IRISHWIND

Autumn **2018**

IWEA
Irish Wind Energy Association

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GLOBAL
WIND DAY
15 JUNE

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WELCOME TO THE AUTUMN 2018 EDITION OF IRISH WIND

IWEA 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 IWEA members in the interests of the promotion of wind energy.

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

Pictures in collage from Global Wind Day & from IWEA members.

David Connolly, **Foreword**
CEO, IWEA

It is a sign of just how rapidly things are changing in the energy sector that last month Minister Denis Naughten TD acknowledged that the National Mitigation Plan – only 15 months old – is not working and has been overtaken by events.

In recent months the European Union has set a target of 32 per cent renewable energy by 2030, ECP-1 provided a pathway for almost 600 MW of wind energy to connect to the grid and in IWEA we launched a detailed plan setting out how Ireland can provide 70 per cent of our electricity through renewable energy by 2030.

However, it was the publication of the high-level design for the Renewable Energy Support Scheme (RESS) that is the most important recent development and is a defining moment for our industry.

It ensures a smooth transition from REFIT to a new, technology neutral, support scheme and contains a welcome determination to accelerate the development of a diverse portfolio of renewable generation in Ireland.

For the first time there is an effort to engage seriously with how community ownership and participation might work in the development of new energy projects. While this lacks detail, it is clear the Department of Communications, Climate Action and Environment sees the industry as key stakeholders in designing how such a system would operate in practice.

RESS also makes mandatory for the first time a specific level of community benefit funding and the rate of €2/MWh has the potential to deliver around €250 million into communities, mostly rural, where new projects are located. This amount of money could transform these communities and make clearer the positive local economic benefits of wind energy. Along with the plan to publish a national community benefit register, the €2/MWh rate will help create a level playing field for those of our members looking to develop projects.

In the coming months we will work with the department and the RESS Auction Design and Implementation Working Group to ensure that the first auction can start in 2019 and that the design of these auctions reflects the twin imperatives of maximising the amount of renewable electricity on the grid while minimising the cost to consumers. In doing so, we will also be setting down a challenge to the department and to Minister Naughten.

The RESS document strongly suggests that the Government's initial response to the new EU target will be to set a renewable electricity target of 55 per cent by 2030 when it presents its National Climate and Energy Plan at the end of the year. However, the report prepared for IWEA by Baringa and launched this month makes clear that a target of 70 per cent is not only technically achievable by 2030, but that it is at worst cost-neutral and may turn out to be cheaper for the electricity consumer. It sets out a bold vision of an Ireland ready at last to assume its responsibility to help stop climate change, an Ireland no longer willing to wallow at the bottom of the class.

No longer can anyone seriously challenge the scale of our collective failure. In June the Climate Action Network identified Ireland as the second worst country in Europe when it came to tackling climate change. A month later the Climate Change Advisory Council confirmed that our greenhouse gas emissions are increasing, not falling, and warned we are 'completely off course' in addressing climate change. Beyond the policy debates and the formal reports, more and more people are seeing the impact of climate change on their lives. From the flooding caused by Storm Eleanor at the start of the year to the impact on farming of drought-like conditions over the summer. Climate change is no longer something that is happening somewhere else, it's happening in our fields and farms, our towns and villages, our homes.

So now is a time for political courage and for clear leadership.

> Ireland must be ambitious. We can no longer afford not to be. We cannot continue to miss targets. Later this year Minister Naughten will have the opportunity to demonstrate that leadership when the Government sets out its National Climate and Energy Plan, outlining how Ireland will play our part in working to achieve the EU's 2030 target.

We need only look across the Irish Sea to Scotland to see what is possible with determined political leadership. In 2009, with cross-party support, the Scottish Government set a more ambitious target for the reduction of carbon emissions than the UK as a whole. They aimed to reduce carbon emissions by 42 per cent by 2020 against the UK target of 32 per cent. This decision drove a decade of planning and energy policy, attracting billions in inward investment, as Scotland again and again exceeded their own targets. None of this could have been achieved without a Government, and a wider political system, willing to embrace this vision.

As Professor Andy Kerr of the Edinburgh Centre of Carbon Innovation explained, "Political vision and leadership in putting forward a challenging target, and corralling the resources and narrative around delivering that target, was as important for setting the framework for tackling climate change as robust evidence that it was achievable".

We need to see a similar mentality in our own political leadership. The new Joint Oireachtas Committee on Climate Action began meeting last month to respond to calls from the Citizens' Assembly earlier this year for Ireland to become a leader in tackling climate change. It is due to report in January, setting out how they believe Ireland can rise to that challenge.

Wind energy has a major part to play. RESS needs to be supported by wind energy planning guidelines that are clear, robust and practical to support the development of the next generation of onshore wind.

We need to see a sense of urgency from Government in eliminating the planning and technical obstructions that have prevented us from exploiting our enormous offshore wind potential.

The commitment in the ECP-1 decision from the CRU and the system operators to process batches more frequently in the future must also be followed through.

These must be our priorities in the months to come, underpinned by a determined drive right across the renewable energy sector for an ambitious, but achievable, 70 per cent target for 2030.

Finally, this is my first time writing the foreword since taking up the role of CEO in April of this year. I would like to thank members and my colleagues in IWEA for all the support they have shown me since my appointment and I look forward to an exciting time for our industry.

UPCOMING EVENTS 2018/2019

MARK YOUR CALENDAR

Sponsorship 2019

Sponsorship Packages for 2019 will be available shortly. If you are interested in sponsorship opportunities for any of these events please contact Lorraine Killick, Membership & Events Manager at lorraine@iwea.com or 086 7325012

MEMBERSHIP NEWS

IWEA Welcomes New Members

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EnerNOC, the global leader in demand response, is now Enel X! Enel X is the innovation division of the Enel Group, Europe's largest electricity supplier. Enel X is contributing to the creation of a new energy ecosystem, where consumers become an active and fundamental part of the network itself. In Ireland, we help industrial and commercial organisations create new business opportunities with their energy use through participating in demand response, advising on procurement, leveraging efficiency software, and implementing distributed generation and electric vehicle infrastructures. We collaborate with Irish businesses not only to facilitate smart and profitable energy use, but also to offer them the opportunity to be a good citizen of an evolving electricity grid system.

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EDF Renewables is part of one of the world's largest electricity companies and our investment and innovation is bringing down costs for consumers and bringing significant benefits for communities. With our 34 wind farms and battery storage unit (786MW) we are providing some of the much needed new affordable, low carbon electricity that is needed. We are building the 177 MW Dorenell wind farm near Garve in the Scottish Highlands and have bought the 450 MW Neart Na Gaoithe offshore wind farm project which is in the Firth of Forth.

EDF Renewables has more than 1 GW in planning and development and we look after the operations and maintenance of our own wind farms. The company is now looking to Ireland for new opportunities as part of our plans to grow the business further.

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Axpo Trading and Sales is the international energy supply and trading arm of the Axpo Group and we are active in 30 different European countries and in the US. We work across the supply chain with producers, retailers and consumers. We offtake in excess of 14 GW of renewable generation and have supplied 55TWh of electricity and 25TWh of gas in 2017.

The Axpo Group was founded in 1914 and is fully owned by the North Eastern Cantons of Switzerland. It employs in excess of 4,000 people and owns and operates nuclear, gas-fired, hydro, wind and solar generation across Europe.

In the Irish market we can offer our clients a wide range of trading services and route to market solutions. These include market access, forecasting, balancing as well as long term bankable PPAs, all tailored to our clients specific needs.

MEMBERSHIP NEWS

IWEA Welcomes New Members

GeoSea
Geotechnical & Offshore Solutions

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GeoSea is a specialised company for (EPCI) offshore works, focused on the installation of wind turbine foundations and erection of turbines. Large jack-up platforms and drilling and piling rigs are our plants of choice for working in deep waters. GeoSea offers first class offshore contracting solutions to global clients.

We have the skills, the technology and the equipment to perform in the most challenging marine environment. Always working closely with our clients, we understand what it takes to define and deliver a project cost effectively, safely and on time.

中广核 CGN
CGNEE Ireland Limited

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CGNEE was founded on 30th June 2014 as the renewable power investment platform of CGN Group for Europe. The CGN group employs over 38,000 staff worldwide and is the largest power operator in China as well as the largest nuclear power constructor worldwide.

From headquarters in Paris, France, CGNEE has acquired wind and solar assets across Europe. CGNEE employ over 90 employees covering all company requirements including Finance, Engineering, Operation & Maintenance, Legal, Commercial & Contracting. As well as headquarters in Paris, CGNEE also holds offices in Bordeaux, Troyes, Belgium, London and Dublin.

Founded in 2017, CGNEE Ireland directly manages a portfolio of 270MW of wind assets across Ireland, Northern Ireland and Wales with an established local operations and finance team providing the full end-to-end asset management capabilities.

HYbrid ENERGY

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HYbrid Energy Solutions design, manufacture and rent grid scale energy storage systems for a wide variety of applications. HYbrid's solutions are suitable for grid services, energy storage, microgrid and renewables integration, amongst other uses.

The products are self-contained, containerised, scalable and easily transportable, delivering a totally flexible solution, including flexible financing options. HYbrid offer a full range of BESS systems from high power short duration, to long duration energy storage systems.

