

Shaping Our Offshore Energy Future

We're harnessing the power of wind to make Ireland more energy independent

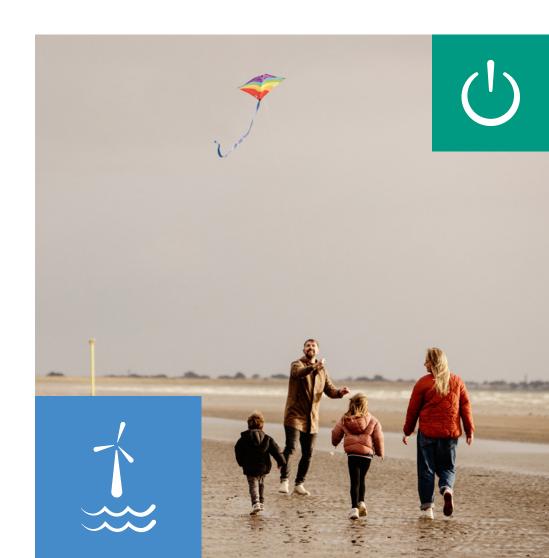




Table of Contents

Background information on this programme	5
Join the South Coast Community Forum for residents and businesses Read our questions and answers section	10





Who are EirGrid and what do we do?

EirGrid develops, manages, and operates Ireland's electricity grid. We are responsible for the safe, secure and reliable supply of Ireland's electricity. Our job is to bring power from where it is generated to where it is needed throughout Ireland, onshore and offshore.

EirGrid is also leading the secure transition of the electricity grid to a sustainable low-carbon future.

Strong electricity grid infrastructure supports the development of our society and economy. But just as importantly, work carried out now to improve the grid will help to create a more sustainable energy future.

While EirGrid is not responsible for generating electricity or building windfarms, we are responsible for connecting electricity generation infrastructure, such as offshore and onshore windfarms, into our national electricity grid.

What is Shaping Our Offshore Energy Future?

The south coast (Cork, Waterford and Wexford) has a key role in Ireland's offshore energy future, a greener power grid and energy independence.

The Government of Ireland's Climate Action Plan 2023 places offshore wind power at the centre of the state's commitment to producing up to 80% of our energy from renewable sources by 2030.

As part of Shaping Our Offshore Energy Future, EirGrid plans to develop offshore electricity substations and associated undersea electricity cables. This new infrastructure will bring the power generated by offshore windfarms into our national electricity grid.

To achieve this we will need to develop:

- An offshore substation off the coast of Waterford or Wexford;
- An offshore substation off the coast of Cork;

- A connection between the offshore substations and existing substations onshore. This will involve undersea and underground electricity cables; and
- New substations near to existing substations onshore.

This will help deliver up to 900 megawatts of additional electricity - enough to power almost one million homes with clean energy. This new electricity will be generated by offshore wind farms in Irish waters.

Developing the offshore electricity grid is key to harnessing Ireland's offshore wind energy potential and providing greater security of electricity supply from a clean renewable source.



Figure 1: Typical configuration of offshore grid features and how it connects to the onshore grid.



To The Grid

Why is this programme needed?

This programme will help reduce Ireland's dependence on fossil fuels such as coal and gas and increase Ireland's energy independence.

To achieve this, we need to connect offshore renewable energy to the electricity grid.

Offshore renewable energy will lay the foundation for significant direct and indirect social and economic benefits and opportunities, regionally and nationally.

What is happening now?

In early 2024 we will be publishing more detailed information on the programme. Over the coming months we will be progressing the technical and environmental assessments. By this stage we will have developed a shortlist of a number of different possible locations for the onshore and offshore infrastructure.

We will publish this information and be consulting with you on this for your feedback. We will provide a number of location options for:

- · Offshore substations,
- Landfall (these are locations along the coast where the submarine cables will come ashore)
- Grid connection (the points on the existing grid where the offshore power will connect)
- Onshore substations







What benefits will this programme bring?



Security and reliability of supply

Building a more resilient and reliable electricity grid helps ensure that everyone has power when and where they need it. This programme will also enable greater energy independence by generating more renewable energy locally.



Sustainability

Shaping Our Offshore Energy Future will enable homes and businesses across the south-east and the island of Ireland to use electricity generated from offshore renewable energy. This is a vital step to help Ireland transition to a low carbon electricity future.



Meet future needs

As our society and economy develops, we are consuming more electricity. This programme will help to meet that growing demand without increasing our carbon footprint.



Economic

This critical programme will help strengthen the economy across the south coast region, encouraging and supporting industry investment with the accessibility of a strong electricity grid.



