Introduction

I am delighted to introduce this year’s Sustainability Annual Report. We have achieved a number of particularly impressive results in 2018/19 – fourth in the People & Planet League, ISO14001 certification of our Environmental Management System and shortlisted as Finalist for two national Green Gown Awards (results to be announced in November 2019).

The past year has seen a dramatic increase in public interest in sustainability – from plastics-awareness to measures to address a changing climate. Our work aims to provide long-term solutions to these challenges. Our contribution to solving these challenges stretches from our impactful research with communities across the world to developing students with the skills and knowledge needed to further tackle sustainability issues.

We continue to address sustainability within our own campus and operations too. We have reduced our carbon emissions by 48% in the past four years – exceeding the ambitious carbon reduction targets we set in 2010. We are now developing our Carbon Management Plan for the next 10 years, and again will be aiming to make serious reductions. Sustainability is about more than reducing carbon, and we are looking at how we can reduce unnecessary waste (not just plastics) and better support a circular economy.

This report is of course just a snapshot of the sustainability work that is underway. To find out more, I encourage you to visit our recently updated sustainability webpages which further detail our activity and opportunities – www.northumbria.ac.uk/sustainability.

Sustainability challenges continue but based on our strong work to date and the commitment of our staff and students, I look forward to Northumbria making an even stronger contribution to sustainability in the coming year.

Professor George Marston
Pro Vice-Chancellor Research & Innovation
Chair, University Sustainability Management Group
The UN Sustainable Development Goals

Our University Strategy commits to supporting the UN Sustainable Development Goals. We support the Goals not only through our campus and operations but also through our quality research and teaching activity.

Introducing the Goals

In 2015, leaders from across the world adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. Building on the Millennium Development Goals, these are a call to action to promote prosperity and wellbeing whilst protecting the planet. The 2030 targets address social needs including education and health, tackle climate challenges and environmental protection, and seek to end poverty and build economic growth.

We are a signatory of the SDG Accord, reaffirming our commitment to the Goals and to engage others and share learning. We also contribute to the annual SDG Accord report, which is delivered at the UN High Level Political Forum.

We are a member of the United Nations Academic Impact (UNAI) - a diverse network of higher education institutions, think tanks, researchers and students in over 130 countries to serve as incubators of new ideas and solutions to global challenges.

Our Next Steps

Our contribution to the SDGs is overseen by our University Sustainability Management Group. Our sustainability activity spans across all University activity including:

- Delivering research impact which addresses SDG targets.
- Equipping students, staff, partners and communities with the knowledge and skills needed to support sustainability.
- Undertaking our activities in a manner consistent with the SDGs.
- Sharing best practice and enabling collaboration to address the Goals.

We have mapped our current contribution to the Goals and identified strengths, weaknesses and further opportunities to maximise our contribution locally, nationally and internationally.

This report notes just some of the areas of activity but for more information, visit www.northumbria.ac.uk/sustainability.

The SDGs at Northumbria

Achieving the targets set out within the 17 SDGs will require action from all countries, governments, businesses and organisations. Universities have a unique role to play given their opportunity to educate future generations and to undertake research for a better world.

Our University Strategy commits to supporting the SDGs through our research, education, campus and operations.
Education for Sustainable Development

It is essential that graduates understand international sustainability challenges in order to fully grasp their chosen discipline, to enhance their own employability and to support sustainability within their chosen careers. Following our commitment to Education for Sustainable Development (ESD) within our Universality Strategy, we are actively working to embed sustainability education across all modules, as well as developing the knowledge of our staff, businesses and the communities in which we work.

Living Lab

The Living Lab approach connects student learning and academic research with our campus and operations. It not only helps to improve the sustainability performance of the University but provides fantastic hands-on learning experiences for our students as well as informing our research. This methodology continues to grow across the University – from trialling models of PV array on our Pandon Building, to informing planting choices to enhance biodiversity.

