Irish Wind Magazine

SPRING 2023 EDITION

INSIDE THIS ISSUE

Build Our Grid – New campaign begins

Ireland's Fair Seas

Wind farms cut spending on gas by €2 billion

WIND ENERGY IRELAND

PRINTED ON RECYCLED PAPER


WIND ENERGY IRELAND


TAKE THE QUIZ
Answer TRUE or FALSE
Press any button to start
Press RESET to go back to the beginning
Press NEXT to advance to the next question


In ONE day, ONE offshore turbine could generate enough electricity to power an average home for 85 years.
KINDLY SPONSORED BY:
coding wind park
DP ENERGY
IBERDROLA
WIND ENERGY IRELAND


Thank You
Bord na Móna

CONTENTS

Welcome to the Spring 2023 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

This is the decisive year for our 2030 targets.

In 2023 we will either start to see the plans and the strategies and the glossy publications turned into action or we will need to accept the targets set out in the Climate Action Plan will not be achieved. Under the new plan, revised in December, the targets for wind energy have been set as 6 GW of onshore by the end of 2025, growing to nine by 2030, alongside at least 7 GW of offshore of which two will be used for green hydrogen production.

This is not the only new plan setting out our pathway to a zero-carbon electricity system.

Last month I was proud to attend the launch of ESB Networks' exciting new strategy and hear its commitment to invest a billion euro annually for the next decade to support the energy transition.

EirGrid is busy working to update its Shaping Our Electricity Future strategy to reflect Ireland's growing ambition. The Government's Offshore Wind Delivery Task-Force is putting together new workstreams and new planning reform legislation has just been published.

Maritime Area Consents have been granted and the terms and conditions for the first Offshore Renewable Electricity Support Scheme are finalised.

This is all progress. It is all good work.

But it means nothing without turbines going in the ground and in the water. Plans to strengthen our electricity grid are only worth something if new cables, substations and overhead lines are being laid and built.

We can reach our targets

There must be no misunderstanding. We can reach our targets. We have the pipeline of projects to deliver the targets and even to go beyond them. We have the investment ready. We have the determination and three decades of experience.

What we need, is delivery.

Achieving our targets, cutting our carbon emissions in line with the law, requires nothing less than a national mobilisation of people and resources not seen since Thomas McLaughlin proposed in 1923 that an impoverished island emerging from four years of war should build the largest hydro-electric dam the world had ever seen.

I still have no sense that either the scale of what we are trying to do, and the tremendous opportunity it presents for this country, is properly and widely understood.

We find ourselves, over three and a half years since the first Climate Action Plan was published, still struggling with an electricity grid miraculously keeping the lights on and a broken planning system incapable of delivering energy projects quickly enough.

And while EirGrid and ESB Networks have clearly upped their game and are starting to deliver, to connect projects and bring forward grid reinforcements, our planning system remains completely unfit for purpose.

Planning

An Bord Pleanála is desperately under-resourced and it lacks the necessary skills and expertise. Onshore projects are spending more than a year in the planning system and then, if and when they secure permission, they are vulnerable to judicial challenge.
On more than one occasion last year when a judicial review was allowed of a grant of planning permission for a wind farm, An Bord Pleanála couldn't even defend their own decisions.

The Government's plans to reform the planning system, to try and speed up the process, are welcome and we will study the proposals with great interest but they are only a small part of the solution.

An Bord Pleanála needs a massive investment of funding and personnel. It does not matter what legislative reforms are introduced if there are not enough inspectors, ecologists and planners, backed up by a crack inhouse legal team, ready to implement them.

Regulator

And as we strengthen our planning system we need to see a similar level of focus on properly resourcing the CRU and ensuring it is delivering on its responsibilities.

Right across on and offshore renewable energy there is still an unacceptable level of uncertainty on exactly how new wind farms will be able to connect to the electricity grid.

EirGrid's essential work on system services, supporting the integration of renewable energy onto the system, is stalled as they wait for the CRU to put the resources in place while our members are struggling with a completely unworkable decision on Articles 12 & 13 of the Clean Energy Package which needs to be urgently revisited.

Ireland must connect an annual average of 560 MW of onshore wind alone between now and 2030. We have only once ever connected more than 500 MW in a single year. And on top of that we need to deliver an additional 7 GW of offshore wind.

We cannot deliver the Climate Action Plan without a robust planning system and effective regulation. Time is running out.

MEMBERSHIP **NEWS**

Welcome to new Sustaining Member: **CIP** *(Copenhagen Infrastructure Partners)*

Founded in 2012, Copenhagen Infrastructure Partners P/S (CIP) today is the world's largest dedicated fund manager within greenfield renewable energy investments and a global leader in offshore wind. The funds managed by CIP focuses on investments in offshore and onshore wind, solar PV, biomass and energy-from-waste, transmission and distribution, reserve capacity, storage, advanced bioenergy, and Power-to-X.

On behalf of its fund Copenhagen Infrastructure IV K/S (CI IV), CIP recently acquired 50% of Statkraft A/S's offshore wind portfolio in Ireland. The acquired portfolio, with an expected capacity of 2.2GW, is comprised of the North Irish Sea Array (NISA) and Bore Array projects, with a combination of fixed bottom and floating offshore foundations. As the exclusive offshore wind development partner to CIP, Copenhagen Offshore Partners will co-lead project development activities.

Contact Details:
Phone: +45 70 70 51 51
Email: cip@cip.dk

Blackhall & Powis Marine Limited
Blackhall & Powis Marine Limited (B&P) are the leading provider of fisheries Liaison, as well as marine and operations support services to the offshore wind and renewables sector.

Led by Tommy Finn, a well-known fishing skipper with over 40 years' experience of fishing around Ireland, the North Channel, Irish and Celtic Sea Tommy has assembled a Fisheries Liaison Team that is second to none, including Michael Sutherland who has over 35 years' experience leading in the fisheries interface role, including Kinsale Head, Corrib Gas Developments and the Bord Gáis Transport Pipelines between Ireland and Scotland.

Michael has been involved in providing successful fisheries liaison support for the Cobra Floating Offshore Wind farm off the Scottish East Coast- at 5 Floaters- currently the largest offshore floating wind farm in the world.

Blackhall & Powis believe they are ideally placed to support the Irish renewables sector as it grows offshore, particularly in the crucial arena of establishing, developing and implementing strategies for gaining the support, cooperation and trust of fishing communities; so vital to successful project delivery.

Tommy is proud to lead a Fisheries and Marine team, which is a natural and complementary extension to Blackhall & Powis on-going provision of extensive land agency, planning and community services to the renewables and sustainable energy sectors in Ireland, the UK and elsewhere.

Contact Details:
Tommy Finn
tommyfinn@blackhallpowis.com
Tel: +44 7787 503119

Iarnród Éireann
Located in the Southeast of Ireland and less then 90 minutes drive from Dublin, Rosslare Europort is now Ireland's number one port for direct Ro-Ro / Pax services to Europe with 32+ services operating to and from Rosslare to Bilbo, Cherbourg, Le Havre, Dunkirk and Zeebrugge every week. The port also operates 56 UK weekly services to and from the ports of Fishguard and Pembroke.

Rosslare Europort is ideally located and unlike many other ports has the capability of being expanded and significant investment is taking place to enhance current facilities at the port and to build Ireland's National Hub for ORE developments in the Irish and Celtic Seas.

Contact Details:
www.rosslareeuroport.ie

Hitachi Energy Ireland Ltd
Hitachi Energy serves customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future.

We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 40,000 people in 90 countries.

Contact Details:
Hitachi Energy Ireland
ie-sales@hitachienergy.com
Tel: +35315134198

Regnum Renewables Developments Limited
Regnum Renewables Developments Limited (RRDL) is a newly established renewable energy company, founded to support Ireland in its journey to carbon neutrality.

RRDL will focus on the development of onshore wind, solar and battery storage sites throughout Ireland.

The founders of RRDL have extensive in-depth experience in the renewable sector and their complementary skillset across all aspects of renewable energy development and financing is an invaluable differentiator for the company.

Contact Details:
Michael O'Sullivan,
Michael@regnumrenewables.ie
Tel: 087 340 9935

Royal HaskoningDHV (HaskoningDHV Ireland Limited)
Royal HaskoningDHV is an independent, international engineering and project management consultancy with 140 years of experience delivering major projects. Royal HaskoningDHV is one of the largest and most successful consultancies supporting offshore wind development. With 20 years of experience, our offshore wind environment teams have now successfully delivered over 14 GW of offshore wind EIA and consents in the UK. We have a wider global portfolio supporting 25 GW of offshore wind projects. Alongside our EIA teams, our dedicated offshore wind engineering team supports offshore wind developers, providing owners engineering services including project feasibility and buildability assessment, concept design and project design development.

Our 30-year Irish heritage is rooted in the design, consent and delivering of major port, flood alleviation and water infrastructure projects. We are also very proud of our more recent track record supporting the development and consent of major Irish offshore wind projects.

Contact Details:
Alistair Davison
alistair.davison@RHDHV.com
Tel: +44 7500 062869

Flotation Energy
Flotation Energy plc delivers clean, green, renewable energy by using our expertise in floating and fixed offshore wind and the energy transition, supporting achievement of carbon-neutral commitments. Perhaps best known for our involvement in Kincardine – the world's largest grid connected floating offshore wind farm; our team has progressed from pioneering demonstrator energy transition and floating offshore wind projects to delivering fast-tracked commercial scale offshore wind and energy transition projects. Flotation Energy is in a strong position to make use of its unique combination of experience, expertise, and insight in offshore wind to identify and develop fixed and floating offshore wind projects. Our business model is to identify offshore wind energy prospects in key target markets and progress these through the complex development process to full scale commercial projects that minimise risk and maximise value. Our existing portfolio of projects in development includes fixed bottom offshore windfarms (480 MW Morecambe; 1200 MW Greystones; 1,500 MW Seadragon) and floating offshore windfarms (100MW White Cross, 1,500 MW Blackwater; up to 500 MW Green Volt and 1500 MW CENOS,).

