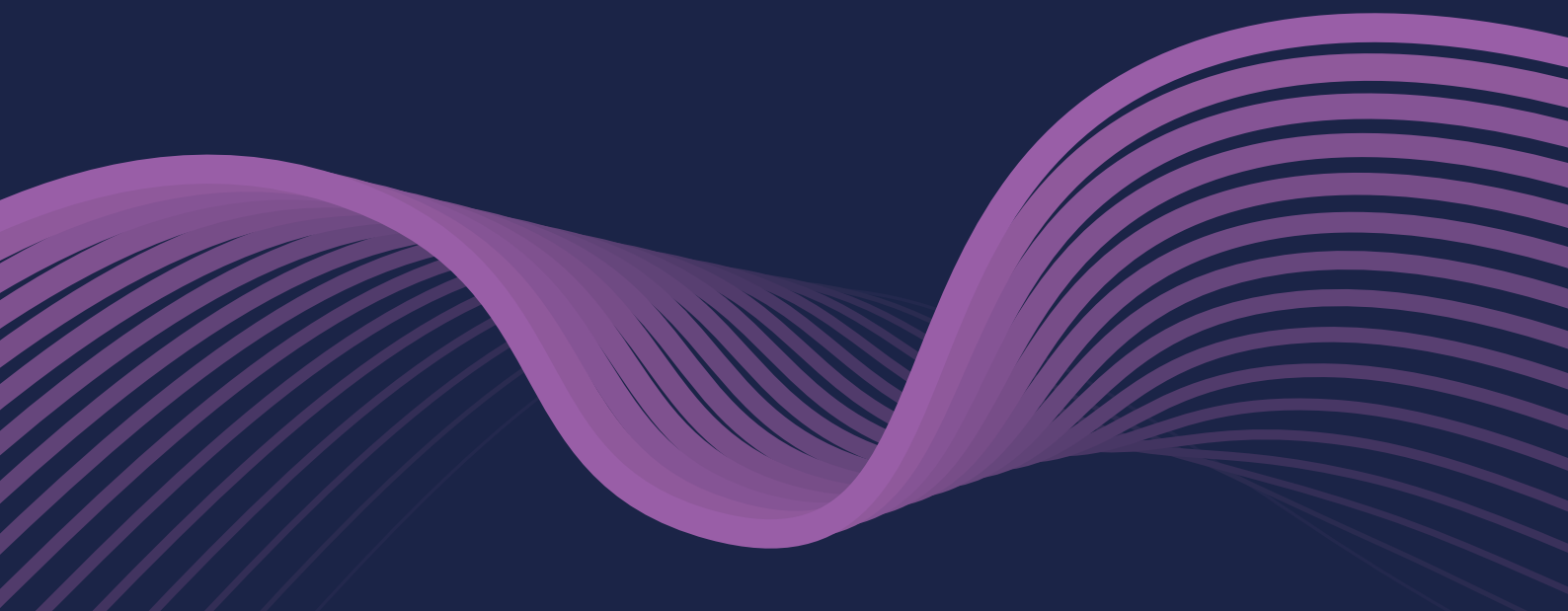




Mac Lir Offshore Wind Farm

Clean Energy
on the Horizon



Harnessing clean energy to power Ireland’s sustainable future

Mac Lir Offshore Wind Farm is a proposed renewable energy development located in the Irish Sea, off the coast of counties Wicklow and Wexford. The project has the potential to deliver enough renewable energy to power over 600,000* households each year, and help Ireland to meet its binding target to reduce greenhouse gas emissions by 51% by 2030.



About the Project

At its nearest point, Mac Lir will be over 22km off the east coast, lying entirely outside Ireland’s 12 nautical mile foreshore limit. The site area for Mac Lir has been strategically selected to reduce visibility from the coast. Its location will limit environmental and economic impacts and harness stronger wind speeds that are found further offshore. A marine geophysical survey for the project was completed in 2023 using the Marine Institute’s RV Tom Crean research vessel, which validated the site as being suitable for fixed-bottom turbine foundation technology.

It is important to Source Galileo that the Mac Lir project is developed in an environmentally, socially

and economically responsible manner. Site surveys and environmental/ecology assessments will be undertaken during the development phase of the project over a two to three-year period. Extensive community and stakeholder consultations will be carried out during this time to gather as much public opinion and feedback as possible. This will help the project team to understand potential concerns and hear ideas at an early stage, and consider them in project assessments and design iterations. Once all assessments are complete and the project team are confident that the project design has been developed in the best way possible, Source Galileo will submit a planning application for the wind farm.

