

Understanding Shared Social Norms for Adoption of Offshore Wind Energy in the State of New Jersey

19 July 2019

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Introduction

In light of the recent development of progressive renewable energy policies in the state of New Jersey, the BSPL led an exploratory research effort in the state as part of the Rapid Switch Initiative, which targets to understand the bottlenecks and stakeholder conflicts of switching to renewable sources of energy in other countries, including China and India. The New Jersey team mapped out stakeholders, and conducted interviews with the involved parties to outline the behavioral, social, and economic barriers to implementation of Offshore Wind energy. These results guided the team to pilot field work in Atlantic City, where local residents were interviewed on their knowledge, attitude, and concerns about the projected development. This research was supplemented by coding a variety of documents surrounding Offshore Wind for norm surfacing, and to make connection with norms identified in the interviews. This report outlines all our findings for use in continued research efforts.

Background

Thus far, New Jersey has one onshore wind energy farm, the Jersey-Atlantic Farm, in a Wastewater Treatment Plant in Atlantic City, and one other small-scale onshore project. However, the current initiatives all surround large-scale offshore wind projects. Throughout the 2000s, there have been several political initiatives to push forward renewable energy efforts, including offshore wind. Yet it was only with the Executive Order #8 released by Governor Murphy in late 2018, aiming for 3500 MW of wind energy by 2030, that Offshore wind energy projects gained momentum. His later Executive Order #28 further pushed the State towards renewables, setting the goal of 100% clean energy by 2050. Since then, the NJ Board of Public Utilities has issued a solicitation in 2018 for a 1100MW project and has processed three proposals, the competitors being Equinor, EDF-Shell and Ørsted. Ørsted won the solicitation. Construction is expected to begin in 2021 and finish in 2024.¹ The general public and civil organizations have mostly been in favor of the project, however there has been discussion of effects on wildlife and tourism while the local coastal communities seem largely unaware of the development that is about to take place.

¹ <https://www.greentechmedia.com/articles/read/breaking-rsted-wins-new-jerseys-first-offshore-wind-solicitation#gs.onuhvm>

Government

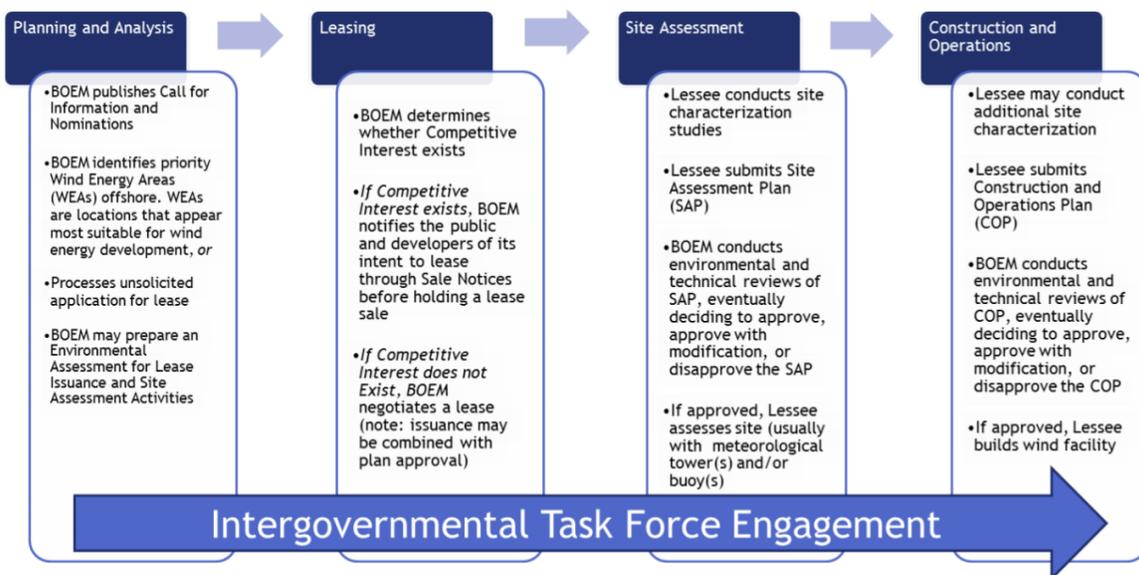
Federal Actors

DOI - Department of the Interior
"Conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people"²

BOEM (Bureau of Ocean Energy Management, part of DOI) - responsible for regulating, approving and leasing federal ocean space off the Atlantic shore (Outer Continental Shelf) for wind and hydroelectric energy projects.

