Irish Wind Magazine

OFFSHORE 2025
EDITION

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County colours – Powering Ireland's future, county by county

New report shows onshore potential

WIND ENERGY IRELAND

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Welcome to the Offshore 2025 Edition of Irish Wind

WEI is the national association for the wind industry in Ireland. This magazine provides updates on news and events in the wind industry in Ireland and is a resource for WEI members in the interests of the promotion of wind energy.

Please contact Lisa-Anne Crookes with comments / suggestions for future editions on lisa-anne@windenergyireland.com

FOREWORD

Noel Cunniffe
CEO

Ireland has not been immune to the challenges facing the global offshore wind industry.

The decision by Corio Generation that it will no longer proceed with the development of Sceirde Rocks is disappointing for the project team and for the wider industry.

It could set back our long-term ambition for a thriving offshore wind energy industry on Ireland's west coast as, without Sceirde Rocks, it will be more challenging to build a supply-chain in the region.

For the most advanced Phase One projects the Requests for Further Information from An Bord Pleanála in April are a welcome sign of some progress but are epic in scope and detail.

The level of additional information requested will take considerable time to compile, provide and for An Bord Pleanála to review. This makes it unlikely any project can receive planning permission before 2027 but Wind Energy Ireland will provide our members with every support to help coordinate engagement with the board and to try to cut those timelines.

Last year, we highlighted the risk to the Phase One projects:

"Our first new offshore wind energy projects have entered the planning system this year. They need to be supported at every step and be given the opportunity to engage with the relevant State agencies to give them the best possible chance of getting planning permission."

We cannot afford to lose projects. We need to build confidence in Ireland among investors and the international supply-chain. The best way to do this is for the Government to work closely with industry to deliver the Phase One projects, this year's Tonn Nua auction and to build a strong pipeline.

The fundamentals have not changed. Ireland still has some of the best offshore wind resources in the world and an incredible opportunity to build a resilient economy backed by affordable, clean, energy.

We have a new Government but their commitment to energy security, competitiveness and cutting our carbon emissions is as strong as ever. They are focused on reinforcing our electricity grid, speeding up our planning system and laying the foundation for Irish energy independence.

In recent weeks plans for a national Designated Maritime Area Plan have been announced and I am confident that when delegates to our Offshore Conference 2025 hear from Minister O'Brien on the first day, and then Minister Dooley on the second, they will share my belief that this is a Government determined to deliver.

The Taoiseach's announcement last month of a Climate Investment Clearing House to accelerate progress on Ireland's energy transition, with a joint Government Industry Forum on Offshore Renewable Energy due next month, is a clear sign that offshore wind is a priority for everyone working in Government Buildings.

Now, we need to see speeches become actions, task-forces and forums becoming engines for change and delivery.

The new Government has a big job of work; support the Phase Ones, deliver a plan for the other sites in the south-coast DMAP and finalise a national DMAP for fixed and floating offshore wind.

If they're prepared to work with our members to deliver, we will not be found wanting.

A letter from our Minister

Darragh O'Brien, Minister for Climate, Environment and Energy

I want to thank the CEO of Wind Energy Ireland (WEI) Noel Cunniffe and his team for inviting me to be a part of this year's Offshore Wind Conference. I am very pleased to attend this year's conference, particularly within the context of our recently announced plans for a national Designated Maritime Area Plan (DMAP) for offshore renewable energy (ORE), and within the context of the state's second offshore wind auction, which will take place in the coming months.

This entire government is committed to working with industry to deliver on our ORE targets. This was evidenced at the recent WindEurope Annual Conference in Copenhagen last month, where a very successful 'Ireland Pavilion' consisted of a partnership between the government and Industry. This followed the first industry and government partnership at the same event in Bilbao, last year.

Through the Offshore Wind Delivery Taskforce, 16 government department and state agencies are working together to ensure that policy on ORE is accelerating at a significant scale and pace The involvement and contribution of WEI within the taskforce will continue to be a valuable addition to its work going forward.

As we look to our future project pipeline, I also want to reassure you that government remains very committed to the development of our Phase One projects. These flagship Phase One projects will make a sizeable contribution to our 5 GW target, and we recently reached a significant milestone with all Phase Ones submitting applications to An Bord Pleanála. Subject to planning decisions, we expect to see these projects entering construction by 2030 and energised as soon as feasible thereafter.

The government recently approved the development of a national DMAP to significantly accelerate the roll-out of ORE, which will enable the state to reach 20GW of ORE by 2040. This will be a game-changer in reaching our long-term emissions targets and will be one of the most significant infrastructure projects taken by the state in the coming decades. We hope to adopt this national DMAP by the end of 2027, and as Minister, I will ensure the necessary resources are in place so we can deliver on these timelines.

The Tonn Nua auction - the first auction site within Ireland first spatial plan for ORE - the South Coast DMAP, will be auctioned in the autumn under the ORESS scheme. Following the Tonn Nua auction, the state will look to bring forward the remaining three sites within the South Coast DMAP, ensuring a consistent pipeline of offshore developments will take place over the coming years.

Wind energy is an opportunity to create a thriving industry that can both charge our economy and lower energy bills. To achieve public acceptance of renewable energy infrastructure, public awareness campaigns around ORE will become an increasingly important part of our work going forward, so the Irish pubic can recognise the importance of ORE in tackling climate change and building a sustainable economy.

Finally, I want to sincerely thank everyone for coming along to this important conference. Along with my colleagues across government, I look forward to sharing more details of our plans with many of you over the next two days.

Wind industry welcomes new national offshore wind map

The Irish wind energy industry welcomed the announcement this month by Minister Darragh O'Brien that work has started on a new national map to identify locations where future wind farms can be developed.

The national Designated Maritime Area Plan (DMAP) for offshore wind will be developed by the Department of the Environment, Climate and Communications and will involve extensive data-gathering and public consultation. It is due to be completed by the end of 2027.

Noel Cunniffe, CEO of Wind Energy Ireland, said: "Industry will welcome the certainty and the ambition the Government is providing with this new approach.

"It will take time, and we will do everything we can to help speed things up, but once complete this will provide enough sites to accelerate the development of offshore renewable energy and to put Ireland firmly at the heart of Europe's response to the energy and climate crises."

Wind Energy Ireland stressed the need for the Government to ensure the funding is available to deliver the map by the end of 2027 and said this needed to be a priority for Budget 2026 later this year.

Noel Cunniffe continued: "This won't be done by the end of 2027 if the resources, the personnel and the expertise isn't in place to ensure we hit that target.

"The offshore wind industry has struggled with missed deadlines in the past and we can't afford more slippages. We would urge the Government, when planning for the budget later this year, to ensure that the funds the department will require to develop this map are in place early and are enough to do the job properly."

Making the announcement earlier this month, Minister for Climate, Environment and Energy Darragh O'Brien said: "The use of strategically planned DMAPs will ensure that developments in Ireland's maritime area take place in a managed and sustainable way.

"An integrated, national approach will ensure that strategic forward planning for skills, enterprise and the industry-wide supply chain development can take place. Ports will have the ability to forward plan for the necessary large-scale offshore infrastructure build-outs required to support ORE development, while forward planning for grid and interconnection can occur within the framework of a long-term holistic view."

Minister of State with special responsibility for the Marine Timmy Dooley said:

"As an island nation with an extensive maritime territory, Ireland has one of the best offshore wind resources in the world. Our seas offer an untapped natural resource which can be the cornerstone of our energy transition. The offshore wind space also has the potential to create thousands of jobs and new investment opportunities by 2030 and beyond."

NEW MEMBERS

BAM

For over 60 years, BAM has shaped Ireland's infrastructure and iconic buildings. Our integrated services help clients reduce carbon emissions and enhance sustainability throughout the lifecycle of their projects.

BAM leverages extensive expertise in renewables and energy sectors across the UK and Ireland, including wind generation, solar energy, HVDC links, grid maintenance, offshore solutions, and related infrastructure.

We provide tailored solutions, backed by civil engineering experience in challenging environments, making us ideal for the Irish market.

As a purpose-led business, we aim to leave a lasting legacy for communities and the planet. Our leadership on the CDP A-List and Irish Green Building Council membership reflects our commitment to becoming net zero in direct operations by 2030.

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Blake Clough Consulting

Blake Clough Consulting is a specialist energy consultancy with a focus on the electricity networks.

We cover a range of areas including power systems studies, electrical design, grid connection consulting, electricity regulation, network innovation and feasibility studies.

We are passionate about the decarbonisation of the energy system and the transition to "Net Zero" and aim to support our clients to accelerate this change as effectively as possible.

We carry out full sets of power systems studies and electrical design for both offshore and onshore wind farms. Another strength is grid connection consulting, where we provide services such as curtailment analysis, grid offer completion and review and regulatory support for renewable projects, including onshore and offshore wind.

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Bord Gáis Energy

Bord Gáis Energy is one of Ireland's leading energy companies, providing energy and services to homes and businesses for almost 50 years.

In 2014, the company became part of Centrica plc. Bord Gáis Energy is committed to energising a greener, fairer future with a goal of achieving net zero by 2040 and helping its customers reach net zero by 2050.

The company is investing in infrastructure and technologies and empowering its customers with sustainable energy solutions.

Earlier this year, Centrica announced a €1bn investment to expand Bord Gáis Energy's renewable energy infrastructure, explore opportunities in offshore and onshore wind as well as battery and hydrogen which are important to ensure security of supply for customers.

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GID Industrial Europe LTD

At GID Industrial Europe LTD, we specialize in supplying hard-to-find and end-of-life industrial computer boards—critical components that keep renewable energy infrastructure operating smoothly. As the renewable energy sector grows, so does the challenge of maintaining legacy systems. Many essential industrial and commercial computer boards become obsolete, making replacements scarce. That's where we come in!

