



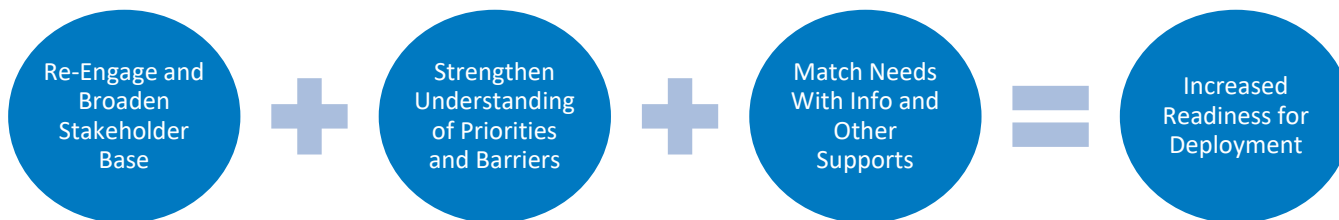
National Distributed Wind Energy Deployment Network

Suzanne MacDonald
Distributed Wind Energy Association
Business Conference
February 27, 2023

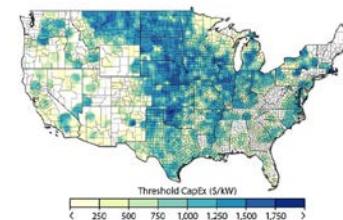


The Opportunity

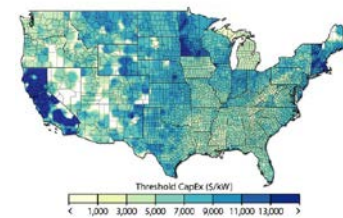
- Between Bipartisan Infrastructure Law and Inflation Reduction Act funding opportunities, technology advancements, and the expansion of siting tools, the **U.S. market is ripe for distributed wind energy deployment**
- Yet a **knowledge and capacity gap** persists with many entities that could support deployment, particularly with local-level awareness of the sector's advancements
- Development of a **national network** can play a critical role in enhancing deployment readiness and informing market development strategies.



Front-of-the-Meter Wind
Baseline 2022 Scenario



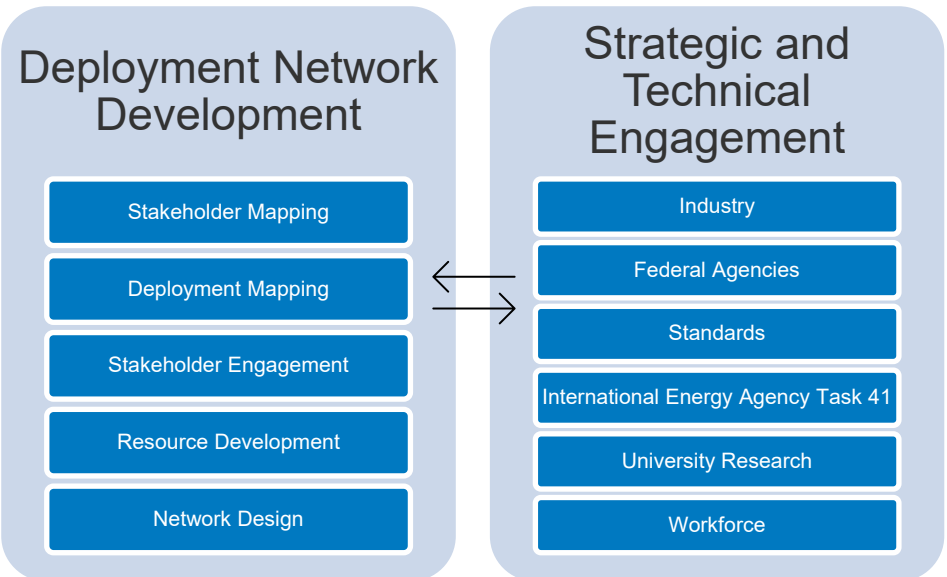
Behind-the-Meter Wind
Baseline 2022 Scenario



Project Overview

- **The Pacific Northwest National Laboratory (PNNL) and National Renewable Energy Laboratory (NREL) collaboration** with support from Wind Advisors, Center for New Energy Economy, and Mana Group
- Leverages extensive experience with **multisector stakeholder engagement**, as well as past facilitation of **deployment-focused programs**
- Network development efforts are informed by ongoing engagement with **“established” stakeholders** such as the Distributed Wind Energy Association
- Designed to create **foundation for future U.S. Department of Energy Wind Energy Technologies Office (WETO) collaborations and investments.**

Strategize, Engage, Network, Deploy (SEND) Distributed Wind



SEND Distributed Wind Energy Team



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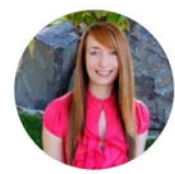
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Building a Bigger Tent

- While the network will welcome participation and input from all stakeholders, Fiscal Year (FY) 2023 efforts are focused on meeting or reconnecting with **those who are not currently involved** in deployment efforts
- WETO-wide stakeholder mapping will bring a focus to rural, historically marginalized, and energy transition communities, as well as tribes, to ensure engagement efforts are **inclusive** and well-positioned to leverage **funding opportunities**
- A WETO-wide **stakeholder engagement coordination** effort has been launched to ensure strategic engagement across the program, address issues of stakeholder fatigue, and actively manage any stakeholder sensitivities.



