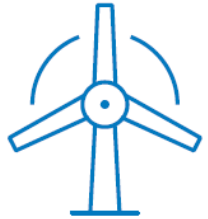
Coastal Virginia Offshore Wind

Dominion Energy®

Actions Speak Louder

Why Offshore Wind?

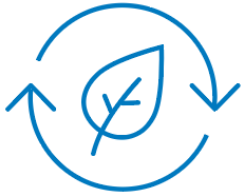
Clean Air
Generates enough energy to power 660,000 homes with zero emissions and fuel costs. That's equivalent to removing 1 million non-EVs from the road annually.



Clean Energy Diversity
Complimentary resource with solar since both generate energy at different times.

Clean Energy Economy
Foundation that can develop into a Virginia supply chain hub to stimulate economic growth and drive down costs

Clean Energy Jobs
Creates clean energy and manufacturing jobs throughout the Commonwealth as well as a talent pipeline through workforce development partnerships



Clean Energy Goals
Critical resource for meeting the Commonwealth's objective of carbon-free energy by 2045.

Clean Energy Research
Continue to support the advancement of offshore wind technology and environmental sustainability for marine, avian and terrestrial habitats

First Turbines in Federal Waters

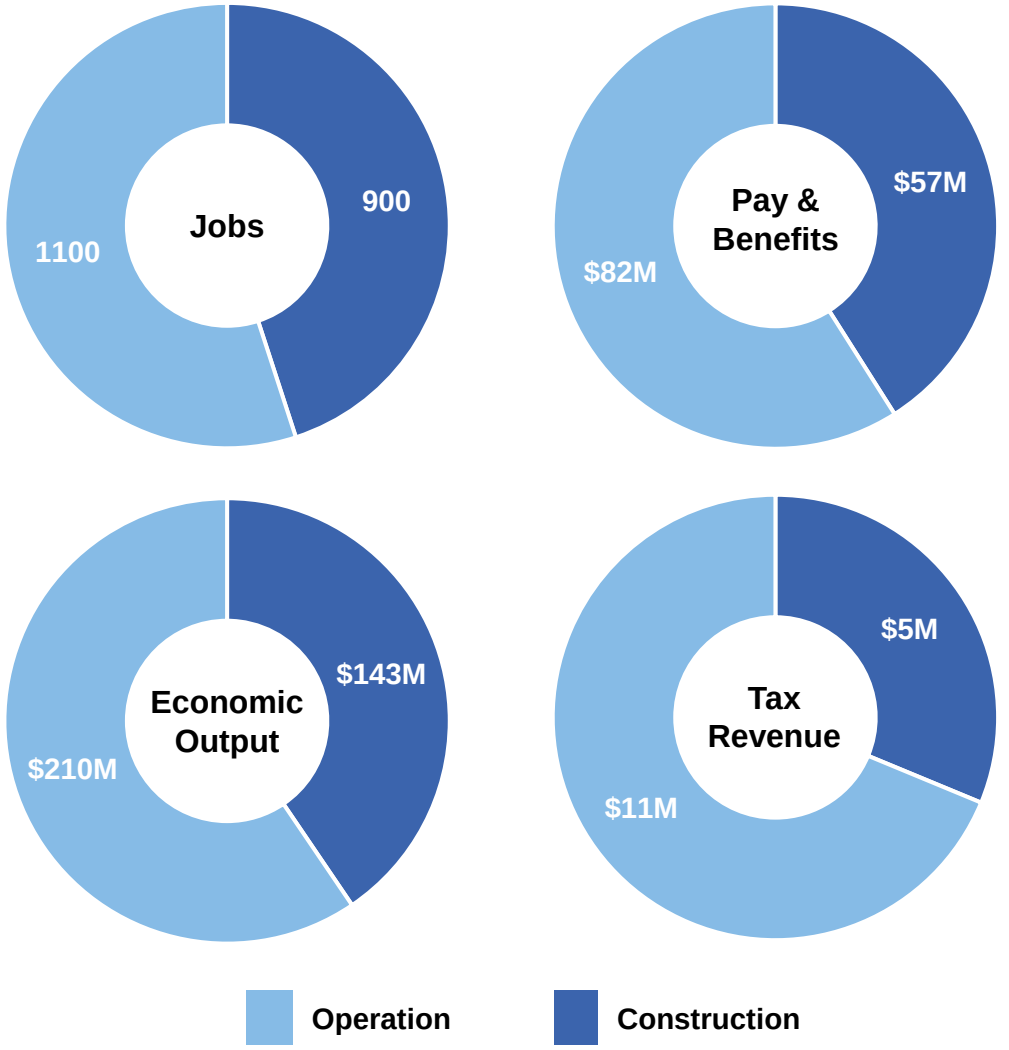
- Two 6-megawatt wind turbines
- 12-megawatt total capacity
- Enough to power up to 3,000 homes
- Approximately 600 feet tall, the height of the Washington Monument
- Located within a 2,135-acre research lease area, 27 miles off the coast of Virginia Beach
- First offshore wind project installed in federal waters and only owned by an electric utility
- Provides valuable experience in permitting, design, installation, and operations that can be applied to the commercial project

