Wind Energy Options for Farmers & Rural Landowners: Risks and Rewards

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Paynesville, MN

WINDUSTRY™

Outline

- About Windustry
- What makes a good wind project
- Landowner Options
  - Lease Your Land
  - Community wind: What is it?
- Risk vs Reward for landowners
- Successful Case Studies

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Windustry

- Non-profit organization based in Minneapolis, MN - work locally, regionally and nationally
- www.windustry.org
- Focus on community wind, landowner options, and rural economic development
- Provide landowner education, outreach and technical assistance

Mission Statement: *"Windustry promotes progressive renewable energy solutions and empowers communities to develop wind energy as an environmentally sustainable, community-owned asset. Through member supported outreach, education and advocacy we work to remove the barriers to broad community ownership of wind energy."*

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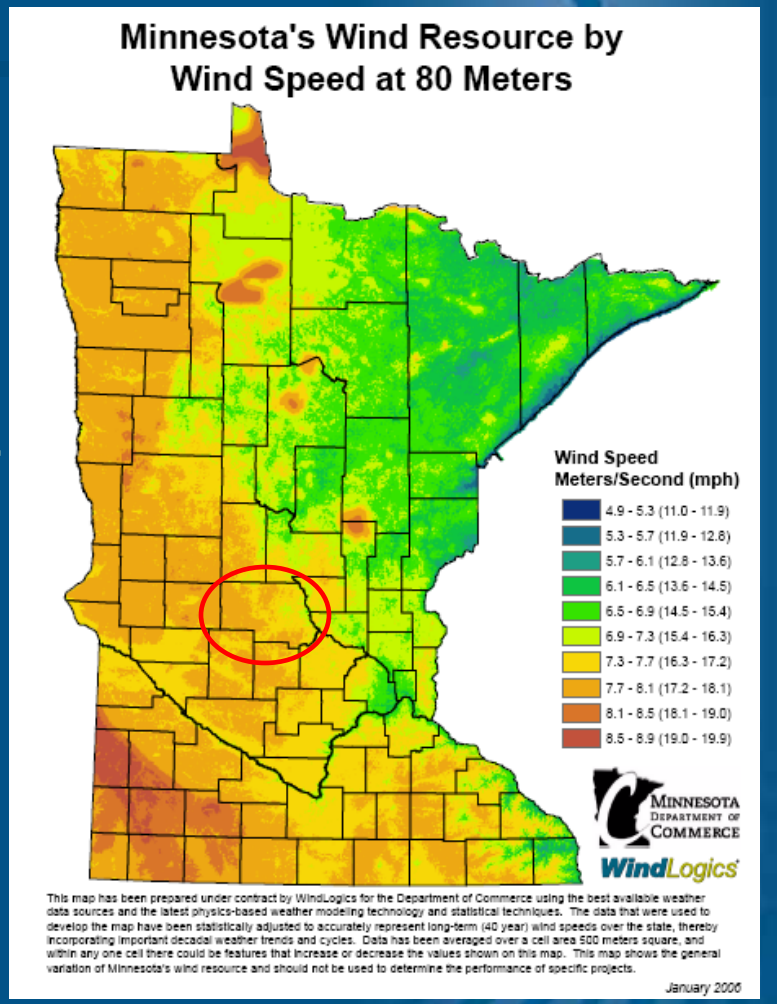
What makes a good wind project?

- Quality Wind Resource
  - Verifiable data, at least one year
- Proximity/access to the power grid
- Cost of Capital
- State and Federal Incentives
  - www.dsireusa.org
- Market for the Power



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State & Federal Incentives

- Xcel Renewable Development Fund
  - Promotes the startup, expansion and attraction of renewable energy projects and companies in the Xcel service area
  - To date, more than $ 70 million has been allocated
- Net-metering
  - utility must compensate customers for customer net excess generation (NEG) at the "average retail utility energy rate,"
  - Size cap is 40 kw
- C-Bed Tariff
  - requires electric utilities to consider community-based wind energy projects, when seeking to add wind generation to its supply mix
  - requires utilities to develop and offer C-BED tariffs. Under a C-BED tariff, the utility offers developers a "front-ended loaded rate" for the energy from a community-based energy project
- Production Tax Credit
  - Tax credit that can be applied to passive income. Works the best with developers who have a large “tax appetite”

