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World's hottest month sounds alarm for real estate, says sustainability expert

With wildfires raging in Europe and July now confirmed as the hottest month on record, the climate crisis shows no signs of abating. According to one sustainability expert, it's never been more urgent to address how we measure and manage our planet's real estate.

Bevan Jones, director of net zero and climate risk at sustainability services company Evora Global, said the significance of real estate in the climate crisis cannot be understated.

"Real estate is absolutely central to tackling the climate crisis," said Jones, "and the fact that we've just experienced our hottest month on record should really sound fresh alarm bells for those managing this mission critical sector."

"Emissions from real estate have an enormous effect on the planet and taking clear and strategic steps to improve its impact on the world is undoubtedly one of our main priorities in this battle against climate change."

"We know from research that real estate drives around 40 percent of total worldwide emissions. From manufacturing the materials used in buildings to the buildings themselves and the energy to power them, real estate determines a vast proportion of our species' combined effect on the planet."



"Meanwhile, estimates from COP26 suggest that \$14 trillion of buildings are going to be uninsurable within 20 years if they fail to meet the required climate and efficiency standards."

"So, not only is it in the interests of the planet but also for those managing real estate, their investments rely on properly tracking and improving their environmental credentials."

According to Jones, the visibility of climate change should radically alter how we address this crisis. "The real estate market has traditionally focused on historic data," Jones said.

"But now, we are moving into a very different world, where climate change is a part of our everyday lives."

"A planet that's too hot is dangerous and we have models telling us what is going to happen in the future."

"These models, that we've been working with over the last thirty years, have been largely accurate. Governments and businesses would do well to start paying attention to them."

Dublin and Sligo students release 'smart' pebbles to track climate change impacts

Primary and second-level students are this week placing 300 specially adapted RFID-enabled pebbles at Killiney Beach (Dublin) and Raghly Beach (Sligo) in a project to track coastal erosion. The innovative project aims to strengthen coastal communities' ability to deal with the impacts of climate change using digital technologies.

Led by Dr Chiara Cocco and Dr Francesco Pilla, researchers with Lero, the Science Foundation Ireland Research Centre for Software, at University College Dublin and Dr Iulia Anton, a researcher at Atlantic Technological University Sligo, the 'smart' pebbles initiative is part of the €10 million European-wide project SCORE (score-project.eu) funded by the European Commission.

"This project is really exciting because we are collaborating with people of all ages - primary school students, transition year students and a local Tidy Towns group - and using innovative technologies to examine the impacts of climate change on their coastal communities. The students will play a key role in releasing and monitoring 300 specially adapted Radio Frequency Identification (RFID) enabled pebbles over the coming months. Each 'smart' pebble, painted yellow and typically about 10cm in size, has a RFID transponder cemented into drilled holes, enabling us to trace the impacts of erosion and their movements over the coming months," explained Dr Cocco, Assistant Professor at UCD.

Dr Anton, the project manager of the SCORE project, said: "Each pebble will be 3D scanned by the 'search and rescue'



students, enabling the tracking of abrasions and markings. Then, we will be able to track the pebble's movements using RFID readers and GPS locators. These citizen science results will be analysed in the lab utilising algorithms to determine climate change impacts on coastal erosion on the beach."

"We are thrilled to start this exciting initiative at Killiney and Raghly Beaches. Our collaboration with local schools, led by dedicated students, is pivotal in this activity. Their role in releasing and monitoring these pebbles, equipped with state-of-the-art technology, will provide invaluable insights into erosion patterns and movements. This citizen science initiative not only fosters environmental stewardship but also empowers

the younger generation to engage in climate resilience efforts actively," Dr Anton added.

Dún Laoghaire-Rathdown County Council and Sligo County Council are also part of this initiative, one of the winning projects of the Accelerator Programme promoted by the EU-funded IMPETUS project (impetus4cs.eu). Dalkey Tidy Towns is involved in the Killiney project in Dublin with Monkstown CBS, Rathdown School and Holy Child. In Sligo, Grange Post Primary School is actively participating in the Raghly Beach project.

Dr Cocco said it is important to raise citizen awareness about climate risks in coastal urban areas.

"The project aims to actively involve younger people and empower them to become active participants in scientific activities related to climate risks," she concluded.

Air pollution and plastic waste among top environmental concerns for Irish people

Plastic waste and the pollution of our air and water are among the top environmental concerns for Irish people.

Almost 80% of households cited water pollution as a very important environmental concern, according to a survey conducted by the Central Statistics Office (CSO).

Coming in a close second place was plastic waste which was rated as a very important concern by 74% of people while 72% consider air pollution to be an important environmental issue.

Just under three-quarters of people surveyed said they would support stricter air pollution controls on industrial and energy-production activities.

These controls are considered to be the most effective means of tackling the issue while just 29% would support traffic restrictions such as congestion charges and low emission zones in polluted cities.

Seven in 10 rural households said they would continue to use their vehicle the same amount even if fuel tax was increased by 10% as without adequate public transport they have no alternative means of transport.

The urban-rural divide is also evident by the number of people who rated green spaces as an issue with 60% of urban households rating it very important compared to 30% of rural people.

Surprisingly, climate change was not among the top three environmental concerns for Irish people with just 69% viewing it as the top issue facing the country.

The results of the report were published on Monday to coincide with the UN Climate Conference, Cop26 which began this week in Glasgow.

A separate report from the CSO revealed greenhouse gas emissions from households dropped by 4% in 2019.

Households emitted 13 million tonnes of carbon dioxide in 2019, almost equal to emissions in 2014 which were the lowest between 2013 and 2019.

Homes were responsible for just over 60% of sulphur oxide emissions and 67% of carbon monoxide.

The decrease in emissions is attributed to a decrease in emissions from household heating.

Over 30% of greenhouse gas emissions came from the services



sector which includes road and air transport. It was the only sector to record an increase in emissions in 2019.

The agriculture, forestry and fishing sector accounted for 28% of greenhouse gas emissions as well as 93% of methane and nitrous oxide emissions in 2019.



Ireland to harness the power of green procurement with the CO2 Performance Ladder

The Irish Green Building Council (IGBC) have launched a pilot of the highly successful CO2 Performance Ladder in Ireland. The first tender has been published by Transport Infrastructure Ireland (TII), with other contracting authorities expecting to use the CO2 Performance Ladder over the coming months.

The Government of Ireland's annual public sector purchasing accounts for 10% to 12% of the country's GDP – and thus has the potential to stimulate the provision of more resource-efficient, less polluting goods, services and works within the marketplace. The CO2 Performance Ladder is a practical instrument that can be used to stimulate structural CO₂ reduction through procurement. More specifically, it provides an award advantage in tenders for applicants that ensure the implementation of an effective CO₂ management system.

Pat Barry, CEO at the Irish Green Building Council said: "By incorporating the CO2 Performance Ladder into their tendering processes, public bodies can send a

clear message to the market: sustainability is not an option; it is an imperative. The CO2 Performance Ladder is a proven instrument in public procurement and carbon emissions reduction. It has been highly successful in mainstreaming green public procurement in the Netherlands, and we are pleased to help bring it to Ireland".

Dr Vincent O'Malley, Head of Environmental Policy & Compliance at Transport Infrastructure Ireland added: "TII is fully committed to carbon emission reduction and to the advancement of a greener future for Ireland. We believe that the CO2 Performance Ladder is a practical tool that can help us achieve our sustainability goals."

The use of the CO2 Performance Ladder can enable Irish governments and businesses to translate their climate ambition into reality. With a certificate on the CO2 Performance Ladder, companies are rewarded with a concrete award advantage during the tendering process. A contractor indicates in the tender that it will perform the contract on one of the five ambition levels of the CO2

Performance Ladder. The higher the 'step', the more effort organisations invest in CO₂ reduction. Commitment at a higher-level result in a higher award advantage, thereby increasing the probability of winning the contract, and enabling contracting authorities to stimulate the sustainable economy. The commissioning party decides the award advantage an organisation can receive on each level of the Ladder.

The CO2 Performance Ladder in Ireland is coordinated by the Irish Green Building Council (IGBC), in collaboration with the Foundation for Climate Friendly Procurement and Business - Stichting Klimaatvriendelijk Aanbesteden en Ondernemen, SKAO, in Dutch. SKAO is the owner and manager of the CO2 Performance Ladder. It is an independent, not for profit foundation.

For further information on the pilot, please visit <https://www.co2-prestatieladder.nl/en/implementation-ireland> and <https://www.igbc.ie/co2-performance-ladder/> ■



Construction workers stand by a CO2 Performance Ladder construction banner.

Ireland's renewables success sets example for other EU countries - MEP Kelly

Séán Kelly MEP cited Ireland's renewable energy integration success as an example for other EU Member States while hosting a high-level conference on "Powering up Europe: Unlocking Ireland's offshore wind potential to help achieve EU climate targets," at the European Parliament, Brussels this week.

Alistair Phillips-Davies, CEO of SSE and keynote speaker, reiterated Ireland's potential as an offshore wind hub. In his view, with the right policies and infrastructure, Ireland can power Europe's energy and climate goals. "Ireland has a vast renewable energy potential and significant ambition to be a global leader in offshore wind. Today's discussion in the European Parliament highlighted that with the right policies and infrastructure in place delivered through cooperation across the EU and through the

North Seas Energy Cooperation (NSEC) initiative, Ireland can become an offshore wind hub, powering Europe's energy and climate goals," said Phillips-Davies.

MEP Kelly, a long-time Member of the Parliament's Energy Committee said: "It is important we learn from each other, and with Ireland's massive success in integration of renewable energy into the grid, where we really are best in the class, Ireland has the opportunity to share the solutions to challenges that some Member States are yet to experience. From laggard to leader".

"We still face major barriers to getting projects to the generation phase. I do not think people realize the extent of the problem. An Bord Pleanála have not approved a wind farm in 12 months. We can write legislation and set targets all we want, but when facing such delays in the administration phase,

potential is doomed not to be realized. We need more resources to planning authorities, it is as simple as that", Kelly said.

Referencing the high volume of legislation coming from the European Commission this term, Kelly stated that "we have passed a huge amount of consequential legislation, with more in the works. Most legislation entail 2030 targets, therefore I believe that the next Commission's mantra should be "implementation before legislation".

Kelly pointed to one notable exception: "For Ireland, there is a major opportunity in the next decade to have virtually no fossil fuels in our electricity system. Gas will not set the electricity price forever, and our market design must incorporate this fact at the right time so that renewables really can flourish and bring in a wave of cheaper electricity".



Pictured (l-r): Stefano Grassi – Head of Cabinet of Commissioner Simson; Ambassador Barbara Cullinane – Deputy Permanent Representative, Ireland; Sean Kelly, MEP for Ireland South; Alistair Phillips-Davies – CEO, SSE; Sonya Twohig – Secretary General ENTSO-E; Kristian Ruby – Secretary General Eurelectric; Pierre Tardieu, Chief Policy Officer, WindEurope.

GridBeyond appoints a new Chief Product Officer and President of North America

Houston – GridBeyond, a leader in intelligent energy solutions, has named Sean McEvoy as the company's President of North America and Chief Product Officer.

With over twenty years' experience at the forefront of technology innovation, Sean will lead the North American team, with a critical focus on pioneering front-of-the-meter and behind-the-meter AI solution development, a role which combines his technical expertise and passion for connecting innovation with real-world applications. The appointment follows GridBeyond's recent acquisition of Veritone Energy Business Inc, which has doubled the size of GridBeyond's team in North America.

In his various C-level and executive leadership roles, Sean has managed several teams across multiple business sectors including sales, product management, software development, and product marketing. Before joining GridBeyond, Sean worked for Veritone, IBM, DELL, QUEST, and Symantec.

Having lived in both Europe and Asia, Sean possesses a deep understanding of international markets. His keen insights into global trends and adeptness in formulating go-to-market strategies have enabled companies to establish a presence on the



Sean McEvoy.

international stage. He has a BSc in Software Engineering and an MBA in International

Business.

With Sean's expertise GridBeyond has already successfully integrated the technology and product portfolio of GridBeyond and Veritone Energy Business Inc, combining real-time asset optimization with AI-powered energy forecasting. By creating a pioneering AI platform that unlocks distributed energy resources' (DERs) potential while enhancing reliability and path to net zero GridBeyond's services have expanded to further support the global energy transition.

On joining GridBeyond, Sean McEvoy, Chief Product Officer and President NA said:

"I'm thrilled to steer GridBeyond's North American journey as President & CPO. Fusing technical expertise with innovation, we're blazing trails in AI solutions. The Veritone Energy merger amplifies our commitment towards SaaS and Net Zero. Together, we're unlocking Distributed Energy Resources' potential and propelling us toward a greener, more sustainable future".

Michael Phelan, CEO at GridBeyond added: "We are delighted to have Sean onboard. His experience and knowledge of the energy sector will be crucial to lead the company in North America and deliver a global zero carbon future".

