Planning for Offshore Renewable Energy in Scottish Waters

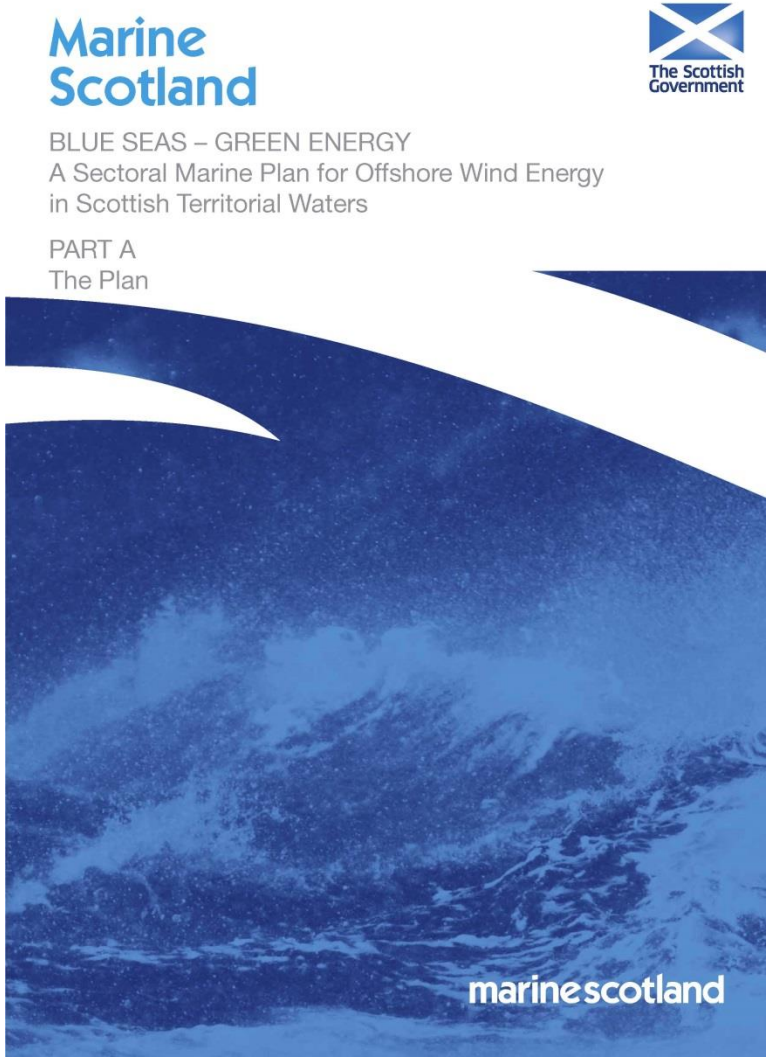
The Scottish Government

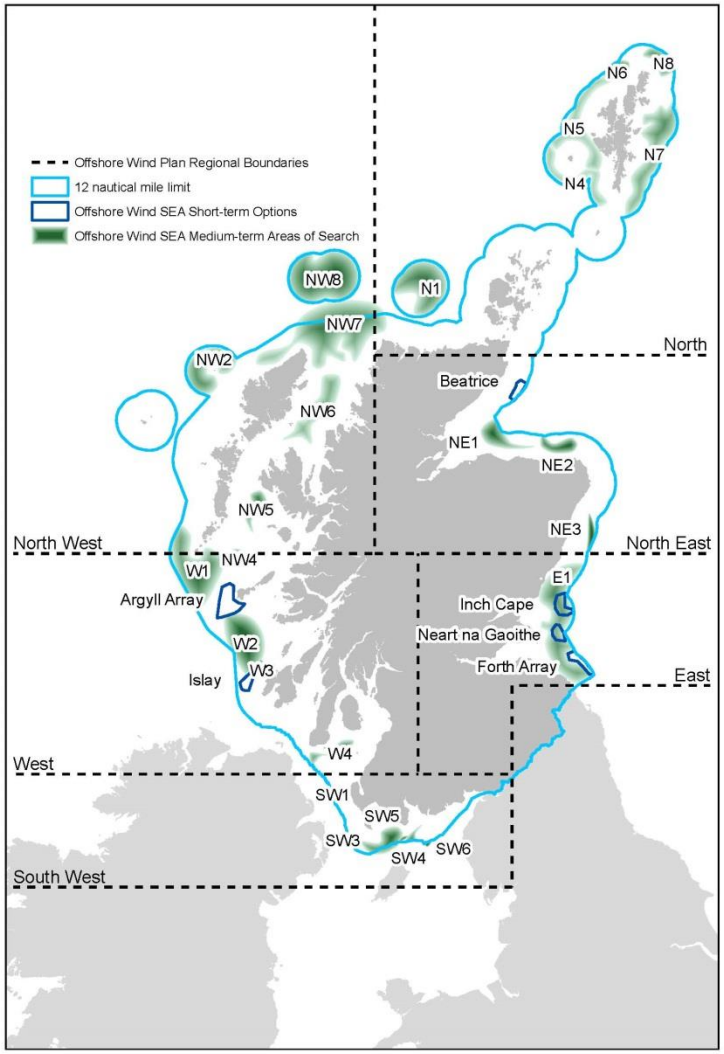
David Pratt

