



BOEM
BUREAU OF OCEAN ENERGY MANAGEMENT

Bureau of Ocean Energy Management

U.S. Outer Continental Shelf Renewable Energy

Photo courtesy Deepwater Wind

James Bennett

Office of Renewable Energy Program Manager

George Mason University – Second Annual Energy Symposium

Fairfax, Virginia | April 26, 2018

Outer Continental Shelf (OCS) Energy

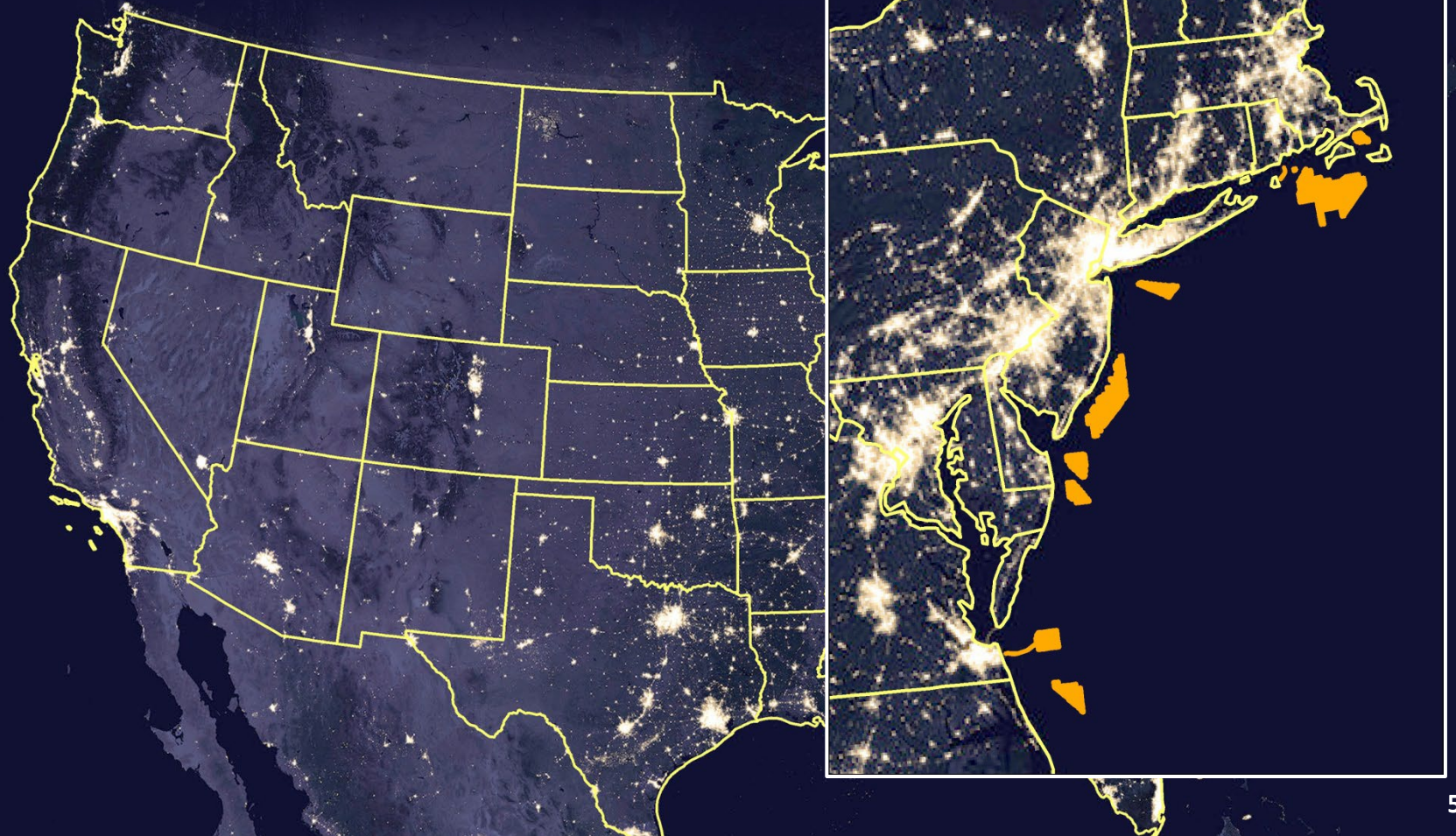
“The Outer Continental Shelf (OCS) is a **vital national resource** reserve held by the Federal Government for the public, which should be made available for **expeditious and orderly development**, subject to **environmental safeguards**, in a manner which is consistent with the maintenance of competition and other national needs.”

Outer Continental Shelf Lands Act (OCSLA) | *Sec 3(3)*

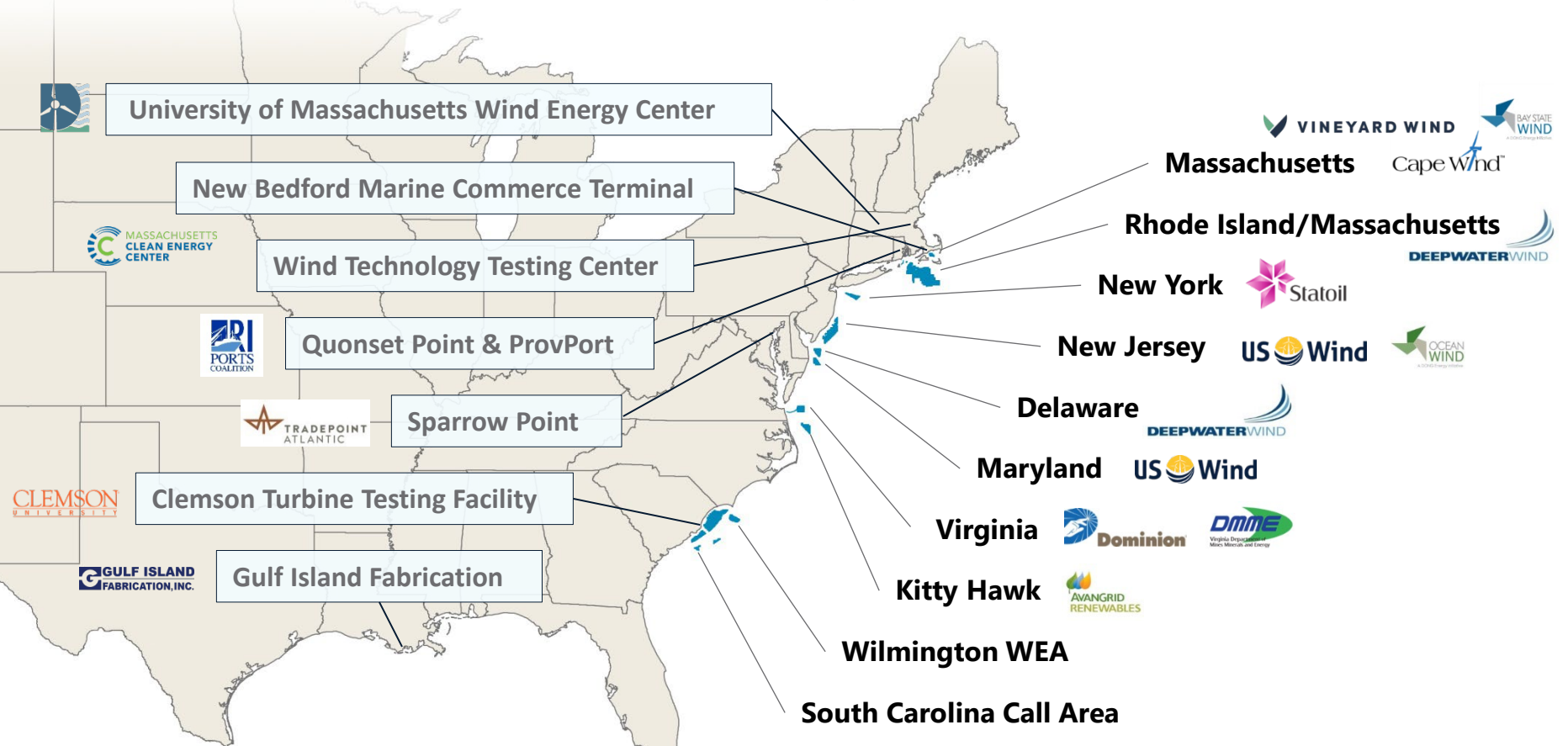
“... may grant a lease [for] energy from **sources other than oil and gas** ... in a manner that provides for safety and protection of the environment.”

