

Transitioning to the Energy Future



Cape & Islands Ocean Energy Brainstorming

Process & Prompts

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Overview

“Beyond Cape Wind”

- Points of Concurrence
- Rules of Engagement

Demonstration Brainstorming

- Objectives
- Needs & Opportunities
- Actions

“Beyond Cape Wind” Process: Mission Statement

Our goal is to accelerate progress toward a sustainable energy future for Cape Cod, Martha's Vineyard, and Nantucket.

We will consider energy supply, delivery, and use from all perspectives, address common challenges relating to our reliance on fossil fuels, and define shared goals relating to efficiency and renewables. We will initiate activities and develop tools for informing, shaping, and changing decision-making at the individual, local, and regional levels.

By working together, we will make a difference.

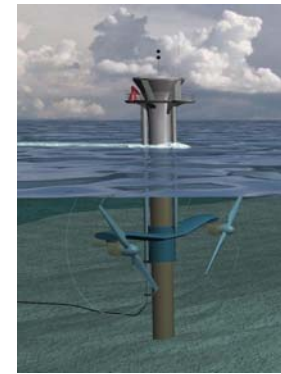
Survey Responses: “Beyond Cape Wind”

Opinions of Cape & Islands Stakeholders

- Large offshore wind, tidal, and wave energy resource base
- Very promising/promising future energy options

Perceived Obstacles

- Lack of policy framework and zoning/permitting process
- Concern over possible economic, ecological, and social impacts
- NIMBYism – “fear of unknown”
- Unproven technology: “long way off” for some options



Proposed Points of Concurrence: Ocean Energy

Common Ground for a Demonstration?

- We want to explore future directions and control future decisions regarding ocean energy development.
- We want to learn how to harness wind, wave, and tidal energy resources in ways that protect and enhance the region's economy and ecosystems.
- We want to create the knowledge, technologies, and institutional capacities required to maximize local benefits and minimize adverse impacts from future large-scale ocean energy development.

Issue Areas

Areas of Discussion

1. Technology
2. Siting
3. Economic Development
4. Economy & Environment
5. Policies & Institutions
6. Funding

Process

- Review prompts
- Provide responses
- Generate ideas

Demonstration Objectives – Technology

Objective: Demonstrate Technologies for Developing Far-Offshore Projects & Achieving Energy Independence

Options

- Wind, Wave, Tidal & Hybrids
- Hydrogen Production & Clean Transportation
- Foundations & Moorings
- Transmission Cable
- Power Electronics & Storage
- Monitoring, Control & Maintenance
- Forecasting & Scheduling
- Impact Mitigation

Key Issues

- What are technology status and timeline for key options?
- What do we want to demonstrate?
- What else do we need to know before making a decision?



Demonstration Objectives – Siting

Objectives

- Establish “Ocean Energy R&D Zones” in state/federal waters
- Zone state/federal waters for commercial projects
- Establish review, siting, sizing, and impact mitigation requirements

Key Questions

- Where might we demonstrate?
- Where do we develop?

Opportunities

- Coordinated Planning w/ OWEC Process
- State: Oceans Sanctuary Act
- Federal: MMS



Demonstration Objectives – Economic Development

Objective: Stimulate Economic Activity

- Induce public-private investment
- Create business and jobs for local firms
- Engage local research/educational institutions
- Establish long-term, fixed-rate contracts for green power

Opportunities

- Public-Private Partnerships
- Research, Development & Testing Facilities
- Institutional Collaborations – Research & Education
- Eco-Tourism
- Public Information Center
- Aggregations/Cooperatives

Demonstration Objectives – Economy & Environment

Objective: Understand Positive/Negative Effects of Ocean Energy & Learn How to Avoid or Mitigate Adverse Impacts

- Tourism & Recreation
- Property Values
- Fisheries
- Navigation & Transportation
- Marine Ecosystems, Habitat & Wildlife

Key Questions

- What are the tradeoffs?
- How do we balance them?
- Who needs to be at the table but isn't today?

Demonstration Objectives – Policies & Institutions

Objective: Give Local Communities Direct Influence & Control

- Development of ocean energy resources
- Purchasing of energy products and services
- Ownership and management of energy infrastructure

Opportunities

- Cape & Islands Energy Technology Strategy
- Green Energy Targets for 2010, 2020, 2030 & 2050
- Regional Policy Plans
- Cape Light Compact
- Cape & Islands Renewable Energy Cooperative
- Ocean Energy Development RFP
- Public-Private Partnerships

Demonstration Objectives – Funding

Objective: Develop Partners/Collaborators

- OWEC
- *Federal*: DOE, DOI, DOT, DOC
- *State*: MTC, DOER, CZM
- *Regional*: Barnstable County EDC
- *Research*: EPRI, WHOI, MIT, UMASS, Foundations
- *Utility*: NStar, National Grid, Keyspan
- *Private Sector*
 - Project Developers
 - Ocean Energy Companies
 - Energy Technology Companies
- *Local Investors*
 - Businesses
 - Soundkeepers
 - Residents & Other Cooperative Members

Next Steps



Cape & Islands Energy Stakeholders

- Working Groups?

MTC/DOE

- OWEC Siting Process?

EPRI

- Integrated Options Study?

Others?

- Partnerships/Collaborations?