

Renewable Energy and the BLM: WIND

(Section 211 of Energy Policy Act)

The BLM manages 20.6 million acres of public lands with wind potential. The BLM's Lands and Realty Management program has authorized a total of 192 rights-of-ways for the use of public lands for wind energy production sites. Of these, 25 authorizations have a total installed capacity of 327 megawatts.

A Programmatic Environmental Impact Statement (EIS) relating to the authorization of wind energy projects was completed in June 2005. This EIS provides an analysis of the development of wind energy projects in the West. In conjunction with the publication of this EIS, the BLM amended 52 land use plans to allow for the use of applicable lands for wind energy development. BLM offices are able to use this EIS as an aid in analyzing impacts for specific applications for the use of public lands for wind energy use. The BLM issued a wind energy policy in 2006 to provide guidance on best management practices (BMPs) and measures to mitigate potential impacts on birds, wildlife habitat and other resource values. The 2006 policy is currently being updated in terms of rental rates, visual resource guidance, requirements for plans of development, and exclusionary areas.

Wind power uses the naturally occurring energy of the wind for practical purposes like generating electricity, charging batteries, or pumping water. Wind turbines capture the kinetic energy in the wind, converting it into electrical energy. Utility-scale turbines are mounted on tall towers, usually 200 feet or more above the earth's surface where the wind is faster and less turbulent. In utility-scale power applications, multiple turbines are connected to the utility grid, providing electricity when the wind blows.

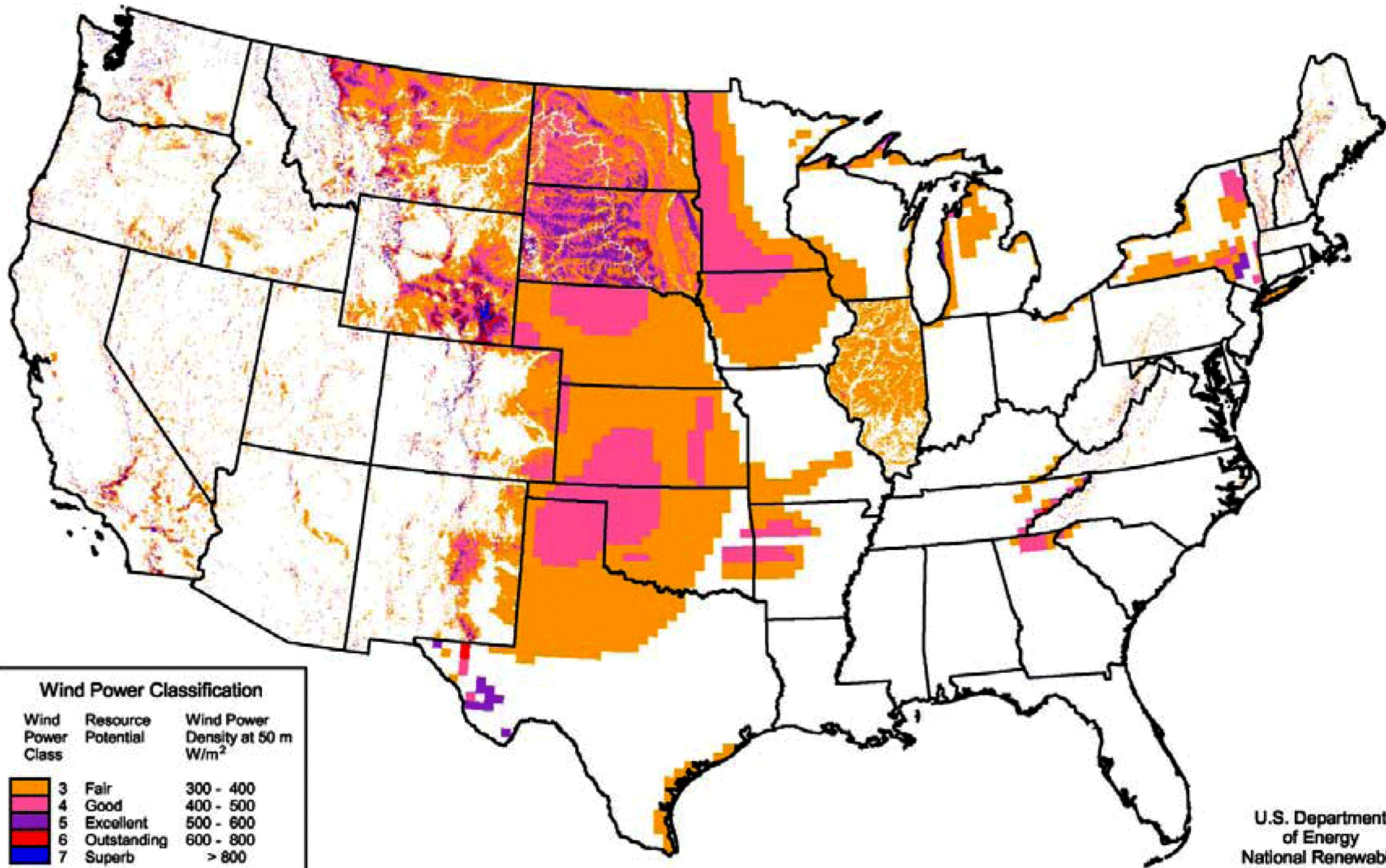
For over a decade, wind energy has been the fastest growing energy technology worldwide, achieving an annual growth rate of over 30 percent. In the United States, the current total installed capacity is over 21,000 MW of wind projects.

Laws recently enacted in most of the western states require energy companies to provide a portion their energy from renewable energy sources. As a result, the BLM anticipates an increase interest in the use of public lands for renewable energy development.

The BLM continues to conduct studies necessary to evaluate and process the increasing number of applications for rights-of-way for the siting of wind energy projects and applications for rights-of-way for electric transmission lines from these projects. The BLM recently approved a wind energy development project in Utah with an additional capacity of 120 megawatts and a wind energy project in Arizona with an additional capacity of 30 megawatts on public lands. There are an additional 15 projects currently being processed in that could add an additional 3,000 megawatts of capacity.

The BLM's wind energy program is part of ongoing efforts to improve the management of energy resources found on federal lands in a balanced way to ensure the Nation's economic and energy security and quality of life.

High- and Low-Resolution Wind Resources



The high resolution wind resource data was produced by NREL or TrueWind Solutions between 1999 and 2003, and was validated by NREL and meteorological consultants.

The low resolution data was produced by NREL/PNL in 1987.

U.S. Department of Energy
National Renewable Energy Laboratory

