Marine renewable energy schemes should take greater account of local needs: study

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Developers should pay more attention to the needs of island communities when consulting on harnessing their potential as sources of renewable energy, a study suggests.

The UK's island groups possess rich resources including strong winds, powerful tides, and reliable wave resources, making them strong candidates for future marine renewable developments.

Yet many still depend economically on industries such as fishing,

aquaculture and tourism, while possessing their own distinct social and political histories.

Now research by the University of Cape Town and Plymouth University suggests there is an appetite for renewable energy projects within these communities, with residents appreciating the benefits such initiatives would bring.

But it says public and private sector bodies are likely to face continued opposition if they fail to take local distinctiveness into account at the beginning of the planning process.

Ian Bailey, Professor of Environmental Politics at Plymouth University, says:

"The understandable temptation is to view island communities that are potential sites for marine renewable energy as broadly similar to each other and to any other rural community. However, such an approach may fail to capture critical features of potential host communities that might determine whether projects are supported or opposed. In order to avoid such eventualities, community consultations need to begin with detailed appraisals of the character, circumstances and place-based values of each community to help frame the development of MRE proposals."

The study, published in the International Journal of Marine Energy, focused on three island archipelagos around the UK coastline – the Scilly Isles off south-west England, and the Orkney and Shetland Islands off the north coast of Scotland – with researchers issuing questionnaires and conducting in-depth interviews with representatives from the renewables and marine industries, conservation groups, community bodies and local residents.

The majority of respondents expressed a positive attitude towards

marine renewable energy offshore – 81.1% for tidal energy, 80.0% for wave and 58.9% for offshore wind – with a minority expressing negative attitudes (5.4% for tidal, 5.9% for wave and 14.8% for offshore wind).

However, communities argued strongly that schemes should provide clear local benefits, and also that any new developments should not harm traditional industries that often form the economic backbone of local communities and part of the islands' heritage.

In many cases, respondents said they were unsure about the potential impacts of such schemes on the marine environment and called for more information to be made public at an early stage in any planning process.

In their conclusion, the authors say:

"The distinctive circumstances, features and place-based values of these island communities provides a powerful lens for understanding why they and others may support or be more cautious towards MRE developments. Attitudes in many local areas are likely to be significantly informed by whether MRE projects are sensitive to the landscape and social characteristics of island communities, and contribute towards addressing the particular vulnerabilities facing remote island communities. These findings provide important lessons for the further development of the MRE sector in terms of the need to place understanding of the distinguishing features of communities at the heart of consultations on the siting of MRE developments."

More information: Jiska de Groot et al. What drives attitudes towards marine renewable energy development in island communities in the UK?, *International Journal of Marine Energy* (2016). DOI: 10.1016/j.ijome.2016.01.007