MEMBERSHIP NEWS

IWEA Welcomes New Members

Electricity Exchange is one of Ireland's largest Demand Response service providers and is emerging as a leading developer of metering, control, and communications systems for the wider energy sector. The company's mission is to enable the increased utilisation of renewable energy worldwide by developing and delivering technologies and services that overcome the barriers that limit its integration.

Using its proprietary control and metering equipment, Electricity Exchange enables large energy users to generate additional revenues by participating in both Demand Side Unit and DS3 System Services Markets.

In 2019, Electricity Exchange will release a new suite of products and services aimed at facilitating fast response services from the wider utility market. These products will enable market participants such as, wind and solar producers, DS3 participants, storage providers, and utility scale generators to communicate more easily with Grid Operators and respond faster to system events, in-turn future proofing their offerings and increasing their revenues.

E: info@electricityexchange.ie
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Height for Hire is a family-run access machinery rental business headquartered in Ashbourne, Co Meath. It has been operating since 1978 and has over 2,000 machines across 36 locations in four countries – Ireland, the UK, Hungary and Slovakia.

Height for Hire has the largest range of access machinery within the British Isles, split into four divisions - core access machinery, truck mounts, spider lifts and self drives. The company has worked in many sectors, including a large number of projects on wind farms in Ireland, Scotland, England and Wales over the past 10 years.

However, it is the way in which they deliver their rental service that makes them different. Height for Hire values uptime, constantly investing in the best machinery, renewing their fleet more often than the competition. This fact, along with their 24/7 Technical Support Helpline, has allowed them to cover their customers, even in extreme locations, around the clock.

The company was shortlisted for EY Entrepreneur of the Year Award 2017 in the international category.

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Cornwall Insight Ireland provides market intelligence, consultancy and training services for parties across the entire value chain in the Irish gas and electricity sectors. Our expertise demystifies complex market and regulatory arrangements and guides our customers to reach evidence based outcomes. Through a combination of subscription services, structured or bespoke workshops, and project work we have the delivery channels to meet your requirements. Based in Dublin, but covering all of the island of Ireland, we're here to help your business forward with confidence whether you're a start-up, large utility or private equity house looking for investment.

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Q&A

Mark Foley, Chief Executive EirGrid talks to IWEA

How can electricity contribute to Ireland's long-term ambitions to have a low-carbon energy system?

I believe that the electricity sector will play the pivotal role in how we decarbonise our economy over the coming years. While I am new to my role in EirGrid, I am keenly aware of the significant strides that have been made in recent years across the energy industry. In documents such as the Government's Energy White Paper, the National Mitigation Plan and more recently Project Ireland 2040, electricity is clearly identified as an area that will lead decarbonisation – in particular the decarbonisation of electricity generation.

From my previous role with Coillte, I know that renewable sources of generation can, and are, displacing carbon intensive fossil fuel generators. We are also seeing how electricity storage can increase overall levels of renewable energy consumption by minimising intermittent renewable generation curtailment.

As we currently view it, Ireland is on track to meets its 40% renewable electricity obligation by 2020. EirGrid will be working with Government and industry to ensure that we meet those targets and, critically, that we start to embrace the challenges of the next decade now so that we do not lose momentum.

What variable renewable electricity penetration do you think Ireland can reach by 2030?

Across the island of Ireland, we are now seeing 30% of our electricity coming from renewable energy. This is a very significant achievement but we must continue to maintain the current trajectory if we are to make the necessary inroads into decarbonisation of both the heat and transport sectors. We are also very cognisant of the targets set out by Government recently in the RESS. From our part, we are committed to working with industry and Government to reach these targets in a timely manner.

It is worth recalling that at the turn of the millennium there were very limited amounts of renewable energy connected to the power system on the island, with just 147 MW of wind. By 2010 this figure had grown to 1,785 KW, with that growing further to 4,471 MW at the end of last year. EirGrid this year delivered another milestone on Ireland's renewables journey when we raised the limit for variable renewable sources - mainly wind - on the power system to 65% … a world leading achievement. We call this System Non-Synchronous Penetration or SNSP.

EirGrid is committed to raising SNSP to 75% by 2020, and our commitment to further innovation is assured. Indeed, it is because of our success in the integration of renewables that the EU has asked EirGrid to lead a pan-European consortium that will look at increasing the levels of renewables on the European power system. This programme is called EU-SysFlex and I am confident it will help us to realise ambitious targets by 2030 or earlier.

What is EirGrid's role in setting out the specific government policies required to meet the renewable energy target for 2030?

In the last number of years, EirGrid has placed a significant emphasis on scenario planning through the development of "Tomorrow's Energy Scenarios" as a prudent way to assist in how the grid of the future will look. To date, the feedback on this has been very positive and it has enabled the introduction of a more flexible approach to the planning of Ireland's future electricity requirements.

What is really interesting is that the underlying message, across the majority of scenarios, points to the inexorable decline of traditional fossil fuel generation, to be replaced by more renewables generation across a range of technologies. The only question is the quantum, which will be significant even in the most pessimistic of scenarios.

Comprehensive engagement and public consultation has informed our published scenarios and they have been shared with the relevant Government departments. They also inform our grid planners in their work to identify any future emerging needs across the system and across the country.

Finally, I welcome the fact that Project Ireland 2040 calls out in a very explicit way the urgency around decarbonisation and crucially make substantial financial provision for investment in decarbonisation over the next two decades.

How do you see the DS3 System Service market evolving in the 2020-2030 timeframe both in terms of the budget for System Services and the framework through which they are procured?

The evolution of System Services has been a significant change to the industry in Ireland and Northern Ireland over the past six years, and a real testament to the value placed on secure system operation.

In EirGrid and SONI, we believe the purpose of the power system is to meet the needs of electricity consumers. This requires two things – firstly, that the energy needs of the consumers are met, and secondly, that the energy needs are met with the consistency that society has come to expect. This can be simplified into two distinct requirements of the power system – energy and resilience. The needs of the energy element of the power system have been met through the Single Electricity Market, and in the future will be met through the I-SEM. The resilience element is being met through the capacity market and through System Services. These two components are fundamental to keeping the lights on.

Traditionally, the energy market has provided the majority of resilience requirements by traditional means, i.e. an excess of conventional generation plant. However, with the Ireland and Northern Ireland power system moving to increasing levels of renewables this may no longer be the case. In this new world, System Services are key to maintaining a safe and secure power system. The transition of the System Services revenue stream moving from €60 million in 2016 to €235 million in 2020 is recognition of how important this resilience is to the future power system.

Looking out to 2030; and in light of Minister Naughten's announcement in the RESS of a 55% RES-E target for 2030, we see the role of System Services increasing in importance into the future. The analysis which is being carried out through the EU-SysFlex project will give us a roadmap for how System Services will evolve towards 2030. We will be collaborating very closely with the electricity industry, the distribution system operators, and our regulators to ensure the future of System Services meets the needs of the power system and continues to drive value to all electricity consumers in Ireland and Northern Ireland.

NIRIG
NORTHERN IRELAND
RENEWABLES INDUSTRY GROUP

BREXIT: THE ELECTRIC FENCE?

Meabh Cormacain, NIRIG Policy & Communications coordinator

Access to the European Internal Energy Market (IEM) – particularly for electricity – is important for energy security and the efficiency of the UK energy system. For Northern Ireland, however, the degree of integration of its electricity market with Ireland requires additional consideration of the potential impacts of Brexit.

We are assured that maintaining the special energy relationship between the UK and Ireland and avoiding the disruption of the Single Electricity Market (SEM) across the island of Ireland is a priority. The level of political, regulatory and business agreement on the importance of maintaining the SEM and the I-SEM is extremely significant. However, with less than half a year to go, the uncertainty of how this widely-agreed priority will be implemented is worrying.

Nearly all 2017 political manifestos in Northern Ireland made specific reference to the all-island energy market and the importance of progressing and protecting this market (with the exclusion of Sinn Féin and the Social Democratic and Labour Party). Prime Minister Theresa May referred to 'protecting the single electricity market across Ireland and Northern Ireland' in her Mansion House speech. The House of Lords EU Committee and the European Parliament both mention the benefits of remaining in the IEM and a broad swathe of British and Irish business groups and energy trade associations all note the delivery of I-SEM, or the UK's continued access to the IEM, as post-Brexit priorities.

The SEM is not itself an EU project. While the original Memorandum of Understanding for its establishment notes 'the context of the European Union's policy on the creation of an EU-wide internal market for electricity' it does not rely on EU legislation to exist. Having said that, the I-SEM is designed to integrate the all-island electricity market with the European electricity market and the detailed supporting policies that facilitate SEM and I-SEM operation are in many cases led or developed through EU law or European institutions.

For example, the EU Third Energy Package created a common requirement for European network codes covering grid connections, market guidelines, and system operation. Enabling the free flow of energy across borders requires common rules for the treatment of energy such as grid connections, capacity allocation and electricity balancing. The codes are designed to provide a more sustainable, secure and competitive electricity market across Europe.

These codes are not transposed by law but through the grid code – that is, through the actions of system operators and regulators.

In August, Minister Clare Perry issued a letter outlining one of several statutory instruments (SI) which the Department of Business, Energy and Industrial Strategy will lay to ensure that the UK's energy market legislation continues to function effectively after the UK leaves the EU. Some of these are very welcome proposals that we have highlighted as vital pieces of post-Brexit I-SEM functioning, including the issue of network codes.

