

Fishers' Attitudes to Marine Renewable Energy

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WS10: Ecological Consequences of Tidal and Wave Energy Conversion



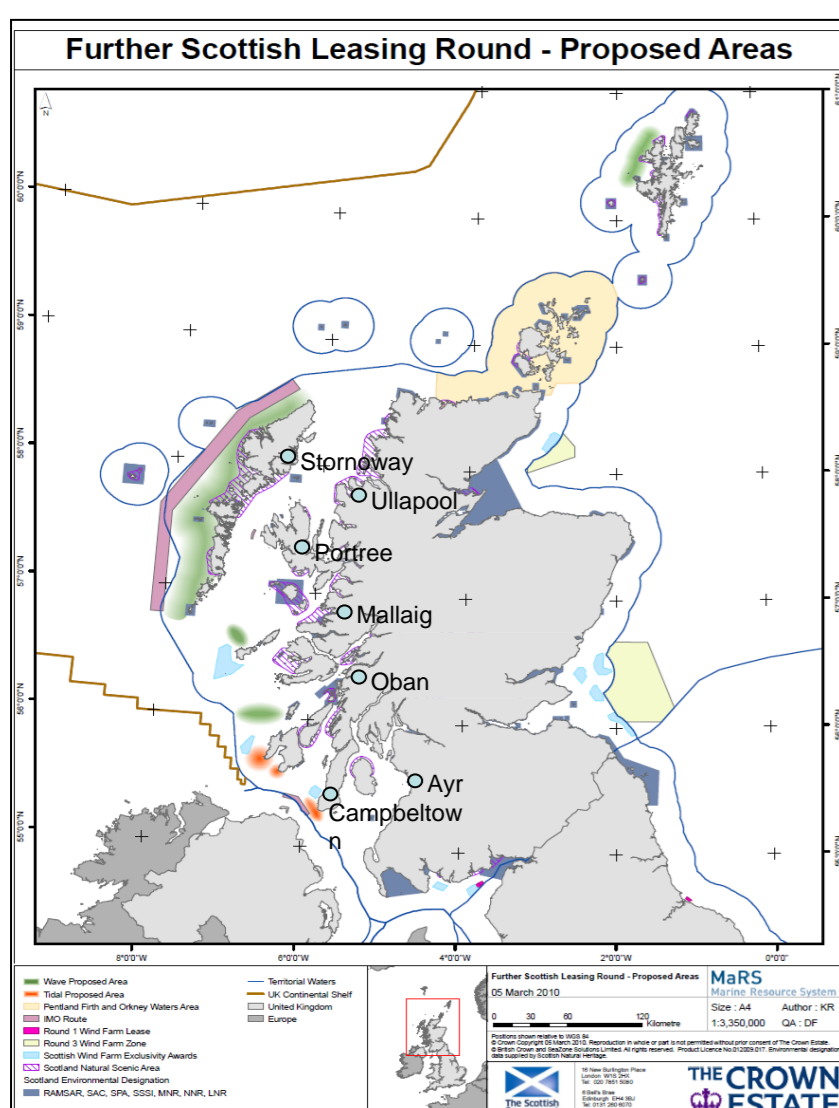
Photographer: Ian Britton (2008), freefoto.com

Introduction

The drive to develop the offshore renewable energy sector may have implications for the fishing industry by limiting access and navigation, as well as having potential ecological impacts (both positive and negative) upon fish populations (Rodmell and Johnson 2002).

Historically a powerful lobby group, fishers' attitudes and behaviour can influence the success of fishery management measures (Richardson 2005), and the success of Marine Protected Areas (MPAs) (Pita et al. 2011) suggesting they may also influence the success of other offshore developments. The objectives of this research were to gather information on the attitudes of Scottish west coast fishermen towards marine renewable energy development and to identify potential explanatory factors for these attitudes.

Methods



- Postal survey questionnaire undertaken: end Oct/beginning Nov 2010
- Design based on previous similar studies
- Sent to main fishing ports on west coast of Scotland: Ullapool, Mallaig, Portree, Stornoway, Oban, Campbeltown, Ayr
- Random sampling using gatekeepers: 500 questionnaires sent to Fisheries Offices, 481 questionnaires forwarded to vessel owners

Analysis

2 complementary methods of analysis used: logistic regression and loglinear modelling - allowing for added interpretation and robustness of analysis.

Results

126 questionnaires received (26% response)



Photographer: Sebastian Czapnik (2009), Dreamstime.com

Logistic Regression

- Mainland based fishermen: **3.2** times more likely to have a negative attitude (95% CI: 1, 10)
- Fishers who know of nearby offshore development: **5.0** times more likely to have a negative attitude (95% CI: 1.0, 9.8)

Loglinear Modelling



Photographer: Rick Dikeman (1983), wikicommons.org

- Explanatory factors have more significant impact on neutral attitudes than positive attitudes
- Mainland-based fishermen: **3.4** times less likely to have a neutral attitude than those on an island (95% CI: 1, 11)
- Fishers who know of a nearby offshore development are also **3.4** times less likely to have a neutral attitude (95% CI: 1, 11) and
- are **7.1** times less likely to have a positive attitude towards marine renewables (95% CI: 2.2, 23)

Preliminary Thoughts

- Is known development indicative of a 'Not in my Backyard' (NIMBY) mentality?
- Island communities are more fishing dependent yet more supportive – perception of development as opportunity for islanders?

References

1. Rodmell, D. and M. Johnson (2002). The development of marine-based wind energy generation and inshore fisheries in UK waters: are the compatible? Who owns the sea?, Tjarno, Sweden, North Sea Commission, Aberdeen.
2. Richardson, E. A., Kaiser, Michel. J., Edwards-Jones, Gareth (2005). "Variation in fishers' attitudes within an inshore fishery: implications for management." *Environmental Conservation* 32(3): 213 - 225.
3. Pita, C., et al. (2011). "An overview of commercial fishers' attitudes towards marine protected areas." *Hydrobiologia* 670(1): 289-306.