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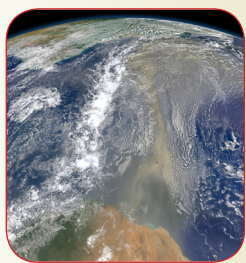
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# Actavo launches new EV Charge Division

- Actavo's first direct-to-consumer offering
- Actavo HomeCharge specialises in home EV charger installation

**T** 7th October 2022: Actavo, a leading international infrastructure operations partner, headquartered in Dublin, has launched its first-ever direct-to-consumer offering, Actavo HomeCharge, specialising in the installation of electric vehicle (EV) chargers in homes. The new service is available to customers nationwide and leverages Actavo's over 40 years of experience in managing In-Home installations for leading brands, as well as its expertise in installing EV charge points in Ireland and the UK.

All of the chargers offered by the company are smart EV chargers, which allow consumers to manage their car charging from a mobile app and avail of the best tariffs. In addition, all of the EV chargers in the Actavo HomeCharge product range qualify for the Sustainable Energy Authority of Ireland (SEAI) grant of up to €600 for home charging units, which is available to homeowners regardless of whether they currently own an electric car.

Actavo's In-Home team of over 500 service engineers, customer service staff, and technicians, currently carries out over 40,000 home visits per month under household brands such as Sky, SIRO, Virgin Media, and Prepay Power. In a new departure, under the Actavo HomeCharge brand, a nationwide team of highly experienced electricians is being deployed to roll out this new service directly to consumers across the country.

Brian Kelly, CEO of Actavo said: "Actavo is delighted to launch its new EV Charge division, HomeCharge. This is an exciting opportunity for the company in the rapidly growing market for Electric Vehicle chargers. We will be leveraging the talent and expertise of one of the country's largest and most experienced in-home installation teams, in our first-ever direct-to-consumer offering."



*Actavo, a leading international infrastructure operations partner, has launched its first ever direct to consumer service, Actavo HomeCharge, specialising in the installation of electric vehicle (EV) chargers in homes nationwide. Pictured at the announcement were Brian Kelly, Group CEO, Actavo, Keith Tobin, COO, Actavo In-Home Ireland, with Martin Foy, Actavo, Electrical Field Manager and April Murray, Actavo In-Home Operations Team. Picture Jason Clarke*



*Actavo, a leading international infrastructure operations partner, has launched its first ever direct to consumer service, Actavo HomeCharge, specialising in the installation of electric vehicle (EV) chargers in homes nationwide. Pictured at the announcement were Keith Tobin, COO, Actavo In-Home Ireland and Brian Kelly, Group CEO, Actavo. Picture Jason Clarke.*

As electric vehicles become more and more ubiquitous, the demand for the installation of smart EV chargers in the home will increase at a fast pace in the coming years. We believe this offering will benefit consumers as it provides a fast, reliable, nationwide service from an expert team and it also speaks to Actavo's commitment to operate sustainably, as we increase our focus on sustainable practices and services."

According to the Central Statistics Office, in the first seven months of 2022, 21% of all new cars licensed for the first time were electric or plug-in hybrid electric vehicles compared with 14% in the same period in 2021.

Actavo HomeCharge will facilitate the installation of a wide range of EV chargers, compatible with all major electric car brands.

## About Actavo

Actavo is an international strategic operations partner, offering a multitude of services across a diverse range of sectors, including telecoms, power, energy, education, events, healthcare, utilities and local authorities. The company is contracted by clients all over the world to design, build and maintain vital infrastructure and deliver support services, underpinned by rigorous quality standards, a multi-award-winning safety performance and industry-leading customer experience. With an international workforce of over 2,000, Actavo delivers network & in-home services, industrial solutions, modular buildings and event infrastructure in over 100 locations. Actavo is headquartered in Dublin and has operations throughout Ireland, the UK, 15 countries in the Caribbean, and delivers technical support services in the Middle East. Find out more at [Actavo.com](https://www.actavo.com) ■



# Ireland must increase offshore wind targets to 7GW by 2030

**SSE Renewables also calls for stepping-stone targets from 2030 to 2050 to achieve 30GW of offshore wind capacity in Ireland.**

Ireland must increase its ambition for climate action from its current 5GW target of offshore wind by 2030 to a more ambitious 7GW of indigenous and secure renewable energy in the same timeframe – that’s according to SSE Renewables, Ireland’s leading renewable energy developer and the company building more offshore wind in the world right now.

The call was made by SSE Renewables’ Director of Offshore Wind Maria Ryan at today’s Energy Ireland 2022, Ireland’s Decade of Delivery conference, taking place in Croke Park, Dublin. She also called for Ireland to establish new stepping-stone or interim targets from 2030 to 2050 to encourage long term investment in the industry and achieve 30GW of offshore wind capacity in Irish waters.

Speaking at today’s Energy Ireland 2022, Ireland’s Decade of Delivery conference, Maria Ryan, Director of Offshore Wind at SSE Renewables, called on government not to let grid limitations limit Ireland’s offshore wind potential and the achievement of more ambitious targets.

Current government policy is to progress the development of offshore wind through a series of phases. Phase 1 and 2 are being led by the developer, while Phase 3 will see the State and transmission system operator (TSO) EirGrid determine sites and grid for offshore wind farms. These phases have been introduced on the basis of the available grid capacity.

## **SSE Renewables’ Maria Ryan said:**

“We recognise the merits of delivering offshore wind on a phased basis, building towards a TSO-led approach. However we believe this approach is limiting Ireland’s potential. We can’t afford to wait until we have a clear sight of additional grid to adjust our ambition upwards.

“Phase 2 projects should not be used to top up the margin that remains to achieving 5GW after Phase 1 delivers. We cannot allow targets to limit our ambition. Ireland must create a long-term pipeline of projects and investment to deliver on our renewable electricity targets and support our energy security and independence. This is best secured by establishing stepping-stone targets up to 2050, leading with the delivery of an increased 7GW target by 2030, and then subsequent targets of 10GW by 2035, 15GW by 2040, 22GW by 2045, and 30GW by 2050.”

Maria Ryan called on the State to resource all agencies involved in offshore wind to manage the workload associated with the expected scale of future development, and to challenge them to play their part in the delivery of increased offshore ambition for Ireland. These agencies include Government Departments, the new Maritime Area Regulatory Authority (MARA), An Bord Pleanála, and EirGrid.

## **Maria Ryan continued:**

“Just six months on from the Glasgow agreement at COP26, energy security and affordability have come into even sharper focus, strengthening the imperative to urgently reduce fossil fuel dependency and decarbonise energy systems. Ireland, like almost all Western countries, needs to urgently end its over-reliance on fossil fuels. That’s why we must urgently enhance our own energy security through the generation of indigenous



green renewable energy. Offshore wind has the greatest potential of any renewable energy technology to combat climate change, both globally and here in Ireland. And at SSE Renewables we are committed to working with Ireland’s State agencies to deliver Ireland’s offshore wind energy ambitions so we can harness the opportunity to transition our energy supply to indigenous and secure renewable energy.”

SSE Renewables is currently progressing a 3GW pipeline of offshore wind energy for development in Irish waters by 2030. This includes the 800MW Arklow Bank Wind Park Phase 2, which is being delivered through the government’s first phase of offshore wind which, under current planning timelines, is expected to deliver first power in 2028 and completion in 2029, subject to a final investment decision. The project recently secured an historic consent from An Bord Pleanála for its onshore grid infrastructure, and in addition, consent from Wicklow County Council for its Operations and Maintenance Facility in Arklow Harbour. The project has also submitted its application for a Maritime Area Consent under the recently introduced Maritime Area Planning (MAP) Act regime.

SSE Renewables is also developing 2.2GW of early-stage offshore projects including the 1GW Braymore Wind Park off the coasts of counties Louth, Dublin and Meath, and the 1.2GW Celtic Sea Array off the Waterford Estuary, both of which are targeting delivery before 2030.

# DataCentres Ireland – Bigger and Better Than Ever... Offering More Choice, More Ideas and More Solutions

DataCentres Ireland, 16-17 November, Dublin – Brings the Data Centre Sector Together

**D**ataCentres Ireland is one of the few events worldwide, which is entirely focussed on the infrastructural needs, issues and solutions required by data centres and other critical environments.

Funded through the exhibition, DataCentres Ireland is free to attend and features a multi-streamed conference programme integrated into the internationally supported Exhibition...

## DataCentres Ireland – The Conference

To facilitate and further the discussion and the dissemination of new ideas and information... We are delighted to announce the introduction of a third Conference Stream into DataCentres Ireland.

The Conference Programme will be announced shortly and features over 70 industry leaders and experts from across the Data Centre Sector.

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The conference programme also benefits from the active involvement of local and international associations including Host In Ireland, Demand Response Association of Ireland (DRAI), iMasons, Technology Ireland, Open Ireland Network, The DCA – Data Centre Alliance, the Sustainable Digital Infrastructure Association (SDIA), Cloud Infrastructure Ireland, amongst others.

Alternatively contact the DataCentres team on +44 (0) 1892 779992 / email [datacentres@stepex.com](mailto:datacentres@stepex.com).

Breaking News – The inaugural Pan African DataCentres Exhibition & Conference, 1 – 2 February 2023, Sandton Convention Centres, Jo’Burg, S. Africa... has just been announced!!!!

See [www.datacentres-africa.com](http://www.datacentres-africa.com) for more details ■

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## DataCentres Ireland – The Exhibition

With over two months, until the doors open, this year’s exhibition features the largest gathering of suppliers and solution providers in the 12 years DataCentres Ireland has been held.

Already over 100 exhibiting companies have confirmed their participation at DataCentres Ireland, giving attendees access to the latest products, services and solutions that can assist them in achieving their goals.





# Alternus Energy signs merger deal with US-based Clean Earth

Alternus Energy merges with a US blank cheque company

**D**ublin-based renewable electricity firm Alternus Energy is merging with a US blank cheque company in a deal that will create a combined entity with an equity value of \$863m (€887m).

Alternus Energy, which is listed on the Euronext in Oslo, is headed by Irish chief executive and chairman Vincent Browne, who will continue to lead the business after the combination with US-based Clean Earth, which is listed on the Nasdaq.

Shares in Alternus have soared on the news, climbing as much as 26pc yesterday over their previous close. Mr Browne owns just over 4.3 million shares in Alternus, which are currently valued at about €8.9m. The company's assets include a planned 122MW of solar energy generation in Ireland. It also owns operational and under construction solar farms in countries including Poland, Romania, Italy, the Netherlands and Germany.

Founded in 2016, it has a total of 168MW of operating assets and 649MW of in-

development projects. It also has 845MW of contracted acquisitions and a further 800MW of solar energy projects which it has exclusive rights to purchase. It aims to own and operate 3.5GW of solar farms by the end of 2025. Alternus will own about 64pc of Clean Earth once the deal closes, and the combined company will have roughly \$220m of cash available at that time.

Alternus and Clean Earth intend to arrange a committed capital-on-demand equity placement programme of up to \$100m and other potential financing options before the completion of the business combination.

Last year, Alternus generated revenue of €20.6m, compared with just €145,000 the year before. It made an operating profit of €4m last year.

In the first six months of this year, its revenue jumped to €17m from €6m in the first half of 2021. It made a €4m operating profit in the first half of 2022.

The Irish company has deployed €140m of a €200m green bond issue and is also in advanced discussions with European banks

to secure up to €500m in new debt facilities to help support its roll-out of new solar parks.

Alternus is preparing to enter the US solar market and said it's also positioned to capture new market share in Europe as rising energy costs drive policy change and capital towards green energy.

"Alternus has reached an inflection point in our growth, with a significant increase in contracted pipeline and operating assets over the past year," said Mr Browne.

He said the planned deal with Clean Earth will leave the Irish firm "well-positioned" to continue developing and acquiring renewable energy assets across Europe and in the United States.

Clean Earth CEO Aaron Ratner said the business combination as well as the Nasdaq listing, access to new equity and potentially lower-cost debt capital should fuel the expansion of Alternus. The Irish company's shares will also continue to be listed on Oslo's Euronext Growth Market.





# “Time for policy to become practice” -

Irish Planning Institute calls for joined-up implementation of Climate Action Plan

- Planning professions play a key role in the delivery of Climate Action goals
- Under-resourcing in the planning system a critical issue that requires urgent attention

**T**he Irish Planning Institute (IPI), the largest professional membership organisation for spatial planners in Ireland, has called for a rapid alignment and implementation of planning and climate legislation at all levels following the introduction of new climate legislation and the Climate Action Plan.

Speaking at the Institute's Annual Planning Conference in Kilkenny, Dr Conor Norton, President of the IPI, highlighted that now is the time for policy to become practice in the planning profession, in recognition of the crucial role that planning will play in making climate action a reality.

In his opening address at the conference, which is focused on Planning for Climate Action and is sponsored by Kilkenny County Council, EirGrid and FuturEnergy Ireland, Dr Norton said: “As a society, we will not meet our obligations of moving towards carbon-neutrality if we do not ensure that new climate policy and legislation are fully and rapidly aligned and integrated with planning policy at national, regional, city and county, and local level.”

Dr Norton pointed to the ambitious climate goals set out by Government with regard to net-zero carbon emissions by 2050 and a 51% reduction in greenhouse gas emissions by 2030. These will be challenging as Ireland faces the dual tasks of dealing with a legacy of unsustainable development while managing both the substantial growth in population and economy that is envisaged by the National Planning Framework, Dr Norton said.

Planning for climate action will require a much greater emphasis on collaborative plan-making in the planning system, which is not currently in place. Furthermore, plans at all levels will need to be far more detailed and rigorous if they are to result in the delivery of better places for living, work and recreation.

