



# OFFSHORE RENEWABLE ENERGY ACTION PLAN (OREAP): CONSULTATION ON THE STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) ENVIRONMENTAL REPORT AND REPORT TO INFORM APPROPRIATE ASSESSMENT (RIAA)



**DISCLAIMER:** The areas outlined within this public consultation and supplementary materials are subject to further refinement and do not provide any assurance of availability of seabed for development. Any stakeholders who make assumptions on areas which may be made available for development do so at their own risk.

**February 2025**

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## Ministerial Foreword

I am pleased to launch this consultation which represents a key milestone in the Offshore Renewable Energy Action Plan, being delivered in collaboration with key partners and stakeholders across government, industry and those who live near and work in the marine area.

Decarbonisation is a key part of my economic plan and by the end of the decade we must significantly increase onshore renewable electricity generation. However, this will only get us part of the way on the journey to 100% clean electricity, so we need to diversify and build offshore energy infrastructure to meet our legal and moral obligation of net zero.

Offshore energy also gives us an extraordinary opportunity to boost our green economy with new supply chains and skills needed here to service this industry. Our ports, harbours and coastal communities are all needed to take advantage of this opportunity to deliver new Good Jobs.

I am grateful to all respondents for their time and input into this consultation, which will be used to develop and refine my Department's approach to offshore renewable energy development in the future. I look forward to hearing your views in the coming weeks.

**CAOIMHE ARCHIBALD MLA**  
**Minister for the Economy**

## Introduction

The Executive's Energy Strategy, 'Path to Net Zero Energy', which aims to deliver an affordable, secure, and clean energy system for current and future generations, was published in 2021. It specifically identified the need to diversify the electricity generation mix with an initial focus on offshore wind and other marine renewables.

The Climate Change Act (NI) 2022 states that the Department for the Economy (DfE) must ensure that at least 80% of electricity consumption is from renewable sources by 2030, setting a clear route to net zero.

DfE lead the development of the Offshore Renewable Energy Action Plan (OREAP). The OREAP was developed to enable the ambition for ORE to be taken forward through the identification and delivery of key actions in collaboration with delivery partners. The OREAP Steering Group oversee the development and delivery of the OREAP, identifying barriers to ORE deployment and seeking solutions to overcoming them, through a joined-up and coordinated approach. An updated version of the OREAP has been published alongside this public consultation.

The consultation has two supporting documents:

**SEA Environmental Report** – A formal and transparent assessment of the likely significant effects on the environment arising from implementation of the OREAP for Northern Ireland, including consideration of reasonable alternatives.

**Report to Inform Appropriate Assessment** – The RIAA has been prepared and provides a transparent assessment of the OREAP and examines the Likely Significant Effects of the plan and the potential for Adverse Effects on Site Integrity of European sites.

The purpose of the consultation is to provide stakeholders with an opportunity to provide input into ORE policy development. We encourage stakeholders who will be impacted by ORE development and the wider energy sector to consider the contents of this consultation and supplementary materials and share their comments. This will provide the Department with valuable insight, which will be analysed and considered as part of the ongoing development of the OREAP.



## How to respond

Responses to this consultation should be submitted via email to:

[OREAP\\_NI@rps.tetrattech.com](mailto:OREAP_NI@rps.tetrattech.com) or you can respond in writing to the RPS Ireland address:

Elmwood House  
74 Boucher Road, Belfast  
Co. Antrim  
BT12 6RZ

When responding via email or in writing, please state whether you are responding as an individual or representing the views of an organisation (please state the name of the organisation). All responses should quote the following reference “OREAP: Consultation on the SEA Environmental Report and RIAA.”.

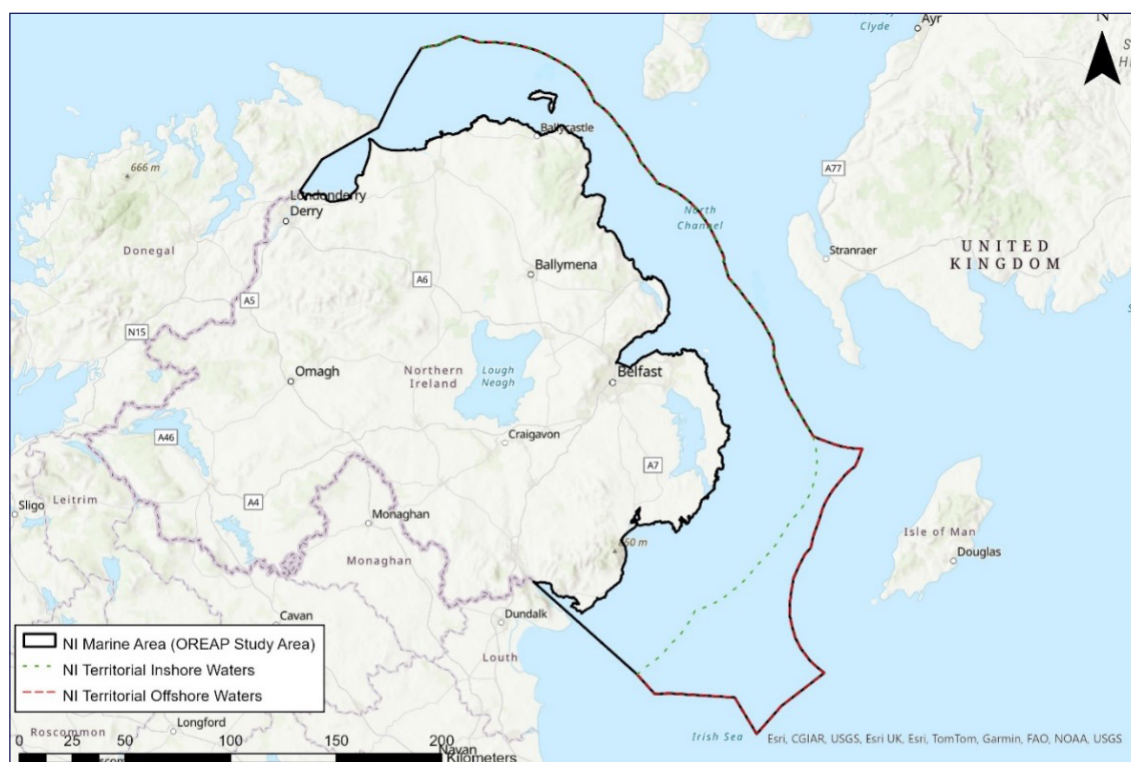
Responses must be received by 23:59 on 22 May 2025.

