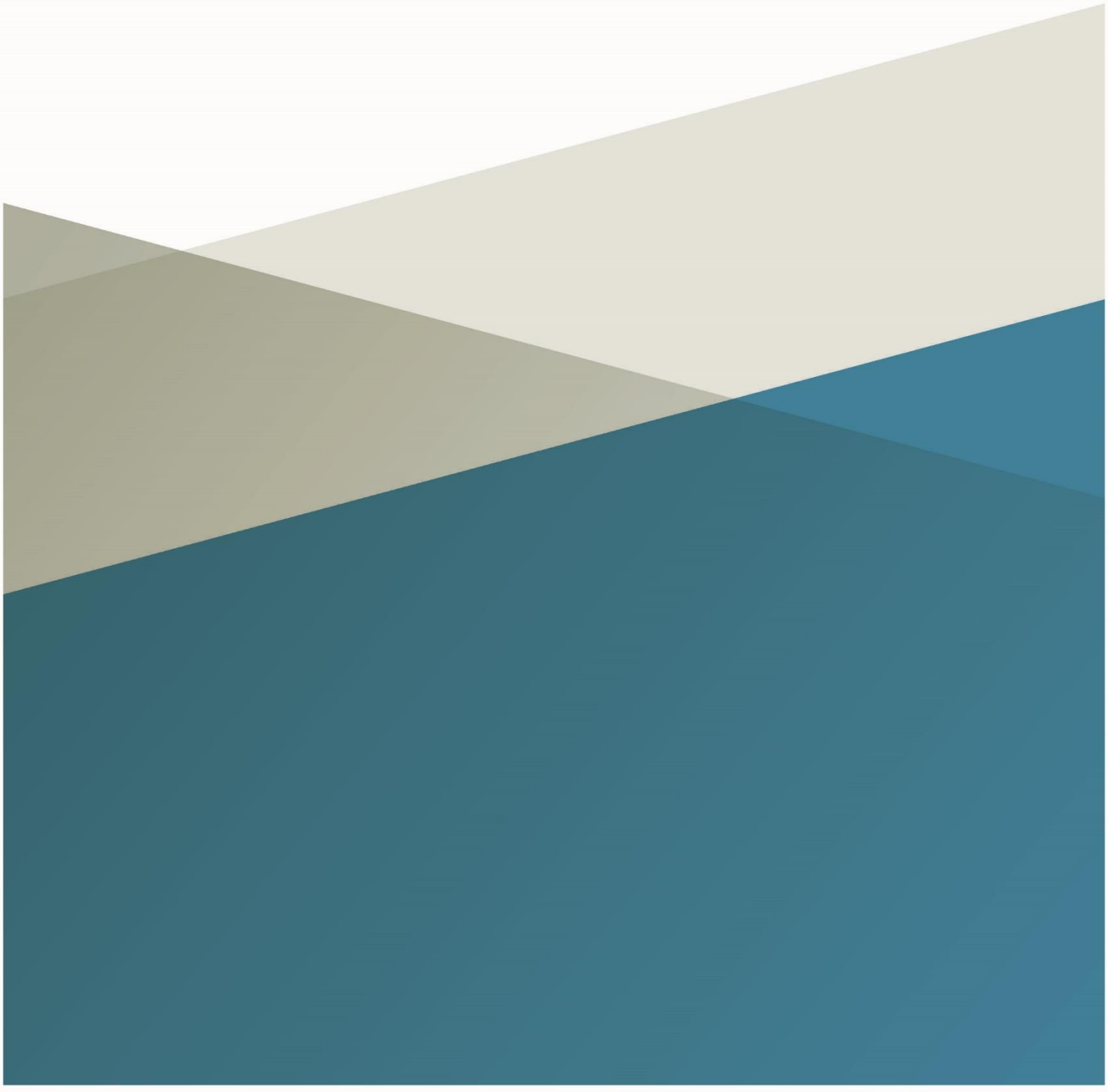
An Roinn Iompair
Department of Transport

Policy Statement on the facilitation of Offshore Renewable Energy by Commercial Ports in Ireland

December 2021



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Background and Context

To help meet the EU's goal of climate neutrality by 2050, the European Commission in November 2020 published the EU Strategy on Offshore Renewable Energy[1]. The Strategy proposes increasing Europe's offshore wind capacity from its current level of 12 GW to at least 60 GW by 2030 and 300 GW by 2050. The Commission aims to complement this with 40 GW of ocean energy and other emerging technologies such as wave, tidal and floating solar by 2050. Under the Green Deal[2], the EU has raised its renewable targets to 40% by 2030 and sets legally binding targets to reduce net EU emissions by 55% by 2030, from 1990 levels, and eliminate them by 2050.