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Croke Park Stadium, Dublin

Bord na Móna reports €95.2m profit, best performance in its 90-year history

- Delivered increased generation capacity of 35% fixed price, indigenous renewables to its portfolio and is on track to do the same in FY24
- Growing climate solutions and renewable energy projects underline success of Brown to Green Strategy - operating profit of €95.2 million achieved in FY23, increased from €78.9 million in FY22
- Financial results show record performance across all areas of Bord na Móna business with profits accelerated by the transformation and restructuring of the company to deliver against set targets
- Strong returns to the Exchequer with one-off enhanced dividend payment of €37.8 million.

Bord na Móna has reported a record operating profit of €95.2 million for the financial year 2023, reflecting the company's continued growth as a climate solutions and renewable energy company in line with its Brown to Green strategy. The strong financial results are the outcome of a record performance across most areas of the business but driven particularly by Bord na Móna's renewable energy portfolio which grew by 35% in FY23 versus the previous year – including Cloncreen and Oweninny Wind Farms (both RESS 1 projects) which collectively delivered an additional 175 megawatts of electricity in the past 12 months.

The company's €95.2 million operating profit for FY23 marks an increase on the FY22 figure of €78.9 million. EBITDA, including contributions from joint ventures, was €139 million, up from €121 million the previous year. In recognition of the extraordinary energy market conditions which prevailed in FY23, Bord na Móna has declared a one-off enhanced dividend of €37.8 million - representing 37.5% of adjusted profit after tax.

Bord na Móna made significant progress in the past 12 months with €100 million invested in the expansion of its renewable energy portfolio, including wholly owned developments as well as joint venture projects. Wind energy milestones included the construction of Cloncreen and Oweninny Wind Farms, and commencement of work at Derrinlough Wind Farm, representing an overall investment of €250 million. Bord na Móna also launched a joint venture with Ocean Winds to develop its first offshore wind farms around the coast of Ireland. The joint venture aims to generate up to 2.3 gigawatts of renewable electricity to power up to 2.1 million homes.

In line with these renewable energy projects, the company continues to invest in accompanying local community benefit schemes. In FY23, Bord na Móna contributed €930,000 in local community scheme funding, bringing the total support



provided over the past six years to over €4.45 million.

Bord na Móna has also advanced its hydrogen-ready and solar operations this year. The company has secured planning permission to launch a 2MW pilot-scale hydrogen electrolysis plant at Mount Lucas Co. Offaly. This will generate over 200,000kg of green hydrogen every year once fully operational. The energy produced will support the decarbonisation of certain parts of the national transport sector. Additionally, the company commenced construction of a new solar farm at Timahoe North in Co. Kildare in FY23 as part of a wider solar energy joint venture with ESB. Timahoe North solar farm will produce 108MWp of renewable energy to the national grid, and enough energy to power around 25,000 homes once it's operational by the end of 2024.

Renewable energy milestones have been achieved whilst maintaining a focus on Bord na Móna's peatlands rehabilitation – 5,500 hectares of natural peatlands were restored by Bord na Móna in the past 12 months, and 14,000 ha have been restored since its rehabilitation activity began. The company is committing to the restoration of 33,000 ha of peatlands in total over a five-year period. This is part of Bord na Móna's Peatland Climate Action Scheme (PCAS), one of the largest peatland rehabilitation programmes undertaken in Europe. The scheme will result in the capture of approximately 100 million tonnes of carbon, sequestering millions more in the future, and supporting the restoration of natural habitats for plants and wildlife.

Bord na Móna marked a key milestone in its Brown to Green journey during the year with the closure of its last remaining briquette factory in June 2023. This represents the final stage of the company's

transition to a fully focused climate solutions and renewable energy company.

The positive performance of Bord na Móna's recycling business also supported its operating profit during the last financial year as it expanded waste collection, processing, and end treatment solutions. These activities support Ireland's drive towards sustainable waste management as envisaged by the Circular Economy Act, and Bord na Móna continues to invest in the development of this arm of the business.

Commenting on the company's financial performance, Chief Executive Tom Donnellan said,

"The financial performance achieved by Bord na Móna over the past 12 months places the company in a strong position to invest further in the expansion of our renewable energy and climate solutions portfolio. Our year-on-year growth also establishes a solid financial platform for the company to deliver on our 10-year plan and support the state in achieving its renewable energy requirements by 2030 and longer-term objective of carbon neutrality by 2050.

We are conscious of our responsibility to contribute to the Exchequer and are pleased to provide an enhanced dividend of €37.8 million for the upcoming financial year as a result of our performance over the past 12 months.

Since 2022, we have achieved a significant number of milestones and firsts as a renewable energy business – including: increasing our energy capacity by 35%; commencing construction of our first ever solar farm; and securing planning permission for the country's first green hydrogen plant. It is encouraging and exciting for us as a business to see more and more projects that we are investing in come to fruition and form part of our widening climate solutions and green energy offering. We hope to continue building this offering further over the coming 12 months and beyond, supporting our wider ambitions to deliver a secure and consistent supply of green and affordable energy for people across the country."

Bord na Móna announces confirmed fledging of a Common Crane chick on rewetted peatlands for the second consecutive year following 300-year breeding hiatus

- Increased breeding success and sightings of the Common Crane are a positive sign for further species growth in Ireland.
- Species sightings connected to habitat restoration through peatland rehabilitation in Ireland.

7th August 2023: Bord na Móna has today announced that a pair of Common Cranes have returned from their wintering grounds from abroad to one of Bord na Móna's rewetted peatlands and successfully fledged a new chick in recent weeks. The Common Crane chick which has taken its first flight (also known as fledging) will soon leave Ireland along with its parents and most likely spend the winter in Southern Europe. This occurrence marks the second time a Common Crane chick (or chicks) has fledged and left Irish shores in the past two years. Prior to this, the species had no known cases of breeding in Ireland for over 300 years.

Additionally, there have been two separate sightings of Common Crane pairs in Offaly and Tipperary over the last few months. The sites where these Common Cranes have been spotted comprise Bord na Móna cutaway bogs, which were formerly used to extract peat for energy production but have since

been rewetted in recent years under different initiatives including as part of the company's Peatlands Climate Action Scheme (PCAS) also referred to as EDRRS.

This EU funded scheme involves the rehabilitation of Bord na Móna's peatlands, and aims to rewet drained peatlands for improved climate, environmental, ecological and hydrological impacts. The benefits of bog rehabilitation include the return of carbon storage that occurs naturally in wet peatlands, as well as restored biodiversity with the revival of various plant and wildlife species, including potentially such species as the recently sighted Common Cranes.

Historically the Common Crane was a breeding resident in Ireland but has been extinct in this country since at least the end of the 16th century, if not longer. Sightings in Irish skies of this species have increased in recent years during periods of migration and overwintering. This is largely attributable

to ongoing population increases across the known breeding range, supported in part by conservation efforts but also natural factors such as climate change effects. In recent years, efforts have been made by Bord na Móna to rehabilitate its peatland sites across Ireland to encourage climate action and the restoration of wildlife in general. This now appears to be benefitting species like the Common Crane, which is more likely to continue to increase in Ireland now that suitable supporting habitat is available in rewetted peatland areas. The restoration and rehabilitation of peatlands is also supporting habitat development for other native plant and animal species, including for example bog cotton, and other bird species of conservation concern such as Redshank and Lapwing.

Mark McCorry, Lead Ecologist at Bord na Móna highlighted the significance of this year's events:

"Further to last year's successful fledging of two Common Cranes in Ireland, we are delighted to report further fledging and additional sightings in recent months of this striking species on home soil. These sightings are a positive sign that the population of Common Cranes in Ireland may be on the rise, while also serving as a good indication that we are developing the right conditions and a favourable habitat to enable the species to thrive in this country.

"Rehabilitating our peatlands is a crucial part of Bord na Móna's wider Brown to Green Strategy enabling our transition from traditional peat harvesting to climate solutions development. It is great to see the impact that peatlands rehabilitation is having from a biodiversity perspective in just a few years since we commenced our peatlands rehabilitation scheme in 2021, and we hope that more plant and wildlife species will continue to thrive in Ireland similar to the return of the Common Cranes."



Veolia expands operations to deliver more sustainable materials to the construction industry

New dedicated plant will process bottom ash from EfW to replace virgin aggregates, recover metals, and advance sustainability - supplying 50,000 tonnes of aggregates per year

Leading sustainable resource management company, Veolia, are expanding operations to help the construction industry increase the supply of material that can be used to replace the virgin aggregates currently used as hardcore for sub-base in the foundation for roads and concrete structures. Working with industry specialists, Meldgaard Recycling and Levenseat, the company has started operations at a new dedicated processing facility at Ling Hall, Warwickshire, which will process incinerator bottom ash (IBA) from the Battlefield Energy Recovery Facility. This will supply around 50,000 tonnes of material per year produced from the treatment of non recyclable black bag wastes.

The UK construction sector is the UK's biggest user of non-renewable materials, and the raw materials have a high carbon footprint. Increasing the use of IBA will help the industry to become more circular and help reach net-zero in line with the Government's legally binding 2050 deadline.

Veolia's new facility will use the latest processing systems to prepare the IBA and transform this into the secondary aggregates that are essential for many construction projects. After careful sampling to check for any hazardous materials, the IBA is processed through a combination of magnetic separation equipment, including overband



magnets and eddy current separators, to remove ferrous and non ferrous metals and the resulting output is then graded for use.

Commenting on the new facility, Donald Macphail, Chief Operating Officer - Treatment said:

"As construction is a significant contributor to the nation's carbon emissions it is essential to deliver materials and

solutions that can advance sustainability, and lower environmental impact. By processing bottom ash from the treatment of non recyclable waste our new facility will deliver an important source of secondary aggregates, and recover metals that would otherwise be lost. In this way it will lower the dependence on virgin resources, limit environmental impact, and reduce carbon emissions"

In becoming the benchmark company for ecological transformation, Veolia is committed to tackle climate change, resource depletion, biodiversity collapse, and pollution. By adopting innovative solutions, and changing patterns of production and consumption the company is placing ecology at the heart of every process to achieve its goal of being carbon neutral. This includes maximising the value from resources to effectively ensure a secure supply of energy, and easing resource scarcity challenges.

For more information visit www.veolia.co.uk ■



Waterford's Harvest Festival Announce Programme for 2023

Sustainability is to the Fore & One of the Oldest fruits in Ireland is Celebrated - The Apple

The annual Harvest Festival in Waterford is back for the 14th year and announcing details of the festival programme with a focus on food sustainability and a celebration of the Irish Apple to the fore for 2023. The festival takes place in the historic streets and squares of Waterford City centre from September 8th to 10th.

The festival is funded by Waterford City & County Council and organised by GIY who are bringing sustainability right to the heart of the festivities with 'Food Matters' food sustainability talks where some of the country's most esteemed food writers, chefs, activists, journalists and business people, it's guaranteed to be an educational, engaging and entertaining debate each day. In addition the festival will be run on HVO (Hydrogenated Vegetable Oil), with a bio-digester onsite, a complete plastics ban and all traders using compostable materials, refill water stations plus a wash up station for reusables. Plus there will be opportunities for everyone to get stuck into some GIY as over 2000 free plants and 1000's of free seeds will be given away to food growing enthusiasts during the festival weekend.

Commenting on the upcoming festival, GIY Founder Michael Kelly says, "We are delighted to share a diverse programme of events for Harvest 2023. The festival is centred on sustainability in every area, from the delivery of the festival to the talks, the traders and indeed to celebrating Irish food, the focal point of which this year is the humble Irish Apple. It will be the theme running through there festival and it is the central theme of the Harvest Festival Dinner menu at GROW HQ too.

The Harvest weekend is a very special weekend in Waterford, it is one that closes out our summer festival season and it is certainly a food occasion that is not to be missed for visitors and locals alike."

For the food fans Waterford's rich food heritage will be key, celebrating the City's diverse restaurants, eateries and producers. The best of Waterford's food and drink will be centre stage at the giant Harvest Festival Market which will traverse across Waterford's wonderful squares and interconnecting streets. I will span from John Robert's Square into Barronstrand Street on to George's Street, Gladstone Street and Hanover



Helping to announce details of the 2023 Harvest Festival which will take place in Waterford City from September 8th to 10th are twins Poppy and James Molloy age 3. The festival will celebrate three days of the finest in Irish food with the theme of one of the oldest fruits in Ireland taking centre stage. For further details and to browse the full programme of free entertainment and events see www.harvest.giy.ie - Photo Patrick Browne.

Street in the Cultural Quarter where a craft market will also be on offer. With a focus on sustainability, the Festival Market includes plenty of top quality local food producers offering an array of unique traders with plenty of fresh offerings and familiar faces.

On the Taste Waterford Kitchen Stage sponsored by Waterford's Local Enterprise Office, there will be a host of Waterford's very own food producers and Chefs who will all be sharing their best recipes and food tips. The stage will be located in the courtyard of Garter Lane Theatre and visitors will enjoy meeting chefs and food producers from all across Waterford with cookery demos on offer each day.