Largest Offshore Wind Project in the U.S.

- Planning 188 14-megawatt wind turbines
- 2,640-megawatt total capacity
- Enough to power up to 660,000 homes
- More than 800 feet tall, the height of an 89-story building
- Located within a 112,800-acre lease area east of the pilot project
- Once complete, it will be the largest project of its kind in United States

Growing a Clean Energy Economy*

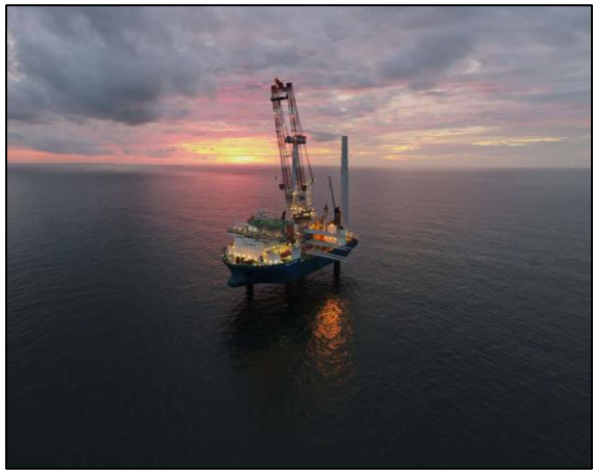
- Approximately **900 jobs** and **$143 million in economic impact** annually during construction
- Approximately **1,100 jobs** and almost **$210 million in economic impact** annually during operation
- Priority hiring of veterans, local workers, and individuals from economically-disenfranchised communities
- Maximizing commerce opportunities for Virginia vendors, subcontractors, and suppliers
- Actively recruiting Virginia businesses through outreach programs
- Workforce Development Partnerships



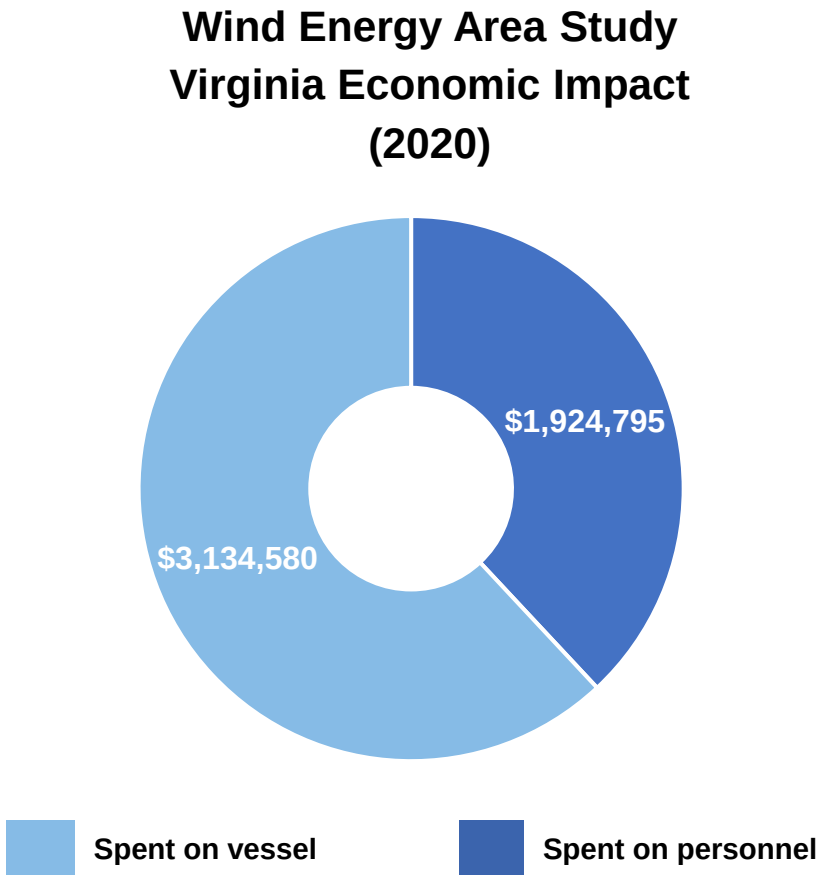
** Potential Impact Of The Development Of The Offshore Wind Industry On Hampton Roads and Virginia. Mangum Economics, 2020*

