



Meeting the renewable energy and MPA targets – challenges & opportunities

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Meeting the renewable energy and MPA targets – challenges and opportunities



- What are the renewable energy targets?
- Future scale of renewables projects
- Examples of good practice within the sector
- Challenges and opportunities for location and management of MPAs

Marine Renewables Targets

- Government target 20% electricity from renewables by 2020
- Ten fold increase in renewable energy needed by 2020 – offshore wind biggest contributor by far
- December 2007 - Government announcement to open up seas to provide an additional 25GW from offshore wind by 2020 (enough to supply electricity to 25 million homes)
- The SEA currently being carried out for offshore energy will identify those areas which government believe are suitable for development with appropriate constraints/conditions



Marine Renewables Targets



- Wave and tidal are important but unlikely to contribute at any scale before 2025.

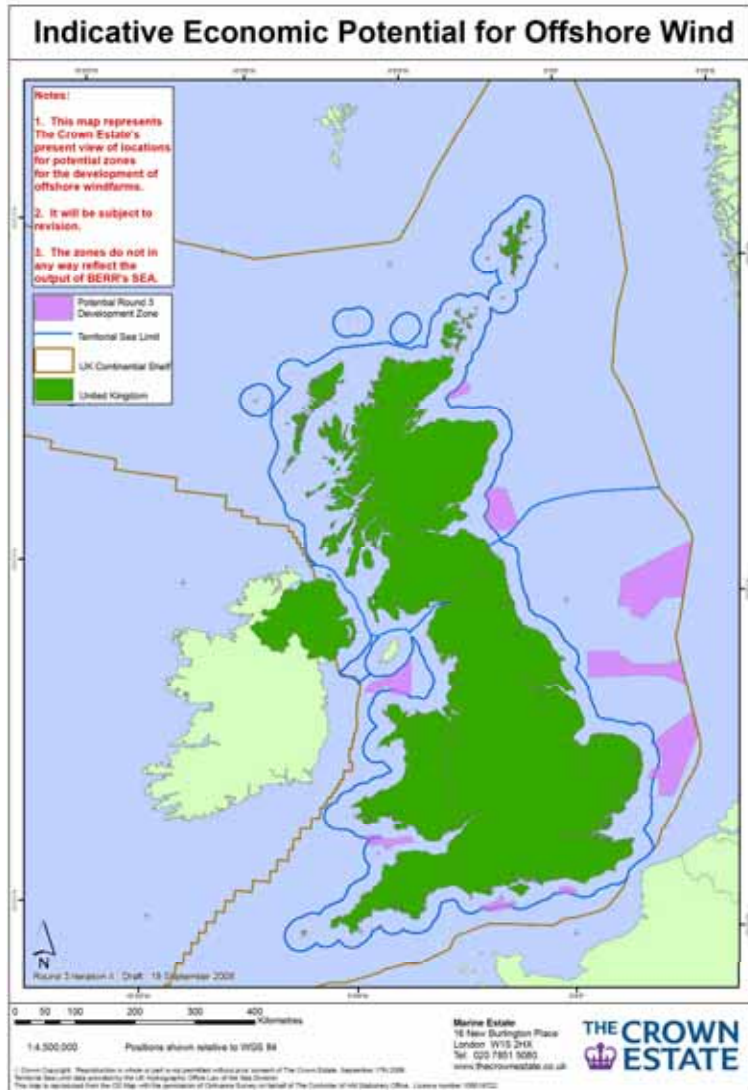


Where we are today



- 8GW electricity already planned from Rounds 1 and 2
- Round 2 – three strategic areas: North West, Greater Wash, Thames Estuary
- Of that 26% operational, 10% under construction and 29% consented

Future Scale of Renewables Projects



- Recent Crown Estate announcement showed seabed areas in which they are seeking developer interest for Round 3
- Subject to outcome of SEA
- Consent window 2012 – 2015 with construction planned 2014 – tight timescales