"In New Jersey, Federal waters commence 3 nautical miles offshore the coast, as a result, BOEM has been facilitating lease sales of OCS blocks for the development of offshore wind energy facilities. BOEM has issued 2 commercial wind energy leases on the OCS offshore of New Jersey."³

BOEM Wind Energy Commercial Leasing Process:

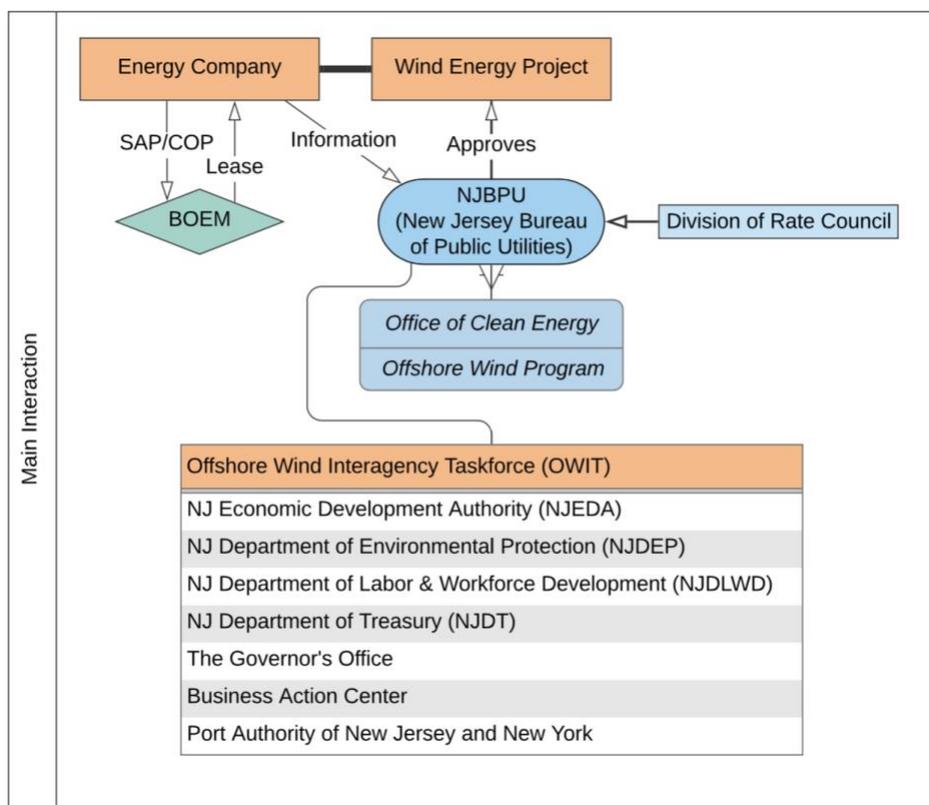


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² <https://www.doi.gov/whoweare>

³ <https://www.nj.gov/dep/aqes/offshorewind.html>

⁴ <https://www.boem.gov/Commercial-Leasing-Process-Fact-Sheet/>



State Actors

Governor Murphy and the Governor's Office:

"January 31st, 2018, Governor Phil Murphy Signed Executive Order #8 which directs all New Jersey State Agencies with responsibilities under the OWEDA to fully implement the act in order to meet a goal of obtaining 3,500 MW from offshore wind by the year 2030."

The Executive Order also set forth provisions to:

- Develop an Offshore Wind Strategic Plan
- Implement Offshore Wind Economic Development Act (OWEDA)'s Offshore Wind Renewable Energy Certificates (OREC) program
- Procure the necessary resources and expertise including an offshore wind economic consultant
- Issue a solicitation for offshore wind projects for the generation of 1,100 MW
- Initiate a rulemaking process to establish the OREC Funding Mechanism
- Initiate discussion with sister states in the Northeast and Mid-Atlantic Region to explore the potential benefits of regional collaboration on offshore wind and other opportunities to combat climate change"⁵

Additionally, Governor Phil Murphy signed Executive Order #28 which sets a more general goal for 100% renewable energy by 2050.

⁵ <https://www.nj.gov/dep/aqes/offshorewind.html>

The New Jersey Bureau of Public Utilities (NJBP):

“the state agency with authority to oversee the regulated utilities, which in turn provide critical services such as natural gas, electricity, water, telecommunications and cable television. The law requires the Board to ensure safe, adequate, and proper utility services at reasonable rates for customers in New Jersey.

- The Board addresses issues of consumer protection, energy reform, deregulation of energy and telecommunications services and the restructuring of utility rates to encourage energy conservation and competitive pricing in the industry.
- The Board also has responsibility for monitoring utility service and responding to consumer complaints.”⁶

The BPU is made up of 5 commissioners appointed by the Governor, so the Governor’s political stance and renewable energy stance directly guides the BPU’s efforts in affecting the energy market.

The NJBP is the crucial leader and manager of the Offshore Wind initiatives of the state and is responsible for issuing, considering, and deciding on solicitations, engaging with stakeholders, including environmental and business organizations as well as governmental agencies such as the NJ Economic Development Authority and the NJ Department of Labor & Workforce Development. In engaging stakeholders, the BPU requests comments and contributions, organizes meetings and roundtable discussions, and directly reaches out to organizations and bodies to seek their input. According to our interview with the BPU officials, notes from the stakeholder roundtable discussions will be included in the draft of the strategic plan that is to be published later in the summer of 2019.