Social and community

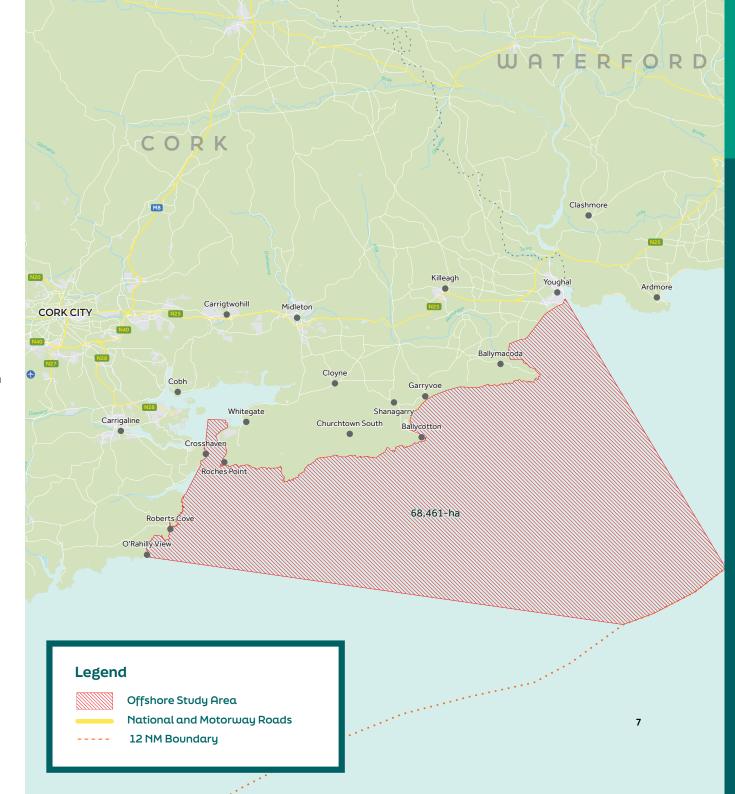
Our community benefit policy will also directly support local communities in the areas that host the programme infrastructure.

Offshore Study Area

The offshore study area is the marine area where we are undertaking initial assessments and studies in relation to the electricity infrastructure required for Shaping Our Offshore Energy Future. Given the nature of the programme, we have identified relatively large study areas. These will be narrowed down as this programme progresses and following stakeholder feedback.

Cork Offshore Study Area

The offshore study area here extends from Ringroe (near O'Rahilly View) to Youghal and extends out towards to the 12 nautical mile (NM) boundary (around 22 kilometres from shore).



Waterford and Wexford Offshore Study Area

The offshore study area here extends from Ballinacourty and Clonea in Co. Waterford to Cullenstown Beach in Co. Wexford and extends out towards to the 12 nautical mile (NM) boundary (around 22 kilometres from shore).

Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) within the offshore study areas

The identified study areas include a number of ecologically and environmentally sensitive areas, including Special Areas of Conservation (SACs) and Special Protected Areas (SPAs); these are prevalent along the Irish coastline, estuaries and foreshore areas of Cork, Waterford and Wexford. EirGrid is aware of these areas, and is committed to their ongoing protection in the development of necessary offshore grid infrastructure. This will primarily occur by avoiding these environmentally sensitive areas in the routing and siting of projects, and where avoidance is not possible, by ensuring that all site investigations and subsequent construction works are carried out in accordance with best practice for environmental protection and enhancement.



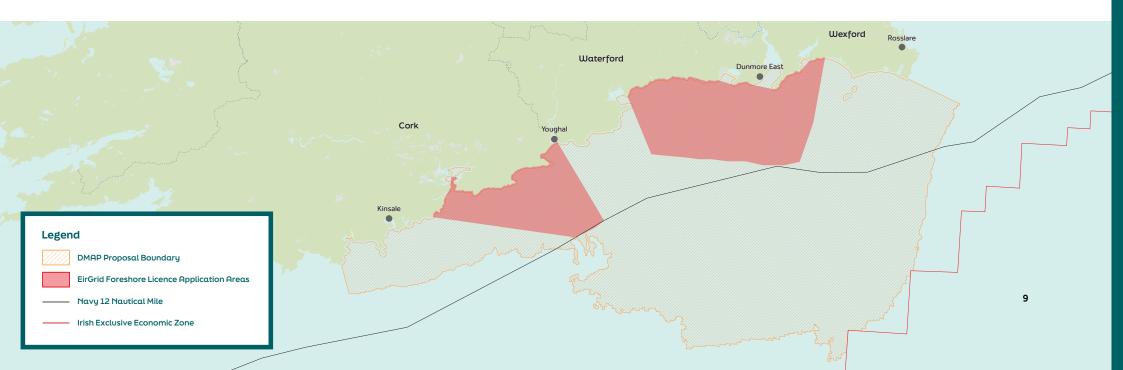
South Coast DMAP Proposal

The South Coast Designated Maritime Area Plan (DMAP) Proposal, published by the Department of the Environment, Climate and Communications, puts forward an initial 'proposed' geographical area within which future offshore renewable energy development may take place, including EirGrid study areas. The geographical area of this initial proposal is approximately 8,600 square kilometres in size.