“While climate action will pose an enormous challenge for planning in the coming years, it will also provide abundant opportunities to create better places and to deliver on critical green and energy infrastructure. Compact and beautiful communities, where walking and cycling are the best options, where local services are easily reached, where work is nearby or connected by public transport, and

## Heneghan

where the air is fresh and nature is in close proximity, are the hallmarks of low carbon places. Many of the changes needed for climate action are perfectly and naturally in step with good place-making and urban design.” Dr Norton continued.

Planning for climate action will, however, require a new commitment to reorganising and resourcing of the planning system, particularly in local authorities. Under-resourcing must be addressed urgently and new expertise and upskilling in planning for climate action is urgently required. A critical priority, which has not as yet been addressed, is the much-needed expert and coordinating role of the Regional Assemblies in planning for climate action.

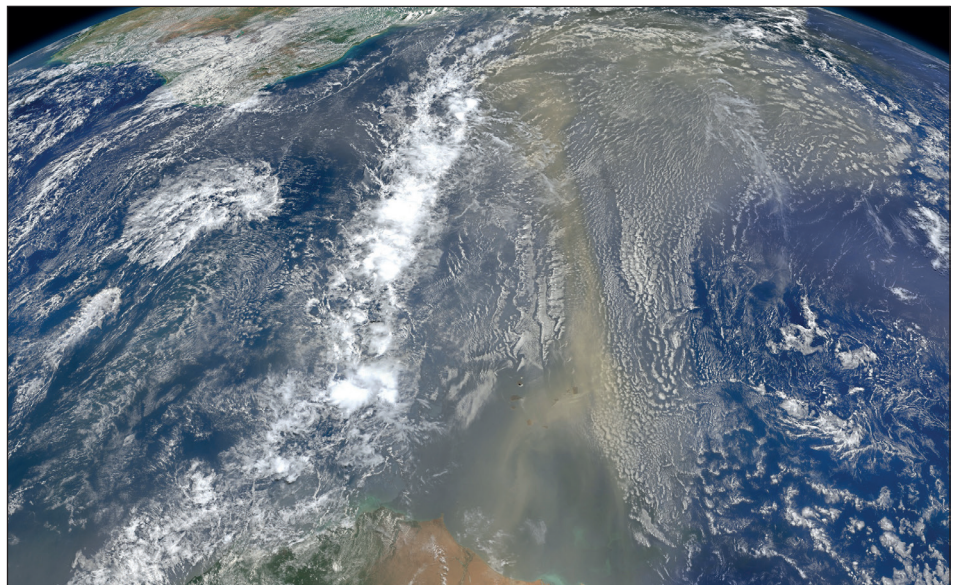
Dr Norton also urged professional planners to prepare for changes in how they work and to assess the strategic and local planning options that will be available to them. Climate action will require new processes for planning, and it will inevitably change the decision-making calculus for plan-making and critical projects, said Dr Norton. Planners can expect a much greater emphasis on targets and ongoing monitoring of plans and development - and will need to adapt their practices accordingly.

Peter Lynch, CEO of FuturEnergy Ireland said: “The latest IPCC climate report, published on April 4, clearly highlights how the window of opportunity to contain

global warming is rapidly closing, with more targeted and urgent action required, including increased and faster adoption of renewable energy. Separately, the EU has recently announced its plan to dramatically accelerate the clean energy transition in response to energy security issues triggered by the Ukrainian conflict. The European Commission's plan includes proposals to simplify and shorten the permitting process and to apply a favoured status to renewables infrastructure. Our planning system is now centre stage, and the biggest enabler for ensuring that Ireland can support the delivery of more renewable energy projects that contribute additional clean, green electricity to the grid, to our businesses and to our homes.”

Michael Mahon, EirGrid Chief Infrastructure Officer, said: “We have a key role in moving to clean, renewable energy and helping the country meet its climate change goals. We look forward to working closely with planning professionals throughout the country over the coming years as we transform the national electricity grid and deliver a cleaner energy future.”

Dr Norton concluded that: “Planning can deliver on climate action, but it must be aligned at all levels of the hierarchy of climate policy and plans. Critical pieces in that hierarchy will need to be addressed, such as planning for regional climate action, and local communities must be empowered with finding local solutions for local climate action.”





# Why collaboration is fundamental to achieving positive climate action

The UNFCCC Conference of the Parties 27 (COP 27) will be held in Egypt this year, the first time the COP has met in Africa. The agenda is still forming, and many are downplaying this year's meeting as more of a "check in" on the way to COP 28 (November 2023), where more substantial announcements are anticipated. But after a year of extreme heat, drought, floods, fires and increasingly unliveable conditions in many of the world's most populated regions – some straight talking at this Africa-based COP is going to be necessary.

The COP process illuminates the sheer challenge of facilitating and maintaining a global commitment to the biggest threat to humanity. The fact that 200 nation states agreed the text of the Glasgow Climate Pact in November 2021, or the Paris Agreement, or the Kyoto Protocol is remarkable. The COP programmes recognise that sustainability and climate action is inter-related and inter-reliant on multiple industries, sectors, regions and countries all acting together to address the challenges we face. And yet, for all the agreements to agree, interpretative latitudes afforded, derogations and carve outs, the COP process has never been tested as much as it will in the years approaching 2030 – as action must be the central theme of every meeting to come.

Last November, we were in Glasgow for COP26, where we saw first-hand just how many business leaders were attending COP for the first time. It was clear from conversations that business has woken up to their role in averting a climate catastrophe. The finance community was committed to putting capital flows into clean energy, and governments realised they alone can't achieve the goal of limiting climate change to 1.5 degrees Celsius — and that we must do this together.

That sense of urgency continues, with



organisations noticeably moving from net zero pledges to action throughout 2022. These are uncharted waters, with so much never done before at scale: stripping carbon emissions from businesses, greening supply chains, and reporting non-financial performance on sustainability issues in a meaningful, consistent way across industries.

It is necessary to take action now, not only as individuals, but as collectives in businesses, across industries and economies, where existing management systems may be the next barrier to progress. Our management processes and paradigms that have built upon specific notions of work, utility and output, keeping workers in short term productivity cycles - yet climate action and sustainability mandates are short, medium and long-term. Traditional responsibility assignment matrices and project management theory seek out a single point of responsibility for tasks - yet climate action and sustainability demand cross-cutting collaboration and engagement, and larger collectives of responsibility (and associated trust requirements) for the implementation of solutions that hitherto has not been the case.

Our existing management paradigms only call for collaboration as a tool in specific circumstances. And in the main, collaboration is not the number one tool in use. The barriers present themselves in a sort of NIMBY reluctance to new climate actions: "That's not my job", "That's not within our current mandate", "I have no responsibility for that", "I have no resources

for this". In these refrains, lies the core challenge of sustainability and climate-based actions for both business and government – the challenge of balancing the work and resources of today with the necessities of the future. As sustainability moves from pledges and strategies to the requirements for immediate near-term actions, the traditional management lines around mandate, responsibility and resources must be altered.

The answer to this challenge, lies in rethinking collaboration – and in this the COP process offers some lessons. We cannot hope to achieve the levels of collaboration demanded without creating the "space" for collaboration to occur in current job descriptions and mandates. Effective collaboration can't happen if only 5% of someone's day is allocated to it. It must be embedded in the role foundation, but then it must also be resourced for success. The COP processes gives you some sense of what true collaboration takes to just attain agreements – with limited actions. Years of diplomatic discussion, bilateral and multi-lateral talks to agree and advance and build upon progress year after year. A continuous commitment to engagement not just once a year – but almost monthly to keep pushing dialogue forward, troubleshooting, reacting, adapting as new politics arise, or new global challenges interrupt focus.

What this all sounds like to many in business and in government departments and agencies, is a reduction in productivity, and an increase in costs, for a payback that is unquantified and in many instances the total investment requirement is unknown.

Which is why the business case for change and action must be clear. It is why in many instances, it will take brave leadership of some to engage and start the dialogue with many.

Businesses engaging in discussions with their value chain don't need to worry about creating the perceived burden of a COP process. The stakeholders in their value chain will already have many common grounds for collaboration. However, in relative terms, it will still require a mindset shift to a much more engaged and dialogue-based relationship. Moving from a price and quantity/quality relationship with a key supplier, to one where you are collaborating on decarbonising a product / component, will bring with it, new power dynamics, transparency and disclosure, that for many

will be uncomfortable. Trust will be central.

Equally, businesses can find that they misjudge their own power dynamics to drive the dialogue to their own ends – resulting in an engagement strategy “retreat” and “rethink”. We have seen this in a number of instances in 2022, where businesses have simply changed their terms and conditions of purchase (to include climate/sustainability metrics or goals), without discussion and engagement with key suppliers – to find themselves then in supply related crisis exacerbated by the war in Ukraine.

Sustainability, resilience, positive climate action – they all demand a new collaborative relationship across value chains, industries, regions and economies.

For many companies, the first step to net zero is switching to a 100% renewable energy supplier or signing renewable power purchase agreements. Beyond that, an overhaul of the enterprise is needed, including supply chains, infrastructure, business practices and purpose. In most businesses, carbon emitted by the supply chain accounts for the majority of total emissions. What companies are realising is that they can't get to net zero without industry-wide change and collaborative engagement.

Change on this scale requires that government, industry, citizens and society act together. Thankfully, collaboration across the private and public sectors is on the rise, opening opportunities for innovation and more sustainable growth. It can't just be talk — action is needed, and collaboration is the way to get us there.

There are many growing examples. Take decarbonising transport, EVs and necessary charging infrastructure. Governments, utilities, local authorities, public transport operators, business owners, fuel courts providers, and the consumer, all have critical roles to play in the establishment of a new electric transport system. Or agriculture, where the tension to decarbonise farm level emissions and balance cost/price with consumer preferences and retailer power dynamics are all merging to create a very complex challenge. Energy systems also offer an example of necessary cross collaboration, where security of supply must balance with the desire to decarbonise to renewables over the course of this decade and perhaps requiring various entities to curtail / adjust their use – lest we experience power outage and blackouts.

Collaboration is the way forward, and it is on the rise. Clients tell us this is where EY's strength as a convener is valuable. We collaborate across a diverse community that spans generations, businesses of all sizes, academia, government bodies, ecologists,



*Stephen Prenderville.*

activists, technology firms, start-ups and innovators to support change and bring new tools to the market. For example, we're collaborating with the next generation on initiatives like the Better Working World Data Challenge, where young data scientists apply their skills to create new ways of tracking biodiversity. Other collaborations include the EY and Microsoft Alliance, where we help to design and deliver transformative cloud solutions such as Microsoft's data platform for reporting ESG data, Microsoft Cloud for Sustainability (MC4S).

We're also working to accelerate the transition to net zero for our clients — and for ourselves. This year we launched EY Carbon. EY Carbon is a multi-disciplinary service that helps clients to transform their business as they plan, implement and measure their journey to net zero and build trust with stakeholders.

EY Carbon offers a framework to support our clients in building the value-based business case for collaboration for sustainability and decarbonisation. We support our clients (public and private) to consider simultaneously, six levers of decarbonisation as follows: process redesign; reducing and greening the energy supply; product and packaging redesign; value chain management; circular economy; and business model innovation. We help clients to consider their net zero goals by addressing all of these levers, while also capturing in

the business case, the cost of the remaining carbon footprint (carbon taxes, emissions trading, offsets) – such that it can always be considered in the case for change.

What type of behaviour does this drive? Without the framework, companies will perhaps consider one or two of these aspects of the challenge – most likely those things they feel they can control themselves. So product or process redesign might be top of the agenda. However, without considering the value chain requirements and opportunities, or energy requirements, redesign can create value chain challenges (lack of available low carbon material, distribution challenges, or customer acceptance challenges), or increase energy demands unintentionally. They can also exacerbate waste processes for example or make things “unrecyclable” or “unrepairable”.

For our part, EY has set an aggressive target: we've committed to achieving net zero by 2025. This will be achieved through our seven-point carbon ambition, including reducing our business travel emissions by 35% by FY25 (against our FY19\* baseline) and working collaboratively with 75% of EY suppliers to support them in setting science-based targets.

Our goal is ambitious, but achievable. And the lessons we've taken away from our own sustainability efforts are invaluable as we work with clients to achieve their targets and fight the climate crisis together.

Ultimately, collaboration demands a shift in mindset and approach for businesses and governments alike. Collaboration cannot be at the expense of the immediate requirements for aggressive action taking. As such, it needs to be embedded in processes, and the space must be created for leaders to engage meaningfully in co-solutioning and discussion with peers while also advancing action. Without this space, burn-out and eventual retrenchment by key staff and personnel will occur, stemming critical progress.

Ultimately, we must make sustainability and climate action collaboration a critical part of all of our job descriptions.





# AEE EXHIBITOR PREVIEW

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## Europe

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# Engineering the Future of Energy Efficiency in Europe – Hear from the International Energy Agency

**T**he inaugural AEE Energy Europe Conference & Exhibition 2022 is taking place in RDS Dublin, Ireland on the 26th & 27th October. This unique event will bring together Energy Engineers and Facility Managers from across Europe. They will have the opportunity to listen to and engage with presentations from Global industry leaders and peers – discussing Policy, Trends and European Innovations.

One of the largest energy efficiency events in Europe in 2022, the week-long schedule includes 2-days of Training (CWEP, ISO50001, CBCP, CMVP, etc), 2-days of conference, 2-days of advanced energy solution exhibition and networking/social events. This schedule of activities over the week will ensure a culture of sharing and learning, while offering AEE European Chapter members the opportunity to openly discuss the challenges, benefits and learnings of adopting the latest technologies and future energy solutions.

The exhibition offers energy efficiency solution suppliers to not only network with AEE European members, but also the greater European energy market. Over 150 companies will exhibit and provide the delegate with an insight into structured energy solutions available today, but also understanding future trends and initiatives.

