



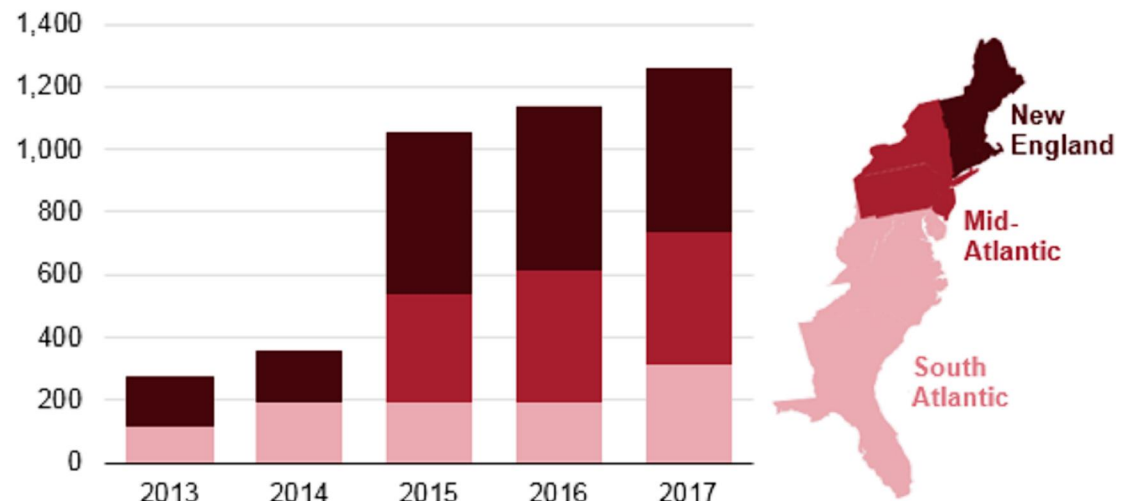
U.S. Energy Information  
Administration

## Today in Energy

December 2, 2016

### Federal leasing for offshore wind grows as first U.S. offshore wind farm comes online

**Cumulative purchased federal leases for offshore wind land area**  
thousand acres



**Source:** U.S. Energy Information Administration, based on [Bureau of Ocean Energy Management](#)

**Note:** 2016 and 2017 values are estimates.

The first commercial U.S. offshore wind farm, Block Island, is scheduled to [come online in late 2016](#). Located three miles off the southeastern coast of Rhode Island, Block Island consists of five wind turbines that will produce 30 megawatts (MW) of electricity. The electricity will be used on Block Island, where electricity is currently supplied by diesel-powered generators. The high cost of current electricity sources on Block Island helps to reduce the economic hurdles typically associated with power from offshore wind.

The developer, Deepwater Wind, [began construction on the project in July 2015](#) and holds two additional leases off the coasts of Rhode Island and of Massachusetts for future developments. Although the Block Island Wind Farm was constructed in state waters, these additional leases are farther from shore in federal waters.

State waters typically extend out to three nautical miles, and federal waters extend out to 200 nautical miles, forming a much larger area known as an exclusive economic zone. The National Renewable Energy Laboratory [estimates that the United States has 4,200 gigawatts of potential offshore wind energy](#), with the majority of that potential in federal waters. Although local state agencies typically handle wind development in state waters, the Bureau of Ocean Energy Management (BOEM) manages all wind development in federal waters.

BOEM awards leases through a competitive bid system. BOEM identifies areas that have wind potential, which it designates as call areas. With enough interest from commercial developers and after public comment, BOEM designates a call area with sufficient potential for wind development as a wind energy area, where it can hold a future lease sale.

