Offshore Wind in New Bedford
New Bedford Wind Energy Center
Massachusetts Wind Working Group
May 28, 2014
New Bedford is...

...Founded in 1787

...Rich culture, maritime, and textile history

...The #1 value commercial fishing port in America

...The #1 new growth Gateway City in the Commonwealth

...a Distinctive Destination—one of only twelve named by the National Trust for Historic Preservation

...America’s 7th most artistic city

...one of Americas 50 top sailing destinations—Yachting Magazine
New Bedford Infrastructure
Moving Ahead

$363M in Private Investment

$94M in Public Investment

858 Jobs Retained

2269 Jobs Created

1984 Construction Jobs

$2.3M Annual Tax Revenue Increase for New Growth

55 New or Expanded Businesses in the Downtown

Construction of the International Market Place, River Walk, and Custom House Square
The Challenges

- Highest Unemployment Rate in MA
- High Dropout Rates Low Education Levels
- Lose of Traditional Manufacturing
- Fishing Regulations
- Aging Infrastructure and Housing Stock
Environmental Impact

Concentrations of Greenhouse Gases from 0 to 2005

- Carbon Dioxide ($\text{CO}_2$)
- Methane ($\text{CH}_4$)
- Nitrous Oxide ($\text{N}_2\text{O}$)
Energy Pipeline
The Natural Resource
Comparative Markets

Cuxhaven

- Population of 50,000
- 6.7% unemployment in 2012
- Two offshore terminals in operation
- $260M in public investment: 2006-12
- $240M in private investment

Bremerhaven

- Population of 114,000
- 24% unemployed in 2002—10% today
- Germany’s largest fishing port
- $328 M invested—50% of total OSW
- 2,000 new jobs: 2001-2013
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NB Marine Commerce Terminal

Dredging Design Elements
- Expanded capacity for deep draft vessel
- Dredging channel to facility at -32.8
- First section of bulkhead to -32.8
- Southern section of bulkhead to -20 to -22

Staging Design Elements
- Southern portion of site for blade storage

Bulkhead
- Expanded berthing capability of deep draft vessels (up to 600’)
- 1,200 linear feet of bulkhead construction (a 1,000’ expansion)
- Dredge material used for fill (9.4 acres)
Massachusetts Wind Energy Area
Epicenter of the East Coast
# Market Data Pointing to Confidence

## Federal Policy
- Obama Administration is “all-in”
- EPA permitting
- BOEM permitting
- DOE loan guarantee
- Investment Tax Credit

## State Policy
- 2008 Green Communities Act
- Port and Infrastructure Study
- PPA negotiations
- Permitting
- Public investment

## Local Policy
- Ground work with State partners
- Mayor’s Advisory Committee
- Trade mission
- Supply Chain and Land use studies
- Bus. Dev. & Workforce Group

## Cape Wind & First-Phases
- All federal & state permits in place
- Dept. of Interior commercial lease
- Power purchase agreements in place
- 18 court victories
- Financing nearly completed
Offshore Wind and the Big Picture

10 Year Plan for Sustainable Economic Development*

- Existing & Small Business
- Emerging Job Sectors
- Communications
- Planning & Development
- Workforce Investment
- Catalytic Projects

Public Safety & Educational Attainment of Community

*NBEDC BOD 1.18.07
In addition to fueling a galaxy of dependent shoreside industries—boatbuilding, barrel making, shipsmithing—prosperity resulted in a profusion of banks, public buildings, schools, and churches; the hill above the town was graced with fine homes and the waterfront was filled with shops, counting rooms, warehouses, and factories. Diversified investments of wealth derived from whaling provided capital for an array of industries, from railroads and textiles to edge tools, carriage making, glass manufacture, and western real estate...
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*outfitting*
*infitting*
*provisioning*
*flour milling*

*oil refining*
*spermaceti candle manufacture*

*brokerages*
*recruiting agents*
*boardinghouses*
*hospitals*
*theaters*
*bakeries*
*tailors*
*commission merchants*
*transport*

*cargo handling*

*blacksmiths*

*pump and block making*

*cordage manufacture*

*iron mongering*

*cooperage*

*sail making*

*shipbuilding*

*cordage manufacture*

*shipbuilding*

*pump and block making*

*cooperage*
Offshore logistics

Captains/deckhands

Heavy equipment operators

Electricians

Welders

Engineers

Onshore handling

Stevedores

Provisions

Tug operators

Escort ferry

Repair mechanics

Fueling

Hotel

Restaurants

Retail

Manufacturing:

Towers

Foundations

Blades

Nacelles

Operations & Maintenance

Provisions

Tug operators

Escort ferry

Repair mechanics

Fueling

Hotel

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Retail

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Offshore logistics
Offshore Wind and the Big Picture

Sustainable Economic Development*

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Offshore Wind and the Big Picture
WEC Areas of Activity

Policy and Advocacy

Business Development

Workforce Development

Land-Use Planning

Outreach and Educational Programs