

# Wind Powering America – Looking Forwards



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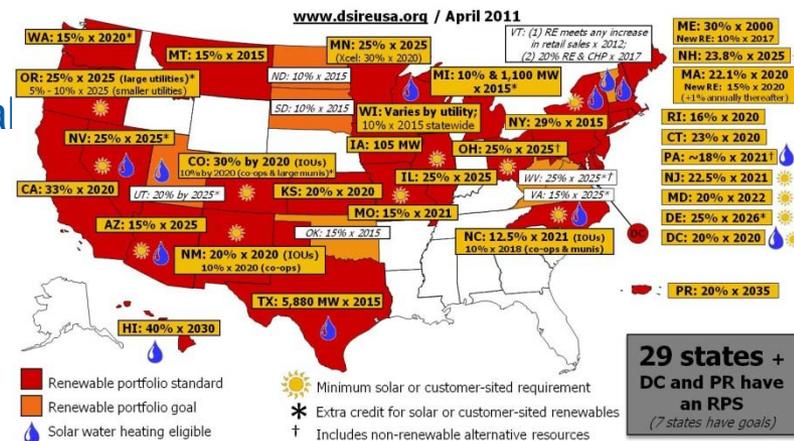
# Key Near Term Challenges

Wind deployment running into a large number of issues – gathered from 6 regional meetings held last month (in ranked order)

- Public acceptance, education and understanding of the public and environmental organizations
- Lack of state markets motivating expanded wind deployment
- Limited transmission
- Complex & locally focused planning, permitting, ordinances, and development process
- Barriers to community and distributed wind, including financing and integration
- Funding for stakeholder engagement support
- Utility wind integration
- Environmental permitting and access to federal lands

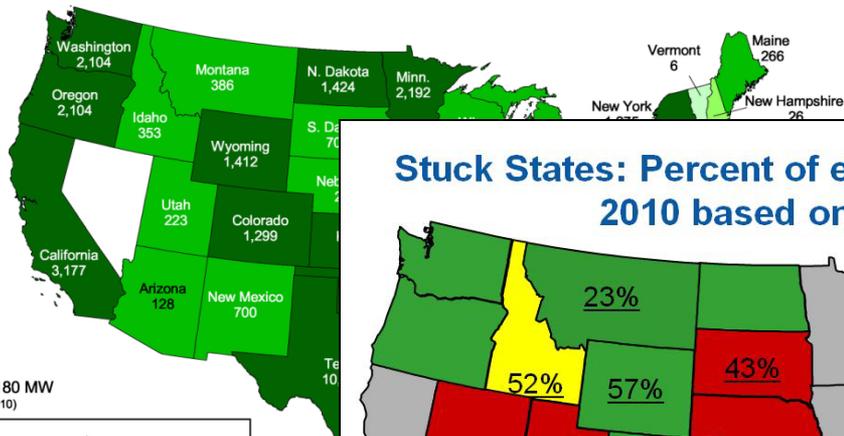
## States facing real local challenges:

- RPS's under challenge in many states
- Idaho wind moratorium
- Wisconsin siting challenges
- Public opinion in New England
- National anti-wind messaging

