TACKLING THE CLIMATE CRISIS

A view from smaller and specialist universities and colleges

MAY 2023



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GuildHE is an officially recognised representative body for UK Higher Education, championing distinction and diversity in the sector. Our 60 members include universities, university colleges, further education colleges and specialist institutions, representing over 150,000 students. Member institutions include some major providers in professional subject areas including art, design and media, music and the performing arts; agriculture and food; education; business and law, theology, the built environment; health and sports.

Foreword

Tackling the climate emergency has been recognised as one of the most important issues of the day and is the key concern of young people.

Many universities have been at the forefront of climate research and addressing climate change over many decades and I'm proud of the role that GuildHE and its members have played in addressing these issues. There is, however, much more that can be done – both to tackle the climate crisis but also wider questions of creating a sustainable world in which we can live.

In recent years many organisations have broadened their engagement to include the biodiversity crisis or even more widely to consider the <u>UN Sustainable Development</u> <u>Goals</u>. The UN Sustainable Development Goals (SDGs) were adopted by the UN in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.



Anthony McClaran
Chair of GuildHE
Vice Chancellor
St Mary's University
Twickenham

The 17 SDGs are integrated – they recognise that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. It has often been commented that Climate Action is deliberately number 13 on the list as it can be difficult to tackle this without having previously having addressed the earlier goals.

The GuildHE strategy rightly talks about our values as an organisation and embeds sustainability right at the heart of this statement:

"We share the values of our members – ethical, inclusive and creative. We care about social justice and sustainability. We know higher education is transformative for individuals, beneficial to industry, local communities and wider society and believe it is a good thing in its own right."

In the 18 months since GuildHE ran its first survey mapping the engagement of universities and colleges in tackling the climate crisis we have seen a significant acceleration in activity. For example, the proportion of respondents agreeing that they had set a target for reducing greenhouse gases has increased from a third in 2021 to just under 50% in 2023. There has also been increased embedding of environmental sustainable development in the teaching curriculum and working with the local authority and partners to declare a climate emergency. There is, however, a recognition that we can do more with almost 60% of respondents saying that they were only partially happy with the rate and scale of their institution's progress.

Finally, thank you to the whole GuildHE team for their support to members on this and a range of other areas to tackle the UN Sustainable Development Goals and in particular to Dr Alex Bols for writing this report.

Executive Summary

In the 18 months since the previous survey of GuildHE member universities and colleges we have seen a significant acceleration in the engagement of universities and colleges across a number of areas.

- The proportion of respondents agreeing that they had set a target for reducing greenhouse gases has increased from a third in 2021 to just under 50% in 2023.
- A large number of institutions responded that they are currently updating their institutional strategy with 39% agreeing (up from 35% in 2021). An increasing number also agreed that they have a separate strategy — 16% up from 13%.
- Environmental sustainability is becoming more embedded across institutions with 45% responding that their strategy is overseen by an institution-wide committee, a jump from 27% in 2021.
- 45% of institutions responded that all investments must be ethical and environmental and another 41% responded that investments should consider the ethical and environmental dimensions.
- 68% of institutions responded that they had embedded environmental sustainable development in some or all of their courses.
- Almost all institutions replied that their students were engaged with this agenda at their institution. Over 60% agreed that there are some students involved in societies and leading green initiatives (up from 54%).
- The survey showed that over 60% have some engagement with their local community groups and businesses, with another 16% looking to expand activity.
- 53% said that their strategy was aligned to the UN SDGs. This is a significant increase since 2021 when only 29% agreed that they were aligned to the SDGs.
- 90% (27 out of 30) institutions responded that they had considered their energy provision. 80% had done a buildings audit (up from 75%).
- 80% of institutions have looked at procurement issues (up from 58%) and two thirds have considered campus biodiversity (up from 38%).
- The key barriers to further engagement are finances and the costs (cited by 84% of respondents) and 71% citing staffing.

Introduction

The universities and colleges within GuildHE have been tackling the climate crisis over many years. GuildHE has been actively supporting its members to share practice and collaborate to help accelerate the rate of change.

GuildHE helped found, and was an active member of, the Climate Commission for Higher and Further Education ¹, 2019–2021. The Commission, jointly established by Universities UK, Association of Colleges, EAUC – the Alliance for Sustainability Leadership in Education and GuildHE, co-ordinated approaches across the further and higher education sectors in the lead-up to COP 26. The Commission created resources for the sector including the <u>HE toolkit</u>, <u>sector targets</u> as well as gathering evidence and influencing Whitehall officials as they developed the Department for Education's Sustainability and Climate Change Strategy ².

GuildHE ran a survey of its members in Summer 2021 to gain a deeper understanding of where institutions were in their journey and the support that they would need from GuildHE. Following the survey we worked with EAUC to deliver a series of workshop sessions in Spring/Summer 2022 looking at providing targeted support for members around specific areas. In February and March 2023 we re-ran the survey to see what progress had been made over the past 18 months.

This report brings together the results from the survey, draws comparisons to the 2021 survey and showcases some examples of how our member universities and colleges have been addressing these issues at an institutional level. The 2023 survey received 31 responses from our member institutions, or a 52% response rate from GuildHE's 60 members. The increased response rate, up from 44%, or 24 institutions, from the then 54 members in 2021, suggests an increased engagement with these issues.