Project Lead – Sectoral Marine Planning for Offshore Renewable Energy

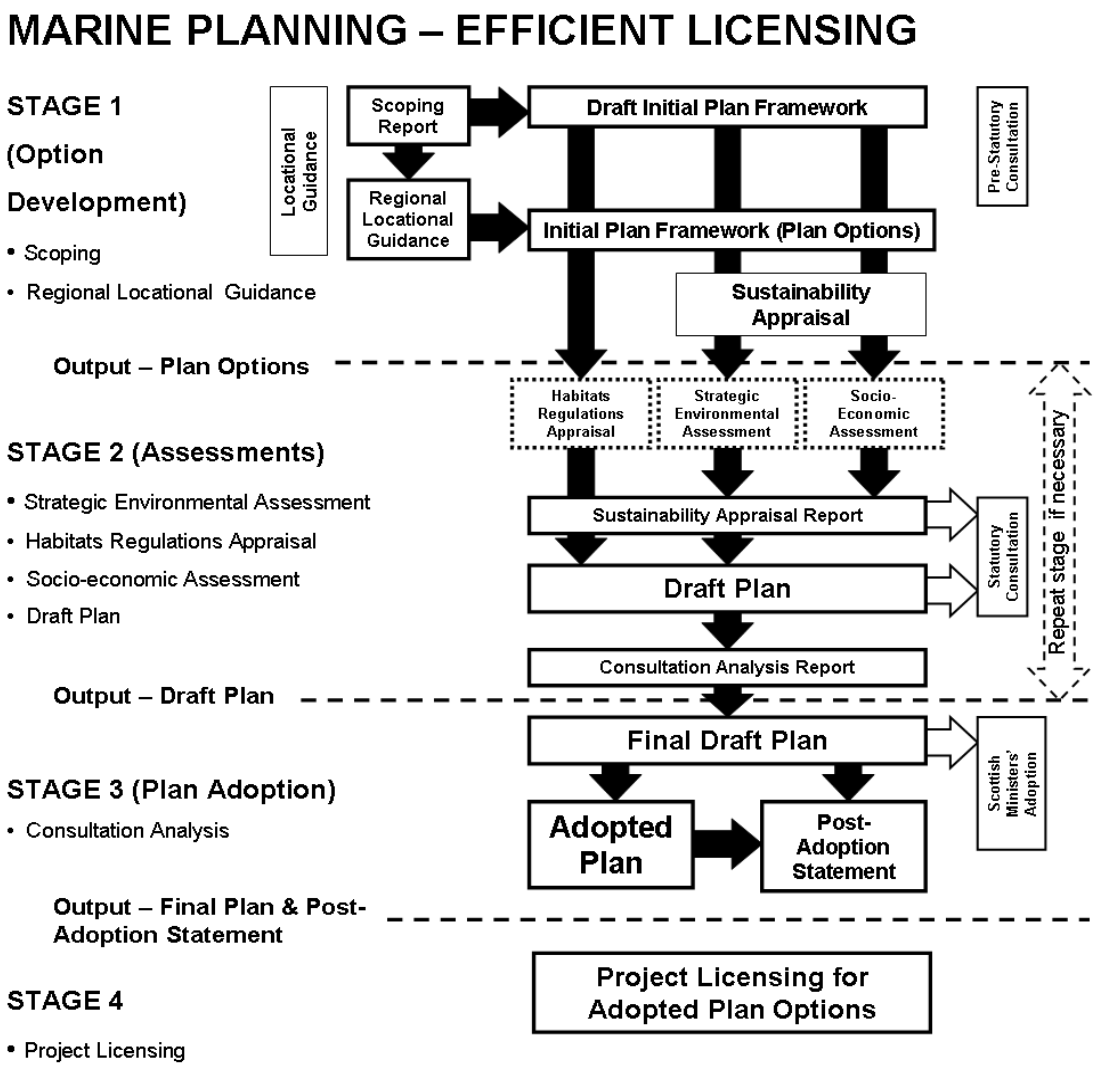
marinescotland

The Plan for Offshore Wind Energy





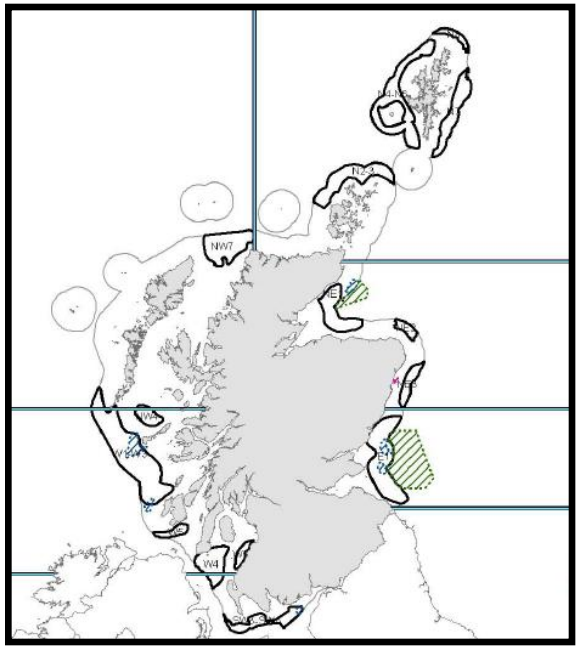
Sectoral Marine Planning