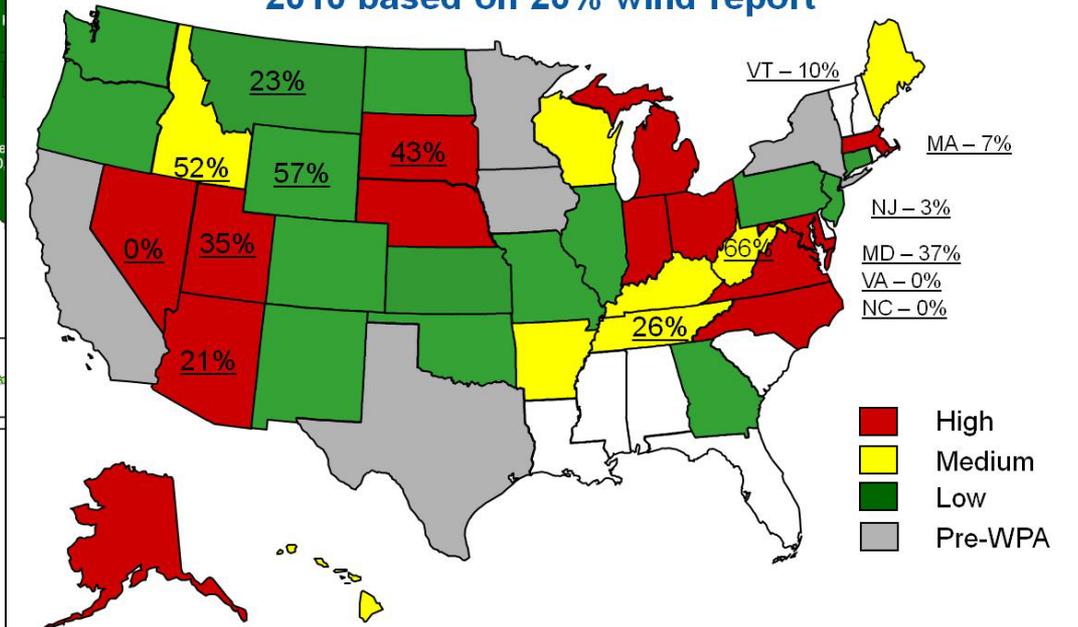


# Status of National Wind Development

2010 Year End Wind Power Capacity (MW)



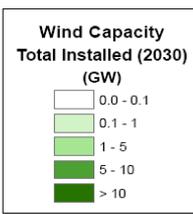
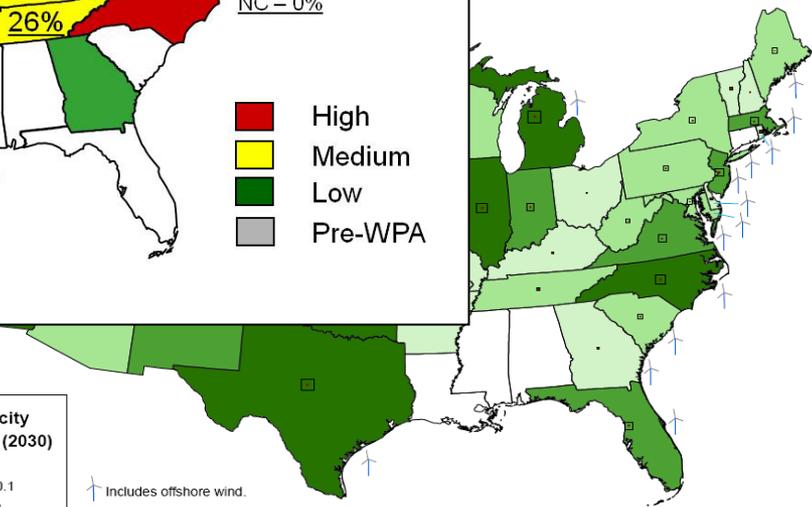
Stuck States: Percent of expected wind installations in 2010 based on 20% wind report



Total: 40,180 MW  
(As of 12/31/2010)



by State (2030)

