



ENERGY, POWER, AND CONTROLS EXCELLENCE

**Wisconsin is leading the way
toward an efficient and sustainable future.**

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toward an efficient and sustainable future.



1,155

energy, power,
and controls
companies



121,932

energy, power, and
controls jobs



**#2 IN
THE U.S.**

for manufacturing jobs
as a percent of total
workforce



826MW

combined net
summer capacity
of onshore

**WIND POWER
GENERATORS**



**240 HYDROPOWER
GENERATORS**

across 65 facilities with a cumulative
net summer capacity of
410MW



1.87GW

combined net
summer capacity of

**SOLAR VOLTAIC
GENERATORS**



**22
MINUTE**

average
commute
time



Access to a talent pool of

65,736

engineering graduates

from across
the Midwest
per year



Workforce Innovation
Grants are providing

\$128 MILLION

to 27 organizations across Wisconsin
to address barriers to workforce
participation such as:

- Child care
- Transportation
- Housing

1,155

Wisconsin energy, power, and controls companies

Data Axle, 2025

121,932

Wisconsin energy, power, and controls jobs

Lightcast 2025 Q1 Dataset



BUILT FOR INNOVATION

Wisconsin is a global center for energy, power, and controls—leveraging market-leading industrial capabilities, advanced academic research, and specialized institutions. We are generating new ideas, advanced applications, and energy efficiency technologies to power the world. Electrical machinery and control manufacturing is one of Wisconsin's fastest-growing and most competitive industrial sectors, and companies in this sector are committed to addressing the world's energy challenges by continuously adapting to new market demand and opportunities. Across the world and throughout this essential and rapidly changing industry, it's hard to find an electron that doesn't flow through something that's made in Wisconsin.

ENERGY — grid modernization, innovating and building next-generation and more compact microgrids that are more reliable and affordable, biofuels, nuclear fusion and fission, renewables and new battery chemistry systems to improve energy storage and safety, and digital twins for industrial efficiencies

POWER — transmission, distribution, monitoring, efficiency, and quality, including improved insulators and dielectrics for higher energy and more compact applications

CONTROLS — power controls and sensors; automation and systems intelligence for industrial and building applications; energy management; SMART grid/ distributed energy, wind, and solar control; energy cybersecurity and resiliency

WISCONSIN'S LEADERS IN ENERGY, POWER, AND CONTROLS

GENERAC[®]

Johnson
Controls 

EATON

 **Rockwell**

 **Xcel Energy**[®]


ALLIANT ENERGY

 **CLARIOS**

Ingeteam



22 MINUTE

average commute time

U.S. Census Bureau, American Communities Survey



0.4%

effective tax rate on income from manufacturing activities

Wis. Stat. § 71.07(5n)

In Wisconsin, we are defined by our collaborative approach. Centers and institutes facilitate partnerships between academia and industry, often with federal funding benefits, while advancing innovation and developing next-generation talent. Regardless of your company's niche in the energy, power, and controls ecosystem, we probably have you covered.

ENERGY AND ENERGY STORAGE

Wisconsin Energy Institute is the home of catalytic research, training, and technology, with nearly 170 faculty members working across disciplines to solve large-scale energy challenges. (UW-Madison)

The **Center for Sustainable Electrical Energy Systems** is developing technologies to make electric power systems more sustainable, cost-effective, and secure. Researchers are developing power-dense and efficient power electronic converter packages, making systems lighter and more efficient. Facilities also include a one-of-a-kind customized environment for electromagnetic interface measurement. (UW-Milwaukee)

The **Energy Advancement Center** hosts one of the few dry labs for energy storage research in a North American university. This is one of only a handful of labs in the world that addresses a full product cycle—material synthesis, proof-of-concept, fundamental electrochemical and material studies, and bench-top manual fabrication of vehicle batteries, through pilot production. (UW-Milwaukee)