Contact Details:
Barrie McMullin
Tel: +44 (0) 1224 548 659
corporatecomms@flotationenergy.com

Siemens Energy
Siemens Energy is one of the world's leading energy technology companies. The company works with its customers and partners on energy systems for the future supporting the transition to a more sustainable world. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. More than 50% of the portfolio has already been decarbonised. Currently the majority shareholder in the company Siemens Gamesa Renewable Energy (SGRE), Siemens Energy is presently buying out the remaining shares and plans to integrate SGRE business and operations into the group in the first half of 2023, making Siemens Energy a global market leader for renewable energies. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs around 91,000 people worldwide in more than 90 countries.

Siemens Energy has a long track record of successfully delivering large energy projects in Ireland dating back to the Ardnacrusha project in 1925 for ESB. Many of Ireland's wind and conventional generation projects have been developed and energised with Siemens Energy technology, including Poolbeg, Moneypoint, Aghada and Kellystown 220kV GIS substation in Dublin.

Siemens Energy Irish Operations teams are currently working to deliver two large turnkey HVDC interconnector projects, the Greenlink 500MW connecting Ireland with the UK and the 700MW Celtic connecting Ireland with France, as well as multiple grid stabilisation solutions including STATCOMS and Synchronous Condensers. We are also providing early engagement and proposals to all the offshore wind developers in Ireland to develop both on and offshore solutions for their projects.

Contact Details:
Daniel Greenan
daniel.greenan@siemens-energy.com
www.siemens-energy.com.

Strengthening the stability and resilience of the Irish grid

Katie Wall, Lead Engineer, ESB Engineering & Major Projects, outlines the role that ESB's new Synchronous Compensator will play in delivering a Net Zero future

My name is Katie Wall and I am the Lead Engineer for ESB on the Moneypoint Synchronous Compensator project. Having a keen interest in STEM subjects in secondary school, I made the decision to leap from Listowel, Co Kerry to Dublin. After completing my undergraduate and masters degrees in electrical energy engineering at UCD, I joined ESB as an electrical engineer on the graduate programme in 2016.

So far I have worked on a range of technologies within new and existing ESB generation fleet here in Ireland and also abroad. In late 2020, I joined the Moneypoint Synchronous Compensator project.

ESB's historic Moneypoint generating station in Co Clare has played a critical role in the country's energy supply for almost 40 years. Today, it is at the centre of our ambitious drive to achieve net zero by 2040. ESB saw a clear opportunity to transition Moneypoint from being a cornerstone of the electricity system as a fossil fuel plant to being a cornerstone of a renewables future for Ireland.

The project, Green Atlantic @ Moneypoint, will see the site transformed into a renewable energy hub, helping Ireland to become a leader in green energy production. The multi-billion-euro investment will see a range of the latest renewable technologies deployed over the next decade. This will include floating offshore wind and green hydrogen production and storage, which will have the capacity to power 1.6 million homes, once complete, continuing ESB's significant investment in the Mid-West region.

We were delighted to welcome Minister Eamon Ryan TD here in November for the official launch of phase one of the project – our new €50 million synchronous compensator. This major piece of technology was delivered alongside our partners Siemens Energy Ltd. ***This is the first synchronous compensator in Ireland and its flywheel will be the largest of its kind anywhere in the world.***

So much work went into the project from the team – from the transportation via barge of the heavy equipment to our local jetty, completing construction within a busy operating power station, to bringing the unit from installation into testing and operation.

I am regularly asked what exactly a synchronous compensator, or condenser, is and what does it do. Historically, Ireland's electricity grid consisted mostly of conventional generation. Think of it like a heavy steam roller travelling on a motorway, hard to stop or knock off balance. As we move forward and replace conventional fleet with more renewables, our grid becomes more like a bicycle trying to travel along a tightrope – easier to stop or knock off balance. So, we now need a safety net to allow us to produce electricity from renewables but still ensure the grid remains stable at all times. That's where the synchronous compensator comes in. It is a safety net for the grid at times of high renewable generation.

A synchronous compensator removes the fuel, the combustion process and turbine from the equation that you would see in a conventional power station. Instead, you take a small amount of electricity in from the grid to start up, synchronise and allow the synchronous compensator to remain connected to the grid.

There is no electricity output from a synchronous compensator. When it is synchronised to the system, it provides two key stability services to the grid – inertia and reactive power.

The synchronous compensator and flywheel in Moneypoint provides 4000 MW of inertia to the grid which is the equivalent inertia contribution of two of the existing thermal units in Moneypoint. Onshore and offshore wind, and solar, play an important role in producing clean electricity but they do not provide this inertia and their output can be affected by sudden frequency events unless inertia is provided elsewhere on the system.

Due to the intermittency of renewables, grid stabilisation technologies have an increasingly important role in a successful energy transition. With the rising share of renewable power and the shutdown of conventional plants, this is only the beginning for synchronous compensators as part of grid operations in Ireland.

Katie (second from right) pictured alongside Minister for the Environment, Climate and Communications, Eamon Ryan TD, to welcome ESB's investment in the new €50 million synchronous compensator at Moneypoint Generating Station, Co Clare in November

Most significantly, the Moneypoint synchronous compensator with flywheel is a cost-effective and zero-carbon solution that will further strengthen the stability and resilience of the Irish grid and support ever-more renewables coming on stream, all in line with ESB's Driven to Make a Difference: Net Zero by 2040 strategy.

Learn more about ESB's Green Atlantic @ Moneypoint project at www.esb.ie

WIND ENERGY IRELAND

WIND FARMS CUT SPENDING ON GAS BY €2 BILLION IN 2022

Wind provided 34 percent of Ireland's power last year.

Irish consumers avoided paying €2 billion for gas last year because the country's wind farms provided 34 per cent of our electricity, up four points on 2021. The figures come from a new analysis published in January by energy specialists Baringa entitled *Cutting Carbon, Cutting Bills: Analysis of gas savings delivered by wind farms in 2022.*

The Baringa analysis found that without wind energy, Ireland would have had to spend an additional €1.65 billion on gas for power generation in 2022 and an extra €340 million on carbon credits to produce electricity by burning that gas.

The savings were particularly significant on days with extremely high gas prices and large volumes of wind energy on the electricity system. On a single day – Tuesday 8 March – the combination of high winds and soaring gas prices delivered a total avoided cost of €43 million in just 24 hours.

Since Ireland imports around 70-75 per cent of our annual gas demand the likelihood is that the vast majority of the €2 billion which would, without wind energy, have been spent on gas would have been imported from Britain.

The report also looked at the role of wind energy in Northern Ireland and identified additional total savings there of £495 million.

Pride

"Our members can be extremely proud of the role Irish wind farms are playing in the middle of an energy crisis driven by our dependence on imported fossil fuels," said Noel Cunniffe, CEO of Wind Energy Ireland. "Every day Irish wind farms are protecting consumers while also cutting the carbon emissions that are driving the climate emergency.

"The best way out of this energy crisis is to accelerate the development of renewable energy, to ensure more of our power is provided here, at home, creating Irish jobs and supporting local communities.

"The Government's plan to reform the planning system by putting in place mandatory timelines for decisions needs to be fully supported and we need total political backing, right across the Oireachtas, for EirGrid's strategy to reinforce the country's electricity grid.

"We cannot build the wind farms we need without a planning system that is fit for purpose and we cannot get the power to where it is needed without a much stronger electricity grid. Both of these issues must be top priorities for all political parties in 2023."

Wind's second best year ever

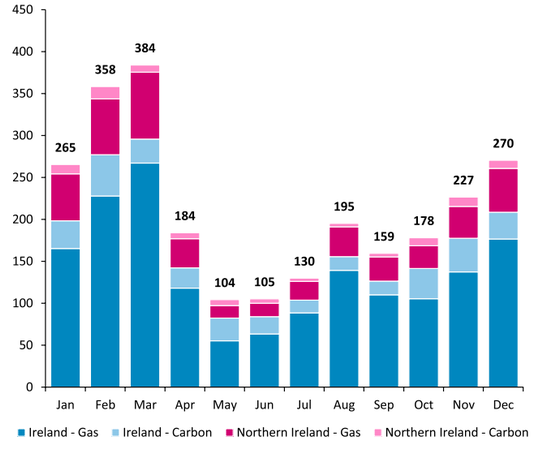
Wind Energy Ireland also confirmed that the island's wind farms provided 34 per cent of the country's electricity in 2022, a total of 13,213 gigawatt-hours (GWh), which is equivalent to the electricity consumption of nearly 3 million Irish families.

Wind energy generation rose from 11,566 GWh in 2021 and was only slightly behind the record set in 2020 of 13,696 GWh.

"The faster we can build and connect renewable energy onto the electricity system the more secure we make Ireland's energy supply, the more money we put back in your pocket and the more we cut our carbon emissions," Mr Cunniffe pointed out.

"If the Government will help us to build more wind farms, and faster, we can deliver the targets set out in the Climate Action Plan. We can build an Ireland that is energy independent, delivering warmer homes, cleaner air and tens of thousands of new jobs, a leader in tackling the climate emergency and in supporting local communities."

Monthly Cost Savings | January – December 2022
€m, nominal



Monthly savings in euro delivered by wind energy in Ireland and Northern Ireland in 2022.

