



NUI Galway  
OÉ Gaillimh

# NUI GALWAY SUSTAINABILITY REPORT

Academic Year 2019-2020

# NUI GALWAY SUSTAINABILITY AT A GLANCE

Sustainability is one of our 4 core values



with 10 Flagship Actions across the university mission



NUI Galway is a signatory to the SDG Accord

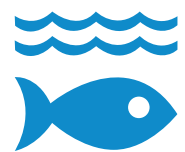


NUI Galway has become a designated University of Sanctuary



NUI Galway ranked **68th** in the world

for addressing the SDGs overall and placed **10th in the world** for addressing UN SDG 14



life below water (Times Higher Societal Impact Rankings 2020)

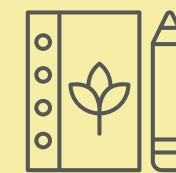


The First in Europe to be awarded Green Lab certification



Cúram Lab at NUI Galway

New Introduction to Sustainability module developed



**40%** reduction



in total energy consumption from baseline

(independently verified by SEAI)



**3,000** KEEP CUPS

distributed to students across the university by the Students' Union



NUI Galway Biodiversity Action Plan developed



# 1.0 INTRODUCTION

Welcome to the NUI Galway Sustainability Report 2019-2020. This is our second annual Sustainability Report. The report outlines progress against targets set out in the NUI Galway Sustainability Strategy 2017-2020. The NUI Galway Sustainability Strategy 2017-2020 sets out a vision to establish the university as a leading, green, smart and healthy campus where graduates are valued for their world-readiness, where research helps tackle societal challenges and the campus is a role model for the transition to a more sustainable future.

The Strategy utilises a Learn-Live-Lead model organised around six key themes (Research and Learning, Energy and Greenhouse Gas Emissions, Nature and Ecosystems, Health and Wellbeing, Built Environment, Governance and Leadership), each comprising objectives and targets to monitor our journey towards sustainability. Using the Strategy as a framework, the report reviews the progress we have made across the six key themes of the Learn-Live-Lead model, through Academic Year (AY) 2019-2020.

AY 2019-2020 has been a year of significant upheaval for our campus communities, owing to the impact of the Covid-19 pandemic. Despite the unprecedented scale of the crisis, our university community has rallied together to respond and tackle issues in many diverse and impactful ways. Our staff, students and alumni have shown a collective community spirit to overcome the pandemic together. Covid 19 has brought to the forefront many of the deep rooted sustainability challenges facing our world today. NUI Galway has demonstrated to the world why our expertise matters and why international collaborations in higher education are needed to solve the world's most pressing challenges.

This report demonstrates that 2019-2020 has been year of significant progress in sustainability at NUI Galway. For example, through extensive consultation with the university and wider communities, sustainability was selected as one of

four core values to shape the university's overall Strategic Plan 2020-2025: Shared Vision Shaped by Values. Sustainability is now one of four core pillars with ten associated flagship actions across the university mission. NUI Galway is a signatory to the United Nations (UN) Sustainable Development Goals (SDGs) Accord. Recognising the fundamental role that universities must play in achieving the 17 SDGs, we are committed to aligning all major efforts to the SDGs targets and indicators, including through our education, research, leadership, operational and engagement activities. Our students continue to be motivated and demand action on sustainability, our lecturers are embedding sustainability across the curriculum, our researchers continue to play a very important role in the global transition to sustainability and our professional services teams are undertaking various initiatives to make our campuses more sustainable.

As 2020 draws to a close, this report demonstrates that we are on track to meeting many of the ambitions, goals and indicators identified in our inaugural Sustainability Strategy. While we are inspired and motivated by our progress to date, we must look to the future, a new decade and plan for success beyond that laid out in our inaugural strategy. It is against this background that we are in the process of reframing and affirming our ambitions in sustainability through the preparation of a refreshed sustainability strategy for the period 2020-2025.



For the launch of NUI Galway's new Strategic Plan 2020-2025, University President, Professor Ciarán Ó hÓgartaigh signed the UN SDG Accord on behalf of NUI Galway



Figure 1: Sustainable Development Goals (SDGs)

The SDG Accord celebrates the critical role that education has in delivering the Sustainable Development Goals (SDGs). The SDG Accord is a commitment that the world universities and colleges make to each other to align all major efforts with the Sustainable Development Goals, targets and indicators, including through our education, research, leadership, operational and engagement activities.