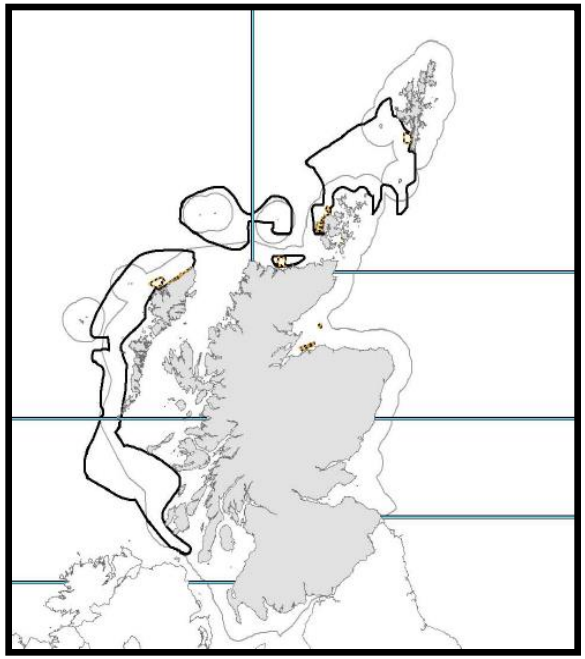
First Step…

- **Scoping exercises undertaken in late 2011 – early 2012**

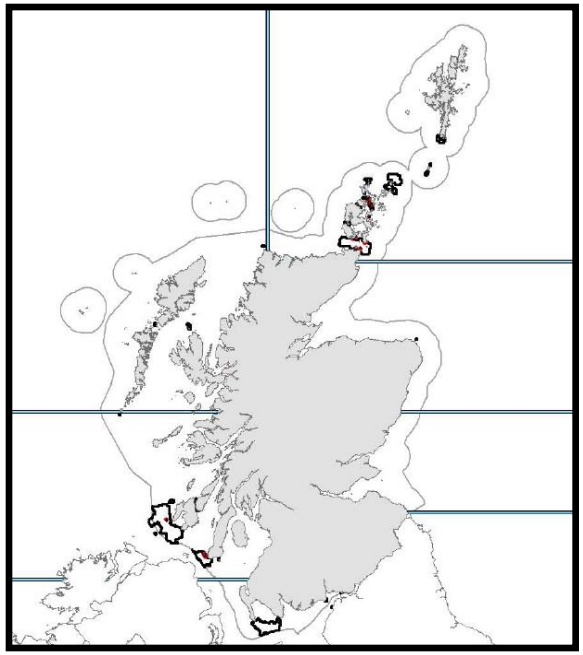
OFFSHORE WIND



WAVE



TIDAL



Where then?

