



Opportunities Through Wind Energy Northeast MN Wind Energy Forum

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Rural Energy Development Initiative

Southwest Initiative Foundation



**SOUTHWEST INITIATIVE
FOUNDATION**



Rural Energy Development Initiative

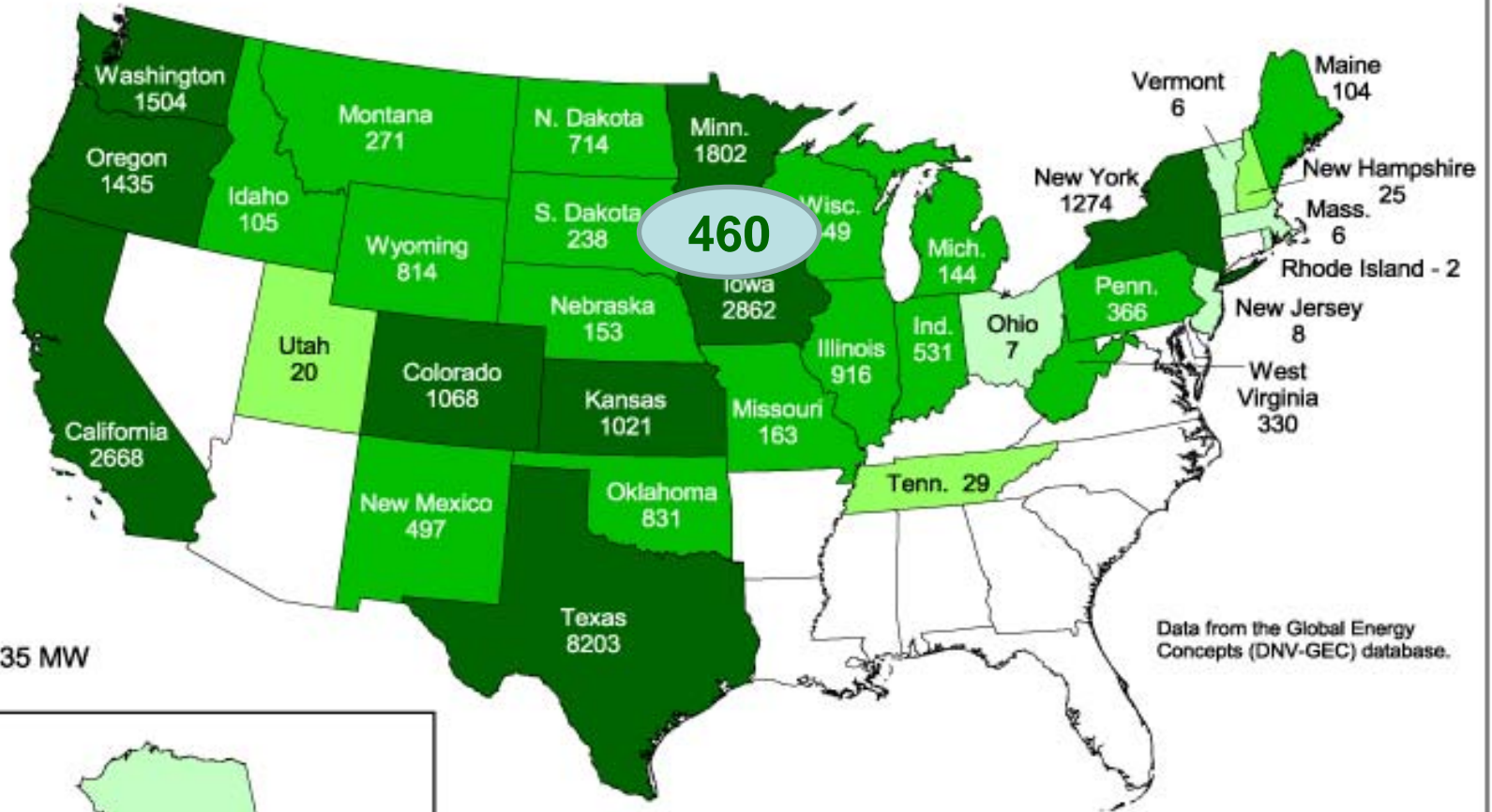
Outreach/Education

- **Over 1,900 educated through 26 forums**
- **Key topics**
 - Risks/rewards of involvement in wind energy projects
 - Considerations for wind energy leases and agreements
 - Wind energy development best practices

Project Assistance

- **Connections to information/resources**
- **Financing toward utility-scale community wind projects**

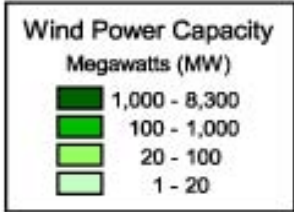
Current Installed Wind Power Capacity (MW)



460

Total: 28,635 MW
(As of 4/30/09)

Data from the Global Energy Concepts (DNV-GEC) database.