WIND ENERGY IRELAND

ANNUAL WIND ENERGY REPORT 2022

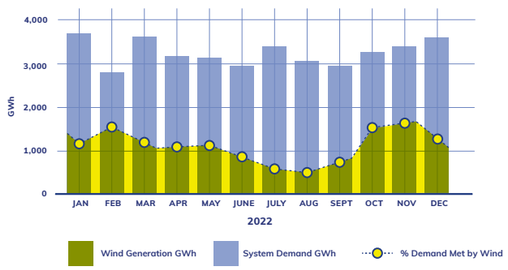
34% of Ireland's electricity from wind in 2022.

SECOND BEST year on record for wind energy.

280 MW of new wind farms connected in 2022.

WIND ENERGY PROVIDED 34% OF IRELAND'S ELECTRICITY IN DECEMBER 2022.

WIND GENERATION + DEMAND MET BY WIND 2022



WIND ENERGY CUTS THE PRICE OF WHOLESALE ELECTRICITY.

Average Price of Electricity in Ireland in December 2022:

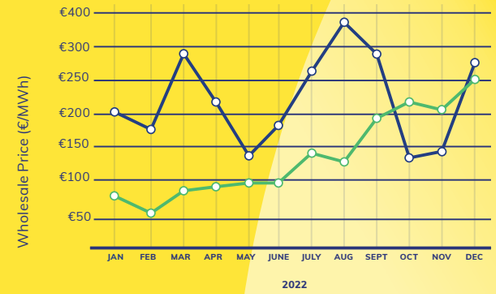
€ 276.52 PER MEGAWATT HOUR

In December 2022 the Average Price of Electricity on the days with:

MOST WIND ENERGY
€ 193.42 PER MEGAWATT HOUR

LEAST WIND ENERGY
€ 320.16 PER MEGAWATT HOUR

MONTHLY PRICE COMPARISON



References:

Generation provided by MullanGrid based on EirGrid's SCADA data which may change slightly as additional metred data is confirmed. Market data provided by ElectroRoute.

A megawatt-hour (MWh) is a unit of electricity. A normal Irish household will use approximately 4.6 megawatt-hours of electricity in a single year. A 3 MW turbine producing electricity at maximum capacity for an hour will produce 3 megawatt-hours. A gigawatt-hour (GWh) is 1,000 MWh.

WIND ENERGY IRELAND

www.windenergyireland.com

Work in Wind

The Work in Wind training and work placement program trains participants to work in renewable policy, renewable planning, grid transmission and energy market trading, community engagement and more. After completing the training, the students undertake a work placement with a host company. The work placement is designed to give them vital first-hand experience and to demonstrate their skills, to build their network and hopefully, to be the first step in gaining a career in this fast-growing industry.

Program Outline

Personal Development Coaching
CV Development & Competency Interviews
Workplace Resilience
Communication & Interpersonal Effectiveness
TTI Success Insights Engagement Assessment & Report which Identifies
Introduction to Terminology & Foundational Understanding
Industry Introduction to onshore and offshore wind
Life cycle of a Wind Farm
Asset Management in the Wind Sector a Foundation Course
Seminar with industry experts
Bespoke and in depth industry modules
Overview of electricity grid policy in Ireland
Overview of electricity market policy in Ireland
Overview of community engagement/public affairs in Ireland
Overview of Biodiversity & Environmental Management
Overview of planning systems for onshore and offshore in Ireland
Work Placement
Work Placement with industry companies

Interested in hosting an intern?

Placements can be office work or a group or solo project. CVs are available on request. We can facilitate an introductory meeting or interview with trainees in advance of work placements starting.

Wind Turbine Technician

The Wind Turbine Technician program delivers a suite of GWO safety and technical certified training, wind sector overview and communication skills workshops. Technicians obtain the certificates required to go out on site after training. After completing the training, the newly qualified wind turbine technicians undertake a work placement with a host company. The work placement is designed to give them vital first-hand experience and to demonstrate their skills, to build their network and hopefully, to be the first step in gaining a career in this fast-growing industry.

Program Outline

Personal Development Coaching
C.V and Interview skills
Resilience in the work place
Effective communication
Introduction to Terminology & Founding Understanding
Introduction
Turbine Awareness Training
Life cycle of a Wind Farm
Workshop with Technicians working in the industry and industry experts
Globally Recognized Certified Health & Safety Training
GWO Basic Safety Training (BST)
GWO Advanced Rescue, Hub, Spinner and Inside Blade rescue (ART-H)
Wind Turbine Safety Rules (WTSR)
Globally Recognized Certified Technician Training
GWO Basic Technical Training (BTT)
Work Placement
Work placement with industry companies

Interested in hosting a technican?

CVs are available on request. We can facilitate an introductory meeting or interview with trainees in advance of work placements starting to ensure best fit.

- We are also looking for speakers to give back by talking about their career journey and advice for people starting off. -

Please contact ledi@windenergyireland.com to register your interests.

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

An Roinn Breisoideachais agus Ardoideachais, Taighde, Nuálaíochta agus Eolaíochta
Department of Further and Higher Education, Research, Innovation and Science

Upcoming Resources

H'ALT Licensing Enterprise Level	IOSH PSCS
UCD Energy Systems Micro credentials	Real Project Management for Renewable Energy
Renewable Energy Graduate Accelerator Programme	IOSH Managing Safely for Solar
Post Graduate Diploma in Environmental Impact and Planning	BESS Workshop
High Voltage Switching and Operations	BESS for Investors, Lenders, and Insurers
Sustainability in Practice for Business Enterprise (white Belt)	GWO Basic Safety Training
Micro solar PV Systems Implementation	Introduction to Battery Energy Storage Systems
Electrical Installation of Micro Generators	Introduction to High Voltage
Domestic BER	Operations and Management HV Electrical Installations
Energia Graduate Programme training support	IPMA® Strategic Project Programme Management Diploma
Sustainability & ESG in Practice - Strategy Development and Deployment (Yellow Belt)	Energy Storage Fire Safety
Sustainability and ESG for Business Success - Strategy and Project Development, Deployment and Reporting (Green Belt)	Cyber Security in the Energy Sector
Offshore Development and Consenting	Introduction to Energy Markets
Heat Pump Installer	Clean Energy Package
Introduction to Green Hydrogen	Policy & Research Dissemination
Renewable Energy Finance	RESS 2 and ORESS 1 Auctions and how they work
Policy Forums	GWO Basic Technical Training
Sustainable Green Organisation	GWO Basic Safety Refresher Training
Corporate Power Purchase Agreements	IOSH Managing Safely for Wind Power (online refresher)
IOSH Managing Safely for Wind Power	Project Finance for RESS
Fundamentals of ESG Materiality Assessments	GWO Advanced Rescue Training
Energy Essentials in Practice for your Business	Grid Connection Process in Ireland
Sustainability Financial, Technical and Management Funding and Supports	Supergrids and Interconnectors
Corporate Sustainability Reporting Directive (CSRD) Essentials	Technical/Incident Report Writing
Get started on your journey to a zero-carbon business	Overview in Wind

Did you know that you can save up to **30%** on the cost of training and development for your company by booking through Green Tech Skillnet?
Please visit https://greentechskillnet.mykademy.com/ to book or alternatively contact training@windenergyireland.com

If there is a course that is not listed or you would like to run some training in house please contact training@windenergyireland.com.
We are also looking to develop out training bundles to deliver a rapid translations to new roles in the energy sector for new recruits. If you are interested in participating in a focus group for a particular job role, please contact Mark Ruane at mark@windenergyireland.com

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

An Roinn Breisoideachais agus Ardoideachais, Taighde, Nuálaíochta agus Eolaíochta
Department of Further and Higher Education, Research, Innovation and Science

New campaign to mobilise support to ‘Build Our Grid’

Wind Energy Ireland is part of a growing number of organisations, businesses and individuals working together to launch a new campaign later this year to support the development of Ireland’s electricity grid infrastructure.

The Build Our Grid campaign will provide an opportunity for members of the public, civil society, the business community and climate activists to show their support for a stronger electricity grid which will be absolutely essential to decarbonising our energy supply.

“We cannot have a zero-carbon electricity system without an electricity grid that supports that,” explained Wind Energy Ireland’s Justin Moran.

“Our grid was built to facilitate twentieth century fossil fuel generators. Renewable energy has different needs and requires more flexibility. We urgently need to strengthen the grid to accommodate all available renewable energy – wind and solar – and to help protect consumers from international fossil fuel prices.”

Already significant volumes of renewable energy are lost every year because the electricity grid is unable to accommodate it. While final figures for 2022 have not yet been published energy analysts expect that around 9% of total potential wind energy generation last year was lost due to local network constraints or limits on the system.

“Every time a wind farm, or as more of them connect a solar farm, is switched off because the grid is unable to take the power then we have gas generation stepping in,” said Justin. “This means more of the carbon emissions that are driving the climate emergency, it means higher electricity prices for consumers who can’t benefit from low-cost renewables and it increases our dependency on fossil fuel imports.”

New strategies

EirGrid and ESB Networks have each published their plans for how they will reinforce the grid in the coming decade.

EirGrid’s *Shaping Our Electricity Future* strategy identifies 48 separate projects due to be completed by the end of 2030. These include upgrading existing infrastructure along with building new substations, new underground cables and installing new technologies on existing lines.

In its strategy launched last month ESB Networks committed to accelerate the connection of new wind and solar farms while delivering “major investments in network infrastructure at all voltage levels, from low voltage to high voltage, such as overhead lines, cables, transformers and substations”.

Ireland will need every single project identified in EirGrid’s *Shaping Our Electricity Future* strategy but even with that we are still emitting more than 70 million tonnes of carbon over the decade so those strategies must be delivered but we also need to start thinking beyond them.

A report from Wind Energy Ireland last year, *Bridging the Gap*, identifies several additional existing power lines which must be upgraded and highlights the need for smart grid technologies like Dynamic Line Rating which allows the electricity system to carry more power when the weather is cooler.