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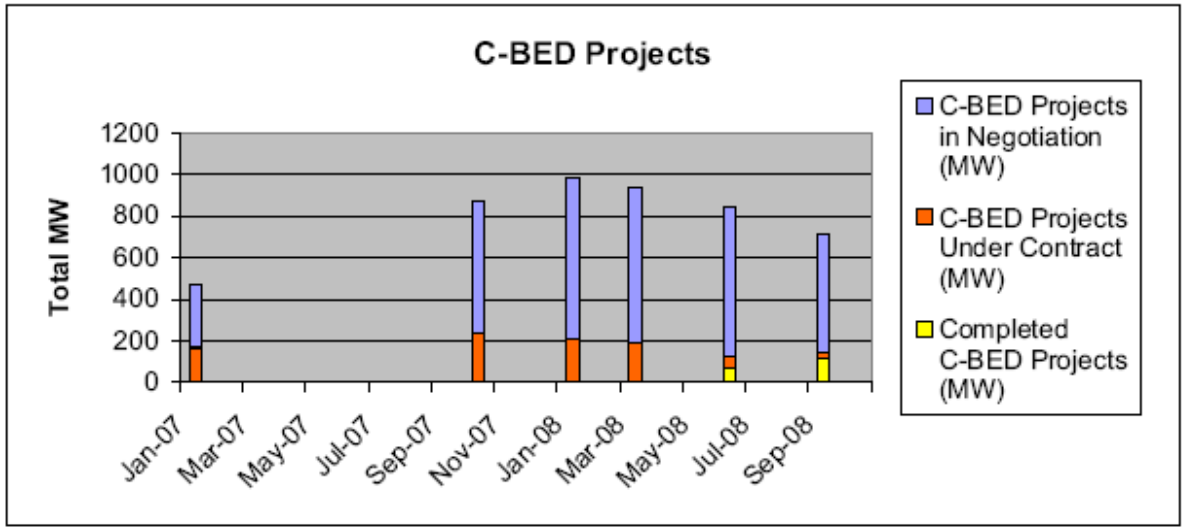
September 30, 2008

Utility	Completed (MW)	Under Contract (MW)	In Negotiation (MW)	Total C-BED Projects (MW)
Xcel	78.4	17.0	446.5	541.8
CMMPA	0.0	10.0	0.0	10.0
GRE	0.0	0.0	0.0	0.0
SMMPA	0.0	0.0	125.0	125.0
Minnesota Power	2.5	0.0	0.0	2.5
MRES	34.7	0.0	0.0	34.7
Otter Tail Power	0.2	0.0	1.9	2.0
Dairyland Power	0.0	0.0	size TBD	0.0
MMPA	0.0	0.0	0.0	0.0
Minnkota	0.0	0.0	0.0	0.0
Interstate Power & Light	0.0	0.0	0.0	0.0
Basin Electric	0.0	0.0	0.0	0.0
Total MN	**115.7**	**27.0**	**573.4**	**716.0**

MN C-BED- September 2008

Total: 115.7 MW



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http://www.state.mn.us/mn/externalDocs/Commerce/CBED_Projects_Report_121107120316_UtilityC-BEDProjects.pdf

Landowner Options

- **Lease your land to a wind project**
  - **Local project**
  - **External developer**
- **Be a partner in a community wind project**
- Put up a residential or farm size wind turbine for your own power

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Wind Development: Risk vs. Reward

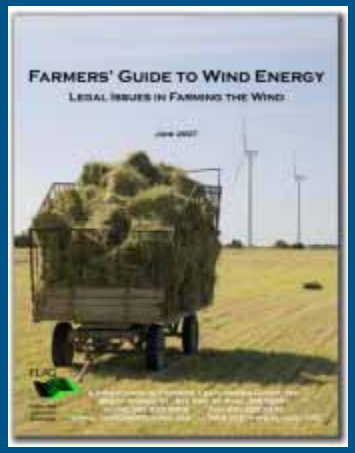
Leasing your land to a developer: Leases & Easements

