

Glasgow Kelvin College

Finance and Resources Committee - 5 March 2024

Environmental and Sustainability Update

Report by Director of Estates and Corporate Services

1. Introduction

The purpose of this report is to provide an update to members in relation to environmental and sustainability matters, and it covers the following areas:

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2. Green Gown Awards 2023

At the 2023 Green Gown Awards, Glasgow Kelvin College was an award winner in the Next Generation Learning and Skills category for its 'Fighting Fast Fashion' initiative. The Green Gown Awards 2023 were held in Liverpool on 30 November 2023. Winners of the Next Generation Learning and Skills category automatically progress to the International Green Gown Awards, to be held in July 2024.

For more information, see the following link on the Green Gown Awards website:

[Glasgow Kelvin College | Green Gown Awards](#)

Photographs from the event are attached at **Appendix 1**.

3. Student and Staff Engagement

UK Planet Earth Games for Colleges 2024

The College is pleased to be participating in the UK Planet Earth Games for Colleges for the second year. The 2024 Planet Earth Games will last through April and include a series of campus events for students and staff to encourage them to embrace sustainable behaviours. Thus far, the Professional Cookery Students have provided a Sustainable Food Stall at Easterhouse, the College's Campus Cycling Officer has organised a 'Bike Day' at each of the campuses, and there are plans with Sports Development and Support for Learning classes to be involved in further events.

Photographs from the Sustainable Food Stall and Cycle Day are attached at **Appendix 1**.

Sustainability Champions meeting

The winter meeting of the GKC Sustainability Champions was held 19 January, and was attended by a range of support staff, teaching staff, as well as student representatives. The discussion focused on Planet Earth Games events as well as initiatives to build on the successes of the Fashion Department Swap Shops and other projects related to the Green Gown Award winning curriculum. The Environmental Sustainability Manager also shared sustainability resources and opportunities for staff and students to attend workshops and become more involved in sustainability initiatives at the College and beyond.

Hedgehog Friendly Campus

The Hedgehog Friendly Working Group continues to meet regularly and is pleased to announce that the College has met the criteria to be accredited a 'Bronze Level' Hedgehog Friendly Campus by the British Hedgehog Preservation Society and Students Organising for Sustainability. The next project for the Working Group is a series of events for Hedgehog Awareness Week in May 2024.

4. Public Bodies Climate Change Duties Report 2022-23

The Public Bodies Climate Change Duties Report for Academic Year 2022/23 was submitted by the deadline of 30 November 2023. The full submission can be reviewed here: [PBCCDR 2022-23](#)

Glasgow Kelvin College is committed to minimising the negative impact its activities have on the environment. As previously reported, in Academic Year 2015/16 the College prepared its first Climate Change Action Plan (CCAP) and reported on its environmental performance from Academic Year 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 can report that annual carbon emissions have continued to reduce and, for Academic Year 2022/23, fell from 1,394 tonnes tCO₂e to 1,289 tonnes tCO₂e marking a 7.5% reduction compared with 2021-22 figures.

Further analysis of the data in the 2022/23 Public Sector Climate Change Duties Report shows that:

- Current levels of carbon emissions at the College (measured in tCO₂e or tonnes of carbon emissions) have fallen by 60.4% since the baseline year of 2014/15 i.e., from 3,257 tCO₂e to a current level of 1,289 tCO₂e;
- Grid electricity usage fell by 0.5% during 2022/23;
- Gas usage during 2022/23 fell by 0.65%;

- Staff travel by private car has continued to increase since 2020/21. Consequently, emissions here have increased from the 3.1 tonnes tCO₂e recorded in 2021/22 to 4.8 tonnes tCO₂e recorded in 2022/23. However, this figure is still well below the 12.8 tCO₂e recorded in 2019-20;
- Following the end of Covid travel restrictions, staff travel by domestic flight and train continued to increase in 2022/23 producing an additional 2.85 tCo₂e compared with 2021/22;
- Water usage over the period is down some 6% on the previous year, with associated emissions down by 1 tCO₂e;
- Emissions associated with waste showed a marked increase on 2021/22. This reflects the return of students to workshops and the associated waste from, e.g. brickwork and construction works.