Marine Renewables and Natural England

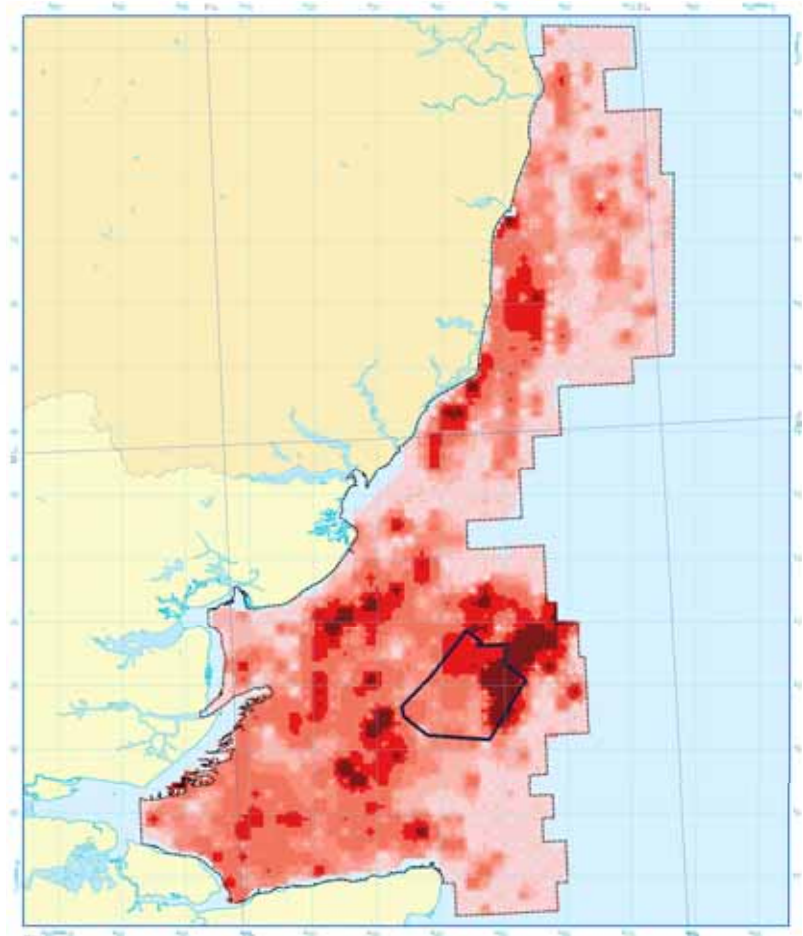


- Natural England supports renewable energy as part of a strategic approach to emissions reduction
- We are working closely with government and industry, and by producing guidance, to ensure that windfarms are designed and built in the right location and in the right way to avoid significant impacts on wildlife, natural features and landscape

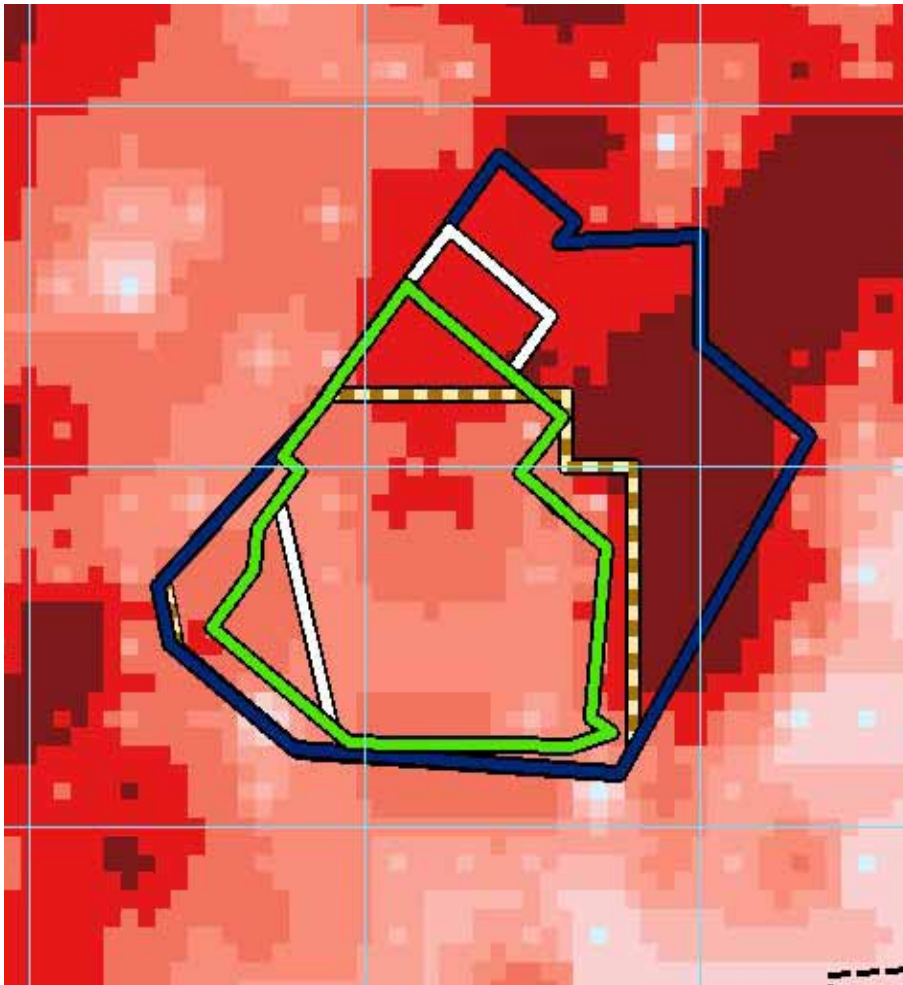
Examples of good practice working within the sector - London Array







