



NUI Galway
OÉ Gaillimh

NUI Galway Sustainability Report

Leading the transition to
a sustainable future

Academic Year 2020-2021

 SUSTAINABLE DEVELOPMENT GOALS



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NUI Galway Sustainability
Highlights AY 2020-2021

New NUI Galway
Sustainability Strategy
launched



Inaugural **Carbon
Footprint Assessment**
for NUI Galway
completed



Winner **Best
Sustainability
Award** Galway
Chamber
Awards



New **Biodiversity
Action Plan**
published with 45
actions to
promote campus
biodiversity



Commitment
to **Net Zero
Carbon
Emissions by
2050** agreed
by University
Management
Team (UMT)



14th in the world in the
Times Higher Education
Societal Impact Ranking for
SDG7–Affordable and
Clean Energy

Introduction

Welcome to our Annual Sustainability Report Academic Year (AY) 2020 to 2021. The analysis contained in this report covers the period 1st September 2020 to 31st August 2021, an academic year once again marked by unprecedented uncertainty and accelerating change, due to the impacts of COVID-19. Despite remote working, virtual activities and online collaborations being the order of the day, our university community rallied together, finding impactful and meaningful ways to engage, collaborate and work together, continuing on our journey to increase the sustainability of the university and beyond.

Section One of the report examines progress across our sustainability strategic theme areas of Research & Learning, Energy & Greenhouse Gas Emissions, Nature & Ecosystems, Built Environment, Health & Wellbeing, and Governance & Leadership. As a signatory to the **SDG Accord**, an institution that commits publically to align all our major efforts to the United Nations (UN) Sustainable Development Goals (SDGs) and share our progress, *Section Two* of the report provides examples of how our teaching, research, outreach and engagement activities are progressing each of the 17 SDGs.

It is important to acknowledge that this year's report is again understandably influenced by the COVID-19 pandemic. For example, the year has seen campus activity reduced to all but essential services. Therefore, data in areas such as transport, waste, energy use and carbon emissions are impacted. Sustainability initiatives requiring on-campus activity were paused; for example, initiatives relating to catering and food services, waste segregation initiatives and efforts to promote active travel to and from campus. On the plus side, just as the COVID-19 pandemic continues to put global sustainability efforts into the spotlight, the crisis has also helped place campus sustainability efforts into the spotlight. For example, a shift to remote working and virtual conferences and events highlights the opportunity to reduce transport related carbon emissions and air pollution.

AY 20-21 marked a milestone year in our campus sustainability efforts with the conclusion of our inaugural Sustainability Strategy and the **unveiling of our new Sustainability Strategy**. Some of the major milestones reached as a result of the first strategy include academic

staff embracing sustainability as part of the curriculum, becoming a Green Campus Ireland awarded site, the appointment of the University's first Sustainability Officer, exceeding the Public Sector 2020 Energy Efficiency target of 33% reaching the university target of 40% in 2020, receiving the first Green Lab Certification in Europe and managing the campus in line with the All-Ireland Pollinator Plan. While we are inspired and motivated by this progress, we are profoundly aware that we must continue to look to the future with a plan for success beyond that laid out in the inaugural strategy. It is within this context, building on the success of our first strategy and after a yearlong consultation process that we launched our second sustainability strategy.

The **NUI Galway Sustainability Strategy from 2021 to 2025** sets out our vision and commitment to be a leader in the transition to a sustainable future and embed sustainability in our culture, operational policies and governance structures and empower our communities to be champions of sustainability. The Strategy was launched by Dr Mary Robinson, former president of Ireland and former UN High Commissioner for Human Rights, on the 9th March 2021. Progress on the roll out of our second sustainability strategy is gathering pace. From the publication of a new **Biodiversity Action Plan** for the campus, completion of our inaugural **carbon footprint**, submission to **STARS**, joining new international sustainable campus networks and ranking **14th in the world** in the Times Higher Societal Impact Ranking for SDG 7 Clean and Affordable energy, the future is looking bright.

For a year that began with upheaval despair and the sudden closure of university campuses to all but essential service, the year is ending in hope with the gradual lifting of restrictions, the roll-out of vaccines across society and a greater understanding of the ways we can tackle the climate crisis. Therefore, as AY 20/21 draws to a close and a return to near normal activity in September 2021, we are looking forward to playing our part in shaping a post pandemic world.

“We do not inherit the Earth from our ancestors; we borrow it from our children”

Native American Proverb

Our Journey — Towards — Sustainability



Vision

NUI Galway will be a leader in the transition to a sustainable future. We will embed sustainability in our culture, operational policies and governance structures. As a bilingual university, we recognise that supporting linguistic and cultural diversity is essential to achieving the Sustainable Development Goals (SDGs). We will empower our communities to be champions of sustainability.



Mission: Learn-Live-Lead

Building on the work of CUSP, we will learn, live and lead sustainability across the university mission. The focus of learn is to continue to embed sustainability literacy into all aspects of University learning and research, the focus of live is to implement the principles of sustainability throughout campus operations and engagement activities; from a lead perspective the aim is to play a central and transformational role in attaining the SDGs by 2030. Our mission is organised around six themes: Research and Learning, Energy and Greenhouse Gas Emissions, Nature and Ecosystems, Health and Wellbeing, Built Environment, and Leadership and Governance.



Values

This Strategy is underpinned by the University's four core values:

- **Respect** – Respect for people, our purpose, our place and our planet.
- **Excellence** – We serve our region, our students and our society best through our high standards in research, teaching, support and engagement.
- **Openness** – We are open to the world, to cultural and to linguistic diversity. We also go out seeking new and deeper research co-operation, new ideas, new partnerships and new ways of engaging.
- **Sustainability** – We cherish our role as a university sustaining our communities and the next generation of citizens and of knowledge for our students and for our society.

Moreover, the work of this Strategy will be engaging, holistic and inclusive; students and staff will be at the heart of the sustainability journey.



Governance & Approach

The NUI Galway Sustainability Strategy 2021-2025 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 at least one 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 2025. The working group leader reports progress to the CUSP General Board on a quarterly basis. The Community and University Sustainability Officer (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. In June 2021, an internal audit of the sustainability function of the university recommended that reporting requirements to the University Management Team (UMT) and Governing Authority and its subcommittees, including the regularity of these returns, be established. Also that a formal reporting line to the Standing and Strategic Planning Committee, a sub-committee of the Governing Authority be established. CUSP Terms of Reference will be updated to implement these recommendations.

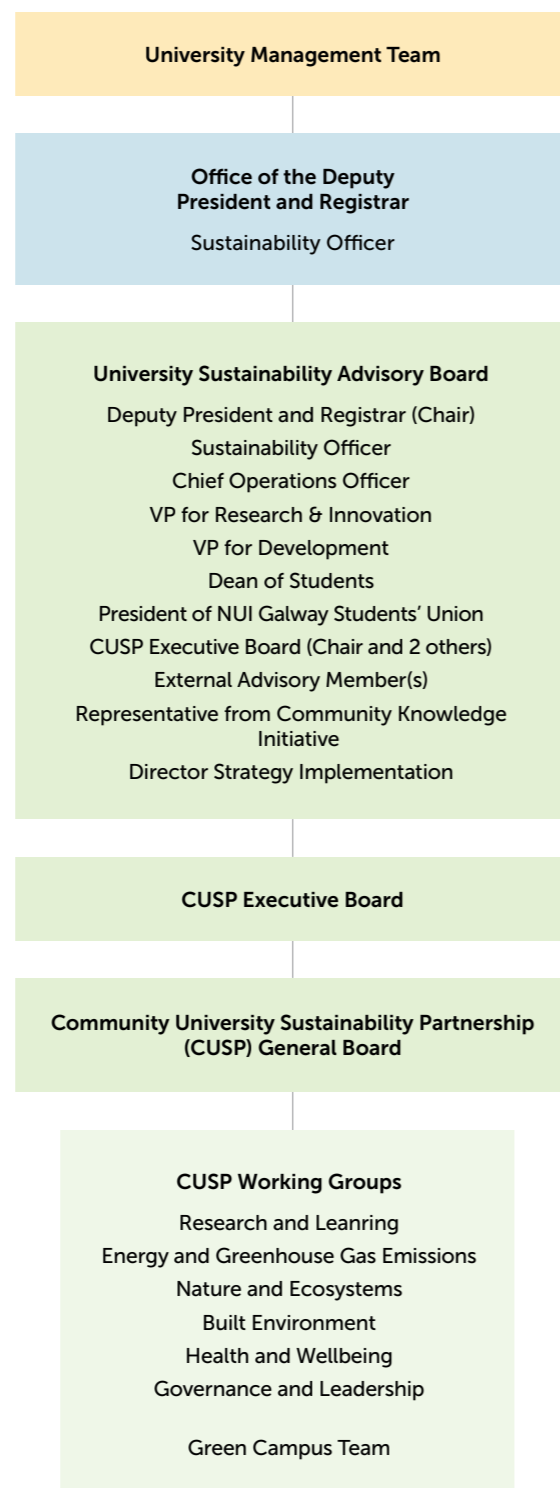


Figure 1 NUI Galway Sustainability Governance Model

Section 1:

Progress on the NUI Galway Sustainability Strategy

Research & Learning

Highlights

- The number of module with environment/ sustainability content increased from 231 modules in 2018 to 303 modules in 2021.
- The **Introduction to Sustainability** module has been launched to a cohort of students in the College of Arts, Social Sciences & Celtic Studies. Module rollout will be extended in AY21-22 and also offered to students in the College of Science and Engineering. The overall aim is to develop the module as a university wide module available to students in all four Colleges.
- Continued roll out of the 'Green Lab Principles and Practice' graduate module. This module introduces students to a range of topics, including: atmosphere & climate; global warming; the psychology, sociology and communication of climate change; climate change communication; sustainability and the SDGs; chemistry and manufacture of plastics; doughnut economics; the circular economy; and how to implement green lab practices. Since January 2020, 53 students have taken the module, with uptake from universities in England, Scotland, Germany and Denmark.
- The NUI Galway grant management system has been aligned to the SDGs and requires Principle Investigators to select the SDGs that their funded projects align to. All new funded research projects now set out how the project aligns with the UN SDGs.
- In the last 5 years, 43% of all research papers in the Scopus database authored by NUI Galway affiliated researchers are attributed to the UN SDGs, with 74% of our research active staff having at least one peer reviewed publication aligned to the UN SDGs in this period.
- Over the last 5 years, NUI Galway's field weighted citation index (FWCI) under each of the SDGs is above 1 with FWCI for SDG3, SDG5, SDG10, SDG11 and SDG16 all being over 2. That means that the total citations received by NUI Galway researcher's publications is over twice the average number of citations received by all other similar publications worldwide related to SDG3, SDG5, SDG 10, SDG11 and SDG16.
- A pilot study to investigate the utility of **Sulitest**, a UN-backed international sustainability literacy assessment method, commenced in AY20-21. The test has been trialled among cohorts of undergraduate and postgraduate students (including the BSc Environmental Science, BSc Applied Social Sciences, MSc Sustainable Environments and MSc Environmental Leadership). The aim of the study is to assess Sulitest as a possible method to measure and improve sustainability literacy.



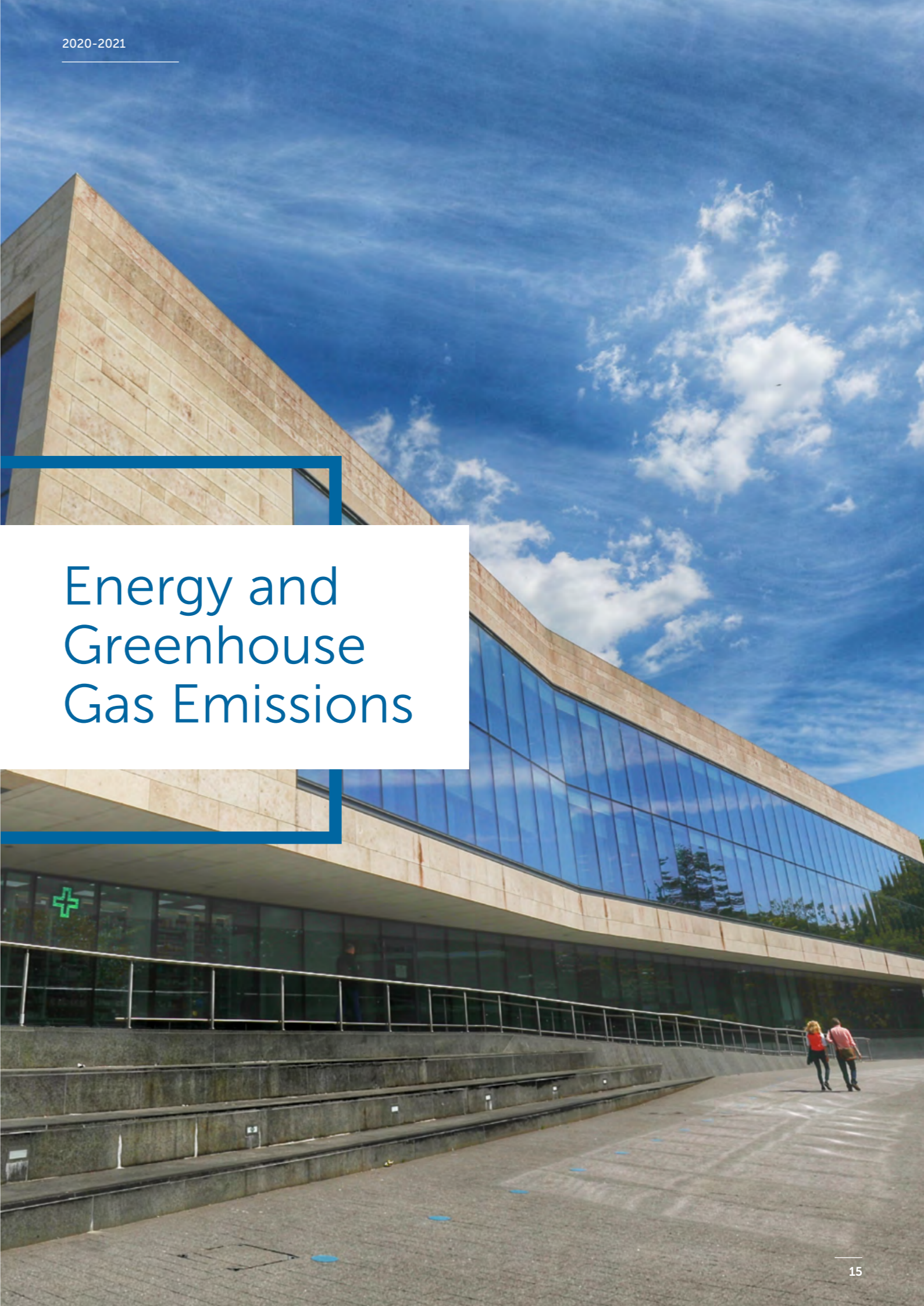
Strategic Aim

Through our teaching and research activities, using the UN SDGs as a framework, we will develop the next generation of students, researchers and innovators for tackling society's evolving sustainable development challenges. We will embed sustainability across our learning, research and the student experience so that individuals across our entire campus community gain the necessary knowledge and skills to become sustainability role models and leaders.



Photo by Dr. Chaosheng Zhang

- Sulitest was also deployed among two cohorts of graduate students enrolled on the Green lab Principles and Practice module.
- NUI Galway hosted a **Student Sustainability Summit** on March 4th 2021 to support student organisations, clubs and societies focused on sustainability and to provide a platform for sharing sustainability ideas for the city and campus. The event brought together students from sustainability themed societies, the student volunteering programme ALIVE, the Student Union (SU) Sustainability Working group and representative form the CUSP team.
- The NUI Galway Student Volunteering Programme **ALIVE**, working in collaboration with James Hardiman Library, IdeasLab, CUSP and the non-profit organisation the Ladder, hosted the **Global Goals Jam** in September 2020. The Global Goals Jam is an international event where creative teams work together on local challenges related to the SDGs. The 2020 JAM event focused on public health and education for all.
- In AY 20/21, NUI Galway operated a **Laptop for Loan Scheme** to support disadvantaged students, in accessing computer devices. Over 900 students received a laptop on long-term loan in order to assist with online learning. Examples of target group prioritised under the scheme included students disadvantaged by socio-economic barriers, students with disabilities, lone parents students who are members of ethnic minorities.
- NUI Galway is a **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 the University of Sanctuary initiative, NUI Galway hosted 12 full time scholarships in AY 20-21. This was an increase from nine scholarships offered in AY19-20.
- A **new sustainability toolkit** was developed for students.



Energy and Greenhouse Gas Emissions

Highlights

- We **exceeded the Public Sector Energy Efficiency** target of 33% energy efficiency by 2020, reaching our 40% target. For AY20-21, we reached a figure of 42% savings. While COVID-19 continued to have a significant impact on energy use across the campus, COVID-19 related energy savings are not included in this figure.
- In AY 20/21, we invested €1,200,000 in infrastructural energy projects including energy saving equipment and technologies. For example, the expansion of our Solar Photovoltaic (PV) Installation to achieve 300kW of Solar PV on 4 buildings on campus; expansion of our LED lighting programme to reach an installation figure of over 4000 LED light fittings across campus; the installation of additional electric car charging points; an improvement in control strategies across older building stock and; a programme to replace equipment that is no longer energy efficient, for example, boilers, pumps, air handling units, fume cupboard fans, light fittings and electric motors.
- NUI Galway ranked **14th in the world** in the 2021 Times Higher Societal Impact Rankings for SDG 7- Affordable and Clean

Energy. This ranking is a measurement of the University's research outputs relating to energy efficiency and renewable energy technologies, our campus practises and policies for reducing energy consumption and our commitment to promoting energy efficiency in the wider community.

- NUI Galway is a leader in the **Energy Efficiency and Decarbonisation Pathfinder Programme (EEDPP)** for the higher education sector. Pathfinder 1 is an energy and carbon-efficient upgrade of Áras De Brún that will achieve a performance improvement of 42% in electrical and 91% in thermal energy related usage. A deep retrofit of the Insight building in the Dangan campus will be carried out as part of Pathfinder 2.
- Recognising that reducing energy consumption and improving energy efficiency are at the forefront of the global climate change agenda, we received re-certification to **ISO 50001:2018**. This is an international energy management standard aligned to SDGs and recognises our efforts to use energy more efficiently and to achieve continuous improvement in energy performance.



- Researchers from the College of Science and Engineering, working in conjunction with Buildings and Estates and the Office of the Deputy President and Registrar, led the development of an inaugural baseline **carbon footprint for NUI Galway**. This baseline will feed into the creation of a climate action plan and a roadmap to net-zero greenhouse emissions for the University.
- We continue to demonstrate excellence in our research into energy saving technologies. For example, the VorTech research team, based within Civil Engineering in the College of Science and Engineering was **the winner of the SEAI Excellence in Energy and Research Innovation Award 2020**. The team's VorTech technology looks at

ways of treating wastewater by using less energy. The team demonstrated the technology in practice, leading to 30% energy recovery. A spin-out company has been formed, **VorTech Water Solutions**, that aims to deliver energy savings at wastewater treatment plants both in Ireland and on a global scale.

- Widespread staff and student energy campaigns and promotions were hosted throughout the year. For example, 12 Days of Energy Christmas campaign focused on seasonal tips and advice to switch off and save; as part of Earth Day 2021, staff from Buildings and Estates organised an earth day awareness stand and distributed LED bulbs, reusable bags, and bike lights to engage students on energy awareness.