Since the Association of Energy Engineers inception in 1981, AEE's Certified Energy Manager (CEM®) credential has become widely accepted, recognised, and used as a measure of professional accomplishment within energy management. It has gained industry-wide use as the standard for qualifying energy professionals both in the United States and throughout Europe. Before this event, energy engineers would have to travel to the U.S. for the latest training and certification, at considerable cost. This event will provide an excellent opportunity for technical education, along with cost savings and a significant reduction in a company's (travel) carbon footprint.

AEE Energy Europe 2022 which will take place on the 26th & 27th October in RDS Simmonscourt, Dublin Ireland and is sponsored by SEAI, Certification Europe and Huawei.

## KEYNOTE SPEAKERS:

The Association of Energy Engineers (AEE) Energy Europe Conference & Exhibition 2022 is taking place in RDS Dublin, Ireland on the 26th & 27th October. This unique event will bring together Energy Engineers and Facility Managers from across Europe – who will have the opportunity to listen and engage with presentations from Global industry leaders and peers – discussing Energy Policy, Trends and European Innovations.

## Challenges, Opportunities & Initiatives – the European view...

Our Keynote speaker (Day 1), Dr. Brian Motherway is Head of the Energy Efficiency Division at the International Energy Agency, overseeing a range of analytical and outreach programmes supporting energy efficiency globally. Prior to joining the IEA Brian was Chief Executive of the Sustainable Energy Authority of Ireland. Brian holds Bachelors and Master's degrees in engineering and a PhD in sociology.

## Formula 1 Delivering Net Carbon Neutrality by 2030 - the journey...

Our Keynote speaker (Day 2), Mark Gallagher, has spent his career working in the global sports business of Formula 1 motor racing. This includes 15 years spent on the management boards of two well-known teams, Jordan Grand Prix and Red Bull Racing, and later as Managing Director of the Cosworth Formula 1 engine company.

During Mark's Keynote, he will share with our audience how Formula 1 will achieve a net carbon neutral target by 2030. Our audience will learn how Formula 1 is working with logistical operators, aircraft engine manufacturers, biofuel organisations and mainstream fuel companies to ensure the sport and its 20 participating Teams innovate and drive for a sustainable future.

To learn more about Brian Motherway and Mark Gallagher's presentations and to register your attendance, please visit: <https://aeeuropeenergy.com/> ■



## Action Zero – Stand #F09

At ActionZero, we produce a patented, high temperature heat pump technology called the EscoPod, designed to replace traditional heating systems with a high efficiency, fossil fuel free alternative.

The EscoPod has been designed specifically to deliver heating and cooling across a range of industries, including Healthcare, Financial Services, Food & Drink, Pharmaceutical, Manufacturing, Public & Heritage Sector.

The ActionZero EscoPod:

- Eliminates fossil fuels & carbon emissions
- Produces multifunctional outputs that can be used for

# ACTIONZERO

heating, cooling, and domestic hot water  
• Reduces Energy Use & Costs by 70%+

Amongst the many benefits of this technology is the fact that it can be installed with minimal disruption i.e., there is no need for costly building fabric or

mechanical system upgrades which are typically required with conventional heat pumps.

ActionZero is a 'one stop shop'. We will manage your decarbonisation journey from end to end – providing an aftercare package that includes Operations & Maintenance, as well as ongoing performance validation via data analytics.

## Brennan & Co. – Stand #D05

Brennan & Co is a leading distributor in the healthcare and scientific markets, based in Dublin. We have been working with Invisible Systems wirelessly collecting data and monitoring conditions from customer operating environments in the Irish market for more than 10 years. Invisible Systems are a leading UK IoT solution provider.

Their intelligent I-System monitoring delivers data and insight to help businesses operate efficiently, achieve net zero and create healthy environments. Whatever your business, we can help you improve efficiency and reduce costs, while delivering regulatory



### Brennan & Co

At the heart of innovation

compliance.

Invisible Systems process over a million data records every day, helping our clients cut their carbon footprint and tread more lightly on the planet – whilst saving time and increasing profit

Our locally based engineers and specialists in Brennan & Co set up, install and maintain the equipment on your site and customise the dashboards to support you operating efficiently. Feel free to contact one of the team on the stand.

## ClimeAction - Stand #109 & J09

Climeaction is transforming the Climate Action solutions space through implementing a fully integrated, full scope transformation framework for business and organizations to reduce their emissions in line with Climate Science, all while reducing operational costs. We take a full picture approach to Climate Action, bringing together a diverse team of experts from across the energy, sustainability and environment industry to deliver practical and measurable results.

When we say "Climate Action Solutions for All" we mean it – Decarbonization of business requires solutions at all levels



### CLIMEACTION

CLIMATE ACTION SOLUTIONS FOR ALL

of the supply chain. To understand how to decarbonize large organizations, it is essential that we understand the challenges their supply chains face. Every scale of business must reduce emissions at the same time – we are one of the only

companies who work with all levels of the supply chain – this is true Climate Action.

Climeaction has worked with over 200 companies since its inception in 2021 and now boasts some of Ireland's best known brands and largest industrial manufacturing sites as our clients.

## Certification Europe – Stand #P01

Certification Europe was founded with the simple aim of providing a certification service which goes beyond simply ticking the boxes. We wanted to provide a service which went beyond the grey, unemotional check-list approach to auditing and inspection which has typified the industry for far too long. As a result, we have constantly endeavoured and will continue to strive to introduce new, cutting edge and innovative approaches to meet the needs of our clients.

Our innovation is not just bounded to the delivery of our service, as an organisation we have always sought to push the



### CERTIFICATION EUROPE™

CONFIDENCE | ASSURANCE | CERTAINTY

boundaries of certification by pioneering the certification of new standards in both the national and international marketplace.

We strive at all times to provide first class customer service and to go the extra mile in everything we do for our clients. We want to ensure that customers feel that through our work, our company has

positively contributed to the success of their organisation in a positive and supporting way. Our aim is to give you an advantage over your competitors through your ISO training, certification and consistent implementation of management systems best practices.

## EnergyElephant - Stand #L12

Don't ignore the elephant in the room.

EnergyElephant ([www.energyelephant.com](http://www.energyelephant.com)) is an award winning software platform that helps organisations make better energy and sustainability decisions using their data. Headquartered in Ireland but operating globally, we focus on automating data creation, collection and reporting across buildings, vehicles and assets so you can focus on getting results.

The EnergyElephant platform uniquely covers energy, waste, water, transport and carbon (including scope 3 emissions) from any location in the world. With all your data in a single location, reporting on cost, energy and sustainability is faster and easier especially for those with ISO 50001 or other energy/carbon reporting standards and frameworks.



Our users include banks, local authorities, universities, public sector bodies, semi-state companies, tech companies, multinationals, retailers, hotels, energy service companies and engineering consultants. The platform has helped manage close to \$2 billion in

energy to date across the world and continues to expand its service offerings.

In summary, our three areas of focus are :

- smartly reducing energy costs,
- saving staff time using automation and AI,
- improving sustainability and reducing carbon emissions.

Contact us today or visit us at our stand to learn more.

## Ermen Systems Ltd - Stand #E01

Ermen Systems will be exhibiting a range of innovative products and systems that contribute to Lean Construction, in the areas of Energy, Water and Environment.

These include:

- Water: Corrosion and Limescale solutions through Non Chemical technologies



- Pollution: Spill Containment and Pollution control utilising Solar technology
- Pipe Systems: Bio-degradable, Toxin free polymers with extremely low smoke emissions and reduced labour
- Energy: HVAC and Lighting.

## ESB Smart Energy Services - Stand #F05

ESB's Smart Energy Services collaborates with large businesses to dramatically reduce energy costs, carbon emissions and consumption. With a €75 million fund available, customers can decarbonise their operations via energy projects suitable



Energy for generations

to their business needs, without the need for upfront investment. A wide range of solutions are available such as EV charging infrastructure, batteries, lighting and renewables.

## Failte Solar - Stand #F01

Failte Solar is the Irish brand in the manufacturing of photovoltaic crystalline solar modules and the related modules. We have the best production unit that helps us in delivering the best and up-to-date products in the industry. Having been into the business, we know exactly what it needs to match the needs of our customers in terms of quality and commitment. Our products are used in various commercial, residential and industrial setups all over the country and abroad as well.



Failte Solar is committed to providing the highest levels of quality and reliability in our products and treating our customers with the utmost professionalism. Together, we are working to increase the practical adoption of PV solar energy worldwide.

Failte Solar in conjunction with world-leading manufacturers of solar energy products has the experience, knowledge, research, and resources to lead the market in the solar energy sector in the world.

## GridBeyond - Stand #H01

GridBeyond began commercially trading in 2010 and is home to the world's first hybrid battery and demand network. Now a global player in the energy transition, GridBeyond provides a powerful combination of technological excellence, consultative approach and unrivalled expertise that enables its partners and clients have future-proof access to energy services, while supporting the



GridBeyond™

wider electricity grid integrate more volatile renewables and make the leap to a greener future. All without impacting operations.

GridBeyond delivers energy services, new revenues, enhanced savings, strengthened operations and sustainability to over 400 I&C sites worldwide, including

some of the planet's best-loved brands.



## Hercuglas Teronta - Stand #J04

Ireland's Commercial Solar PV, BESS, Heat Pump and Small Wind Provider. Solar PV

Harness the power of the sun and save money on your electricity supply with sustainable, reliable, and cost-effective energy for your business. The power that the solar PV panels generate can be used directly onsite, stored for later use or, in some cases, fed back into the grid to create an additional revenue stream.

### Battery Energy Storage Solutions (BESS)

We provide comprehensive, fully integrated, and market-



leading battery storage solutions that can serve all of your requirements.

### Small Wind

Our turbines offer a unique combination of beauty & power with an innovative combination of low noise and high-efficiency technologies. Our turbines are ideal for urban and off-the-grid applications.

### Heat Pumps

We offer a variety of High Efficiency, High Temperature, Heat Pump types (air, ground, water and waste-source) to best suit your specific financial and environmental requirements.

## Huawei – Stand #D01

Founded in 1987, Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. We have more than 194,000 employees, and we operate in more than 170 countries and regions, serving more than three billion people around the world. We are committed to bringing digital to every person, home and organization for a fully connected, intelligent world.

With an established presence in solar markets worldwide,



Huawei provides new generation string inverters with smart management technology to create a fully digitalized Smart PV Solution – FusionSolar. By integrating cutting-edge digital, internet and PV technology, our FusionSolar Smart PV Solution is efficient, easy to install, safe and reliable, helping you achieve better ROI with higher yields and lower maintenance cost. Making Huawei the preferred choice

for investors and developers worldwide.

## Lean Construction Ireland – Stand #D02

**WHO WE ARE...** Lean Construction Ireland is an all-island, independent, and voluntary not-for-profit association whose members passionately believe that Lean Thinking & Practices can enable and sustain enhanced effectiveness, efficiency, productivity, and profitability for the Irish Construction Sector, Clients, and Supply Chain.

**WHAT WE DO...** Lean Construction Ireland leads a community of learning and practice that promotes the application of Lean Thinking & Practices throughout the Irish Architecture, Engineering,



Construction (AEC) sector so as to realise value-add for all stakeholders in the value chain. It supports the free and open exchange of knowledge, information, and experiences around good practices and case studies. It also supports ongoing research into Lean practices nationally and globally, their application to AEC, and their sharing with the wider Lean Construction Ireland Community. It is aligned to LCI USA.

**CORE VALUES...** Collaboration. Leadership. Teamwork. Commitment. Knowledge. Innovation. Integrity.

## River Publishers – Stand #B10

River Publishers is an international publisher with headquarters in Denmark. We publish high-quality books, edited volumes, and high-impact journals for institutional and professional markets in key fields within Science, Technology, and Medicine (STM), distributed by Taylor and Francis and IEEE.

River Publishers is the official publisher for the AEE book catalogue. This includes



over 100 high-quality books focusing on energy management, energy efficiency, engineering, renewables, clean energy, and sustainability. AEE Members can apply a 15% member discount to any book purchased from the AEE bookstore and access all our titles online through the AEE eLibrary.

## ResourceKraft – Stand #G11

ResourceKraft is leading the convergence of big data and energy to address the demands of our rapidly changing energy market. We specialise in technology-driven, end-to-end; hardware and software solutions designed to measure, manage and control energy.

Established in 2007 and is built upon our founders experience in the electronics, computing and energy industries. ResourceKraft delivers innovative smart energy solutions to over 100 clients globally to indigenous firms, multinational manufacturing companies and large global utilities.

Our 30 strong team of engineers have an impressive track record in designing and delivering complete energy data solutions from hardware specification right through to software analytics and custom reporting, using standard or bespoke solutions specific to your business needs.

### Products

- Advisor Energy Analytics: Cloud-based energy monitoring data acquisition, analytics and reporting software allowing companies to analyse, manage and reduce their energy use. ResourceKraft provides an end-to-end solution for



energy management implementation including site survey, solution design, Hardware provision, installation, commissioning, and project management. On-going system support including meter gap analysis, hardware validation and reporting services.

- Resolve Power Quality Analysis:

Resolve is a scalable, web-based real-time power quality analysis and metering system for MV and LV. Capable of remotely querying millions of power quality events across your whole estate in just seconds, from your browser.

ResourceKraft also provides bespoke solution development services through its services arm, Full Stack Energy (FSE). FSE is a boutique development house providing custom technology solutions and team augmentation for complex energy-related projects, across the US and Europe including utilities, ESCO's, multinationals and more. For more information see [www.fullstackenergy.com](http://www.fullstackenergy.com).

Have an energy project you need help with? Please contact us on [sales@resourcekraft.com](mailto:sales@resourcekraft.com) or call us on 01-90529999. [www.resourcekraft.com](http://www.resourcekraft.com) ■

## Siemens Xcelerator – Stand #

### Accelerate digital transformation with Siemens

Siemens Xcelerator is a new, open digital business platform featuring a curated portfolio of IoT-enabled hardware and software, a powerful ecosystem of partners, and a marketplace.

