



UKERC

Global Marine Renewable Energy Conference

Technology Roadmap for Marine Renewable Energy.

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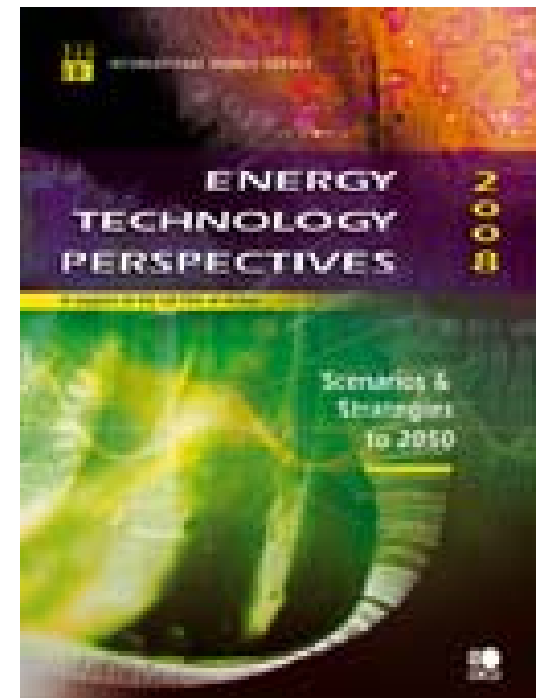


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Road-mapping: Why

- Roadmaps (RMs) are an effective tool to underpin the identification of policies and measures
- Focus R&D and business investments to accelerate technology development.
- Roadmaps can facilitate the creation of international frameworks to accelerate the development and adoption of low carbon technologies.
- Coherent approach and significant engagement with the global market



Road-mapping process

Battelle Roadmap

- **Step 1 : Vision Statement**

To exploit energy from waves and tidal currents in a sustainable way aiming for an installed capacity of 2GW by 2020 (UK).