“\textit{The opportunity to engage in a live project for a client provides the students with a real challenge but also an experience which they really appreciate}”. (Course Leader, Environmental Sciences)

Student projects undertaken this year include:

- Developing an allotment management plan
- Auditing module content against the UN SDG’s
- Exploring challenges regarding waste at the end of the academic year
- Base-lining plastic usage within our catering operations.

Supporting sustainability in our communities

Our students have also undertaken sustainability projects for a number of external organisations and individuals through research projects as well as through our various Clinics.

These innovative Clinics enable businesses, organisations and individuals to access expert consultancy services from our student experts. In turn they provide real-world experience for our students to support employability and enterprise. Clinics include the Student Law Office, the Business Clinic and the Building Advice Centre.

Student Law Office

Currently shortlisted for a Green Gown Award, our Student Law Office provides free legal advice and representation to over 300 people each year. We also pioneer StreetLaw – delivering presentations on legal rights to local schools, refugee groups, tenants associations and charities.

Business Clinic

The Business Clinic provides free consultancy advice to SMEs, multi-nationals and not for profit organisations. The service is provided by our final year undergraduate and postgraduate business students with expertise including feasibility studies, HR, audit, marketing and IT.

Building Advice Centre

Now in its eighteenth year of operation this is a free service open to the public and charities. Our supervised students provide guidance on issues from damp patches to home improvement options, but can also advise on energy-reduction measures for the public to consider.
Embedding Sustainability within the Curriculum

In order to gather a baseline overview of the extent to which our current modules consider the SDGs, we mapped our Module Descriptors against the SDGs and considered the strength of the connection.

![SDG Mapping Results 2018/19](image)

Although we know that a large number of our courses consider challenges relating to the SDGs, we found that only 16% of Module Descriptors currently reference such issues. Work is now underway, led by our Education for Sustainable Development Working Group, to improve on this result with a target to ensure sustainability considerations are a requirement of all new modules by October 2021.

In preparation, case studies, training and best practice are being captured and shared to support the academic community. Our Business School is leading as a PRME Champion – promoting the importance of responsible management education – with a target to achieve University-wide PRME status by January 2021.

Sustainability skills for all

In addition to Undergraduate and Postgraduate Modules, we also offer a range of short courses - from carbon footprinting to climate change risk and resilience - to help businesses develop their own effective sustainability strategies. We also now offer the National Examination Board in Occupational Safety and Health (NEBOSH) Certificate in Environmental Management.

We also host a number of events, exhibitions and talks throughout the year open to all. Events this year have included:

- **Public lectures** including a talk introducing the UN SDGs delivered by Sir Mark Moody-Stuart, Chairman of the United Nations Global Compact Foundation;
- The Design School’s ‘Wear to Now?’ exhibition exploring the changing shape of the sustainable fashion revolution;
- Our Responsible Business Seminar series, attended by businesses, academics and school-students alike.
Research for the SDGs

Our Research is driving forward solutions to global sustainability challenges. Our innovative, quality research ranges from tackling FGM across Africa, to addressing wildlife trafficking between Mexico and the UK. We collaborate with business, NGOs, governments and researchers across the world to support real and positive impact at a global scale.

United Nations Academic Impact

In January Northumbria University became a member of the United Nations Academic Impact (UNAI). This places us within a diverse network of students, academics and think tanks, in order to serve as incubators for new ideas, inventions and solutions to address the targets of the SDGs. This both demonstrates our commitments to high quality research in support of the SDGs as well as further facilitating global collaboration.

Research with Impact

We conduct ground-breaking research and have an international reputation for creating successful, multidisciplinary research projects that make an impact nationally and internationally. The positive impacts of our research can be felt locally, nationally and internationally whether it be shaping local economic development plans, informing government policy on tackling child-hunger or supporting volunteer response in disaster zones around the world. Just some of these inspirational research stories can be heard on our updated sustainability website (www.northumbria.ac.uk/sustainability) or visit www.northumbria.ac.uk/research/research-impact-at-northumbria.