- Hard-to-Find & End-of-Life Parts
- Industrial & Commercial Computing Solutions
- Supporting the Renewable Energy Sector

By extending the lifespan of renewable energy systems, we help businesses reduce downtime, lower costs, and support a more sustainable future. Need help sourcing rare components? Let's connect!
#RenewableEnergy #IndustrialSolutions #Sustainability #EndOfLifeParts #GIDIndustrial #EnergyTech #CircularEconomy #TechSolutions

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K2 Management (Part of Ramboll)

K2 Management has driven innovation in global wind energy since 2007, empowering developers to deliver exceptional projects. In 2024 we joined Ramboll, a renowned architecture, engineering, and consultancy company, which has amplified our capabilities as a world-leading wind consultancy, offering full service solutions in offshore and onshore wind - with increased resources to take on large-scale wind projects and a strong global presence.

With close to 1,000 experts across nearly 30 countries, we are positioned to support clients as an end-to-end development partner, providing services within engineering, planning, project management, analysis, and due diligence, spanning the entire project value chain - whether onshore or offshore, we're dedicated to helping Ireland and the world transition to a more sustainable future.

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Pinergy

Pinergy is a fully regulated electricity supplier who supplies ALL of our customers with 100% certified Green Electricity regardless of tariff or customer segment. We aim to support all our customers to navigate the energy transition by helping them to understand their consumption and to optimise their use of electricity.

Our customer-led proposition is to Supply renewable energy, Analyse consumption data to help our customers to optimise their energy usage and give our customers the power to transform their business' energy, future & the world.

We work with commercial clients in many sectors such as Property, Hospitality, Retail and Manufacturing across Ireland who are looking to directly access Wind Energy and other renewable energy sources under Power Purchase Agreements (PPAs).

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Powercomm Group

Powercomm Group is a leading provider of medium and high-voltage engineering solutions.

Powercomm has grown into a trusted leader in the sector, consistently evolving to meet the dynamic needs of our clients and the industry. Over the years, we have broadened our scope, significantly expanding our expertise and services.

Our clients include data centres, wind and solar farms, battery storage solutions, and high-voltage substation installations supporting the national electrical transmission and distribution networks.
We strive to go above and beyond for our clients while keeping safety are the core of what we do.

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Stakelum Consultancy

Stakelum Consultancy was created to bring together our expertise in transaction management with our passion for climate change.

- We deliver clear and concise due diligence and transaction management advice to support developers and clients in the offshore wind, onshore wind and solar industries in Ireland.
- We specialise in providing tailored strategic and commercial advisory services to companies looking to enter and expand within the renewable energy sector. Our comprehensive approach ensures that your business is well-equipped to navigate the dynamic landscape of renewable energy and achieve sustainable growth.
- Lastly, we offer educational services covering the renewables sector in Ireland, empowering businesses with the knowledge needed to thrive in this field.

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TOBIN

TOBIN is a multidisciplinary professional services practice operating across the private and public sectors in Ireland since 1952. Unique to our company, we offer our clients a wide range of services under one roof, resulting in economical and streamlined projects. TOBIN boasts a robust team of highly qualified Project Managers, Scientists, Engineers, and Planners strategically located across Ireland to drive large-scale project delivery. Our expertise is rooted in sustainability, aiming to diminish our carbon footprint, optimize resource utilisation, and enhance quality of life. TOBIN spans all sectors of the energy and environment market, with a particular emphasis on renewable energy. We prioritise stakeholder engagement, ensuring innovative solutions that meet the evolving needs of our clients and communities.

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Wills Bros

Wills Bros, a family-run civil engineering contractor, has been at the forefront of infrastructure development in Ireland and the UK for over 50 years. In the last 3 years, we have delivered 560 MWp of renewable energy infrastructure as earthworks, CBoP, and part-EBoP contractor while also fulfilling the functions of PSCS and PSDP. These projects included Europe's largest solar farm on cutover peatland (108 MWp) and a windfarm with seven Enercon turbines (25.2 MWp). Our scope included access tracks, road widening, electrical ducting, substation platforms, hardstands, compounds, pile testing, floating access roads, sigma piles, transformer bases, interconnector, drainage, fencing, and ecological mitigation works. We pride ourselves on continuous high standards, resulting in strong client relationships and repeat contracts.

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Bringing Irish wind and whiskey to Copenhagen

More than 70 Irish delegates from Government, industry and key State agencies joined 16,000 attendees at Wind Europe's Annual Event in Copenhagen at the start of April.

This was the second time a joint Ireland Pavilion has featured prominently at one of the world's biggest renewable energy trade shows and a huge crowd joined our networking reception on the first day, fuelled by some of Ireland's best whiskies.

The pavilion's theme, how Ireland can support European energy independence, was the consistent message from across the entire Irish delegation.

"Our island at the edge of Europe is at the heart of our shared European energy future," said Wind Energy Ireland CEO Noel Cunniffe. "Europe's wind farms, supported by solar, storage and a new generation of advanced interconnectors, will secure the future of a prosperous, competitive, continent in which our people can thrive."

EirGrid announcements

There was a large delegation from EirGrid in Copenhagen with some major announcements. Ireland's transmission system operator announced a €1 billion procurement programme for a variety of projects to support the delivery of an offshore electricity grid.

They also published the results of a study carried out with other European TSOs which aims, in the long-term, to develop a single offshore electricity grid for the Irish, Celtic and North seas.

Similar in thinking to the SuperGrid, originally proposed by Eddie O'Connor, it would move away from designing the offshore grid on a national basis and towards a much more integrated, more efficient system for moving clean, affordable, power across Europe.

"This work can contribute significantly to regional planning, supporting the achievement of our collective offshore wind objectives," said EirGrid Chief Infrastructure Officer Michael Mahon.

"A logical next step is to consider how the grid map and the recurrent planning process we are proposing can be used as the basis for discussions on how cost sharing can work for offshore energy infrastructure in the region."

Minister Timmy Dooley TD

Minister of State at the Department of the Environment, Climate and Communications, with special responsibility for the Marine, Timmy Dooley TD led the Irish Government delegation and spoke at a packed Ministerial Plenary Session on the morning of the third day of the event.

"In recent years," he told the audience of industry and political leaders, "Ireland has achieved a number of important milestones in offshore wind, including: Ireland's first offshore wind auction, the publication of the State's first marine spatial plan for offshore wind development and the approved terms and conditions of Ireland's second offshore wind auction, which will take place later this year.

"The revised National Planning Framework, published this week, will create a stronger support for renewables at a regional and local level, providing clarity and consistency across the planning system, ensuring that Ireland remains an attractive country in which to invest in renewable energy projects."

Thank you

A special thanks to our co-exhibitors whose support made Ireland's presence at Wind Europe possible: ESB; DP Energy; Green Tech Skillnet; Skillnet Offshore Wind Academy; SkySpecs; Statkraft and XOCEAN, along with our networking reception sponsors, Bord na Móna – Ocean Winds, and our branding sponsor FuturEnergy Ireland.

A second life for wind turbine blades – furniture, bike shelters and bridges

By Dr Angie Nagle, CEO & Co-Founder of BladeBridge

Have you heard the one about the charging station that used to be a turbine?

BladeBridge repurposes decommissioned wind turbine blades, giving them a second life as bike shelters, street furniture, bridges and e-bike charging stations. Founded by three Cork based researchers the company wants to form partnerships to repurpose as many blades as possible.

BladeBridge's parent research group, The Re-Wind Network, initially identified the looming problem of end-of-life blade management and the tragedy of discarding thousands of these well-engineered objects. 70+ concepts were generated by the team and assessed for their ability to substitute high CO2 raw materials such as steel and concrete, and, critically, for their potential to use a lot of blade material.

The pedestrian bridge idea emerged early on - the blades are structurally suited to replace steel girders, and Ireland will require an additional 1000 pedestrian bridges for its expanding cycling network. In December 2022, BladeBridge Ltd was formed.

Repurposing wind blades into sustainable infrastructure such as cycling bridges addresses two market areas. The first is the wind sector: Repurposing blade material is higher on the EU waste hierarchy than recycling and is good publicity for wind farms who publicly choose to repurpose what would have been waste material.

Who are we working with?

The second sector is public bodies building infrastructure: Sustainable public procurement requires sourcing products with a lower environmental footprint. Creating products by repurposing a durable waste materials results in infrastructure with up to a 50 percent lower carbon footprint. It also shows an organisation's engagement with the circular economy.

BladeBridge is developing partnerships with waste management companies (WMC's), furniture designers and steel fabricators to expand operations. WMCs involved in material handling of end-of-life blades can provide blade sections cut to BladeBridge specifications, minimising the need for expensive cutting and safety equipment. We have built a strong partnership with Perch Design, a furniture company who design and prototype our new street furniture and shelter concepts. Partnerships allow BladeBridge to focus on two key items: Business development by matching available blades to customers requiring durable products, and international expansion to enable the repurposing of blades outside of Ireland.

Examples in Ireland

BladeBridge has already worked with public and private customers – for example we repurposed blades for Scottish Power, Everun, and Energia. We co-developed electric bike charging hubs with ESB. Mayo County Council commissioned furniture and two integrated picnic table shelters, made from Scottish Power blades. We're building a trail bridge in Kilrush

for Clare Local Development Company along with street furniture. Mallow Tidy Towns have commissioned a set of street furniture. And we built a lectern for the Dutch Embassy and delivered a wheelchair accessible planter to a hospice in Dublin.

Our perfect customer is a utility with ageing wind assets, who is also building durable infrastructure. We are actively looking for companies to pilot other structural uses for blades, such as towers or sound barriers.

In the short term, we are ramping up our manufacturing capacity in North Cork by hiring fabricators and quality engineers. Long-term, we envision bringing our designs and business model to the UK and Europe. Larger volume, less bespoke products would greatly expand the number of blades that could be repurposed. Products will continue to be developed based on their ability to substitute substantial amounts of high carbon materials.

Ultimately, we want to enable the repurposing of all of the world's blade material into sustainable infrastructure. We want to continue our rooting in academia by becoming a waste valorisation exemplar to other companies and supporting research in dematerialization, efficiency, and circular material use.