As reported within the Public Sector Climate Change Duties Report, the five main targets for Glasgow Kelvin College for the year ahead are:

1. To continue to maintain the College estate.
2. Progress with the projects planned under the £2.6m grant awarded to the College under the Scottish Government Energy Efficiency Grant Scheme. (Note: this project is now not proceeding.)
3. Complete the implementation of the Green Academy at the College.
4. Progress the sale or lease of the College's West End Campus.
5. Continue to inspire and encourage staff and students to continue to adopt environmentally sustainable ways of learning, teaching, working and living.

The College has published its Public Sector Climate Change Duties Report 2022/23 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. A link to the webpage can be found here:

[Climate Change Reporting - Glasgow Kelvin College](#)

5. Clean Heat 24 Event

Representatives from the College, including the Environmental Sustainability Manager, will attend the Clean Heat 24 event organised by Scottish Enterprise, to be held in Glasgow on 27 March 2024. A range of experts, including Local Authorities, will provide an overview of their Local Heat and Energy Efficiency Strategies highlighting the scale of the Clean Heat opportunity in Scotland. The event will also spotlight Scottish companies on the range of capability they can bring to the clean heat supply chain, the importance of innovation, and investing in the supply chain. Private investors will also attend and advise on what they look for when investing in a clean heat project.

6. Heat in Buildings Consultation

The Scottish Government is asking for views on proposals to form part of a Heat in Buildings Bill as set out in the Programme for Government. A link to the consultation paper can be found here:

[Delivering net zero for Scotland's buildings - Heat in Buildings Bill: consultation](#)

Proposals include:

- That private rented homes will be required to meet a minimum energy efficiency standard no later than 2028;
- That owner-occupied homes will be required to meet the same minimum energy efficiency standard by the end of 2033;
- That all homes and non-domestic buildings will be required to end their use of polluting heating by the end of 2045; and
- In order to create a smooth trajectory towards 2045, that those purchasing a home or non-domestic property before 2045 would be required to end their use of polluting heating systems within a specific period following that purchase.

The Scottish Government also published proposals for a new Social Housing Net Zero Standard that would require social landlords to meet an energy efficiency standard between 2033 and 2040 and install clean heating across their stock by 2045 where it is technically feasible and cost-effective to do so. A link to the consultation paper can be found here:

[Social housing net zero standard: consultation](#)

7. Local Heat and Energy Efficiency Strategy – Glasgow City Council

The concept of a Local Heat & Energy Efficiency Strategy (LHEES) was introduced following Scottish Government consultation in 2017. This was followed by the Heat in Buildings Strategy published in October 2021 which confirmed that the introduction of area based LHEES are fundamental to the Scottish Government's approach to heat decarbonisation. It is envisaged this action will significantly contribute to realising the outcomes of the Glasgow Climate Plan on renewable heating and a just transition.

The LHEES was approved in November 2023 and provides a citywide strategic assessment of where in Glasgow certain interventions relating to heat decarbonisation and fuel poverty may have the greatest impact. Accompanying the strategy is a delivery plan that identifies key actions aimed at progressing identified interventions.

The ambition of Glasgow's LHEES is to provide affordable, reliable and low carbon heat that helps the city reach its net zero carbon target in a just and inclusive manner by 2030. Successful delivery of this ambition will be achieved by focusing on reducing demand, decarbonising supply, and decentralising systems.

Glasgow's LHEES has four key focus areas, each of which have been determined by an assessment of the challenges and opportunities unique to Glasgow's net zero heat transition. These include:

- Heat Networks.
- Individual or Communal Heating Solutions.
- Poor Energy Efficiency as a Driver of Fuel Poverty.
- Pre-1919 Tenemental Properties.

For heat networks, part of delivery in the short term will seek to recategorise heat network zones identified in the LHEES from their current indicative status to a legal designation following the regulations under the Heat Networks (Scotland) Act 2021. Through the Act, local authorities are required to identify and potentially designate Heat Network Zones. The LHEES has provided a first pass for this, identifying 'Indicative Heat Network Zones' (IHNZs).