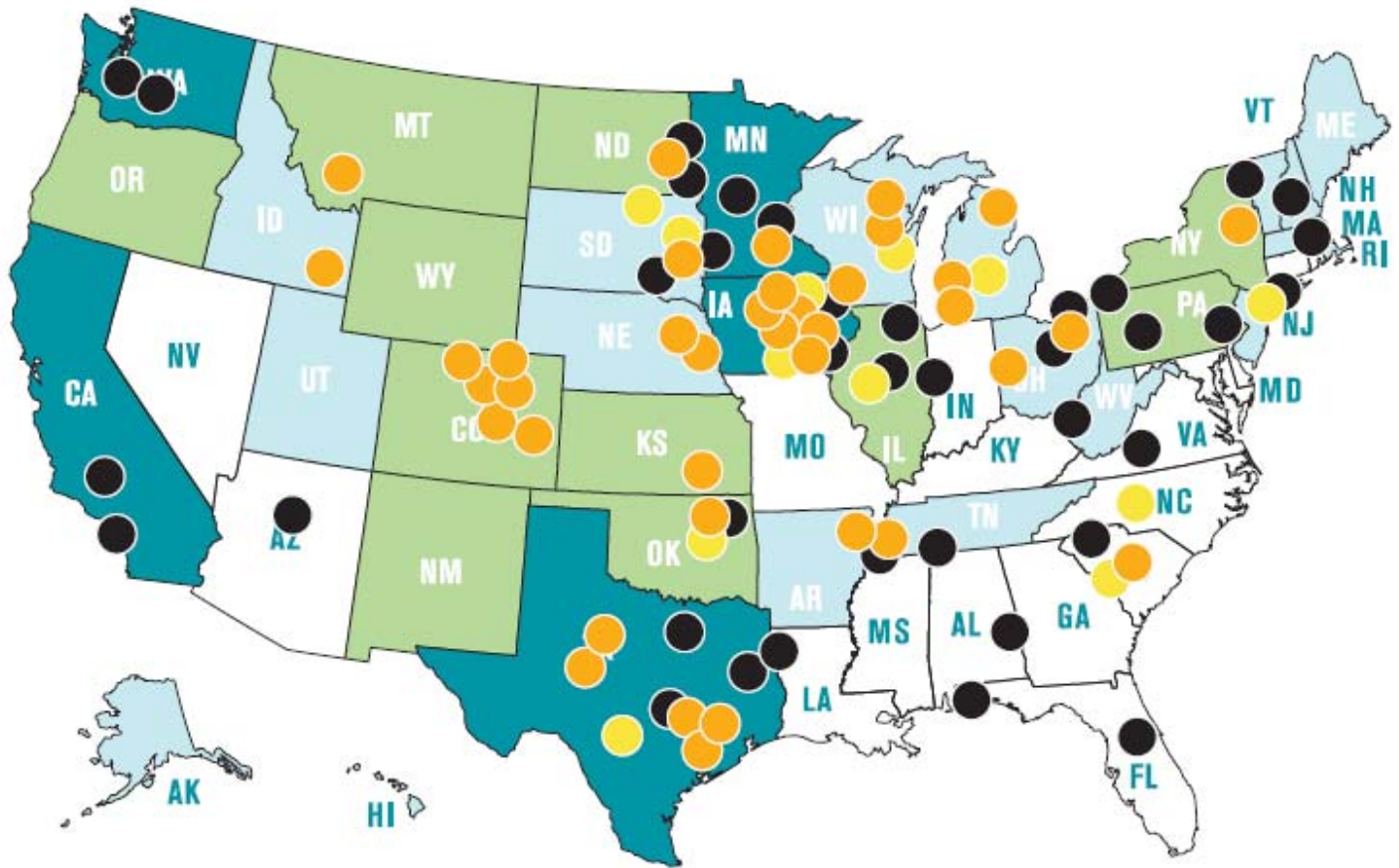


U.S. Department of Energy
National Renewable Energy Laboratory



Wind Power Jobs: Revitalizing Our Domestic Manufacturing Base

Wind Energy Jobs Revitalize Economy



Wind generation capacity installed (megawatts, MW*)

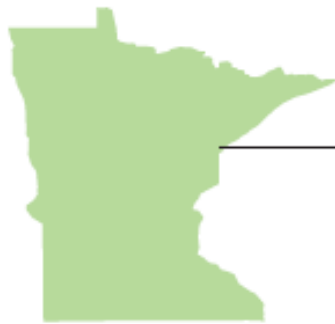
- > 1000 MW
- > 100 MW
- < 100 MW

Manufacturing facilities

(existing or announced)

- Online Prior to 2007
- Online, Expanded or Announced in 2007
- Online, Expanded or Announced in 2008

* One MW generated enough electricity to power the equivalent of 250-300 average homes.



