# **Offshore Wind Summit**

September 25, 30, and October 7, 2020

National Governors Association Center for Best Practices & The Embassy of Denmark





# **Introductory Remarks**

Jessica Rackley, Energy & Environment Program Director, NGA Center for Best Practices

Michael Guldbrandtsen, Counselor, Embassy of Denmark





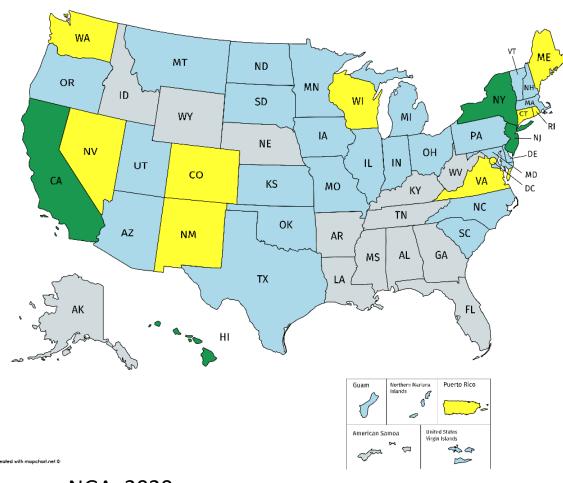
EMBASSY OF DENMARK Washington D.C.

## Thank You to our Sponsors

# **Orsted**SIEMENS Gamesa

RENEWABLE ENERGY

# **States with Clean Energy Goals**



- States with 100% clean or renewable energy goals electricity sector only
- States with 100% clean or renewable energy goals economy-wide
- States with Renewable Portfolio Standards or targets

Source: NGA, 2020





EMBASSY OF DENMARK Washington D.C.

### **Offshore Wind Technical Potential**

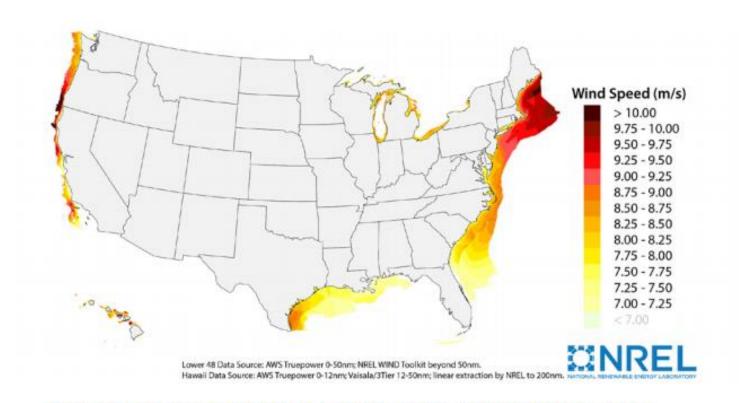


Figure 17. Wind speed map for the U.S. offshore wind energy technical resource area

Source: NREL, 2016 Offshore Wind Energy Resource Assessment for the United States