This report draws on the Climate Commission's Higher Education Toolkit ³ as a useful framework for the report. The Climate Action Toolkit considers five critical elements:

- · Leadership and Governance
- Teaching
- · Research and Knowledge Exchange
- · Community Engagement
- · Campus Management

We hope that you find this report helpful and an insight into the work of smaller and specialist universities and colleges in tackling the climate crisis.

- [1] https://www.eauc.org.uk/climate commission
- [2] https://www.gov.uk/government/publications/sustainability-and-climate-change-strategy
- [3] https://www.eauc.org.uk/climate action toolkit

Chapter 1: Leadership and Governance

The HE Toolkit starts by focusing on the important issue of Leadership and Governance within institutions and suggests six steps:

- 1. Governors and Senior Management Team (SMT) to speak out against the climate crisis
- 2. SMT to communicate to staff, students, alumni and other institutional stakeholders about the climate emergency and the importance of taking climate action
- 3. SMT to incorporate climate emergency actions into management and governance arrangements
- 4. SMT to conduct a data gap analysis to ensure data collection and measurement is in place to track progress
- 5. If you have direct investments in fossil fuels, SMT to set out and implement a divestment strategy
- 6. SMT to build the business case for positive investments in low carbon sectors of the economy

The survey looked at various different elements relating to Leadership and Governance including the institutional strategy, who leads on this area of activity, as well as questions of resourcing.

Institutional strategy

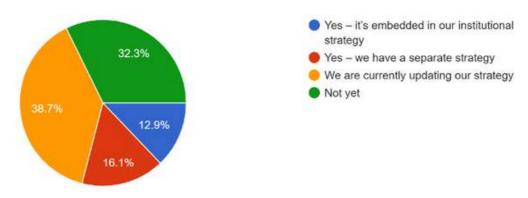
The HE Toolkit outlined a number of specific activities that could be taken by leaders and governors within higher education and in particular the importance of speaking out and communicating the importance of this issue. A key way of doing this can be through high level statements and strategies.

Chart 1 shows the responses to the survey on whether institutions have a strategy to tackle the climate crisis. The largest group of respondents outlined that they are currently updating their strategy with 39% agreeing (up from 35% in 2021).

There were varying responses about the extent to which this strategic approach was embedded in their institutional strategy, whether they have a separate strategy, if they are in the process of updating the strategy or whether they do not currently have a strategy.

An increasing number also agreed that they have a separate strategy, 16% up from 13%, although almost a third responded that they don't yet have a strategy.





Case study: University College of Estate Management

The new UCEM strategy seeks to embed sustainability as the strategic driver for UCEM, central to the institution's purpose, and at the heart of our culture, decision making, leadership and management. This will work alongside four additional areas of focus: what we teach; the way we teach; how we operate; and who we influence.

To be the world's most sustainable university, sustainability must be at the heart of UCEM and embedded in how we work. Sustainability will be at the centre of UCEM's core purpose as an institution.

We will be a transparent and accountable institution, with sustainability driving our strategy and decision-making. Our staff will be knowledgeable in the sustainability agenda and understand their contribution. All in our sphere of influence will be enabled and encouraged to work and live sustainably and with good health and wellbeing. We will be an institution for which equality and diversity are a given, and our leadership will reflect the communities we serve through our mission to deliver a sustainable built environment.

Our aspirations:

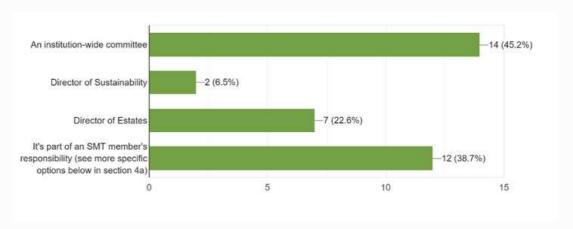
- Strategic focus Ensuring sustainability is central to UCEM's core purpose and integral to our strategic ambitions.
- Culture of sustainability Supporting and encouraging staff to embrace
 a shift to a more sustainable lifestyle, beyond the scope of just their work
 environment.
- Staff inclusivity, diversity and well-being UCEM being seen as an institution that is a leader of inclusivity, diversity and wellbeing.
- **Student voice** Enhancing the student voice and input in all aspects of UCEM, including governance structures. Students will be co-creators in organisational development and in the development of education.

Institutional lead

There were some significant changes about who leads their institutional engagement on climate sustainability issues. A similar number of respondents in both surveys said that the issue was part of an SMT member's responsibility. However, the number of institutions citing the COO as being responsible increased from one to five institutions, accompanied by a slight drop in those responding that the Director of Estates leads on the topic, suggesting an increasing importance given to the topic.

There has also been a significant jump in the number of institutions responding that their strategy is overseen by an institution-wide committee 45% (up from 27% in 2021). This institution-wide perspective, as well as the shifting of responsibility from the Director of Estates to COO, perhaps implies a shifting recognition of the wider aspects of embedding climate sustainability across the institution. One institution commented their working party had only been in existence for a year but that a great deal of progress had been made.

Chart 2: Responsibility for leading institutional engagement on climate sustainability issues

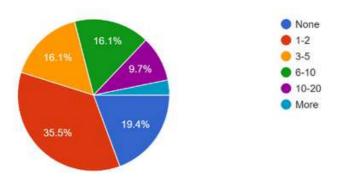


Staff resourcing

As shown in chart 3 in response to the question about the number of staff directly responsible for delivering the strategy there are still more than half (55%) institutions with two or fewer staff responsible, although this has dropped slightly from 58% in 2021.