Our open digital business platform leverages digitalization and makes your business more flexible, resilient, efficient, and sustainable. To make this possible, Siemens Xcelerator creates value by



facilitating interactions and fostering innovation between multiple parties. It is open to everyone – partners, experts, developers and, of course, you.

Together, in one common place, we can tackle the complexities of today and tomorrow. With the highest personalization potential, easy access, holistic OT/IT integration, deepest

domain know-how. Providing support along the whole digital transformation value chain.

## SQT Training – Develop Real Capability – Stand #P02

QT is a training partner rather than a provider of courses. We seek to make a significant and measurable contribution to the organisations we work with. For 30 years we have brought the latest thinking, the leading techniques and the most accomplished industry trainers into ambitious organisations, large and small, throughout Ireland, the UK and Europe.

### Learn From Leaders

All our tutors are hand-picked, experienced, industry experts



so clients can learn from leaders. Our expert Environment and Energy tutors come from diverse sectors as these issues affect every industry, organisation, community and person. They will guide you through legislation, implementation, compliance and beyond in a way that is clear and deeply practical. Their technical knowledge is supported by practical, real world experience that makes a tangible difference to daily problems faced in industry.

## South East Energy Agency – Stand #L04

3 Counties Energy Agency (3cea) rebrands as South East Energy Agency. This exciting rebrand comes at a very significant time as the team celebrates 20 years in business. The new name reflects our new alliance,

now serving Counties Carlow, Kilkenny, Wexford and Waterford. Building on the success already achieved by the 3cea, the four Counties have come together to create a low carbon, energy efficient zone that gives us the scale to achieve our ambitions in



energy efficiency by 2030 and 2050. Our next challenge is to deliver the ambitious decarbonising targets and work together to support the transition to more rational use of energy and integration of clean

energy across the region. Our success in reaching the targets will depend on how we and others work in partnership to deliver energy efficiency, clean energy, behavioural change and greater sustainability.



## Sustainable Energy Authority of Ireland (SEAI) – Stand #L01

SEAI is Ireland's national sustainable energy authority. We work with householders, businesses, communities and government to create a cleaner energy future. Discover our vision, values, and strategy.

### Our vision

Our vision is for Ireland's energy to be sustainable, secure, affordable, and clean. To achieve this, Ireland must use less energy, move to clean energy, and innovate to create new solutions to meet our energy needs. Leading the transition to smarter



and more sustainable energy activities is central to what we do.

### Why sustainable energy?

Sustainable energy improves people's lives, brings comfort and convenience, and addresses environmental challenges. It is

also beneficial to our economy, creating and protecting jobs. Our role is to help homes, businesses, communities, and industry to be more energy efficient. We also support the development of clean energy technologies.

## Spirax Sarco Ltd – Stand #J06

Imagine realising further savings and improved efficiency on your steam system. You'll need products, services and technical support to meet stringent carbon reduction targets, whilst maintaining reliable processes. That's where we can come in.

Our range of products and services, supported by experienced engineers, will ensure optimum performance from your steam system, from trap surveys to new plant room projects.

Steam is familiar in nature and part of life every day.



Yet this extraordinary fluid is a high efficiency, mission-critical tool for diverse and important industries, and increasingly relevant as part of our sustainable future. Steam is too small a word for it. This is Natural Technology. More and more

industries and organisations are recognising steam as the Natural Technology that fits with their sustainability agendas. With new steam generation technologies including Thermal Battery, we're on a path towards carbon-free steam generation.

## Veolia – Stand #L11

Veolia is Ireland's leading environmental services company providing solutions that enable ecological transformation. We provide a comprehensive range of energy, waste and water services and are dedicated to carbon reduction, protecting the environment and building the circular economy.

Veolia in Ireland works with our customers to carefully manage scarce resources. Through our expertise in operations, engineering and technology we reduce the environmental impact of our customer's activities while helping industrial companies, services organisations and the public sector to operate in a



more efficient manner.

Veolia's 700 employees on the island of Ireland are part of the world's leading provider of environmental solutions. Together with nearly 220,000 colleagues

around the world we are dedicated to providing innovative solutions that are based on best practices, environmental protection and a better quality of life for others.

Veolia has been awarded the Business Working Responsibly Mark certification for responsible and sustainable business practices. The Mark, developed by Business in the Community Ireland and audited by the NSAI is based on ISO 26000.

## Vivid Edge – Stand #J11

Vivid Edge delivers fully-funded turnkey decarbonisation projects "as a service". We work with large organisations accelerate their transition to sustainable energy. The savings from reduced energy consumption usually exceed the monthly fee for the upgraded service, and the fee only starts once the project is fully operational. With us you can save energy and cut costs while helping the planet.

If you are a large energy user, we can help you to:

- dramatically **REDUCE** energy consumption
- **UPGRADE** energy-using assets
- accelerate achievement of your **SUSTAINABILITY** goals
- **REDUCE LOSSES** from wasted energy
- **CUT YOUR ENERGY COSTS** without capital expenditure
- Increase operational **RESILIENCE**

Vivid Edge is a multi-award-winning innovator. Our pioneering "as a service" model saves you energy, and the savings on your



energy bill fund our service fee. Projects to date have reduced energy consumption by 71%.

We address sub-optimal performance in areas from heating, cooling, lighting and control systems to upgrade offices, data centres and processing facilities. You can use some of our preferred suppliers and

installation partners, or select your own.

Our in-house engineering, risk and finance expertise enables us to execute and accelerate your retrofit projects for a sustainable difference. Our unique offering addresses many of barriers that have prevented businesses from implementing long-term energy efficiency projects to date.

We are looking forward to meeting you on AEE Energy Europe Conference!

With Vivid Edge, more is possible!

# New €3.5m fund designed to accelerate uptake of Clean Air as a Service in schools before Autumn term

**S**chools and colleges struggling to cope with the twin challenges of staff and pupil safety and energy efficiency can now finance 'Clean Air as a Service' through a new €3.5 million fund established by leading energy efficiency firm, Energys Group. Repayment costs are a little as 5p / per day per pupil on a 5-year agreement.

The fund, which 'goes live' today (27th June 2022) is designed to be off-balance sheet; simple to administrate and apply for; and presents no commercial risk to successful applicants. Any educational establishment – local authority maintained, academy, or faith school - is eligible to apply. Independent schools are also eligible and welcome to apply.

Energys Group is already well-known for its installations of energy efficient retrofit technologies including LED lighting in over 1000 schools and colleges. The Company believes its new Clean Air as a Service (CAaaS) model and dedicated £3.5m fund, will act as a much-needed driver for safer, more energy efficient schools, in line with a school's duty of care to provide a safe environment.

Well-managed indoor air quality delivers a wide range of benefits including:

- lower rates of sickness and absenteeism

- higher levels of productivity and cognition, leading to better results
- peace of mind to staff, pupils and other building users.

Energys Group's CAaaS finance model is very similar to that used in other sectors where the upfront cost of investment in hardware is prohibitive to uptake. For a pre-agreed monthly 'packaged fee', a school can benefit from Energy Group's Goji Air indoor air management technology, any ongoing maintenance and spares, plus warranties. Energys Group calculates that, on average, the cost of monthly payment will be 5p per child, per day – averaging at £17/per month over a 5-year agreement.

## 'Paradigm shift'

"The Covid-19 Pandemic has led to a paradigm shift in attitudes towards indoor air quality," says Kevin Cox, CEO at Energys Group. "Last Autumn, we saw two things happening in the school's market. Our customers were already struggling to cope with the rising cost of energy in a volatile market, whilst Covid safety concerns led to national guidance that 'open windows' meant 'safer spaces'. Of course, the truth is, open windows do not necessarily result in 'safer environments'. Plus, of course, it

creates a massive additional demand for space heating – and this is something most schools and colleges can ill afford," he says.

The company says this combination of factors and challenges has resulted in significant interest from schools and colleges in new approaches to clean air management. However, the recent and rapid rise in energy prices means many schools are simply unable to afford to invest in the available technologies. The new CAaaS model offers an easy 'win-win' route to safer, cleaner air – and a more sustainable approach to heating-related energy in school buildings.

## Goji Air technology

Energys Group offers best-in-class technologies as part of its technology portfolio. Its patented technology, sanitises and protects like no other air purifier on the market. It is trusted by a multitude of businesses and facilities around the world including hospitals, schools, transport operators, wellness clinics, residential care homes and in the hospitality industry. Goji Air is also the only medical grade air purification system with NCCO Technology, proven, in laboratory conditions, to minimise the transmission of airborne viruses like seasonal flu and Covid-19 by neutralising such viruses with 99.95% efficiency.

## Next steps

Schools and colleges interested in applying for its €3.5m fund for Clean Air as a Service are urged to act quickly – as funds will be released on a first-come-first-served basis; and demand is expected to be high. The first stage in the process is to register with Energys Group to book FREE No-obligation Trial with a Goji Air Unit. To do so, schools can contact Energys Group on +44 (0)1403 786212 or find via the web.





# Kensa's AR Climate Change Campaign Hailed by Industry as Digital Innovation

A ground-breaking augmented reality

**A** groundbreaking augmented reality (AR) climate change campaign delivered by Kensa Group recently won the Heat and Efficiency: Digital Innovation Award at the 2022 Association for Decentralised Energy (ADE) Awards.

The ADE is the leading trade organisation whose members deliver a range of solutions encompassing District Heating & Cooling and Energy Efficiency and work together to advocate the UK's priorities for achieving net-zero.

Through the award-winning 'Welcome to Green Street' campaign, Kensa – the UK's leading manufacturer and installer of ground source heat pump technology – used ground-breaking AR technology and immersive storytelling to bring to life a greener future in which whole communities make the switch from gas boilers to ground source heat pumps.

Using the real-life inner-city suburb of Green Street in Glasgow as a basis for the AR experience, virtual tour guide 'Doug' sets out how the current gas grid could be replaced with renewable infrastructure in an interactive fly-through, demystifying ground source technology and showcasing

its benefits.

Stephanie Gregory, Marketing Director at Kensa Group, said: "We are very proud that the 'Welcome to Green Street campaign' has been recognised as a leading digital innovation in this field.

"We wanted to create a shift in how people think about heat pumps and how they heat their homes. For the UK to achieve our carbon reduction commitments, all of us, across society, policy, industry and the economy must be connected to this united goal."

Launched to a global audience at the pivotal COP26 climate change summit in 2021, 'Welcome to Green Street' delivers a vitally important message about how the UK can tackle climate change and leaves the valuable legacy of a blueprint detailing how communities can switch to renewable heating technology.

The government is aiming for 600,000 heat pumps to be installed every year by 2028. The award-winning digital campaign demonstrates Kensa's pioneering solution to this challenge. To facilitate the widespread roll-out of the technology, Kensa is urging key stakeholders to focus efforts on street-by-street installations of Networked Heat

Pumps, rather than replacing gas boilers on a house-by-house basis.

The use of engaging and accessible mobile-based augmented reality technology aims to break down the perceived barriers to the widescale electrification of heat and showcase to policymakers and the public that Networked Heat Pumps can achieve decarbonization goals at scale for the lowest cost.

In addition, over the last 18 months, Kensa has delivered an extensive body of evidence-based work to support the stand-out digital communications campaign. Whilst Ambient Heat Networks are not a new concept and smaller Networked Heat Pumps systems have been installed successfully, so far this is still not a mainstream solution.

Stephanie continued: "It is one thing to make low-carbon heating technologies available, but it is entirely a different matter to achieve their installation in homes and their adoption for use on a mass scale. Our work at Kensa is not just theorizing – we are developing models based on real-life urban communities – and providing a blueprint that can be rolled out across the country."



Kensas Stephanie Gregory and Karl Drage accepting ADE Award.

# BuJo Burgers flips to biomethane

First Irish restaurant to cook its meals using renewable gas

**B**uJo continues to lead the way in hospitality sector sustainability as they switch from chargrilling their grass-fed beef burgers over natural gas, to renewable gas.

Chef-led by Culinary Director Gráinne O’Keefe, BuJo has outlets in Sandymount and Terenure and is the first Irish restaurant to cook its meals using renewable gas supplied through the national gas network. The renewable gas, known as biomethane, is a carbon neutral gas being produced from farm and food waste by Green Generation in Nurney, Co. Kildare, and injected into the national gas network via a dedicated renewable gas entry point in Cush, Co. Kildare.

“From the outset, we have endeavoured to make BuJo as sustainable as possible and I am really excited that we’re now using gas from renewable sources that has been produced here in Ireland,” Ms O’Keefe said. “The flame is at the very heart of BuJo as our burgers are chargrilled over fire, so we feel very privileged to be the first that can now say that those flames are powered by renewable gas. Switching to biomethane means an even further reduction in our carbon footprint, which is great news for BuJo, for our guests, for our team and most importantly, for the environment.”

Gas Networks Ireland first introduced domestically produced biomethane into Ireland’s gas network in small volumes in 2019, via the country’s first renewable gas injection point in Cush and the company is currently preparing to build a second injection facility in Mitchelstown, Co Cork. BuJo co-founder Michael Sheary said the switch to renewable gas for the next 12 months [as per certification requirements] could not have been easier. BuJo will receive a formal certification from Gas Networks Ireland to show that the gas it is using is renewable.

“The whole process has been very straightforward, and we didn’t need to change our grills or appliances to be instantly more sustainable,” Mr Sheary said.

Sustainability has been central to the development of BuJo and the company is committed to high levels of community stewardship across its entire operation. BuJo sources its bespoke blend of grass-fed beef and free-range chicken from Bord Bia ‘Quality Assured’ & ‘Origin Green’ certified Irish family farms and all of its packaging is compostable. It is the only burger focussed restaurant in Ireland and the UK to achieve a



*Gas Networks Ireland’s Large Industrial and Commercial Sales Manager, Sean Crowley, with BuJo’s Culinary Director Gráinne O’Keefe.*

3-Star rating from the Sustainable Restaurant Association.