Strategic Aim

Building on past progress, we will continue to exceed targets set out in the Public Sector Energy Efficiency programmes and act as a leader in the sector through project demonstration, community engagement and collaboration with energy users across our campuses. We will embrace proven new technologies to increase our buildings' energy efficiency and Building Energy Rating by integrating sustainability in all Buildings and Estates planning and development under the auspices of the Climate Action Plan. We will develop a pathway to move ambitiously towards carbon neutrality by 2030.



Nature & Ecosystems

Photo by Dr. Chaosheng Zhang

2020-2021

Highlights

- In February 2021, a new [NUI Galway Biodiversity Action Plan 2021-2025](#) was published outlining 45 actions aimed at enhancing campus biodiversity and increasing campus and wider community awareness and appreciation of biodiversity over the next 5 years. Short-term actions are aimed at pollinator enhancement and building on the work of the Organic Society; medium-term actions focus on enhancing our wetlands for biodiversity and developing innovative composting systems and; long-term actions include developing green roofs, living walls and implementing management actions for the brown hairstreak butterfly.
- New wildflower enhancement schemes have been introduced at Dangan and beside the Arts Millennium building. A new College Park pollinator enhancement scheme has been introduced. An orchard is being established beside the Orbsen building. Additional bird boxes, bat boxes and bee/insect hotels have been introduced at key location across the campus. Habitat enhancement measures for brown hairstreak butterfly are being implemented (*Thecla betulae*) e.g. Blackthorn pruning.
- NUI Galway students led *Earth Day 2021*. Earth Day is an annual worldwide event falling on April 22nd and the theme for Earth Day 2021 was *Restore our Earth*. Student themed societies hosted a series of virtual events throughout the week (April 19th-23rd) to highlight that urgent action is needed to restore our earth and to encourage volunteering and local action to address the climate crisis. The programme of events included a nature photo competition, anti-fast fashion show, climate action quiz, Eco Café, movie screening, local beach clean-ups and guest speakers. To acknowledge and support the leading role of our students in highlighting the climate crisis and as a symbolic gesture of our institutional commitment to focus our collective efforts on the urgency of sustainability and climate action, the Quadrangle Building on the main NUI Galway campus was illuminated in green on the day.
- NUI Galway sports pitches are managed in line with the [All-Ireland Pollinator Plan- Pollinator Friendly management of Sports Clubs](#). A pollinator friendly pesticide code has been adopted reducing the amount of herbicides on the sports pitches by 92%. Off pitch grass is managed for pollinators by developing short and long flowering meadows.

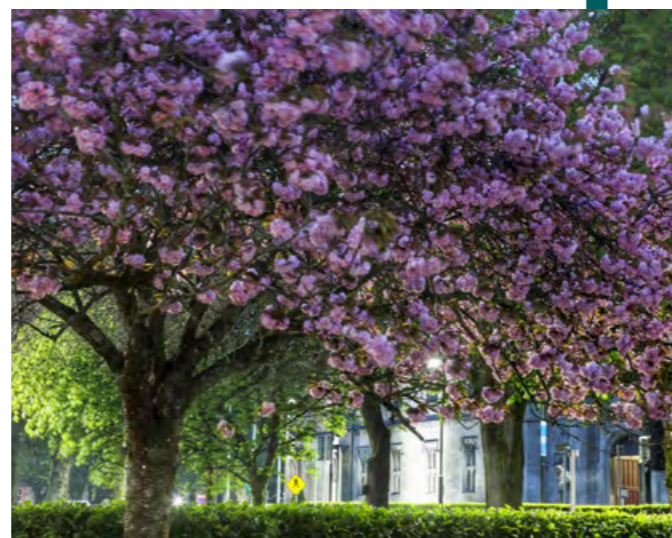


Strategic Aim

To become a role model for our positive impact on the environment. To continue to enhance the management of our campus environment in ways that are sensitive to our ecosystems, in keeping with our aspirations to be an exemplar in biodiversity research and learning.

- NUI Galway is a champion of the **Galway National Park City** initiative. The mission of this initiative is to have Galway city recognised as a National Park City, by achieving a *greener, bluer, healthier, safer, beautiful, sustainable, equitable, harmonious and wilder environment where people value, benefit from, and are strongly connected to the rest of nature*. Champions work together connecting Galway residents to nature and improving the richness, connectivity and biodiversity of Galway’s habitats.
- Kylemore Abbey and NUI Galway have come together to form a new partnership to deliver the **Kylemore Abbey Biodiversity Stewardship Programme**. The Programme is a collaboration between Kylemore Abbey and the School of Natural Sciences at NUI Galway. The aim of the partnership is to develop a Biodiversity Management Plan for Kylemore to safeguard the biodiversity of the Estate and to provide a location and rich ecosystem in which students will be able to study and learn about species, habitats and wider ecological and sustainability topics with practical applications.

“healthy and biodiverse ecosystems are the foundation for life on this planet”



Health & Wellbeing



Highlights

- NUI Galway was accredited with the **KeepWell Mark™** - a workplace wellbeing accreditation from Ibec. A **wellbeing committee** is in place developing a holistic strategy for staff health and wellbeing, building on the WorkPositive Initiative.
- NUI Galway launched a **Domestic Violence Leave Policy**, the first Higher Education Institution to do so in Ireland. The policy was launched by Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris TD on May 26th 2020. The purpose of NUI Galway's Domestic Violence Leave Policy is to provide for a period of paid time away from work for staff members who have suffered or are suffering from domestic violence or abuse. This leave will enable the staff member to take the time they need to seek assistance in a structured and supported environment.
- Recognising the challenges posed by the growing complexity and supply of intoxicants in society and a desire to create a safe environment for our campus community to discuss and manage toxicant misuse, NUI Galway has launched a new **Intoxicants Policy**. The policy addresses ways to avail of professional support to deal with alcohol or drug addiction, ways to

manage leave, treatment, and rehabilitation. To coincide with the launch of the Policy, NUI Galway partnered with **Mental Health Ireland** to deliver a Alcohol and Mental Health Workshop on the 27th July 2021.

- In July 2021, NUI Galway launched a new publicly available **online learning hub to promote educational and information resources on sexual consent**. The online learning hub was launched by the Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris TD, as part of a Government initiative to improve the understanding on the meaning of, and importance of, consent in sexual activity. This initiative builds on the work of the pioneering Active* Consent research team in NUI Galway.
- In July 2021, the Government launched Healthy Ireland's **National Healthy Campus Framework**. This National Healthy Campus Framework offers guidelines to third level institutions to embed health and wellbeing into campus life for staff and students. In response to the framework, NUI Galway is establishing a multidisciplinary health and wellbeing working group and reviewing opportunities for seed funding to implement the Healthy Campus Charter.



2020-2021

- Initiatives throughout the year led by **Student Services** to promote student mental health and wellbeing. Workshops covering topics including Wellness, Managing Stress & Anxiety, Sleep, Optimism, Skills for Life, Eco psychology, Healthy Food Made Easy. An Exam Stress helpline was led by the Chaplaincy Service.
- A number of themed health and wellbeing weeks took place throughout the year. NUI Galway's Student's Union Mental Health week took place 16th to 20th November, 2020 to encourage students to take time to look after their mental health and to raise awareness of mental health issues. Earth and Sustainability week took place 22nd to 26th February, 2021; Substance Awareness week 15th to 19th March, 2021; Keep Well Study Well week 1st to 5th March, 2021 and Diversity Week 12th to 16th April, 2021.
- Eco Café led by the Counselling Service is an informal regenerative community space for students who have ecological concerns, ideas, information to share or information needs. The Café is hosted weekly throughout the year and the initiative offers students troubled emotionally or physically by the ecological crises with a supportive and connected space and highlight avenues for student involvement in campus sustainability initiatives.
- The Kingfisher Club extended its Free Fitness Club Digital Membership until the end of May 2021, offering all students and staff **free access** to live streaming fitness Classes. Their classes are aimed at all levels of fitness and require no equipment.



Strategic Aim

Using a whole-of-university approach, improve the health and wellbeing of students and staff who live, learn, work and play in our community by helping them to attain full physical, social, sexual and mental health and wellbeing.



Built Environment

Highlights

WATER

- As a participant in the Water Stewardship Programme, NUI Galway is working in conjunction with Irish Water to 'lower our water use and operating costs while protecting the environment'.
- Our NUI Galway Water Stewardship Charter, published in November 2020, sets out our commitment to maintain and achieve further reductions in water usage on campus and to highlight the importance of water as a critical and limited resource. The Charter sets out our commitment to reduce water usage on campus by 10% by 2025 based on a 2018 baseline.
- The Sustainable Water Partner badge demonstrates that key staff have undertaken a course designed to show leadership and set goals/targets in reducing water consumption.
- On-going programme of installing water-saving devices in laboratories, kitchens, workshops and WC facilities across the campus e.g. low flow taps, dual flush WC's, time control on urinal flushes and showers, and low flow shower heads.
- As part of our Building Management System (BMS), the plumbing maintenance team installed twelve additional digital water meters for data collection. Our aims is to extending the programme of

measurement, analysis and efficiencies to all significant buildings on campus by 2025. Water has been included as part of the new data collection, monitoring and verification system pertaining to ISO 50001:2018. Dashboards, such as in the Alice Perry Engineering building, display the amount of water consumption to building users.

- Collaboration with the Green Lab Certification programme to reduce unnecessary water usage in scientific laboratories across the campus.
- Ongoing roll out of drinking water stations across the campus with the installation of 4 additional stations in AY20-21.
- Beach clean ups were organised by NUI Galway Student Union, Marine Society and Energy Society. The Students' Union launched their #SustainableMonday campaign at the beginning of February, the aim being to offer NUI Galway students advice and encouragement to live more sustainably and to highlight the small changes we can all make that will have a big impact on our planet. Each Monday students are challenged to think globally by acting locally. Building on the high participation rates of clean-ups hosted as part of the Random Act of Kindness challenge earlier in the year the 2minute beach clean-up formed a key part of the Sustainable Mondays Campaign.



Strategic Aim

To raise awareness with staff, students and visitors of water as a critical and limited resource that must be used responsibly. To eliminate all unnecessary water usage on campus, to maintain and further improve the water usage reductions achieved on campus in the last period. To eliminate the reliance of staff, students and visitors on single use plastics for water consumption.

Highlights

WASTE

- Through AY 2020-21, COVID-19 continued to have a significant impact on the quantity of waste generated; the volume of waste produced on campus was approximately one third the normal amount. The recycling figure for AY 2020-21 is 52%, remaining consistent with the figure for AY 2019-20.
- Extension to food waste segregation stream with the introduction of food waste bins to all student accommodation apartment buildings in Goldcrest Village and Corrib Village.

- As part of Galway Green Labs programme and the new Procurement Framework, ongoing efforts continue to reduce single-use laboratory plastics and promote the use of green products/alternatives. Labs across the campus are attempting to substitute single-use plastic with other reusable materials and working with suppliers to reduce packaging plastic.
- NUI Galway is participating in the [Campus Living Labs Sustainability Project](#); a 2 year joint project delivered by the Irish Universities Association (IUA) in partnership with the National Waste Prevention Programme (NWPP) of the Environmental Protection Agency (EPA). Campus Living Labs is aimed at reducing waste, improving recycling practises and driving circular economy efforts in Irish universities.

- In November 2020, as part of National Science Week, a research group from NUI Galway hosted a virtual showcase event entitled, [Plastic Recycling in Ireland - How to improve plastic recycling together](#). The event was organised by the [Innovative Energy Technologies for Biofuels, Bioenergy and Sustainable Irish Bioeconomy](#), an international research group led at NUI Galway that investigates novel technologies for alternative fuels and renewable commodities from waste and wastewater treatment. The event featured presentations from professionals from industry, academia and society, and included open discussion on ways to advance and improve plastic recycling.

- [Glassary](#) is a student led equipment reuse initiative, part of the ALIVE volunteering programme that encourages NUI students to divert unwanted household items from landfill. Equipment collection points are set up at student accommodation centres across the campus and students are encouraged to donate unwanted white goods, household items and clothing. The items are donated to charity, or stored for re-use by incoming students. The initiative now in its second year successfully diverted approximately 2 tonnes of equipment from the waste stream.
- NUI Galway joined the [Tech2Students](#) campaign with the national goal to deliver 5,000 refurbished laptops to students in need all over Ireland, which is in response to the digital divide experienced by students in need.



Strategic Aim

Prioritise prevention of waste at every opportunity through eco-design, reuse and repair. Recycle and re-use waste in ways that promote resource efficiency, reduce cost, protect health and the environment and move us towards a circular economy.



Highlights

TRANSPORT

- The Transport working group is leading the development of a new NUI Galway Travel Plan 2021-2025. A revised Travel Plan survey has been created to include feedback from the NUI Galway Travel Plan Survey 2016, Whitaker Institute led Ireland's National Remote Working Project and the National Transport Authority (NTA) Remote Working Survey. Survey to be rolled out in November 2021 when students return to campus.

- We are committed to continuing the process of upgrading our university transport fleet with electric vehicles. For example, additional electric vehicles ordered for the Building and Estates fleet and Library transport fleet, will be delivered in early 2022.
- Cycle to Work scheme and the Travel Pass scheme were promoted at all Employee Relations Roadshows. The Cycle to Work scheme was extended to include €1250 for bicycle and €1500 for an E-Bike. Seeking accreditation to Cycle Friendly Employer- European accreditation for campuses and colleges in AY 21-22.



2020-2021



Strategic Aim

Support day-to-day operations and planned growth of the university, while minimising traffic impact and enhancing mobility and sustainable travel options. Working in collaboration with local government and other partners, endeavour to reduce the carbon footprint of transportation.

- 'Marchathon' and 'Walktober' are examples of Smarter Travel Workplaces and Campus walking challenges hosted by the NUI Galway Students Union. Marchathon is a team challenge, with teams of 3-6 people signing up and aiming to take as many steps as possible during the month of March. The Marchathon step challenge took place from March 1st to March 28th 2021 and had over 60 teams of students and staff participating. Walktober took place from October 5th to November 1st 2020 and had over 90 teams of students and staff competing.
- The team behind the Galway Energy-Efficient Car (GEEC) at NUI Galway has been crowned European champion in a major student engineering competition. The GEEC road freight team were declared outright winners of the European region for their research and innovation on improving aerodynamics of heavy trucks in the category of Decarbonising Road Freight Transport.



Governance & Leadership

Highlights

- NUI Galway increased its participation in international sustainable ranking systems by submitting an application to the Sustainable Tracking and Rating System (STARS) by the Association for the Advancement of Sustainability in Higher Education.
- NUI Galway ranked 82nd (out of 1118 institutions i.e. Top 7.3%) in the Times Higher Societal Impact Rankings in 2021 compared to 68th (out of 768 i.e. Top 8.9%) in 2020. In total, NUI Galway were ranked under 9 of the SDGs in 2021, up from 7 of the SDGs in 2020.
- NUI Galway increased its participation in International partnerships by joining the ENLIGHT European University network, the Environmental Association of Universities and Colleges (EAUC) and the Association for the Advancement of Sustainability in Higher Education (AASHE).
- As a signatory to the SDG Accord, NUI Galway continues to fulfil its commitment to 'share our learning' and 'account to both local and global communities our progress toward the SDGs'. In May 2021, NUI Galway submitted an SDG Accord Annual Report 2021. As part of the annual report, case studies were shared covering a range of topics including, electricity from renewable sources; greening lab practises; service learning and community engaged research and; institutional governance
- An inaugural carbon footprint assessment for NUI Galway was completed, which estimates the greenhouse gas emissions attributable to NUI Galway in 2019 as 53,396 tonnes of CO₂e (which is 2.63 tonnes per full-time equivalent staff and students). Based on the carbon footprint, a *Climate Action Plan will be developed for the university in line with requirements set out in the Climate Action and Low Carbon Development (Amendment) Bill 2021*.



Strategic Aim

CUSP will provide leadership in the transition to a sustainable future through our teaching, research, professional support services, actions and impacts. We will sustainably manage our campus and all our external affairs and become a role model for similar organisations, by our positive impact on the environment and society. We will develop our graduates as future sustainability leaders in Ireland and globally, developing the next generation of students, researchers and innovators for tackling the world's evolving sustainable development challenges.

- NUI Galway is finalising a new Climate Action and Sustainability Policy to formalise the target of net zero carbon emissions, agreed by the University Management Team in June 2021. In line with the 'Climate Action and Low Carbon Development (Amendment) Bill 2021', NUI Galway has committed to pursue and achieve no later than 2050, the transition to being a university with net-zero greenhouse gas emissions that is climate resilient, biodiversity-rich and environmentally-sustainable.
- As a bilingual university, we understand the deep-rooted connections between people and place in Ireland and around the globe. In July 2021, NUI Galway launched its inaugural Irish Language Strategy. **A Strategy for the Irish Language 2021-25** sets out an ambitious vision to bring the University's bilingual campus to life and to set out a path for truly bilingual culture, through operational policies, governance structures and empowering its communities to be champions of the Irish language.
- To advance the NUI Galway Sustainability Strategy objective 'to develop on campus student sustainability leadership opportunities', NUI Galway hosted the **Student Sustainability Leadership Awards 2021**. The Awards were open to NUI Galway students and successful applicants were awarded an 8 week scholarship (between June & August 2021) funded by the Office of the Deputy President and Registrar in conjunction with the Community University Sustainability Partnership. The central aim of the awards is to develop student leaders that are dedicated and enthusiastic about developing a more sustainable campus and community.
- At NUI Galway, we are leading the setting up of 'Irish Green Labs' as a network of public sector and later, private/corporate labs, that will collaborate and share information on how best to reach lab greening goals. Members of the network include the EPA, HSE, Irish Water, Teagasc, the DAFM, the Marine Institute, NUIG (the first University to join), UCC, UL, TCD, GMIT, Limerick IT, Sligo IT. As part of an SFI-funded 'Plastics Challenge' project (January-March, 2021), NUIG, in collaboration with Irish Manufacturing Research, completed a national single-use lab plastics audit, which collected data from 80 labs across Ireland and identified the top lab single-use plastic resins.
- NUI Galway was announced as the winner of '**Best Sustainability Award**', at the Galway Chamber Awards 2020, hosted in February 2021. The award recognises our leadership in sustainability and our long tradition of partnerships with community groups and organisations in the Galway region to develop sustainable solutions and practices.

Section 2:

Progress on the SDGs



SDG 1

End Poverty in all its forms everywhere

1 NO POVERTY



Students and Learning

The NUI Galway Access Centre

The [NUI Galway Access Centre](#) aims to create a supportive learning environment for students who have experienced socio-economic disadvantage by offering a wide range of supports, enabling students realise their educational potential irrespective of their socio-economic background. Examples include [foundation and pre-entry access programmes](#), [NUI Galway Breaking the SEAL](#), [Higher Education Access Route for School leavers \(HEAR\)](#), [Youth Academy](#), [Attract Transition Succeed \(ATS\) Mentoring programme](#), [University of Sanctuary](#) and the [School of Sanctuary Programme](#). In AY 20-21, the Access Centre has been to the fore of a Government COVID-19 initiative, supporting disadvantaged students in the higher education sector, in accessing computer devices. Through the [Laptop for Loan Scheme](#), 991 laptops were made available to NUI Galway students. Students disadvantaged by socio-economic barriers were prioritised under the scheme. The [NUI Galway Financial Aid Funds](#) provide financial supports to students experiencing short or long-term financial difficulties while attending higher education. In AY 20-21, the Financial Aid Funds had an unprecedented number of applications (972, up from 550).