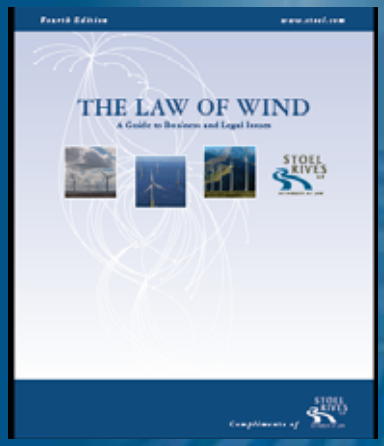
- Main way for landowners to participate in wind energy development
  - No cash outlay
  - Low financial risk
- Few standards: range from good to bad to ugly.
- Compensation varies widely based on turbine size, wind resource, price of energy and many other factors.
- Long term commitments – usually last 20 to 40 years.
- Best results when landowners make informed decisions.
- Options for easements and leases are typical components of most wind energy projects, large and small.

Windustry's Package of Lease/Easement Resources

Materials include: (will be updated in early 2009)

- Easements and Lease Agreements – What might appear in these contracts and what to watch out for. An updated version of Windustry's original "Wind Energy Easements: Legal Issues."
- Compensation – Compilation of compensation packages from real wind projects.
- Policy and Best Practices – Recommendations and Proposals to facilitate sustainable wind development.
- Bibliography of additional resources.
  - Farmer's Legal Action Group report on Landowner options
  - Stoel Rives LLP guide "The Law of Wind"





Lease vs. Easement vs. Option

- Lease
  - – Contract for exclusive possession of land for a period of time for specified compensation
  - – Parties may specify terms
- Easement
  - – Permission to use an area of the land, while the landowner retains ownership
- Option
  - – Right to obtain lease or easement rights at some point in the future
  - – May be useful during period before developer knows for sure whether project is viable

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Compensation Packages – How much can you expect?

- Old: $2,000 per turbine year.
  - Based on turbines in the 600-750 kW range.
  - “Average” figure popularized in late 1990s.
- New: bigger turbines (1.5-3.0 MW) usually mean bigger payments.
- Often, landowners will receive various payment depending on the stage of development
  - Initial Payment/Signing Bonus
  - Pre-Operation Fees
  - Operating Fees
    - Fixed Payment: About $3,000-$6,000/MW
    - Royalty Payment: About 2-3 % royalties based on revenue
    - Some leases do a combination of the two factors

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Before you sign on the dotted line...

- How much of my land will be tied up and for how long?
- How much will I be paid and how will I receive payments?
- Are the proposed payments adequate now and will they be adequate in the future?
- How will a wind project impact my other land uses?
- Who will be responsible for decommissioning the project at the end of the lease?
- Who is responsible for associated taxes?
- Have I considered all of my other options and is this the best one for me?

More questions listed in the Outline.

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What is Community Wind?

Working Definition:

- Locally owned, commercial-scale wind projects that optimize local benefits.
  - Locally owned means that members of the local community have a significant direct financial stake in the project other than through land lease payments, tax revenue, or other payments in lieu of taxes.

Benefits of Community Wind

All the benefits of wind energy development

- Clean Electricity
- Economic Development
- Energy Security
- Environmental Benefits

PLUS…

- Greater stimulation of local economies
- Increased local energy independence
- Keeps water sources clean
- Local wealth creation
- Greater acceptance of wind power

