

Session 1: Ocean energy potential in Islands

UNLOCKING THE POTENTIAL OF OCEAN ENERGY AROUND THE GLOBE



Roland Roesch - rroesch@irena.org
Deputy Director, IRENA Innovation and Technology Center (IITC)

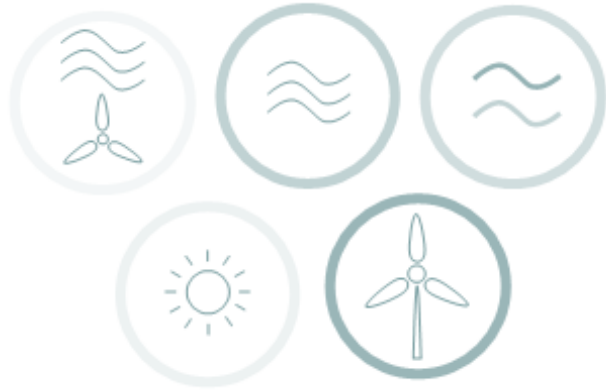
- Framework for action to support SIDS in their transformation to a renewables based and resilient energy system.
- Focused in supporting 36 SIDS spread across the Caribbean, Indian and Pacific Ocean.
 - *The LHI also counts with valuable support from 19 developing partners.*
 - *Launched September 2014 at New York Climate Summit with new priority areas and target endorsed by partners in at the United Nations General Assembly in New York in September 2018*
- **Strategic objective:**
 - *Enable sustainable energy transformation for people on the front line of climate change on small islands around the world.*
 - *Enhance energy independence and economic prosperity on SIDS.*



Priority areas

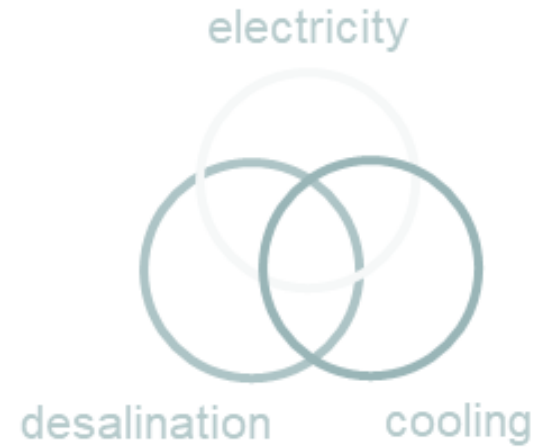
- ✓ Support with Nationally Determined Contributions (NDCs).
- ✓ Expand from assessment and planning to implementing.
- ✓ Support the development of RE bankable projects.
- ✓ Expand focus beyond power generation to end-use sectors.
- ✓ Leverage synergies between renewables and energy efficiency.
- ✓ Promote the use of renewable as means to foster broad socio-economic development.
- ✓ Link renewable energy uptake to climate resilience and more effective disaster recovery.
- ✓ Enhance collection and dissemination of data and statistics.
- ✓ Boost renewable power deployment → 5 GW of installed capacity in SIDS by 2023.





Distributed energy resources

Enables further diversification of the power generation mix by harnessing local energy resources, hence enhancing energy security



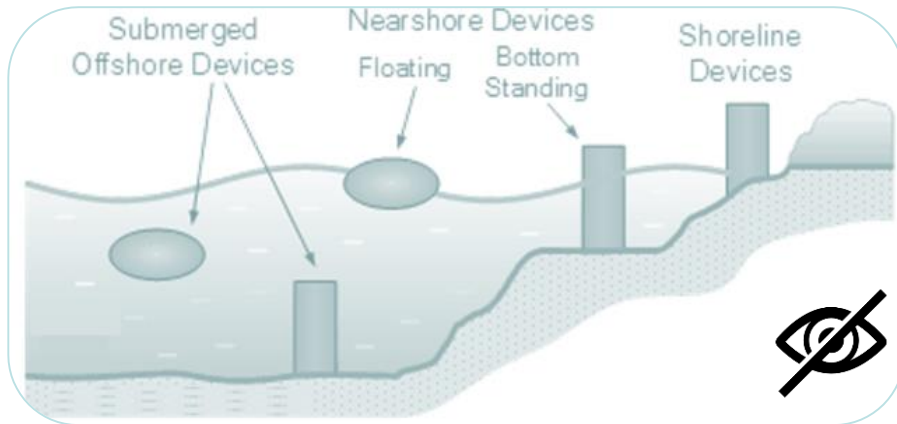
Sector coupling

In addition to power generation, OE opens the door for meeting other typical needs in SIDS



Land restrictions

SIDS have limited land available, OE enables zero competition for land for other key needs e.g. crop growth and other productive uses.



Little to non visual impact

Economy of SIDS depends highly depends on tourism; OE technologies ensure little to non impact to the landscape.



Predictable

Tides are driven by the moon, hence, predicting the power output is possible and results in good complement for VRE (e.g. wind and solar)