Office of Clean Energy:
Office of the NJBP established in 2003 to implement its Clean Energy Program (2003). By Governor Murphy’s executive order, the Office is the main actor in projecting the state’s efforts in reaching 100% renewable energy by 2050, including the *Offshore Wind Energy Program*, which is directly responsible for working with offshore wind development.

How does an offshore wind project get approved by the BPU:

- BPU sets application window (~September 20 — December 28, 2018)
- Applicant meets with BPU and Division Rate counsel at least 30 days prior to submitting application
- Board Staff must notify the applicant within 30 days of the submission if the application is administratively complete or is deficient (deadline: January 28, 2018)
- BPU has 180 days to approve, conditionally approve or deny application, which must comply with Title 14 of the New Jersey Administrative Code (deadline: June 28, 2018)
- Offshore wind developers need roughly six months from the date of a Board Decision to qualify for the Federal Investment Tax Credit (ITC), which expires December 31, 2019.

⁶ <https://www.bpu.state.nj.us/bpu/about/index.html>

Dates are in reference to the 1100MW Solicitation of 2018

Source: 9/17/18 State of New Jersey Board of Public Utilities (NJBP) Solicitation Summary⁷

*Update: Ørsted won the solicitation on June 21st

Round 2:	2020 – 1,200 megawatt OREC Application Window Opens 2021 (July) – BPU Decision 2026 – COD
Round 3:	2022 – 1,200 megawatt OREC Application Window Opens 2023 (July) – BPU Decision 2028 – COD
Total:	3,500 MWs of Installed Offshore Wind Capacity by 2030¹

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Division of Rate Counsel: serves as an independent advocate for consumers and provides policy inputs. Utilities first report a request of rate change to the Rate Counsel after which the Council creates an analytical evidentiary report to represent the pro-ratpayer stance in an investigation. Then, BPU has the final say.

Interagency Task Force on Offshore Wind: calls upon all state agencies (led by the BPU) with responsibility under OWEDA to work collaboratively to support Governor Murphy’s offshore wind agenda, and towards the establishment of a vibrant offshore wind market, both in New Jersey and in the Mid-Atlantic region.

Includes large bureaucratic actors that review and advise with propagation of renewable offshore wind development. These include:

- The Governor’s Office
- NJ BPU
- NJ Department of Environmental Protection (DEP)
- NJ Economic Development Authority (EDA)
- NJ Department of Labor and Workforce Development
- NJ Department of Treasury
- Port Authority of NJ & NY

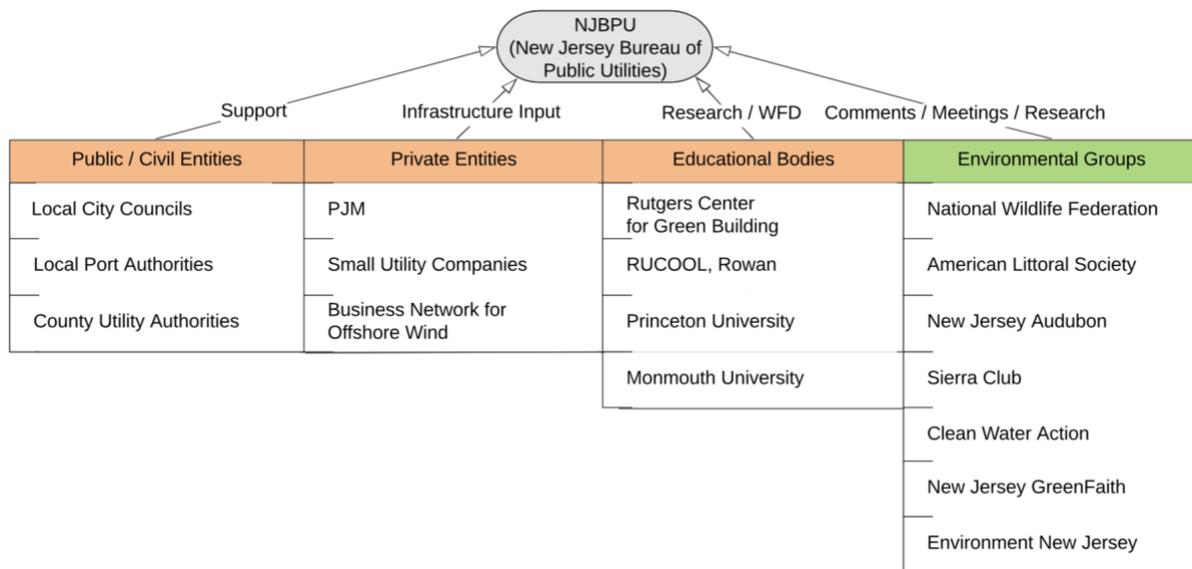
NJ Economic Development Authority (NJEDA) [interviewed]: an independent state agency that provides support for small businesses, housing development, and job growth in the local areas. Thus, the EDA has pursued extensive cooperation with the BPU, engagement with developers and suppliers. The EDA is working on establishing a workforce development network, including the proposal of the WIND Institute,