For more visit **www.bladebridge.ie**

Build our Grid

PLEDGE YOUR SUPPORT FOR A STRONGER ELECTRICITY GRID

Ireland's electricity grid was built for fossil fuels, not clean energy. To cut bills, reduce carbon, and stop relying on imported fossil fuels, we need urgent grid upgrades.

Right now, progress is being held back by a lack of political will. Your voice can help change that.

SIGN THE OPEN LETTER. DEMAND A CLEANER, CHEAPER ENERGY FUTURE.

SCAN TO PLEDGE YOUR SUPPORT

Cleaner energy, lower bills, Build Our Grid.

Skillnet
Offshore Wind
Academy

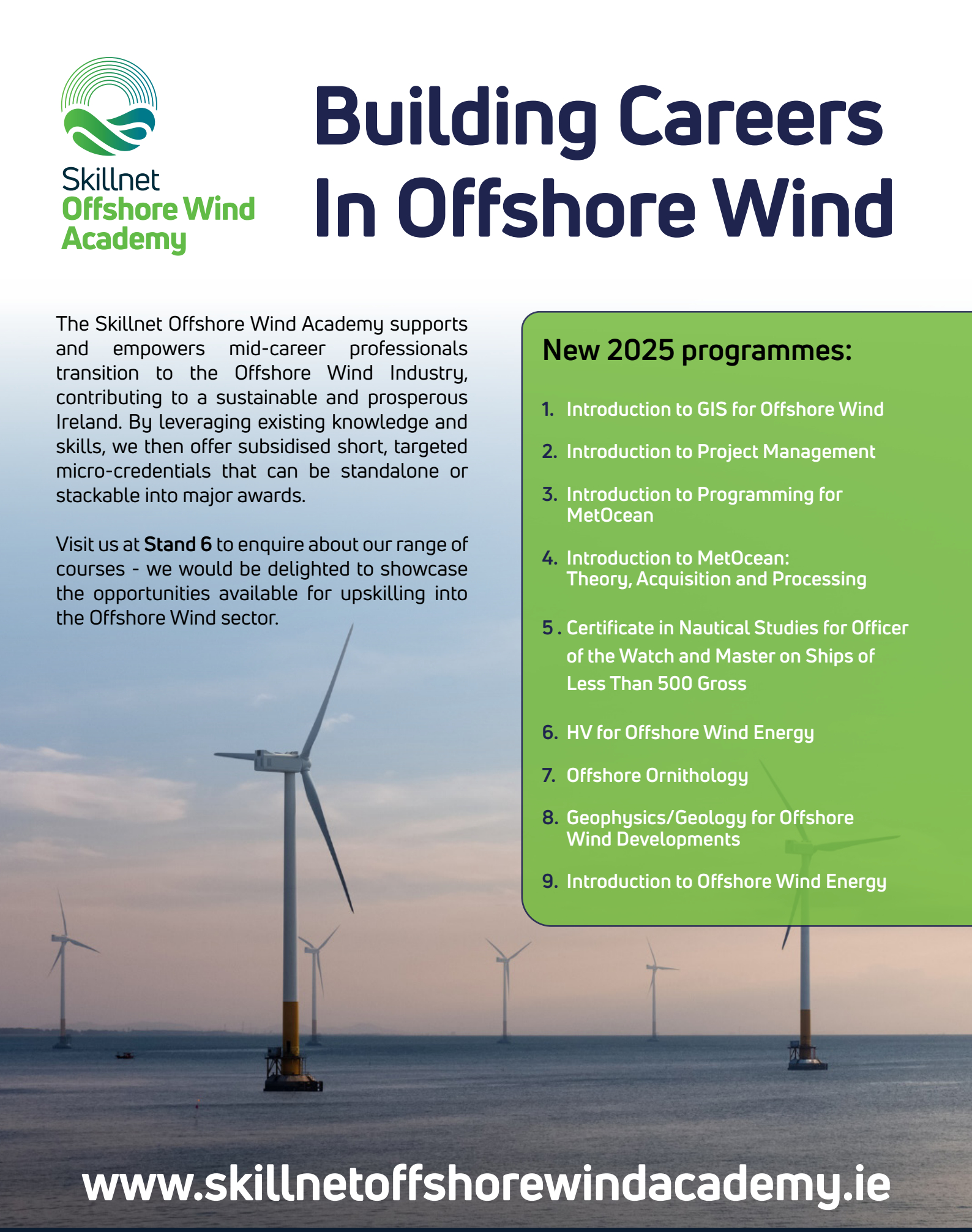
Building Careers In Offshore Wind

The Skillnet Offshore Wind Academy supports and empowers mid-career professionals transition to the Offshore Wind Industry, contributing to a sustainable and prosperous Ireland. By leveraging existing knowledge and skills, we then offer subsidised short, targeted micro-credentials that can be standalone or stackable into major awards.

Visit us at **Stand 6** to enquire about our range of courses - we would be delighted to showcase the opportunities available for upskilling into the Offshore Wind sector.

New 2025 programmes:

1. Introduction to GIS for Offshore Wind
2. Introduction to Project Management
3. Introduction to Programming for MetOcean
4. Introduction to MetOcean: Theory, Acquisition and Processing
5. Certificate in Nautical Studies for Officer of the Watch and Master on Ships of Less Than 500 Gross
6. HV for Offshore Wind Energy
7. Offshore Ornithology
8. Geophysics/Geology for Offshore Wind Developments
9. Introduction to Offshore Wind Energy



www.skillnetoffshorewindacademy.ie

Skillnet Offshore Wind Academy is an enterprise initiative of Wind Energy Ireland. Skillnet Offshore Wind Academy is co-funded by Skillnet Ireland and participating businesses. Skillnet Ireland is funded from the National Training Fund and the European Union through the Department of Further and Higher Education, Research, Innovation and Science.

Skillnet IRELAND

Rialtas na hÉireann
Government of Ireland

Co-funded by
the European Union

Hope for electricity consumers as new report finds Irish onshore wind energy can treble

Extensive mapping has found that Ireland can generate at least a further 6,000 MW of wind energy, in addition to what is already built or in the planning system.

In a new study commissioned by Wind Energy Ireland, leading Irish planning and environmental consultancy MKO has calculated Ireland's capacity for further onshore wind development, which is the country's cheapest source of new electricity.

A report published earlier this year found that, between 2000 and 2023, onshore wind farms saved Irish electricity consumers nearly €840 million.

In this new study and the first of its kind, Protecting Consumers: Our onshore wind energy opportunity, analyses Ireland's geography, identifying the land available in the country for future development.

The mapping exercise identified roughly 1,302km2 of land on which wind farms could be built – less than 2 per cent of the Republic of Ireland. Conservative estimates suggest this would be enough to produce nearly 6,000 MW of onshore wind energy.

Assuming the 2030 Climate Action Plan target of 9,000 MW is met this additional capacity would treble our current wind generation.

Launching the new report, **CEO of Wind Energy Ireland, Noel Cunniffe**, said:

"We need to protect Irish electricity consumers and onshore wind energy is Ireland's most affordable source of new electricity. The more wind energy that we can develop, the less we rely on imported fossils fuels, and the better protected Irish families and businesses are from a volatile fossil fuel market.

"Every month we see wind energy reducing electricity costs. Tripling our onshore wind capacity, which is possible by delivering our existing pipeline and developing the land identified in this research, would drive these costs down even further.

"We are calling on the Government to set new targets for onshore wind energy of 11,000 MW by 2035 and 15,000 MW by 2040."

Brian Keville, Managing Director of MKO Ireland, added: "Ireland has significant additional potential to harness our indigenous onshore wind energy resource.

"This analysis clearly demonstrates that a significant amount of onshore wind energy can be delivered in just two per cent of the country's land mass, while taking account of planning and environmental constraints and design requirements."

This study is the first objective and methodological assessment of Ireland's future onshore wind potential.

It considers every domestic and commercial building in the country, every river, lake, protected area, heritage site and existing wind farm as well as a host of other constraints. The research also accounts for standard levels of attrition experienced by projects as they move along the development pipeline.

Key recommendations

The report's authors propose five key recommendations to support Irish electricity consumers:

- **Clear target:** To encourage investment in onshore renewables the Government should set increased 2035 and 2040 targets for onshore wind.
- **Clear policy:** We need clear, consistent, policy set at a regional level identifying preferred areas for onshore renewable energy. This would help County Councils to identify enough land to develop the onshore wind we need.
- **Stronger grid:** Significant reinforcement of the electricity transmission grid will be required to harness the full potential of our wind energy resource.
- **Updated guidance:** The existing draft Wind Energy Development Guidelines must be updated and finalised, based on robust scientific evidence.
- **Landscape:** This research should be used to develop a national approach to assessing the sensitivity of landscape to onshore wind energy.

Noel Cunniffe continued: *"The research is clear. Ireland has an incredible opportunity to keep developing our most affordable electricity source, to build a strong, resilient, and competitive economy based on a secure supply of energy.*

"The identified land makes up less than 2 per cent of the country and it is important to remember farming and tourism often continues as normal on a wind farm. That small area of land could provide an enormous amount of clean, affordable, power."

Accelerating the development of onshore renewable energy will require resourcing and reforming our planning system as well as clear support – from communities, industry and across the political spectrum – for a stronger electricity grid.

Noel Cunniffe concluded: *"At a time when our economy is under threat from tariffs, energy costs and global uncertainty we have a solution, ready-made, here in Ireland.*

"To develop this enormous potential we need a well-resourced planning system which prioritises renewable energy and takes full advantage of changes in EU law designed to accelerate the development of wind power.

"Supporting this we must have a stronger, more robust, electricity grid which ensures the clean, affordable, power from these wind farms gets to those who need it.

"Building that grid means delivering essential upgrades and new power lines, like the North-South Interconnector, which is the spine around which we can build an electricity grid for a 21st century economy."

