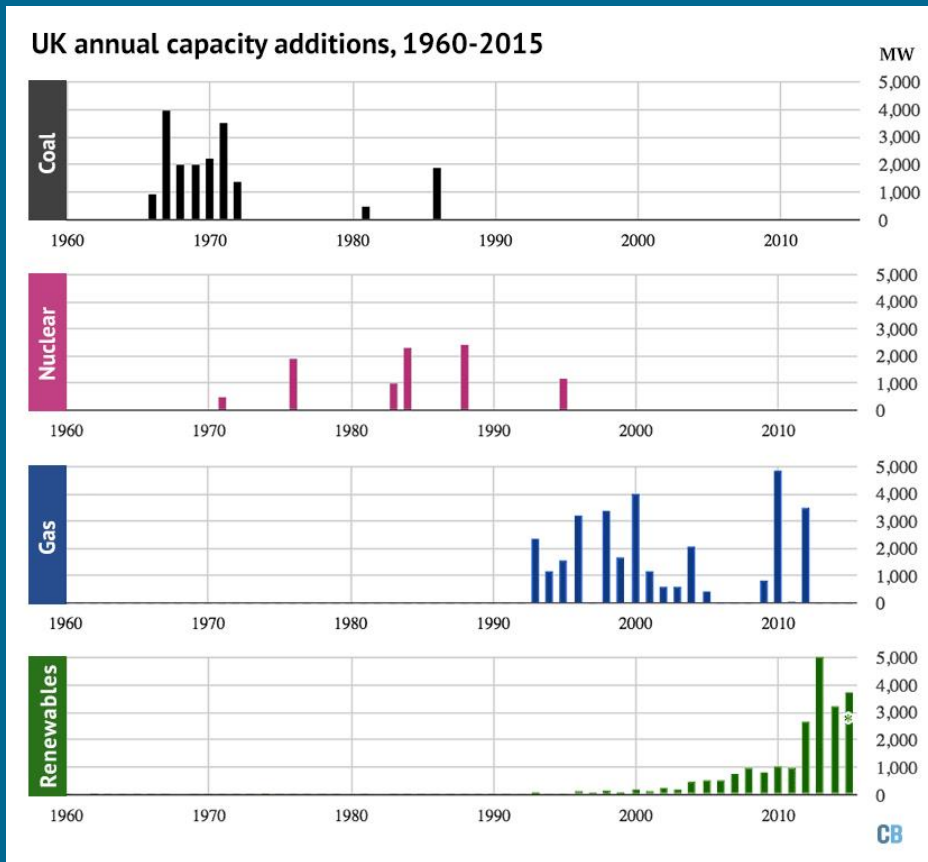




# **South Pembrokeshire Demonstration Zone: Update**

**Renewable Wales Conference  
16 June 2016**

# Wave Energy – The Drivers

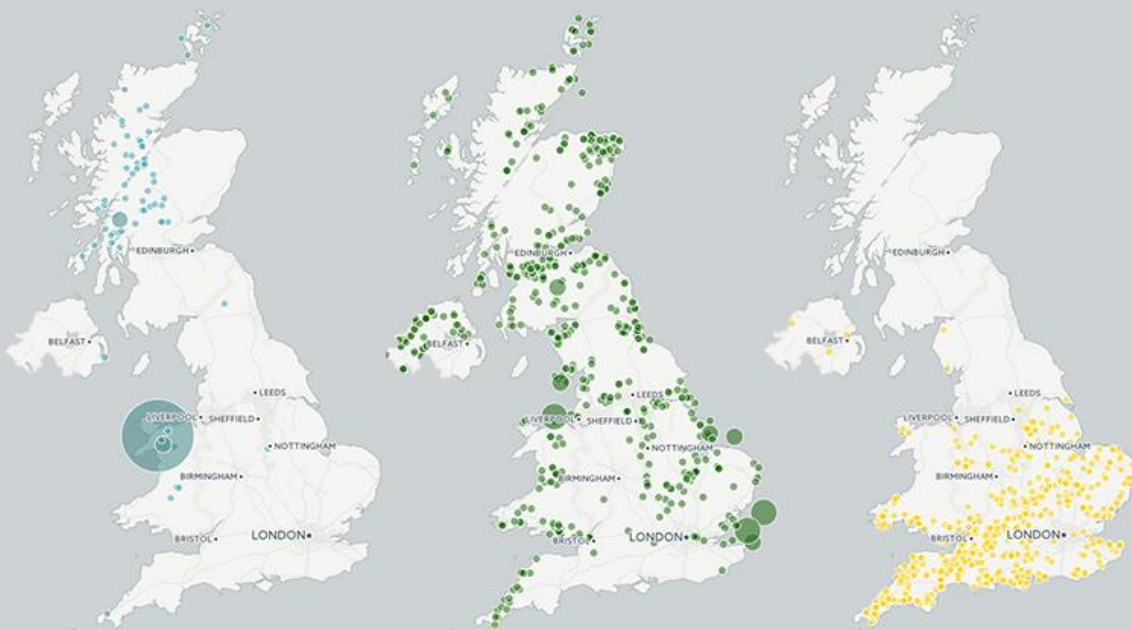


Graphics from Carbon Brief Website