⁷<https://www.dropbox.com/s/ux1eaadc1xstm2q/BPU%209%3A17%3A18%20Offshore%20Renewable%20Energy%20Solicitation%20%28OREC%29%20.pdf?dl=0>

⁸<https://www.state.nj.us/bpu/pdf/publicnotice/2019%20ANNUAL%20EO8%20REPORT%2002082019%20FNL%20V2.pdf>

and established an additional Offshore Wind Tax Credit to encourage developers to pursue projects in New Jersey over other states.

NJ Department of Environmental Protection (NJDEP) - Coastal Management Office: works to account for multiple climate change initiatives, regulates operation in state and federal waters. Fisheries, largely operating at site-specific locations in federal waters, carry input to the DEP, who collaborate with BOEM, for consideration of fishery impact in the development of Offshore Wind. Competing interests also arise from the Department of Defense (specifically the Coastal Guard) that would have to share the federal water space with Offshore Wind projects.



Local Actors

Atlantic City Council & The Mayor’s Office

The Council unanimously approved Fishermen’s Energy Offshore Wind Farm, but the BPU rejected the project because of great ratepayer cost.⁹ In general, little involvement was identified within the local government as for the Offshore Wind development process.

Atlantic City Utilities Authority (ACUA)

ACUA works to enhance the quality of life of the Atlantic County population, by protecting waters and lands from pollution by providing waste management.¹⁰ The existing onshore wind project, the Jersey-Atlantic Farm, is within one of their waste-management facilities. However, they do not yet seem to play a great role in the offshore project in development.

More on the observations from our Atlantic City fieldwork is discussed in a later section.

⁹ <https://why.org/articles/n-j-rejects-atlantic-city-offshore-wind-project-for-third-time-too-pricey/>

¹⁰ <http://www.acua.com/about-us/>

Private Sector

Business Network for Offshore Wind (BNOW): a non-profit organization that aims to expand and organize the supply chain around Offshore Wind in the Atlantic States, including New Jersey, New York, and Maryland. As evidenced by port outsourcing in the UK as a result of rapid switch to Offshore Wind, development of local port infrastructure is crucial for jobs creation, and BNOW aims to forward this notion. As mentioned by other stakeholders, commercial fisheries remain one of the largest stakeholders with competing interests.

Utility Companies

PJM: A regional transmission organization that coordinates the movement of wholesale electricity in Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. *In order to be approved, any wind project application must be eligible for the PJM Queue, which is the process of requesting interconnection rights to the PJM grid.*

Local electrical companies involved include...

- **Jersey Central Power & Light Company**
- **Atlantic City Electric**
- **Public Service Electric and Gas Company (PSE&G)**

Wind Energy Developers¹¹

Ørsted/Deepwater Wind:

Ørsted is one of the biggest offshore wind farm developers in the world. According to Ørsted, they install 1 in every 4 offshore turbines¹². In the fall of 2018, Ørsted acquired Deepwater Wind, further increasing Ørsted's access to the U.S. market. Ørsted acquired the lease of federal waters off the Atlantic City coast for its Ocean Wind project. *The project was approved by the NJBPU on June 21st 2019 through the 2018 Solicitation.*

Ørsted recently signed a partnership agreement¹³ with Rutgers University Center¹⁴ for Ocean Observing Leadership (RUCOOL)¹⁵ for supporting local research in offshore wind possibilities and impact. Likewise, Ørsted established a research partnership¹⁶ with Rowan University¹⁷ to support engineering research and workforce development for green technologies.

¹¹ <https://www.boem.gov/Lease-and-Grant-Information/>

¹² <https://us.orsted.com/>

¹³ <https://oceanwind.com/News-Archive/2019/06/Orsted-US-Offshore-Wind-Announces-Partnership-with-Rutgers-University>

¹⁴ <https://rucool.marine.rutgers.edu/orsted-us-offshore-wind-partners-with-rutgers-university/#.XQkAmdNKgzU>

¹⁵ <https://rucool.marine.rutgers.edu/>

¹⁶ <https://us.orsted.com/News-Archive/2019/04/Ocean-Wind-Rowan>

¹⁷ <https://today.rowan.edu/home/news/2019/03/28/%C3%B8rsted-us-offshore-wind-announces-research-partnership-rowan-university>

EDF Renewable Energy is a French energy company that plans to co-develop an offshore wind energy farm with **Shell** (jointly **Atlantic Shores Offshore Wind**) on a leased area off the shore of Atlantic City, Beach Haven, and Barnegat Light, which is just north of Ørsted's lease. EDF-Shell experienced multiple rejections of EDF's smaller joint venture with Fishermen's Energy.