As approved by Government and the Oireachtas, all future offshore wind development in Ireland will take place according to a strategic, sustainable and plan-led approach.

What this means in practice is that the State, in cooperation with local communities and with consideration for other maritime activities including fishing and seafood production, and with provisions for environmental protection, will determine the appropriate location for offshore wind developments.

Following an initial eight-week public information period carried out by the Department of the Environment, Climate and Communications, and environmental impact assessments and analysis to assess its suitability for offshore renewable energy development, a 'Draft DMAP' will then be published, which will identify specific areas for future offshore renewable energy development. The Draft DMAP will then undergo a further sixweek statutory public consultation period before it is presented to the Minister for Housing and both houses of the Oireachtas for approval.



Find out more and get involved

All information about this project is available at <u>eirgrid.ie/offshore</u>. We can also post you a copy of information.

Please request this by contacting one of our community liaison officers. See page 12 for contact details.



South Coast Offshore Community Forum

As part of EirGrid's public engagement strategy for a cleaner energy future and to fulfil our commitment to putting citizens at the heart of our decision making, we establish a community forum with all of our infrastructural projects to ensure communities are heard and supported at every step of the journey.

We know that there will be considerable interest in this offshore grid infrastructure programme. With this in mind, we are setting up a South Coast Offshore Community Forum to communicate, consult and engage with local residents and businesses across the region. Depending on the level of interest, we will discuss with communities the merits of setting up a forum in multiple areas.

If your organisation is interested in getting involved in this forum, please email southcoastoffshore@eirgrid.ie.

South Coast Offshore Infrastructure Forum

To help maximise economic and social opportunities in relation to the development of this new infrastructure, we will be coordinating with other state bodies, local authorities, education institutions, business representatives and community development organisations through a new South Coast Offshore Infrastructure Forum. This forum will be independently chaired.

Frequently asked questions

? What does grid infrastructure mean?

The electricity grid links energy users such as schools, businesses, homes and farms with energy generators. It is designed to ensure that power can flow freely to where it is needed.

Grid infrastructure is the physical structures which make up the transmission grid. These include the underground cables and overhead lines used to transmit electricity, the pylons which hold the overhead lines, and the substations used to convert the electrical current and raise or lower the voltage of that current.

To date, this infrastructure has been predominantly located on land. However, with the Shaping Our Offshore Energy Future, we will be extending this out to sea as we look to develop our offshore grid infrastructure (offshore substations and marine cables).

What are the Government Offshore Wind Development plans?

The Government Policy Statement on the Framework for Phase Two Offshore Wind targets at least 5 GW of offshore wind to be delivered onto the electricity grid by 2030. In addition to this, the policy targets a further 2 GW of floating offshore wind being in development by 2030. The 5 GW programme will be referred to as Phase 2 with the 2 GW called Phase 3.

? Is EirGrid a wind farm developer?

No, EirGrid is not a wind farm developer. As the developer of Ireland's electricity grid, EirGrid is responsible for connecting power generated from renewable sources like offshore wind to the grid, for use by homes and businesses around the country. EirGrid does not install power generation infrastructure (such as wind turbines), which is constructed by private developers. As part of this programme, EirGrid will provide the infrastructure needed to connect power generated from wind turbines to the electricity grid, including offshore substations, undersea cables and onshore substations.

Why is there a focus on the south coast?

The area of the south coast identified is suitable to connect wind power developments to the electricity grid, with onshore connection points available near potential offshore development locations.

The targeted placement of offshore substations will ensure that the development of wind energy off the south coast proceeds in a plan-led manner. This seeks to make sure local community and stakeholder feedback and best practice environmental requirements will guide the location of offshore infrastructure ensuring it is built in the most suitable location.



Who can I contact?

Email: southcoastoffshore@EirGrid.ie

Contact our Community Liaison Officer:



Michelle Walsh
Community Liaison Officer
+353 85 870 4999
southcoastoffshore@EirGrid.ie



Eoghan O'Sullivan Community Liaison Officer +353 87 247 7732 southcoastoffshore@EirGrid.ie