## Strategic Environmental Assessment and Habitats Regulations Assessment (HRA)

Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 sets out a procedure that must be undertaken by statutory bodies to identify and assess the environmental impact their plans or programmes are likely to have before they are adopted.

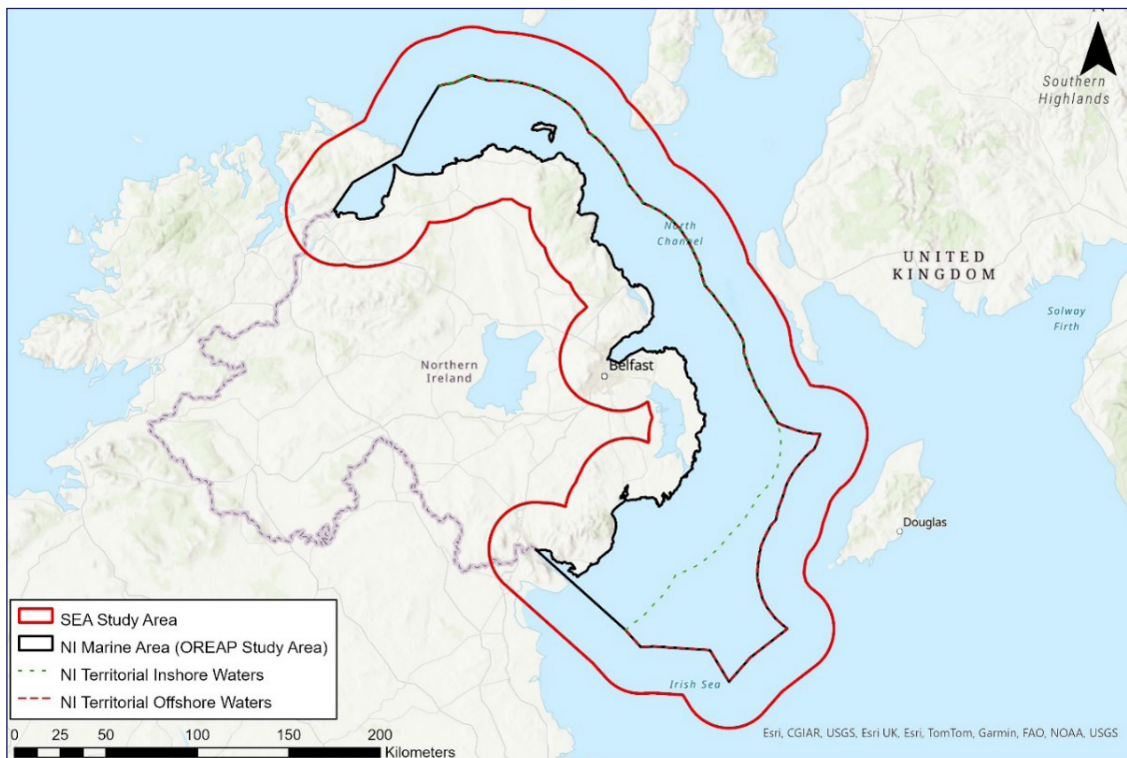
An early objective of the OREAP was to undertake environmental assessments (a Strategic Environmental Assessment and Habitats Regulations Assessment) and spatial characterisation work to establish potential resource in NI's marine area. A SEA has been completed and a HRA is underway. Both reports are summarized in this consultation document. Full details can be seen in the SEA Environmental Report and Report to Inform Appropriate Assessment (RIAA).

The NI marine area also referred to as the "OREAP Study Area" is comprised of two distinct areas, the NI inshore region (up to 12 nautical miles) and the NI offshore region, which extends into the UK Exclusive Economic Zone (EEZ) which can be seen in Figure 1.