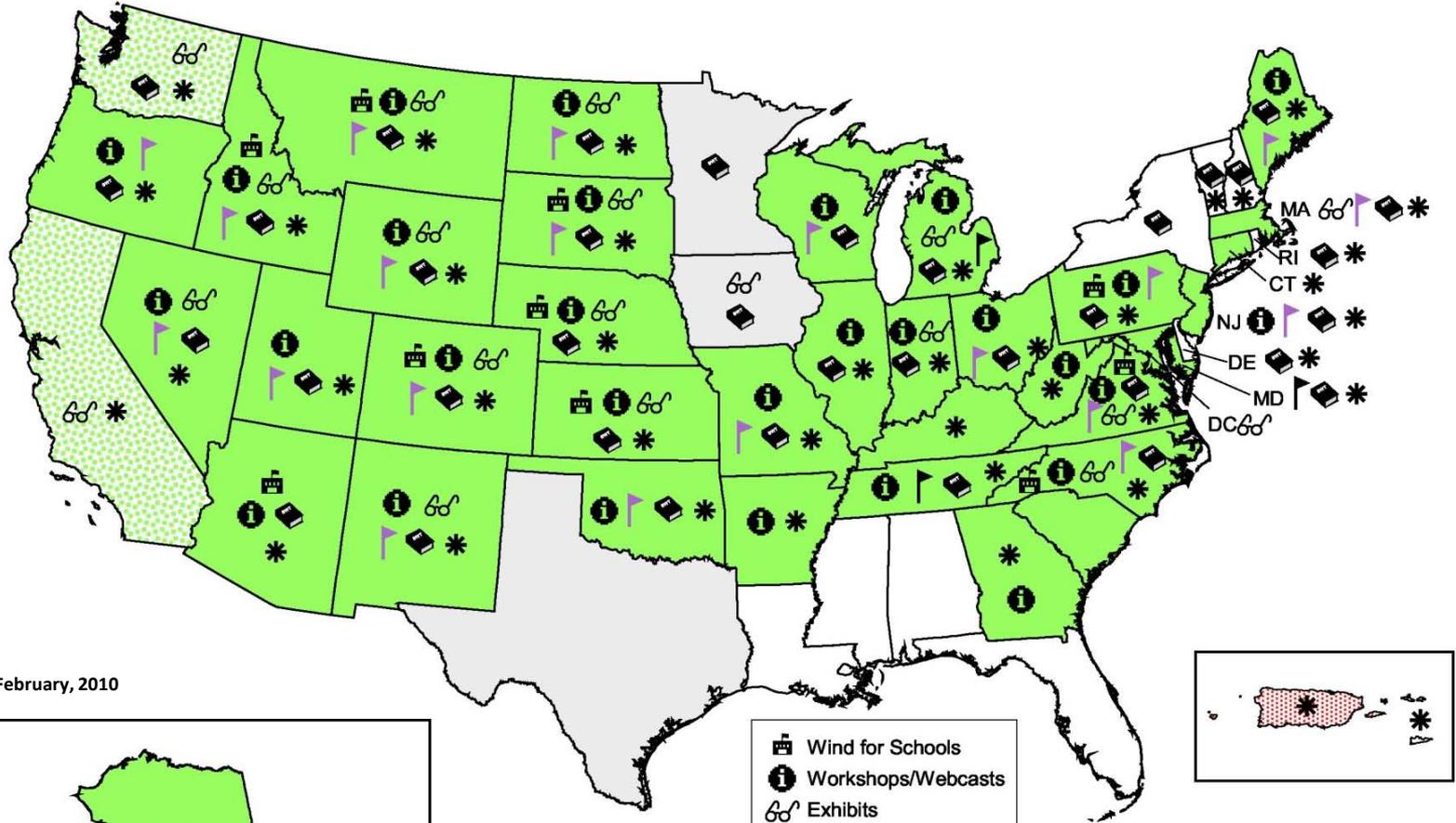


↑ Includes offshore wind.

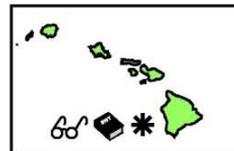
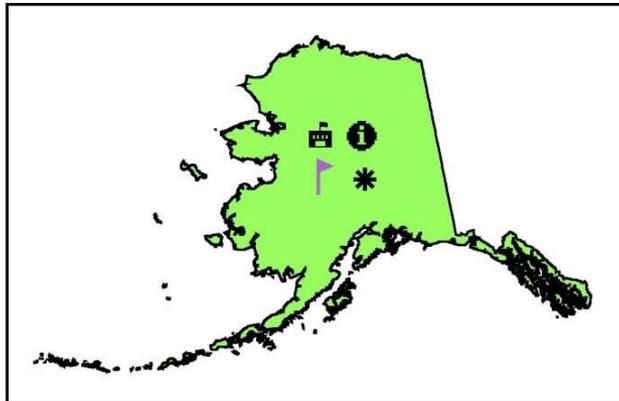
The black open square in the center of a state represents the land area needed for a single wind farm to produce the projected installed capacity in that state. The brown square represents the actual land area that would be dedicated to the wind turbines (2% of the black open square).

