

Development of this strategy was coordinated by Advanced Procurement for Universities & Colleges (APUC), on behalf of the Scottish University and College Sectors.

Scottish University and College Sectors

Supply Chain Climate & Ecological Emergency Strategy

2022 to 2030

Endorsed / Approved Version 1.0

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Introduction

The Scottish University and College sectors are committed to carrying out all of their operations in an environmentally, socially, ethically and economically responsible manner. This commitment extends to their procurement & supply chain management, which is a vital part of sector activity and accounts for between circa 20% (Colleges) and 35% (Universities) of institutional turnover (well in excess of £800m per year).

Our supply chains are estimated to make up between 65% to 80% of the sectors' total Greenhouse gas (GHG) emissions footprint. The Supply chain, and related demand management within institutions, is therefore seen as a key focus for early attention across all institutions to significantly reduce GHG emissions from our needs for goods and services, wherever these emissions are generated in the supply chain.

Effective management of this area will play a critical role in the sectors contribution in helping to address the Climate and Ecological Emergency, as acknowledged by both Scottish and UK Governments, and across the Universities and Colleges in Scotland.

Strategically, Universities and Colleges across Scotland are increasingly setting ambitious targets encompassing all three scopes of the Greenhouse Gas Protocol, often specifying 2030 as their net zero Greenhouse gas (GHG) emission target point with others embracing similarly ambitious targets within the context of their operations, that take account of the necessary roadmap in achieving net zero carbon usage.

There is a significant level of shared values across both the University and College sectors in Scotland with both sectors being strong supporters of a Just Transition with all having ambitions to reach net zero before the Scottish Government's defined target date of 2045 (with interim targets of 75% lower by 2030 and 90% by 2040, both versus the 1990 baseline). This, combined with a high degree of commonality in their supply chains, has complimented the desire of the University and College sectors for this Strategy to be developed and approved to set out the combined direction of travel for addressing the Climate and Ecological Emergency across the supply chains of both sectors in Scotland. This complements the wider supply chain responsible procurement activity across Universities and Colleges such as safeguarding human rights in supply chains, enhancing equality, and delivering community benefits and wealth building.

Specific timings of relevant deliverables at a sector level have generally not been included in this strategy due to the complexity and diversity in the delivery timings of individual plans. This document also serves the purpose of meeting the Scottish Government's Climate & Procurement Forum's requirement that each sector shall have a Climate Supply Chain Strategy endorsed, in place and in implementation. Institutions will be encouraged to, as appropriate, schedule in the relevant aspects of this strategy into their institutional plans. This Strategy will remain a live document and be updated as and when required.

Scope of Strategy

The scope of this strategy and the strategic work supporting it includes:

- Externally obtained goods and services (purchased, leased, rented etc) – including staff and student travel funded by institutions *but excluding all staff and student travel to / from campus*;
- How goods and services are used while in primary use phase within / for institutions;
- Maximising use of circular economy approaches, including innovation / development of these;
- Working practices / demand management around reducing the need for the relevant expenditure;
- How purchased goods are disposed of and what can be done with them at end of life to minimise negative environmental impact.
- Working with the sectors' research community on innovation that could be integrated into supply chains to assist in delivering the outcomes of the strategy

Overarching Objective of the Strategy

Although the ultimate net zero target dates will vary across the University and College sectors in Scotland, due to the significance of supply chains in the overall activity, the sectors' collectively will aim, for its supply chains that have a material impact on climate change, to be net zero by 1st January 2030 or earlier.*

** Unless there is no viable solution to provide for this option, in exceptional cases. In such cases we will work with the relevant supply chains to move towards the objective as soon as possible thereafter.*

[References to “net-zero” in this document are based on the IPCC definition: *Net zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. Where multiple greenhouse gases are involved, the quantification of net zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, and others, as well as the chosen time horizon)*]

Collective Expectations of Our Supply Base

Our overarching expectations of our supplier community are as follows:

- Universities and Colleges across Scotland are increasingly setting ambitious targets encompassing all three scopes of the Greenhouse Gas Protocol, often specifying 2030 as their net zero target, we require our suppliers to take meaningful and material steps to support us in this task.
- Where appropriate and practical to do so, we will aim to enter into agreements and contracts with suppliers that share and adhere to our vision and whose goods and services for their whole life (including beyond intended first life and at end of life) minimise negative environmental, social and ethical impacts. This will include structuring tenders and selection processes to enable this.

