

5TH ANNUAL CAPE COASTAL CONFERENCE

Tidal Energy for Cape Cod – Part of the Answer

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Marine Renewable Energy Collaborative of New England, Inc.



Ocean Energy for New England

What is Tidal Energy

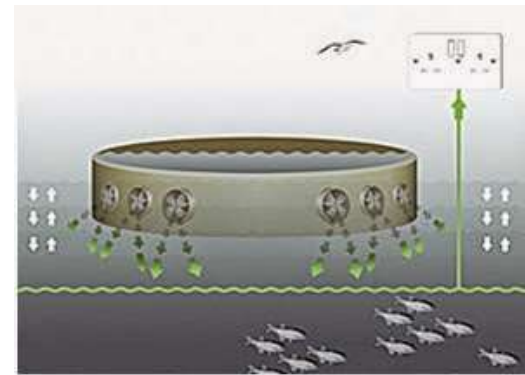
- Two Types:
 - Potential – Position



Pool, Portugal, 1280



Barrage, France 240 MW



Lagoon Concept

- Kinetic – Motion or In Stream



Why Tidal Energy?

- Power - 6 knots Tidal \approx 400 mph Wind
- Predictability - Centuries vs Hours
- Impact – Minimal
 - Out of Sight
 - High Torque/Low Speed 20 mph vs 300 mph
 - Low Conflict – Lazy Fish
 - Low Noise for High Noise Environment
 - Near Shore

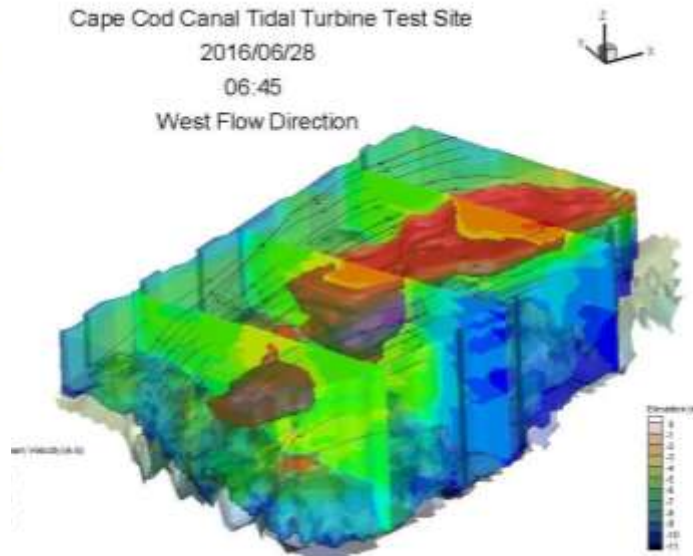
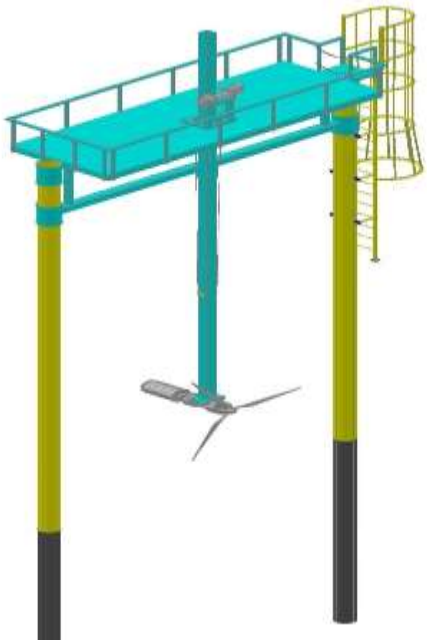
Why Not?

- Big - 100 tons plus Ballast/Mooring
- Deep - 40 meters or More
- Limited - >6 knots



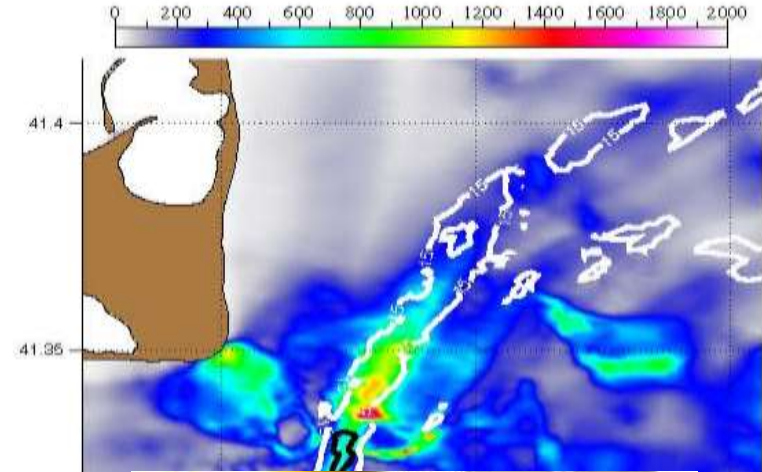
Test Site

- Bourne Tidal Test Site (BTTS)
 - 3 meter Turbines
 - 4 knots
 - Prepermitted, Accessible
 - Instrument Testing



Muskeget Tidal Project

- 5 MW Pilot, Up to 20 MW
- 10 years and \$2+ million
- Feasibility Study
 - New Technologies



MRECo



- Marine Renewable Energy Collaborative, Inc.
 - Non Profit Dedicated to Developing Industry
 - Includes Wave – Nantucket, Cuttyhunk
 - Many Partners
 - Seaport Economic Council
 - US Army Corps of Engineers, Town of Bourne
 - Massachusetts Clean Energy Center
 - MassTank, AGM Marine, Impact Labs, FSI, WaterCube
 - UMass, URI
 - You?



US Army Corps
of Engineers.



ImpactLABS



Look at our Website: www.MRECoNewEngland.org