BLUE ECONOMY
COOPERATIVE RESEARCH CENTRE

Australian Government
Department of Industry, Science and Resources

AusIndustry
Cooperative Research Centres Program

Risk-based Procedures for Safe and Reliable ORES

Summary

The pressing demand for energy generation from renewable resources, as well as the increasing activities in the offshore environment, are driving significant progress in the research, development and implementation of new technologies.

In Australia, a wide range of market opportunities are emerging due to the growth in the ocean energy sector. Emerging offshore technologies including Offshore Renewable Energy Systems (ORES) are complex to design, commission and operate, mainly due to the uncertainties involved with planning and managing their life cycle, given the newness of concepts, randomness of the offshore environment and lack of reliable procedures.

Provision of risk management procedures will greatly assist in enhancing social acceptance, accelerating ORES developments to replace fossil fuels fostering efficiency and sustainability for the infrastructure and operations in the blue economies.

This project will develop a framework for risk assessment methods, decision-support tools and a set of procedures that will enhance the safety, value-adding and cost-effectiveness of ORES.

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Research Program
Offshore Renewable Energy Systems

Project Leader
Rouzbeh Abbassi, Macquarie University

Duration
18 months

Participants
- Auckland University of Technology
- Carnegie Clean Energy
- DNV Australia
- Macquarie University
- Optimal Group Australia
- Pitt&Sherry
- University of WA
- UTAS

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