

Want to Keep Our Graduates in New England? Build A Robust Offshore Wind Industry

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New England is home to some of the first and finest colleges and universities in the nation. We are also the home of the nation's first offshore wind farm. But this small, five-turbine 30 megawatt (MW) facility off the coast of Block Island, R.I. is just the beginning. Thanks to the leadership of the New England states, hundreds, and hopefully thousands, more megawatts of offshore wind are coming soon.

New England's greatest strength is the intellectual capital developed by its colleges and universities. Unfortunately, polls show that New England is not always good at retaining graduates after they complete their degrees. We educate the future clean-energy leaders we need to remain competitive in a low-carbon economy. But if the growth of our home-grown industry doesn't keep pace, our graduates and researchers will need to leave the region in search of opportunities.

While offshore wind may be a nascent industry in the United States, it is far from unproven; turbines have been spinning off the coast of Europe for years, and in fact, big European companies are putting their financial capital to work in our waters. Following the success of the Block Island Wind Farm, states up and down the East Coast are beginning to explore offshore wind to transform their electric power systems—for grid reliability, electric rate stabilization and reduction, and decarbonization— while simultaneously working to support local communities and to reduce any negative impacts.

Our power system, operated as a single system across our six New England states, has undergone much change in recent years. Low-cost natural gas has largely out-competed coal and oil plants. This transition is also fueled by public policy goals aimed at reducing fossil fuel emissions that harm public health and contribute to climate change. Pursuant to these public policies, between 2,200 and 3,800 MW of offshore wind should be built off the coast of New England in the next 15 years. This is a step in the right direction, but not enough to support a robust, home-grown industry that will keep intellectual capital and financial returns in our region. Northern European countries realized the potential of offshore wind nearly three decades ago and have 12,000 MW of offshore wind already installed, with plans to double that capacity by 2030.

The diversity of our institutions and graduates is the backbone of our strength. Together, we are training the future engineers, investors, attorneys, biologists, architects, designers, economists, managers, and other environmental professionals to help build this new, home-grown offshore wind industry that will power our New England grid into the future.

We welcome the prospect of a responsibly sited and vibrant offshore wind industry in our regional waters. Not only will offshore wind farms help us combat climate change by replacing retiring fossil fuel power plants, they will serve as tremendous educational and employment assets for institutions of higher education across New England. The [costs](#) released this year for the first offshore wind project in Massachusetts (Vineyard Wind) are much lower than anticipated and very close to the cost of hydroelectricity. Massachusetts ratepayers will realize about \$1.4 billion in economic benefits and about 3,600 [jobs](#) will be created by the Vineyard Wind project. Recent [studies](#) show that even modest amounts

of offshore wind will result in hundreds of millions of dollars in energy savings and thousands of tons of CO2 emissions prevented annually.

In addition to the existing research we are doing on offshore wind, we are preparing a new generation of highly skilled professionals poised to expand the potential for this growing and necessary industry. UMass Lowell is the lead for the only National Science Foundation-sponsored center on wind energy, [WindSTAR](#), an industry-university collaborative research center. Vermont Law School's [innovative renewable energy clinic](#) has enabled its graduates to be hired by the offshore wind development industry in New England; this opportunity is growing rapidly as the industry develops. Colby College's [Environmental Studies Program](#) is adding faculty capacity and developing a new focus area on renewable energy, particularly offshore wind. The University of Rhode Island has emerged as a leader in integrating community-based expertise and the best available science into the [siting and implementation of offshore renewable energy](#) to ensure the least amount of impact on existing uses and wildlife – a critical approach being taught to URI students. Dartmouth College's Tuck School of Business endowed the [Revers Center for Energy](#) in 2016, giving students the tools to explore the vast opportunities and challenges in the energy sector today and in the years to come. This summer, the Yale Center for Business and the Environment (CBEY) is launching a [year-long, admissions-based online certificate](#) for working professionals who seek to accelerate the financing and deployment of clean energy.

New England's colleges and universities can and will help this industry grow even beyond what existing public policy envisions. Our professors, students, and graduates will help ensure a robust offshore wind industry is built with minimal impact on the marine environment and maximum benefit for our economy and environment. As we educate the leaders of tomorrow, we need to build an industry that will keep our graduates in New England.

Signed:

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