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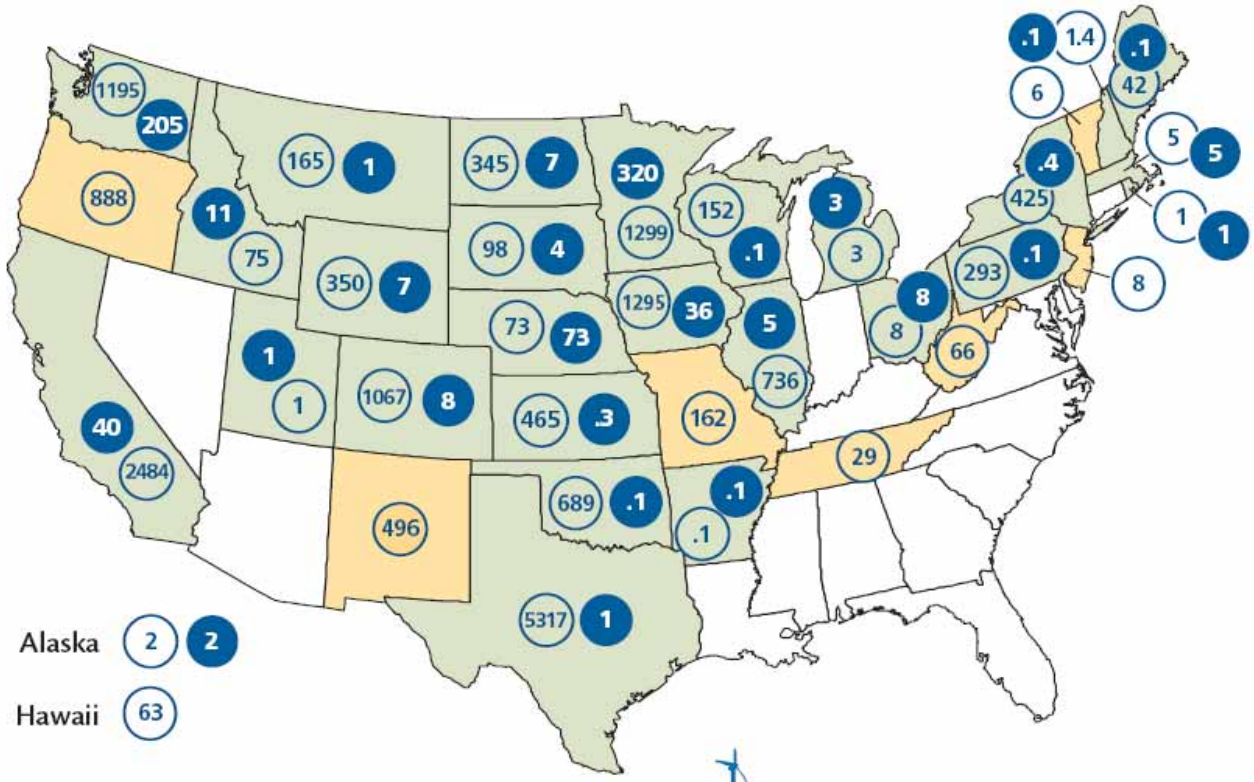
Installed Community Wind and Wind Capacity in the U.S.



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Community Wind States

Wind Farm Only States

275 Community Wind (MW)

895 Total Wind Capacity (MW)

18,281 MW of Wind Installed in the U.S.

736 MW is Community-Owned

July 2008

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Minnesota Supports Community Wind Through Public Policy

- Renewable Energy Standard (RES)
  - 25% X 2025, & 30% X 2025 for Xcel (Minn. Stat. § 216B.1691)
- Renewable Development Fund
- Production Incentives - Small Wind Tariff
  - 1 to 1.5 cents per kWh for projects under 2 MW
- Net Metering for systems under 40kW
- Community-Based Energy Development Tariff (C-BED)

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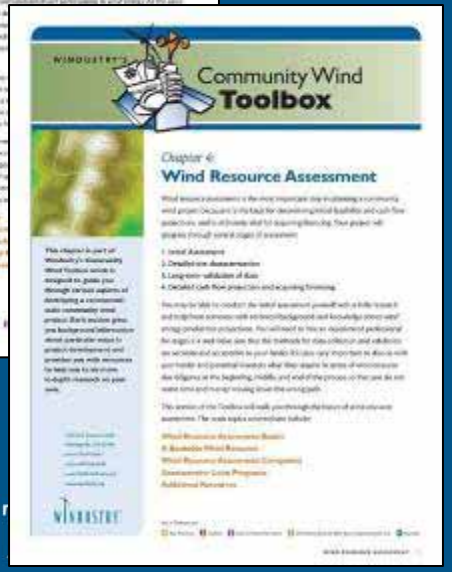
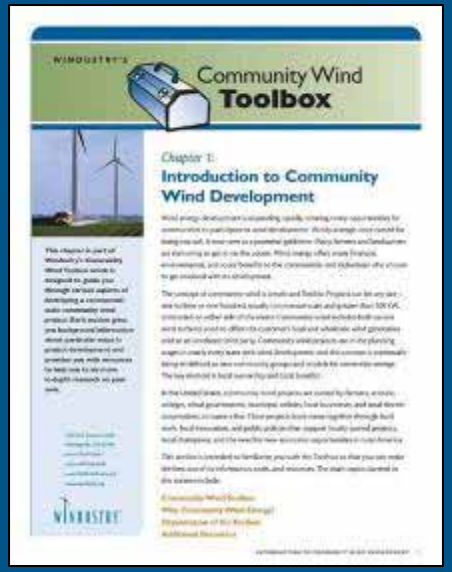
Windustry Resources: Community Wind Toolbox