- We will require our suppliers to support the aims of the University and College sectors in reducing the GHG emission impact of their supply chains, including having clear and verifiable plans and actions in place, where reasonable and proportionate to the nature of the goods and services provided.

Working in partnership with our suppliers, other sectors and relevant bodies, the sector will establish clear, fair, appropriate and consistent measurement approaches for GHG impacts reporting and will put these in place as early as possible.

Strategy Developed with Commitment and in Partnership

This strategy has not been created in isolation, it represents a powerful collaboration of all the professional areas and groups within the University and College sectors that have a material involvement and / or impact in Primary Impact Areas of Climate Change (PIACC), including:

- Directors / Heads of Procurement
- Directors / Heads of Sustainability
- Directors / Heads of Estates
- CIOs / Directors of Information Services / IT
- Directors / Heads of Catering
- APUC
- EAUC

These professional areas have been and will be fully supported in their work by the Principals of Scotland's Universities (coordinated via Universities Scotland), and the Principals of Scotland's Colleges (coordinated via the College Development Network). Members of Cross functional groups within the sectors that have specific responsibility for addressing the Climate & Ecological Emergency have formed an integral part of this strategy's formation, these being:

- CDN - Climate Emergency Experts Group (CDN-CEEG)
- Universities Scotland – Efficiency & Climate Emergency Committee (USECEC)
- The University & College Sectors Climate Emergency Procurement Working Group (CEPWG)

The Scottish University and College sectors will also actively work with the Scottish Funding Council, the Scottish Government and a range of collaborative supply chain partners to deliver, driving and leading on the change agenda where appropriate, the outcomes from this Strategy, with coordination being focussed via APUC. In particular, this will include the UK Universities Procurement Consortia (UKUPC) and the other sectoral Centres of (public) Procurement Expertise across Scotland.

In relation to their supply chain management activity, the Scottish University and College sectors will comply with all environmental and climate-based legislation, in addition, it will also wherever appropriate, align its activities, plans and outputs with key governmental guidance on managing the Climate and Ecological Emergency such as the Scottish Government “Public Sector Leadership on the Global Climate Emergency Guidance” (published in October 2021).

Influencing and Collaboration with Supply Chains Beyond Our Own

The people and groups that have contributed to the development of this Strategy also maintain links to other individuals and organisations that have an involvement in addressing the Climate and Ecological Emergency, including organisations such as the University and College Climate Commission, the UK and Scottish Governments (primarily the Scottish Government Climate and Procurement Forum), the International Council for Local Environmental Initiatives ([ICLEI](#)), the Organisation for Economic Cooperation & Development ([OECD](#)), [UK Universities \(& Colleges\) Purchasing Consortia -Responsible Procurement Group \(UKUPC-RPG\)](#) and the UK Higher Education Procurement Association Responsible Procurement Group ([HEPA-RPG](#)).

GHG Emission Reduction Themes

The following themes will be utilised across the sector wherever appropriate and possible to provide a multifaceted approach to dealing with the Climate and Ecological Emergency and for reporting of the outcomes in relation to these as key performance areas:

- **Demand management - reduce / modify demand (DM)** - we will explore and utilise demand management to reduce/consolidate demand for goods/services in order to reduce purchase volumes, promote resource sharing, and alleviate GHG impacts of inappropriate “Just in Time” procurement.
- **Stop Fulfilling Perceived Needs completely (SFPN)** - we will explore where the use of the goods/service can be stopped/phased out through redistribution of current supply or through change in business processes and implement the necessary changes.
- **Buy Lower Emission Alternatives (LEAs)** - in procurement of materials and equipment, we will explore where lower emission alternatives can be used/procured, and where appropriate, make purchases accordingly.
- **Reduction via Reduced Waste in supply chain (RW)** – we will drive a focus on where waste can be reduced in the end-to-end supply chain and maximise use of reusable solutions / packaging, this will have wider environmental impacts beyond climate.
- **Reduced Emission Design and / or production changes (RED)**– we will work with suppliers to encourage innovation and development of plans to reduce GHG emissions at point of design and production. This can also be applied to in-house production if applicable.
- **Reduced Emissions in Transport (RET)** – we will explore and implement where appropriate aspects such as consolidated ordering, localisation of supply, low emission modes of transport etc.
- **Reduced Emissions in Use / after Use (REU)** - using whole-life-costing as a standard approach, we will apply a strong focus on buying goods and equipment that minimise emissions impacts both while in use and in end of life processing. Users will be supported in adopting behaviours that reduce emissions when using bought in goods and equipment.
- **Use of Circular Economies (UCE)** – we, working with suppliers and shared service providers as appropriate, will develop circular economy solutions, or utilise those created by others to maximise the effective life of goods and equipment purchased – using redeployment, upgrading, or upcycling. This includes specifying new products that make upgrading or modification in later life possible / easier.

