

REFERENCE	
Title:	US Marine and Hydrokinetic Renewable Energy Roadmap
Date:	Nov 2011
Author:	Ocean Renewable Energy Coalition
Funded by:	US Department of Energy
Hard copy reference:	
URL:	http://www.oceanrenewable.com/wp-content/uploads/2011/05/MHK-Roadmap-Final-November-2011.pdf
Date accessed:	21/02/2014
Web Format:	pdf
IEA topics covered	Ocean Energy
Geographical focus:	United States
Brief Abstract:	This roadmap identifies the eight key areas for key research and development in the US ocean energy sector, in order to achieve 2030 commercialisation and installation targets.

OUTPUTS	
Short Report?	
Major report?	yes
Visualisations?	
Information held on dedicated software?	
- which package?	

ARCHITECTURE	
Timescales used:	2011-2030
Trends and drivers?	yes
- list	Technical research & development; policy; siting and permitting; environmental research; market development; economic and financial issues; grid integration; education and workforce training
Enablers?	yes
- list	Need for more RD&D experience; Need to work cooperatively with communities and stakeholders; need to work collaboratively with other agencies to develop regulation and policy frameworks; job creation will result from educated workforce and development of policies/framework and deployments
Performance measures/targets?	yes
- list areas	Phase 1 includes technology demonstration and pilot projects from 100kW to 5 MW. Phase 2 consists of pilot projects (5 MW) transitioning to small commercial arrays

	(50 MW). Phase 3 focuses on small arrays (50 MW) with a transition to large, utility-scale arrays (100 MW).
Mapping of RD&D activities?	yes
Critical assessment of capabilities?	

PROCESS	
Methods used:	
- Desk study?	yes
- Consultation	yes
- Interviews?	yes
- Facilitated workshop(s)	yes
- Working groups/task force	Yes
- Integrated Process	yes
Stakeholders engaged:	
- University based researchers	Yes
- Other public sector researchers	Yes
- Business – technology	Yes
- Business – other	Yes
- Government - energy	Yes
- Government – SET	
- Government – other	
- NGOs	yes
No of people engaged:	
Budget (if known):	
Commitment to re-visit?	yes

ACTIONS IDENTIFIED	
List of actions?	yes
Actions listed according to timescale?	yes
Actions prioritised?	Yes
Sequencing/dependencies identified?	No
Responsibility for actions identified?	No
Types of actions identified:	
- Basic research?	yes
- list areas	Lifecycle and manufacturing processes; cost reduction; policy and regulatory framework; environmental policy
- Applied research?	
- list areas	Seabed attachments; engineering design; power takeoff and control
- Development & demonstration	yes
- list areas?	Testing infrastructure; installation, O&M; grid integration
- Other types of action?	
- list other types	

This Roadmap Characterisation was compiled by Samantha Quinn of the University of Edinburgh in March 2014

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