BuJo has won several sustainability awards since its inception in 2017 including the Food Made Good ‘Reduce, Reuse, Recycle’ award presented to Ms O’Keefe by Raymond Blanc in London. The business was previously a recipient of the Pakman ‘Food Waste Management’ award for creating a sustainable menu that eliminates unnecessary packaging waste, introducing 100% compostable packaging, and for its exceptional recycling of 95% of food waste to energy.

“We are incredibly proud to have achieved the highest rating possible from the Sustainable Restaurant Association as it underpins how we operate right across the business from sourcing the very best of premium Irish produce, community initiatives and environmental best practice,” Ms O’Keefe said. BuJo’s fine-dining, food-first, approach to the humble burger includes going to great lengths to continually ensure that we are as sustainable as possible.”

## **Biomethane – A Green Gas**

As well as helping to decarbonise agriculture, biomethane can reduce emissions in heating, cooking, manufacturing, transport and electricity generation. It will play a major role in Ireland and the EU’s commitment

to becoming an energy-efficient, low carbon economy, with the European Commission identifying Ireland as having the highest potential per capita to produce biomethane. Ireland’s 2021 Climate Action Plan had an initial target of 1.6TWh/yr of biomethane on the national gas network by 2030 and outlines the Government’s intent to explore opportunities to increase production and further reduce emissions in the agri-food sector.

More recently, the Government in its Budget 2023 publication ‘The Use of Carbon Tax Funds 2023’ outlined its decision on Sectoral Emissions Ceilings; increasing the ambition for domestic biomethane production of up to 5.7 TWh, which equates to approximately 10% of gas supply. A domestic biomethane industry will also provide significant opportunities for local communities from the sale of biomethane, feedstock used to produce the renewable gas, and a bio-fertiliser digestate that is a by-product of the process.

Gas Networks Ireland’s Large Industrial and Commercial Sales Manager, Sean Crowley, said there has been significant growth in demand from businesses looking to source sustainable and indigenous fuel alternatives:

“We are very excited to be able to transport biomethane to BuJo through our gas



### About BuJo

Bujo, which takes its name from Burger Joint, opened its first restaurant on Sandymount Green in Dublin in 2017 and recently opened a second restaurant in Terenure. Bujo's Culinary Director is the award-winning chef Gráinne O'Keefe, who has a strong track record in fine dining restaurants and is chef-patron at Mae in Ballsbridge. Website: [www.bujo.ie](http://www.bujo.ie). Instagram: @bujoburgerjoint ■

network. Cleaner carbon neutral renewable gas will help Ireland reduce its reliance on imported fossil fuels and help to decarbonise Irish homes, businesses, transport and supply chains. Using biomethane requires minimal investment in new infrastructure, as it can be transported through the existing gas network, which is one of the safest and most modern gas networks in Europe. By gradually replacing natural gas with renewable and carbon neutral gases such as biomethane and hydrogen, businesses like Bujo can be powered by increasingly cleaner energy."

### Certifier of renewable gases

Gas Networks Ireland is the body responsible for both supervision and issuing guarantees of origin for current and new renewable gases under new EU regulations. Each certificate represents Gas Networks Ireland's guarantee that the equivalent amount of renewable gas has been injected into the gas network. By providing an objective means of tracking the commercial transactions of renewable gas through the supply chain, Ireland's Renewable Gas Registry will help establish trust in the market and confidence in the renewable gas sector, supporting the expansion of production, providing certainty for customers and providing an incentive for gas producers to inject renewable gas into the network.

"The expansion of clean renewable gas will help Ireland reduce its reliance on imported fossil fuels," Mr Crowley said. "Bujo is leading in terms of sustainability and we are proud and delighted to be part of their journey".

For more information about the benefits of biomethane or to enquire about becoming a customer or producer, visit [www.gasnetworks.ie/biomethane](http://www.gasnetworks.ie/biomethane) ■

### About Gas Networks Ireland

Gas Networks Ireland operates and maintains Ireland's 72.7bn, 14,664km national gas network, which is considered one of the safest and most modern renewables-ready gas networks in the world. Almost 720,000 Irish homes and businesses trust Ireland's gas network to provide efficient and reliable energy to meet their heating, cooking, manufacturing and transport needs. The gas network is the cornerstone of Ireland's energy system, securely supplying more than 30% of Ireland's total energy, including 40% of all heating and almost 50% of the country's electricity generation. By working to replace natural gas with renewable gases, such as biomethane and hydrogen, and complementing intermittent renewable electricity, Gas Networks Ireland is supporting Ireland's journey to a cleaner energy future.

[www.gasnetworks.ie](http://www.gasnetworks.ie) ■

## Cheaper heat pumps: Octopus changes colour to RED in Craigavon

Generator-retailer Octopus is deepening its industry-disrupting interest in heat pumps, buying Renewable Energy Devices, a specialist manufacturer in Craigavon, Northern Ireland.

**D**espite a government target of 600,000 working units by 2028, pumps' perceived high price and a shortage of trained fitters kept home installations as low as 35,000 in 2020.

Last month though, chancellor Sunak removed VAT on home fitting of the air – and ground-sourced varieties until 2027.

Octopus reckons that incentive, plus RED upping output to over 1,000 pumps a month, plus the government's new Boiler Upgrade Scheme offering up to £5,000 upfront, now make heat pumps price-competitive with traditional boilers.

Extending, quietening and beautifying RED's range to make the technology attractive in smaller homes, is Octopus' route to success. Accelerated production at RED as early as this year will be followed by the creation of 100 skilled green jobs.

Founded by Dr. Jason Cassells, RED designs and manufactures patented air- and ground-sourced heat pumps, including their controls, software and onward distribution systems. Eighty per cent of components come from the UK.

The partners in this 'multi-million pound investment' are also investigating more suitable locations to expand production further.

Greg Jackson's Octopus already pumps £10 million into a centre in Slough, researching commercial ways to decarbonise heat in buildings.

With a focus on time-intelligent power-buying, the firm's smart grid technology will enhance RED's hardware. Owners of EV and PV panels will benefit still more; the retailer believes on-roof solar could slash as much as 70% from a pump's running costs.

Heat pumps are a key element in the Johnson administration's plan for greener energy. Last week's energy security strategy announced the launch of a Heat Pump Investment Accelerator Competition this year. Worth up to £30 million, it is aimed at UK manufacturers such as RED, as their product cuts national demand for gas, thus increasing the country's energy independence.

Energy minister Lord Callanan commented: "The Energy Security Strategy has laid out a future where we will be powered by homegrown renewable and nuclear energy and heat pumps using this cleaner, cheaper electricity will allow us to warm our homes.

'Model T moment' to make pumps affordable?

"Together with private sector investment such as this by Octopus Energy, we're making heat pumps an affordable, convenient and obvious choice for consumers – especially with global gas prices at record highs."

Octopus founder and CEO Greg Jackson said: "I am absolutely thrilled that Jason and his team are joining forces with us.

"This is the "Model T" moment for the heat pump industry", Jackson went on. "Thousands of heat pumps rolling out of RED's Craigavon factory a month is just the beginning.

"Like the original Ford, we're planning to scale production every year, cutting costs even further and making heat pumps affordable for everyone".

Launched in 2016, Octopus sells low carbon energy to 3.1 million homes. Across Europe the group manages a green generation portfolio valued at £3.4 billion.

# Veolia launches its first renewable fuelled fleet

New collection fleet fully powered by HVO takes to the roads around Broadland

**F**ollowing the contract start on 1 April, Veolia has launched a brand new fleet of green fuelled vehicles to collect waste and recycling, including food and garden waste, from residents across the Broadland district. In a first for Veolia in the UK, the fleet will be solely powered by renewable Hydrotreated Vegetable Oil, HVO.

Reducing energy consumption and reaching carbon neutrality are essential for combating climate change. Veolia's new contract for recycling and waste services for Broadland District Council included a commitment to reduce operational emissions and develop low carbon solutions and this supports the council's aim for continuous environmental improvement.

Every vehicle in the fleet is fully powered

by Hydrotreated Vegetable Oil (HVO), a bio-based liquid fuel made from vegetable oils and animal fats. Being made from renewable raw materials, HVO is a low carbon, low emission, fossil-free and sustainable alternative to conventional fossil diesel which eliminates up to 90% of net CO<sub>2</sub> and reduces nitrogen oxide (NO<sub>x</sub>), particulate matter (PM) and carbon monoxide (CO) emissions. However, it is fully interchangeable with conventional diesel and can be used pure or blended with fossil diesel if required.

**Pascal Hauret, Managing Director Municipal, Veolia UK said:**

"We're delighted to launch our first fully HVO powered fleet in Broadland. HVO significantly reduces CO<sub>2</sub> emissions so this is a hugely positive step in our shared

commitment to net zero. Importantly, whilst the availability of HVO is still limited in the UK, Veolia has secured a guaranteed supply for the entire contract term.

"As part of our ambitious and achievable carbon reduction plan, this new fleet will help drive us towards our 2050 Net Zero ambitions."

Councillor Judy Leggett, portfolio holder for Environmental Excellence said: "We're very pleased to be continuing our very successful working relationship with Veolia through the award of this major new contract. The contract brings together an excellent service for residents with innovative new approaches which will help to make our waste and recycling services more effective and even more environmentally friendly."





# GridBeyond hires a new HR manager to support the company global growth, to invest in its people and support talent development



GridBeyond

**G**ridBeyond, energy asset optimisation company, has appointed Laura Merriman new HR Manager to support the company global growth and develop its HR functions.

As the company opens to new markets, GridBeyond has recently entered the Australian market in addition to the already existing North American and Japanese markets, and becomes more complex and articulated, the new HR manager will bring in those changes that the company needs to support its growth and development.

Laura has been working in HR for over ten years, she has worked for several industries such as sports and gaming, pharma, security and software, which have allowed her to gain a broad range of different experiences. She holds an MSC in Talent, Leadership and HR Strategy and is a member of CIPD.

During her career, she has delivered many employees and integration projects for the

company she has worked for, including programmes to support talent attraction and retention of high performing team members, programme to support the business revenue model strategy employee integration plan, training to ensure the strategic delivery of the performance management process.

On joining GridBeyond, HR Manager Laura Merriman commented:

“In the last year, the company has grown quite rapidly and since I have started, in a very short time, I have already advertised more than 15 vacancies, including a new Talent Acquisition position which is going to support me in the company growth and development.

“The job is very dynamic, I am currently working with several markets at the same time and each market has its own challenges and



Laura Merriman.

differences and each of them requires different strategies.

“It is very interesting and rewarding, as I believe that people are the best assets for the company and that our ability to win in the marketplace lies within the talent and passion of our people. I’m committed to creating a culture and environment that makes us a great place to work”.

Michael Phelan, CEO at GridBeyond said: “GridBeyond is growing globally at an increasingly fast rate, and we are very happy to have Laura joining our team to help us to support the company in this exciting time for us.

Her expertise is crucial for Gridbeyond as we look for new talents and passionate people to join our company and make it a better place where to work”.

## GridBeyond launches operations in Australia

**G**ridBeyond, the world’s leading technology player for managing distributed and flexible energy resources is expanding its geographic reach to provide services to Australia. After launching in the USA in 2020 and Japan in 2021, GridBeyond is continuing its global expansion plans in Australia.

GridBeyond will provide AI-powered demand response, virtual power plant (VPP) services and generation and storage asset optimisation across Australia’s National Electricity Market. Using artificial intelligence and data science, the company’s technology solution will allow its C&I customers to participate both in grid services for balancing the grid and in wholesale markets through their energy generation, storage and industrial load. Combining solvers, market access, and automatic trading in one place this empowers C&I businesses, EV fleet operators, generators, and energy storage operators to maximise revenues and savings.

GridBeyond Senior Business Development Manager Diogo Cabral said: “Australia is a market with very strong fundamentals for the long-term success of demand flexibility services where electricity consumers value highly any services that protect them against market prices’ high volatility creating

increased cost savings and additional revenues through optimisation tools and robotic trading and by optimising the combination of different types of assets they have (solar, storage, demand assets); and/or by simply running consumption profiles’ optimisations through AI and by participating in attractive grid services like the FCAS (frequency response) market.

“At the moment with the increasing number of extreme weather events per year, there is a strong political shift away from fossil fuels and towards renewable energy, which strengthens the business case for demand flexibility in Australia. With the help of GridBeyond, C&I businesses can become a strong support in providing valuable grid services through demand response, to allow the continuous and sustainable growth of renewable energy and support the country towards its net zero targets.”

GridBeyond launched in 2010 and is now a global player in the energy transition, provides a powerful combination of technological excellence, consultative approach and unrivalled expertise that enables partners and clients to have future-proof access to energy services, while supporting the wider electricity grid to integrate more volatile renewables, reduce emissions and make the leap to a greener future.

Following successful operations in the

UK, Ireland, USA, and Japan, from April 2022, the company’s globally recognised and award-winning technology platform will be available for businesses in Australia’s National Electricity Market.

GridBeyond, already delivers distributed and flexible energy resources management, energy trading, price and energy optimisation, enhanced savings, strengthened operations and sustainability to over 400 sites worldwide, including some of the planet’s best-loved brands.

GridBeyond CEO Michael Phelan said: “The entry of GridBeyond in the Australian Energy Market is further recognition of GridBeyond’s energy expertise. Operating in the VPP & DERMS market that is planned to grow at a CAGR of 20% by 2026, GridBeyond is strongly positioned to continue the significant growth we have seen and to continue to support businesses, asset owners and grid operators throughout the transition to a net zero future and beyond. The FCAS (frequency response) market in Australia is very similar to the ones we manage in Ireland, so we are bringing unparalleled expertise to Australian businesses to manage their flexible energy resources and co-optimize them with wholesale trading. Our microgrid controls that integrate EVs are also a good fit for Australia’s energy market need”.