The **U.S. Department of Energy Industrial Assessment Center** provides free evaluations to manufacturers and wastewater treatment plants to help them reduce waste, save energy, and reduce carbon emissions. To date the center has saved those businesses roughly 20% of their energy bills. (UW-Milwaukee)

The **Great Lakes Bioenergy Research Center** is one of four bioenergy research centers of excellence established by the U.S. Department of Energy. It researches and develops efficient, sustainable biofuels and bioproducts made from dedicated energy products grown on marginal land. (UW-Madison)

The largest **wind tunnel** in Wisconsin is used to test wind turbine rotor blades as researchers work to make the turbines more efficient, quieter and longer-lasting. The facility is widely used for aerodynamics, to measure airflow over buildings and many other applications. The team also uses biomimicry in this work, using the shape of bird wings as inspiration for the shape of the blades. (UW-Milwaukee)



#2

for manufacturing employment concentration in the U.S.

Business Facilities Magazine, July/August 2024

Workforce Innovation Grants are providing

\$128 MILLION

to 27 organizations across Wisconsin to address barriers to workforce participation such as:

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- Transportation
- Housing



POWER

The **Power Systems Engineering Research Center** is a hotbed of electrical transmission and distribution research. (UW-Madison)

With more than 60 corporate sponsors, the **Wisconsin Electric Machines and Power Consortium's** researchers work together to research and develop the newest technologies and techniques in electric machines, power electronics, actuators, sensors, drives, motion control, and drive applications. (UW-Madison)

With the presence of companies such as Realta Fusion, Wisconsin is leading the way to develop **fusion technology** for an abundant source of clean energy—with the presence of UW-Madison and the entire UW system as a key resource for startups working on related technologies.

CONTROLS

The **Grid-connected Advanced Power Electronics Systems** (a National Science Foundation Industry/University Cooperative Research Center) has a mission to accelerate the adoption and insertion of power electronics into the electric grid, to improve system stability, flexibility, controllability, robustness, and economy. Member universities and companies span the U.S. (UW-Milwaukee)

The **Connected Systems Institute**, chosen to host the nation's first Microsoft artificial intelligence lab focused on manufacturing, develops domain specialists through education, state-of-the-art lab

and collaborative research facilities, which include an advanced manufacturing testbed, digital twin technologies, and industrial machine learning and networking. (UW-Milwaukee)

The **Trustworthy Cyber-Physical Systems and Infrastructures Lab** addresses the issues related to the emerging fields of cyber-physical systems applied to smart grid, microgrid, energy-efficient buildings, water and natural gas distribution networks, intelligent and sustainable transportation, health care systems and smart manufacturing. (UW-Milwaukee)



Federal agencies funding academic energy, power, and controls research in Wisconsin include:

- The U.S. Department of Energy
- The National Science Foundation
- The U.S. Department of Defense
- The U.S. Navy (Office of Naval Research)
- The U.S. Air Force
- The U.S. Department of Agriculture
- The Advanced Research Projects Agency-Energy (ARPA-E)
- STTR/SBIR grants from these agencies



WISCONSIN BY THE NUMBERS



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combined net
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**WIND POWER
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**SOLAR VOLTAIC
GENERATORS¹**



730

publicly accessible
charging stations with

1,763 CHARGING PORTS
for electric vehicles²



1,300+

buildings with green
certifications³



Wisconsin was awarded a
\$62+ MILLION

federal Solar for All Grant
to help fund solar energy
systems for low- and
moderate-income
households.

Sources: (1) U.S. Energy Information Administration; (2) U.S. Department of Energy Alternative Fuel Data Center; (3) Green Building Information Gateway

THE WORKFORCE YOU NEED



4,670

engineering degrees and certificates awarded in 2022

U.S. NCES IPEDS

65,736

engineering graduates from across the Midwest

U.S. NCES IPEDS

Wisconsin is known for its industrious, Midwestern work ethic, and its educational system is universally admired. With a high school graduation rate consistently ranked among the top in the nation, Wisconsin offers a steady pipeline of talent to keep our state at the forefront of innovation and economic growth.