- Round 2 Project in the Thames Estuary
- Up to 271 turbines, 245km², 1 GW
- During baseline surveys it became apparent that the area is important for red throated diver – pSPA



Examples of good practice working within the sector- London Array



Key

-  Phase 1 Aug. 05
-  Option a Nov. 05
-  Option b Nov. 05
-  Indicative Build

- Indicative build - 12.6% interaction
- Option a – 3.1% interaction

Examples of good practice working within the sector- London Array



- Close working with developer – no surprises when EIA submitted
- EN scoped AA with developer, led to several iterations of actual shadow AA by DTI
- Consented December 2006 as phased development
- 175 turbines avoiding highest concentration of red throated divers
- Subject to post-construction monitoring and review
- Ongoing involvement: demonstrates an adaptive management approach



Examples of good practice working within the sector - Thanet

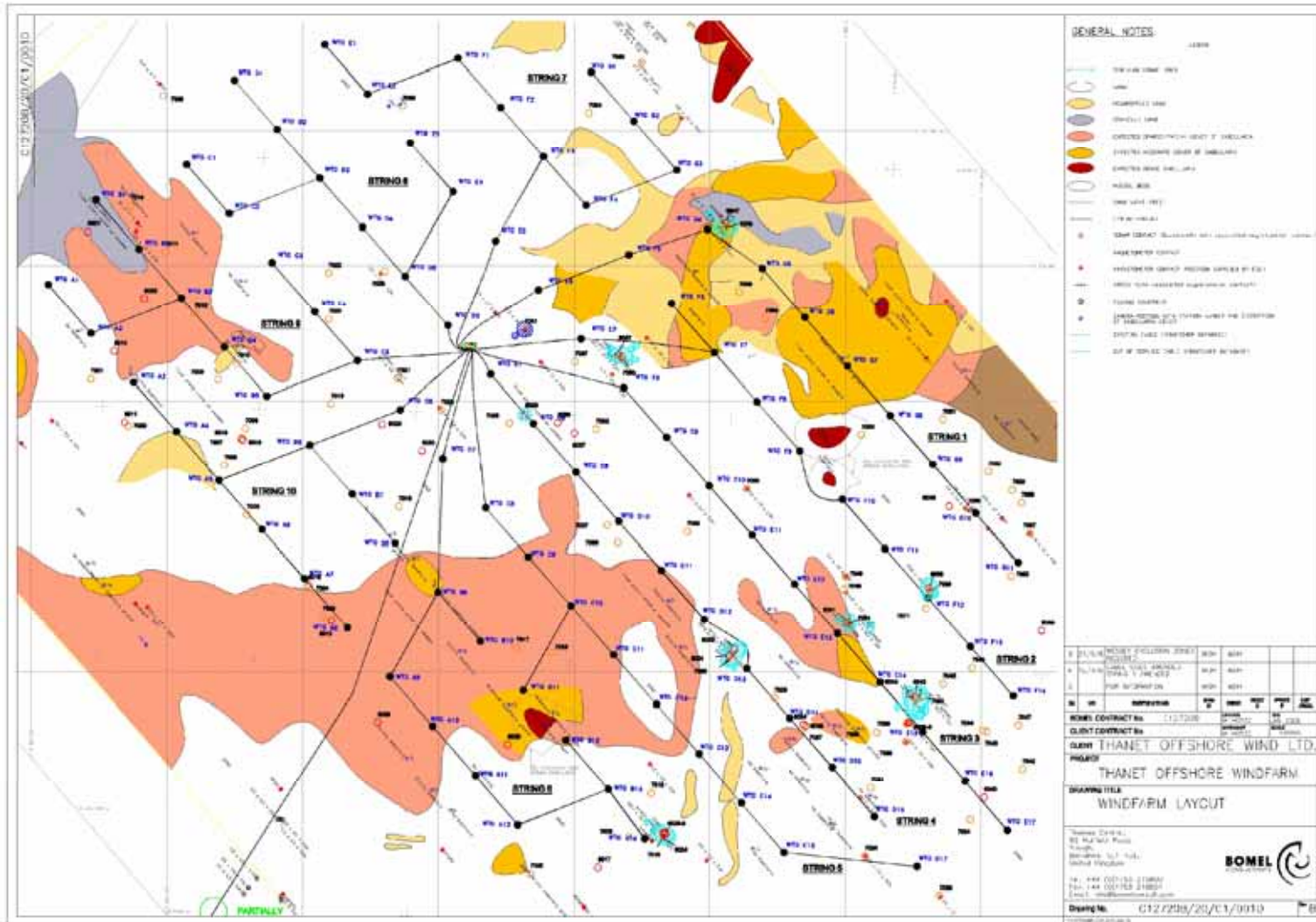


- Area found to contain *Sabellaria spinulosa* in its reef building form
- Annex I habitat under Habitats Directive
- Developer agreed to re-survey area in 12 months prior to construction and micro-site turbines and cables as necessary to avoid reef areas
- Agreed a practical reef classification with developer which could be used in mapping and repeat surveys



Sabellaria spinulosa reef
(courtesy of Conoco Philips)

Examples of good practice working within the sector - Thanet

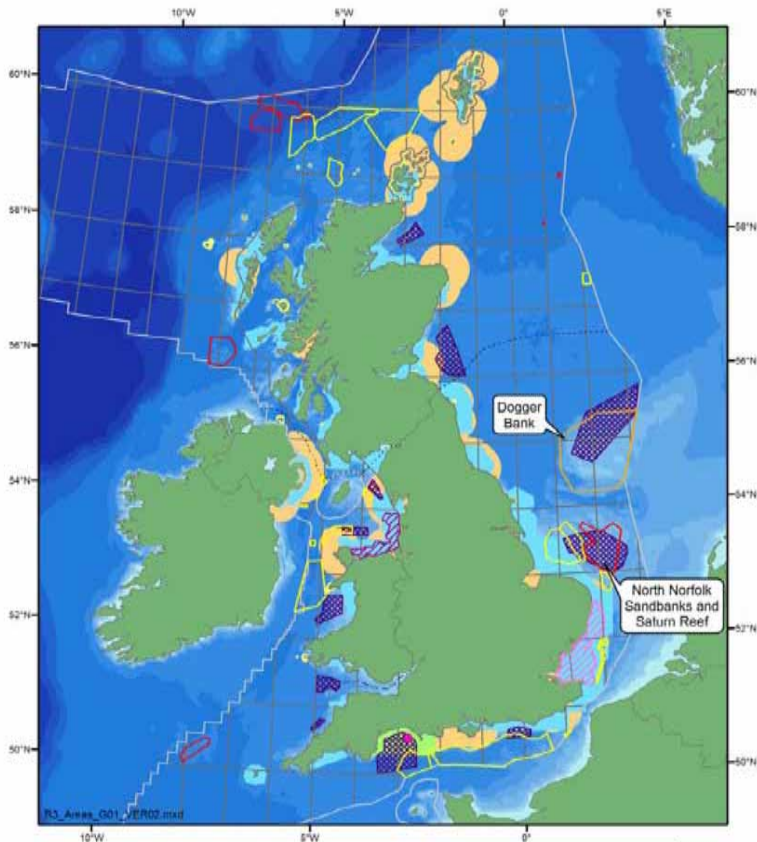