## Wave Energy – The Drivers

### The UK's hydro, wind and solar capacity

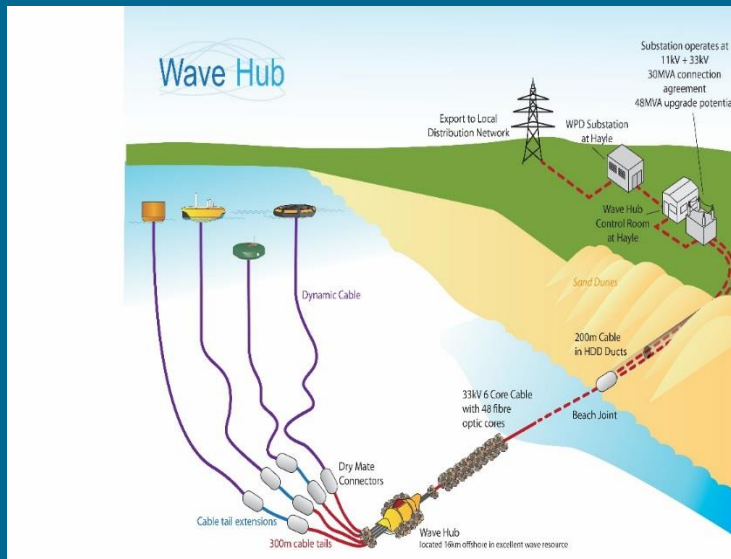


CB



# Wave Hub Limited

Operator of the world's largest and most technologically advanced site for testing and development of large scale wave energy arrays.



