Prioritisation of marine renewables research

The Scottish Government

Dr Ian M Davies

Renewables and Energy Programme

ian.davies@gov.scot

marinescotland science

Marine Scotland's roles in renewable energy

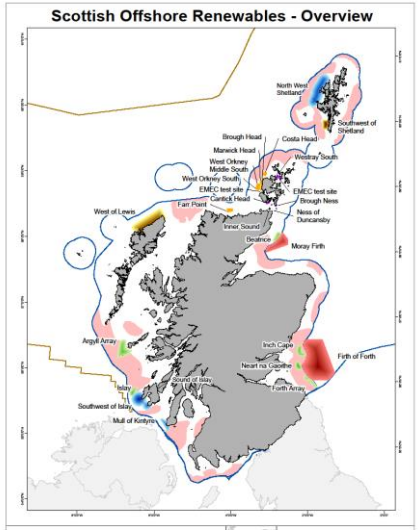
Planning authority

Licensing authority

Science support

Renewables and Energy Programme

Licensing, marine planning, environment



History

marinescotland science

COWRIE

DEFRA Research Advisory Group

Strategic Ornithological Support Services

NERC

FLOWBEC, RESPONSE, 2 others

Need access to, or drive towards, funding
Need clear steer from stakeholders
Need wide stakeholder buy-in
Needs continuity

ORJIP wind

marinescotland science

Initially funded by TCE, DECC and MS

Industry to define priorities and develop projects

Transferred management to Carbon Trust

One large project funded on bird collision

Smaller project on acoustic deterrents

Developing a project on porpoise response to piling

ORJIP Ocean Energy

marinescotland science

Contracted to experienced renewables consultancy

Wide engagement with stakeholders, very open to ideas

Seeking consensus

Very active leadership, using initiative

Developing international links

Basis for additional funding (small) to do useful things

No significant practical project funding

SPORRAN

marinescotland science

Marine Scotland initiative

Developing evidence maps to support marine renewables

Process includes MS scientists, MS licensing, academics, developers, consultants, SNCBs,

Ornithology
Marine Mammals
Benthic ecology
Social and economics

Fish and fisheries
Diadromous fish
Physical processes

SPORRAN outputs

marinescotland science

Theme 1. Increasing baseline understanding of marine ecosystems.

Reduce uncertainty and increase baseline understanding of marine ecosystems in relation to marine planning and licencing of offshore renewables through innovative monitoring / modelling solutions and data sharing initiatives.

Theme 2. Detecting impacts and avoidance behaviour

Methods to monitor and detect impacts and avoidance behaviour of marine species in response to offshore renewables development including the consideration of cumulative impacts.

SPORRAN outputs

marinescotland science

Theme 3. Assessing population level impacts
Assessing/monitoring the population level consequences of marine renewables development on marine species.

Theme 4. Understanding Mitigation Options
Understanding and monitoring the efficacy of mitigation measures in areas of marine renewable development.

Is it working?

marinescotland science

Basis for interaction with Research Councils

- **2 Innovation internships**
- **Support for academic project proposals**

Basis for internal bids for funding for external commissioning

- **Ornithology**
- **Acoustic impacts on mammals**
- **Acoustics of tidal stream areas**

Helps to steer internal research project development

Attracted co-funding

Lessons

marinescotland science

Lead organisation with a clear driver to advance the process

Have clear funding and enthusiasm for the coordination role

Engage with as full a range of stakeholders as possible

Strive for consensus

Have some associated research funding

Welcome co-funding

Try to keep internal project relations simple

Engage actively with potential funders

Seek new funding opportunities