In the Junior GIYer's zone which will take over O'Connell Street families will enjoy the Woolly Farm where children can learn more about our furry and feathered friends. Artist Aga Krym will create a new living art installation with Slí Waterford based on the UN sustainable Development Goal of Zero Hunger. In addition Cool Food School and GIY will be hosting workshops

on seed sowing, growing and cooking food and Monty Potts will be on hand to help out plus there will be art workshops, Fun Drums and at Waterford City Library there will be story-telling, colouring sessions and more.

Special events will also be on offer including a restaurants trail, not one but two live music stages programmed by WAMA's Trevor Darmody and Waterford will also be home to the World Honey Championships where visitors can meet the best honey producers and learn all about the process as they have a chance to meet with the makers, and vote to decide the festivals best tasting honey.

The Waterford Harvest Festival is funded by Waterford City & County Council and is a weekend-long celebration taking place from Friday 8th to Sunday 10th of September and will see the city come to life with markets, special dining events, panel discussions and plenty more. For further details and to browse the full programme of free entertainment and events see <https://harvest.giy.ie/> ■

ESB launches High Power EV Charging Hub at Barack Obama Plaza

- New eight-bay charging hub is capable of providing 100km of charge in as little as six minutes
- The chargers are powered by 100% renewable electricity

ESB has today launched its new High Power (200kW) EV charging hub at the Barack Obama Plaza motorway service in Co Tipperary that will enable eight EVs to charge simultaneously using 100% renewable energy. The new charging facility is capable of providing 100km of charge in as little as six minutes.

The charging bay, which is located at a critical juncture in Ireland's road network on Junction 23, just off the M7 Motorway at Barack Obama Plaza, will be a game-changer for EV drivers, particularly those travelling long distances in the midlands and Munster region.

The announcement marks a significant milestone in ESB's €20m investment in all-island EV infrastructure, which is a key part of ESB's sustainability strategy and commitment to reaching net-zero by 2040.

With this €20m investment programme, which is partially funded by the Government's Climate Action Fund, ESB aims to deliver 50 High-Power hubs across the country as part of its national EV network strategy. Since the Climate Action Fund was allocated, the funding has allowed ESB to install 28 high power sites nationwide, replace almost all

of the standard 22kW chargers with newer technology, and upgrade 42 chargers to faster speeds.

Among these projects was the launch of a similar High Power Hub in Junction 14 in 2021. Since its launch, the chargers have enabled more than 60,000 charges monthly – a number that is expected to increase considerably in the coming years as the number of EVs on our roads increase.

This innovative charging hub will also play a key role in helping to meet Ireland's ambitious transport targets as laid out in the Climate Action Plan.

Speaking at the launch, John Byrne, Head of ESB ecars said:

"We are so pleased to be launching our new high power charging infrastructure today at Barack Obama Plaza. With several thousand visitors daily, this location will be of critical importance to ensuring that drivers in the region feel empowered to make the electric transition."

"EVs are the fast growing segment in the Irish car market, and at ESB, we are committed to ensuring that the public charging network is there for drivers when they need it. Today's launch is just the next

step of our plan which will see the remaining 28 high power sites at various stages of planning or build over the coming months." John added.

Welcoming the new chargers, Supermacs founder and owner Pat McDonagh said:

"At Supermac's, we have identified and prioritised opportunities to promote environmentally friendly activity as part of our ongoing Glan & Glas initiative. Electric vehicles are becoming an increasing presence on our forecourts at The Plaza Group and The Barack Obama Plaza is now one of the country's largest e-charging sites. This is certainly way of the future, and we are delighted to be a part of it."

Matthew Sealy, Chairperson of the Irish EV Association also welcomed the new hubs:

"It's great to see the increasing number of EVs on Irish roads in recent times, and fantastic to see the rapidly expanding network of charging hubs across the country, which will encourage even more people to make the switch. This new charging hub will be of huge importance to local EV drivers, commuters, and tourists, giving them even more flexibility on their journeys."



Marek Moderski (Retail and Forecourt Manager, Barack Obama Plaza), John Byrne (Head of ESB ecars), and Matthew Seally (Chairperson of the Irish EV Association) come together to unveil the new High Power EV Charging Hub at Barack Obama Plaza.

Eamon Ryan in row with Dublin Port after it tells Minister it won't hand over 10 acre city car compound for housing

Area was developed in 2014 at a cost of €3.4m for imported vehicles

Dublin Port is refusing to give up its new car compound for housing despite pressure from the Land Development Agency and Environment Minister Eamon Ryan.

The ten-acre site can hold 2,500 newly imported cars at any one time while they await distribution to salesrooms around the country.

Mr Ryan said it should be housing people, not cars.

“Do we want these large areas as car parks, within walking distance of O’Connell Street, within walking distance of the Luas?” he said.

“That should be housing. I don’t think we should be using Dublin City centre as the car park for new cars. We can put them in another location.”

The State-owned Dublin Port Company dismissed the idea, saying the compound was a critical facility and it had nowhere else to hold the 110,000 cars arriving over the year.

The site, which is separated from the main port area by the M50 near the Port Tunnel entrance, was only developed in 2014.

It has a private flyover across the motorway so cars can be driven from the quayside without using public roads.

Construction of the facility cost €3.4 million and it was formally opened by then transport minister Paschal Donohoe.

Dublin Port said in response to Mr Ryan’s remarks that the car compound was performing an essential role in achieving Ireland’s target of having 845,000 electric vehicles and hybrids on the road by 2030.

“Dublin Port is currently running close to capacity and would not be able to accommodate the importation of cars in any other part of the port,” it said.

“It is also likely that an alternative would result in a significant increase in emissions if this volume of vehicles needed to be transported back for sales in the greater Leinster area from another port.”

The site is one of three around the port that were identified by the Land Development Agency as having potential for residential



Dublin Port’s car import storage facility and the neighbouring Polefield site have been identified by the Land Development Agency as having potential for residential development

development, with space for at least 1,200 homes. A smaller plot known as the Polefield site beside the the car compound is unused but is not zoned for housing.

Mr Ryan said it should have been rezoned when the Dublin City Development Plan was reviewed earlier this year.

“Dublin City Council made the wrong decision. They didn’t rezone it last summer. That should be rezoned. It could be developed relatively quickly,” he said.

A third site at the East Point Business Park is tied into a lease with 13 years to run but Mr Ryan said plans should be made ahead of time for when it came to an end.

The Minister met with port officials last week to discuss this and other issues.

Earlier this year he had a very public spat with the port company after he took issue with its new long-term development plan which aims for massive growth of the container terminal.

Mr Ryan criticised the lack of provision for development of rail freight and renewable energy in the plans which he said were based on “a continued reliance on unsustainable models of maritime trade and logistics that run counter to our national climate, circular economy, housing and biodiversity objectives”



The site is separated from the main port area by the M50 near the Port Tunnel entrance. Photo: Niall Carson/PA.

GridBeyond launches Bid Optimizer to boost batteries profits

GridBeyond has launched Bid Optimizer, a new product for energy storage operators and merchant generators that eliminates guesswork from energy bid optimization.

Battery operators need to place 24 trades in the day ahead and 288 trades in the real time market every day, but by leveraging the power of AI, the product aligns market price forecasts with simulations of battery storage, renewable, and thermal assets to simplify decision-making while ensuring optimal bids that go beyond conventional strategies. Not only does this aid transparency around asset trading but it also maximizes businesses gross margin and overall profit compared to a business-as-usual strategy, across forward trading periods.

Its proven technology empowers merchant generators and energy storage operators by providing them with a strategic advantage in optimizing their energy and ancillary offers, maximizing the profitability of a business's entire portfolio. The product combines GridBeyond best-in-class price, demand, and generation market forecasts with simulation of a range of trading strategies and market outcomes. This enables the exploration of various trade scenarios and quantifies the probabilities involved in making projections. In addition, users can create/customize their own trades and view trading history and comparisons against perfect foresight through the cloud-based interface, ensuring transparency and ease of reporting.

Looking at the technology in practice, in the week of August 17 - 24, 2023 a battery in ERCOT using GridBeyond's Bid Optimizer would have received a 58% increase in

revenue. This is worth \$25,300/MW just for that single week alone.

The launch of Bid Optimizer follows up GridBeyond's recent acquisition of Veritone Energy Business Inc, which has brought together two of the most innovative companies in energy forecasting, trading and optimization.

GridBeyond's technology platform provides real-time optimization of distributed assets across a range of industries and asset types and Veritone Energy's AI-powered software unlocks the full potential of DERs while enhancing reliability.

The combination of the two technologies has allowed GridBeyond to deliver Bid Optimizer together with a new user platform, and extremely accurate forecasting technology that enables customers to generate revenues and support them on their path to net zero.

The delivery of Bid Optimizer was led by Sean McEvoy, GridBeyond President of North America and Chief of Product Officer who also worked on the delivery of other recently launched GridBeyond products including:

- Forecaster - which boasts an impressive +95% accuracy in its forecasts of ISO-wide demand, yielding up to 19% more revenue for each asset within markets
- Designer - which leverages AI to optimize prospective energy investments for profitability and sustainability
- Baseline - for monitoring and visualize site and organization-wide consumption and emissions in real-time
- Managed Battery as a service - for energy storage monetization with real-time optimization

Sean McEvoy, President of North America

and Chief of Product Officer at GridBeyond commented:

"With better forecasting, comes better results. Our Bid Optimizer product enables customers to manage risk and gain benefits. By forecasting everything from weather conditions, the need for balancing actions on the grid, to short-term wholesale market prices, our product manages renewable generation and battery storage assets, helping businesses to maximize revenue, manage risks, and reduce carbon emissions at the same time".

About GridBeyond

GridBeyond's vision is to deliver a global zero carbon future. By leveraging AI, we innovate and collaborate with our customers to create optimal value from energy generation, demand and storage to deliver a zero-carbon future. By bridging the gap between distributed energy resources and electricity markets, GridBeyond's technology means every connected asset – whether utility-scale renewables generation, battery storage, or industrial load – can be utilized to help maximize opportunities and enhance the grid. By intelligently dispatching flexibility into the right market, at the right time, asset owners and energy consumers unlock new revenues and savings, resilience, and management of price volatility, while supporting the transition to a Net Zero future.



AEE Climate Action Certificate course

5 0% funding is now available for eligible applicants through the Lean and Green Skillnet.

The Government's Climate Action Plan 2023 targets greenhouse gas emissions reductions for industry of 35% by 2030, which means every organisation will need a plan to manage their emissions reductions over the next 7 years.

Our 2-day Climate Action Certificate course in conjunction with the Association of Energy Engineers (AEE) will provide you with the knowledge and confidence to develop your own Climate Action Plan, and will be held again later this year on 12 & 13 October.

Overview as follows:

- Open to all professionals looking to develop Climate Action Plans for organisations, i.e. Sustainability, Facilities, Energy, Operations, Finance, Marketing, HR executives. No prior knowledge required.
- Professional Development Certificate will be issued from Association of Energy Engineers (AEE) in Atlanta.
- 12-13 Oct, 2023 at The Rediscovery Centre, Dublin 9.
- 15 hrs CPD + 1 hr assessment
- More information at www.climateaction.ie



ie
• Expert Trainers: Raoul Empey, Sustineo and Conor Molloy, AEMS ECOfleet
"I really enjoyed the course, eye opening, very interesting. I found Conor and Raoul

excellent, really made it interesting and enjoyable. I would be happy to recommend it to both colleagues and friends. The venue was excellent." - David McCrone, National Transport Authority.

Association of Energy Engineers Ireland (AEE) Corporate Membership

AEE Ireland is the accredited Irish Chapter of The Association of Energy Engineers (AEE).

The AEE is a nonprofit professional society of 18,000 members and 25,000 certified individuals in over 100 countries. The mission of AEE is "to shape the future of the energy industry through Networking, Energy Awareness, Education, Training, Professional Certification, Recognition and to Foster action for Sustainable Development."

Joining AEE Ireland as a Corporate Member offers an exceptional opportunity to become part of a prestigious network of Energy Professionals and gain recognition among a diverse group of individuals, including Energy Engineers, Sustainability Managers, Renewable Managers, Facility Managers and more.

AEE Ireland serves as a platform for bringing together accomplished professionals from across Ireland who hold responsibility for the efficiency and sustainability of their respective facilities, organizations, and groups.

As a Corporate Member, you will have the chance to engage in meaningful discussions, share best practices, and collaborate with like-minded experts in the field.