The Programme for Government (2020) (PfG) and the Climate Action and Low Carbon Development (Amendment) Act 2021 commit Ireland to a 51 per cent reduction in emissions by 2030 and Zero emissions by 2050. The PfG set a target for 70% of electricity to be generated from renewable sources by 2030 and set a target of 5GW of offshore wind by 2030. The Climate Action Plan published on 4th November 2021 (CAP 21) has since increased the target to up to 80% renewable electricity by 2030. It also sets out how Ireland will take advantage of the potential of at least 30GW of floating offshore wind power in our deeper waters in the Atlantic.

The National Marine Planning Framework (NMPF) published earlier in 2021 brings together all marine-based human activities for the first time, outlining the government's vision, objectives and marine planning policies for each marine activity including, port activity and Offshore Renewable Energy.

The Maritime Area Planning Bill 2021 has passed through all stages of the Oireachtas. This will provide the legal underpinning to an entirely new marine planning system, enabling the development of Ireland's substantial offshore wind potential.

Ports

As an Island nation, Ireland's commercial ports are our key international maritime gateways, with at least 90% of Ireland's trade by volume exported and imported by sea. National Ports Policy, the National Marine Planning Framework and the National Development Plan recognise the importance of ports in connecting Ireland to the rest of the world in terms of trade, transport and tourism and Ireland must be capable of delivering additional port capacity to meet that demand. The importance of maritime capacity and connectivity was highlighted during COVID-19 and Brexit.

[1] https://ec.europa.eu/energy/topics/renewable-energy/eu-strategy-offshore-renewable-energy_en

[2] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/energy-and-green-deal_en

While the primary function of our State ports is to facilitate maritime transport, our ports are more than trading gateways to the world. They are also enablers of other activities. The significant role that ports can play in facilitating the development of the Irish offshore renewable energy sector is widely recognised.

Assessment

Given Ireland's increased ambition in Offshore Renewable Energy and pending a review of overall National Ports Policy, the Department of Transport, in conjunction with the Irish Maritime Development Office (IMDO), conducted an assessment of the options for Irish State ports to facilitate the sector and assist in Ireland achieving its emission reduction targets.

The assessment involved confidential engagement throughout 2021 with individual companies and stakeholders in the ORE sector to ascertain their needs and intentions and to facilitate further discussions with the Ports. Cross departmental engagement between the Departments of Transport, Environment, Climate and Communications has also been ongoing. In addition, engagement with other ports and administrations to establish best practice in this regard in Europe formed part of the assessment.

Policy decision

Taking account of the conclusions and recommendations of that assessment, the Minister for Transport has decided that a multiport approach will be required to address the needs of the ORE industry. This approach is best suited to deliver the ORE targets set out in the PfG and the CAP 21 and to position Ireland to take advantage of the economic opportunity created by the roll out of both fixed and floating offshore wind in Irish waters. It is also in line with National Ports Policy 2013 which recognised the role that ports can play in servicing the offshore energy sector and the need for further port capacity in this area.

ORE developments will typically require both large-scale port infrastructure for project deployment and smaller-scale port facilities to provide ongoing operation and maintenance (O&M) services. Around the Irish coast, ORE projects will develop in several phases.

To meet Ireland's target of 5GW by 2030, it is clear that a minimum of two facilities will be required from 2025 onwards for deployment activity. A multiple of typically smaller ports will be needed for O&M operations.

Port location cannot be overlooked in the context of the roll-out of the ORE industry in Ireland. The location has operational advantages that reduce costs and delays and de-risk the construction phase of the ORE project.