Funding success and Doctoral Training Opportunities

We have received a wide number of financial awards this year which will enable us to further build on the research and impact we deliver and to offer further exciting and impactful doctoral training opportunities. Examples include:

ReNU:
The EPSRC Centre for Doctoral Training in Renewable Energy Northeast Universities (ReNU) will train 65 PhD students across Northumbria, Newcastle and Durham Universities over the next five years, building on our strong reputation within this research area.

HBBE:
Together with Newcastle University we will establish the world’s first research Hub for Biotechnology in the Built Environment (HBBE). It will aim to create a new generation of ‘Living Buildings’ which are responsive to the natural environment, grown using living engineered materials, which process their own waste, reduce pollution, generate energy and support a biological environment that benefits health.

ONE Planet:
Funded by the NERC, ONE Planet offers a cohort-based Doctoral Training Partnership at Northumbria and Newcastle Universities. It aims to produce independent research scientists and future leaders who will design sustainable transdisciplinary responses that address intensifying global change. The Doctoral Training roles incorporate dedicated placements aligned with the Government’s Industrial Strategy Challenge.
The Global Challenges Research Fund

The Global Challenges Research Fund (GCRF) is a £1.5 billion fund announced by the UK Government in late 2015 to support cutting-edge research that addresses the challenges faced by developing countries.

In 2018-19, we were awarded over £2.1 million via the Global Challenges Research Fund. This supports a number of research projects, short-term exchanges and workshop activities with partners in low and middle-income countries and includes partners in South and Central America, Sub-Saharan Africa and in South and South East Asia supporting a range of Sustainable Development Goals.

GCRF Summit

In July we co-hosted the annual GCRF Summit at Northern Stage in partnership with Durham and Newcastle Universities. The summit brought together international development experts from across the world to highlight new ideas being used to tackle sustainable development challenges including poverty and food security, health and wellbeing, sustainable water and climate change.

Collaboration was one of the key themes of this year’s summit, as Professor Matt Baillie Smith of Northumbria University explains: “The Summit provides a forum for sharing understanding, insights and innovation in research to address global challenges in developing countries, as well as an opportunity to develop new partnerships to maximise the positive impacts of the research.”

Our GCRF Research

Examples of some of our GCRF research projects include:

<table>
<thead>
<tr>
<th>1 No Poverty</th>
<th>Living Deltas Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>To safeguard river delta futures through resilient communities and sustainable developing focusing on three major deltas in Asia: The Red River, The Mekong and The Ganges-Brahmaputra-Meghna.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6 Clean Water and Sanitation</th>
<th>Skills acquisition through volunteering by displaced youth in Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with international partners to analyse whether volunteering by displaced youths in Uganda helps their skill acquisitions and reduces inequalities.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8 Decent Work and Economic Growth</th>
<th>Multi-hazard Urban Disaster Risk Transitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>To reduce risk for the poor in tomorrow’s cities by making urban development in low and middle-income countries resilient to multiple disasters.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11 Sustainable Cities and Communities</th>
<th>Cities of Roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with partners within a research network to build capacity to use cross-cultural and interdisciplinary dialogues to address challenges associated with urban growth and loss of indigenous knowledge.</td>
<td></td>
</tr>
</tbody>
</table>
Environmental Management

Over the past few years we have developed a new and comprehensive Environmental Management System. This not only supports compliance and management of our environmental impacts, but also ensures continual improvement. In February 2019 we undertook our first six-day NQA audit, resulting in successfully achieving EcoCampus Platinum and ISO 14001:2015 certification – the international standard for Environmental Management Systems.

Our EMS activity this year has consisted of many activities including:

- University Sustainability Management Group undertake continual review of the EMS and its performance.
- Monitoring performance.
- Business Travel Emissions 18-19
- Aug - OctNov - Jan Feb - Apr May - Jul
- Compliance Audits
- Internal Audits
- Inspections
- ISO 14001 Audit
- Implementing environmental incident reporting and investigation.
- Understanding our context and environmental impacts.
- Identifying Compliance Obligations and Stakeholder interest.
- Publishing an Environmental Policy with targets and objectives.
- Management Review
- Planning
- Checking
- Implementing
- Developing a comprehensive Communications Calendar.
- Launching new Environmental Procedures:
  - Waste Management
  - Energy & Water
  - Discharges to Water
  - Emissions to Air
  - Grounds Management
  - Contractor Control
  - Emergency Response
  - ...

