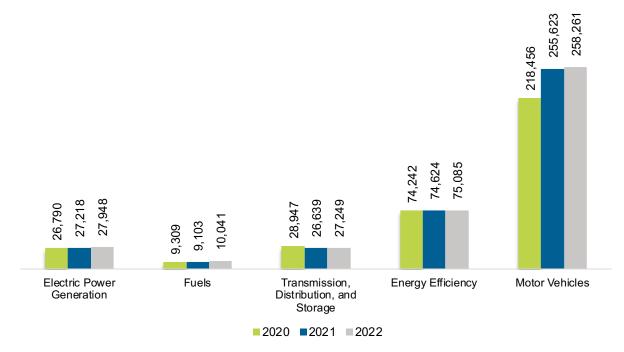
Michigan

U.S. ENERGY AND EMPLOYMENT REPORT — 2023

Overview

Michigan had 398,583 energy workers statewide in 2022, representing 4.9% of all U.S. energy jobs. Of these energy jobs, 27,948 were in electric power generation; 10,041 in fuels; 27,249 in transmission, distribution, and storage; 75,085 in energy efficiency; and 258,261 in motor vehicles. From 2021 to 2022, energy jobs in the state increased 5,376 jobs, or 1.4% (Figure MI-1). The energy sector in Michigan represented 9.2% of total state employment.

Figure MI-1. Employment by Major Energy Technology Application



Breakdown by Technology Applications

Electric Power Generation

As shown in Figure MI-2, the electric power generation sector employed 27,948 workers in Michigan, 3.2% of the national electricity total, and added 729 jobs from 2021 to 2022 (2.7%).

5,345
5,113
5,227
3,663
2,930
2,993
2,559
117

Solft Electricity

Traditional Hydroelectricity

Traditional Hydroelectricity

Natural Case

Coal Electricity

Figure MI-2. Electric Power Generation Employment by Detailed Technology Application

Utilities was the largest industry sector in the electric power generation sector, with 36.4% of jobs. Construction was second largest with 22.0% (Figure MI-3).

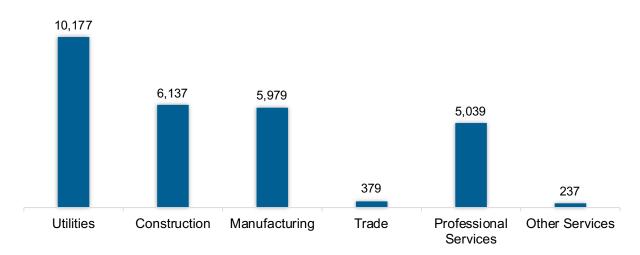


Figure MI-3. Electric Power Generation Employment by Industry Sector

Fuels

The Fuel sector employed 10,041 workers in Michigan, 1.0% of the national total in fuels (Figure MI-4). The sector gained 938 jobs and increased 10.3% from 2021 to 2022.

4,870

1,489

817

150

Coal Oil & Other Petroleum

Natural Gas Corn Ethanol Other Ethanol Woody Petroleum

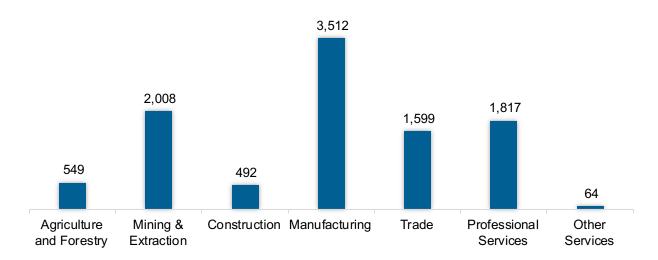
Non-woody Biomass

Biomass

Figure MI-4. Fuels Employment by Detailed Technology Application

Manufacturing jobs represented 35.0% of fuel jobs in Michigan (Figure MI-5).





Transmission, Distribution and Storage

The transmission, distribution, and storage (TDS) sector employed 27,249 workers in Michigan, 1.0% of the national TDS total (Figure MI-6). The sector gained 610 jobs and increased 2.3% from 2021 to 2022.

17,717

2,737

Traditional Storage Smart Grid Micro Grid & Other Transmission and Distribution

Figure MI-6. Transmission, Distribution and Storage Employment by Detailed Technology

Utilities was the largest proportion of TDS jobs in Michigan, accounting for 40.6% of the sector's jobs statewide (Figure MI-7).

