Building GREEN in Greensburg

Wind Farm



The wind that nearly destroyed the town of Greensburg now supplies homes and businesses with clean, renewable energy. Completed in March 2010, the Greensburg Wind Farm is helping the town meet its "100% renewable energy, 100% of the time" goal.

- *Ten 1.25 megawatt (MW) wind turbines* supply a total of 12.5 MW of renewable wind energy to the town and beyond
- Generates enough energy to power 4,000 households or every home, business, and municipal building in Greensburg
- Excess power from the town, which will use between 1/4 and 1/3 of the energy generated, is returned to Kansans on the grid as renewable energy credits for other Kansas Power Pool and Native Energy, Inc. customers.

PROJECT BACKGROUND

Through a partnership with the U.S. Department of Energy's National Renewable Energy Laboratory (NREL), the town of Greensburg received expertise and guidance from NREL consultants on renewable energy and energy efficiency.

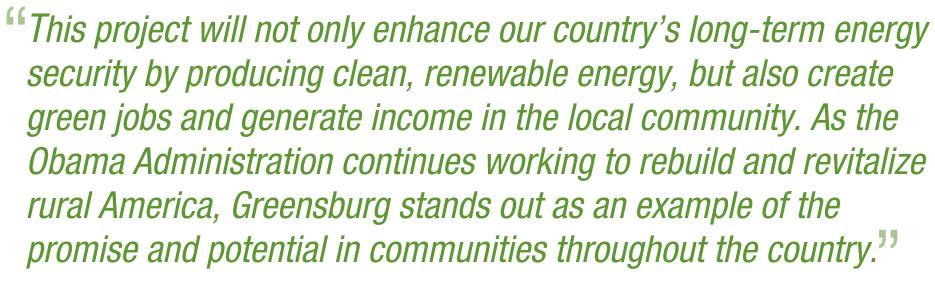
- Kansas offers the third highest potential for wind energy in the U.S.
- Thorough research conducted by NREL proved the viability of wind power in the area.

PROCESS

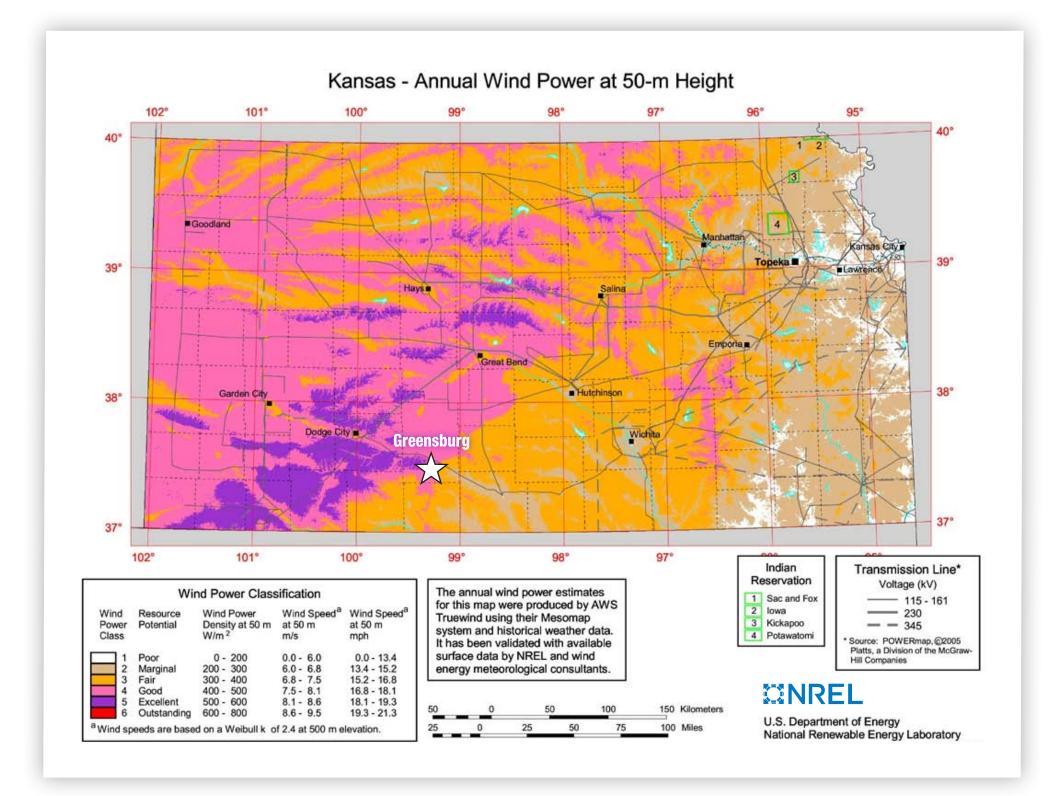
- NREL consultants created detailed wind speed maps to determine the optimal site for the wind farm based on average annual wind speed at varying heights
- The town teamed with John Deere Wind Energy to build and maintain the wind farm
- *Native*Energy, Inc. organized the renewable energy credits and carbon offsets for the project.

FINANCE

- The total cost of the project was \$23.3 million, with a loan from U.S. Department of Agriculture Rural Development for \$17.4 million
- The remainder of the project was funded through an equity investment from John Deere Wind Energy and gap funding from *Native*Energy, Inc.



-U.S. Agriculture Secretary Tom Vilsack



This map shows that at 50 meters, Greensburg, Kansas, has a wind power of Class 4 or higher (dark purple), which is excellent for generating wind power with large turbines.



Courtesy of NativeEnergy, Inc.

