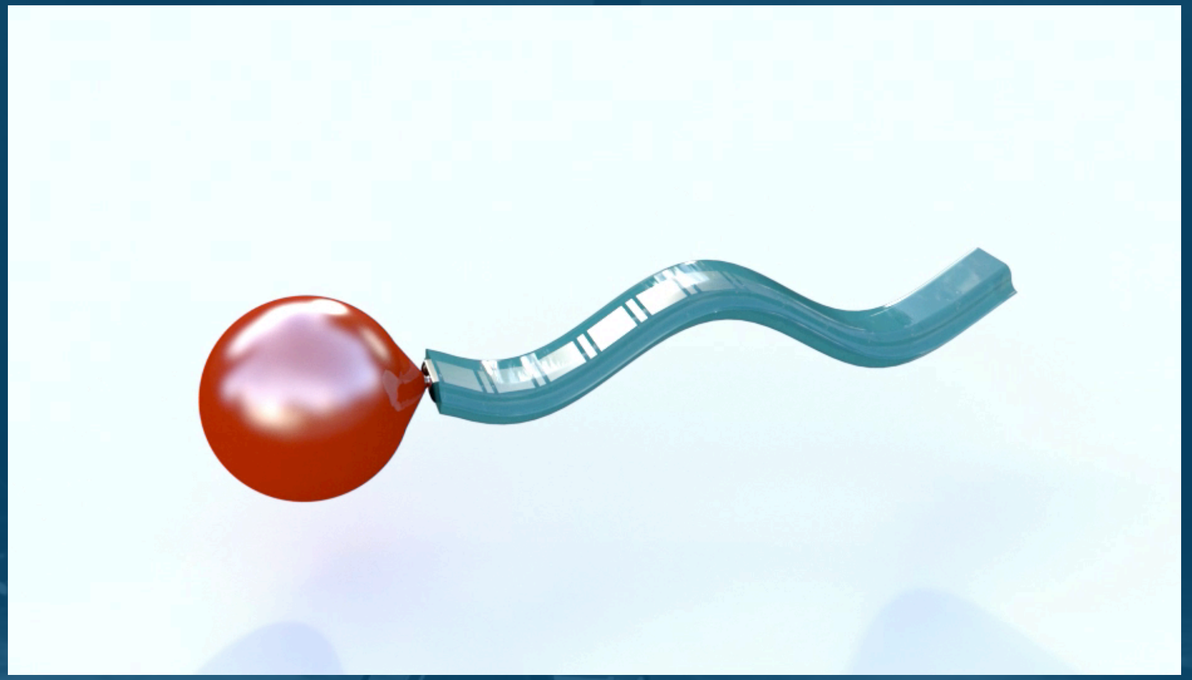
Powering the Blue Economy™

OCEAN OBSERVING PRIZE

EEL Drone

Description

The Electrically Engaged UnduLation (*EEL*) ocean observing system harvests hydrodynamic energy during maneuvering by mimicking the gait of aquatic eels. The flexible drone consists of a single-body submersible that can harvest energy from waves and currents. Power is generated during both station keeping and depth profiling using Smart Materials. The key benefits include size, weight, volume, redundancy, and form. The targeted impact for *EEL* is to 1) mitigate battery limitation, 2) increase autonomy, and 3) reduce the cost of ocean data.



Team

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Dry Weight	45.0 kg
Max Length	2,200 mm
Max Depth	200 m
Number of System Bodies	1
Total Energy Storage Capacity	768 Wh
Wave Energy Conversion Method	Attenuator
Average Recharge Power	4.92 W