EirGrid.ie



Energy Citizens Roadshow

- Riverbank House Hotel, Wexford Town
- 菌 13 / 03 / 2024











Home Energy Grants and Upgrades Micro-generation and Community Ownership 13/03/2024

EirGrid Energy Citizens Roadshow

Welcome.

Please take time to network, explore the information stands and help yourself to refreshments.

The panel discussion will commence at 7pm.





Agenda

7.00pm Open and Welcome Sinead Dooley, EirGrid 7.05pm Overview of Event and Introduction of the Panel Ciaran Mullooly, MC 7.10pm What Shaping Our Electricity Future means for Wexford Kevin Dolan, EirGrid 7.25pm National Network, Local Connections Alan Keegan, ESB Networks 7.40pm SEAI Supports for Communities and Households Yvonne Byrne, SEAI 7.55pm Wexford's Climate Action Plan Frank Burke, Climate Action Coordinator, Wexford County Council 8:10pm Questions and Answers 8.25pm Wrap up and close of event





Open and Welcome

Sinead Dooley, Head of Public Engagement, EirGrid







Overview of this evening

Ciaran Mullooly, MC







What Shaping Our Electricity Future means for Wexford

Kevin Dolan, Head of Customers and Connections, EirGrid







Who are **EirGrid** and What Do We Do?

State-owned operators of Ireland's electricity transmission grid.

We send power from where it is generated to where it is needed.

We operate the wholesale electricity market.

We operate electricity interconnectors with neighbouring countries.

We do not generate electricity.





Ireland's electricity grid

The grid gets into every corner of Ireland, bringing reliable power to homes, farms, schools, hospitals, and businesses.

There is approximately 9,500 km of highvoltage (110kV+) powerlines and cables across the island.

Peak demand during the cold snap last December was 7,031MW.

Electricity is getting greener all the time.





Ireland's electricity grid Coleraine Letterkenny Strabane Magherafelt Antrim Belfast Omagh Lisburn Enniskillen Banbridge Sligo Newry Dundalk Louth Castlebar Carrick -on-Shannon Navan EirGrid Mullingar



The Government has asked us to prepare the grid so up to 80% of Ireland's electricity can come from renewable sources by 2030



Ireland's Electricity Grid

The grid needs to carry at least <u>17GW</u> more renewable electricity by 2030 - that is more than triple 2020 levels. 100 kilowatts



30 Homes

100KW is enough to power approximately <u>30 homes</u>

1MW megawatt

300 Homes

One Megawatt is enough to power approximately <u>300</u> homes

1GW gigawatt



One Gigawatt is enough to power approximately <u>300,000</u> <u>homes</u>

300,000 Homes



Ardnacrusha Hydroelectric Power Plant

In 1927, the Ardnacrusha hydroelectric power plant provided 4 times the amount of energy required (400%) by the country and was completed at a cost of one fifth of the Irish state budget. In 2023, it now represents approximate 1.8% of our needs.



Amount of power needed

Power generated from Ardnacrusha

≁ +400%

1927

4 1.8%



2023

Context for preparing the plan

More electricity will be carried across the grid than ever before, and most of this power will come from renewable sources.

The grid needs to carry at least 17 GW more renewable electricity by 2030 - triple 2020 levels.

Power generated from renewable sources depends on the weather.

Renewable electricity is typically generated far away from where most electricity is used.





How did we consult and engage?





What did the Public say?

- Onshoregeneration
- Security-of-supply
- Publicengagement
- Landownerconcerns

- Ecology
- Environment
- Offshore-wind
- Future-proofing
- New-technology







Microgeneration

Community Ownership



Benefits for

regional and rural communities



Social Acceptance



Keeping costs manageable



What infrastructure will be required?



Existing Projects in the pipeline

294



40 New Projects in Ireland

4 new circuits 24 upgrades to existing circuits 1 new transformer 11 new technology projects



12 New Projects in Northern Ireland

3 new circuits7 upgrades to existing circuits2 new technology projects



New Circuit (indicative area shown)

Uprate Circuit Upvoltage Circuit Dynamic Line Rating Power Flow Controller New Transformer



Our 6 Step Approach to Project Development



Step One	Step Two	Step Three	Step Four	Step Five	Step Six
How do we identify needs of the electricity grid?	What technologies can meet these needs?	What's the best option and what area may be affected	Where exactly should we build?	Apply for planning permission	Construct, energise (make live), and share benefits.



What is Shaping our Offshore Electricity Future

EirGrid has been tasked by Government, to deliver a plan-led approach for connecting offshore wind to the electricity grid.