Given the size of many GuildHE institutions, and that many staff in member institutions are responsible for several different areas, it is perhaps less surprising that they do not have the resources to allocate large numbers of staff members to have direct responsibility for delivering the strategy.

Chart 3: Numbers of staff with direct responsibility for delivering the climate change strategy

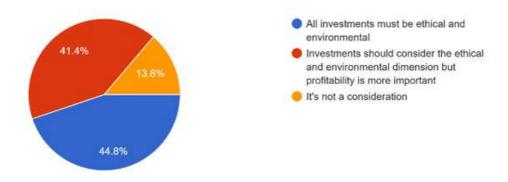


However, it should be noted that there seems to have been some investment in this area. Four institutions replied that they have 10 of more staff responsible for this compared to none in 2021 institutions.

Investments

The HE Toolkit highlights the importance to ethical investments, and in particular divesting from fossil fuels. We asked a new question about ethical and environmental investments in this year's survey. 45% of institutions responded that all investments must be ethical and environmental and another 41% responded that investments should consider the ethical and environmental dimensions, with only 14% saying that it wasn't a consideration.

Chart 4: Importance of ethical and environmental considerations as part of the institution's investments



Funding was noted as being a problem in smaller institutions, but it was suggested by one institution that implementing a small but sustained investment plan can be a good starting point focusing on quick wins. As part of this, using capital projects to accelerate progress can also demonstrate the value of investing in this area.

Chapter 2: Teaching

The next section in the HE Climate Action Toolkit looks at Teaching and suggests three steps:

- 1. Embed sustainability and climate justice in the curriculum for all students
- 2. Examine field trip provision in order to understand the carbon impact of travel options
- 3. Ensure all staff are carbon literate and have understanding of the Sustainable development goals

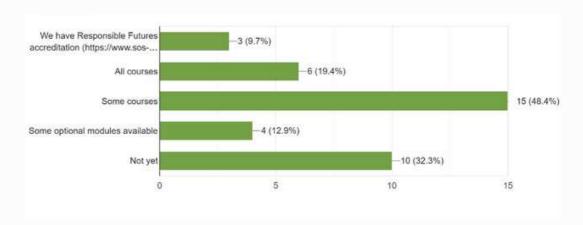
Curriculum

As part of the survey we asked institutions how embedded environmental sustainable development is in their curriculum. Overall, 68% of institutions responded that they had embedded environmental sustainable development in some or all of their courses.

Six institutions (10%) agreed that it was embedded across all courses which was the same number as the previous survey. Three institutions also responded that they had received **Responsible Futures** accreditation, up from two last time.

There has also been an increase in the number of respondents agreeing that it was embedded in "some" courses, with 15 institutions agreeing compared to 9 last time. However, this is still an area for attention as almost a third of respondents replied that they had not yet done this.

Chart 5: Level of embedment of environmental sustainable development in the curriculum



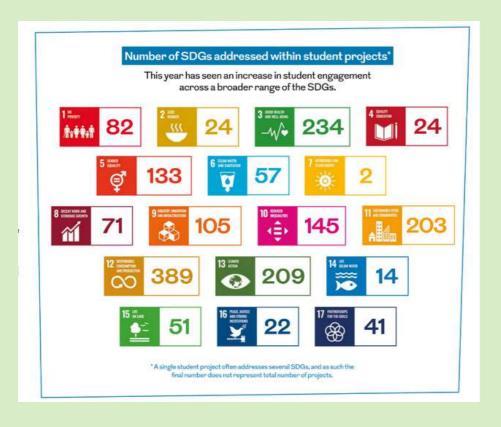
Case study: Leeds Arts University

Leeds Arts University produces a sustainability <u>report</u> which includes a case study on their mapping of courses against the Sustainable Development Goals. The University also holds annual sustainability awards for student work across all courses with the winning entries highlighted in the report.

All teaching and learning at the university ensures that students acquire the relevant skills, knowledge and understanding to enable them to progress into employment within the creative industries.

Throughout 2020/21 we have continued to develop the process of mapping contribution to the goals across all courses, recording how and where the SDGs are integrated in curriculum content and delivery, and how they are embedded within individual students' projects. 71% of courses have mapped the coverage of the SDGs within the curriculum and student work.

Within each course there is a natural alignment with many of the SDGs, with student work demonstrating engagement within the context of their individual creative practice.



Case study: Arts University Bournemouth

Arts University Bournemouth Sustainability Awards recognise final year students who take a particularly interesting or innovative approach to matters of sustainability through their projects, which rewards the individual students and also creates awareness of issues relating to sustainability, environment and ethics and social justice.

AUB is committed to recognising and promoting the brilliant work which students do in responding to the importance of sustainability – whether that's in ethically-focused approaches to their work or through the development of impactful eco-friendly initiatives.

Previous winners have included an architecture student's shared living model for Bournemouth town centre, taking its inspiration from the Boscombe Chine Gardens' landscape and knitting together the living green spaces of the town applying sustainability principles through materiality and technology. Also, acting students created a unique rap musical called Veggie Wrap (No Mayo). The piece was designed to be Theatre in Education to educate people on how simple choices like what you eat can have a huge effect on the environment.