**Figure 1: NI Marine Area - showing inshore and offshore regions**

For the purpose of the SEA assessment, a preliminary SEA Study Area has been defined comprising of the NI marine area and a 15km buffer around this area as can be seen in Figure 2. Within this SEA Study Area, the potential for positive or negative effects on SEA environmental topic areas has been determined, with reference, where relevant, to the potential for effects at a greater distance (e.g. for mobile species).



**Figure 2: SEA Study Area**

The environmental assessments have been completed in parallel with and to inform the further development of the OREAP. The process has promoted open communication with stakeholders to provide the most environmentally driven approach to ORE development in NI waters. This engagement included the OREAP Steering Group, the Offshore Renewable Energy Forum (OREF) and industry representatives.

Consultation was undertaken on SEA Scoping between September – October 2023. The responses submitted were taken into consideration in the assessments. This process ensured that key stakeholders were given the opportunity to provide additional input including supplementary data which has allowed the environmental assessments to provide a more accurate understanding of the demands on our marine area and to identify areas which may be more or less sensitive to ORE development.

The outputs of the environmental assessments will allow further refinement of the spatial plans for ORE to be integrated into the OREAP following this public consultation. This will ensure that the OREAP is an environmentally led plan which aligns with core policies of the draft Marine Plan<sup>1</sup> in particular the objective ‘to help realise the potential of energy resources and energy storage within the marine area, while fully considering the requirements of other marine interests’. The assessments have been undertaken in accordance with the draft Marine Plan and UK Marine Policy Statement. Once adopted, the Marine Plan for Northern Ireland will inform and guide the regulation, management, use, and protection of the NI marine area.

1 [Marine Plan for NI \(daera-ni.gov.uk\)](https://daera-ni.gov.uk)

## Identification and Assessment of Resource Zones

A three-stage identification and appraisal process detailed in section 6.1 and further specified in section 9.2 of the SEA Environmental Report was undertaken for each ORE technology. A summary of the process and the key considerations and outcomes have been outlined below.

## Stage One: Technically Suitable Resource Zones

The first stage of the assessment involved the identification of areas that are suitable for the development and operation of the various ORE technology types (fixed wind, floating wind, tidal, wave). These areas were then divided into what the SEA has termed Technically Suitable Resource Zones (TSRZ).

The criteria applied to each of the TSRZ can be seen in section 6.1 of the SEA Environmental Report. At this stage in the assessment areas which were considered to be too small (<10km<sup>2</sup>) or discontinuous to facilitate commercial scale development were screened out.

Based on the criteria applied for wave energy, water depth of 10m – 200m; average wave height >1.2m; average wave energy >20kW/m, no locations were identified as suitable for commercial scale wave energy extraction within the study area.

If it was not possible to spatially refine a TSRZ to avoid key areas of potentially significant environmental effects, it was recommended to screen out the TSRZ for further consideration. At this stage of the assessment the following TSRZs were screened out:

- Fixed Wind Rathin Torr Head
- Fixed Wind Ards Peninsula
- Fixed Wind Irish Sea Offshore 2

Where areas of a TSRZ were considered of higher risk, these zones were refined to avoid the potential for significant environmental risk based on key constraints and sensitivities. Seascape areas were used to partition the remaining TSRZ for each technology which can be seen in Annex A.

## Stage Two: Recommended Resource Zones

Following identification of the TSRZs a constraints screening was undertaken, to identify areas of higher risk, informed by key constraints and sensitivities data (listed in Annex C of the SEA Environmental Report).

Further refinement of these TSRZs resulted in the identification of 11 resource zones within NI's marine area which offer potential for ORE. The SEA has termed these Recommended Resource Zones (RZs) as they take into account avoidance of areas of highest environmental or technical constraint. These zones as referenced in section 9.2 of the SEA Environmental Report have been listed below and a map outlining these zones can be seen in Annex B.

### Fixed Wind

- Fixed – Atlantic
- Fixed – Mourne Lecale
- Fixed – Irish Sea Inshore
- Fixed – Irish Sea Offshore 1

### Floating Wind

- Float – Atlantic
- Float – Rathlin Torr Head
- Float – North Channel
- Float – Irish Sea Inshore
- Float – Irish Sea Offshore

### Tidal

- Tidal – Atlantic
- Tidal – Rathlin Torr Head

Further assessment of the areas was undertaken informed by wider constraints and sensitivities data (listed in Appendix D of the SEA Environmental Report). These assessments identified the potential for positive and negative effects of the areas on the environment in the short, medium, and long-term, and the likely significance of these effects.

The assessments recognise that development of ORE has the potential to have negative impacts on flora and fauna in their vicinity, marine mammals, birds, fish, and seabed habitats. In addition, localised effects on the seabed and water quality are likely during construction and decommissioning of ORE developments. There is potential for disruption or displacement of existing users within these areas, particularly for shipping and commercial fisheries.

