NATIONAL WILDLIFE FEDERATION

Coastal Virginia Offshore Wind

America's largest offshore wind project will provide power to about 25% of Dominion Energy's residential consumers in Virginia.



176 turbines

2,587 megawatts

660,000 homes powered

The Path to Power

From initial site selection to electrons entering the grid, over 10 years of site analysis, permitting, planning, and construction went into CVOW.

February 2012
Bureau of Ocean Energy Management finalizes Wind Energy Area

September 2013
Second-ever competitive offshore wind lease auction in the United States

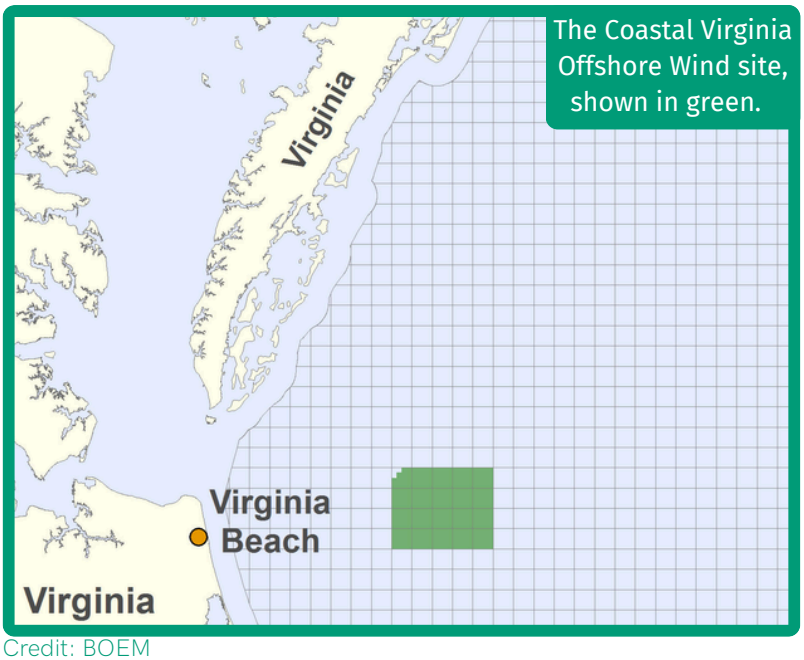
October 2020
The 12MW-CVOW Pilot project enters full commercial service

November 2023
BOEM approves Construction and Operations plan

May 2024
Steel in the water! First monopile is installed

March 2026
First power! CVOW begins delivering energy to Virginia

27 miles off the coast of Virginia Beach, Coastal Virginia Offshore Wind (CVOW) is providing **clean, domestic energy** to Virginians.



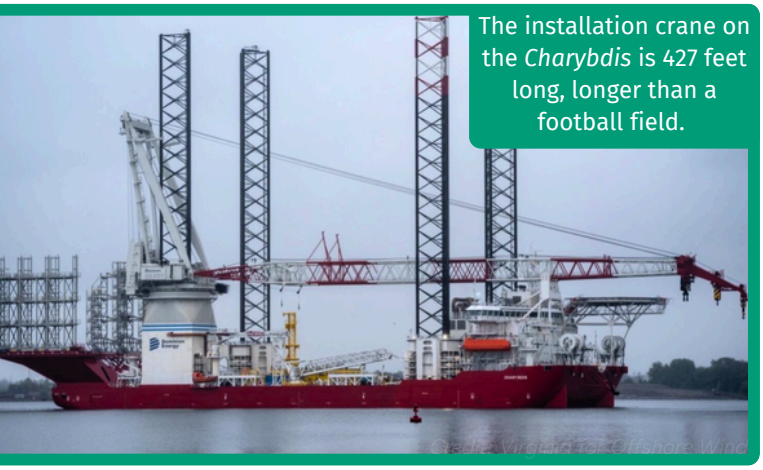
Credit: BOEM

First in Federal Waters, Foremost in Power

- Before the 176-turbine CVOW began construction, the CVOW Pilot project, which consists of two 6-megawatt turbines, was the **first offshore wind project built in federal waters**. Operating since 2020, the project can power 3,000 homes in Virginia.
  - CVOW Pilot is currently helping to avoid up to 25,000 tons of carbon dioxide emissions annually.
  - In its first year of operation, CVOW pilot had a capacity factor of 47% – this means that the project was on average producing 47% of its 12 MW nameplate capacity. This is higher than onshore wind projects (around 34% capacity factor) and on par with coal plants in 2025 (49%).
- CVOW Pilot helped provide proof of concept for the commercial CVOW project, which will be the **largest in the United States** when it completes construction in 2027. Dominion projects that CVOW will avoid up to 5 million tons of carbon dioxide emissions annually, the equivalent of planting more than 80 million trees.

Delivering Benefits for Virginians

- Virginia is one of the states leading the way in offshore wind. The industry has already brought over $1 billion in economic investment to the state.
- An economic analysis of the benefits of the CVOW project for Virginians included $210 million in annual economic output, $5 million in additional Virginia state tax revenue, and the creation of 900 jobs during construction and 1,100 permanent jobs during operations.
- The Portsmouth Marine Terminal, which faced closure during the pandemic, has become one of the busiest offshore wind ports on the East Coast. The port's activity has generated 540 construction jobs and 60 operations roles, and has brought around $1.8 billion in direct investment and over 220 contracts to Virginia since 2020.
- A new operations and maintenance hub is under development at Fairwinds Landing, projected to support 200 construction jobs and 100 permanent operations jobs.



The installation crane on the *Charybdis* is 427 feet long, longer than a football field.

Credit: Virginia for Offshore Wind

Powering the Supply Chain Across Coasts

CVOW's turbines were installed by the *Charybdis,* the nation's first-ever U.S.-built, U.S.-owned, and U.S.-crewed Wind Turbine Installation Vessel. Built in Brownsville, Texas, by offshore engineering group Seatrium, the project employe over 1,200 workers at peak construction and used 14,000 to of domestic steel.

Spotlight On: Protecting Virginia Shorebirds

The Delmarva Bay is an important staging area for many species of birds making their way between the the Amazon rainforest and northern Canada during fall and spring migration periods, including the whimbrel (pictured at right). The coastal marshes and mud flats provide the perfect place for the whimbrel to burrow for fiddler crabs during their journey. Among other wildlife-focused initiatives involved in the CVOW project, developer Dominion committed to funding The Nature Conservancy and the William and Mary Center for Conservation Biology to conduct a study on the whimbrel aimed at gathering more specific data on the whimbrel's flightpath and flight altitude to inform the responsible development of offshore wind.



Hudsonian Whimbrel

Credit: Animalia

Sources: 1. Dominion Energy. "Coastal Virginia Offshore Wind (CVOW) Update (May 11, 2022)." PDF. 2. Dominion Energy. "Coastal Virginia Offshore Wind (CVOW) Brochure." 3. POWER Magazine. "Against the Wind: Inside the Completion of America's Largest Offshore Wind Plant" (2026). 4. Inside Climate News. "Virginia: Dominion Energy, Whimbrel and Wind Turbines" (Sept. 8, 2025). 5. Dominion Energy. Coastal Virginia Offshore Wind (project website). 6. Hampton Roads Alliance. "Offshore Wind Economic Impact Report" (2020). 7. Virginia Renewable Energy Alliance. Offshore Wind in Virginia. 8. Energy Information Administration. Electric Power Monthly. 9. The New Bedford Light "How many homes does an offshore wind farm actually power?" (2025).