- **Step 2: Analyse current *Landscape*.**

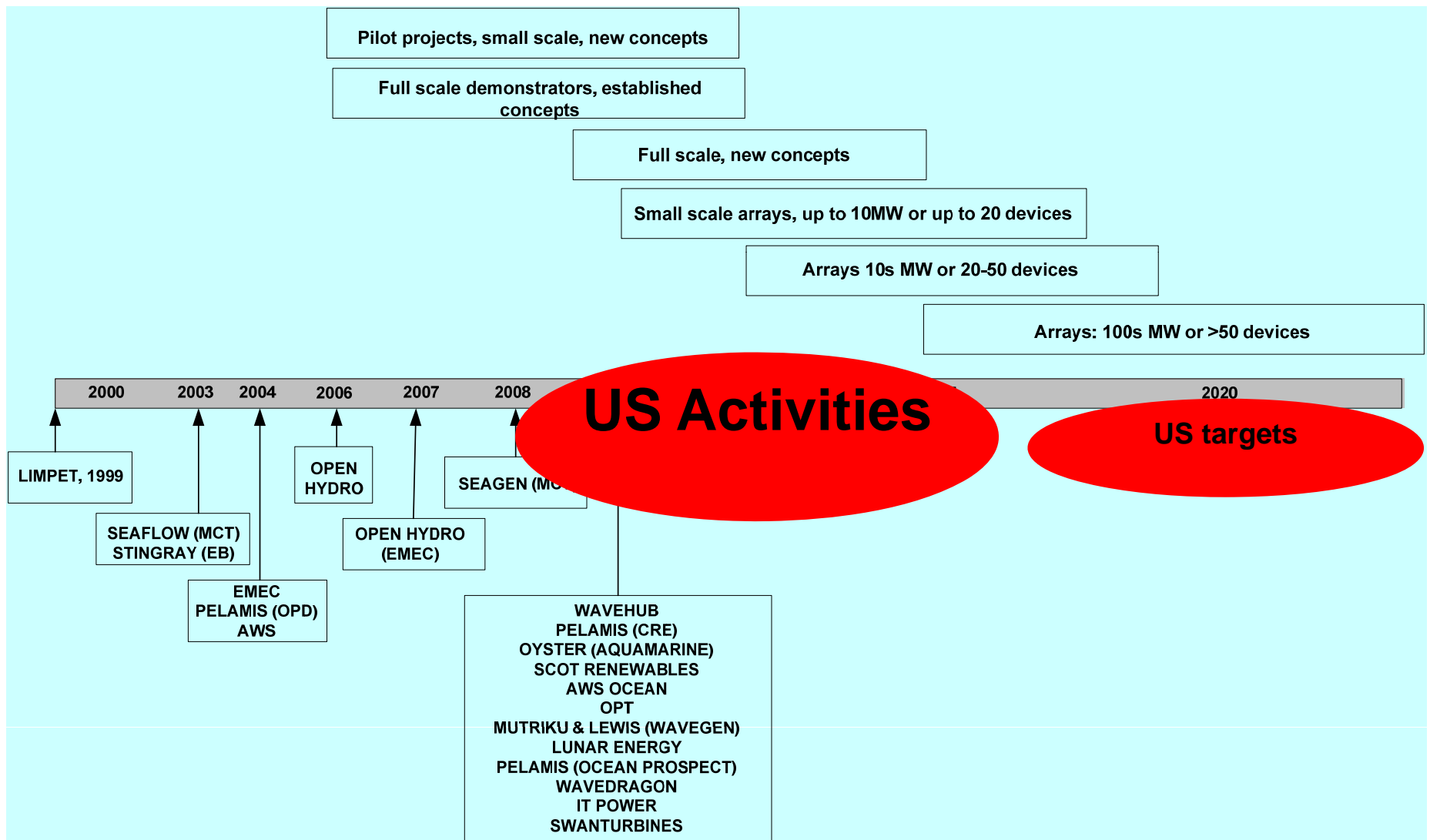
- **Step 3: Route and process**

- **Deployment Scenario**
- **Commercial Strategy**
- **Technical Strategy**

- **Consensus based, Workshops, and interviews, meeting place facilitation**

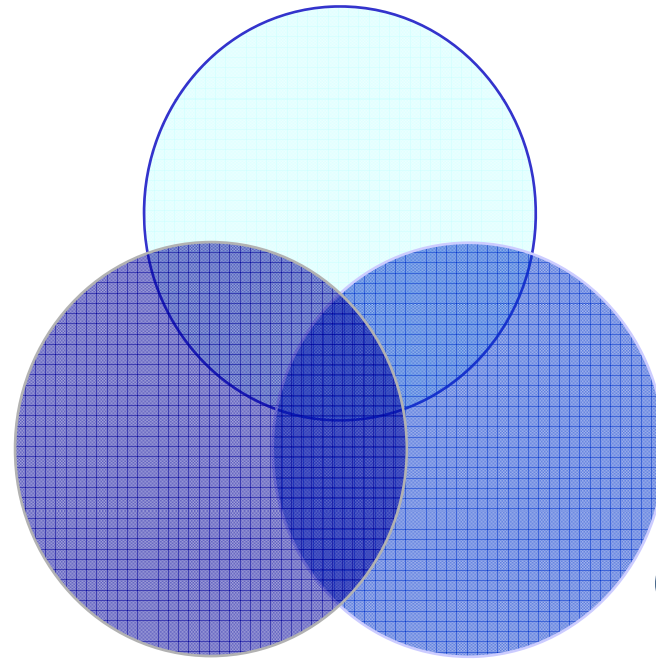


Current & Future Deployment: Progress



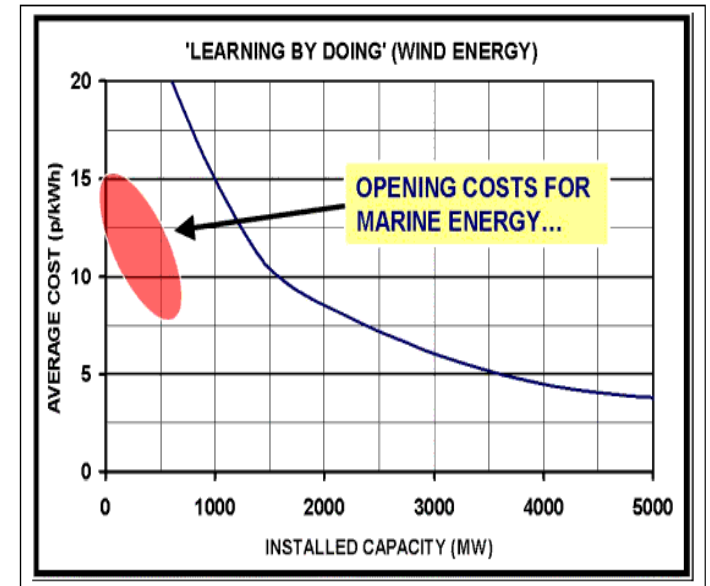
Strategies and Scenarios: Batelle Approach