For example, the SI will give powers to the Secretary of State and (in Northern Ireland) the Department for the Economy to create new Network Codes for a period of two years after exit day. This will be limited to bringing into UK law those provisions of network codes which are already in adopted instruments (but won't come into force within the EU until a date after EU exit day and so won't automatically become part of retained EU law under the terms of the Withdrawal Act). Other powers will focus on REMIT and gas security of supply.

This letter and the proposals outlined within it provide some welcome indication that key issues for continued functioning of the market are being addressed. Energy will remain devolved so these functions will need to be transferred to the DfE Minister, rather than the Secretary of State, but this will need to be done correctly to ensure we do not run into challenges if there is no devolved government in place. The letter provides for potential decision-making by the SoS on what might otherwise be devolved matters.

Other issues which remain unresolved include the question of who would arbitrate in the case of a dispute in the SEM/I-SEM. Should there be no recourse to the European Court of Justice (ECJ), there will be a need for an alternate dispute resolution mechanism. Again, this should not be an insurmountable challenge, but no options for such a mechanism are, as yet, on the table. Avoiding a two-speed market may well require coherent energy, climate and environmental policies across the island of Ireland.

Given that the secure supply of energy is fundamental to our economy and society, it is positive that everyone agrees on the importance of the SEM after Brexit. For the Northern Irish producer, consumer, generator, operator and regulator of electricity, however, details on the flexible and imaginative solutions required to ensure its continued effective functioning will become increasingly important as we draw closer to EU exit.

This is an updated version of an article first published in the UK in a Changing Europe on 7 August 2018:
http://ukandeu.ac.uk/brexit-and-the-island-of-ireland-the-electric-fence/

Green Tech

Skillnet

A new brand for your learning and development needs

We had a busy and successful first half of 2018 at the Green Tech Skillnet.

The network has officially rebranded from the Wind Skillnet to reflect the diversification of Ireland's energy system and to support the optimisation of renewables on the Irish grid in the short, medium and long term. We aim to do this through cutting edge learning and development initiatives to meet existing and emerging skills development needs.

To date this year, we have put almost 255 people from 97 companies in the renewable energy sector through training and development activities which include workshops, training courses, conferences, and networking events. With up to 30% grant aid available for these events this represents a sizeable discount for the sector in the area of learning and development.

Seamus Hampson accepting the Safety Innovation Award on behalf of Siemens Gamesa Renewable Energy

TRAINING AND EVENTS

We were once again delighted to be part sponsors of the IWEA Health and Safety Conference in May. This year's Health & Safety Conference focused on measures to improve safety in construction, operations and personal wellbeing in the Irish wind industry and to support national and international companies in delivering Ireland's energy targets in a safe and efficient manner. The personal wellbeing session of the conference was received very well, and we hope to run a Health and Wellbeing Event towards the end of the year.

"The Wellbeing section is something I will take with me for life and pass onto colleagues, friends and family" (Delegate)

The network also supported the inaugural IWEA Safety Innovation Award, which was awarded to Siemens Gamesa Renewable Energy and involved an ergonomic assessment of operational turbines for manual handling. Oweninny Windfarm, ESB Generation & Wholesale Markets, Roadbridge and ESB were shortlisted for the award. The Safety Innovation Award was created to recognise an innovative programme, policy, tool or project that demonstrates a proven accomplishment in the area of health and safety for the wind energy sector.

In conjunction with Skillnet Ireland's Management Development Programme and the Irish Management Institute, the network offered two new accredited management programmes for the network in both Dublin and Cork, the Post Graduate Diploma in Strategy and Innovation and the Post Graduate Diploma in Management. These courses are aimed at helping business owners, managers and management teams achieve better results, whilst contributing to the success of their business.

The recent launch of IWEA's Community Engagement Strategy at the Spring Conference in March, announced a series of new measures and undertakings as part of the association's work to ensure best practice guidelines in community engagement are the norm across the country. To further develop these commitments, IWEA planned a morning seminar in June for key stakeholders. The session involved international guests from jurisdictions with significant experience in the area including John Brereton, Natural Forces (Canada), Fabian Tenk, World Wind Energy Association (Germany), Chris Morris, Local Energy Scotland (Scotland) and Mio Schrøder, PlanEnergi (Denmark). The session was expertly chaired by Dr. Celine McInerney of UCC. Much of the learning from the workshop has fed directly into the newly formed Community Engagement Committee and working groups within IWEA.

Pictured at the Community Engagement Workshop, June 18. Dr Celine McInerney, UCC. David Connolly, IWEA. Chris Morris, Local Energy Scotland, Dr Valentin Bertsch, ESRI. John Brereton, Natural Forces. Fabian Tenk, WWEA. Mio Schroder, PlanEnergi

PPA WORKSHOP

We also ran a Corporate PPA event in June. The workshop was very well attended by IWEA members and other key stakeholders and highlighted the various counterparties perspectives and key concerns in relation to Corporate PPA's in Ireland. Presenters on the day included Dr David Connolly, CEO IWEA, Marie Donnelly, Eamonn Confrey (DCCAE), Philip Newsome (DCCAE), Ciaran O'Brien (Brookfield Renewable), Angela Treanor (Elgin Energy) and David McAuley (Host in Ireland / Bitpower).

Some of our autumn courses included:

- Co-Location
- Grid Connections in Ireland (Wind and Solar)
- Introduction to Solar PV
- EV Integration
- Energy Storage
- Offshore Consenting and Development
- IOSH Managing Safely for Wind Power (Feb 19)

You can now book and pay online for Green Tech Skillnet courses.

The network hopes to launch its Asset Management e-learning pilot module later this year.

THANK YOU

We are currently in the process of the funding application for 2019's programme. The Learning Needs Analysis (LNA) that we undertook earlier this year has been key to informing this application and is vital to Green Tech Skillnet in ensuring that we continue to deliver value add, bespoke, leading-edge courses relevant to our members. We would like to take this opportunity to thank those of our members who engaged in this process with us.

For information on any of our courses and events please visit the Learning Hub on our website www.iwea.com/learning-hub or www.greentechskillnet.ie or contact Jeanette Gill at jeanette@iwea.com.

Ross McNally and Jeanette Gill, Green Tech Skillnet

SSE Airtricity is proud to hold Ireland's largest renewables portfolio - trading over 1,400MW in the all-island market.

Talk to our Energy Markets team about Power Purchase Agreements in I-SEM.

Talk to us today

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marketservices@sseairtricity.com

sse Airtricity | Energy Markets

CURIOUS ABOUT CORPORATE PPAS?

TALK TO THE EXPERTS IN SSE AIRTRICITY ENERGY MARKETS

History

With the industry quickly acclimatising to I-SEM, and the high-level design of the RESS now known, the attention for many developers is shifting towards securing a route to market. To successfully deliver the renewable energy projects Ireland needs, we need creative and innovative financing solutions, and at SSE Airtricity, we believe Corporate Power Purchase Agreements (PPAs) have the potential to play a significant role.

Traditionally developers prefer government-backed support schemes, due to their stable and long-term nature, while Corporate PPAs are often met with scepticism. This view has been justified in light of challenges surrounding divergence in price expectations from both parties, duration and bankability of contracts, and the absence of comparable price data. Additionally, there has been a lack of development projects ready to progress due to planning and grid access issues. These challenges have resulted in an absence of subsidy-free Corporate PPAs in the market. However, looming international climate and energy targets, and the prospect of a smaller subsidy regime, means that scepticism is quickly being replaced by curiosity.

Opportunities in Ireland

So why do we believe a Corporate PPA market is achievable in Ireland, when other arguably more advanced and more competitive markets elsewhere in Europe, have seen limited success? The two main requirements for a vibrant Corporate PPA market are an appetite for green energy from locally-based corporates, and a pipeline of fully-consented renewables projects. In relation to the former, Ireland is home to more than 60% of the RE100 signatories, a Climate Group initiative under which the world's most influential companies commit to achieving 100% renewable power by a target date. On the latter, while there have historically been grid and planning obstacles for renewables projects, these barriers are starting to lift, resulting in the emergence of a strong pipeline of consented projects, including wind and solar, all looking for an effective route to market.

Across Europe and the US, large corporates have entered Corporate PPAs to allow them to directly demonstrate their green credentials. There are fundamentally two 'standard structures' used for Corporate PPAs – 'sleeved' and 'virtual/synthetic' - although there are 26 variations of these two structures used internationally. The market in Ireland has seen the emergence of an additional model, incorporating a 'supplier-lite' type structure. This results in a corporate setting up as an energy supplier, taking on all associated administrative and assurance burdens, to provide a clear link between their energy supply and the renewable generation they're financially supporting. We believe this is unnecessary, and the same result can be achieved through the simpler, internationally-recognised 'virtual/synthetic' mentioned above.

Take for example a recent announcement by Facebook, where they have signed a 15-year PPA in Norway for the output of the 294MW Bjerkreim cluster of three wind farms. Under the terms of the deal, Facebook will buy 1,000 GWh of electricity each year to power its Nordic data centres in Denmark and Sweden. While the projects are being developed by Norsk Vind Energi, and ultimately owned by German renewables investor and asset manager Luxcara GmbH, the Swedish state-owned utility Vattenfall AB will have the long-term supply and service agreements from Facebook. Vattenfall will integrate the wind energy into Facebook's supply agreement, and provide balancing services for the wind farms.