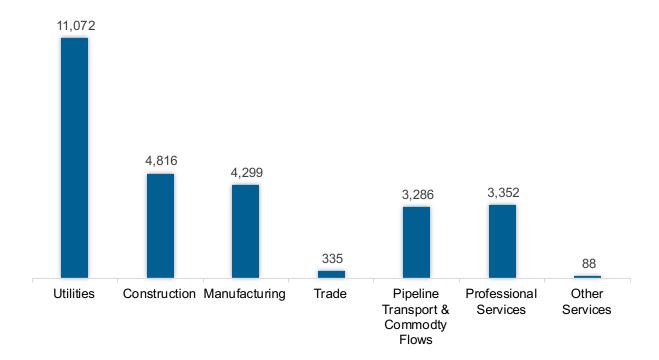


Figure MI-7. Transmission, Distribution and Storage Employment by Industry Sector

Energy Efficiency

The energy efficiency (EE) sector employed 75,085 workers in Michigan, 3.4% of the national EE total. The EE sector added 461 jobs and increased 0.6% from 2021 to 2022 (Figure MI-8).

13,955

Insulation

40,047

40,047

11,833

3,059

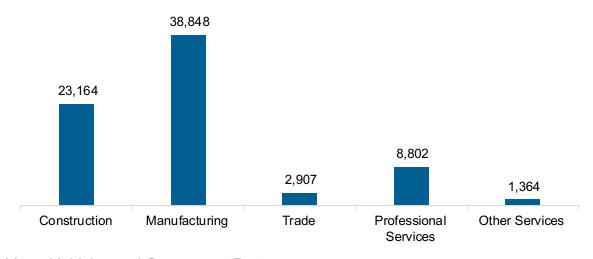
Energy Star & Traditional HVAC High Efficiency & Advanced Materials and Insulation

Other Heating & Cooling

Figure MI-8. Energy Efficiency Employment by Detailed Technology Application

Energy efficiency employment was primarily found in the manufacturing industry (Figure MI-9).





Motor Vehicles and Component Parts

The motor vehicles and component sector employed 258,261 workers in Michigan, 9.9% of the national total for the sector. Motor vehicles and component parts added 2,638 jobs and increased 1.0% from 2021 to 2022. Manufacturing is the largest proportion of motor vehicle jobs (Figure MI-10).

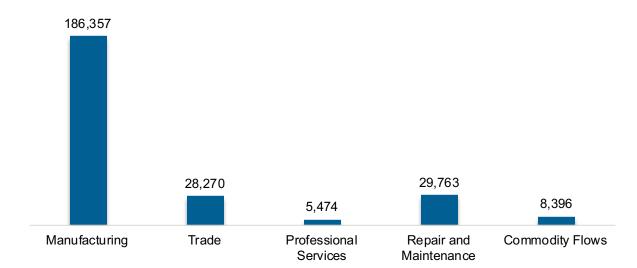


Figure MI-10. Motor Vehicle Employment by Industry Sector

Clean Energy Jobs

In 2022, there were 137,479 jobs in clean energy in Michigan if traditional transmission and distribution is included and 119,623 jobs if it is not.²³ These increased under either definition, growing 3.6% with traditional transmission and distribution and 3.8% without.

Employer Perspectives

Expected Growth

Employers in Michigan are similarly optimistic than their peers across the country about energy sector job growth over the next year (Table MI-1).

Table MI-1 Expected Growth by Major Technology Application

Technology	State Expected Growth Next 12 Months (percent)	U.S. Expected Growth Next 12 Months (percent)	
Electric Power Generation	6.0	6.0	
Electric Power Transmission, Distribution, and Storage	5.0	3.9	
Energy Efficiency	6.2	6.4	
Fuels	3.8	1.6	
Motor Vehicles	5.8	5.5	

²³ The definition of "clean energy" at the state level differs from the national definition due to data availability. For more information see Appendix A of the national U.S. Energy and Employment Report.

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Hiring Difficulty

Employers in Michigan reported 46% overall hiring difficulty (Table MI-2).

Table MI-2 Hiring Difficulty by Major Technology Application

Hiring Difficulty	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Did not hire (percent)	Overall Hiring Difficulty
Overall	22	24	7	47	46