(The above GHG Reduction Themes are aligned to the subject areas in the Scottish Government Climate & Procurement Forum FNT2030 Category Planning key themes)

Primary Impacts Areas of Climate Change (PIACC) - Sector Strategic Approaches

The University and College Sectors have identified seven Primary Impact Areas of Climate Change (PIACC). The high level overall strategic approach to addressing the Climate and Ecological Emergency across these areas is set out below.

To aid colleagues across the sectors in addressing these areas, the sector (coordinated by APUC) has developed, published and will keep up to date PIACC Guides, which contain a variety of suggested quick and longer-term opportunities, suggest framework agreements that can support GHG emission reduction activity and other useful information, signposts and case studies. APUC will provide sustainable supply chain resources from its core team that will provide support to institutions in developing strategies / plans / approaches to address the climate and ecological emergency through supply chain activity.

Across all PIACC areas, there will be a strong focus on innovation and adoption of a fundamental principle of deep-decarbonisation in sourcing and operational strategies across our supply chains. This will reach beyond procurement and the relevant delivery areas of specific services, for example this will include how we manage financial transactions such as the outlawing of total depreciation leases and replacing them, where leasing is appropriate, with residual value leases (so that the full value of purchased goods is not paid for via the lease costs, thus forcing the asset owner to find a further productive life for the assets at the end of the lease rather than simply sending them to landfill).

It should be noted that although these PIACCs are the most significant areas of impact overall across the University and College sectors, the University and College sectors will also focus on other areas where appropriate where there is material GHG impact.

Estate Operations & Development

(The aspects within this section fall within the cross-public sector Climate & Procurement Forum's "Energy" and "Construction" PIACCs but as they are so integrated in practice, have been covered under a single University and College sectors PIACC of Estate Operations & Development)

Deep "decarbonisation" of the estate has become one of the main imperatives for University and College leaders. The University and College sectors and the Scottish Government "Programme for Government" recognises the need for climate action in this area, the sectors therefore will:

- Promote Framework Agreements that are put in place / maintained, that provide as a priority, an easy / simple cost-effective route to market for energy needs that enable and encourage lower GHG emission options and provide transparency over the impacts attributed to purchases under the agreements;
- Support and encourage low / zero carbon local energy generation solutions;
- Share best practice on how to reduce energy demand across the sectors'-built environment in alignment with Scottish Government guidance and legislation including the Heat in Buildings pending legislation and where energy consumption cannot be avoided, where practical, ensure demand is switched to renewable / green energy where this is not already in place;
- Consider heat decarbonisation as appropriate for estates investment and actively engage in the development of alternate and low carbon heat sources to assist transition to net-zero;
- Build expert knowledge on how to finance the necessary change needed. Maintaining support for existing schemes such as SFC's Financial Transactions (HE);
- Strongly promote Behavioral Change (e.g. turn heating down, "Switch-off & Save", monitor out-of-hours energy use and undertake regular Energy & Lighting Audits to identify potential waste and savings

Sustainable construction and the efficiency of new and existing non-domestic buildings are factors that the University and Colleges sectors will consider as part of a robust climate strategy. Environmental impacts of buildings and infrastructure, including the GHG emissions that contribute to climate change, can be linked to all stages of a building's lifecycle. Extracting raw materials, transforming them into products, transporting them to site, the construction process, use and maintenance, and demolition and disposal activities all demand energy.

The sectors will adopt a systematic and hierarchical approach to minimising the impact of our built environment on the environment and integrate this approach into all related supply chain activity. This approach can be summarised into four activities:

- Firstly, we will minimise our overall demands on the environment by using our land, estate, spaces and assets to their fullest potential. We will continually challenge our holdings and usage of land, spaces and assets to ensure the right size and shape of our estate.

