



Session | Coupling ocean energy with other sectors: Innovative business models and complementarities with renewable offshore technologies

Wednesday, October 16 – 1:45 – 4pm Halifax Convention Centre, Halifax, NS

IRENA Workshop

After decades of efforts from some governments, industry, entrepreneurs and research centres, ocean energy technologies (OET) -including wave, tidal, OTEC and salinity gradient- are yet to reach the commercialisation stage and scale-up deployment. When looking into the economics around OET, based on the levelized cost of electricity indicator, it seems to be that the gap between OET and other renewable power generation technologies continues to be rather big. However, currently some efforts are observed in the direction of finding additional revenue streams associated with the deployment of OET, in addition to selling electricity, which may help to strengthen their business case.

This session will introduce **novel pathways to couple ocean energy technologies with other energy sectors.** In the first part of this session, industry experts will discuss business models that can enable new revenue streams for ocean energy projects; as it is the case of ocean power generation coupled with aquaculture, water cooling, ancillary services (e.g. through energy storage), hydrogen production and storage, among others.

In the second half, the discussion will highlight ocean energy complementarities with offshore renewable energy technologies such as offshore wind, floating PV and floating wind. With an emphasize on how ocean energy and offshore technologies can work together, benefiting from synergies across the project development and deployment phases.

Objective/focus

- 1. Provide international view of renewable energy around the world and how ocean energy development plays a role
- 2. Influence of innovative business models in achieving industrial roll-out
- 3. Leveraging complementarities between ocean energy and renewable energy offshore technologies

Agenda | Overall Time: 1:45 – 4pm

Opening Remarks

Setting the Scene | 1:45- 1:55 pm

1. IRENA activities: Offshore technologies overview. Roland Roesch, Deputy Director Innovation and Technology Center, International Renewable Energy Agency (IRENA)





Part 1: Innovative Business Models: Coupling sectors | 1:55- 2:55 pm

Moderator: Roland Roesch, Deputy Director Innovation and Technology Center, International Renewable Energy Agency (IRENA)

- 1. River and tidal hydrokinetic power systems, microgrid turnkey solutions. Alexandre Paris, President and CEO, ORPC Canada.
- 2. Alternative revenue streams for ocean energy. Rob Flynn, European Marine Energy Center, Europe
- 3. Capul Phillipines Project, Marlène Moutel, Business Development Engineer, Sabella
- 4. Value beyond the grid: Ocean Energy sector coupling opportunities. Alessandra Salgado, Associate Program Officer, IRENA
- 5. Panel discussion open to audience

<u>Coffee Break</u> | 2:55- 3:15 pm

Part 2: Leveraging complementarities: Ocean energy and RE offshore technologies | 3:15- 4:00 pm

Moderator: Elisa Obermann, Executive Director. Marine Renewables Canada

- 1. Offshore wind experience and its complementarities with ocean energy- John Wright, Executive Director, Business Development. Northland Power, Canada and Germany
- 2. Joining offshore wind and wave energy devices: Commercial and technical benefits. Sarah Thomas, Project Manager, DP Energy.
- 3. Ocean Power Innovation Network (OPIN) project, cross-sectoral collaboration for SMEs working in offshore renewable energy. Neil Farrington, Innovation Manager, Offshore Renewable Energy Catapult, UK
- 4. Panel discussion open to audience