- Report an Environmental Incident
A Sustainable Campus

We are continually working to develop a campus that not only provides a first-class environment for our students and staff, but also improves sustainability performance. Our campus can also provide the opportunity for staff, students and visitors to learn more about sustainability considerations within building design.

Building the Future

In recent years, we have made transformations to our estate in order to improve student learning and wellbeing and to improve the sustainability of our campus.

Student Central – transforming the 1969 Library into a 24/7 space for all student-facing services - from social spaces to careers guidance, digital commons to silent workspaces. It also enabled enhanced space utilisation, reducing the need for other buildings to be open 24/7.

Computer & Information Sciences Building – a world-class home for staff and students with adaptable spaces for research and teaching, incorporating Smart Building technology and a specialised Building Management System, continually analysed by our staff and student researchers.

Architecture Studios and Extension – cutting-edge extension to our Grade II listed Sutherland Building, providing a new ‘collegiate home’ for the department and one of the highest levels of space-per-student studio space in the UK. The low carbon design provides a space with flexible layouts, light-filled work environments and spaces for nature.

Pandon Building – a change of use saw 600 support staff co-located to encourage collaborative working, improve space efficiency and achieve energy usage by 30%.

Delivery of these projects has been recognised as a shortlisted entry to this year’s national Green Gown Awards. Results will be announced in November 2019.

Sustainable Campus Trail

Our new Sustainable Campus tour enables students, staff and visitors to explore the sustainability features of our campus – from where to top up their refillable bottle, to the locations of our solar PV arrays. The trail is available as a hardcopy tour and as an online map.

Sustainable Construction Guidance

To ensure that all construction projects enhance the sustainability performance of our estate, we have developed new Sustainable Construction Guidance. This outlines considerations for all projects, ranging from heating and cooling options to supporting biodiversity. We are also trialling the SKA rating scheme to embed sustainability within refurbishments. Our new Guidelines gained the Campus Services team an excellence Award in our Green Impact audits.
Another Year of Impressive Carbon Savings

2018/19 has been another busy and successful year for our Carbon Management Programme which saw us exceed our 2020 target a year early, achieving a 38% reduction against our 32.5% 2020 target. Over the last four years Scope 1 and 2 emissions have dropped by 48%.

Scope 1 & 2

Scope 1 & 2 emissions include emissions from our buildings and fleet vehicles including gas, electricity, petrol, diesel and heat purchased from the local heat network.

Emissions from electricity use reduced by 21% compared to the previous year, although there was a small increase in gas emissions. In total, this amounted to an **11.5% reduction in Scope 1 and 2 emissions** for 2018/19 compared to the previous year, and resulted in savings of over £1.7 million compared to business as usual. Over the last three years, total energy costs avoided are approximately **£4 million**.

We have completed a range of projects throughout the year in order to achieve these excellent results. Improvements include:

- LED Lighting and controls in the Students’ Union.
- New Solar PV array on Ellison B Block.
- Continual improvements to our Building Management System to control building services.

This work has also been helped by our excellent Green Impact Teams, who help raise their colleagues’ awareness of sustainability and take action to make improvements in their Faculty or Service.

Scope 3

Scope 3 emissions include emissions from electricity transmission losses, business travel, waste disposal and water use. We have also included refrigerant gas in this section as it was not included in the original baseline.

This year, we achieved an **11% reduction in Scope 3 emissions** compared to the previous year, due to large decreases in water consumption and grid transmission losses. There was also a 4% reduction in emissions from business travel.

Next Steps

Although we have already exceeded our 2020 target, we are not stopping there. We are aiming for a 43% reduction from our baseline for 2020.