Masters in Social Work

NUI Galway's Masters in Social Work aids the development of students wishing to gain accreditation as professional social workers. Students study issues relating to poverty and anti-poverty practices within subjects including social policy, critical social work theory and community development methods. Students must pay attention to human rights and social justice throughout their studies, which includes a focus on the impact of poverty on people's rights to survival, development, protection and participation. Students are taught practices of anti-oppressive practice and anti-discriminatory practice which encourages them to reflect critically on the impact of many factors on people's lives, including poverty.

8%

of NUI Galway students come from disadvantaged areas
([HEA Deprivation Index Score Report](#))

Research

Domestic Violence – The Cost of Doing Nothing

Ground-breaking research from the Gender and Public Policy cluster of the Whitaker Institute at NUI Galway, on the economic cost of domestic violence in low and middle-income countries has been pivotal to developing new legislation and policies to protect women in Egypt, South Sudan and Vietnam. Women experience domestic violence behind closed doors; however, its impact reaches beyond the individual and their family, having serious consequences for national economies. For example, costing research, led by NUI Galway, found that lost productivity, in days, was equivalent to a 4.5% reduction in the female working population in Ghana in 2019. For individual women survivors, domestic violence poses a drain on household resources through out-of-pocket costs to access services to treat and mitigate the consequences of violence. In Vietnam, women survivors spent approximately 25% of their annual income on these expenses. As countries strive to expand women’s economic participation to accelerate economic growth and eradicate poverty, this loss is substantial.

Recognition of these consequences is key to governments enacting new legislation, investing in support and judicial services, and scaling up prevention efforts. NUI Galway’s theoretical frameworks, toolkits and manuals are increasingly used worldwide to guide costing projects, ultimately seeking to eliminate this pervasive form of violence and eradicate poverty

Community Engagement

An Mheitheal Rothar

An Mheitheal Comhshaol, is a not-for-profit Cooperative based in the NUI Galway Business Innovation Centre. The Cooperative, operating as An Mheitheal Rothar from two locations on the NUI Galway campus, uses income from enterprise activities to lead progressive change for a more sustainable society. The Community Workshop provides hands-on bike maintenance workshops; this initiative is particularly popular with students and people on lower incomes. Participants learn in a peer-to-peer environment how to repair and maintain their bikes; the workshop operates on a donation basis. The University Bike Shop, scheduled



69 Publications
(Scopus Publications 2016-2020)

to open in late 2021, will provide a bike repair service on the campus grounds and offer new and second hand bikes for sale to students, staff and the wider community. The shop aims to promote active and sustainable transport and complement the bike-to-work-scheme. The second hand bikes will come through ReCycle your Cycle, a flagship circular economy initiative that provides training and employment opportunities for the long term unemployed.



Glassary

Glassary is a student led re-use initiative that encourages NUI Galway students to donate unwanted clothing, white goods and household items. Donation collection points are set up at student accommodation centres across the campus. Students are encouraged to divert unwanted items from the waste stream by donating to charity, or for re-use by incoming students. In AY 20/21, donations were made to five non- profit organisations local to the University (Society of Saint Vincent De Paul, Galway Simon Community, Cancer Care West, ARD Family Resource Centre and Rahoon Family Resource Centre). The initiative, now in its second year, successfully diverted over two tonnes of household items from waste. Glassary is an initiative of the ALIVE volunteering programme. ALIVE (A Learning Initiative and the Volunteering Experience) is NUI Galway’s Student Volunteer Programme.



NUI Galway through the Community Knowledge Initiative (CKI) is a supporting partner of COPE Galway, a charity that provides essential services to some of the most isolated and vulnerable men, women and children in Galway.

SDG 2 Zero Hunger

2 ZERO HUNGER



2020-2021

Students and Learning

Programmes on Agriculture, Food Security and Sustainable Food Systems

To meet growing global food demand, agriculture and food systems need to transition towards more sustainable, equitable and resilient models. This will require a focus on sustainability combined with technological, institutional, business and social innovations. NUI Galway offers a range of programmes that equip students with the interdisciplinary skills to respond to such challenges; for example, the [Masters in AgriBiosciences](#) and the [Masters in AgriFood Sustainability and Technology](#). Our [Masters in Climate Change, Agriculture and Food Security \(CCAFS\)](#) provides students with the skills and tools for developing sustainable agricultural practices, policies and measures to address the challenges that global warming pose for agriculture and food security worldwide. The course won the Best New Postgraduate Award (HEA Awards 2017) and was also shortlisted for Best Science Award for 2018–19. For AY 21/22, the option of pursuing a bachelor's degree in [Agricultural Science is back on the prospectus](#) for the first time in 40 years. The bachelor's degree programme in Agricultural Science is grounded in sustainable food production, environmental science and rural development.

NUI Galway Environmental Society

Formerly known as CCAFS Society, the [NUIG Environmental Society](#) concerns itself with awareness raising and action around issues pertaining to climate change, agriculture and food security. The society is closely linked with the CCAFS research platform, which sees scientist, professionals, policy makers, and communities working in concert to adapt to climate change. The society provides NUI Galway students with a platform to become involved in local and global action with regards to climate change and its associated impacts. The aim is to focus not only on environmental problems themselves, but also on linked issues such as capitalism, environmental racism and the protection of indigenous communities. Past campaigns include '[Fossil Free Campaign](#)' and campaigns promoting the reduction of fast-fashion consumption. [Enviro Soc Earth week](#) took place from March 22nd to 26th, 2021 and included local clean ups, guest speakers, vegan cooking nights and documentary screenings.

Research

NUI Galway Plant & AgriBiosciences Centre

NUI Galway [Plant & AgriBiosciences Centre \(PABC\)](#) is an interdisciplinary research centre, advancing plant and agricultural biosciences for sustainable development, to meet social and economic challenges in Ireland, the EU and internationally (including in developing countries). A major aim of the PABC is to facilitate the development of a '[Community of Practice](#)' in relation to plant and agricultural biosciences, where researchers and innovators can work together to generate novel knowledge, products and services that can facilitate sustainable development. Research themes include, for example, future crops that focuses on leveraging plant and crop biosciences for 'bio-based' sustainable development; harvesting of algal for provision of useful products and services for humanity; working in partnership with the CCAFS initiative on research and training activities in Ireland and in Africa; smart farm technologies and; agricultural research for development.

Our target is

**50% REDUCTION
IN FOOD WASTE**

from catering outlets by 2025, ahead of the Irish Government's target of halving food waste by 2030.

([NUI Galway Sustainability Strategy 2021-2025](#))

Winner of the SFI Future Innovator Artificial Intelligence (AI) for Societal Good Challenge,

In July 2021, a research project at NUI Galway was announced as the **winner** of the Science Foundation Ireland (SFI) Future Innovator Artificial Intelligence (AI) for Societal Good Challenge, for its AI-based satellite imagery analysis tool to measure climate change adaptation in agriculture. The TAPAS team was awarded €1 million funding for their interdisciplinary project resulting in a tool capable of providing data on the effectiveness of agricultural interventions for climate change adaptation. The technology developed by the School of Mathematics, Statistics and Applied Maths in collaboration with the Ryan Institute has the potential to empower communities across the globe to proactively reduce the impact of climate change, most especially those communities in the developing world whose economies are almost entirely dependent on agriculture.

Community Engagement

Some Good Food Stories

All caterers on the NUI Galway campus offer vegan, vegetarian and meat free options on campus every day. The campus boasts outdoor herb gardens maintained by the chefs and all are committed to ensuring that locally sourced ingredients are served that are both fresh and in season. The community of Sodexo dining services have established a **food waste watch programme**, which champions the reduction of food waste on their 'watch'. Sodexo teams rapidly capture food waste data, giving clear insights into what is being wasted in their kitchens. With this knowledge, teams implement targeted operational and behavioural changes to help end avoidable food waste. The **Food Space dining service** raises the sustainability bar by using only local, seasonal ingredients and aim to have zero-waste kitchens. Vegetable trimmings are turned into pickles and ferments, coffee grinds are used as soil fertiliser, waste milk is made into ricotta cheese and the resulting whey is added to pickling liquor, all activities of a highly motivated and environmentally aware kitchen.



127 Publications
(Scopus Publications 2016-2020)



NUI Galway is a founding member of the Irish Forum of International Agricultural Development whose vision is transformed livelihoods of people living in poverty in the developing world through initiatives which support resilient, equitable and sustainable agriculture, food and nutrition security.

SDG 3 Good Health and Wellbeing

3 GOOD HEALTH AND WELL-BEING



Students and Learning

Study Programmes

NUI Galway, in a unique partnership with the National Institute for Prevention and Cardiovascular Health, is offering a globally unique suite of postgraduate programmes in Preventive Medicine and Cardiovascular Health including MSc Preventive Cardiology, MSc Diabetes, MSc Obesity, MSc Cardiovascular and Pulmonary Rehabilitation, and PG Cert in Cardiac Rehabilitation. These courses focus on the prevention and control of heart disease, stroke, diabetes, obesity and enabling active lifestyles, health and well-being. All programmes take an important interdisciplinary approach, delivered in partnership with the National Institute for Prevention and Cardiovascular Health (NIPC) and Croí, the West of Ireland Heart and Stroke Charity. This enables interaction with clinical experts in cardiovascular disease prevention, diabetes and obesity, together with community and public health champions and key opinion leaders in cardiovascular medicine. The programmes are aimed at a wide range of professions, including nursing, allied health professionals and the goal is to produce a new generation of leaders in cardiovascular health and disease prevention.

NUI Galway Student Society

NUI Galway has 20 student-led, health-related, societies. Sláinte Society, is one of NUI Galway's health promotion societies and focuses on promoting all aspects of physical and mental health. Teddy Bear Hospital is an initiative by Sláinte Society that has been running for the last 16 years. Over the years, children have attended the hospital with teddy bears suffering from an imaginative range of sore ears, sick tummies and all kinds of other ailments. Medical, healthcare and science students help diagnose and treat the teddy bears. In the process, they hope to help children, ranging in age from 4-8 years, feel more comfortable around doctors and hospitals. Teddy Bear Hospital was organised as a virtual event in April 2021. On the virtual call with the Teddy Bear Hospital team, participants and patients were greeted by two teddy doctor specialists. The children and their 'patients' learned how to take care of their teddy's health through three main themes: general health, lifestyle, and emotional wellbeing.

Research

Research Centres

Addressing health challenges requires a multi- and interdisciplinary and co-ordinated approach. There are over 20 research centres based in the NUI Galway College of Medicine, Nursing and Health Sciences, carrying our leading research addressing health challenges. For example NUI Galway's Health Promotion Research Centre published its Health Behaviour in School-aged Children Trends Report 1998-2018, in March 2021. NUI Galway's Corrib Research Centre for Advanced Imaging and Core laboratory has recently led five international trials and three investigator initiated trials, involving over 7000 patients, as part of its role as a global centre of excellence for cutting-edge imaging methods, innovation, research, collaboration and education. CÚRAM, the SFI Research Centre for Medical Devices based at NUI Galway, announced a new research partnership with B. Braun to develop a novel drug delivery system for cannabinoids, for more effective treatment of wound pain and improved wound healing, and the development of a device for the management of wound odour.

Public Patient Involvement ignite Network

NUI Galway is leading a new network of universities to champion public and patient involvement in health and social care research. In January 2021, the Health Research Board, in conjunction with the Irish Research Council, announced the development of the new Public and Patient Involvement (PPI) Ignite Network across seven universities and 10 partner organisation. With NUI Galway as lead, the network is being established to put the public and the patient at the centre of health and social care research. It aims to ensure that the next generation of graduates is familiar with Public and Patient Involvement (PPI) and know how to incorporate it into their research. In the partnership, patients and members of the public will have the opportunity to work with research teams to decide what issues are important to focus on and how best to carry out research. A key goal will be to ensure that the voices of marginalised and disadvantaged groups are heard.



1,767 Publications
(Scopus Publications 2016-2020)

NUI Galway's top output for the past 5 years in terms of publications is SDG 3. Our field weighted citation index (FWCI) for SDG 3 is over twice the global average.

NUI Galway has over
50 SPORTS CLUBS
and nearly
100 STUDENT SOCIETIES

aimed at promoting physical social and mental well-being. NUI Galway's societies were the big winners at this year's Board of Irish College Societies (BICS) Awards taking home an outstanding

SEVEN AWARDS

In February 2021 NUI Galway was announced as an official

ROWING IRELAND PARTNER PATHWAY UNIVERSITY

In March 2021 NUI Galway announced a **CENTRE OF EXCELLENCE PARTNERSHIP WITH BASKETBALL IRELAND**



ICU Family Link at University Hospital Galway - Winner of Knowledge Transfer Ireland Impact Award 2020

Responding to COVID -19

From vaccines to variants and pandemic preparedness to rapid responses, our research & innovation community has mobilised against the pandemic to develop innovative solutions to improve health & wellbeing and support the [response to the COVID-19 crisis](#).

For example, NUI Galway is leading the EU's [Pandem-2 project](#), which is designed to help countries in the bloc to better prepare for and respond to future pandemics. The €10million two-year project involves the development of a suite of novel concepts, services and IT systems which will enable pandemic managers to prepare for a wide variety of different scenarios and possible responses. The overarching aim of the project is to position Europe to respond coherently and effectively to the next pandemic, whenever it comes and whatever form it takes. [NUI Galway sponsored research](#) in the US, Canada, Mexico, France, Spain and Ireland shows critically-ill COVID19 patients are less likely to die or to require invasive ventilation if lying prone on their stomachs while receiving oxygen. The impact of the technique, known as awake prone positioning, was assessed in hospitals in six countries on more than 1,000 coronavirus patients requiring advanced breathing support. The findings are published in *The Lancet Respiratory Medicine*. The study was the first clinical trial of its kind into the practice of awake prone positioning and ran from April 2020 to January 2021.

A new video call system developed in NUI Galway that connects patients in intensive care with their families, while there are COVID-19 restrictions on visits to hospitals, won a Knowledge Transfer [Ireland](#) (KTI) impact award in December 2020. The university worked with industry partners [Cisco](#) and [IBM](#) to deliver a state-of-the-art video call system - known as [ICU FamilyLink](#) - specifically for the intensive care unit setting at [University Hospital Galway](#) (UHG).

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NUI Galway is the academic partner to the Saolta University Healthcare group. Medical Academy buildings are cited at each of the Saolta University Hospital sites including Donegal, Mayo, Sligo and Ballinasloe where students gain a unique experience of service delivery in a secondary health care centre.

Community Engagement

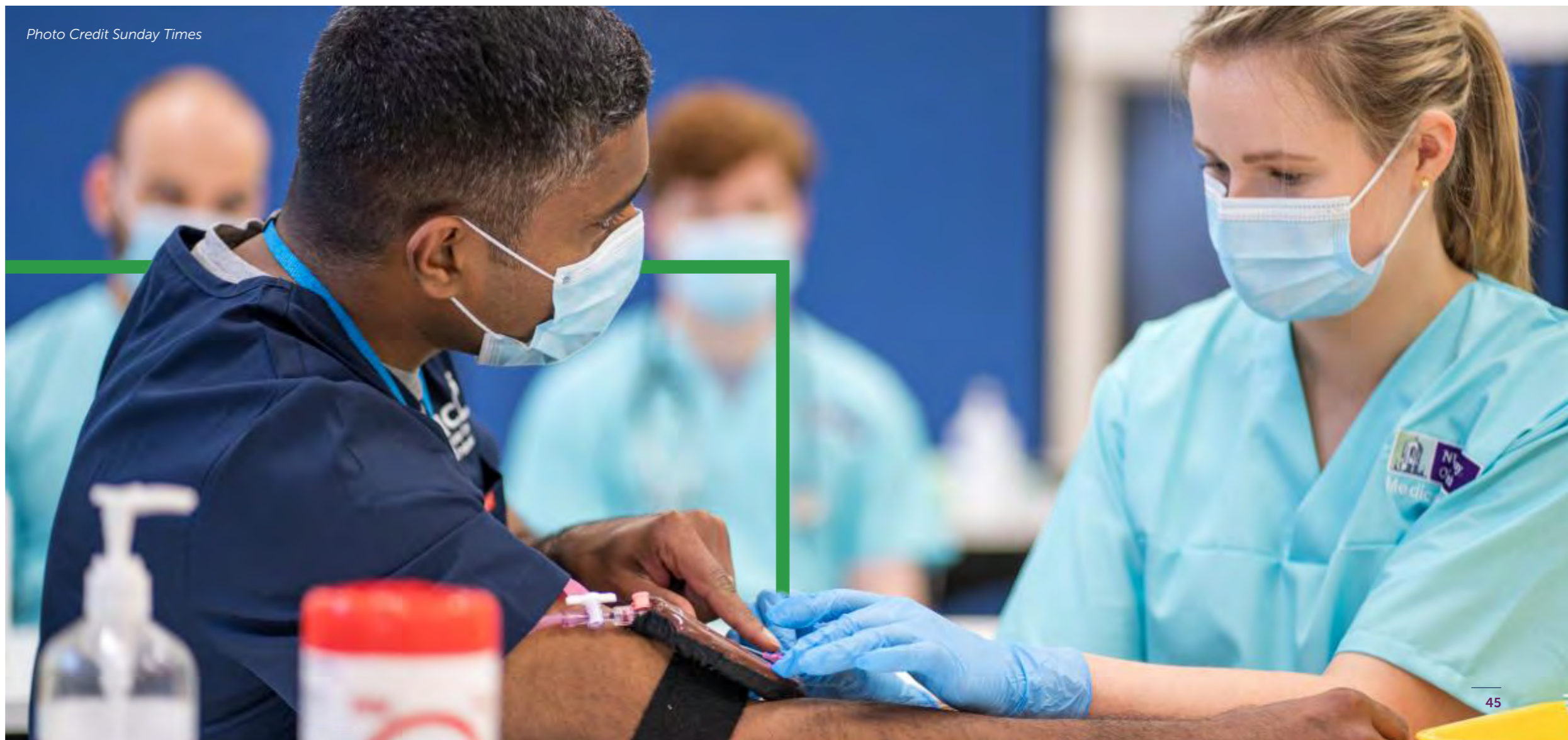
Responding to COVID-19: Enhancing Policy and Society

Throughout the COVID-19 pandemic, our research & innovation community has conducted extensive research across society, to help understand how the pandemic has affected people. This knowledge, in turn, has helped to inform our nation's policies. [Examples](#) of our wide ranging research, investigating how the pandemic has affected people, includes: shedding a light on vaccine hesitancy among young women; impact of COVID-19 on teenagers; addressing the housing crisis post COVID-19; how COVID-19 affects our behaviours; a government commissioned public COVID-19 myth-busting website; looking after the mental health needs of frontline workers; impact of COVID -19 on people with dementia and; impact of COVID-19 on food habits.

Project UniCoV

NUI Galway has partnered with University College Dublin (UCD), University College Cork (UCC) and Trinity College Dublin (TCD) to lead a pilot rapid testing project on four college campuses. The project, called [UniCoV](#) will conduct a large-scale analysis of testing technologies for use in surveillance of COVID -19 and prevention in higher education settings. These will include rapid antigen testing, saliva-based PCR testing and wastewater surveillance. With over 8,000 participants, the pilot project will help us learn more about different types of tests, how effective they are and if they can or should be used in higher education settings. UniCoV will inform surveillance systems to support the provision of safe campus environments and provide evidence to facilitate return to campus activity for staff and students in further and higher education institutes. The findings will inform the development of early warning systems for future outbreak prevention and control.