Chapter 3: Research and Knowledge Exchange

The next section in the HE Climate Action Toolkit looks at Research and Knowledge Exchange and suggests three steps:

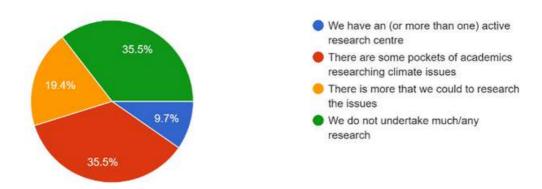
- 1. Review research processes to identify opportunities for minimising carbon emissions in research activities
- 2. Review and orientate the research and KE agenda towards supporting initiatives that provide opportunities for carbon management, climate mitigation and adaptation
- 3. Work with local commerce and industry to support a transition to a low carbon economy
- 4. Embed climate consciousness into the national research agenda

Research Community

Many universities across the UK are at the cutting-edge of researching the impact of climate change and ways to tackle this, from the University of Reading's engagement with the 2021 UN Intergovernmental Panel on Climate Change report on the increasing impact of climate change to the research at Imperial College's Grantham Institute to achieve a zero-carbon future. The Climate Commission mapped some of the research centres across UK universities to highlight the scale of activity across all universities. GuildHE institutions are generally smaller and more specialist than many in the sector and yet many make an important contribution to research.

Some of our member institutions do not have extensive research capacity, however, there were a number of institutions that replied that they have one or more active research centres into sustainability issues and another 11 institutions where there are pockets of researchers considering these issues (compared to 7 institutions in 2021).

Chart 6: Level of research community engagement in sustainability issues

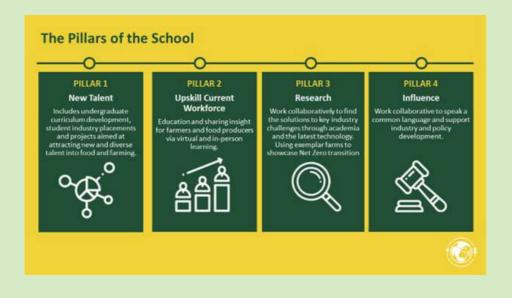


Case study: Harper Adams University

The School of Sustainable Food and Farming (SSFF) at Harper Adams University (HAU), supported by our steering partners McDonald's UK&I, Morrisons and the NFU, was established in October 2021 to support and accelerate the industry on its journey towards net zero emissions within the remits of wider sustainable agriculture (profitability, biodiversity, welfare). SSFF draws on academic and practical expertise, as well as industry networks, to develop knowledge and skills for farmers and other businesses in the supply chain who are committed to reducing the environmental impact of food production. SSFF's purpose is to:

- Equip farmers and the supply chain with skills and knowledge towards net zero within sustainability parameters (economic, environmental and social).
- Talk a common language with regards to net zero and sustainable farming.
- Improving farm data to track carbon emission reductions and sequestration offsetting at a whole farm system approach.
- Encourage new entrants into the food industry and a diversity of entrepreneurial people.

To realise this purpose SSFF has four key pillars of delivery: New Talent, Upskilling the Current Workforce, Research and Policy & Influence (below). Through these pillars SSFF is able to support the sector and supply chain to educate, collaborate, influence and develop solutions to challenges facing the agricultural supply chain.



Case study: University of Winchester

The University of Winchester's Institute for Climate and Social Justice seeks to explore the intersections of climate change and social justice in global communities. Sex, gender, 'race' and socio-economic inequality and discrimination cut through many environmental issues confronting our planet, whether it is air pollution in London or drought in sub-Saharan Africa. Therefore, to be achieved, climate justice must be addressed intersectionally. The Institute is committed to conscientising communities, producing knowledge and engaging in advocacy for policy change.

The Institute also works closely with the University of Winchester's Centre for Climate Change Action and Education, based in the Faculty of Education. CCCAE is an interdisciplinary research and knowledge exchange centre aiming to be a catalyst for action to defend, conserve and help heal Earth systems. The Centre aims to investigate educational responses to the climate and biodiversity crisis and to raise awareness of the urgency of action on climate change and biodiversity loss.

Chapter 4: Community Engagement

The next section in the HE Climate Action Toolkit looks at Community Engagement and suggests three steps:

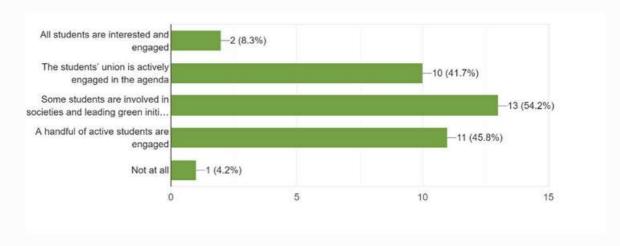
- 1. Work with Local Authorities, Local Economic Partnerships, community groups and others to support understanding of, and opportunities for, decarbonisation and adaptation measures in strategies, plans and projects
- 2. Work with local organisations and industry to support climate, social and racial justice
- 3. Support and empower your students' union to engage students in climate action

Engaging students

Almost all institutions replied that their students were engaged with this agenda at their institution, although the extent to which they engaged varied.

