



Stakeholder Engagement for a New Offshore Wind Turbine



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Working Towards a Balance of Voices: **Offshore Wind's Host Communities and The Wind Energy Industry**

As part of the X-Rotor design process of a new offshore wind turbine, our task in UCC is to find out what are the attitudes of host communities and the wider wind energy industry, on what they want or do not want from an offshore wind turbine.

Methodology: We surveyed Local Host Communities and the Wind Energy Industry

The host communities were in Ireland, Scotland and Spain and included the coastal community, those involved in fishing and marine transport, people working in tourism, etc. The Wind Energy community includes developers, researchers, OEMs. etc.



Results: Industry is concerned with business. Host communities are concerned with the environment, fishing and jobs.



important attribute Low maintenance **Reliability** wind energy offshore wind wind cost onshore wind offshore wind turbine impacts Wind blades

Very Important (3) Important (2) Not so Important (1) Don't know (0) Irrelevant (-1)

2.30 Purchase Cost 1.42 Visibility 2.40 Installation Cost 1.67 Bird Strike 2.20 O&M Cost 2.18 Power Choice 1.92 Effect on Wildlife 1.82 Choice of Height 1.40 Impact on Shipping

1.50 Fixed/Floating



Not surprisingly, the Wind **Energy Community were** primarily concerned with the cost of electricity (LCOE), survivability of the turbine, the installation, maintenance, and purchase costs. The Host Communities were positively disposed towards offshore wind, seeing it as a source of jobs and renewable electricity. They expressed concerns about the fishing industry and wildlife.

Conclusions: What next?

Find out how to match the market choices from the Wind Industry to the specific characteristics of the X-Rotor design and maximize these. Determine the ways in which the concerns of the Host Communities can be addressed without loosing technical and financial advantages.

Impact on wildlife Main concern change ones environmental friendly coastal communities concern wildlife No concerns loss fisheries and all wildlife fishermen energy birds/wildlife wind turbines environment concern would be the impact concerns about all types

Strongly Disagree (-2) Disagree (-1) Neither Disagree nor Agree (0) Strongly Agree (2) Agree (1)

100%

0.91 Offshore Wind is Good -1.09 Problem for Fishing -0.68 Damage to Tourism -0.07 Wildlife is Disturbed 0.68 Coastal Jobs -0.11 Seabird Impact 0.58 Cheap Electricity

-0.39 Noise from Turbines





1.07 Climate Change is Bad 1.12 We Need More Power 0.61 I will need more power 1.16 Heating is Expensive 1.46 Transport is Expensive 1.16 Electricity is too Expensive -1.14 Global Warming is a Hoax -0.65 Wind Energy is too Unreliable





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100%

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