Energy Policy Act of 2005 | *Sec. 388*

Recipe for Success: Market Demand



Atlantic OCS Renewable Energy Activities

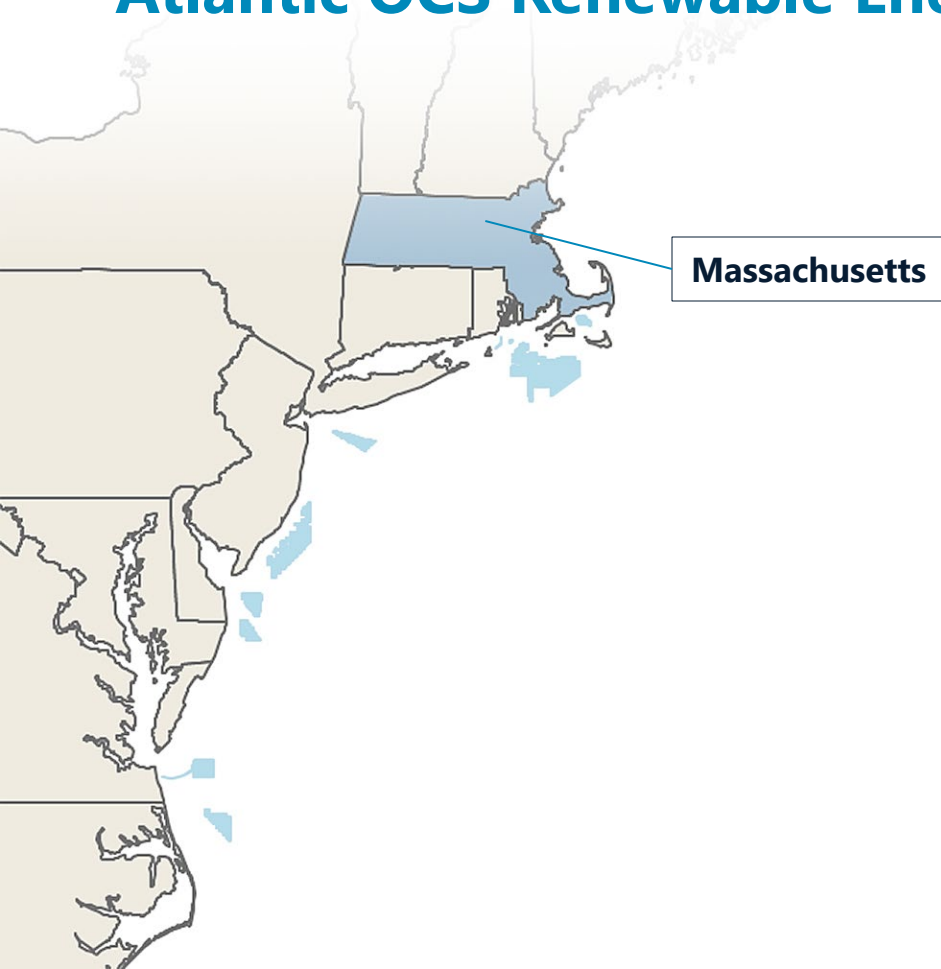


Atlantic OCS Renewable Energy: State Leadership



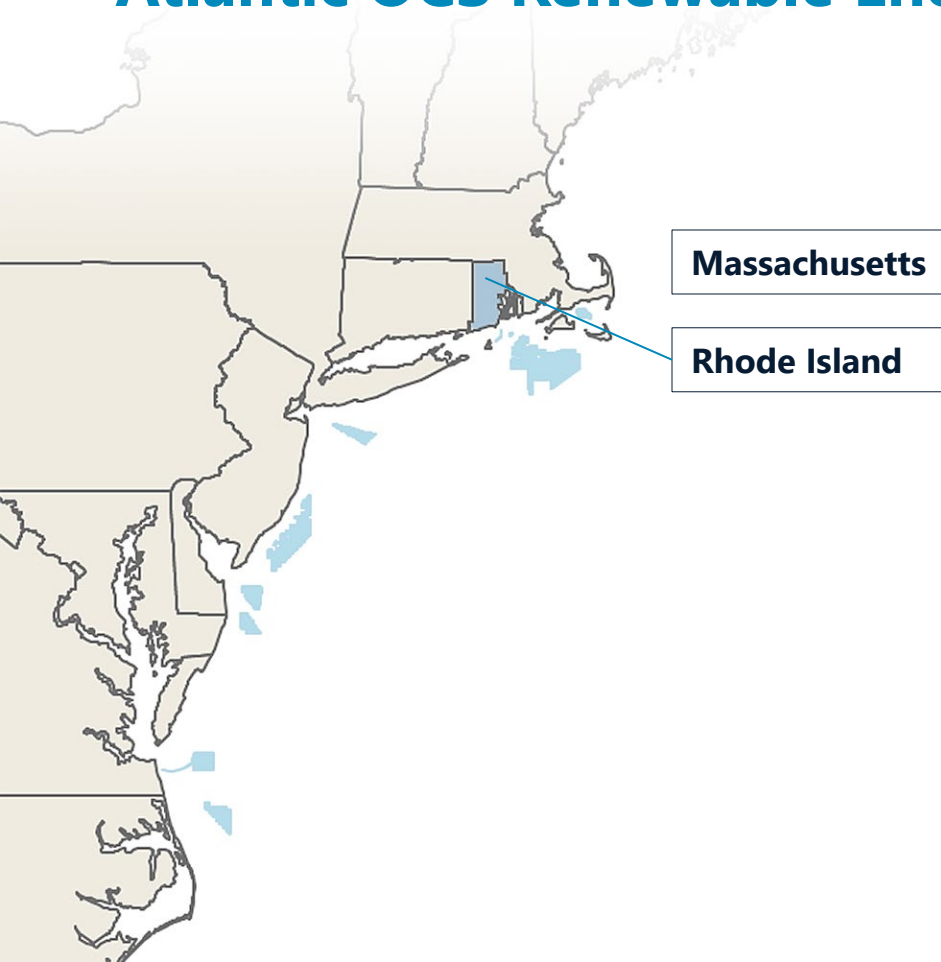
Photo courtesy Deepwater Wind

Atlantic OCS Renewable Energy: State Leadership



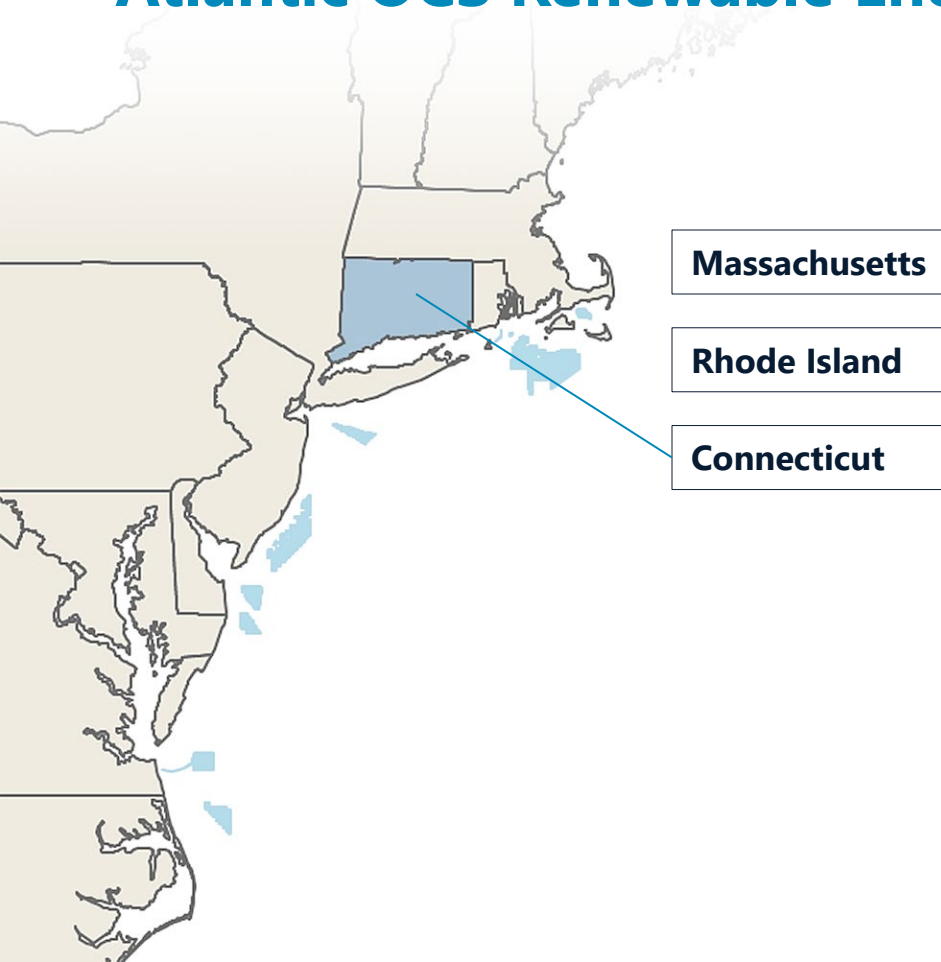
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Massachusetts	400	1,600	25% by 2030

