

Billions of dollars in new investments, robust commitments from various states, and support from the federal government have created a conducive environment for making offshore wind a commercial reality. This session will explore recent developments in the offshore wind industry in the region, current and planned projects by leading offshore wind energy developers, offshore wind supply chains, job creation and workforce development, grid interconnection, economic development, community engagement, and public-private partnership issues.

Session 1

Offshore Wind Power: Transforming Vision into Reality

Moderator: Taryn Boland

Deputy Chief of Staff

New Jersey Board of Public Utilities



Taryn Boland is the Deputy Chief of Staff at the New Jersey Board of Public Utilities (NJBPU), having joined the Board in November 2020. In her time at NJBPU she has worked on several key initiatives including the NJBPU Pandemic Response Proceeding, Community Solar Pilot Program Year 2 and overseeing the Agency's Communications and Information Technology Divisions.

Prior to serving in her role at NJBPU, Taryn was the Communications Manager for the Corporation for Supportive Housing national nonprofit organization where she developed and delivered messaging and content to raise awareness on the positive impacts of supportive housing to improving individual and community health.

Taryn's commitment to public service began in the 5 years she worked in the district office of Congressman Bill Pascrell, Jr and in the years following during her time at the New Jersey Housing and Mortgage Finance Agency.

Ms. Boland is a lifelong New Jersey resident and earned a Bachelor in Government and Law at Lafayette College and a Master in Public Affairs and Politics at the Rutgers University Edward J. Bloustein School of Planning and Public Policy.

Evan Weiss

Senior Advisor – Finance and Major Projects

Governor's Office of the State of New Jersey



Evan Weiss is the Senior Advisor for Finance and Major Projects in the administration of Governor Phil Murphy. He focuses on finding creative solutions to New Jersey's most pressing economic and community development problems, including managing the fiscal response to COVID-19, building the largest offshore wind port in the US and establishing New Jersey as the base of the US OSW supply chain, financing affordable housing and water infrastructure, and collaborating with hospitals and universities. He has published several articles on tax policy and has worked on initiatives to use tax incentives to build schools and invest in high-potential tech, life sciences, and small businesses.

Prior to entering the Governor's administration, Mr. Weiss was Director at PEL Analytics and HJA Strategies, where he specialized in developing and implementing turnaround strategies for distressed cities and school districts. He is a graduate of the University of Chicago.

Jim Ferris

Bureau Chief of New Technology, Clean Energy Division

New Jersey Board of Public Utilities



Jim Ferris is the Bureau Chief of New Technology for the Clean Energy Division, BPU. Mr. Ferris leads the BPU's offshore wind efforts, and has experience in OSW generation, transmission, supply chain, permitting and regulatory matters. Mr. Ferris and the BPU work closely with the NJ DEP and other state agencies on the responsible development of OSW and the protection of New Jersey's marine and coastal environment.

Before joining the government sector, Mr. Ferris worked in the private consulting sector. He has been working in the clean energy field for more than 25 years.

The Clean Energy and Sustainability Analytics Center (CESAC)

