

Climate Action Framework Principles

Keele University has had a strong institutional level commitment to sustainability and climate action for over a decade across all aspects of its operations, education, research, its campus, staff and student community and wider external engagement. Keele is recognised as a sector leader for its whole-institution holistic approach to sustainability, embedding sustainability in everything we do.

In May 2019, Keele University Council declared a climate emergency and committed to an ambitious target of reaching carbon neutrality by the year 2030.

Carbon neutrality, also referred to just as 'net zero', means balancing emissions of greenhouse gases with removal of emissions from the atmosphere. Reducing emissions must be the focus, as opportunities to balance current levels of emissions are limited. Some organisations have pledged to go further, removing more emissions than are emitted.

Climate change may be the greatest challenge the human race has ever faced. Urgent action is required globally to reduce the release of greenhouse gases that causes global heating and drives climate change. In addition we need to manage our land better so that natural processes can help remove more carbon dioxide from the atmosphere and lock it up in storage in our soils and vegetation. The United Nations' Paris Agreement in 2015 aims to keep the increase in global average temperature to well below 2°C of pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C. If we don't reach these targets it will have catastrophic consequences on the planet's natural systems which we rely on for our health, wellbeing and prosperity. Science-based target setting is required to align our strategies with the Paris Agreement goals.

'Climate action' is also one of the UN's Sustainable Development Goals, with implications to and interactions with, all of the other 16 goals, which form a road map to a better, more sustainable and equitable future. This highlights that tackling climate change does not sit in isolation to all of the other pressing agendas in society and as a university, but it is part of them.

The 'decade of action' required to combat runaway climate change has necessarily and inevitably been impacted by the response to the Covid-19 pandemic. As a society we need to ensure that our recovery from the pandemic is framed around 'building back better' and a 'green recovery', allowing for building back the economy at the same time as moving towards our net zero targets at the pace that the science requires of us. As a University we want to not just play our part in this 'green recovery' but to be at the forefront of leading it.

We have already made significant progress to reduce our carbon footprint and achieved our 2020 absolute carbon reduction target of 34% based on 1990 levels a year early, despite the university having undergone very substantial growth in the last years. The major new renewable energy development on campus, with the installation of up to 26,000 solar photovoltaic panels installed in the campus grounds, two wind turbines and a battery storage capability, will significantly reduce our carbon emissions associated with electricity.

Our Institute for Sustainable Futures is increasingly driving research into issues such as climate change, food security and clean energy on a local, national and global scale. Our world leading Smart Energy Network Demonstrator (SEND) and the HyDeploy trial are

landmark projects using our campus as a genuine living laboratory to test and evaluate how we can decarbonise our energy systems.

Tackling climate change requires international as well as national and local action. As a University with a leading profile in driving sustainability developments and initiatives, and as an anchor institution in the region, we can take a lead in transitioning to become a net zero carbon organisation and also support others to do so through our knowledge, influence and engagement. Only by working together can we tackle this global challenge.

Our Climate Action Framework Principles represent our high-level strategy for meeting our commitment to tackling climate change.

Our Climate Action Framework principles

Our Climate Action Framework principles builds on our Environmental and Social Sustainability Policy commitments which set out our objectives to embed sustainability in all that we do and how we endeavour to contribute to the UN Sustainable Development Goals. We will take a whole University approach to tackling the climate crisis including within our research, education, our own carbon emissions, the use of our land and estate, and through university partnerships and governance.

Our climate action framework aims to ensure that we:

- 1) **Produce** our own low carbon energy on site
- 2) **Reduce** our carbon emissions throughout all areas of our activities and operations across scopes 1,2 and 3
- 3) **Remove** carbon dioxide emissions from the atmosphere by maximising the use of our natural environment to increase the drawdown of carbon and maximise its long-term storage in our plants and vegetation.

Keele University commits to:

1. Operational Carbon Emissions Reduction

To achieve Net Zero carbon emissions by 2030, which includes our campus operational emissions (scopes 1 and 2) and indirect emissions such as commuting, business travel and procurement (scope 3), building in the processes to measure these emissions in a meaningful way, and ensuring decisions around the university estate are made with a net zero future in mind.