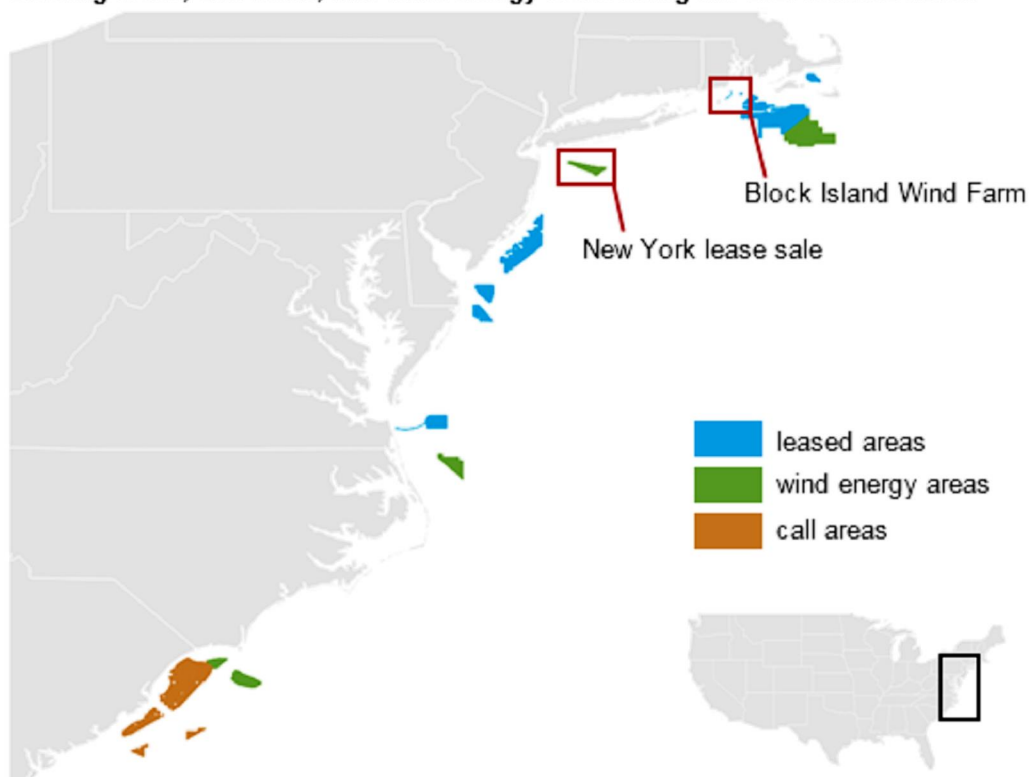
BOEM held the [first competitive federal offshore commercial wind lease sale](#) in 2013 and auctioned off nearly 165,000 acres for wind energy development off the coasts of Massachusetts and of Rhode Island. Since then, BOEM has held four additional auctions for wind development in the Atlantic region. To date, it has issued 11 commercial leases in federal waters, 9 of which were purchased through the competitive bid process. BOEM issued the other 2 leases before the first competitive lease sale. Cumulatively, since 2013 more than one million acres of land in federal waters have been leased for wind development and have generated more than \$16 million in revenue from the lease sales for the federal government.

During the same period, the [federal government collected more than \\$24 billion in revenue](#) from offshore energy extraction activities, predominantly from oil and natural gas. This revenue includes rent, royalties per energy unit, and other fees. Because offshore wind is still in the development phase, companies are not currently paying royalties on production or other fees, but BOEM will collect future revenue from operating fees and additional lease sales. Production fees will be based on the capacity of the wind farm, its capacity factor, the average wholesale electric power price, and an operating fee rate that BOEM determines.

On December 15, BOEM will hold a [lease sale for offshore New York](#) for nearly 80,000 acres, and it plans to have another lease sale for areas of offshore North Carolina in 2017. Fourteen companies have qualified to participate in the New York lease sale. To qualify to participate, a company must demonstrate that it is financially, legally, and technically able to bid and develop on the lease. Since the first lease sale in 2013, the number of companies qualifying to participate has steadily increased, from 8 in 2013 to 14 in the latest offering. While there is no guarantee that a company holding a lease will choose to develop a wind farm, the purchase of a lease is a significant indicator of interest.

Wind speeds offshore tend to be higher and less variable compared to onshore. Additionally, offshore wind has the potential to provide power in coastal areas where demand is high and land-based renewable energy resources are limited. However, offshore wind currently has much higher costs than onshore wind, solar, or nonrenewable electricity generation options to serve loads on the U.S. mainland.

### Leasing areas, call areas, and wind energy areas along the U.S. Atlantic coast



**Source:** U.S. Energy Information Administration, based on [Bureau of Ocean Energy Management](#)

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