Montclair State University

Clean and Sustainable Energy Summit

September 23, 2021



New Jersey Board of Public Utilities

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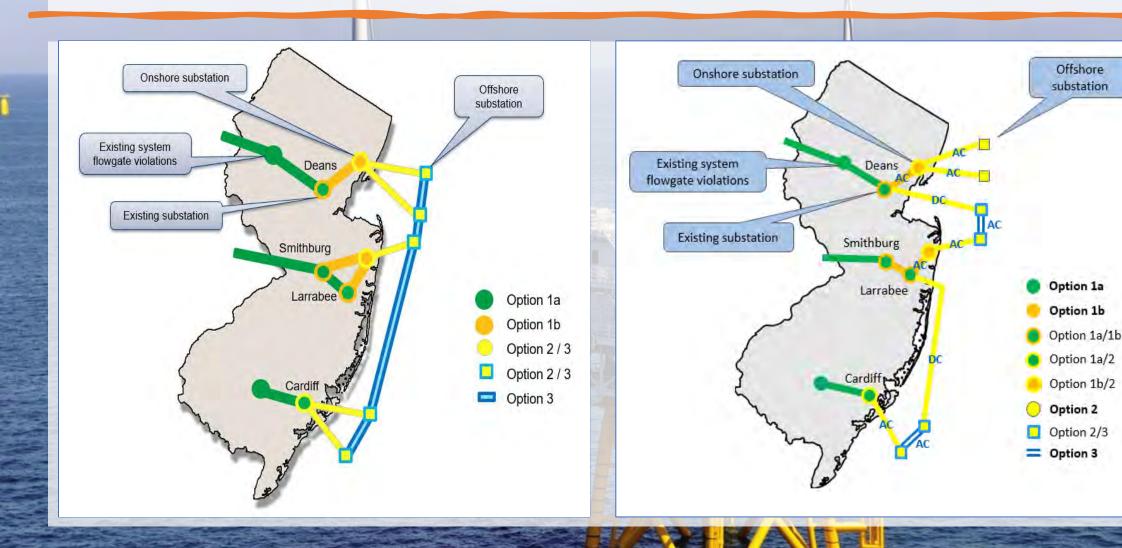
www.nj.gov/bpu



Offshore Wind Solicitation Schedule

Solicitation	Capacity Target (MW)	Capacity Awarded (MW)	Issue Date	Submittal Date	Award Date	Estimated COD
1	1,100	1,100	Q3 2018	Q4 2018	Q2 2019	2024-25
2	1,200 – 2,400	2,658	Q3 2020	Q4 2020	Q2 2021	2027-29
3	1,200		Q3 2022	Q4 2022	Q2 2023	2030
4	1,200		Q2 2024	Q3 2024	Q1 2025	2031
5	1,342		Q2 2026	Q3 2026	Q1 2027	2033
Total Awarded + Target	7,500					

State Agreement Approach Transmission



Jen Becker

Managing Director, Wind Institute Development

New Jersey Economic Development Authority



Jen Becker is the Managing Director of Wind Institute Development at the New Jersey Economic Development Authority (NJEDA), leading New Jersey's efforts on offshore wind workforce development, education, research, and innovation. She has over 20 years of experience conducting research, developing public policy and crafting programs to advance sustainable development, particularly around issues of green jobs, clean energy, ports, and manufacturing. Currently, she also teaches at Pratt Institute's Graduate Center for Planning and the Environment and is the Co-Chair of the Women in Renewable Industries and Sustainable Energy NJ Chapter.

Prior to joining the New Jersey Economic Development Authority, she led numerous consulting projects including for the Port Authority of New York & New Jersey and Atlantic Shores Offshore Wind. Previously, Jen served as the Chief Sustainability Manager at the New York Power Authority and as Vice President of Clean Energy and Sustainability for the New York City Economic Development Corporation. Jen also has experience working at with several non-profit organizations.



LARGE AND ACCESSIBLE TALENT POOL



4th

highest share of advanced degree holders in the US

NEW JERSEY HAS:

TALENT FOR THE ENTIRE WIND ECOSYSTEM

A WORKFORCE READY FOR OFFSHORE WIND



90,000+

workers with offshore wind-adjacent skills

PIPELINE OF TOP TALENT



150+

higher education institutions in the region

NEW JERSEY IS LAUNCHING: The Wind Institute







A CENTRALIZED HUB FOR

OFFSHORE

WIND WORKFORCE

DEVELOPMENT

CHAMPIONS RESEARCH
AND INNOVATION THAT
UNLOCKS MARKET
POTENTIAL

\$3M GWO SAFETY
TRAINING CHALLENGE

\$1M WIND TURBINE
TECH CHALLENGE

JOINED THE NATIONAL OSW R&D CONSORTIUM

Diversity and Inclusion Efforts for Businesses and Workers

- New Jersey Wind Port project setting new standard for minority, veteran, and women-owned business inclusion and employees
 - Diversity set-aside goal in CM agreement: 15% of contract value for MWVBE firms, 25%
 SBE and 3% DVBE
 - Affirmative Action goals for workers: 18% people of color and 6.9% women
- Support for MWBEs
 - Indefinitely waived \$100 filing fee to become certified as a SMWVBE and streamlined documentation for businesses already certified through other public entities
 - Discounted rates for offshore wind trainings for MWVBE firms
- Diversity and inclusion efforts to be included in all workforce programs





Davon McCurry

New Jersey Deputy Head of Government and Market Affairs

Ørsted



Davon McCurry is the Deputy Head of Government and Market Affairs in New Jersey at Ørsted. He is a policy and political professional, specializing in policy analysis, relationship management, and political strategy.