Although nationally we are ahead of the 20% estimate for 2010, many states are behind in their projected capacity installations

# Current WPA State Activities



Activities as of February, 2010



-  Wind for Schools
-  Workshops/Webcasts
-  Exhibits
-  Anemometer Loan
-  Small Wind Guide
-  Validated Wind Map
-  Wind Working Group

-  Completed
-  Planned
-  Inactive/Evolved
-  Completed (continuing investment)
-  Pre-WPA

U.S. Department of Energy  
National Renewable Energy Laboratory



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# Changes Being Implemented

## Use of new and innovative communication tools

- Monthly **webinar series** on various topics
- **Bi-monthly E-newsletter** – currently reaching over 3500 people
- Complete **revamp of WPA web site**, expanding user information/collaboration capabilities, moving towards the use of the web site as a portal for information and sharing.
- **Shift away from print** communications products
- Implementation of **new user supported media** – Wiki's etc.

## Leverage new and old partnerships

- **Continue to support priority states** at a reduced level **through FY11** with a focus of capturing lessons learned and success stories from the last three year priority state funds
- **Conduct regional meetings** to capture state feedback and expand dialog on the pro's/con's of a regional approach
- **Support for existing regional partnerships**; Great Lakes, New England, and Mid-Atlantic
- Continue to **support all states summit** – routinely ranked as one of the best overall meetings of the year by many attendees

# Changes Being Implemented

Building on a new in-depth stakeholder analysis

- Identify products to support stakeholders
- Development of multi-year communications strategic plan, federal needs assessment & electronic impact assessment strategy

Economic analysis

- Update JEDI models for wind, NG, & coal while developing transmission analysis capabilities
- Conduct targeted analysis on wind and grid development impacts

Continue ramp down and offloading of work with Native American organizations

Stronger focus on off-ramping of activities that can be supported by other stakeholders

Working to do more with less

# WPA Regional Approach

The strategies that helped us get to 2% can not be the same ones that will take us to 20% (and beyond)

- Built off successful networks operating in the Great Lakes and New England
- Allows better regional collaboration and success sharing
- Leverages larger funding pool between states
- Allows strong and weak states to collaborate in a regional vision
- Federal level WPA plays a more hands off supportive role – funded by Wind Program
- Have to face reality – Deployment is a reduced priority and we have to do more with less

There will be challenges:

- Will lose some focus and some state programs – especially weak ones
- Wind is still a local issue – state by state engagement is critical