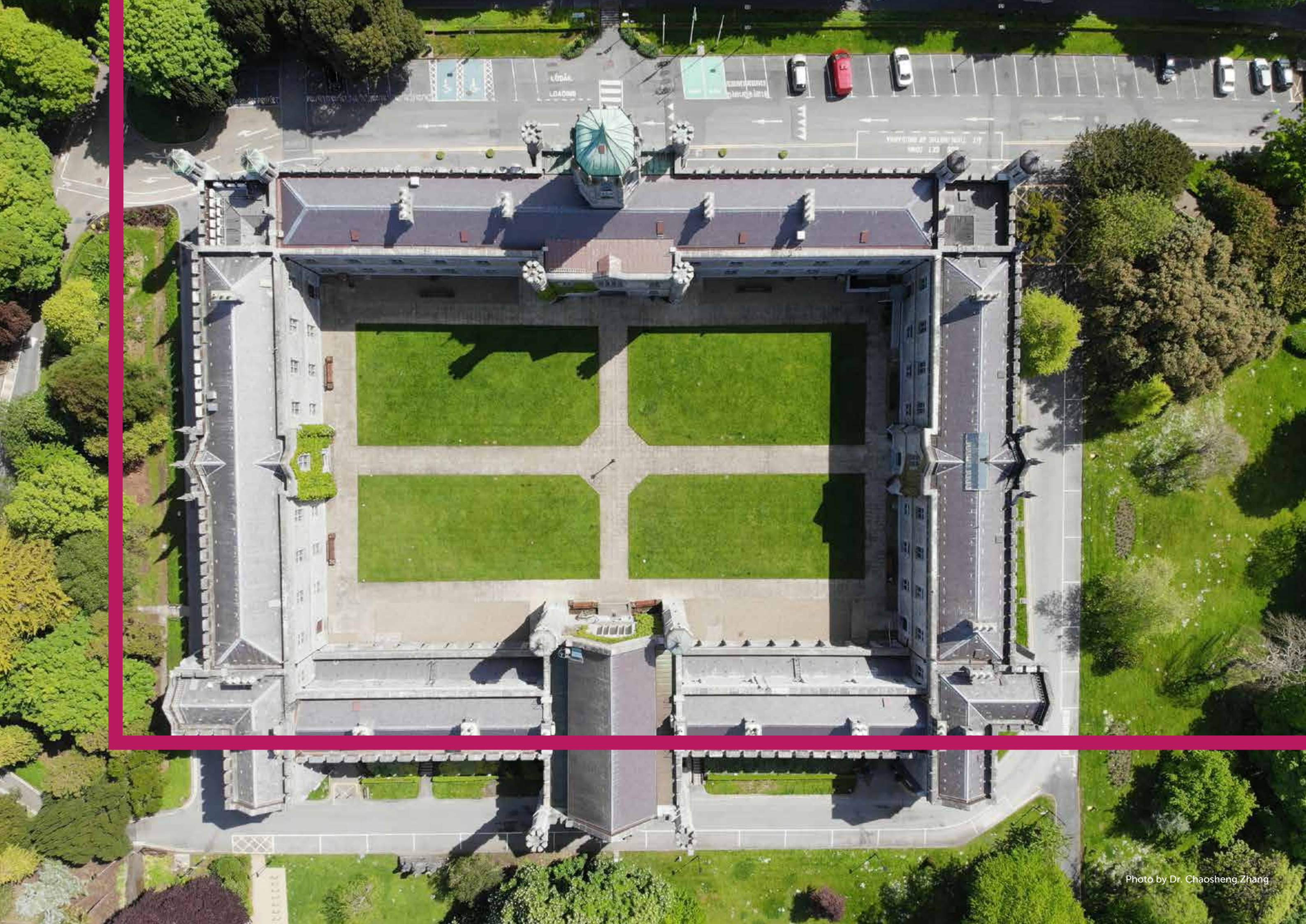


Photo by Dr. Chaosheng Zhang



# 2.0 GOVERNANCE & APPROACH

The NUI Galway Sustainability Strategy 2017-2020 was developed following extensive engagement with the campus community through the Community and University Sustainability Partnership (CUSP). CUSP was established in 2015 under the direction of the Deputy President and Registrar to showcase how a university can become a role model for the transition to a more sustainable future. CUSP operates via a multidisciplinary board of over 30 students and staff - the CUSP General Board.

The CUSP General Board meets 5 times per year and reports progress to the Deputy President and Registrar. All CUSP General Board members are members of a Sustainability Working Group. There are six Sustainability Working Groups organised around the six key themes of the Learn-Live-Lead model. Each working group has a working group leader and a set of targets and objectives to achieve by 2020.

The working group leader reports progress to the CUSP General Board on a quarterly basis. A Communications and Engagement Team drives marketing and communication initiatives across the working groups. In September 2019, the University appointed a Community and University

Sustainability Officer (CUSO). The CUSO reports to the Deputy President and Registrar and working with the CUSP General Board and Executive Board plays a lead role in the implementation of the NUI Galway Sustainability Strategy. The University Sustainability Advisory Board provides strategic oversight of NUI Galway's commitment to sustainability as detailed in the Strategic Plan, Sustainability Strategy and SDG Accord. The CUSP Executive Board is a sub-committee of the CUSP General Board and represents the CUSP General Board on the University Sustainability Advisory Board. In April 2020, NUI Galway published its Sustainability Terms of Reference. The Sustainability Terms of Reference sets out the work plan and reporting structure of the CUSO, CUSP General Board, CUSP Executive Board and University Sustainability Advisory Board.

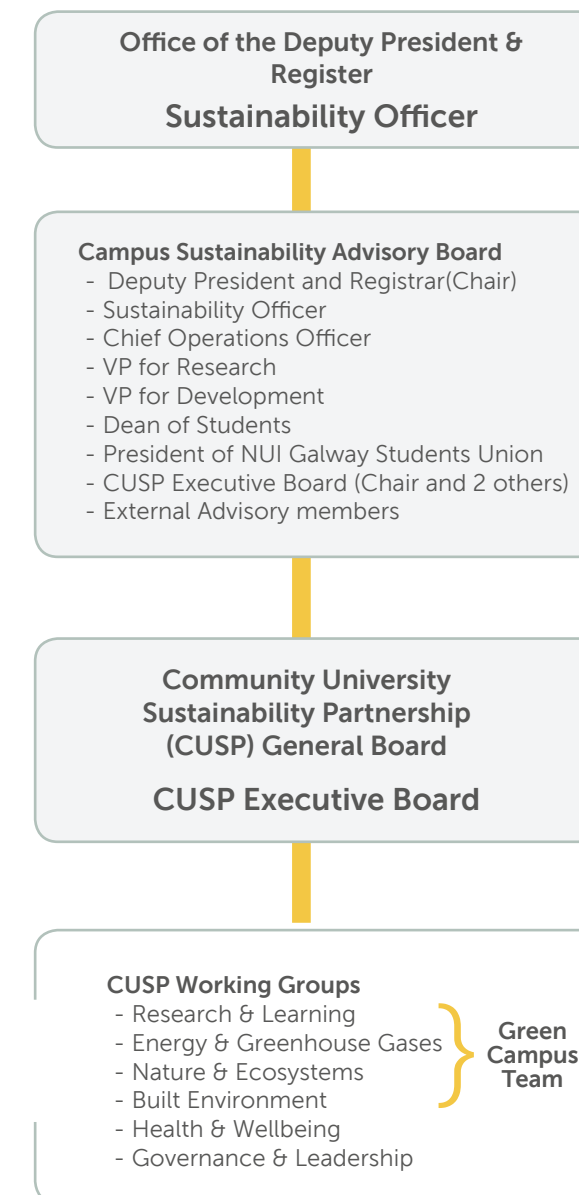


Figure 2: NUI Galway Sustainability Governance Model

# 3.0 RESEARCH & LEARNING

## Our Strategic Aim

Embed sustainability literacy into all aspects of learning and research so that our entire campus community gain the necessary knowledge and skills to become sustainability role models and leaders in their service to the outside world.