Atlantic OCS Renewable Energy: State Leadership



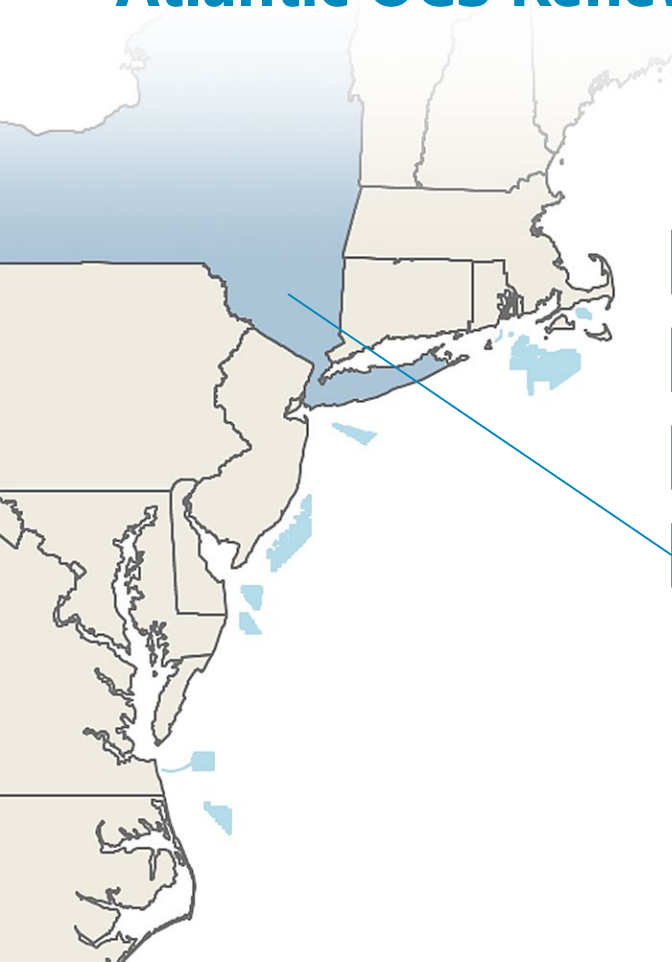
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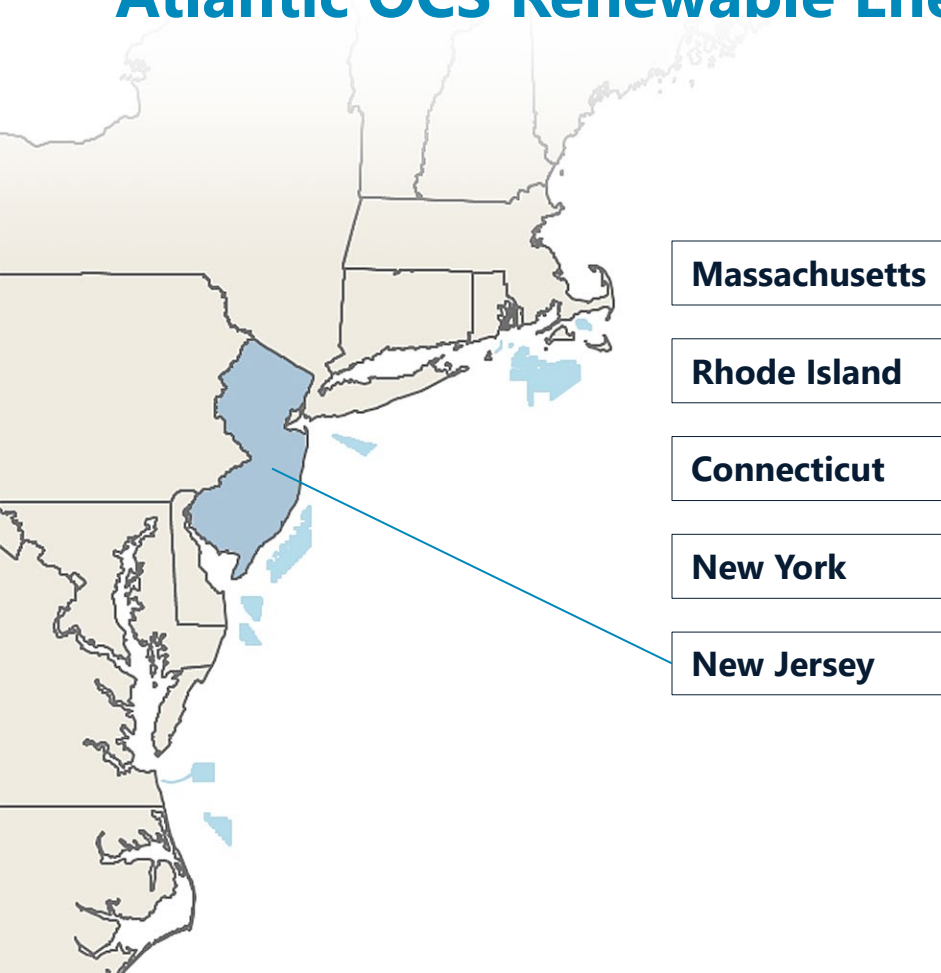
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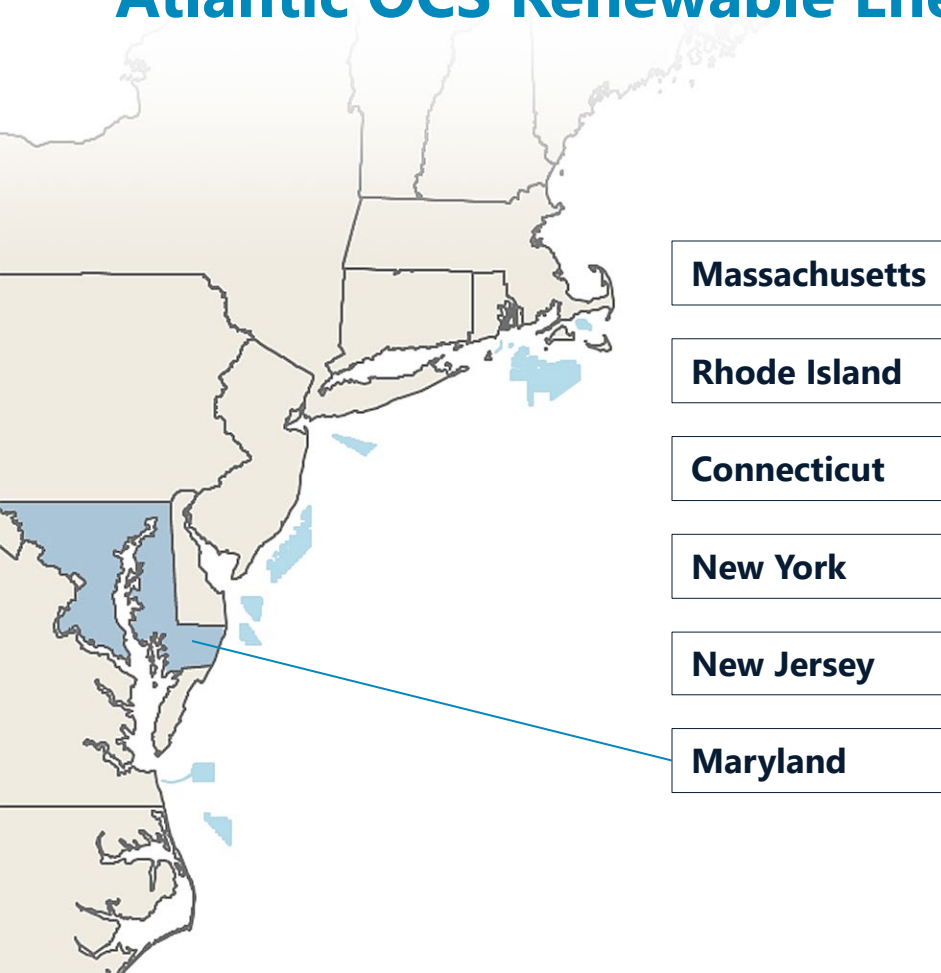
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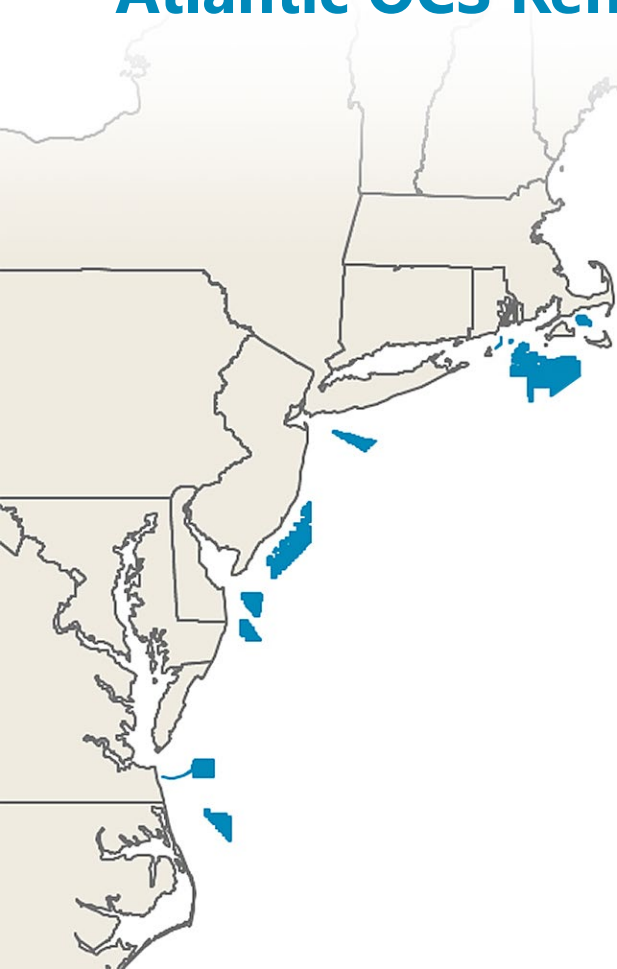
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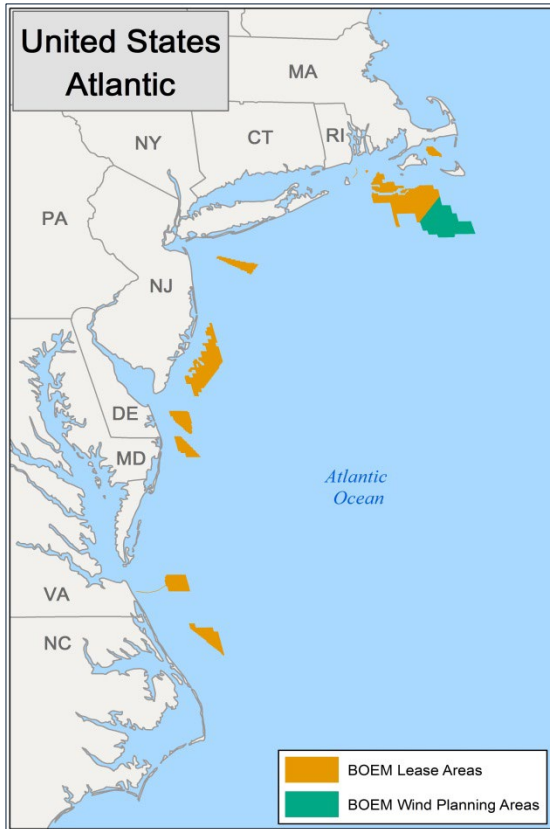
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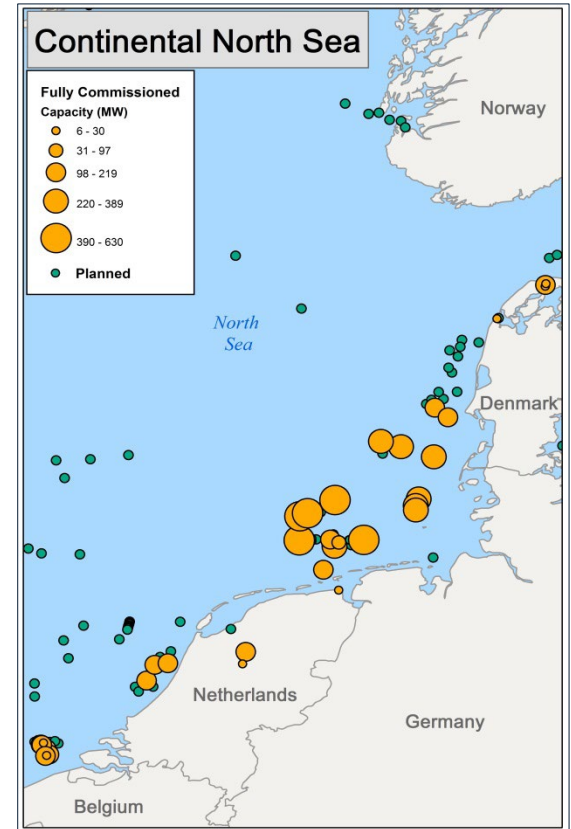