Dominion Energy – A Leader in the U.S. Wind Industry

Endeavor, Dominion Energy's Crew Transfer Vessel

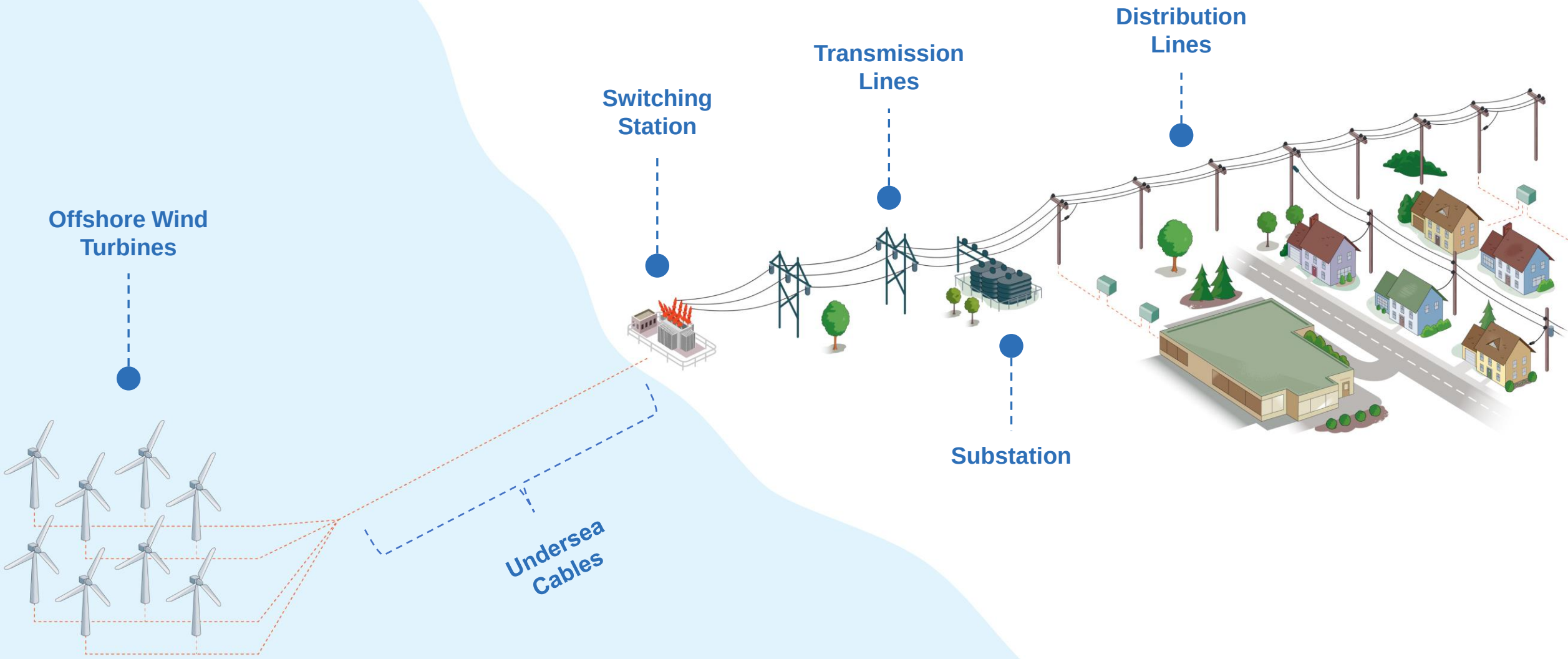


Keppel AmFELS – one of the world's largest wind turbine installation vessels

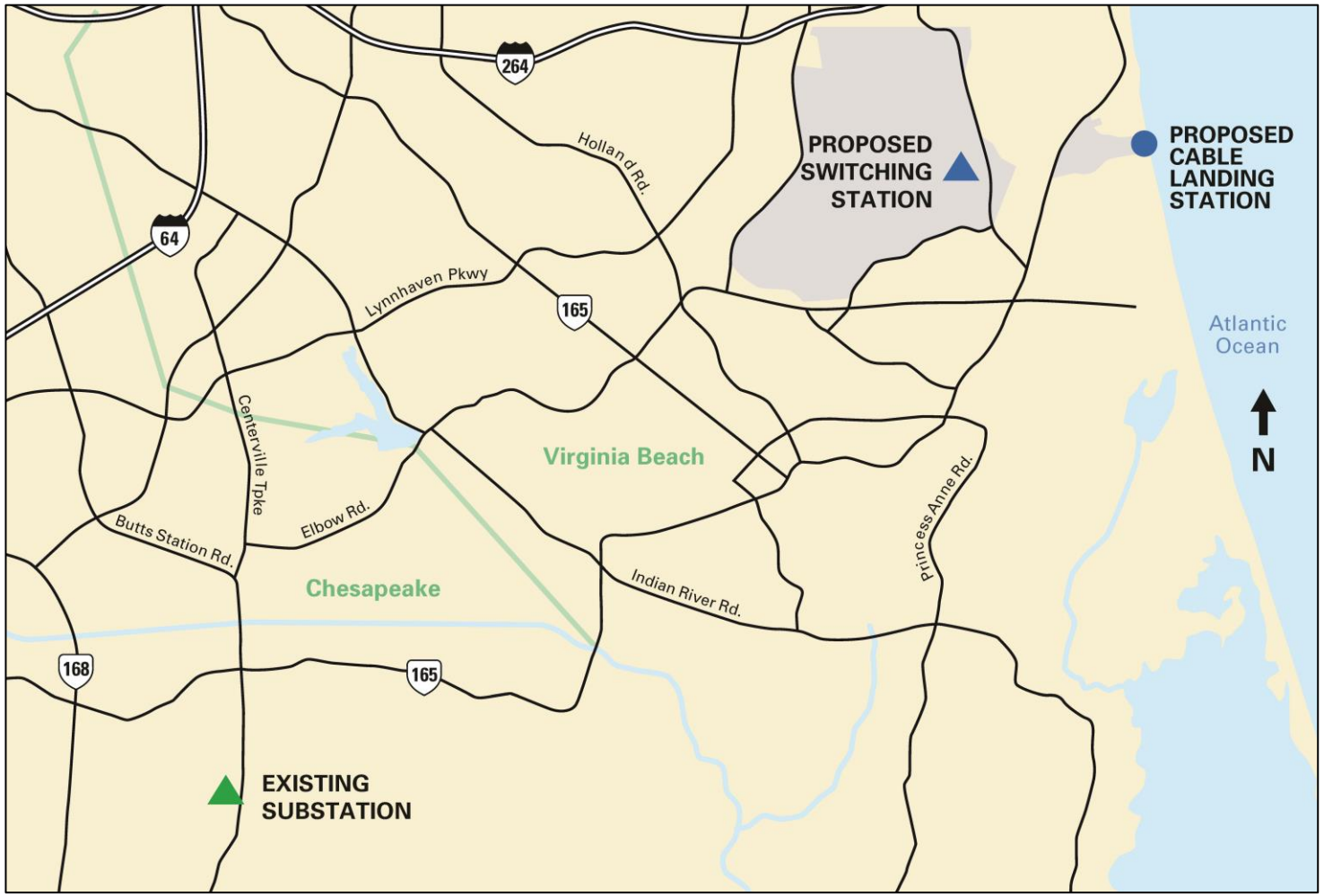



Offshore Turbines + Onshore Transmission = CVOW
Dominion Energy®
Actions Speak Louder

Offshore to Onshore



Onshore Project Summary



- Dominion Energy is exploring all electrical solutions for transmission routes
- Undersea cables are proposed to come ashore at State Military Reservation (SMR) in Virginia Beach
- Transmission lines will interconnect SMR to a proposed switching station located near Naval Air Station Oceana
- Transmission lines will then interconnect from the switching station to Dominion Energy's existing Fentress Substation in Chesapeake
- Approximately 13 miles from the proposed switching station to the substation

