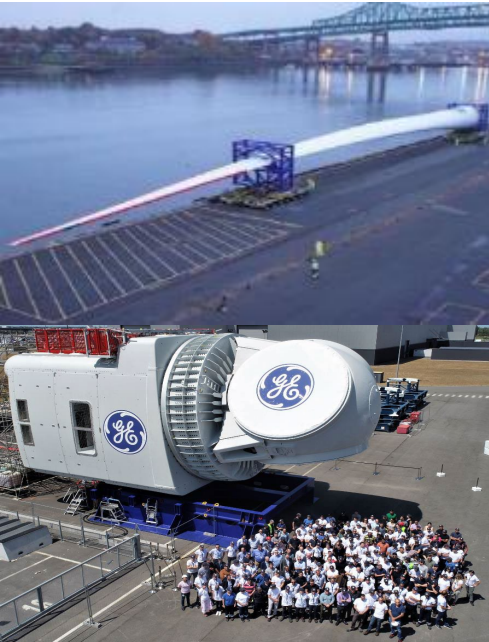


E20 - WINDExchange Stakeholder Engagement and Outreach

Mitigate Market Barriers – Stakeholder Engagement & Workforce Development
Mary Hallisey
National Renewable Energy Laboratory (NREL)

August 2, 2021



FY21 Peer Review - Project Overview

Project Summary:

- **WINDEXchange** focuses on mitigating barriers associated with wind energy siting and planning to address concerns that intersect with community values, risk assessment, and planning processes.

Project Objective(s) 2019-2020:

- Create an expanded network of experts and stakeholders to inform research and outreach
- Develop communications and information resources to support community-based decisions.

Overall Project Objectives (life of project):

- To mitigate uncertainty that may cause delay or denial of wind energy projects through the dissemination of fact-based siting research and information relevant to communities.

Project Start Year: FY 2019
Expected Completion Year: FY 2022
Total expected duration: 4 years

FY19 - FY20 Budget: \$2,814,988

Key Project Personnel: Mary Hallisey (PI), Ruth Baranowski, Corrie Christol, Frank Oteri, Jeremy Stefek, Elizabeth Gill, Chloe Constant

Key DOE Personnel: Maggie Yancey



Project Impact



FY 19-20 WINDEXchange Evolution of Objectives:

- Providing solutions-based engagement with key stakeholders
- Transitioning from a regional approach to a National Strategy providing technical assistance and information resources for communities to make informed siting and planning decisions
- Mitigating barriers to siting and planning, reducing uncertainty that may cause delays or denial of projects by:
 - Expanding network of experts to inform across a broad array of issues
 - Developing issue-based information that addresses community needs.

Program Performance – Scope, Schedule, Execution

WINDEXchange Approaches and Outcomes

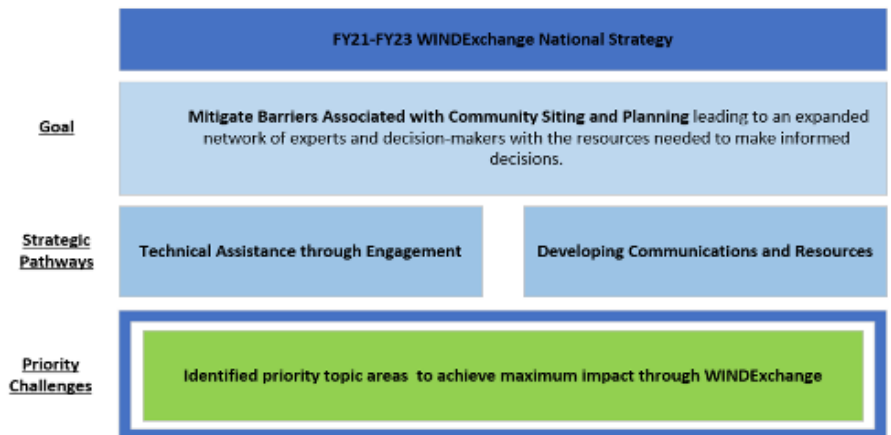
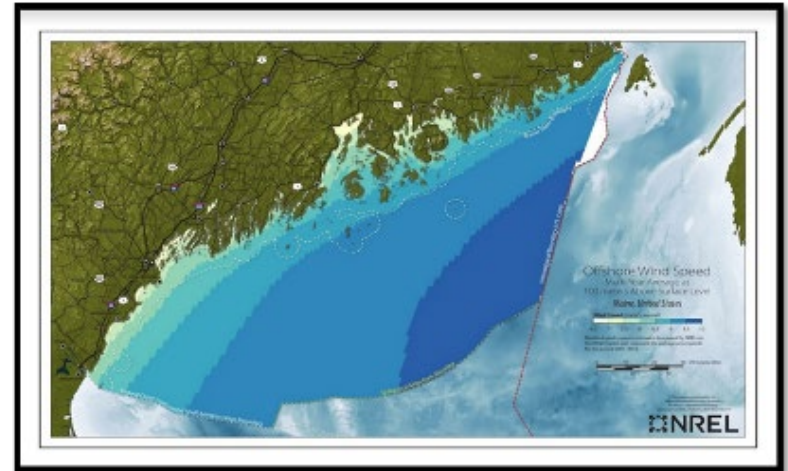