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TOTAL	3,318 MW	7,500 MW	--

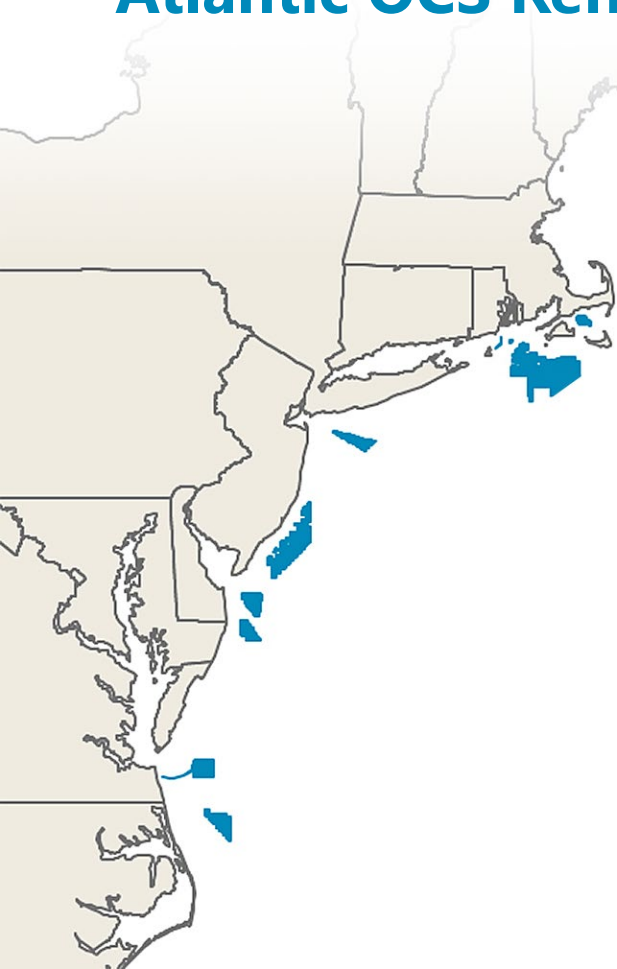
U.S. Atlantic and North Sea Offshore Wind Facilities



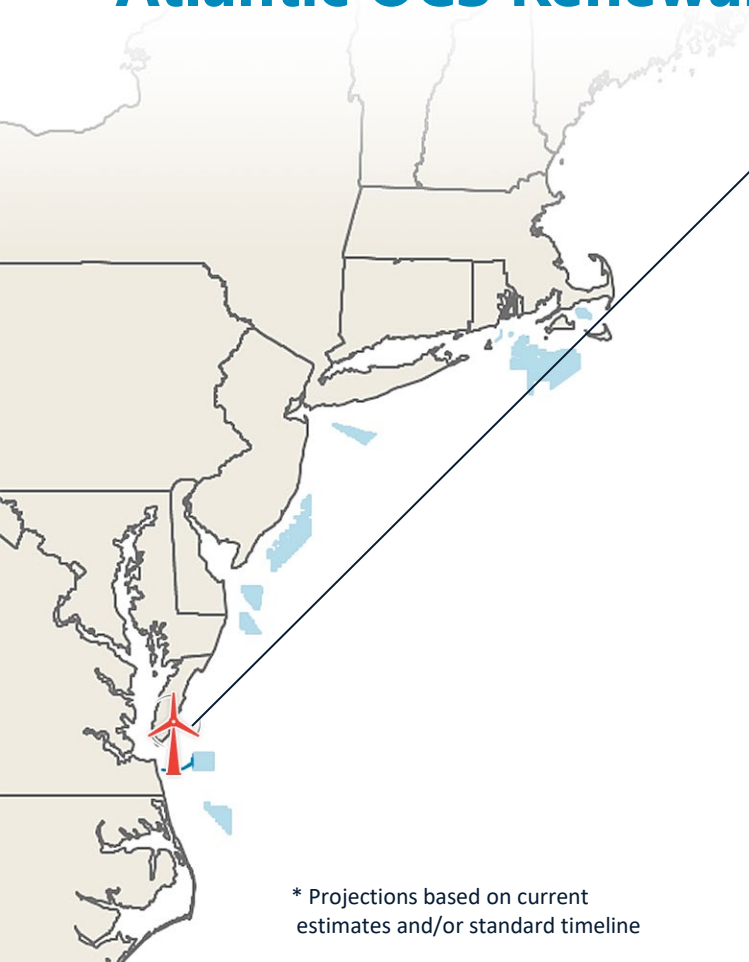
Population (< 50 mi of coast)	51,607,259		42,411,495
Length of Coast (NM)	600		700
Number of Active Projects	14		37
Production Start Date	2020 (anticipated)		1996
Active Production (MW nameplate)	0		8,174
Anticipated Production (MW)	7,500		43,878



Atlantic OCS Renewable Energy: "Projects in the Pipeline"



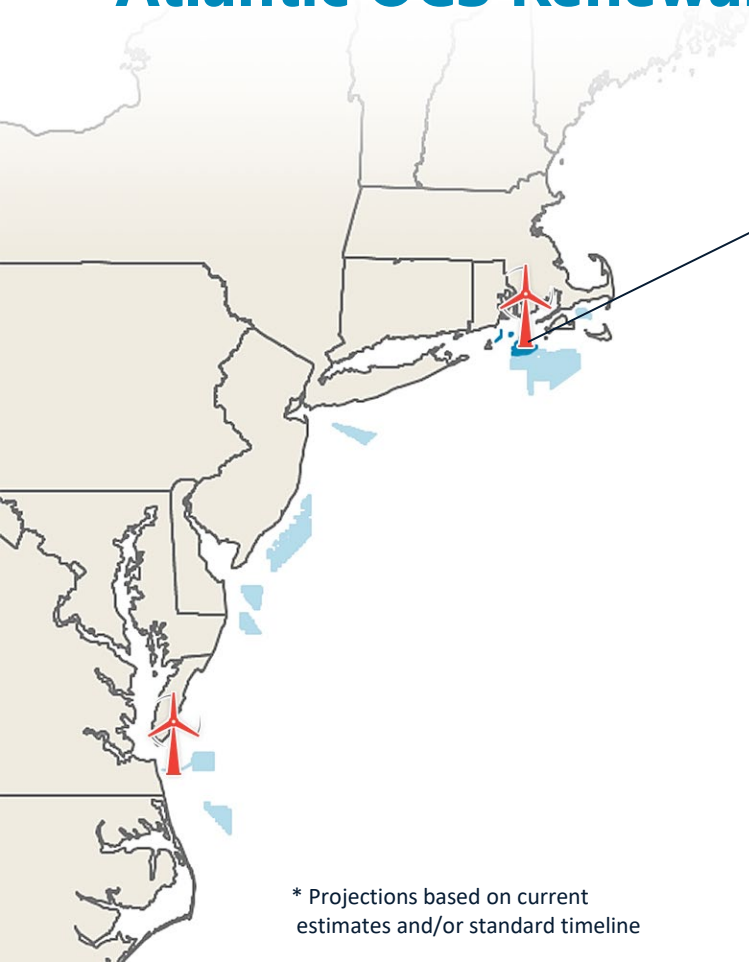
Atlantic OCS Renewable Energy: "Projects in the Pipeline"






Year	Project	Company
2020	Coastal Virginia Offshore Wind (CVOW)	 

