

Marine Planning – Offshore Renewable Energy & Commercial Fisheries



Scottish Government
Riaghaltas na h-Alba
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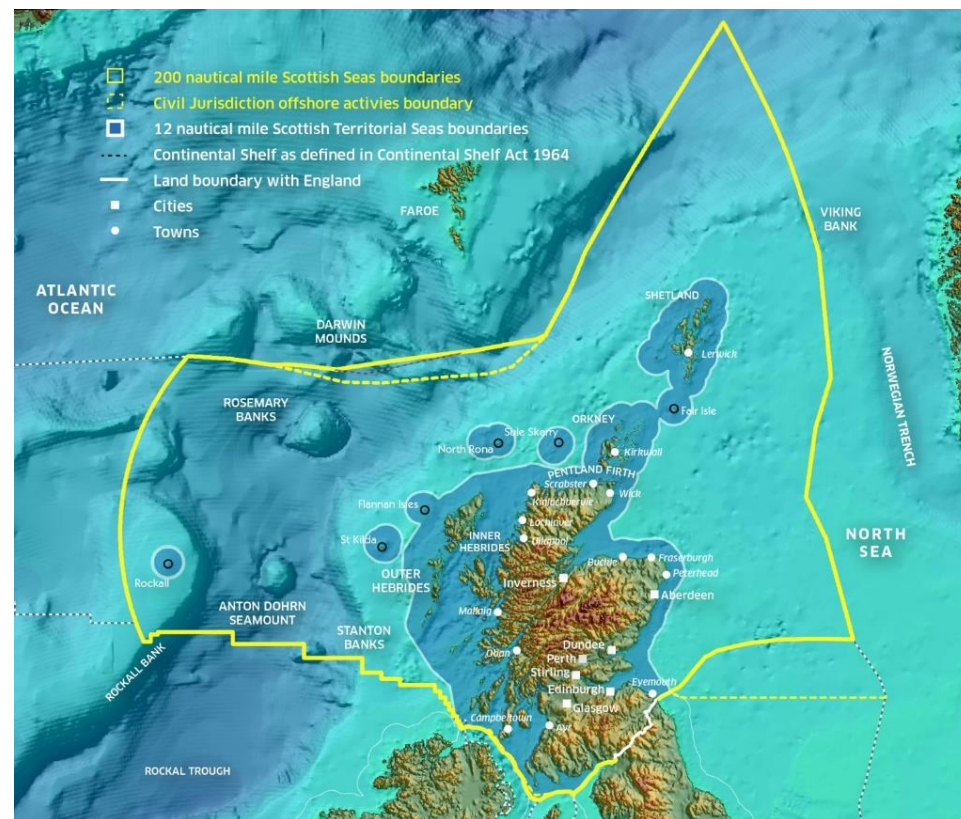
BRUCE BUCHANAN

The background of the slide is a photograph of a coastal landscape, featuring a body of water, a sandy beach, and rocky cliffs. The entire image is overlaid with a semi-transparent blue filter. White, curved graphic elements are present on the left and right sides of the slide.