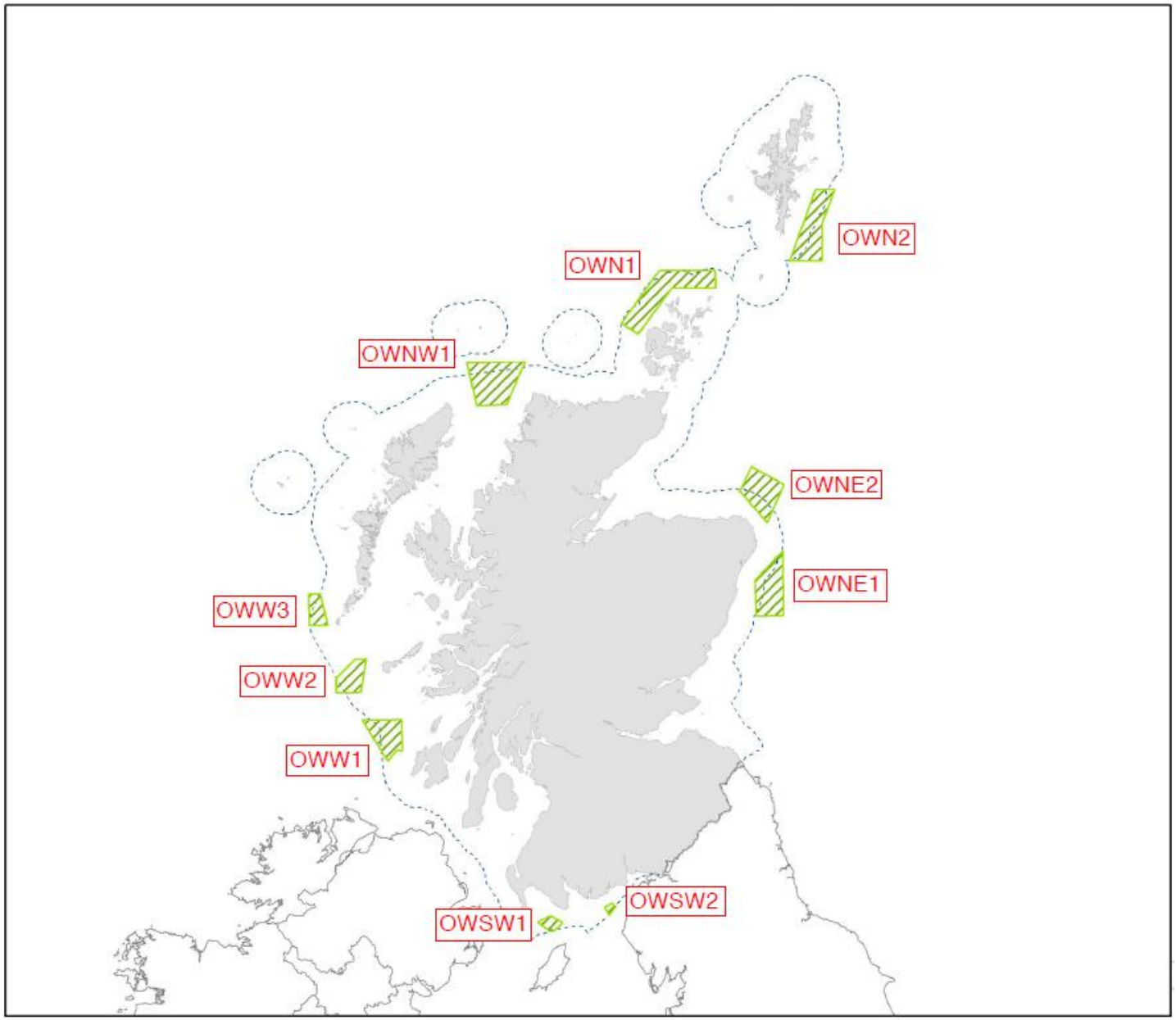
- ‘Pre-consultation’
  - **Additional to statutory requirements**
  - **Providing an opportunity for early views on the content of the plan, and the preparation process**

- Areas of Search identified (Scoping)
- Public Participation Statement
- Draft Initial Plan Frameworks
- *Draft Regional Locational Guidance