Over 60% agreed that there are some students involved in societies and leading green initiatives (up from 54%) and 42% that the students' union is actively engaged in the agenda. Interestingly the proportion that replied that it was just a handful of active students who are engaged dropped significantly from 46% to 29%.

Chart 7: Level of engagement by students in sustainability issues



Case study: Royal Agricultural University Enterprise Programme

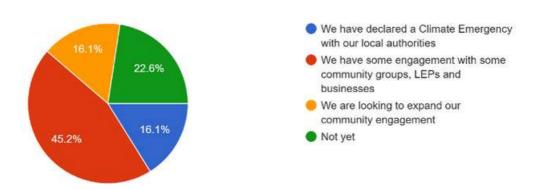
The Royal Agricultural University Enterprise and Entrepreneurship Programme endeavours to create awareness of enterprise by providing inspiration and support to enable students to progress their ideas to reality. Our programme nurtures students throughout the start-up journey via our "Think, Try, Launch, Grow" delivery model. This approach ensures we provide the right support at the right time for our student entrepreneurs who are embarking upon this exciting but often daunting journey.

The Programme has embraced sustainability, both social and environmental, offering students opportunities to put such theories as corporate sustainability and ethical leadership into practice. The Programme also requires students to consider the environmental impact of their business practices and to justify them at key points during the Programme. Hopefully, this will embed strong awareness of sustainability and the impact their business may have on the world around them as they grow in the future.

Community engagement

The survey asked how engaged institutions were at working with their local community. The survey showed that over 60% have some engagement with their local community groups and businesses, with another 16% looking to expand their community engagement. Almost 23% haven't yet had much engagement and this section includes a couple of examples from members that might be helpful examples of ways in which this activity could be expanded.

Chart 8: Level of engagement of working with the local community



The survey results were broadly similar to the previous survey, however the number of institutions that have declared a climate emergency with their local authorities has increased from two to five suggesting that there is a deepening of engagement.

Case study: Writtle University College

The Essex Climate Action Commission was set up in 2020 to develop ambitious recommendations to mitigate the complex problems of climate change. The scope of the Commission includes transport and infrastructure sectors, waste management, energy, green infrastructure and community engagement. It also explores how to attract investment in natural capital and low carbon growth.

An interim report detailing recommendations and strategies was published in November 2020 https://www.essex.gov.uk/climate-action. In February 2022 the Commission embarked on phase 2 of the programme – engaging local communities and facilitating implementation strategies.

The ECC Green infrastructure expert group contracted WUC to deliver training and participatory planning workshops to local community stakeholders using MARISCO – a systematic planning method developed and published in 2014 (Ibisch & Hobson 2014; https://www.marisco.training/). The target area for delivering planning workshops the Coln and Blackwater Catchments – the designated Climate Focus Area (CFA). Between April and July 2022 Peter Hobson, Professor in Biodiversity Conservation and Sustainability at Writtle University College, coordinated and delivered on behalf of Essex County Council ten community stakeholder workshops attended by representatives from local parish and town councils, government agencies, and various environment NGOs.

MARISCO is an open and transparent full participatory planning process designed to empower local communities to make decisions, share knowledge between all stakeholders – academics, business, professional staff and local community members – and to develop ambitious strategies for the delivery of sustainable action plans to help mitigate effects of climate change, and to recover nature.



Representatives from three Essex Parish Councils have already reported the adoption of the participatory planning process to support the planning and delivery of their Parish Neighbourhood Plans.

Also, at the March 2023 Brightlingsea Nature Event the organisers show-cased their local Nature Recovery Project, community garden, local wildlife and nature mapping, with reference to the ECC-Writtle workshops, including the Brightlingsea Wilder Verges. https://brightlingsea.info/brightlingsea-nature-event-will-demonstrate-recovery-work-around-the-town/

Peter said: "Our task is to facilitate community-based climate action and nature recovery planning strategies. The workshops have received excellent feedback and we're delighted to have received 100% satisfaction so far from participants."

Case study: University of Worcester community recycling scheme with school and housing association

University students created and market tested recycling information posters and a video aimed at their fellow students on campus. This proved so successful that this concept moved off campus and saw students working with primary school children to create their own 'at home' posters. They held a workshop with the school's Eco Club, who drew typical items that belonged in rubbish or recycling. Creative Media students turned their artwork into posters that the pupils took home to give their family greater guidance, becoming 'pupils as teachers'. This approach attracted sponsorship from a national housing association, Platform Housing, one of the largest housing associations in the Midlands. They distributed free re-usable recycling bags to all school households in Worcester. Pupils measured their recycling rates on class tally charts and competed over a four-week period to see which school community (two schools and between classes) made the 'most difference'. The council agreed to collate data from recycling street collections to measure actual impacts, although COVID did impact on this, and school data collation.

Platform Housing Group, which owns over 47,000 homes mostly in areas of the highest need, have used this project in Worcester as a catalyst for trialling in other areas, where they know there are fly-tipping issues and low recycling rates. As a first stage they have distributed 1,000 white recycling bags to customers and are planning to survey these customers in six months' time to measure the impact and success, prior to deciding whether to upscale the project.

Case study: York St University

York St John University researchers inspire climate change awareness through school storytelling project



'Suitcase Stories' is a Natural Environment Research Council (NERC) funded public engagement project using storytelling to explore climate adaptation with young people.

