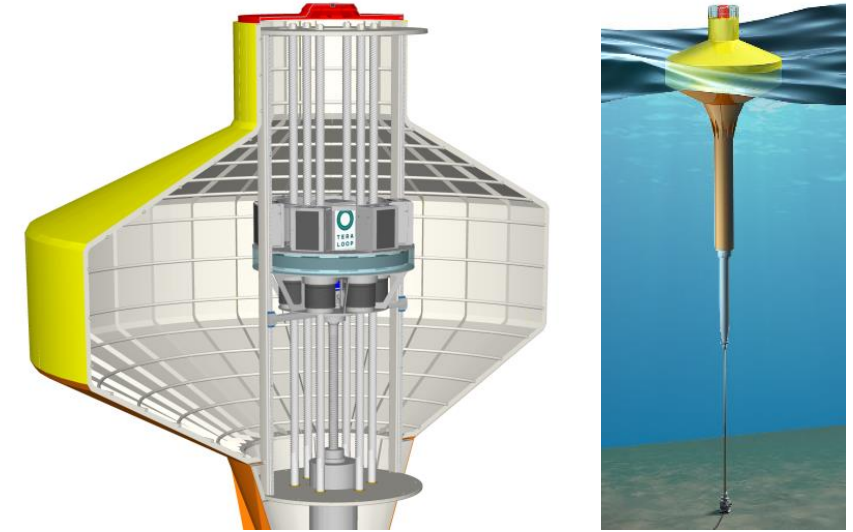


Description of technology/business model:

InfinityWEC is a 500 kW point absorbing wave energy converter using a regenerative PTO with integrated flywheel energy storage, providing both advanced force control and predictable constant power output. The technology originates from the regenerative braking systems used in **electrical vehicles**. Frameless torque motors and ball screw actuators from **heavy machinery industries**, providing superior combination of power and force density, efficiency, stroke length and velocity, and conversion ratio from linear motion to rotary motion. Mooring system with cylinder and flexible pipe originating from **oil and gas industry**.



Company/ Institution	Ocean Harvesting Technologies AB, Sweden. (www.oceanharvesting.com)
Revenue streams	Predictable constant power & ancillary services.
Projects	InfinityWEC, point absorbing Wave Energy Converter with regenerative PTO.
Capacity	500 kW and 2 GWh annual output per WEC (40 kW/m resource).
Additional benefits	Advanced wave-by-wave PTO force control, increasing power output and providing control of buoy motion, improving reliability, survivability and LCoE.
CAPEX (range)	2.4 MEUR / MW at 100 MW deployed capacity.
LCOE (range)	100 EUR / MWh at 100 MW deployed capacity, targeting 35 EUR / MWh at GW scale.
Lessons Learned	The importance of concept development, supported by extensive simulation analysis and system engineering to evaluate feasibility, optimize performance and analyze loads and requirements. Identify suitable technologies from other industry sectors.