

# Wind Energy: A Wise Investment for Minnesota

In 2007, Minnesota adopted a Renewable Energy Standard (RES) requiring utilities to produce 25% of their electricity from renewables by 2025, with Xcel Energy to produce 30% by 2020. This visionary policy has boosted our state's economy, created jobs and served as an example for other states in the region.

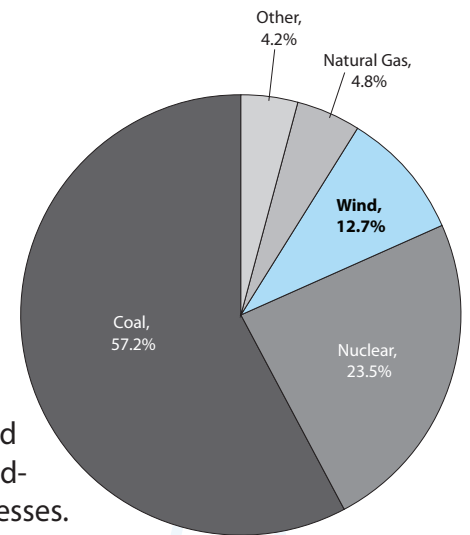
## The RES Works...

**Minnesota is the Fifth Largest Wind Energy Producing State in America.**

Creating stable statewide policy to incentivize wind development has helped develop **2,718 megawatts of wind**, 12.7% of our state's energy and enough to provide **770,000 Minnesota homes** with clean, affordable energy.

## ...and Puts Minnesotans to Work.

Minnesota's investment in wind creates jobs and supports Minnesota families. These jobs come from all sectors, including truck drivers, crane operators, earth movers, cement workers, and various construction, management, consulting and engineering positions. Wind development also revitalizes rural economies, spending thousands annually in restaurants, gas stations, hotels and other local businesses.



## Wind Energy in Minnesota (2012 AWEA data)

**\$7.6 Million in Annual Property Tax Payments**

**2,000-3,000 Minnesota Jobs**

**\$8 Million in Annual Payments to Landowners**

## Wind is Cost Competitive...

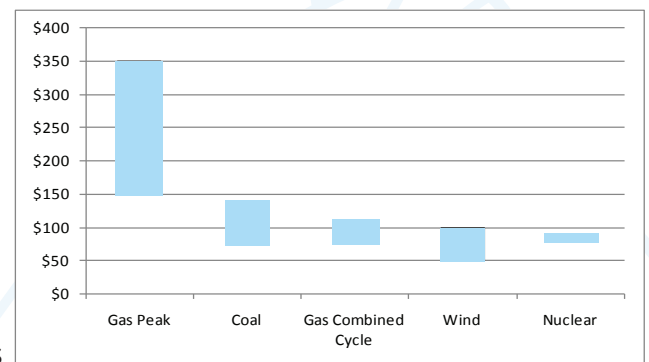
Wind energy is already one of the most cost effective sources for new energy (see chart), particularly in states with a strong wind resource like Minnesota.