> This will involve the delivery of grid transmission infrastructure to connect offshore renewable energy resources to points on the south coast

> > New electricity substations and associated undersea electricity cables.



How is Offshore Wind being Developed

Phase 1 -Developer led 3.1 GW

• Auction held in May and four successful projects.



Phase 2 - Plan led 900MW (EirGrid)

- South coast EirGrid develops the grid offshore.
- Private developers then connect to offshore station locations.

Rialtas na hfliseann Government of Ireland

> Accelerating Ireland's Offshore Energy Programme Policy Statement on the Framework for Phase Two Offshore Wind March 2023

Phase 3 - Plan led 2 GW

 Floating offshore wind in development by 2030



Wexford?



Summary











The Oval 160 Shelbourne Road Ballsbridge Dublin 4 D04 FW28

+353 (0)1 677 1700



National Network, Local Connections

Alan Keegan, ESB Networks









EirGrid Energy Citizens' Roadshow: Wexford

Alan Keegan, DMSO Regulatory & Stakeholder Hub Manager.



Who We Are



Future Energy Customers



Our Services



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NATIONAL NETWORK, LOCAL CONNECTIONS PROGRAMME



We deliver and connect electricity to 2.4 million homes and businesses. We play a central role in enabling climate action through the electrification of heat and transport as well as connecting renewables.



Delivering Electricity for 90 Years



180,000 km Network



€800m Annual Investment



3,500 Employees nationwide

Our focus: Sustainability at our core

ESB NETWORKS



Where do customers fit into all this 'sustainability' NOW ?

Customers will play an essential role in achieving the ambitious climate change targets....



- +15,000 domestic customers are delivering demand flexibility by signing up to Is This A Good Time?
 - Get involved at esbnetworks.ie/time
 - +40 commercial customers are supporting the efforts to help with security of supply
- +400,000 customers adopting solar/heat pump technology
- + 34,000 customers adopted EVs in 2023
- ~80,000 microgen customers eligible for Clean Export Guarantee.
- 1 million Solar Panels across Ireland
- Community energy projects

Where do customers fit into all this future 'sustainability'?



Our Services

- Connection of Micro Generation & Mini Generation
- ESB Networks Online Account
- National Smart Metering Programme
- Security of Supply Initiatives





Connecting Micro-Generation



Think solar panels on the roof of the home

NC 6 Form



Free of cost

Connecting Mini-Generation





NC 7 Form



Approx €1,000









Supports micro gen

View your electricity usage on your ESB Networks Online Account



Empowers all electricity customers to take control



No more estimated bills

ESB Networks Online Account





Sign up to our 'Is This a Good Time?' Customer Programme







Get useful information and tips to help you learn how to **take control** of your home's electricity usage.

- Find out when the best times are to use your electrical appliances (i.e. outside of peak hours of 5-7pm or when renewable electricity is being generated).
- Get **rewarded** for taking control when prompted (via energy events).

esbnetworks.ie/time
Beat the Peak Business

The scheme has been set up for commercial electricity users and specialised energy management companies to provide flexibility services to the Irish electricity network.



The purpose of the scheme is to:

 Shift demand during peak evening periods to alleviate potential tightness on the network and mitigate System Alerts. During the scheme, commercial electricity users will be asked to reduce demand reduction between 4.30-7pm, Monday – Friday (excluding public holidays).

SERVICE DETAILS



- Service Assets will be remunerated for reducing demand on a daily basis and for Peak Events that are called by ESB Networks.
- Service Providers will be remunerated for recruitment and management of Service Assets.

Find out more by visiting esbnetworks.ie/business or if you have any questions, please reach out to our team at <u>btp@esb.ie</u>



CONNECTING A CLEAN ELECTRIC FUTURE, METER BY METER

At ESB Networks, we've been connecting customers to Ireland's power network for years. We're now installing smart electricity meters in your area as part of the National Smart Metering Programme.

Your new smart meter will reduce the need for estimated bills and help you to manage your electricity usage. We'll be contacting you before your meter is installed.

Find out more at esbnetworks.ie/smartmeter ä , L 🔒 L) o-L 0--0-A BEB

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engagement@esbnetworks.ie



SEAI Supports for Communities and Households

Yvonne Byrne, Local SEC Mentor, SEAI













Wexford Roadshow

Wednesday 13th March 2024

- SEAI Supports
 - -Sustainable Energy Community (SEC) Programme
 - -Individual Home Grants
 - -Community Grants
 - -Energy Audits
 - -Next Steps

Presentation by



Overview: Southeast Region

A Sustainable Energy Community (SEC) is a community in which everyone works together to develop a sustainable energy system for the benefit of the community.