Mac Lir at a Glance

Site area	174km ²
Capacity	700MW+
Distance from coast	22km
Surveyed water depth range	57 to 79m (Average 65m)

Technology proposal	Fixed bottom foundations
Households supplied by renewable energy	Over 600,000/year
Potential number of turbines	Circa 47
Carbon offsets	Over 1 million tonnes/year



Wind Farm Infrastructure

Development Overview

The site for Mac Lir is approximately 174km² in size. During the development process this area will undergo ongoing assessment and refinement to limit environmental impacts and optimise design.

It is expected that the project will have a capacity of 700MW+. Based on offshore wind turbines that are available in the market today, 700MW equates to approximately 47 turbines. The project has the potential to deliver enough electricity to meet the needs of over 600,000* households and will offset over 1 million tonnes** of harmful carbon emissions each year.

Developing an offshore wind farm is an incremental process. At each step along the way we will share information and provide opportunities for the local community and other stakeholders to engage with us to help shape the project.

Climate Action

Source Galileo commenced development activities on Mac Lir Offshore Wind Farm in 2021 and are continuing to progress the project in support of the Irish Government’s Climate Action Plan 2023, which aims to have 5GW of offshore wind in operation by 2030 and reach net-zero no later than 2050.

The Climate Action Plan 2023 is underpinned by laws passed in Ireland that contain binding commitments to reach net-zero no later than 2050 (Climate Action and Low Carbon Development (Amendment) Act 2021). Reaching net-zero will help to tackle the climate crisis and protect future generations from the devastating consequences of climate change.

Offshore wind energy will be transformational for Ireland, providing a home grown and sustainable energy system for future generations. Generating our own renewable energy at scale will be another important step in reducing Ireland’s ongoing and unsustainable reliance on imported fossil fuels.

Project Timeline to 2030***

2021	2022	2023	2024	2025	2026	2027/28	2030
Data acquisition and feasibility analysis. Fisheries Liaison Officer appointed. Environmental surveys commenced. Stakeholder engagements begin and continue throughout each phase of the development process.	Foreshore Investigation Licence Application submitted. Environmental Impact Assessment (EIA) consultant procurement. Planning and procurement of offshore geophysical survey.	Two-year aerial surveys completed. Onshore grid feasibility study completed. Offshore marine geophysical survey completed. EIA consultant appointment. Environmental and site surveys ongoing.	EIA Scoping. Pre-application consultation with An Coimisiún Pleanála.	Offshore Renewable Energy Support Scheme (ORESS) Auction. Maritime Area Consent (MAC) process. Progression of EIA studies.	Finalise EIA studies. Submit application for development consent.	Receive grant of development consent. Commence wind farm construction.	First Power. Project commissioning and delivery of clean, renewable energy for the Irish electricity consumer.

Project Benefits



Reduce CO₂

Help Ireland reach its targets on greenhouse gas emissions and aid in the fight against climate change, with the potential to offset 1 million tonnes** of carbon emissions annually.



Energy Security

Reduce Ireland's unsustainable reliance on imported fossil fuels, whilst also generating clean, sustainable electricity to power homes and businesses.



Employment and Economy

Generate inward investment in the local community, providing employment opportunities and support to local businesses.



Community

Enable local communities to benefit from the opportunities in the blue economy by contributing millions of euro each year in community funding to support economic, environmental, social and cultural projects and initiatives in the local area.



Healthier Environment

Reduce air pollution by switching to clean energy, creating a healthier living environment for current and future generations.

About Source Galileo

Source Galileo is a developer of large-scale renewables projects in Europe, with a focus on Ireland, the UK and Norway. Our team has decades of expertise in developing major renewable energy projects. We listen closely, build partnerships, foster positive relationships and apply all our experience to deliver projects that have lasting sustainable and economic benefits.

Find out more at
sourcegalileo.com



Stay Informed

The environmental assessment process for the Mac Lir project is under way. Local knowledge and information that you have can help to shape the project in a positive way. Please get in touch with us to have your say in the project.

Contact the project team by email
info@macliroffshorewind.ie

For the latest news on the project visit
macliroffshorewind.ie

Fisheries Liaison Officer
(021) 203 1005

*Based on projected installed capacity of 700MW, typical projected capacity factor of 50% and SEAI key statistics 2021 (5,043kWh/household)

**Based on projected annual output of wind farm and SEAI Key Statistics for Electricity, "CO₂ emissions intensity of electricity" (348 gCO₂/kWh)

***Timeline is for indicative purposes only and based on critical path development activities commencing in 2021. The sequence of events may be subject to change.