When we talk about climate change and its impacts, we often focus – rightly – on how to prevent it. However just as important, given that the consequences of climate change are already affecting many communities, is learning how to adapt to it. Young people can expect to see dramatic upheavals in their lifetime in terms of food and water supply, health, the economy, migration, and work.

It is vital that everybody is involved in responding to the climate crisis, so that the solutions developed are democratic and equitable. The more knowledge we have, the more we are able to combat eco-anxiety in a resilient and compassionate manner. This was the thinking behind 'Suitcase Stories', funded by NERC as part of the 'Creative Climate Connections' programme.

In 2022, young people in Batley and Leeds worked with storytellers and researchers from York St John University, a climate journalist and (via remote technology) young people from Nigeria. The young people used what they learnt to create short stories that could pack into suitcases and communicated how people are already experiencing the effects of climate change and what we can learn from how they are adapting.

The project team are now working with Students Organising for Sustainability UK, to evaluate and share their approach more broadly across the education sector.

Case study: University of Winchester

Plastic Free University Status

The University of Winchester were officially awarded Plastic Free University status from national charity Surfers Against Sewage (SAS). This award of 'Plastic Free Communities' Status highlights the work and commitment as an institution we have made to tackling single-use plastics (SUP). It by no means signals we are plastic-free, and we do not claim to be, but we are clear that we view SUP as a problem and have made a commitment to do what we can feasibly to remove them from our operations.

Fleet vehicles

By the end of 2021/22, 48% of fleet vehicles had been switched to electric vehicles as part of our journey towards our target of net-zero carbon emissions by 2025.

Hedgehog Friendly Campus Gold Award

The University of Winchester has been recognised for its hedgehog-friendly campus with a prestigious Gold Hedgehog Friendly Award from the British Hedgehog Preservation Society (BHPS).

The Gold award comes after three years' hard work which began in 2019 and has seen students and staff create hedgehog-friendly habitats, set up feeding stations and help to survey hedgehog activity on campus.

The many initiatives undertaken as part of creating a hedgehog-friendly environment included a collaboration between the University and neighbouring Royal Hampshire County Hospital (RHCH) to make Burma Road – which bisects the University's main campus and the RHCH site – the first in Winchester to install road signs requesting drivers to slow down in case there are hedgehogs crossing. The University of Winchester is one of 13 universities across the UK to achieve Gold status in 2022.

The accreditation follows the team's successful Bronze accreditation in the 2019/20 academic year and a Silver accreditation in 2021.

Chapter 5: Campus Management

The next section in the HE Climate Action Toolkit looks at Campus Management. This is the largest section in the toolkit suggesting a number of steps in a variety of different areas including:

- 1. Energy
- 2. Carbon
- 3. Transport
- 4. Food
- 5. Procurement
- 6. Buildings
- 7. Biodiversity

Level of engagement in member institutions

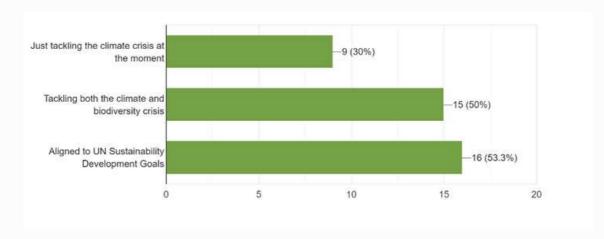
Respondents were asked how engaged their institution is with tackling the climate crisis and how broad their engagement is – whether they were focused on tackling the climate crisis, whether this had been broadened out to include the biodiversity crisis and whether they were aligned with the UN SDGs.

Six institutions (19%) said that it was completely embedded across their institution with another 15 (48%) saying that they had some engaged departments and champions. Four institutions said that they were keen to get more involved and six said that they were still in the early stages of their engagement.

When looking at the breadth of their engagement half said that they were tackling both the climate and biodiversity crisis, a four per cent increase since the last survey.

53% said that they were aligned to the UN SDGs which is a significant increase since 2021 when only 29% agreed, or an increase from 7 respondents agreeing to 16 respondents this time.

Chart 9: Breadth of engagement across climate crisis, biodiversity crisis and UN SDGs

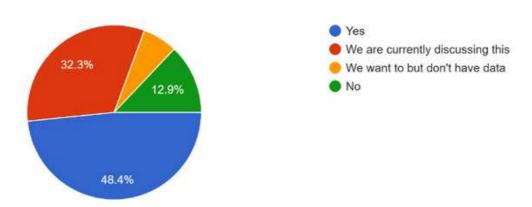


Targets

The proportion of institutions saying that they have set a target for reducing their greenhouse gas emissions has significantly increased from a third of institutions to just under half (48%). There are also another third of institutions that are currently discussing this.

There were significant drops in the number of institutions responding that they want to but don't have the data, with 7% agreeing down from 25%. The number agreeing that they don't have targets is now only 13%, down from 17% 18 months ago.





Scope 1, 2 and 3 refer to different types of emission, with Scope 1 referring to the direct emissions from the institution and to the emissions directly from operations that are owned or controlled by the institution. Scopes 2 and 3 are indirect emissions with Scope 2 referring to emissions from the generation of purchased electricity, heating or cooling. Scope 3 includes all the indirect emissions (not included in Scope 2) that occur in the value chain of the institution, including both upstream and downstream emissions.