SEAI: Sustainable Energy Community Pathway



A Sustainable Energy Community (SEC) is a community in which everyone works together to sustainably use energy, providing benefits for the whole community.



Climate Change Legally Binding Objectives:

County Wexford: Carbon Neutrality 2050

51% reduction in GHGs by 2030 relative to 2018 levels

Ireland likely to exceed the first two carbon budgets(2021-2030) by 24%-34% (EPA)



replacement, cylinder insulation, LED's, wood stove, heat pump, heating controls.
 Target to retrofit half million homes to BER B2.

Switch to Renewables: (Target 500MW of community-based projects)



Deployment of solar PVs and possibly battery storage.

Dramatic change to our Transport Systems: (Walking, cycling, public transport & EV cars)



Reduce car journey distances by 20%.
Walking, cycling and public transport to account for 50% of our journeys.
Nearly 1 in 3 private cars will be electric vehicles.
70% of people in rural Ireland will have buses for at least 3 trips to the nearby town daily.

Where do we use energy in our everyday lives?



What appliances use the most energy in your home?





Three Steps to a Home Energy Upgrade

Maximise the comfort and savings of your home with these 3 steps to a home energy upgrade

1. Assess



2. Insulate



3. Add Renewables





1. Assess

Don't know where to start? Or just want to carry out one or two energy upgrades?

 Get a Building Energy Rating (BER) assessment of your home. It will provide you with a roadmap to achieving a minimum B2 BER energy rating

Considering multiple energy upgrades and applying for the One Stop Shop service?

- A Home Energy Assessment (HEA) will provide both a BER rating and the required technical report detailing the energy upgrades needed to get your home to a B2 rating and better.
 - 2. Insulate Fabric First
 - 3. Renewables



Home Energy Grants





Home Energy Grants Comparison

	Free Energy Upgrade	Community Energy Grant	One Stop Shop Service	Individual Energy Upgrades
		(Homes)		
Home Energy Assessment	Ø	\bigcirc	Ø	×
Project Management	×	\bigcirc	Ø	×
Wall and Roof Insulation	Ø	Ø	Ø	Ø
Floor Insulation	×	Ø	Ø	×
Windows	Ø	Ø	Ø	×
Hearing Controls	Ø	Ø	Ø	Ø
Heat Pump Systems	Ø	Ø	Ø	Ø
Solar Water Hearing	×	Ø	Ø	Ø
Solar Electricity	×	Ø	Ø	Ø
Ventilation	Ø	\bigcirc	Ø	×
BER Assessment	Ø	Ø	Ø	Ø



Grants for ceiling insulation and cavity wall can cover up to 80% of the total cost for an average home



SEAI: Free Energy Upgrades

The SEAI Warmer Homes scheme delivers **free energy upgrades to eligible homeowners** who are in receipt of one of the following:

For qualifying homeowners in receipt of certain welfare benefits:

- Fuel Allowance
- Job Seekers Allowance for over six months with a child under seven
- Working Family Payment
- One-Parent Family Payment
- Domiciliary Care Allowance
- Carers Allowance
- Disability Allowance for over six months with a child under seven
- > Must own and live in your own home which was built & occupied before 2006



https://www.seai.ie/grants/home-energy-grants/free-upgrades-for-eligible-homes/

Grants for Home Owners: Installation of Solar PVs

There is a solar PV grant for homes and this is capped at €2,100. For more information please see the link below on the SEAI website.

Grant value for solar electricity

* the grant is paid on a pro rata basis e.g. for a 2.5kWp system the grant value would be €1,725

Grant name	Value	Example
Solar PV grant	€800 per kWp up to 2kWp	€1600 for 2kWp solar panels
	€250 for every additional kWp up to 4kWp Total Solar PV grant capped at €2100	€1850 for 3kWp solar panels €2100 for 4kWp solar panels

VAT for domestic solar installations cut from 13.5% VAT to 0.0% from May 1st 2023.

Planning exempt for domestic homes

Can sell back surplus electricity and receive a credit of approximately 20c – 25c per kWh.