- Secondly, we will seek to maximise how our land, estate, spaces and other assets perform by optimising utilisation and efficiency, and by seeking carbon reduction through application of appropriate technologies. Ensuring our maintenance and operational strategies are aligned to enhance our climate friendly and resilient estate.
- Thirdly, we will minimise the carbon emissions of the energy that supplies our land, estate, spaces and assets. We will achieve this by exploring low-carbon energy generation and securing low-carbon utility sources, interfacing these with our building systems, and developing the appropriate estate energy distribution and storage networks.
- Lastly, we will mitigate and minimise the environmental impacts and unavoidable by-products of our necessary estate activities. This includes carbon, waste and displacement of nature. Through robust environmental accounting, we will have an informed basis for our offsetting requirements.

Catering

Catering is one of the major sources of GHG emissions in the University and College sectors. Food production, consumption and disposal have a significant role in causing climate change, being responsible for between 15-30% of UK GHG emissions. Most emissions are thought to come from food production associated with agriculture. Other components such as food transport, processing and waste account for a smaller, but still vital, share. The University and College sectors will continue to build understanding of and assess the environmental impacts of catering. The sector will take steps to minimise these emissions that derive from food.

In delivering positive change in relation to the impacts of climate change through delivering catering provision, the University and College sectors will:

- Ensure that Framework Agreements are put in place / maintained, that provide as a priority, an easy / simple cost-effective route to market for catering needs that enable and encourage lower GHG emission options and provide transparency over the impacts attributed to purchases under the agreements.
- Sourcing food / produce locally, where appropriate and where to do so would reduce GHG emissions and the wider negative impacts of food miles (noting that the most local food is not always that with the lowest GHG impacts).
- Adopt seasonal produce policies where possible and in such cases, avoid purchasing food when it is not in season, and undertake menu planning accordingly.
- Expand provision of lower meat volume menus and reduce meat / ruminant offerings with high GHG emission impacts across all days of provision
- Maximise utilisation of sustainable produce: for example, using only MSC accredited Fish.
- Encourage the use and purchase of Organic Produce to protect fragile ecosystems
- Implement where possible “optimised-in-time” delivery, minimising refrigeration requirements and stock while balancing this with minimising numbers of deliveries. The sectors will plan and coordinate with each other to enable a reduction in GHG emissions through the consolidation of deliveries (institutions will look to reduce deliveries and/or work collaboratively on delivery dates with neighbouring Institutions).
- Ensure suitable selection criteria is applied to encourage use of suppliers who offer increased sustainability benefits.
- Implement measures to reduce and/or ban single use beverage containers.
- Stop buying any food products / material that have been airfreighted
- Utilise the [TUCO emissions calculator](#) for preparing menus and / or for detailed reporting on GHG emission impact.
- Provide simple (e.g. red / amber / green) GHG emission flags against menu options so that staff and students can make quick informed decisions over their food options.

Furniture

It is critical moving forward that the sector views furniture as a long term asset, not as a disposable commodity and that the carbon impact of that asset be viewed across its whole life, from its creation to its disposal, with options such as repair, refurbishment and remanufacture reviewed prior to purchase of new product, which could result in over three times the tonnes of avoided CO₂ (tonnes equivalent) and CO of the product's own weight.

In delivering positive change in relation to the impacts of climate change through the acquisition and use of furniture, the University and College sectors will:

- Apply a default strategy of re-use, repair, or upcycling of existing furniture rather than replace.
- Where it is not possible to choose remanufactured/refurbished over new products, the University and College sectors will:
 - Ensure that Framework Agreements are put in place / maintained, that provide as a priority, an easy / simple cost-effective route to market for furniture needs that enable and encourage lower GHG emission options and provide transparency over the impacts attributed to purchases under the agreements.
 - Specify products from sustainable sources, measuring the level of recycled components and sustainable characteristics, while being aware that recycling does not always result in a reduction in GHG emissions
 - Consider design characteristics for durability of use, re-use, repair, upgrade, upcycling, remanufacture and recycling, and low impact manufacturing options including the level of recycled materials utilised.
 - Seek minimum warranties and guarantees around availability of spare parts and / or maximise purchase of furniture using modular and / or adaptable construction methods to provide maximum lifespan.
- For products being replaced or considered to be at their end-of-life, options for re-use will be investigated both internal and external to the sectors, including via existing supply chains, and if this is not feasible, the purest and most effective forms of recycling, including back into the supply chain, sought.
- To encourage utilisation and development of circular economy solutions, the University and College sectors will put in place / maintain Framework Agreement(s) and / or circular economy shared service options that provide an easy / simple cost-effective route to market for furniture refurbishment needs that enable and encourage lower overall GHG emissions and provide transparency over the impacts attributed to this circularised economy approach.
- Make appropriate use of sustainable Take-Back schemes.

