A Return to Rapid Growth, with Clean Vehicle Jobs Driving Ahead

Midwest clean energy and clean transportation jobs grew by over 5 percent in 2021, with electric vehicle manufacturing jobs leading the way.

**Quick Facts**

714,323

Clean energy jobs

+24%

Growth of jobs in the clean transportation sector, the region’s fastest-growing sector in 2021

5.4%

Growth in clean energy jobs in 2021

Clean energy companies employed more than 714,000 Midwesterners at the end of 2021, over a 5 percent increase from 2020 and a return to growth after an unprecedented decline in 2020. Approximately 55 percent of the clean energy jobs lost during the COVID-19 economic downturn were regained. In 2021, clean energy jobs grew almost 40 percent faster than the overall economy. More Midwesterners worked in clean energy than the number of lawyers, accountants and auditors, web developers, and real estate agents in the region combined.

The biggest sector of the Midwest clean energy industry is energy efficiency, over 67 percent of the region’s clean energy workforce. The 479,626 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 advanced transportation sector saw an increase of 24 percent in the Midwest. The sector added 21,939 new jobs for a total of 112,591 workers. Hybrid, plug-in hybrid, and electric-vehicle sector jobs accounted for most of the sector’s growth.

Solar energy jobs, another highlight in the Midwest, grew by 8.4 percent to 39,934 workers.

Across all clean energy sectors, the majority of clean energy jobs in the Midwest were in manufacturing and construction.

69%

Small businesses drive the Midwest’s clean energy sector – in 2021, 69 percent of the region’s clean energy businesses employed fewer than 20 individuals

11%

Approximately 11 percent of the region’s clean energy workers were veterans

Learn more about the Midwest’s clean energy industry at [www.cleanjobsmidwest.com](http://www.cleanjobsmidwest.com)
Recent federal policies like the Inflation Reduction Act (IRA), the Infrastructure Investment and Jobs Act (IIJA), and the CHIPS and Science Act, as well as state policies like the Climate and Equitable Jobs Act in Illinois, make unprecedented investments in the clean energy economy and create promise for strong future growth in clean energy jobs.

Still, there is more to do to meet the nation’s climate goals of reducing climate emissions by 50 percent by 2030, improving equity in the clean energy economy, and growing clean energy jobs:

- **Implement recently passed federal policies to support a rapid and just transition to clean energy.** The IRA, IIJA, and the CHIPS and Science Act include a combined investment of hundreds of billions of dollars in the clean energy economy. Coordination across federal, state, and local agencies will be integral to maximize the effectiveness of this historic level of funding.

- **Develop and fund federal and state workforce development programs.** Workforce training will be critical to the continued growth of the industry, as over 80 percent of employers in the region report at least some difficulty hiring workers.

- **Expand our regional transmission grid and increase ease of access for clean energy projects.** The Midcontinent Independent System Operator (MISO)’s recent announcement of new transmission infrastructure will improve the region’s congested grid. More is needed from MISO and the Midwest’s other regional transmission organizations, PJM and the Southwest Power Pool, as many wind and solar projects will not be built if the transmission is not there to integrate them.

- **Advance state-level clean energy policies.** It will be important for Midwest states 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

- **Energy Efficiency**
  - Energy STAR & Efficient Lighting: 97,926
  - Traditional HVAC: 109,012
  - High Efficiency HVAC & Renewable H&C: 115,806
  - Advanced Materials: 102,611
  - Other: 54,270

- **Renewable Energy**
  - Solar: 88,898
  - Wind: 112,591

- **Advanced Transportation**
  - Hybrid Electric Vehicles: 51,638
  - Plug-In Hybrid Vehicles: 22,944
  - Electric Vehicles: 27,968
  - Natural Gas Vehicles: 4,901
  - Hydrogen and Fuel-Cell Vehicles: 5,140

- **Grid & Storage**
  - Clean Storage: 14,002
  - Smart Grid: 4,378
  - Micro Grid: 3,413
  - Other Grid Modernization: 3,487

- **Clean Fuels**
  - Solar: 39,934
  - Wind: 28,203
  - Geothermal: 1,174
  - Low-Impact Hydroelectric: 2,023

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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 2021 U.S. Energy Employment Report (2021 USEER), produced by the United States Department of Energy (DOE) and collected and analyzed by BW Research Partnership (BWRP).