## Highlights

- A new 'Introduction to Sustainability' module has been developed that aims to provide students with a broad overview of key topics relating to environmental, social and economic sustainability. The module is a collaboration across disciplines, schools and colleges and explores the concept of sustainability in the face of global change.
- Alongside the Green Labs Certification, a new 'Green Lab Principle and Practice' module has been developed for postgraduate students, aimed at reforming the practices in scientific laboratories to reduce their environmental footprint and be established on a more sustainable basis.
- Work on compiling an inventory of NUI Galway modules on sustainability has been expanded to investigate the UN SDGs content of modules. A task force has been established as part of the Research and Learning Working Group to establish SDG content of modules. A survey has been circulated to all NUI Galway academic and teaching staff seeking to align their work to the SDGs. A novel Excel tool to measure the extent to which programmes at NUI Galway address UN SDGs has been developed and implemented in a pilot in the School of Engineering.
- NUI Galway's application to participate in the 2020 European Universities Association Learning & Teaching Thematic Peer Group was accepted. NUI Galway along with six other universities is a participant in the Environmental Sustainability of Learning and Teaching peer group which will examine key challenges related to the environmental sustainability of learning and teaching, seeking to identify institutional policies and processes that can support development towards more sustainable learning and teaching in higher education.
- The NUI Galway Student Volunteering Programme ALIVE, working in collaboration with James Hardiman Library, Launchpad, CUSP and the non-profit organisation the Ladder, hosted the Global Goals Jam from Friday September 20th until Sunday September 22nd 2019. The Global Goals Jam is an international event where creative teams work together on local challenges related to the SDGs. This year's theme focused on water, waste and climate change. The two-day event invited people from all backgrounds including, Alumni, current students, staff and members of the public. The event was organised to generate awareness of the UN SDGs among the campus community.



Photo by Dr. Chaosheng Zhang

NUI Galway's research is contributing to knowledge advancement, innovation and solutions to support the SDGs. We have contributed over 3,500 research publications to the SDGs in the past 5 years, representing over 11% of Ireland's research on the goals in that period. Over 59% of these papers were with over 2,700 international collaborating institutions across the globe and we were cited 220% the global average, demonstrating our research towards the SDGs is highly cited and impactful.



## In the Spotlight

### LEARNING AND STUDENTS

#### New Sustainability themed courses and modules

The 2019-2020 academic year saw the introduction of a new module in the Applied Social Sciences Degree based around the SDGs 'Critical skills for Social Scientists: Exploring the Social Sciences'. This module is developed around the 17 SDGs in response to critical climate and sustainability discourse globally.

2019/20 saw the first cohort of students complete the new one-year taught Masters in Sustainable Environments. This multidisciplinary course combines modules from Environmental Science, Engineering and Economics to provide students with experience of research-led learning opportunities to develop their skills in identifying and evaluating sustainable solutions for real-world environmental problems.

### RESEARCH

#### Ranked in Top Ten Universities in the world for research on life below water

The Times Higher Education (THE) University Impact Rankings is a global measurement of universities' contribution to the UN SDGs. In 2020, NUI Galway ranked 68th in the world for addressing the SDGs overall and placed 10th in the world for addressing UN SDG 14 – life below water. SDG 14 aims to sustainably manage and protect marine and coastal ecosystems from pollution and address the impacts of ocean acidification. NUI Galway ranked in the top 10 globally for research on life below water and education and support for aquatic ecosystems both locally and globally.

### COMMUNITY ENGAGEMENT

#### Public lecture series on Climate Justice

NUI Galway hosted a series of free public lectures on the theme of climate justice. The programme opened with an event entitled 'Climate Justice: Who's Responsibility is it' co-hosted by the Ryan Institute NUI Galway in conjunction with The Irish Centre for Human Rights. The event was timed to coincide with several key events in Ireland and internationally, including the United Nations Climate Action Summit, the Global Climate Strike and the High Court judgment in Friends of the Irish Environment CLG v The Government of Ireland, Ireland and the Attorney General ('Climate Case Ireland').

An analysis of NUI Galway's research across the UN SDGs between 2015 and 2020 was carried out by the Planning & Institutional Research Office using data from Scival. The analysis involved a review of the number of Publications to indicate which SDGs NUI Galway is contributing to, and how it compares on a national and global level. The analysis shows NUI Galway has a proportionally higher than the Irish and global average output in: SDG 14-Life below Water, SDG 2-Zero Hunger, SDG 6-Clean Water & Sanitation and SDG 11-Sustainable Cities & Communities.



Photo by Dr. Chaosheng Zhang







Photo by Dr. Chaosheng Zhang



# 4.0 ENERGY & GREENHOUSE GAS EMISSIONS

## Our Strategic Aim

At NUI Galway we are committed to leading the way in reducing energy consumption in new and refurbished buildings, measuring and reporting energy use, implementing energy saving initiatives, investing in renewable energy sources and reinvesting energy cost savings in new sustainability technologies.

## Highlights

- We achieved ISO 50001:2011 recertification. This international energy management standard recognises our efforts to use energy more efficiently and to achieve continuous improvement in energy performance.
- We have exceeded the Public Sector Energy Efficiency target of 33% energy efficiency by 2020, reaching our 40% target.
- With support from Sustainable Energy Authority Ireland (SEAI), Better Energy Communities Programme, a number of projects were implemented by Buildings and Estates through 2019/2020; for example, the installation of LED lighting, heat pumps, solar panel installations and air handling unit upgrades. Currently, there are over 20 sustainable energy projects running on site.
- NUI Galway has been shortlisted by SEAI for the second time under the Leadership in Public Sector Programme.
- NUI Galway has been selected to lead a Higher Education Authority (HEA) Energy Efficiency and Decarbonisation Pathfinder Programme. Working in conjunction with HEA and SEAI, we will undertake an energy and carbon efficient upgrade of Áras De Brún; the building will be used as an exemplar building on energy and carbon reduction.
- COVID 19 has had a considerable impact on the profile of energy use across the campus. Energy consumption has significantly reduced in some areas, while larger energy intensive buildings did not reduce as expected. Into the future COVID-19 will bring major challenges with an increase in energy use expected to comply with revised ventilation guidelines, increased hand washing; the implementation of new teaching technologies will potentially increase electrical usage on campus in the future.





## In the Spotlight

### LEARNING AND STUDENTS

#### Energy Resilience and the Built Environment

In September 2019, we had the first intake of students into the new EPSRC-SFI Centre for Doctoral Training in Energy Resilience and the Built Environment (ERBE CDT), which brings together established energy research centres at Loughborough University (LU) and University College London (UCL) with MaREI, the SFI Research Centre for Energy, Climate and Marine. The ERBE CDT brings together world-leading academics from physics, engineering, the social sciences and economics. Through the SFI MaREI Centre, NUI Galway is a partner institution in the ERBE CDT.