Photo Credit Sunday Times



SDG 4

Quality Education

4 QUALITY EDUCATION



2020-2021

Students and Learning

Excellence and Inclusiveness

NUI Galway provides access to education across all academic programmes through a range of inclusive and responsive [Access Programmes](#) addressing educationally vulnerable cohorts. The mission of NUI Galway's [Centre for Excellence in Teaching and Learning](#) (CELT) is to foster a culture of excellence in teaching and learning. CELT supports academic staff in the skills of curricular design and teaching by offering a number of programmes aimed at enhancing the professional practise of those teaching in higher education. For example, the [Postgraduate Certificate in Teaching and Learning in Higher Education](#) and the [Postgraduate Diploma in Academic Practice](#). The [Professional Master of Education](#) (PME) is offered by the [School of Education](#); this is a recognised postgraduate qualification for teaching and provides the professional knowledge, understanding and pedagogical skills required to become a post-primary teacher. In AY 20-21, 312 students enrolled on the PME. [The President's Awards for Teaching Excellence](#) recognise the outstanding efforts of teaching staff to ensure NUI Galway students receive the highest quality learning experience. The [NUI Galway Inclusive Teaching & Learning project, which](#) finished in May 2021, aimed to raise awareness of the diversity, in all its forms, of the student population and ways in which how we teach and the materials we use can be redesigned to widen their accessibility to all our learners. Two key aspects of the project were: the promotion of Universal Design for Learning (UDL) and the implementation of [Blackboard Ally](#).

Designing Futures

In October 2020, NUI Galway was awarded €7.57 million in funding for its [Designing Futures](#) project as part of the Human Capital Initiative funded by the Department of Further and Higher Education, Research, Innovation and Science. The goal of Designing Futures is to enable every student to succeed in the future world of work. Designing Futures will ultimately empower every student to design their personalised skills development pathway, and to have their transversal skills achievements recognised on graduation alongside their degree. Innovative methods of teaching and delivery will be promoted in this project, so that learners will benefit from improved quality and more engaging ways of learning on enterprise-focused courses, providing

lifelong learning and upskilling opportunities for all. The Designing Futures project is led by NUI Galway, partnered by a consortium of large and small enterprises, and draws on best practice in design thinking and trans-disciplinary learning pioneered by Stanford University and Georgia Institute of Technology in the US and the University of Strathclyde in Europe.

Centre for Adult Learning and Professional Development

NUI Galway's [Centre for Adult Learning and Professional Development](#) (CALPD) offers an extensive range of professional, part-time and evening courses and lifelong learning opportunities with its flexible courses allowing students to study at their own pace in a wide range of subject areas. With online and blended learning course options, access to Government funded [Springboard plus](#) courses; [Recognition of Prior Learning](#) (RPL), [Continuing Professional Development](#) (CPD) programmes; the Centre aims to provide upskilling and professional development opportunities for all. In AY20-21, 1140 students achieved awards with CALPD. The Centre is embarking on an exciting [new project in the area of micro-credentials](#) with a view to transforming lifelong and life-wide learning. The micro-credentials will be enterprise-focused and developed in response to the upskilling needs of employees in the workplace. They will provide a truly flexible and agile learning experience for busy professionals to meet the ever-changing business needs of today's enterprises.

Research

NUI Galway School of Education

NUI Galway School of Education has a range of funded research projects across its three themes: Education Culture and Society; Innovation in Education and Professional Learning. The [Education Culture and Society](#) research theme is concerned with issues of inequity and social justice at school, higher education, and initial teacher education levels, relating to social class, ethnicity, gender, sexualities, language, and disability. Examples of recent projects include [Schooling at Home: Life Two](#); and both [the Crisis Coping for Marginalised Youth](#) and [Bridging Worlds: New Learning Spaces for New Times](#) projects engage with sustainability through community involvement. The [Innovation in Education](#) research group has expertise in innovation, pedagogy and technology in education,



177 Publications
(Scopus Publications 2016-2020)

including STEM and science engagement, computational thinking and mathematics pedagogy, mobile learning and educational design. For example, the design of **Spaceship Earth** is to inspire, engage and educate teachers, students and the public about STEM through launching high-altitude balloons from Ireland to the 'Edge of Space'. The high-altitude balloons carry student projects allowing reflection on the uniqueness of our blue planet, reminding everyone of our efforts to avert climate change. Research stemming from **Professional Learning theme** covers a range of areas including; special and inclusive education; literacy and numeracy education; school leadership and; teacher and student wellbeing and empathy many of which incorporate place-based and project-based learning encouraging life-long learning opportunities.

Western Institute for Studies in Education (WISE)

In May 2021, NUI Galway, Galway-Mayo Institute of Technology and St Angela's College Sligo **announced** the foundation of the Western Institute for Studies in Education (WISE). WISE aims to create a Centre of Excellence that will serve to strengthen the collective expertise of three teacher education providers in NUI Galway, Galway-Mayo Institute of Technology and St. Angela's College Sligo. WISE will support collaboration among the three institutions with the aim of developing courses, research and public engagement in teacher education to enhance and promote teacher education in the Western Region.

Community Engagement

Education and Outreach Initiatives

In April 2021, **three NUI Galway public engagement and education outreach initiatives** were awarded funding of over €300,000 through the SFI Discover Programme. The funding is to support projects dedicated to engaging over 385,000 members of the public in science, technology, engineering and maths (STEM) subjects. **Cell EXPLORERS** is a science education and public engagement programme locally delivering educational science outreach activities to school children and the Irish public. **Science Waves**, led by CÚRAM, the SFI Research Centre for Medical Devices, is an education and public engagement programme that aims to raise awareness of its research and increase understanding of

preventative behaviours which can reduce the incidence of chronic illness. CÚRAM is working with children from underrepresented communities to create accessible, engaging, and fun radio shows. **ReelLIFE SCIENCE** is a nationwide science video competition, which encourages young people and the general public to discover more about STEM and its impact on individuals, society and the environment. Young people from schools and youth organisations are challenged to research a STEM topic and communicate it to the public through an engaging and educational three-minute video. Lifelong learning is also a real focus of our partnership with the **Galway Science and Technology Festival** engaging the general public, schools and all ages.

NUI Galway's **Youth Academy** works with high ability 4th, 5th and 6th class primary school students to support their learning and academic development. NUI Galway's **Uni 4 U** is a primary schools initiative aimed at increasing participation, diversity and equality of opportunity in third level education.



Literacy Lift Off programme

The core function of the **Community Knowledge Initiative** (CKI) is to educate students for their role as active citizens and to ensure that graduates have knowledge, skills, values and attitudes to understand and address the SDGs for positive societal change. This is reflected in the NUI Galway Strategy 2020-2025 Mission Statement "NUI Galway is for the Public Good". The CKI established a number of flagship programmes engaging students to community and society. For example, through their **service learning programme**, academic staff have created over 30 modules that engage all 17 of the SDGs across the curriculum and encourage students to explore issues vital to society. **Literacy Lift Off** is an example of a CKI service learning module taken by 2nd year NUI Galway English students. Research indicates that many children do not have the opportunity to read with their parents, and a literacy problem can emerge such as a low reading age and ability. The Literacy Lift Off module gives primary school children a one-to-one experience to read with NUI Galway students to help combat and counteract this challenge and instil a passion for reading.

ARAN (Access to Research at NUI Galway) is our institutional repository supporting Green Open Access publishing. This route provides open access publication at no cost to the researcher or reader.

The repository hosts

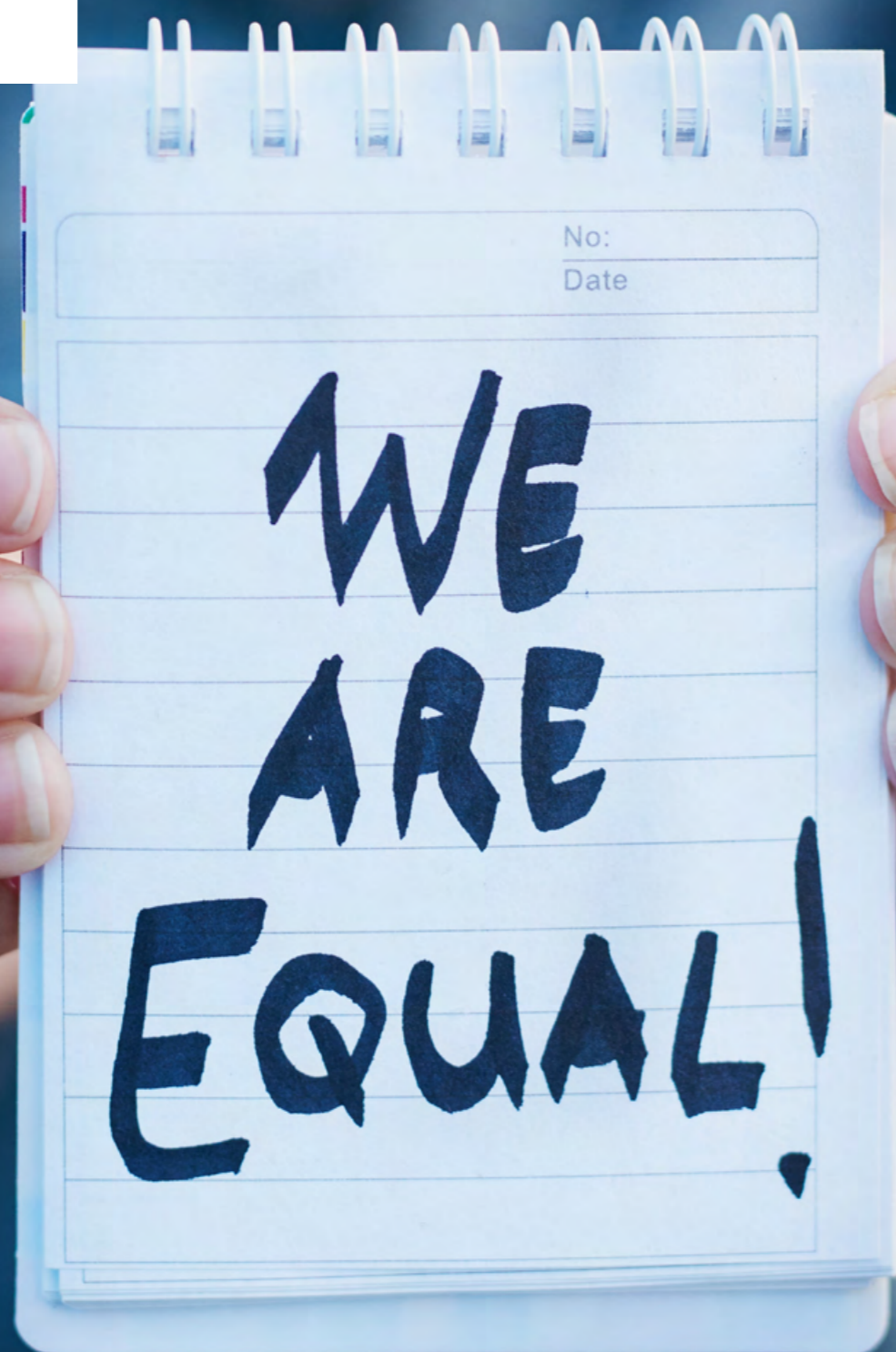
13,302 PUBLICATIONS INCLUDING 9,184 ARTICLES, 46 BOOKS AND 395 CHAPTERS.

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NUI Galway is a partner of **ENLIGHT**; a European University formed by nine comprehensive, research-intensive universities from nine European countries. The ENLIGHT alliance aims to guide students to become lifelong learners and agents-of-change ready to tackle the challenges of tomorrow.

SDG 5

Gender Equality

5 GENDER
EQUALITY

99 Publications
(Scopus Publications 2016-2020)

Students and Learning

Masters in Gender Globalisation and Rights

The Masters in Gender, Globalisation and Rights is the flagship teaching programme of the **Centre for Global Women's Studies** at NUI Galway. It offers students an opportunity to study the gender dimensions of globalisation and global issues, through an interdisciplinary programme that combines the fields of gender and women's studies, international development, human rights, peace and conflict studies. The programme includes modules in globalisation, development, human rights, gender and feminist theory, health and sexuality, women in agriculture, historical perspectives, and peace and conflict. In addition, the Centre for Global Women's Studies offer the undergraduate module **European Women's Studies** each semester for visiting international and Erasmus students. Global Women's Studies topics are also integrated into the BA subject **Political and Sociological Studies**.

Active*Consent

In July 2021, NUI Galway launched a new publically available **online learning hub** to promote educational and information resources on sexual consent. The online learning hub was launched as part of a Government initiative to improve the understanding on the meaning of, and importance of, consent in sexual activity. This initiative builds on the work of the **Active* Consent** research team in NUI Galway. The online learning hub is based around the idea of 'consent literacy' for all members of our society. This means that people feel confident in their knowledge and understanding of consent, their communication skills with partners, how to access supports themselves or help others to do so, and how we can safely challenge unacceptable aspects of our culture. NUI Galway Active* Consent workshops are provided as an integral component of college-based orientation programmes for all first year students at NUI Galway. In AY 20-21, the programme reached approximately 3000 students, which is the highest number among Higher Education Institutions (HEI's) in Ireland.

WiSTEM Society

The WiSTEM student society (Women in Science, Technology, Engineering and Mathematics) secured funding from the EDI fund to provide 10 paid lab-based summer internships in STEM disciplines in 2021. The internships provided undergraduate students (1st–4th years) of the society with work experience and support during their academic and professional career. Women are underrepresented in the STEM field. For example, UCAS 2019 reported that females represented 39% of Science, 19% of Technology, 19% of Engineering and 37% of Maths applicants. The Irish Central Statics Office highlights that less than 25% of the STEM workforce are women. Coupled with the fact that, on average, women earn 18% less than men in the EU, initiatives such as this may provide support for female students in planning their career.

Research

Global Women's Studies Cluster

Research in the Global Women's Studies cluster at the NUI Galway Centre for Global Women's Studies investigates the operation of gender in society, gender inequalities, changing notions of gender identity, and the challenges of achieving women's empowerment and human rights in Ireland and beyond, in a context of globalisation. Research themes include: Gender equality, economy and empowerment; Gender, violence, health and sexuality; Religion, gender, human rights and the public sphere; Women, peace and security. Examples of reports published in 2020 include: Guidance on Estimating Resource Requirements for selected interventions in the United Nations Joint Global Programme on Essential Services for Women and Girls Subject to Violence and beyond (see report [here](#)) and Estimating the Cost of child marriage in the Arab Region (see report [here](#)).

Senior Academic Leadership Initiatives

The Senior Academic Leadership Initiative (SALI) is an initiative by the Higher Education Authority (HEA) to accelerate progress in achieving gender balance at the senior academic level in higher education institutions. In January 2020, NUI Galway was awarded two senior leadership positions as part of the scheme – an Established Professor of Engineering and a Professor of Older Adult health. NUI Galway's

Aurora programme is targeted at women in academic, support and research roles in the University, in order to enable leadership potential and provide an opportunity for growth and development. The programme provides an introduction to leadership in higher education and a positive view of leadership as a route to career progression.

Community Engagement

Gender Equality within Higher Education

In 2021, NUI Galway secured a renewed Athena SWAN Bronze Award in recognition of the University's continued progression on gender equality. The Athena SWAN Charter is a framework which is used across the globe to support and transform gender equality within higher education (HE) and research. The renewal of the award highlighted a range of initiatives being taken at the University, including improvement in the representation of women in senior academic roles. Bronze award status has also been granted to five of NUI Galway's Schools taking the total of school awards to eight.



In 2021, NUI Galway secured a renewed Athena SWAN Bronze Award in recognition of the University's continued progression on gender equality. The Athena Swan Charter is a framework which is used across the globe to support and transform gender equality within higher education (HE) and research.

The Office of the Vice President for Equality and Diversity (OVPED) leads on embedding Athena SWAN principles across the university. The Gender Equality Action Plan (GEAP) sets out actions, responsibilities and times lines relating to Athena Swan and other areas including culture, governance, training & development, recruitment, and promotion. The GEAP is updated by the Vice President for Equality & Diversity every 2 months to ensure progress and oversight. The OVEP hosted a series of events from March 8th to 12th, 2021 to celebrate International Women's Day 2021.

Domestic Violence Leave Policy

In April 2021, an NUI Galway Domestic Violence Leave Policy was agreed by the University Management Team (UMT) for immediate effect. The policy has adopted a wide definition of domestic violence to capture the range of experiences all staff members may suffer, including intimate partner violence, violence by other adult family members, and child to parent violence. The purpose of NUI Galway's Domestic Violence Leave Policy is to provide for a period of paid time away from work for staff members who have suffered or are suffering from domestic violence or abuse. The Domestic Violence Leave Policy places NUI Galway as a leader in the sector, recognising that Higher Education Institutions are not only institutions of learning that contribute to knowledge on deep-rooted social problems such as domestic violence; they are equally places of work committed to creating a safe and respectful working environment that promotes dignity and wellbeing of all members of their communities. New research including that from the Centre for Global Women's Studies at NUI Galway has quantified the impact of domestic violence on productivity loss. For example, NUI Galway, in conjunction with the International Center for Research on Women and IPSOS MORI, has carried out a study on the economic and social impacts of violence against women and girls (VAWG). The study highlights the challenges VAWG creates for employment mobility and attainment of managerial positions through its productivity impact. The study surveyed approximately 100 businesses in key economic sectors in Ghana, Pakistan and South Sudan and found that a significant proportion of female employees were absent, late and less productive as a result of intimate partner violence.

The proportion of female staff holding the role of Senior Lecturer at NUI Galway increased from **33% IN 2016/17 TO 47% IN 2020/21**

The proportion of female staff holding the role of Personal Professor in the University increased from **16% TO 28%** over the same period. (renewed Athena Swan Bronze Award 2021)



SDG 6

Clean Water and Sanitation

6 CLEAN WATER AND SANITATION



230 Publications
(Scopus Publications 2016-2020)

Students and Learning

NUI Galway offers a number of modules and programmes focused on water resources engineering and water resources management. For example, students are introduced to the topic of **Clean Water and Sanitation** in the **Water Engineering Design and Practice** module, where the importance of water and wastewater purification (both natural and engineered) are portrayed. This module is taught alongside **Environmental Engineering**, which has a focus on the importance of 'pollution swapping' and greenhouse gas emissions in the design of wastewater treatment systems. Through our module in **Hydrology and Water Resources Engineering**, students learn about the natural processes that control water resource availability and quality and how to assess a waterbody's suitability for water extraction or effluent discharge. **Design of Sustainable Environmental Systems I and II** focusses on the design of such systems with an emphasis on energy efficiency and recovery. Our **Master of Engineering in Civil Engineering** offers a water stream where students can take modules specifically focused on water engineering and management; in the **Water Quality** module, for example, students gain advanced understanding of the stressors that can affect water quality in rivers and lakes and learn how to build models to simulate the effects of wastewater effluent on water quality. With modules on the Water Framework Directive, Freshwater Acidification and Water Quality, our recently launched **Masters in Marine and Freshwater Resources: Management** is focused on understanding management in marine and freshwater environment in the context of global change.

