Heriot-Watt University Strategy 2025 Global Environmental Sustainability

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Purpose of the paper

Heriot-Watt Strategy 2025: *Shaping Tomorrow Together* identified Environmental Sustainability as one of its selected Strategic Performance Indicators (SPI). *Strategy* 2025 recognised that "in addition to ensuring delivery of statutory environmental requirements across campus locations, we will develop: globally relevant targets for our emissions; revisit our organisational practises and behaviours; and, importantly, to quantify the net societal and global impact of flagship ground breaking research projects and policies."

Building on input from our university community, this paper presents our implementation plan to achieve the SPI of a **Pioneering Sector Leading Approach to Global Sustainability**. It utilises information collected through the Watt Forum discussions in 2019, Climate Action Week 2019, as well as workshops/presentations to UE, ULF and Court in 2019. In addition, in 2020 we established the Global Environmental Sustainability Group to lead the development and implementation of the policies, strategies and plans relating to global environmental sustainability that are presented here. As we implement this plan and further develop our objectives, we will continue engaging our Heriot-Watt community in the co-creation and ownership of the actions.

The core of the plan is the adoption of 10 institutional commitments that form the basis through which we will demonstrate our global leadership to our community and international stakeholders.

Each of these commitments requires a series of actions which require leadership and resources to deliver. A full list of actions will be developed following approval of the necessary institutional commitments. By way of an example, the paper includes a list of actions that are already underway either as business as usual (due to our statutory obligations) or to support the delivery of other elements of *Strategy 2025*. Some of these actions can be delivered with existing resources, however, where additional resource is required this will form part of the 2021/22 strategic planning discussions.

The Court is invited to **comment** on the commitments and **approve** these as the basis for the implementation of our Pioneering Approach to Global Sustainability.

In addition, in preparation for these discussions, a document has been previously circulated, that contains important background information on current obligations, policies and thinking on the route to NetZero (Appendix A2).

Structure of the paper

We have structured this paper to present first **our ambition** to pioneer a sector leading approach to global environmental sustainability (Section 2). This ambition is catalysed by **our commitments** that will be delivered through a series of actions (Section 3). In addition, we have included Appendix A1 that presents different scenarios for achieving NetZero and background reference material (Appendix A2).

Our Ambition and Commitments

A University is its people. We know that our community (students, staff, alumni and wider business and community partners) are eager to utilise their skills, time and resources to achieving global environmental sustainability.

Our University strategy is built on our strong heritage and future ambition to be purpose driven and values led. Global environmental sustainability is one area within our Strategy where we can and need to demonstrate much stronger leadership and fortitude. As a global charity with responsibilities and opportunities we must lead out on making change happen to achieve Global Environmental Sustainability. We have a unique opportunity to do this as a global organisation that:

- graduates some 6,500 students annually,
- researches in areas of direct relevance to sustainability,
- has an appetite to engage with radical innovation to shape and drive solutions and
- can use the capacity of our 140,000 global alumni to influence worldwide.

Therefore, as a pioneering and global university, our ambition is to take a distinctive lead in defining the route to global sustainability. At the core of our ambition, we will be utilising our global presence, linked to our educational and research excellence to make a significant impact in the attainment of the United Nations Sustainable Development Goals (SDGs). In particular, our approach will focus on SDG13 Climate Action and related SDGs, where we will deliver a suite of actions covering – how we as an organisation will achieve NetZero Carbon emissions and by what date; aligning the power of our global presence in education and research to enable society to achieve NetZero carbon. During 2020 we have refined our ambitions, to create a road map for implementation, which is based upon the following commitments.

Our commitments

Our 10 institutional commitments are listed here.

Leadership Through Action:

- 1. We will inform, empower and support our global community in taking personal and collective action to assist in delivering the SDGs.
- 2. We will commit to achieving NetZero carbon emissions by a suitably ambitious date, between 2030 and 2035 depending on outcome of detailed planning.
- 3. We will support our signing of the *Sustainable Development Goal Accord* at an institutional level.

Thought Leadership and Foresighting:

- 4. We will utilise the convening power of Panmure House to promote discussion and debate to encourage fresh thinking on how to achieve the SDGs.
- 5. We will challenge ourselves, industry and national governments to achieve progress towards the SDGs.
- 6. We will adopt a Strategic Environmental Assessment (SEA) process.

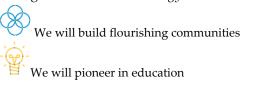
World Leading Research, Teaching and Enterprise:

- 7. We will map and align our global presence in educational excellence and world-leading research with the UN SDGs
- 8. We will create a *Global Research Institute in NetZero Carbon* aligned with an international *Skills Academy for "green jobs"*.
- 9. We will demonstrate and quantify the potential global impact of the radical innovations in research and policy.
- 10. We will seek to develop an enterprise accelerator programme to support start-up companies with radical approaches to carbon innovation.

Actions and timelines against each of these commitments will now be considered, below.

Our Approach: Actions and Delivery

This Section includes actions and timeline to deliver our commitments. We have mapped these to the strategic themes of our *Strategy 2025*.