Ireland
Chapter

For further information on becoming a member of AEE Ireland please contact
Shauna Clancy, Corporate Membership
E: shauna@boxmedia.ie | P: + 353 46 977 3434 / www.aee.ie

Iarnród Éireann and Latvia's DIGAS to trial Europe's first retrofitted hydrogen freight locomotive

Iarnród Éireann Irish Rail and DIGAS signs a contract for the Europe's first retrofitted hydrogen internal combustion engine freight locomotive providing a cleaner, cheaper and more practical way to decarbonise diesel locomotive fleet

CLEANER

Iarnród Éireann Irish Rail is providing a locomotive and will test a retrofitted hydrogen locomotive using a cleaner burning renewable fuel

CHEAPER

DIGAS will provide a cost-effective way how to introduce a hydrogen in the fleet of existing diesel locomotives by retrofitting diesel locomotives with a specialised internal combustion engine (ICE) hydrogen system

PRACTICAL

The collaboration will demonstrate a practical path towards complete decarbonisation of the diesel locomotive fleet

14th September 2023 – Iarnród Éireann Irish Rail, operator of the national railway network of Ireland and provider passenger and freight rail services, and DIGAS, a global trailblazer in an instant decarbonization solutions for the railway sector, have signed a contract to retrofit a freight diesel locomotive from diesel fuel to hydrogen as a proof of concept. The purpose of the €1.5m project is to help decarbonise the operations of Iarnród Éireann diesel locomotives, assist the company in meeting its goals as a Sustainable Development Goal champion, increase the competitiveness of the company

and reduce carbon exhaust emissions.

Based on the agreement, Iarnród Éireann will provide the 071 Class Diesel Locomotive for the conversion as well as make the workshop available for the installation, testing and commissioning activities. DIGAS, will manufacture deliver and install a Hydrogen Internal Combustion Engine (H2 ICE) retrofit kit to convert the diesel locomotive to a hydrogen powered locomotive. The conversion will allow the locomotive to run on renewable, emissions free fuel instead of the diesel fuel. As part of the agreement, the two companies will share technical and commercial information necessary for DIGAS to design, manufacture, install, and support the commissioning of the Hydrogen conversion kit and allow Iarnród Éireann to properly test a retrofitted locomotive.

Unlike other hydrogen projects in the rail sector where hydrogen is used in to run locomotives via fuel cells or through specially produced hydrogen engines, this project will showcase a unique approach where hydrogen will be used in the locomotive's current internal combustion engine.

This innovative technology requires minimal change to be done to the locomotive. If successful, the project will showcase a more practical and cost-effective way to decarbonise and run the existing diesel locomotive fleet with hydrogen powered engines.

The project is currently in the design process and scheduled for two testing phases across 2024 and 2025. Phase 1 will be focused on static testing of the locomotion to check power and emissions output. Phase

2 will follow in 2025 and focus on service trials of the locomotion out on the rails. All designs and testing standards are subject to approval from the Commission for Railway Regulation (CRR).

"Iarnród Éireann has 18 071 class diesel locomotives in railway operations, 12 of which are used to support freight operations. If the conversion tests are successful, these locomotives can be converted to greener and more efficient alternatives" comments Jim Meade, Chief Executive of Iarnród Éireann. "Iarnród Éireann is a designated champion of the state's commitment to the United Nation Sustainable Development Goals. We are committed to taking a leading role in supporting the Irish Government ambitions to decarbonise transportation sector by 2040."

"We are very excited to have Iarnród Éireann as our partner for this project. Among other reasons, Iarnród Éireann management is really committed to decarbonisation of their operations. This project is proof to that commitment not only in words, but also in actions. Therefore, in spite of the aggressive timeline in front of us, together we feel confident in our joint ability to make this historic step towards sustainable mobility in a timely manner" explains Petro Dumenko, CEO & Co-founder of DIGAS "We see the same challenge over and over again with all railway operators – the need to decarbonise their operations but having an extremely long lifecycle of their assets which still runs on diesel fuel. This project will showcase a cost-effective and practical way for operators like Iarnród Éireann to decarbonise their existing fleet of diesel locomotives".

The project is funded by Iarnród Éireann and DIGAS, and co-funded by EIT Urban Mobility, a body of the European Institute of Innovation and Technology and Mechanical Engineering Competence Center, a Latvian body receiving the funding from the European Recovery and Resilience Facility. The work under the contract has commenced on both sides with an objective to test a retrofitted hydrogen locomotive in 2024. As part of the agreement, Iarnród Éireann will bring the partners into the project who will provide a hydrogen refueling for the retrofitted locomotive.



SSE Renewables submits planning application for Solar Farm co-located at Richfield Wind Farm

Proposed development in Ireland's 'Sunny South East' is SSE Renewables' first co-located solar project

SSE Renewables is this week submitting a planning application for a proposed Solar Farm project to be co-located adjacent to its existing Richfield Wind Farm in Ireland's 'Sunny South East'.

The planning application, which is being submitted to Wexford County Council, proposes the development of a circa 21MW solar photovoltaic (PV) array on a 44 hectare site in the townlands of Hooks and Yoletown in south Wexford. The proposed solar farm location is near the existing 18 turbine Richfield Wind Farm which has been in operation since 2006. Submission of a planning application follows a period of local public consultation on the project, which took place earlier this year.

With an installed capacity of 27MW, Richfield Wind Farm is already capable of generating enough renewable energy to power up to 18,000 homes annually, while abating almost 18,000 metric tonnes of harmful carbon dioxide per annum. Together, the proposed hybrid co-located development of a 21MW solar farm alongside the existing wind farm could increase the typical annual renewable energy output from Richfield by around 25 per cent, enough to power an additional 4,500 Irish homes annually.

In addition to increasing the renewable energy output from Richfield, a combined wind and solar asset at the site would be more productive and resilient, as it will be capable of contributing power to Ireland's grid at times when the sun shines but when the wind does not blow. This could further

support efforts to meet Ireland's target of generating 80% of its electricity from renewable sources by 2030.

The proposed solar development will have a hybrid grid connection with Richfield Wind Farm. The development of the project will be subject to changes in Ireland's current grid connection consenting regime to allow for 'hybrid' technology grid connections to facilitate co-location of wind and solar generation sources. Delivery of the project is also subject to securing an economic route to market ahead of a final investment decision expected around early 2026.

In addition to the renewable energy benefits of the proposed development, the project will also play an important role in combatting the nature emergency. Should the project secure all its consents and progress to delivery, SSE Renewables will plant 15% of the site area with native woodland species as per its own Biodiversity Net Gain targets and also in line with requirements set out in the Wexford County Development Plan 2022-2028.

Brides, Senior Project Manager, SSE Renewables said:

"The submission of this exciting project for planning permission comes at a time when Ireland is looking to secure more renewable energy. This project is a perfect example of how we can expand the renewables output for Ireland by leveraging existing wind farm assets for the development of adjacent solar farm projects such as this.

"If co-located projects like Richfield Solar are to help deliver Ireland's climate

goals, industry will require more certainty as to how the regulatory framework will be evolved to support these developments. At present, we lack the necessary policy to underpin these kinds of hybrid technology grid connections.

"We stand ready to work closely with key government and regulatory stakeholders to remove any remaining barriers to the delivery of hybrid connections, and so support the delivery of important solar and battery technology projects co-located at wind farm sites."

SSE Renewables is Ireland's leading owner, developer and operator of renewable energy projects, including onshore and offshore wind energy projects. Its wholly-owned portfolio includes almost 700MW of operational onshore wind farms, the largest on the island, as well as an ambitious development pipeline of 1.3GW of new projects across offshore wind, onshore wind, solar and batteries.

Project proposal

The proposed site area is 44.4 hectares and will include the following:

- A 21 MW solar farm comprising ground mounted solar photovoltaic (PV) panels;
- Linear arrays of mounted solar panels up to 3m in height laid out from west to east to optimize the solar gain from a southerly aspect;
- 7 inverter/transformer power stations and 2 containerised substations;
- Grid connection via the existing Richfield Wind Farm 38kV substation;
- Construction of internal cable ducting to connect the facility to the existing Richfield Wind Farm 38kV substation; and
- A new site access from the northwest of the site.

4,500 homes powered based on projected installed capacity, typical projected solar load factor of 10%, and typical annual consumption (4,200kWh). Quoted kilos of carbon emissions abated based on projected annual MWh output and latest average CO₂ Emissions (0.236g/kWh) in the All-Island Single Electricity Market, and published by the CRU in its Fuel Mix Disclosure and CO₂ Emissions for 2020, October 2021.



REvolve is “Driving Circular Action” as An Garda Síochána CO2e savings announcement highlights commitment to circular economy

REvolve, an independent technology-driven supply chain solution driving the circular economy in the automotive sector, was formally launched with the announcement that, in 2022 An Garda Síochána's net Carbon dioxide equivalent (CO2e) savings by procuring green parts from REvolve partner, Ted4Parts, for its fleet were 38,477.35 kgCO2e, in comparison with purchasing newly manufactured vehicle parts. This represents an average 94% saving for An Garda Síochána.

The impressive figure was announced by Minister of State with responsibility for Public Procurement and eGovernment, Ossian Smyth TD, at the event at REvolve's Castleblayney partner facility on September 18th. Minister for Rural and Community Development, Heather Humphreys TD, and members of An Garda Síochána, amongst other key stakeholders in automotive repair in Ireland, also attended the event.

Leading the way in B2B transformation driving circular action within the automotive supply chains through its custom-built technology platform engineered with the expertise of Philip Mackessy, of Mackessy Technology based in Limerick, REvolve OS empowers clients, like An Garda Síochána, to embrace all the benefits of sustainability in a new and innovative way by bringing an independent panel of quality-assured vehicle recyclers and green parts suppliers, and green parts consumers such as insurers, repairers, and fleets, together in a structured, value-driven way, with real, measurable financial and environmental benefits.

The Monaghan based company is focused on maximising the re-use of automotive parts and resources, and the software is designed from the ground up to integrate with fleet, insurer and repairer workflows to streamline the use of green parts for all stakeholders, delivering real, measurable financial and carbon savings for all stakeholders through its innovative technology.

REvolve's network of quality and progressive salvage agents and approved vehicle recyclers across Ireland and the UK offer the highest level of service, focusing on the key metrics of the client, and all REvolve-



supplied green parts are graded to the VRA standards to ensure only the highest-quality green parts enter the repair cycle.

Richard Brennan, Managing Director of REvolve explained “Green parts provide a more sustainable motoring solution, not only in helping to reduce carbon emissions, but also by presenting additional operational advantages such as reducing vehicle downtime and associated costs. Measurement is an integral part of our service, in terms of proving net carbon emissions savings, sustainability impacts, and commercial savings. Transparency and full disclosure about the carbon savings associated with green parts will help educate and inform clients so they can understand the difference they're making by choosing to reuse parts over buying them new.”

Brennan continued “We hope that in the long-term, green parts will become the standard option for vehicle repairs. Carbon labelling in Ireland is the next step in raising awareness that green parts can reduce repair costs, and are better for the environment. But ultimately, our approach goes beyond simple measurement and reporting, as we enable improved decision-making, towards better-informed strategies in delivering superior sustainability performance and business value.”

REvolve enabled the carbon emissions savings for An Garda Síochána through the provision of 551 reclaimed vehicle parts of varying make and model throughout 2022 from REvolve partner, Ted4Parts. The net CO2e saving of 38,477.35 kgCO2e is equivalent to the emissions arising from

driving 100,000 miles in a non-electric family car; charging 4,700,000 smartphones; or the yearly carbon sequestered by 48 acres of forest.

Commenting on the results and rationale for sourcing green parts through REvolve, Mark Murphy, Fleet Technical Supervisor, An Garda Fleet Management said “Using high quality, safety checked green parts, rather than new parts, not only ticks the environmental box for An Garda Síochána, but helps ensure the quickest possible turnaround for repairs. We're excited to see further carbon savings as we continue on our sustainability journey with Ted4Parts through REvolve.”

Commending REvolve and An Garda Síochána for the positive impact this partnership has on the circular economy, Minister Smyth said “Today has given me an opportunity to see how REvolve's independent, technology-driven supply chain solution helps to streamline the sourcing of green parts for the automotive business. I welcome such innovative startups that encourage a circular life-cycle approach in their industry.”

All of REvolve's defined carbon savings are independently audited and verified to ensure complete transparency. The newly announced CO2e figures for An Garda Síochána were developed by Earthshine Group within an independent study of the net CO2e savings associated with purchasing used vehicle parts via REvolve, as compared with purchasing newly manufactured vehicle parts.

For further information visit <http://www.revolvefleet.com/> ■

The impact of the energy crisis on businesses' net zero ambitions

Forget 2050: we will know where we are in the fight against climate change by 2030. To stand a chance of meeting commitments to limit temperature rises to 1.5°C by mid-century, experts agree that we must halve global emissions in just seven years' time.

Yet the recent energy crisis, sparked by the post-pandemic economic rebound and the conflict in Ukraine, is hindering progress towards net zero goals. Record high prices for gas and electricity have had knock-on impacts on operations, pricing, profitability, and more.

Immediate concerns outweigh long-term ambitions

This explains why business leaders have been focused on combating what they perceive to be more immediate challenges, such as economic pressures, supply chain delays, and skills shortages. Our research shows that 82% of UK and Irish business leaders admit that the energy crisis will affect their business' ability to meet decarbonisation targets.

This is in stark contrast to boardroom ambitions on tackling climate change: 88% of the organisations we surveyed have net zero plans in place, and 39% see climate change as an increasing priority over the next three years. Yet despite their best intentions, business leaders are not fully committed to their decarbonisation goals – a worrying setback for both the climate and for business. Moreover, some sectors, like the public sector (at 27%) and healthcare (50%) are finding it difficult to get board-level buy in to tackle the energy crisis.