However, further clarity on the scope of the heat network regulations from the Scottish Government is required before the Council can confidently assign appropriate locations and sizes of Heat Network Zones to inform designation. A link to the full strategy can be found [here](#):

[Local Heat and Energy Efficiency Strategy – Glasgow City Council](#)

8. Scottish Central Government Energy Efficient Grant

In relation to the Scottish Government Energy Efficient Grant for the public sector decarbonisation scheme, a Project Manager - Gordon Ross from Watts – was appointed to oversee this £2.6m project.

A number of complications arose with this project, resulting in the College cancelling the Pre-Construction Contract with Ameresco and the funding being withdrawn by the Scottish Government.

Liaison has taken place with the College insurance company.

A detailed report will be presented to the Board of Management in March 2024.

9. Funding activities

There are no new funding activities to report.

10. Networking

EAUC Scotland

The Environmental Sustainability Manager will present a case study at the EAUC Scotland Spring Forum and AGM on the 'Fighting Fast Fashion' project which was a winner in the Next Generation Learning and Skills category at the Green Gown Awards 2023.

Additionally, two College lecturers, Samuel Thomson, and Gemma Cummins, will give a presentation of how they embed Education for Sustainable Development (ESD) in their teaching. These presentations will be part of the 'Realigning the Curricula' series offered by EAUC.

GCRB Regional Environmental Sustainability Group

Glasgow City Council and a group of key regional partners, including GCRB, are working towards the city's application to win UNESCO Learning City Accreditation. The Environmental Sustainability Manager, in partnership with the College's Equality and Inclusion Lead, has worked to supply Sue Roberts, at GCRB with text as to how the College contributes to the themes of the 'Learning City', to be included in the application.

Community Engagement in Easterhouse

The Environmental Sustainability Manager has been working with Provan Hall and the Support for Learning classes to establish a community partnership where students contribute to the historic gardens, while also gaining skills and knowledge of local biodiversity and horticulture practices.

The College also looks to partner with The Pavilion to facilitate Climate Action projects in Easterhouse. Specifically, the College hopes to be able to share the upcoming Sustainability Course being developed for the College for the Learning Network with Community Learning Hubs.

11. Transport Poverty

The Public Health and Sustainable Transport Partnership Group, hosted by Public Health Scotland, has published a new briefing on transport poverty.

Transport plays a vital role in our health and wellbeing. It provides links to education and employment, to social connections, to affordable and quality nutrition, and to leisure activities.

A lack of transport options that are available, reliable, affordable, accessible and safe, referred to as transport poverty, creates serious health and social implications by blocking people's ability to meet their daily needs and provide a good quality of life.

Based on a review of key literature and engagement with a wide range of partners, this briefing highlights the causes of transport poverty and how it contributes to poor health, providing recommendations to increase awareness of the issue and guide actions for change.

Glasgow Kelvin College has resources available to provide more affordable transport to campuses, such as the First Bus Commuter Scheme, the Cycle to Work Scheme, as well as free bike loans for staff and students. A link to the full briefing can be found here:

[Transport Poverty: A Public Health Issue](#)

12. Network Rail Path to Springburn Campus

The College was recently approached by Network Rail to re-engage in conversation about the construction of a direct path from the Springburn Rail Station platform to the College. The Springburn Station is a station of focus for Network Rail because of its poor accessibility, and Network Rail looks to collaborate with Glasgow City Council to submit a bid for 'Access for All' funding to improve the accessibility.

The College had engaged with Network Rail previously (2022) to discuss the feasibility of a bike and wheelchair accessible path to the Springburn station platform, but the project was not progressed at that time due to numerous concerns from the College as reported to the Finance and Resource Committee. With new project management at Network Rail, and support from the local authority, this project looks to progress without any financial obligation from the College.

The College fully supports Network Rail's application for funding and the proposed project, as it will increase access to the College for students and staff, alleviate foot traffic through neighbouring housing developments, and encourage individuals to use sustainable travel options.

13. TravelKnowHow Consultancy

The College has been working with TravelKnowHow Scotland over the last four months to collect data on staff and student commuting habits and rationales for travel to campus.

Based on the data collected, through a travel survey and discussions with the Environmental Sustainability Manager, TravelKnowHow Scotland will be providing the College with a bespoke Travel Plan. This Travel Plan may be incorporated into the College's Climate Change Action Plan and the data collected can be used in funding applications, as well as to provide commuting carbon emission data for the Public Bodies Climate Change Duties Report.

