



The ORECCA European Offshore Renewable Energy Roadmap

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Structure of Presentation

- Purpose of Roadmaps
- Ocean and Wind Energy Existing Roadmaps
- ORECCA Roadmap
 - Vision & Scope
 - Structure & Methodology
 - Roadmap Strands
- Summary and Questions



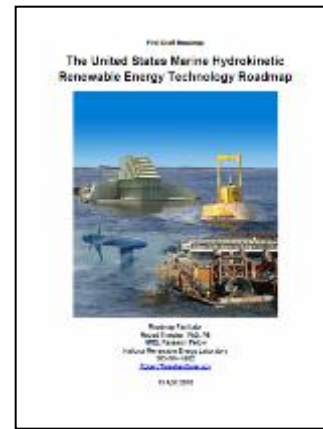
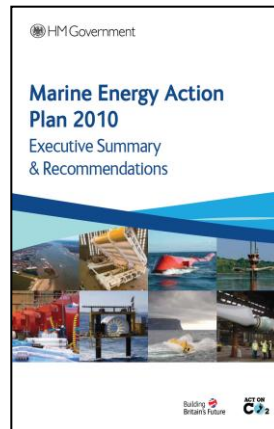
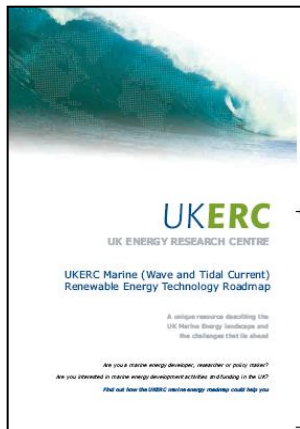
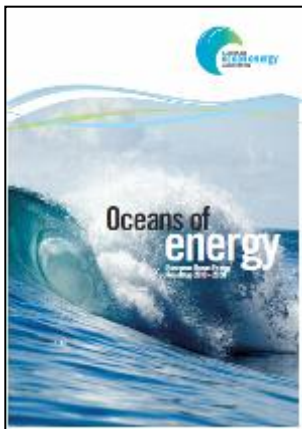
Purpose of Roadmaps



- ✧ Long term strategic planning tool
- ✧ An effective tool to underpin the identification of policies and measures
- ✧ Focus R&D and business investments to accelerate technology development

Ocean Energy Roadmaps

- EU-OEA Oceans of Energy
- UKERC Marine Renewable Energy Technology Roadmap
- FREDS MEG Marine Energy Roadmap (Scotland)
- DECC Marine Action Plan (UK)
- Marine Hydrokinetic Renewable Energy Technology Roadmap (USA)



Wind Energy Roadmaps

- EWEA Oceans of Opportunity
- IEA Wind Energy Technology Roadmap
- TP Wind SRA/MDS
- European Wind Initiative Roadmap
- Greenpeace/Garrad Hassan Sea Wind Europe



Combined Offshore Renewable Energy Roadmaps?