Information Technology / Services (IT/S)

The use and critical role of ICT hardware, software and digital content is increasing with time as the institutions undertake programmes of digital transformation to equip the sector to deliver world class education in the digital age. Information technology is key to enable the delivery of remote teaching, streaming of lectures, provision of virtual learning environments, research content and storage. Accessible digital content is also crucial in terms of education.

There has recently been an explosion in the demand for mobile devices due to the pandemic and the migration to a flexible office and study environment, with additional funding for devices also having been provided to the sector to support students and address digital inequality. One significant impact of this digital transformation is a huge increase in demand and use for IT equipment, which in many instances involves large and complex supply chains, which impacts on efforts required to achieve net zero. Global eWaste is estimated to be over 50 million metric tons, which is forecast to continue to increase annually unless checked.

The increase in demand for ICT equipment increases the CO₂ emissions in the supply chain and the use phase. There are, if managed appropriately, some significant potential offsetting benefits provided by digital enablement, such as the reduced need for travel and carbon savings provided by connected classrooms and paper reduction. There are also many steps that will be taken to find the most efficient method of IT/S deployment. However, it is not yet fully understood what the impact of digital transformation is on CO₂ emissions (and wider environmental impacts, water use etc, and human rights impacts), and this is likely a complex area which will require further detailed work. Studies and research will be encouraged to understand what good behaviour looks like and to help us answer what is the optimum IT/S ecosystem with regards to the goal of net-zero. Research will be planned and undertaken to determine if increased use of cloud services is simply passing the responsibility down the supply chain or creating a more efficient environment.

The University and College sectors will apply as appropriate the following activities in addressing these issues:

- Ensure that Framework Agreement(s) and / or circular economy shared service options, are put in place / maintained that provide, as a priority, simple cost-effective routes to market for IT hardware purchases and refurbishment needs that enable, specify and encourage lower overall GHG emissions and provide transparency over the impacts attributed to the purchase / circularised economy approach as applicable.
- Ensure hardware available from framework agreements are energy efficient – and specify eco label such as EPEAT, TCO where possible.
- Develop an efficient process for circular procurement on IT hardware, to enable institutions to gain GHG savings and cost savings through redeployment.
- Encourage that goods supplied to the sector have a “right to repair” and are designed to enable repair and modular upgrade either within institutions or through circular economy solutions.
- Demand that suppliers provide take back options to encourage recycle and reuse.
- Challenge the market to increase where appropriate the availability of spare parts for longer periods of time.
- Work with suppliers to understand the supply chain map and identify any areas of vulnerability to Climate change (e.g. 2021/22 semiconductors shortages caused by droughts in Taiwan).

- Challenge suppliers to reduce emission in their own supply chain, for example, to invest in renewable energy throughout the supply chain.
- Challenge suppliers reuse content of goods within the supply chain.
- Develop enhanced understanding of GHG emissions used in cloud hosted environments, software and streaming products and recommend / adopt ways to reduce CO2 emissions through low carbon supply chain and optimisation of use.
- Reduce data centre GHG impacts by implementing / reviewing data retention strategies that mean data will be held in as low impact form as possible for only as long as it is needed to be retained for legal or operational reasons.
- Institutions will review policies and practices to limit the number of devices in use per staff member to the minimum and provide guidance in efficient technology equipment utilisation to students.
- Institutions will deliver policies that address digital wellbeing and digital poverty so that the full environmental benefits of optimal use of technology can be achieved by all staff and students having equitable access to relevant technologies.