Projects to help us achieve this could include LED lighting upgrades, insulation to pipework, upgrades to pumps, fans and motors and further Solar PV installations.

We will also be producing our next Carbon Management Plan, covering 2020 to 2030, which will put us on a trajectory towards Carbon Neutrality by 2040.
Waste & Resource Management

Tackling waste and the associated challenges is high on our sustainability agenda. It is an issue not only with significant environmental and financial impacts but which is also of key interest to a large number of our students, staff and stakeholders.

**Waste Reduction and the Circular Economy**

Key to protecting resources and minimising the impact of waste, is to avoid producing waste where possible and to find a new life for waste items. We now have a number of schemes in place to try and reduce waste production. These include:

- participation in the national Refill initiative to reduce purchases of plastic bottles;
- incentivising use of reusable cups with a 20p discount in our cafes; and
- use of the Too Good to Go app to reduce food waste.

We continue to support the British Heart Foundation Student Move Out scheme, donating 1169 bags of items in summer 2019, worth over £16,000 to the charity. We have achieved a *7% reduction in total waste* in 2018/19 compared to the previous year.

We are also implementing measures to further support the *circular economy* approach – giving unwanted items a second life rather than becoming waste:

- our Northumbria Shop now includes bags made from old plastic bottles;
- coffee grounds from our cafes are used on our estate to add nutrients to the soil;
- unwanted IT is sent to a company for repair and resale at a low price to schools and other customers.

Throughout 2019-20 we will further embed the circular economy approach, exploring opportunities within our procurement activity and identifying alternative disposal options for some waste streams.

**Where our Waste Goes**

![Destination of Waste 2018/19](image)

- Composted
- Recycled
- Anaerobic Digestion
- Energy from Waste
- Incineration
- Landfill

We send zero non-hazardous waste to landfill and this year **35% of our waste was reused, recycled or composted**. We hope to improve on this recycling rate going forward however issues faced by the UK waste infrastructure have resulted in fewer types of items being accepted for recycling and contamination limits have become a lot tighter. The focus therefore needs to be to reduce waste wherever possible.
The Plastic Challenge

Public awareness of the harm that plastics can cause to the environment has grown immensely over the past year with use of unnecessary plastics being regarded as unacceptable by a large number of people. We have worked to further raise awareness through events such as our free public film-showing of Albatross in October and litter pick events in partnership with Surfers Against Sewage.

Our Global Commitment

In October 2018, the University became a signatory of the New Plastics Economy Global Commitment. This unites businesses, governments, and other organisations behind a common vision and targets to address plastic waste and pollution at its source. It is led by the Ellen MacArthur Foundation in collaboration with UN Environment.

We can support the Global Commitment not only by reviewing our own operations but also through our Research and Engagement activity.

Spotlight on Plastics Engagement

Founded by Northumbria Alumni Ben Morison, and supported by our senior lecturer Simon Scott-Harden, the Flippoli Project aims to raise awareness of plastic waste among African communities and the world. The Project consists of a boat constructed entirely from plastic collected on beaches and roadsides in Kenya to show the potential of ‘already-used’ plastic. Made using 10 tonnes of plastic waste and 30,000 repurposed flip-flops – the boat has completed its 500km voyage from Kenya to Tanzania and has captured the attention of governments, schools, communities and businesses – changing behaviours to protect our oceans.

Plastics at Northumbria

Tackling the Plastic Challenge is not easy. Many perceived ‘solutions’ may actually have higher environmental costs or may be items for which there is no disposal route in place. We are therefore taking a thorough approach to our response to the Plastic Challenge to ensure our responses are viable, sustainable and deliver real environmental benefit.

Throughout 2018/19, we have baselined our use of plastics – from disposable items within catering, to equipment used within our labs. Our analysis discovered 40 tonnes of plastic in use at the University – from bins and furniture, to single-use disposable items.

This enabled us to identify priority areas based either on exceptionally high volume of plastics or where use of plastics seems unnecessary.

