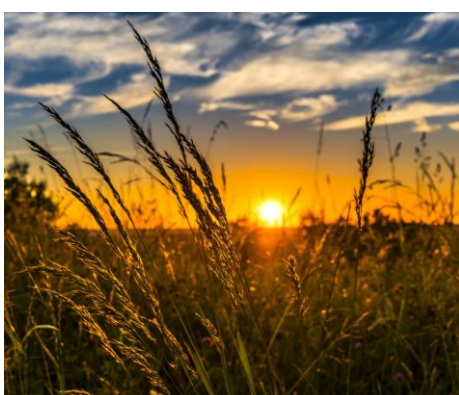




UCC's carbon neutral ambition

UCC has set sector-leading targets in its ambitious [sustainability and climate action plan](#), which was launched in July. UCC is aiming to become a zero-waste campus by 2030 and a carbon neutral campus by 2040. The University has also been recognised internationally by winning [Sustainability Institution of the Year](#) at the International Green Gown Awards 2023.



Farm Biodiversity Programme

The Munster Agricultural Society (MAS) are providing a philanthropic gift of €375,000 to the Cork University Foundation for the development of a Farmland Biodiversity Education and Research Programme within Agricultural Science at UCC. MAS will also loan a two-acre research site to UCC for plot-based research in soil and grassland science. [Read more..](#)



Summit on Energy Independence

Dr Paul Deane (ERI, MaREI) was amongst the invited experts in attendance at the recent [Energy Summit](#) at Government Buildings. The Taoiseach, along with the Tánaiste and Minister Eamon Ryan, convened the Summit at Government Buildings to bring together representatives from the private, public and voluntary sectors to discuss Ireland's decarbonisation of its energy systems.



New ideas for public engagement

The Creative Climate Action Spark fund will fund 24 projects piloting new ideas for public engagement at a local, community level, or communities of practice including [Blueprint](#), a MaREI project coordinated by Dr Lydia Cumiskey and Dr Denise McCullagh which will capture lived experiences and narratives in a flood-affected community in Derry.



European Climate Change Adaptation Conference

More than 1,450 people attended [ECCA2023](#) in July (co-organised by the MaREI Centre) promoting science, decision-support tools and case studies for climate adaptation. The overall message was the importance of involving the whole of society in implementation of adaptation - every generation, every level of governments and every sector.



A just transition in agriculture

As part of its 50th-year work programme, the National Economic and Social Council (NESC) - advisory body to the Taoiseach - has published a new report chaired by Prof Thia Hennessy (ERI, CUBS), [Just Transition in Agriculture and Land Use](#). This report argues that the agriculture and land use sector can increasingly be a part of the solution to addressing urgent climate change and biodiversity loss.



Electrofuels in a Circular Economy

Electrofuels store electricity as low carbon energy vectors such as hydrogen or methane and as such can facilitate decarbonisation of sectors such as transport, agriculture, and wastewater treatment. A recent cross-institutional paper led by the CEEES research group plots circular economy decarbonisation pathways for hydrogen & electrofuels. [Read it in full here..](#)



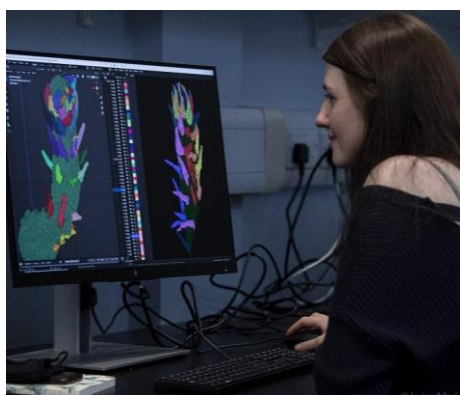
Marine plastic exposure risk for oceanic birds

Understanding where wildlife encounters plastic is crucial for targeting research and mitigation. A team of global researchers, including ERI's Prof John Quinn and Dr Mark Jessop, tracked the movement data of over 7,000 seabirds to identify the areas of the world's ocean where seabirds would most likely encounter plastic. [Read the full Nature publication here..](#)



Impact of climate change on Ireland's flora and fauna

Researchers in the ERI and Dept of Geography have used modelling, citizen science data, and climate projections to investigate [the impact of climate change on Ireland's deer and 13 of our most vulnerable plant species](#). Researchers Dr James O'Mahony and Dr Paul Holloway found that rare native plant species will go extinct and non-native sika deer will increase across Ireland.



Fossil study sheds light on famous spirals found in nature

A 3D model of a 407-million-year-old plant fossil has overturned thinking on the evolution of leaves and has led to fresh insights about spectacular patterns found in plants. [The research published in Science](#) overturns a long-held theory around a famous pattern in nature. Palaeontology PhD student Holly-Anne Turner (ERI and BEES) is the first author on the study.