Replace the back-up

Our fossil-fuel based back-up must also be replaced. Ireland currently uses gas and coal generators to back-up the electricity system and ensure it remains secure. We must start work now to replace these with low and zero-carbon technologies like battery storage, new interconnectors and demand-response technologies which lower electricity demand at times of tight supply.

“Ireland is not an easy country in which to build energy infrastructure,” said Justin, “and a number of projects in the 2010s, which were badly needed, did not succeed. The Build Our Grid campaign will make clear to politicians, journalists and people right across Ireland that there is support for investment in our electricity grid.

“Irish people want cheaper power. They want cleaner power. And they want to stop relying on other countries for fossil fuels to keep the lights on. They want to be energy independent. We can do this but only if all of us who believe in Ireland’s energy revolution come together to make our voices heard.”

For more details on the Build Our Grid campaign contact Justin Moran at justin@windenergyireland.com**.**

Scaling up our digital presence

One of Wind Energy Ireland’s key strategic objectives is to build powerful communities. We do this by telling Ireland the story of wind energy – the benefits it’s bringing and will continue to bring to our way of life, our climate and our energy bills. One of the ways we’re growing support for wind energy is via our digital channels.

Total website visitors: 34,000

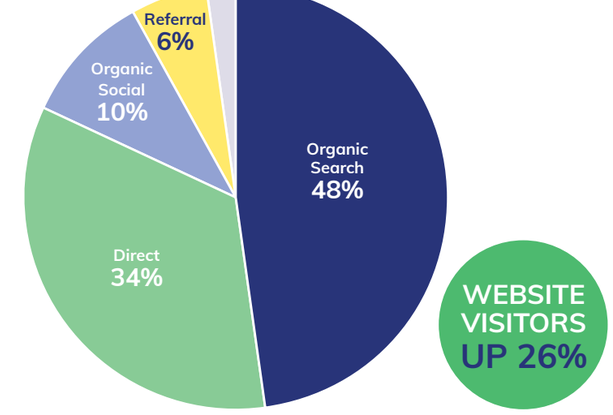
Total social media followers: 35,886

Social media growth: 15% in followers

Total reach: 1,439,102

Part of our strategy is to engage with and convert active and latent climate advocates to become wind energy champions!

We have joined **Instagram** and **TikTok** where we can connect with groups of people – especially younger demographics – with similar interests. We are building a presence using both organic and paid content to reach new audiences.



WEBSITE VISITORS UP 26%

We have also expanded our main website with new education pages, wind facts & stats and monthly wind figures. We are spreading the word to a wider audience through investing in search engine optimisation (SEO) and targeted digital advertising.

First Instagram Campaign

We ran our first influencer partnership late last year with the sustainability advocates at The Useless Project who shared information with their Instagram audience about the basics of wind energy, how to chat to friends and family about it, and with our help they answered some great questions from their 48,000+ followers.

*figures are based on July – December 2022

Last Halloween, we ran a short multi-channel digital advocacy campaign, There's nothing scarier than climate change. The messaging, targeting 18-30 year olds with an established interest in climate topics, promoted wind energy as part of the solution to the climate emergency. The creative was mostly short video messages using trending audio on Instagram reels and TikTok. Over seven days, we reached over 250,000 individuals across TikTok, Instagram, Twitter, Facebook, YouTube and the Google Display Network. The landing page saw 4,000 visitors and the posts themselves had 2,500 engagements.

WIND ENERGY IRELAND

IRISH WIND INDUSTRY AWARDS

sse Renewables

All systems go for Irish Wind Industry Awards 2023

Every year more than 400 guests come together to celebrate people in our industry who represent the very best of who we are – the innovators and the pioneers, those who write our success stories and the architects of Ireland's clean energy future.

From a small wind farm on the coast of Mayo in 1992 our colleagues have built an entirely new industry employing thousands of people, cutting our carbon emissions and making our country more energy secure.

The Awards night it is a celebration of who we are, of what we have accomplished and, most importantly, what we will achieve.

Shortlisted Candidates announced

This year the Irish Wind Awards will take place on Friday 10th March, in Killashee House Hotel, Naas. Check out the shortlisted candidates in each of these categories:

- 1. Wind Energy in the Community Award - Sponsored by Ocean Winds
- 2. Exemplary Health and Safety Performance Award - Sponsored by Bord na Móna
- 3. Excellence in Project Delivery Award - Sponsored by ElectroRoute
- 4. Best Contractor Award - Sponsored by Vestas
- 5. Leading Legal/Financial Consultant Award - Sponsored by Nordex Energy Ireland
- 6. New Market Entrant Award - Sponsored by A&L Goodbody
- 7. Talent & Skills Development Award - Sponsored by Green Tech Skillnet
- 8. Young Person of the Year Award - Sponsored by Energia Renewables
- 9. Champion of Renewables Award - Sponsored by SSE Renewables

Scan me for more information!

Sponsors:

Media sponsor:

windenergyireland.com

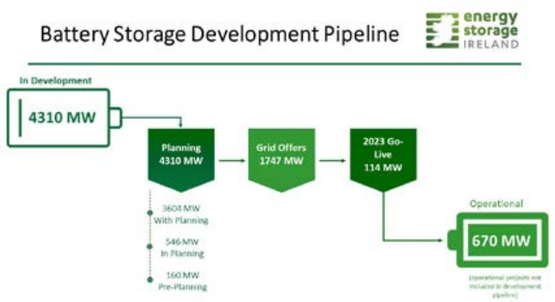
Latest ESI Survey shows Battery Storage Pipeline now over 4,000 MW

Author

Bobby Smith

Head of Energy Storage Ireland

The results are in for Energy Storage Ireland's latest storage pipeline survey and they show that the pipeline of battery projects has increased substantially since our 2021 survey. The volume of operational batteries in Ireland and Northern Ireland now stands at 670 MW. Given that there was virtually no large-scale battery storage in operation just two years ago, this is an incredible amount of development in a short space of time and is a testament to the hard work and enthusiasm of the industry. The results also show there is an additional 114 MW of batteries in construction and anticipated to go-live in 2023.



"The most striking outcome of the survey is that the volume of projects with planning or in the planning system has nearly doubled going from 2,000 MW in 2021 to now over 4,000 MW."

Most of these projects are targeting multi-hour durations which reflects the longer-term trend in the market away from "DS3 only" batteries towards systems that can access more of alternative revenue streams in the energy and capacity markets. It is also good to see more projects now with grid offers or expecting a grid offer through ECP 2.3 which means the grid connection process is finally starting to process storage in larger volumes and clear some of the backlog. The DECC consultation on an energy storage policy framework for Ireland will also be important in setting out the long-term strategy and policies to facilitate the delivery of storage projects here.

ESI launches Protecting Consumers Report

Our latest report *Protecting Consumers* with energy market experts, Baringa, shows that batteries in Ireland and Northern Ireland can reduce wholesale electricity prices for Irish consumers by up to €35 million.

Currently, operational battery storage projects are not able to sell the energy they store into the wholesale electricity market. This is due to limitations in EirGrid and SONI's market systems and the TSOs' current policy to hold all batteries back for reserve in case there is an issue on the power system.

The study analysed the winter period October 2022 – March 2023 and showed that enabling battery storage projects to compete in the market at times of high electricity demand would reduce Ireland's dependence on imported fossil fuels and help to protect Irish electricity consumers by reducing electricity prices. By displacing the most expensive fossil fuel generators at times of peak demand, batteries would save up to €35 million for Irish consumers.

ESI is currently engaging with the Regulators and TSOs on fixes to market systems and policies that would enable battery storage to participate in the market and unlock these benefits for consumers. You can find the full report on the ESI website energystorageireland.com

For more information on the work of Energy Storage Ireland or to get details on membership, please contact Bobby Smith at info@energystorageireland.com

Wind Energy Ireland Policy Updates

Do you know what we do?

The policy team currently manages twelve committees – Markets, Grid, Planning, Net Zero, Offshore, Offshore Grid, Offshore Consenting, Community Engagement, Health & Safety, Asset Management, FLOSH and Green Hydrogen. WEI also collaborates on storage policy issues with our colleagues in Energy Storage Ireland, and on all-island matters with Renewable NI.

Each committee contains several working groups in which cross-committee subject matter experts participate and contribute to discussions and workstreams on a range of industry-related issues. These range from responding to public consultations, to commissioning economic analyses and reports, to identifying policy changes which will deliver renewables at lower costs to the consumer. The working groups provide members with an opportunity to influence key stakeholders and policy decision-makers, via the WEI platform, and therefore help to shape the direction of energy policy in Ireland. Described below are several key workstreams currently active across various WEI policy working groups and committees.

WEI Member can apply to join a committee by emailing amanda@windenergyireland.com

Wind energy delivering for the Irish consumer

As 2023 begins and we draw another year closer to our 2030 targets, it brings an important opportunity to reflect on what has been fantastic twelve months for the wind energy industry. As a direct result of wind energy, Irish consumers avoided paying €2 billion for gas over the course of last year. Wind provided an impressive 34% of Ireland's electricity in 2022, our second-best year on record, and we are well-placed to build on this in the years ahead with close to 300 MW of new wind farms having already been delivered this year.

We also have an extremely strong pipeline of projects, both onshore and offshore eager to follow suit in the coming years and help drive Ireland towards achieving a zero-carbon electricity system as quickly as possible. From a policy perspective, every year between here and 2030 becomes make-or-break in terms of meeting our targets; we need all key stakeholders working to maintain the momentum of 2022, provide the ambition and certainty to the industry, while ensuring bottlenecks are addressed and unnecessary barriers are removed.