Students at the Fox Islands Wind ribbon-cutting ceremony; "The Future," copyright Peter Ralston/Ralston Gallery, 2010

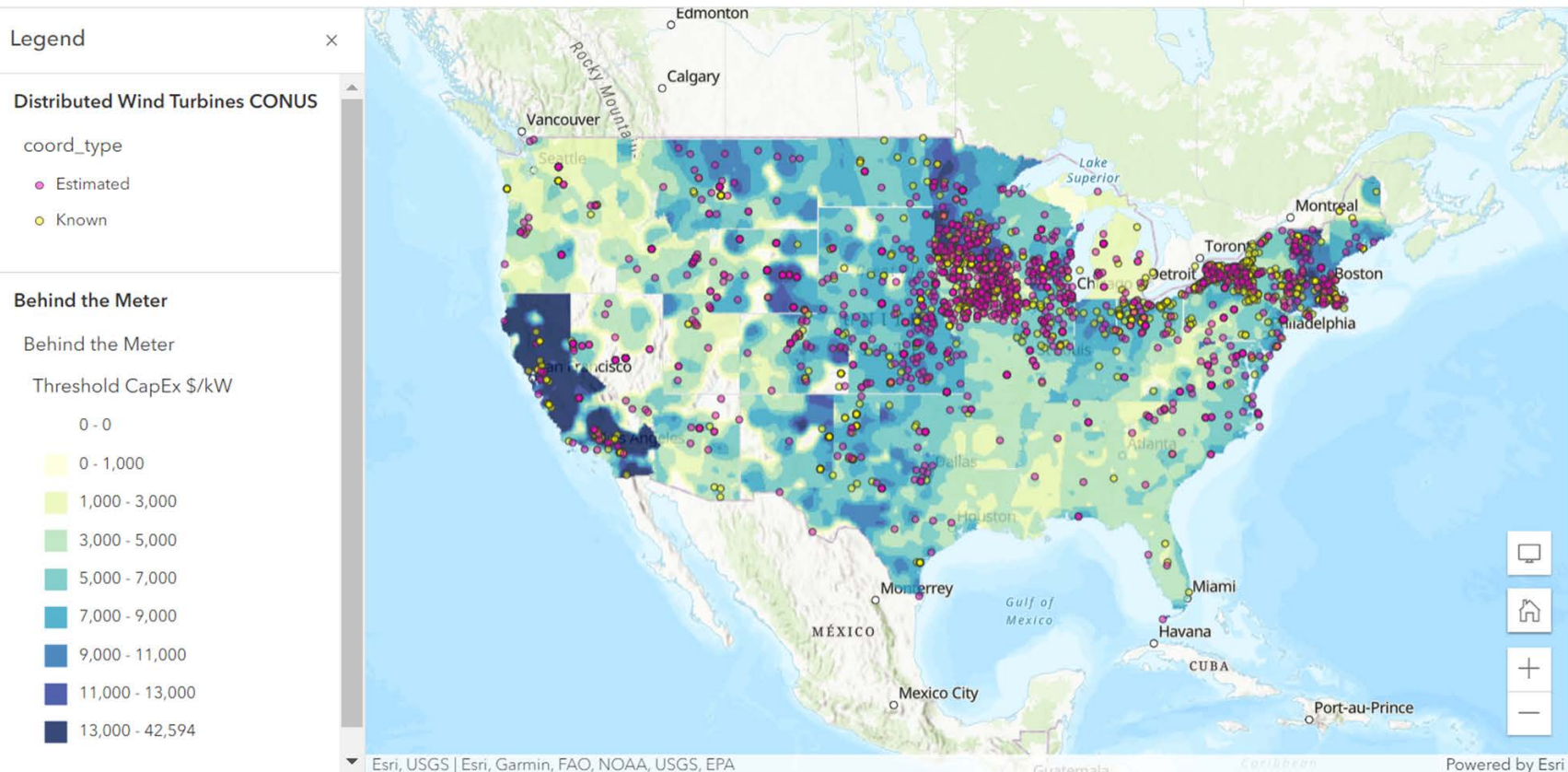
Prioritizing Deployment Opportunities

- Multilayer deployment mapping findings will be used to identify areas with **strong potential for cost-effective distributed wind energy deployment**
- Team will prioritize engagement in these areas to ensure those **best positioned to deploy** can connect with available resources that will help them move projects forward
- Engagement opportunities will highlight up-to-date, easy-to-understand information on the sector but will primarily focus on **identifying distributed wind energy deployment opportunities, barriers, and needs**
- Stakeholders will be matched with existing resources and support. **More robust activities**, including the potential for focused TA, will be designed for FY 24.



750 kW Aeronautica turbine installed at the Testa Produce warehouse in Chicago
Photo from WES Engineering

Sample Deployment Map



Sample deployment map featuring data from NREL's Distributed Wind Futures Study and existing turbine locations, prepared to inform network engagement efforts. Source: PNNL

Anticipated FY 23 Outcomes

- ✓ Creation of a **defined network of newly engaged, diverse set of stakeholders** who understand the value of distributed wind energy
- ✓ New or improved **distributed-wind-focused informational products** and stakeholder support
- ✓ Identified **demonstration project** opportunities and increased awareness of relevant **funding opportunities**
- ✓ Plan for FY 24 **network activities**
- ✓ Clarity around **what programs, tools, and other resources** need to be implemented to see wider distributed wind energy technology acceptance.



Stakeholders tour the National Wind Technology Center. Photo by Dennis Schroeder, NREL

How to Get Involved

- **Inform our outreach:** *Who have you always wished would consider distributed wind energy?*
- **Direct our support:** *Is there a project that could benefit from technical assistance or other national lab involvement?*
- **Help us tell the story:** *Share photos of your projects and identify possible case studies.*

The problems we seek to solve change as we solve them, and we need to be prepared to change along the way too.





Thank You!

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