We will be a globally connected University



Commitment 1: We will inform, empower and support our global community in taking personal and collective action to assist in delivering the SDGs.

Action 1: Develop an engagement and outreach plan (including e.g. surveys, digital platforms, Watt Forum, COP26, etc.) to advocate the positive impacts of personal action.

Delivery: The 2019 Watt Forum confirmed a strong HWU community desire to take personal action to advocate the positive impacts of personal action, such as recycling, mode of travel, energy saving behaviours etc., while recognising that these, whilst helpful, will not address the global challenge. Starting in Q4 2020/21, the Associate Principal (Global Sustainability) will work with the Marketing and Communications Directorate and Heriot-Watt Engage team to develop our engagement and outreach plan and required resources to be approved from Q1 2021/22.

Resources: Staff support for engagement and internal/external outreach and other associated costs will be included in the 2021/22 financial plan for a Q1 start.

Action 2: Provide our global community (students and staff) with the opportunity to study for a micro-credential in sustainability, incorporating best practices around education for sustainable development.

Delivery: The Deputy Principal (Education and Student Life) with the UCLT will investigate the practicality for providing a micro-credential in sustainability during Q1-Q2 2021/22 with the intention of launching this programme in Q1 2022/23. *Resources:* To be identified following investigation study in Q1-Q2 2021/22.



Commitment 2: We will commit to achieving NetZero carbon emissions by a suitably ambitious date, between 2030 and 2035 depending on outcome of detailed planning.

Action 3: Develop a detailed NetZero Plan, including establishing data collection and reporting processes and setting appropriate intermediate emission reduction targets, including our approach to offsetting residual emissions. *See Appendix A1- Scenario modelling and resource requirements.*

Delivery: From Q4 2020/2021 and on-going till reaching NetZero, the Operations Manager (Energy, Environment & Sustainability) will lead this activity, including establishing data collection and reporting processes and setting appropriate intermediate emission reduction targets. The plan will also detail climate change adaptation / resilience planning arrangements and define the University's approach to offsetting residual emissions.

Resources: Engineering consultancy support low/zero carbon energy master planning / heat feasibility, building fabric upgrades prioritisation, local renewable energy scheme

feasibilities for Dubai / Malaysia will be required and included in 2021/22 planning round discussions.

Action 4: Support relevant sustainable commitments, such as Global Universities and Colleges Climate Letter.

Delivery: The Associate Principal (Global Sustainability) and the Operations Manager (Energy, Environment & Sustainability) will review practices and make recommendations to UE regarding becoming a signatory to relevant sustainable commitments (Appendix A2) – to be completed in Q1 2021/22.

Resources: UN SDG reporting & Environmental Officer, will be included in the 2021/22 financial plan for a Q1 start.



Commitment 3: We will support our signing of the Sustainable Development Goal Accord at an institutional level.

Action 5: Develop an updated Environmental Policy Statement to reflect our sustainability aspirations and commitment to environmental compliance and with reference to the UN SDG's.

Delivery: The SDG Accord represents a commitment by international educational institutions to delivery of the goals and to report annually on progress. Signatories of the accord also share the learning with each other both nationally and internationally and report their performance against the metrics to an annual UN High Level Political Forum. Our existing Environmental Policy Statement was developed in 2012 and needs to be significantly updated. The University Operations Manager (Energy, Environment & Sustainability) will lead this activity in consultation with the Infrastructure Services Management Board and the Infrastructure Committee with a view for Court approval by Q1 2021/22.

Resources: UN SDG reporting & Environmental Officer will be included in the 2021/22 financial plan for a Q1 start.

Action 6: Harmonise sustainability planning across campus locations via global policies / local action plans addressing core sustainability areas and SDGs.

Delivery: From Q1 2021/22, the University Operations Manager (Energy, Environment & Sustainability) with support from RED and sustainability leads at each campus will work to harmonise global policies and local action plans.

Resources: Need appointment of sustainability leads at each campus - internal support.



Commitment 4: We will utilise the convening power of Panmure House to promote discussion and debate to encourage fresh thinking on how to achieve the SDGs.

Action 7: Through the Hutton Series we have identified ten radical actions we need to do as a University community to become globally sustainable.

Delivery: The Hutton Series on Climate Change was launched in October 2020 and comprises a series of events taking place across 2020/21 at Adam Smith's Panmure House, bringing together a diverse cross-section of experts, business leaders, scientists, and concerned citizens in the service of one simple aim: to identify ten key priorities, innovations & actions to mitigate the climate crisis. The Hutton Series are coordinated by the Bicentennial Research Professor - Environmental Governance and Diplomacy.

To date, two Hutton Series events have been held – the first (October 2020) set out the challenge by debating "what should we (HWU) and we (globally) do to address the issues that we are facing in this world where the climate is changing?" and the second (December 2020) solicited views from the financial sector on its role in mitigating climate change.

Resources: Already allocated in 2020/21; follow up plans will be developed and budgeted for inclusion in the 2021/22 financial plan.



Commitment 5: We will challenge ourselves, industry and national governments to achieve progress towards the SDGs.