Community Wind Toolbox





Wind Project Ownership Levels of Local Investment

Varying Degrees of local Investment/Value-added

- Some local organizing, debt & equity investment
- May or may not stay locally owned
- Example: Trimont Wind

Lower Levels of local Investment

- Conventional Developer Owned Wind Projects
- Local involvement limited to taxes, land leases, and indirect economic benefits

High Local Investment

- Public Projects
- Community or Farmer Owned Projects
- Examples: Minwind Energy, Schools, Municipal Utility or REC

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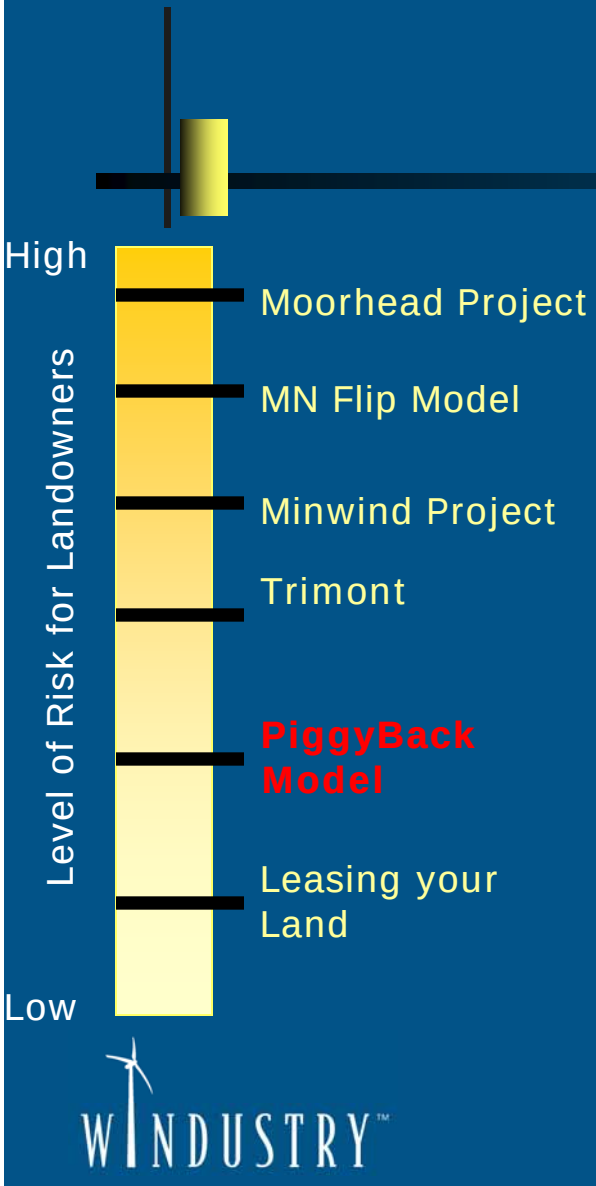
PiggyBack Model
Lamar, CO



- Leveraged utility scale projects to develop a locally owned project
- Five 1.5 MW GE turbines less than 25 miles from CO Green, a 162 MW project in Lamar
- Municipal Utilities (Lamar Light & Power and Arkansas River Power Authority) timed their project to coincide with Colorado Green.
  - Coordinated with CO Green to lower development, construction and maintenance costs.