Equinor is the 3rd company that responded to NJBPU's 2018 Solicitation. Its current lease area for Boardwalk Wind is off the shore of Sandy Hook.

US Wind is a large player in the wind industry, currently with no concrete projects planned for New Jersey. However, as stated on their website, "The New Jersey Wind Energy Area includes about 343,833 acres, roughly 7 miles off the coast from Atlantic City. US Winds holds the lease for the North Lease Area, which is 183,353 acres."¹⁸

Fishermen's Energy is a fishermen-owned company that partnered with EDF-Renewables to plan a small 24 MW wind energy farm (Nautilus Project) within 3 miles of the Atlantic City shore in the New Jersey state waters. Upon approval from the BPU, it would have received a subsidy necessary to begin construction. However, the project was declined on the basis of high costs, and the environmental as well as economic impacts the project might yield due to proximity to shore. As of latest news (2018), the company agreed to an acquisition by EDF, and the company's activities died down since Nautilus's rejection and BPU's acceptance of Ørsted's application.

¹⁸ <http://www.uswindinc.com/our-projects/>

Civil Groups

Education/University Research Groups

Rutgers University: Center for Green Building: “conducts evaluation studies and manages various evaluation studies, determines need for outside contractors, reviews draft reports.”

Princeton University: host for stakeholder meetings and programs.

Rowan University¹⁹: research partnership with Ørsted.

Rutgers University: provides research for the BPU²⁰ and holds research partnerships with Ørsted and EDF-Shell.²¹

Monmouth University Polling Institute²²: conducted a comprehensive poll to evaluate New Jerseyans’ support for Offshore Wind Energy. Their findings indicated a "strong support" for Wind Energy, pointing out that most residents are "unaware of costs, but prioritize environmental benefits". More specifically, "Three-quarters of New Jersey residents (76%) would favor placing electricity-generating wind farms off the coast of the state", but "most residents currently expect that their rates will not increase because of wind farm development"²³.

**Note: similarly, through our field-interviews, we found that a number of people did not expect an increase in rates, in fact believing that there might be a decrease (rather than the planned increase) in rates.*

Unions

South Jersey Building and Construction Trades Council is an organization which consists of 23 unions, with 25,000 members total. In February they partnered with Ørsted for the construction of their now approved project, so a portion of the needed labour is guaranteed to be local.²⁴

**Note: On our field-trip to Atlantic City a recurring resident concern was that labor would be primarily outsourced.*

¹⁹ https://www.pressofatlanticcity.com/education/rowan-launching-offshore-wind-clinics-with-orsted/article_2baf5c8-f183-5fc3-af96-0dc1e5a4c239.html

²⁰ https://www.pressofatlanticcity.com/news/press/science_nature/rutgers-helps-offshore-wind-firms-predict-breezes-off-atlantic-city/article_9d398850-0067-564b-aa1a-33d100c4dd76.html

²¹ <https://rucool.marine.rutgers.edu/atlantic-shores-offshore-wind-partners-with-rutgers-university-to-study-new-jersey-ocean-environment/#.XQkyx9NKgzU>

²² https://www.monmouth.edu/polling-institute/documents/monmouthpoll_nj_040319.pdf/

²³ https://www.pressofatlanticcity.com/news/offshore-wind-firm-partners-with-south-jersey-unions/article_ad575db3-ab4d-543d-a340-03704b2252ac.html

²⁴ https://www.pressofatlanticcity.com/news/offshore-wind-firm-partners-with-south-jersey-unions/article_ad575db3-ab4d-543d-a340-03704b2252ac.html

Note: these were identified based on the comments to BPU's OSW Solicitation proposal.²⁵

National Wildlife Federation: national environmental organization that has worked on Offshore Wind in areas most promising in developmental momentum. NWF assumes an important role as an information tank for all environmental initiatives as well as a major organizer of stakeholder meetings among other environmental groups. The biggest obstacle to smooth implementation of Offshore Wind is again identified to be Commercial Fisheries. Additionally, corresponding to our field interview findings, the NWF sees concern in outsourcing jobs and transmission lines outside of the States as well as locating ports outside of the New Jersey area.

New Jersey Audubon: major contributor to environmental impact assessments, especially as to Offshore Wind impact on bird migration and bat movement. NJ Audubon worked on pre-construction assessments of the Fishermen's Energy project and the Jersey-Atlantic Wind Farm., More generally, their role for all Offshore projects directly targets "smart siting for offshore wind power to minimize potential impacts to wildlife." Compared to NWF, NJ Audubon is not as much an advocate as a large research think-tank that encourages "maximising energy production and minimizing impacts to wildlife."