OCEaN, working together to deploy offshore wind in harmony with nature

By Madlie Le Bihan, Senior Manager Offshore Energy & Nature

Offshore wind farms are essential for reducing Europe's reliance on fossil fuels and mitigating climate change, and healthy marine ecosystems are vital. Poorly planned developments could adversely affect these ecosystems, which could have knock-on effects and in turn reduce their ability to store carbon and mitigate climate change.

Although offshore wind farms generally have limited environmental impacts compared to other maritime sectors, their relatively recent introduction and the already degraded state of many European marine ecosystems has led to heightened scrutiny. Concerns focus on potential effects on vulnerable marine species, habitats, and coastal landscapes from the deployment of multiple wind farms.

However, deploying offshore wind energy and its associated grid infrastructure can be done in a manner that respects both nature and local communities. Meticulous planning can minimise negative impacts and active stakeholder engagement which adapts projects to local contexts, can maximise positive outcomes and fostere creative solutions.

Effective maritime spatial planning is key to addressing fears that offshore wind farms might encroach on ecologically sensitive areas. For instance, where we plan well we can avoid overlaps between wind farms and critical habitats such as seabird breeding sites, fish spawning grounds, or marine mammal feeding areas.

Offshore wind development presents opportunities to benefit local communities. Early engagement with coastal populations ensures their perspectives are considered and that approaches can be considered which are inclusive of community input. Community benefit funds provide communities with an opportunity to directly influence how their gain from offshore wind is used for the good of their community and locality.

To address the challenges of environmentally- and socially-responsible offshore wind deployment, the Offshore Coalition for Energy and Nature (OCEaN) unites NGOs, transmission system operators (TSOs), and wind industry representatives from the Northern and Baltic Seas. Their collective goal is to promote offshore wind expansion simultaneously with nature protection and restoration.

OCEaN Members collaborate on various initiatives, including policy analysis, advocating for improved mitigation of infrastructure's environmental impacts, and a better integration of nature considerations into planning processes. Their work encompasses the entire lifecycle of offshore wind and grid infrastructure.

In 2025, OCEaN will continue to empower their members by facilitating the exchange of expertise on strategies and best practices for environment-friendly offshore renewable energy expansion. The Coalition's activities include:

- **Promoting measures to avoid and minimise potential environmental impacts of infrastructure on marine ecosystems.**
- **Advocating for nature-inclusive design in offshore wind and grid infrastructure.**
- **Highlighting innovative projects that demonstrate how such infrastructure can enhance or restore marine ecosystems.**
- **Sharing lessons learned from various European countries as they strive to balance offshore renewable energy development with environmental protection.**
- **Exploring land-sea interactions and the social implications of offshore renewable energy expansion.**

Through these combined efforts, OCEaN aims to foster the development of tailored frameworks and the adoption of good practices across countries bordering Europe's northern seas. Med OCeaN, OCEaN's sister coalition in the mediterranean ensures that the lessons learned are transferred to the south of Europe as offshore wind starts to take off.

An effective planning of offshore renewable deployment can only happen if it includes safeguarding marine environments and the communities who depend on them. In doing so, the energy transition can usher in a period of revitalisation for citizens, communities, and marine ecosystems.

The Renewables Grid Initiative (RGI) is the convener and moderator of OCEaN.

Team Lead: Cristina Simioli, Director Offshore Energy & Nature
Editor: Charlotte Mueller, Communication Manager

Heating homes with wind power

By Alan Wyley, CEO of EnergyCloud

EnergyCloud has a mission to end energy poverty. We do this by creating solutions to use surplus renewable energy – which would otherwise be wasted – and redirect it to homes in fuel poverty. According to the ESRI, there are over 550,000 people in energy poverty today and over €2.1 billion in surplus renewable energy has been dispatched down since 2017.

EnergyCloud Ireland is a not-for-profit company limited by guarantee and the process is underway to register as a charity and, having hired a full-time CEO, we will build out the full-time executive team in 2025.

We are now supported by EirGrid, ESB, Amazon Web Services, Bord Gáis Energy, Electric Ireland, Pinergy, PrepayPower, SSE Airtricity, as well as Local Authorities, Approved Housing Bodies, Wind Energy Ireland and the Irish Solar Energy Association.

Programme for Government

In addition, the new Programme for Government commits that the Government will "explore if legislation could be enacted to divert surplus renewable energy, that would otherwise be wasted, to homes in fuel poverty" and "explore ways to use surplus renewable energy to help reduce energy poverty, ensuring that renewable energy benefits all communities".

This is a very exciting development for EnergyCloud and all in energy poverty and we look forward to working with the Government to use the surplus renewable energy to reach all those in energy poverty during the lifetime of this Government.

We have successfully rolled out pilots with Cluid Housing, Co-Operative Housing Ireland, Tuath Housing as well as Galway and Offaly County Councils using smart immersion controllers. On nights when there is surplus wind energy, we remotely activate the immersion controllers and heat the tank of hot water for the resident.

EnergyCloud then provides a monthly report on energy usage to the electricity retailers who credit the resident back each month with the related cost, meaning the residents receive free tanks of hot water each night when there is curtailment.

"Very much appreciated"

As one resident wrote to us: "I'm just writing to say that this project is great and very much appreciated. It's brilliant to wake up in the morning to have hot water to use straight away. It is also saving us electricity too as we don't have to use the electric shower now in the mornings; we can use the one connected to the bath taps without having to turn on the gas or immersion first."

The average savings to the resident are between €10 and €15 per month, which is very welcome. But there is also a softer benefit beyond this. In many cases the resident would not have heated their water at all, so we may not have saved them money that evening, but we have provided them a free tank of hot water that they wouldn't have got otherwise.

As one resident said recently, "It's great to wake up to hot water without the cost".

For EnergyCloud, smart immersion controllers are only the beginning, we seek to add more technologies and expand our reach to thousands of homes. But the real scale will come from Government policy to reach the 550,000 homes in energy poverty in a targeted fashion and we look to working with the government to achieve this.

The last word should be from a resident who wrote recently, "I thank you, God bless you, I really appreciate it."

Hybrid projects present a great opportunity for Ireland

By Bobby Smith, Head of Energy Storage Ireland

Hybrid projects are sites that combine two or more types of electricity generation and/or storage units connecting through a single connection point. Hybrid projects present opportunities to increase the production of renewable electricity by increasing the output at the connection point, resulting in more efficient use of grid infrastructure.

Key challenges

However, while there are co-located projects in Ireland that combine different forms of generation and storage, these are treated as separate connections, and it is not currently possible to share the same grid capacity. This means there are lots of existing connections for wind and solar assets that are being underutilised. The four key barriers, amongst others, to the deployment of hybrid sites are:

1. Sharing of Maximum Export Capacity (MEC) is not allowed at present between assets on a multi technology site.

2. Cross charging is not allowed, whereby a battery can be charged from the renewable asset as well as from the grid.

3. Lack of clear definitions around what is and is not allowed for hybrid sites.

4. Multiple legal entities (MLEs) not allowed behind the same connection point.

New report on benefits of hybrid sites

Energy Storage Ireland (ESI) recently commissioned a report from Cornwall Insight to explore the potential benefits from hybrid sites. Some of the key findings of the report include:

- ~5.2 GW of the operational and in development pipeline of wind and solar projects in Ireland and Northern Ireland has the potential to convert into or build out as hybrid sites with BESS.

- There are significant system wide benefits from the widespread roll out of hybrid sites. The annual benefits of hybrid sites, when the estimated renewable capacity is located with a 2-hour BESS are:

  - ~460,000 tonnes of CO2 can be saved per year which is equivalent to ~100,000 cars, 405 MW of CCGT capacity, or 11.5 percent of the annual emissions reduction required to meet the SEM's 2030 emissions target

  - ~1,200 GWh of additional renewable power can be utilised annually which is an equivalent of ~460 MW of wind output and ~1.4 GW of solar output

  - ~€146 million of cost can be saved per year, with gas costs making up 53 percent, balancing costs 25 percent and carbon costs 21 percent of the total cost savings

  - ~16 percent of renewable dispatch down can be avoided

ESI's recommendations

A suite of changes must be made to enable hybrid sites and to unlock the benefits which they can provide.

This must be done through a clear implementation plan provided by the System Operators in conjunction with the CRU. These changes need to be meaningful or we risk missing out on this opportunity. It is timely then that the CRU recently consulted on steps to allow the sharing of MEC between multiple technologies at the same connection point. This is something industry supports but we need clarity on next steps for when and how this will be implemented as well as how the other barriers mentioned above will be addressed. The CRU is expected to provide a decision and implementation plan for sharing of MEC by the end of 2025.

To read the full Cornwall Insight report, visit:
www.energystorageireland.com

Powering the Clean Revolution

How offshore wind energy can deliver a sea-change for Northern Ireland

Laoiseach Scullion is a Policy and Public Affairs Advisor for RenewableNI, the voice of the renewable electricity industry in Northern Ireland.

As Northern Ireland's transition towards net zero continues, with our "80 by 30" target looming large, it's an exciting, if demanding, time for the renewables sector.

Absolutely critical to achieving our net zero targets will be the deployment of offshore wind.

Northern Ireland is ideally suited to offshore wind development. With some of the most favourable wind conditions in Europe, the UK's largest single port estate, and indigenous businesses that boast a strong culture of innovation, collaboration and excellent engineering capability, the region is the perfect cluster for scaling up a thriving offshore wind and supply chain industry.

In the Northern Ireland Energy Strategy Action Plan 2022, the Department for the Economy (DfE) committed to a target of 1GW of offshore wind capacity by 2030. This reflects an understanding from within government of the importance of developing an offshore wind sector at pace.

Offshore wind has the potential to lower electricity prices, deliver greater energy security, and create highly skilled green jobs for consumers and communities across NI. RenewableNI's The Clean Revolution report shows that if 1.5GW of offshore wind were installed by 2032, it could power 1.6 million homes, create more than 1,500 highly skilled jobs, and deliver up to £2.4 billion in Gross Value Added, while also offsetting 49 million tonnes of CO_2.