### RESEARCH

#### Deploying renewable hydrogen solutions in remote and island communities

Remote working is booming, but remote communities struggle in an increasingly connected economy. One facet of life in these communities, which can have abundant renewable resources, is dependency on imported fossil fuels. An interdisciplinary team of researchers at NUI Galway, from Chemistry, Economics and Engineering, aim to change this by deploying renewable hydrogen solutions in remote and island communities throughout Ireland and Europe, through Seafuel, GenComm and HUGE, which are three EU Interreg projects. The projects demonstrate the feasibility of hydrogen to store and use renewable energy locally, while establishing the Community Hydrogen Forum to engage, inform and inspire.

### COMMUNITY ENGAGEMENT

#### NUI Galway Energy Team of the Year

In October 2019, a team from NUI Galway Buildings and Estates was awarded the National Energy Team of the year by the Sustainable Energy Authority of Ireland (SEAI) in recognition of their inclusive and long-term approach to energy management. NUI Galway are committed to reducing energy and carbon consumption in line with the Government Climate Action Plan 2030. The Energy Team aim to lead by example by implementing best practices in energy efficiency and promoting the concept of energy efficiency at all levels in the organisation from students and academics to administration staff and contractors. As part of its strategy, the Energy Team run initiatives and campaigns which encourage and provide tools to students and staff on how they can reduce energy use on campus and in their homes. The Energy Management System, developed by NUI Galway Energy Team, allows for independent verification and monitoring by SEAI of energy and carbon reduction on campus.



The Energy Team from NUI Galway Buildings and Estates awarded SEAI National Energy team of the year in October 2019





# 5.0 NATURE AND ECOSYSTEMS

## Our Strategic Aim

To improve biodiversity and promote the benefits of interaction with nature

## Highlights

- NUI Galway continued to implement and map actions for pollinators. New pollinator friendly planting schemes were created across the campus drawing on the All-Ireland Pollinator Plan. Actions are uploaded onto the National Biodiversity Data Centre website for public viewing.
- A Biodiversity Action Plan has been developed, mapping actions for pollinators and setting out additional conservation actions for invertebrates, mammals, birds, plants and habitats.
- More bilingual signage to indicate areas where perennial planting or grass cutting regimes are designed to benefit pollinators.
- Additional external seating has been installed using recyclable material and fallen timber.
- In 2019, 265 students and 249 staff responded to our Biodiversity Awareness Survey. There was overwhelming support for actions to safeguard nature. As a result of the responses to the survey, a living labs taskforce has been set up to map biodiversity. This has already resulted in records of hedgehogs and smooth newt being added to our information on campus-wide biodiversity.

## In the Spotlight

### LEARNING AND STUDENTS

#### MSc students present Biodiversity Survey findings at An Taisce Green Campus Network meeting

Postgraduate students from three MSc classes: MSc Environmental Leadership, MSc Sustainable Environments and MSc Sustainable Resource Management: Policy and Practice presented the findings of the Biodiversity Awareness survey to staff and students. They also presented their findings at An Taisce's Green Campus Network meeting, which is the annual conference for all the green campus committees to connect and share their experience. The students confirmed how proud they were of the work that has been done at NUI Galway.

### RESEARCH

#### Brown Hairstreak Butterfly Translocations

In February 2020, 30 branches of blackthorn containing overwintering eggs laid by a rare butterfly, the Brown Hairstreak, were translocated by third year Environmental Science students, postgraduate researchers and staff based at Applied Ecology Unit. They did this because the site containing the blackthorn was due for development. The students carefully cut the branches containing the eggs and reattached them to young blackthorn on a site safeguarded by the college for biodiversity. In April, when the caterpillars would normally hatch out, remnants of were eggs were seen. In August, nibbled blackthorn leaves were seen on the bushes that had supported the translocated branches. Further research is underway, but we hope that this is evidence that we are successfully managing our habitats for this rare butterfly.