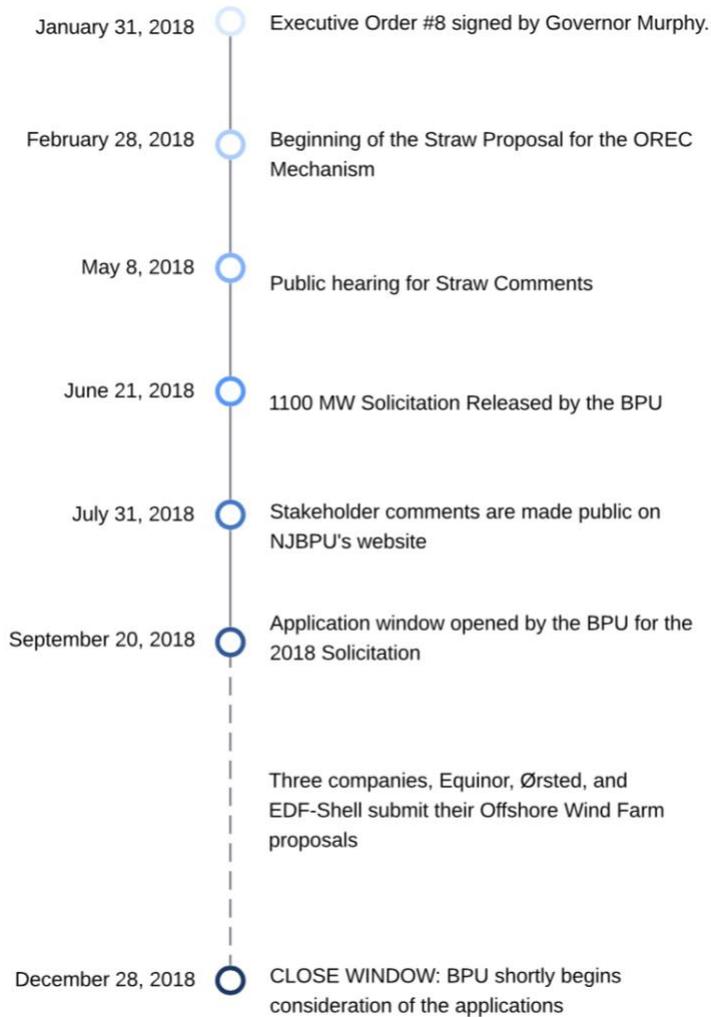
GreenFaith NJ: a pro-offshore wind multi-religion organization that encourages education and job access for religious residents in regards to Offshore Wind. At large, GreenFaith is an advocacy group that targets "protection to workers, good wages alongside environmental protection."

Other groups that have not yet been interviewed or researched closely:

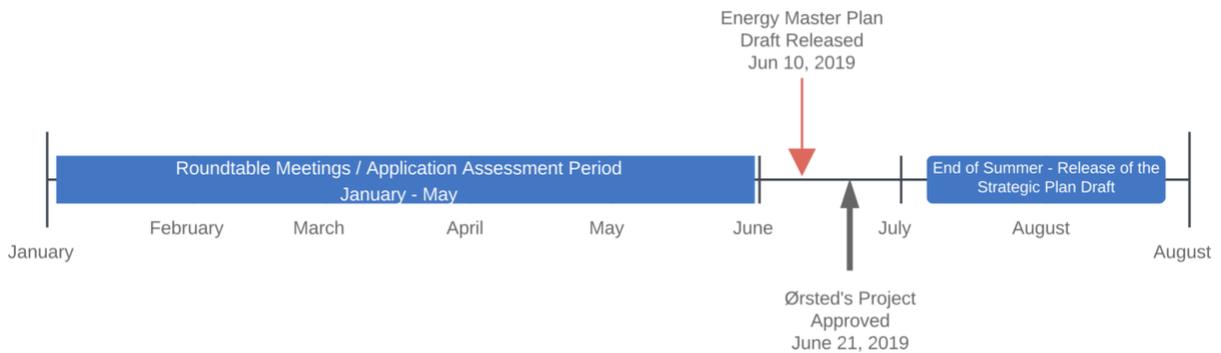
- Environment New Jersey
- Natural Resources Defense Council
- New Jersey Work Environment Council
- American Littoral Society
- Clean Water Action
- Sierra Club

²⁵ <https://www.bpu.state.nj.us/bpu/agenda/rules/orec.html>

Offshore Wind Timelines



26,27,28



26 <https://www.dropbox.com/s/6eyibrasr6zdnvr/Executive%20Order-8.pdf?dl=0>

27 <https://www.bpu.state.nj.us/bpu/pdf/rules/OSW%20-%20Announcement%20of%20Public%20Hearing%20Final.pdf>