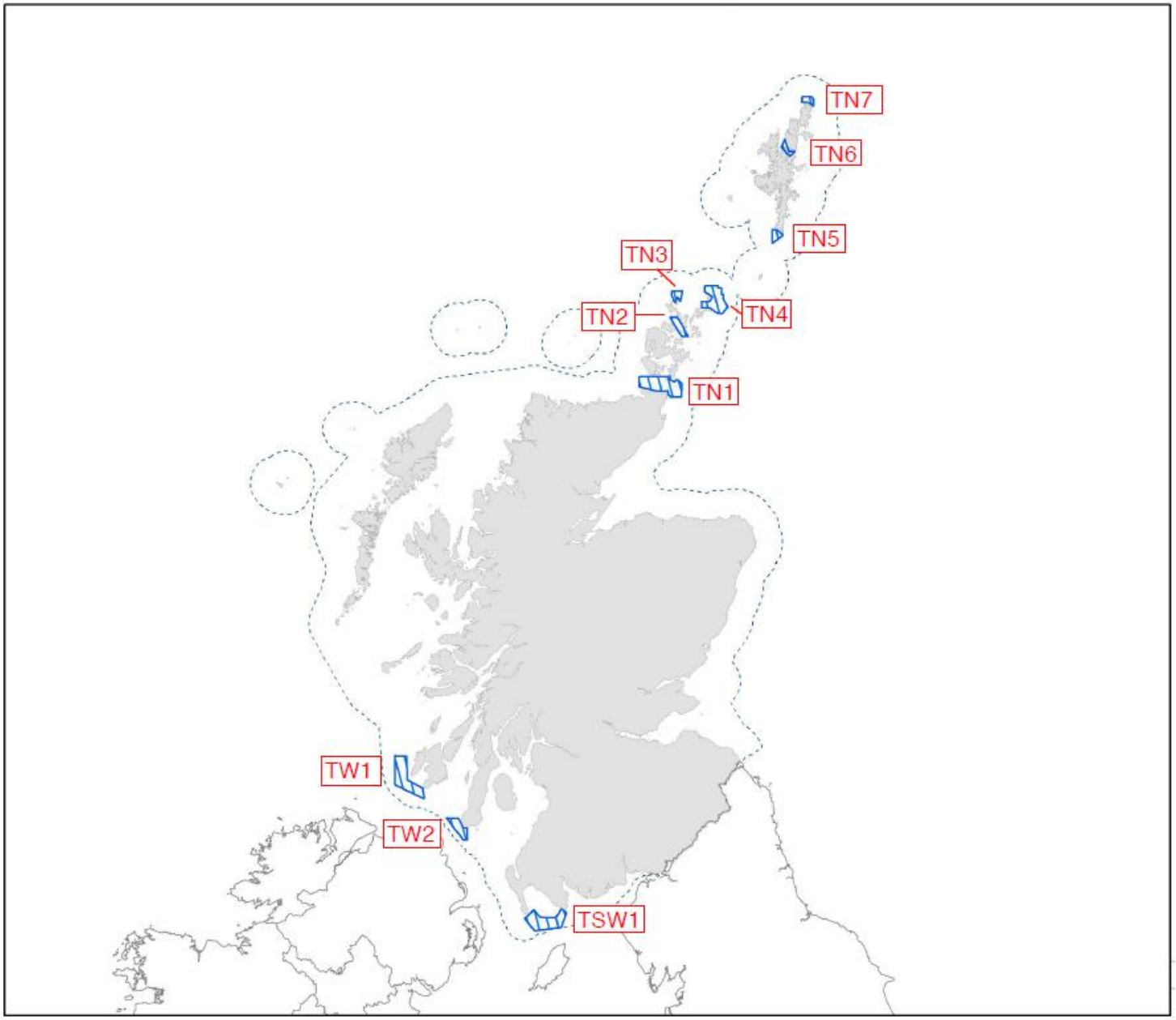
Where now?

- Draft ‘Plan Options’ identified
- Draft Plan options currently subject to assessment:
  - Strategic Environmental Assessment
  - Habitats Regulations Appraisal
  - Socio-economic Impact Assessment
- Use assessment findings to shape the Draft Plans