Photo by Dr. Chaosheng Zhang



The NUI Galway campus being used as a living lab for biodiversity monitoring





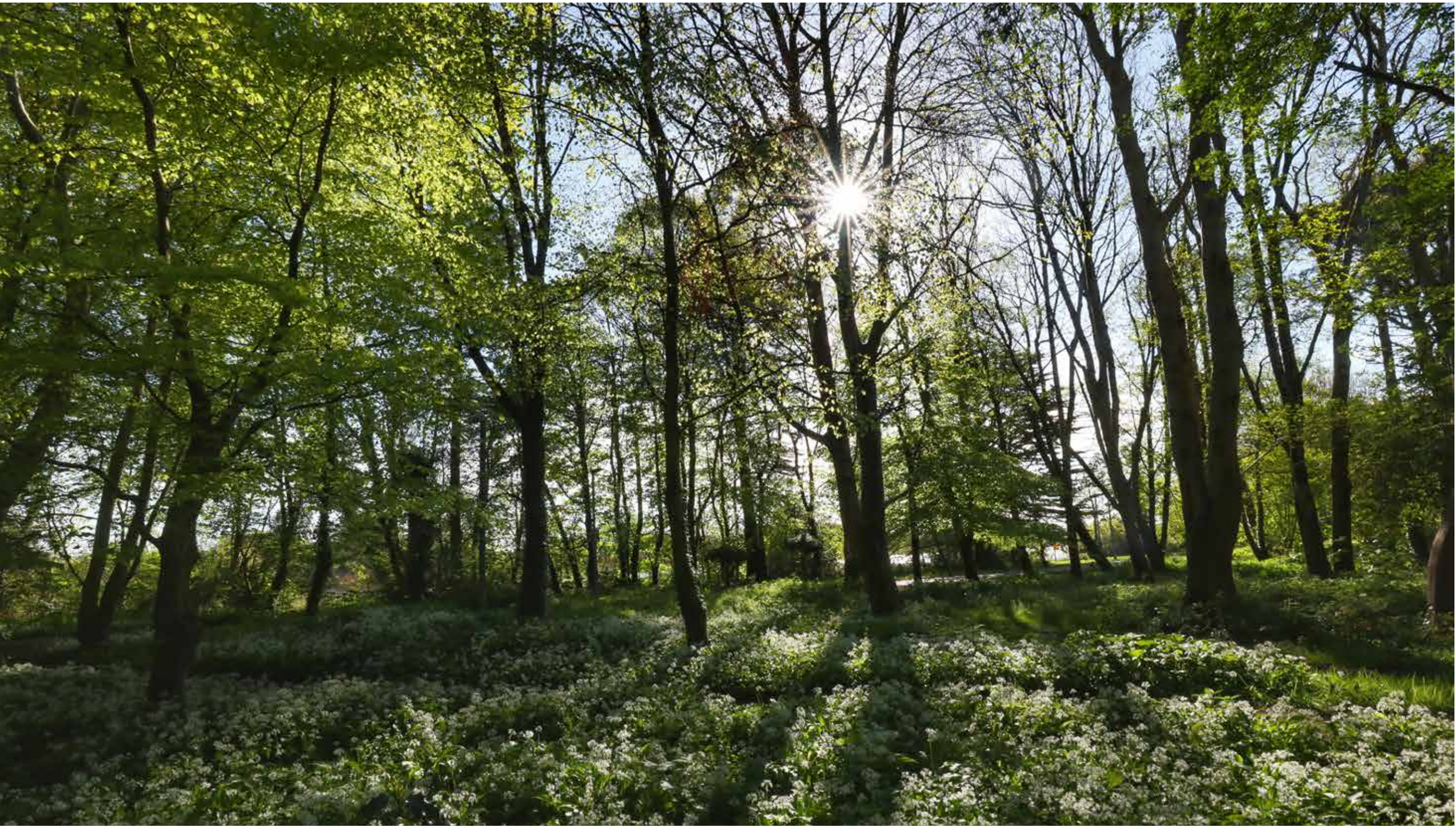


Photo by Dr. Chaosheng Zhang



## Community Engagement

### Wild connections with wider community

NUI Galway is connecting with local groups and representatives to support Biodiversity initiatives within and beyond our campus grounds. Our aim is to build on the pollinator plan and biodiversity actions to connect spaces for nature and communities throughout Galway city. Due to COVID-19 impacts and restrictions, many of our proposed engagement activities have had to be rescheduled or postponed or reconfigured. To find a way round this, Nature and Ecosystems personnel have contributed to the Nature at Home initiative by the Ryan Institute at NUI Galway, which included ways people could connect with nature and nature activities they could undertake at or near their home.



Photo by Dr. Chaosheng Zhang

# 6.0 BUILT ENVIRONMENT

Over the last year we have demonstrated our commitment to the principles of the SDGs through our effective and efficient use of water, a key natural resource; by preventing and reducing waste and managing waste in a sustainable way and by encouraging and facilitating sustainable transport and travel patterns. We are committed to creating a campus that will have a positive impact on the surrounding environment, promoting resource efficiency, reducing pollution and protecting historic areas of the campus.

## WATER Our Strategic Aim

To minimise the local, regional and global environmental impacts of water usage by reducing university-wide water usage, increasing the use of reclaimed water and reduce bottled water consumption on campus.

## Highlights

- Buildings & Estates have installed additional water meters throughout the campus. The water meters significantly enhance building performance monitoring capabilities by bringing to light water consumption of individual buildings, identifying high water demand buildings and detecting leakages in a timely manner.
- NUI Galway staff are taking part in a Water Stewardship Training Programme by Irish Water. This is a certified programme through which attendees learn how to develop a certified Water Map of the campus.
- NUI Galway Students' Union (SU) through the Student Project Fund funded the installation of additional water fountains on campus as a mechanism for students to save money on bottled water and reduce plastic waste. Buildings & Estates monitored 4 water fountains over the Christmas exam period 2019 and determined that 20,000 litres of water was dispensed into fill bottles avoiding 450kg of plastic waste.
- Installation of water saving devices across the campus included the replacement of twist taps to percussion taps in a number of buildings.
- The School of Engineering and Buildings & Estates collaboration led to the publication of methods for driving efficiency in building water networks at secondary and third level education buildings. Using the newly developed methodology, case studies demonstrated 62% savings in water consumption which resulted in energy and carbon emission savings of the order of 50 kWh and 30 kg CO<sub>2</sub> per day, respectively.



## In the Spotlight

### LEARNING AND STUDENTS

#### The campus as a living lab for sustainability

In 2019/2020, a group of final year undergraduate Engineering students carried out a comparative review of water and energy consumption. The students used water and energy consumption data from selected NUI Galway buildings to seek to identify correlations between the usage of the resources. The impact of the Energy Management System on the resource use was also considered and how an equivalent system for water may be progressed. Final year students from Business Information Systems focused on water consumption and developing a business case for engaging building users in reducing their consumption. A number of water meters were installed by the Buildings and Estates Office to provide data for this project work. Both projects were supported by NUI Galway Research and Academic staff.

### RESEARCH

#### Sustainable approach to waste water treatment

A research group in Civil Engineering have recently carried out a number of high-profile projects in the areas of wastewater and hydraulic engineering, which have resulted in a spin-out company focusing on energy efficient wastewater treatment and hydropower recovery (Vortech WS Ltd). Working in collaboration with a Galway-based civil engineering construction contractor, the research group designed and tested (at large scale level in NUI Galway) a novel solution to a critical challenge in the London Super Sewer project. The novel solution will help the city cope with demands on wastewater infrastructure caused by climate change and population/industrial growth. The multi-million Euro construction is in its final stages in London and the project was acknowledged by Engineers Ireland by winning The Technical Innovation of the Year Award in 2019 and the SEAI Research and Innovation Award in 2020.

### COMMUNITY ENGAGEMENT

#### Personal Care products highlighted as microplastic pollutants in Irish Waters

Researchers from Earth and Ocean Sciences and the Ryan Institute at NUI Galway carried out a study on the contribution of widely flushed personal care products (wet wipes and sanitary towels) to the ocean plastic crisis. The study found that personal care products are an underestimated source of white microplastic fibres in the marine environment and 50% of wet wipe brands tested in the study were labelled flushable despite containing plastic fibres. The study increases public awareness of microplastic pollution in the marine environment and highlights the need for us to adopt our behaviours and shift away from the inapt disposal of personal care products to the sewage system.



