



# Community Wind Lessons from the Midwest

## Wind Powering America Summit June 7, 2007

### Los Angeles Convention Center

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# Topics I Will Cover

- Examples of Community Wind in the Midwest and why these projects were built
- What state policies are needed to promote Community Wind



Single 900 kW Wind Turbine Owned  
By Waverly Light & Power  
a Consumer Owned Utility

**Buffalo Ridge Minnesota from 10,000 feet**

**The Birth Place of Community Owned Wind Power**

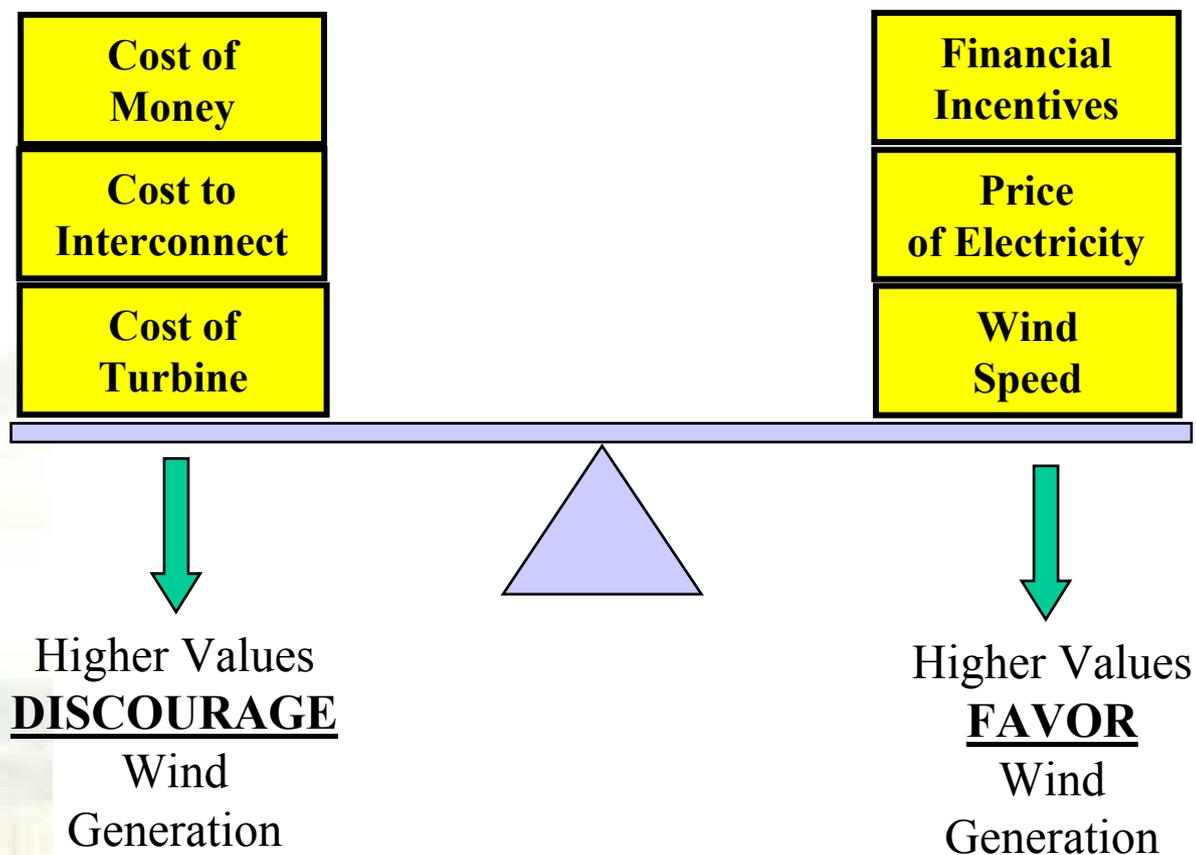


# Community Member Owned Wind



- Typically farmers (singly or collectively), landowners, and businesses
  - Minnesota is the leader in the U.S. with about 400 individuals today and many more in the future
  - Iowa is second with about 30 today with another 75-200 in the pipeline
- State financial support
  - Annual payment from the state
  - Annual tradable tax credit
- Higher power purchase rates (C-BED rules)

# The Overall Economics of Wind Generation is Determined by a Balance of Factors



# Wind Turbines at Schools and Colleges



- Twelve Iowa schools and colleges in Iowa, and five in Minnesota have wind turbines. All projects are the result of two major factors:
  - 1) Supportive Public Policies
    - Net Metering
    - Grants
    - Low cost financing
    - Tradable state tax credits
    - Green tags or RECs
    - Administrative and technical support from state
  - 2) Determined local champions

**Iowa Schools:** Spirit Lake, Nevada, Sentral, Clay-Everyly, Akron-Westfield, Forest City, Clarion, Eldora, Iowa Lakes Community College, Grinnell College