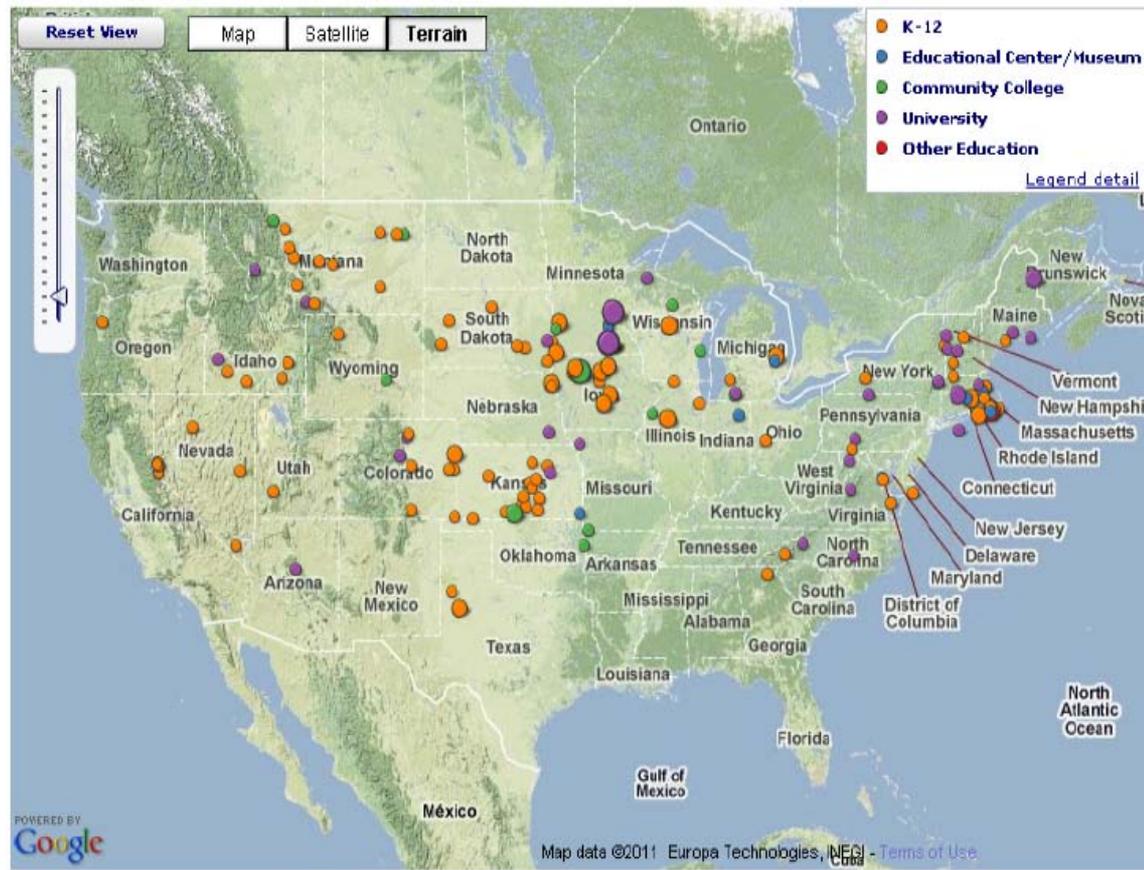


Great Lakes Regional Wind Meeting

# Wind Workforce Development

## Activities:

- Work with the wind industry to expand the understanding of the labor needs and appropriate skill sets.
- Working with Community Colleges to develop targeted programs that will meet industries needs.
- Filling the gaps in education development across the federal government (Commerce, Education, NSF)
- Provide a location to collect and disseminate information about programs/projects relating to wind educational development
- Develop of a Wind Workforce Roadmap



Expected reductions in FY12 will likely require the curtailment of work

# Wind for Schools

Raise awareness about the benefits of wind energy while simultaneously developing a wind energy knowledge base to educate future leaders of our communities, states, and nation

## Project Approach:

Develop and then work through a Wind Application Center started at a state university to install small wind turbines and implement educational programs at K-12 schools using university students interested in a career in the wind industry.



Wind turbine at Sanborn Central School in Forestburg, South Dakota. PIX # 16032 Photo credit: East River Electric Power Cooperative

## First Two Years Results:

- Active programs in 11 states.
- Over 60 students graduated in 2011 with wind specific experience from supported Universities, a number going into the wind industry
- 200 students graduated after taking a Undergraduate level class or student project incorporating wind energy
- Wind turbines installed at 63 K-12 schools
- Over 40 Wind for Schools systems planned at K-12 schools for 2011

## Vision forwards:

- Work with five new states to initiate activities
- With AWEA work with six original state universities to identify outside funding & motivate Affiliate programs
- Improve K-12 educational outreach
- Don't expect DOE funded expansion

# *Carpe Ventem*



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[www.windpoweringamerica.gov](http://www.windpoweringamerica.gov)