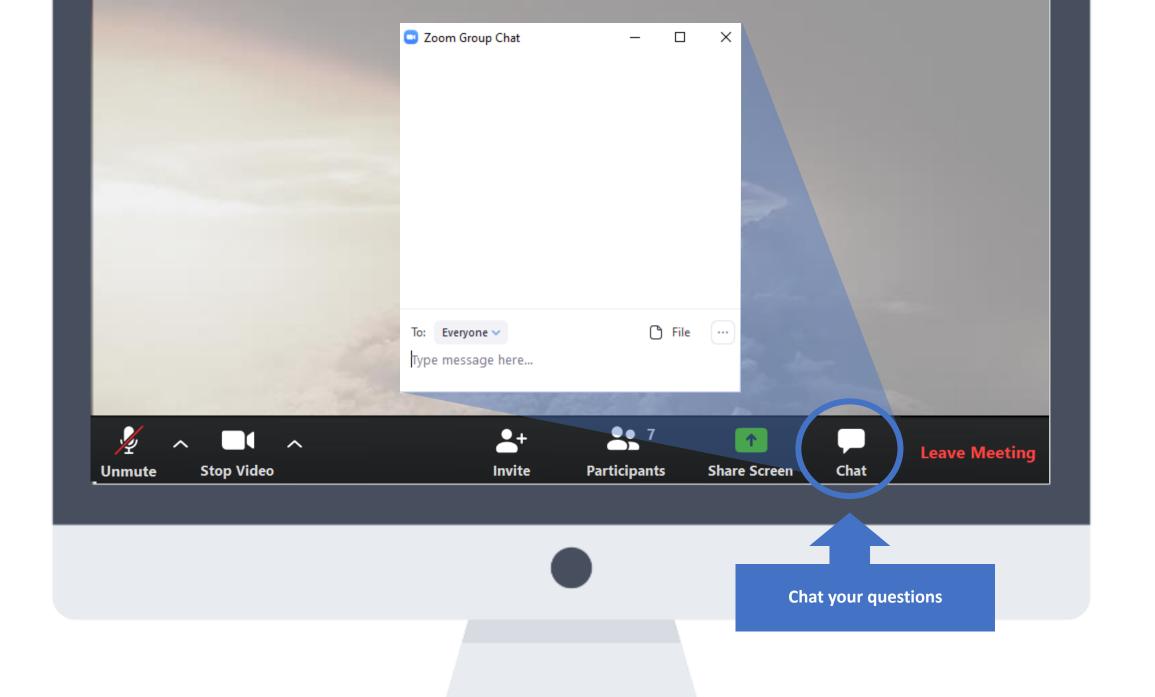


Today's Virtual Meeting: Zoom Controls



The Zoom menu bar appears at the bottom of the Zoom window once the meeting begins.

If you don't see the menu bar, move your mouse slightly and the bar will appear.



# **Introductory Remarks**

# Michael Guldbrandtsen Counselor Embassy of Denmark





### **Welcome Remarks**

**Tim Blute** 

**Director** 

**NGA Center for Best Practices** 





# Introduction to the Day – Offshore Wind Update

**Thomas Brostrøm** 

**CEO** 

**Ørsted North America, Offshore** 





# Offshore Wind Summit

Thomas Brostrøm, CEO Ørsted North America, Offshore



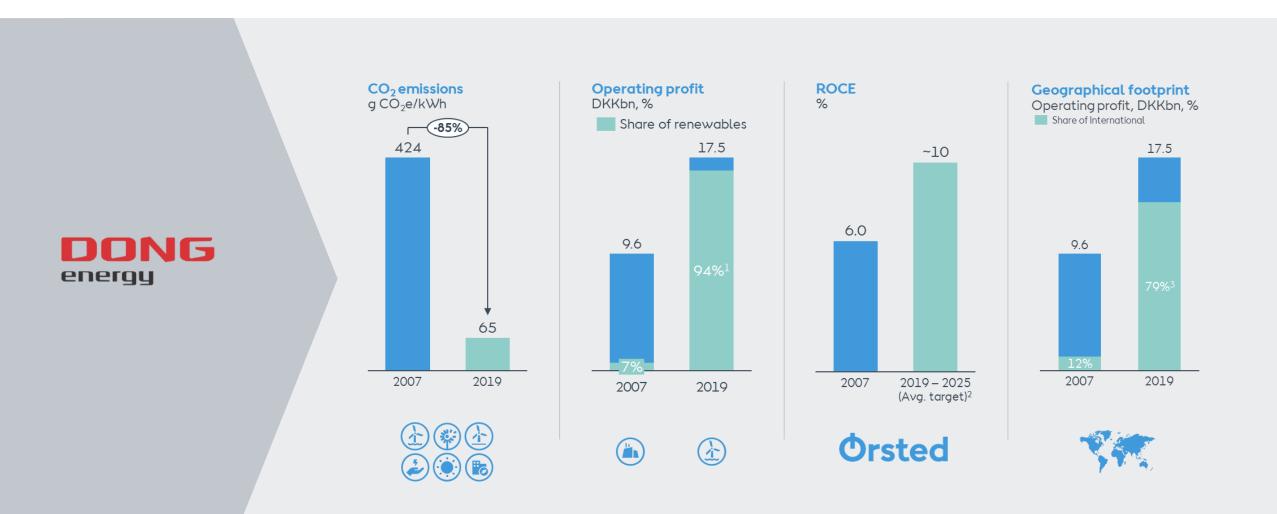
# Ranked most sustainable company in the world