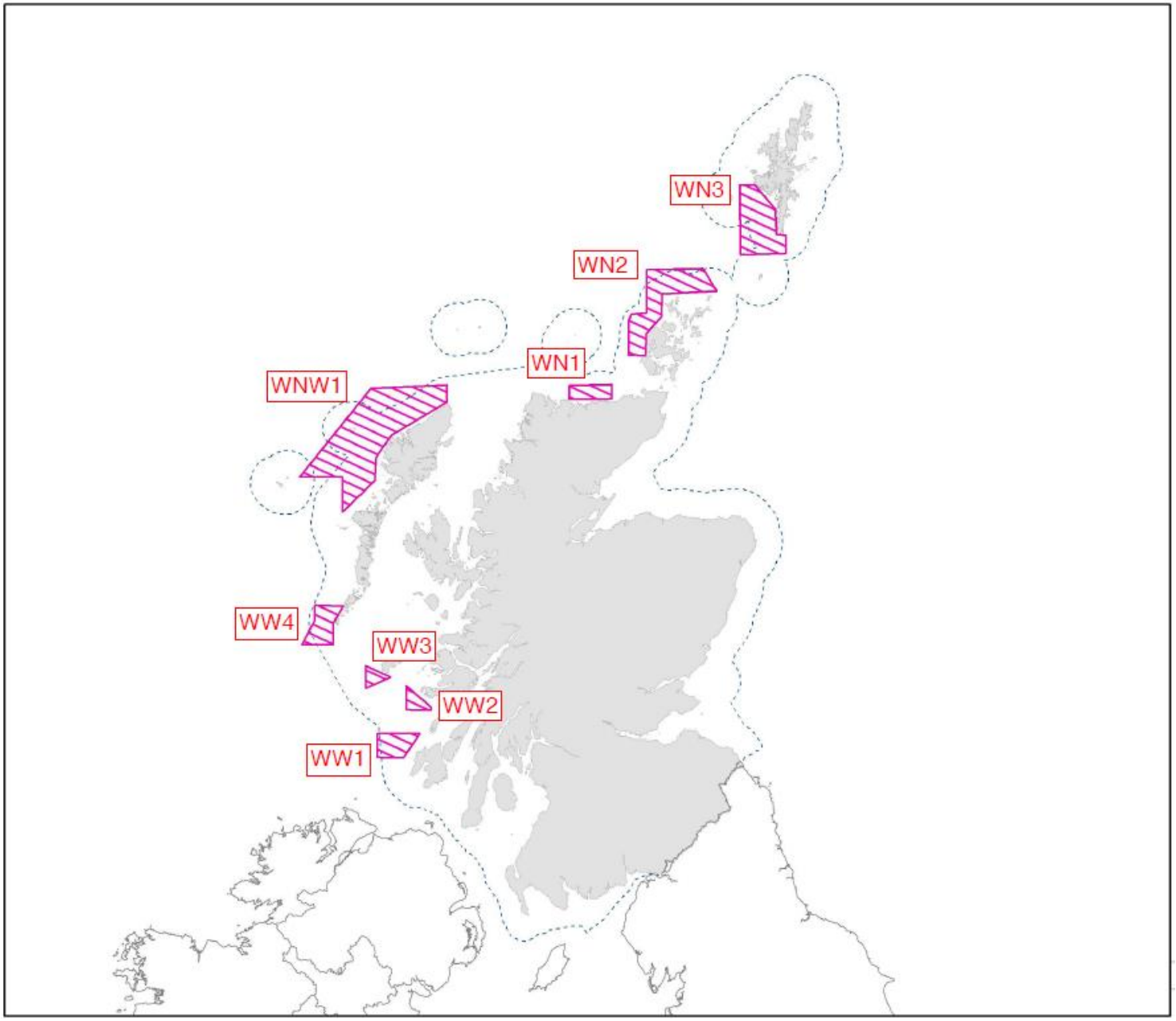
Offshore Wind



Tidal



Wave



Approach to the Sustainability Appraisal

- Assessment informed by:
  - Current state of the marine environment and its likely future evolution
  - A Socio-economic Baseline Review and Data Gap Analysis
  - Research into the potential effects of devices
  - Initial information from project level assessment and monitoring
- Where possible environmental issues were identified at regional level

Approach to the Sustainability Appraisal

- Assessment looked at potential effects of:
  - alternative wind, wave and tidal technologies;
  - development within the alternative draft plan option areas with respect to the environment and existing sea users; and
  - High, medium and low growth scenarios
- Recommendations and mitigation:
  - Specific to draft plan options
  - Considerations for project level assessment
  - Wider marine planning and research

Timetable

- Undertake Assessments – Current Stage
- Publish Draft Plans, along with the Sustainability Appraisal Report, for public consultation in Summer 2013 *
- Consultation will be undertaken and analysis published.
- Plans finalised in 2013

* Scotland's first Draft National Marine Plan and proposed network for Marine Protected Areas (MPAs) will also be out for consultation

What’s in the Draft Regional Locational Guidance?

http://www.scotland.gov.uk/Topics/marine/marineenergy/Planning

- Shows initial options – areas of search
- Explores potential areas for development
- Identifies wider baseline information relating to a wide range of features and activities
- Highlights further (non-spatial) information as a means of exploring key constraints and opportunities
- Next steps – refine in line with ‘Draft Plan’