Researchers from Earth and Ocean Sciences and the Ryan Institute at NUI Galway investigating microplastic pollutants in Irish Waters

## WASTE Our Strategic Aim

Minimise the local, regional and global environmental impacts of our waste by developing policies and procedures that focus on reducing the amount of waste generated on campus and diverting waste from landfill. Engage with the entire campus community to reduce waste generated and promote recycling.

## Highlights

- Covid 19 has had a significant impact on the quantity of waste generated. Monthly waste figures show a 60% reduction in the amount of waste generated each month between April and August 2020 as compared to the period September 2019 to March 2020.
- The Binless Office waste segregation and recycling scheme was fully rolled out in Summer 2020. This 5 year project aims to eliminate under desk office bins and generate awareness of the volume of waste produced on a daily basis and how to segregate it correctly.
- The University is certified zero waste to landfill.
- In January 2020, our pricing mechanism for coffee and other hot beverages changed. All caterers introduced the practise of displaying hot beverage prices to exclude the price of the disposable cup. The purpose of the levy is to shift behaviour towards the use of these long-life/ceramic cups as the default choice for all customers. This levy applies to all single use cups, including disposable and compostable cups. Unfortunately due to Covid-19, a temporary return to single use disposable cups was implemented throughout the campus as a health and safety measure to protect our campus community.





## Highlights

- In AY 2019/2020, Buildings and Estates introduced waste league tables based on the proportion of waste recycled by different buildings across the campus. The purpose of the league table is to motivate the campus community to adopt more resource efficient ways by bringing into focus the amount of waste recycled versus total waste generated in each building.
- In January 2020, NUI Galway ALIVE student volunteers collected over 45 bags of donated goods from International Students in an initiative to reduce waste, promote circular economy and contribute to social wellbeing. The donations included an array of duvets, blankets, pillows and bedding. The donated goods were laundered and gifted to COPE Galway, a non-profit organisation that manages hostels for people experiencing homelessness.
- NUI Galway has been selected as one of three universities to participate in a Living Labs Waste Characterisation Project led by the Environmental Protection Agency (EPA) in conjunction with the Irish Universities Association (IUA) Sustainability Working Group. The project seeks to develop best practise approaches for waste prevention, waste management and circular economy activities on campus and is strongly aligned to our strategic plan commitments relating to waste management and plastic usage.

## In the Spotlight

### LEARNING AND STUDENTS

#### Students design for the circular economy

In 2019/2020, Mechanical Engineering students were challenged to create solutions to solve problems of overproduction and over consumption that are rife in everyday life. The projects aimed to find ways to reduce resource use, minimize waste and enable more circular business models. Examples of projects submitted included a Smart Golf Ball, a Reverse Vending Machine suitable for Ireland, Greener Yoghurt Pots, a Sustainable Festival Tent and Smart Dispenser for a zero waste retail outlet. Students learned how to apply life cycle thinking, design for environment, systems thinking and develop their engineering skills in innovative ways to address sustainability challenges.

### RESEARCH

#### Fungi for conversion of campus catering wastes to low-cost energy feedstocks

Fungi are ubiquitous in Nature, where they have both essential symbiotic and unwanted antagonistic relationships with other living organisms and play important roles in the efficient and sustainable recycling of organic matter. In September 2019, researchers from Biochemistry and the Applied Ecology Unit, in collaboration with Buildings and Estates staff, and final year students from Environmental Science, Botany & Plant Science and Biotechnology commenced two 'fungal' projects. One aims to map fungal biodiversity on the NUI Galway campus with a view to identifying species associated with fertile/flora-rich versus non-fertile/flora-poor areas, while the second is investigating the 'recycling systems' of fungi for conversion of campus catering wastes to low-cost energy feedstocks.

### COMMUNITY ENGAGEMENT

#### The Free Keep Cup Initiative

In December 2019, the Student Union distributed over 3,000 free Keep Cups to students across the campus to reflect students' commitment to reducing single-use beverage cups and creating a more sustainable campus. Each student receiving a Keep Cup signed a sustainability pledge showing their commitment to adopting more environmentally friendly lifestyle choices. The free Keep Cup initiative aims to encourage even more students to start on a journey towards responsible consumption. All retailers on the NUI Galway campus offer a discount to customers presenting a reusable cup.





## TRANSPORT

### Our Strategic Aim

To cater for the travel needs of University staff and students, and to encourage sustainable modes of transport such as walking, cycling and public transport.

### Highlights

- NUI Galway SU has been centrally involved in campaigns to promote sustainable travel. In October 2019, the SU hosted the Road Safety Authority shuttle and crash simulators on campus for a very informative Road Safety Awareness Day. Hundreds of high visibility items and bike lights were distributed to students as part of a keep students' safe and seen initiative. In March 2020, the SU organised 53 teams to compete in the Marchathon Challenge and despite the Covid-19 emergency and closure of the university, the challenge was completed over a 4 week period.
- Researchers from the Whitaker Institute NUI Galway in partnership with the Western Development Commission published findings from its survey Remote Working in Ireland during COVID 19. Summary results from the national survey of 7,241 individuals across a wide range of industries and occupations over a one week period in April-May 2020 show the top three advantages of working remotely were no traffic and no commute, reduced cost of going to work and commuting, and greater flexibility as to how to manage the working day.
- The NUI Galway Strategic Plan 2020-2025, launched in December 2019, prioritises the expansion of the Galway to Connemara Greenway with greater connection for cyclists and pedestrian between the campus and the city.
- Buildings and Estates have undertaken a substantial review of national, regional and local planning policy along with the University's own parking and travel surveys, policies and revenue strands. Recommendations included the approval of new policy, expansion of the park and ride service and revenue generating options. The work is currently paused due to the Covid-19 pandemic.
- Covid-19 has delayed preparation of an updated NUI Galway Travel Plan. The decision was taken to postpone travel surveys due to the impact of remote working and blended learning on travel patterns.
- New campus wide parking signage and way-finding signage was erected. Pathway improvements, expansion of campus based electric transport fleet and installation of additional electric car-charging points across campus were also achieved.
- NUI Galway continues to work closely with Galway City Council and National Transport Authority on the implementation of the Galway Transport Strategy.

## RESEARCH

### Single line tram works best in a rectangular city

A recent publication in the Journal of Public Transport from the School of Mathematics, Statistics & Applied Maths at NUI Galway proves mathematically the increased feasibility of a single line tram in Galway City due to the shape of the city. The research shows that if one was to put in a tram of any fixed length in to a rectangular city (and the shape of Galway City is broadly rectangular) compared to a circular city, then a higher percentage of people will find the tram useful in the rectangular case.