At SSE Airtricity, we believe this is the model best suited to the market in Ireland. Our Regulation and Public Affairs teams have been busy engaging with the relevant authorities on the market structure front, to allow Corporate PPAs of this kind to play their part in Ireland's renewables revolution.

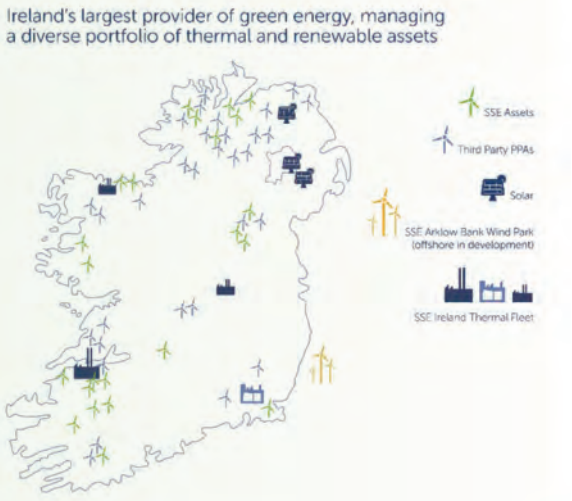
WHY SSE AIRTRICITY?

- Large Energy User Customer Base
- Large PPA Portfolio
- Understanding of value contribution of all parties to Corporate PPA ecosystem
- Understanding of Financiers' Requirements
- Settlement Capabilities

It's important to note that Corporate PPAs are not just for the tech giants of this world. Under EU Directive 2014/95, already transposed into Irish law, all corporates with more than 500 employees have to disclose non-financial information including their greenhouse gas emissions and energy consumption. These regulations apply for financial years beginning after 1 August 2017. At SSE Airtricity, we have had a surge of enquiries from businesses in relation to reducing their carbon footprint as responsible corporate citizens.

An aggregate of these kinds of businesses could provide the load required for a Corporate PPA arrangement. Alternatively, a project of the right size could allow a business to go it alone. The market is there, and we believe the solutions are too.

As experts in energy generation and supply, SSE Airtricity is ideally placed to develop bespoke Corporate PPA structures for both developers and large energy users, and our dedicated Energy Markets team is ready and waiting to cater for all needs and expectations.



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RENEWABLE ENERGY

INTERNATIONAL **WIND EXPERTS** MEET IN DUBLIN

Drawing from international experience and with expert speakers from Canada, Scotland, Germany and Denmark, an IWEA hosted seminar in June showcased best practice in how to engage with communities located close to wind farms.

The panel of contributors were brought together for a seminar to share their lessons from engaging with local communities and their experience of models of community ownership in developing wind farms.

Supported by Green Tech Skillnet the large audience included guests from environmental, academic and community backgrounds as well as leaders from Ireland's growing wind industry.

Many of those attending from outside the wind industry provided valuable insights on how the wind energy sector could improve how it communicates and works with people affected by the construction of wind farms.

The seminar was organised to build on IWEA's new Community Engagement Strategy, first launched at our Spring conference in March, and to learn from international best practice on how best to engage with local communities.

Following the seminar, IWEA's newly formed Community Engagement Committee (made up of representatives from our member companies) started to look at how the industry in Ireland can learn lessons from other countries to identify new ways to support local communities.

Emmet Egan, Chair of the IWEA Community Engagement Committee, said:

"The work we are doing here is a real step-change for the industry in Ireland. We looked at examples across Europe and further afield of how this has been done most successfully. We want to learn from this and bring it to our work here in Ireland.

"Wind provides a massive opportunity for us all – for business, jobs, our environment and for our communities – to benefit directly at a very local level. We want to bring host communities with us, to work together to make decisions that benefit them."

Head of Communications and Public Affairs at IWEA, Justin Moran, set out the ambitions of the new committee and highlighted the strong support for improving community engagement among members.

"There is a real sense of change in the industry, a new momentum behind the need for better engagement with communities" he said.

"Our Community Engagement Committee is already looking into practical ways we can do this. The positive benefits of wind for Ireland cannot be overstated, but we also have to address the concerns that arise at a very local level when a new wind farm is proposed.

"We must work more closely with people, challenging falsehoods and providing the facts in clear and accessible language.

"We need to work harder to highlight the benefits wind energy can bring rural areas, providing investment, jobs and support for community projects and initiatives to small villages and towns across the country."

- Presenters at the summer event included John Brereton, President of Natural Forces, in Nova Scotia, Canada.
- Fabian Tenk, who works at the World Wind Energy Association headquarters in Germany as Project Manager in the field of Community Wind.
- Chris Morris who is responsible for the delivery of the Scottish Government's Community and Renewable Energy Scheme (CARES).
- Simon Robinson, the founder of Snell Bridge, an Edinburgh-based FCA registered corporate finance business that specialises in the renewable energy sector.
- And Mio Schrøder, Head of the Wind Power Municipal Planning & Environmental Assessment Department at PlanEnergi consulting in Denmark.

All of their presentations are available to view at our website www.iwea.com

COMMERCIAL RATES UPDATE - SO NEAR AND YET SO FAR

As most wind farm operators will be aware, all counties are now set to be part of the rates revaluation programme by 1st January 2023. Based on the current method of valuation, this means that most projects will see their rates liabilities rise from €5,000-7,000/MW to €15,000-20,000/MW, if they have not already done so.

This new system was first trialled in Limerick and all projects in Limerick remain under appeal to the Valuation Tribunal. In February 2018, a decision of the Valuation Tribunal was issued in respect of Grouse Lodge Wind Farm. It was largely expected that the first decision of the tribunal in the matter would have significant impact on the likelihood and scale of any reductions.

Whilst we would feel that the judgement goes a significant distance to addressing the differences between the parties, the Commissioner of Valuation immediately appealed this decision to the High Court using a legal mechanism known as 'case stated'. When a case stated is lodged, the judgement is stayed and no official determination is given. The judgement is therefore not in the public domain.

At the time of writing, we have no official confirmation of the arguments that will be used in the Commissioner's appeal. In the interim, the Valuation Tribunal has listed a number of further cases in Limerick for hearing.

Though this is a noble effort on their part to advance matters, it effectively guarantees further legal action will ultimately be taken on these cases.

If the Valuation Tribunal confirms valuations and rationale in line with Grouse Lodge, the Commissioner will appeal to the High Court; if the Tribunal reverses its decision on Grouse Lodge and issues the valuations unchanged, the appellants will appeal to the High Court. In short, the leading decision in Grouse Lodge has made matters worse and not better, which is very sad state of affairs.

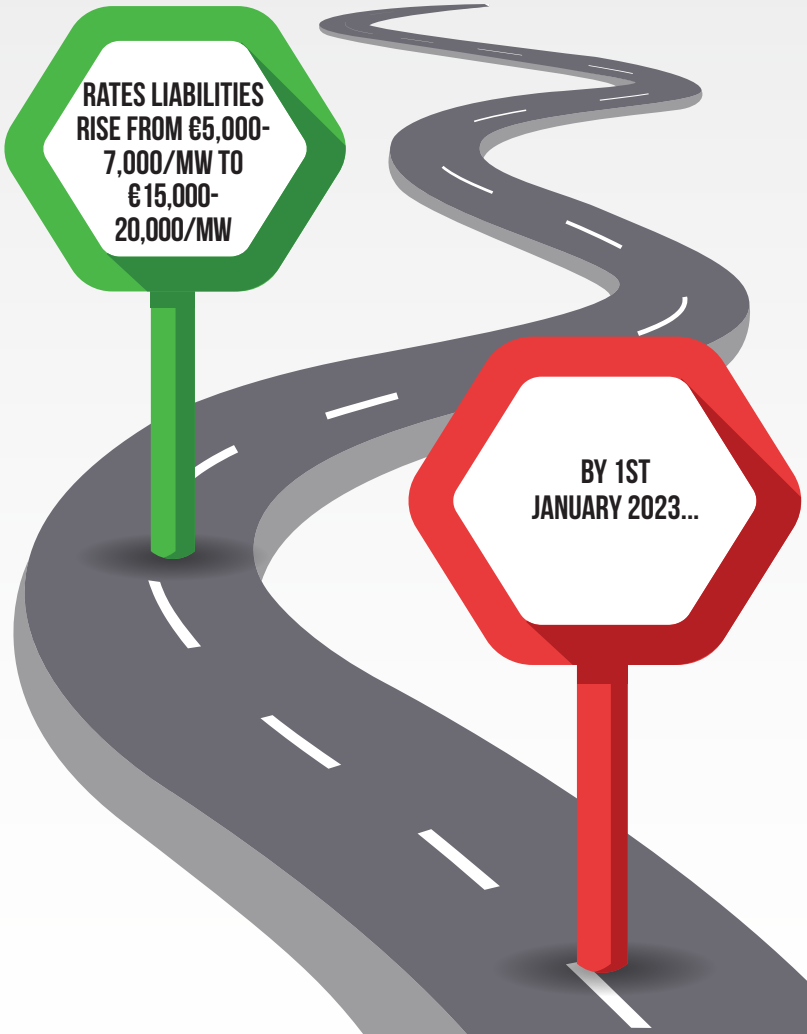
As rating agents, all we can advise individual operators is to have any documentation from the Valuation Office fully investigated once it arrives to you, as this is the only way to be sure that your own position is represented. In terms of an industry-wide approach, we are now deeply concerned that the only way to achieve representative liabilities is through political pressure.