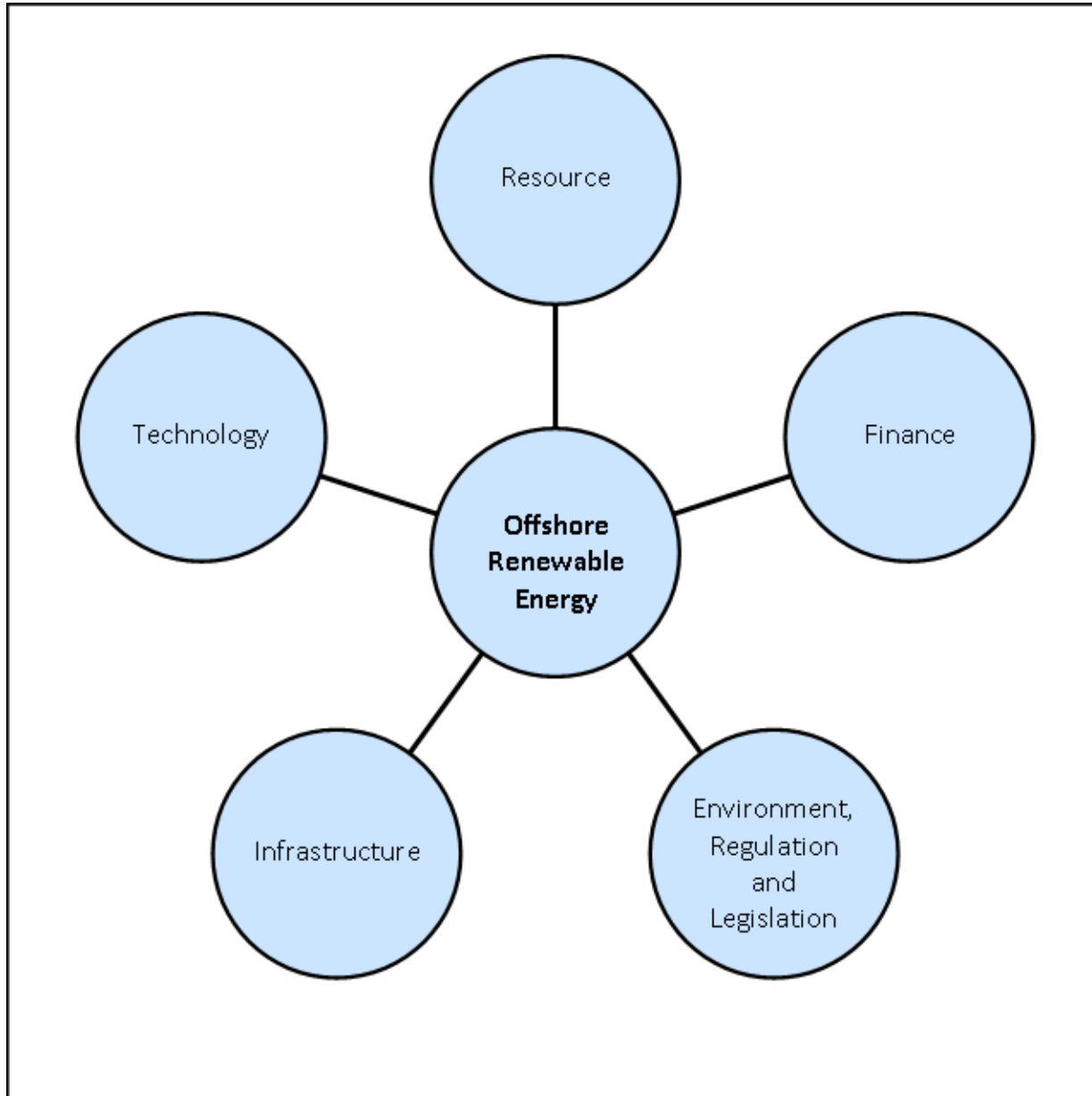
✧ There are none!!

Vision of ORECCA Roadmap

- ✧ The ORECCA European Offshore Renewable Energy Roadmap aims to support the strategic development of the EU offshore renewable energy sector so that it become a competitive energy source with increased commercial deployments across Europe.
- ✧ Scope: Offshore wind, wave and tidal current
- ✧ Audience: Finance, Supply Chain, Policy Makers...

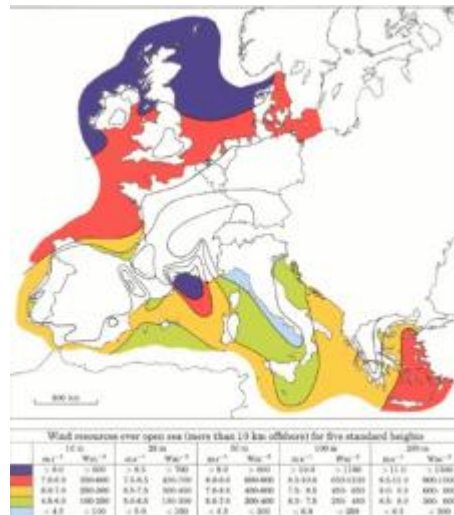
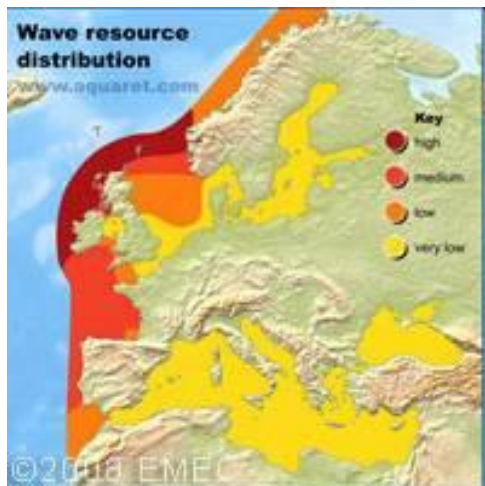


