



U.S. Department of Defense
Office of Local Defense
Community Cooperation



Virginia Department of Military Affairs



tools for
**SUSTAINABLE
SOLUTIONS**

Project Overview – December 2021
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Project Goal & Vision



Minimize/mitigate the impact of wind energy siting decisions in the Commonwealth of Virginia on US military readiness and enable the development of diverse energy sources to supply the power needs of individuals and businesses.

A set of processes, supporting tools, and training which enable organizations planning or considering the siting of wind energy projects in the Commonwealth of Virginia, to develop their projects in a way that mitigates the impact on military readiness, operations, and research activities.



Scope of Solution



- Develop processes to achieve the project goals, integrating current DoD and Coast Guard procedures with those of the Commonwealth
- Develop recommended policy and regulatory/ ordinance changes required for the success of the solution
- Develop a tool will enable a user to identify the impacts and mitigation considerations for any location in the Commonwealth of Virginia.
- Establish outreach and training program to inform and educate the various stakeholders as to the processes and tools, along with how to use them.
- Develop business model and recommendations for how the system will be maintained and sustained into the future.



Key Findings from Discovery



- Main user personas are Developer, Military, and Government
- There are multiple development cases, each having different permitting leads and supporting agencies
- There is a mixture of regulations, laws, agencies and other requirements that are not always clear
- Defense tends to be buried in the process
- Steps and coordination are missed or not done in a timely fashion
- Large need for information and education



Design Approach



- Assist Commonwealth with harmonizing approach to wind energy development
- Provide clarity by making processes transparent
- Leverage extant resources – be additive to work already done
- Provide a place where wind energy developers interested in projects in Virginia can come to learn and be facilitated through the process
- Provide state agencies and municipalities aid in tracking of permitting and site information
- Create process to ensure the DoD receives information in a timely manner, can provide input to the permitting/development process, and is aided in tracking developments and installations.
- Create an extensible framework which can easily add other states wind development, or other renewables



WindSite – Start Screen



Virginia Wind Energy Siting Tool

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Providing interactive resources and process flow to customers and government stakeholders seeking to establish locations for sustainable wind energy developments.

SELECT YOUR PATH BELOW.



Initial Developer Screen



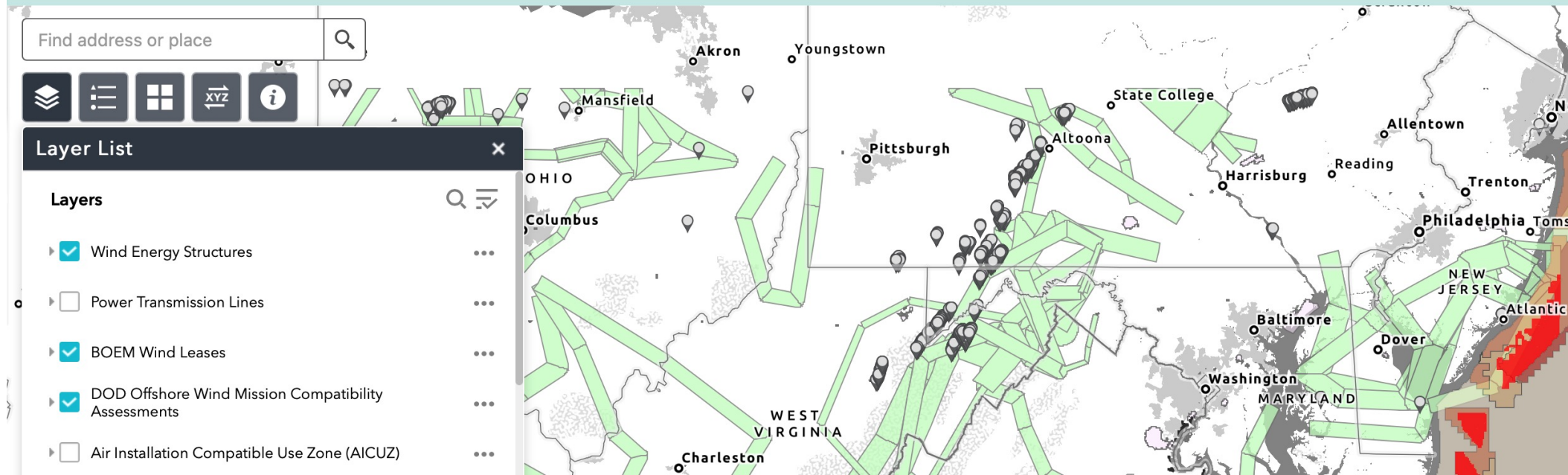
Virginia Wind Energy Siting Tool

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Prospective developers of wind energy sites can use our tool's public platform for exploring and learning about the various permitting processes. Here we will provide an explanation on the data, information, and resources we are sharing for our community.