Challenges and opportunities for location and management of MPAs - now

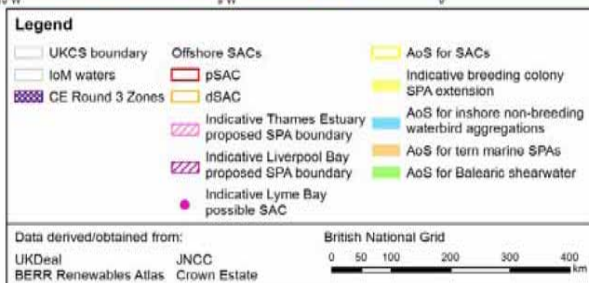


- Existing consented and proposed offshore wind farms are presenting challenges for us in advising on their impacts on existing and future designated features
- Need to ensure robust baseline and good monitoring packages and learn from evidence coming from projects already in the water
- Risk management approach being adopted plus adaptive management once construction starts to address problems as they arise

Challenges and opportunities for location and management of MPAs – into the future



- Map from current SEA
- Ambitious marine renewable energy generation targets are coinciding with us looking for sites to designate as marine SACs and SPAs and in near future MCZs - competition for space!



Challenges and opportunities for location and management of MPAs – into the future



- Need to explore opportunities to secure better outcomes from windfarms for the natural environment and for people
- Of significant potential are benefits associated with the entire footprint of a development
- If it can be agreed that the location and operation of the offshore wind farm itself is compatible with nature conservation, it is possible that in some cases, offshore wind farms with their exclusion areas could qualify as Marine Protected Areas



Any questions please contact me:

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