Institutions have different targets for Scopes 1, 2 and 3:

- 17 institutions responded that they have targets for Scope 1 emissions (up from 9) with 14 of these aiming for 2030.
- For Scope 2, 16 institutions have targets, with 11 institutions aiming for 2030 (compared to 7 in the previous survey).
- 13 respondents replied that they have currently set a target for Scope 3 activities, up from 5 in the previous survey. 7 of the 13 replied that they are aiming for 2030.

This increase since the last survey – particularly those having targets for Scope 3 emissions – suggests a deeper engagement with the issues. There is, however, a recognition that more work is needed. Only 10% of respondents agreed that they are "on target", with 47% recognising that they need to accelerate progress and 43% agreeing that there is still "some way to go".

Institutional activities

When thinking about areas of institutional activity we looked at a number of areas. There has been good engagement with sustainability issues across many estates type areas, with 90% of institutions (27 out of 30 respondents) responding that they had considered their energy provision. Over 80% had done a buildings audit (up from 75%). There were also some significant changes with over 80% of institutions looking at procurement issues (up from 58%) and two thirds having considered campus biodiversity (up from 38%).

Energy provision —27 (90%)

Transport on and to campus —20 (66.7%)

Catering and food supply —24 (80%)

Procurement issues —25 (83.3%)

Buildings audit —25 (83.3%)

Campus biodiversity —20 (66.7%)

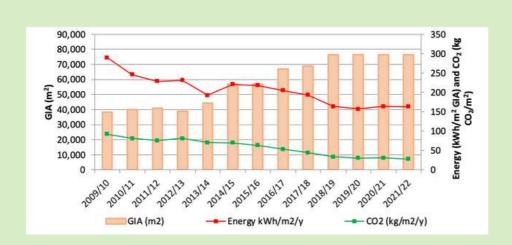
Chart 11: Consideration and type of estate issues

Case study: Bath Spa University

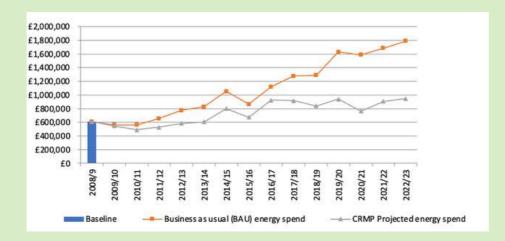
During 2010 we published our first Carbon Reduction Management Plan, which set out how we would reduce our Scope 1 and 2 emissions by 50% (from 4,000 tonnes) over the following 10 years to 2020. Despite increasing the size of our estate by around 50%, increasing operations of our existing estate by around 20% and inviting another 1,000 students to live in university accommodation, we have now just about reached this target.

We've achieved this through a combination of standard energy saving measures like upgrading insulation, improving draught proofing and installing more efficient plant and lighting. However, in addition, we've carried out an Energy Performance Contract on our main campus, installed two biomass-fired district heating networks, upgraded all our BEMS controls protocols and implemented innovative control strategies on our existing air conditioning systems.

From a Scope 1 and 2 carbon and energy efficiency perspective, we have outperformed all expectations and are now 45% more energy efficient (kWh/m2/y) and around 70% more carbon efficient than we were in 2010 (chart to the right).



Implementation of our initial carbon reduction programme had a cost of around £4M. Cost savings from energy saved will provide a simple payback during 2023, making the entire programme cost-neutral to the organisation (chart below).



We have since published our second Carbon Reduction Management Plan, which sets out our pathway to net zero emissions by 2030. This includes some Scope 3 sources but excludes procurement and construction at this time. The primary focus for this phase is the decarbonisation of our heating systems, which we are currently scoping.

Waste

In 2014 we implemented a new waste and recycling scheme across all our campuses and residences. Our goals were to maximise recycling and food waste recovery for anaerobic digestion, minimise waste to landfill, reduce operating costs for the University, eliminate health and safety issues associated with sharps and black bags, and to generally make the campus a nicer place by reducing litter.

We trialled a new, bagless, three-stream process on one of our residential blocks for six weeks. The trial achieved a doubling of recycling from 34% to 68% and gave us essential feedback to help design a new system.

Our new system was based on the following principles:

- Simple three stream process: Recycling, Food and Non-recycling
- Consistent the same three choices with the same colour schemes and the same messaging in every location
- Bagless All bins and our in-house waste management processes would be designed to work without bags
- All waste and recycling would be centralised and compacted to minimise waste transport on and off site

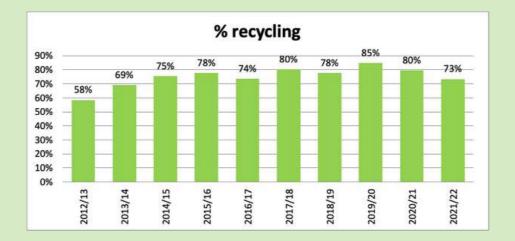
We worked with a local bin manufacturer to design bins that would meet our needs and procured large compactors to consolidate both mixed recycling and residual waste (example in Figure 1).

To develop a business case, we carried out a five year cost forecast for the "business as usual" process, taking into account all waste-associated costs, including BSU staff time for waste management. We did the same process for the new system, including around £250k implementation costs. The analysis demonstrated a £200k overall cost reduction over the five year period.

Recycling rates certainly improved as a result of the new system and have been in the high 70-80% region since (chart below). In addition, we have had much less site litter and no incidences of injury through sharps penetration of black bags. However, a recent analysis of our residual waste stream has demonstrated that we can do much better. Watch this space!