Who can apply

All homeowners, including private landlords, whose homes were built and occupied before 2021 can apply. This is defined as the date your electricity meter was installed. This is different to other grant measures where the home must be built before 2011.

https://www.seai.ie/grants/home-energy-grants/solar-electricity-grant/

Community Energy Grants

Communities and businesses	Households	Schools
SEAI's Community Energy Grant	Community Energy Grant - Homes	Department of Education – Summer Works Scheme
SEALENCISY Addit Vodencis 62,000		
LEADER	One Stop Shop	Pathfinder
Community Climate Action Fund	Individual Grants	
Sports Capital Grant	Warmer Homes Scheme	
Town and Village Renewal Fund		
Community Centres Investment Fund		
Community Benefit Fund		

- PPN publicises the latest information on grants
- SEAI's Community Energy Grant. Co-ordinated by South-East Energy Agency. Businesses and Community buildings can receive 30% to 50% of the costs of energy efficiency works

Express interest at <u>www.southeastenergy.ie/contact</u>





Business Energy Audits

- Energy Audits for Businesses available through SEAI
- €2,000 voucher which will help you to understand:
 - How much energy your business uses?
 - The equipment and processes that use the most energy?
 - What actions you should take to save energy, and their estimated cost and impact?

To qualify you must have an energy spend of €10,000 per year

For more information: https://www.seai.ie/business-and-publicsector/small-and-medium-business/supports/energy-audits/



Next Steps



The mentor for County Wexford is available to support you implement projects.

□ Advise on grants.

□ Identify similar projects and link you with agencies e.g. Wexford County Council.

Utilise the **Sustainable Energy Community (SEC)** network to support you all to implement projects in your homes, community, businesses and farms.

Thank you for listening

County Mentor: Yvonne Byrne



Email: info@yvonnebyrneconsultancy.ie

Wexford's Climate Action Plan

Frank Burke, Climate Action Coordinator, Wexford County Council







Energy Citizens Roadshow

Wexford County Council Climate Action Plan & Energy opportunities



Environment Climate Action Team

- Frank Burke Climate Action Coordinator
- Clare Kelly Climate Action Officer
- Clinton Donovan Community Climate Action Officer







National Climate Objective

"pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable, and climate neutral economy" (legally binding)



Climate Action Plan (CAP) – Statutory Requirement

The Climate Action and Low Carbon Development Amendment Act 2021 prescribes that:

14B (1) Each local authority shall prepare and make a plan relating to a period of five years (... referred to as a 'local authority climate action plan') which shall specify the mitigation and the adaptation measures to be adopted by the local authority'



Goals of the Plan

- 51% Reduction in Greenhouse Gas Emissions by 2030
- 50% Reduction in Energy Consumption
- Adapt to & mitigate against the impacts of Climate Change
- Support, Influence & Facilitate the public, communities and businesses to reduce their own emissions



Evidence-based Climate Action

The preparation of the CAP was evidence based and involved the following baseline assessments

- Assessing climate change risks and impacts specific to County Wexford
- Developing a countywide baseline emissions inventory
- Developing a baseline emissions inventory for the Enniscorthy Decarbonisation Zone.



The Remit of the Local Authority

Full Accountability	Influence	Facilitate	Advocate
Delivering on climate action in areas within own remit: including local authority's own buildings, infrastructure, systems, operations and staff.	Influence sectors and communities on climate action Direct: Procurement / supply chains and staff protocols. Regulatory: Decision making on planning and development, waste, bye laws, application of standards. Broad: Through the provision of services across the range of functions, prioritisation, channelling investment etc	Coordinate efforts between different stakeholders e.g. Decarbonising Zones and Facilitate through the identification of funding, use of regulatory levers. Collaborate and engage in partnerships on climate action	Creating the local vision, communication, awarene raising, promotion, capac building.

Wexford County Council Energy & GHG Glide path







Baseline Emissions for County Wexford







Baseline Emissions for Enniscorthy DZ



% Greenhouse Gas Emissions per Sector for Enniscorthy DZ



Risk Assessment

Key Climate Hazards Identified for County Wexford









MITIGATION - TRANSPORT

- Active Travel
- Wexford Co. Co. Fleet Management
 - Transitioning LGV fleet to EV's
 - HGV's investigate using HVO (HydroTreated Vegetable Oil) as a direct replacement for Road Diesel





- •5 Year plan 2024-2029
- 133 actions
- Mitigation
- Adaptation
- Resilience
- Biodiversity



5 Areas of Action










Energy Related Actions in CAP

- 24 Energy Actions in total
- 18 county wide
- 6 Decarbonisation Zone

	Governance & Leadership	Actions	Built Environment & Transport	Actions	Natural Environment & Green Infrastructure	Actions	Communities, Resilience & Transition	Actions	Sustainability & Resource Management	Actions	Totals
County-wide	5	GL1 GL2 GL3 GL9 GL10	9	BET1 BET3 BET4 BET20 BET27 BET28 BET30 BET31	1	NEGI10	3	CRT2 CRT3 CRT15	0		18
Decarbonisation Zone	1	DZGL4	3	DZBET2 DZBET15 DZBET18	0		0		2	DZSRM1 DZSRM3	6
Totals	6		12		1		3		2		24

