

Midwest Clean Energy & Transportation Jobs Are Growing

Midwest clean energy and clean transportation jobs grew by almost 4 percent in 2022 and the industry is poised for continued growth thanks to federal climate investments passed last year.

QUICK FACTS

734,753

Clean energy jobs

+11.2%

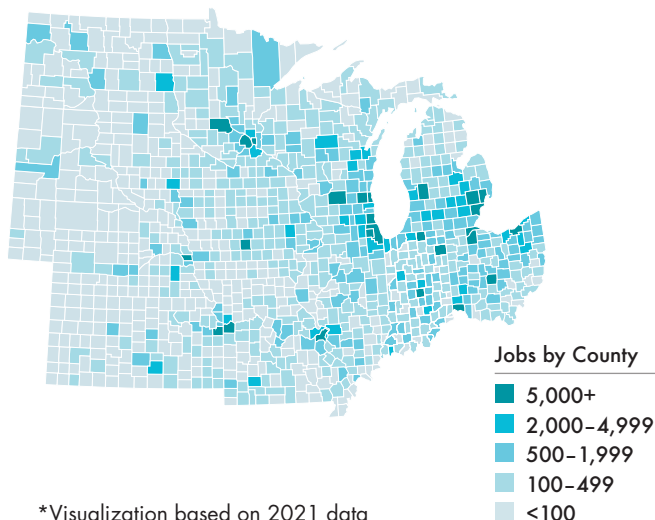
Growth of jobs in the clean transportation sector, the region's fastest-growing sector in 2022

3.6%

Growth in clean energy jobs in 2022

Clean energy and clean transportation companies employed more than 734,000 Midwesterners at the end of 2022, growing by more than 25,000 jobs, a nearly 4 percent increase from 2021. Clean energy is a significant part of the Midwest economy, with the sector adding jobs 50 percent faster than the region's overall economy. In fact, more than 4 times as many Midwesterners worked in clean energy than the number of lawyers, web developers, and real estate agents in the region combined. In 2022, clean energy jobs grew faster than the overall economy, and this growth is expected to continue as federal clean energy and vehicle incentives lead to new clean energy projects, a resurgence of domestic manufacturing, and lower upfront costs for homeowners to make energy efficiency improvements.

Clean Energy Jobs* in the Midwest



*Visualization based on 2021 data

The biggest sector of the Midwest clean energy industry is energy efficiency, comprising more than 66 percent of the region's clean energy workforce. The 487,285 energy efficiency workers in the Midwest manufacture ENERGY STAR-rated appliances, install efficient lighting, ventilation, and air conditioning (HVAC) systems, and install advanced building materials in homes and commercial buildings.

As more automakers and their suppliers continued to shift to electric vehicles, the clean transportation sector saw an increase in employment of over 11 percent in the Midwest. The sector added over 12,000 new jobs for a total of 119,786 workers. Electric vehicle related jobs accounted for most of the sector's growth.

Renewable energy jobs in solar (6% growth) and wind (2% growth) continue to see gains throughout the region while smaller, emerging subsectors like battery storage technologies (7% growth) and grid modernization (12% growth) are also continuing to expand.

Clean energy jobs are found in every corner of the region. While big cities like Chicago (85,415), Detroit (66,586), and Minneapolis (38,362) were some of the largest hubs for clean energy jobs, more than one in five — or more than 147,000 — jobs are in rural areas.

70.5%

Small businesses drive the Midwest's clean energy sector — in 2022, 70.5 percent of the region's clean energy businesses employed fewer than 20 individuals

11%

11 percent of the Midwest's clean energy workers were veterans in 2022

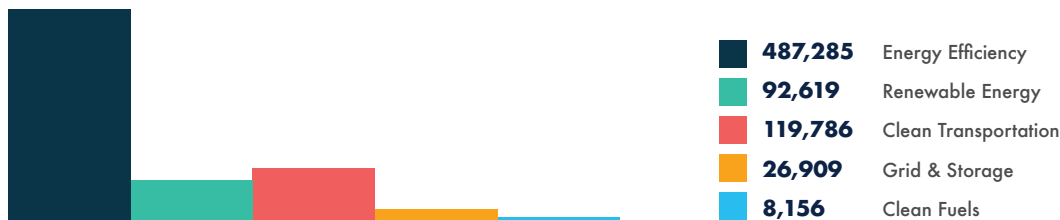


POLICIES MATTER

While recent federal policies, including investments and tax credits for energy efficiency upgrades, EV and solar purchases and new clean energy projects create strong tailwinds, there is still more to do. To meet the nation's climate goals of reducing climate emissions by 50 percent by 2030, improve equity in the clean energy economy and grow clean energy jobs, lawmakers and policymakers should:

- **Defend against attempts to roll back federal clean energy and vehicle investments:** Just one year after the passage of the Inflation Reduction Act, companies are investing over \$86 billion in large scale clean energy projects that will lead to the creation of over 74,000 jobs, thanks to the federal investments and incentives in the new law. Of the 210 projects announced, almost a quarter are in Midwestern states. Attempts to rollback provisions of the federal clean energy incentives threaten future clean energy job growth and economic opportunity.
- **Develop and fund federal and state workforce development programs.** One of the largest barriers to clean energy job growth is the challenge to fill open positions. Workforce training will be critical to the continued growth of the industry, as nearly 86 percent of employers in the region report at least some difficulty hiring workers.
- **Expand transmission to increase access for clean energy projects.** Federal and state governments must work with the Midwest regional transmission organizations to build more transmission. Without more transmission, many wind and solar projects will not be built.
- **Advance state-level clean energy policies.** It will be important for states throughout the Midwest to enact state policies that support renewable energy, energy efficiency and electric vehicles to leverage federal investment and help create thousands of new jobs.

JOBS BY SECTOR



2022 SUBSECTOR DETAILS



Energy Efficiency

100,087	Energy STAR & Efficient Lighting
111,388	Traditional HVAC
117,453	High Efficiency HVAC & Renewable H&C
103,293	Advanced Materials
55,075	Other



Grid & Storage

14,979	Clean Storage
4,520	Smart Grid
3,529	Micro Grid
3,893	Other Grid Modernization



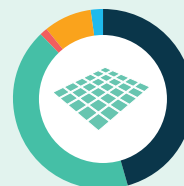
Clean Fuels

5,036	Other Ethanol/Non-Woody Biomass
3,129	Other Biofuels



Clean Transportation

54,198	Hybrid Electric Vehicles
25,031	Plug-In Hybrid Vehicles
34,251	Electric Vehicles
6,304	Hydrogen and Fuel-Cell Vehicles



Renewable Energy Generation

42,345	Solar
39,030	Wind
1,418	Geothermal
7,777	Bioenergy/CHP
2,058	Low-Impact Hydroelectric

Unless otherwise stated, the data and analyses presented in this report by Evergreen Climate Innovations and Environmental Entrepreneurs (E2) are based on data collected for the 2023 U.S. Energy Employment Report (2023 USEER), produced by the United States Department of Energy (DOE) and collected and analyzed by BW Research Partnership (BWRP).