Research

Supporting Ireland's National Action Plan on Antimicrobial Resistance

A clean environment is essential for human health and well-being. However, the interactions between the environment and human health are highly complex and challenging to understand. One way in which the environment and health interact is when poor sanitation and unsafe water supplies lead to water-related diseases. The **Ryan Institute's Centre for One Health** conducts research to unravel such a complexity. The EPA-funded

PIER (Public health Impact of Exposure to antibiotic Resistance in recreational waters) project is led by researchers from the [Centre for One Health](#) at NUI Galway. The PIER project is examining the risk of colonisation with antimicrobial resistant organisms (AROs) following exposure to recreational waters and is generating valuable evidence to inform policy makers and water regulators. The PIER project is also examining how environmental exposure to AROs impacts on quality of life and use of blue/green spaces. The HSE-EPA-funded AREST (Antimicrobial Resistance and the Environment – Sources, persistence, Transmission and risk management) project is led by researchers from the [Centre for One Health](#) at NUI Galway. The AREST project is generating national level data on the key sources, hot spots and drivers of antimicrobial resistance in the environment, including the aquatic environment. The AREST project brings together experts in human health, animal health and environmental health across the country, embedding the “One Health” concept and building the capacity of Ireland’s research community to support [Ireland’s National Action Plan on Antimicrobial Resistance](#).

Researching Wastewater Treatment Processes

The [Energy Systems Integration Partnership Programme](#) (ESIPP) is addressing some of the leading energy challenges of our time, as we move to decarbonise our energy system. NUI Galway is a leader on the ESIPP Water/Energy Nexus - Impacts and Modelling work package that looks at the impacts of demographics and climate change on water infrastructure. Wastewater infrastructure is facing challenges including the need to meet demographic and economic growth, while mitigating the impacts of climate change and meeting regulatory requirements and net zero-carbon targets; this NUI Galway led ESIPP work package is investigating such challenges. The [INNOQUA](#) project designed and developed nature-based technology for improved wastewater treatment and reuse. Due to its modular configuration, the INNOQUA system can address multiple aspects of wastewater treatment and water re-use in water stressed communities, rapidly expanding cities and industries – both in developed and developing countries. The decentralised approach helps to reduce pressure on inadequate wastewater networks, while reducing the water and energy demands of typical centralised wastewater treatments – supporting sustainable development. NUI Galway acted

as the Technical Lead on this project involving 20 partners and 12 demonstration sites in the EU, South America, Africa and Asia.

Protecting Water Quality

Through the [Water management for the sustainable use and protection of peatlands](#) project, the [Geo-ENvironmental Engineering](#) (GENE) research group, based at NUI Galway, is seeking to develop the scientific knowledgebase on peatlands and water management for different types of peatlands found in peat rich areas of Northern Europe and Indonesia. Peatland are important in several regions as they contribute to many ecosystem services including drinking water provision. When peatlands are drained, negative environmental impacts occur, including reduced surface water quality, loss in biodiversity and greenhouse gas emission. The [PEST-MAN](#) project is an EPA and Department of Agriculture Food and Marine (DAFM) funded research project focused on pesticide management for better water quality. The project aims to understand the drivers and pressures for the use of pesticides in the environment and evaluate any potential impact and risks to the environment and human health.

NUI Galway & EPA Research Facility

The [NUI Galway/ EPA Water Research Facility](#) (WRF) is a world class infrastructure for research and technology development providing a test-bed for innovative water, wastewater and waste treatment technologies. The WRF is located on the site of the Tuam Wastewater Treatment Plant (TWWTP), Co. Galway, and can treat a side-stream of the TWWTP influent for a population equivalent to a town of up to 400 people. Core funding to establish the WRF was provided by the EPA through its STRIVE Research Programme, and by NUI Galway. Critical



support came from Galway County Council, who provided the site and carried out the civil engineering works. Building on the EPA’s initial investment, other agencies including Enterprise Ireland are currently funding research projects on new green technologies at the WRF. The WRF is helping the development of innovative technologies and techniques required to meet the Water Framework Directive, protect the environment and grow the smart economy. New processes for water treatment are being trialled in real-world conditions to provide practical and robust solutions.

Community Engagement

Water Stewardship Programme

NUI Galway is committed to the effective and efficient use of water throughout the campus and the appropriate treatment, management and disposal of wastewater. We are striving to reduce our water usage and increase the use of harvested rainwater through a series of measures, including: water leakage detection and repair programme, education and outreach, process-related efficiency measures, greywater and rainwater harvesting. As a participant in the [Water Stewardship Programme](#), we are working in conjunction with [Irish Water](#) to lower our water use and operating costs while protecting the environment. The [Sustainable Water Partner badge](#) demonstrates that key staff have undertaken a course designed to show leadership and set goals/targets in reducing water consumption. Our NUI Galway [Water Stewardship Charter](#) sets out our commitment to maintain and achieve further reductions in water usage on campus and to highlight the importance of water as a critical and limited resource. The Charter and our NUI Galway Sustainability Strategy sets out our commitment to reduce water usage on campus by 10% by 2025 based on a 2018 baseline.

Evaluation of the Public’s Awareness of their Drinking Water

Ireland’s water quality in general is improving; however, there are still significant occurrences of microbial contamination. Such incidences result in restrictions and boil water notices being placed on water supplies, the impact of which on the public’s trust in their water supply is not yet fully understood. Researchers from the Centre for One Health at NUI Galway carried out research to evaluate of the [public’s awareness](#) of the quality of their drinking

water and implications for health. Overall this survey found knowledge among the public of where drinking water comes from and its treatment appears to be lacking. Also, water quality incidents impact on water use and regular up to date information is important in maintaining the public’s confidence. Findings generated by this work will help inform the general public, providers of water and governing bodies on how to improve communication with the general public on water related issues.

THE PIER Blue Spaces Survey

As part of the EPA-funded PIER project, researchers from the Centre for One Health at NUI Galway are carrying out the PIER’s Blue Spaces survey. This aims to improve the cleanliness of and access to our rivers, lakes and seas in the future. To do this, it is important for us to understand what is currently working well to improve and protect our waters and what is stopping us from using them to the fullest. Findings of this work will help improve blue spaces for all.

3 metred drinking water fountains located in the Hardiman Library dispensed over

19,000 LITRES

of water during a 3 week study period in December 2019. This represents potential saving of over

€23,000
and

444.2 KG’S

of plastic waste- in comparison to buying single use bottled water.

SDG 7

Affordable and Clean Energy

7 AFFORDABLE AND CLEAN ENERGY



2020-2021

Students and Learning

Energy Engineering specialisation

NUI Galway offers degrees in **Energy Systems Engineering** at both undergraduate and postgraduate levels. Energy Systems Engineering is a multidisciplinary programme that aims to meet the current and growing challenge of dwindling fossil fuel resources and the critical demand for alternative, renewable energy sources as a national, Europe-wide and global priority.

Energy Society

The goal of the **NUI Galway Energy Society** is to use fact-based discussion and open collaboration to develop an understanding and awareness of energy production, consumption and its impacts. The society strives to make renewable energy options and everyday sustainable habits visible on campus and integrated into students' lives however possible. During AY 20-21, the Energy Society hosted a range of events, for example, a weeklong celebration of International Earth Day incorporating beach clean-ups, guest speakers, activities to support the circular economy; a range of online events including 25 Days of Shop Local Christmas and Meatless Mondays. The Energy Society is working in partnership with the Menlo Residents Association and Galway National Park City to bio-diversify Menlo village and the wider Galway area. As part of this initiative, during April 2021 the society planted 450 native Irish trees in Galway's People's Forest Park and donated 50 trees to students to plant in their own gardens, highlighting the importance of biodiversity, ecosystem support, and carbon sequestration. Additionally, the NUI Galway Energy Society is hosting a Bike Week initiative full of prizes and free bike safety materials to promote cycling as an alternative form of transport to driving around the city. The Energy Society has also developed a Sustainable Lifestyle app, created a Circular Economy Map for Galway City, and will be hosting an Anti-Fast Fashion show at the European Parliament Building to highlight the energy intensive practice of fast fashion and greener, cheaper options such as purchasing clothing and other consumables second hand.



332 Publications
(Scopus Publications 2016-2020)

The Combustion Chemistry Centre C3 is engaged in fundamental research on the **COMBUSTION OF BIOFUELS** and has maintained its reputation as being among the top combustion research laboratories in the world, with its director being ranked in the

TOP 1% of Clarivate Analytics list of Highly Cited Researchers in his field each year since records began. NUI Galway is proud to have **FIVE ACADEMICS** who have been named on the annual **Highly Cited Researchers 2020 list from Clarivate** in 2020.

Research

World leaders in testing of tidal turbine blades

The **Sustainable & Resilient Structures Research Group** at NUI Galway has been working over the past 13 years at the cutting edge of renewable energy R&D, which has resulted in the establishment of the world leading testing facility and an open-course design software (BladeComp) for full-scale tidal turbine blades. This has allowed the Research Group to provide a key de-risking service to allow for the development of the tidal energy sector as it strives for commercial viability. In AY20-21, these facilities have been used to **de-risk full-scale blades** to help the sector reach commercial viability; the companies tested for include Orbital Marine Power (Scotland), ORPC (USA/Ireland), Schottel (Germany) and ÉireComposites (Ireland). As a direct result of these testing campaigns, operational trials have commenced in Alaska and Scotland. For example, the ORPC device completed over 7,000,000 revolutions during its ten months of operation, making it the longest operating current energy converter in America. This technology is being further developed in our ongoing collaborative **H2020-CRIMSON project**. During the static testing programme for the Orbital Marine Power 1MW rotor blade, as part of the SEAI-funded **SEABLADE Project**, the maximum load applied to the blade was 1,008kN, which is over 100 tonnes or the equivalent loading to the curb weight of approximately 10 double-decker buses. This was the **largest load ever reported** on a tidal blade in the world. 20-year equivalent fatigue life testing was also performed – another world's first for a blade of this size. This blade was co-designed using NUI Galway's in-house BladeComp software. Therefore, the activities of the Research Group have been essential for the development of tidal energy.

Engaging with Communities towards an affordable and clean energy futures

Through several Horizon 2020 (H2020) projects funded by the European Commission, NUI Galway researchers have been supporting communities in a transition towards an affordable and clean energy futures. For example, **EnergyProspects** is a three-year project led by NUI Galway that will produce an interactive online database of over 500 diverse cases of energy citizenship, highlighting those characteristics that most effectively

promote active energy citizenship and have the potential to contribute to the clean-energy transition. This builds on the recently completed **ENERGISE H2020** project, which was a €3.7 million social science research project led by NUI Galway that explored the factors driving individual and collective energy choices and practices across Europe. The **REACT! project** is a 4-year research project with 24 partners, including NUI Galway, in 11 countries with its objective to achieve island energy independence through renewable energy generation and storage, a demand response platform, and promoting user engagement in a local energy community. Through this project and other initiatives, Údarás na Gaeltachta (Regional authority responsible for the economic, social and cultural development of the Gaeltacht), ESB Networks (utility company), SEAI (Ireland's national sustainable energy authority) and NUI Galway are working closely with the community on the Aran Islands (Galway) to be self-sufficient in locally generated renewable energy and free of dependence on fossil fuels.



Community Engagement

Green Hydrogen

The work of NUI Galway researchers continued to influence the policy and industry agendas for hydrogen on the island of Ireland and beyond. For example, an academic based in the School of Engineering briefed Minister for Climate Action and Transport, Eamonn Ryan, on the potential and barriers of hydrogen in Ireland and was subsequently invited to present his findings to the Government of Ireland's Inter-Departmental Working Group on Hydrogen. NUI Galway were commissioned by the Northern Ireland Department for the Economy to study **the role of hydrogen in Northern Ireland's energy transition**. NUI Galway co-founded **Hydrogen Ireland**, an industry organisation with 185 members. NUI Galway established the Galway Green Hydrogen Hub, an industry-academic initiative to deploy a green hydrogen value chain in Galway to fuel 20-40 buses. In the **SEAFUEL project**, NUI Galway is leading the first example ever of green hydrogen production using seawater and solar with the aim to fuel a zero-emission fleet in the Canary Islands. As part of the First Thoughts series in the 2020 Galway International Arts Festival, an academic in the School of Engineering **chaired a panel discussion** on climate action featuring Minister Eamonn Ryan.

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NUI Galway **exceeded the Public Sector Energy Efficiency target of 33% energy efficiency** by reaching a figure of 42% savings in AY2020/21. While COVID-19 continued to have a significant impact on energy use across the campus, COVID-19 related energy savings are not included in this figure.



Decarbonising energy use of buildings

NUI Galway continued to decarbonise energy use of our buildings, sharing lessons learnt with other third level institutions, public authorities and the wider community through, for example, our involvement in the U9 group of third level institutions in Ireland, **IUA Sustainability Working Group**, **SEAI Sustainable Energy Communities** and the **Energy Efficiency and Decarbonisation Pathfinder Programme (EEDPP)** for the higher education sector. In AY 20/21, we invested €1,200,000 in infrastructural energy projects including energy saving equipment and technologies (See Section 1 of this report for further details). In AY20/21, researchers in the School of Engineering at NUI Galway, working with colleagues in Buildings & Estates and others, have developed pilot innovative/intelligent ground source heat pump infrastructure to decarbonise heating infrastructure for NUI Galway, targeting An Sport Ionad as the net thermal energy beneficiary. This initiative is aligned with the **NUI Galway Strategic plan** ambition of moving towards carbon neutrality by 2030. This is part of the H2020 **EU GEOFIT project** that will provide innovative teaching/research infrastructure in ground sourced renewable energy systems and innovative artificial intelligence (AI) based software optimisation system.

SDG 8

Decent Work and Economic Growth

8 DECENT WORK AND ECONOMIC GROWTH



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NUI Galway, through its [Investment Strategy](#), commits to only appointing Investment Managers who are signatories to the [United Nations Principles for Responsible Investment](#) (UNPRI).

2020-2021

Students and Learning

The NUI Galway Employability Award

The [NUI Galway Employability Award](#) is an initiative designed by the Career Development Centre to encourage students to gain work experience and develop employability skills. Student complete five elements of the Award: Employability Workshops, Work Experience, Career Events, Skills workshops and Reflective Assessment. The Award is intended to prepare students directly for the job market by recognising what students have learned and the skills students have developed through work and extra-curricular activities, thereby giving students a competitive edge in the job market. Employers were central in the design and development of the award structure and deliver key components of the award by facilitating employability and skills workshops for students. 330 students received the award in May 2021; the award is published on students' diploma supplement.

The Transition to Employability Programme

The [Transition to Employment programme](#) is a series of workshops for students with a disability or mental health challenge, to get support and advice as they prepare to leave university and transition to the world of work. The programme provides information on disability legislation, disclosure planning, employability skills and an opportunity to meet with employers who promote inclusion in their organisations. Over 250 students have completed the programme since 2017. The Programme received international recognition in June 2021, by winning an [Excellence Award for Disability and Inclusion](#) from the Association of Graduate Careers Advisory Services (AGCAS) in the UK.

Student Sustainability Internship Programme

At NUI Galway, we recognise that internship programmes are a great way for students to gain valuable work experience. Providing paid internships and opening programmes to students from a wide variety of backgrounds helps promote equal access for all and ensures that we are not overlooking students that cannot afford to work for no pay. A sustainability paid internship programme has been running at NUI Galway since 2016. The purpose of the [NUI Galway Student Sustainability Leadership Awards Programme](#) is to extend sustainability beyond the classroom and enhance students'



125 Publications
(Scopus Publications 2016-2020)

academic, career and personal development, in a way that does not overlook students that cannot afford to work for no pay.

Student and Staff Harassment and Sexual Harassment Policy

NUI Galway is committed to creating an environment that proactively promotes dignity at work. All staff and students have the right to do their work, research and study in an environment that is free from harassment or sexual harassment. Our [Staff Harassment and Sexual Harassment Policy](#), launched in 2020 and our [Student Harassment and Sexual Harassment Policy](#), launched in 2018 aims to eliminate all forms of harassment and sexual harassment in the workplace.

Research

Work, Organisations & Society Cluster of the Whitaker Institute at NUI Galway

The [Work, Organisations and Society](#) cluster of the Whitaker Institute investigates the relationships between business, labour, organisations and society. Cluster members recognise that prevailing business and management models, and organisational models, can result in unsustainable and sometimes destructive outcomes for work, societies and economies. Research themes include business and organisational ethics, new forms of exclusion and precarious work, workplace discrimination relating to class, race, ethnicity, gender, disability and other grounds, work relations and labour market regulation, and whistleblowing in organisations. For example, a recent [opinion piece](#) by leading academics in the Work, Organisations & Society Cluster sets out to explore some of the glaring inequalities in the Irish labour market which COVID-19 has highlighted, such as the impact of precarious work, inconsistencies in the way in which older workers are treated, and the impact of reproductive labour. The

lack of external childcare provision during the pandemic, and particularly the gender divide in supporting home schooling, has highlighted the unequal social and economic impact of caring roles. Cluster members host regular webinars on these issues, attended by speakers and guests from around the world.

Community Engagement

The Global Galway Project

NUI Galway is on a journey to create a more globally diverse, and culturally rich, learning and working experience. A place where everyone has a sense of belonging, where we nurture global citizens and where everyone has a place to thrive. The **Global Galway Project**, launched in April 2021, is about putting in place adaptable structures and collaborative ways of working to encourage a culture of internationalisation across the whole of our University. Our internationalisation vision is for a diverse student and staff body involved in research and learning who are well supported, with a broad portfolio of high quality global partnerships and a curriculum that values mobility and international perspectives. This will enhance the recognition, innovation and employability of all our students and staff.

Saol Café

SAOL Café is the first social inclusion café in a higher education institution in Ireland, founded by the CKI in partnership with the NUI Galway Commercial Services office and a community based innovation and enterprise centre (**SCCUL Enterprises**). Since its opening in 2015, the café has provided a safe environment for people from all backgrounds to learn soft and hard skills in the hospitality industry. The café provides an opportunity for people who would not normally be considered for employment in the hospitality industry. Our vision for SAOL café is to make it a commercially viable business, but also one that can make a real change and prepare people for economic labour.

ALIVE Volunteering Programme

ALIVE (A Learning Initiative and the Volunteering Experience) is NUI Galway's Student Volunteer Programme. Alive was established to harness, acknowledge and support the contribution that NUI Galway students make by volunteering. The ALIVE certificate acknowledges the volunteering contribution that students makes to the community, through clubs, societies and directly

through engagement with over 400 community organisations and voluntary bodies. Through the programme, students have an opportunity to build civic leadership skills, enrich their personal development and employability skills and connect with the SDGs. Students volunteer with environmental programmes, education programmes, people with disabilities and for social justice causes. The work varies from online administration, campaigns, fundraising, clean-ups, recycling, befriending and tutoring. Approximately 800 students received ALIVE certificate in AY 20-21 with more than 80,000 hours of voluntary activity undertaken by these students across the University campus, Galway city, and wider communities to develop their own practical skills and civic awareness.



of our graduates are employed or in further study within 6 months of graduating. (2020 Graduate Outcome survey).

SDG 9 Industry, Innovation and Infrastructure

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Student and Learning

IdeasLab – The Student Enterprise Hub at NUI Galway

Established in late 2020, IdeasLab offers NUI Galway students a place to cultivate their curiosity and ideation, to support their creativity and innovation, and to activate their entrepreneurship skills. IdeasLab encompasses seven pillars of engagement: mentorship; industry challenges; internships programme; empathy lab; coaching and mentoring; module design and delivery; innovation sandbox and; Start100. IdeasLab programmes have over 1,500 engagements with students and 500 engagements with industry partner each year. The programmes provide an opportunity for students to develop problem solving, critical thinking and entrepreneurship skills, while working to solve global challenge and learning how to set up a business. In addition to the portfolio of activities offered through IdeasLab, the unit also works with academic and industry partners across Europe to deliver EU funded projects. The portfolio of EU funded projects includes, for example, From Scientist to Innovators for Industry (SCIFI), Women Entrepreneurship Bootcamp, Ideas to Impact (i2i) and ENERGHY Summer School.