marinescotland

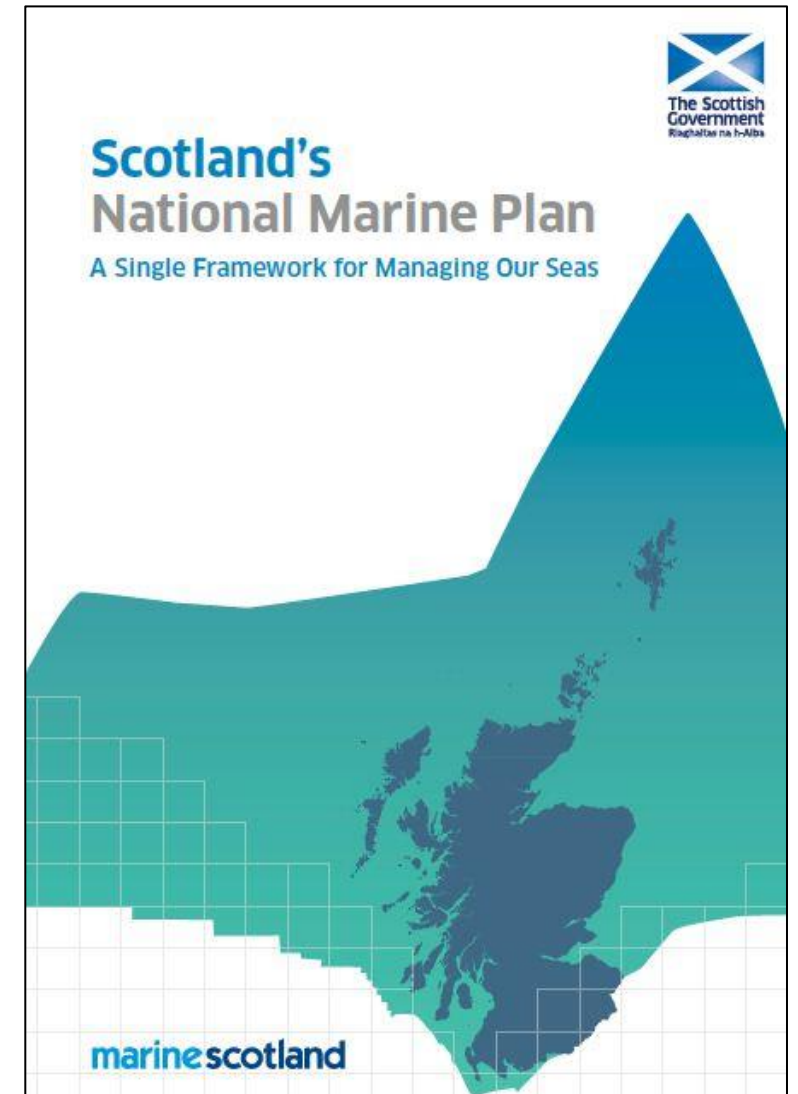
Marine Scotland Directorate

- Directorate - Scottish Government
- Responsible for the sustainable management of Scotland's seas
 - Fisheries, Aquaculture, Marine Planning and Licensing, Compliance and Science.
- Personal experience: Fisheries Compliance & Marine Planning and Policy