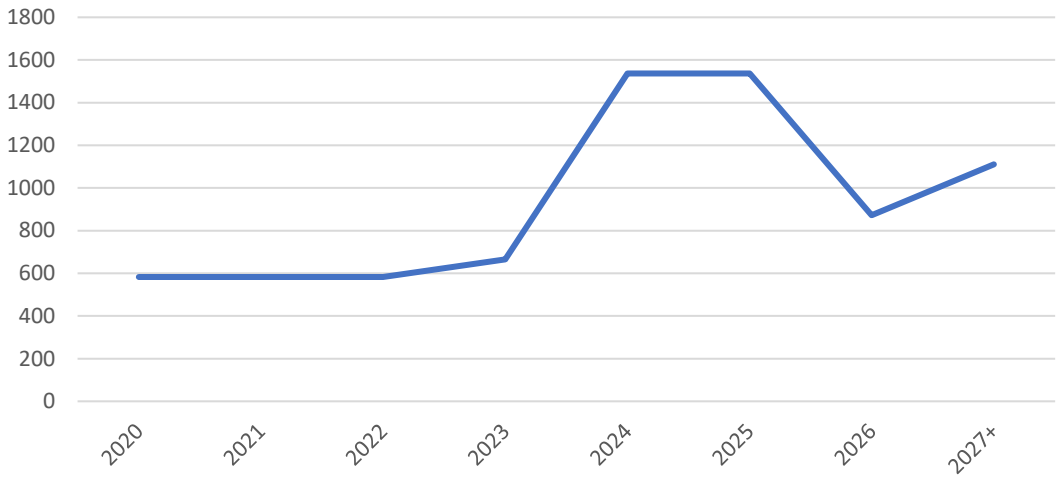
Permitting and Regulatory Agencies

Required Plans, Surveys, and Studies

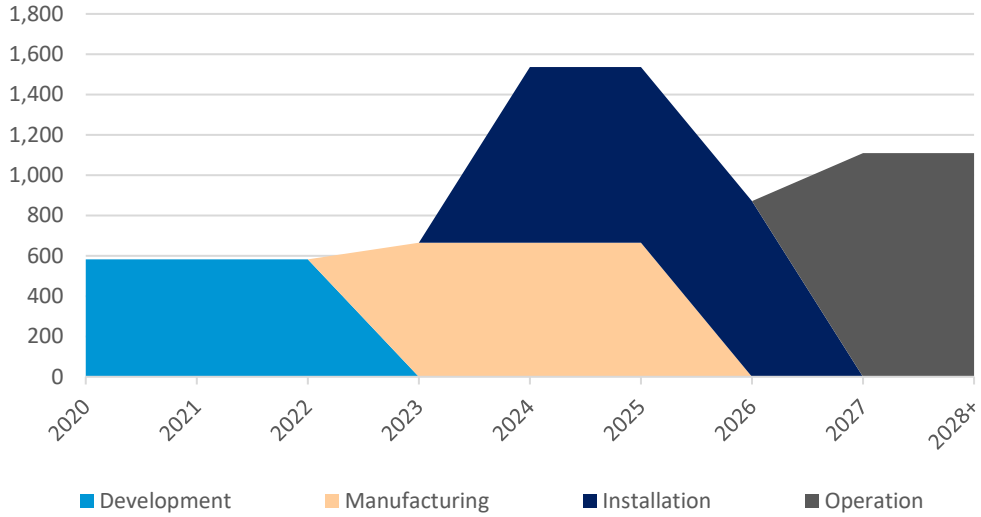
- Safety Management System
- Emergency Response Plan
- Oil Spill Response Plan
- Cultural Resource Protections
- Marine Debris Prevention Plan
- Acoustics
- Air Emissions
- Avian and Bat
- Aviation Impacts
- Electric and Magnetic Fields
- Fisheries
- Geophysical, Geotechnical, and Benthic
- Historic Architecture
- Marine and Terrestrial Archaeology
- Marine Mammals and Sea Turtles
- Navigational Safety Risk
- Sediment Transport
- Terrestrial Biological Resources
- Visual Impacts

Job Opportunities Fluctuate by Project Phase

Projected Virginia Jobs by Year*



Projected Virginia Jobs by Project Phase*



Key Factors for OSW Job Expansion

- BOEM Notice of Intent for U.S project
- Maintaining Virginia's favorable OSW Policy
- Virginia's low cost of business
- Workforce development programs for OSW jobs
- Port of Virginia advantages and terminal investments

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Creating a Clean Energy Workforce

- K-12
- Technical Training Facilities
- Higher Education
- State Agencies, Workforce Councils and VEDP