# Currently Onsite

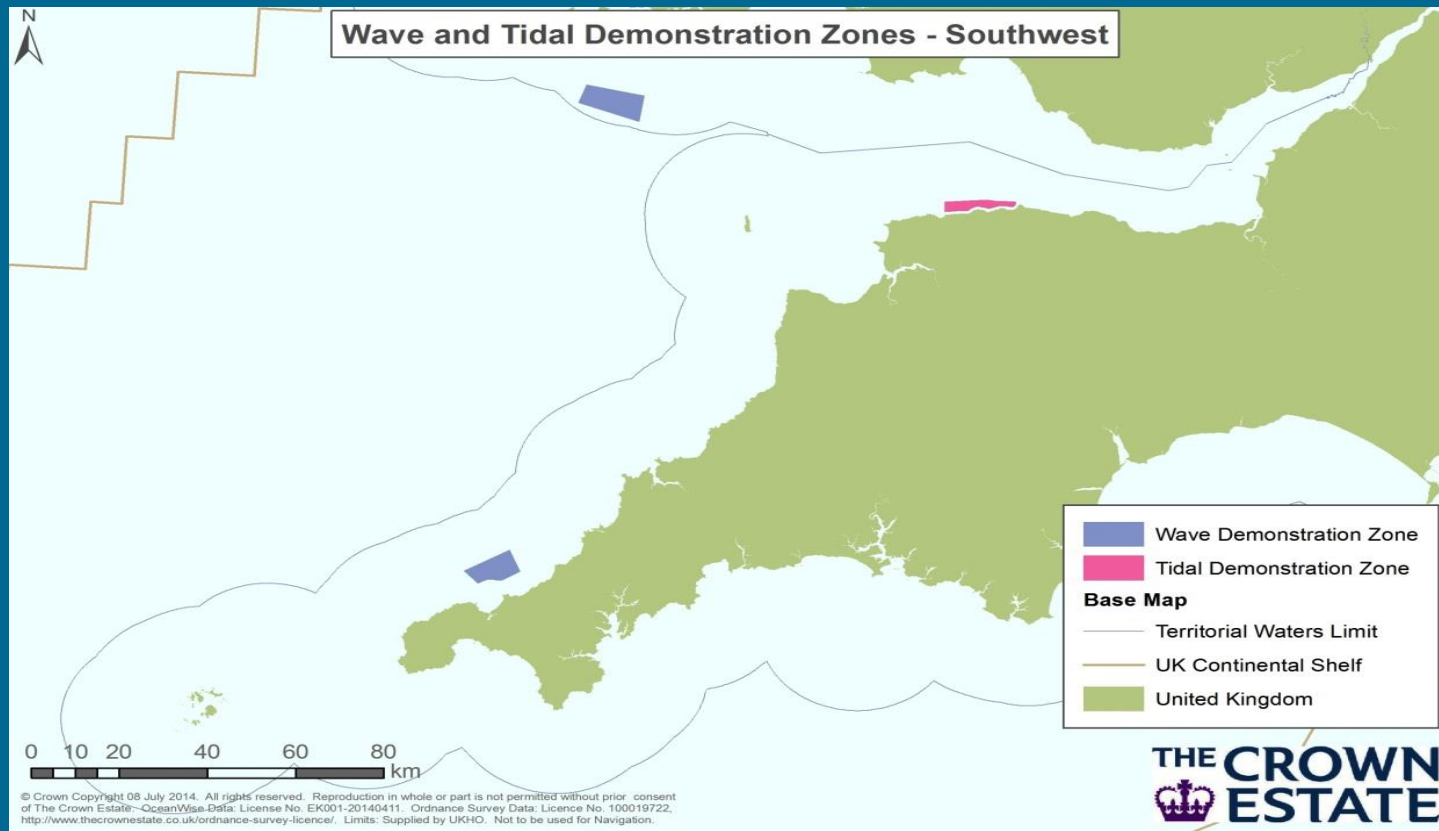


# Deployments 2016

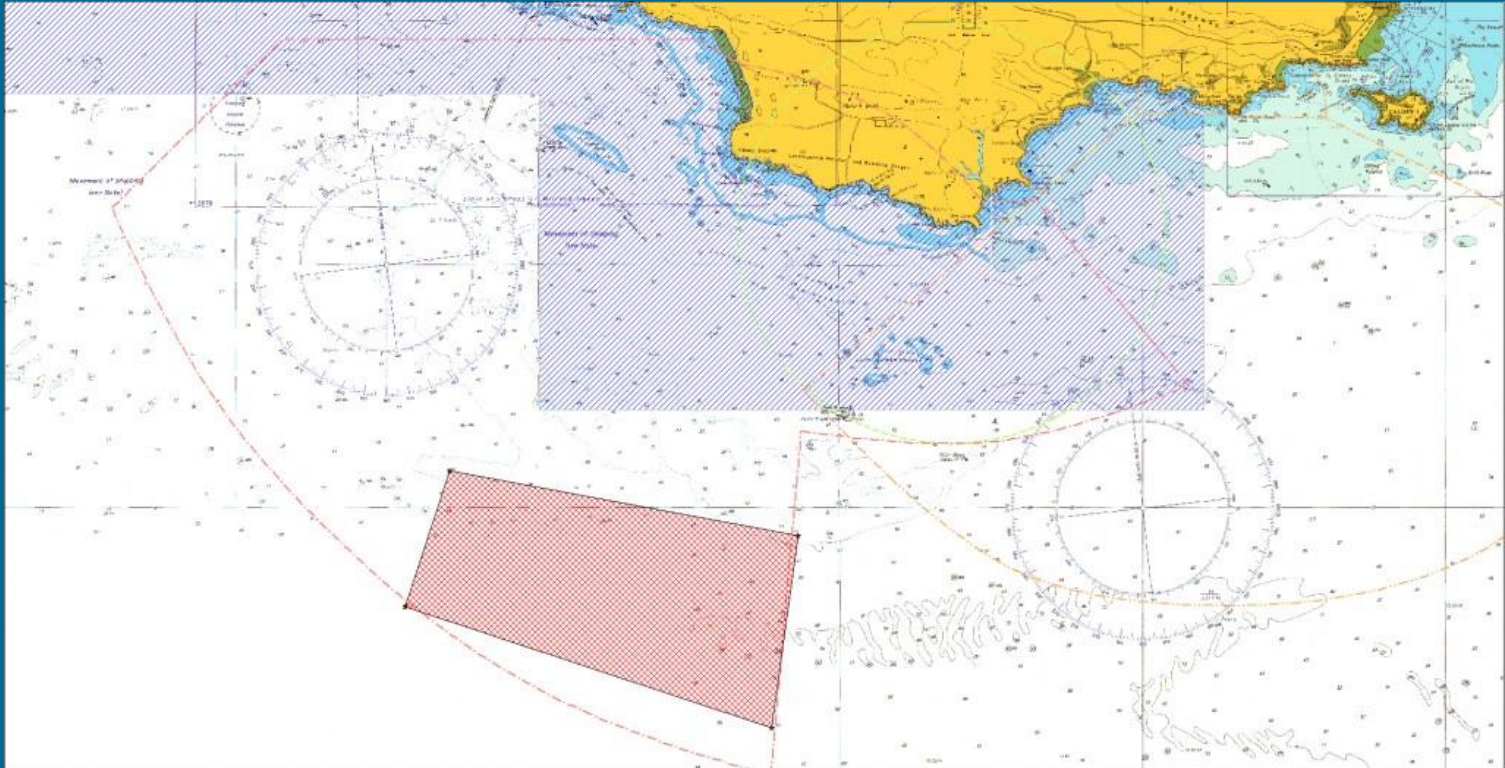
Fortum/ Wello Penquin



# Demonstration Zones



## South Pembrokeshire Demonstration Zone





# Current Status



- WHL secure 45 year lease from the Crown Estate
- Secure Insurance for Site
- Initial assessment of developer interest and site suitability
- Safety Plans submitted
- Regular meetings with the Crown Estate
- Assess funding Options
- Start funding application process (OLT and full application)

# Recent Progress



- Steering group established
- Further developer and stakeholder engagement
- GIS database developed
- Landfall options being assessed
- Commercial structure being considered
- Scope of feasibility study agreed
- Grid applications being prepared
- WEFO funding application progressing
- Risk register developed

# Industry Feedback



- Development plans – all expressed interest in the maximum 30MW sublease
- Site data requirements – general consensus existing wave resource data is sufficient to inform decision-making and detailed geophys data is not currently required
- Infrastructure – mixed response from developers on offshore infrastructure requirements
- Commercial structure – some interest in being part of an SPV but issues to address around a joint PPA and CfDs

# Commercial Structure



- Considering several options
  - We carry out project development with support from partners and then form an SPV with investors and/or customers to build, own and operate the site
  - We form an SPV from the start
  - We carry out the design, build and O&M without an SPV
- Considering whether the OFTO structure has any value and/or lessons we can learn from
- Need to be able to adapt as industry matures given zone may take some time to be developed

# Specific Developer Feedback –

What would add further value ?



1. Option to allow commercial projects
2. Ability to secure an option over an area and grid connection 4 years before deployment
3. Existing permission/ consented site
4. Detailed Surveys
5. Onsite Platform
6. Free/ discounted testing
7. Good wave resource observations/ measurement
8. Easy access and deployment facilities
9. Speedy deployment of cables
10. Ability to build out from single devices to large arrays in same area using same local supply chain
11. Attractive PPA
12. Less than 10km to port.
13. Larger test sites – more export capacity
14. Measurements of current/ swell as well as wave resource



# **South Pembrokeshire Demonstration Zone: Summary**

**Renewable Wales Conference  
16 June 2016**