

The Block Island Wind Farm off the coast of Rhode Island is America's first offshore wind farm.



Wind Power to Spare

The Enormous Energy Potential of Atlantic Offshore Wind

The Atlantic coast has access to abundant offshore wind energy. With proven technology and falling costs, offshore wind is ready to help power the region with clean energy.

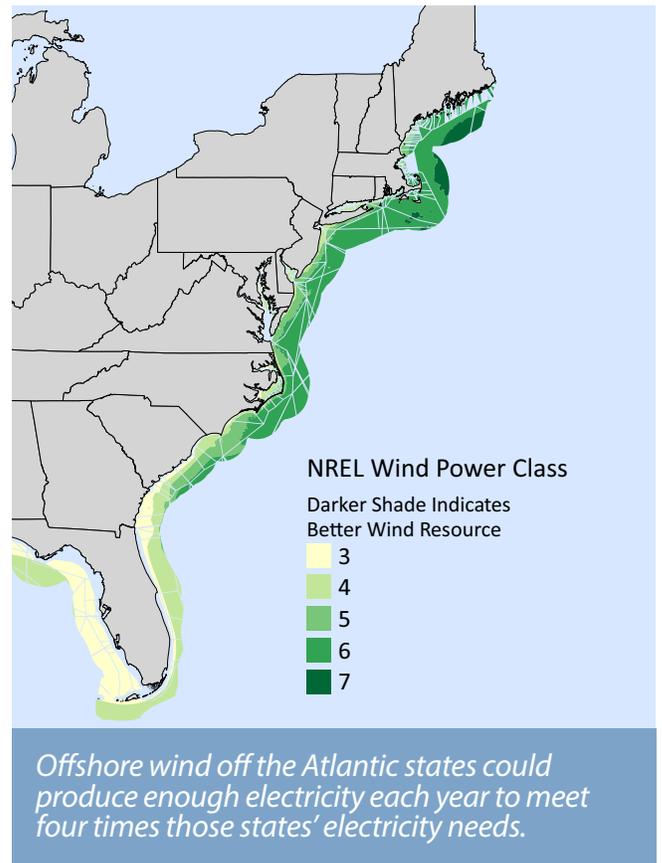
Atlantic Offshore Wind Is an Abundant Clean Energy Source

To achieve a truly clean energy system, Atlantic states – which account for more than a quarter of the nation's energy use – will need to tap into a massive clean energy resource.

Offshore wind off the Atlantic states could produce enough electricity each year to meet four times those states' electricity needs (4,574 terawatt hours). This is even after accounting for areas unsuitable for wind turbines, like shipping lanes and marine reserves.

The offshore wind resource off of 12 of the 14 states with Atlantic coastline could produce at least as much electricity as is currently used in those states.

Tapping into offshore wind can also help meet future electricity demand created by electrifying activities currently powered by gasoline, natural gas and other fossil fuels. If developed to its full potential, Atlantic offshore wind could supply double the estimated electricity it would take to power all current needs plus estimated demand from electrified heating and electric vehicles.



Offshore Wind Is Ready to Power the Region

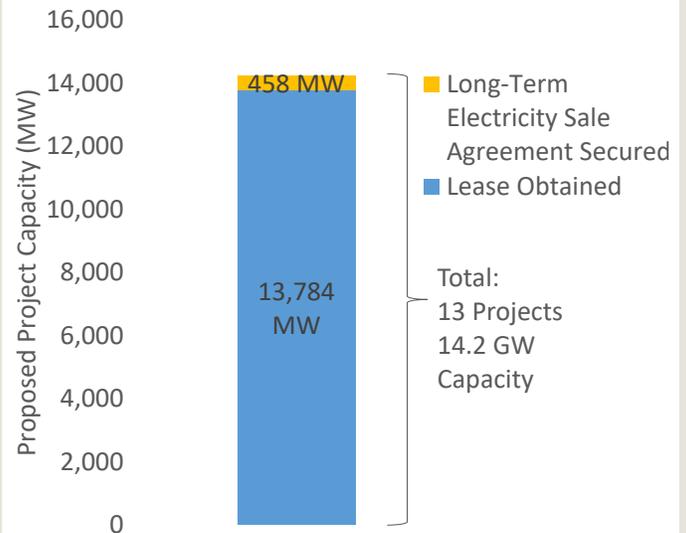
Offshore wind technology is proven, advanced, and affordable.

- Offshore wind is proven. Europe is home to 4,100 offshore wind turbines that supply enough electricity to power more than 20 million homes each day. In Denmark, offshore wind supplied 15 percent of electricity use over the first half of 2017.
- Offshore wind can generate more power, more efficiently than ever before. The turbines at the nation's first offshore wind project in Rhode Island produce 30 times more electricity each year than the first offshore wind turbines installed in Europe in the early 1990s.
- Offshore wind has become affordable. According to Lazard, the average global levelized cost of energy for new offshore wind fell by 27 percent from 2012 to 2017, to a cost that is comparable to a new coal-fired power plant and cheaper than a new nuclear plant over its entire life cycle.



The wind turbines at Rhode Island's Block Island Wind Farm generate 30 times more electricity each year than the original offshore turbines built in the early 1990s.

Offshore Wind Projects Are Proceeding All Along the Atlantic Coast



The offshore wind projects moving forward on the Atlantic coast could eventually power more than 5 million homes.

Planned projects – many of them in advanced stages of development – will soon dramatically increase Atlantic offshore wind.

As of February 2018, 13 offshore wind projects along the Atlantic seaboard have obtained ocean area leases and are moving forward. With a total estimated capacity of 14.2 gigawatts (GW), these proposed projects could power approximately 5.2 million homes.

Nearly 0.5 GW of proposed projects have both obtained a lease and secured a long-term agreement to sell power from the project (an offtake agreement). The securing of an offtake agreement is an important step for an offshore wind project, because it ensures a long-term revenue stream to finance the project's development, installation and operation.

*For more information and the full report,
please visit
www.environmentamericacenter.org*

