Bigger Quieter More Efficient

8,000 components working together to leverage the laws of physics; today's wind turbines are a feat of engineering.

Xcel Energy®

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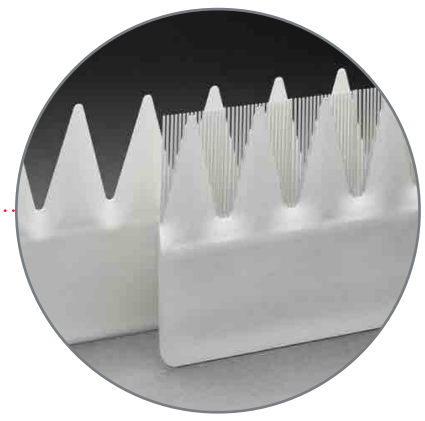
Quieter Than Ever

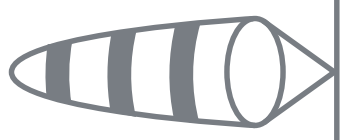
Flexible fringe elements designed to mimic an owl's wing allow blades to slice through the air with less resistance, for less noise plus slower speeds of newer wind turbines result in less sound output.



More Efficient Technology

Better turbine gearing, improving aerodynamic designs and longer blades make today's wind turbines more effective at generating electricity.

- When generating, a modern turbine can provide electricity for up to 1,000 homes.

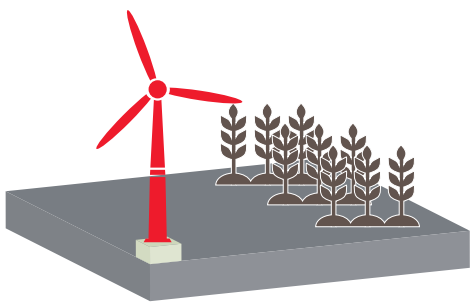


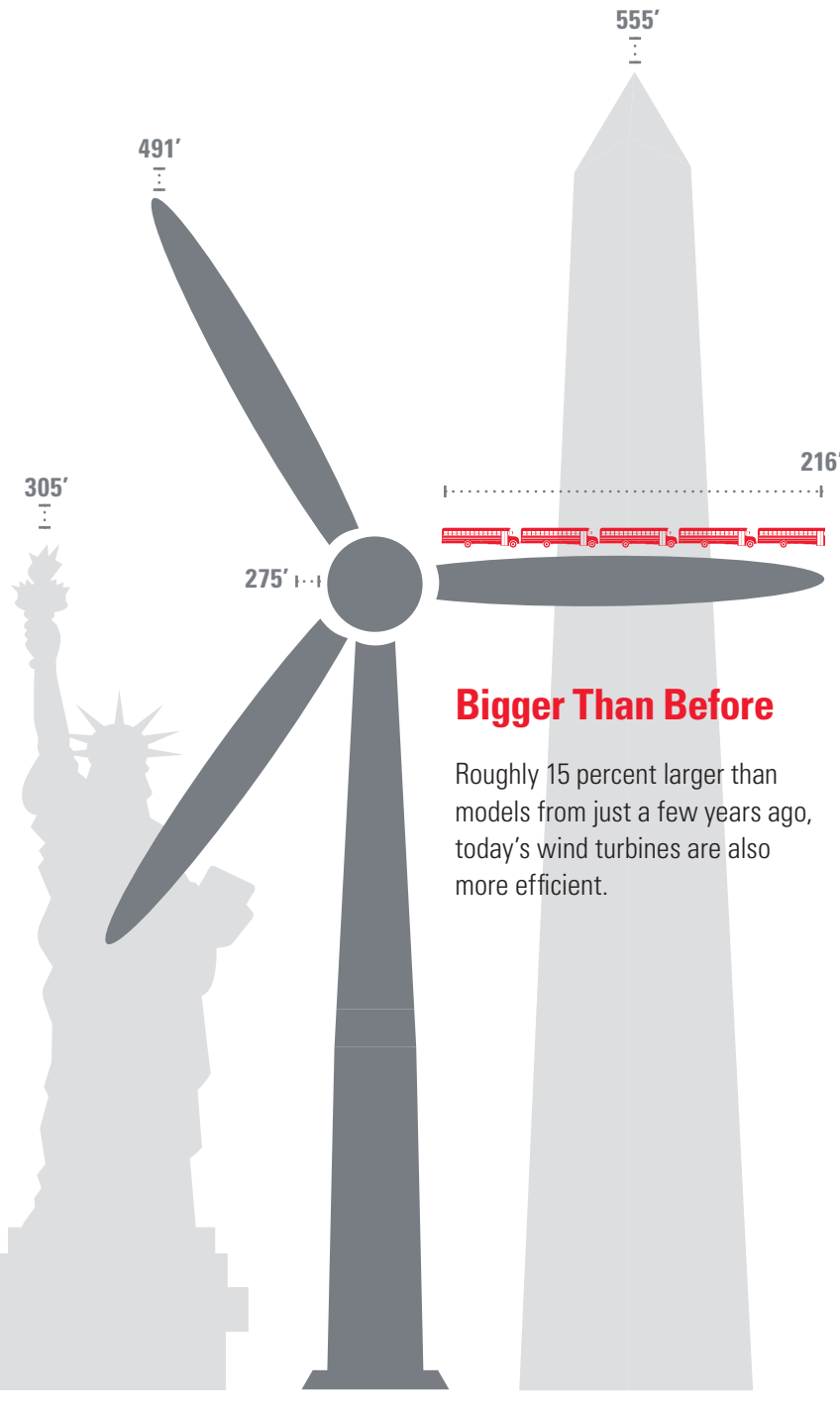
Forecasting the future

Highly detailed wind forecasting uses real-time, turbine-level operating data and applies sophisticated algorithms to forecast the amount of wind power that will be produced to help balance the demands of the electric grid.

Balancing Resources

Each turbine uses less than 1.5 acres, which means about 98 percent of a wind farm's acreage can be used for agriculture or other purposes.





Bigger Than Before

Roughly 15 percent larger than models from just a few years ago, today's wind turbines are also more efficient.

The Economic Benefits

The average 200 megawatt wind farm:

- Generates more than $1 million in annual local property taxes.
- Requires about 200 construction workers to build and 10 full-time workers to maintain operations.
- Provides landowners more than $1 million in payments each year.
- With historic low wind prices, the cost to build a wind farm is more than offset by the future fuel savings.