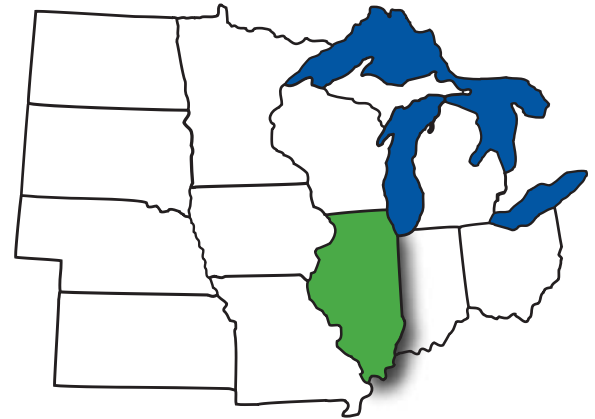


# Growing Illinois' Green Economy

**T**HE BOOM IN CLEAN ENERGY DEVELOPMENT, ESPECIALLY WIND POWER, PRESENTS a tremendous opportunity for economic growth in Illinois and the Midwest. This boom is creating new construction jobs, long-term operations and maintenance positions, and positive indirect economic benefits from payroll spending, property tax revenues and land leases. Some of the best long-term economic opportunities are coming directly from the manufacturing of wind machine components.

As the Midwest wind industry continues to grow, more wind equipment is being manufactured here—near where it is being installed. That simplifies construction and transportation logistics. That locational advantage is spurring new good-paying manufacturing jobs.

A modern wind turbine has more than 4,000 parts, most of which are not “high tech” or “cutting edge” but basic components: gears, structural towers, ball bearings and electrical switches. Illinois has many businesses and thousands of skilled workers who have been making these types of components for decades and can be part of the wind industry supply chain. Some of the companies currently engaged in the wind supply chain are:



## **Brad Foote Gear Works, Cicero:**

Brad Foote Gear Works, founded in 1924, is a leader in the production of large, high-quality gearing systems for oil drilling, power generation, mining and other heavy industries. Over the past decade, the company has started to produce gear boxes for large wind turbines. In 2007, the company was acquired by Tower Tech (now Broadwind Energy), a Manitowoc, WI-based company that is building a portfolio of companies providing components to the wind energy industry. Brad Foote Gear Works employs 400 workers at its Cicero plant.

## **Trinity Industries, Clinton:**

Trinity Industries manufactures rail cars, structural steel towers and a variety of other steel products. Its plant in Clinton employs 160 people producing 280 foot towers for modern wind turbines, supplying GE, Siemens and Suzlon.

## **S & C Electric, Chicago:**

Based in Chicago's West Rogers Park neighborhood since 1911, S&C Electric is a global leader in the production of components for the electric power distribution industry, including switches, sub-stations and protection devices. The growth in wind energy and related electricity grid infrastructure has created a significant new market for the company's production of wind power equipment.

## **Winergy Drive Systems, Elgin:**

Winergy Drive Systems, a division of Siemens, produces gear boxes exclusively for the wind industry at its Elgin plant which employs 100 workers. Siemens is building another plant nearby that will eventually employ an additional 250 workers.





A number of other Illinois companies are targeting wind turbine manufacturers as a new market for them. These companies include:

- **CENTA Corporation**, Aurora (flexible couplings and driveshafts)
- **Leeco Steel**, Chicago (steel plate for towers)
- **Rockford Bolt & Steel**, Rockford (fasteners)
- **Rohn Products**, Peoria (concrete and foundation services)

With its strengths as a corporate and financial center, the Chicago area is also host to an increasing number of U.S. headquarters for wind power development and related companies. These include:

- **Acciona**, a large Spanish-based wind developer and turbine manufacturer (U.S. turbine manufacturing plant is in Iowa)
- **Broadwind Energy**, a publicly-held Naperville-based holding company that has acquired a number of companies involved in the wind energy supply chain, including Brad Foote Gear Works (described above), Tower Tech (tower manufacturer) and EMS (turbine maintenance)
- **E.ON Climate & Renewables**, U.S. headquarters for a German renewables company
- **Horizon Wind Energy**, a Texas-based wind energy farm developer, owner and operator
- **Invenergy**, the largest independent wind energy project developer in the U.S.
- **JPMorgan Chase Capital Markets**, one of the largest institutional investors in U.S. wind energy projects
- **Juhl Wind Company**, a leader in developing and managing community-based wind power
- **Midwest Wind Energy**, an Illinois-based wind energy developer
- **Nordex**, a German wind turbine manufacturer that is building a U.S. manufacturing plant
- **Suzlon**, a major wind turbine manufacturer (blades are produced in Pipestone, Minnesota)

### How Can Illinois Grow Its Wind Energy Supply Chain Activity?

Iowa, Michigan and Ohio economic development organizations started working earlier both to attract manufacturers to their state and play a matchmaking role in bringing turbine assembly companies and component suppliers together. Illinois is working hard to catch up and needs to continue to improve and expand its outreach activities while advancing its policy leadership and innovations. While many companies are building their own relationships, Illinois state agencies and the City of Chicago can play a more active role in opening doors to turbine manufacturers and educating component suppliers on opportunities in the wind energy industry. In addition, the State of Illinois and City of Chicago should work with universities, community colleges and not-for-profit organizations to help train wind tech workers in this growing field.