A difficult balance to strike

Our research findings highlight the fine balance that needs to be struck between addressing immediate threats while preparing for future ones. Although few in the boardroom will argue against addressing climate change, kicking the climate 'can' down the road won't just impact broader efforts to address climate change – it doesn't make business sense.

As energy market volatility becomes the new norm, delaying decarbonisation goals will present organisations with new business risks associated with fluctuating energy prices and extreme climate events. Businesses that continue to address their carbon reduction ambitions, however, will see tangible benefits in terms of lower costs and greater efficiency.

Regaining lost ground

The good news is that practical steps can



be taken now to get businesses back on track and reap the added benefits of embracing automation, digitisation, and sustainable technologies.

These benefits include reduced exposure to variable energy pricing, operational efficiencies through automation, electric vehicle cost savings in low emissions zones, phasing out dependence on finite fossil fuels and the futureproofing this creates, and the reputational benefits of being more sustainable.

When getting started, lower cost, 'quick win' measures can deliver immediate benefits for businesses, helping leaders to obtain crucial stakeholder buy-in for longer-term projects.

Indeed, once the wider benefits of being carbon neutral become clear to senior decision-makers, net zero will rise up boardroom agendas once more.

Start with a strategy

A good starting point is to create a strategy that aligns with your business plan, considers the entire lifecycle of power generation, and involves collaborators from across the business.

Achieving net zero is a whole company initiative. Involving key stakeholders – from leaders to operation managers – from the outset will ensure that your plan has a widespread impact and that accountability for its implementation lies with multiple functions.

Invest in a mix of solutions

There isn't a silver bullet for decarbonisation. It's likely that you will need to invest in a combination of technologies and processes that work together to manage energy use. Understanding this from the outset will enable you to assess vendor solutions critically and set stakeholder expectations on results.

Get external advice

You're an expert in running your business: invite net zero experts to analyse your current plans and results to help you identify areas for improvement, and develop a comprehensive plan underpinned by your business goals and operational efficiency. Sustainability partners can provide end-to-end digital solutions and services to help you determine which solutions you'll need – and getting started can be as simple as booking a remote energy assessment.

For example, Schneider Electric acts as both a sustainability enabler, supporting partners and customers with our digital solutions and services, and a sustainability practitioner, leading in ESG and committed to becoming net zero across our end-to-end value chain. In other words, it is relied on to advocate and support net zero initiatives across its network of partners and customers. We work collaboratively to share best practices and knowledge to facilitate a more effective transition toward net zero.

Decarbonisation isn't costly

The great news for business leaders today is that investing in decarbonisation technologies and solutions not only makes business sense – it also doesn't have to be expensive. The payoff can be significant for your operations, efficiency, resilience, and competitiveness – and can often be measured in months rather than years. With careful forecasting and planning, you can invest in net zero initiatives that deliver a mix of immediate and long-term results.

For many leaders, procrastinating on their net zero commitments now will hinder future growth. In fact, decarbonisation is expected to deliver US\$26trillion (£22 trillion) in economic benefits to the global economy through 2030. There's never been a better time to get back on track with net zero.

More than 4,000 School Children Visit Lidl's Free Educational Farm to Fork Experience at The Lidl Farm

- Celebrating one year in operation this October
- The Lidl Farm offers primary school children a free educational farm to fork experience, located at Lidl's Newbridge Distribution Centre in Co. Kildare

Celebrating one year since its launch in October 2022, Lidl's free educational Farm to Fork experience – The Lidl Farm – has welcomed more than 4,000 primary school children to learn how everyday produce gets from the farm to the shelves of their local Lidl store. Aimed at 2nd to 6th class, The Lidl Farm school tours run from September to October and from April until the end of the school year in June.

Lidl has utilised over 8-acres of unused land at their Regional Distribution Centre



completely free, with schools only needing to cover their own transport costs to get there, making this an affordable school trip which has been welcome news for many parents.

Speaking about the success of The Lidl Farm to date, Agri Aware Chairman, Shay Galvin said:

"The Agri Aware partnership with The Lidl Farm is brimming with positivity for agriculture, giving school children hands-on learning about their food. Almost one year since its launch, more than 4,000 school children have come through The Lidl



in Newbridge, County Kildare to develop a free education resource for primary school children in partnership with The Lidl Farm's official education partner – Agri Aware. The Lidl Farm delivers an outdoor classroom experience, guided by the Social, Environmental and Scientific Education (SESE) curriculum. Pupils learn through a combination of hands-on activities and discussions led by Agri Aware's Education Officers. Each educational experience ends with a train ride through Lidl's Regional Distribution Centre, where students learn about the retailer's quality check process and how fruit and vegetables are stored to ensure that produce is fresh when it arrives to a Lidl store.

School tours at The Lidl Farm are



Farm gates with great enthusiasm, ready to learn about the Farm to Fork experience. Connecting schools with farming to help children understand where their food comes from is one of Agri Aware's key missions as an organisation, and The Lidl Farm is a perfect platform to enhance that learning."

Lidl are currently taking bookings for The Lidl Farm for the 2023/2024 school year. To learn more and for schools to register their interest, please visit <https://thelidlfarm.abettertomorrow-lidl.ie/> ■

CAP23 ups the ante for renewable energy

The Government once again increased its goals for electricity decarbonisation with the publication of the Climate Action Plan 2023 (CAP23). However, doubts remain as to whether or not the new goals are achievable.

Electricity

The most notable of CAP23's targets in terms of the decarbonisation of electricity comes in the form of increased ambitions for the deployment of renewable energy generation that will "strengthen the electricity grid and meet the demand for flexibility". As part of these measures, the Government has increased its aim for the proportion of renewable electricity to 80 per cent by 2030; the 2021 Climate Action Plan (CAP21) had previously aimed for "up to 80 per cent where achievable and cost effective, without compromising security of electricity supply", meaning that what was once seen as a maximum is now the minimum target for the Government.

Sustainable Energy Authority of Ireland (SEAI) data shows that the Government's target of 40 per cent by 2020 was just narrowly missed, with renewables accounting for 39.1 per cent of electricity generation in 2020, but that the 2020 proportion then fell in 2021, the latest year for which full data is available, with renewables accounting for 36.4 per cent of electricity generation. This means that the State's proportion of electricity coming from renewable sources would need to more than double from 2022 to 2030.

The Government's aim to reach such a revolution in renewable energy production is to be powered by increasing ambitions in various forms of renewable generation:

- the aim for onshore wind capacity by 2030 has been raised to 9GW, from "up to" 8GW in CAP21;
- 7GW of offshore wind is aimed to be developed by 2030, with 2GW dedicated to green hydrogen production, this target retains the CAP21 target of 5GW – although it adds the caveat "at least" – of offshore wind production of electricity and adds the 2GW specific to hydrogen; and
- 8GW of solar energy will be produced by 2030, a significant increase from the targets set out in CAP21, where between 1.5GW and 2.5GW were aimed at for 2030.

Published in September 2022 in the run up to the publication of CAP23, the Government's Sectoral Emissions Ceilings set out an aim of circa 75 per cent reduction



in electricity emissions by 2030, with CAP21 having contained a guiding agreed range of between 60 per cent and 80 per cent when compared with 2018 levels of emissions. In June 2023, the Environmental Protection Agency (EPA) warned that "increased renewable energy generation, from wind and solar, if delivered as planned, can reduce energy industry emissions by 60 per cent", although the EPA did also state that the goals would achieve the 80 per cent renewable electricity generation target by 2030.

The EPA notes that the continued dependence on coal due to the unavailability of gas-fired generation due to the Russian invasion of Ukraine and the slow implementation of renewable electricity targets has "undone some of the good work of recent years". Such 'good work' as carried out under CAP21 is listed in CAP23, including: 2022 being a record year for connection of renewable electricity to the grid; the enactment of the Maritime Area Planning Act 2021 and the creation of the Maritime Area Consent regime; 1,836MW of renewable generation through the RESS 2 auction, which represented an increase of

almost 20 per cent in Ireland's renewable electricity generation capacity; and the connection of the first grid-scale solar project to the grid.

CAP23 outlines plans to have the renewable electricity share up to 50 per cent by 2025 as a steppingstone to 80 per cent by 2030, with onshore wind and solar to have capacities of 6GW and "up to" 5GW respectively by 2025. The plan also calls for demand side flexibility to be between 15 per cent and 20 per cent by 2025 as Ireland builds toward 30 per cent by 2030.

CAP23 lines out three themes to deliver abatement in electricity: accelerate renewable energy generation; accelerate flexibility; and demand management. Cumulatively, these three themes will deliver an abatement of 9.56 MtCO₂eq by 2030 if key performance indicators (KPIs) are met. These KPIs include the capacity generation and demand flexibility goals mentioned above, the production of green hydrogen from surplus renewable electricity, the putting in place of required long-term storage, zero-emission gas-fired generation from biomethane and hydrogen commencing by 2030, and a rate of renewables on-grid at any one time of between 95 per cent and 100 per cent being achieved.

Associated actions included in CAP23 for the achievement of such KPIs include some already achieved, such as the establishment of the Maritime Area Regulatory Authority and the completion of the Offshore Renewable Energy Development Plan. The plan contains 27 actions for 2023 relating to electricity, including the completion of new analysis by EirGrid in order to update Our Electricity Future to accommodate the new target of 80 per cent renewables.

Heat

Two of the three key targets in CAP23 relating to industry come under energy usage: the drive towards achieving between



70 per cent and 75 per cent carbon neutral heating by 2030 and a 10 per cent reduction in fossil fuel demand by 2030 through energy efficiency. The plan states that the Government plans to provide carbon-neutral heat for industry through high efficiency heat pumps powered by renewables for low and medium temperature heating, while indigenously produced biomethane and green hydrogen (in the longer term) will power high temperature heat demands. Industrial heat and processing is named as the fourth priority usage for hydrogen in the National Hydrogen Strategy, published after CAP23, with the likely market energy timeframe given as 2030-2035.

SEAI's Energy in Ireland 2022 report identifies that fossil fuels are the heat source in 73 per cent of the State's dwellings and the built environment section of CAP23 attempts to get to grips with this, detailing government plans to have up to 0.8 TWh of district heating installed capacity by 2025, due to rise to 2.7 TWh by 2030, to have 170,000 new dwellings using heat pumps by 2025 and 280,000 by 2030, and to have 45,000 existing dwellings doing the same by 2025 and 400,000 by 2030. Also notable is the plan to have "up to" 0.4 TWh of heat provided by renewable gas by 2025, rising to 0.7 TWh by 2030. Under the National Retrofit Plan, 500,000 dwellings should be



retrofitted to BER B2 cost optimal or carbon equivalent by 2030, a move that, along with the 400,000 heat pumps to existing dwellings, would abate 2 MtCO₂eq.

Transport

CAP23 notes that 20.2 per cent of transport's first sectoral carbon budget (lasting until 2025) was expended in 2021, a figure that would be consistent with compliance were it not for the fact that finalised 2022 figures are expected to report a further increase in transport emissions. The plan states that fleet electrification and

the use of biofuels will "provide the greatest share of emissions abatement in the medium term" for one of the most difficult-to-decarbonise sectors.

Of the 6.08 MtCO₂eq of transport emissions the Government plans to have abated by 2030, electrification and vehicle technology coupled with biofuels make up 5.82 MtCO₂eq. By 2030, the Government plans to have 845,000 private EVs, 1,500 EV buses, and 95,000 commercial EVs on the roads, along with a biofuel blend rate of E10:B20, meaning a blend of up to 10 per cent of bioethanol in petrol and 20 per cent of biodiesel in diesel. CAP23 also contains a commitment to study opportunities to "broaden supply of a more diverse range of renewable transport fuel types and feedstocks – in particular, the supply of advanced biofuels and renewable fuels of non-biological origin".

While CAP23 does not contain much with regard to the use of hydrogen in transport, the National Hydrogen Strategy has since ranked road and rail transport as the seventh priority area for hydrogen, specifically for road transports "requiring long duty cycles and longer distances" and for rail "where electrification [is] not feasible/or as a backup".

Fund offers climate action panic button we shouldn't wait too long to push

Taking more than €3 billion of tax revenues out of circulation may dial down the temperature in an over-heating economy but will it help an over-heating climate? That's the test that awaits the new €3.15bn Climate and Nature Fund.

Details of what it will fund when it becomes available between 2026 and 2030 are sketchy. Tentative examples of how it might be used were given. Something like the State's recent purchase of Dowth Demesne for the creation of a new national park in Co Meath. Or maybe a district heating scheme such as the long-awaited plan to use waste heat from the Poolbeg incinerator to warm the homes of Docklands Dublin.

Such projects are possible now when the public finances are strong but could be swiftly shoved aside in an economic downturn. But it may not be an economic emergency that presses the fund into action. The climate crisis will be incentive enough.

