

# Circular Economy Opportunities for Offshore Wind Turbines in the Irish Sea

Initiative to encourage co-operation across and around the Irish Sea  
space



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In partnership with:



Rialtas na hÉireann  
Government of Ireland



Llywodraeth Cymru  
Welsh Government

## INTRODUCTION

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The operational wind farms in the Irish Sea are some of the oldest in the world. Multiparty collaboration can enable better decision making to protect the environment and biodiversity, and inform future development plans to recover materials whilst leveraging the existing local supply chain. This initiative focuses on cross border collaboration of the regions of Wales and Ireland to investigate the offshore wind decommissioning opportunity and capability in the regions.

### Key Objectives:

1. **Quantify Offshore Decommissioning Opportunities:** Conduct a detailed scoping study on the extent of current and planned wind turbines in the Celtic and Irish Seas.
2. **Materials and Innovation Analysis:** Map end-of-life materials, assess re-cycling potential, and review the benefits of repowering versus extending the life of existing wind farms.
3. **Stakeholder Engagement and Capacity Building for Consortium Formation for Future Decommissioning Projects:** Through workshops, bring together key stakeholders in ports, supply chains, government, and academia to establish consortia for future decommissioning initiatives.

We are looking to speak to organisations interested in engaging with a broad range of stakeholders looking to enable circular approaches to offshore wind. This could include:

- **Industry** with experience in domains such as decommissioning onshore wind turbines, capability and facilities for offshore operations, component refurbishment and recycling facilities
- **Ports** with offshore operations expertise and appetite to grow their offshore wind services
- **Government and Industry Bodies** looking at regional supply chain growth

## CIRCULAR ECONOMY FOR THE WIND SECTOR

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The Offshore Energy Catapult also invite interested stakeholders to join their ongoing Joint Industry Project titled 'The Circular Economy for the Wind Sector' (CEWS). As demand for raw materials increases to meet global renewable energy installation targets, so too does the need for a circular economy and security of supply for strategic materials. Non-price factors are increasingly important within offshore wind leasing rounds, with some countries now including circular economy criteria within the bid process. CEWS is focused on finding practical solutions to the inevitable and growing challenge of wind farm decommissioning, including future investment needs for specific materials, physical and regulatory challenges to wind farm decommissioning and the reclamation of materials, and investigation of the barriers and opportunities for a sustainable approach to decommissioning.

CEWS is building the body of knowledge required to establish standard practice and guidance for decommissioning offshore wind farms so that the sector may avoid the expensive and lengthy trial-and-error processes experienced by other sectors.

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