We have replaced a number of single-use items within our catering outlets, increasing the use of reusable crockery and replacing plastic crockery with wooden alternatives. Our next steps will be to trial alternatives to plastics where environmentally beneficial options are available and viable, and to explore disposal options to reduce the amount of plastic going to waste.
Water

Preventing money going down the drain

This year has seen an amazing 27% reduction in water consumption across the campus. This saving is in excess of 55 million litres of water; equivalent to almost 700,000 baths or the annual water use of 420 households.

Case Study – City Campus Water reduction

On City Campus there is one main meter which supplies the north of the campus.

After adding data logging to the water meter we found that the supply was losing over 2,500 litres of water per hour.

Additional meters were added to buildings to determine where the losses were occurring. Surveys found a number of toilets which were flowing continuously, which accounted for a large proportion of the losses. Two leaks were also found underground and repaired.

Following repairs there was a 33% reduction in water use through the meter, totalling 27 million litres of water.

The saving has been achieved by monitoring of water meter data loggers to quickly identify and fix leaks and losses. Training was also given to cleaning staff to identify and report potential losses from toilets and basins.

The water reduction saved over £120,000 over the year.
Travel

Our activity to encourage sustainable travel choices is not only motivated by aims to reduce carbon emissions and air pollution, but to also support the health and wellbeing of our staff and students through active travel. Our next staff and student travel survey will take place in 2019/20 but over this year we continue to encourage and facilitate sustainable travel choices among our staff and students.

Good for the Planet, Good for You!

From lunchtime walks to ‘Walk to Work Month’, we have encouraged staff and students to get out and about to support their health, explore Newcastle and make sustainable travel choices.

For those with a slightly greater distance to travel, we have further promoted cycling through our Cycle 2 Campus Scheme. This not only provides secure cycle parking, shower and locker access and free Dr Bikes and security tagging for cyclists, but has also included guided cycle tours to help less-confident cyclists gain familiarity with routes around the city.

Choosing low-carbon travel was further incentivised by our Northumbria Moves app. This enables users to gain points for active activities undertaken and to trade these in for a range of rewards from free coffees to local discounts.

Driving Positive Change

We are making our contribution in moving towards the government target of all new cars being electric by 2040. Ten additional Electric Vehicle charging points have been installed across our campuses this year. Our Mail & Transport van is an electric vehicle as are the vans used by our partners Sodexo, Chartwells and CBRE.

Business Travel

Northumbria University is an international University. This enables collaboration with academics, students, governments and businesses across the world to develop impactful research tackling global challenges and providing real-world insight to our students. This has resulted in an increase in the flight miles undertaken through business travel: however, the reduction in carbon associated with air travel, means our business travel emissions have actually reduced by 4%.

We use and promote travel-reduction measures such as tele-conferencing where possible, as well as using train travel where suitable. We address our scope 3 emissions, including business travel, within our carbon planning and have achieved a reduction in our total scope 1, 2 and 3 emissions of 11%.
Biodiversity

We are an urban university but our researchers and students are helping to support nature at our campus and beyond.

**Our new Biodiversity Action Plan**

Following our University-wide biodiversity audit in May 2018, we launched our new Biodiversity Action Plan (BAP). This sets out the premise that development work to our estate should look to advance staff and student wellbeing and/or support for biodiversity. It provides guidance on positive options for planting borders, grassland, trees and green walls, as well as identifying locations which provide the greatest opportunity for supporting biodiversity.

Measuring improvements in biodiversity can be hard to achieve but our innovative approach has enabled quantitative targets to be set based on values assigned to the land across the estate. Improvements made should be evidenced by improved results within our next University-wide audit in May 2020.

**Sharing Best Practice**

In order to deliver the actions set out in our BAP, we developed our Biodiversity Living Lab Group. Consisting of academic researchers, students and staff from our estates team, this group can share plans and insight. Our research on pollinators has informed planting options around campus with a newly planted area of campus to be monitored by staff and student researchers in order to detect the impact of plant species on bees within the urban setting.

