## Innovative business models and sector coupling



## **Description of technology/business model:**

Using ocean temperature difference, OTEC can be a key utility infrastructure:

- As a baseload RE, OTEC can deliver a high share of RE into the grid, hence reducing GHG emissions and oil price increase dependency
- OTEC can deliver electricity to produce potable water, hence fighting increasing water scarcity linked with climate change
- OTEC can deliver electricity to foster electric mobility
- OTEC can be combined with a SWAC system to provide air-conditioning to large cooling consumer

OTEC can be the key catalyst for energy transition in tropical Islands.

Company	Bardot Ocean
Revenue streams	Electricity, cooling, drinking water, deep ocean water
Projects	OTEC
Capacity (MW)	≈1MW → 8,5GWh electricity per year (98% load factor)
Additional benefits	Grid stabilization, new economic development opportunities with deep water valorization
CAPEX (range)	30-60 MUSD (highly depending on site characteristics)
LCOE (range)	250-450 USD/MWh (highly depending on other revenue streams)
Lessons Learned	High upfront development cost to gather site data Importance of long term reliable contracts