The assessments recognised the importance of coastal landscapes and cultural heritage features, and the potential for ORE development to negatively affect sea views from these areas due to the visibility of the offshore infrastructure associated with ORE generation. However, the assessments also recognised the potential for long term positive effects through the generation of renewable electricity which has the potential to positively impact on air quality and climate by supporting a move away from fossil fuels.

## Stage Three: Refined Resource Zones

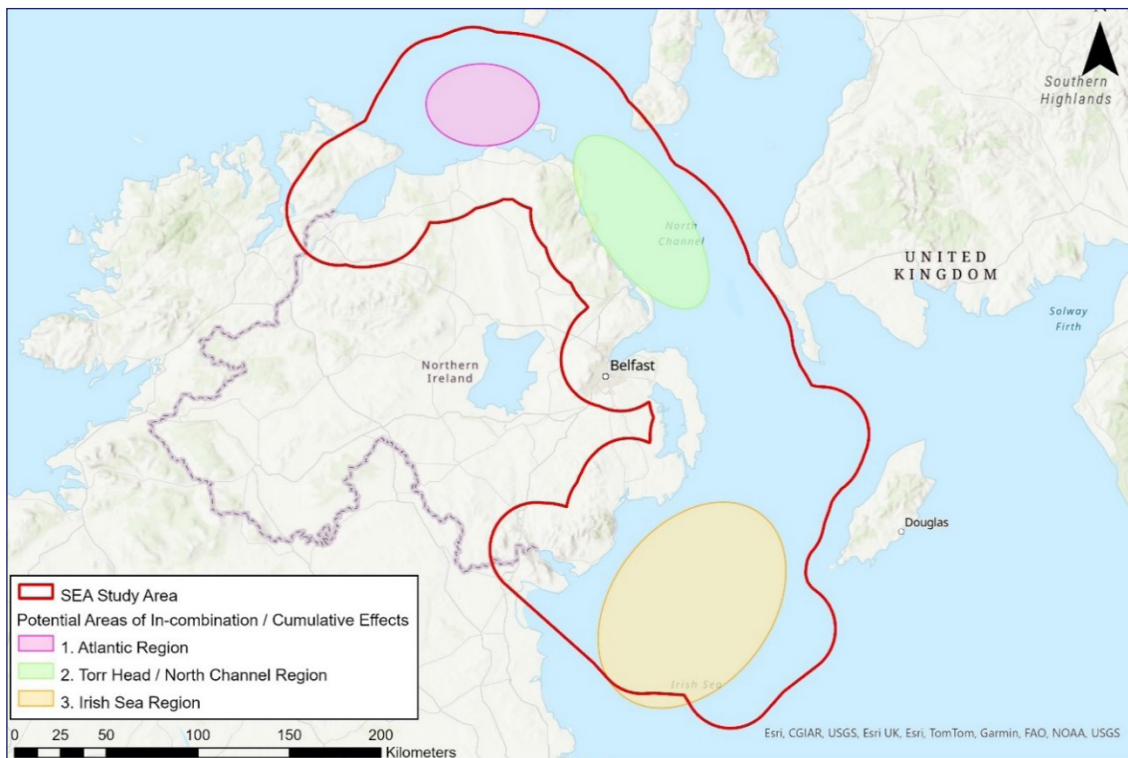
There is potential to further limit the environmental impacts of ORE in NI. The assessment conducted further refinement of the Recommended RZs to reduce the likely impacts of any potential ORE development. These areas represent the least environmentally constrained/sensitive areas which lie within the Recommended RZs. This refinement resulted in the removal of Float – Rathlin Torr Head. The Refined Resource Zones can be seen in Section 9.2 of the SEA Environmental Report and Annex C.



## Cumulative/In-Combination Effects

The environmental assessments also considered the potential for cumulative/in-combination effects of ORE. Three broad regions which have been detailed further in Section 9.3 of the SEA Environmental Report can be seen in Figure 3 below:

- Atlantic Region
- Torr Head / North Channel Region
- Irish Sea Region



**Figure 3: Potential areas of In-Combination and Cumulative Impacts**

These regions are where developments could interact at both the construction and operational stage and therefore have greater potential for in-combination or cumulative adverse effects, which would need to be taken into consideration at all future stages of offshore development.



## Mitigation and monitoring

The environmental assessments have recommended mitigation measures where potential adverse effects on the wider environment have been identified from potential ORE development.

Section 10.1 of the SEA Environmental Report outlines recommended mitigation measures where potential adverse effects on environmental topic areas have been identified from implementation of the OREAP. This includes general mitigation measures such as further environmental studies based on detailed designs and construction methodologies and mitigation by environmental effect. The proposed measures aim to prevent, reduce and as fully as possible, offset any significant adverse effects on the environment due to implementation of the OREAP.

The mitigation measures that have been put forward in the OREAP and SEA processes will be included within the OREAP and will be undertaken in the course of its adoption, pending the outcome of a 12-week public consultation period. It is essential that all mitigation proposals are taken into consideration at all future stages of offshore development.

The implementation of the OREAP will be monitored on an ongoing basis by the OREAP Steering Group in order to identify at an early stage, any unforeseen adverse effects which will enable remedial action to be taken as appropriate. An SEA monitoring programme is outlined in Section 10.2 of the SEA Environmental Report.