In February this year, Economy Minister Caoimhe Archibald launched the Offshore Renewable Energy Action Plan (OREAP): Consultation on the Strategic Environmental Assessment (SEA) Environmental Report and Report to Inform Appropriate Assessment (RIAA). This marks a first step towards identifying areas for the development of offshore renewable energy.

Among the core objectives of the OREAP — the pathway through which DfE sets out the steps needed to deliver 1GW of offshore wind by 2030 — is the revision of the Strategic Environmental Assessment (SEA) and Habitats Regulation Assessment (HRA) of offshore renewable energy in Northern Ireland's marine area. Neither of these assessments have been updated since 2012 and bringing them into line with current circumstances is essential.

Crucially, the SEA and RIAA assessments will allow DfE and its partners to identify the most suitable and sustainable areas for offshore wind development. This will help maximise the potential of offshore renewable energy, while maintaining strong relationships with other key marine users and coastal communities, and minimising disruption to the seabed.

When launching the consultation, Minister Archibald said:
"Offshore renewable energy in our marine area is a key deliverable of the Executive's Energy Strategy. It could be the North's most ambitious energy infrastructure in a generation, which could supply our homes and businesses with clean and affordable electricity."

This endorsement from the Minister is a welcome boost to all of us committed to a greener future for Northern Ireland. We back the sentiment completely and, together with our members, elected representatives and policymakers, are keen to collaborate in unlocking the major investment needed to support the development of a domestic supply chain and fully exploit our homegrown wind resource to power the clean revolution.
We've also seen positive signs more widely across DfE and the Executive in recent weeks, including the successful Northern Ireland Assembly motion on the Green Energy Transition, which includes support to "upscale offshore energy production" as a critical priority.

The 12-week consultation on the OREAP closes on 22 May. Once complete, an updated plan will be published, serving as a catalyst as we finally move towards a round of offshore wind leasing. So, while there is still a long way to go, progress is looking hopeful.

If momentum is maintained, industry hopes to see leasing rounds begin in 2026. Offshore wind can deliver the scale of renewable generation needed to meet NI's decarbonisation targets. If the next steps are taken in a timely way, offshore wind will deliver a true sea-change in our journey to net zero.

RenewableNI is the voice of the renewable electricity industry. Through the development of policy, best practice and public communications, we represent those engaged in wind, solar and battery storage development. Our members make up a large majority of the renewable industry supply chain in Northern Ireland.

Green Tech Skillnet

Skills CONNECT
Reskilling Through Enterprise

A New Career in Renewable Energy Awaits

In 2021, Green Tech Skillnet developed the innovative Skills Connect training and work placement programmes aimed at helping jobseekers transition into the renewable energy sector.

These programmes received the Best Talent Development Initiative Award in 2022 from the Learning and Development Institute.

Work in Renewables

The **Work in Renewables** programme, which starts in early autumn this year, provides a wide range of training covering the life cycle of a wind farm, an overview of onshore and offshore wind, the renewable energy grid, policy, planning, markets, community engagement and environmental impact management. Graduates of the Work in Renewables programme will also be certified in the fundamentals of wind farm asset management for the ISO 55001 standard.

Programme Outline

Personal Development Coaching
CV Development and Competency Interviews
Workplace Resilience
Communication and Interpersonal Effectiveness
Introduction to Terminology & Foundational Understanding
Industry Introduction to Onshore and Offshore Wind
Lifecycle of a Wind Farm
Introduction to Asset Management
Workshop with Industry Experts
Bespoke and In-depth Industry Overview Modules
Electricity Grid Policy for Renewables
Electricity Market Policy for Renewables
Planning Systems for Renewable Energy
Offshore Wind
Communications and Public Affairs in Ireland
Biodiversity and Environmental Management

Wind Turbine Technician

The **Wind Turbine Technician Programme**, usually held in the spring of each year, provides a series of Global Wind Organisation (GWO) certified safety and technical training courses, wind industry overview and personal development workshops. Technicians receive the GWO certificates required to work on site following the training.

Programme Outline

Personal Development Coaching
CV and Interview Skills
Effective Communication and Resilience in the Workplace
Introduction to Terminology & Foundational Understanding
Wind Turbine Awareness Training
Workshop with Technicians Working in the Industry and Industry Experts
Globally Recognised Certified Health & Safety and Technical Training
GWO Basic Safety Training (BST)
GWO Basic Technical Training (BTT)
GWO Advanced Rescue, Hub, Spinner, and Inside Blade Rescue (ART-H)
Wind Turbine Safety Rules (WTSR)
Slinger Signaller
Enhanced First Aid

Solar PV Installer

Ireland's solar industry is booming and the demand for skilled solar PV installers is growing rapidly. Employers are struggling to fill these roles due to a lack of available qualified candidates. The Solar PV Installer programme aims to address this acute skills shortage while providing learners with the opportunity to build a meaningful and lasting career. The bootcamp is a 6-week programme delivered face-to-face and online.

Programme Outline

Personal Development Coaching
Teamwork Skills and Personal Responsibility
Adaptability and Proactiveness
CV Development and Mock Interviews
Support with Job Search and Application
Solar PV Installation
Solar PV Technology and System Components
Performance Factors and Efficiency
Installation Planning and Regulations
Installation Techniques and Maintenance
System Design, Testing, and Feasibility Studies
Health and Safety
Working at Heights
Manual Handling

Interested in hosting an intern or a technician?

CVs are available on request. We can also facilitate an introductory meeting or interview with candidates in advance of the work placement starting to ensure best fit. Please contact **skillsconnect@windenergyireland.com**

Green Tech Skillnet is co-funded by Skillnet Ireland and network companies. Skillnet Ireland is funded from the National Training Fund and the European Union through the Department of Further and Higher Education, Research, Innovation and Science.

Skillnet IRELAND

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Green Tech Skillnet

DON'T MISS OUT
Reserve your place now

Did you know that Green Tech Skillnet can save you up to **60%** on your company's training and development costs?

Visit **greentechskillnet.com** to view and book our courses.
If you're interested in in-house training or a course not listed on our website, please contact us at **training@windenergyireland.com**

Training Resources

Electricity Market Fundamentals for Renewables	Certificate in Industrial Instrumentation Calibration
Certificate in Industrial Instrumentation Calibration	Micro-credential in Strategic Leadership
Electricity Market Fundamentals for Heat and Transport	Suite of Battery Systems and Energy Storage courses
Micro-credential in Strategic Leadership	Artificial Intelligence & Business Analytics
Grid Connection Process in Ireland	Heat Pump Installer
Suite of Battery Systems and Energy Storage courses	Project Management and Impactful Leadership
Operational Constraint and Curtailment in Ireland	Diploma in Sustainability
Artificial Intelligence & Business Analytics	Micro-credential in Electricity Grid Operation and Planning
Introduction to Battery Energy Storage	Micro-credential in Electrical Grid Engineering, Analysis and Modelling
Advanced Diploma in Planning and Environmental Law	QQI Level 6 Micro Solar Photovoltaic Systems Implementation and Electrical Installation
Wind Energy as Gaeilge	Micro-credential in Strategic People Management
Heat Pump Installer	Micro-credential in Finance for the non-financial manager
Corporate Power Purchase Agreements	Diploma in Strategy, Development and Innovation
Certificate in Sustainability Strategy, Risk and Reporting	Sustainability in Practice for Business
QQI Level 6 Industrial Electrical Safety and Systems	Sustainability for Business Success

We sincerely appreciate the continued support of all our member companies.

Their commitment to upskilling employees through our training programmes, championing green initiatives and promoting Ireland's leadership in climate action is invaluable.

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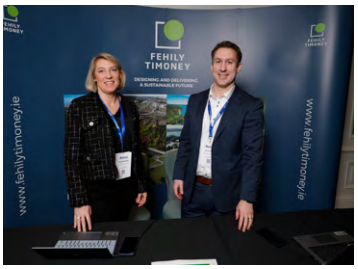
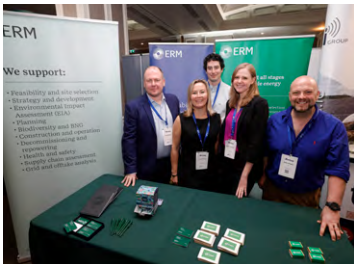
WIND ENERGY IRELAND ANNUAL CONFERENCE

attracts over 750 people across two days





Pinergy

Pinergy for Energy Producers

We are your trusted route to market for Commercial Green Electricity and Purchase Power Agreements (PPAs)

Contact our **Wholesale Energy Team**
Tadhg Gunnell - Tadhg@pinergy.ie

Powering energy transition

Green Tech Skillnet

Micro-credentials

University Certified Programmes

Diversify your professional profile with Green Tech Skillnet University Programmes

Green Tech Skillnet, funded by Skillnet Ireland, offers accredited university qualifications that support innovation and business transformation. These stand-alone qualifications are internationally recognised through ECTS credits, allowing flexible learning and progression towards diplomas or masters degrees. We partner with leading institutions such as University College Dublin, University of Limerick, South East Technological University, Atlantic Technological University and Munster Technological University to deliver practical, industry-focused programmes.

Current Programmes starting in September '25 Include:

Electrical Grid Engineering, Analysis and Modelling – *UCD*

This course covers electrical power system design, blending theory with practical examples. Gain essential skills in grid engineering, power flow analysis, and system protection

Electricity Grid Operation and Planning – *UCD*

This micro-credential covers power system operation and energy economics, with theoretical and hands-on learning. Gain skills in economic dispatch, frequency control, and electricity markets.

Environmental Impact Assessment for Onshore Wind Farms – *UL*

This module covers the EIA process for onshore wind energy, focusing on EU directives, Irish legislation, and practical case studies. Gain skills to navigate regulations and assess environmental impacts.

Certificate in Renewable Electrical Systems - HV Infrastructure Design, Compliance and Safety – *SETU*

This part-time, blended learning programme upskills technicians and engineers in renewable energy and HV/MV electrical systems. Gain skills to plan and design renewable energy projects connected to the Irish Electrical Grid.

