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2016 Distributed Wind Market Report

Wind turbines in distributed applications are found in all 50 states, Puerto Rico, Guam, and the U.S. Virgin Islands to provide energy locally, either serving on-site electricity needs or a local grid. Distributed wind is defined by the wind project's location relative to end-use and where it is on the grid system, rather than turbine or project size. Triad Recycling & Energy hosted an open house Turbine Day event to celebrate the commissioning of its first 100-kW Northern Power Systems wind turbine. *Photo Credit: Northern Power Systems*

Distributed Wind Powers the Nation's Infrastructure

From powering industrial processes and municipalities to energy exploration, distributed wind contributes to the energy mix that keeps America running. In Ohio, One Energy installed and operates a behind-the-meter 1.5 megawatt (MW) wind turbine that powers a pumping station for Marathon Petroleum. Smaller 400 watt or less turbines typically paired with solar photovoltaic systems provide energy for remote applications, such as oil drilling stations and offshore platforms. Triad Recycling & Energy installed a 100 kilowatt (kW) turbine to power its waste-management operations in New York and plans to install another turbine in 2017.

Distributed Wind Market Grows with Significant Financing

In January 2016, United Wind, the leader in the distributed wind lease market, announced that it had secured $200 million in project equity capital from Forum Equity Partners to expand its lease program. A year later, United Wind announced that it had purchased 100 Excel 10 Bergey WindPower wind turbines, the largest order ever—by number of units—for either company.

Also in January 2017, One Energy LLC secured $80 million in financing from Prudential Capital Group, signaling institutional capital acceptance of One Energy's approach to providing distributed wind to industrial and commercial customers.

States Drive New Distributed Wind Capacity

Several states, including Rhode Island, Illinois, Minnesota, Maryland, and Michigan, have recently taken steps supportive of distributed wind.

Rhode Island led the United States in new distributed wind capacity additions with 15 MW in 2016, mainly as a result of updated virtual net metering policy. Virtual net metering allows the energy from a project not sited on the customer's property, but within the utility service area, to be credited to the customer's utility bill. Multiple remotely sited 1.5-MW wind turbines provide dedicated power for the town of West Warwick and a Narragansett Bay Commission wastewater-treatment plant in the state.

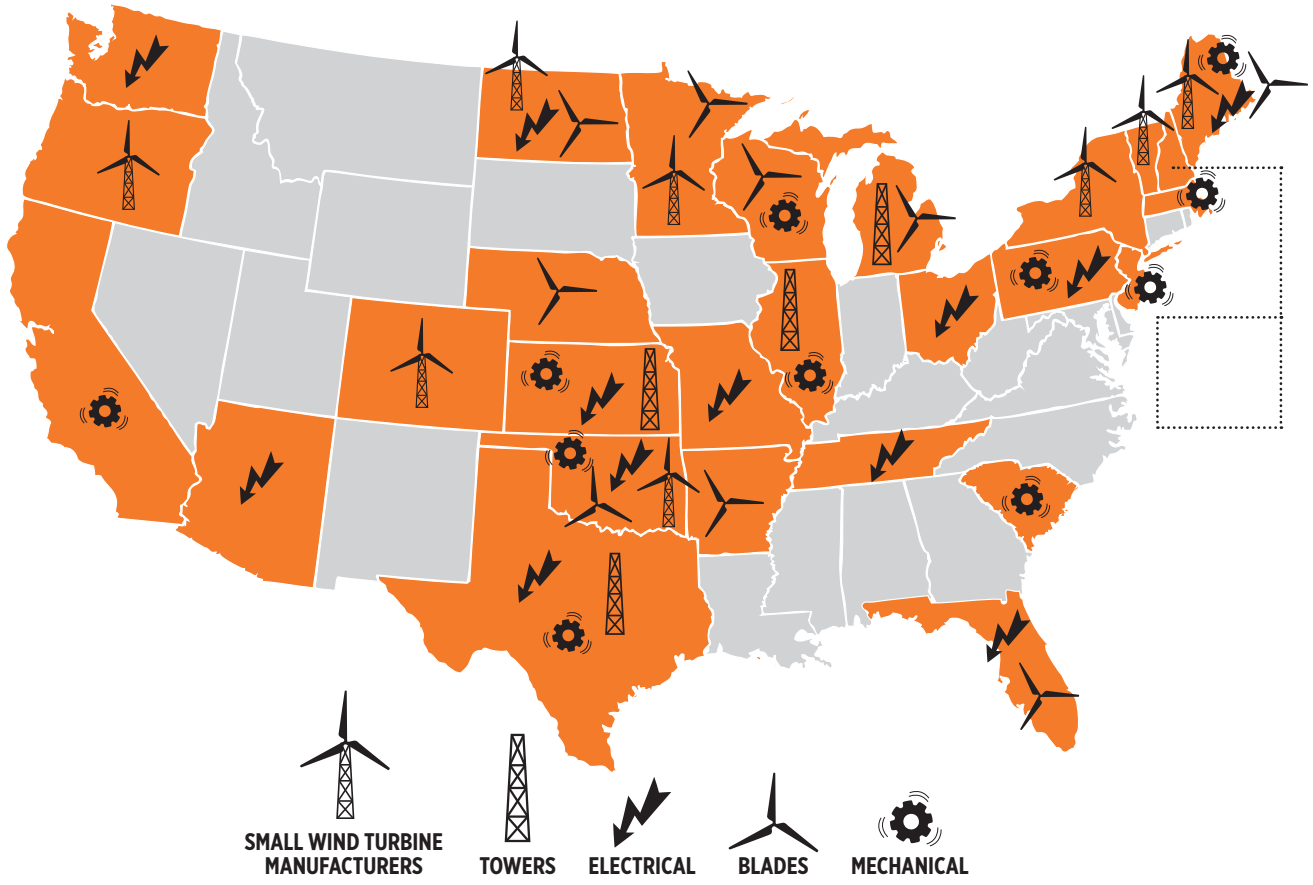
Domestic Manufacturing Dominates U.S. Small Wind Market

Nine U.S.-based and three foreign small wind (up through 100 kW) manufacturers reported domestic sales in 2016. The U.S.-based small wind manufacturers rely on a domestic supply chain that spreads across at least 23 states. These supply chain vendors provide the mechanical, electrical, tower, and blade components essential to small wind turbines.

In 2016, 2.4 MW of small wind was deployed in the United States, with documented projects in 22 states, from Hawaii to South Carolina, at an investment value of $14 million. U.S.-based small wind manufacturers dominate the domestic market, representing 98% of the 2.4 MW.

In addition, six U.S.-based manufacturers exported 10.3 MW of small wind in 2016, primarily to Italy, the United Kingdom, and Japan, at an investment value of $62 million.

Purchasing a U.S.-made small wind turbine supports a variety of jobs from manufacturing to construction, while delivering clean, homegrown energy.



27 **States with Small Wind Manufacturing:** Arizona, Arkansas, California, Colorado, Florida, Illinois, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Washington, Wisconsin

U.S.-based small wind turbine manufacturers rely on domestically produced components for over 80% of the content needed to produce turbines for use both in the United States and across the globe.

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energy.gov/eere/wind/distributed wind

PNNL SA 126263 • May 2017

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