Draft RLG - Contents

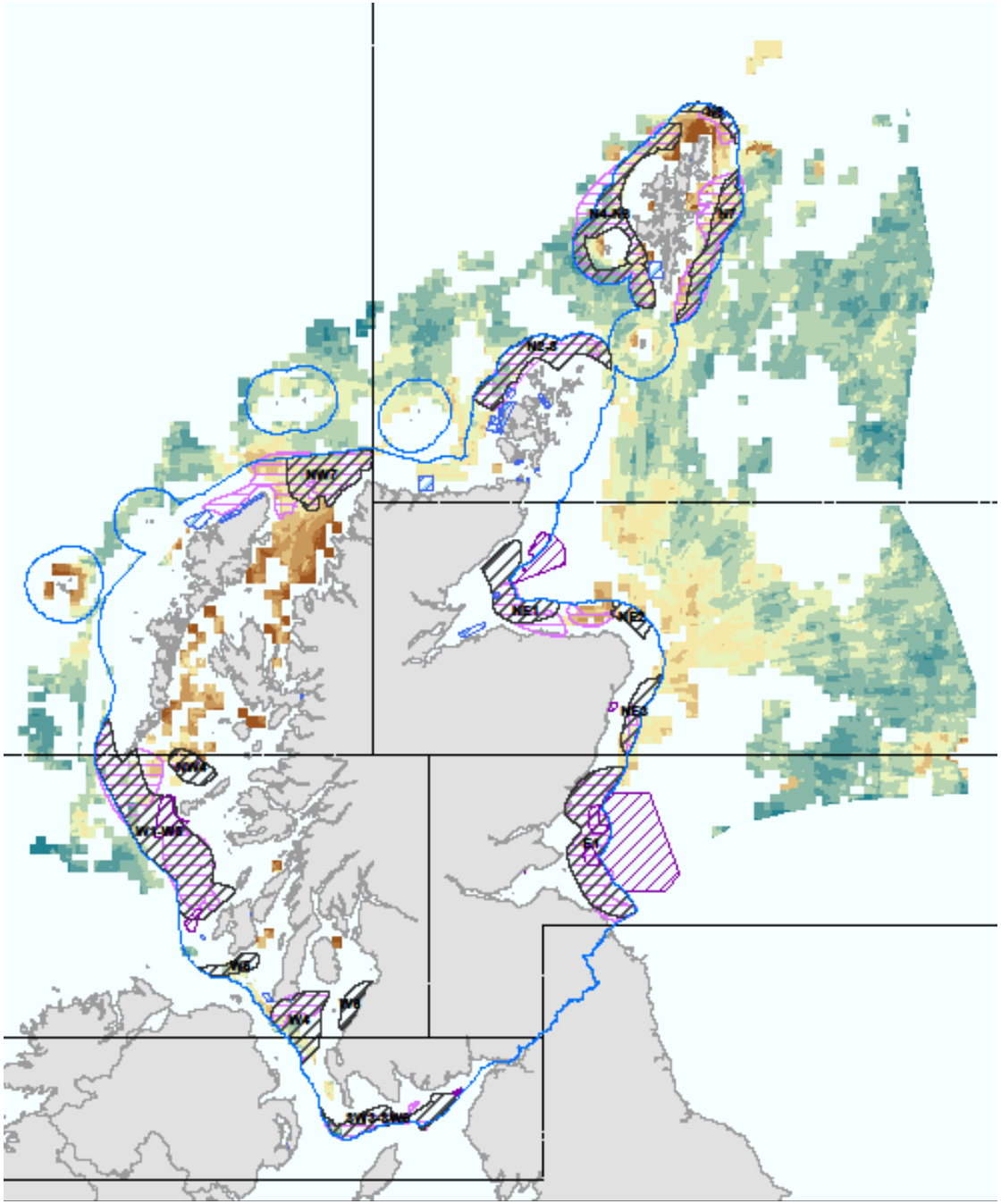
- Resource
- Aquaculture
- Aviation
- Bathymetry and Seabed
- Cultural Heritage
- Defence
- Environment
  - *Designated Sites*
  - *Landscape Designations within Region*
  - *Marine Mammals, Basking Sharks and Seals*
  - *Seabirds*
- Fishing
  - *Commercial Fishing Regional Overview*
  - *Areas of Search Interaction*
  - *Fish Processing Activities*
  - *Wild Salmon and Sea Trout*
- Infrastructure and Grid Provision
  - *Existing*
  - *Future*
- Oil and Gas
- Planning
- Ports and Harbours
- Recreation
  - *Recreational Angling*
  - *Recreational Boating*
  - *Scuba Diving*
  - *Sea Kayaking*
  - *Small Boat Activity*
  - *Surfing and Windsurfing*
  - *Areas of Search*
- Shipping
- Social
- Supply Chain
- Tourism

Initial assessment of potential locations for deep water turbines

Objective: To investigate deep water sites where floating wind turbines could be installed.