- **FY19: Assessment of past work to inform new National Strategy** and continuation of tools and information resources development
 - Regional Resource Center retrospective documentation
 - WINDEXchange website additions, JEDI enhancements, radar and offshore wind resource slide decks
- **FY19/20: Program transition focus on alignment with WETO research goals**
 - Execution of suite of projects targeting community needs (Economic Development Guide, Siting Technical Resource, Wind Energy Planning & Siting Information Workshop)
 - Incorporation of subject matter expert input, technical advisory groups, and/or steering committees to ensure scientific rigor
 - Challenges: Shifting scope of projects led to extended deadlines to ensure greater product accuracy and quality
- **FY20: Completion and implementation of priority challenge-based strategy**
 - Designed as a 2-year effort with goal of significant expansion under future merit plan process
 - Incorporated expert partnering concepts from strategy design into ongoing bridge projects to ensure broad input to project outcomes and expanded networks to share information resources.



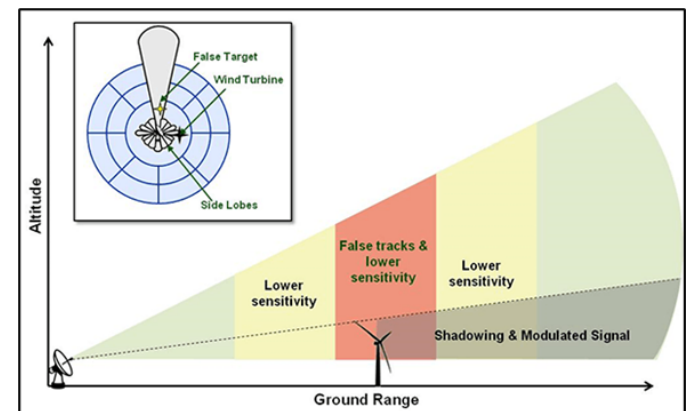
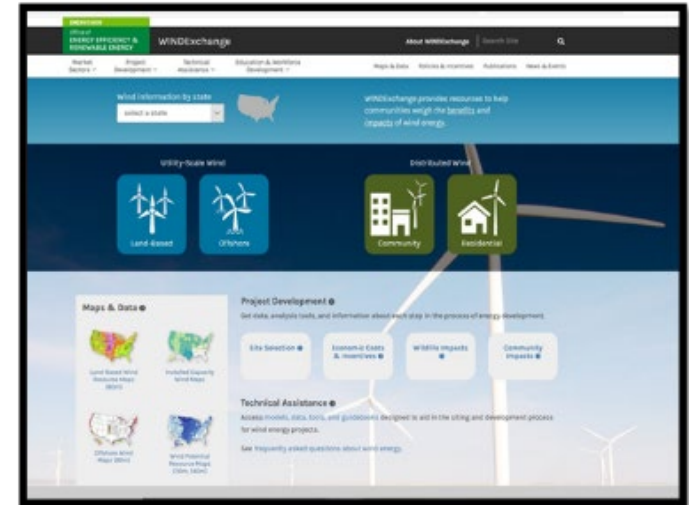
Program Performance – Accomplishments & Progress

- Developed a **National Strategy** to reduce uncertainty and mitigate siting barriers for communities and wind energy deployment
- Developed **100-m wind resource maps** for the Northeast and Mid-Atlantic regions and a social media dissemination campaign that resulted in increased website traffic
 - **NORTHEAST:** offshore: Gulf of Maine | NY-CT-RI-MA; land-based: ME | MA-CT-RI | NY | VT-NH
 - **MID-ATLANTIC:** offshore: VA-MD-NJ-DE; land-based: PA-MD-DE-NJ | VA | WV
- Developed **JEDI upgrades and new user interface**
 - Redesigned for broader, non-technical audience
- Completed initial drafts of the:
 - Economic Development Guide
 - Wind Siting Technical Resource
 - Wind Energy Planning & Siting Information Workshop plan
- Approved next phase of **IEA Wind Task 28:** Social Acceptance