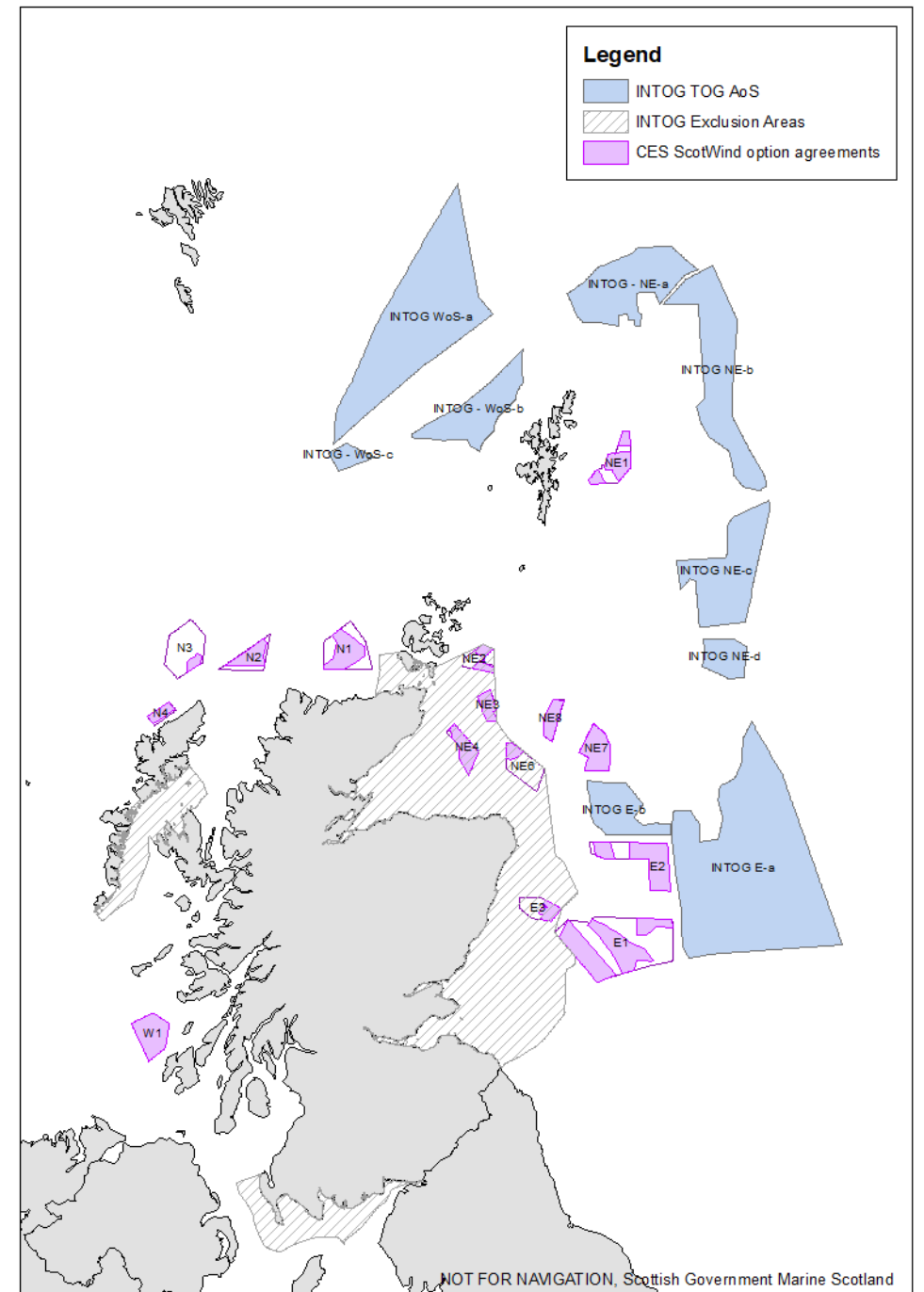
Marine Planning & Development

- **National & Regional Marine Planning**
- National marine plan 2: engagement strategy
- <https://www.gov.scot/publications/scotlands-national-marine-plan-2/pages/2/>
- **Sectoral**
 - Spatial planning and assessment framework
 - ScotWind, INTOG, Wave and Tidal
- **ScotMER**
 - Addressing research needs
 - Facilitating consenting and better planning
- **Licensing & Consenting**
 - MS – Licensing & Operations Team