Prior to working for Ørsted, Mr. McCurry worked for the New Jersey Department of Environmental Protection as the Director of Legislative Affairs where he was responsible for managing state legislative and congressional issues impacting the Department, and helped to manage intergovernmental relations. He also served as an aide in the Office of Governor Murphy and an associate at Princeton Public Affairs Group. Mr. McCurry graduated from Rutgers University with his B.A. in Planning and Public Policy.

Orsted

New Jersey Overview

Offshore Wind Power: Transforming Vision into Reality

Ørsted Projects in New Jersey



Ocean Wind 1:

- 75/25 JV with PSEG
- 1,100 MW
- 15 miles off the coast
- Power over 500,000 homes
- Commercial operations expected by the end of 2024
- O&M facility in Atlantic City
- Initial Paulsboro investment
- Pro-NJ Grantor Trust



Ocean Wind 2:

- 1,148 MW
- Power 500,000 homes
- Construction expected in 2028
- Commercial operations expected 2028/2029
- Further investment in Paulsboro
- Investment in bringing GE nacelle facility at New Jersey Wind Port
- Will also utilize O&M facility in Atlantic City
- Pro-NJ Grantor Trust 2 with an additional \$8 million



Partnerships EEW / Port of Paulsboro





Full-scale foundation manufacturing facility at Port of Paulsboro

- Construction is underway for a full-scale manufacturing facility
- Partnership with EEW American Offshore Structures
- The facility will serve Ocean Wind projects as well as the rapidly progressing U.S. offshore wind industry for years to come
- Will be home to 500 full-time jobs and represents an investment for \$250 million