Finance Minister Michael McGrath said as much when he described the fund's purpose as being "to help the achievement of carbon budgets through capital projects where it is clear our climate targets are not being reached".

In other words, it's an emergency fund, a



Environment Minister Eamon Ryan after the announcement of the Budget.

multi-billion euro panic button to be pushed when 2030 is closing in, the drastic emission reduction targets that we're legally bound to meet by then are looming large and we are a long way from reaching them.

It will be needed to supercharge climate action measures in whatever way works to achieve a quick-acting carbon cut. That raises a question of whether it is wise to wait until what looks like the inevitable happens. If €3.15bn could be spent straight away, in addition to the climate action funds already allocated and pledged, might 2030 be a less scary prospect?

That question is complicated by the fact that there is a dual purpose to the fund. It

is not only a carbon-busting war chest - it is also a safe refuge for a good chunk of the enormous corporation tax windfall that experts have warned must not be released into the fast-growing economy for fear of pushing inflation into overdrive.

It is a pity expert advice is not always heeded when fast-growing economies push emissions into overdrive.

The environmental NGOs that campaigned for a Climate and Nature Fund have welcomed its establishment, even though they had dared to hope for €8bn.

Friends of the Earth's Oisín Coghlan said it was a "landmark" development. "It's not everything we need to fund a fair and fast transition, but it is a substantial down-payment," he said..

Environment Minister Eamon Ryan described it as a "gamechanger" in that it would safeguard essential projects if the economy tanks. He recalled how hugely important public transport projects, MetroLink included, were shelved during the last recession when they could have acted as gamechangers for climate. "My heart was broken," he said.

Now climate and nature are broken too and we shouldn't wait too long to push the panic button on their behalf.

Transforming Society for a Climate-Resilient Future Has Never Been More Urgent

Talking about adaptation just before COP27 last year, UN Secretary-General António Guterres said “it’s time for a global climate adaptation overhaul that puts aside excuses and picks up the toolbox to fix the problems.” He called for a “global surge in adaptation efforts”, especially further adaptation financing to help vulnerable communities in developing countries.

Adaptation means taking action to prepare for predicted impacts of a changing climate. It also requires adapting to irreversible climate impacts that have already been ‘locked in’, like sea level rise or increased temperatures. When we think about adaptation, we often think about it in the context of the Global South: regions where climate catastrophes outstrip peoples’ ability to adapt. Adaptation needs in the developing world are set to skyrocket to as much as \$340 billion a year by 2030, and there is an obvious obligation for countries, like Ireland, to step in and scale up financing for adaptation support. At COP27, Ireland announced €5 million for climate adaptation in developing countries and Small Island Developing States. This public, grant-based finance for adaptation represents a step in the right direction, but it needs to be rapidly ramped up.

Turning our attention to Ireland, where we have yet to experience the extent of the devastating impacts of climate change that are a persistent reality for the Global South, it is easy to forget our historic responsibility to build resilience and protect affected communities. However, it is also easy to overlook the need to invest in climate adaptation in our own country. With 40% of the population in Ireland living within 4km of the sea and our major cities – Dublin, Galway, Cork – all under threat, we are foolish to fail to take adaptation seriously.

The 6th European Climate Change Adaptation Conference focused our

attention on this crucial topic. Taking place from 19th to 21st June in Dublin, the conference brought together Europe’s leading adaptation experts to showcase solutions, exchange knowledge, and accelerate the implementation of adaptation solutions at every level. Co-hosted by University College Cork and MaREI, ECCA covered adaptation across varying thematic areas, including sea level rise, coastal change, energy, wellbeing, and finance. Many diverse perspectives are required to develop solutions to adapt to climate challenges, and a variety of stakeholders – academics, researchers, policymakers, local authorities, businesses, investors, NGOs, and youth – were invited to attend and contribute to the conference.

Over the three days, participants heard about case studies across Europe: droughts in Swedish sea basins, coastal erosion in Scotland, sea level rise in the Balearic Islands, heat stress in France and climate-induced relocation in England. Where climate impacts and challenges were discussed at length, the most holistic examples and assessments not only explored how the climate has changed, but also how society has changed. This served as a helpful reminder: any scenario for climate adaptation must include scenarios for social, political, and economic development.

For example, think about the psychological aspects of climate adaptation: what happens to your brain when you are told that you will need to relocate because of future climate risks? What does it mean mentally to leave behind your community, culture, and livelihood? Then there are the health impacts: 44 million people in Europe work in agriculture and outdoors. Consider the heat stress impacts on those workers’ productivity and health.

There is also a need to have an honest conversation not only about the potential impacts of adaptation, that stretch far

beyond what the average Irish mind can imagine, but also about the price tags attached to the interventions and policies needed. It could cost up to €41 billion a year to finance adaptation in Europe. Unlike climate mitigation actions which boast more immediate profitability, adaptation has a longer-

term return and is more costly. This does not make investing in adaptation any less worthwhile, nor should it serve as an argument to delay the advancement of adaptation response. Rather, it reminds us of the scale of the challenge ahead and the need to promote coordination across sectors. Financing climate change adaptation models will require public-private partnerships and scalable funding models, enabling conditions for large-scale social transformation.

We know that the climate is changing, yet paradoxically, our societies are not changing as a result. Since the last ECCA conference in June 2021, Europe has experienced the warmest summer on record, severe floods have swept across western Europe, and dry conditions have scoured the Mediterranean. In 2022, temperature records were broken in Europe, with a record high temperature in Ireland in July 2022. 16,000 died in Europe because of last year’s heatwaves. It felt particularly striking that the ECCA conference 2023 was also unfolding against the backdrop of an exceptional marine heatwave off the coast of Ireland, with sea temperatures as high as 18 degrees. These extreme and unprecedented temperatures pose threats to marine species and ecosystems, like kelp, seagrass, fish, and oysters.

Research has shown that climate change will play a role in the frequency and intensity of future extreme floods in Ireland. This would affect houses and residents as well as infrastructure, like the electricity transmission grid. Facing climate hazards, a “wait and see” approach does not seem like a sensible one. The ECCA conference showed that we need to be proactive, rather than reactive, when thinking about adaptation options. To enhance the effectiveness, scalability, and sustainability of adaptation solutions, we must also think in places, not projects. We must think in geographies and generations.

The adaptation mission requires fundamentally rethinking how countries adapt: from process and planning to implementation, governance, and financing. To deliver the right solutions in time, we must move beyond an incremental approach, and radically reimagine and transform our places to enable them to flourish in a future climate. By highlighting examples, expertise, and experiences across the globe, ECCA 2023 reminded us: we are running out of time, but we are certainly not running out of ideas.



Skillnet Climate Ready Academy and IDA Ireland Partner to Support Businesses Achieve Sustainability Targets

Sustainability Leaders Programme, delivered by Skillnet Climate Ready Academy, underway for IDA Ireland member companies to achieve sustainability targets

Skillnet Ireland and IDA Ireland have partnered to roll-out a Sustainability Leaders Programme delivered by the Skillnet Ireland Climate Ready Academy for IDA client companies. The interactive programme for 24 participating companies will support these businesses to develop and implement climate-positive and carbon reduction measures.

The opening Sustainability Leaders Programme workshop took place this morning at the IDA Ireland Headquarters in Dublin 2. The programme will run for twelve weeks, incorporating six workshops, and aims to drive and assist both firms and sustainability professionals to embrace sustainable business practices towards a decarbonised economy.

Those responsible for the sustainability management in their company will benefit greatly from the programme, and it is most suited to businesses still in the early stage of putting a sustainability strategy in place. The programme has the dual target of developing trainee skills at an individual level and delivering tangible impacts at organisation level.

The Sustainability Leaders Programme deals with the challenges that businesses face while transitioning to a sustainable business model and provides practical advice on how to overcome them through identifying the key organisational levers and actions that facilitate change.

Following the completion of the course, participating businesses will have a tailored sustainability report and charter for their business which captures the business case for action and an agreed plan for the first 12 months. The programme supports trainees in understanding where sustainability is used within the business and educates participants on how to conserve resources.

The creation of a Sustainability Charter equips companies with the knowledge and confidence to engage in sustainability and provide a roadmap for the upskilling of their staff.

The roll out of the latest Sustainability Leaders Programme comes at an important time for businesses. From January 2024 onwards, Irish businesses will at different stages be required to comply with the European Union's Corporate Sustainability Reporting Directive (CSRD) which will place significant responsibilities on these businesses to accurately report sustainability



R-L) Mark Jordan, Skillnet Ireland, Maria Kelly, Skillnet Climate Ready Academy and Mary Buckley, IDA Ireland, photographed in the IDA Ireland Headquarters at the opening of the Sustainability Leaders Programme delivered by the Skillnet Ireland Climate Ready Academy.

efforts and climate impact.

Registration for the next Sustainability Leaders Programme, which begins in early 2024, is now open to businesses at the following link: www.climatereadyacademy.ie/ida

Mark Jordan, Chief Strategy Officer at Skillnet Ireland, "Climate action and sustainability must now be a fundamental part of all business strategies. As new corporate regulations come into effect, there will be more responsibility for businesses to demonstrate that they are making an effort to become more sustainable. With the valued support of IDA Ireland and through the Skillnet Climate Ready Academy, the Sustainability Leaders Programme provides businesses with the necessary mentorship, support and guidance required to develop impactful and lasting sustainability plans."

Mary Buckley, Executive Director, IDA Ireland said "Climate change is a reality and businesses need to adapt and become leaders in implementing positive environmental

and sustainable practices. Programmes such as the Sustainability Leaders Programme which educates business leaders and helps them on their journey to becoming more sustainable are vital. IDA Ireland is delighted to be collaborating with Skillnet Ireland and the Skillnet Climate Ready Academy on this programme and I would encourage all Irish businesses to sign up for the next term in early 2024."

Maria Kelly of the Skillnet Climate Ready Academy said, "For businesses, the transition to a green and sustainable future involves a critical and honest analysis of all aspects of the organisation, from supply chain to delivery. This will require new thinking, continuous development and upskilling for all employees within an organisation. The Sustainability Leaders Programme will give participants the vital onboarding they need to deliver this change, positively respond to the climate crisis and futureproof their business."

Transition to renewables will require ‘huge national effort’, energy summit told

Realising Ireland’s potential to generate renewable energy will require a huge national effort, the Tánaiste has told key figures in the industry.

Micheál Martin joined Taoiseach Leo Varadkar and Minister for the Environment Eamon Ryan at an Energy Summit in Government Buildings in Dublin.

The event brought together private, public and voluntary stakeholders in the energy sector.

The summit was convened to discuss how best to shift Ireland away from fossil fuels and towards indigenous, renewable energy sources.

In his opening remarks, Mr Martin said the Programme for Government had identified renewable energy, and offshore renewable energy in particular, as an area of enormous potential and a strategic priority for Ireland.

“The war in Ukraine and the disruptive effect that it has had on energy markets has only reinforced the urgency and importance of realising that potential,” he said

The Tánaiste added: “What is very clear is that our ambitions require a huge national effort involving all arms of the State, the business sector, and the wider community.

“I am hugely optimistic about what we can achieve as a country, and I see today as an opportunity to listen to the views of you, as leaders across different sectors, on how we can collectively deliver on the enormous changes that are necessary.

“As Minister for Foreign Affairs, I am acutely conscious of how this energy transformation is being driven across Europe – with even more ambitious targets and regulations agreed over the past 18 months since the invasion of Ukraine.

“I believe Ireland can, should, and will play an important role in Europe’s energy transformation – given the potential of our offshore resources in particular.

“The €1.6 billion Celtic Interconnector project, which will connect our national grid into the European mainland, and which is currently under way, is crucial in that regard.

“We have made the political commitment,

and now the big challenge, which I look forward to hearing more about today, is delivery, delivery, delivery.”

Mr Martin asked the stakeholders what Government could do to secure buy-in from across society for the changes he said were required.

“We should be honest that alongside the massive potential of what we are undertaking, some of the change will be difficult – not just the financial and technological challenges, but building greater community support for grid infrastructure, wind turbines and solar panels, and getting better and smarter on how and when we use energy,” he added.

“But there are great examples from abroad which we can learn from, and scope to develop unique Irish capacities and skills over the years ahead.

“My hope is that we are able to look back in 20 years’ time – when people from other parts of the world are visiting Ireland to learn from us – and be satisfied that as a nation, we made the very most of the opportunity we have been presented with.”



Tánaiste Micheal Martin, Taoiseach Leo Varadkar and Minister for the Environment Eamon Ryan listen to Helen Brophy, director general at the Institute of Public Administration, at the Energy Summit (Liam McBurney/PA).

Join us at DataCentres Ireland, 22 – 23 November 2023, RDS, Dublin

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- Get New Ideas and Information
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Latest Update of the 2023 DataCentres Ireland Conference Programme

DataCentres Ireland is pleased to announce that on the 23 November, Simon Coveney, Minister for Enterprise, Trade and Employment will deliver the Keynote address.