Given the legal mire that has engulfed the Valuation Tribunal proceedings, there is no end in sight to this process and it is worth bearing in mind we are already over four years in.

In the interim, inflated liabilities are causing significant difficulties for existing and potential projects seeking to get bank financing.

The only definitive way to end this uncertainty is to amend the Valuation Act 2001. The criteria used for assessing wind farms needs to be set out in law to ensure consistency and fairness. This would take time and money; but most importantly it would require the entire wind industry getting behind whatever amendment proposal was to be made.

Needless to say, any significant updates from the Valuation Tribunal or the High Court will be communicated to members as soon as it is available.



By David Halpin M.Sc. (Real Estate) BA (mod), Surveyor at Eamonn Halpin & Co. Ltd.

Special Feature

IRELAND - OFFSHORE

ALEX MEREDITH, CHAIR, OFFSHORE COMMITTEE, IWEA

If Ireland is to play its part in the international battle to avoid catastrophic climate change there is no time to waste.

To meet decarbonisation targets the Irish electricity system must make a decisive switch to renewable electricity within a decade. If we hesitate, overcomplicate or prevaricate, we risk failing. In Ireland, as across Europe, we must take on the challenge of decarbonisation with a clarity of purpose and a real sense of urgency.

To rise to the challenge we must pull hard on all levers. No technology should be ignored and all parts of the country should be encouraged to play its part.

The offshore wind resource in Ireland is one of the most reliable and abundant in Europe. Ireland is also blessed with shallow sea-beds off the east coast, close to the centres of electricity demand.

Those practical and geographical reasons point to offshore wind as major part of the solution to the decarbonisation puzzle. Add the falling cost of offshore wind, community benefits and the potential economic opportunities of constructing large scale infrastructure offshore and it is not surprising that is it now a mainstream view that offshore wind will play a significant part in the energy transition of Ireland. Indeed, Minister Denis Naughten TD put it succinctly at Ocean Wealth Summit in Galway back in June when he said, "I believe that offshore renewables are critical if we are going to achieve our 2030 objectives".

But logic and belief alone will not be enough.

The planning, grid and regulatory challenges of developing energy projects offshore require a determined and coordinated approach from government and industry to unlock the potential. That determination has existed in Ireland in the past, notably to deliver the 25MW Arklow Bank development in 2004 and it must be reignited.

Today we have up to 3GW of offshore wind in development off the east coast, a pipeline that (with the right levels of collaboration and drive) could deliver an efficient and cost-effective green backbone to the Irish electricity system in good time for 2030. Developing off the east coast also provides the opportunity to deliver large, transmission scale capacity directly in the region where it is required; in the high electricity demand east coast region immediately adjacent to Dublin. Prioritising this first phase of offshore wind development in the east would therefore strengthen the electricity system's already stretched resources, reduce transmission costs for consumers and provide capacity to meet the strong demand increases which are anticipated in the future.

Evidence from the UK suggests that for every 1GW of offshore capacity installed, the host country benefits from €2bn of economic activity, and the Strategic Energy Assessment predicted that by 2040 over 20,000 new jobs could be created in the wind industry. Alongside the broad range of employment created, offshore wind has delivered substantial community benefits packages to help regenerate and reinvigorate coastal communities.

So the opportunity to facilitate smooth and immediate deployment of offshore wind off the east coast presents a win-win-win-win for Ireland – fighting climate change, bringing supply to the demand, capturing local community benefits, delivering economic growth.

IWEA is supporting and helping coordinate industry efforts to ensure that Ireland capitalises fully on this exceptional opportunity.

The Offshore Committee was set up in June 2018 and has members representing interests from all parts of the offshore wind sector. The committee brings together expertise from across Ireland and Europe facilitating collaboration between OEMs, developers, consultants, lawyers and everything in between. The focus of the committee has initially been on understanding and responding to the RESS framework announcement but the Planning sub-group has also been busily working to understand the government's intentions in relation to the planning process for offshore including a very productive meeting with Minister Damien English in September.

The fundamental drive for certainty and consistency from our regulators and politicians underpins IWEA's Offshore Committee work. That means engaging with government and regulators to ensure a robust foreshore planning regime and specific connection policies that facilitate grid opportunities for offshore projects. In short we will seek, on behalf of IWEA members, to encourage and shape a clear regulatory framework for planning, grid and route to market for offshore wind to ensure that the sector can move rapidly to achieve its full potential.

A major step on that journey will be the Offshore Wind Seminar on 8th November at Arklow Bay Hotel. This event will see the IWEA Offshore Committee working alongside NOW Ireland to present speakers on a range of topics relevant to the offshore wind industry in Ireland as well as sharing experiences from across Europe. The symposium will also offer an opportunity for a Q&A with developers in the offshore wind space to learn first-hand about the key challenges and opportunities that they are facing. I would like to encourage everyone with an interest in offshore wind in Ireland to come along and participate fully in the discussion.

There is no doubt that the political desire exists to remove the regulatory hurdles standing in the way of a flourishing offshore wind industry in Ireland. IWEA is ready to help convert that desire into reality. As we have seen in other jurisdictions, particularly the UK, speedy progress can be made if we work together to unlock the delivery of projects at scale with all the economic benefits that they bring.

IWEA's Offshore Committee will take the initiative. We will be a trusted liaison, sounding board, active facilitator and critical friend to all stakeholders wishing to support Ireland's transition to a clean energy future.

The momentum behind the offshore wind industry in Ireland is building. IWEA intends to play its part to ensure that this game-changing sector delivers the for Ireland.

WIND THROUGH THE **LENS**

Members across the country took the opportunity of Global Wind Day 2018 (15 June) to send in pictures of their favourite wind farm views.

The winner of the IWEA run GWD photo competition was Jacinta Roche from Wexford. She took the winning image at Morriscastle beach in Wexford with her family – you can see Ballywater Wind Farm in the background. Here Jacinta is pictured receiving her voucher with her beautiful children Oscar and Layla.

Here are some of the other entries we received. Lovely to see so many of you out and about enjoying your local wind farm.

Winning Image

Winning Smiles

Policy Update

IWEA Policy Update – Autumn 2018

The policy team has now expanded its committees to a total of six – Markets, Grid, Planning, Energy Systems, Storage and Offshore. Each committee contains a number of working groups which tackle specific topics and issues. The working groups allow for cross-committee subject matter experts to come together to work on industry related topics. They range from commissioning economic analyses and reports to developing responses to consultations. The working groups provide IWEA members with an opportunity to influence key stakeholders and policy decision-makers, via the IWEA platform, and therefore help to shape the direction of energy policy in Ireland. Described below, are several key workstreams currently active across various IWEA Policy working groups and committees. Any member of IWEA can apply to join a committee by emailing office@iwea.com.

Renewable Energy Support Scheme (RESS)
DCCAE published its RESS High-Level Design document on the 24 July 2018. The document provides a roadmap for Ireland to meet its 2030 targets and largely follows the policy themes of the Energy White Paper published in 2015 including community engagement, minimising cost to consumers and diversity in the renewable energy technologies deployed. RESS will use a series of scheduled, competitive auctions giving the Government the opportunity to respond to falling technology costs, market conditions and renewable electricity policy objectives over the lifetime of the scheme. An Implementation Group will be established by DCCAE to deliver the detailed design of RESS. A RESS working group was established under the Markets Committee to review the High-Level Design and to develop an initial list of areas that the industry felt required clarity and areas that would benefit from industry guidance. The intention of this paper was to open discussions with DCCAE.

I-SEM
At the time of writing the I-SEM was on track to go-live for the first delivery day on 1 October 2018. The SEM Committee issued its final go-live notice on 31 August 2018. This marks the coming of the end of a significant project that has impacted the entire industry and the establishment of a new market format.

REFIT in I-SEM
DCCAE published its decision on the arrangements for Electricity Support Schemes in I-SEM on 14 June 2018. The reference price for wind greater than 5 MW will be the minimum of the Day-Ahead Market Price or a blend of 80% of the Day-Ahead Market Price and 20% of the Balancing Market Price. The reference price for wind less than 5 MW will be the minimum of the Day-Ahead Market Price or a blend of 70% of the Day-Ahead Market Price and 30% of the Balancing Market Price.

REFIT Grace Period
To qualify under REFIT a wind farm must be connected to the grid by 31 March 2020. The Grid Delivery Working Group raised a concern in relation to this timeline given that capacity issues within ESB Networks have resulted in delays of four to six months in the delivery of connections. To mitigate this risk, IWEA presented the option of allowing a Grace Period for Grid Delivery to DCCAE. The proposed Grace Period would extend up to 31 December 2020 and would apply to those wind farms that have a grid connection scheduled after 30 June 2019.

Cost Benefit Analysis of Wind 2000-2020
IWEA has commissioned a study to evaluate the economic impact of wind energy between the year 2000 and 2020. It will include the additional cost of wind energy for the consumer such as financial support via the PSO and network costs as well as savings due to wind energy such as reduced wholesale electricity costs and capacity costs. The results will be presented at IWEA's Autumn Conference in October.