The **Universities of Wisconsin** are regularly cited as leaders in terms of quality and reach, with established leadership in research and talent development. And as the **first state in the nation to develop a technical college system**, Wisconsin has more than 100 years' experience training its workforce to fulfill ever-changing industry demands.

Our 16 technical colleges and 24 universities, with a combined total of 93 campus locations around the state, prepare students to make strong contributions to Wisconsin's economy—and the leaders who hire them.

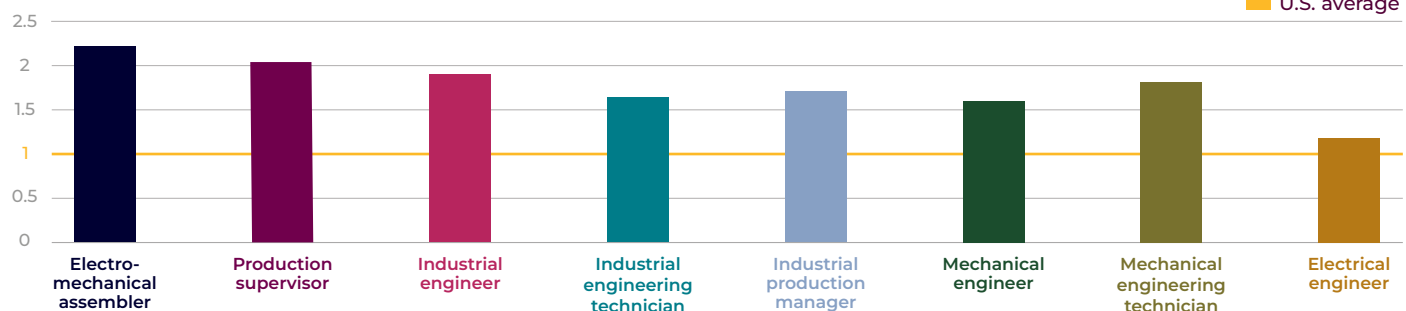
ADVANCING KNOWLEDGE

In Wisconsin, our universities lead in research and technology commercialization, supporting partnerships, companies, and policymakers to develop new, innovative products that fill market needs. For example:

- UW-Madison and UW-Milwaukee are both **Tier 1 research universities**, among the top 4% in the nation.¹
- UW-Madison ranks in the top 3% of U.S. universities for **engineering research expenditures** and near the top of global rankings.²
- Ranked in the top 10 nationally for **computer and civil engineering** as well as its undergraduate engineering program, the Milwaukee School of Engineering has always engaged leaders of business and industry.³

Sources: (1) Carnegie Classification of Institutions of Higher Education; (2) U.S. National Center for Education Statistics; (3) U.S. News & World Report

EMPLOYMENT CONCENTRATION



Lightcast 2025 Q1 Dataset

THE WORKFORCE YOU NEED



MINNEAPOLIS-ST. PAUL METRO AREA HAS A COMBINED WORKFORCE OF

2.4 MILLION

for employers to draw from

U.S. Census 2023 American Communities Survey



SINCE 2017, WISCONSIN HAS HAD A **NET INFLOW**

of people in the family formation years of ages 25-54.

Forward Analytics 2022

MINNEAPOLIS

MINNESOTA

UNPARALLELED ADVANTAGES

Wisconsin offers a business climate that's especially suited to energy, power, and controls.

Workforce

We deliver the second-highest concentration of experienced manufacturing workers in the U.S.,¹ often three to four times higher in critical industry sectors than competing states.

Academic excellence

We push the boundaries of theoretical and applied science--and prepare talent for the future. At more than \$1.7 billion annually,² our flagship University of Wisconsin-Madison ranks sixth in the U.S for research spending; the Universities of Wisconsin awarded 40,419 degrees in 2023.³

Low risk of natural disaster

We offer remarkably low risk for every imaginable type of disaster, from earthquakes and wildfires to climate threats like heat waves, tornadoes, and hurricanes. According to a WEDC analysis of FEMA data, Wisconsin has the second lowest risk of natural disasters of any state.