This year's multi-streamed conference programme features industry experts addressing a range of Strategic and Operational Themes include:

- Sustainability
- Irish Energy Grid - Fact from Fiction
- Data Centres role in today's society
- Data Centres - Driving businesses and employment
- The Circular Economy
- Data Centres Facilitating the Greening of the Grid

- Standby Generation
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The banner features the 'DataCentres Ireland' logo on the left, with 'DATA' in large blue letters and 'centres Ireland' in smaller blue letters below it. To the right of the logo, the text 'Infrastructure. Services. Solutions.' is written in blue. Further right, the dates '22-23 Nov' are in blue, followed by '2023' in large orange letters, and 'RDS, Dublin' in blue below it. At the bottom, there is a blue bar with the text 'EXHIBITION & CONFERENCE' in white, and another blue bar below it with the website 'www.datacentres-ireland.com' in white. The background of the banner includes a graphic of overlapping colored squares (blue, orange, green, yellow) and a white square with a blue border.

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Ireland has finally released its 30-year climate plan - here's what it says

The long-term climate strategy has been published today three years after an EU deadline.

THE GOVERNMENT HAS finally published an EU-mandated long-term climate strategy, laying out sector-by-sector plans for how to drive down greenhouse gas emissions.

Cabinet approved the draft long-term strategy this week for submission to the European Commission, three years after a deadline of 1 January 2020. The government also intends to prepare an additional, updated version of the strategy that will not reach the EU until at least the end of the year.

The EU Commission has outlined that “stable long-term strategies are crucial to help achieve the economic transformation needed and broader sustainable development goals”.

The first version of Ireland's long-term strategy, published today, outlines steps for how the electricity, industry, built environment, transport and agriculture, forestry & land use sectors can cut their emissions over the next several decades to help the country play its part in thwarting the climate crisis, which has already caused “substantial damages” and “irreversible losses” to the planet.

Ireland's overarching climate targets are to reduce emissions by 51% compared to 2018 by 2030 and to reach net-zero by 2050.

“Reaching climate neutrality will mean that Ireland will have no further negative impacts on the climate system by mid-century,” the strategy details.

“This represents an extremely ambitious target for Ireland to meet over the next three



decades, but one which is in line with the scale and severity of climate breakdown facing the international community and which underscores Ireland's commitment to showing leadership on climate action.”

The strategy maintains that it is “important that climate policy and investment, throughout this transition, is managed in a manner which supports Ireland's international competitiveness and protects economic growth” – a potentially contentious statement given that many experts are divided on whether economic growth is compatible with the changes necessary to prevent catastrophic impacts of climate change.

In the electricity sector, current focuses are phasing out coal and peat-fired electricity generation and making sure 80% of electricity comes from renewable sources by 2030. Managing electricity demand “will be a central part of our approach to achieving emissions reductions”, while “unlocking the flexibility of large electricity demand users [such as data centres] will be a key challenge”.

“Energy demand, including data centres, will be expected to operate within sectoral emissions ceilings and further signals will be required to locate demand where existing or future electricity grid is available and close to renewable energy generation. Research and development in energy storage and flexibility (such as a science challenge to industry) will be required to put Ireland on a pathway to net-zero-carbon data centres,” the strategy outlines.

“Meeting Ireland's 2050 climate neutrality target will require full decarbonisation of the

power sector. In order to achieve this, Ireland will need to achieve near zero emissions from 2035.”

A major factor will be the expansion of offshore wind generation as a source of renewable energy for Ireland, but also to allow Ireland to sell renewable energy to other European countries. Installation rates of wind and solar power will need to “significantly accelerate”, along with the “timely modernisation and expansion of the power grid in a cost-effective way”.

Other measures the government may employ in the long-term include the use of gases like hydrogen, new interconnectors with other European countries, and energy storage.

In industry – which relates mainly to activities in manufacturing and the production of certain materials, such as cement – the strategy argues that full decarbonisation “poses significant challenges”.

“There is no known way to deliver complete decarbonisation in some industry sub-sectors, such as cement. This means that the sector will need to reduce emissions as much as possible and use negative emissions to offset these remaining emissions,” the strategy says.

Core measures for industry will include substituting certain fuels with alternatives, electrifying low-temperature industrial processes, and increasing the use of solid biomass. Additional, less-researched measures may involve the use of bio-gas, carbon capture and storage, or the injection of carbon dioxide into concrete in a process that reduces its climate impact.



The built environment – that is, Ireland's residential, commercial and public sector buildings – will need to see significant retrofitting and electrification of heat systems.

"All buildings will need to switch to technologies such as heat pumps or district heating by 2050, meaning that the gas grid will no longer supply existing homes and commercial premises," the strategy says.

Key measures will be diligent urban planning, zero-emission new buildings, retrofitting of existing buildings, and zero-emissions heating through electrification and the use of district heating.

The transport sector will need to undergo an "unprecedented transition" focused on demand reduction, switching from cars to sustainable modes of transport, and electric vehicles.

"Achieving climate neutrality will require continued and significant electrification of passenger cars and commercial vehicles, including for heavy duty vehicles by 2050. It will also require deployment of alternative fuels, particularly for heavy duty and long-haul vehicles, acknowledging that the precise mix of technologies and fuels for this sector is uncertain at this point," the strategy outlines.

"Many of these measures are expected to be cost-beneficial before 2030 but will require adequate infrastructure to be in place for businesses and private individuals to fully take advantage of zero-emission technologies."

There will be "radical shifts in the organisation of different modes of our transport system, driven by digitalisation, automation data sharing and interoperable standards, will take place over the next three decades".

"Effective regulation will be needed to ensure that technological developments maximise decarbonisation within the sector, by facilitating smart traffic management, shared mobility options, modal shift and



demand management, which in turn will reduce congestion and increase occupancy rates in transport fleets, both public and private."

Finally, agriculture, forestry and land use will need to be transformed through scaling up efficient food production, diversifying farming activities, increasing the sequestration of carbon in forests, peatlands and wetlands, and improved management of grasslands.

Driving down emissions in agriculture – currently a primary contributor to Ireland's emissions – is "challenging, but achievable", the strategy says.

"We will need to build on the developments in GHG efficient practices, technology and farm income diversity committed to under the Climate Action Plan, and pursue deep decarbonization, for example, through incorporating feed additives, driving demand shift, adopting new technological solutions.

"In addition, we will continue work to enhance sink potential of various land uses in Ireland, including meeting our objective to achieve 18% forest cover in Ireland by 2050, while minimising emissions from other land under agricultural production and from non-agricultural wetlands."

Costs and benefits

Modelling of the cost of actions in the Climate Action Plan 2021 – which set out a broad range of measures to be taken in the subsequent years – found that it could require €125 billion to complete, or an average of €14 billion per year between 2021 and 2030, according to the strategy.

The total figure represents an additional €45 billion compared to if no climate action was taken and €80 billion of reallocated public and private funds.

The strategy details that it is "not possible to predict exactly how the next decade will unfold" because the pace of changes "will not be precisely in line with our assumptions today", and as such, the estimate of the amount of investment needed will be updated over time.

Transitioning to a fully climate-neutral economy and driving down emissions is estimated to require a cumulative investment of between €200 to €250 billion from 2030 to 2050, according to the strategy.

However, the transition is expected to have an "overall net positive effect on the economy through incremental investment, additional consumer spending, and reduced

imports of fossil fuels".

In addition to the direct benefits of reducing emissions for the sake of thwarting climate change, the strategy outlines the co-benefits of climate action for Irish society and the economy.

Ireland could "reap economic benefits" from developing and exporting offshore wind and from being a leader in innovative business models in areas like retrofitting. Meanwhile, spending on importing fossil fuels will be reduced.

There will be a "direct positive impact" on human health through facilitating active transport modes like cycling and walking and by cutting down harmful air emissions, especially from sectors like transport and agriculture, the strategy says.

And fully decarbonising houses will "see more significant improvements in terms of housing comfort: not only will zero carbon homes reduce the risk of temperature-related deaths, but it can also contribute to improved health outcomes through improved indoor air quality and reductions in moisture-related issues".

The alternative not taking sufficient action carries numerous risks, the strategy outlines, in the areas of finance, technology, market expectations and international reputation – on top of the direct impacts of climate change on humans and the environment.

Late submission

In 2018, a European Union Regulation set out that member states should develop 30-year strategies laying down how they plan to tackle the climate crisis to help fulfil EU requirements under the crucial Paris Agreement.

Member states were given 13 months to compile their strategies and submit them to the European Commission by 1 January 2020.

By the start of 2023, Ireland was one of the only countries to have not yet submitted the strategy, even after the EU opened infringement proceedings in September 2022 over the delay.

The delay came despite the Climate Change Advisory Council (CCAC) warning in 2021 that it was concerned, in the absence of the strategy, about the potential for "higher cost implications of delay in long-term action".

Addressing the delay, the strategy says: "While Ireland had prepared a draft of the Long-term Strategy on Greenhouse Gas Emissions Reduction in 2019, its submission to the European Commission was paused to ensure it aligned with new domestic climate ambition, including that which was set in Irish law in 2021 and that which is presented in Ireland's updated Climate Action Plan 2023."

Currently, the world is around 1.1 degrees warmer than pre-industrial times and is already experiencing impacts of the climate crisis such as heatwaves, droughts and melting ice sheets.



Data centres could end up using 30% of Ireland's energy supply, activist claims

Data centres could be using 30 per cent of Ireland's energy supply within the next 10 years, according to an environmental organisation.

Oisín Coughlan, chief executive of Friends of the Earth Ireland, made the claim after the decision of Fingal County Council to approve planning permission for three new Amazon Web Services data centres which will use 73 megawatts (MW) of power.

Speaking to RTE's Morning Ireland, Mr Coughlan said the energy usage of the data centres was comparable to the 84 MW generated by the new Mountlucas wind farm in Co Westmeath.

He pointed out that plans to bring the oil-fired Tarbert power station back online this winter would generate 150 MW. "So half of Tarbert will be dedicated to keeping these data centres going rather than keeping our lights going," he said.

Mr Coughlan said opponents were not saying there should not be any data centres at all, there was just concern that Ireland was already heading towards 10 times the European average, even before the recent approval.

"Of course we're going to have data centres, we just don't need to have every data centre that's going in Europe. The other country that has anything like ours is Singapore – 14 per cent. We're heading to 30 per cent. It's already more than all the urban homes in Ireland, twice as many as all the



rural homes in Ireland. That's the power the data centres are using now and we're heading to double that in the next 10 years."

Friends of the Earth submitted an observation to the planning application for the three data centres that this would "lock us into our dependency" on fossil fuels. "It's a triple threat. It's a threat to our energy security, the security of our power system, a threat to our pollution limits. And to be honest, it's a threat to the credibility of this government on climate."

The Government had announced a moratorium on data centres around Dublin

because of the risk to the power grid, he said.

"And here we are. This is driving a coach and horses through that if this is allowed to go ahead. And the reason it might be able to go ahead is because they already have a grid connection at the site for an existing data centre."

If the three new data centres go ahead it will drive up demand for gas and fossil fuels, Mr Coughlan said. "Because even if they say they're going to use renewables, it means that there's less renewables for the rest of us. So the rest of us have to use gas or coal from Moneypoint to keep the lights on."



Plans to extend district heating launched

A new report to pave the way for the expansion of district heating to Irish homes and businesses was launched today by Minister for Environment, Climate Action, and Communications Eamon Ryan.

District heating is a tried and tested technology for redistributing decarbonised energy to a group of connect buildings and sites.

It uses a network of highly insulated pipes to deliver heat from a central energy source to provide space heating, and hot water, to the buildings connected to the piping network.

This allows for flexibility in terms of the energy used for the central heating systems and is suited to widescale, rapid decarbonisation of central heating systems.

It also allows for alternate combinations of energy resources to be used, at different times, over the lifetime of the district heating network.

Ireland has the lowest share of renewable energy use for heating and cooling in Europe and decarbonising the country's existing stock of residential and commercial buildings is a huge challenge.

Earlier this year Ireland's first district heating programme started operating in Tallaght in South County Dublin where waste heat from a local Amazon Data Centre is carried by hot water through a network of insulated pipes to heat South Dublin County Council offices and the local library.

An extension to the scheme is also planned

to channel the heat to 133 affordable apartments to be built on public land as well as a very large innovation centre for start-up tech firms.

In this instance in Tallaght, it is expected that 1,500 tonnes of carbon emissions will be saved simply by capturing and reusing the heat that would be wasted by the Amazon Data Centre.

Waste heat could also be captured from other data centres, power stations and industrial facilities elsewhere and used in a similar fashion. Codema, the energy agency for Dublin, said that, potentially, almost 80% of the heat demand in Dublin, and 50% nationwide could met by district heating. Another district heating scheme, the Dublin District Heating Project, is being led by Dublin City Council in Ringsend.

Their, the aim is to heat as many as 80,000 homes in using the heat generated by the burning of rubbish in the Ringsend waste incinerator.