Principal requirements:

- Depth between 80-120 m
- Wind resource > 9 ms-1 (mean annual wind speed)
- Relative proximity to electrical substation or cable connection
- Relatively low wave activity
- Proximity to a harbour
- Low constraint level (potential interference with other users of the sea)



2011 Marine Scotland Science Scoping Report

- Constraint layer clipped by depth used to identify potential floating turbine areas

Additional Layers:

Wind Resource

Electrical Substation

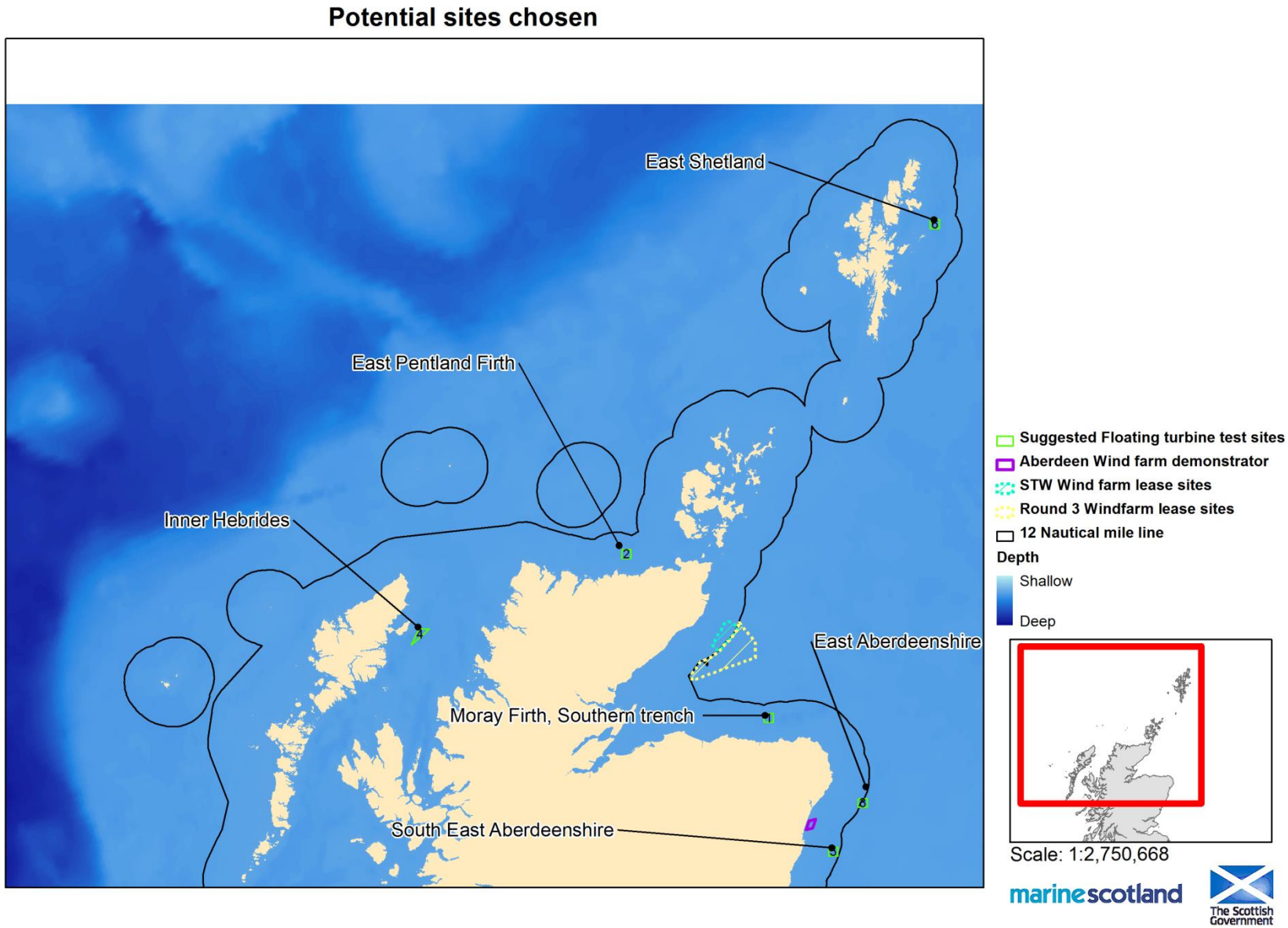
Cable & Cable Landings

Wave activity

Proximity to Harbour

Constraint level

Potential T&D Deepwater Locations



More information -

- Offshore Renewable Energy Planning Webpage
- http://www.scotland.gov.uk/Topics/marine/marineenergy/Planning

- Offshore Renewable Energy Planning Mailbox
- offshorerenewableenergy@scotland.gov.gsi.uk