# Potential for up to 2,000 jobs in South-East under Rosslare Europort Offshore Wind Hub Plan

Gateway to Europe and soon to be Ireland's Offshore Renewable Energy Hub, Rosslare Europort announces big plans for the future.

**R**osslare Europort management is announcing plans to establish the port, its hinterland and the south-east region as Ireland's Offshore Renewable Energy (ORE) Hub, with the potential to create 2,000 jobs.

After a history making 2021 which saw Rosslare Europort become Ireland's number one port for direct RoRo/Pax services to Europe, the port today (Friday 22nd April) outlines its vision to become the Offshore Renewable Energy Hub of Ireland at a seminar in the Terminal Building (10:45hrs, Fri 22nd April).

At the event, Jim Meade, Chief Executive of Iarnród Éireann (Port Authority for Rosslare Europort) and Rosslare Europort General Manager Glenn Carr welcomed local, national and international industry and government representatives to the port, including Minister of State at the Department of Justice James Browne TD. Stakeholders discussed plans to make this vision a reality, and the economic and environmental potential the ORE industry holds for the South East region.

The Offshore Renewable Energy hub plan represents an investment estimated at €200 million, and will be aligned with existing developments such as:

- Rosslare Europort Masterplan, including port digitalisation: These works will reflect its status as Ireland's Gateway to Europe and will include new freight and passenger facilities, storage, export and import facilities, berth extension. Matching the port's physical transformation, a digitalisation of systems and operations is also planned which will deliver a better, more effective and more efficient Port

- Office of Public Works Project T7, to develop a permanent Border Control Post within the port, to provide the facilities and systems for all aspects of Border Control

- New TII N25 Rosslare Europort Access Road will ensure a better experience for port users and enhance quality of life for those living and working in the area by taking trucks out of the village and improving access and connectivity to the port.

In total, these developments and the ORE Hub plan will see a total of €350 million invested in the port and its environs.

## Why Rosslare Europort?

Ireland represents one of the best ORE resources in Europe, with a sea area of 490,000sq kms. Rosslare Europort is ideally positioned to serve the many Offshore Wind developments planned in the Irish and

Celtic seas, the majority of which are located within 100 nautical miles of Rosslare.

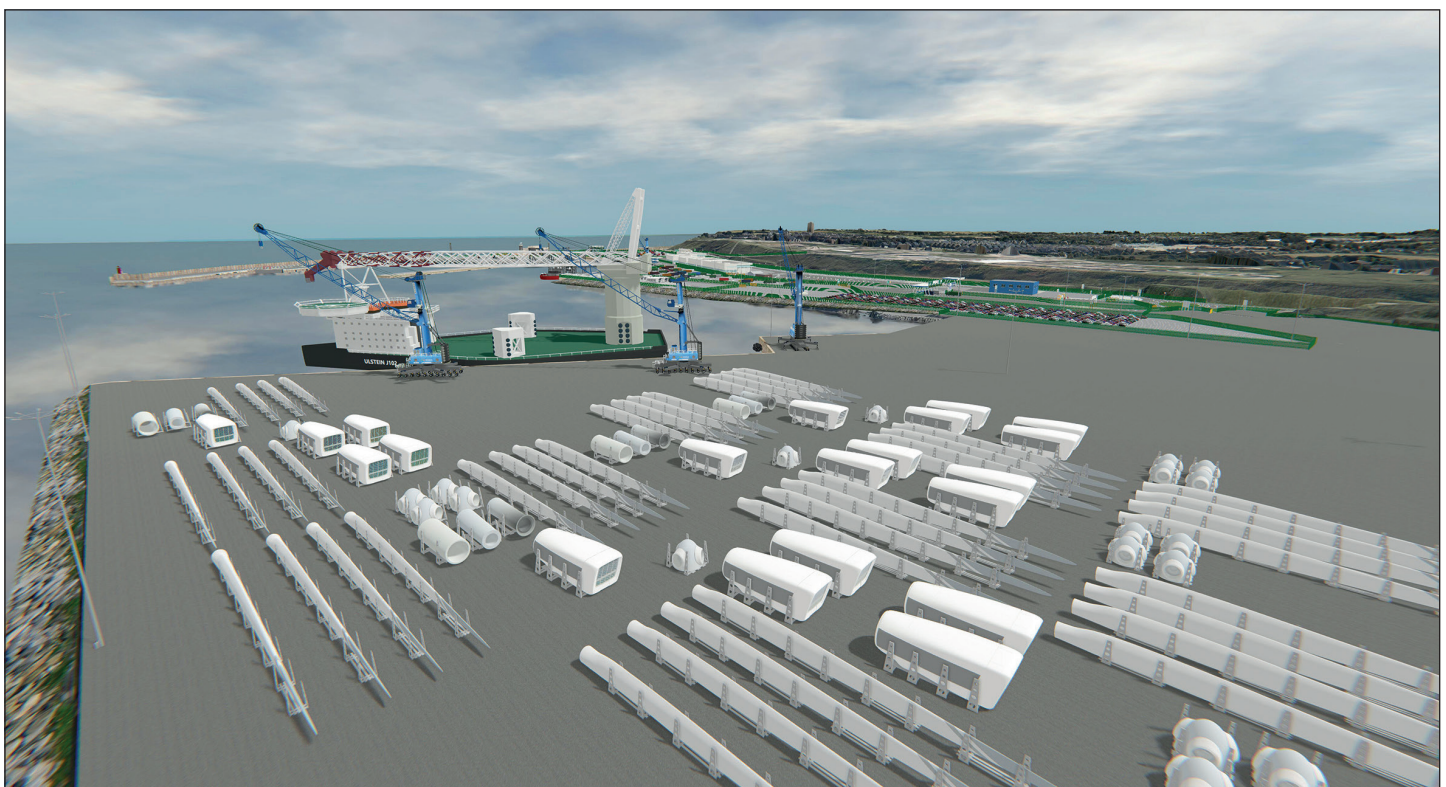
The national Climate Action Plan targets five gigawatts from ORE by the end of 2030, and Rosslare has unmatched advantages to support this, and act as a new sustainable hub for the South East. These include:

- The port is uniquely located within 60 nautical miles of most of the planned developments in the Irish and Celtic seas.
- Access can be developed to provide the key infrastructure requirements to serve the different stages of the OSW projects to include, marshalling, assembly, staging and load out of key components, ongoing operations, maintenance and crew transfers.
- The support of national and local government, industry and tourism, including the notable support of Port of Waterford.

## Rosslare Europort Infrastructure

To ensure Rosslare Europort can deliver its vision, the significant works required would include:

- ORE purpose-built quay and berth
- ORE quayside storage and pre-construction / up to 50 acres in area
- Navigable channel dredged down to a





minimum of 9 metres depth

- Management Control Centre & management offices and facilities

The ORE specific works would be in addition to those already outlined in the Rosslare Europort Infrastructure Masterplan which is set to transform the physical infrastructure of the port.

### ORE Hub plan progress

Rosslare Europort is already working to be Ireland's ORE hub:

- Expert ORE consultants have been appointed to bring the project to planning.
- Financial consultants appointed to develop the detailed business case and funding options
- Application submitted to the EU Connecting Europe Facility for 50% co-funding for the studies and designs for planning, an application supported by Government, local authorities of the Southeast, Business Chambers, IBEC, Waterford Port and the Offshore Industry.
- Rosslare Europort is actively engaging with all the potential developers that will be involved in OSW and have undertaken comprehensive surveys and engagements with them to understand the industry requirements and gain support for the Rosslare project.
- Discussions have also taken place regarding a potential start up facility that could be available from late 2023 at Fisherman's Quay in the port on a limited basis.

This would offer the industry some port capacity while the transition to the main facility is completed.

Jim Meade, Chief Executive of Iarnród Éireann said "Rosslare Europort has been to the forefront of our national response to some of the most critical issues we have faced in recent times. Working with State Agencies, Rosslare prepared for and responded to Brexit, transforming our direct connections to the continent of Europe. In recent weeks, we have ensured the rapid and successful establishment of reception facilities for Ukrainian refugees arriving to our shores. Now, as we face the urgent need for decarbonisation and to ensure energy security, the board and management of Iarnród Éireann fully supports the ambitions of Rosslare Europort to be Ireland's ORE hub."

Glenn Carr, General Manager, Rosslare Europort said "we have engaged extensively at European, national and regional level to understand the needs of the ORE industry. It is clear that not only is Rosslare Europort uniquely placed to support the development of the industry, but that this development can be a transformative one for the South-East region. In terms of economic potential, the South-East can be to offshore renewables what Dublin's silicon docks are to the tech sector. The support shown by stakeholders to date, and here today in the terminal building, shows that we can achieve this as a region for the nation."

### Why the South-East?

Rosslare Europort as Ireland's ORE hub will establish this renewable energy hub in a dynamic and growing region delivering:

- Infrastructure and skills for industry
- a growing and educated workforce with excellent education for all including the new South East Technological University
- and quality of life for its communities.

Ireland South East is the most connected region in Ireland. It is:

- Home to two of Ireland's most strategically located and complementary ports – Rosslare Europort (RoRo) and Waterford Port (LoLo)
- Connected to Dublin and its airport within 90 minutes via two motorways
- Rail connectivity via two rail lines to Dublin, and from Waterford to Limerick
- Home to €5m upgrade for Waterford airport

Port of Waterford has joined with Rosslare Europort to support the Rosslare ORE Hub ambition. With one of Ireland's most modern terminals handling a range of cargoes, adjacent landbanks zoned to accommodate new and existing port related businesses, and strong rail and road connections, Port of Waterford is positioned to support many of the prospective offshore wind farm locations in the Irish & Celtic Seas, centred on the Rosslare ORE Hub.

## Build Digital Project Launch

The formal launch of the Build Digital Project took place today Thursday 7<sup>th</sup> April 2022. This hybrid event was held in St Laurence's Church, TU Dublin, Grangegorman while also live streamed.

The Event was opened with a video message from Minister Michael McGrath of the Department of Public Expenditure and Reform.

Minister McGrath's address reiterated his department's announcement from November 2021 of the funding of €2.5 million from the Department of Public Expenditure and Reform that was awarded to the Build Digital Project for a five-year period to build momentum in digital adoption for the Irish construction sector.

"After 5 years, the project will have increased the use of digital methods across the entire Irish construction and built environment sector.

The regional spread of those involved in the Build Digital Project, in partnership with TU Dublin, is critical and will see the rollout of these initiatives across the country. Project partners include the Construction IT Alliance, Munster Technological University, Galway Mayo Institute of Technology (now Atlantic TU), University College Dublin, and Waterford Institute of Technology (soon to be South East TU)."



The presentation that followed included: Project Director Avril Behan who provided an overview of the Build Digital Project including its role in relation to Housing for All. Project Lead Robert Moore's brought the audience through the programme for 2022, year 1 of 5. Industry representative Tim Ferris of Jones Engineering and Chairman of the

CIF's Construction 4.0 group spoke about modernising the Irish construction sector and the role of the project in influencing practice by bringing all of industry on a supported journey. Industry Lead Pat Lucey closed out the event by explaining next steps in the project



# Heat Network Projects Awarded Funding to Reduce Waste and Create Energy

**H**eat networks that will use Energy from Waste to be developed in London and East Devon with support of funding awarded through the Government's Heat Networks Investment Project (HNIP).

Over £250 million of funding has been awarded to heat network schemes under the Heat Networks Investment Project (HNIP) since it opened its doors to applicants in 2018. The total Capex of schemes offered HNIP funding exceeds £826 million highlighting the scale of the opportunity for investment in the sector.

Energy from Waste plants tackle two key challenges as we move towards a more sustainable society: waste and climate change. Not only do they deliver significant base-load low carbon electricity, but they also process waste that would otherwise end up in landfill. The generation of electricity results in high temperature waste heat which can be captured and used to heat our homes and buildings. Finally, the ash produced as a by-product can be used as aggregate in the construction sector.

## Veolia (Funding Award: £16 million)

Veolia has been awarded over £16 million to bring an EfW sourced, low-carbon, heat network to a new area of Southwark, supplying heating and hot water to several existing estates and schools that currently depend on gas boilers and supporting the future growth to a new regeneration area aimed to accommodate 20,000 new homes over the next 15 years. The project is subject to further agreement with SELCHP Ltd, the existing EfW energy centre, and will involve some modifications to improve efficiencies and enable further heat extraction and the construction of a new 6km district heat network.

The proposed network will provide immediate and long-term carbon reductions to these developments compared to the proposed counterfactuals, while providing good value to residents and businesses. The network is expected to deliver on average 11,100 tonnes of carbon savings each year.

Commenting on the latest carbon reduction energy project, **Gavin Graveson, Veolia Senior Executive Vice-President, Northern Europe Zone, said:**

"Decarbonisation of the domestic heat

supply is a key area where the UK can advance progress towards the net-zero carbon goal by increasing the adoption of heat networks. The proposed expansion of the existing Energy Recovery Facility (ERF) derived heat network, to a further eleven estates across the London Borough of Southwark, has now been made possible with support from BEIS and Triple Point Heat Networks. This significant new heat network project will deliver low carbon affordable heat to over 3,000 Southwark homes, local schools, and enable commercially viable connections to future private and commercial customers."

**Cllr Helen Dennis, Cabinet Member for the Climate Emergency and Sustainable Development, said:**

"Seventy-nine per cent of emissions in Southwark are from buildings, so to achieve our ambition of being net-zero by 2030, it's crucial that we take steps to green all of our homes and buildings and support the shift away from gas. We are delighted to see this significant project move forward to do just that on eleven of our estates and at five of our schools in the Old Kent Road and North Peckham area. This will provide a sustainable and affordable heating and hot water solution, which will keep our students and residents warm, whilst also making a massive reduction in the borough's carbon emissions."