#### Significant transformation of Ørsted over the past decade <sup>1</sup>





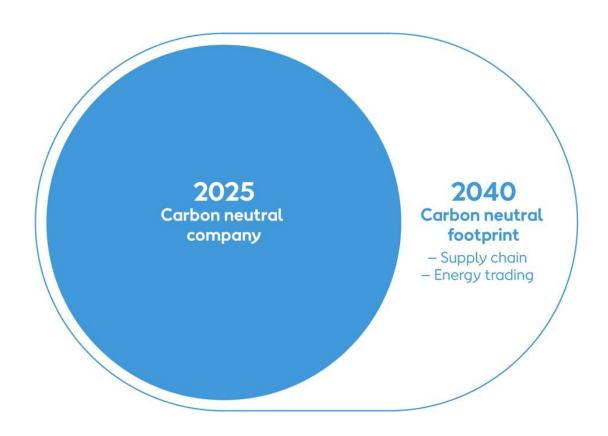
Note 2: ROCE target for 2019-2025



Note 3: International share calculated based on Group EBITDA excl. divestments and miscellaneous un-allocated costs totalling 16 DKKbn

#### The first major energy company to reach net-zero emissions in its energy generation

- We will become carbon neutral by 2025.
- This will make Ørsted the first major energy company to reach net-zero emissions in its energy generation – far ahead of science-based decarbonization targets for limiting global warming to 1.5°C.
- Additionally, we've set a target of achieving a carbon neutral footprint by 2040.



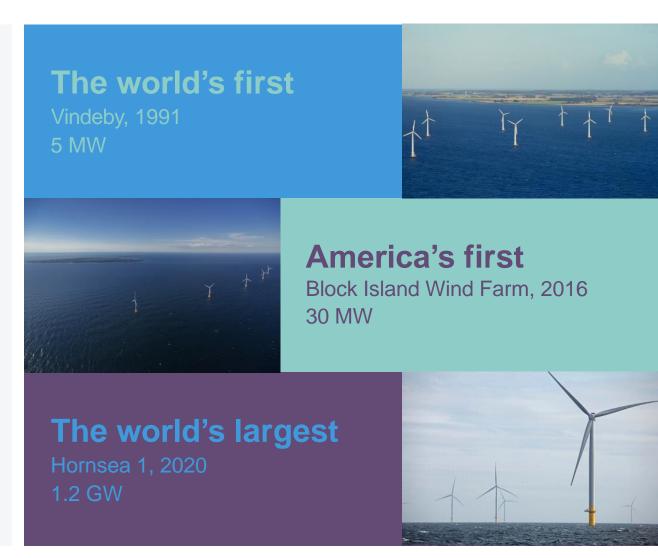


#### Ørsted Offshore: Global overview

25+ years of experience and unparalleled track record

#### The global leader in offshore wind

- > **6.8 GW** installed capacity
- > 3.1 GW under construction
- > 1,500+ turbines spinning
- 26 offshore wind farms in operation