Supporting improved water quality in Zimbabwe

The [most recent UN GEMS Water/CDC newsletter](#) includes a profile of Onesmus Kativhu from Harare, Zimbabwe, a technician in the teaching laboratory at the University of Zimbabwe. To support his work, he is undertaking a Continuous Professional Development course online via the GEMS/Water CDC. [Read the piece in full...](#)



Highlighting energy poverty

Dr Niall Dunphy (ERI, CPPU) was amongst the experts providing input to the South East Energy Agency's seminar on energy poverty in Ireland. Regional stakeholders discussed the current Irish situation, and Dr Dunphy presented examples from the [Energy Measures](#) project which aims to develop tailored measures to support energy vulnerable households.



Anticipating uncertainties in the energy sector

Prof Brian Ó Gallachóir has just published a study with colleagues in the IEA ETSAP community assessing 4000 scenarios of the world's energy system, climate and economy. The analysis identifies the drivers with the most impact on policy decisions to implement the Paris Agreement goals, and sheds light on the design of robust and effective climate change mitigation policies. [Read it in full...](#)



Challenges in water treatment

Disinfecting drinking water can create challenging byproducts. The PRODOM project led by Dr John Weatherill has been investigating the use of a method called EEM-PARAFAC (Fluorescence excitation–emission matrices parallel factor analysis) to study these byproducts, exploring the relationships between certain fluorescence and the byproducts. [Read the full research review here...](#)



Standardised data for climate-smart decision making

Met Éireann has released the first climate projections of the [TRANSLATE](#) project at the European Climate Change Adaptation Conference 2023. Led in UCC by ERI's Dr Paul Holloway and Dr Páraic Ryan, the Met Éireann-funded project will develop a unique climate dataset to support climate adaptation and mitigation in Ireland. [Read the report in full...](#)



Transdisciplinary approaches to sustainability research

[A new research paper](#) led by Dr Evan Boyle and Dr Connor McGookin (ERI, MaREI) analyses the transdisciplinary approaches academics use to engage with stakeholders on sustainability challenges. The paper focuses on the motivations and challenges of transdisciplinary research, current institutional circumstances influencing such research practices and potential ways forward.



Sustainable management of the Irish Sea – a new report

The Department of Housing, Local Government and Heritage has published an ecological sensitivity report on the Western Irish Sea, paving the way for future Marine Protected Areas designation. This milestone report was co-authored by Dr Damien Haberland, Dr Tom Doyle, and Dr Danielle Orrell (MaREI, ERI BEES). [Read the report in full..](#)



Conference award for offshore renewable energy project.

Congratulations to [Quang Vu Dinh](#), H-Wind PhD Student, who won Best Presentation for his talk "*A method to map the levelised cost of hydrogen from offshore wind farms coupled to onshore electrolyzers via HVDC*" at the 6th International Conference on Clean Energy & Technology held in Penang, Malaysia. [Read more about the H-Wind project here..](#)



UCC Futures – Sustainability Meet our new ERI Academic

[Prof Valeria Andreoni](#) is the new AIB Professor in Sustainable Business in CUBS. By integrating principles of environmental, social and governance (ESG) into business strategies, Prof Andreoni will drive innovation, inspire future leaders and contribute to the sustainable development of society and the economy.



UCC Futures – Sustainability Meet our new ERI Academic

[Dr Tracy Bradfield](#) is Lecturer in Economics of Sustainable Business in CUBS, and Research Associate of Spatial and Regional Economics Research Centre. Her work to date includes survey and econometric analyses of farm-level data and farmers' attitudes to agri-environmental schemes, with a focus on making policy recommendations.



ERI in the Media

"A typical household could reduce their electricity bills by €450 per year, and if done at scale Ireland could meet one-quarter of household electricity needs, a study by UCC's MaREI Research Centre found last year."

- [The Irish Times](#)



ERI in the Media

"The key component in human-wildlife conflict resolution is empathy. Recent calls for (and implementation of) culling across certain parts of Ireland indicates there is currently little of this for urban gulls."

- [Dr Paul Holloway](#)



ERI in the Media

"Climate policies are heavily weighted towards 'carrots', promoting low-carbon solutions, such as subsidising electric vehicles, rather than 'sticks', such as reallocating road space to public transport and cycling."

- [Prof Hannah Daly](#)



ERI in the Media

"Pterosaurs were found to be highly precocial like reptiles, with very limited parental care and juveniles ready to live (and fly!) on their own soon after hatching."

- [Dr Zixiao Yang](#)