Expanding Opportunities for Virginia Businesses

- More than 300 Virginia attendees for the December B2B meetings
- Hampton Road Alliance Friday Forums – Supplier Readiness Series
- Partnering with local, regional and state chambers of commerce and economic development organizations
- 2021 Business Network for OSW International Partnering Forum in Richmond, Virginia

Opportunity Awareness
- Project Update
- Commercial Requirements

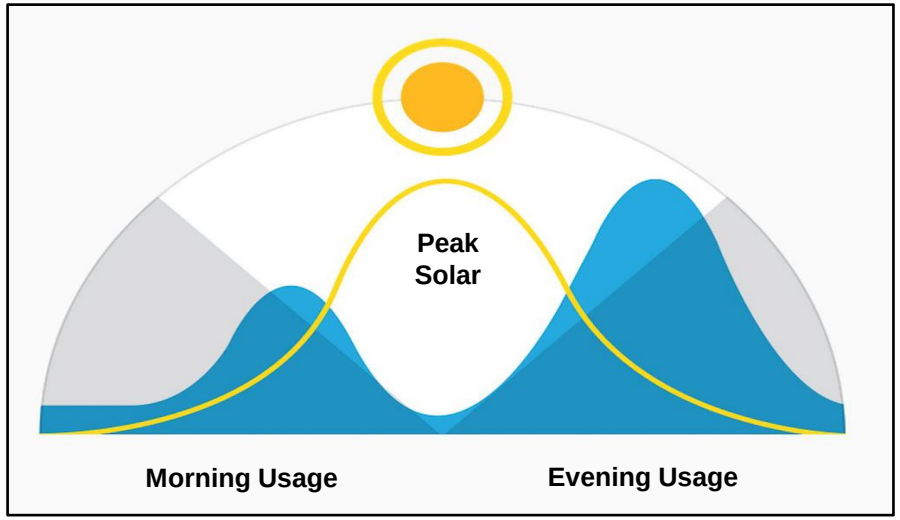
Preparation and Business Development
- Plan for Success
- Training and Certification

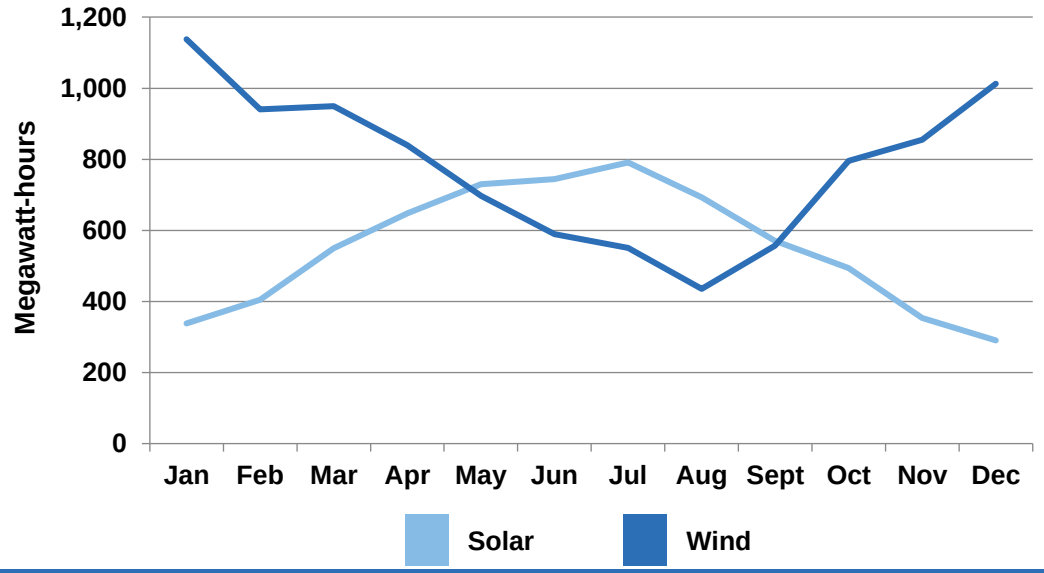
OSW Industry Education
- Business Network for OSW Training
- HR Alliance

Vendor and Contractor Expos
- Open Houses
- RFI/RFP Activity

Clean Energy Reliability

- Virginia's fully integrated regulatory model designed to maximize reliability
- Mix of energy resources increases reliability
- Peak solar energy does not align with peak usage
- Wind and solar complement one another on a daily and annual basis
- Wind and solar paired together lead to stable, renewable power in Virginia





Questions and Shared Insights