IWEA 2030 Energy Vision

IWEA launched the 2030 Energy Vision this month. The paper compares two scenarios – one where no further investment is made in renewable energy in Ireland and one where 70% renewable energy is achieved by 2030. The study shows that not only is it technically feasible to deliver 70% renewable energy by 2030, it is also cost neutral to the consumer. The key assumptions are shown in Table 1. Visit the IWEA website to read the report.

Table 1 All-Island key scenario assumptions in the 2030 Energy Vision

	2020 Assumptions	Fossil 2030	Renewable Energy 2030
% RES-E	41%	37%	70%
% RES	13%	15%	25%
Total Electricity Demand (TWh)	40	46	49
Wind Power (MW)	4,800	4,800	10,190
Solar Power (MW)	320	320	2,900
Interconnection (MW) - All Island	580	580	2,030
SNSP Limit - All Island	75%	75%	90%
Min Gen - All Island	1,000	1,000	700
Electrical Vehices (nr)	0	0	629,398
Heat Pumps (nr)	0	0	396,302
Small Scale Battery Storage (MW)	0	0	500
Large Scale Battery Storage (MW)	0	0	1,200

ECP-1 Results
The ECP-1 results were published on 31 August. 294 MW of new wind applications were accepted, 1 MW of wind was accepted under the "non-GPA fold in" category and 280 MW of relocations of wind projects were accepted. In total 575 MW of wind will be processed under ECP-7.

Wind Energy Guidelines
The Wind Energy Guidelines are still under review by the DHPLG and DCCAE. There is currently no clear signal on when these will be published. October 10th will see the launch of WHO Environmental Noise Guidelines which might help see the draft guidelines move to the next stage. IWEA's Planning Committee is currently undertaking several actions to analyse the impact of the proposed Wind Energy Guidelines on wind energy development. The primary focus has been on the new noise limitations. A detailed analysis of noise methodologies is being carried out to create a model for setting an appropriate limit on wind turbine noise.

Regional Planning
IWEA is currently analysing a regional approach to wind energy development. This research will aim to show how three regional authorities could manage the transposition of national planning policy. In welcome news the DCCAE have a tender out to update the "Renewable Electricity Policy and Development Framework". The sooner this is completed the sooner a regional approach could be implemented by the DHPLG. The Planning Committee is currently exploring the idea of comparative approaches to landscape classifications.

Hen Harrier Threat Response Plan
Following IWEA's response to the Hen Harrier Threat Response Plan (HHTRP) a Consultative Committee meeting was held to discuss review/comments on the HHTRP in early September by the DCHG. IWEA was represented at this meeting. The final launch of the HHTRP following the Consultative Committee and Public consultations are taken on board in Q4 2018/Q1 2019.

Offshore Seminar
IWEA will host an Offshore Seminar on 8 November. (See our Membership and Events pages for more details.)

Q&A

Pauline Gallacher, Chair of Neilston Development Trust

Can you tell us a little about the Neilston Development Trust and your role in it?

The Neilston Development Trust is a community development trust. There are more than 200 of these in Scotland. They exist, as the name suggests, to further the aims and the development of the local community.

They exist to respond to identified needs but they can also be something quite visionary. I had a background in urban design and architecture and I decided I'd quite like to try supporting the community to help address some of the shortcomings I saw in the local planning system.

We wanted to look at ways in which people could feed into more strategic development as opposed to the kind of reactive scenarios you tend to have when developments are proposed.

We started out in 2004, then in 2006 we bought the local bank and turned it into a café, office and meeting space for the trust. Then in 2009 we produced something called the Neilston Charter.

This was an aspirational planning document with the aim of making the environment and infrastructure more appropriate and well-designed. It was around the same time the opportunity to invest in the wind farm came along.

How did the trust get involved in wind energy?

When we did the Charter one of the things we instructed the consultant to do was to look at how we might ensure a more sustainable future, so in the Charter you'll find mention that it would be good to be involved in renewable energy and it was kind of a happy coincidence that the opportunity came at a time we were already thinking about it.

We're also not far from Whitelee Wind Farm, which is one of the biggest in Europe, so people in the area were familiar with wind farms and wind turbines. So when Carbon Free Developments approached us, saying they were interested in exploring a community partnership model, NDT was delighted to respond.

How did the trust raise the money to invest in the wind farm?

Well we had no financial assets in the trust, no reserve, so anything we were going to invest we were going to have to find. We didn't raise money from among residents, this wasn't that kind of offer. Social Investment Scotland were very helpful to us, they were able to provide some loan funding and to put us in touch with other social investors.

Together, we put together a package of £950,000, which meant we invested £860,000 after costs in what turned out to be a 28.3 per cent equity investment in the Neilston Community Wind Farm and which started operation in 2013. It was also helpful that the Scottish Government had a target specifically for community ownership of renewables,(I think they've exceeded that since), so that meant some of the social investors were very open to us but they still took a very keen look at the business plan and our ability to pay the interest which was at 8 per cent. If we had had assets on our balance sheet it would have made things a bit easier but we didn't at the time.

What was the local reaction, was there much opposition?

We were very careful to do a good public consultation. But I also think a big part of the difference was that sense of being a genuine stakeholder.

If you're going to have large wind turbines outside your window and the profits are going to investors a hundred miles away, or even in France and Italy that's one thing, it's another thing to say you own a third of that and that money is going to come into Neilston in perpetuity.

Eventually, you made the decision to sell your share of the wind farm, can you talk us through that decision?

There were a couple of reasons behind this. First of all, the UK Government cut the one of the key subsidies for onshore wind farms, so in terms of our income, that meant it was a lot less than we'd planned for. The next thing was that the fall in energy prices also had an impact. The windfarm itself was doing well; but our indebtedness remained (and interest charges rolling up, despite reprofiling).

So for us, as a community, this meant there was now a question about whether we would be able to pay our loans and our ability to do that was becoming compromised.

We were then approached by two different potential purchasers and they made what our partners considered to be very attractive offers, so on that basis it suited both parties to consider selling the wind farm.

The offer we took enabled us to clear our debts. We then had a fund of several hundred thousand pounds for the trust and we took two million pounds of the proceeds and set up a charitable organisation called the Neilston Windfarm Legacy. It's about to launch its first round of applications for funding and local groups, including NDT, can apply for funding. The fund is run by volunteer trustees chosen for their experience but we have the benefit of very competent financial advisers who are helping us to organise the fund and to invest it for the long term so the money is working for us.

What lessons would you have for similar plans in Ireland?

I think if we're serious about whether communities are going to be self-reliant and empowered they need to have a dependable and long-term source of funding. If the Government really wants to see communities prosper it needs to ensure they have a reliable source of income, and renewables ticks the box, promoting a low carbon economy while providing that resource.

It's also important to know that these kinds of initiatives aren't easy. They need people with a certain amount of energy and capacity. It requires an enormous amount of that. It was just fortunate that I was able to devote a year to making NDT's investment in the windfarm happen, and that with massive support from our commercial partners.

One thing that could make it easier would be to find some way of supporting community groups investing in projects like this. There are national charities with serious money sitting in not particularly high-earning investments. If you could design a 'revolving door' where big charities , under appropriate conditions, could lend to communities which have these kinds of social projects, this could be to the benefit of all concerned.

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See you at the IWEA Autumn Conference! Get in touch if you would like to connect.

Proud IWEA member

MEMBERS *Mingle*

Images taken at our Health and Safety Conference this summer. The day included a breakout session where delegates completed a series of tasks under time pressure. The activities fed into a wider session on mental health wellbeing for workers.

Garret Farrelly

Partner | Head of Energy and Infrastructure Group

Matheson

Leading the way in Energy and Infrastructure

Garret Farrelly is a market-leading advisor and the Head of the Energy and Infrastructure Group. He advises on all aspects of energy law including energy-related M&A, energy regulation, development and project finance of thermal and renewable generation projects, electricity and gas networks, mining, and oil and gas exploration.

Matheson was recently named Ireland M&A Legal Adviser of the Year at the 2017 Mergermarket European M&A Awards. Excellence matters and Matheson's Corporate and Commercial Department, led by 20 partners, is the recognised leader in the Irish legal market with unparalleled experience in complex and innovative domestic and international corporate transactions across all industry sectors. As part of our Corporate and Commercial Department, our Energy and Infrastructure Group has the depth of resources and personnel to be able to lead complex and extensive energy-related transactions.

Matheson has worked on more cross-border deals in the energy sector, advising the bidder, than any other Irish or international law firm in the last ten years.

Discuss your Irish energy legal needs with Garret Farrelly (garret.farrelly@matheson.com) or your usual contact at Matheson.

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Financial Times Innovative Lawyers Report 2017

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Monterey Insight Ireland Fund Survey 2017

IWEA's Committee Update

IWEA expanded its range of committees this year and we now have ten committees that members can join:

Markets, Planning, Energy Systems, Grid, Asset Management, Health & Safety, Storage, Offshore, Community Engagement and NIRIG.

All committees web pages can be found on www.iwea.com/

How to join?

IWEA members are welcome to join the IWEA committees, with a maximum of one person from each company per committee. If you would like to know how to become a committee or working group member, then please contact office@iwea.com.

Why join?