## COMMUNITY ENGAGEMENT

### CycleLocal – Win Prizes for Cycling

CycleLocal, a fun three week cycling event designed to engage NUI Galway students and staff, build morale and increase activity, ran between 20th July and 9th August. Participants were asked to visit the Smarter Travel Active Travel Logger website and register their team. During the three weeks each cyclist logged the number of trips they completed each week. Once a participant had been cycling for at least 10 minutes that qualified as a trip. Participants completed the trips on their own but contributed to their teams tally. Teams were eligible to win prizes each week and the team that ranked at the top of the leaderboard was awarded a trophy and a €400 donation to a charity of choice.





# 7.0 HEALTH & WELLBEING

## Our Strategic Aim

To create a healthier, more sustainable campus environment that is committed to the happiness, safety and wellbeing of all students and staff. Provide opportunities for healthy, safe and sustainable food and opportunities for physical activity. Strengthen mental health and resilience. Reduce alcohol and other substance misuse.

## Highlights

- As part of NUI Galway's Active\* Consent programme, a Consent Strategy and Toolkit has been developed. The toolkit offers guidance for Higher Education Institutions (HEI's) designing an institutional Action Plan to address consent, sexual violence and harassment through a sustainable, joined up strategy across each campus community.
- We secured funding from the Minister for Further and Higher Education to enhance mental health and wellbeing supports for students. The funding will be used to recruit additional Student Counsellors and Assistant Psychologists, implement the Framework for Consent in HEIs and implement the National Student Mental Health and Suicide Prevention Framework.
- The Student Resilience Project (SRP) expanded its reach to all First Year students in Law and selected programmes in Health Sciences in 2019-20, in addition to all First Year students in Commerce, Second Year Psychology students and selected postgraduate programmes. The increase in reach to nearly 1,000 NUI Galway students is an important step in the roll out of the SRP, which provides psychoeducation and skills training in relation to personal development, working in groups, and awareness of drugs and alcohol. The project is a collaboration between the School of Psychology, the Student Counselling Service, and Student Services.
- Health and wellbeing seminars were provided to staff and students to disseminate the findings from the Student Information Project (SIP), which has documented student wellbeing since 2016. This provides a unique insight among Irish colleges of changes in use of alcohol and drugs, and in patterns of stress, anxiety and depression. Using the capacity developed through the SIP, it was possible to design and conduct a survey of NUI Galway undergraduate and postgraduate students in May 2020 on their academic experiences during lockdown and to assess the impact on their personal wellbeing. The findings were disseminated extensively through staff seminars and briefings to Academic Council.
- The Student Success Quiz was completed by over 1,000 NUI Galway students as part of Student Orientation 2019-2020. The Success quiz seeks to find out how prepared students are for university and provides advice on how to navigate university life from their health to course choice and engagement. The Success Quiz is a holistic way for students to look at their wellness at the start of their university journey.
- Sláinte Society, NUI Galway's health promotion society, focuses on promoting all aspects of physical and mental health. Sláinte took home Best Society Charity/Civic at the Board of Irish Colleges Societies (BICS) National Society Awards in 2020. Judges commended their Teddy Bear Hospital, an initiative where up to 200 medical healthcare and science students diagnose and treat teddy bears as a way to help children, ranging in age from 4-8 years, feel more comfortable around doctors and hospitals.





Photo by Dr. Chaosheng Zhang



## In the Spotlight

### LEARNING AND STUDENTS

#### CEIM- co-curricular academic peer learning programme

CÉIM is a co-curricular academic peer learning programme that supports first year students' transition to higher education through a series of measures aimed at promoting academic success, building social networks, developing transferable skills and supporting progression to second year. CÉIM is run as a partnership between students, academic staff and the Students' Union and is available to approximately 1,650 first year students. In 2019, the number of students offered CÉIM increased by over 35% and the external CINNTE institutional quality review and subsequent report commended the work conducted by CÉIM and recommended it be mainstreamed.

### RESEARCH

#### Improving health and wellbeing in response to the Covid-19 crisis

NUI Galway researchers have been to the fore in carrying out research to improve health and wellbeing in response to the Covid-19 crisis. Examples of the diverse array of projects underway across our colleges include: Rapid Blood Test for antibodies; Connecting Families in Intensive Care Unit; Two patients-one ventilator; Smartphone Solution for Social Distancing; Improving long term recovery; Delivering Decontamination wipes; Helping Patients Breathe; Ultraviolet Drone to fight Covid-19; Personal Protective Equipment (PPE) amid Global Shortages; NUI Galway academics are members of the national Covid-19 modelling team that informs the recommendations of the National Public Health Emergency Team (NPHE) to the Irish Government.

### COMMUNITY ENGAGEMENT

#### Our Community Promise Cúram Dá Chéile

At part of the NUI Galway Covid-19 response plan, students and staff are asked to sign a community pledge to consider and prioritise the health and safety of those around them. The pledge known as Cúram Dá Chéile is a commitment to adhere to public health advice and to behave responsibly. Signatories to the pledge are asked to take personal responsibility for ensuring they are up to date with the latest public health information, follow guidance and show empathy, respect and due consideration to others in the university and wider community. Cúram Dá Chéile is an initiative to show solidarity with the wider community and reduce the spread of Covid-19.



NUI Galway students and staff sign Cúram Dá Chéile pledge



# 8.0 GOVERNANCE & LEADERSHIP

## Our Strategic Aim

To show leadership in the transition to a more sustainable future by promoting sustainability scholarship, social justice, human rights and global citizenship as graduate and staff attributes, building practical partnerships with communities and other organisations and achieving public sector targets.

## Highlights

- The overall strategic plan 2020-2025 for our university was launched earlier this year with sustainability as one of the four values that shape the research that drives us, the teaching we share, the support we give and our engagement in the world and for the world.
- We became a signatory to the SDG Accord in December 2019, where we commit to embed the UN SDGs into our education, research, leadership, operations, administration and engagement activities. We have committed to do more to deliver the SDGs, to annually report on our progress, and to do so in ways which share the learning with other institutions both nationally and internationally.
- Times Higher Education University Impact Rankings for 2019/2020 placed NUI Galway 68th out of 767 Institutions in the world for addressing the UN SDGs. This ranking is based on how each university is contributing to achieving the UN SDGs. In addition, NUI Galway achieved a rank of 10th in the world for the SDG14: Life Below Water.