Power Systems Dynamics and Control – *ATU*

This module covers dynamic control mechanisms in power systems, focusing on synchronous machines and power electronics. Gain skills in advanced control techniques for grid stability and renewable energy integration.

Fundamentals of Modern Energy Storage Solutions – *ATU*

This module explores the need for energy storage and modern techniques like electrochemical, thermal, and mechanical methods. Gain insights into efficiency, scalability, and the environmental impact of energy storage solutions.

Energy Economics and Policy – *UL*

This micro-credential covers energy economics and policy, focusing on the dynamics of energy markets and the role of public policy. Gain skills to assess and debate key issues in energy sustainability.

Professional Diplomas – *UCD Professional Academy*

UCD Professional Academy offers a range of Management Diploma, Business & Finance Diploma, Marketing & Design, Data Analytics Diploma and Digital & IT Diploma courses, giving you career defining certifications. Delivered at convenient times and formats, such as On Demand & On Campus courses.

Battery Technician Programme – *MTU and InnoEnergy*

This certification covers skills for designing, operating, and maintaining battery systems, including practical lab testing. Gain expertise in battery management, safety, and recycling processes.

Universities are also encouraged to propose courses addressing industry skill gaps.

Get Involved

Help shape the future of renewable energy and sustainability.

Join our **Skills Advisory Groups** or propose new initiatives.

Contact **jeanette.gill@windenergyireland.com** to learn more.

Green Tech Skillnet is co-funded by Skillnet Ireland and network companies. Skillnet Ireland is funded from the National Training Fund and the European Union through the Department of Further and Higher Education, Research, Innovation and Science.

Skillnet Ireland

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Co-funded by the European Union

Helping Offshore Developers Plan for Nature-Inclusive Design

By Sarah Cosgrove, PhD, Restore Innovation, CEO

Marine ecosystems make up 99 per cent of the planet's living space by volume, yet they are among the least visible and most fragile environments. Unlike terrestrial habitats, their health is often difficult to observe, making them more prone to being misunderstood or overlooked. As offshore wind energy accelerates across Ireland and Europe, it is vital that biodiversity protection and ecosystem health are considered from the outset. Nature-Inclusive Design (NID) presents a key opportunity to embed nature-positive solutions into renewable energy development.

Restore's Nature-Positive Vision

Restore Innovation was established to support offshore developers plan for the sustainable use of ocean space for renewable energy by identifying NID opportunities that support ecosystem restoration and biodiversity enhancement, building with nature in mind. Rather than focusing solely on mitigating negative impacts, Restore promotes a shift toward proactive, net-positive approaches where offshore wind development becomes part of the solution for marine conservation.

Opportunities Within the Red Line Boundary

Within the full boundary of an offshore wind project - from the intertidal zone to offshore turbine locations - there is significant potential to incorporate NID measures. These can range from simple to complex, and choosing the right approach to successfully co-exist with marine protected areas and nearby fishing grounds presents a unique set of challenges. Such solutions include those which offer shelter and foraging opportunities for juvenile fish, create artificial reefs for the targeted colonisation of key species, in addition to innovative monitoring technologies to assess biodiversity and support adaptive site management. When combined with reduced fishing pressure, these solutions can help transform wind farms into thriving marine reserves.

Data-Driven Support for Developers

To help developers realise the potential of NID, Restore has created a planning platform that supports early-stage decision-making. By leveraging a range of marine data sources alongside our proprietary NID database, Restore offers site-specific insights and tailored guidance on biodiversity strategies. Key features of the platform include:

- Modelled scenarios linking NID solutions to site conditions and local species.
- Global tracking of NID research projects to inform solution selection.
- Prioritisation of strategies that align with ecological and regulatory goals.
- Targeted outputs to aid stakeholder engagement and consultation.
- Real-time access to environmental data to support adaptive project planning.

Meeting Regulatory and Sustainability Goals

Restore's platform enables developers to align with emerging environmental regulations, including the Corporate Sustainability Reporting Directive (CSRD). Through transparent, traceable methodologies, the tool provides a clear framework for identifying biodiversity opportunities and demonstrating compliance across the project lifecycle.

Unlike traditional consultancy models that often produce static reports, Restore's interactive platform keeps developers connected to the latest NID technologies and validated insights and regulatory updates. Continuous access to global insights helps developers respond effectively and unlock long-term environmental and project value.

Looking ahead to bluer waters

By automating key compliance tasks and reducing the need for time-intensive research, Restore helps developers minimise the time, cost, and risk involved in site-specific Nature-Inclusive Design (NID) planning. And, as the sector continues to grow, Restore is committed to evolving alongside it - leading efforts to integrate biodiversity enhancement into standard development practice. Through its innovative, data-driven platform, Restore provides ongoing support to help developers navigate complex NID requirements and embed biodiversity protection, restoration and enhancement as part of site development.

At the Ireland pavilion at Wind Europe's Annual Event in Copenhagen were Noel Cunniffe, CEO Wind Energy Ireland; Rachael McFarlane, Skillnet Offshore Wind Academy Manager; Minister of State Timmy Dooley; Robert Lynch, Strategic Programme Manager with Skillnet Ireland; and Karl Picard, Policy and Research Advisor with Skillnet Ireland.

Pioneering training for a sustainable future

By Rachael McFarlane, Skillnet Offshore Wind Academy Manager

The Skillnet Offshore Wind Academy is a national initiative launched by Wind Energy Ireland in partnership with Skillnet Ireland which supports mid-career professionals transition to the Offshore Wind Industry.

By leveraging existing knowledge and skills, we offer short, flexible and targeted micro-credentials (subsidised by Skillnet Ireland) that can be standalone or stackable into major awards.

As highlighted in Building our Potential: Ireland's Offshore Wind Skills and Talent Needs, there is an urgent need to address the skills gap in the offshore wind industry if we are to reach our ambitious targets. Ireland aims to deliver at least 5 GW of installed offshore wind capacity by 2030, with a long-term target of 37 GW by 2050. This requires a significant investment in training and skills development to ensure a workforce capable of delivering these goals.

Experienced professionals

The Skillnet Offshore Wind Academy supports these targets by providing experienced professionals with the skills and knowledge necessary to thrive in this rapidly growing industry via micro-credential courses.

As we look ahead to 2025/26, we are excited to announce a range of new courses designed to meet the evolving needs of the offshore wind community.

These initial micro-credential courses address critical areas in the offshore wind industry, ensuring a well-rounded skill set for professionals and urgent industry demand.

As we plan for the future, we are developing new micro-credentials for delivery next year, targeting key roles in the offshore wind sector such as Project Managers, Offshore Consenting Managers and Wind Turbine Technicians.

Join us in making a difference

Our long-term goal is to expand the offering of micro-credentials each year, leading to major awards that are recognised industry-wide.

We invite you to be part of our journey towards a sustainable future. Here's how you can get involved, influence the direction and development of the Skillnet Offshore Wind Academy and contribute to the growth of the offshore wind sector:

- Review tenders: Help us ensure the quality and relevance of our training programmes.
- Join an advisory group: Provide valuable insights and guidance to shape our initiatives.
- Register your interest for training: Stay updated on upcoming courses and opportunities.
- Request training development: Let us know your specific training needs and help us tailor our offerings.

If you would like to support the Skillnet Offshore Wind Academy's growth, join the advisory board or register your interest in any of our courses, please contact: rachael.mcfarlane@windenergyireland.com

Current courses we have running include:

1. Introduction to Coastal & Marine Governance at University College Cork
2. Offshore Wind Energy at University College Cork
3. Environment Impact Assessment of Marine Renewable Energy Developments at University of Galway

Upcoming 2025 Courses:

1. High Voltage Engineering for Offshore Wind Technicians
2. Offshore Wind Ornithology: Field Techniques and Impact Mitigation
3. Geophysics and Geology for Offshore Wind
4. Introduction to Offshore Wind Energy
5. Introduction to Project Management
6. Introduction to GIS for Offshore Wind
7. Introduction to Programming for MetOcean
8. Introduction to MetOcean: Theory, Acquisition, and Processing

Education roundup

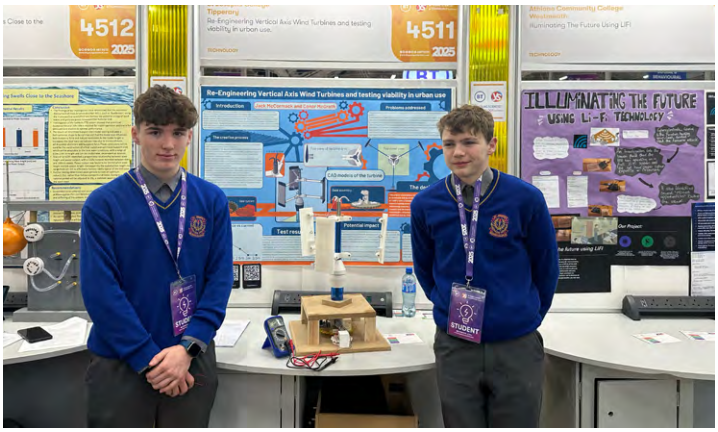
Taking wind energy to classrooms and teaching staff

It's been a busy start to 2025 for our education initiatives with a stand at the BTYSTE in early January setting the scene.

We met with hundreds of students, parents and teachers with three wind energy specific projects on display in the hall. Promoting our www.workinwind.ie information portal for schools, we also facilitated turbine making demos with a team from DKIT.

In March Wind Energy Ireland sponsored a number of school visits to mark Engineers Week in Offaly and Westmeath. Thanks to the students of Scoil Bhride, Edenderry who welcomed Wind Energy Ireland Communications Manager, Lisa-Anne Crookes to their lesson on wind energy and engineering. This lesson and others were delivered by Midlands Science. It was great to see our turbine making kits in good hands.

In March also we exhibited for the first time at the Institute of Guidance Counsellors Annual Conference. Here we spoke to guidance teachers from across Ireland about jobs in wind and the opportunities the industry offers. We will definitely be working with this group more in the future. The introduction of the new Leaving Certificate subject in Climate Action and Sustainable Development brings our industry even more into focus.