28 <https://www.bpu.state.nj.us/bpu/agenda/rules/orec.html>

Main Concerns with Offshore Wind Farms

Overview

1. Cost to Ratepayers
 - a. issue: increase cost to ratepayers in the short-term
 - b. goal: shape the public opinion in favour of paying for the long-term investment
 - c. issue: require large federal, state, and local subsidies
 - d. goal: achieve economies of scale and utility-based construction
2. Endangerment of Wildlife
 - a. issue: interfere with marine life, bird and bat movement
 - b. goal: keep turbines far offshore in non-migration / fish concentration zones
3. Commercial & Recreational Fisheries
 - a. issue: interfere with fisherman business and scatters fish near turbines
 - b. issue: maintenance and construction vessels will crowd out fish and the fishermen
 - c. issue: decreased mobility and changed fish egg dispersal around turbine sites
 - d. goal: maintain the business conditions while minimizing marine impact
4. Transmission Lines
 - a. issue: beach / sand erosion
 - b. goal: establish secure grid connection near shore--avoid beach destruction
 - c. issue: creates issues for fishermen and degrades the local fish population²⁹
 - d. goal: bury, secure, and maintain cables deep under the sea floor
5. Port Siting & Development
 - a. issue: international developers use their people and ports
 - b. goal: promoting job creation locally
6. Building the Supply Chain
 - a. issue: multiple Atlantic states supporting many offshore projects with the same companies
 - b. goal: ensure secure installation and transition with a coordinated interstate effort

Potential Concerns for the Locals:

- Aesthetic reasons: visual impact
- Effects on tourism: visual impact
- Sound pollution: proximity impact, not encountered in NJ research

²⁹<https://www.bostonglobe.com/metro/2018/03/16/plans-for-massive-offshore-wind-farms-stir-fears-among-fishermen/hzti6ZJw71WNmqFtLJepJI/story.html>

Interview Findings

To demystify the internal interactions between big-profile stakeholders and compile first-hand information on Offshore Wind bottlenecks and perspectives, our team has compiled a stakeholder contact sheet. We have directly contacted 35 individuals and organizations. 19 (54.3%) of them responded to us. We were able to conduct 8 (22.9%) interviews with these officials, one following our field-interview format.

Overall Observations:

- A. *Governmental Agencies:* More apprehensive than other actors. It appears that given Offshore Wind's complexity among various competing interests, some governmental actors were unwilling to disclose any information on these competing interests or recognize any negative impacts projected by other stakeholders.
- B. *Environmental Groups:* More open to share social norms in the interviews compared to other officials.
- C. *Private Sector:* Private sector sample of our research was not large, however participants were willing to share their opinions without restraint.

Most Relevant Present-Day Concerns That Came Up in Interviews:

- Building up the supply chain and local production
- Ensuring local port development and job growth
- Handling the opposition from fishermen

None of the local agencies and authorities appear to be directly involved in the implementation of Offshore Wind projects.

Example Norms That Have Come Up:

Governmental Agencies:

1. Everyone is in favor.
2. There should be some programs for them to be able to incur that additional cost. It's more for industrial consumers, of course. I do understand it's difficult for some people, so there should be programs to provide grants and support.
3. Generally the states adapt a range of energy resources. NJ looks at energy efficiency and renewable energy options considering their broader environmental role.
4. Jobs - job creation should provide broad benefits to all communities. Economic impact should be broadly shared and come from net economic benefit of offshore wind.

Environmental Groups:

1. Obviously the Government thinks that the state is ready [for OSW].
2. Offshore is a transformational climate solution. There is no better game in town.
3. Environmental efforts are taken for granted.
4. These are public waters, and [we] understand that it's not "first come, first serve". It doesn't mean [commercial fisheries] have the right until perpetual time to be fishing every square inch of the ocean. They are neither impact free use of the ocean. I'm not totally against commercial fisheries.

Private Sector:

1. And in order to be attractive to developers, you have to have a large pipeline and a number of projects.
2. It may be great to have federal government do that, but honestly, they won't. The federal government is not going to do that. So states need to do it.
3. Today we pay X for fossil fuels and gas, but for some reason we don't want to pay money for kiloWatts. Why won't we move for kW? Why does it have to be so cheap?
4. It is okay to have more utility bills, if we are creating more jobs and new industries. I think if we're to move as a country, as a blue state, why are we not saying that its okay that we're paying more on our bills? People are used to everything being so cheap.
5. We're creating jobs, new industries when old fossil fuel industries are dying.

Field Interview Findings

In light of the recent approval of the 1100 MW offshore wind project in Atlantic City, our team conducted a series of field interviews in the city. To get a better understanding of the norms concerning offshore wind energy, we spoke with city officials, residents, workers, and visitors. Participants had a 1/20 chance of winning a \$5 Dunkin' Donuts Gift Card. Females were less willing to participate. We were able to interview 15 people in total.

