

Ocean Energy
Industry Forum
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OREDPA

Presentation:
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Vision and Goals

Vision

- Our offshore renewable energy resource contributing to our economic development and sustainable growth, generating jobs for our citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner

Goals

- Goal 1: Ireland harnesses the market opportunities presented by offshore renewable energy to achieve economic development, growth and jobs
- Goal 2: Increase awareness of the value, opportunities and societal benefits of developing offshore renewable energy
- Goal 3: Offshore renewable energy developments do not adversely impact our rich marine environment and its living and non-living resources

Opportunity

- Ireland has a sea area of 900,000 square kms (10 times our landmass) with one of the best offshore renewable energy resources in Europe
- ***EU Blue Growth Study*** identifies offshore wind (size €2.4bn and recent growth 21.7%) and ocean renewable energy (size €<0.25bn and recent positive growth) as among the most promising activities in terms of future potential
- ***Strategy for Renewable Energy 2012 – 2020*** also identifies green growth through research and development of renewable technologies including the preparation for market of ocean technologies as strategic goal
- ***Economic Study for Ocean Energy Development in Ireland (SEAI and INI)*** indicates that a fully developed island of Ireland OE sector serving both domestic and export markets could produce an NPV of €9bn and between 25,500 and 69,000 jobs to Ireland and NI

Policy Context

- EU 2030 Policy Framework for Climate and Energy: Recognises that renewable energy has an important contribution to make in the period to 2030
- Planning and Development: Government has published its Maritime Area and Foreshore (Amendment) Bill which represents a radical transformation in this area and the Bill is included in the Government's legislative programme for 2014
- Infrastructure:
 - **Grid 25**, DS3 programme, the first part of EirGrid's Offshore Grid Study (2011), ISLES and NSOGI
 - The development of offshore renewable energy represents a significant opportunity for our **ports**, particularly those along the western seaboard. It will complement the National Ports Strategy, increasing tonnage, turnover, profits and employment in key ports

Policy Context

- Job Creation and Economic Growth:
 - ***Action Plan for Jobs*** prioritises finalising the OREDP and related SEA and AA to provide a clear framework for marine renewable energy development
 - ***Report of Research Prioritisation Group*** identifies marine renewable energy as one of fourteen priority areas for Ireland
 - ***Harnessing Our Ocean Wealth*** recognises the potential of Ireland's offshore and specifies time-bound enabling and development targets, including implementation of the OREDP

SEA and AA

- A key objective of the OREDP is to provide a policy framework for the assessment of applications for planning consents and the carrying out of Environmental Impact Assessments (EIA) for individual projects
- SEA and AA provide a wealth of information at a strategic level to inform planning decisions, and move from a project-led to a plan-led approach
- The potential environmental impacts of scenarios for developing up to 4,500 MW of offshore wind and 1,500 MW of wave and tidal energy, irrespective of its commercial viability, the existing onshore power transmission grid, or other such constraints, within the period to 2030

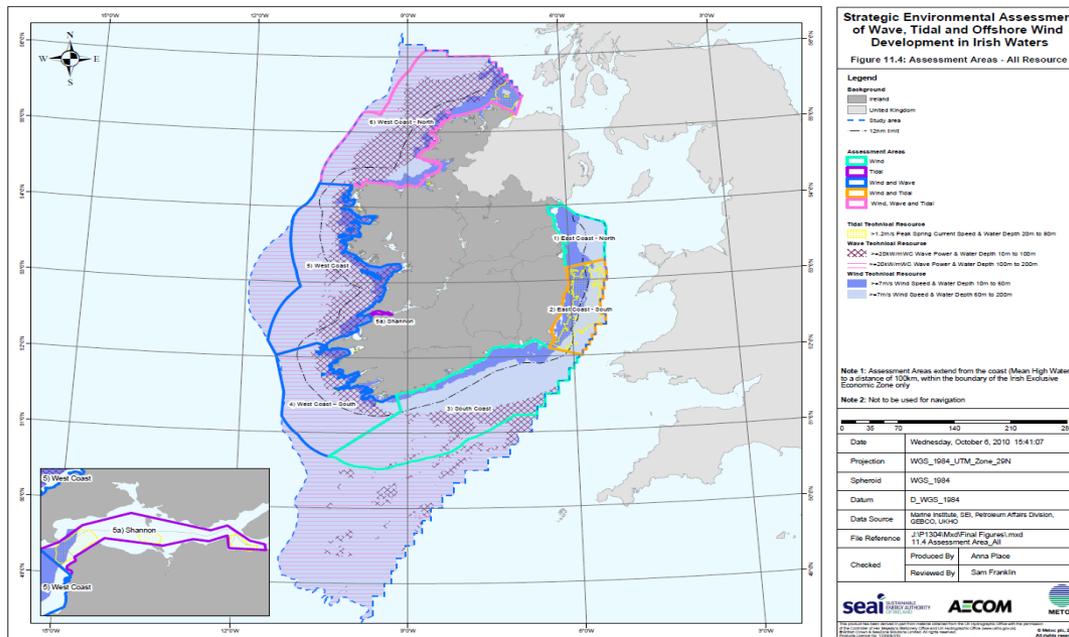
SEA Development Scenarios

	Low Scenario (MW)	Medium Scenario (MW)	High Scenario (MW)
Offshore Wind	800	2,300	4,500
Wave and Tidal Current	75	500	1,500