**Minnesota Schools:** Lac Qui Parle, Pipestone, Carleton College, St. Olaf, U of M at Morris

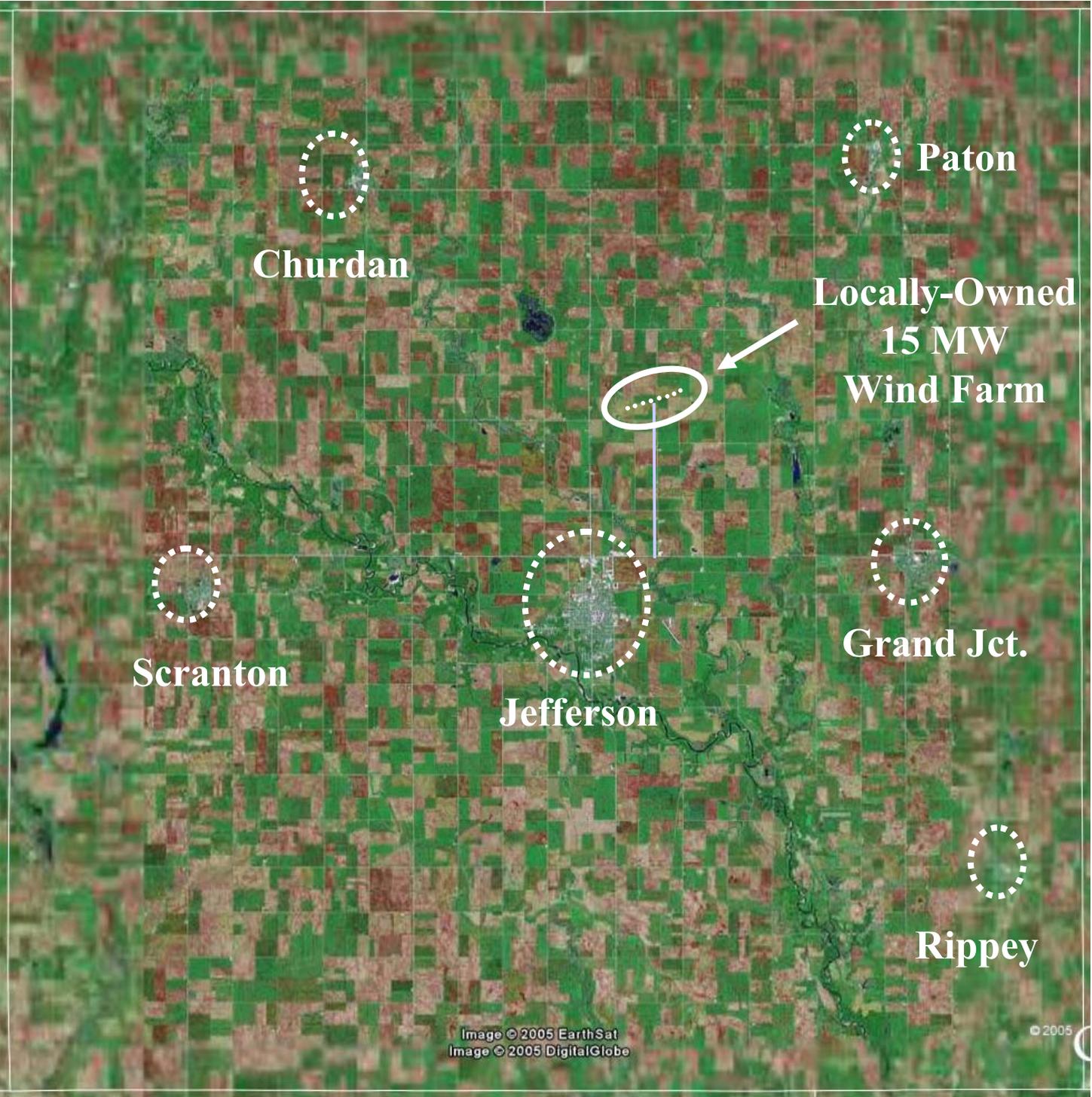
# Wind Turbines for Consumer-Owned Utilities

School Children on a Field Trip to Visit Turbines Owned by Seven Iowa Municipal Utilities



- Small utilities owned by city residents or cooperative members
- Minnesota & Iowa have about 10 utilities that own a turbine installed locally
  - Another 100 utilities own a share of a larger wind farm
- In nearly all cases, wind power costs more for the first 10 to 15 years of the turbine's life, with savings occurring after that.
- Customer pressure is primary driver, with other drivers being environmental benefits and local champions
- Grants and CREBs very important

- The proposed wind farm would generate about 47,000 megawatt-hours per year
- Jefferson uses about that same amount of energy per year
- The Proposed Wind Farm Will Be a Significant Supplier of Electricity to the County



- The 15 MW Locally-Owned Wind Farm Will Save the Equivalent of Enough Coal To Fill a Train 3 Miles Long Every Year