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Trimont Area Wind Farm

- 100 MW Wind Farm (67 1.5 MW GE Turbines)
- Organized by group of local farmers and landowners (Pre-development)
- Answered a RFP from Great River Energy to develop the project
- Sold it to PPM Energy
- Some opportunity for revenue in addition to lease payments

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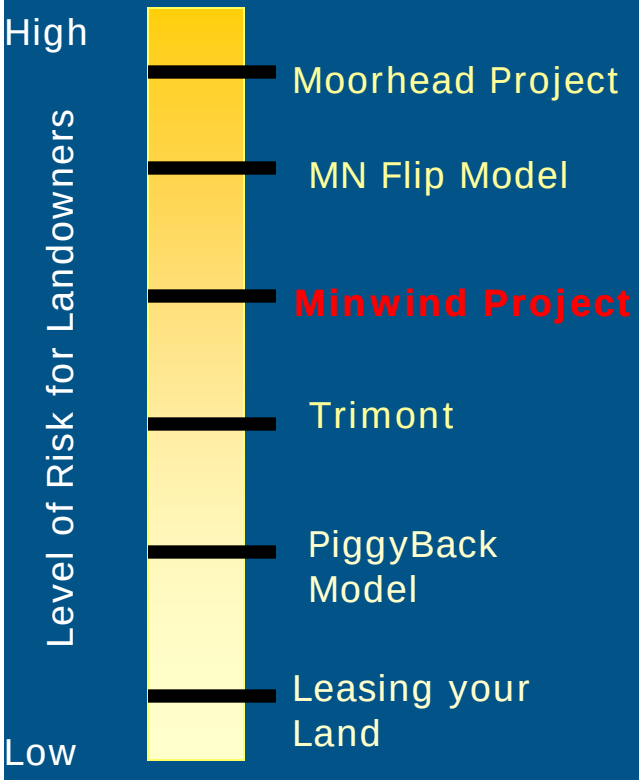
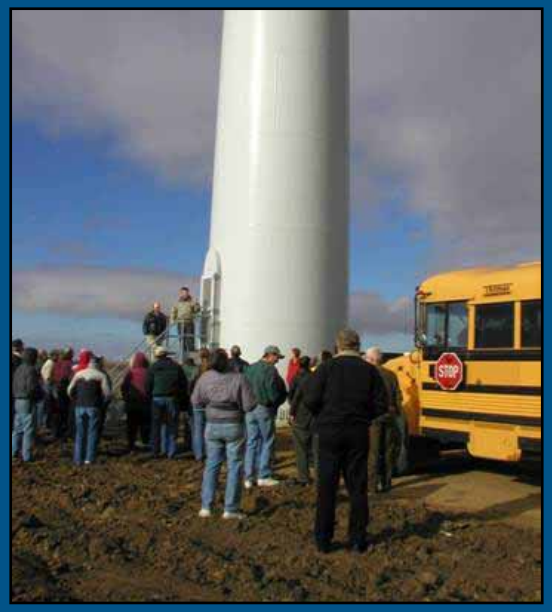
Minwind Energy, Luverne, Minnesota



Farmer Ownership:

- Nine LLCs, 11 wind turbines owned by 200+ local investors.
- Installed in 2002 and 2004.
- Goals: local economic dev., maximize return on investment, diversify local economy.



"We wanted a farmer owned project that would bring economic development, get farmers a return on their investment, and could use local businesses and contractors to do the work."
--Mark Willers, CEO Minwind Energy


Lawyers
USDA
Elected Officials
State Energy Office
Accountants
Contractors
Bankers
Developer
Minwind Board
Equipment Suppliers
Minwind CEO
Accountants
Investors

Minnesota “Flip” Model

- Allows local owners to own a significant portion of the project, while partnering with an equity investor that can utilize the PTC
- Equity investor has controlling interest is first 10 years of the project, then controlling interest “flips” to landowners.
- Typically, the local landowners contribute start-up capital to secure permits, interconnection and pre-development work. Equity investor contributes cash to acquire turbines and for construction/operation.
- Advantages of using the ‘flip’ are:
  - Efficient utilization of tax benefits
  - Potentially easier to access debt financing
  - Eventual local ownership