The benefits of joining an IWEA Committee include:

- Opportunity to influence policymakers and make a positive contribution to the wind industry.
- Opportunity to engage with Key Stakeholders such as DCCAE, DHPLG, EirGrid, ESBN, CRU, An Bord Pleanála and others via input to consultations and attendance of internal and external meetings.
- A chance to act as the voice for the industry at stakeholder meetings and public events, as well as IWEA conferences
- An opportunity to actively engage in the work of the Working Groups.

What Committees are there?

MARKETS COMMITTEE

Chair: John McNamara

Markets Committee

The Markets Committee looks at a range of financial issues and risks to the wind industry and develops solutions to these through the working groups. Activities cover the wind industry's Route to Market via existing and new support schemes, the operation of wind energy in Ireland's electricity market (SEM/I-SEM) and broader policy developments affecting the electricity market such as the Clean Energy Package and Brexit.

Working Groups include: RESS, REFIT in I-SEM, I-SEM, Brexit

GRID COMMITTEE

Chair: Donal Smith

Grid Committee

The Grid Committee examines a range of issues affecting project delivery and connection to the electric grid. Topics range from high-level policy and regulation, such as procedures for grid connection applications and processing, to specific issues related to the grid and wind energy connections such as Harmonics and Met Mast Guidelines.

Working Groups include: Enduring Connection Policy, Grid Delivery, Build Out Survey, Contestable Cable Works, Hybrid Plants, DS3/Curtailment, Grid Code Compliance Testing

PLANNING COMMITTEE

Chair: Brian Keville

Planning Committee

The Planning Committee looks at the many planning issues affecting the deployment of wind farms in Ireland.

Working Groups include: WEGs (Noise), Kilronan/Section 5's,

STORAGE COMMITTEE

Chair: Bernice Doyle

Storage Committee

The Storage Committee was set up in July 2018. It is run by the chair chosen from the IWEA membership and the committee reports to the IWEA Board and Council. The Storage Committee was established as a forum to addressed the needs of the storage industry to work on areas of common interest of the members.

ENERGY SYSTEMS COMMITTEE

Chair: Paul Blount

Energy Systems Committee

The Energy Systems Committee was established as a forum for the wind energy industry to discuss broader energy policy and to evaluate how the surrounding energy system will need to evolve in the future to accommodate more wind. Central to this committee is the IWEA Energy Vision, which sets out how Ireland can provide 70% of its electricity with renewable electricity in 2030 without increasing the cost of electricity for the consumer.

Working Groups include: 2030 Targets, Future Costs, Heat & Transport, Cost-Benefit Analysis of Wind Energy.

COMMUNITY ENGAGEMENT COMMITTEE

Chair: Emmet Egan

Community Engagement Committee

IWEA regularly reviews and updates best practice guidelines on how wind farm developers and owners interact with the local community. This began with general 'Practice Guidelines' March 2012, which was followed by more detailed guidelines on being a Good Neighbour in 2013. Specific recommendations were proposed for Ownership in 2017 and these were all combined and updated in 2018, with the launch for consultation of Community Engagement Strategy March 2018.

IWEA is currently engaging with various stakeholders across communities, policy and industry about this new strategy and is aiming to complete a final version by early 2019.

NORTHERN IRELAND (NIRIG)

Chair: Rachel Anderson

Northern Ireland Committee

The Northern Ireland Renewables Industry Group (NIRIG) is a collaboration between the Irish Wind Energy Association and Renewable UK. NIRIG represents the views of the large-scale renewable energy industry in Northern Ireland, providing a conduit for knowledge exchange, policy development support and consensus on best practice between all stakeholders.

Working Groups include: Markets, Grid and Planning

HEALTH & SAFETY COMMITTEE

Chair: Ronan O'Meara

Health & Safety Committee

The aim of the Health & Safety Committee is to protect people, maintain and develop stakeholder relationships, and ensure access to all relevant information and policy development processes. The Committee will look to secure the safety of the industry through the benchmarking of international practices, knowledge sharing and the dissemination of information to the whole industry, beyond our membership base.

Peer support - IWEA strives to provide fora which allow industry peers an opportunity to openly seek opinion, guidance, information and support.

Working Groups include: Operations, Construction, Logistics & Wind turbine safety rules

ASSET MANAGEMENT COMMITTEE

Chair: Sheila Layden

Asset Management Committee

This committee works on the premise that effective Asset Management drives the optimisation of asset base lifecycle in terms of performance, cost and risk. The Asset Management Committee focuses on: Continuous improvement, establishment and promotion of high standards with regards to technology, systems, community, policy and commercial return.

Working Groups include: Operational including Rates, Standard Setting, Engagement

OFFSHORE COMMITTEE

Chair: Alex Meredith

Offshore Committee

The Offshore Committee was established this year as a forum to address the specific needs of offshore wind. Offshore wind costs are falling rapidly in other parts of Europe and Ireland has a very large offshore resource, so the committee is working to ensure that there is an efficient policy framework in place for the development of offshore wind in Ireland.

Working Groups include: Consenting & Route to Market.

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ESB TRADING: READY FOR I-SEM

The introduction of I-SEM will mean a fundamental change in managing energy assets in the Irish electricity industry. ESB has developed a major trading capability to deliver asset optimisation, risk management and wholesale market access. ESB Trading now offers a range of services to manage renewable assets across this new all-island market, including:

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- **Supplier Lite Contracts**
- **Flexible Green Hedge Swaps**

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If you would like to learn more about the Renewables Services that ESB can offer in I-SEM, please contact:

Anne Ruddy
Renewables Contracts Manager
Email: anne.ruddy@esb.ie
Telephone: (01) 702 7128
Mobile: (087) 799 1180

AUTUMN 2018 GENERATION TABLE:

IWEA's policy team carried out a survey to update members on the latest level of energised wind on the Island of Ireland. As of October 2018, IWEA's, database indicates that there is a total wind generation capacity of 4670 MW broken down into 3536 MW in the Republic of Ireland (ROI) and 1134 MW in Northern Ireland.

The table gives further detail around where the increased capacity (MEC) stems from and primarily concentrates on large scale wind farms. As with previous generation tables all information displayed has been gathered through contacting both developers and specialised consultants within the industry. Connection dates are based on available information and may be subject to change. IWEA also used the ESB and Eirgrid connections and contracted lists as a reference point.

With the industry soon leaving REFIT behind and entering the new era of auction-based schemes, grid connection estimates are as important as ever. Prior to this edition of the Generation Table it was noted that from January – April 68 MW was connected to the grid in ROI. The table below, shows that a further 152 MW has now been added since the last publication.

Projecting forward we see the possibility of a further 183.98 MW being connected by the end of 2018. While not breaking the record year that was 2017 it could be the second-best year of connections on record. Looking forward to 2019 we see 559 MW in the connection pipeline, together these figures show consistent growth of installed wind energy in ROI. If all projected projects are connected on time we could see ROI total MEC at 3719 MW by 2019 and 4278 MW by 2020.

In Northern Ireland the figures available show that five new wind farms with a total of 101.9 MW have been connected since the last edition of the generation table. These new wind farms will be added to the existing growth in 2018 of 21.1 MW. A further 9.2 MW will be added in the next year.

2018 Connected ROI (Since last publication - April)

Farm Name	MEC	County	Owner/Developer
Ballagh Wind Farm	4.60	Limerick	Blackrock
Cappawhite B Wind Farm	13.18	Tipperary	ABO Wind
Carrickallen Wind Farm	22.00	Cavan	Galetech Energy Developments
Clahane (2)	13.80	Kerry	Pallas Windfarm Ltd
Cloghanaleskirt Wind Farm	12.55	Kerry	Peter O'Brien
Cloonlusk Wind Farm	4.25	Galway	Connaught Wind Power
Grady Joinery	2.50	Mayo	Grady Joinery
Kelwin Power Plant	34.00	Kerry	GE
Rathnacally Wind Farm (Freemount)	4.45	Cork	NTR
Total Increased MEC (Apr - Oct)	**152.73**		

2018 ROI to be Connected

Farm Name	MEC	County	Owner/Developer
Ballincurry Wind Farm Ltd	4.70	Tipperary	Thomas Cooke
Ballycumber Wind Farm	18.00	Wicklow	KBM Wind Group Ltd
Glantaunyalkeen Windfarm	10.00	Kerry	Innogy
Knockalassa formally (Keelderry (1))	26.88	Galway	Michael Murnane
Kilbranish Wind Farm (Greenoge (2))	2.50	Carlow	Greenogue Wind Farm Ltd
Knockalough (1) (prev. Clochar na Lara)	33.60	Galway	Knockalough Wind Farm Ltd.
Loughaun North (2)	44.50	Galway	Brookfield
Magheramore and Cloontooa Wind Farm	40.80	Mayo	PWWP Developments Ltd
Rossaveel Wind Farm (Clifden)	3.00	Galway	Lir Environmental Research
Total Increase MEC (Oct – Jan 2019) (IF ALL PROJECTS CONNECTED)	**183.98**		