A multiport approach removes the risk of a single point of failure that could occur for financial, operational, environmental, or planning reasons. A multiport approach will ensure sufficient flexibility to deal with these uncertainties and that port capability can come on stream as required at a number of locations.

Phases 1 and 2

The objective of achieving 5 GW of installed offshore wind by 2030 will primarily be met through the deployment of fixed pile turbines off the East and South East coasts. This is because of more favourable sea areas with significant waters available at depths of under 60 meters, combined with the proximity to an existing relatively strong onshore transmission system. It is the intention that the 5 GW target will be facilitated through two phases of offshore wind deployment with two specific auctions to take place under the Renewable Electricity Support Scheme (RESS), ORESS 1 and ORESS 2. A consultation to inform the approach to the second phase will include the option of including some floating offshore wind as a special category in ORESS 2.

Regarding the location of future offshore generation, the Shaping Our Electricity Report published by EirGrid in November 2021 identifies that almost the entirety of offshore generation required to meet the 5 GW objective would be connected to the onshore transmission system on the East and South coast, with the vast majority to be connected on the East and South East coasts.[3] The EirGrid report assumes that only around 400 MW will be connected on the west coast by 2030.

It is recognised that existing ports in Ireland, or entities within ports with development plans, e.g., Rosslare Europort, the Port of Cork, can play a significant role in providing the required largescale port infrastructure for those deployments. Drogheda Port is also proposing the development of large-scale infrastructure at a new east coast location which could also be an option for east coast deployments. Existing facilities at a port in Northern Ireland can also play a role in supporting these activities. There are opportunities for other east coast ports also for O&M services, e.g., Waterford. The ports at Wicklow and Arklow have already entered into arrangements with individual ORE project developers. There is one project included under Phase 1 off the West Coast offering an opportunity to ports in that area. However, the significant potential for ORE in the Atlantic is not envisaged until later in the decade.

The current structure of the State commercial ports sector is that of independent commercial entities, each required to further develop their commercial business. As private sector involvement in the provision of port infrastructure and services already occurs within some ports, it is considered appropriate that other terminal owners or operators within the port may provide the required

[3] Shaping_Our_Electricity_Future_Roadmap.pdf (eirgridgroup.com)

infrastructure, working in collaboration with a port. It is also appropriate for port companies to bring private partners on board in developing these facilities.

The consultation process currently underway on the first Renewable Electricity Support Scheme (ORESS 1) signposts that in order to capture the maximum economic benefit of offshore wind for local communities, to deliver long-term, high value employment in these areas, and to ensure a level playing field between projects, it is proposed that operation and maintenance services for each project successful at ORESS 1 are required to be headquartered in either Ireland or Northern Ireland.

It is anticipated that a second auction, ORESS 2, will be held by 2025 to facilitate further deployments to underpin delivery of the 5GW target. This auction may also include a special category for floating offshore wind.

Phase 3

Further offshore wind-specific auctions are planned later in the decade, for deployment post-2030, as part of an enduring, plan-led regime for offshore wind in Ireland. The Offshore Renewable Energy Development Plan II will inform the identification of the optimal areas for renewable technologies through a comprehensive assessment of all available data and information. This will include identification of areas off the South West and West coasts which typically have deeper waters, and a less developed onshore transmission system than on the East coast. Floating turbines, where the turbines are anchored to the seabed rather than directly fixed, will provide the opportunity to develop the deeper waters in the South West and West coasts. The potential to generate green hydrogen from offshore wind will also provide an opportunity for development in these areas that is not fully electricity grid dependant.

This technology is currently at the early stages of commercialisation and is developing faster than initially anticipated. It is acknowledged that this is an area in which Ireland has a very significant deployment opportunity in the medium to long term.

In that context, it is recognised that ports, e.g., Shannon Foynes Port or Port of Cork, or entities within the ports, can also play a significant part in the provision of the required large scale port infrastructure. There will also be opportunities for other ports along the west coast (in addition to the project under Phase 1) such as the ports of Galway, Bantry Bay (under the Port of Cork), and the Fishery Harbour Centres of Ros an Mhíl, Killybegs and Castletownbere which are under the remit of the Department of Agriculture, Food and the Marine.