* Projections based on current estimates and/or standard timeline

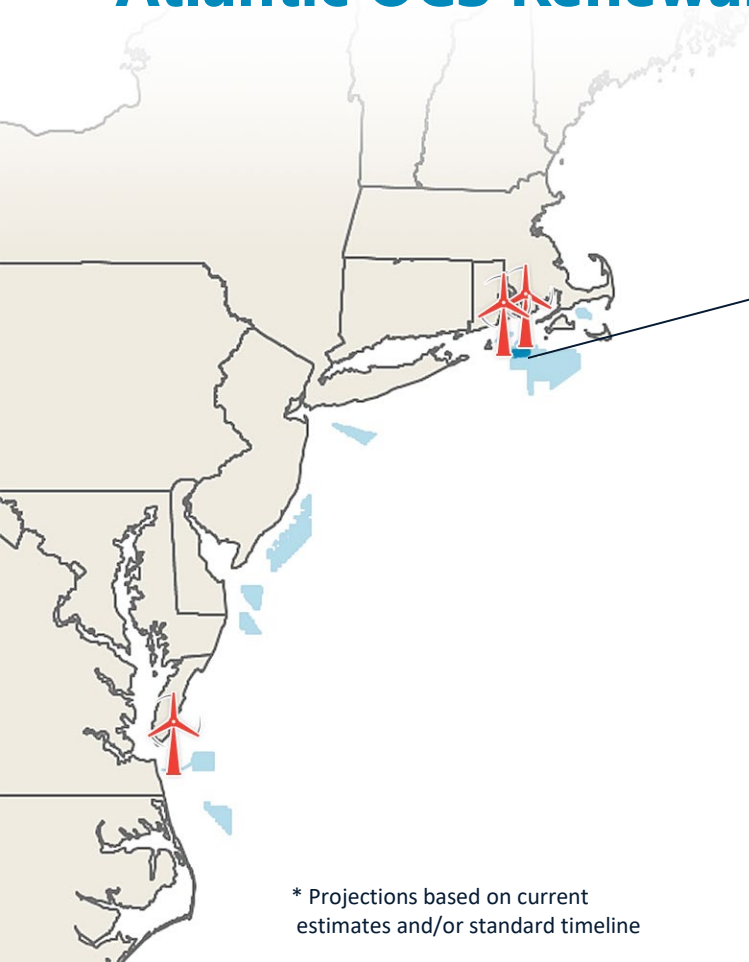
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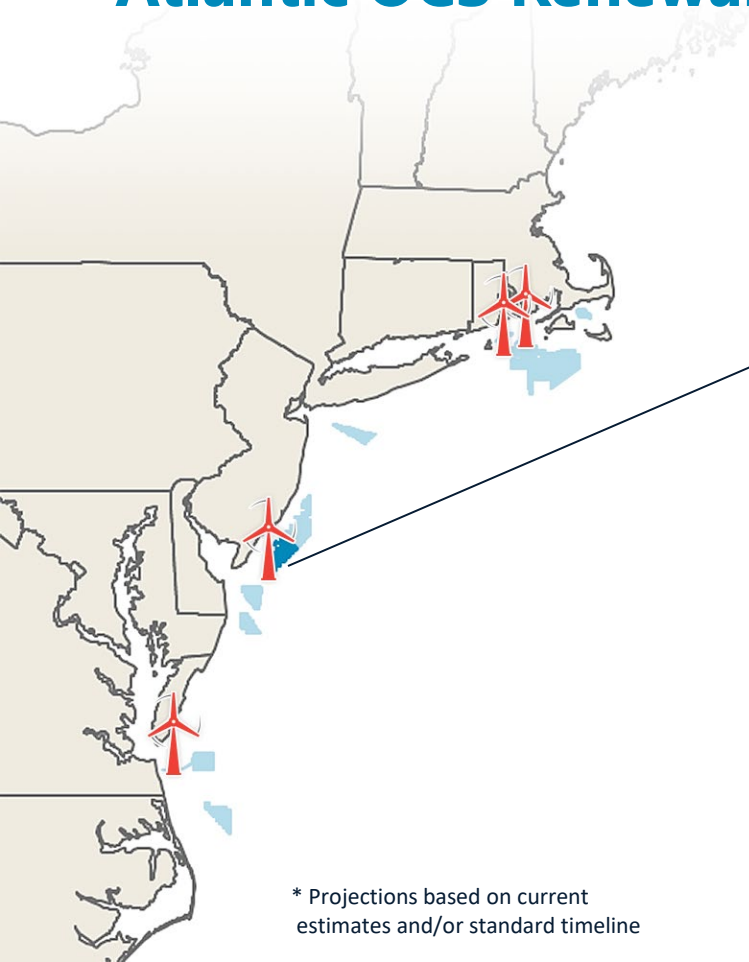
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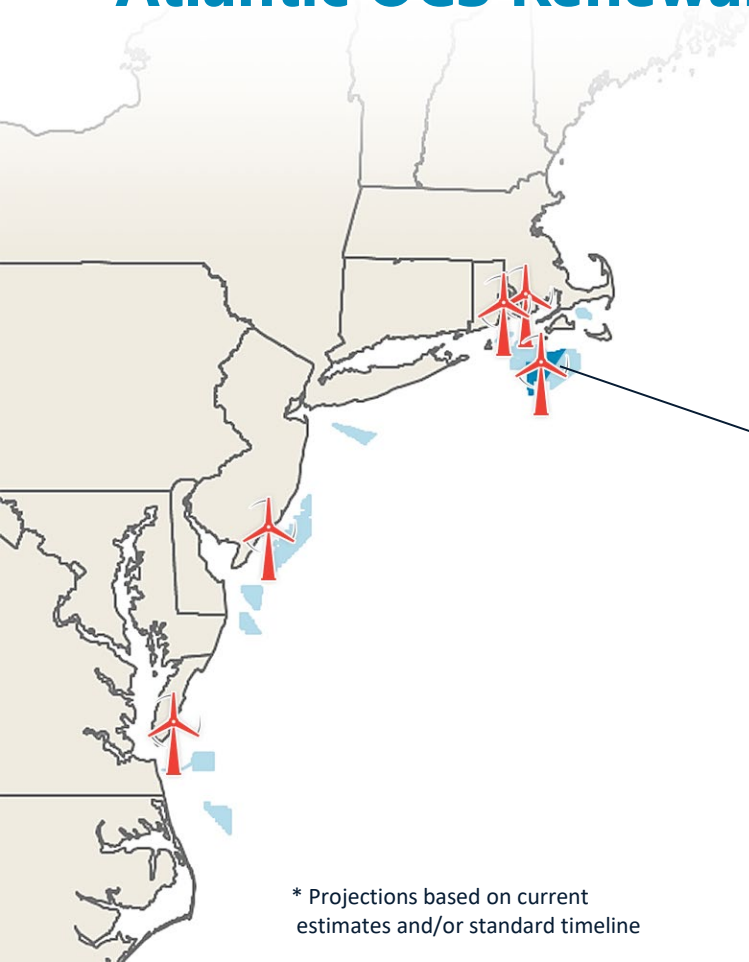
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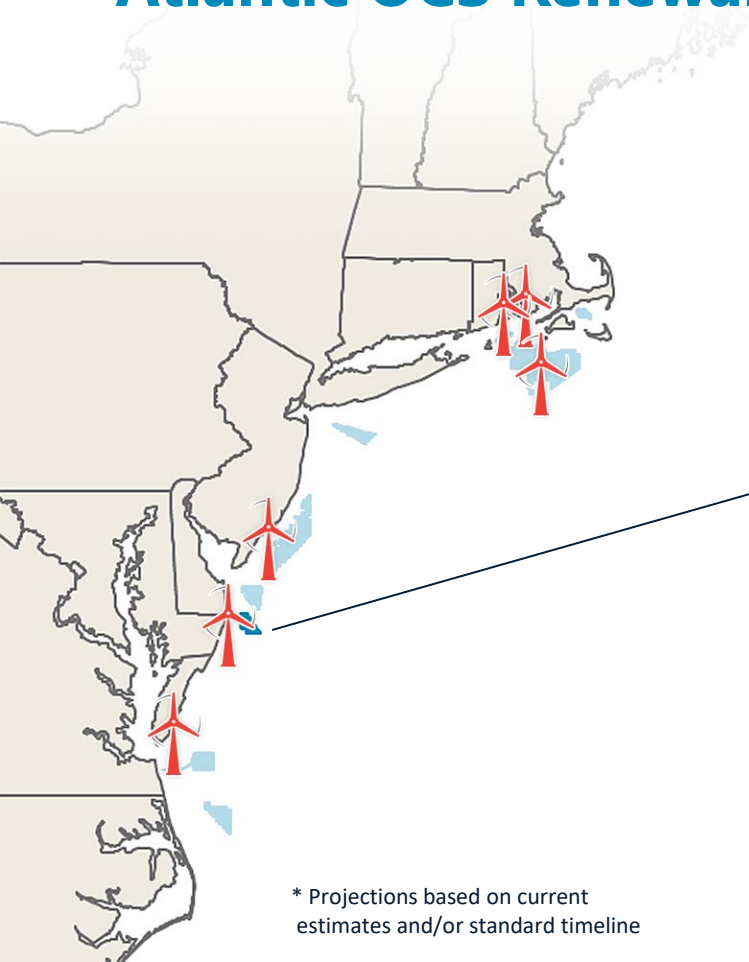
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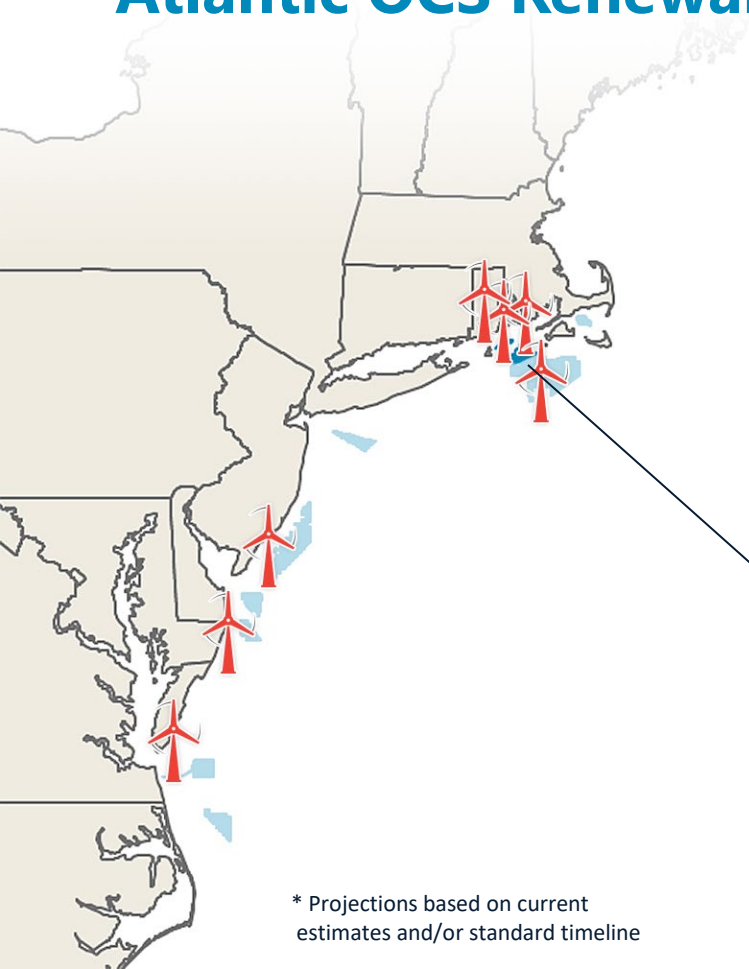
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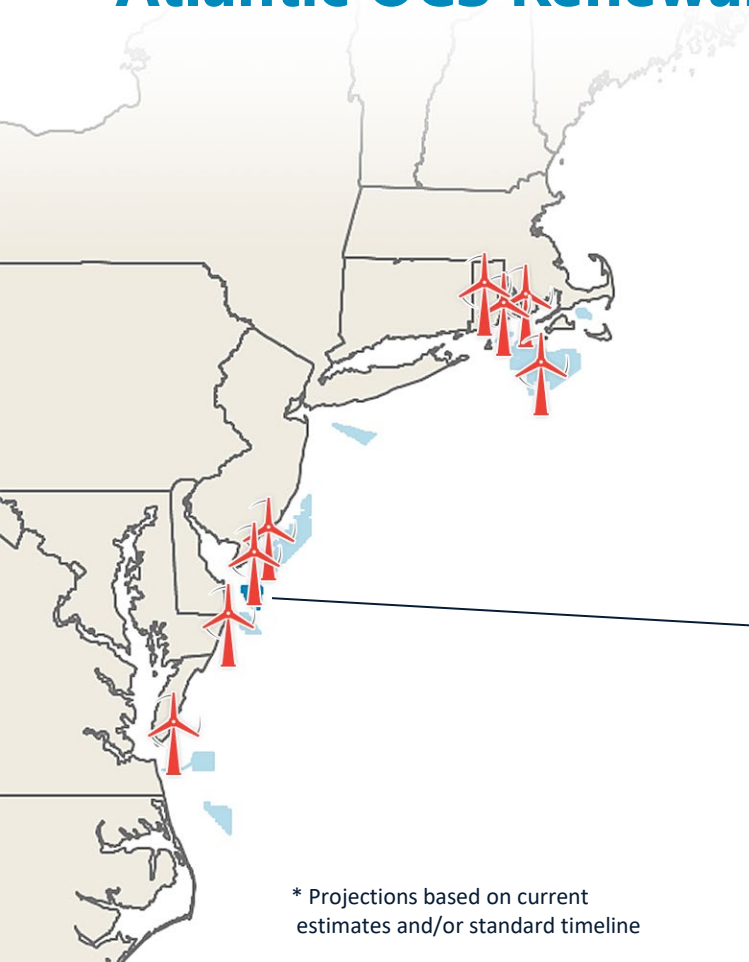
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2023	Revolution Wind	