#### Rapid advances in offshore turbine technology



Boeing 747 Length: 250 ft





Year: 1991 Diameter: 115 ft Tower Height: 115 ft Capacity: 0.45 MW



Middelgrunden

Year: 2001 Diameter: 250 ft Tower Height: 210 ft Capacity: 2.00 MW



#### **Anholt**

Year: 2013 Diameter: 394 ft Tower Height: 270 ft Capacity: 3.60 MW



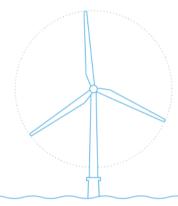
#### **Block Island Wind Farm**

Year: 2016 Diameter: 505 ft Tower Height: 335 ft Capacity: 6.00 MW



#### **Burbo Bank Extension**

Year: 2017 Diameter: 538 ft Tower Height: 370 ft Capacity: 8.00 MW

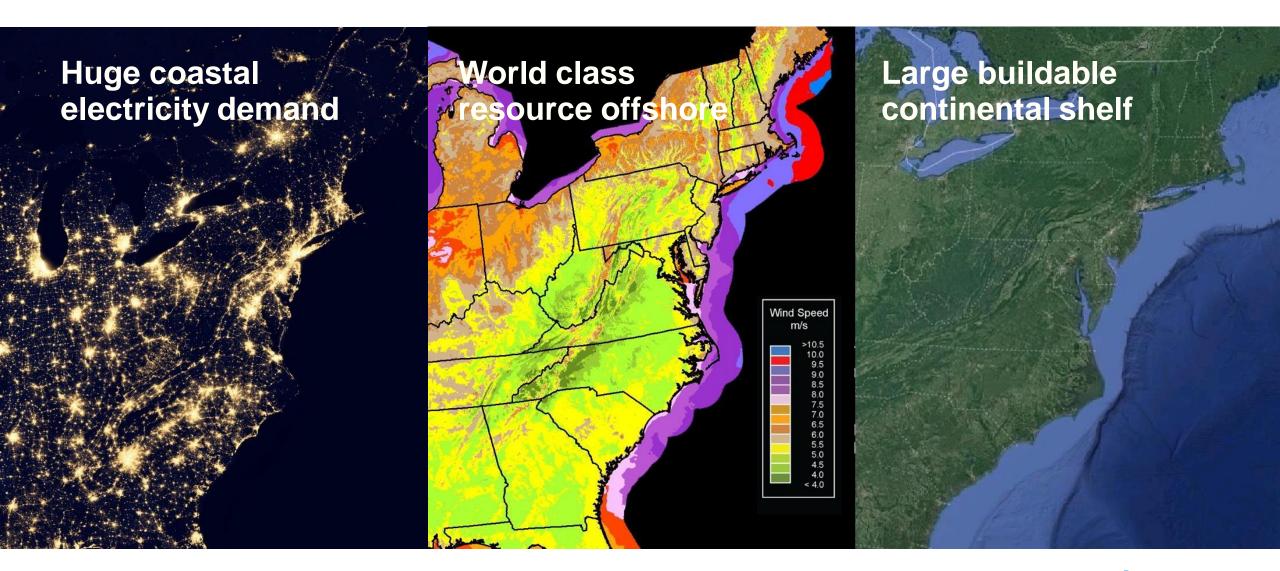


#### Skipjack Wind Farm

Year: 2023 Diameter: 722 ft Tower Height: 502 ft Capacity: 12.00 MW\*



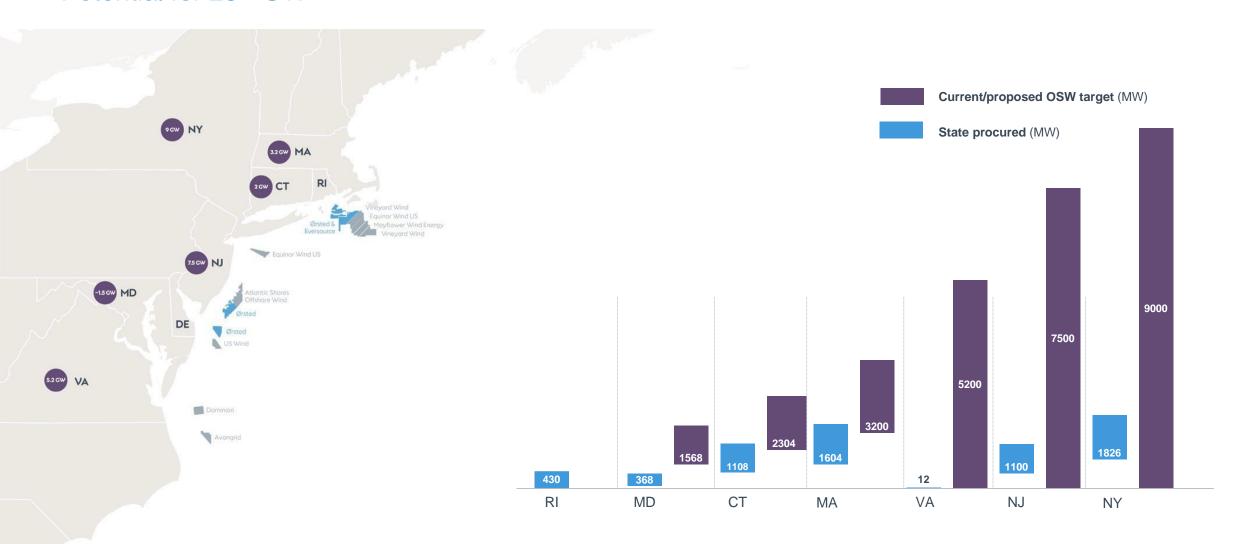
#### Why offshore wind





#### Offshore wind market on the East Coast

#### Potential for 25+ GW





#### **Investing in American Port Infrastructure**



#### **Rhode Island**

- Two ports: ProvPort and Quonset
- Investing \$40 million in upgrades with JV partner Eversource
- Construction, fabrication, and operations for multiple projects



#### **New London**

- \$77.5 million of a \$157 public-private
   partnership with JV partner Eversource and the
   State of Connecticut and Connecticut Port
   Authority to re-develop New London State Pier
   into a heavy-lift cargo and deep-water port
- Supporting construction for regional projects



#### **Baltimore**

- Former Bethlehem Steel site is an excellent heavy construction facility
- Investing \$38 million in fabrication and port upgrades
  - \$13.2 million invested at Tradepoint Atlantic
- Serving the Skipjack Wind Farm project



