Ocean Wind
The Importance of Stakeholder Engagement in the Development of Offshore Wind Projects

May 2019
Ørsted Offshore

Ørsted is the global leader in offshore wind

25+ years of experience and track record in the offshore wind power sector

Unparalleled experience and track record

25 offshore wind farms in operation

5 offshore wind farms under construction

We built the world’s first offshore wind farm...

Vindeby

5 MW

...and the world’s largest operational offshore wind farm

Walney Extension

659 MW

5.6 GW constructed capacity

3.4 GW under construction

~ 1,100 turbines
world’s leading operator
Ørsted Offshore overview

Ørsted offshore wind global footprint

Unparalleled experience and track record

1991  25+ years of experience and track record in the offshore wind power sector  2019

26 offshore wind farms in operation  3 offshore wind farms under construction

5.6 GW Constructed capacity  3.4 GW under construction  ~2,450 Dedicated employees

~1,150 turbines  World’s leading operator

13 million people with clean electricity  23 Partnerships
Why Offshore Wind for New Jersey and the Region
Ocean Wind application
Ørsted, with the support of PSEG, has submitted an application to build New Jersey’s first offshore wind farm

As presented in its proposal to the NJBPU, the Ocean Wind project will:

- Provide more than half a million New Jersey homes with clean, reliable power.
- Directly create several thousand construction jobs along with thousands of ancillary jobs, and approximately 70 permanent jobs to support the project over its 25+ year lifetime.
- Make significant investments in New Jersey’s offshore wind infrastructure through the Ocean Wind Pro-NJ Trust, which will support Minority Business Enterprises, Women Business Enterprises and small businesses entering the offshore wind industry and enable infrastructure resiliency projects throughout South Jersey.
- Partner with universities and research organizations to support educational initiatives and R&D on offshore wind.

Ocean Wind lease area
- 3,500MW potential capacity
- 160,500 acre lease area
- 65-100 feet water depths
**Ørsted U.S. Offshore Wind**

Attractive and geographically diverse portfolio of offshore wind assets with potential for 8-10GW

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**Ørsted U. S. offshore wind portfolio**

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**Unique position with large adjacent projects**

**In operation**

- **Block Island (30MW)** operational since December 2016. 20-year PPA, starting price USD 236/MWh and 3.5%

**Under construction**

- **Coastal Virginia Offshore Wind** 12MW (EPC contract)

**Awarded**

- **South Fork (130MW)** COD expected in 2022. 20-year PPA with LIPA
- **Skipjack (120MW)** COD expected in 2022. 20-year OREC contract, starting price USD 171/MWh and 1% price escalator
- **Revolution Wind (704MW)** COD expected in 2023. Long-term PPAs currently under negotiation in Rhode Island (400MW) and Connecticut (304MW)

**Projects under development**

- **Bay State Wind** up to 2GW
- **Ocean Wind** up to 3.5GW
- **Garden State** up to 800 MW off the coast of Delaware / New Jersey
- **Revolution Wind** up to 1.2 GW in Massachusetts adjacent to Revolution Wind and Bay State Wind

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Note 1: in 2017 Ørsted and Dominion Energy entered into a strategic partnership in which Ørsted will construct two 6-megawatt turbines off the coast of Virginia. This may pave the way for future cooperation on further offshore wind development in Virginia to develop 2 GW of offshore wind capacity

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Ørsted Offshore, March 2019
Ørsted built a strong integrated end-to-end business model – fosters strong drive for stakeholder engagement

Ørsted Offshore core competencies

- **Develop**: Identify and mature projects (~250 employees)
- **Build**: Manage construction, sourcing and supply (~1,300 employees)
- **Operate**: Conduct life-cycle maintenance (~700 employees)
- **Own**: M&A, attract capital through partnerships, asset management (~200 employees)

- ✓ Ability to design and optimize projects with a 'total life-cycle cost of wind farm' mindset
- ✓ Experience and expertise along the entire value chain allow for better understanding and management of risks
- ✓ End-to-end model reduces LCoE through fast feedback and learning across the entire organization

Full-time employees

- Ørsted
- 2,450

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Environmental stewardship

- Protecting marine mammals
- Conserving fisheries & other marine life
- Improving air quality
- Benthic species and habitat surveys

- Environmental stewardship is our core principle: we believe the world should run entirely on green energy
- Seamlessly collaborated and coexisted with the fishing community and marine life for 25+ years
- Hired a dedicated marine biologist focusing on protecting marine mammals
- Hired local Fisheries Liaisons to work directly with the local fishing community
Basic stakeholder engagement principles

- Stakeholder engagement is as much about cultivating support as anticipating and addressing opposition

- Need a balanced strategy that addresses both facets

- Sometimes “getting to neutral” is the main goal, and accepting the fact that you may never get to no opposition
Areas of stakeholder sensitivity

– Viewshed
– Cost
– Impacts to existing ocean users
  – Commercial fishing
  – Recreational fishing
  – Shipping and other maritime uses
– Environmental issues
  – Marine mammals
  – Avian and bat species
– Local impacts at landfall locations
Rutgers University and Ørsted US Offshore Wind

- Metocean data sharing
- Monitoring marine mammal acoustic activity with marine gliders
- New materials for foundations
- Stakeholder engagement
- Policy initiatives