We have also established and chair a new Newcastle Biodiversity Group, bringing together representatives from local universities, the Council and the health service in order to develop a coordinated approach to supporting biodiversity across Newcastle.

**Hedgehog Friendly Campus**

The UK’s hedgehog population has reduced by 50% since 2000. Increasing habitat loss means hedgehogs are moving out of their rural homes and into built areas though these pose new threats such as traffic, litter, poisoning and lack of access to food and water. The Hedgehog Friendly Campus initiative encourages universities to review their campuses and activities to support the urban hedgehog population.

We are now members of this initiative and are undertaking a range of actions from raising awareness to undertaking monitoring, and have set a target of achieving the Bronze Hedgehog Friendly Campus award by December 2019.
# Performance 2018/19

<table>
<thead>
<tr>
<th>Area</th>
<th>Target (Sustainability Policy 2017/18)</th>
<th>Deadline</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Management</strong></td>
<td>Top 30 People &amp; Planet</td>
<td>2023</td>
<td>Fourth place</td>
</tr>
<tr>
<td>Aim: To ensure continuous improvement in our environmental performance.</td>
<td>ISO14001 certification</td>
<td>2020</td>
<td>ISO14001:2015 certification</td>
</tr>
<tr>
<td></td>
<td>65% student rating for institutional commitment</td>
<td>2019</td>
<td>76%</td>
</tr>
<tr>
<td><strong>Energy and Carbon</strong></td>
<td>32.5% reduction in scope 1 &amp; 2 emissions (from 2005/6).</td>
<td>2020</td>
<td>38% reduction</td>
</tr>
<tr>
<td>Aim: To reduce scope 1, 2 and 3 carbon emissions.</td>
<td>10% reduction in scope 1 &amp; 2 emissions (from 2017-18)</td>
<td>2019</td>
<td>11.5% reduction</td>
</tr>
<tr>
<td></td>
<td>4% reduction in scope 3 emissions</td>
<td>2019</td>
<td>11% reduction</td>
</tr>
<tr>
<td></td>
<td>Average DEC rating of D</td>
<td>2020</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>3% reduction in kWh/m2 (Improved efficiency).</td>
<td>2019</td>
<td>12% reduction</td>
</tr>
<tr>
<td></td>
<td>3% reduction in emissions per student.</td>
<td>2019</td>
<td>11% reduction</td>
</tr>
<tr>
<td><strong>Waste and Resource Management</strong></td>
<td>5% reduction in waste.</td>
<td>2019</td>
<td>7% reduction</td>
</tr>
<tr>
<td>Aim: To minimise and manage waste, in accordance with the waste hierarchy.</td>
<td>60% onsite recycling, composting &amp; reuse.</td>
<td>2020</td>
<td>Currently 35%</td>
</tr>
<tr>
<td></td>
<td>0% non-hazardous waste to landfill.</td>
<td>2019</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Water Management</strong></td>
<td>2% reduction in mains water consumption.</td>
<td>2019</td>
<td>27% reduction</td>
</tr>
<tr>
<td>Aim: To reduce the volume of water we use.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Travel</strong></td>
<td>4% reduction in emissions from business travel.</td>
<td>2019</td>
<td>4% reduction</td>
</tr>
<tr>
<td>Aim: Minimise the environmental impact of business travel and the travel undertaken by staff, students and visitors to and from the University.</td>
<td>Reduce single-occupancy vehicle rate to: City Campus: Staff - 24%, Students - 7% Coach Lane Campus: Staff - 59%, Students 29%</td>
<td>2023</td>
<td>Next survey 2019-20</td>
</tr>
</tbody>
</table>
## Performance 2018/19