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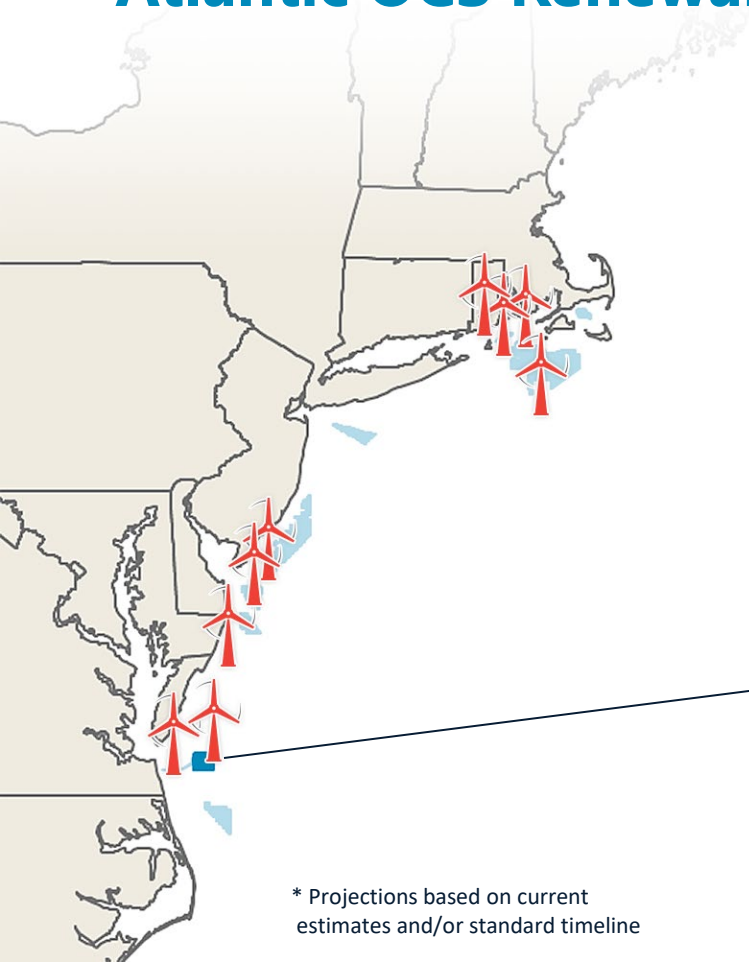
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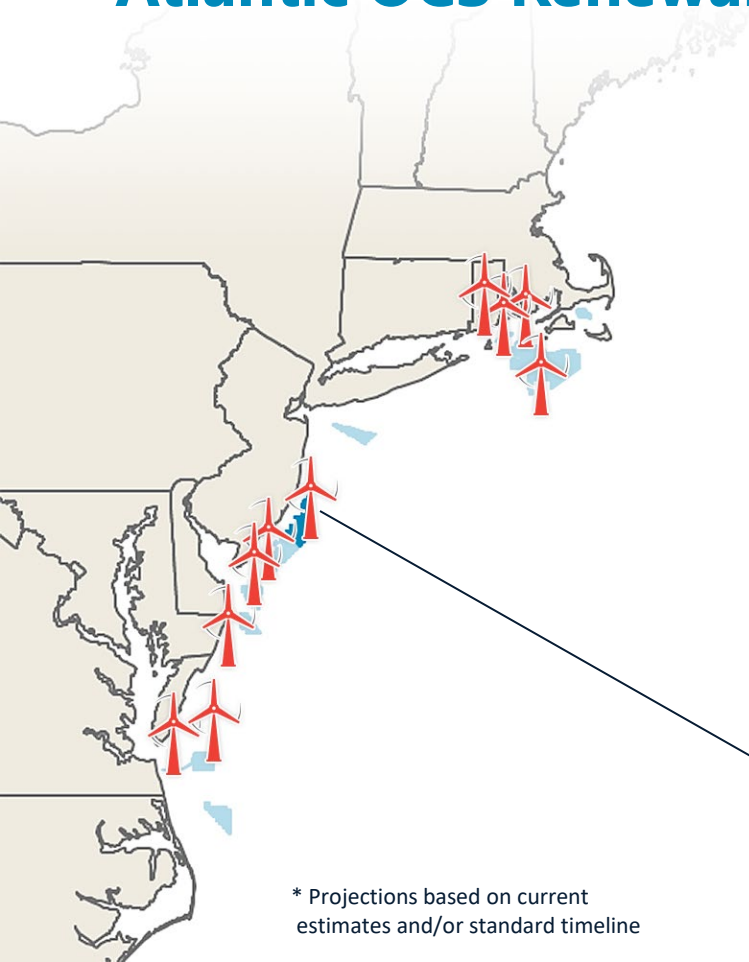
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2025	Dominion Commercial Lease	