## ...and is a Wise Investment in Minnesota's Future.

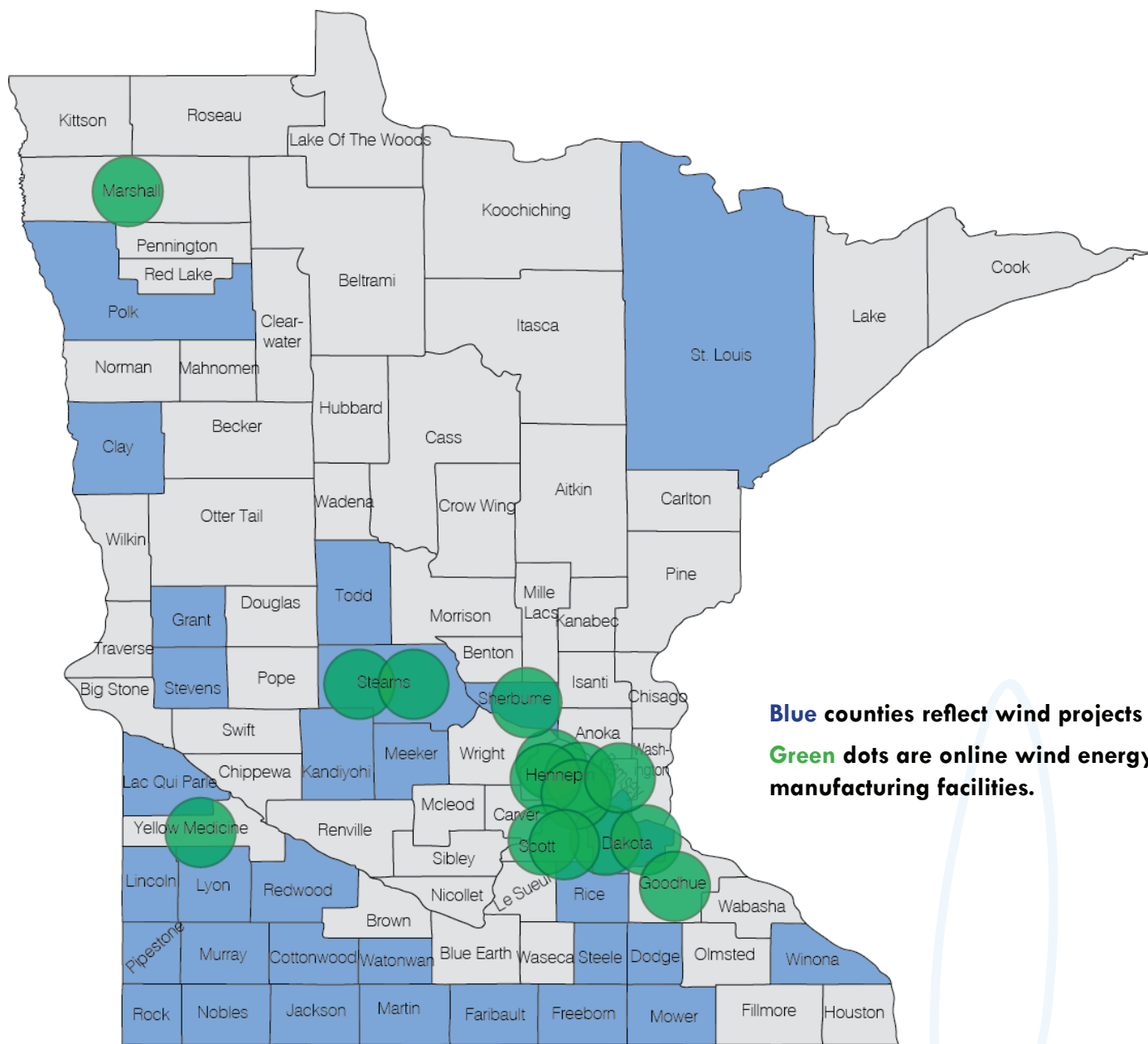
The current market in Minnesota as evidenced by recent results from utility requests for proposals shows that Minnesota wind is being delivered for less than \$50 per megawatt hour on a flat price basis for 20 years. This compares to some estimates that project the price of power to rise to over \$100 over the same period. Wind represents a tremendous value now and in the future for the state's ratepayers, and will keep our economy healthy well into the future.

Creating electricity from Minnesota wind also keeps our air and water clean, and reduces carbon dioxide emissions by more than **5.4 million metric tons** each year, the equivalent of removing hundreds of thousands of cars annually.

Levelized cost of new energy; \$ per megawatt hour (Source: Goldman Sachs research estimates)



# Wind in Minnesota



**Blue counties reflect wind projects**  
**Green dots are online wind energy manufacturing facilities.**

## Did you Know?

- The Port of Duluth handled nearly a million freight tons of wind energy cargo between 2005 and 2010.<sup>1</sup>
- Minnesota's wind-related supply chain boasts more than 100 companies producing fabricated structural metal, plastics and composite fabrication, turbines, motors, printed circuits, and other components.<sup>1</sup>
- Minnesota's wind resource could provide nearly 25 times the state's current electricity needs<sup>2</sup>

<sup>1</sup> Positively Minnesota

<sup>2</sup> National Renewable Energy Lab