Roadmap Structure and Method



Resource Strand

- Offshore renewable resource estimates (EU)
- Maps of individual resources and combined resources
 - Including some infrastructure
- Identification of key areas with combined resources



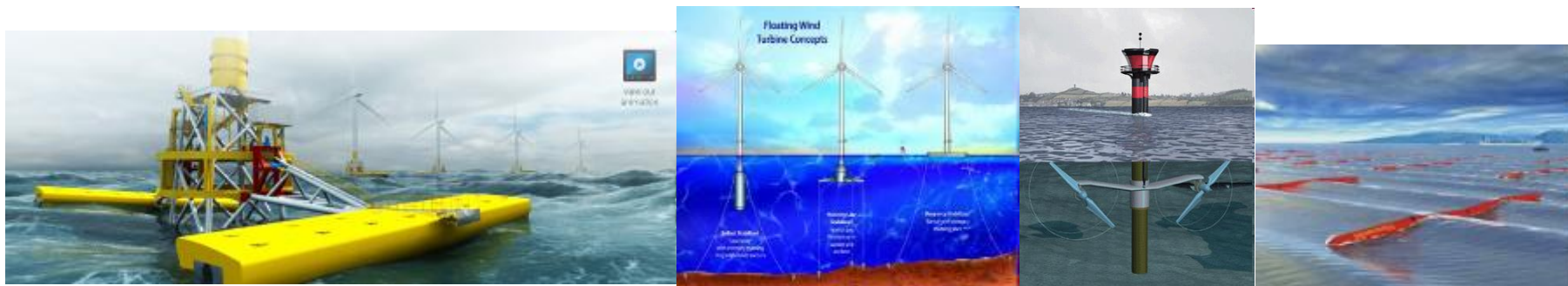
Finance Strand

- ✧ Funding requirements
- ✧ Existing financing and funding support
- ✧ Investment opportunities in member countries
- ✧ Identification of finance gaps and needs (for technologies and countries)