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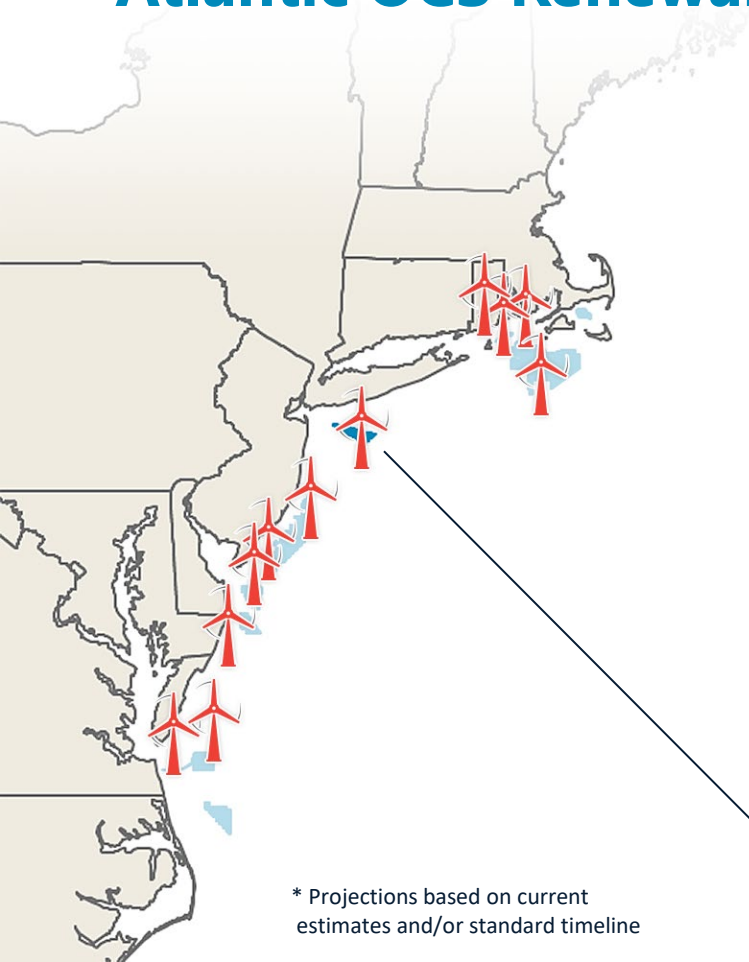
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2023	Skipjack Windfarm	 
2025	Dominion Commercial Lease	
2026	U.S. Wind (NJ)	

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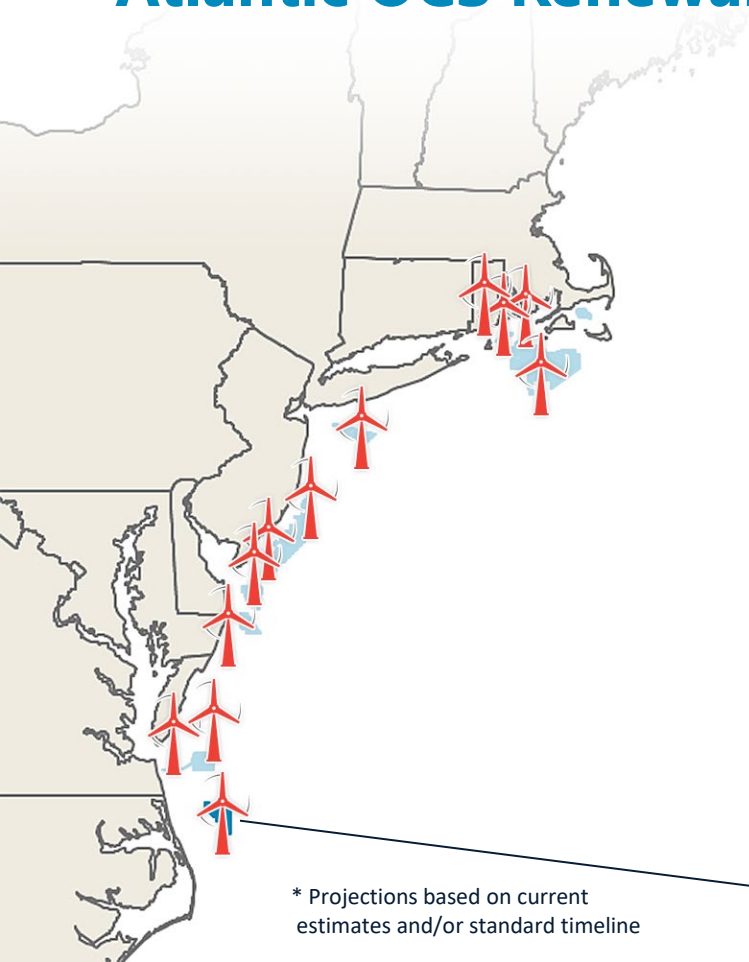
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2025	Dominion Commercial Lease	
2026	U.S. Wind (NJ)	
2027	Empire Wind	

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2023	Revolution Wind	
2023	Skipjack Windfarm	 
2025	Dominion Commercial Lease	
2026	U.S. Wind (NJ)	
2027	Empire Wind	 Statoil
2027	Kitty Hawk	

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Atlantic OCS Renewable Energy: Job Creation



- **10,000 full-time equivalent jobs for construction of 800 MW wind farm**
- **10,000 - 15,000 full-time equivalent jobs ongoing for multiple winds farm projects**
- **Local content expanding from 40% to 70% as industry matures**

NREL Jobs and Economic Development Economic Impact Model; BVG Associates Limited, "NYSERDA Report 17-22"

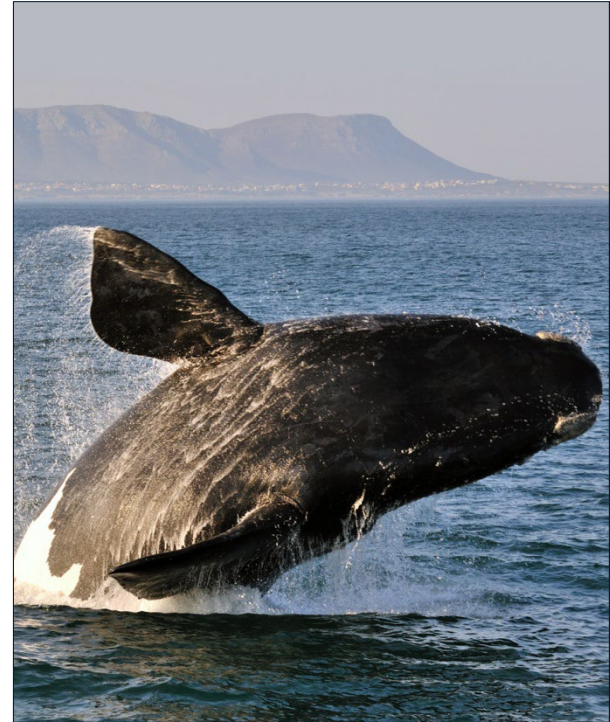
Block Island: Construction

Gulf Island Fabrication facility in Louisiana provided structures for Block Island.



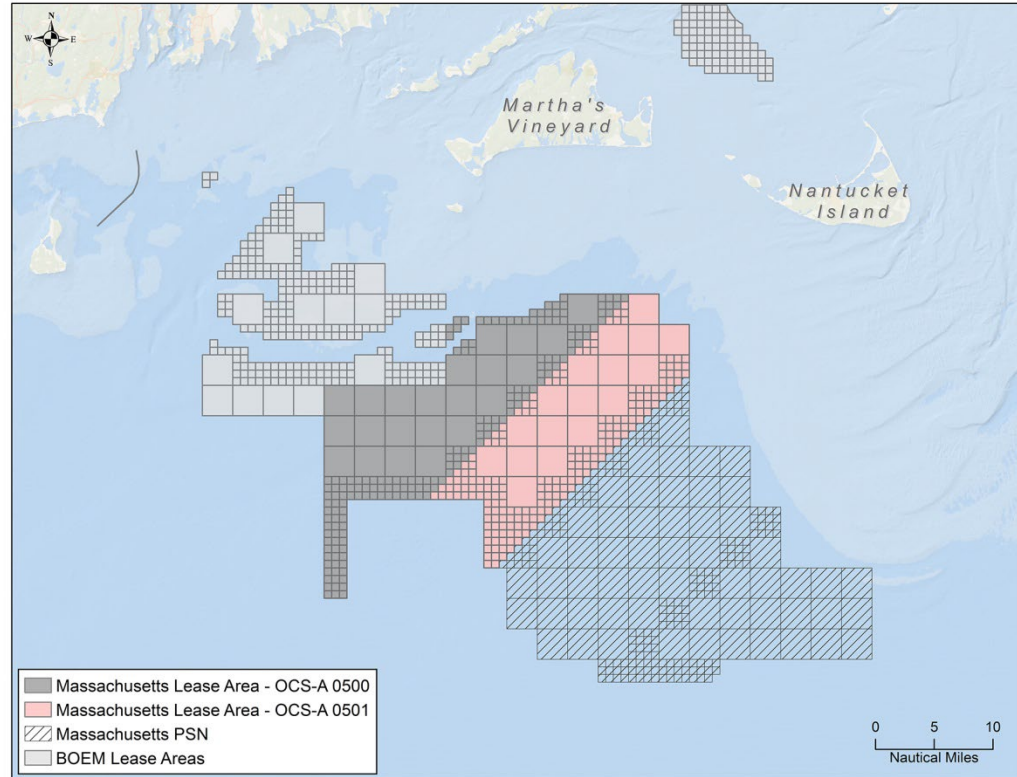
Challenges

- Commercial and recreational fishing
- Viewshed / visual impact
- Navigation and safety
- Wildlife