Figure 1. Example of three-stream bin for academic areas. The bin has an internal three-cassette system, which eliminates the use of bags (except for standard food waste liner) and enables rapid swap-out by our waste team.



Case study: Abertay University

Abertay University places the UN Sustainable Development Goals (SDGs) at the heart of its strategic priorities, embedding sustainability in its activities and aspirations and harnessing the power of students, staff and its local and global communities.

Through actions set out in its new Sustainable Development Strategy, the University is committed to working to reach net zero on campus by 2038 and will continue to make real world impact at local, national and international level through its research, much of which has a focus on SDGs.

Abertay worked with the James Hutton Institute and Arbikie Distillery to create the world's first climate positive gin from the humble garden pea, an award-winning project that took a holistic new approach to creating spirits.



Arbikie Master Distiller, Dr Kirsty Black and Professor of Zymology, Graeme Walker

Each bottle of Nàdar gin has a negative carbon footprint, meaning the process avoids more emissions than it creates. This is achieved by utilising all useful components of the peas from the de-skinning and distilling process to create home-grown animal feed for local farmers and also through peas' natural ability to source essential nitrogen for growth from the atmosphere, avoiding the need for environmentally-damaging fertilisers.

The journey started as a PhD project in Abertay's labs and Nàdar is now a commercially successful product that has led to the creation of new products for Arbikie. The collaboration has put Scotland on the map as a leader in sustainable spirit production, with the process behind Nàdar showcased to international delegates at COP26 in Glasgow.

Success in pea gin followed on from the University's wider research stream in food innovation and sustainability which has created sustainable beer from faba beans, new avenues for whisky distillery by-products, improved the shelf-life of fruits through pioneering use of ultrasound, developed new ways of using insects as a sustainable protein base for food products, and many other areas.

Chapter 6: Barriers

The previous chapters of the report have looked at the key areas of activities across institutions and what they are doing to tackle the climate crisis in a wide range of ways. There are, however, a number of barriers to further engagement with key issues highlighted as finances and costs (cited by 84% of respondents) and 71% citing staffing with additional comments about a lack of knowledge beyond the sustainability team plus a lack of in-house expertise.

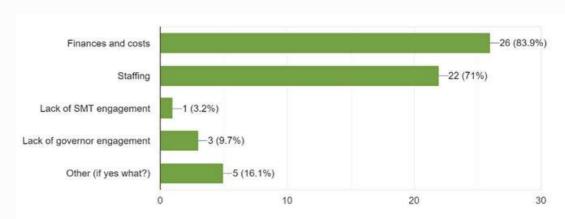


Chart 12: Main barriers for the institution's further engagement

The point about finances and costs was reinforced in the comments from respondents, noting that as a small institution managing priorities on a limited budget can be a real challenge. This was reiterated by a comment about a lack of coherent and consistent government policy and in particular a lack of government strategic financing.

Institutions provided many comments about how they're trying to overcome some of the financial barriers. Many institutions are seeking to apply for competitive grants and loans and also collaborating with others to do this. Salix funding was also highlighted as funding one institution's transition to heat pumps and they are hoping for future success with Skills Funding. Other suggestions included private investor and philanthropic routes.

Several institutions mentioned working closely with their neighbouring university and also the local authority. One of the challenges mentioned was that in order to get funding it was often necessary to have detailed and costed plans that require an element of upfront funding to bring in the relevant expertise.

Chapter 7: Conclusion

This report brings together a number of case studies from across GuildHE member universities and colleges and demonstrates some of the interesting and innovative ways that smaller and specialist institutions are tackling the climate crisis. As part of our support for members we will bring together member case studies to help highlight how similar types of institutions have been addressing these issues.

The report also suggests that there has been an acceleration in activities amongst universities and colleges over the last 18 months. Activities to tackle the climate crisis have become further embedded across institutions and at a more strategic level, with more institutions integrating ESD in their curriculum, working with their local communities and developing research activities in addition to considering how they make their estate more sustainable.

However, there is still further to go. Many of the institutions that GuildHE works with are smaller and more specialist than the sector average and while this means that they can be more agile and responsive, it also means that they may have more limited resources — both financial and staffing. It was notable that in response to a question about DfE Climate Action Plans, highlighted in their Sustainability and Climate Change Strategy, the largest response — 55% of respondents — replied that they are making progress to develop their plan but that they need more support.

GuildHE will consider how we can further deepen our support for members and embed this engagement across our range of activities. This will include specific support in developing Climate Action Plans, showcasing member case studies, bringing in expert advice, surveying to help benchmark activities, national lobbying around comparable data and funding and a range of other activities.

About GuildHE:

GuildHE is an officially recognised representative body for UK Higher Education, championing distinction and diversity in the sector. Our 60 members include universities, university colleges, further education colleges and specialist institutions, representing over 150,000 students. Member institutions include some major providers in professional subject areas including art, design and media, music and the performing arts, agriculture and food, education, business and law, theology, the built environment, health and sports.

Authored by:

Dr Alex Bols, Deputy CEO, GuildHE

Contact us:

Woburn House 20 Tavistock Square London WC1H 9HB

020 3393 6134 info@guildhe.ac.uk @guildhe

Charity No. 1012218

www.guildhe.ac.uk