This monitoring will be undertaken in conjunction with future reviews of the OREAP, in advance of updates, to enable monitoring outcomes to influence OREAP development. Monitoring is also likely to be required as part of the consenting conditions at the project level for ORE developments. Any future development which may be sited in areas identified in Figure 3 should undertake monitoring within the wider area, to inform the baseline and potential adverse effects of subsequent developments within that area.

### RIAA mitigation

Plan-level mitigations will ensure that any ORE development arising from the OREAP fully considers the impacts and effects on European sites, their Qualifying Interest Features (QIFs), and Conservation Objectives (COs) at a project-level. The following plan-level mitigation are proposed to be included within the OREAP:

- All ORE projects arising from the plan must undertake project-level HRA to fully assess the impacts and effects on European sites, their QIFs and COs and must avoid adverse effects on European sites.
- The mitigation hierarchy must be applied to avoid impacts for all ORE projects affecting marine ecosystems.
- The mitigation hierarchy must be applied to noise and water quality impacts for all ORE projects.
- All ORE projects arising from the plan must include biosecurity measures to reduce the risk of introducing or spreading Invasive Non-Native Species (INNS).

## Habitats Regulation Assessment

A Habitats Regulation Assessment (HRA) is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (Habitats Directive) as set out in The Conservation (Natural Habitats, etc) Regulations (NI) 1995 as amended.

A HRA considers the implications of a plan or project (either individually or in combination with other plans and projects) on a European site. It consists of a staged approach with each stage determining whether a further stage in the process is required.

The first part of the process ascertains whether a plan or project is directly connected with, or necessary to, the management of any European site, and if this is not the case, whether it is likely to have a significant effect on any European site (either alone or in combination with other plans or projects) in view of the site's conservation objectives. The RIAA has been prepared and provides a transparent assessment of the OREAP and examines the Likely Significant Effects of the plan and the potential for Adverse Effects on Site Integrity of European sites. The RIAA states that with the application of appropriate plan-level and project-level mitigation measures, adoption of the OREAP will not adversely affect the integrity of any European site.

The RIAA will inform the conclusions of the Appropriate Assessment to be undertaken by the department. The resource zones are subject to the public consultation process and further refinement of the areas will be considered based on the best available data and evidence. As such these figures and those contained within the SEA Environmental report and supplementary materials do not represent ambition or commitment at this stage.

Table 1 outlines each of the Recommended and Refined RZs and the maximum theoretical capacity of each area. The maximum theoretical capacity represents development of an ORE technology across the whole area of a resource zone. It is not a realistic development scenario but allows a worst case scenario to be assessed from an environmental impact perspective.

Capacities for resource zones provided are mutually exclusive for example, the environmental assessment identified the Atlantic Area as having potentially suitable areas for fixed, floating, and tidal energy, however, all three would not be possible.

Depending on technology type and final assessments an estimate for potential offshore generation within the NI marine area would likely be between 1 - 4 GW. This assumption is based only on environmental assessments and further assessment is needed to assess both the commercial viability of the resource zones as well as the cumulative impacts of potential development within these areas.

**Table 1: Recommended & Refined Resource Zones and maximum theoretical capacities (GW)**

Technology	Resource Zone	Recommended Maximum theoretical capacity (GW)	Refined Maximum theoretical capacity (GW)
<b>Fixed</b>	Atlantic	0.43	0.26
	Mourne Lecale	0.45	0.17
	Irish Sea Inshore	1.76	0.52
	Irish Sea Offshore 1	0.79	0.56
<b>Floating</b>	Atlantic	2.22	1.06
	Rathlin Torr Head	0.43	-
	North Channel	1.81	0.54
	Irish Sea Inshore	1.48	0.50
	Irish Sea Offshore	5.7	1.72
<b>Tidal</b>	Atlantic	1.62	0.99
	Rathlin Torr Head	0.89	0.15

## Next steps

Following a 12 week public consultation the Department will consider further refinement of areas as appropriate based on the best available data and evidence. The OREAP acknowledges that there are areas within the Recommended RZs which are environmentally aspirational (refined zones), and this will be a key consideration when considering options for ORE at the next stage of the refinement process.

The potential areas will then undergo further consideration by The Crown Estate during the regional refinement stage (leasing assessment) and by developers at project level through the various consenting processes.

## Consultation Questions

Stakeholders are asked to consider in full the contents of this consultation and all supplementary materials before providing a response to the consultation questions.