Laboratories

Laboratory spend makes up one of the largest (but with comparatively lower levels of wider awareness) areas of supply chain GHG emissions in the University and College sectors (primarily but not exclusively in relation to HE). STEM activity in the sectors is driven by research and by teaching needs. Laboratories are a complex area with the GHG impacts coming from the use of consumables (many currently single use), the manufacture of complex equipment with specialist technology, research matter (covering a myriad of materials) and chemicals. Work is under way to explore GHG emission reductions in this spend, detailed work will be undertaken between procurement professionals and those managing lab environments to deal with the challenges faced.

These include grant conditions that can limit effective use of equipment across projects (leading to duplicate procurement of under-utilised equipment etc) with spend often having to occur in isolation, the need for cutting edge equipment, and due to the complexity of spend, large number of suppliers making large numbers of deliveries on a daily basis to each of Scotland's Universities and Colleges.

The University and College sector will apply as appropriate the following activities in addressing these issues:

- Ensure that Framework Agreements are put in place / maintained, that provide as a priority, an easy / simple cost-effective route to market for laboratory needs that enable and encourage lower GHG emission options and provide transparency over the impacts attributed to purchases under the agreements.
- Ensure Framework Agreements (where practical/desirable), include an option to take advantage of a Low-Carbon or Carbon neutral delivery/servicing/operation model. (e.g. fully managed service.)
- Encourage greater use of post-Framework activity to select a smaller volume of suppliers and to work with them to minimise the frequency of delivery events.
- Promote the use of whole-life cost & impact models in Labs procurement with focus on energy efficiency in usage (requiring suppliers to provide energy performance data where appropriate) and in end-of-life decisions. APUC will collate energy efficiency etc.
- Reduce the need to purchase new equipment:
 - Influence suppliers to consider serviceability/upgradeability when designing new products.
 - The operating life of instruments will be extended wherever possible.
 - Explore opportunities for re-use/re-homing/repurposing of redundant equipment.
 - Leverage/promote locally hosted equipment databases where they exist. Provide a platform where they do not. (using the knowledge capability derived from edam.ac.uk; WARPi; equipment.data.ac.uk etc)
 - Mandate extended product lifetimes by contract conditions where possible and appropriate (e.g. mandate spares availability of 7 years following EOL announcement)
- Encourage the centralised ownership / control of Lab equipment. Such a measure will enable more effective management of servicing/maintenance/operations.
- Explore and implement circular economy solutions and sterilisation services for lab equipment to reduce wherever possible the use of single use laboratory consumables and equipment.

Travel & Transport

Due to the international scope of the University and College sector's reach, travel is one of the principal sources of carbon emissions in the Higher and Further Education sectors. Due to the nature of the sector, international travel is an important part of delivering the sectors' objective of teaching, research and exchange of ideas.

Another consideration is the impact of international travel of foreign and UK students. In addition to this are the impacts of staff and student commuting. The Scottish Higher and Further Education sector recognises that this is unsustainable and is making efforts to understand and address the environmental impacts of travel. Individually and collectively institutions are taking steps to minimise emissions from travel and become more carbon conscious. Attempts are being made to measure the impact and change behaviours and ways of working to create a better travel culture. As noted earlier however, travel not funded by institutions is out of scope of this Strategy, some aspects of these factors however are touched on below however as there is a degree of cross-over between institutionally funded and independently funded travel.

The University and College sectors will apply as appropriate the following activities in addressing these issues:

- Ensure that Framework Agreements are put in place / maintained, that provide as a priority, an easy / simple cost-effective route to market for travel needs that enable and encourage lower GHG emission options and provide transparency over the impacts attributed to purchases under the agreements.
- Creation of tailored, challenging GHG reduction targets and monitoring.
- Discourage increasingly, access for vehicles with internal combustion engines from campuses, stipulating CarbonE neutral delivery fleet from as early a date as possible (this will vary depending on the location of institution).
- Promote and incentivise (via salary sacrifice schemes etc) where appropriate active travel and low GHG transportation.
- Promote blended learning and hybrid working to reduce commuting.
- Advocate alternatives to single passenger car journeys and unnecessary air travel including restricting funded staff and student air travel within the UK where viable land transport options exist.
- Engage with students and staff to understand needs and address them.
- Eliminate unnecessary travel and use technology to replace travel where possible and practical.
- Raise Awareness of the environmental impacts of travel, providing GHG impacts of different travel options to travellers and line managers to enable informed lower GHG impact choices to be made.
- Use financial incentives and disincentives to nudge traveller behaviour towards lower GHG options including through travel policies that prohibit the use of high CO₂ personal vehicles on sector business.
- Exploit / commit to regional, national and international collaboration to share best practice and lobby for change, including working in partnership with funders to the sectors to broaden the impact and consistency of approach.
- As a last resort, offset GHG emissions from travel when it is necessary using effective and robust approaches.