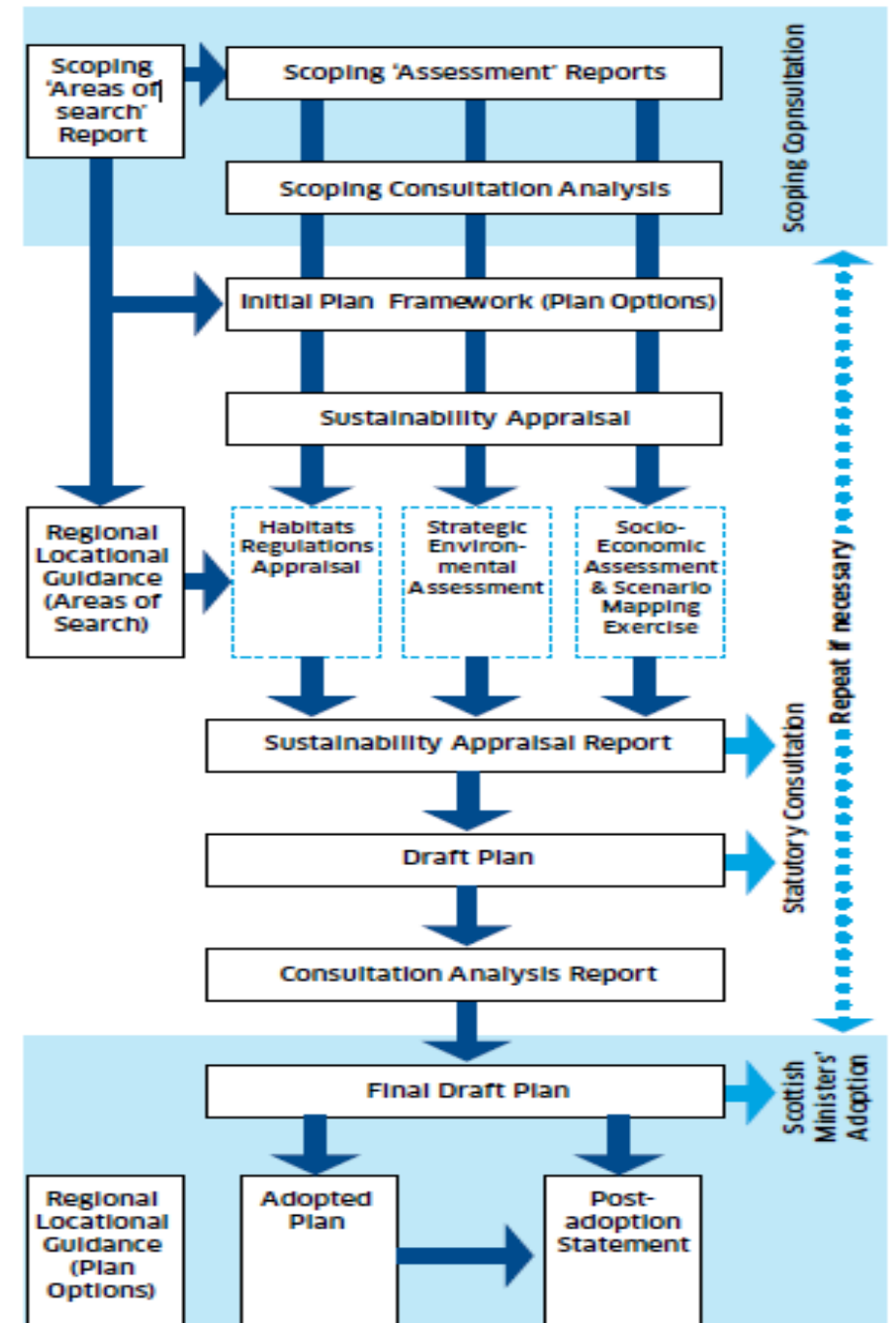
What is Sectoral Marine Planning?

- Integrated process bringing together
 - Spatial Planning
 - Strategic Environmental Assessment
 - Habitats Regulation Appraisal
 - Socio-Economic Impact Assessment
 - Statutory consultation
- Delivers Sectoral Plans with Plan Options for sustainable development
- Supports leasing
 - ScotWind
 - INTOG (Innovation and Targeted Oil & Gas)