18 Sept. 23, 2021

Ocean Wind 1 and Ocean Wind 2: Strong commitments to New Jersey

Investments

1. Port of Paulsboro / EEW

- Ocean Wind 1 monopile manufacturing
- Ocean Wind 2 full scope facility

2. Port of Newark/Elizabeth

• Electric class 8 drayage trucks

3. New Jersey Wind Port

- GE Nacelle assembly
- Turbine marshalling

4. Atlantic City

- O&M facility
- Project office

5. Newark

 Digital Operations Headquarters

Partnerships

1. Rutgers University

- Marine Mammals
- 2. Montclair State University
 - Tourism

3. Stockton University

· Offshore wind education

4. Rowan University

Offshore wind research

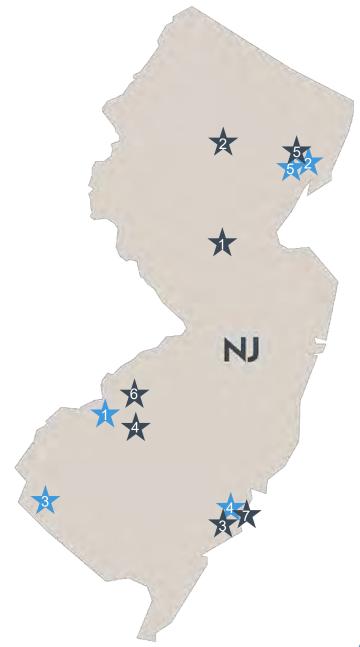
5. NJIT

 Needs-based support for scholarships and STEM program funding

6. NJ Shares

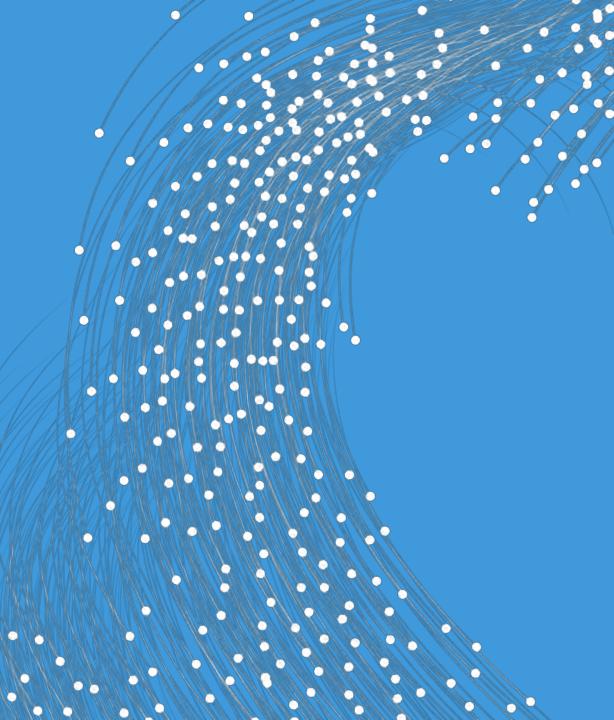
 Utility bill grants / Ørsted Cares

7. Jingoli Live Classroom





Thank you



Doug Copeland

Development Manager

Atlantic Shores



Mr. Copeland has worked in the renewable energy industry for over 15 years, leading development efforts in onshore and offshore wind, solar and energy storage. Currently, Mr. Copeland oversees the development and overall portfolio of the Atlantic Shores project with a focus on the pre-financial decision phase. In this role, Mr. Copeland leads the interconnection strategy, liaisons with the fishing industry, oversees real estate efforts, external affairs, government relations, and port strategy. He has served on offshore wind market advisory groups in New York, New Jersey, Maryland, and as vice-chair of the American Wind Energy Association's (AWEA) Offshore Wind Steering Committee.

Prior to his career in the renewable energy industry, Mr. Copeland ran a nationally recognized economic development program. He earned his bachelor's degree from Villanova University and a master's degree from Boston College.



Atlantic Shores Offshore Wind

September 2021



US East Coast Market - New Jersey's Role

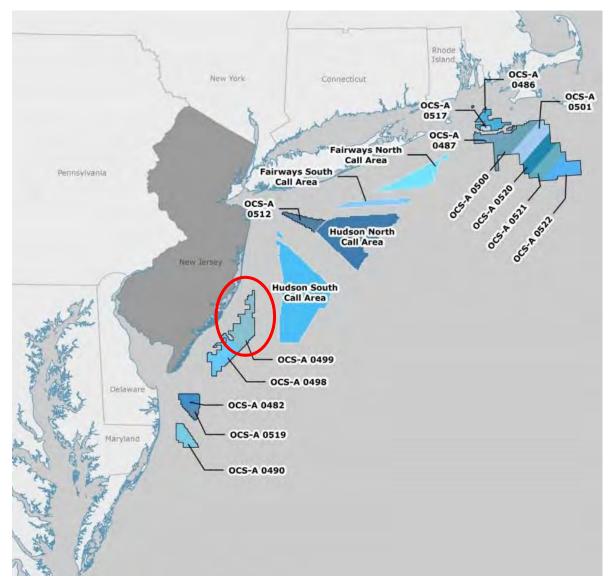


Image Source: NEW JERSEYOFFSHORE WIND STRATEGIC PLAN

- New Jersey position to become a major hub for the east coast offshore wind market.
- Atlantic Shores is proud to focus our efforts in New Jersey.
- Current efforts involve studies across the entire lease, while advancing our first project.
- Active engagement with local communities, fishermen, suppliers, elected officials, and supply chain partners.



Atlantic Shores - Studies & Surveys Conducted

Visual Impact Assessment Visual Resources Assessment Onshore Noise Report Historic Resources Visual Effects Assessment Historic Resources Visual Effects Analysis

Air Emissions Calculation Methodology Aircraft Detection Lighting System (ADLS) Analysis Obstruction Evaluation & Airspace Analysis Aerial Search and Rescue Risk Assessment Air Traffic Flow Analysis Navigational and Radar Screening Study



Metocean Analysis Report Metocean Design Basis



Avian Assessment Report

Bat Monitoring Report

Avian Digital Aerial Survey Report

Avian Survey Plan

Hydroacoustic Modeling Report Marine Mammal & Sea Turtle Monitoring Plan



Geophysical and Geohazard Report Munitions and Explosives of Concern Hazard and Risk Assessment