A new year, new targets to achieve

The final days of 2022 saw Government taking an important step towards this as it published its long-awaited update to the *Climate Action Plan*. The updated document includes several very welcome increases in ambition, for wind energy specifically, and indeed for the deployment of renewables and the wider decarbonisation of the electricity sector more generally.

The electricity system has been handed the sizable task of achieving a 75% reduction in CO2 and reaching 3 million tonnes of CO2 by the final year of the 2026-2030 carbon budget period. To put this in context, our 2021 emissions were in the region of 10 million tonnes of carbon, and so a rapid reduction of carbon from the system every year between now and 2030 is crucial. This means accelerated and consistent deployment of renewables over the course of the decade to ensure we remain within our carbon budgets – onshore wind and solar being crucial to achieving this, with offshore making an enormous contribution later in the decade.

The wind industry will be central to delivering on Ireland's Climate Action Plan ambition. A new increased target of 9 GW for onshore wind has been set for 2030, with a sub target of 6 GW set for 2025. Additionally, the revised plan has reaffirmed the Government's commitment to the 7 GW offshore wind target, 2 GW of this to be specifically to produce Green Hydrogen. We have the high-level Government ambition, and we have more than enough projects in the pipeline to meet these targets; it is crucial now to ensure strong policy frameworks are in place that will enable us to deliver for 2030.

A Planning System fit for 2030?

The increased ambition in CAP23 is of course extremely welcome from an industry perspective, but with increased ambition, thoughts immediately turn to how we can ensure that the projects we need to achieve these targets can progress as efficiently through the planning system as possible. For this reason, the publication in late December of the outline of the proposed *Planning and Development Bill* is very welcome and is something with real potential to accelerate the deployment of renewable energy projects and address many of the issues that have frustrated this industry over the years.

Wind Energy Ireland has been extremely consistent on one point in particular - we cannot build the onshore and offshore wind farms we need to cut our carbon emissions and meet government targets unless applications for planning permission are processed much more quickly. The proposal in the outline of the Bill to put timelines in place for planning decisions to be made, for example, would be a huge boost and very much in line with the intent of the European Commission's *REPowerEU strategy*, launched in response to the energy crisis which has been a constant in policy discussions over the course of 2022.

WEI look forward to seeing the full draft of the Bill in early 2023, but ultimately, even with the best of intentions, this will all come down to resources and whether key actors are adequately equipped to enable industry to deliver on the Government's ambition. Reforms to the planning system must go hand-in-hand with the allocation of the needed resources in An Bord Pleanála, the NPWS and for key environmental stakeholders.

Looking ahead to another big year for renewable energy policy

An exciting aspect of 2023 are the two important upcoming auctions. Firstly onshore, and the third iteration of the Renewable Electricity Support Scheme (RESS 3) provides an important opportunity for us to get more onshore wind and solar through the auction and on the road to delivery. Additionally, November saw the publication of the Terms and Conditions for Ireland's first offshore auction, ORESS 1. This will run at the end of April, and by early May we should have a sense of which projects will be the first Irish offshore projects to be granted a RESS contract.

2023 looks likely to be another year packed with policy delivery. We await the publication of the updated version of EirGrid's *Shaping our Electricity Future Strategy*, a crucial document that will inform of how EirGrid plans to reinforce our grid to accommodate huge volumes of onshore and offshore renewables by 2030. Additionally, in the early parts of the year we are likely to have clarity on several key policies that have been long-awaited in our industry, for example the Government's new hydrogen strategy, the blueprint for the second phase of offshore wind projects, and a decision on a new firm access policy from the SEM Committee.

EU policy heats up

On top of this, EU-level energy policy continues to heat up as the European Commission prepares to come forward with legislative proposals to reform the electricity market in March, while the REPowerEU provisions on permitting enter negotiations between the European Council and the European Parliament. This follows the introduction of an electricity market price cap, and measures to accelerate the deployment of renewables via Emergency Council Regulations towards the end of last year. All of these have the potential to have a profound impact on Ireland's energy policy landscape and it will be important to keep a close eye on developments in Brussels over the course of 2023.

What are people saying about wind energy?

Every year we carry out a survey with Interactions Research to understand how Irish communities feel about wind energy and how this translates to attitudes and behaviours. In 2022, we took this a step further and organised focus groups with people who live in areas where wind farms might be developed in the future.

The first focus group discussed onshore wind and met in November 2022.

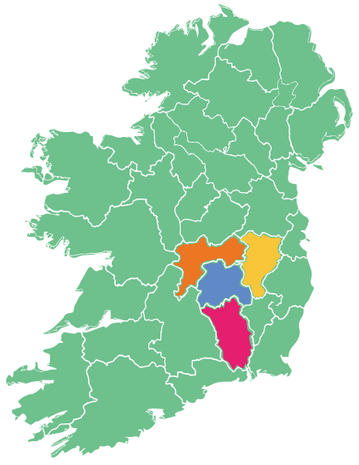
The participants, who came from Offaly, Kildare, Laois and Kilkenny, shared their attitudes and opinions on wind farms in general and how they would feel if a wind farm was being developed locally.

Offaly

Kildare

Laois

Kilkenny



Early findings

Our analysis of the focus group is a work in progress, but we wanted to take this opportunity to share some of our early stage learning:

- There is a real deficit of understanding of the basics about wind energy, how the planning system works and other associated topics.
- Concern about climate change was real, in fact it was palpable and very high. We learned that concern about climate change is absolutely not solely the preserve of the under 35s.
- Climate change is perceived to be a big, overpowering topic – people find it difficult to break it down into actions of real value that they personally can take to make a difference.
- Preventing further, damaging climate change and building sustainability into our daily lives is seen as expensive and even unaffordable for people under financial pressure in a time of high inflation. There was a call for leadership from Government to make it easier and less costly for people to take actions which would make a difference in combatting the effects of climate change.
- Energy cost inflation and having sources of less costly energy was very high on the minds of participants.
- The need to develop wind energy was acknowledged, but “not near me” continues to be a theme.
- Negative assumptions and damaged perceptions as a result of past infrastructure initiatives, including grid development need to be overcome. Building understanding in the early stages of communicating wind farm projects is important.
- Wind industry communication is recognised to have improved but needs to improve further.
- Basic understanding of wind energy must be built up to enable people to engage productively with wind farm developers about proposed projects.
- Limiting consultation and engagement to within a very limited radius of proposed wind farms leads to fear, mistrust and negativity.
- Wherever a wind farm is proposed, it was recommended that standardised information should be provided and a standard process of introduction should be employed.
- Knowledge of community benefit was scant. It was recommended that the industry communicate to create more awareness of the benefits.

The focus group did not want to hear about wind farms solely in the context of climate action and cutting carbon emissions.
In a nutshell, the focus group wanted to know:

1. How building wind farms will make a difference to individuals and communities;
2. The contributions wind farms make in terms of energy generated and other key information;
3. Why building wind farms is doing something meaningful for every single person in Ireland.

What next?

We are completing analysis of what we learned from listening to the focus groups.

We will be sharing the learning with Wind Energy Ireland members through our committees and working groups, with a view to adapting our communications, so that, as an industry, we are collectively telling wind energy stories and sharing information that will bring people with us as we transition to renewable, sustainable sources of energy.

Get in touch with Yvonne O’Brien, **yvonne@windenergyireland.com** for more information

NEW TO WIND ENERGY?
Here's what to expect...

As the renewables industry grows at an exponential rate, an increasing number of specialists from other disciplines are joining the support team. From GIS specialists to IT experts, HR managers to legal executives, here's what industry newcomers need to know about this unique, exciting sector.

Author: Janine Thomas, FuturEnergy Ireland communications manager

Get ready for a rollercoaster ride

Renewable energy is ramping up at an incredible pace. Constant updates from the Government, the EU, the WHO and various COP gatherings among others mean that renewable energy targets and goals are constantly changing to put an increasing emphasis on the importance of renewable energy. Then there's the technology, which is moving so fast that game-changing innovations in areas such as wind power, clean hydrogen and battery storage will soon become reality.

I joined FuturEnergy Ireland in 2021 as communications manager after working as a journalist. I wrote about sustainability and have a passion for climate action, but pivoting into renewables was a huge learning curve due to the sheer amount of information out there and the constantly evolving nature of the industry. Yes, it's exciting, but it's a lot to absorb.

Every day's a school day but it doesn't have to be overwhelming. I'm lucky to have a highly supportive team who patiently explain policy nuances and the more technical aspects of their work.

There's a passion among the people

The renewable energy sector is right up there in terms of career feelgood factor. The FuturEnergy Ireland team share a passion for climate action and a genuine drive to create a more sustainable world for our children and our children's children. This comes across in their actions, enthusiasm and the way colleagues go the extra mile.

Land manager Jeanette Byrne joined FuturEnergy Ireland last year after working as a legal executive for a law firm. "The overwhelming sense of working towards the common good is striking," she says.

"Expect to learn far beyond your own discipline from your colleagues from a variety of specialisms working together cohesively and collaboratively. The opportunity for creative thought and problem-solving in an effort to achieve the end goal is also refreshing."

GIS specialist Laura Fox was also surprised by the level of commitment and hard work. "I have never experienced anything like it," she says. There is always a focus on striving to keep up with and implement the latest developments and technology."

We love an acronym

Do you know your TDR from your TSO? Your CLO from your PM? Let's not forget the RFI from ABP to expand on the EIAR and NIS, and are those 2006 or draft 2019 WEGs? Meetings can be a minefield when you first start as colleagues glibly reel off a list of acronyms in every sentence.

Our tip? FuturEnergy Ireland's PMO manager Jenny Collins, who joined us last year, made a list on the intranet of all the possible acronyms and explainers – and don't be afraid to ask if you come across a new one. And remember, to the outside world, all of these potentially maddening abbreviations need explaining in full.