Climate & Ecological Change - Adaptation

The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as "*adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities*".

As well as seeking to reduce emissions and minimise environmental damage the University and College sectors recognise that there will be a need to adapt to climate change that has already taken place and will continue to do in the coming years. Changing weather patterns and rising sea levels may lead to a range of increasingly challenging seasonal conditions from hotter, drier summers to increased risks of flooding in winter. There is a need to take early action to adapt in order to increase resilience and reduce risks. The sector will seek to address adaptation. The steps required to adapt can vary depending on local circumstances. It will be important to look at risk and options assessment as well as implementation, monitoring and review.

Specifically, in relation to supply chain (and in addition to that set out in the Construction section above), the University and College sectors will:

- Develop future new adaptation related needs (modified and new) into long term specifications / supply planning for local and collaborative procurement and collectively share emerging knowledge across sectors and wider partners.
- Adapt specifications for existing requirements to take account of the need to address adaptation.
- Build adaptation related supply chain risks into institutional risk registers.
- Make more use of multiple source / multi-region strategies (while being aware of increased risk from lengthy supply chains) to build resilience.
- Adapt sourcing plans to limit risk from lengthy more volatile supply chains that will become increasingly unreliable as the impact of climate change increases.

Sector Reporting Approach / Tools

The University and College sectors will report on progress against this Strategy using a variety of means, including:

- The University and College sectors will provide (coordinated by APUC) an annual report on activity against objectives at a summary level.
- Institutions and APUC will report on activity addressing the Climate and Ecological Emergency within their annual reports in line with Scottish Government requirements.
- APUC will on behalf of, and for the sectors, manage a supply chain emissions reporting tool for use within the sectors, using the UK Government DEFRA methodology (or an alternative if the government standard changes) which will provide annual reports on GHG emissions at institution, category and supplier levels.
- Where climate related objectives are included within strategies led by the CDN-CEEG or by USECEC, these organisations will report on progress in line with their normal reporting protocols.
- Institutions will produce for each relevant PIACC area relevant to them, FNT2030 Category Action Plans and report on the status of these at least annually.

Sector Leadership Endorsement of this Strategy

As noted above, this Strategy has been co-developed by a broad range of senior stakeholders / stakeholder groups across the University and College sectors in Scotland (please see Annex 1). This collectively developed Strategy has then been endorsed by the USECEC and the CDN -CEEG, with final endorsement provided by the most senior level of leadership across both the University and College Sectors, the Principals of the institutions from each sector, facilitated by their representative bodies Universities Scotland and the College Development Network.

The Strategy will be reviewed and updated periodically with the timings for this informed by the USECEC and the CDN -CEEG.

Annex 1 – Co-Developers Group

The following people were responsible for co-developing this strategy (either by involvement in the core development group or contributing to sub-groups):

Procurement / Supply Chain Experts – Procurement Strategy Groups

Kate Murray – Queen Margaret University
Fiona Hughes – University of Strathclyde
Charles Kennedy – City of Glasgow College
Andy Anderson – APUC (Estates)
Michael McLaughlin – APUC (IS)
Brian Dearden – APUC (Labs)
Steve Connor / Rica Bieke – APUC (Responsible Procurement)
Louise Levens – APUC (Catering)
Angus Warren – APUC CEO (Chair of Group)

Experts from (Non-Procurement) Relevant Professional Groups / Areas

Estates / SAUDE – Roddy Yarr – University of Strathclyde
Estates / SAUDE – Mark Simpson – University of St Andrews
Estates / SAUDE – Rose Jenkins – University of Dundee
Estates – Fergal McCauley – City of Glasgow College
Estates - William Curry – Dumfries & Galloway College
Catering – Steven McKay – University of St Andrews
Information Services / HEIDS – Brian Henderson – University of Aberdeen
Sustainability – Spela Raposa – Zero Waste Scotland
Sustainability – Fraser Lovie – University of Aberdeen
Sustainability – Matt Woodthorpe - EAUC
Sustainability – John Keenan – Glasgow Colleges Region