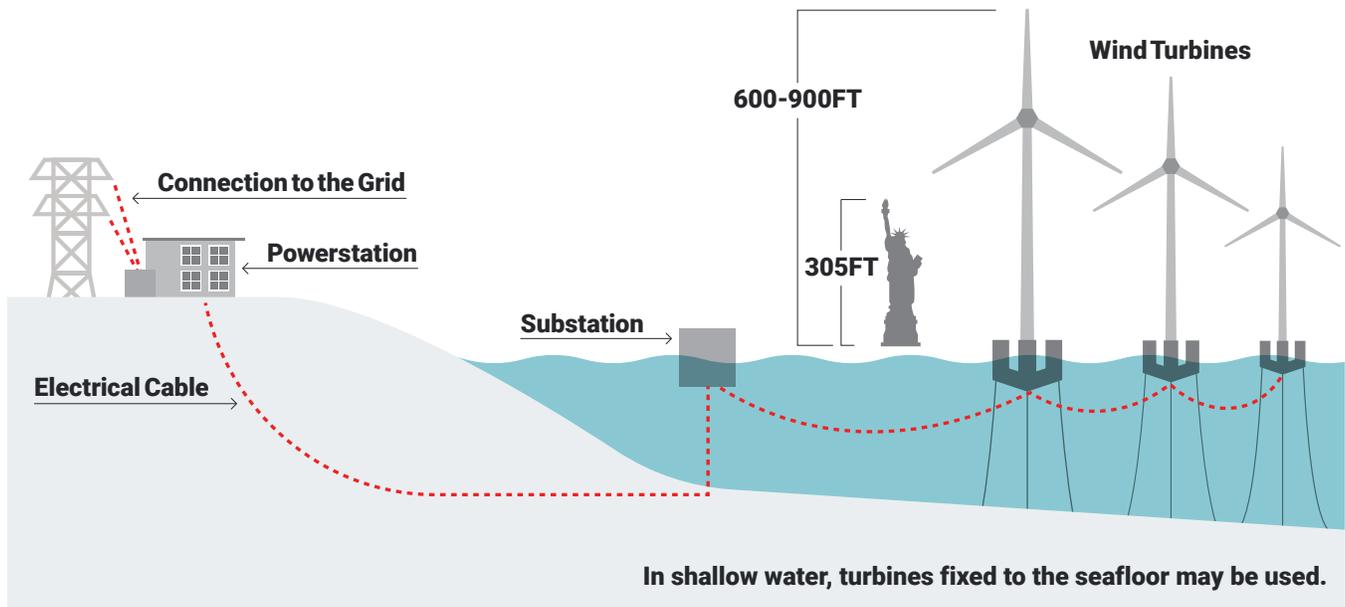


Offshore Wind Energy



Offshore wind energy refers to the use of wind turbines in the ocean or Great Lakes to generate electricity. A group of interconnected wind turbines is referred to as a wind farm. As the U.S. seeks to vastly increase development of renewable energy sources, we've seen a surge in proposed offshore wind energy projects. As this industry expands, so does the need to understand both the benefits and the potential negative impacts that offshore wind farms may have on our marine environment, coastal economies and recreational use areas.



POTENTIAL BENEFITS

- Reduces the need for new and existing fossil fuel facilities that pollute local communities and disproportionately impact communities of color
- Decreases greenhouse gas emissions, the main cause of climate change
- Helps meet growing demand for national energy needs
- Provides access to powerful and steady offshore winds to provide reliable energy
- Can be placed far offshore, reducing land-based visual impacts
- Creates green job opportunities in coastal areas
- Helps states and local communities meet renewable energy goals
- Creates artificial reefs that provide habitat and recreational opportunities

POTENTIAL NEGATIVE IMPACTS

- Blades can kill, injure and displace birds and bats through habitat loss and collision
- Noise during construction may disorient and displace marine mammals, turtles and fish
- Turbines can alter coastal views
- Turbines may increase navigational challenges for vessels
- Turbines can conflict with existing uses and access, such as fishing
- Cables and anchoring systems for floating turbines may entangle whales and other wildlife
- Power cables emit electromagnetic fields, potentially disorienting and displacing wildlife
- Turbines may alter seafloor and water column environments, disrupting local habitat
- Onshore transmission infrastructure can degrade coastal habitats and impede access
- Multiple large-scale wind farms could have cumulative negative impacts to wildlife
- Increased vessel traffic for construction and maintenance may elevate the risk of wildlife strikes

Though Surfrider encourages the use of renewable energy, we believe that offshore wind farms need to be carefully planned and thoughtfully designed. Offshore wind farms should drive innovation for better models in the future to mitigate negative ecological, economic, and recreational impacts while addressing the issue of climate change.

SURFRIDER WIND POLICIES AND PRINCIPLES

The Surfrider Foundation applies the following principles when evaluating potential offshore wind projects:

- A.** Consider impacts to the environment through comprehensive assessments and application of best available science;
- B.** Require baseline data and frequent monitoring to quantify impacts to the environment and threats to public safety;
- C.** Consider existing uses of the project area and ensure public safety while maintaining access for ocean recreation opportunities;
- D.** Employ adaptive management to ensure that new information is applied to assess needs for modification, mitigation, and/or removal;
- E.** Include meaningful public input and ensure transparency so that local communities have an opportunity to provide input.



Photo: Melissa Gates



Learn more about the impacts and opportunities for wind energy at go.surfrider.org/offshore-renewables

Reach out to Surfrider Foundation's Environmental Director, Pete Stauffer (pstauffer@surfrider.org), for more information on how to respond to offshore wind energy in your area!

KNOWN OFFSHORE WIND PROJECTS PROPOSED LOCALLY

Project Name: _____

Company Name: _____

Location (Miles Offshore): _____

Amount and Height of Turbines: _____

Timeline: _____

Surfrider Concerns: _____

Other: _____

Project Name: _____

Company Name: _____

Location (Miles Offshore): _____

Amount and Height of Turbines: _____

Timeline: _____

Surfrider Concerns: _____

Other: _____