

Submission to Oireachtas Committee on Communications Climate Action & Environment

Ireland's Offshore Wind Resource

Time to Deliver on our Offshore Potential

Ireland's Opportunity

Ireland's offshore wind resource is one of our greatest untapped resources. Ireland's location, climate and seabed conditions, make our waters one of the most suitable locations for offshore wind projects. Ireland has an opportunity to develop a major and sustainable offshore wind industry at no net cost or risk to the exchequer. Developing our offshore wind resources would help Ireland achieve the following:

- Avoid EU fines by helping to achieve our renewable energy and emissions reduction targets
- Increase security of energy supply – increasingly important in a post Brexit environment
- Create a new sustainable indigenous industry for Ireland, comparable to tourism and agri-food
- Deliver significant job creation, both directly and indirectly



Ireland's territory is ten times its land area – larger in total than Germany.

Background

Offshore wind is the fastest developing renewable technology in Europe. As more and more projects are being built, the costs associated with offshore wind are falling rapidly. Recent offshore wind technology development has seen the commercial introduction of large capacity turbines with correspondingly high efficiencies that have significantly reduced the cost of producing energy offshore, as evidenced in recent auction results in the UK and Europe.



Offshore costs have fallen ahead of schedule and are continuing to decline

These technology developments combined with the ability to construct large scale projects offshore where land access and environmental constraints are less of a problem than onshore, means that Offshore wind offers substantial scale that can be delivered quickly. This creates the following opportunities which should be advanced as part of Government policy to meet and exceed our renewable energy and emissions reduction targets.

- First projects available to generate from 2020, contributing to Ireland’s renewable energy fleet and helping to meet targets
- Reduced community opposition to renewable energy infrastructure roll out due to reduced environmental and social impacts of projects at remote offshore locations.
- Reduced requirement for multiple grid connections and the associated infrastructure required for multiple smaller scale onshore projects.
- Strategic project locations close to demand centres, enables connections to the existing transmission system, avoiding the need for large scale grid upgrades and new high voltage transmission lines.
- Unlocks a new industry that will create a significant boost to the economy and job creation in the Irish Marine sector. A recent report undertaken by the Offshore Wind Catapult group in the UK found that the Gross Value Added (GVA) per GW of offshore wind deployed in the UK is £1.8bn for current projects and is expected to increase to £2.9bn/GW by 2030.

Ready to Go

A number of Irish companies, based all around the island of Ireland, have, for a number of years, been seeking to build offshore wind farms with a view to generating clean, renewable energy, either for the domestic market or for export.

Significant research has been carried out on these projects. Most are well advanced in terms of identifying their project specifications and preferred design. Many of the projects have engaged in significant public consultation and most are well advanced or through the planning process.

While Ireland’s offshore industry has been slow to develop, much of the preparatory work has already been done. Offshore is well placed to deliver the clean renewable energy that Ireland needs. Indeed Ireland could be generating first power from it’s offshore wind resources by late 2020 if the Irish Government committed to developing this resource. Beyond this, Ireland’s west coast will, in the longer term, offer an even greater opportunity, with the development of floating turbine technology.



The initial opportunity is on the east coast. In time technology will open up the west coast

Making it Pay for Ireland

The State will benefit from offshore wind in a number of ways. Each project will require substantial labour in the construction phase. Much of this employment can be provided from the Irish construction sector and through the network of Irish ports.

The State will also receive a lease fee for the rent of the Foreshore. The State will charge a rent to the developers, guaranteeing them a substantial revenue from each wind farm, for up to 55 years.

The State will benefit from the significant saving on fines which will occur if we do not reach our renewable targets.

Finally, the State will generate substantial revenues from corporation tax, employment taxes and other taxation instruments. This is new economic activity, based on exports, so the revenue is a payment into the State, helping our balance of payments.

Creating Jobs

In addition to the direct benefit, there is also a potential for many indirect jobs in supplying the materials that will build offshore wind farms in both the UK and Ireland. While Ireland is unlikely to have factories building turbines, many other opportunities exist. Ireland can become a centre of excellence for foundation technology, supporting IT and programming development, cabling and environmental consultancy. All of these areas offer the opportunity for thousands of jobs. Many companies are already benefiting from offshore projects in the UK, and the development of an Irish industry would ensure more jobs could be created more quickly.

Cost Advantage

While cost has previously been a barrier to deploying offshore projects, recent technology developments have made the cost difference less of an issue and as a result offshore is leading the development of European renewables. Ireland is particularly well placed to take advantage of these reduced costs. With excellent wind speeds and consistency of wind, Ireland is an ideal location for investment. The sea bed conditions off the Irish Sea are also among the best in the world for developing offshore projects. Ireland is now recognised as having a significant competitive advantage over other countries in terms of offshore wind development.

Planning Advantage

In planning terms, offshore projects are easier to build and have less impact on residents. The nearest turbines would be many kilometres offshore. At present, onshore turbines can be built at a distance of 500m from homes and other buildings. The Offshore Renewable Energy Development Plan, published by the Government, which included a substantial Strategic Environmental Assessment, concluded that the opportunity exists for substantial offshore wind development off the Irish coast.

Making it Happen – Next Steps

The offshore wind industry offers a significant opportunity to the Irish State. It can create substantial employment, raise significant revenue through taxes and foreshore lease payments and, in the longer term, as an export industry, it can help improve our balance of payments. All that is required for this to happen is for the Government to facilitate the development of offshore wind, at no cost, by doing the following:

1. Confirming that it is seeking to develop this resource as a matter of priority
2. Including Offshore Wind Technology in the new Renewable Energy Support Scheme in a practical way.
3. Working with European Governments and windfarm developers to co-operate on an All-Islands and EU energy policy