2. Research and Innovation

Have world-leading research in environmental and social sustainability supporting the transition to the net zero carbon economy and enable students, researchers and innovators to use the campus as a genuine 'living laboratory' for climate action research and innovation projects, as well as raising public awareness. We must also commit to considering and acting upon the carbon and wider sustainability impacts of *how* we do our research.

3. Education and Learning

Ensuring that all our students from Foundation year to Postgraduate Research students have climate-related learning embedded into their programmes of study and working with the Students' Union, into co- and hidden curriculum opportunities,

empowering them as future leaders to contribute to achieving a net zero society both now and in the future. We also commit to delivering pedagogically innovative teaching practices to reduce carbon emissions.

4. University Strategy and Governance

Ensuring there is clear leadership and governance for implementation of the Climate Action Framework principles, with climate (and wider sustainability considerations) a key requirement of decision making processes and built into university governance at all levels, with climate-related actions a key area of responsibility for all managers and leaders of Schools and Directorates.

5. University Finance

Ensure that supporting a net zero carbon society and economy is a key requirement in all University investments and funding decisions, including working with other stakeholders such as pension providers.

6. International Engagement

Have a strategy for international engagement and partnerships that supports a net zero carbon transition.

7. University community engagement and awareness

Engage with staff, students and the wider community to support behavioural and cultural changes to reduce carbon emissions and ensure our climate actions are inclusive and contribute to the health and wellbeing of our staff, students and wider society.

8. Leadership and collaborations and climate advocacy

Communicate to our key partners on our climate action commitments and encourage collaborations on transitioning to a net zero carbon society and economy. Ensure our communications raise public understanding and engagement with the climate emergency and urgent need for action.

9. Land-based carbon sequestration and storage

Managing and making decisions on the natural resources of our estate to maximise the drawdown of atmospheric CO₂ and enable its long-term storage within our soils and vegetation, and consider the carbon implications of any disturbance to soils and vegetation.

10. University communications

Ensure that the university's climate emergency commitments are a regular part of university communication, to ensure engagement and leadership throughout the university.

11. Co-benefits and links to other agendas

Seek to ensure and communicate co-benefits between the Climate Action Framework and links to other agendas, for example the benefits to well-being, and links to decolonisation of the curriculum, race equality, global citizenship, and impact; as well as to deal transparently with tensions such as international travel and recruitment.

Implementation and Reporting on our Progress

The University Executive and University Leadership Group will ensure that our Climate Action Framework principles are communicated and reported at all levels of the University and that our commitments towards a transition to a zero carbon economy and society is embedded within governance structures.

We will communicate our Climate Action Framework principles with all staff, students and the Keele community and will engage with them to participate in developing climate action solutions.

We have identified priority actions to deliver our Climate Action Framework principles:

- a) Develop a costed Net Zero Carbon Reduction Plan by the end of 2021 for renovation of our estate and operations, including an evidence-based carbon trajectory that will enable us to track our progress and keep within our 'carbon budget', in line with the Paris Agreement objectives (while working to reduce our emissions as we develop the plan).
- b) Improve the data quality relating to the University's carbon emissions, recognising that this is a strategic tool to understand, track and systematically reduce our carbon footprint.
- c) Support our Schools and Directorates to develop their own plans and actions for achieving our net zero target.
- d) Deliver Carbon Literacy training to the University Leadership Group and other key staff as well as further roll-out to wider staff and students.
- e) Develop a climate emergency consultation process including development of a staff and student 'citizen assembly' on the climate emergency, alongside other forms of on-going participation.

Implementation and progress against our Climate Action Framework principles will be monitored and reported at the University Environment and Sustainability Steering Group (ESSG), which is chaired by Professor Mark Ormerod, Deputy Vice-Chancellor and Provost, and the institutional strategic lead for sustainability. Progress against our targets and implications to the university's decision making will be reported on a six-monthly basis to University Executive Committee, University Leadership Group, Senate and Council.