**Ken Hunnisett, Triple Point Heat Networks Investment Management, said:**

"Heat networks are at their brilliant best when using heat from natural resources or here, with these two exciting schemes in Southwark and Cranbrook, when recovering heat which would otherwise be wasted.

Benefitting from a combined award of loan and grant funding exceeding £26m, the scale and ambition of the two projects reflect the growth in the UK's heat network market while also being exemplars of how green infrastructure can be a driver of tangible local economic growth and a compelling means of levelling up the very different communities of a bustling metropolitan borough and a Devon new town.

The HNIP has now closed for applications, but we'll continue to showcase its many success stories. Over the past three years we have seen some incredible projects come forward for funding we look forward to seeing them develop and expand further."

**Business and Energy Minister, Lord Callanan, said:**

"Heat networks powered by energy from waste sites are an important and low-cost part of the UK's low carbon heating mix, helping to reduce our reliance on gas and oil for heating.

"Transitioning heat networks away from gas can help protect consumers from the volatility of fossil fuel prices and this funding will accelerate the development of technologies that help shield households and businesses."





# Steam is too small a word for it... This is Natural Technology

**S**tream is an inherently natural medium and is something familiar that we can all understand on its simplest level – it is just the boiling of water, but with some totally unique properties. This is why it has been adopted as the preferred method of delivering thermal energy and motive energy throughout our industrial history. Distributing steam around a system, a building or a process can be done safe in the knowledge that is just water, but with far higher thermal qualities. As technology advances, the methods of steam generation will continue to become:

- increasingly sustainable
- capitalising on renewable sources
- optimised through digital advances

Our ability to produce it, harness it and control it makes it an incredible medium with a vast range of applications and uses including electrical power generation, sterilisation, cooking and cleaning. As renewable generation solutions and digital controls evolve, steam will be a vital part of our sustainable future as we transition to greener technology. As sustainability agendas accelerate and organisations look to invest correctly in green technology, the availability of renewable power is on the rise, which fits well with advances in the electrification of steam. So why is steam the ideal choice for thermal energy transfer?

## High energy density

Steam has a high energy density enabling effective transfer of large quantities of energy. If we circulate water with a flow and return temperature of 71 – 82°C (160 – 180°F), then each litre (or kg) of water has the ability to deliver 46 kJ/kg. If we circulate water with a flow and return temperature of 60 – 80°C (140 – 176°F), then each litre (or kg) of water has the ability to deliver 84 kJ/kg. In comparison, if we take steam at 1 bar g, we have the ability to deliver 2201 kJ/kg. If the application allowed for subcooling of the condensate to 10°C (a drop of 110.42°C), then the additional energy available is 464 kJ/kg. By adding this to the enthalpy of evaporation we can achieve a total of 2665 kJ/kg. Per kg, steam Hfg has 26 times more useful energy than water at delta 20°C, or 48 x more than water at delta 11°C.

## Precise Temperature Control

Steam has a temperature that is relative to the pressure and maintains a constant

temperature as it gives up its energy and changes state from a gas back to a liquid (unlike water that starts to lose temperature immediately as it gives up energy). This allows steam to maintain uniform temperature during heat exchange. In comparison, water would see a temperature drop as soon as it starts to exchange energy.

## Smaller infrastructure

When steam pressure increases, the volume decreases. So if we distribute at a higher pressure, steam pipes are smaller, minimising valuable process space, lowering costs and minimising radiated losses.

## Flows naturally

Steam moves from areas of high pressure to areas of low pressure without the need for pumps. This eliminates high electrical loads and maintenance associated with circulation pumps. In addition to this, a plant will only consume the steam it requires when needed, when compared to wet systems that continually circulate. If electric condensate return pumps are used, the electrical load is far less than that of a water system, due to steam's high energy density.

## Efficient heat transfer

Steam can be used directly onto products e.g. equipment sterilisation in healthcare, cooking produce in food and beverage or even indirectly via heat exchangers. Steam is a fantastic heat transfer medium. When using an indirect heating surface (heat exchangers), the heat transfer coefficient when using steam is much greater than other heating mediums.

## Natural Water Cycle

Most steam applications use the same cycle as the earth's natural water cycle (Hydrologic Cycle), so we may see an industrial process, but it is also a very natural process. There are however exceptions such as direct injection.

## Central to the transition to greener technologies

Thermal heating is commonly reliant on the burning of fossil fuels and industry is increasingly looking at how to generate steam in a carbon-free way. The transition



to greener technology can start today through system optimisation, digitalisation, electrification, biofuels and zero emission steam to name just a few. Technology is currently available to reduce carbon emissions, improve sustainability and even fully decarbonise steam production. But there is also huge investment in emerging technologies to help decarbonise steam production in other ways including green hydrogen, advanced electrification and thermal battery technology.

The first step on the road to a green future is to ensure all systems are working correctly and fully optimised – often the quickest wins too. There should be ongoing activities to look at how systems are currently operating and to make sure they are operating effectively and efficiently including:

Reducing demand through improved plant management and preventative maintenance

- Adopting steam system best practice to minimise plant consumption
- Addressing areas of energy loss by implementing heat recovery
- Maintaining steam quality to maximise process effectiveness
- Measuring of utilities to trend and optimise performance

Even when considering significant plant changes to address sustainability and energy, it is important to understand the starting point for your plant, the base-line energy consumption.

## Next steps

Benefit from the power and capabilities of steam while decarbonising and working towards net zero. Expertise from Spirax Sarco is your gateway to tailored solutions that deliver twenty-first-century steam powered operational efficiency, helping you to meet your sustainability targets and solve multiple business challenges. Spirax Sarco can work with you to give your business a clear forward vision whilst harnessing the power of steam today and in the future.

Make the most of steam in your sustainable future at [www.spiraxsarco.com/global/en-GB](http://www.spiraxsarco.com/global/en-GB) ■

# Nearly a third of Irish households now living in energy poverty

ESRI says cutting indirect taxes on fuel represents a 'poorly-targeted' response

**N**early a third of households in the State are now living in energy poverty, defined as spending more than a tenth of their income on energy, as a result of the recent surge in gas and electricity prices, a new study has found.

The research by the Economic and Social Research Institute (ESRI) calculated that households are paying on average €21 more a week for energy, rising to €38 more when motor fuels are included, on the back of the recent price hikes.

This means that a record 29 per cent, or 550,000 households, in the Republic are now spending more than a tenth of their disposable income on energy, the threshold for energy poverty. This was up from 13 per cent as recently as 2015 and from a previous record of 23 per cent back in 1994/95.

The ESRI warned that its calculation only covered energy price inflation between January 2021 and April this year and that a further 25 per cent increase – similar to the increase applied by Electric Ireland in May – would push as many as 43 per cent of Irish households into energy poverty.

Should energy prices rise by a further 25 per cent, the average weekly outlay on energy will increase by €36.57, excluding motor fuels, or by €67.66 if they are included, against the January 2021 benchmark, it said.

Rising energy prices, aggravated by Russia's invasion of Ukraine, have pushed Irish inflation to a 38-year high of 7.8 per cent in May. In its study, the ESRI noted

that there was a "strong income gradient" in terms of the impact of energy price increases. It estimated that recent increases in energy costs (including motor fuels) equated to 5.9 per cent of after-tax and transfer income for the lowest-income fifth of households compared to 3.1 per cent for the highest income fifth. "This is because a larger share of lower-income households' spending is on energy, particularly home heating and electricity," it said.

Learn more

The think tank also warned the Government that trying to mitigate the impact of rising energy prices by cutting indirect taxes on fuel – such as VAT, fuel duty, or the carbon tax – represented a poorly-targeted response as most of the aggregate gains would go to the highest-income 40 per cent of households while less than a third would go to the lowest-income 40 per cent, who have been more adversely affected by rising energy prices.

Instead, increases to welfare payments, the fuel allowance, and even lump-sum payments such as the household electricity credit were better targeted measures. It said "a Christmas Bonus-style double welfare payment" would result in gains that are larger in both cash terms and as percentage of income for lower-than for higher-income households, while avoiding blunting the incentive to invest in energy-saving technology.

"Rising energy prices are having a substantial impact on households, many

of whom were already experiencing energy poverty or deprivation," one of the report's authors, Niall Farrell, said.

Fellow researcher Barra Roantree said the findings had important implications for policy. "If the objective is to protect those most affected by rising energy prices, cutting indirect taxes is a poorly targeted response. This is as most of the revenue is spent compensating higher-income households who have been less affected," he said.

Tánaiste Leo Varadkar came under pressure on Wednesday night from Fine Gael colleagues to intervene again on the cost of fuel before the budget, and to abolish car tax come October.

Multiple contributors at a meeting of the Fine Gael parliamentary party - led by former cabinet minister Regina Doherty - called for more to be done to bring down the cost of petrol and diesel to consumers.

Ms Doherty was backed up by Clare TD Joe Carey, Kerry TD and deputy Government chief whip Brendan Griffin and Senator Tim Lombard - who also said that the Government should remove car tax in the October budget, arguing that the public transport fare reductions had little impact for rural dwellers.

Mr Varadkar told the meeting that the Government might already be at the limit of what can be done on excise and VAT but he would contact Minister for Finance Paschal Donohoe regarding the possibility of further cuts.





# Veolia extends energy savings at Royal Berkshire Hospital

£9.7 million works move the Hospital move a step nearer a zero carbon future by installing hydrogen-ready boilers

**G**lobal resource management company, Veolia, is now increasing energy savings at the Royal Berkshire Hospital in Reading following a 15 year extension to the existing contract. The £9.7 million works have seen the 740 bed Hospital move a step nearer a zero-carbon future by installing hydrogen-ready boilers, believed to be the first use of this technology in the NHS. By installing more efficient boilers, reducing distribution heat losses, and improving control of the heating and hot water systems the hospital will save around 3.8GWh of gas and 850 tonnes of carbon per year.

This highly complex and difficult process, which is self-funding from the energy savings, covered completely removing the existing steam generation and distribution from the site and converting to Low Temperature Hot Water. This involved installing the new network, comprising around 3km of pipework and 44 heat exchangers, whilst the existing system continued to supply vital heating and hot water to the medical facilities.

This challenging project was funded from the Government Health Infrastructure Plan, that required the project to be completed by the close of the financial year. By using Veolia's experienced design and construction team, removal of steam dependence was successfully achieved by the end of March, with additional works extending into April. Site surveys, design of the system and negotiations of the contract amendment were all achieved within three months.

The Royal Berkshire Hospital provides acute medical, surgical and maternity services to West Berkshire and Southern Oxfordshire and the new contract builds on the success of the previous agreement

signed in 2012. This provided the design and build of an energy scheme that achieved a 25% carbon footprint reduction by 2015, and delivered energy savings of £920,000. Under the contract Veolia designed, built and funded a 2MWe CHP unit, a 1MW waste heat boiler, and installed hot water mains and a plant management system to control the energy centre. Fitted in wards and circulation areas, 1,500 low energy lights saved £30,000 a year alone, and the cost of the downstream energy management improvements was repaid through guaranteed performance savings.

Commenting on this latest innovation John Abraham, Chief Operating Officer - Veolia UK & Ireland - Industrial, Water & Energy said:

“Enabling the NHS to become more sustainable through energy efficiency, and helping them to focus budgets on patient care is very important as it enhances facilities, and improves healthcare. This latest project also helps the Trust to move a step nearer the net zero carbon target. We look forward to working in partnership with them, and continuing our joint energy efficiency programmes that can redirect cost savings to healthcare.”

Managing energy in Hospitals since 1938, Veolia now provides secure on-site energy, FM and waste services to over 230 UK hospitals, and this includes over 100 combined heat and power plants. By implementing site wide carbon management strategies the company is at the forefront of delivering significant cost and carbon reductions using proven energy efficient technology, and best practice optimisation, supported by energy awareness campaigns.

## Time to take responsibility for our electricity prices

**A**nyone opening an electricity bill in 2022 will notice a monumental price increase. The CSO revealed earlier this month that electricity prices had risen 22 per cent in a year, with several suppliers since announcing further increases.

The calls to accelerate the deployment of renewables at customer and utility scale are well made; this is the only option to free Ireland's citizens from the tyranny of fossil(ised) markets. It is also the necessary step towards battling climate change.

Policymakers can protect citizens not only through installing solar panels but by reviewing the policy choices that shape the prices customers pay. Ireland is not completely the victim of international commodity markets; the inconvenient truth is that the effect of fossil fuels is compounded by local policy and regulatory decisions.

The data suggest a closer look is required.

Latest figures from Eurostat show that Ireland has the fourth highest residential electricity prices in the EU. This cannot be explained away by international factors alone.

The price for trading dead dinosaurs to

burn, or international wholesale energy prices, has been rising consistently since early 2021 and this naturally contributes to an increase in the prices householders and businesses pay.



# Record electrical waste recycled but targets must change - WEEE Ireland report

Irish consumers recycled a record number of electrical items last year, but the country's largest e-waste scheme has warned that its unsustainable targets need to change to reflect a more circular economy.

**D**espite ever-rising public awareness and participation, targets do not count circular strategies already undertaken by businesses and consumers to prevent e-waste, including reuse and repair.

WEEE Ireland is one of the best performing recycling schemes in Europe, with a record 18.7 million waste electrical items collected in 2021, the organisation's annual report has revealed.

127,000 fridges and 205,000 TVs and monitors were recovered, as well as over 2.3 million lightbulbs in a total takeback of 38,464 tonnes – 57% of the average goods sold over a three-year period.

The equivalent of over 54 million used AA portable batteries were also prevented from ending up in landfill.

However, the changing nature of products that power our lives mean that the recycling versus sales targets that benchmark the European WEEE system are no longer fit for purpose.

