

## Why GAO Did This Study

Offshore wind, a significant potential source of energy in the United States, requires a number of oceangoing vessels for installation and other tasks. Depending on the use, these vessels may need to comply with the Jones Act. Because Jones Act-compliant vessels are generally more expensive to build and operate than foreign-flag vessels, using such vessels may increase the costs of offshore wind projects. Building such vessels may also lead to some economic benefits for the maritime industry. A provision was included in statute for GAO to review offshore wind vessels.

This report examines (1) approaches to use of vessels that developers are considering for offshore wind, consistent with Jones Act requirements, and the extent to which such vessels exist, and (2) the challenges industry stakeholders have identified associated with constructing and using such vessels to support U.S. offshore wind, and the actions federal agencies have taken to address these challenges.

GAO analyzed information on vessels that could support offshore wind, reviewed relevant laws and studies, and interviewed officials from federal agencies and industry stakeholders selected based on their involvement in ongoing projects and recommendations from others.

View [GAO-21-153](#). For more information, contact Andrew Von Ah at (202) 512-2834 or [vonaha@gao.gov](mailto:vonaha@gao.gov).

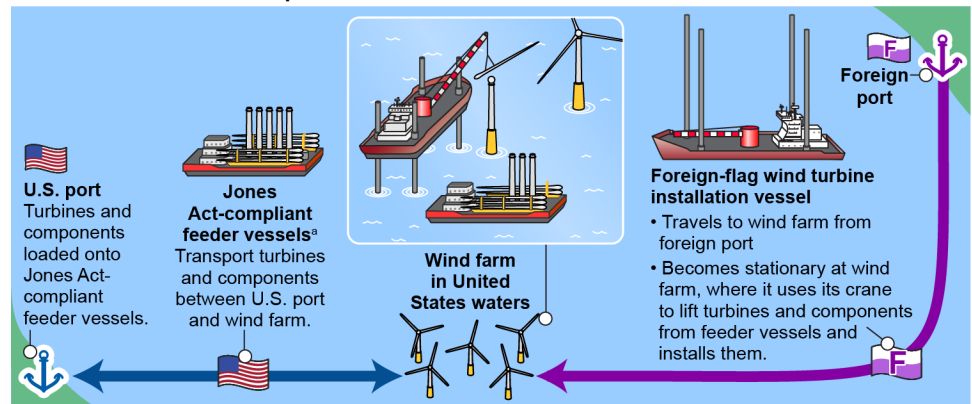
## OFFSHORE WIND ENERGY

### Planned Projects May Lead to Construction of New Vessels in the U.S., but Industry Has Made Few Decisions amid Uncertainties

#### What GAO Found

Under the Jones Act, vessels carrying merchandise between two points in the U.S. must be built and registered in the United States. Developers are planning a number of offshore wind projects along the U.S. east coast, where many states have set targets for offshore wind energy production. Stakeholders described two approaches to using vessels to install offshore wind energy projects in the U.S. Either approach may lead to the construction of new vessels that comply with the Jones Act. Under one approach, a Jones Act-compliant wind turbine installation vessel (WTIV) would carry components from a U.S. port to the site and also install the turbines. WTIVs have a large deck, legs that allow the vessel to lift out of the water, and a tall crane to lift and place turbines. Stakeholders told GAO there are currently no Jones Act-compliant vessels capable of serving as a WTIV. One company, however, has announced a plan to build one. Under the second approach, a foreign-flag WTIV would install the turbines with components carried to the site from U.S. ports by Jones Act-compliant feeder vessels (see figure). While some potential feeder vessels exist, stakeholders said larger ones would probably need to be built to handle the large turbines developers would likely use.

**Example of an Offshore Wind Installation in U.S. Waters Using a Foreign-Flag Installation Vessel and Jones Act-Compliant Feeder Vessels**



Source: GAO. | GAO-21-153

Stakeholders identified multiple challenges—which some federal programs address—associated with constructing and using Jones Act-compliant vessels for offshore wind installations. For example, stakeholders said that obtaining investments in Jones Act-compliant WTIVs—which may cost up to \$500 million—has been challenging, in part due to uncertainty about the timing of federal approval for projects. According to officials at the Department of the Interior, which is responsible for approving offshore wind projects, the Department plans to issue a decision on the nation's first large-scale offshore wind project in December 2020. Some stakeholders said that if this project is approved, investors may be more willing to move forward with vessel investments. While stakeholders also said port infrastructure limitations could pose challenges to using Jones Act-compliant vessels for offshore wind, offshore wind developers and state agencies have committed to make port investments.