Wind energy company named as one of Ireland's Best Workplaces

Tralee headquartered ENERCON was recognised among the Best Medium Workplaces™ in Ireland 2025.

Photographed is John Higgins Health and Safety Officer with ENERCON based in that HQ in Tralee, Co Kerry.

Managing director of ENERCON Windfarm Services Ireland ltd, Noranne Stack said, "We are delighted to be recognised as one of Ireland's Best Workplaces. At ENERCON our people are our greatest strength, and this award reflects their hard work and dedication. As a company, we are committed to fostering a workplace where people feel valued, listened to, and safe so we can continue to uphold the standards of being a Great Place to Work."

ENERCON has operated in Ireland since 1998. The Irish Headquarters was formally established in Tralee in 2010, and ENERCON now has more than 200 people employed throughout the Island with service station bases in Enniscorthy, Thurles, Millstreet, Bantry, Tralee, Newcastle West, Ennis, Moycullen, Ballina, Collooney, Burt, Donegal Town, Coleraine and Omagh, as well as a branch office located in Santry, Co. Dublin.

John Higgins Health and Safety Officer with ENERCON

Wind Energy Ireland hosts wind energy briefing for the new Oireachtas

By Chloé Sullivan, Senior Public Affairs Specialist, Wind Energy Ireland

In March this year, Wind Energy Ireland (WEI) delivered its first wind energy briefing to TDs and Senators of the new Oireachtas. A special thanks to Malcolm Byrne TD for the warm welcome on the day. During the presentation, we updated elected representatives and parliamentary staff on how wind energy is already powering Ireland, and the even greater role it can play in our future.

Five asks for the next five years

Over the next few years, Wind Energy Ireland is calling all Oireachtas members for their support to:

1. **Build more onshore, and new offshore, wind farms**
2. **Set Ireland's vision for renewable energy beyond 2030**
3. **Plan for the long-term potential of offshore wind energy.**
4. **Develop Ireland's electricity grid to help our society electrify.**
5. **Create a planning system that can build a zero-carbon society for Ireland.**

Wind energy in Ireland today

Ireland has abundant wind resources which can be the key to our future prosperity.

Last year, Irish wind farms supplied a third of our electricity. This meant that Ireland's spending on gas for electricity was cut by almost one billion euro last year. Electricity generated from Irish wind farms replaces imported fossil fuels and increases our supply of clean energy. Wind also lowers prices for consumers by keeping the most expensive fossil fuels of the electricity system. Lower wholesale electricity prices lead to lower bills for Irish consumers. Recent research from energy specialists Baringa (January 2025) found that wind and solar farms have saved Irish electricity consumers €840 million since 2000.

Millions of euros are invested every year in community benefit funds for local communities to invest in the priorities they choose for their area – like outdoor play facilities, sports grounds and community spaces. At a local level, wind farms contribute around €51 million in commercial rates to rural county councils each year, which is used to develop local amenities like roads and public transport services.

Challenges to overcome

Ireland has a strong pipeline of wind energy projects to help achieve the Government's targets set out in the Climate Action Plan though there are challenges this Oireachtas will need to overcome.

These include ensuring that our planning system can build renewables and new energy infrastructure at pace, strengthening our electricity grid to make it more resilient and investing in our ports so that Irish wind farms can be built in Irish ports.

If we can overcome these challenges, then the reward for our country is great. Our local communities will have more affordable, secure and clean energy to power homes and businesses around our island.

The choices made during this Oireachtas term will shape our energy future, that of our children and our country.

We must harness the potential of Irish wind energy to deliver cleaner power, cheaper power and to lay the foundation for Irish energy independence.

ireland electrified

Ireland Can Electrify

By Cathal Murphy, Senior Policy Analyst Ireland Electrified

Ireland is seeing continued growth with renewable electricity and expanding into offshore wind has even further immense potential. However, at the same time, the State has been very poor at developing renewable heat and transport, despite the largescale possibilities that exists for the electrification of those sectors.

Ireland Electrified is a trade association promoting the electrification of heat, domestic and industrial, as well as transport. This transition to electric heat and transport represents a cleaner, more secure energy source, and can provide many benefits to the electricity grid as well as the end user. We advocate for decarbonising our economy in sectors currently heavily reliant on largely imported fossil fuels with greater electrification from renewable energy sources. This means increased energy security, less exposure to volatile fossil fuel prices, and a more sustainable energy source for householders, businesses, transport and large industry.

Emissions from heat and transport are in some ways the forgotten child of our climate obligations. The Irish State has the worst performance in the EU for using renewable energy sources for heating and cooling and toward the latter end of the table when it comes to renewable transport. In terms of the share of energy related CO_2 in energy emissions, heat makes up 33 percent and transport 43 percent and both largely using imported fossil fuels.

Electrification and the Electricity Market

Electrification significantly reduces emissions and supports a better environment. It also provides practical solutions to existing grid and electricity market challenges. As renewable electricity grows, the electrification of heat and transport across domestic, industrial, public and private sectors creates a new source of demand for clean energy. With increasing curtailment and constraints on the grid, electrification can help relieve pressure. Flexible demand, thermal storage and vehicle-to-grid (V2G) technologies offer storage solutions and system benefits. Growing renewable generation and growing electrification both contribute to a stronger, more efficient energy system.

Expand policies to support electrification

To realise these benefits, Ireland's policy framework must be expanded. The opportunities are clear, but supportive policy is needed to accelerate progress and encourage the shift away from fossil fuels.

Ireland Electrified has developed a range of research papers and policy positions to support this transition, highlight the benefits of electrification and advocate for change. These include reforms to electricity price pass-through mechanisms to incentivise and reward electrification, as well as proposals to improve grid connection policy for electrified technologies.

Electrification can benefit Ireland

Electrification is better for Irish homes, businesses and industry. It is better for transport, both private and public. It strengthens the electricity market and helps protect our environment and society. These broad benefits can only be realised with the right policy framework. That framework must support the transition and embrace electric heat and transport for the good of all.

Visit **www.irelandelectrified.ie for more information.**

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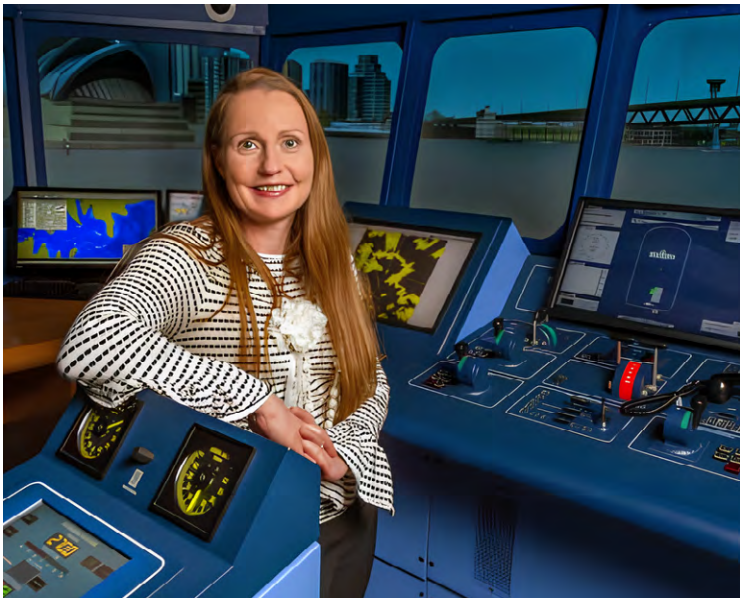
Train to work at sea



Captain Sinead Reen, course coordinator.

- **What is the role of the NMCI and GT Skillnet in this partnership?**
  The National Maritime College of Ireland is the only third-level organisation in Ireland meeting the STCW (International Convention on Standards of Training, Certification and Watchkeeping for Seafarers) regulatory requirements necessary to be approved by the Irish Maritime Administration for training merchant marine personnel. The NMCI is also the only institute in Ireland providing academic tuition for students wishing to attain a Certificate of Competency (STCW) in Master, chief mate, engineer, officer in charge of navigational watch and electro technical officer, and Certificate of Competency (less than 500 Gross Tonnage in the Near Coastal Area).

  Simply put, if you want to work at sea on merchant ships, you come to the National Maritime College of Ireland. Training seafarers is expensive business. On this course, our students spend a lot of time in our simulators. The course has 250 + hours of study and costs €5250.

  The funding from GreenTech Skillnet means that fishers can upskill and advance in their maritime careers for a fraction of the standard cost.

- **What is the course content?**
  It provides comprehensive tuition in watchkeeping, emergency procedures, ship stability, construction, and cargo operations, aligning with STCW requirements for vessels less than 500GT. Students gain vital knowledge in maritime law, pollution prevention, and onboard safety measures, learning to manage resource allocation, implement security protocols, and handle maritime emergencies.

- **Who is eligible? Why is it relevant?**
  The course is ideal for someone who already holds a Skipper Full or Second-Hand Full fishing ticket. People applying for the Certificate of Competency (OOW/Master <500GT Near Coastal Area) must have additional STCW and other qualifications as listed in the Department of Transport Exam Directions (see www.seafers.ie for additional details).

- **Tell me about jobs in this area?**
  Graduates may serve as Officers of the Watch or Master on vessels less than 500GT. Typical roles include operating near-coastal passenger ferries, support craft for wind farms or offshore installations and commercial fishing or small cargo vessels.

  In addition, they can work within maritime operations, overseeing safety, shipboard management, and compliance with industry regulations.

- **What other courses do you run relevant to offshore or onshore wind?**
  The college offers a comprehensive suite of maritime programmes from NFQ Level 6 to Level 10. Our seafaring courses in Nautical Science, Marine Engineering, and Marine Electrical Engineering equip graduates to manage vessels and carry out the installations that will drive Ireland's carbon-neutral ambitions.
  We also offer a broad range of Supply-Chain and Logistics programmes at both undergraduate and postgraduate levels, ensuring graduates can effectively manage the flow of materials required for green energy initiatives, sustainability and promoting the circular economy.

