Exploring Knowledge Infrastructures to Support Marine Renewables: the Case of Research Innovation in Scotland



Shana Hirsch, PhD Research Scientist Human Centered Design and Engineering (HCDE) University of Washington slhirsch@uw.edu

All-Center Meeting 2019



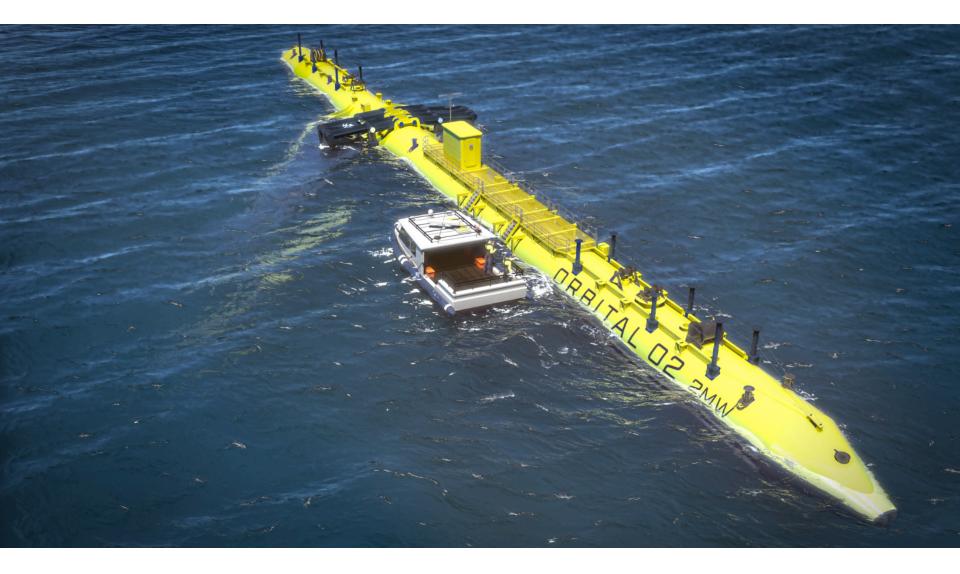
Scottish Energy Strategy: The future of energy in Scotland





December 2017







KNOWLEDGE INFRASTRUCTURES

- > Organizations and institutions
- > Epistemic cultures and norms
- > Standards
- > Test facilities and Instruments
- > Research Collaboratives or Boundary Organizations
- > Computing resources
- > Data and databases
- > Funding and policy support

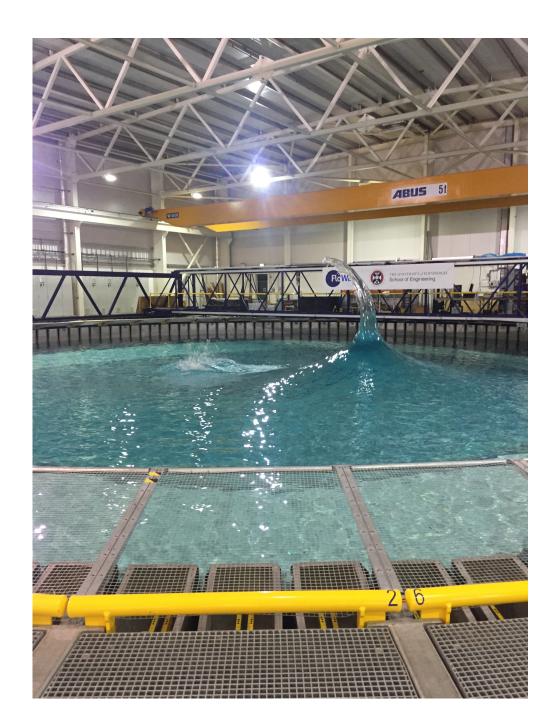
KNOWLEDGE INFRASTRUCTURES

> Networks of people, artifacts, institutions Generate, share, maintain knowledge (Edwards et al., 2010)

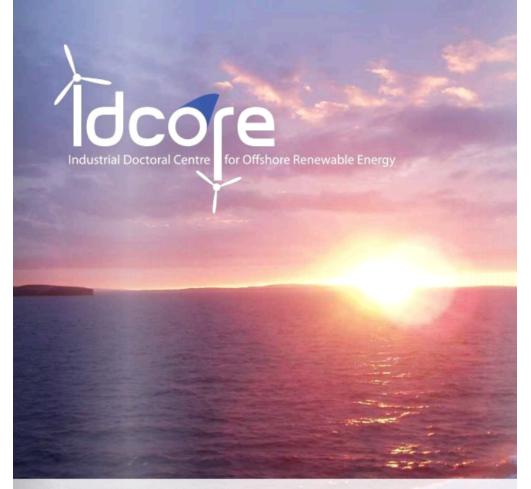
- > Support scientific work and also influence it (Bowker and Star, 1999)
- > Paradoxical: can support and stifle change (Star and Ruhleder, 1994)











Deliver World-Class, Industry Focussed, Research in Offshore Renewable Energy

Meeting the UK's ambitious (2020 and 2050) deployment targets for offshore renewable energy technologies will require the development of new techniques and technologies to design, build, install, operate, and maintain devices in hostile environments at an affordable economic cost with minimal environmental impact.



THE UNIVERSITY of EDINBURGH





www.idcore.ac.uk Grant number EP/J500847/1

ECRE - RENEWABLE ENERGY IEC SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN RENEWABLE ENERGY APPLICATIONS	
bout IECRE Members News Testing & Sectors Committees Reference Events & Material Meetings	Search
Testing & Certification > IEC Standards	
EC Standards operated by the IECRE	
List of IEC Standards	rch:
List of IEC Standards Table sear	Sector
List of IEC Standards Table sear Standard	Sector
List of IEC Standards Table sear Standard IEC 61400-22:2010 Wind turbines - Part 22: Conformity testing and certification IEC 61400-1:2005	rch: Sector WE-ON WE-ON



The Oil & Gas Technology Centre







PROUD TO BE THE HOME OF RENEWABLE ENERGY INNOVATION

PROUD TO BE THE HOME OF RENEWABLE ENERGY INNOVATION

Thank You slhirsch@uw.edu