- We published our Sustainability Terms of Reference in June 2020, which sets out the purpose, organisation and membership of the Community and University Sustainability Partnership (CUSP) General Board, the University Sustainability Advisory Board (USAB) and the CUSP Executive Board. The CUSP General Board, the CUSP Executive Board and the USAB have been established to progress and embed the sustainability vision of the university. The CUSP General Board has an advisory function to the Deputy President and Registrar through the USAB.
- The Galway Green Labs initiative, established by the Director of the Galway Neuroscience Centre at NUI Galway, led to the SFI CÚRAM Centre laboratory at NUI Galway being the first in Europe to be awarded Green Lab Certification in November 2019.

## In the Spotlight

### LEARNING AND STUDENTS

#### University of Sanctuary

NUI Galway has become a designated University of Sanctuary, a movement aimed at promoting the inclusion of International Protection Applicants, refugees and Irish Travellers within the community in meaningful ways. As part of our University of Sanctuary initiative at NUI Galway, a specific University of Sanctuary Scholarship Programme was introduced for AY 2019-2020. The scholarship programme is designed to increase participation at NUI Galway for International Protection Applicants, refugees and Irish Travellers and 9 scholarships were offered through the programme this year including 6 undergraduate and 3 postgraduate scholarships. For AY2020-2021, the programme will be expanded to include 12 full time scholarships.

### RESEARCH

#### Green Lab Certification

Now considered the global standard for best practices in laboratory sustainability, 'My Green Lab' certification is recognised by the Association for the Advancement of Sustainability in Higher Education (AASHE), the American Energy Society, and the International Institute for Sustainable Laboratories. In order to gain certification, laboratory practices are assessed under up to 14 categories, within the broad areas of Energy, Water, Waste and Green Chemistry. The achievement of Green Lab Certification in the CÚRAM Centre at NUI Galway was quickly followed by that of the Lambe Institute at University Hospital Galway (UHG). Certification of all laboratories on-campus as 'green' by 2025 has since been adopted as a flagship action of NUI Galway's sustainability strategy. Dr Una FitzGerald has also become the first Chair of an SEAI working group for public sector labs, which is collaborating on the setting up of an 'Irish Green Labs' platform that would assist in embedding green lab practices within all laboratory sectors across Ireland (Teagasc, DAFM, the Marine Institute, Irish Water, State Labs, Universities and Institutes of Technology).

### COMMUNITY ENGAGEMENT

#### Student volunteering

NUI Galway students are actively volunteering in a wide range of campus initiatives, local community non-profit organisations and with campus outreach programmes in schools and youth clubs. These activities are a valued non-formal learning opportunity and include environment, health and wellbeing, educational and equality projects. In AY19/20, ALIVE invited 1,000 students to reflect on their volunteering experience and indicate the SDG their voluntary efforts aligned with. Students indicated that at the core of their volunteering work was a focus on SDG 3 – Good Health and Wellbeing and SDG 4 – Quality Education.

NUI Galway subscribes to a number of national and international sustainability related programmes and partnerships, for example;

All IRELAND Pollinator Plan

An Taisce Green Flag

ATHENA Swan

ENLIGHT University

Irish Universities Association Sustainability Working Group

ISO 50001 Energy Management System

My Green Lab

SDG Accord

SEAI Public Sector Partnership Agreement

University of Sanctuary



NUI Galway becomes a designated University of Sanctuary in September 2019





# 9.0 CONCLUSIONS

We will provide leadership to inform the transition to a sustainable future through our teaching, research action and impacts.

## **'Shared Vision Shaped by Values' - NUI Galway Strategy 2020-2025**

As a university community, we are distinctly shaped by our values, values that emerged through broad and inclusive consultation with our students, staff and other stakeholders. In December 2019, we shared our values with the world with the publication of the NUI Galway Strategic Plan 2020-2025 Shared Vision Shaped by Values. Sustainability is now enshrined as one of our four core values. Alongside and linked to respect, excellence and openness, sustainability is at the heart of everything we do. Sustainability shapes how we learn, live and lead as a university community.

From a learn perspective, in AY2019-2020 we continue to focus on embedding sustainability literacy into all aspects of university practise learning and research. Our progress is broad and varied; from developing a new 'introductory to sustainability module', finding new ways to assess and progress sustainability content within curricula, making university opportunities available to marginalised communities and placing 10th in the world for addressing the UNSDGs for research on life below water and support for aquatic ecosystems.

From a live perspective, we are profoundly aware of the key role our university must play in creating and promoting sustainability in living environments. We recognise that sustainability and health is inextricably linked and that we have a responsibility to promote the health and wellbeing, not only of our students and staff, but also the communities we serve. From significantly exceeding the

National Government target of 33% energy efficiency by 2020, initiatives to reduce waste and promote circular economy, expanding the opportunities to connect with nature and promote biodiversity; we have achieved notable success across the 'live' pillar through 2019-2020. Central to this success is the way our university community rallied together to respond to the challenges of living with Covid-19. Our students, staff and alumni have worked together and with others around the world to address local regional and global challenges presented by the Covid-19 crisis.

Through 2019/2020 we continued to demonstrate leadership in sustainability and embedding the SDGs. We are committed to sustainability at an institutional level. Quoting from the University's Strategic Plan 2020-25: 'Building on the work of our Community and University Sustainability Partnership and its approach to learn live lead sustainability across the university mission, we will embed sustainability in our culture, operational policies and governance structures and empower our communities to be champions of sustainability'. Sustainability is one of four core pillars in our strategic plan with ten associated Flagship Actions across the university mission. We have signed the UN SDG Accord. In April 2020, The Times Higher Education (THE) Impact rankings ranks NUI Galway 68th in the world for addressing the UN SDGs. The first laboratory in Europe to be awarded Green Lab Certification is based at NUI Galway.

Thanks to the considerable efforts of many, we are on track to achieve much of that set out in our inaugural sustainability strategy. As we enter a new decade, a decisive era for people and the planet, we must step up our efforts, connect the dots, and fully embed sustainability across the university mission. We will provide leadership to inform the transition to a sustainable future through our teaching, research, actions and impacts.

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## Key Actions for 2020-2025

**Reframe and affirm our ambition in sustainability with the development of the NUI Galway Sustainability Strategy 2020-2025.**