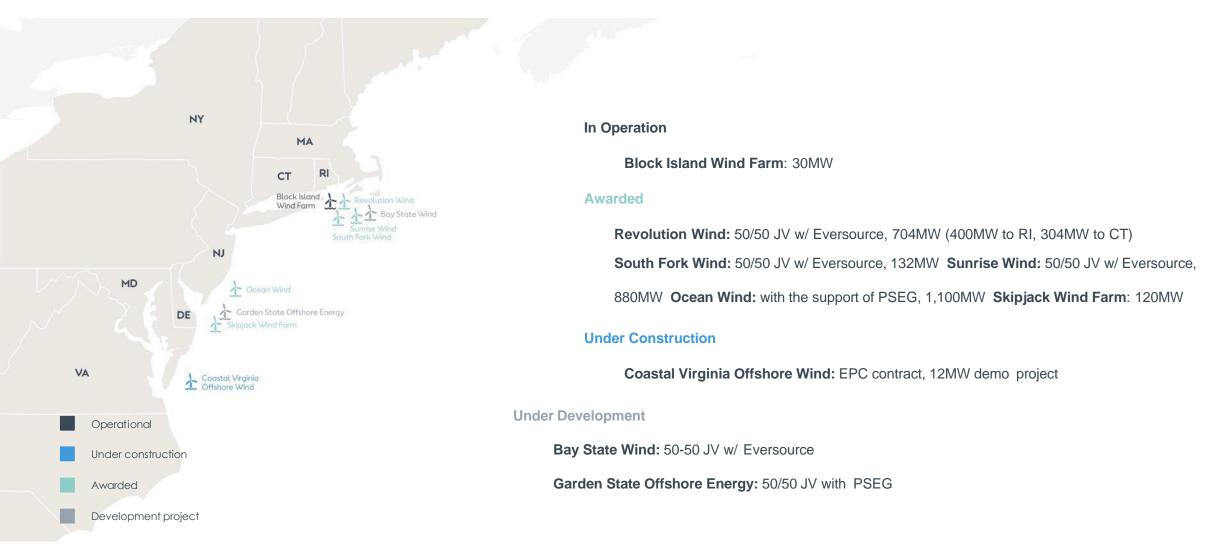
#### Long Island

- Constructing a new Operations and
  Maintenance (O&M) hub in the greater Port
  Jefferson area with JV partner Eversource
- Creating up to 100 permanent full-time jobs and economic investment for Long Island



#### Ørsted U.S. Offshore Wind portfolio

#### Attractive and geographically diverse portfolio with potential for 8-10GW





#### **Block Island Wind Farm**

#### America's first offshore wind farm



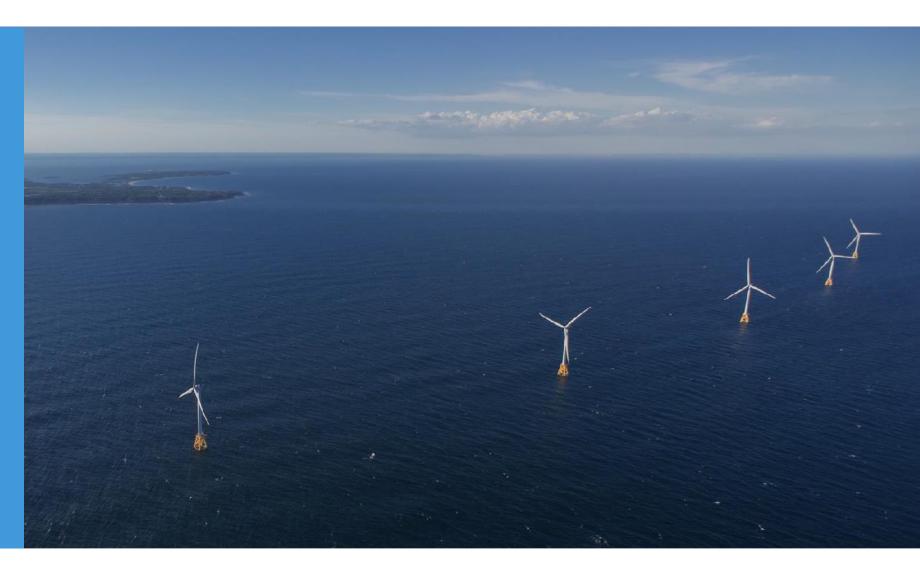
30MW project



17,000 homes

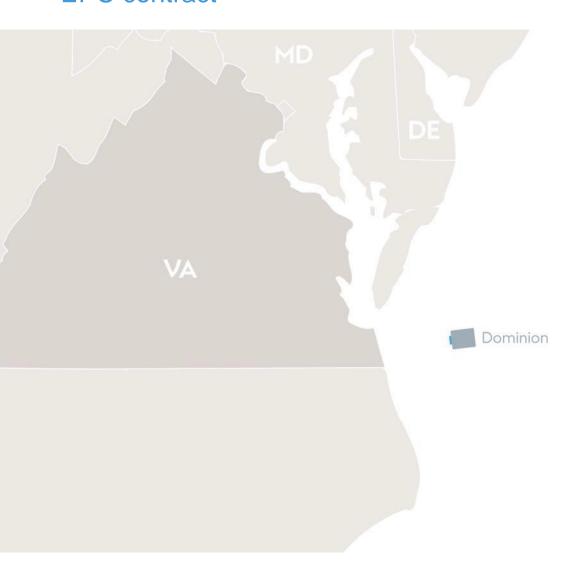


First in the nation





## Coastal Virginia Offshore Wind (CVOW) EPC contract



#### **Project overview**

- Ørsted is the EPC contractor for Dominion Energy on the CVOW project
- 12MW (2 six-megawatt turbines) demonstration project enough to power 3,000 homes
- Located in a BOEM research lease held by the Department of Mines, Minerals and Energy approximately 27 miles from the City of Virginia Beach
- This summer, Ørsted successfully completed the installation of the two turbines - the first turbines in U.S. federal waters.