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NUI Galway is a partner of Global Challenges University Alliance (GCUA) 2030. The objective of GCUA 2030 is to equip the next generation of researchers, teachers and academic leaders with knowledge, tools and networks that will strengthen their capacity to contribute to the SDGs through innovation and international collaboration.

Programmes in Agricultural Innovation & Entrepreneurship

The Masters in AgInnovation is a one-year distance education, blended learning entrepreneurship development programme, aiming to fill the gap in terms of entrepreneurship/intrapreneurship skills for the agri-ecosystem in Ireland. Key stakeholders include micro, small, medium and large agri-companies, as well as farmers. The aim of this course is to teach people how to identify areas for innovation specifically within the agri-domain, to create innovation-driven enterprises, or to create new business units within an existing company. The programme is funded by Springboard+ (the Government of Ireland and the European Union). In AY 20-21, the programme was open to 30 students, increasing to 40 students in AY21-22. This Masters in TechInnovation is a one-year full-time entrepreneurship development programme that aims to fill the gap in terms of entrepreneurship/intrapreneurship/innovation skills identified by small and large companies focused on exploring the commercial potential of solutions to identified industry needs across a wide range of domains. The aim of this course is to teach people how identify commercial needs, respond to the need in the form of a high-level solution, test the viability of that solution, develop a commercial response and create a company or a new business unit within an existing company, with a particular focus on innovation-driven enterprises that can scale up.

Research

The Innovation Office

The Innovation Office at NUI Galway engages with researchers, enterprise, government and society to accelerate the impact of NUI Galway research and innovation by enabling collaboration, knowledge transfer and research commercialisation. From developing and protecting new inventions and research breakthroughs, to encouraging entrepreneurs and mentoring spin our companies, the Innovation Office is playing a significant role in Galway and the wider regions start-up and innovation ecosystem. For example, our Business Innovation Centre is home to over 35 companies. In 2020, we secured 9 Licencing Deals, 46 Industry Deals, 32 Invention Disclosures and 12 Patents filled. In the last 5 years, we have spun-out 14 companies, bringing our number of spin-

2020-2021

outs to over 20. The creation of companies whose purpose is to turn research into societal impact is one of the core activities of the Innovation Office at NUI Galway. Examples of spin-outs with a particular focus on solutions for a sustainable world include NVP Energy and VorTech Water Solutions.

The Explore programme is where NUI Galway students and staff find support for innovative ideas. Staff and students across campus are invited to apply for collaborative projects. There is up to €900 in funding available, along with a support structure provided by the Innovation Office, to enable innovative ideas to get off the ground. To date, over 100 projects have been supported by EXPLORE. The Programme is managed by the Innovation Office and supported by the Galway University Foundation.



NUI Galway spin-out Vortech Water Solutions - winner of the sustainability category in the Irish Times Innovation Awards 2020

Community Engagement

Innovation and Creativity District for Galway

NUI Galway is working in partnership with Galway City Council for the development of Nuns' Island and Earl's Island as an Innovation and Creativity District. The Innovation and Creativity District will incorporate a new Innovation hub, City Lab, Adult Education Centre and riverside campus, to regenerate this part of Galway and strengthen the linkages between business, research and a living city. The development will also include a landmark cultural and performance space, acknowledging the University's role as a national cultural institution and its contribution to Galway as a Capital of Culture. The area will be framed within sustainable public realm to support engagement with the waterways and the natural landscapes of this urban environment. In March 2021, NUI Galway and Galway City Council welcomed the Government's announcement of funding of €4.3 million for the Innovation and Creativity District in Galway.



256 Publications
(Scopus Publications 2016-2020)

Enactus NUI Galway

Enactus NUI Galway is a group of students from a wide variety of academic disciplines, possessing an entrepreneurial spirit and passion for innovation, that develop sustainable projects. Working alongside their Business and Faculty Advisory Board, the mission of Enactus NUI Galway is to develop sustainable projects within the community, with the primary aim of benefitting society. There are eight Enactus groups nationwide; the other seven groups are made up of third level institutions across Ireland. NUI Galway competed in the Enactus Eco Challenge 2020. This is an initiative where teams that show the most potential in creating and sustaining an environmentally focused social initiative are awarded seed funding. The seed funding goes towards the scaling and development of the projects into available eco enterprises. Two project from Enactus NUI Galway were awarded seed funding; Buzzbox, a project to safeguard the bee population, and Ecode, a project to improve waste segregation.

In the last 5 years, we have spun-out

14 COMPANIES
bringing our number of
spin-outs to over 20.

SDG 10 Reduced Inequalities

10 REDUCED
INEQUALITIES



153 Publications
(Scopus Publications 2016-2020)

Students and Learning

University of Sanctuary

NUI Galway is a **University of Sanctuary**, a movement aimed at promoting the inclusion of International Protection Applicants, refugees and Irish Travellers within the community. As part of our University of Sanctuary initiative, NUI Galway introduced a specific University of Sanctuary Scholarship Programme. The University of Sanctuary Scholarship Programme is designed to increase participation at NUI Galway for International Protection Applicants, refugees, vulnerable immigrant groups, and Irish Travellers. In AY 2019-2020, 9 scholarships were offered through the programme including 6 undergraduate and 3 postgraduate scholarships. For AY 20-21, this increased to 12 full time scholarships.

Universal Design and Accessibility Policy

In June 2021, NUI Galway adopted a Universal Design and Accessibility Policy. The policy demonstrates the university's commitment to ensuring that the design of new education programmes and the review of existing programmes includes an assessment of the extent to which the programme is inclusive for all, including students with disabilities. Also to ensuring that both the design and implementation of learning and teaching strategies, as well as the learning environment, recognise the entitlement of students with disabilities to participate in all activities provided as part of their programme of study. Two **inclusive learning projects** have taken place at undergraduate (2018-2021) and postgraduate level (2020) to increase staff awareness of their responsibilities to design inclusive programmes for all students. Universal Design Learning Digital Badge Training is being rolled out in the University; there are 35 staff fully trained, 40 staff are undertaking the badge and there are 6 trainers on campus.

Transition to Employment

Transition to Employment is an annual widening participation initiative run by the Career Development Centre. It seeks to support students with disabilities or mental health conditions who are preparing to transition into the work place. The programme is in its fifth year and was shortlisted for the Zero Project Global Awards 2021, which supports the implementation of the Convention on the Rights of Persons with Disabilities (CRPD) of the United Nations. The Transition programme comprises of a series of four workshops which provide valuable information on managing transitions, disclosure, connection with employers, and follow on supports after graduation. The programme moved to virtual delivery in response to COVID-19 and 75 students participated across the four sessions. Collaboration with employer representatives and Employability Galway provided valuable information for students on disclosure and internship programmes for graduates with disabilities.

Research

The Centre for Disability Law and Policy

The Centre for Disability Law and Policy (CDLP) is an internationally recognised centre of research excellence at NUI Galway's School of Law. The centre focuses on advancing social justice and human rights for people with disabilities through legislative and policy reform. Examples of current research projects include: DARE that aims to equip a new generation of researchers to respond to global challenges facing persons with disabilities; Re(al) productive justice explores the legal regulation and the real life experiences of disabled people in Ireland in making reproductive decisions; ResPoNCE aims to explore the impact of strategic decision-making created by states and healthcare systems in Europe in order to establish whether the rights and needs of people with disabilities are being met. The Centre for Disability Law and Policy is a constituent research centre of the Institute for Lifecourse and Society (ILAS). ILAS is a designated research centre that brings together existing work in relation to targeted populations, such as older persons, children and families, and persons with disabilities, into one domain of research, teaching and policy.

Community Engagement

The Office of the Vice President for Equality and Diversity

NUI Galway's Office of the Vice President for Equality and Diversity (OVPED) is responsible for leading and promoting all aspects of equality and diversity throughout the University. This includes introducing and mainstreaming mechanisms to ensure frequent monitoring and awareness of gender in key decision-making processes. This includes, for example: Equality Impact Assessment (EIA) of all new and revised policies; recruitment monitoring; complete reform of academic promotions processes at both Senior Lecturer and Professorial levels; monitoring of committees and working groups to ensure a minimum representation of 40% men and women. A suite of new policies have been developed to enable equality and inclusiveness. The OVEP offers career support training programmes, which includes NUI Galway's Aurora programme and inclusion training programmes covering areas including LGBT+, disability and cultural diversity, such as the NUI Galway Ally programme. A number of staff networks have been established to provide peer support, networking, engagement and social interaction opportunities; for example, the University Women's Network, LGBTQ+ network and International Staff Network. In 2021, NUI Galway was awarded a special €1million fund to drive the University's agenda in equality, diversity and inclusion. NUI Galway is one of only five colleges to be awarded funding from the Performance Fund for higher education institutions, in recognition of innovative programmes to help create a better society.



In AY 20-21
7.2%
 of NUI Galway students registered for
DISABILITY SUPPORT

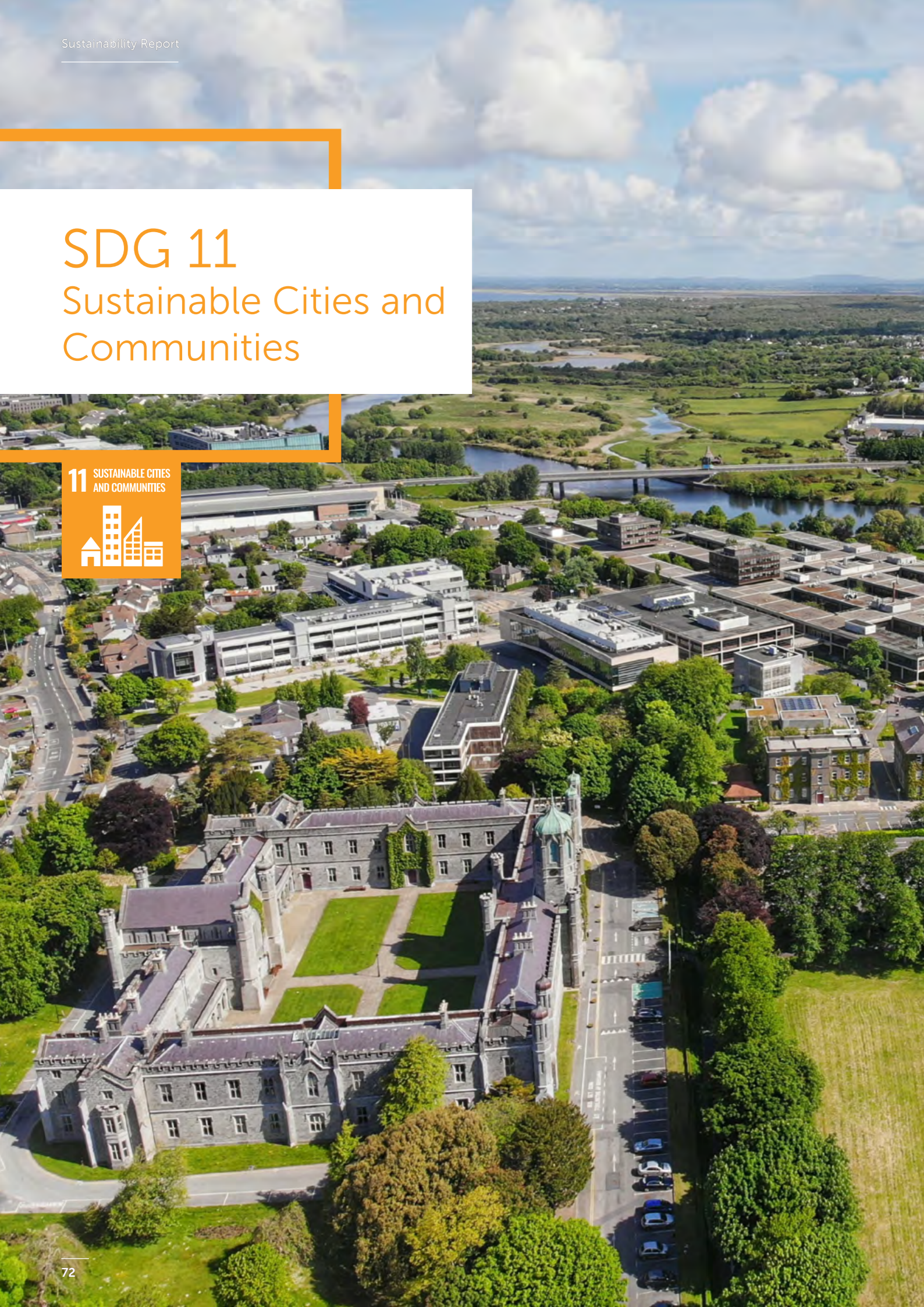
i
 NUI Galway is a member of the Local Economic Community Plan SDGs Working Group. The working group is an innovative cross sectoral approach co-ordinated by Galway City Community Network that aims to make action on the SDGs visible in Galway city.

Students from NUI Galway have developed a unique initiative to support people in high risk groups during the Covid-19 pandemic by sending parcels to help ease isolation.

SDG 11

Sustainable Cities and Communities

11 SUSTAINABLE CITIES AND COMMUNITIES



2020-2021

Students and Learning

Study Programmes

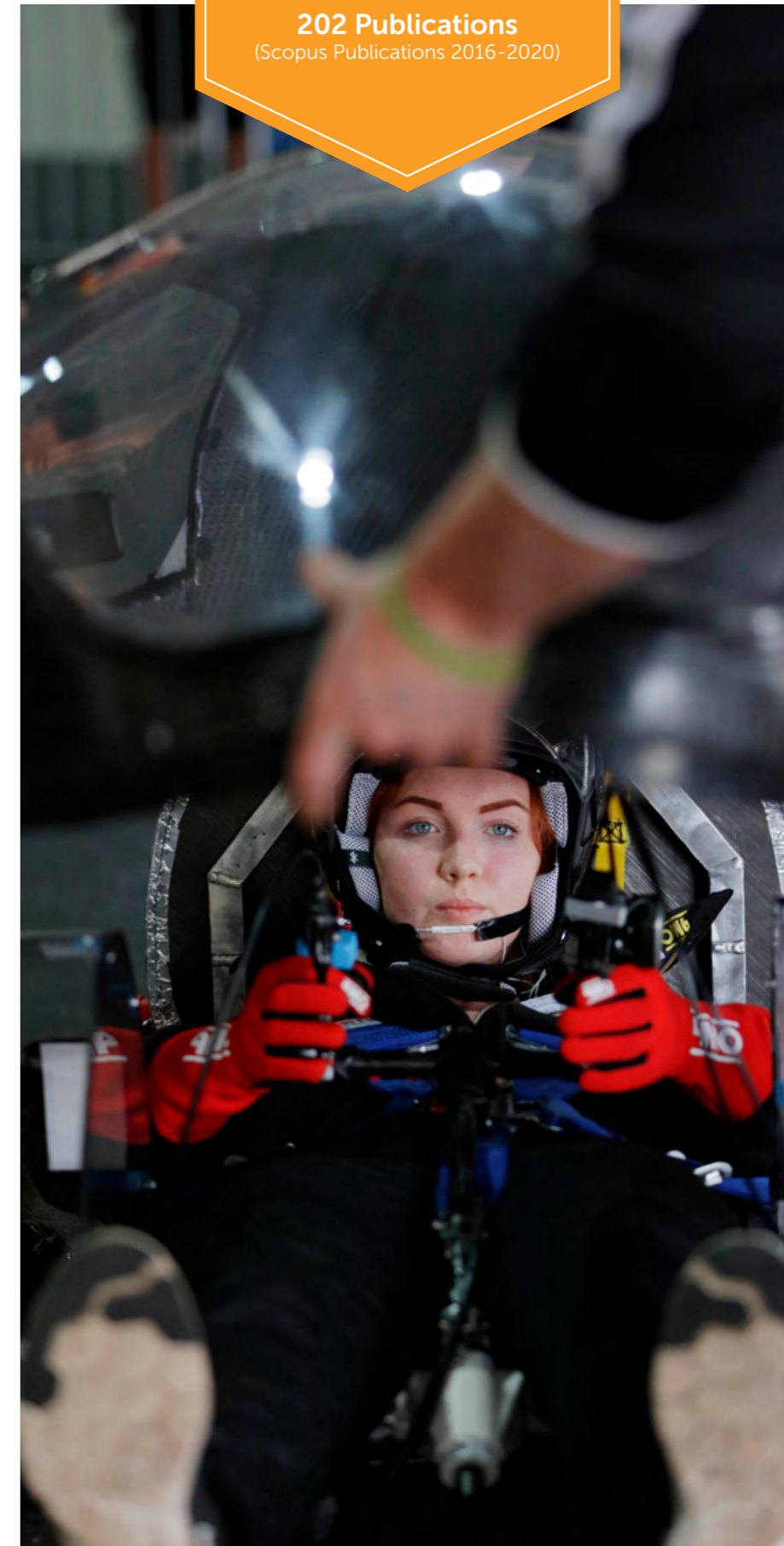
With modules in Built Environment, Energy Economics and Policy, Water Quality, Energy in Buildings, the **Masters in Sustainable Environments** provides students with insight into environment, health, and sustainability issues within urban and rural environments. The programme integrates ecological, health and sustainability issues and considers their interaction within the natural and built environments. Through the programme, students develop skills to appraise sustainability issues and challenges associated with integrating the built and natural environments. Through the **Masters in Rural Future Planning and Innovation**, we acknowledge that the rural represents a key sphere in any discussion on sustainable development, while also recognising that the profile of rural areas is evolving. While agriculture remains a vital component of the rural economy, other sectors (e.g. industry and retail) now provide the bulk of employment. In this regard, the rural increasingly mirrors the urban. Therefore, the programme aims to provide students with the knowledge and skills to evaluate the vital importance of the rural to future sustainable development and identify future planning needs and challenges, while responding to these challenges in innovative ways.

Galway Energy Efficient Car (GEEC)

The team behind the Galway Energy-Efficient Car (GEEC) at NUI Galway was crowned **European champions** in a major student engineering competition. The GEEC is a three-wheeled single-seat battery-electric vehicle designed, developed and raced by NUI Galway students. Usually the team would race the GEEC at Shell Eco-marathon Europe, but due to COVID-19 the students took part in design competitions as part of the 2021 virtual programme. The GEEC road freight team were declared outright winners of the European region for their research and innovation on improving aerodynamics of heavy trucks in the category of Decarbonising Road Freight Transport. The team excelled by identifying aerodynamics as a major cause of energy loss in heavy trucks and proposed easily fitted modifications for conventional heavy goods vehicles (HGVs) and lorries, which reduce energy, waste and carbon dioxide (CO₂) emissions by approximately one fifth.