Funding options

Cognisant that Member States throughout Europe have a common goal in the reduction of greenhouse gas emissions through progressing ORE, the Department engaged extensively with other Member States and the Commission advocating for the inclusion of funding for ORE related port infrastructure under the Connecting Europe Funding facility (CEF) which is the funding instrument for the EU's Trans-European Transport Network (TEN-T).

The CEF criteria were extended to allow EU funding for conducting studies and for the development of ports capacities and facilities in relation to offshore wind farms in the next 2021-2023 funding window. This is significant and a clear recognition of the vital role that ports will play in achieving carbon reduction through wind energy and a sign that the EU is committed to supporting the development of ORE port infrastructure.

Successful eligible TEN-T applicants can obtain grant funding of up to 50% of eligible costs for studies and up to 30% of infrastructure works costs.

There will be three calls for applications in this period and the Department of Transport is currently engaging with eligible TEN-T ports or eligible entities within TEN-T ports to assist, where appropriate, in applying for this funding. The potential applicants at this stage are applying for funding for studies which will either be looking at the feasibility of a largescale project or will effectively prepare them for lodgement of planning applications.

These studies may enable a number of entities to be in a position to proceed to planning from 2022 onwards and, if successful, commence construction from 2024 onwards. This timeline ties in with the first Renewable Electricity Support Scheme (ORESS 1) auction, which will take place towards the end of 2022, and first construction for projects successful at this auction is expected from 2025. Successful ORE development bidders will be better positioned to engage commercially with the port of their choosing, although it is encouraged that they engage with ports as early as possible to inform design criteria and to support the business case for investment in the port.

Additional financing opportunities may arise in the future through the European Investment Bank, the Ireland Strategic Investment Fund, Green Funds or other sources. However, any such investment will only be made on the basis of the commercial viability of the project.

Other opportunities

The Department of Environment, Climate and Communications has commenced updating the Offshore Renewable Energy Development Plan (OREDP 1). The Department of Transport is represented on the ORDEP II steering group and subgroups. This work will inform the identification of candidate ORE areas for potential future designation under the Designated Marine Area Plan (DMAP) process as provided for in the Maritime Area Planning Bill.

Ireland has a sea area of 490,000 km2 that is approximately seven times its landmass. With one of the best offshore renewable energy resources globally, there is very significant potential in utilising these resources to generate carbon-free renewable electricity. The development of this vast resource can enable Ireland to enhance the security of energy supply by substituting imported fossil fuels with indigenous renewable resources and, potentially, by developing an export market in green energy, either through electricity export from interconnectors or from power to gas such as hydrogen generation. Greenhouse gas emissions will be reduced, while delivering growth to the economy and supporting regional development. There is also potential for wave and tidal renewable energy in the waters around Ireland and the potential for very large-scale green hydrogen and green ammonia projects. These are still very much pre-commercial technologies at this time.

A number of ports and private entities are already progressing plans to provide the facilities and infrastructure required to assist the ORE sector to develop in Ireland. This Policy Statement endorses that development.

The Department of Transport will establish a ports co-ordination Group to coordinate port responses and maintain policy alignment.

In addition, the CAP 21 states that a cross-departmental ORE Team, chaired by the Department of Environment, Climate and Communications, is being established to capture wider economic and business opportunities associated with the development of offshore renewables in Ireland. This will include the identification of supporting infrastructure development and supply chain opportunities as Ireland's ORE industry is developed.

Enterprise Ireland has already established an offshore wind cluster of Irish SMEs and have been targeting market opportunities particularly in the UK market, to prepare companies to meet supply chain demands for the roll-out of the sector in Ireland.

In conclusion, this policy clarifies a number of matters related to how Irish commercial ports will support the roll out of the ORE industry. The statement is attentive to existing National Ports Policy as well as EU and national ambitions to reduce carbon emissions. It also recognises the economic potential of the offshore renewable energy industry and the very significant gains that can be made by Irish ports and the national economy.

ENDS

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