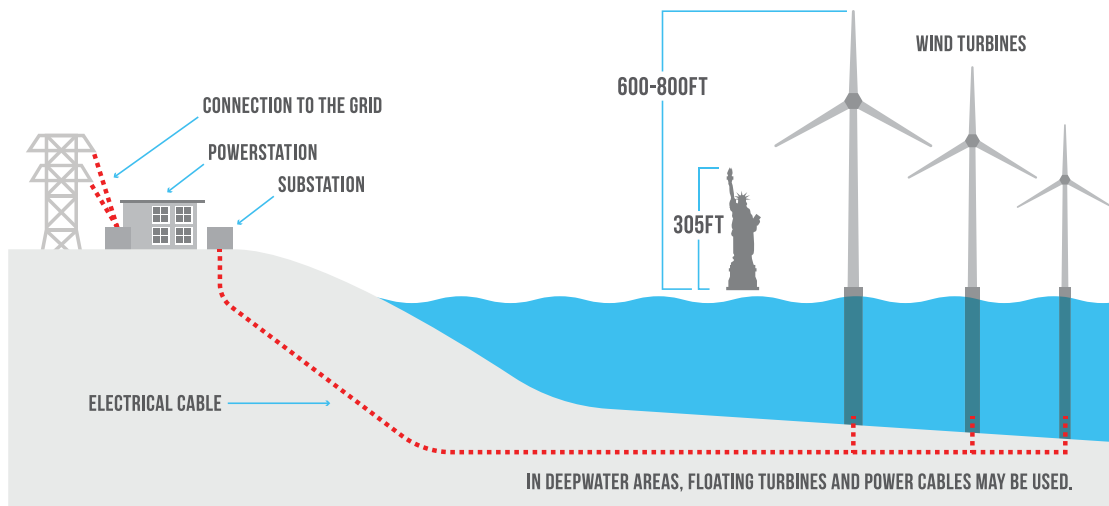


OFFSHORE WIND ENERGY

Offshore wind energy refers to the use of wind turbines in the ocean or large freshwater areas to generate electricity. A group of interconnected wind turbines is referred to as a wind farm. As the U.S. seeks to develop renewable, homegrown and cost-effective energy sources, we've seen a surge in proposed offshore wind energy projects. As of October 2018, there is only one operating offshore wind farm in the U.S., but there are many new wind energy projects being proposed, ranging in size from four to 100 turbines each. As this industry expands, it's important to understand both the benefits and negative impacts that offshore wind farms can have on our marine environment, coastal economies and recreational use areas.



POTENTIAL BENEFITS

- Helps meet growing demand for U.S. energy needs
- Decreases greenhouse gas emissions, the main cause of climate change
- Provides access to powerful offshore winds
- Can be placed far offshore, reducing land-based visual and aesthetic impacts
- Creates job opportunities in coastal areas
- Helps states and local communities meet renewable energy goals
- Creates artificial reefs that provide habitat and recreational fishing opportunities
- Reduces reliance on non-renewable fossil fuels

POTENTIAL NEGATIVE IMPACTS

- Turbine blades can harm birds and other wildlife through displacement, habitat loss and collision
- Noise during construction may disorient and displace marine mammals, turtles and fish
- Turbines alter coastal views
- Turbines can increase navigational challenges and prevent access for vessels during construction
- If used, floating power cables can entangle whales and other marine mammals
- Power cables emit electromagnetic fields, potentially disorienting and displacing wildlife
- Turbines can disturb the seafloor, alter habitat and temporarily decrease underwater visibility during construction

Though Surfrider encourages the use of renewable energy, we believe that offshore wind farms need to be carefully planned and thoughtfully designed to prevent negative ecological, economic and recreational impacts.

SURFRIDER WIND POLICIES AND PRINCIPLES

The Surfrider Foundation believes that the following principles must be applied when evaluating or planning for potential offshore wind projects.

- Developer avoids and mitigates negative local and regional impacts to wildlife, habitat, and physical oceanography; and tracks impacts by using best available science, frequent monitoring and baseline data
- Wind farm design ensures public safety, maintains access for ocean recreation opportunities and considers existing uses of the project area
- Development of the wind farm includes meaningful community input, ensures transparency and uses comprehensive planning and regional data portals
- The wind farm operator employs adaptive management, incorporates new information and proceeds incrementally and cautiously to mitigate cumulative impacts



Learn more about the impacts and opportunities for wind energy at:

[GO.SURFRIDER.ORG/OFFSHORE-RENEWABLES](https://go.surfrider.org/offshore-renewables)

Reach out to Surfrider's Mid-Atlantic Policy Manager Matt Gove, mgove@surfrider.org, for more information on how to respond to offshore wind energy in your area!

OFFSHORE WIND PROJECTS PROPOSED LOCALLY

Project Name: _____

Company Name: _____

Location (Miles Offshore): _____

Amount and Height of Turbines: _____

Timeline: _____

Other: _____

Project Name: _____

Company Name: _____

Location (Miles Offshore): _____

Amount and Height of Turbines: _____

Timeline: _____

Other: _____