Program Performance – Accomplishments & Progress

- **WINDEXchange newsletter**
 - Published WINDEXchange newsletters #207-#215 in FY19 and FY20, ending with **34,901 subscribers**
- **WINDEXchange website**
 - Published revised [radar content](#), including two new subpages: [Wind Turbine-Radar Interference Mitigation Working Group](#) and [Government Review Process for Radar Interference](#)
 - **FY20 Q1/Q2 Snap-Shot** -136,000 users, Total Views: 342,000 pageviews, Top pages: Small Wind Guidebook (42,193 pageviews), home page (24,900), What Is Wind (11,052)
- **Developed a new slideshow:** [Block Island and Beyond: Offshore Wind in the United States](#)
- **Added state profile pages** that include megawatts under construction in each state, links to the U.S. Wind Turbine Database maps, RPS information, cities with 100% renewable energy commitments, and more



Project Performance - Upcoming Activities

- **FY21 Activities**
 - Wind Energy Planning & Siting Information Workshop
 - Economic Development Guide
 - Siting Technical Resource
 - Wind Project Recycling and Circular Economy Toolkit (Phase I, foundational information)
 - Offshore Wind Fixed-Bottom Webinar (series plan)
 - Economic Tools (JEDI, Economic Development Guide) dissemination and amplification plan
 - 100-meter wind resource maps for the Great Lakes, West Coast, Gulf Coast, and Southeast
 - Video: *A Tutorial for Understanding Land-Based and Offshore Wind Resource Maps*
- **FY22 PROPOSED work for the remainder of Merit Review period**
 - Wind Project Recycling and Circular Economy Toolkit (Phase II)
 - Offshore Wind Webinar Series (three to five new foundational technical webinars)
 - Economic Development Guide (Phase II – analysis of equity across economic benefit options)
 - Technology Today (Toolkit Phase I – analysis of technology advancements on community acceptance)
 - 100-meter wind resource maps for remaining states

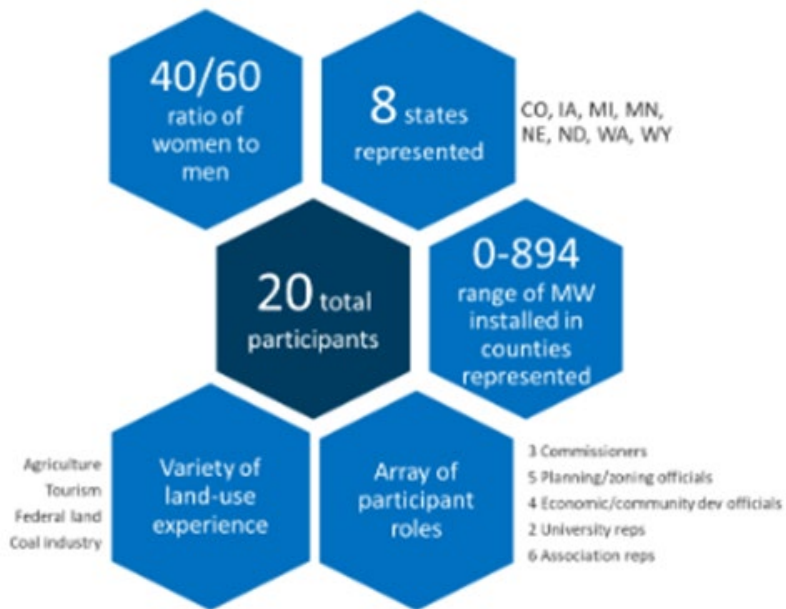


Stakeholder Engagement & Information Sharing



WINDEXchange Communication and Outreach is achieved through two Strategic Pathways, defined in the National Strategy:

- **Technical Assistance through Engagement**
 - **Connect** local governments to experts and information
 - **Convene** forums to foster knowledge and engage experts for information exchange
 - **Steward** the next generation of wind energy siting experts
- **Development of Communications and Resources**
 - **Produce** tools, resources, publications
 - **Disseminate** through established platforms and networks
 - **Amplify** through new relationships and non-traditional networks



Wind Energy Planning & Siting Information Workshop Stats

Key Takeaways and Closing Remarks



Project Impact: Realignment with WETO siting R&D goals to address community-based uncertainty

Project Performance: Significant progress and gaining momentum following program transition

Stakeholder Engagement: Partnering with experts and co-designing solutions for and with communities to help mitigate siting barriers and address challenges through a local lens.