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Further Reading: Brennan, N., & van Rensburg, T. M. (2020). Public preferences for wind farms involving electricity trade and citizen engagement in Ireland. *Energy Policy*, 147, 111872.

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Read More About: This project "[The social acceptability of wind farms and electricity export- a discrete choice econometric approach](#)" within the Whitaker Institute for Innovation and Societal Change.

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Public preferences for the development of offshore wind farms incorporating electricity trade

Recent advances in offshore wind technologies implies that bottom fixed and floating turbines can be deployed further from shore at lowering cost and several studies indicate that Ireland is particularly well placed to exploit this potential. However, factors which influence the acceptance of offshore renewables may differ to those of onshore projects, particularly if energy trade is involved and public knowledge of the technology is less well developed.

Research findings

Data were gathered using a face-to-face choice experiment survey of 260 respondents conducted by a survey company at selected sites on the Irish coastline during 2018. This sample reflects early experiences of expected future offshore developments. Respondents completed a choice experiment presenting options for a new offshore wind farm in their area combining different numbers of turbines, setback distance, and level of energy export and community control. Quizzes and factsheets were used to establish levels of existing knowledge and self-reported certainty.

The results indicate low levels of knowledge about wind farms and associated benefits. Less well informed individuals prefer greater levels of citizen participation in a new offshore wind energy development and derive more utility from larger numbers of offshore turbines. Although the quiz results reveal there is no significant difference in knowledge about offshore wind between male and female respondents, women are more sceptical about the benefits of offshore wind over onshore and have stronger preferences for higher levels of citizen participation.

The results also signify the importance of both setback distance and engagement with local residents and indicate that citizens are willing to accept wind farm development that allows for electricity export positioned at nearshore providing that local residents are significantly involved in the planning process.

Policy Implications

These findings suggest that more resources should be devoted to participation compared with onshore wind farms. Responding to this demand will be particularly challenging for Ireland due to the larger scale of offshore wind and the government's recent requirement that wind farms must be 100% owned by the local community in order to apply in the community category in future RESS auctions.

The results indicate significant scope for electricity exports provided communities are involved in participatory planning procedures, benefit arrangements and offshore wind farm design. An effective response to demands for increased information about the offshore wind industry as well as public participation and turbine installation at further distances from shore may soften opposition to wind power developments.

The findings suggest engaging with women, less informed individuals and individuals less certain about their position regarding offshore wind is especially worthwhile.