Deadline? What deadline?

After working in a newsroom, where daily deadlines had to be met or an editor with gnashing teeth would have your head on a stick, the timelines for wind projects, which take years from concept to operation, seem the other extreme.

Don't be fooled, the pressure's still on even if you're not used to the long timeline, so get organised and keep the end goal in sight. That Government target of 80% renewable electricity by 2030 is approaching faster than you think.

Slugs are stakeholders too!

For many specialists joining the industry, the principles of the job are the same, but the operating environment is entirely different. This was the case for PMO Manager Jenny Collins, who previously worked in the IT sector, which she found much more predictable.

"In a renewables project, you are working with the natural environment which includes floods, storms, endangered species, birds, bats, bugs, forests, bogs – there are a lot more unpredictable outcomes and the projects reflect this," she says.

"I'm proud to work for FuturEnergy Ireland because we take our environmental responsibility very seriously. Project timelines are long, but this is because we try to make the right decision every time for every stakeholder, right down to the smallest slug!"

Get country savvy

Working with local stakeholders to wind projects involves a unique skillset that the community engagement team need to master to build strong relationships.

When Shane Lowry got out on the ground, he quickly learnt how to break the ice with local homeowners. With biscuits. "If you're knocking on doors, have a packet of chocolate tea cakes or Kimberley's with you if you are invited in," he advises. "Build up a good bladder for the copious amounts of tea you will drink."

Small talk is also essential to build connection. Shane's subjects of choice? "Know your GAA and read the Farmers Journal weekly."

Wind farm sites are in far-flung corners of the country, so be prepared for narrow lanes, potholes and Google Maps glitches. Brush up on your driving skills and country driving etiquette, advises Shane. "You'd better be good at reversing back down narrow roads as oncoming tractors trump your car every time."

Expect to become a climate activist

The more you learn about renewable energy, Government policy and climate inaction, the more impatient you are likely to become. Kevin Donnellan joined the FuturEnergy Ireland team as a Community Liaison Officer last year and feels this frustration. Yet this is also spurring him on to be part of the renewable energy evolution.

"What has really surprised me is the reality of the transition from burning fossil fuels to renewables to lower carbon emissions," he says. "We have a very good Government road map and FuturEnergy Ireland has the expertise and sites to deliver on renewable energy targets, but there are many roadblocks ahead. We must use every opportunity to find ways around these roadblocks through motivation and action to deliver on climate change."

You'll be harvesting rain water, popping on an extra jumper instead of the central heating and saving up for an electric car before you know it...

WIND ENERGY IRELAND

Growth, targets, action and diversity in NI

Author
Steven Agnew
Director of RenewableNI

The past 12 months have been hugely productive for RenewableNI.

We appointed our new chair and deputy – Garth McGimpsey, RES, and Paul Carson, Strategic Power Projects. Jennie Condron joined us as a policy and research analyst, leading in markets and grid. We will be joined shortly by a new full-time policy analyst, who will lead in key objectives in the areas of planning, offshore wind and green hydrogen.

We were delighted to see two years of lobbying result in the Climate Bill setting a target of 80% renewable electricity by 2030, up from the 70% target set in the Energy Strategy. Onshore wind can deliver 70% of this target, but offshore generation will be essential to reach 80%.

In addition to generating enough electricity to power 1.6 million homes, development of the offshore industry could result in up to £2.4 billion gross added value and 1,500 new jobs.

Recognising the importance of this, Northern Ireland's Department for the Economy launched a consultation on the draft *Offshore Renewable Energy Action Plan (OREAP)*. It closes on March 16. It is focused on planning, licensing, consenting and the development of offshore renewable energy.

RenewableNI will lead an industry response to the consultation, making clear the opportunities and the industry's readiness. As part of this, RNI called for a more solid commitment to connecting offshore by 2030 with a greater than 1GW ambition beyond this. The draft OREAP set a target of 1GW of offshore from 2030 while attempting to accelerate this ambition 'if feasibly possible'.

RenewableNI will be holding a free seminar to mark the publication of OREAP on April 18 in Belfast. For more information, visit RenewableNI.com/EnergySeminar

RenewableNI is also working on the high-level Route to Market Consultation. A second consultation, with firmer proposals, is expected later this year, with both consultations to be completed within 2023.

Energy Strategy Action Plan for 2023

The Energy Strategy Action Plan for 2023 is expected early this year, along with a report on 2022. While the Action Plan is welcome and shows that iterative steps are being taken in the right direction, progress is slower than what is needed to achieve the 80 by 30 target.

Of course, the political volatility has contributed to delay.

At the time of writing, it had been nearly a year since there was a fully functioning Assembly and no ministers since October. Policy is still being progressed with multiple public consultations ongoing and in the pipeline, however, eventually legislation will be needed.

To ensure there has been continued progress of renewable policy during the prolonged absence of the Executive, RenewableNI has engaged with MLAs and senior civil servants.

I have been representing our members in meetings to discuss the main issues and challenges the industry faces. It is vital we ensure the benefits of developing renewable electricity are understood.

Key developments RenewableNI has been part of are:

- Introduction of the 80% by 2030 renewables target
- Publication of the OREAP
- A commitment to a bespoke NI renewable electricity support scheme
- (the beginning of) progress on planning reform
- Commitment to a revised Shaping Our Electricity Future Roadmap for 80 by 30

What's to come?

This year looks set to be a packed calendar for RenewableNI events. We are delighted to be continuing the Renewable Energy Seminar series. Aimed at engaging, educating and stimulating debate in the renewable electricity industry, the series includes five free seminars. We begin in February with a session focused on the NI Energy Strategy 2023 Action Plan, with the Department for Economy invited and taking questions.

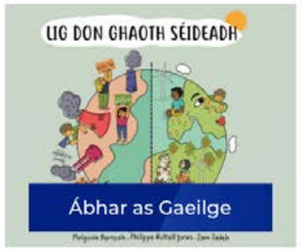
This will be followed by the OREAP session, mentioned above, in April and a Markets session is confirmed for Tuesday 6 June.

Following the success of our Smart Energy Conference last year we have moved to a much bigger venue. Save the date – we will be in Belfast's ICC on Thursday 19 October. The venue change allows for a large space for exhibition stands and plenty of opportunities for networking.

This year we are putting a spotlight on diversity in the renewable industry. We have always tried to ensure a balance of speakers, but are aware that there is a lack of women attending events. We conducted a short diversity survey and will be hosting a Women in Renewables event. We are working with RenewableUK to launch *The Switch List*. Celebrating diversity and inclusion, this will be a free directory of expert speakers from across the energy sector. This will allow you to register as a speaker, and for people to search the directory when organising their own events.

Overall, it is going to be a busy year, but we know that by working together we have the power to make real change in Northern Ireland – we hope you can join us to be part of this.

The Power of Education



Our education material aims to inform and engage young people with information on wind energy and climate change in Ireland. We work with teachers and students to develop resources for classroom and at home. There is a huge appetite for information on sustainability, renewable energy and plans to tackle climate change. We want to provide that information in an age-appropriate way. We have a growing number of educational resources, videos, infographics and tools for schools available on our website in Irish and English: https://windenergyireland.com/about-wind/education

Thank you to members who supported us in some of this work in 2022, here is a snapshot of what we produced in the last few months.

Get in touch if you would like to find out more about our education plans for 2023
https://www.windenergyireland.com/about-wind/education
Our Education Programme (windenergyireland.com)

GAME CHANGING

Policy Research, Graduate Training, Grant Funded Projects and more

Our research and policy team has a strong track record in publishing game-changing industry research and undertaking studies with partners to support the government in setting national policy. Our major publication in the second half of 2022 was the National Port Study, completed with Gavin & Doherty Geosolutions, which was launched at the Wind Energy Ireland Offshore Conference.

Plans for 2023 policy-priming research are well underway. We will complete, with support from our members, research in the following areas over the coming months:

- **Ireland's offshore wind potential**
- **Repowering our onshore wind farms**
- **A review of the Electricity System Framework**
- **Offshore supply chain readiness**
- **A technology review of the SuperGrid**

Research events hosted by WEI

Building on the success of the new Research Poster Room at WEI's Annual Conference in April 2022, we held our 'Thesis in Three' event during the Offshore Conference in UCD. This initiative presented students and researchers with an opportunity to pitch their work and engage with key stakeholders. Congratulations to Laura Nagle, our inaugural winner. Laura presented her master's thesis Moneypoint 2.0: Investigating the Potential for Floating Offshore Wind off the West Coast.

The 2023 Research Poster Room (held during WEI's Annual Conference) is sponsored by Ocean Winds. It provides students and researchers with the opportunity to present their work and engage with industry stakeholders. Keep an eye out for it if you are attending.

The research team has yet more exciting work to come in 2023. The strategy identifies four key goals, and the full version is available at https://windenergyireland.com/policy/research-strategy

T-shore

Grant Funded Projects - T-shore - EU

T-shore, Technical Skills for Harmonized Offshore Renewable Energy, is Wind Energy Ireland's first involvement with an EU funded project. The research project was funded under the ERASMUS+ 2021 call.

T-shore brings together 13 partners from countries including Belgium, Denmark, Ireland, The Netherlands and Norway to research approaches for skills provision in the offshore renewable energy sector and blue economy.
Wind Energy Ireland is the lead partner for Work Package 7, Communication and Dissemination and will work alongside our partners for the next four years.

To learn more about T-shore and the work we are doing, please visit our website t-shore.eu and keep up to date by following our social media channels.

Pending applications

WEI was fortunate to join several consortiums with several high calibre partners in the application process for the Sustainable Energy Authority of Ireland (SEAI) RD&D programme during 2022. We expect to receive formal outcomes on our applications in the coming weeks.