"I needed a way to diversify my farm operation to survive. There's nothing coming to us so we had to create our own jobs. It's not easy to put a wind energy project together, but it is a good opportunity. That's why I am doing it.“ --Dan Moore, Farmer

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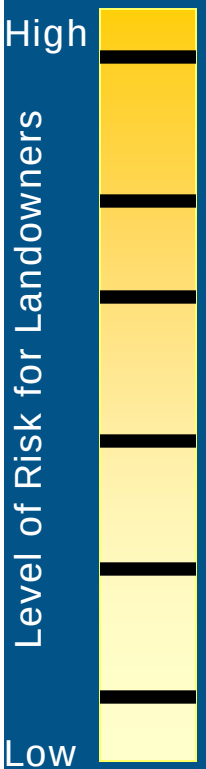
Moorhead Public Service
Moorhead, Minnesota



Moorhead Project

MN Flip Model

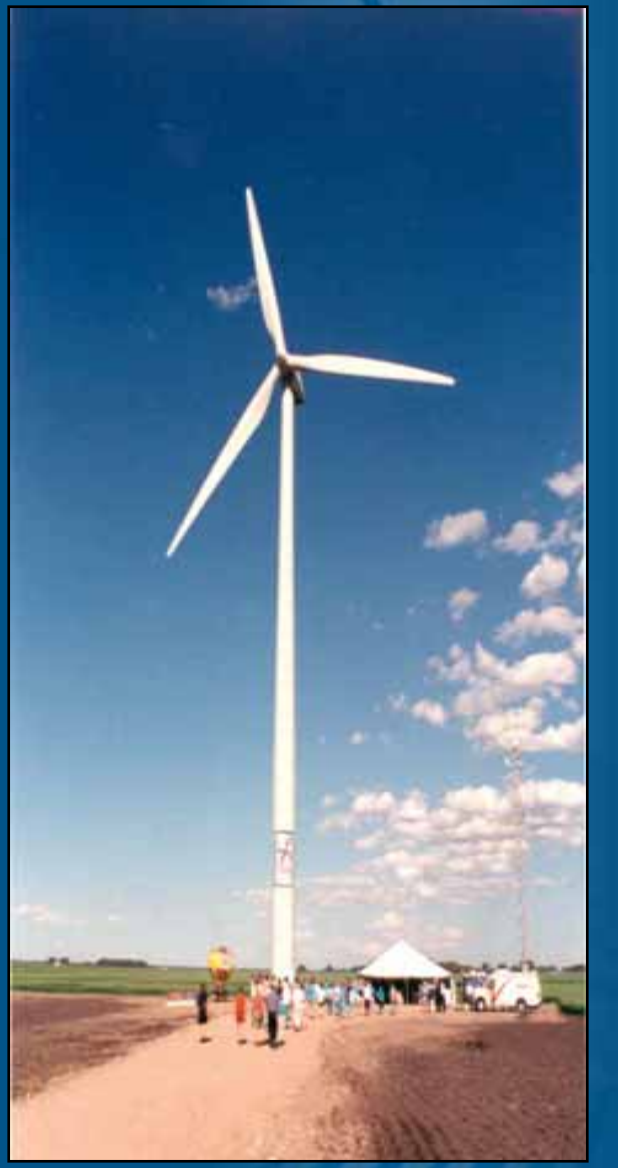
Minwind Project

Trimont Project

PiggyBack Model

Leasing your Land

- Two 750 kW turbines, installed in 1999 and 2001.
- Public utility- used their own funds to purchase the machine. (pre-approved by city council)
- Among the highest subscription rates in the nation and one of the early successful municipal projects.



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CAPTURE THE WIND

In Summary:

- Know your rights as a landowner, whether you are signing a lease or developing your own project
- Stay current; the market and the legislative landscape is changing. Be flexible and creative
- Work to get the policy incentives right
  - Now is the time to talk to your elected officials and candidates. Vote for those candidates that support the energy policy you support
- Work together for a stronger voice.
  - Developing a community owned wind project is difficult and time consuming. You need to work together to achieve results. Think creatively and act collaboratively.

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“Community wind helps get people connected to their energy use. Local energy production helps to build a better society, a better culture, and a better planet.”
--David Benson, Nobles County Commissioner & Farmer
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