Offshore Wind Energy Development in the U.S.
The United States has a vast offshore wind energy resource with a technical potential of more than 2,000 gigawatts (GW), or nearly double the nation's current electricity use. Harnessing America’s offshore wind resources presents an enormous opportunity to create tens of thousands of highly-skilled jobs, revitalize coastal communities, and deliver large amounts of clean, reliable energy to the country’s biggest population centers.

The U.S. currently has one operational offshore wind project with many more on the way. The nation’s first commercial offshore wind project, the Block Island Wind Farm, came online in December 2016. Developed by Deepwater Wind, the Block Island Wind Farm is a 30 megawatt (MW) project with five turbines located three miles off the coast of Block Island, Rhode Island.

According to the Department of Energy, the U.S. offshore wind development pipeline potential rose to 25,824 MW in 2018, as state policy commitments increased from 5,300 MW by 2030 to nearly 20,000 GW by 2035. This pipeline includes 3,892 MW of project-specific capacity and 21,542 MW of undeveloped lease area potential capacity.

Out of this pipeline, project developers have announced that roughly 2,000 MW of new offshore wind capacity is expected to be operational by 2023. States including Maryland, Massachusetts, Rhode Island, Connecticut, New Jersey, and New York have completed solicitations for nearly 1,770 MW of offshore wind energy, and additional solicitations are planned for the near future. As of July 2019, states had selected more than 4,500 MW of offshore wind through state-issued solicitations. The Department of Interior’s Bureau of Ocean Energy Management (BOEM) has issued fifteen active commercial wind energy leases to date, adding over $472 million to the U.S. Treasury. Another five projects have submitted unsolicited lease applications to BOEM, while four projects have obtained exclusive development rights to a site from federal or state authorities.

In a recent offshore wind lease auction, three separate parcels each went for a record $135 million, underscoring robust competition and market interest. The record more than tripled the previous $42 million set in 2016. All offshore wind lease auctions to date have totaled more than $472 million. BOEM has also announced it will hold lease auctions for new California and New York Bight lease areas in 2020.

While a majority of the nearer-term activity is concentrated in the Atlantic off the Northeast coast, projects have also been proposed off the Southeast coast, in the Pacific off of California and Hawaii, and in the Great Lakes. With stable policies in place, the Department of Energy found the U.S. could develop a between 11-16 gigawatts (GW) of offshore wind projects by 2030 and 86 GW by 2050. As we continue to develop this homegrown resource, costs will continue to drop, value to consumers will grow, and the U.S. will see new jobs and investments in manufacturing and port infrastructure.
Recent State Activities Driving Offshore Wind Demand

Massachusetts

- In May, Massachusetts issued its second offshore wind RFP, seeking between 400 MW to 800 MW of offshore capacity. The winners will be announced in November.
- In June, Massachusetts officials recommended that state electric distribution companies procure an additional 1,600 MW of offshore wind capacity by 2035.

New York

- The New York legislature passed a bill in June that increases its offshore wind target from 2,400 by 2030 to 9,000 MW by 2035. Governor Cuomo signed the bill into law in July.
- In July 2019, New York announced the winners of its first offshore wind solicitation: Ørsted & Eversource's 880 MW Sunrise Wind project and Equinor's 816 MW Empire Wind project. The project developers are now negotiating contracts with NYSERDA.

New Jersey

- In June 2018, New Jersey granted the state's first offshore renewable energy certificate (OREC) award to Orsted's 1,100 MW Ocean Wind project, the largest offshore project planned in the U.S. to date. The project has a first year OREC price of $98/MWh, and an estimated levelized net OREC price of $46/MWh after revenues are refunded to ratepayers.

Maryland

- In May 2019, Maryland passed an offshore wind mandate of 1,200 MW by 2030 as part of an increase in the state's RPS.

Connecticut

- In June 2019, Connecticut enacted a law requiring the state to procure 2,000 MW of offshore wind by 2030. The state issued a draft RFP for 2,000 MW of offshore wind capacity in late June, with a final RFP to come in mid-August.

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