<table>
<thead>
<tr>
<th>Area</th>
<th>Target</th>
<th>Deadline</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel</strong></td>
<td>3% reduction in emissions from commuter travel (from 2018) (average CO2e per head).</td>
<td>2023</td>
<td>Next survey 2019-20</td>
</tr>
<tr>
<td></td>
<td>No increase in emissions from student start and end of term travel.</td>
<td>2020</td>
<td>Next survey 2019-20</td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
<td>Publish an up-to-date Biodiversity Action Plan.</td>
<td>2018</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Increase metres of space considered medium or high value for biodiversity (m²).</td>
<td>2020</td>
<td>Next Survey May 2020</td>
</tr>
<tr>
<td><strong>Procurement</strong></td>
<td>Maintain Fairtrade status.</td>
<td>2019</td>
<td>Fairtrade product range increased. (USMG agreed not to participate in new Fairtrade certification scheme).</td>
</tr>
<tr>
<td></td>
<td>Bronze Food for Life accreditation.</td>
<td>2019</td>
<td>Bronze certification</td>
</tr>
<tr>
<td></td>
<td>Establish baseline for Flexible Framework.</td>
<td>2020</td>
<td>Baseline established (Level 1)</td>
</tr>
<tr>
<td></td>
<td>Establish baseline for procurement emissions.</td>
<td>2020</td>
<td>In progress</td>
</tr>
<tr>
<td><strong>Sustainable Buildings</strong></td>
<td>Average DEC rating of D</td>
<td>2020</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Develop specifications for sustainable design and build.</td>
<td>2019</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Establish target for space efficiency within Estates Masterplan.</td>
<td>2019</td>
<td>Sustainability and space efficiency included but no targets set.</td>
</tr>
</tbody>
</table>
## Performance Review 2018/19

<table>
<thead>
<tr>
<th>Area</th>
<th>Target</th>
<th>Deadline</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emissions &amp; Discharges</strong>&lt;br&gt;Aim: Prevent pollution by minimising local discharges to air, land and water.</td>
<td>7% reduction in scope 1, 2 and 3 emissions.</td>
<td>2019</td>
<td>11% reduction</td>
</tr>
<tr>
<td></td>
<td>2% reduction in escape/addition of refrigerant gases.</td>
<td>2019</td>
<td>68% reduction</td>
</tr>
<tr>
<td></td>
<td>Implement reporting of environmental incidents and set baseline.</td>
<td>2019</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Education for Sustainable Development</strong>&lt;br&gt;Aim: To raise awareness of sustainability among staff, students and the communities in which we work, and develop their skills and knowledge to support sustainable development.</td>
<td>20 sustainability events per annum.</td>
<td>2019</td>
<td>23 events</td>
</tr>
<tr>
<td></td>
<td>1 large campus campaign.</td>
<td>2019</td>
<td>Student move out campaign spring/summer 2019</td>
</tr>
<tr>
<td></td>
<td>Green Impact team in every Faculty and Service.</td>
<td>2019</td>
<td>No team in IT Services</td>
</tr>
<tr>
<td></td>
<td>Establish baseline for number of student research projects on sustainability at Northumbria.</td>
<td>2019</td>
<td>20 students undertaking research projects</td>
</tr>
<tr>
<td></td>
<td>Establish baseline of taught programmes incorporating content linked to the Sustainable Development Goals.</td>
<td>2019</td>
<td>Mapping completed</td>
</tr>
<tr>
<td><strong>Research</strong>&lt;br&gt;Aim: To undertake research that supports the Sustainable Development Goals, and to use our research to inform our operations in support of sustainability.</td>
<td>Establish baseline of the No. of student research projects on sustainability at Northumbria University.</td>
<td>2019</td>
<td>20 students undertook research projects</td>
</tr>
<tr>
<td></td>
<td>Establish baseline mapping of how current research currently supports the Sustainable Development Goals.</td>
<td>2019</td>
<td>Mapping completed</td>
</tr>
<tr>
<td><strong>Climate Change Resilience</strong>&lt;br&gt;Aim: To be resilient to risks from weather and climate change.</td>
<td>Produce a Climate Resilience Plan and integrate with the Estate Masterplan.</td>
<td>2021</td>
<td>In progress</td>
</tr>
</tbody>
</table>

**Note:** Targets denoted in grey relate to deadlines extending beyond the 2018/19 reporting period or which became no longer applicable.