### Question 1:

**On the basis of the assessments conducted do you agree with the areas identified and proposed mitigation measures? If not please tell us why.**

### Question 2:

**Do you have any comments on the SEA Environmental Report?**

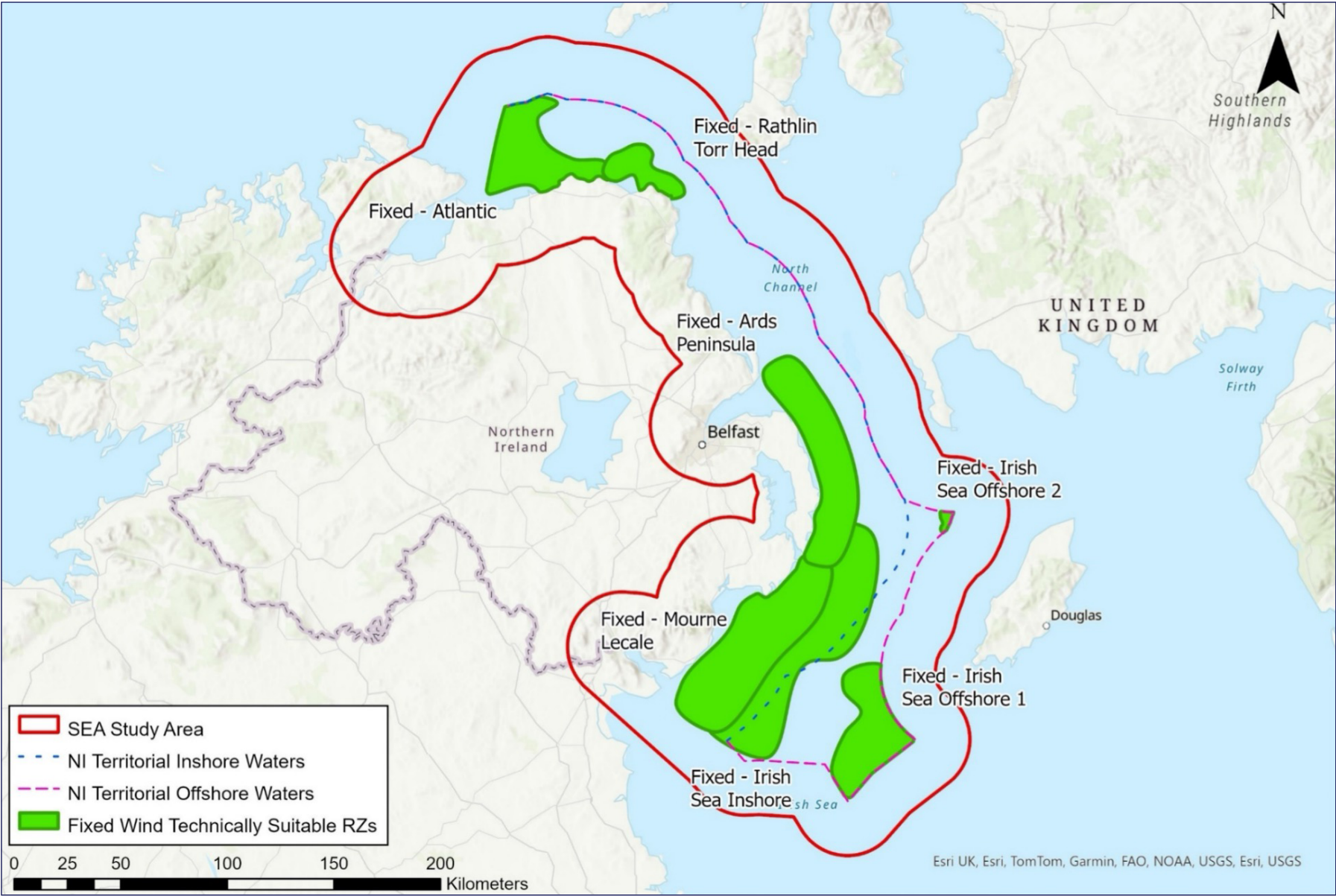
### Question 3:

**Do you have any comments on the Report to Inform the Appropriate Assessment?**

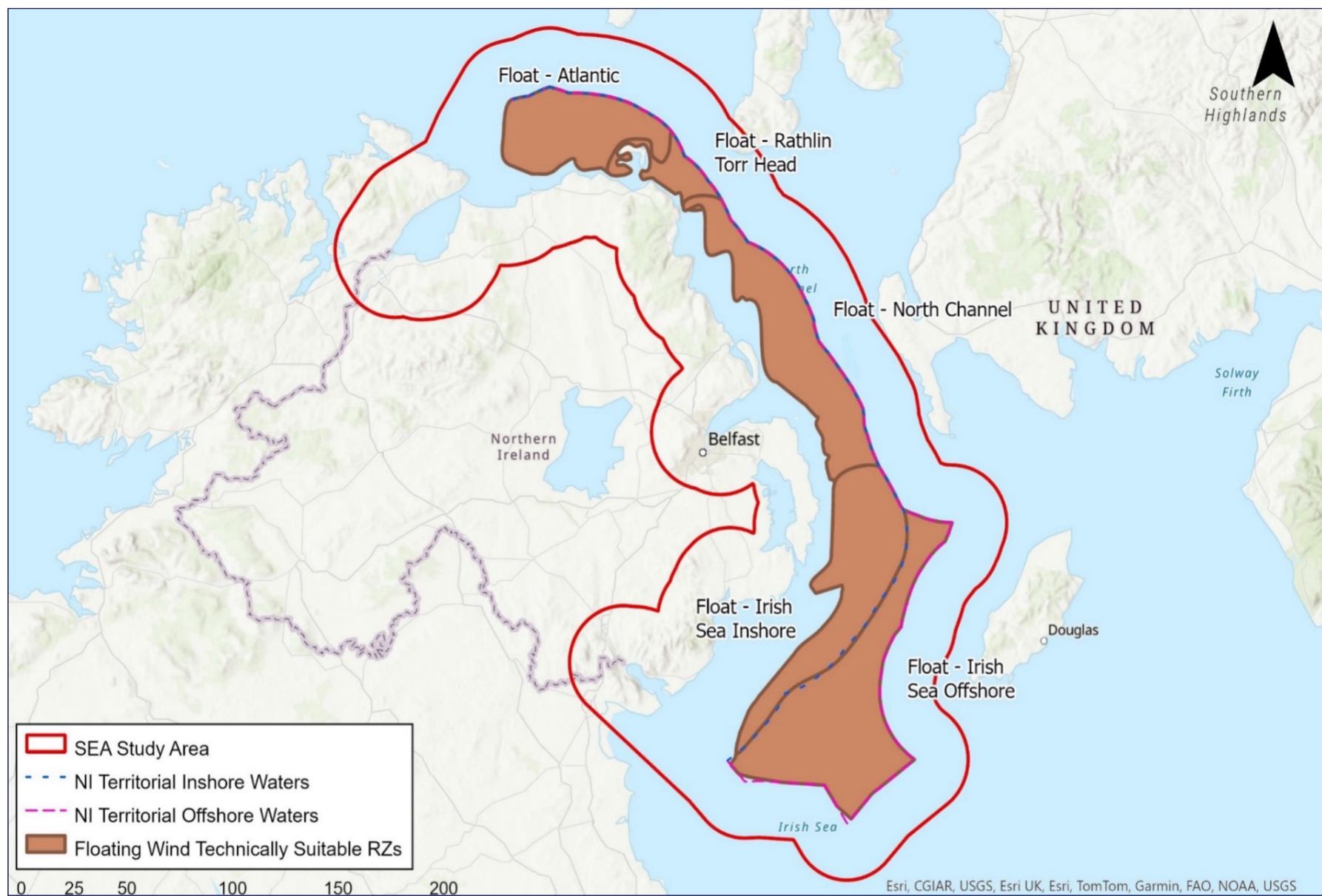
### Question 4:

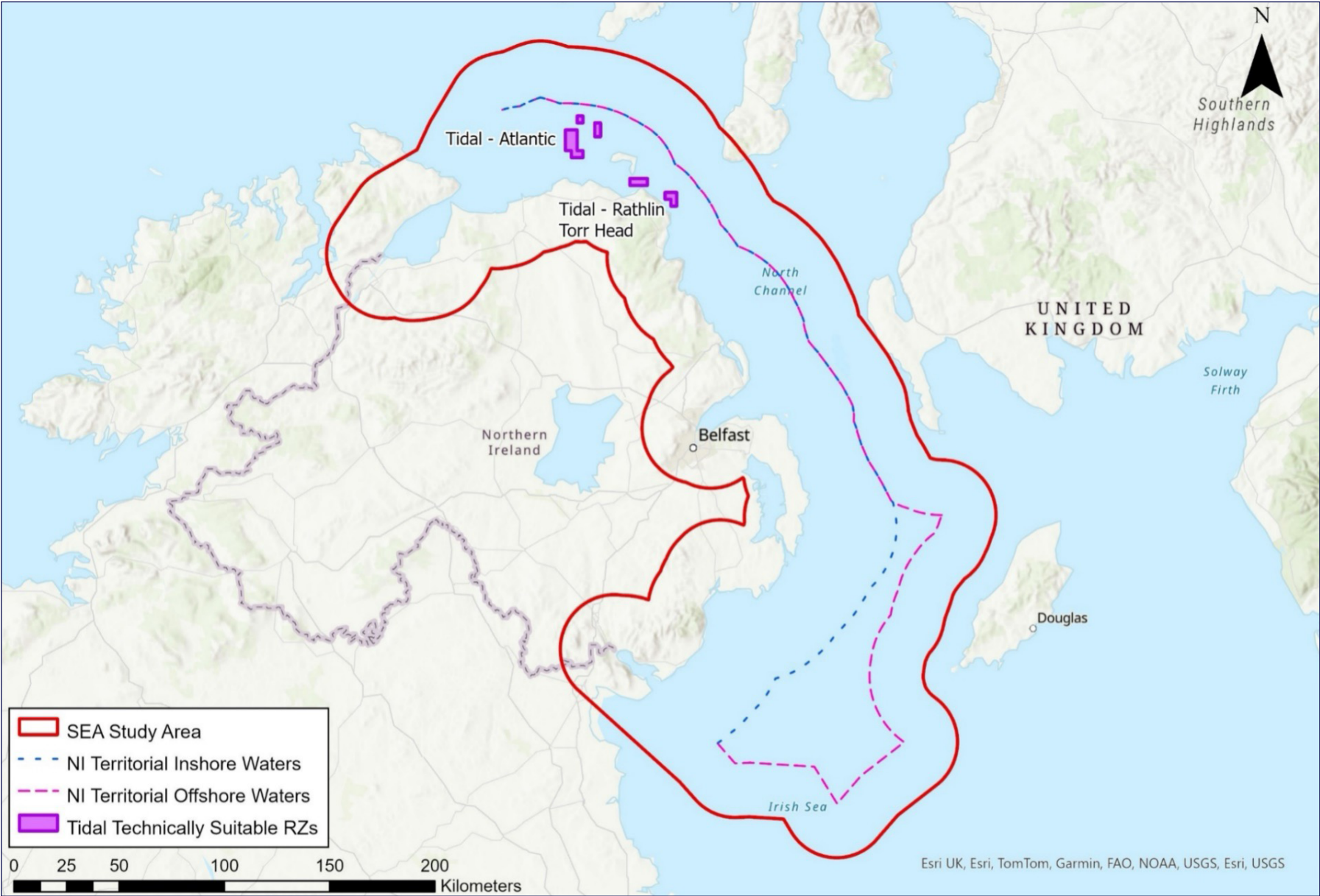
**Do you have any comments on any of the areas which has not already been considered in supporting documentation. Please provide evidence to support your answer.**