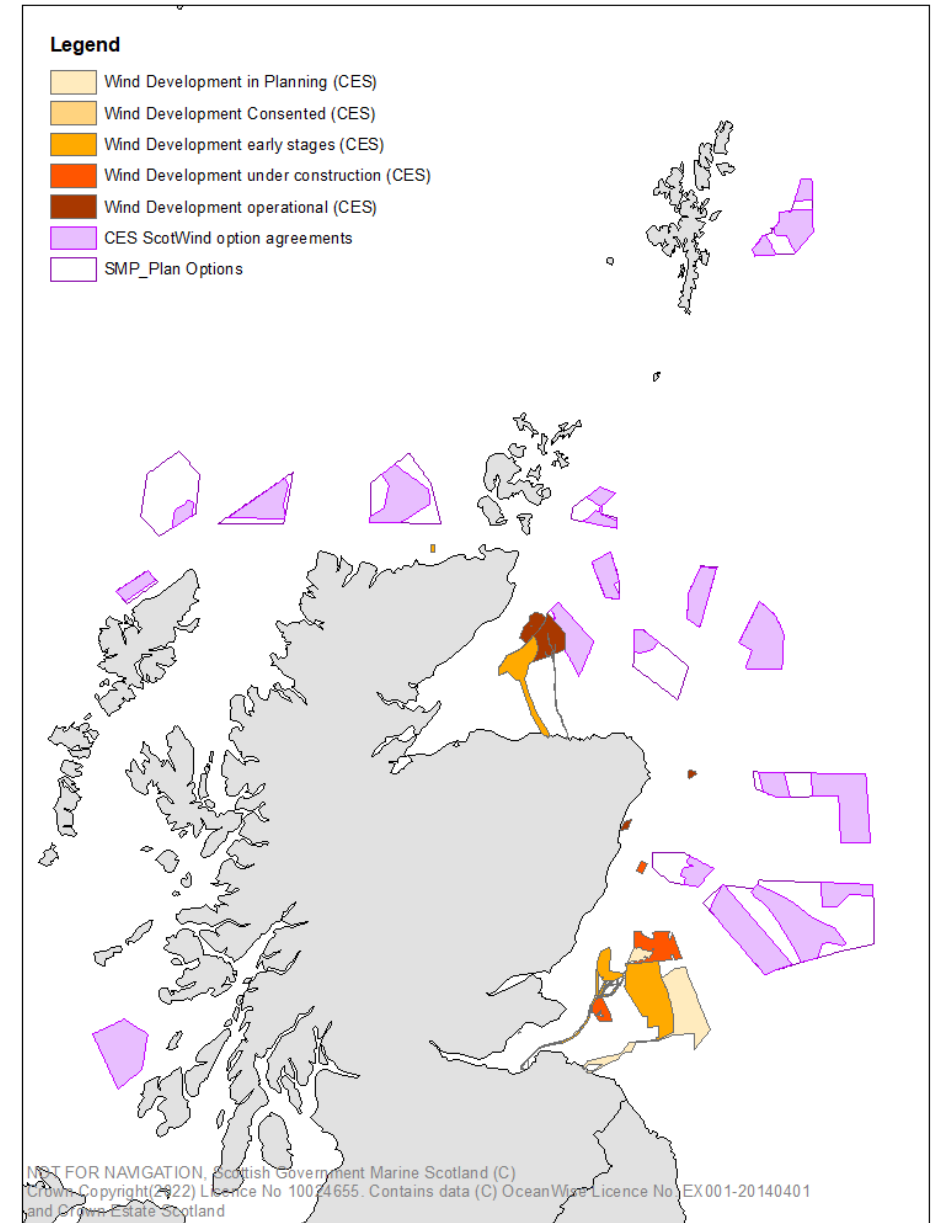


Sectoral Marine Plan (SMP) for Offshore Wind Energy & the iterative review process (IPR)