Marine Archaeological Resources Sensitivity Assessment

High Resolution Geophysical and Geotechnical Site Investigation Report Marine Archaeology Resource Assessment

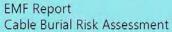






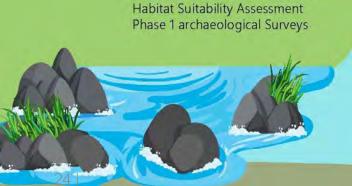
Navigation Safety Risk Assessment Fisheries Communication Plan Fisheries Monitoring Plan







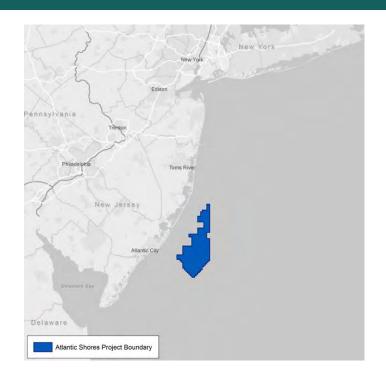
Benthic Monitoring Plan Benthic Assessment Report Essential Fish Habitat Assessment Benthic Habitat Mapping Sediment Dispersion Modeling Report



Wetland and Stream Delineation



Atlantic Shores Project Timeline and Job Creation



Development

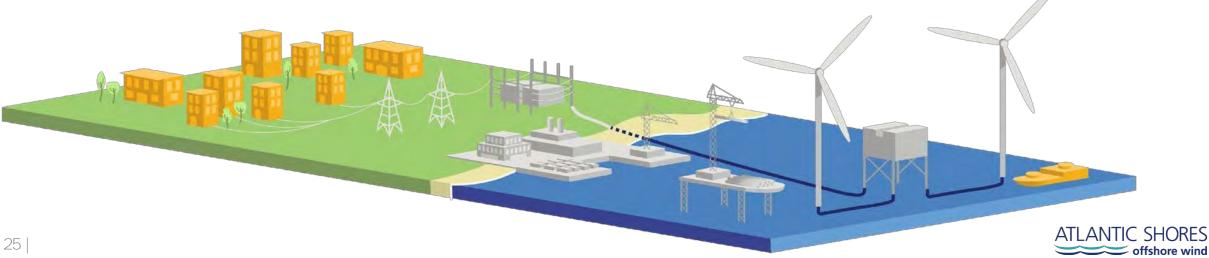
- 2019-2024
- Direct Jobs: 1,700 FTE
- Jobs that will be created in order to develop the lease area in anticipation of start of Construction

Construction

- 2024-2027
- Direct Jobs: 5,700 FTE
- Construction phase is peak employment period

Operations & Maintenance

- 2027+
- Direct Jobs: 11,100 FTE
- Long term jobs over 30 years



Damian Bednarz

Managing Director

EnBW North America

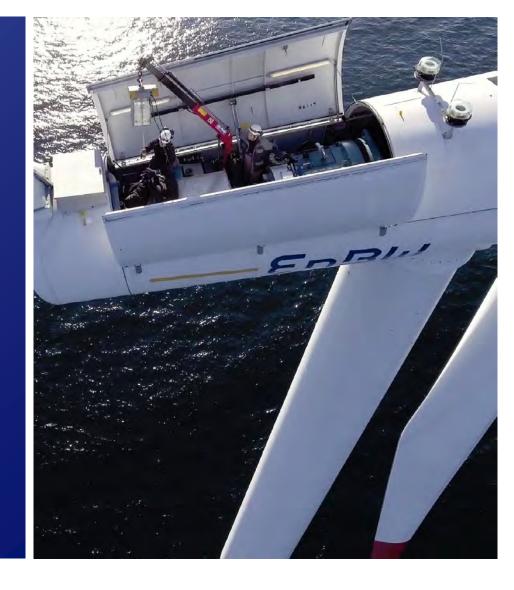


Damian Bednarz leads EnBW's US team and is responsible for managing day-to-day operations and resources of EnBW North America to implement its business and project development strategies across multiple markets. Damian also serves as EnBW North America's primary external representative on all public affairs, which includes community engagement, strategic communications and government affairs. After a decade in clean energy advocacy, Damian joined EnBW as it set out to build clean energy entities from the ground up across the U.S., especially the once in a generation opportunity that comes from offshore wind development.

