

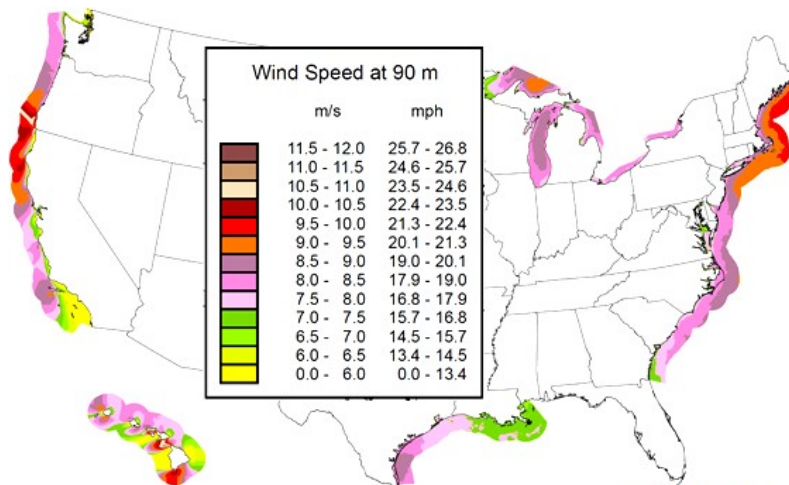
Renewable Energy on the Outer Continental Shelf

In 2009, President Barack Obama and Secretary of the Interior Ken Salazar announced the final regulations for the Outer Continental Shelf (OCS) Renewable Energy Program, which was authorized by the *Energy Policy Act of 2005* (EPAAct). These regulations provide a framework for leases, easements and rights-of-way for activities on the OCS that support production and transmission of energy from sources other than oil and natural gas.

In the foreseeable future, the Bureau of Ocean Energy Management (BOEM) anticipates development of renewable energy on the OCS from three general sources:

1. Offshore Wind Energy

Offshore wind turbines are being used in a number of countries to harness the energy of the moving air over the oceans and convert it to electricity. Offshore winds tend to flow at higher sustained speeds than onshore winds, making turbines more efficient. The Obama Administration's Goals for Offshore Renewable Energy call for achieving 10 megawatts of wind capacity in the OCS and Great Lakes by 2020 (Great Lakes are not regulated by BOEM). Offshore Atlantic winds alone could produce an estimated 1,000 gigawatts of energy.



Source: National Renewable Energy Laboratory

First Commercial Lease Signed

The first commercial wind lease was signed in 2010 by Secretary Salazar and Cape Wind Associates for a project in federal waters offshore Massachusetts.

The Cape Wind Energy project would be the first wind farm on the OCS, potentially generating enough power to meet 75 percent of the electricity demand for Cape Cod, Martha's Vineyard and Nantucket Island combined.

A thorough environmental assessment was conducted, and the Construction and Operation Plan, which details additional terms and conditions to be followed, was approved in April 2011.

Construction is expected to begin in 2012.

2. Ocean Wave Energy (Hydrokinetic)

There is tremendous energy in ocean waves. Wave power devices extract energy directly from the surface motion of ocean waves. A variety of technologies have been proposed to capture that energy, and some of the more promising designs are undergoing demonstration testing.

3. Ocean Current Energy (Hydrokinetic)

Ocean currents contain an enormous amount of energy that can be captured and converted to a usable form. Some of the ocean currents on the OCS are the Gulf Stream, Florida Straits Current, and California Current. While technology is still at an early stage of development, it is likely that submerged water turbines similar to wind turbines would be employed to extract energy from ocean currents.

The Process

Multiple federal agencies have responsibilities for the regulation and development of offshore renewable energy. BOEM issues leases and grants for both OCS wind and hydrokinetic projects. BOEM also permits the construction and operation of wind facilities, while the Federal Energy Regulatory Commission will permit the construction and operation of hydrokinetic facilities on BOEM-issued wave and current leases.

As required by EPCRA, BOEM will issue leases on a competitive basis unless it determines that no competitive interest exists. After a lease is acquired, the developer must submit and receive approval of appropriate plans (wind) or license applications (hydrokinetic). At the end of the lease term, the developer must decommission facilities in compliance with BOEM regulations.

In the fall of 2010, Secretary Salazar launched the “Smart from the Start” wind energy initiative to expedite the responsible development of wind energy projects off the Atlantic coast. In coordination with the relevant states, BOEM has identified Wind Energy Areas (WEAs) offshore the Atlantic coast that appear most suitable for renewable energy development and will take steps to make the permitting process for projects more efficient. The “Smart from the Start” initiative is integrated fully with President Obama’s Executive Order on coastal and marine spatial planning efforts.

A number of states on the Atlantic coast have initiated planning for projects to support their renewable energy portfolio standards and developers are pursuing leases. For example, Florida is interested in developing ocean current energy. Pacific Northwest states are looking into developing wave energy. On both coasts and in Hawaii, BOEM is working with interested and affected federal, state, local and tribal governments through individual state intergovernmental renewable energy task forces, memoranda of understanding (MOU) and other arrangements to assure proper consultation and coordination. Secretary Salazar and the Governors of 11 East Coast states signed a MOU that established the Atlantic Offshore Wind Energy Consortium in May 2010. The Consortium has been working with BOEM on regional issues relating to siting, data and science and authorization of renewable energy projects on the OCS.

BOEM and the Department of Energy (DOE) signed a MOU to address numerous offshore renewable energy issues of mutual interest; and DOI and DOE issued the first interagency plan on offshore wind energy, demonstrating a strong federal commitment to expeditiously develop a sustainable, world-class offshore wind industry in a way that reduces conflict with other ocean uses and protects resources. BOEM is also working with other interested federal agencies to establish MOUs to coordinate OCS renewable energy activity.

In addition to issuing leases, BOEM also has the authority to issue Right-of-Way (ROW) grants for offshore transmission lines linking OCS renewable energy installations to facilitate efficient interconnection to the onshore electrical grid. BOEM received a ROW request for a proposed transmission line on the OCS running from Virginia to New York and issued a public notice asking whether there is competitive interest in constructing renewable energy transmission facilities in the proposed area and soliciting comments on the potential environmental consequences. The bureau expects other ROW requests in the northeast and off Hawaii in the near future.

As required by EPCRA, BOEM has established payments to ensure fair return to the U.S. Treasury for the rights conveyed by OCS renewable energy leases, easements and ROWs. All lessees and grantees must pay rent, and lessees must pay an operating fee in lieu of rent when commercial electrical generation commences. The operating fee is based on the installed capacity of the wind turbine generators.



For more information, please visit: <http://www.boem.gov/Renewable-Energy-Program/index.aspx>