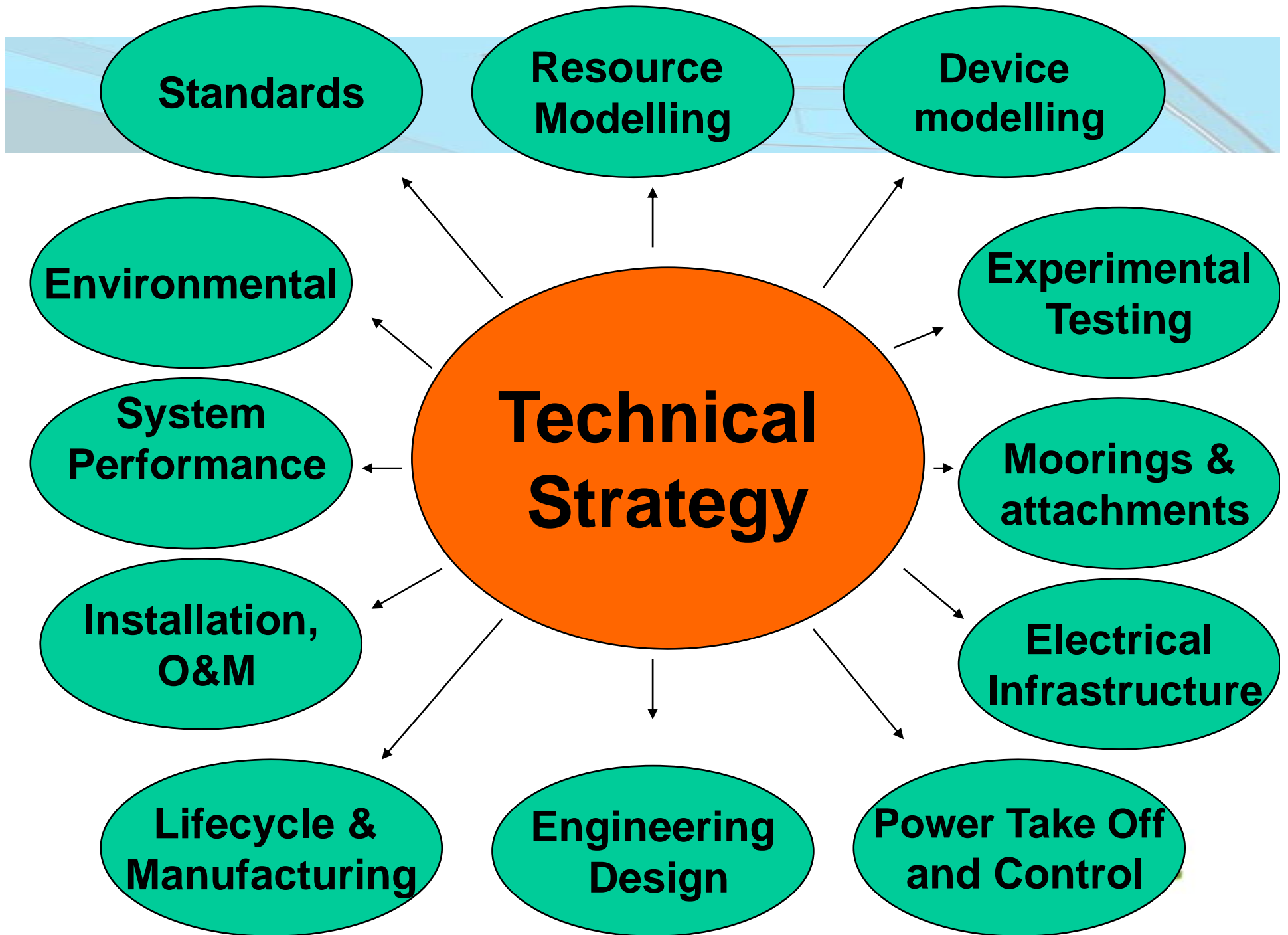
Deployment Scenario

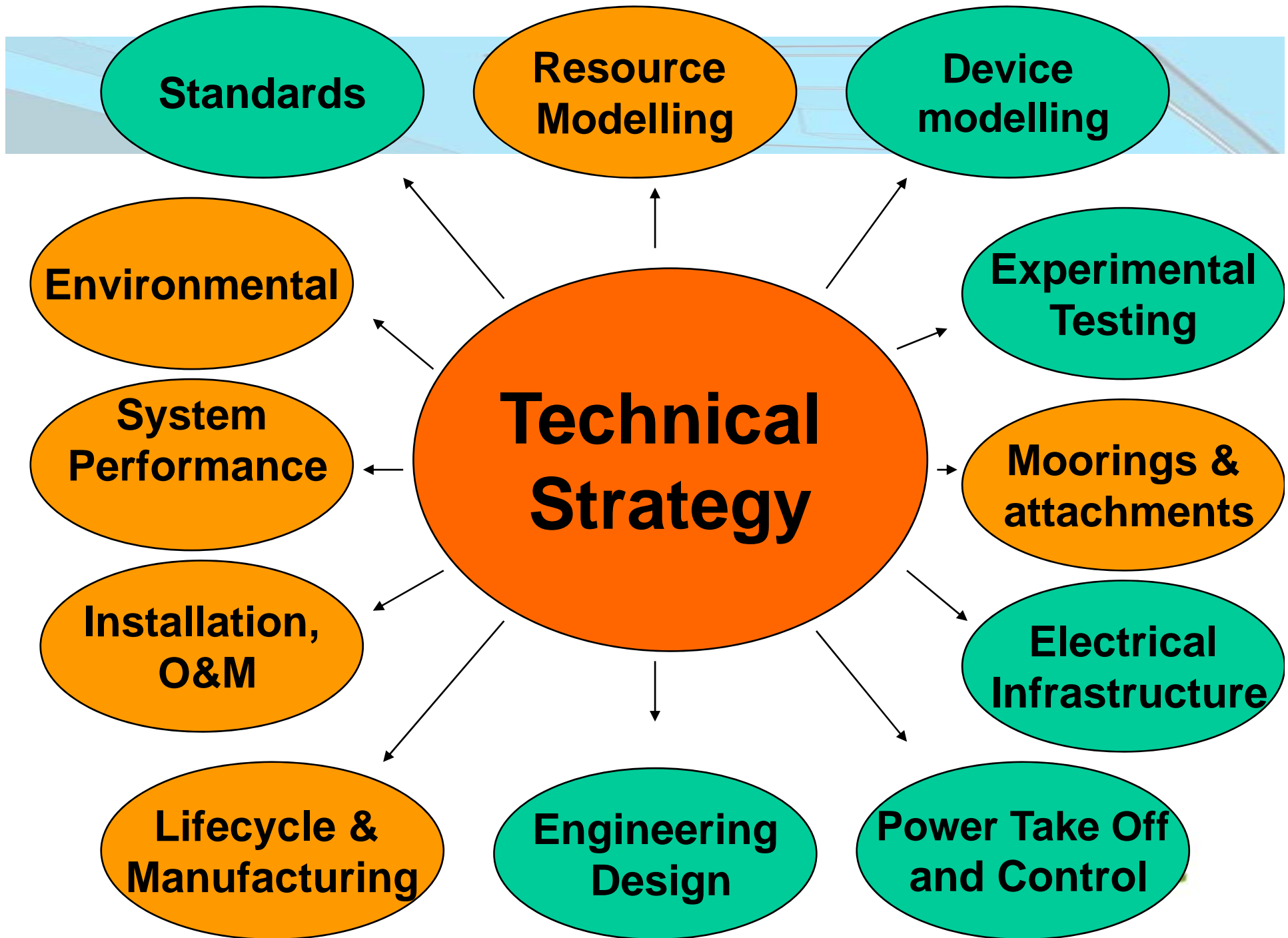


Technical Strategy

Commercial strategy







Examples of solutions

- **Overcoming the challenge with the modelling of turbulence and its effect on tidal turbines match well with large scale US/Canadian flow tank infrastructure and knowledge.**
- **Global challenges with resource assessment could be matched with the existing US expertise in this area**
- **Additionally countries/states with aspirations only to be technology providers will be made aware of the international challenges and opportunities available in the international marine energy sector.**

Summary

- **Enormous Opportunity**
- **Still significant technical challenges**
- **Many area of common interest**
- **Focus investment and avoid duplication**
- **Oil in barrels, Ocean Energy M or Square M, Collaboration?.....**



UKERC and Supergen Marine Energy

Thanks for your attention

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UK ENERGY RESEARCH CENTRE

UKERC Marine (Wave and Tidal Current)
Renewable Energy Technology Roadmap

A unique resource describing the
UK Marine Energy landscape and
the challenges that lie ahead

Are you a marine energy developer, researcher or policy maker?
Are you interested in marine energy development activities and funding in the UK?
Find out how the UKERC marine energy roadmap could help you

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