Prior to joining EnBW, Damian managed a diverse clean energy and climate portfolio at Kivvit, a nationally ranked public affairs and strategic communications firm. Damian also served in several senior leadership roles at the U.S. Department of Energy during the Obama-Biden Administration, including chief of staff for the Office of International Affairs and White House Liaison.In 2012, Mr. Bednarz was awarded the Gold Cross of Merit by the Republic of Poland, the country's highest civilian honor, for building a stronger relationship on energy and climate cooperation between the United States and Poland.

EnBW North America

Montclair State University
Clean & Sustainable Energy Summit 2021



Damian Bednarz September 23, 2021



Building a clean energy future. Together.

EnBW North America partners with communities to establish renewable energy solutions that will deliver lasting economic and environmental benefits to achieve our shared climate goals.

We pioneered offshore wind in Germany, imagining and building a better energy future



Largest integrated utility in Germany



Committed to company-wide net-zero carbon emissions by 2035



Built Germany's first commercial offshore wind project; committed to global markets with a 6GW development pipeline



Advancing innovation in floating offshore wind, battery storage, e-mobility, and beyond

And we've built a strong ground game in the US before obtaining a lease



Offices established in Jersey City and Boston



Actively exploring offshore wind and clean energy opportunities on East and West coasts



Majority owner of Castle Wind Offshore, a California floating offshore wind project



Committed to early engagement, learning from first movers to bring the second wave of US projects online

Unlocking generational environmental & economic opportunities

EnBW North America is guided by the principle of early and often engagement, making targeted local investments to support awareness of the offshore wind industry in the New York Bight.

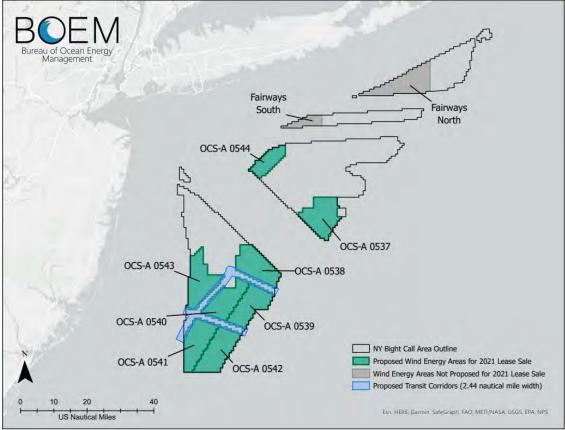
- » Engaged more than 100 unique stakeholders across 250+ meetings
- » Regularly engage public agencies and organizations to prioritize a clean energy transition and workforce development opportunities
- » Promote local supply chain development: EnBW supplier database, founding sponsor of OSW Supply Chain
- » Multi-platform engagement with fishing communities: Dedicated Fisheries Liaison, Fisheries Communications Plan, 3,000+ survey to commercial & recreational fishermen
- » Committed to building an inclusive and diverse industry by partnering with MWBE and EJ organizations



The Bight

A competitive lease auction in the New York Bight can be the catalyst for a robust national offshore wind industry and create new economic and climate opportunities for our

community.



OSW is a priority for the Biden-Harris Administration:

- » All of Government Approach
- » 30GW national offshore wind target by 2030

Next federal lease auction:

- » Prioritize competition: best for ratepayers; translates into more and diverse investments
- » Seek greater collaboration and coordination between federal and state agencies; look to states for strategic approaches to support supply chain, workforce, and environmental justice
- Commit to robust and coordinated stakeholder engagement to reach mutually beneficial solutions
- » Anticipated auction in late 2021/early 2022

Diverse voices and issues

A successful offshore wind industry requires collective communication and commitments across all stakeholders.

141 comments were submitted to BOEM's recent process:

- » ~26 associations submitted support for integrating environmental justice tenants into OSW development
- » Labor organizations are heavily engaged, submitting 29 comments
- » ~10 associations support greater collaboration between federal and state governments
- » Most developers agree in prioritization of competition
- » ~14 associations note the need for greater support to incorporate tribal engagement
- » Ongoing concerns from the fishing industry were expressed by 12 associations