Overall Observations:

Atlantic City is known for its casinos and attracts tourists through its resort-like facilities and extensive beach. During our visit, we observed that the city itself did not benefit greatly from the developments in these sectors, and our interviewees have mentioned that tourism has slumped in recent years. The City has been attempting to encourage tourism, introducing summer attractions like beach concerts. The Offshore Wind installment might help the tourism in the area for the first few years after deployment. The city residents we encountered seemed mostly low-income and POC. On the other hand, the tourists appeared mainly middle-income and Caucasian. The wealth inequality was quite evident. Some residents felt that casinos had overwhelming power in the city.

We have observed that except for the city officials, the interviewees were mostly unaware of the approved Offshore Wind project. Even though they were familiar with wind farms--primarily through the existing onshore wind installment on the city's sewage plant--they were not informed about offshore wind or the on-going project in Atlantic City. Upon us informing them of Ørsted's project, interviewees expressed a strong desire for generation of local jobs, with fear that labor might be outsourced. Tourists did not believe the turbines would influence their decision to return. A great misconception was that a majority of the interviewees thought that the new project might lower their bills.

Example Norms That Have Come Up:

- Energy sources should be offered to [residents] first.
- We have to consider people with boats, jet skis, and swimmers. Swimming areas have to be well protected.
- We need to look at all other developed countries [Europe] for business model.
- Companies abide by [environmental] guidelines.
- [State's] priority should be economic.
- Manual labour from the Atlantic City. It might provide much needed economic support. Hopefully lower energy costs.
- People at the top needs to implement this. Federal government needs to take over and say we'll do this.

- People need to justify to me that there is an issue [climate change].
- The state should not be involved in this.

Coding Findings

We have coded 6 documents: 2 from private companies [Equinor's comments to BPU on 1100 MW OSW solicitation; Equinor's Earnings Call for Q4 2018], 1 governmental report [NJ 2019 Energy Master Plan Draft], 3 documents from environmental organisations [Environment New Jersey, New Jersey Work Environment Council, GreenFaith comments on BPU solicitation; NJ Audubon & NWF op-ed on NJ Spotlight; a fisherman's op-ed on Providence Journal].

Overall observations

- A. *Environmental groups*: Comments on current efforts and what needs to be done.
- B. *Private companies*: Most private company documents did not have many norms since they were mainly focused on financial metrics.
- C. *Governmental documents*: Stating vision, setting targets, planning the progression.

Example norms that have come up:

1. "We need to develop a process that addresses the needs of fishermen and the wind farm industry that is outside of mitigation, well before it; more of an inclusive planning approach that respects the needs and concerns of all at the table," - *Providence Journal*
2. "The Nautilus project just didn't meet the high standards that have been set by the state to ensure New Jersey's people and wildlife don't pay too high a price — economic or environmental — as we develop this critically needed new clean-energy source," - *Op-ed NJ Audubon*
3. "Climate change is happening, the world needs a comprehensive transition of our energy systems, and our industry has to be an integrated part of that transition," - *Equinor's Earnings Call*
4. "The transportation sector should be almost entirely electrified by 2050..." - *NJ Energy Master Plan Draft*
5. "That being said, we need to be careful about making requirements that prohibit supply chain companies from crossing state lines to provide necessary components and services," - *Env. Groups' Solicitation Comments*
6. "We strongly believe that in order to manage the timelines and risks of construction of such a project, offshore wind developers themselves need to be in control of the construction of tie-in lines," - *Equinor's Solicitation Comments*

Other Keywords

Offshore Wind Economic Development Act [of New Jersey] (OWEDA): The Act advised the Board of Public Utilities to establish a program for Offshore Wind Renewable Energy Certificates (ORECs) to incentivize the development of Offshore Wind facilities. It establishes Offshore Wind renewable energy certificate program, and authorizes the EDA (NJ Economic Development Authority) to provide tax credits for qualified wind energy facilities in wind energy zones.³⁰

Offshore Wind Renewable Energy Certificates (OREC): The OREC Funding Mechanism rules establishes the financial process of allocating funds to offshore wind projects, by payments through electricity suppliers in New Jersey and PJM revenues from ratepayers. Part of the revenues of the Offshore Wind projects, then, flow back to ratepayers through the electric distribution companies (Atlantic City Electric, JCP&L, Rockland Electric Company, and PSE&G).³¹

³⁰ <https://www.nj.gov/dep/aces/offshorewind.html>

³¹ [http://www.njcleanenergy.com/files/file/OSW%20Notice%20of%20Stakeholder%20Meetings%20OREC%20Funding%20Mechanism2-21-13%20\(2\).pdf](http://www.njcleanenergy.com/files/file/OSW%20Notice%20of%20Stakeholder%20Meetings%20OREC%20Funding%20Mechanism2-21-13%20(2).pdf)