Sectoral Marine Plan for Offshore Wind Energy

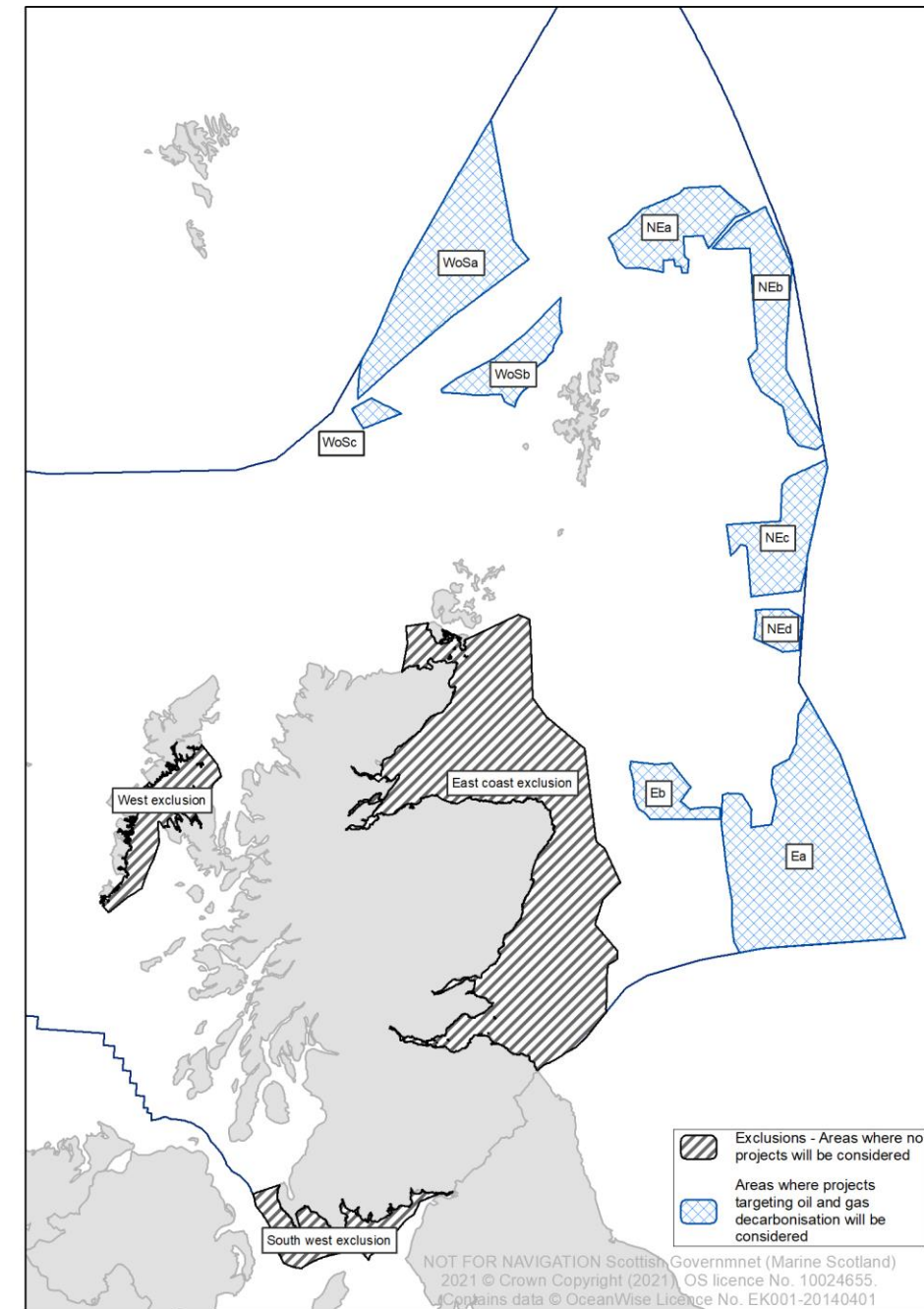
- October 2020 Sectoral Marine Plan for Offshore Wind Energy
- 15 Plan Options
- Based on SEA, SEIA and HRA – capacity of 10GW
- ScotWind Leasing Round
 - 20 projects awarded (option agreements)
 - £756 million option fee revenue
 - Potential 27.6GW capacity
 - £25bn+ investment
- Iterative Review Process



INTOG

A targeted offshore wind planning and leasing exercise to support innovation, transition and decarbonisation

- Up to 4GW of “Targeted Oil and Gas” projects could be delivered
- Up to 500MW of smaller “Innovation” projects
- ✓ Opportunity and Constraints Analysis
- ✓ Area of search consultation held in 2021
- ✓ Initial Planning Framework published Feb 2022