  In addition, our Master's in Maritime Operations, Certs in Maritime Law and Risk Management, and Port and Offshore Renewable Energy Project Management will develop leaders capable of overseeing the design, implementation, and maintenance of major maritime projects.

- **How can people find out more about this course and others?**
  The best places to find out more about our courses are on our website, www.nmci.ie.

I'm Aodán Mac Donnacha, skipper at Aran Island Ferries based at Galway city docks. The vessel I skipper is Saoirse Na Farraige. I also work out of Rossaveel harbour in the winter months to the three Aran Islands.

- **How did you hear about the course and why were you interested?**
  I heard about the course from Laoise from GreenTech Skillnet who lives on the Aran Islands.

  I was interested in the course from an early age, I already had a Power Boat Level 3 ticket and a Yatchmaster and Fishing ticket. I worked in the UK with a company called Windcat Workboats working in the offshore wind sector for around eight years.

  So going onto this Ticket Master 500 course was always a goal and hopefully I would like to upgrade further in the future.

- **What did you get from the course?**
  The course gave me more in-depth knowledge of cargo operations and business and law.

  I would highly recommend it to others - the college (NMCI) is an unbelievable tool in teaching us.

Advancing Ireland's renewable future

Did you know that Wind Energy Ireland's research team is currently collaborating on a record 11 funded research projects?

Our focus spans cutting-edge renewable energy technologies, advancing new innovations, shaping policy and developing the skills essential for the future workforce. From floating offshore wind to environmental protection, we're playing a pivotal role in Ireland's renewable energy transition.

EU-funded research projects

Our EU-funded initiatives include two Erasmus+ funded projects.

Technical Skills for Harmonised Offshore Renewable Energy (T-shore) addresses the offshore wind industry's skills gap by developing training for technicians and establishing a European network of Centres of Vocational Excellence (CoVEs) for offshore wind.

Another key project is Engineering Education for a Sustainable Future (EESF), which aims to modernise engineering education, equipping graduates with essential sustainability skills.

National initiatives

At a national level, our SEAI-funded projects focus on advancing renewable technologies and addressing environmental considerations. These projects are part of the SEAI RD&D programme, which funds critical research and development across the sector.

Floating offshore wind projects:

- Integrated Design of Floating Wind Arrays Ireland (IDEA IRL): Developing a roadmap for floating wind energy in Ireland.
- Anchor and Mooring Selection for Floating Offshore Wind (AMSFLOW): Creating advanced anchor and mooring solutions for optimising floating offshore wind platforms in challenging metocean conditions.
- Floating Platforms for Atlantic Environments (AtlanticFloat): Enhancing the design and performance of floating wind turbines in harsh Atlantic environments.
- De-risking Ireland's Floating Offshore Wind Targets (DIFOWT): Tackling challenges related to investment in ports, vessels and workforce development to support Ireland's floating offshore wind ambitions.

Other SEAI-Funded projects:

- INNOV8HEAT: Helping industries use surplus wind and solar energy for heating and cooling, reducing reliance on fossil fuels.

- Re:harrier: Studying wind farm impacts on hen harriers, using data to guide sustainable wind energy development while protecting this vulnerable species.

- Irish Marine Acoustics Platform (IMAP): Monitoring underwater noise to assess offshore wind development's impact on marine ecosystems.

In addition to our SEAI-funded projects, we're collaborating on Offshore ADAPT, a Marine Institute-funded initiative focused on offshore wind turbine design flexibility, and Nature+Energy, funded by Taighde Éireann – Research Ireland. This project explores how wind farms can contribute to land management and natural capital.

Communication and engagement

Our role in funded research projects is focused on communication, dissemination, and stakeholder engagement. We craft distinct, recognisable brands for each project, ensuring visibility and recognition.

Through our strong connections with industry leaders via Wind Energy Ireland's members, conferences and workshops, we bridge the gap between academia and industry, ensuring project outcomes are innovative and aligned with real-world needs.

Policy-priming research

Our policy-oriented research continues to be a key focus, providing evidence and analysis to influence policy development in areas critical to Wind Energy Ireland's strategy. This year, we launched two important reports:

- Good for your Pocket: Demonstrating how renewable energy is reducing electricity costs for Irish consumers, while decreasing dependence on imported fossil fuels.

- Cutting Carbon, Cutting Bills: Analysing the savings in gas consumption achieved by wind farms in 2024, highlighting the environmental and financial benefits.

These reports are essential in outlining the challenges and opportunities the industry faces, offering valuable insights for both policymakers and industry leaders.

Key highlights

In January, we hosted our Research Poster Room, sponsored by Bord na Móna | Ocean Winds, at our Annual Conference. The event served as a platform for knowledge-sharing and networking among researchers, students, and industry peers. The poster session winner was Anthony Gibbons of Maynooth University for his research on Using Generative AI to improve bird call classification at wind farms.

At this year's Offshore Conference, we are running our popular Thesis-in-Three competition, also sponsored by Bord na Móna | Ocean Winds. The competition, open to postgraduates, challenges participants to present their research in just three minutes, highlighting their work's impact on the wind energy sector.

This engaging event provides a unique platform for students to showcase their innovative research while promoting the vital role of academia in advancing Ireland's renewable energy goals.

Looking to the future, the Wind Energy Expo Ireland 2025 will take place in October, featuring Research and Innovation Sessions showcasing ongoing R&D projects across the sector.

We invite all interested parties to explore collaboration opportunities with us as we continue advancing Ireland's energy transition. Whether you're in wind energy or the wider renewable energy sector, we're eager to discuss how we can work together.

Contact the Wind Energy Ireland research team:

- Dr. Sarah Kandrot, Research Programme Manager: [sarah.kandrot@windenergyireland.com]

- Dáire Horgan, Senior Research & Development Analyst: [daire.horgan@windenergyireland.com]

- Patrick Cantwell, Research Communications Specialist: [patrick.cantwell@windenergyireland.com]

Follow WEI Research for the latest updates on LinkedIn:

SCAN ME

Delivering a successful shared marine space

By Tina Raleigh, The North Irish Sea Array (NISA)Project Development Director

Developing offshore wind is all about engagement and meaningful two-way communication, be it with your project team, officials, residents, community groups or local politicians.

A key stakeholder in the NISA project is the fishing community and we have been talking and listening to the fishers since the beginning of the project. Engagement with the fishing industry began in 2019, when NISA was just a concept layout, and was done primarily through the project team, working with a dedicated Fisheries Liaison Officer.

It is important to acknowledge that the offshore industry can deliver many benefits and enhance the sustainability for the fishing community. A country that is powered by clean, renewable energy will have long-lasting positive impacts for climate, energy security and biodiversity and this includes our shared marine space.

A key priority in achieving that goal is to ensure sustainable sharing of the marine space between offshore wind development and local fishers, prioritising meaningful dialogue and collaboration.

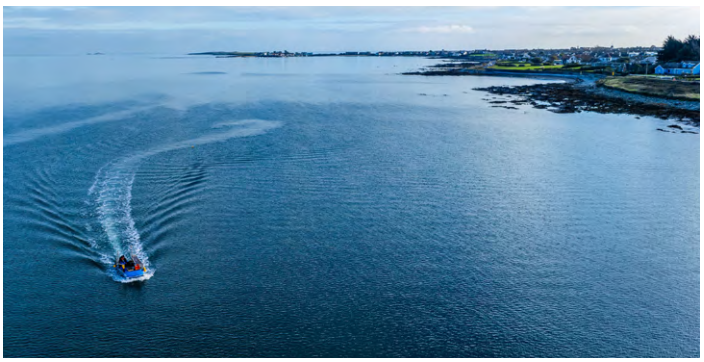
Each of the layout concepts that were considered for NISA during the design process considered issues such as turbine layout orientation, turbine spacing and array locations, and how they relate to fishing practices.

At each stage we took stock and endeavoured to adapt how we were developing the project, to allow NISA and the fishing community to successfully share the area of the sea being considered. The existing fishing practices in this area have been studied during reviews of design layouts, with the aim of making every effort to allow for the best possible outcomes for the fishing community. Protecting the current fishing positions of those making a living from the proposed wind farm area is a core priority for us.

In all survey campaigns to date, we have engaged to minimise disruption, and we remain cognisant and respectful that they are out there making a living. That is how we will continue to work. In establishing this relationship, we have found that recognising that the fishing industry has a unique, and sometimes difficult, history is an important place to start. Understanding and acknowledging this has been key to setting the foundation for a positive relationship. Taking time to understand the local fishing fleet in detail also allows for a deeper engagement with pro-active communication and mutual respect.

Building on the feedback that we have received over the years from the fishing industry and the understanding that we have developed, we are at an advanced stage of delivering an initiative that will deliver action on both the risks and opportunities that have been shared with us. In line with how we have worked to date, this initiative will not be NISA working on its own. It will enable the fishing community to be part of the decision-making process, in terms of how NISA can deliver the best outcomes if developed. It seeks to formally establish ways of working with the fishing community to deliver on mutually beneficial objectives like a shared marine space, the generation of renewable energy, sustainable food production and a healthy marine environment.

Co-existence between offshore renewable energy and other marine activities is achievable but there must be robust communication and most importantly, all stakeholders must know they are listened to and heard. The NISA team is committed to continuing our pro-active engagement with the fishing community and delivering a project that will benefit all.

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2025 EVENTS

05

Offshore Wind Conference

27th - 28th May

Clayton Hotel,
Burlington Road,
Dublin

06

ESI Annual Conference

26th June

Croke Park,
Dublin

09

Ireland Electrified Annual Conference

11th September

Radisson Blu Hotel,
Dublin

10

Wind Energy Expo Ireland

22nd - 23rd October

RDS
Dublin

11

Irish Renewable Energy Awards

13th November

Dublin Royal Convention Centre,
Dublin