SEA and AA

- The study area was split into six assessment areas around the Irish coastline, reflecting the distribution of wave, wind and tidal resources in Ireland's waters

Table 3 – Map of SEA Study Area



SEA and AA

- The overall conclusion of the SEA and AA found that it would be possible to achieve the high scenario of 4,500 MW from offshore wind and 1,500 MW of wave and tidal devices without likely significant adverse effect on the environment. In addition, the cumulative assessment found that greater levels of development could be accommodated within assessment areas without significant adverse effects on the environment
- However, a route to market is key

SEA and AA

Assessment Area	Total amount of development (MW) that could potentially occur within each assessment area without likely significant adverse effects on the environment (taking into account mitigation).				
	Fixed Wind (MW)	Wave (MW) 10 to 100m Water Depth	Wave (MW) 100m to 200m Water Depth	Tidal* (MW)	Floating Wind** (MW)
1: East Coast (North)	1200 to 1500***	-	-	-	-
2: East Coast (South)	3000 to 3300****	-	-	750 to 1500	-
3: South Coast	1500 to 1800	-	-	-	6000
4: West Coast (South)	600 to 900	500 to 600	3000 to 3500	-	5000 to 6000
5: West Coast	500	5000	6000 to 7000	-	7000
5a: Shannon Estuary	-	-	-	Limited potential	-
6: West Coast (North)	3000 to 4500	7000 to 8000	6000 to 7000	750 to 1500	7000 to 8000
Total Development Potential (MW) without likely significant adverse effects)	9800 to 12500	12500 to 13600	15000 to 17500	1500 to 3000	25000 to 27000

Policy Enablers and Actions

- Put in place a robust Governance Structure for the OREDP: A Steering Group chaired by DCENR and including representation from DJEI, DECLG, DTTS, DAFM, the SEAI, the EPA, the MI, the NPWS, and industry will be established. It will update MCG on an ongoing basis
- Increase Exchequer Support for Ocean Research, Development and Demonstration: DCENR will increase its multi-annual Ocean Energy Development Budget by €16.8m (made up of €14m capital and €2.8m current) in the period 2013 to 2016, bringing total cumulative funding to €26.3m to provide for AMETS, MI, Cork and Galway Test Sites, IMERC and the Prototype Fund. Options for an additional €30 million capital funding in the years 2016 to 2018 will be explored with DAFM, DJEI and DPER

Policy Enablers and Actions

- Introduce Initial Market Support Tariff for Ocean Energy: From 2016 an initial market support scheme, funded from the public service obligation levy, equivalent to €260/MWh and strictly limited to 30MW for ocean (wave and tidal) energy will be introduced. This 30MW will be competed for by ocean energy interests in a public competition and focused on pre-commercial trials and experiments
- Develop Renewable Electricity Export Markets: Subject to its being mutually beneficial for Ireland and the UK, the objective is to enter an Inter-Governmental Agreement in 2014 to underpin the development of an export market
- Develop the Supply Chain for the Offshore Renewable Energy Industry in Ireland: An Inter-Governmental Agreement to export renewable electricity to the United Kingdom will bring potentially significant employment creation opportunities. In addition to construction, and operations and maintenance jobs, the supply chain for wind generation will be galvanised as such projects are likely to form a significant part of the initial export activity. It is important to note that there are overlaps between the supply chains for onshore wind, offshore wind, and wave and tidal energy developments. All relevant State agencies, particularly in the enterprise area, will have to coordinate their activities to ensure the employment potential of export projects is maximised

Policy Enablers and Actions

- Introduce a New Planning and Consent Architecture for Development in the Marine Area: DECLG's Maritime Area and (Foreshore) Amendment Bill aims to provide for streamlined development consent process, to include both the onshore and offshore elements of strategic infrastructure projects. The Bill includes provisions that will enable project developers to seek a maritime option at an early stage, subject to certain qualifying criteria, depending on the nature and location of the proposal
- Ensure Appropriate Infrastructure Development: The development of offshore renewable energy is critically dependent on the development of enabling infrastructure at a number of points in its value chain, including grid and port facilities. The Offshore Renewable Energy Steering Group will produce a report on the integrated infrastructure requirements of the offshore renewable sector

Policy Enablers and Actions

- Put in place Arrangements for Environmental Monitoring: A key finding of the SEA and AA processes was the need to put in place a number of mitigation measures with regard to the development of offshore renewable energy. The Offshore Renewable Energy Steering Group will take forward in a dedicated workstream, the recommendations from the SEA and AA processes, regarding the need for the collection and dissemination of data and the monitoring of potential significant environmental impacts arising from the development of offshore renewable energy installations
- Explore Potential for International Collaboration: Within the context of the British Irish Council's Marine Energy Committee, Ireland will actively contribute to the development of a programme of co-operation and collaboration in offshore renewable energy. In addition Ireland will continue to participate in the Ocean Energy ERA-NET, which brings together sixteen partners from nine member states intent on gaining the benefits of coordinated research funding

Policy Enablers and Actions

- Communicate that Ireland is Open for Business: Ireland must be presented at home and abroad as open for business in offshore renewable energy. The DCENR will work with the DJEI, the DEAI, EI and the IDA to put in place a communications plan to present the Irish offshore opportunity to both national and international investors to leverage the maximum job creation and economic growth potential from the OREDP

Next Step

- Begin implementation!