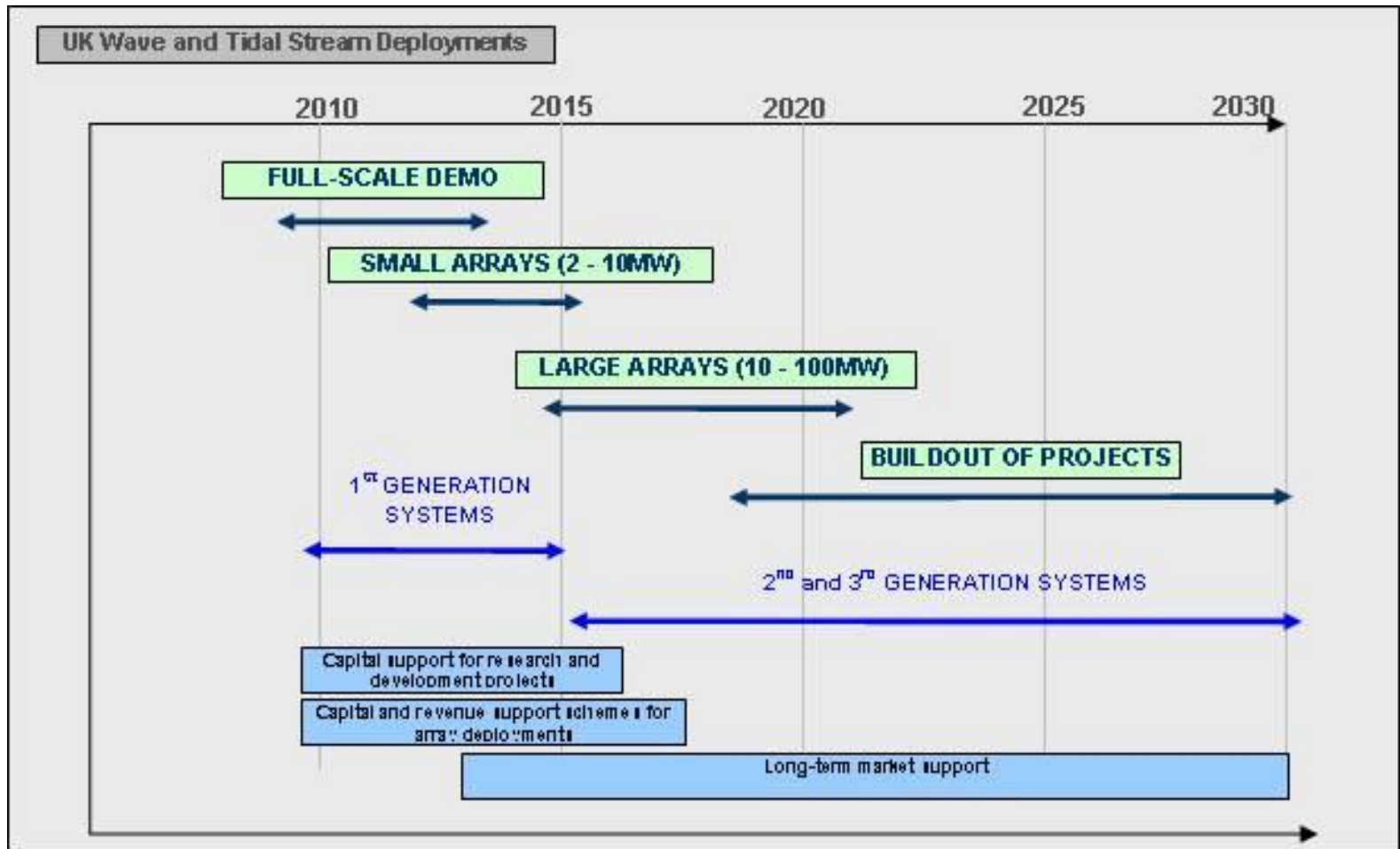


Technology Strand

- Technical state of the art of offshore renewable energy devices
 - Individual
 - Combined
 - Enabling Technologies
- Innovations and synergies in the technologies
- Prioritisation mapping of critical needs for technology development



Example: Deployment Timelines



UK Marine Energy Deployment Plan to 2030 (Source: DECC, 2010)

Infrastructure Strand

- Key Infrastructure requirements for offshore renewables
- Synergies and commonalities in infrastructure requirements for wind, wave and tidal energy
- Prioritisation of key infrastructure needs



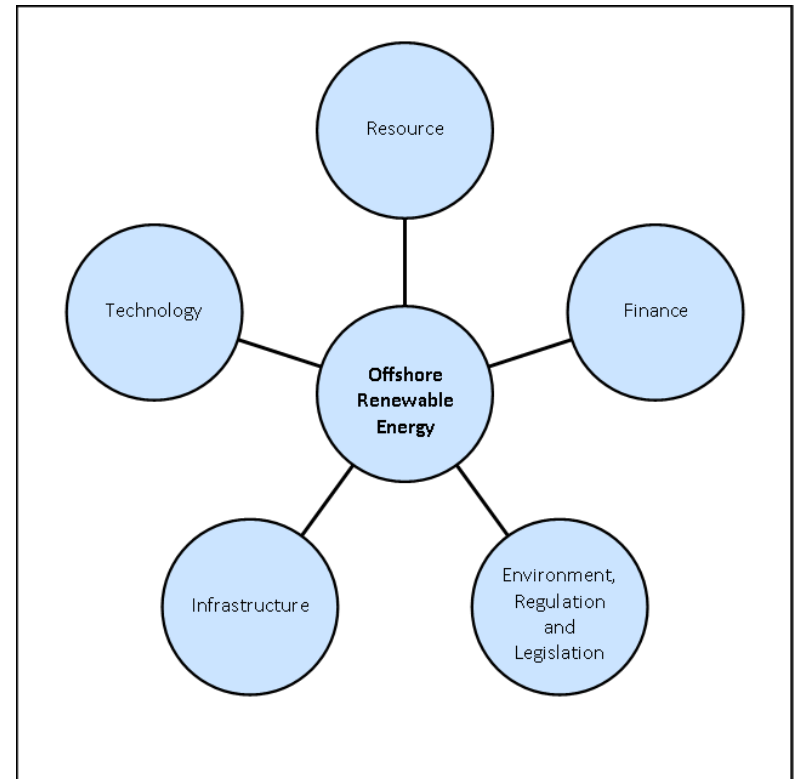
Environment, Regulation and Legislation Strand

- Key environmental issues arising from offshore renewable energy deployment
- Commonalities between key environmental impacts and possible mitigation measures used across EU
- Key regulations (existing and needed)
- Key legislation (existing and needed)



Summary

- ❧ Pan-European, Pan-Technology Offshore Renewable Energy Roadmap
- ❧ Roadmap builds on five key strands
- ❧ Developed based on inputs from ORECCA work packages as well as connections with MARINA and other relevant initiatives.



Thank you!

**Thanks for listening
Any questions?**



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