Action 8: We will enter the Times Higher Education Impact Rankings for Global Sustainability in 2022.

Delivery: Aspects of our activities cover all the 17 SDGs and we will identify which of these our research and teaching strengths will have the greatest impact upon. Here, we will develop reporting methodologies and data collection processes in relation to several aspects of HWU operations and engagement / outreach to enable and support HWU submission to *THE University Impact Ranking*. Work will start from Q1 2021/22 led by the Associate Principal (Global Sustainability), supported by the Planning Office and RED and with a view to enter our submission in Q2 2021/22.

Resources: Staff support in the Planning Office for underpinning co-ordination, marketing and communications will be considered in the 2021/22 planning round for a Q1 start.

Action 9: Develop processes to identify and prioritise opportunities to showcase our sustainability research outcomes at each campus in support of our NetZero target and broader SDGs.

Delivery: The Deputy Principal (Business and Enterprise) supported by the Enterprise team will develop the processes to be in place from Q2 2021/22.

Resources: Resources for this action have yet to be quantified.

Action 10: Establish in partnership the *Pioneers in Global Sustainability Award* recognising successes towards NetZero.

Delivery: The Associate Principal (Global Sustainability), Deputy Principal (Research and Innovation) and supported by RED will develop this activity with a view to launch the award in Q4 2021/22.

Resources: Resources for this action have yet to be quantified



Commitment 6: We will adopt a Strategic Environmental Assessment (SEA) process.

Action 11: Establish processes to use SEA information in decision-making and preparation of policies and plans so we can ensure high level of protection of the environment and to promote sustainable development across all our activities.

Delivery: During Q4 2020/21, a team led by the Associate Principal (Global Sustainability) and the Operations Manager (Energy, Environment & Sustainability) will review practices for adopting SEA process (e.g. <u>Scottish Government SEA</u> <u>Gateway</u>), and develop a plan for implementation supported by appropriate training

from Q1 2021/22. The established process will ensure that papers to senior boards / committees include consideration of Net Zero / sustainability impacts alongside existing processes for consideration of impacts on e.g. privacy / equality, etc. *Resources:* UN SDG reporting & Environmental Officer will be included in the 2021/22 financial plan for a Q1 start; and Environmental and Management Systems (EMS)



Commitment 7: We will map and align our global presence in educational excellence and world-leading research with the UN SDGs.

maintenance and recertification (formal external every 3 years).

Action 12: Develop a new on-line masters qualification programme on Sustainable Business Practice.

Delivery: The Deputy Principal (Business and Enterprise) is currently leading the development of this programme with a view to be officially launched in Q1 2021/22. *Resources:* Resources for the launch of the programme will be included within the HW-Online budget.



Commitment 8: We will create a Global Research Institute in NetZero Carbon aligned with an international Skills Academy for "green jobs".

Action 13: Develop and agree the business case for the *GRI in NetZero Carbon* that will include the Net Zero Demonstration Hub.

Delivery: Building on the success of our national leadership and successful bid to host the UK's Industrial Decarbonisation Research and Innovation Centre (IDRIC), we will create a Global Research Institute (GRI) in NetZero Carbon. The activities of the GRI in NetZero Carbon will go beyond industrial decarbonisation and undertake research aligned more broadly to net zero on each of our campuses. The Deputy Principal (Research and Innovation) supported by RED is currently developing this plan to be submitted for approval in Q4 2020/21. The implementation of the successful business case is expected from Q1 2021/22.

Resources: Request for resources via business plan to be submitted for approval.

Action 14: Develop proposal for Skills Academy for green recovery, aligned with the *GRI in NetZero Carbon* business case.

Delivery: The Deputy Principal (Business and Enterprise) will lead this activity from Q4 2020/21. This will also consider the development a programme of secondments and placements for "green jobs".

Resources: External resources will be sought to support this activity.



Commitment 9: We will demonstrate and quantify the potential global impact of the radical innovations in research and policy.

Action 15: Develop processes to quantify the decarbonising impact of our research and policy innovations within our campus locations and broader decarbonising impact following potential global implementation.

Delivery: The Associate Principal (Global Sustainability) with support from the EPSRC IAA account will start this activity from Q4 2020/21 and continuing thereafter. Initial areas for consideration include aviation fuels, green logistics, geoenergy, low-carbon

technologies, sustainable buildings, fisheries. In this way, we will promote their adoption globally and demonstrate our leadership and the potential value of our research.

Resources: NetZero Impact Officer covered under the EPSRC IAA account from Q4 2020/21 to Q1 2021/22.



Commitment 10: We will seek to develop an enterprise accelerator programme to support start-up companies with radical approaches to carbon innovation.

Action 16: Working in partnership with GRID and Converge Challenge, implement pilot programme.

Delivery: The Deputy Principal (Business and Enterprise) will lead this activity from Q1 2021/22.

Resources: External resources will be sought to support this activity.

Action 17: Roll out programme across all global locations.

Delivery: The Deputy Principal (Business and Enterprise) will lead this activity from from Q3 2021/22.

Resources: External resources will be sought to support this activity.