Sectoral Marine Planning

- INTOG leasing process open – exclusivity awards anticipated spring 2023
- SMP Iterative Plan Review – engagement & assessment work ongoing
- Complete re-assessment of SEA, HRA and SEIA (Spring 2023)
- Consider combined cumulative effects of IPR and INTOG - Complete Sustainability Assessment
- Consultation on draft plan and assessments (Summer 2023)
- Adoption of Final Plan (winter 2023)

Scottish Marine Energy Research Programme (ScotMER)

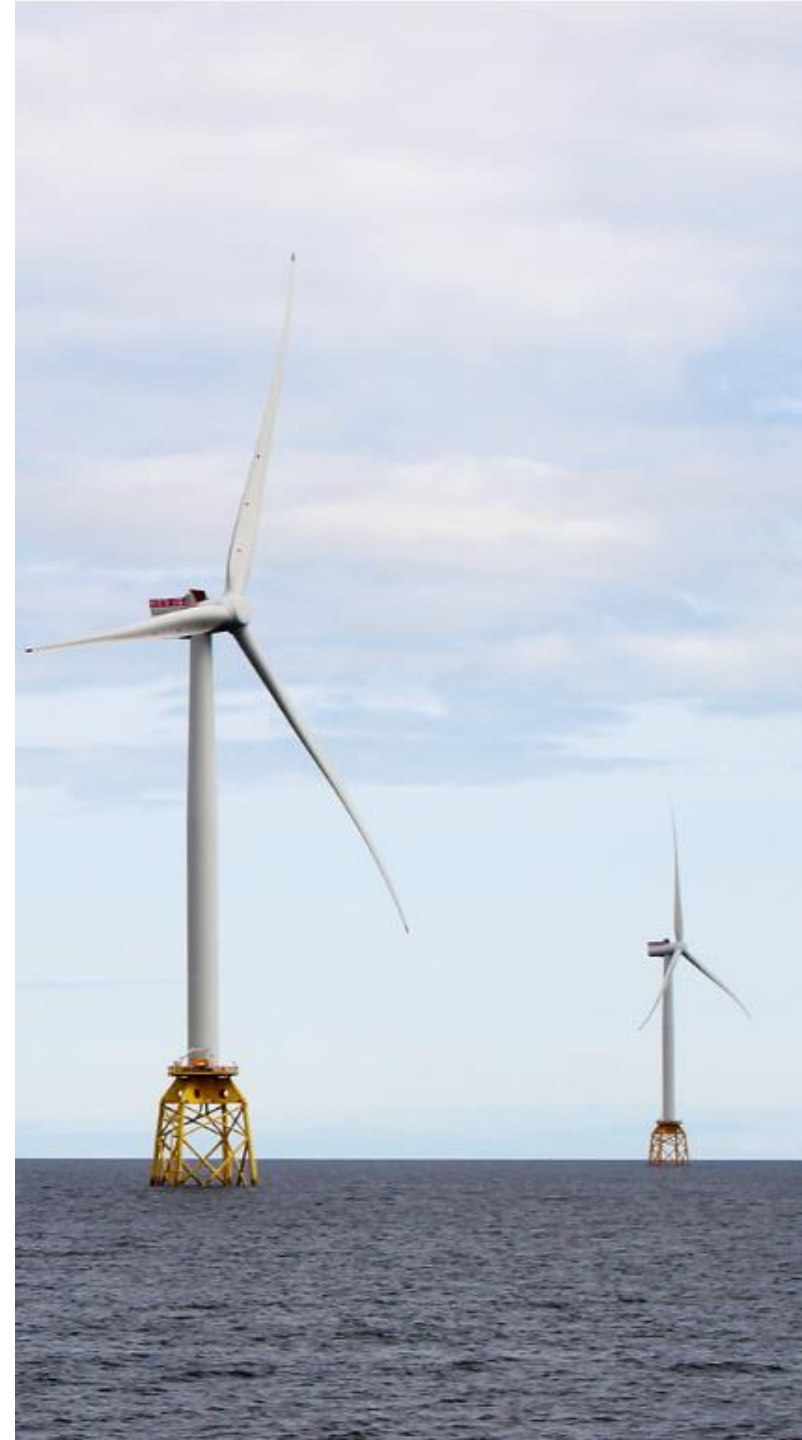
- Scottish Marine Energy Research Programme
 - ScotMER Fish & Fisheries Group
- Fish & Fisheries evidence map
 - Draft evidence gaps
 - Draft research questions
- Fisheries relevant projects



What is ScotMER?