Speaking in Ringsend this morning, where he launched the report of the District Heating Steering Group, Minister Ryan said: "We must radically reduce our reliance on fossil fuels and transition to more sustainable, low-carbon alternatives, particularly for heating our buildings, and



district heating has a key role to play in that".

The minister said that the recommendations made in the report of the Steering Group will enable the example of the Tallaght District Heating Project to be replicated throughout the country.

The Steering Group report puts forward eleven overarching recommendations including the need to: - enable public, private, and utility actors to realise district heating development in Ireland.

- develop a regulatory system for district heating that ensures consumer protection and a vibrant district heating sector.
- enable and mandate public bodies to connect to district heating networks.
- establish a Centre of Excellence for district heating in the SEAI which would support all providers in the development of district heating.
- financially support the roll out of district heating in Ireland.



Minister for the Environment, Eamon Ryan, and Kieran Mullins, Project Director at Dublin Waste to Energy.

Ireland to join legal effort to defend EU targets to get new petrol and diesel cars off the road by 2035

EU regulations are critical to delivering on Government plans to phase out the sale of new fossil fuel-powered vehicles

Ireland is to join a legal effort to defend EU targets to get new petrol and diesel cars off the road by 2035. At Cabinet on Tuesday, Tánaiste Micheál Martin got Government approval for Ireland to intervene in a case challenging EU plans to effectively ban internal combustion engine cars by 2035.

The legal action aims to overturn EU regulations strengthening CO₂ emission performance standards for new cars and vans which would see new targets reduce emissions by 55 per cent in cars and 50 per cent in vans from 2030, and 100 per cent from the start of 2035.

The EU regulations are in turn critical to delivering on Government plans to phase out the sale of new fossil fuel-powered vehicles, a Government spokesman said on Tuesday.

The case is being taken by makers of

carbon-neutral synthetic fuels who, among other things, argue the EU regulations fail to capture the full environmental impact of making battery powered electric vehicles.

“Ireland was relying heavily on this legislation to support delivery of our programme for government commitment to ban these vehicle sales by 2030,” the Government spokesman said.

The EU has said that individual member states are unable to move alone outside of EU law – and therefore Ireland is restricted in introducing such a ban by way of domestic legislation.

“If this case is successful it will significantly impact on the EU’s ability to achieve those climate targets for the transport sector, and then similarly upon Ireland’s ability to meet our 2030 climate action targets in relation to private fleet electrification, which is a

key measure of the decarbonisation of the sector nationally. For this reason there is a strong rationale for Ireland to seek leave to intervene in the case,” the spokesman told journalists on Tuesday.

The Government said it is understood a number of other member states are considering joining the legal action ahead of a deadline of October 23rd for notifying the European Court of Justice.

Under the State’s climate action plan the Government intends to deliver almost one million electric vehicles on Irish roads by 2030, with electrification of the car fleet “the single most impactful abatement measures to achieve a 50 per cent reduction in CO₂ emissions from the transport sector by 2030”.



Under the State’s climate action plan the Government intends to deliver almost one million electric vehicles on Irish roads by 2030. Photograph: John Walton/PA Wire.

Rooftop renewables risk making the rich richer, as latecomers will struggle to access the grid

With Ireland's current electricity infrastructure not designed to cope with mass installation of rooftop solar panels, better-off households who are first to install solar PV will benefit the most.

Many people are now becoming "energy citizens" by installing rooftop solar panels and other small-scale renewable energy projects in their properties.

In theory, this is a "win-win". Added renewable energy brings down the cost of energy, and by replacing fossil fuels cuts planet-warming carbon dioxide emissions. But there is concern that as more people install solar panels and other renewable projects, local electricity grids may become congested.

We wanted to understand this problem and propose a solution, and our latest research has just been published. Though we focused on Ireland, where we live and work, something similar is happening across much of the world.

We first surveyed the country's entire electricity infrastructure and discovered that if everyone wanted rooftop solar, then the grid could only serve 5% of the 1.6 million electricity customers studied.

That is based on each household wanting to install 6 kilowatts of renewables — rooftop solar on one side of a typical house, for instance, or a single small wind turbine — which is the maximum limit supported by the microgeneration support scheme in Ireland.

"In other words, if everyone installed solar panels, then 95% of households would not be able to connect them to the national grid".

This appears to mirror the situation at present in electricity grids like that of California, Spain and Germany, where early-comers are blocking access for latecomers. While these countries are further ahead in their rollout of rooftop solar, portions of the electricity grid now have no availability for new installations.

This is unfair: often, more well-off households are the first to install solar PV, and benefit from subsidies. It also limits how useful microgeneration can be to the overall goal of decarbonising society.

A game of musical chairs

The situation could be compared to a game of musical chairs.

The first problem is the number of chairs: the electricity grid was not designed for every house to produce lots of renewable



energy. As the sun shines, for example, every customer with a solar panel must instantly use the electricity or spill it to the grid.

This is fine if only a few customers are spilling, but at a national scale all that spilled energy can exceed the physical capacity of the cables, causing equipment-damaging overvoltage or service interruptions from protection tripping. To prevent this the grid operator must limit the amount of renewable energy connected.

There are some ways to address this problem technically — to make more chairs available. These include investing in new cables, or installing home battery banks and timed electric vehicle chargers so energy use can be better coordinated. But these ideas all come with large financial costs.

Electricity grids in wealthy countries — the Irish grid being a good example — have been under construction for over a century and re-purposing them will be no small feat. Doing this may be even more difficult in emerging economies due to additional struggles to cover the costs.

The second problem is the music, or who gets to sit first. Current policy allows a "first-come first-served" approach to installing renewables, which inevitably gives priority to high-income portions of society to find an empty chair to sit in, and to benefit financially.

Justice implications

As the electricity sector is transformed by renewable energy, there are new justice implications worth exploring. Imagine building a house, or moving to an area in the future, to find out that all grid availability has already been taken and it is not possible for you to connect any new solar panels. The direct benefits of owning a clean energy installation are not for you.

Our research suggests it is possible to adjust this policy to make grid availability a shared resource.

First, instead of blanket limits — like the subsidised 6 kilowatts in Ireland — we'll need a detailed analysis of the grid to work out how much renewable generation per household is fair, or the maximum each can have without affecting others.

This calculation is necessary because that "fair share" varies for customers, as there are technical constraints derived from the user's location in the grid (how near are they to a substation, how many people does that substation serve, how is it then connected to the wider grid, and so on).

The second way to better share the grid is to acknowledge that some households have the money to install more than their fair share, and instead help everyone else to work together.

For instance, less interested or capable households could pool their shares in new solar panels or wind turbines in exchange for cheaper electricity derived from those very installations.

Factor in equity

We should recognise some progress. Irish and European institutions are trying to achieve decarbonisation goals, and renewable energy installations are indeed accelerating. The transition to low-carbon energy is now inevitable — the question is not if, but how, the transition is conducted.

But renewable energy should not exacerbate existing inequalities. Policies for domestic wind and solar should factor in concerns about equity, meaning we could allow all electricity customers to benefit financially from clean energy, and not just from having cleaner air to breathe.

Our new research opens a discussion for regulators and government institutions. This is not about music or chairs, but about the fundamental question of fairness and ownership in a fast-evolving energy sector in Ireland and beyond.

Fast-charging facilities for new DART+ trains at Drogheda Station, as contract awarded

Charging infrastructure will allow battery-electric fleet provide expanded and emission-free services on Drogheda line before electrification

Iarnród Éireann has awarded a €28 million contract for train-charging infrastructure at Drogheda to Alstom, the leading French transport services company.

The fast-charging infrastructure on two platforms and one siding at Drogheda will be installed by end of 2024 to enable new battery-electric DART+ trains, entering service in 2025, to operate to and from Drogheda in advance of planned electrification of the line, and to be recharged during service turnaround at Drogheda.

Funded by the National Transport Authority as part of the DART+ Programme under Project Ireland 2, the project will see electrification of three lines at Drogheda, as well as supporting infrastructure including a new sub-station at Marsh Road. The charging infrastructure has secured planning permission from Louth County Council, enabling preparatory works to commence in late 2023.

Of the initial order of 95 DART+ carriages entering service in 2025, 65 are battery-electric powered, with 30 electric. The battery-electric units will have 840 kWh of energy per 5-carriage train, with trains to operate in up to 10-carriage formation.

In advance of planned electrification under DART+ Coastal North, the battery-electric DARTs will operate on Dublin to Drogheda service, being powered by the existing 1500V DC overhead lines on the DART from city centre to Malahide, and then under battery power to Drogheda.

They will be capable of operation of journeys up to 80 kilometres on battery power alone, and benefit from charging at Drogheda during turnaround between journeys. This will happen automatically, with the pantograph (arm on top of DART which connects to overhead lines) extending upon arrival to the charging platform to overhead lines, and then lowering again automatically once the train is ready to depart.

The charging infrastructure will be capable of charging a throughput of up to three 10-carriage length trains per hour. Additionally, overnight charging will occur and regenerative



DART+ mock-up1: A mock-up of the new DART+ fleet at Inchicore. Battery-electric trains for the new fleet will enter service from 2025, allowing the new fleet to serve Drogheda and Northern Commuter stations with charging facilities announced today, in advance of electrification.

braking will replenish batteries on the move.

Furthermore, there will be a 3.6 MWh Energy Storage System installed at Drogheda. This will provide additional flexibility allowing multiple trains charge simultaneously, and extra resilience to the power supply from the grid.

A further 90 battery-electric carriages have also been ordered as part of the DART+ Programme, delivery of these additional trains will commence delivery from Spring 2026 and enter service from Summer 2026, with similar charging infrastructure envisaged elsewhere in the Greater Dublin Area, and also being examined for the Cork Commuter network and for Wicklow.

Iarnród Éireann Chief Executive Jim Meade said: "This investment will allow us accelerate the benefits of DART+ to customers on the Drogheda commuter route, with a brand new fleet and extra capacity to be provided in just two years time. Furthermore, we are currently undertaking the second round of public consultation for full electrification and capacity improvements for the Drogheda line under DART+ Coastal North. DART+ Coastal North will double the number of commuters who can travel on this route, and dramatically increase service frequency."

Anne Graham, CEO, National Transport Authority said: "I very much welcome today's announcement on the DART+ project and this development is a clear indication of the real progress that is being made across the Programme. Thanks to DART+, passenger capacity and service frequency will be vastly improved for people across the rail network in the Greater Dublin Area over the coming years. DART+ will allow more people to make sustainable travel choices and will contribute to reducing our emissions by providing a reliable alternative to the private car. NTA looks forward to continuing to work with Iarnród Éireann in making DART+ a reality."



Drogheda Station Commuter Trains: Drogheda Station, where a €28 million contract for fast-charging facilities for new DART+ trains will see the new fleet begin operations from 2025.

Alstom Country Managing Director, Ireland Piers Wood said: “Projects such as this will deliver social and economic benefits to

Iarnród Éireann passengers and Alstom is proud to be playing a part in enabling these benefits.”

DART+ Programme Status update

Project	Serving	Update	Next steps
DART+ West	Maynooth/M3 Parkway to City, including new depot West of Maynooth	Railway Order application lodged 29th July 2022	ABP oral hearing expected to be scheduled
DART+ South West	Hazelhatch to Heuston and Phoenix Park Tunnel	Railway Order application lodged 22nd March 2023	ABP oral hearing expected to be scheduled
DART+ Coastal North	Connolly to Drogheda	Second Public Consultation completed	Railway Order application expected to lodged late 2023
DART+ Coastal South	Connolly to Greystones	Emerging preferred option being developed	Public Consultation dates to be confirmed
DART+ Fleet	All DART+ routes above	185 DART+ carriages ordered from Alstom	First carriages arrive 2024, enter service from 2025

Offshore wind delays contributing to high energy bills - MEP Colm Markey

Fine Gael’s Colm Markey has warned that electricity bills will remain high unless Ireland speeds up the rollout of indigenous energy sources such as offshore wind production.

The Midlands-North-West MEP was reacting to new figures, which reveal that electricity prices here are the highest in Europe

The Household Energy Price Index, commissioned by the Austrian and Hungarian energy regulators, revealed that Irish consumers are paying €900 a year more compared with the EU average.

“It is deeply concerning that Irish households are paying such a significant premium for electricity compared to the rest of Europe. These findings reveal a pressing need to expedite the development of indigenous energy sources, particularly offshore wind. The lack of available alternatives and the heavy reliance on overseas energy supply are key contributors to this alarming disparity”, he

commented.

He added, “It is imperative that Ireland takes swift and decisive actions to address delays in the development of offshore wind projects. By prioritising the expansion of renewable energy infrastructure, Ireland can simultaneously work towards meeting its climate targets and alleviating the financial strain on consumers”.

MEP Markey said several pressing issues need to be addressed.

“We must address complex regulatory procedures, ensure we deliver on our commitment to redevelop the national grid and invest in our ports to support offshore production. Offshore wind has the potential to play a transformative role in Ireland’s energy landscape and if we tackle these challenges head on, we can create a more resilient and affordable energy future for our citizens. We need to overcome the aspirational gap and get on with delivery”, he concluded.



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