance on electrical grid*	3-10 yr	£500,000 - £1M	10-40% decrease
		Replace remaining lighting systems with LED lights*	1-3 yr	£10,000- 50,000	10-20% decrease
		Estate Staff training in BEMS data analysis, interpretation, and response to maximize energy efficiency	1 – 2 yr	0 - £5,000	10-20% decrease
		Improve space efficiency by fostering collaborative working spaces & hybrid working practices.	1 – 2 yr	0 - £5,000	1-5% decrease
		General energy efficiency estate improvements in ventilation, insulation, heating, etc.	1-20 yr	£3 M	5-25% decrease
ICT Electricity Use		Develop and implement a timed power shutdown of student and staff IT campus devices. Investigate and implement other power-saving innovations of IT systems.	1-3 yr	£0	5 –10% decrease

*Feasibility dependent on funding support from sources such as Scottish Central Government Energy Efficiency Grant Scheme.

Scope 3

Scope 3 emissions are often difficult to accurately account for, and therefore difficult to set action plans to address, as these encompass all the emissions that the College is associated with up and down its value chain. Scope 3 emissions include purchased goods and services, travel emissions (business and commuting), as well as emissions from waste and water. Meaningful reductions in Scope 3 emissions are contingent upon other partner businesses, institutions, and individuals making similar commitments towards carbon neutrality.

***Some of the College's Scope 3 Baseline carbon emissions are not available, but the College aspires to identify more complete and accurate methods for collecting Scope 3 data in the future.*

Source of Carbon Emission	** Baseline tCO ₂ e	Proposed Action	Timescale	Cost	tCO ₂ e savings
Staff business travel (flights)	37.3	Create policy to encourage the use air travel as transportation mode of last resort.	1-3 yr	£0	5 –10% decrease
Staff business travel (other)	22.4	Create policy to encourage renewable modes of transportation over driving, as well as encouraging participation in virtual conferences & meetings.	1-3 yr	£0	5 –10% decrease
Staff Commute	**	Promote utilisation of the College's cycle resources to increase active travel to and from campuses. Incentivise use of public transportation or active transportation	1-3 yr	£0	5 –10% decrease
		Further improve IT platforms and promote hybrid working.	1-3 yr	0 - £5,000	5 –10% decrease
		Install more EV charging stations to encourage staff to choose electric or hybrid vehicles.	1 - 5 yr	£10,000-50,000	5 –10% decrease
Purchased Goods and Services	**	Explore refurbished products and strive to use suppliers who offer products that can be serviced and repaired as opposed to replaced.	1-20 yr	0 - £5,000	10-20% decrease
		Engage with APUC Sustainability team to utilise resources and frameworks referenced in FNT2030 sustainable procurement strategies.	3-5 yr	0 - £5,000	5-10% decrease
		Create scorecard to evaluate suppliers to GKC on their emissions and sustainability practices & select suppliers based on said evaluation.	3-5 yr	0 - £5,000	5-10% decrease
Waste	23.4	Work with ENVA to develop a plan to continue to reduce emissions due to waste management.	1 – 20 yr	0 - £5,000	10 – 20 % decrease
Water	14.5	Continue to monitor water use and identify ways to reduce consumption and waste.	1 – 20 yr	0 - £5,000	10 – 20 % decrease

The Path to Zero

Glasgow Kelvin College has consistently made reducing its carbon footprint a priority and has been informally working towards net zero since publishing its first Climate Change Action Plan in 2015. The College not only met its goal of reducing 2015 carbon emissions by 42% by 2020 but exceeded it with a reduction of 57%. Based on the data provided in the annual Public Sector Climate Change Duties Report documenting our emission reductions to this point, carbon emissions should continue to decline towards zero as the proposals of this Action Plan are realised.

Beyond the Scope of Emissions

Along with this Race to Zero Action Plan, Glasgow Kelvin College is also revising its Climate Change Action Plan to address and respond to other aspects of the Climate Emergency. The College has been a leader in community development and engagement. To ensure a just transition, where all members of the Glasgow community are equipped to deal with the impacts of climate change, Glasgow Kelvin is in a unique position to build more resilient communities and residents. As a Further Education institution, Glasgow Kelvin College's Climate Change Action Plan includes multiple commitments to increase Green Job training, deliver a comprehensive environmental sustainability curriculum, and support behavioural and societal change. The College is also determined to develop more green spaces and increase biodiversity on its campuses to the benefit of its students, staff, and the communities where those campuses are located.

These commitments put forward in this document, as well as the College's updated Climate Change Action Plan will augment the impressive work that the College is already undertaking in response to the Climate Emergency. The College utilises the expertise of its many stakeholders to provide campus events that promote behaviour change, such as Green Week, student orientation events, and Staff training. The College has a long history of supporting active travel through cycling resources and events offered to both students and staff. The East End Community Garden not only provides a learning space for Cookery students to grow their own produce, but it also offers a green area of biodiversity for the surrounding community to enjoy. The College is proud of its efforts in response to the Climate Emergency and looks forward to taking further action as a sustainability leader in Glasgow communities.

Glasgow Kelvin College is committed to reducing greenhouse gas emissions towards achieving Net Zero, as well as providing support for those being affected by the climate transition.