Investing in research to promote the sustainable development of offshore renewable energy.

Best available science when considering the planning and consenting of offshore energy developments that contribute to our low carbon future, while also protecting Scotland's unique marine environment and other marine users.



ScotMER – 7 receptor groups



Fish & Fisheries evidence map – what’s captured in the map:

- Knowledge gap and ID number
- Key research questions
- Target species/group e.g. fisheries fleet or target species
- Why is the knowledge gap important?
- Consenting prioritisation & wider relevance
- Research considerations
- Relevant publications – building on current evidence base
- Current research underway – linking up with other researchers/projects in UK and internationally, collating current research papers, avoiding duplication of work
- Further research activities – research proposals

Fish & Fisheries Evidence Map									
ID	Knowledge Gap	Target Species/Group	Researcher	Project Name	Status	Relevance	Knowledge Gap	Researcher	Project Name
10.01	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.02	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.03	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.04	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.05	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.06	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.07	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.08	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.09	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.10	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.11	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.12	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.13	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.14	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.15	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.16	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.17	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.18	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.19	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A
10.20	Knowledge gap: understanding the impact of climate change on fish and fisheries	Wildlife Species	Dr. Jane Smith	Project A	In Progress	High	Wildlife Species	Dr. Jane Smith	Project A

Draft evidence gaps – updated Autumn 2022

- FF.01 – Mapping of fishing effort and catches in space & time
- FF.02 – Methods to predict fisheries displacement levels and locations for future offshore developments
- FF.03 – Monitoring of commercial fishing activity in the vicinity of offshore wind farms and cables
- FF.04 – Improving how commercial fisheries impacts are assessed in EIAs and CIAs
- FF.05 – Coexistence between offshore renewables and commercial fishing
- FF.06 – Strategic fisheries management in offshore wind farms and potential for habitat and species recovery
- FF.07 – Underwater noise and vibrations
- FF.08 – Electromagnetic fields (EMF)
- FF.09 – Collision risk
- FF.10 – Essential Fish Habitat
- FF.11 – Inshore fish populations/distributions
- FF.12 – Monitoring the impacts of offshore renewables on marine fish and shellfish
- FF.13 – Fish aggregation effect/reef effect around offshore renewables
- FF.14 – Cumulative pressures and impact pathways on marine fish and shellfish species



Fisheries relevant projects

Completed projects	Current projects	Key future project proposals subject to funding
ScotMER Fish & Fisheries Literature Review by Brown & May Marine	Essential Fish Habitat project by Anita Franco (final stage)	ORJIP CoEx project 'Improving the evidence base for coexistence between offshore renewables and commercial fishing – a focus on cabling' (scoping)
Good practice guidance for assessing fisheries displacement by Xodus	Commercial Fisheries Sensitivity Mapping and Displacement Modelling (FiSMaDiM) OWEC project led by Cefas (kick off stage)	ScotMER proposal - Recommendations for an effective monitoring programme for commercial fisheries in relation to offshore wind farms
	Strategic EMF project (drafting scope of work)	
	Hywind static fishing gear trials at the Hywind floating offshore wind farm by Equinor and MSS (half way through)	

Commercial Fishing

- Commercial Fisheries working Groups (Streamlining work) (FIRs / FLOs)
- Transit routes / Shelter areas
- Damage to gear template
- Cables – Over-trawl
- FLOWW best Practice guidance
- Strategic Group



Questions