Sources: (1) Business Facilities Magazine, July/August 2024; (2) U.S. NCES Higher Education Research & Development Survey; (3) U.S. NCES IPEDS data; (Map) U.S. Census 2023 American Communities Survey

DULUTH/SUPERIOR
185,000*

2.5 hrs

1.5 hrs

EAU CLAIRE
114,000*

2 hrs

1.5 hrs

WAUSAU
103,000*

1.5 hrs

GREEN BAY
213,000*

1.5 hrs

APPLETON
158,000*

OSHKOSH-NEENAH
113,000*

FOND DU LAC
66,000*

1 hrs

LA CROSSE
91,000*

2.5 hrs

MADISON
465,000*

1.5 hrs

JANESVILLE-BELOIT
106,000*

1 hrs

SHEBOYGAN
74,000*

MILWAUKEE
1 Million*

ILLINOIS

CHICAGO



MILWAUKEE AND CHICAGO METRO AREAS HAVE A COMBINED WORKFORCE OF

7.2 MILLION

for employers to draw from

U.S. Census 2023 American Communities Survey

* Figures represent the working-age population for each Metropolitan Statistical Area

UNPARALLELED ADVANTAGES

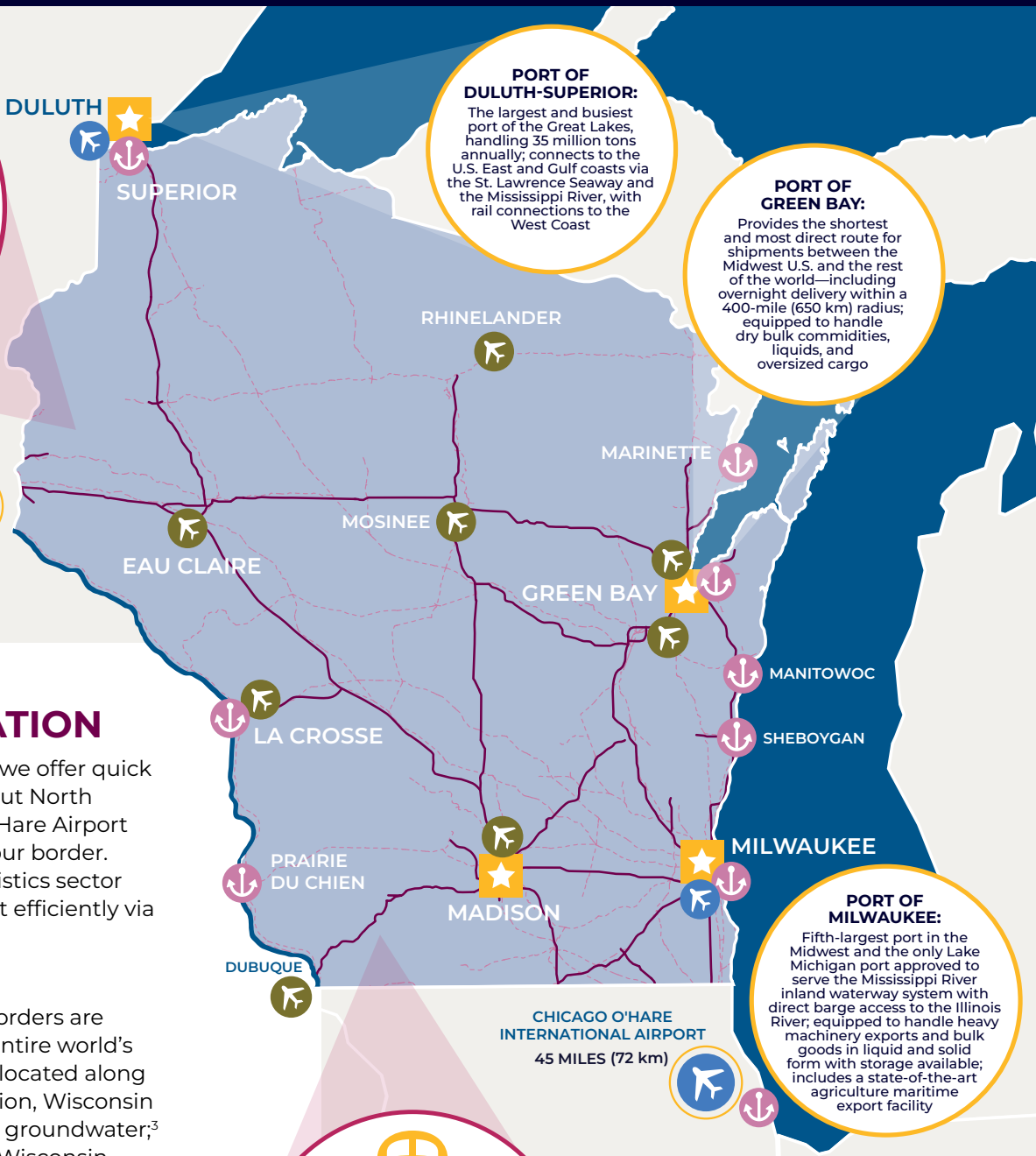
NEARLY 40% 
of U.S. manufacturers
ARE REACHABLE
WITHIN
A DAY'S DRIVE
U.S. Bureau of Labor Statistics