MINNESOTA

Economic Impacts From the 20% Vision 9,942 MW new development

Wind energy's economic "ripple effect"

DIRECT IMPACTS

- Landowner Revenue:
 - \$26.5 M/yr
- Local Property Taxes:
 - \$28 M/yr
- Construction Phase:
 - 14,500 new jobs
 - \$1.9 B to local economies
- Operational Phase:
 - 2,300 new long-term jobs
 - \$210 M/yr to local economies



INDIRECT & INDUCED IMPACTS

- Construction Phase:
 - 15,200 new jobs
 - \$1.5 B to local economies
- Operational Phase:
 - 1,800 local jobs
 - \$180 M/yr to local economies

TOTALS

CONSTRUCTION + 20YRS

- Total economic benefit = \$11.2 billion
- New local jobs during construction = 29,000
- New local long-term jobs = 4,000

Source: Governor's Wind Energy Coalition, *Wind Energy & Green Jobs*, Feb 2009. Data compiled through National Renewable Energy Laboratory's Jobs and Economic Development Impacts model.

Construction Phase = 1 - 2 years
Operational Phase = 20+ years



Opportunities for Involvement

- Put up a residential or farm size wind turbine for your own power
- Lease your land to a wind project
 - Local project
 - External developer
- Be a partner in a community wind project
- Work in the industry
- Start a business to support the industry
 - Supply-chain manufacturing, operations & maintenance crews, etc.



Wind Development: Risk vs. Reward

Lower Risk &
Responsibility:
Lower Reward



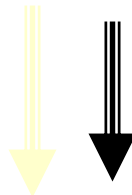
Leasing Land



Wind Company,
Utility

Intermediate Risk
& Responsibility:

Intermediate
Reward



Cooperative,
Investment Pool,
Partnership

Greater Risk &
Responsibility:
Greater Reward



Individual
Ownership



Federal Incentives

- ✦ Federal Production Tax Credit
 - 2.1 cents/kwh tax credit for electricity generated by qualified energy resources applied to passive income. Best for corporation with large tax appetite
- ✦ Business Energy Investment Tax Credit (ITC)
 - Temporary ability to claim ITC 30% investment tax credit (ITC) instead of production tax credit (PTC). This is an option, not a requirement
- ✦ Treasury grant program
 - Allows taxpayers that are eligible for ITC (including investment tax credits claimed in lieu of production tax credits) to receive an equivalent financial grant from the Department of Treasury instead
- ✦ Federal Small Wind Investment Tax Credit
 - Owners of small wind systems with 100 kilowatts (kW) of capacity and less can receive a credit for 30% of the total installed cost of the system.
- ✦ USDA Rural Energy for America Program (REAP)
 - 25 % of total project cost, qualified rural land

Why Community Wind?

- ⤴ Landowners participate with ownership in local “Project Company”
- ⤴ Participate/shape the development process
- ⤴ Direct sensitivity to the needs of the community
- ⤴ Landowners have access to more financial returns than a lease payment
- ⤴ Permitting is less controversial and more participatory
- ⤴ Competitive advantage with utilities
- ⤴ Greater share of revenues stay in the community by a factor of 3 or 4 times





Community vs. Corporate Development

Payment/Benefit offered to Landowner	Community Energy Co.	Corporate Developer
Turbine Lease Payments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Area/Turbine Payments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ownership in Company through Assignment of Wind rights	<input checked="" type="checkbox"/>	
Local Planning and Design	<input checked="" type="checkbox"/>	
Participates Financially in Project Sale	<input checked="" type="checkbox"/>	
Participates Financially in PPA	<input checked="" type="checkbox"/>	



Conclusions

- Outlook for wind energy in 2009 and beyond still positive
- Job creation opportunities are strong through not only construction and operations, but also manufacturing
- Community wind projects have greater economic development impacts



	Outside	Local
Local Income	\$1.3 million	\$4 million
Job Creation	18	41

(Based on Outside 40 MW vs. Local 2-20 MW projects)



Where to Get More Information

- Windustry's Community Wind Toolbox
 - www.windustry.org
- Farmer's Legal Action Group: Farmers' Guide to Wind Energy
 - www.flag.org
- American Wind Energy Association
 - www.awea.org
- North American Water Office
 - www.nawo.org
- Database of State Incentives
 - www.dsireusa.org