This first map below is aimed at providing developers with a broad overview of siting wind projects by combining wind energy potential data, power and transmission cable routes, and local ordinances — among other types of useful information for first run analysis. [CLICK HERE to open the Map in a new window.](#)



Project Types



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PROJECT TYPE



SELECT YOUR PROJECT TYPE:

Onshore
150 MW or less

Onshore
More than 150 MW

Offshore
Federal Lease

Offshore
Federal Unsolicited

Offshore: State
150 MW or less

Offshore: State
More than 150 MW

← **BACK**

Depending on the location and generating capacity of each turbine, wind energy developers will go through different permitting and authorization processes. Use this interactive graphic to learn which permitting process your project will go through.

There are different permitting processes for onshore and offshore wind farms. In general, state agencies (DEQ and SCC) oversee onshore while BOEM, a federal agency, oversees offshore development. There are two types of process for state jurisdictions: the Permit-by-Rule process guided by the DEQ for all projects under 150 MW or the permit process through SCC for any over 150 MW. Utility scale projects almost always have to go through SCC. Offshore

Different Requirements for Each Type



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PROJECT TYPE

PROJECT TYPE: Offshore Federal Lease

- Onshore 150 MW or less
- Onshore More than 150 MW
- Offshore Federal Lease**
- Offshore Federal Unsolicited
- Offshore: State 150 MW or less
- Offshore: State More than 150 MW

Based on your project selection, you will go through the following permitting process:



BACK GO TO Step 2

Guide User Through Standard Action Series



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Step 6: Finishing Up

Once you have completed all required steps, continue to work with the agencies overseeing the process. Feel free to return here should you need more data, information or resources from this point on.

Provide Context Sensitive Mapping Data



analysis. [CLICK HERE to open the Map in a new window.](#)

DEVELOPER

Find address or place

Layer List

- Wind Energy Structures
- Power Transmission Lines
- BOEM Wind Leases
- DOD Offshore Wind Mission Compatibility Assessments
- Air Installation Compatible Use Zone (AICUZ)
- Military Training Routes At or Below 1500 ft AGL
- Special Use Airspace (SUAs)
- Local Ordinances

Provide Contextual Access to External Support Sites



Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense for Sustainment

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Military Aviation and Installation Assurance Siting Clearinghouse Reviews

Mission Compatibility Evaluation Process

The DoD has a structured process for developers to request a mission compatibility evaluation of a proposed energy project, as documented in [Part 211 of Title 32 CFR](#).

Some states have incorporated notifying DoD about proposed energy projects into their requirements. The Electrical Reliability Council of Texas (ERCOT) is one example. [PGR047 FIS Department of Defense Declaration](#), passed in 2016, requires entities to notify the Clearinghouse of a proposed energy project and request an informal or formal review.

Federal Aviation Administration

New User Registration

[Getting Started - Desk Reference Guide V_2018.2.0](#)

- Please populate the form below and accept the Restriction of Liability Statement in order to register.
- A valid **Username** is at least 4 characters long and may contain letters, numbers, or the following special characters (_ - @ .). No spaces are allowed in a Username.
- A valid **Password** is at least 8 characters long and contains one letter, one number, and one special character (e.g., Fly2High, gllDer\$77, @ntenna#5).
- Required fields indicated with an asterisk*

* First Name:

* Last Name:

* Email Address:

* Username:

* Password:

* Retype Password:

* Phone Number: () - - ext

Fax Number: () - -

Organization / Company:

* Address 1:

Address 2:

* City:

Marine Cadastre National Viewer

OPERATING STATUS CONTACT US

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Regulatory Framework and Guidelines

Overview Workplace Safety Regulatory Roadmap National and Regional Guidelines App

Overview of BOEM's Regulatory Framework

The [Energy Policy Act of 2005 \(EPAct\)](#) authorized BOEM to issue leases, easements and rights of way to all Continental Shelf (OCS). EPAct provided a general framework for BOEM to follow when authorizing these renewable energy development takes place in a safe and environmentally responsible manner.

Future Plans



Complete 1.0 in December (Current effort)

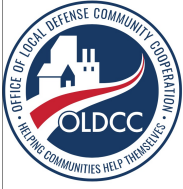
- Launch 10 December 2021

Version 2.0

- Add capabilities to 1.0
- Start addition of other states
- Start expansion into solar

Recruit participation from Smart Power Agreement states and others





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