We are seeking new academic and industry partners to join us in future collaborations, and the co-production of energy research. There are upcoming calls nationally and at EU level that we are exploring. If you are interested in working with us, please get in touch. We are also working with the iCRAG centre in UCD to develop a new floating wind consortium which has recently been presented at our FLOSH committee. Contact the team at research@windenergyireland.com to learn more

Green Tech Skillnet | WIND ENERGY IRELAND

Graduate & Career Development Programme

Skillnet | Co-funded by the European Union

GCDP

The Graduate & Career Development Programme (GCDP) was launched in September 2022 brining 21 trainees from 13 member companies together for a 20-session training programme for graduates and recent entrants to the renewables industry. The programme last 10 months, delivered with a mix of online and in-person modules, twice per month, focusing on five key pillars.

1. **Industry Knowledge**
2. **Soft Skills**
3. **Networking**
4. **Group Project**
5. **Site Visits**

We would like to give a special thank you to Beauchamps and ESB who have participated with our programme by hosting sessions at their offices. The programme has continued in 2023 with Green Rebel & EIH2 next to host a session in March, with site visits being facilitated by Gas Network Ireland and Bord na Mona.

The group project is a research report, that will be presented at this year's Annual Conference, along with a presence in our Research Poster Room. The project gives the trainees the opportunity to hone their soft skills that are being developed through 6 modules during the programme, touching on themes of communication, interactions, resilience, negotiation, conflict, and stakeholder engagement to mention a few.

WEI are proud to announce the second cohort of our GCDP for September 2023, please reach out to the programme coordinator Dáire Horgan at the conference or at daire@windenergyireland.com with any questions.

Green Tech Skillnet

Training, research and jobs

Green Tech Skillnet

Who are we?

Wind Energy Ireland is the promoting organisation for the Green Tech Skillnet (GTS). GTS identify, develop and deliver training to bridge skill gaps to develop our current and future workforce. This ensures security of service to the sector and prepares it for future skills requirements. Our remit extends across the energy sector, with training, skills research, networking events and green skills advocacy in wind, solar, energy storage, green hydrogen and electrification of heat and transport.
GTS heavily discount the cost of courses for companies of all sizes through grant funding which was awarded by Skillnet Ireland. Skillnet Ireland is funded through the Department of Further and Higher Education, Research, Innovation and Science ("DFHERIS") and the EU Brexit Adjustment Reserve Fund. With the support of our members, we continue to push the sector forward equipping companies and people with the skills required for a green transition.

2022: Year in numbers

The Green Tech Skillnet **delivered over 110 programmes/training courses, to more than 350 businesses. More than 1,200 employed and 80 unemployed people were trained in 2022**. We look forward to developing further courses to support skills, creativity and innovation of our member companies in 2023.

Winning awards

In 2022, Simon Harris, Minister of DFHERIS announced the **expansion of our Wind Turbine Technician programme** at ESB's Raheenleagh Wind Farm near Arklow, Co Wicklow. The training and work placement programme helps to transition jobseekers to the energy sector. This is done via intensive Global Wind Organisation training (GWO) and personal development skills and by connecting participants with companies. The programme won the Best Talent Development Award at the Irish Institute of Training and Development Awards 2022.

We developed a new training programme designed to help finance workers' transitions into the renewable energy sector and also give other professionals in the sector financial literacy on renewable projects.

L-R: *Wind Turbine Technician Shirley Costelloe; ESB Operations Manager Robert Farrell; Green Tech Skillnet Network Manager Mark Ruane; Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris; Skillnet Ireland Director of Policy and Communications Tracey Donnery; Wind Turbine Technician Eduardo Rivero.*

Report launches

We launched a number of reports including the *Hydrogen and Wind Energy – The Role of Green Hydrogen in Ireland's Energy Transition*, and we recently commissioned research into the workforce requirements for delivering the energy storage needed for Ireland's 2030 energy system, it will be completed early this year.

We created an innovative new wind industry graduate programme which trains graduates from different companies in a wide range of personal development and industry knowledge programmes.

What's next? Green Tech Skillnet - three year strategy

We finished the year with our submission to Government on our three-year strategy. We won further funding to support the development of projects in offshore wind, sustainability, accelerated learning through digitalisation, commercial energy efficiency and we have doubled our training budget.

We are taking big steps this year to help companies to tackle their sustainability agenda with training, coaching, in-company workshops, sustainability frameworks and partnerships with industry leaders.

We will develop an Offshore Wind Development Pathway tool to help educate and provide a step-by-step, interactive and publicly available guide of what is involved in developing an offshore wind farm in Ireland, and in doing so, showcase the wide-ranging opportunities across the sector.

We will commission a research report which will review how Ireland will meet its 2030 targets for commercial business retrofit.

We will build blue skills bridging training for marine certifications which will allow for transition between marine career pathways – something that has never been done before.

Supporting career transitions to the renewable energy sector

The next students for Wind Turbine Technician and Work in Renewable Energy courses are targeted to start in the April and September of 2023. We are seeking host companies to give trainees a work placement or a project. Please engage with us early for work placements. **Please contact Ledi Hoxha at ledi@windenergyireland.com**

Green Tech Skillnet steering group and focus groups

Our Skillnet is governed by representatives of the member companies to oversee, guide and direct the network. We have monthly online meetings. We are looking for volunteers to be involved in shaping the sector.

We are looking for a balance of business skills in the steering group, for example enterprise expertise in the relevant sector/region and finance, governance, learning and development, HR, marketing, or other relevant functions.

We are currently working with UCC on an industry advisory group on offshore wind skills needs and UCD on energy system skill needs.

If you are interested in participating in a focus group for a particular job role, please reach out to mark@windenergyireland.com

For more information on programmes/courses with Green Tech Skillnet contact Laoise Ní Fhlaithearta:
laoise@windenergyireland.com

The Wild Bee Nursery Project
bee nest boxes, built by local children

By Éabhín Byrne, Senior Analyst, Wind Energy Ireland

To encourage pollination and support nesting spaces for bees, we have teamed up with local communities and our members to make bee nest boxes for wind communities across the country.

In 2021, Wind Energy Ireland collaborated with the All-Ireland Pollinator Plan to produce the ***Pollinator-Friendly Management of Wind Farms*** guide. These guidelines outline the key actions wind farm operators could introduce to benefit Ireland's pollinators, many of which are in severe decline. As WEI itself does not own or manage wind farms, we were keen to find a way to make our own impact, and our attention landed on Action 5: ***"provide nesting spaces for bees"***.

I reached out to Brendan Heneghan of AFRY, the Chair of WEI's Construction Safety Working Group, to discuss practicalities of drilling nesting holes in fences during the construction of wind farms. We soon set our sights on a more ambitious target which combined the aim of providing nesting spaces for bees with another action of the guide; raising awareness.

The plan was to create a network of solitary bee nest boxes across the country, bringing wind farms, schools, and communities together in the process.

Our goal was to pair wind farms with their local schools - the wind farm would sponsor a woodworking module for the school where students could learn about pollinators and build bee nest boxes that had everything a solitary bee requires. Making sure our project nest boxes were suitable for the successful overwintering of the bee larvae was a top priority. **There are a variety of styles of bee nest boxes already available, but the vast majority have flawed designs, featuring a combination of unsuitable materials, splintered wood, shallow or open ended holes, openings to large useless cavities, insufficient weather protection, and "insect-friendly" features that will only serve to attract insect predators of bee larvae.**

A key element of this project is a detailed set of design criteria which we carefully developed and which was later approved by the All-Ireland Pollinator Plan team. All students must adhere to those criteria when designing their nest boxes, and a printed guide outlining the criteria and advising on best nest box placement and maintenance will be provided to every student.

We are delighted to announce that the pilot phase of The Wild Bee Nursery Project is launching this spring, with the support of seven industry sponsors: Bord na Móna, ESB, FuturEnergy Ireland, Green Tech Skillnet, NTR plc, Ørsted and SSE. The transition year woodworking classes of their seven nominated schools from across the country will begin the module with class visits from the sponsors. They will be introduced to both the project and their local wind farms and will conclude with class trips to the wind farms. We hope to see hundreds of nest boxes installed by the students around their local communities and we look forward to sharing the results from each school as the project progresses.

We have ambitious plans for a wider launch of the project in the second half of the year, including broadening out into other community groups such as youth groups and men's sheds. If you're interested in being involved, I'd love to hear from you at eabhin@windenergyireland.com.

Bee educated – some facts

Honeybees, bumblebees, and solitary bees all have different survival strategies. The famous honeybee's ability to make honey enables their large colonies to survive the winter, whereas almost the entirety of a bumblebee colony will die in the autumn. Bumblebees rely on their adult queens to survive the winter alone in hibernation, reappearing in the spring to begin new colonies. Solitary bee species don't have the support of a colony and must invest everything in their own larvae, trusting that their solo but cumulative efforts will ensure that enough larvae will successfully overwinter to emerge as adults the following spring to keep the population stable.

Ireland has 15 species of cavity nesting solitary bees which seek out existing spaces to shelter their young. Inside a suitable cavity, the female prepares a parcel of woven leaves or mud, gathers a small food reserve of pollen and nectar, lays a single egg and seals it all safely away. She may return to the cavity to line up several such parcels in a row before leaving them and moving on to find a new site. The adult bees live for just a few short weeks and must use that time to work tirelessly to leave behind as many stored offspring as possible. Hidden away, the eggs hatch, and the larvae develop into pupae. Before developing into adults, they must first wait many months for the spring, all the while at risk from a variety of threats. **The safety of these vulnerable bundles of larvae is critical to the survival of these species, and the availability of quality nesting sites is therefore of huge importance.**

WIND ENERGY IRELAND

Ireland's Fair Seas

Author: Aoife O'Mahony,
Fair Seas, Campaign Manager

Fair Seas Ireland is a coalition of Ireland's leading environmental non-governmental organisations (eNGOs) and environmental networks. We are calling for 30% of Ireland's ocean territory to be fully protected by 2030 and believe this is our greatest chance at restoring ocean health. We must act now and with urgency to tackle the twin biodiversity and climate crises.