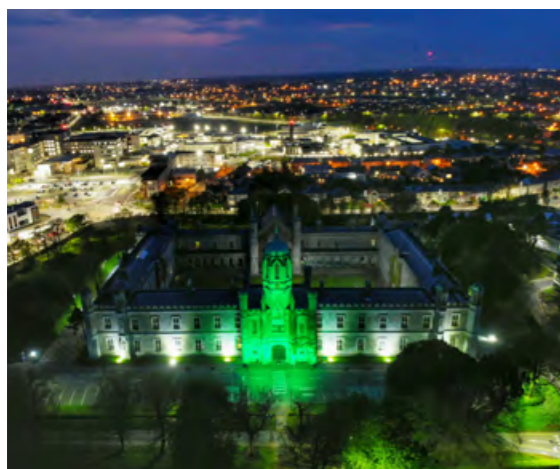
202 Publications
(Scopus Publications 2016-2020)



Research

Ireland's National Remote Working Project

The Whitaker Institute at NUI Galway and the Western Development Commission are leading the **Remote Working in Ireland** project. Phase 1 of the project analysed findings from a survey of over 7,000 people, approximately six weeks after COVID-19 restrictive measures were introduced in Ireland. The majority (83%) of respondents indicated that they would like to work remotely after the crisis is over. The top three advantages of working remotely were identified as: no traffic and no commute; reduced costs of going to work and commuting and; greater flexibility as to how to manage the working day. Phase two of the survey gathered responses from more than 5,000 employees six months after lockdown and shows that 94% of employees are in favour of working from home some or all of the time. The third survey gathered data on employees' experiences of remote working one year on from lockdown and seek inputs on their preferences post pandemic. The Whitaker Institute's remote working project, reports and data has extensively informed the Department of Enterprise, Trade and Employment's national remote working strategy published in January 2021, entitled **Making Remote Work**. The strategy's objective is to ensure that remote working is a permanent feature in the Irish workplace in a way that maximises economic, social and environmental benefits. The strategy recognises the benefits of remote working in reducing transport related carbon emissions and air pollution.



NUI Galway lights up in green to mark Earth Day 2021

NUI Galway is a
MEMBER OF
COALITION 2030
 an alliance of civil society organisations working together to ensure Ireland keeps its promise to achieve the SDGs.

Moycullen 2030 Village Plan

Researchers from NUI Galway's School of Geography, Archaeology and Irish Studies, together with Forbairt Pobail Maigh Cuilinn (Moycullen Community Development Association), have developed a people powered plan for the future development of the village. The **Moycullen 2030 Village Plan** project was funded by the Irish Research Council. A number of key infrastructural investments are in train for Moycullen village; a bypass of the village, a new primary school, a dedicated cycleway in the form of the Connemara Greenway, and a substantial housing development. These advances, together with longer term infrastructural investments such as the planned ring road around Galway city, will have very real implication for the village. For example, a conservative estimate indicates that the population of the village will double by 2030. The Moycullen 2030 Village Plan is an effort to plan for these changes from the bottom up rather than top down; it is essentially a culmination of the wishes of a community and is seeking to identify a sustainable future for a village in the context of a rapidly urbanising Ireland.

Community Engagement

2020 Galway European Capital of Culture

As **European Capital of Culture for 2020**, Galway has a unique opportunity to build a lasting legacy for the cultural and creative arts sector in the city and its hinterland, boosting the reputation of the city and region, and building new relationships across Europe and the wider world. NUI Galway is the Official **Legacy Partner** to the European Capital of Culture project and is supporting the development of a cultural legacy

programme which will have an enduring impact on Galway's creative arts sector. The legacy of Galway 2020 will include the creation of new teaching courses – including a new Masters in Arts Management, the recruitment of new students into Creative Arts programmes, and the development of new local, national and European partnerships in teaching and research. In the longer term, the creation of a **landmark cultural and performance space** consolidates our role as a national cultural institution and our contribution to Galway as a city of culture.

Through the **Centre for Creative Arts Research** (CCAR), based at the Moore Institute, NUI Galway has supported the development of **cultural legacy projects** within the university. The projects will run until 2022 and explore the themes of Language, Landscape and Migration, addressing aspects of European culture, identity, and creative cities; and connecting with the University and its wider communities. New research partnerships and networks have been developed at a national level with the Arts Council, Creative Ireland and Royal Irish Academy, and internationally in Germany, Denmark, USA, UK (Centre for Cultural Value) and Singapore. The **Centre for Creative Arts Research** is hosting Visiting Fellowships and Artist-in-Residencies that will engage new publics in the humanities and arts practice and research. In March 2021, the **Centre for Creative Arts Research** at NUI Galway published an online special issue for the University Network of European Capitals of Culture, on the theme of **European Capitals of Culture: The Art of Reimagining**. In April 2022, NUI Galway will host the Cultural Trends Conference, bringing together an international cohort of world class researchers under the banner of 'Cultural Policy Futures'.

Galway National Park City

Galway National Park City (NPC) is an initiative seeking to make Galway one of the first national park cities in the world. A veteran environmental campaigner based at the Insight Centre for Data Analytics at NUI Galway is spearheading the initiative. The Galway NPC movement has supporters, or 'champions' from numerous facets of society around the city including, for example, student and youth advocates, academics, representatives from the Arts sector, private industry, healthcare, community and voluntary groups. The President of Ireland, Michael D. Higgins, is a patron of the initiative and has applauded the people of Galway City for the campaign saying that it is a "powerful and tangible exemplar" of what can be done by grass-roots campaigns. The NUI Galway Community University Sustainability Partnership (CUSP) team is a proud champion of Galway NPC and a number of students and staff from across the university are key drivers of the project. For example, the **Walking and Cycling Trail** mapping project and the **Green Directory for Galway City** are led by members of the campus community. The overall vision of Galway NPC is to generate a 'greener, bluer, healthier, safer, beautiful, sustainable, equitable, harmonious and wilder environment where people value, benefit from, and are strongly connected to the rest of nature'. At the launch of NPC Galway in October 2020, President Michael D Higgins said *"The National Park City for Galway is of course part of a bigger international picture that will contribute to the United Nations 2030 Agenda about which Sabina and I feel so passionately, and the 17 Sustainable Development Goals that emanate from this milestone international agreement that endeavours to create a more just and inclusive world."*



The **Creative, Liveable and Sustainable Communities** cluster at NUI Galway's Whitaker Institute is a **research leader** in areas such as land-use, urban design, smarter cities and the creative economy. The **Built Environment and Smart Cities** research Group at NUI Galway's Ryan Institute seeks to address challenges presented by unsustainable trends in energy use and the built environment.

SDG 12 Responsible Consumption and Production

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



161 Publications
(Scopus Publications 2016-2020)

Students and Learning

Galway Green Labs

Cognisant of the impact that laboratory research has on our environment, researchers from CÚRAM, the SFI Research Centre for Medical Devices based at NUI Galway, launched the Galway Green Labs initiative. The project commenced as a student and staff project funded by Explore NUI Galway with a focus on reducing plastic waste across lab processes. Students and staff work together across different green teams which are strategically based within the five main laboratories to determine areas where laboratory plastics can be reduced, re-used or replaced with non- fossil based alternatives. The project extended to CURAM achieving My Green Lab certification, the first Green Lab certification for a laboratory in Europe.

Certification of all laboratories on campus as 'green' by 2025 has since been adopted as a flagship action of NUI Galway's sustainability strategy. The associated Green Lab Principle and Practise module has been developed for postgraduate students and is aimed at reforming practises in scientific laboratories to reduce their environmental footprint. Since January 2020, 53 students have taken the module, with uptake from universities in England, Scotland, Germany and Denmark.



Climathon 2021

NUI Galway students participated in [Climathon 2021](#), a national competition on climate action, led by the French Embassy in Ireland. The focus of the competition is on deepening knowledge and awareness of the UN SDGs and focussed on consumption and production. Students from across the university participated in a month long programme examining issues surrounding sustainable production and consumption on campus virtually, and developing and implement solutions to these issues, building on design thinking, innovation and entrepreneurship skills. The programme culminated with two selected students presenting their fast fashion idea entitled [Know your Label](#) at the Climate and Community Conference in May 2021.

Research

Environment, Development and Sustainability Research Group

With experts in political science, sociology, economics, geography, and law, the [Environment, Development and Sustainability](#) (EDS) cluster is a research leader in the area of sustainable consumption and production and everyday sustainable practices. Members of or EDS group are elected representatives on the [European Roundtable on Sustainable Consumption and Production](#) (ERSCP) and [SCORAI.EU](#) and NUI Galway has hosted numerous international sustainable consumption conferences, such as co-chairing the 2020 [SCORAI International Conference](#). Our research challenges the efficacy of focusing on consumption in isolation from other associated and supporting practices when attempting to redirect living onto more sustainable pathways. This is framed through an examination of various consumption practices; energy, water, food and waste, as well as other themes, such as sustainable cities and the circular economy. This work is supported through numerous successful European projects in 2021. One specific example of EDS's 2021 research is work on the development of ['consumption corridors'](#) i.e. creating space for sustainable consumption by defining minimum and maximum consumption standards that permit individuals to satisfy their needs and to live a life they value without impairing the possibility of a good life for other people.

CAMPAIGNers

Understanding how low-carbon lifestyles can be fostered by municipal/regional policy is a crucial challenge for behavioural science. This requires an understanding of the factors driving decisions of millions of people, yet many have little experience with the low-carbon lifestyle choices available to them. NUI Galway is the lead social science partner on the new [CAMPAIGNers](#) (Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network) project, a three year European study that commenced in May 2021, which aims to develop a ground breaking approach that enables citizens to gain real-life experiences with low-carbon behaviours in various consumption domains (e.g. transportation, energy, IT, banking, insurance, food, clothing, etc.). The CAMPAIGNers' innovative approach will implement a 'goal-setting network', where over 100,000 citizens receive and create challenges to try out tailored adaptations to their daily consumption patterns. Their responses to these challenges, associated treatments, and short questionnaires will deliver unprecedented data of behavioural processes, (local) barriers to change, and motivators, allowing for empirically-based scientific support of cities in crafting policies to encourage more sustainable consumption and low-carbon lifestyles. Together with local, national and EU policy makers insights are analysed regarding the 'right-level-to-act' and policy-ready recommendations are jointly derived.

The first [my green lab certification](#) for a lab in Europe is [based at NUI Galway](#).



Green Lab Certification has been selected as a [key indicator of progress](#) for the UN Climate Change's High Level Climate Champions 2030 Breakthroughs [Race to Zero](#) campaign.

RACE TO ZERO

Community Engagement

Campus Living Labs

NUI Galway is participating in the [Campus Living Labs](#) project; a 2 year joint project being delivered by the Irish Universities Association (IUA) in partnership with the National Waste Prevention Programme (NWPP) of the Environmental Protection Agency (EPA). Campus Living Labs commenced in April 2021 and is aimed at reducing waste, improving recycling practises and driving circular economy efforts in Irish universities. The project involves gathering evidence on campus waste management and waste composition, monitoring the behaviours and attitude of students and staff to waste management, designing and rolling out interventions to prevent waste and increase recycling and monitors the effectiveness of such interventions through follow up behaviours and attitude surveys and characterisations. NUI Galway is a member of the Campus Living Labs Project Governance Committee that is chaired by the EAP and comprised of representatives from EPA, IUA, the Department of Environment, Climate and Communications and one other IUA university.

Campus wide waste management initiatives

Our Buildings & Estates Office are spearheading a range of initiatives targeting a reduction in waste produced on campus and a 55% rate of

recycling by 2025. The [Binless Office](#) waste segregation and recycling scheme was fully rolled out in 2021. Central to the scheme is the removal of traditional under-desk office bins for which there is no segregation option and replacing bins with dedicated waste stations, in key communal locations on every floor of NUI Galway buildings. Waste stations provide general waste, recycling and composting locations. Since the introduction of Bin the Bin, the recycling rates within buildings have increased to 70%. [Waste league tables](#) were introduced in 2020. 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. NUI Galway is a certified zero waste to landfill site. In line with UN SDG 12.4, our [Chemical Agents Inventories](#) policy, launched by the School of Chemistry in November 2020, aims to monitor the movement of chemicals and to control the end of life cycle and disposal of chemicals and their ultimate destination/ destruction on completion of a project.

Our new [Masters in Consumer Psychology](#) includes a module on Sustainable Consumption. This complements our existing postgraduate course in [Social Marketing and Sustainability](#) that focuses on the area of sustainable consumption.



Inspiring gardener Laura O'Connor leads a herb masterclass on the NUI Galway campus

SDG 13

Climate Action

13 CLIMATE ACTION



Photo by Dr Chaosheng Zhang



166 Publications
(Scopus Publications 2016-2020)

Students and Learning

Climate Action themed courses and initiatives

Recognising that climate change is one of the greatest challenges facing societies around the world, we offer courses across our colleges that are focused on equipping graduates with the knowledge, skills and experience to take climate action. Examples include the Masters in Coastal & Marine Environment; Physical Processes Policy & Practice by the College of Arts, Social Science and Celtic Studies; Masters in Global Environmental Economics by the College of Business Public Policy and Law and Masters in Energy Systems Engineering by the College of Science and Engineering. Our recently launched Bachelor of Science in Geography and Geosystems focuses how the ecosystem goods and services provided by the environment are impacted by climate change and human activity.

The theme for Earth Day 2021 was Restore our Earth. NUI Galway students, led by student themes societies, hosted over 10 virtual events throughout the week of April 19th to 23rd, 2021 to highlight that urgent action is needed to restore our earth and to encourage volunteering and local action to address the climate crisis. To acknowledge and support the leading role of our students in highlighting the climate crisis, and as a symbolic gesture of our institutional commitment to focus our collective efforts on the urgency of sustainability and climate action, the Quadrangle Building on the main NUI Galway campus was illuminated in green on the day. As part of NUI Galway's outreach to secondary schools, students and staff hosted an online summer camp in June 2021 called The Inventioners, which focussed on SDG 13 Climate Action. Students used design thinking methodology to identify a problem related to climate action that affects them, brainstormed and validated a solution, which they developed into a video pitch for a panel of judges to review.

Research

The Ryan Institute

The Ryan Institute is NUI Galway's multidisciplinary hub for research and innovation supporting sustainable development, from local to global scales. A major thrust of the Ryan Institute's research and innovation in sustainable development is focused on addressing key sustainability challenges relating to energy and climate change. Energy systems, climate change and biodiversity loss are intertwined. Transitioning all economies and societies to sustainable energy production and consumption patterns now stands at the centre of global efforts to reach climate targets. Due to global warming arising from use of non-sustainable energy sources, climate change poses a major threat to future sustainable development. The Ryan Institute's Energy Research Centre (ERC) and SFI MaREI Centre in NUI Galway are at the forefront of research efforts to transition to more sustainable energy systems. The Ryan Institute's Centre for Climate and Air Pollution Studies (C-CAPS) conducts research in the area of atmospheric composition climate change and air quality impact on ecosystems. The Ryan Institute's Biodiversity and Bioresources research cluster conducts research to mitigate the global loss of biodiversity and degradation of natural capital that continues at a rapid pace with global warming accelerating the loss of biodiversity

NUI Galway a leader in global climate simulations

ICHEC, Ireland's high-performance computing authority, is established in and hosted by NUI Galway. It has recently completed a large ensemble of global climate simulations which comprise Ireland's contribution to the International Coupled Model Intercomparison Project. The datasets and results were included for assessment in the recently released IPCC AR6 Reports on climate change which states: "It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred." The NUI Galway simulations place Ireland amongst leading international scientific researchers on climate change.

Researching the impact of climate change on coastal communities

Researchers from NUI Galway's Discipline of Geography have spearheaded research on the

challenges for coastal modelling, management and adaptation in Ireland. For example, a leading researcher from the Discipline of Geography is the lead author on a substantial research project "Building Coastal and Marine Resilience in Ireland", funded by the Marine Institute and Environmental Protection Agency. This research inspired the development of the 'Coastal Life Collective' which operates as a brokerage organisation to build alliances and common purpose within 20+ coastal communities in Ireland, with a particular focus on climate action challenges. The academic is a member of the European Marine Board Working Group on 'Coastal Resilience'. The group's research will inform EU policy and promote science-based decision making in coastal conservation, restoration, habitat and biodiversity management, in response to increasing threats from climate change, pollution, and human impacts. In June 2021, the Climate Action Regional Office – Atlantic Seaboard North signed a memorandum of understanding with NUI Galway to work together to scope out an approach for the development of nationwide education campaigns, a Community Forum to support the Knowledge Hub for coastal communities, and training workshops hosted by Natural Capital Ireland for communities and local authorities to develop Nature-based Solutions in order to build community resilience to climate change and socio-economic pressures.



NUI Galway is a signatory to Race to Zero, a global campaign to rally leadership and support from amongst others, the higher and further education sector, for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.

Community Engagement

Leading academic partner for the EU LIFE Peatlands and People Project

The European Commission is providing funding of €10million towards a project to highlight the power of peatlands to effect significant climate action wins. NUI Galway is selected as the leading academic partner for the EU LIFE Peatlands and People project. The EU LIFE Peatlands and People project is co-ordinated by Board na Móna, together with NUI Galway, National Parks and Wildlife Service (of the Department of Housing, Local Government and Heritage), the EPA, and ERINN Innovation Ltd. The Peatlands and People project is a major national initiative that will contribute to the long-term implementation of Ireland's Climate Action Plan. The plan aims to engage people in Ireland and across the European Union with the benefits of peatlands restoration, in particular to realise the power of peatlands to effect positive climate action. This research follows on from the NUI Galway's Interreg CARE Peat project, which demonstrates climate action by involving community and regional stakeholders and using innovative technologies for new restoration and carbon measurement techniques.

Mace Head - NUI Galway's battle station against air pollution and climate change

As a member of the WMO's Global Atmosphere Watch (GAW) programme, the Advanced Global Atmospheric Gas Experiment (AGAGE), and the UNs European Monitoring and Evaluation Program, NUI Galway's Mace Head Atmospheric Research Station is one of the world's most important atmospheric monitoring stations. Currently, emissions are reported by governments in a bottom-up manner (i.e. estimated inputs into the atmosphere); however, following COP-21 in Paris, the development and necessity of emissions verification is the top priority for all nations aiming to achieve their emissions targets. Without accurate emissions verification, the reported emissions have very much reduced confidence levels and leave urgent actions, such as those underpinning and addressing SDG 13, lacking in verified emissions accuracy and credibility. To address this challenge, Mace Head and the University's Ryan Institute Centre for Climate & Air Pollution studies (C-CAPS) are working in conjunction with the EPA, to develop and deploy a verification system. The first phase of this verification system has been tested over the last year and, worryingly, the verification top-down systems reveals that the previously reported 'official' bottom-up estimates are underreporting true emissions by 50%.



Mace Head - NUI Galway's battle station against air pollution

NUI Galway exceeded the Public Sector Energy Efficiency target of

33% ENERGY EFFICIENCY

by 2020, reaching our

40% TARGET

In AY 20/21, we invested

1.2 MILLION

in infrastructural energy projects, for example, the expansion of our Solar Photovoltaic (PV) Installation to achieve 300kW of Solar PV on 4 buildings and reaching an installation figure of over 4000 LED light fittings across campus. In 2021, NUI Galway committed to pursue and achieve no later than 2050, the transition to being a university with

NET-ZERO GREENHOUSE GAS EMISSIONS

that is climate resilient, biodiversity-rich and environmentally-sustainable.

SDG 14

Life Below Water



2020-2021

Student and Learning

Programmes and initiatives

NUI Galway offers a number of education programmes focused on aquatic ecosystems at undergraduate and postgraduate level. For example, our recently launched **Masters in Marine and Freshwater Resources: Management** is focused on understanding management in marine and fresh water environment in the context of global change, in support of SDG14. Commencing in AY 21-22, the newly established programme equips graduates with the skills required to start addressing critical challenges' society will face during the 21st century from human impact on the aquatic environment. Examples of other courses equipping students with knowledge and skills to address SDG 14 includes: the **Masters in Coastal & Marine Environments: Physical processes, Policy and Practice** and bachelor degree programmes in **Earth and Ocean Sciences** and **Marine Science**.