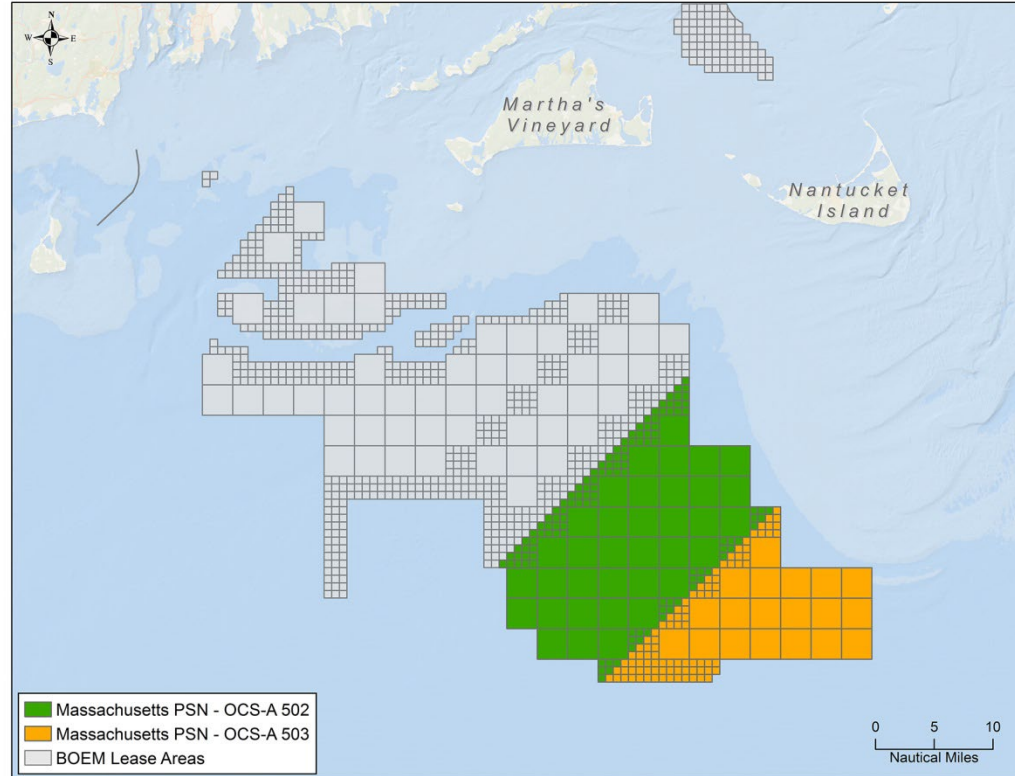
Vineyard Wind Notice of Intent (NOI) to Prepare Environmental Impact Statement

- 800 MW facility offshore MA
- Next phase of environmental review
- Public meetings in MA and RI next week
- Comment period through **April 30, 2018**



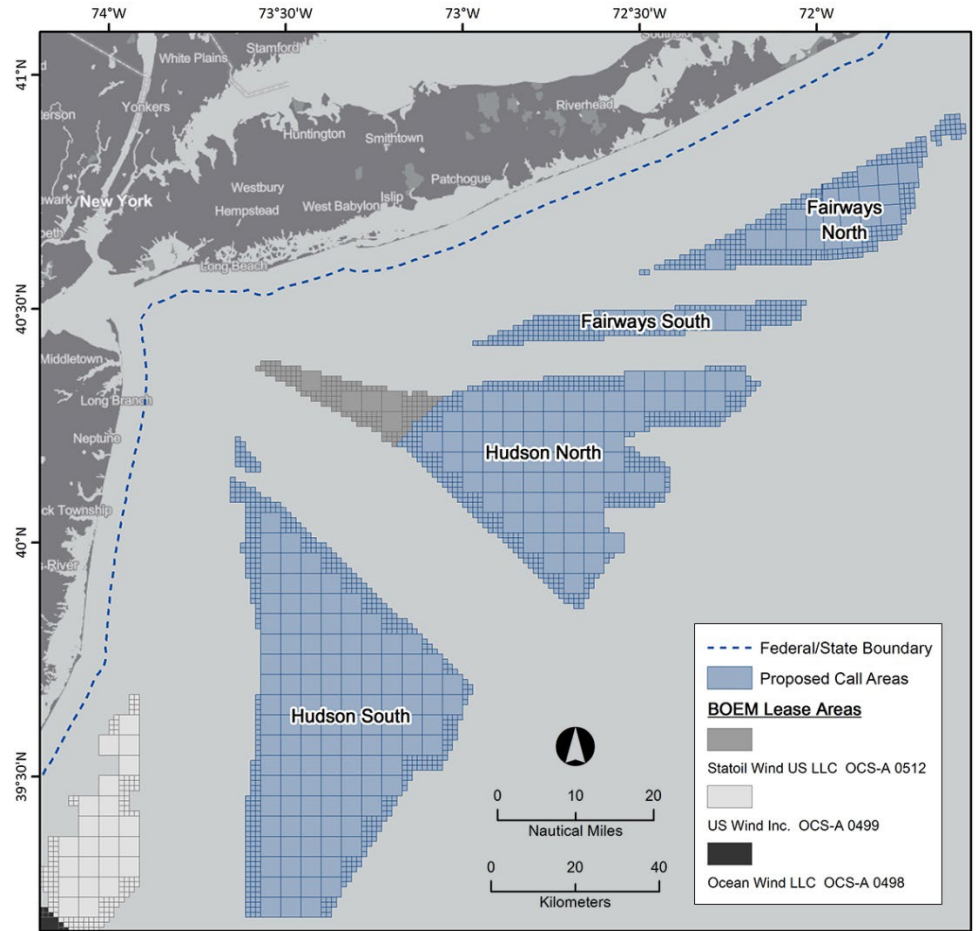
Massachusetts Proposed Sale Notice (PSN)

- Proposes sale of Wind Energy Area offshore MA
- Two additional lease areas totaling 390,000 acres
- Auction by end of 2018
- Comment period through **June 11, 2018**



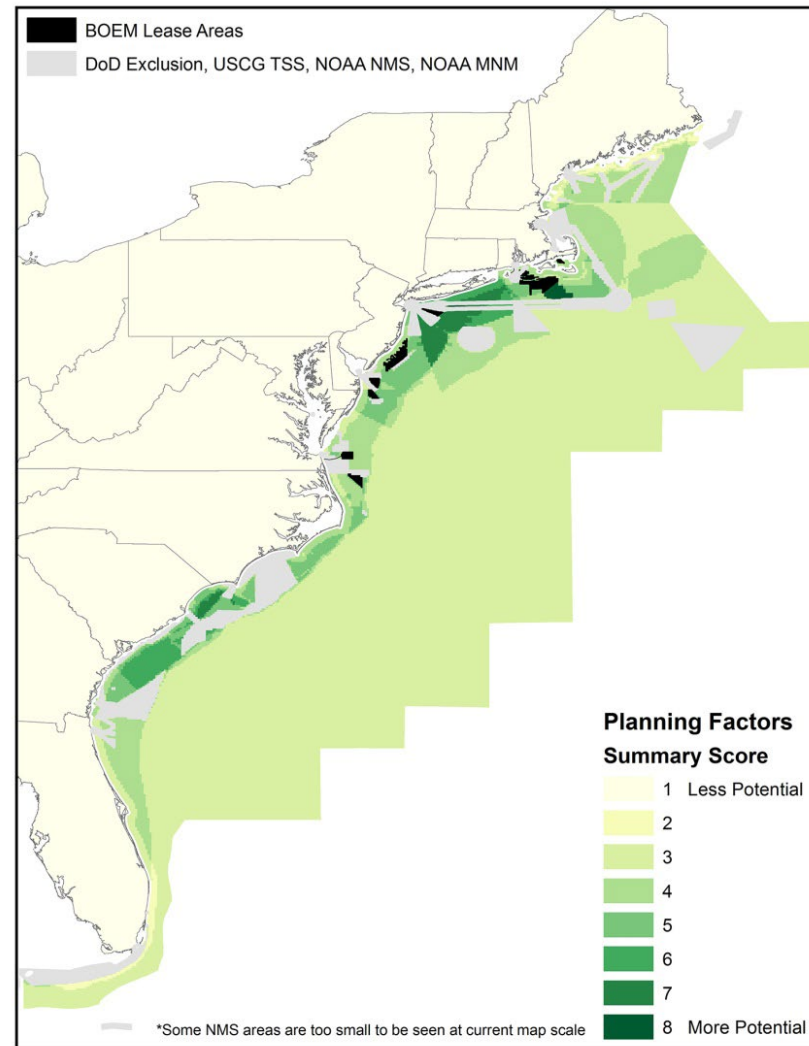
New York Bight Call for Information and Nominations

- Identifies initial areas under consideration for leasing
- Comments will inform identification of Wind Energy Areas
- Comment period through **May 29, 2018**



Atlantic Leasing Request for Feedback (RFF)

- Pipeline of projects needed for supply chain and cost reduction
- Identifying additional areas suitable for leasing
- Request for Feedback describes areas identified and methodology
- Comment period through **May 21, 2018**



More Information

Bureau of Ocean Energy Management

www.boem.gov

Renewable Energy Program

www.boem.gov/Renewable-Energy

Oil & Gas Program

www.boem.gov/Oil-and-Gas-Energy-Program

Regulatory Information

www.boem.gov/Regulatory-Development-Policy-and-Guidelines



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