To this end, in June 2022, Fair Seas published a report *Revitalising our Seas - Identifying areas of interest for Marine Protected Area designation in Irish Waters*. This report states that Ireland's Marine Protected Areas (MPAs) may need to increase 18-fold by the end of the decade to effectively protect and restore critical habitats and address the climate emergency.

The report shows how it would be possible for Ireland to meet its European targets of 30% MPA coverage by 2030. Sixteen high biodiversity, species rich and nature abundant 'areas of interest' have been identified that make up a network of MPAs covering 175,504 km2 of Ireland's maritime area. That would protect an area of the ocean over twice the size of the island itself.

To make this happen, Fair Seas is building a community of ocean advocates and is working alongside key stakeholders to ensure that Ireland delivers robust legislation which allows for effective MPAs. Interestingly, an online opinion poll commissioned by Fair Seas last October showed that four out of five people would support a campaign to protect more of our seas, and that a large majority of respondents (81%) saying they would agree to give them more legal protections.

New MPA legislation is forthcoming

In December 2022, the Government published the general scheme for the proposed Marine Protected Areas Bill 2023. This 57 page document sets out plainly, what the proposed legislation once drafted, will contain. This is a big and important step towards Ireland being able to create nationally based MPAs under new legislation, and fulfill its national and international 30x30 MPA commitments.

In anticipation of the general scheme, Fair Seas compiled a white paper outlining our key asks and priorities for the forthcoming MPA legislation to ensure it is ambitious and robust. This is a once-in-a-generation opportunity to shape how Ireland values, manages and uses its seas; a beacon of hope for our declining species and habitats. The legislation must be effective, but so too must the implementation of the new law to ensure that it delivers for nature, restores our native biodiversity, and provides essential benefits and services for society too.

While the Fair Seas team analyse the contents of the general scheme, it is worth noting that there is still a long way to go before the proposed legislation is over the line. First, the general scheme will go to a pre-legislative scrutiny committee in the Oireachtas, then recommendations from that committee will help inform the first draft of the new law. Next, it will go through the various committee and reporting stages in Dáil Éireann and Seanad Éireann, including considering amendments which will be a critical (and final) time to improve the contents of the proposed legislation. Only when it is approved in both houses will it be sent to President D. Higgins for final sign off into Irish Law.

Fair Seas' whole focus over the coming months is ensuring the new law delivers for Ireland's seas, before it is too late.

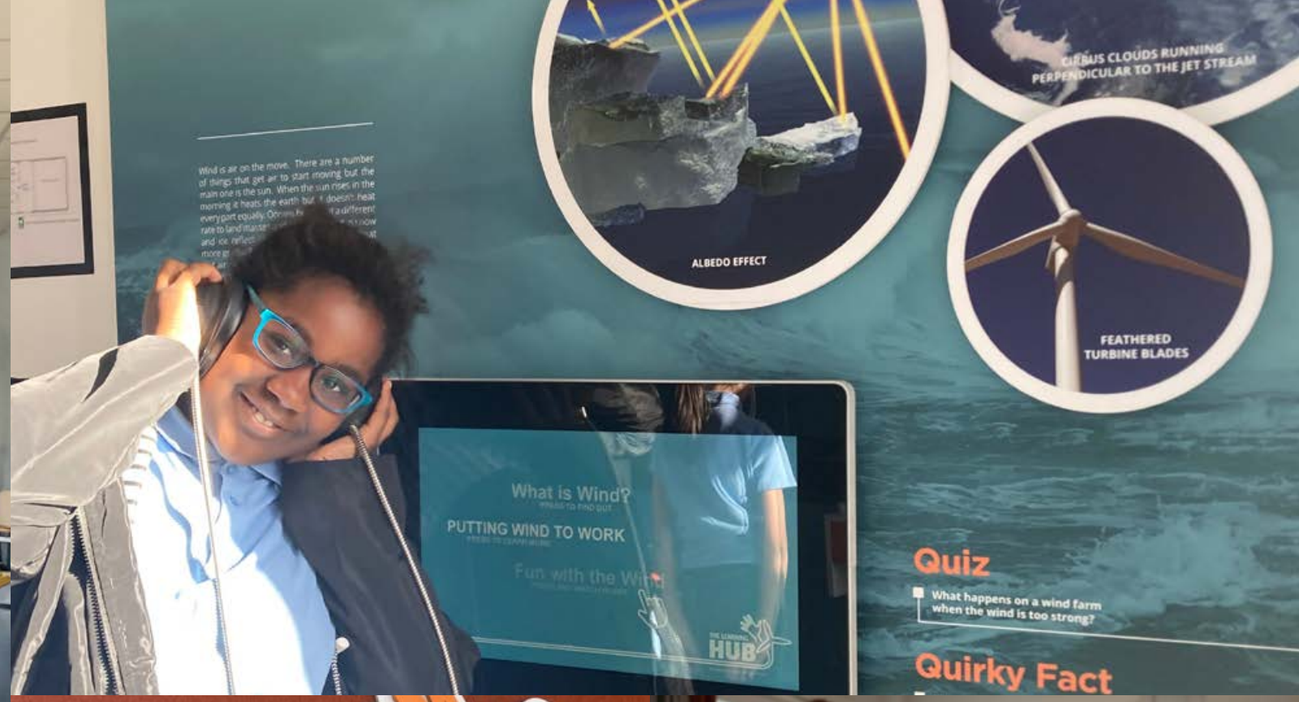
Fair Seas Conference - 8th June 2023.

Fair Seas Ireland will host its inaugural conference in Cork next June on World Ocean Day 8th June 2023. Fair Seas will bring ocean advocates, government, industry and key stakeholders together to map out the next steps for Marine Protected Areas (MPAs) in Irish waters. Sessions will focus on the designation and management of Marine Protected Areas and learning from best practices across the world. National and international experts and stakeholders will convene to share their experiences in developing Marine Protected Areas.

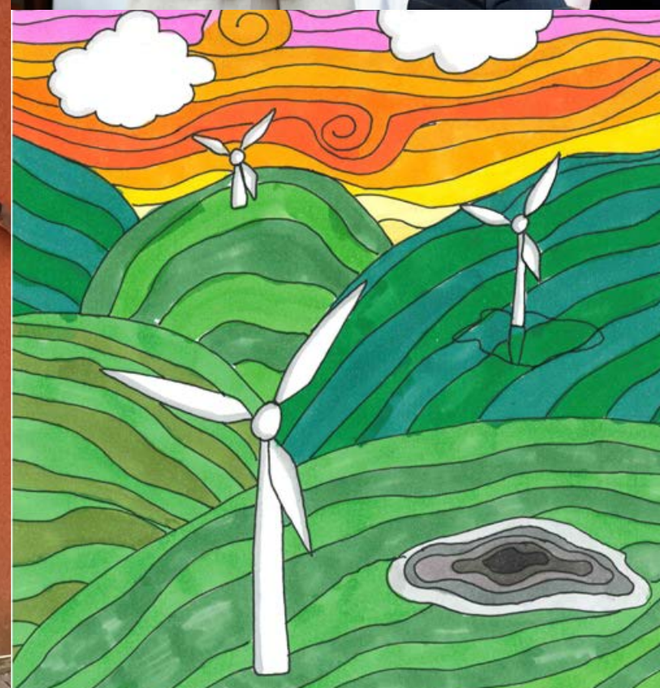
For more details subscribe to our newsletter to stay up to date with the conference, campaign, and ocean conservation news: **www.fairseas.ie.**

WIND ENERGY IRELAND


Bord na Mona


ALBEDO EFFECT
CIRRUS CLOUDS RUNNING PERPENDICULAR TO THE JET STREAM
FEATHERED TURBINE BLADES
What is Wind?
PUTTING WIND TO WORK
Quiz
What happens on a wind farm when the wind is too strong?
Quirky Fact


THE LEARNING
HUB
At Mountlucas Wind Farm



WIND ENERGY IRELAND

CALENDAR OF EVENTS 2023

FEB

WIND ENERGY IRELAND Annual CONFERENCE 2023

14-15 FEB

CLAYTON HOTEL BURLINGTON ROAD
DUBLIN

MAR

IRISH WIND INDUSTRY AWARDS

10 MAR

KILLASHEE HOUSE HOTEL
NAAS

APR

Wind EUROPE ANNUAL EVENT 2023 COPENHAGEN 25-27 APRIL

Joint Pavilion WEI & RenewableUK

25-27 APR

COPENHAGEN

MAY

WIND ENERGY IRELAND Offshore WIND 2023

16-17 MAY

DUBLIN ROYAL
CONVENTION CENTRE

JUN

WIND ENERGY IRELAND

Corporate Golf & Networking

09 JUN

THE K CLUB
PALMER SOUTH

JUN

eHEAT Ireland

eHeat Ireland Conference

21 JUN

THE RADISSON BLU ROYAL HOTEL
DUBLIN

SEP

energy storage IRELAND

ESI 2023 Annual Conference

21 SEP

CROKE PARK

OCT

WIND ENERGY IRELAND Wind Energy TRADE SHOW 2023

11-12 OCT

SPORT IRELAND CAMPUS
BLANCHARDSTOWN

Dates for your diary!

Sponsorship

For sponsorship queries, please contact Lorraine Killick on lorraine@windenergyireland.com