2019 ROI to be connected

Farm Name	MEC	County	Owner/Developer
Black Lough Wind Farm	12.50	Mayo	Black Lough Windfarm Ltd
Boolard Wind Farm (Charleville)	4.45	Cork	NTR
Boolynagleragh (1)	36.98	Clare	Hibernian Wind Power
Bunnahowen Wind Farm (Temp)	2.55	Mayo	Alpha Wind Energy Ltd.
Bunnyconnellan Wind Farm	28.00	Mayo	NTR
Cahermurphy Wind Farm	6.00	Clare	Alpha Wind Energy Ltd.
Carrowleagh Wind Farm (2)	2.65	Mayo	Loftus bros.
Cleanrath Wind Farm	30.64	Cork	Wind Prospect Ireland Ltd.
Clogheravaddy Wind Farm	20.00	Donegal	ABO
Corvin Wind Turbine	2.10	Donegal	Corvin Wind Limited
Cronalaght 2 Wind Farm	17.00	Donegal	Gaoithe Teoranta Gineadoiri
Derragh Wind Farm	12.00	Cork	Mudkar Ltd
Derreenacrinnig West	5.82	Cork	George O'Mahony
Derrysallagh Wind Farm	34.00	Roscommon	GE Energy
Esk Wind Farm	5.95	Cork	Michael Murnane
Esk 2	5.4	Cork	Michael Murnane
Enros - Sorne Hill Single Turbine (3)	2.30	Donegal	Inish Wind
Grousemount WF (+ Barnastooka WF)	111.42	Kerry	ESB Wind Power / Kerry Wind Power Ltd.
Killala Wind Farm	19.20	Mayo	Killala community Wind Farm Ltd.
Kiltumper Wind Farm	4.99	Clare	Renewable Power Generation
Knockawarriga Ext	6.60	Kerry	Brookfield
Lissycasey Wind Farm	13.40	Clare	Renewable Power Generation
Mauricetown Wind Farm	13.80	Limerick	Mauricetown Wind Farm
Oweninny Power	89.00	Mayo	ESB and Bord na Móna

AUTUMN 2018 GENERATION TABLE:

2019 ROI to be connected cont.

Farm Name	MEC	County	Owner/Developer
Raheen Bar Extension	6.80	Mayo	Ecopower
Raragh 2 Wind farm	11.50	Cavan	Mainstream Renewable Power
Sorrell Island (Glenmore)	24.00	Clare	Enerco (Clare Winds Ltd)
Three Trees	4.25	Donegal	Three Trees Wind Energy Ltd.
Tobertooreen	23.10	Limerick	Element Power
Tullynamalra Wind Farm	2.63	Monaghan	Wind Energy Direct
Total Increase MEC (Jan 2019 – Jan 2020) (IF ALL PROJECTS CONNECTED)	**559.03**		

2018 Connected NI (Since last publication)

Farm Name	MEC	County	Owner/Developer
Cornavarrow Wind Farm	36.00	Tyrone	Energia Renewables Power
Elginny Hill Wind Farm	23.00	Antrim	Antrim Wind Energy Ltd
Slieveglass Wind Farm	6.90	Antrim	Energia Renewables Power
Tieges Mountain Wind Farm	11.00	Fermanagh	Energia Renewables Power
Castlecraig	25.00	Tyrone	NTR
Total Increase MEC (Apr – Oct 2018)	**101.9**		

2018/2019 NI to be Connected

Farm Name	MEC	County	Owner/Developer
Slieve Kirk Wind Farm (Increased MEC)	9.20	Derry	SSE Renewables Development Uk Ltd
Total Increased MEC 2018/2019	**9.20**		

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RESS – WHAT DO YOU NEED TO KNOW?

The Department of Community, Climate Action and Energy (DCCAE) published its Renewable Energy Support Scheme (RESS) High-Level Design paper on 24 July 2018. The aim of the paper is to set out the outline of the type of support that will be available for renewable technologies post REFIT, the mechanism that will be used, the funding for the support and the conditions of the support.

The objectives of RESS are to deliver our renewable electricity targets under the EU obligations, increase community participation in and ownership of renewable electricity projects, ensuring value for money for electricity consumers and enhancing security of supply.

RESS will move away from the current support tool implemented by the Department in that it will be offered through a series of scheduled competitive auctions. There will be a uniform clearing price meaning that the price will be set by the last generator that satisfies the criteria within the allowed volume.

RESS will be a two-way Contract for Difference with a strike price. The Day-Ahead Market Price will be used as the reference price. This means that RESS will be paid when the Day-Ahead Market price is below the strike price and generators will owe the scheme when the Day-Ahead Market price is above the strike price.

We do not have clarity on whether the reference price is an average price over the year or a renewable energy weighted price e.g. wind weighted or solar weighted electricity price.

The intention is to hold the first auction, named RESS-1, in 2019. RESS-2 can be expected in 2020. The idea behind the move to scheduled auctions is to provide the Government with the flexibility to respond to falling technology costs and market conditions.

	Auction Capacity (GWh)	Auction Year	Delivery Year (end of)	Single Technology Cap
RESS 1	1,000	2019	2020	No
RESS 2	3,000	2020	2022	Yes
RESS 3	3,000	2021	2025	TBC
RESS 4	4,000	2023	2027	TBC
RESS 5 (possible)	2,500	2025	2030	TBC

HOW DOES MY PROJECT GET INTO AN AUCTION?

There are a number of eligibility criteria set out in the paper. The first is that the technology needs the support. This is assessed through a viability gap analysis with a 3 year Levilised Cost of Energy (LCOE) look back. Cambridge Economic Policy Associates (CEPA) undertook an economic appraisal of RESS on behalf of DCCAE. CEPA determined that all the technologies reviewed would have a viability gap until at least 2025.

The 2015 Energy White Paper made specific commitments regarding community benefit and community ownership and DCCAE has made provisions for those commitments in RESS including:

- Complying with DCCAE's code of practice.
- Establishing a Mandatory Community Benefit Fund and Register
- Project contribution of €2/MWh for all RES-E generation produced and seeking support via RESS auctions.
- Investment opportunities to local communities within a 10 km radius with priority given to those within a 5 km radius.
  - To de-risk the investment process, communities only must register their interest in investment prior to RESS, it is only after a project is successful in RESS that the communities need to provide the funding.
  - There is no minimum level of community investment required. A project must only demonstrate that it has of fered community investment (e.g. through a project website) and will not be penalised if it is unsuccessful.
  - Projects with high levels of community investment will not be disadvantaged in an auction compared to those that are – although it is not yet defined how this will be managed
- Planning and grid requirements that must be met. This will include having received a grid offer.
- Bid bonds are required to be in place prior to the auctions. Bid bonds will be linked to project milestones including financial close, construction, becoming operational and meeting the community engagement criteria. Bid bonds will be lost if a project fails to meet the project milestones. The intention is to minimise speculative bidding.

INTERVENTION LEVERS

RESS has been designed with multiple policy objectives in mind. To ensure the auction outcome appropriately delivers those objectives, the Department has identified a number of intervention levers that may be applied to an auction, including:

1. Delivery date deadline associated with each auction. For RESS-1 this will be 2020.
2. Technology cap (between 45 and 75%) may be implemented. It is unlikely that this will be used in RESS-1 however it does seem to be the intention that it a technology cap will be used in RESS-2. If the single technology cap is reached in an auction then other, more expensive, technologies could be accepted. However, these technologies will need to demonstrate a cost margin (e.g. 15%) from the marginal uniform price to be considered successful in RESS.
3. While the auction is technology neutral, an enhanced LCOE may be used. This could see dispatchable technologies being valued higher e.g. bioenergy.
4. Capacity set per auction to reflect system demand for the period of the auction.
5. Unlike REFIT that had a 15-year fixed support, the length of support will vary by the auction.
6. The budget for each auction may be capped.
7. There may be a maximum strike price by technology.
8. Separate community-led category in the RESS auction with a certain percentage (5-15%) of capacity ring-fenced for this category. This will not be present in RESS-1 however, it is intended that this would be present in RESS-2 with an upper limit of 10% (about 100 MW of wind). Community-led is not defined in decision but the consultation suggested that these were projects with over 50% ownership.

EU RES-E TARGETS

The EU has set the overall renewable energy target to be 32%. Ireland must now negotiate how much of a contribution it will make to this target. The paper indicates that it is the Government's intention to propose that Ireland set a target of 26% renewable energy by 2030. This equates to 55% contribution from renewable technologies in the electricity sector. IWEA recently undertook a study which confirms that it is possible to supply 70% of electricity through renewable technologies by 2030. IWEA will be engaging with policy makers over the next few months on this view in a hope of increasing the Irish 2030 RES-E target.

NEXT STEPS

IWEA submitted an initial list of questions on the RESS High-Level Design document to the Department in August. The Department is establishing a RESS Auction Design and Implementation Working Group with EirGrid and CRU to work through the detailed design for RESS-1. IWEA will engage with the Department with a view to providing input into this Implementation Working Group.

IRISHWIND

IWEA organises numerous conferences, exhibitions, seminars and networking events for the benefit of its members and the industry.

IWEA 2018 Calendar of Events

8TH NOVEMBER 2018
IWEA Off Shore Forum
Arklow Bay Hotel, Arklow,
Co Wicklow

6TH DECEMBER 2018
Connect Event

IWEA
Irish Wind Energy Association

IWEA 2019 Calendar of Events

25TH JANUARY 2019
Irish Wind Industry Awards
Clontarf Castle Hotel, Clontarf,
Dublin 3

12TH & 13TH MARCH 2019
IWEA Spring Conference
The Clayton, Burlington,
Dublin 4