“As a nation we are consuming more electrical goods than ever. The annual tonnage on the market rose by 50% in six years to 22kg a head last year, with 69 million units placed on the market in 2021.

“We need to recognise that many larger appliances don't reach end of life for many



years through design and repair strategies,” said WEEE Ireland CEO, Leo Donovan.

“If we are buying more electronics, we need to adopt a one plug in, one plug out mantra as we do not have enough raw materials in the ground to keep up with growing global demand.

“Although our percentage takeback levels are far above the European average, the distance to our mandatory 65% take back target is widening every year.

“The changing nature of products and their lifecycles, mean that the simple linear weight system is no longer fit for purpose.

“If a laptop is repaired or reused it is not currently counted towards Ireland's environmental performance.



“New home technologies such as solar PV panels and heat pumps, for example, are large tonnage items which now have a life span of more than 15-20 years thanks to innovation by the producers.

“They will not reach end of life for recycling for decades and yet still count in today's target measurements.

“The same has happened in lighting where long-lasting LED bulbs are changing the nature of the landscape previously dominated by short use incandescent bulbs.”

Mr Donovan also cited the support from the White Goods sector in Ireland to grow the level of reuse and repair, with their new Circular Economy Skills Initiative course aiming to produce enough Irish experts to ensure thousands of washing machines, fridges and dishwashers are given a new lease of life.

“We need targets to benchmark our systems and drive improvement, but the legacy linear WEEE targets are not measuring true progress across the European e-waste system, and you must ask if they are fit for purpose,” said Mr Donovan.

“We need to rapidly incentivise the transformation across the industry to deliver a more circular and resource efficient economy. An all-actors approach is needed through documentation of the flows of all appliances and their materials by everyone involved in the value chain.”

WEEE Ireland accounts for over two thirds of all national waste electrical and electronics collection activity on behalf of 1,296 producer members.

In 2021, the equivalent of 231,179 tonnes of CO2 emissions were avoided by recycling e-waste through the WEEE Ireland Scheme as opposed to landfilling. That is the equivalent of the annual carbon consumption of 4,624 hectares of trees.

An average of 94% of material across the WEEE categories was recovered for use again in manufacturing or final energy recovery. The 20,702 tonnes of iron recovered is enough to build almost three Eiffel Towers.

The country's largest electrical and battery recycling scheme also exceeded the EU's 45% target for waste portable batteries in 2021 by 1% – with 1,085 tonnes collected, a 16% increase on 2020.

57% of electrical waste was collected from retailer sites – up 233 tonnes on the previous year, and the seventh year of increases, while 28% was collected at local authority sites.



# SSE Airtricity announced as official Energy Partner to the Dublin Climate Summit as the Business Marks 25 Years Since its Founding

**S**SE Airtricity has been announced as the official Energy Partner to the Dublin Climate Summit, which takes place this Thursday, 12th of May, at UCD's O'Reilly Hall. The Dublin Climate Summit is leading-edge sustainability and climate-focused conference where investment, finance and policymaker leaders will meet to deliver net zero goals in business.

For 25 years SSE Airtricity has been a leader in driving Ireland's green energy revolution and this event is closely aligned to the ethos of the company. The conference will hear from Wall Street investors, leading international speakers, global financiers, and decision-making green energy suppliers.

Klair Neenan, Managing Director, SSE Airtricity said: "SSE Airtricity is delighted to be the official Energy Partner of the Dublin Climate Summit. This event speaks to a number of our values and



Klair Neenan.

to our vision of achieving net zero. The Dublin Climate Summit provides a perfect platform to underscore SSE being the UK and Ireland's clean energy champion, and our commitment to delivering an ambitious €12.5bn capital investment plan to accelerate progress towards net zero.



"Airtricity was founded 25 years ago as a pioneer in green energy. The innovation and commitment to sustainability demonstrated then, are values that continue to drive our business and increasingly, our customers, too. It is fitting that we would celebrate 25 years by partnering with an event that aims to lead the conversation around green solutions that will support future generations.

"The event will host some of the leading organisations driving the climate change and green energy agenda in Ireland and internationally. As Ireland's largest provider of 100% green energy and the first accredited one-stop-shop under the government's National Retrofit Programme on the back of our Generation Green Home Upgrade SSE Airtricity has been at the forefront of helping businesses and individuals target net zero emissions.

"I look forward to participating and sharing our vision for net zero, and also hearing the first-hand experiences and insights of international organisations operating in this space."

The second Dublin Climate Summit will be a hybrid event with delegates attending in-person and over 2,000 joining virtually on the day. Speakers at the event include: An Taoiseach Micheál Martin TD; Klair Neenan, Managing Director, SSE Airtricity; Paschal Donohoe, President of the Eurogroup; Catherine Martin T.D; Minister for Tourism, Culture, Arts, Gaeltacht, Sport and Media; Kay Harrison, New Zealand Climate Change Ambassador; and Marcel Haag, Director for Horizontal policies, DG FISMA, European Commission.



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- Buffering large loads, such as Electric Vehicle (EV) charging, from the grid so that they can be more easily and cheaply connected, and combining all of these to turn your site into a smart microgrid
- Battery energy storage technology is most impressive where it is deployed to manage a combination of these activities simultaneously.



# SSE Renewables and Siemens Gamesa Renewable Energy announce MoU to bring green hydrogen to Ireland and the UK

**S**SE Renewables and Siemens Gamesa Renewable Energy have signed a Memorandum of Understanding (MoU) to explore the opportunity to produce and deliver green hydrogen through electrolysis using energy from two onshore windfarms in Ireland and Scotland.

The partnership aims to encompass the full green hydrogen value chain, including construction, supply chain management, customer offtake and storage, end user requirements, reliability and operation and maintenance.

The two companies will also aim to work with green hydrogen customers across a range of industries including transportation, major distilleries and gas network operators.

Hydrogen is fast being recognised as having a potentially revolutionary role to play in decarbonising hard-to-abate sectors, including heavy industry and transportation. The partnership between SSE Renewables and Siemens Gamesa will help power commitments by both companies to support the Irish and UK Governments in reaching their individual net zero targets, including in the UK hitting 5GW of low carbon hydrogen production by 2030.

Under the partnership, SSE Renewables and Siemens Gamesa aim to co-locate hydrogen production facilities at two selected onshore wind farms, one each in Ireland and Scotland to be announced in due course, from which the partners will begin production and delivery of green hydrogen through electrolysis.

Looking beyond onshore wind, Ireland and Scotland's abundant renewable energy resource can support the establishment of a hydrogen economy, presenting long-term opportunities to export green hydrogen to regions around the UK and to mainland Europe.

Jim Smith, Managing Director of SSE Renewables, said:

"Hydrogen is rapidly becoming an important and exciting component of the strategy to decarbonise power production, heavy industry and transport, among other sectors. And the revolutionary production of green hydrogen from wind energy offers wider opportunity for markets such as Ireland and Scotland to further exploit our abundant wind resources. That's why it makes perfect sense for SSE Renewables and Siemens Gamesa to come together to explore how we can use our experience and expertise to harness our fantastic wind resource to bring the green hydrogen revolution to Ireland and Scotland, and so help decarbonise the wider UK and European economies."



Paulina Hobbs, Siemens Gamesa Renewable Energy Service Northern Europe & Middle East CEO, stated:

"It took three decades for wind and solar to reach grid parity with fossil fuels, green hydrogen needs to do the same in one decade if we are to reach our 2050 carbon neutral targets. Siemens Gamesa is committed to making this happen but it can only be achieved when we work together with companies such as SSE Renewables to help springboard the development and we are very excited to see what this partnership can create."

Siemens Gamesa has already successfully collaborated to bring a hydrogen production plant into operation where hydrogen is produced from an onshore wind project. The Brande Hydrogen pilot site in Denmark features a battery, a turbine and an

electrolyzer to serve as a test bed for several technology pathways, including the production of green hydrogen in the near-term from existing wind projects.

Siemens Gamesa's partnership with SSE Renewables in Ireland and Scotland aims to allow for the future development of these technologies at scale, producing cost efficient green hydrogen and proving the feasibility of green hydrogen production co-located with wind farms.

With an operational renewable portfolio of 4GW and a development pipeline including over 1GW of onshore wind and the largest offshore wind pipeline in Ireland and the UK at around 7GW, SSE Renewables is well placed to provide the future renewable power needed to power a green hydrogen economy. Siemens Gamesa is a world-leading supplier of on- and offshore wind turbines and services and is also at the forefront of developing technologies and innovative wind-to-hydrogen solutions, playing a pivotal role in the energy transition.





# ACTIONZERO AND CORK AIRPORT PARTNERSHIP SAVES ALMOST €4 MILLION IN ENERGY COSTS

The actions resulting from a long-standing partnership between Irish-owned climate technology company ActionZero and Cork Airport has helped to reduce the airport's carbon emissions by more than half in the decade from 2009 to 2019.

**A**ctionZero was formed in 2021, following the merger of Energy Services and Straightline Energy Solutions. Cork Airport began working with Energy Services more than ten years ago and ActionZero continues to guide and support the facility today.

The partnership has achieved a cumulative energy cost saving of approximately €3.9m and reduced the airport's carbon emissions by 56% vs 2009 emissions, or 4,003 metric tonnes, which equates to taking more than 800 cars off the road for a year. Cork Airport has also successfully achieved 'Reduction' status as part of the Airport Carbon Accreditation programme every year since 2011 and is working towards net-zero emissions.

This year, Cork Airport was ranked as the best performing commercial state body in Ireland for energy savings by the Sustainable Energy Authority of Ireland.

Roy O'Driscoll, Acting Managing Director at Cork Airport said, "We're fully committed to reducing our carbon footprint and our impact on the environment. We're delighted to work with ActionZero (formerly Energy Services) to achieve our 2030 energy reduction targets as set out by the Climate Action Plan. Together, I am confident that we can reduce our greenhouse gas emissions by 50% compared to 2018.

CEO of ActionZero, Denis Collins added, "This is a paramount moment for climate action across the public sector and industry.

It's time to lead and take action. At ActionZero, we're proud to have a comprehensive portfolio with our patented EscoPod, Consulting and Analytics offerings enabling our clients to take action for decarbonisation, with minimal retro-fit or fabric changes. Our partnership with Cork Airport is an important one, making a difference over many years. We're looking forward to continuing to work with Cork Airport as it moves towards a future free from greenhouse gas emissions. Cork Airport shares our passion for combining commercial opportunity and social good. Not only has the facility saved almost €4m in energy costs, it has successfully reduced its carbon emissions by 56%."

Cork Airport, with the support of ActionZero has developed a comprehensive Carbon Management Plan that promotes energy efficiency throughout the campus and supports other scheduled energy reduction, water conservation and waste reduction initiatives.

ActionZero is headquartered in Cork city and has recently established a manufacturing, research and development centre in Tralee, Co Kerry. The company's primary focus is developing energy solutions across industry and enterprise. ActionZero's innovative heat pump technologies generate heat in a process that eliminates the need for fossil fuel. In particular, it offers a solution for difficult to decarbonise high temperature heat across a range of market sectors.





# LGBT Ireland announces SSE Airtricity as new National LGBT+ Helpline partner

The national LGBT+ Helpline will remain free to call as LGBT Ireland has announced a new funding partnership with SSE Airtricity.

**S**SE Airtricity's Sponsorship of the National LGBT+ Helpline is the first time this vital community support has been fully funded and will enable LGBT Ireland to keep the Helpline free of charge for those who need support or to speak in confidence and without judgement.

The partnership between Ireland's largest provider of 100% green energy and the national support service for Lesbian, Gay, Bisexual, and Transgender people and their families and friends, will also allow the group to advertise further services and will support the training and vetting of LGBT Ireland volunteers.

Over the last number of years SSE has engaged in several projects to promote diversity and inclusion in the workplace. The utility is a signatory of Business in the Community Ireland's Elevate Pledge, committed to creating a workforce that is representative of all members of Irish society.



Announcing the partnership, Paula Fagan CEO of LGBT Ireland said: "We are thrilled to be announcing this partnership with SSE Airtricity today. The National LGBT Helpline is a vital support to LGBT+ people across the country, and to family member and friends who are seeking help and information to support their LGBT+ loved ones. The helpline can be a lifeline for people who are struggling and so it is imperative that we can provide the service free of charge to everyone that needs it. This funding through this partnership will enable us to do this and to promote our services more widely."

Mia Fahey McCarthy, Head of Sustainability, SSE Ireland said: "Volunteer organisations like LGBT Ireland are essential to communities around Ireland and play an important part in supporting so many people. We are thrilled to be partnering with an organisation that is building an inclusive Ireland which embraces and celebrates diversity. SSE values inclusion and diversity and understands the importance of people being their true, whole self and we hope our new partnership with LGBT Ireland will help people to achieve this through availing of supports from this wonderful, volunteer organisation."

Klair Neenan, Managing Director, SSE Airtricity said: "We are delighted to support

LGBT Ireland and help them deliver the invaluable assistance they provide to people across Ireland. This partnership will help secure and deliver a vital service for everyone connected to our LGBT Communities.

As an organization that is committed to building an open and inclusive culture, we know the importance of having a safe space for people to ask questions, seek advice and speak their minds. Pride is an important day in our calendar each year where we schedule a series of talks, training and usually some fun activities too! However, for SSE being inclusive is not just a once-a-year event, our leaders complete an inclusive recruitment course before hiring and next month all of our senior managers will be attending an Inclusion & Diversity leadership programme. I hope our support of LGBT Ireland will highlight the great work they do and bring more people to their support services. Everyone at SSE is looking forward to working with Paula and her team and continuing to learn about how we can be more inclusive."

The National LGBT+ Helpline is run through a network of trained volunteers based in six local helplines across the country. They are in Cork, Galway, Mayo, Kilkenny, Dundalk and Dublin. It operates 30 hours a week, seven days a week.





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