14. Climate Adaptation Plan & Risk Register

Using guidance from EAUC and Adaptation Scotland, and in response to requests for climate adaptation plans in the Public Bodies Climate Change Duties Report, the Environmental Sustainability Manager has created a Glasgow Kelvin College Climate Risk Register, with plans to incorporate findings from the Risk Register into a College Climate Adaptation Plan. The GKC Climate Risk Register considers projected climate changes for Glasgow, examining them against the vulnerability of the College estate, ITC, operations, teaching, and surrounding infrastructure. The Risk Register also accounts for existing mitigants and controls at the College and provides an action plan for adapting to the risks and impacts of a changing climate.

15. Disposable Vape Ban

A UK-wide ban on disposable vapes (e-cigarettes) has been approved and could come into effect this year, though the ban will most likely be implemented by 2025. The disposable vapes pose a significant threat to the environment and people's health, as well as being the cause of multiple bin and waste facility fires. The College is planning on installing smoking shelters at its three campuses. These shelters will include cigarette bins and had planned to include vape disposal bins. The College will consider decreasing the number of vape-bins purchased due to the upcoming ban.

16. Safety Alert – e-bike batteries

A safety alert has been issued by the Office for Product Safety and Standards (OPSS) who are taking enforcement action regarding the risk of fires caused by batteries used in e-bikes and e-scooters and has issued a warning about 'UPP' branded e-bike batteries manufactured in China. The batteries have been linked to a number of fires across England.

The product safety report can be found here:

[Product Safety Report: UPP Battery E-Bike Battery Packs sold via Amazon, AliBaba, eBay, Made in China and Desertcart \(2401-0083\)](#)

The College can confirm that campus e-bikes for use by staff and students do not use UPP batteries instead utilising BOSCH batteries, which are stored securely and separately when the bikes are not in use.

Electric vehicle battery packs store a lot of energy in a very small space. When damaged, an internal short circuit triggers a chain reaction called 'thermal runaway'. The battery pack then generates more heat than it can dissipate and catches fire.

About 95% of battery fires are classed as ignition fires, which produce jet-like directional flames. The other 5% involve a vapour cloud explosion.

Once batteries are on fire, they can be hard to manage. Lithium battery fires burn at extremely high temperatures, can last for days and cause extensive damage. They often reignite just when the fire seems to have subsided.

If not managed properly, battery fires can emit highly toxic gases and chemicals for many hours. Properly trained firefighting crews are needed to handle these fires.

17. Audit Scotland: Environment, Sustainability and Biodiversity Annual Report 2022-23

The Risk Management Committee, at its meeting held on 30 January 2024, considered Audit Scotland's Environment, Sustainability and Biodiversity Annual Report for 2022-23. The report provides an update on the progress Audit Scotland is making towards its organisational environmental targets. It also provides an update on how Audit Scotland is developing its approach to auditing climate change.

The link to the report can be found here:

[Audit Scotland: Environment, Sustainability and Biodiversity Annual Report 2022-23](#)

18. Impact on Students

There may be a negative impact on current and future students as the College moves forward further into an arena of unprecedented, reduced funding and increased cost pressures.

19. Risk and Assurance

There are no additional risk and assurance implications that are not covered within this report.

20. Equality

There are no equality implications arising as a consequence of this report.

21. Data Protection

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

22. Environmental and Sustainability Impact

There is an overall risk to the environment due to the negative arena being experienced at present i.e. extremely tight financial arena.

The College's position as a community college remains vital as a positive destination for the communities served during these times of ongoing hardship, however, the funding reduction may reduce this community asset.

23. Resources

The £2.6m award for energy efficiency capital works has been withdrawn by the Scottish Government. Other funding streams to address environmental projects will be sought.

24. Recommendations

- i) It is recommended that members note the content of this report, links and appendix.

25. Further Information

Further information can be obtained from Lisa Clark, Director of Estates and Corporate Services - lisaclark@glasgowkelvin.ac.uk, Sarah Shea, Environmental and Sustainability Manager on sshea@glasgowkelvin.ac.uk or Roddy MacKenzie, Regulations and Compliance Manager on rmackenzie@glasgowkelvin.ac.uk

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Green Gown Awards



Sustainable Food Stall at Easterhouse



Cycle Day at Springburn