Research

The Sustainability of Marine Environments

The **Socio-Economic Marine Research Unit (SEMRU)** based in the Whitaker Institute at NUI Galway carries our research on the economic importance of coastal and off-shore marine environments. Other research areas include marine spatial planning and marine ecosystem service valuation. SEMRU's research is conducted in partnership with national agencies, for example, the Marine Institute, Teagasc, EPA, the Irish Marine Federation; and international organisations, for example, the Marine Alliance for Science Technology Scotland, The Centre for the Blue Economy California and Ifremer, France. SEMRU was a member of the Marine Protected Area Advisory Group for the Department of Housing, Local Government and Heritage and chaired the economic, social and cultural perspectives section of the **Expanding Ireland's Marine Protected Area Network** report published by the Department in 2021. Members of SEMRU serve on the Department's Marine Spatial Planning Advisory Board. SEMRU carried out the first full report on the value of Irish marine ecosystem service benefits in 2018 and as a partner on the **EU Atlas** and **MERCES** projects SEMRU have produced numerous reports and



250 Publications
(Scopus Publications 2016-2020)

academic papers that examine the benefits and costs of marine ecosystem conservation and restoration efforts. As the lead partner on the EU **MOSES** project SEMRU have been developing indicators of ocean economic sustainable development and examining how ocean economy industries can transition to more sustainable 'blue' growth paths. The Ryan Institute's **Centre for Ocean Research & Exploration (COREx)** conducts research to improve sustainability of both marine and coastal systems and are the leading university users in Ireland of research vessels such as the Celtic Explorer. The Ryan Institute's **SFI iCrag (Galway) Centre** researchers are conducting geosciences research to address research challenges in the fields of energy security, raw materials supply, groundwater protection, safeguarding the geomarine environment and protection from the Earth's hazards. The Ryan Institute supports a number of dedicated core research facilities related to SDG 14 for example the **Chemical Monitoring Facility** and the **Carna Aquaculture research station**.



In 2020 Times Higher Education University Impact Rankings placed NUI Galway **10th** in the world for addressing SDG 14 Life Below Water



Community Engagement

SOPHIE Project

NUI Galway is part of an interdisciplinary European collaboration that is developing a research road map for the next decade of oceans and human health science across Europe. Researchers from the Seas Oceans and Public Health In Europe (SOPHIE) project, have recently published the initial steps that a wide range of organisations could take to work together to protect the largest connected ecosystem on Earth. The researchers point to the huge reliance on the global ocean as a source of food and economic income internationally, and the strong evidence that access to healthy coasts can improve and preserve physical health and mental wellbeing. The researchers highlights 35 first steps for action and call on planners, policy-makers and organisations to understand and share research into the links between ocean and human health, and to integrate this knowledge into policy.

Beach Clean-ups

Student led beach clean ups are regularly organised by NUI Galway SU, Marine Society and Energy Society. The SU launched their #SustainableMonday campaign in January 2021, offering NUI Galway student's advice on how to live more sustainably and highlighting that small changes can have a big impact on our planet. Each Monday students are challenged to think globally by acting locally. Building on the high participation rates of clean-ups hosted as part of the Random Act of Kindness challenge earlier in the year beach clean-up formed a key part of the sustainable Monday's campaign. Members of the Marine Society met bimonthly during 2020 to carry out beach clean-ups in the Salthill and Claddagh areas of the city.

The Irish Ocean Literacy Network

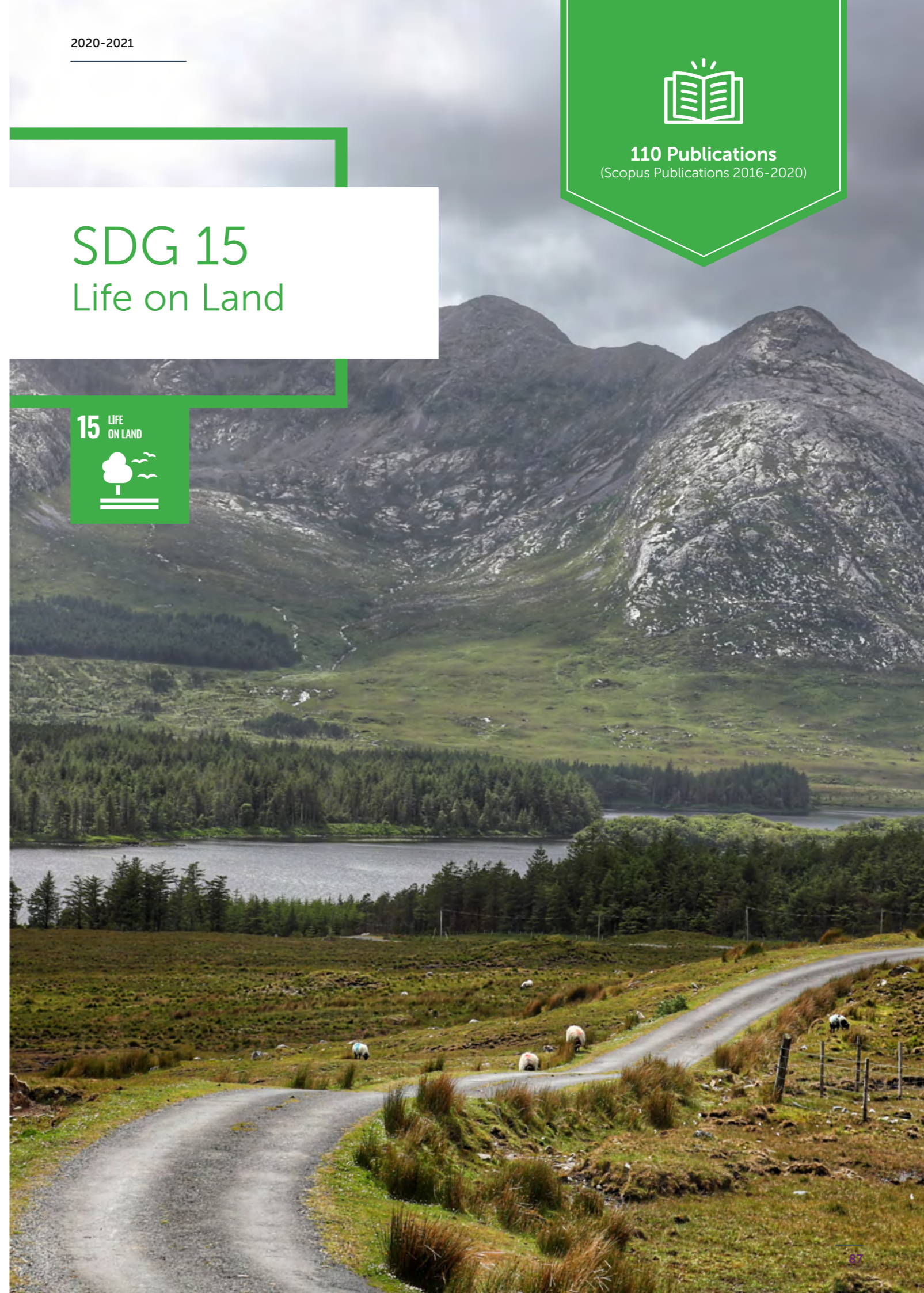
NUI Galway is a member of The Irish Ocean Literacy Network (IOLN). IOLN's mission is to create, maintain and develop an informal network of ocean literacy champions to facilitate collaboration, sharing and coordination of marine outreach and ocean literacy projects across the island of Ireland.

NUI Galway participates in the Ocean Sampling Day, a worldwide research campaign where marine biologists around the globe participate in sampling surface waters of the world's coastal areas. The campaign takes place yearly during the northern hemisphere's summer solstice. It brings together researchers, students and citizens, all working to assess the composition and function of prokaryotic and eukaryotic microbial communities.



110 Publications
(Scopus Publications 2016-2020)

SDG 15 Life on Land



Students and Learning

Programmes and Initiatives

At NUI Galway, we are committed to enhancing the student and staff awareness of biodiversity issues on campus and promoting the campus grounds as an educational and recreational resource. The NUI Galway Biodiversity Action Plan, published in February 2021, outlines 45 actions aimed at enhancing campus biodiversity and increasing campus and wider community awareness and appreciation of biodiversity over the next 5 years. The [Biodiversity Action Plan 2021- 2025](#) was compiled with contributions from classes of the [Masters in Environmental Leadership](#) and the [Masters in Biodiversity and Land-Use Planning](#). The [NUI Galway Organic Gardening Society](#) provides an opportunity for students to practise sustainable gardening in the organic garden on campus. The Society grow a variety of crops, including tomatoes, apples, lettuce and potatoes, herbs, and borage for pollinators and is open to the university community as well as the public. The Organic Garden is an initiative that supports pollinators, contributes to students' education and promote positive mental health. The [NUI Galway Biodiversity Trail](#) has been developed to promote the campus as an educational and recreational resource and as a health and wellbeing initiative to connect people to nature and help them feel restored. The trail is supported by interpretation panels guiding users throughout habitats on campus and a podcast that can be downloaded from the NUI Galway website.

Research

Conservation ecology and biodiversity research

The [Applied Ecology Unit](#) (AEU), in the School of Natural Sciences at NUI Galway undertake applied ecological research on internationally famous ecosystems such as disappearing lakes, peatlands, unregulated flood meadows and coastal grasslands.. Habitat protection is a key research theme, where the aim is to develop long term, sustainable habitat management strategies to ensure the future protection of habitats and their associated invertebrate. The AEU examine ways in which humans can improve their interaction with the environment in areas such as agriculture, forestry, climate change, health and recreation. The Ryan Institute's [Biodiversity and Bioresources](#) research cluster conducts research to mitigate the global loss of biodiversity and degradation of natural capital that continues at a rapid pace. The research is focussed on two linked areas: the biodiversity, ecology and evolution of species, habitats and ecosystems and; the materials, products and services provided by natural resources.



NUI Galway is an [All- Ireland Pollinator Plan Partner](#). From pollinator friendly planting, to reduced mowing frequency and herbicide usage, we are managing the campus grounds in ways that enable pollinators to thrive.

Study Finds Potential Control Strategy for Infestations of Japanese Knotweed

A [recent study from NUI Galway](#), in collaboration with AECOM and University of Leeds, has found that the removal of moisture could act as a potential control strategy for smaller infestations of Japanese knotweed, which are particularly common in urban settings. Findings show that incorrect herbicide treatment cannot control the growth and regeneration of this invasive plant, but that fully drying the plant material in a lab environment allowed it to be returned to the soil without risk of regrowth. The research also showed that if there are no nodes attached to the rhizomes there is no regeneration. Japanese knotweed is a problematic invasive plant found in many areas of Europe and North America. It can grow up to two to three metres in height and can dominate an area to the exclusion of most other plants. Control of Japanese knotweed is complicated by its ability to regenerate from small fragments of plant material.

Farming Rathcroghan Project (2019-2023)

The [Farming Rathcroghan Project : sustainable farming in the Rathcroghan archaeological landscape](#) was awarded approx. 1million euro by the Department of Agriculture, Food, and the Marine as part of the European Innovation Partnership (EIP) scheme. This project is actively promoting the development of innovative and sustainable farming practices in the culturally sensitive archaeological landscape of Rathcroghan, Co. Roscommon. It provides guidance, advocacy and proactive support to local farmers towards maintaining and enhancing the archaeological landscape, while providing co-benefits for a range of services including environmental protection, carbon sequestration and improvement in water quality. This project is directly aligned to SDG 15; one of the key tenets of the Farming Rathcroghan EIP is to protect, restore and sustainably promote the sensitive natural environment upon which the cultural landscape is placed.



Community Engagement

Kylemore Abbey and NUI Galway Biodiversity Stewardship Programme

Kylemore Abbey and NUI Galway have come together to form a new partnership to deliver the [Kylemore Abbey Biodiversity Stewardship Programme](#). The Programme, launched in August 2021, is a collaboration between Kylemore Abbey and the School of Natural Sciences at NUI Galway. The Programme aims to document the current biodiversity profile on the 1,000-acre Kylemore Estate and identify biodiversity projects and research topics that will benefit not only Kylemore Abbey but the wider community. Through the partnership a Biodiversity Management Plan will be developed for Kylemore to preserve and safeguard the biodiversity of the Estate. The Programme provides a location and rich ecosystem in which students will be able to study and learn about species, habitats and wider ecological and sustainability topics with practical applications.

Our NUI Galway Biodiversity Action Plan outlines

45 ACTIONS

for enhancing campus biodiversity by 2025

SDG 16

Peace, Justice and Strong Institutions

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Photo by Dr Chaosheng Zhang

2020-2021

Students and Learning

Student Programmes

NUI Galway School of Law has been ranked as **85th in the world** for Law in the 2021 Times Higher Education World University Rankings by Subject. This ranking recognises the School's innovative approach to teaching law and high quality legal research. The School of Law and its internationally renowned research centres, including the [Irish Centre for Human Rights](#) and [Centre for Disability Law & Policy](#), offer a range of student programmes. For example the Irish Centre for Human Rights (ICHR) offer [Masters of Law \(LL.M\) Master's programmes](#) in specialised human rights areas including; peace-building, international criminal justice, international disability law, refugee and migration law, business and human rights, gender and climate justice. The [Bachelor of Arts with Human Rights](#) offered by the College of Arts, Social Sciences, and Celtic Studies in conjunction with the [Irish Centre for Human Rights](#) (ICHR) is the only undergraduate programme of its kind in the Republic of Ireland that allows undergraduates to specialise in a field that was previously reserved to postgraduate study. The School of Law offers [undergraduate courses](#) in for example, Law Criminology and Criminal Justice, Law and Commerce, Law and Taxation. In conjunction with the Centre for Disability Law, the [LLM in International and Comparative Disability Law and Policy](#) is unique in the world as an innovative and internationally focused LLM dealing with the process of law reform in the field of disability.

Education plays a vital role in preserving history and preventing human rights violations

[Students from the Irish Centre for Human Rights \(ICHR\)](#) are collaborating with the Clann Project and survivors, educators and activists in order aims to amplify the voices of survivors of Ireland's Magdalene Laundries, Mother and Baby Homes and Industrial Schools. Research on memorialisation efforts in Canada, Australia and Germany, highlighted the fact that education plays a vital role in preserving history and preventing human rights violations. And so by listening to survivors, the students realised the importance of memorialising the past abuses, which occurred in these institutions, to ensure that they do not happen again. They also aim to highlight the State's continuing failure to provide comprehensive redress and impact UN SDG Targets 16.6, 16.7, 16.9 and 16.10.

Research

Conflict, Humanitarianism and Security cluster of the Whitaker Institute

NUI Galway's [Conflict, Humanitarianism and Security](#) cluster brings experts from politics, sociology, geography, psychology and human rights together to develop new insights on the causes of conflict and measures that can help to end conflict. With exceptional access to government actors and state materials, this cluster has a high global impact in terms of informing public policy around conflict resolution, rights and security. One such project is a series of papers based on the private diaries and notes kept by Brendan Duddy, whose house was the venue for meetings between the Irish and British in 1975. At a time of back-channel negotiations in Afghanistan, Iraq and the Middle East, his account of the dynamics of conflict and secret peace-making provides a unique insight that cannot be found in the official records.

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NUI Galway is a member of the [Scholars at Risk Network](#); an international network of institutions and individuals whose mission it is to protect scholars and promote academic freedom.

The Irish Centre for Human Rights

The Irish Centre for Human Rights (ICHR) based in NUI Galway is one of the world's premier academic human rights institutions, dedicated to the study and promotion of human rights, international criminal law and humanitarian law. It has developed a global reputation for excellence in teaching, research and advocacy in the fields of International Human Rights Law, Peace Operations, Conflict and Humanitarian Law, International Migration and Refugee Law and Policy and International Criminal Law. It works across all ten of the UN SDG 16 Targets. Its program of conferences and other events attracts high level human rights policy makers, practitioners and academic experts from across the world. Significant emphasis is placed on skills development driving the practice of international law and human rights through clinical legal education. The Irish Centre for Human Rights (ICHR) is involved in a number of research and advocacy projects designed to actively contribute to the promotion of human rights, both in and outside of Ireland. Examples of current projects include: Human Rights, Forced Migration and Gender Equality in Uganda; FRANET- Ireland Project; Providing for Peacekeeping Project; UN Peacekeeping and Protection of Civilians; Business and Human Rights in Ireland. The Director of the ICHR has recently been appointed as the United Nations Special Rapporteur on Trafficking in Persons, especially women and children and in August 2021, published her first annual report to the UN Human Rights Council. The report makes a number of recommendations to States, and stresses that the empowerment of survivors of trafficking is critical to ensuring that the human rights of victims are fulfilled without discrimination. The Report will be presented to the General Assembly on October 2021, with a side-event co-hosted by the Irish Mission to the UN



The Law Society of NUI Galway was founded in 1920 and hosted a **programme of events** in March 2021 to celebrate its 100th year.

Community Engagement

International Disability Law Summer School

The world's largest Disability Law Summer School focusing on the United Nations Convention on the Rights of Persons with Disabilities took place virtually from 31st May to 2nd July 2021. The Summer School, hosted by the Centre for Disability Law and Policy, focused on Article 30 of the UN Convention on the Rights of Persons with Disabilities, Access to Culture, Recreation, Leisure and Sport for People with Disabilities. The Summer School took place over 5 weeks with over 140 participants from over 40 countries taking part, including artists, academics and human rights activists.

Human Rights Law Clinic

The Human Rights Law Clinic at the Irish Centre for Human Rights introduces students to the concept of 'social change lawyering'. The Clinic prepares and enables students to contribute their skills to community-based movements for social change. Students devise their clinical projects in coordination with community organisers and work to produce legal research and analysis that aims to make a positive contribution to the protection of human rights in Ireland and internationally. Since the launch of the Centre in December 2019, students have carried out a range of research and advocacy activities alongside community-based groups in Ireland tackling issues including the treatment of children in the Direct Provision system; Ireland's (non-)performance regarding its climate change mitigation obligations; the need for national memorialisation and education regarding 'historical' abuses in institutional settings and the adoption system; and the ongoing lack of access to personal files or administrative records concerning 'historical' abuses in Magdalene Laundries, Mother and Baby Homes, County Homes, residential schools and the adoption system.

UN Appointment on Human Security

An academic based in Geography at NUI Galway was appointed Policy Advisor on Human Security in the UN Human Development Team in May 2021. The appointment is in support of a new vision for global security and international development, in which the UN is strategising to advance more supportive human development and human security programmes in response to the COVID-19 pandemic. On the announcement of the appointment, NUI Galway said "The world is facing an inflection point in terms of human-environmental well-being. As we seek to rebuild from COVID-19, we are delighted to have our NUI Galway colleague taking a lead role in the vital global challenge of tackling holistically the overlapping precarities of our ecologies and societies".



298 Publications
(Scopus Publications 2016-2020)



Photo by Dr Chaosheng Zhang

SDG 17 Partnerships for the Goals

17 PARTNERSHIPS FOR THE GOALS



At NUI Galway, we recognise the power of partnerships in achieving the SDGs; partnerships support the implementation of every one of the SDGs, as well as the framework itself. Examples of NUI Galway partnerships seeking to progress the SDGs at the global, regional, national and local levels are detailed throughout this report and some key examples are highlighted in the section below.





NUI Galway
OÉ Gaillimh

NUI Galway Sustainability Report

Academic Year 2020-2021