Innovative business models and sector coupling



Description of technology/business model:

TECHNOLOGY: OWSC WECs pump seawater ashore where the pressurized flow is split into two streams to: 1) provide feedwater to a reverse osmosis desalination plant; and 2) drive a motor/generator set for electricity production. NOTE: the ratio of water and electricity production can be managed to suit the specific needs of customers. BUSINESS MODEL: RME sets up local SPVs that provide equity, arrange debt, hire EPC contractor(s), purchase equipment and sell water to customer(s) pursuant to long-term contracts. RME provides ancillary services including local hiring, training & maintenance.



Company/ Institution	Resolute Marine Energy, Inc.
Revenue streams	Wave-powered desalination systems
Project	Cape Verde commercial pilot
Capacity (m ² /water_	500 m ³ /day (rated capacity)
Additional benefits	Wide range of social, economic and environmental benefits
CAPEX (range)	\$6,250/m ³ production capacity (~\$25M for 4,000 m ³ /day plant)
LCOW (range)	\$1.20 - \$2.00 m ³
Lessons Learned	i.e: limitations in getting private capital, risks not covered by either insurance or manufacturers guarantees, lack of cost data for PPA proposal, etc