MINNEAPOLIS-SAINT PAUL INTERNATIONAL AIRPORT
 25 MILES (40 km)

PORT OF DULUTH-SUPERIOR:
 The largest and busiest port of the Great Lakes, handling 35 million tons annually; connects to the U.S. East and Gulf coasts via the St. Lawrence Seaway and the Mississippi River, with rail connections to the West Coast

PORT OF GREEN BAY:
 Provides the shortest and most direct route for shipments between the Midwest U.S. and the rest of the world—including overnight delivery within a 400-mile (650 km) radius; equipped to handle dry bulk commodities, liquids, and oversized cargo

PORT OF MILWAUKEE:
 Fifth-largest port in the Midwest and the only Lake Michigan port approved to serve the Mississippi River inland waterway system with direct barge access to the Illinois River; equipped to handle heavy machinery exports and bulk goods in liquid and solid form with storage available; includes a state-of-the-art agriculture maritime export facility



AN IDEAL LOCATION

From the center of the U.S., we offer quick access to markets throughout North America. Chicago and its O'Hare Airport are less than an hour from our border. And our well-developed logistics sector moves your goods to market efficiently via rail, road, air, or water.

Natural resources

Nearly 85% of Wisconsin's borders are water,¹ and one-fifth of the entire world's liquid surface fresh water is located along the state's borders.² In addition, Wisconsin has 1.2 quadrillion gallons of groundwater;³ this plentiful supply means Wisconsin businesses have no trouble getting access to the water they need for their operations.

Fiscal responsibility

From our fully funded state pension system⁴ to our extraordinary credit rating, we offer a politically stable, low-tax, low-regulation, business-welcoming environment.


WISCONSIN IS SERVED BY FOUR CLASS I RAILROADS
Surface Transportation Board

-  COMMERCIAL PORTS
-  COMMERCIAL AIRPORTS
-  FOREIGN TRADE ZONES
-  HIGHWAY SYSTEMS
-  RAILROAD LINES (SELECTED)

Sources: (1) WEDC analysis using a Wisconsin Department of Natural Resources map; (2) Wisconsin Water Facts, Wisconsin Water Library, UW-Madison; (3) Wisconsin Department of Natural Resources; (4) Wisconsin Department of Employee Trust Funds



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