Annex A: Technically Suitable Resource Zones



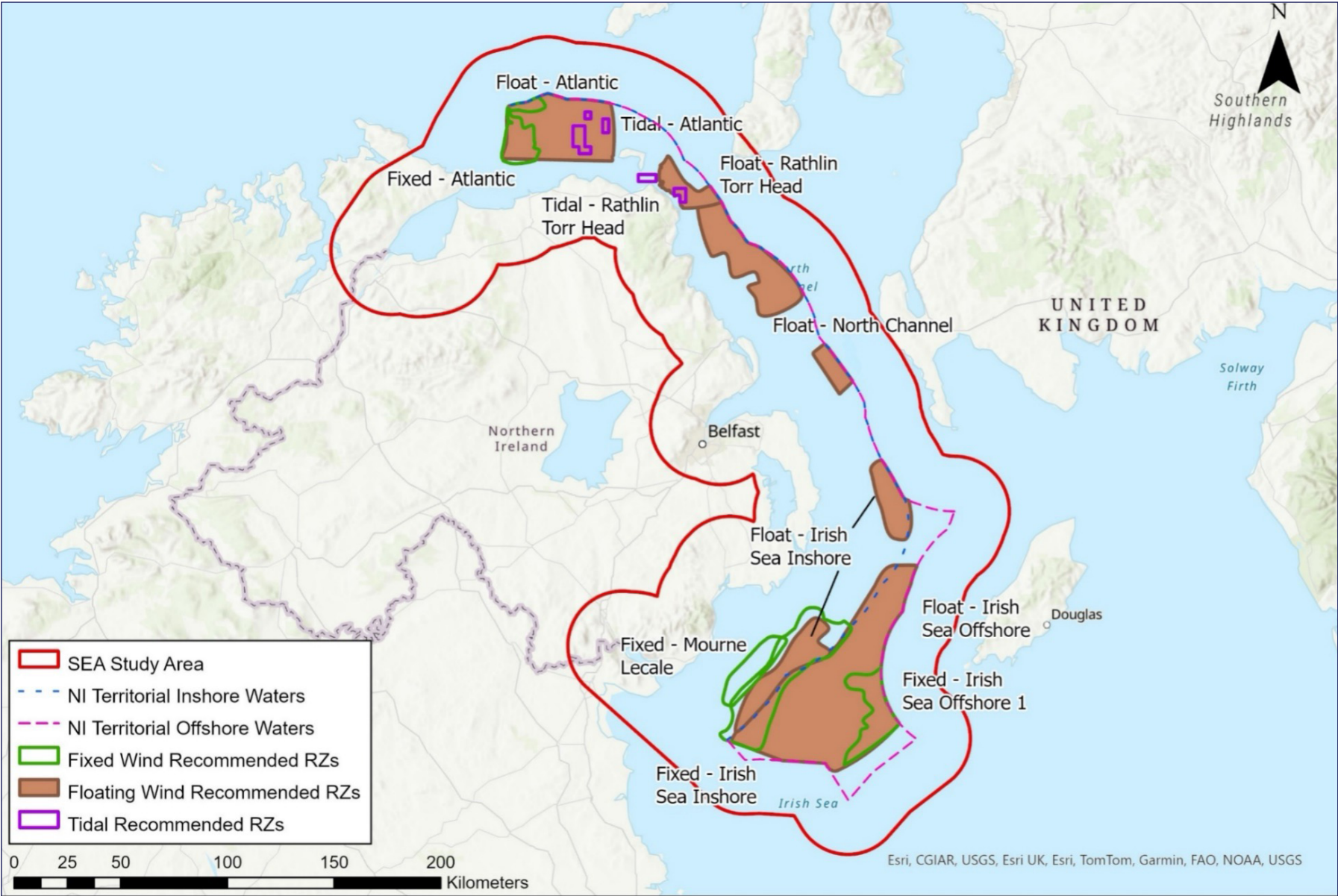








# Annex B: Recommended Resource Zones



Annex C: Refined Resource Zones