#### **Schedule**

2019	Onshore construction
2019	Fabrication of turbines and foundations
2020	Installation offshore
2020	Commercial operations



#### **Engagement across the spectrum of stakeholders**







#### Local community –

Engagement early and often in the local communities near the project location

#### NGOs -

Local, state, regional, and national non-profits

#### Fishing –

Commercial and recreational, plus shoreside supply chain





#### Academic -

University, college, and other academic partners

#### Research and Development –

National labs, research institutions, private entities



### Our vision

Let's create a world that runs entirely on green energy



# BOEM: 'Federal Lease Sales & Permitting Process'

**Walter Cruickshank** 

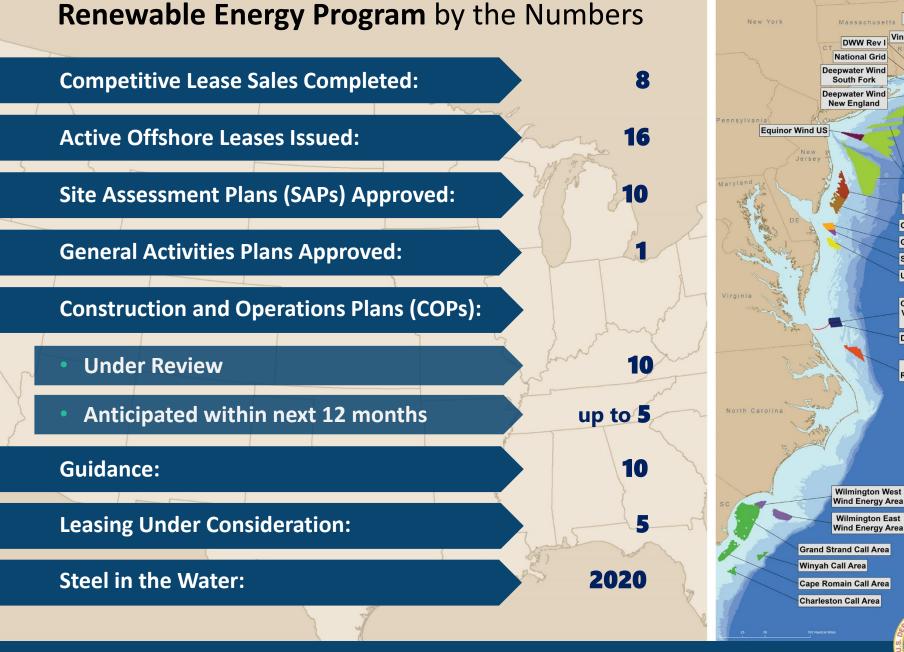
**Deputy Director & Acting Director** 

**Bureau of Ocean Energy Management (BOEM)** 









**Bay State Wind** 

New York Bight Call Areas

Atlantic Shores
Offshore Wind

Ocean Wind

GSOE I (Garden State)

Virginia Research

Skipjack US Wind

Dominion

Avangrid Renewables

# Panel Discussion on Stakeholder Engagement

Moderator: Julia Bovey, Director of External Affairs, Equinor

#### **Panelists:**

- James Boyd, Coastal Policy Analyst Rhode Island Coastal Resources Management Council
- Catherine Bowes, Program Director Offshore Wind Energy, National Wildlife Federation
- Lyndie Hice-Dunton, Executive Director Responsible Offshore Science Alliance





# State Breakout Discussions on Stakeholder Engagement





## **State Report Out & Closing**