Energy Actions

Governance and Leadership GL Goal : Foster Governance, Leadership and Partnerships for Climate Action										
No.	Action	Adaptation & Mitigation	КРІ	Lead Dept & Partners	Timeframe	Dependencies	DECA Goal Objective			
GL3	Appointment of a dedicated Energy Officer, Facilities Manager and a Biodiversity Officer (in addition to the existing Heritage Officer) and the continued commitment to the three positions of a Climate Action Coordinator, a Climate Action Officer and a Community Climate Action Officer.	Adaptation	 a) Appointment of Biodiversity Officer, Facilities Manager & Energy Officer. b) Role commitment for the three dedicated roles within the Climate Action team 	Corporate Services Climate Action Team	2024/2025	Department approval Funding availability	1.2 1.3 3.2			
GL10	In line with Strategic Objective 2 of the South east Regional Enterprise Plan 2024, continue the work to establish the South East as a leader in Off-shore renewable Energy whilst advocating and exerting influence to ensure supported projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effect	Adaptation & Mitigation	Establishment of a South East Renewable Energy Hub	Local Enterprise Office High Performance Building Alliance Harbour Section - Environment	2029	Participation rates on programmes.	5.2 3.4 1.4 5.3 5.5 6.2			

South East Energy Unit - setup

- Energy Pathfinder for Council Buildings
 - 50% project match funding50% consultancy match funding
 - Regional Energy Officer 1/5th self-funded
 - Energy Officer self-funded
 - Tipperary are the lead authority
- Position paper completed and await SEAI approval
 - Top 6 Significant Energy Users energy upgrade



Examples of Mitigation projects



RESIDENTIAL in County Wexford

Total GHG emissions from Residential Sector (2018) = 433.9 ktCO₂eq.



Wexford County Council new-build houses delivered to NZEB standard - Droichead-Carley NZEB





BioGas Heating System for Wexford Fire Station



Pictured BioGas installation, gas storage cylinders and a decompression unit in secure compound

- Replaced Oil & LPG heating systems with Biogas installation
- Supporting local industry through the purchase of BioGas, locally sourced in Waterford.
- Reduces WCC Green House Gas emissions
- Mitigate against rising costs of fossil fuel
- 17% decrease in energy 58% decrease in CO2 emissions



Solar panels on the roof of Wexford County Council



Public Lighting Retrofit Programme





Some of the Councils Electric Vehicles





- Home Energy Kit
- Available to borrow in all County Wexford Libraries



Examples of Adaptation projects



Marram Grass & Dune Restoration

- Role of dunes and the grasses that support them in protecting our coastline from erosion, flooding and storm damage
- Marram grass has rhizomes that grow metres long and knit together with roots to from a strong matrix that holds together the loose light sands of our dunes



 Restoration and planning projects along the Wexford Coast





Sustainable Urban Drainage System

- Manage rainwater run-off
- Help prevent flooding
- Provide Habitat for Wildlife



Coastal Erosion & Coastal Protection



- 350m section of coast
- 14 properties and access road at risk.
- Beach access





Wexford Community Climate Action Programme

Supporting Wexford to build low carbon communities



OUR COUNTY. OUR OPPORTUNITY. OUR FUTURE

Clinton Donovan Community Climate Action Officer Wexford County Council



Rialtas na hÉireann Government of Ireland Tionscadal Éireann Project Ireland 2040

Community Climate Action Programme 5 project themes





Community Climate Action Programme

- 100% grant funding
- •Closed 6th March
- Competitive assessment
- Not-for-profit groups & clubs
- 18 months to carry out approved works



Get on the Climate Action mailing list!

Climate Action Mailing List

le.com

I'm not a robot

First Nam

Comhairle Contae Loch Garman

Wexford County Council

HERE'S HOW YOU CAN HELP TODAY

In this installment meet our ~

Plan and upcoming funri

suggestion for an ar

Did you know that there will be a matress amnesty at our county recycling centres in Holmestown, Enniscorthy, Gorey and New Ross in the coming weeks? For the €2 entrance fee you can get rid of up to 3 mattresses and all the household recycling you can fit in your car.

Welcome to our first Climate Action Newsletter. We will aim to send these out to you Welcome to our first climate a month to let you know what the Cleam is up to and about climate action in , get updates on the Climate Action

OUR COUNTY. OUR OPPORTUNITY. OUR FUTURE

WEXFACTION RD



OUR COUNTY. OUR OPPORTUNITY. OUR FUTURE



Questions and Answers





Wrap up





