

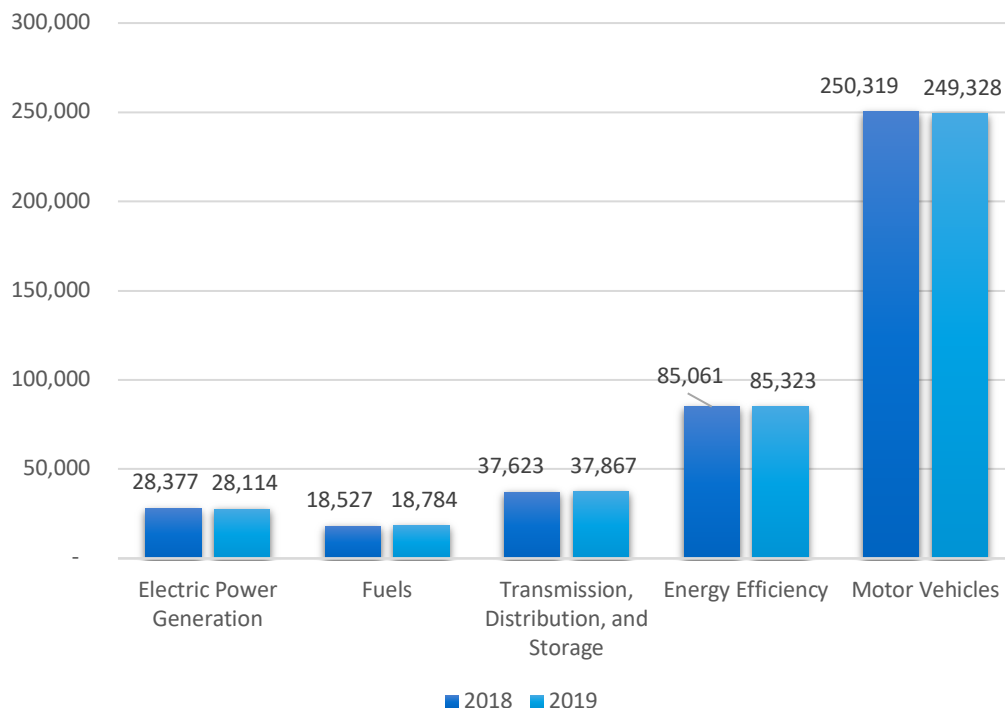
Michigan

ENERGY AND EMPLOYMENT — 2020

Overview

Michigan has a low concentration of energy employment, with 84,764 Traditional Energy workers statewide (representing 2.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 28,114 are in Electric Power Generation, 18,784 are in Fuels, and 37,867 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Michigan is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Michigan has an additional 85,323 jobs in Energy Efficiency (3.6 percent of all U.S. Energy Efficiency jobs) and 249,328 jobs in Motor Vehicles (9.8 percent of all U.S. Motor Vehicle jobs).

Figure MI-1.
Employment by Major Energy Technology Application



Overall, Traditional Energy jobs grew by 0.3 percent since the 2019 report, increasing by 236 jobs over the period. Energy Efficiency jobs added 262 jobs (0.3 percent) and motor vehicles lost 991 jobs (-0.4 percent).

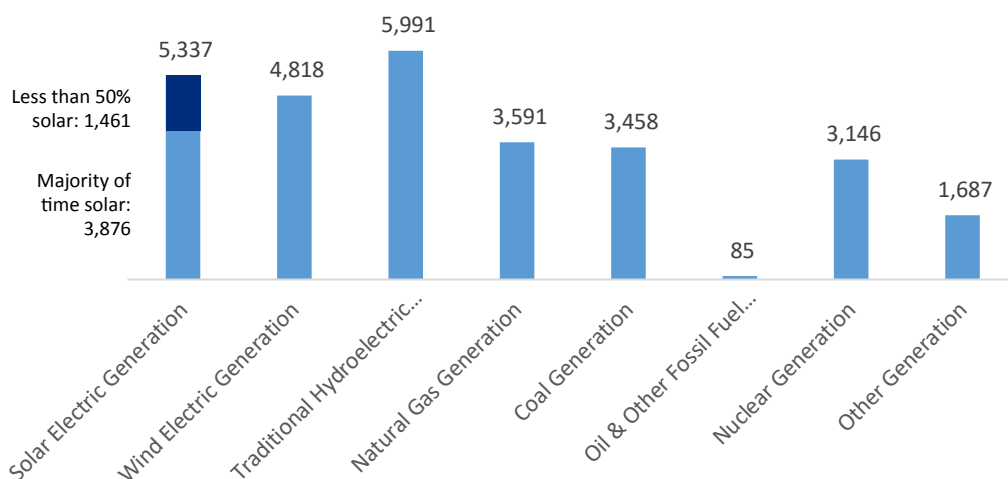
Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 28,114 workers in Michigan, 3.2 percent of the national total and losing 264 jobs over the past year (-0.9 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 7,135 jobs (down -3.5 percent), followed by traditional hydroelectric generation at 5,991 jobs (down -2.9 percent).

Figure MI-2.

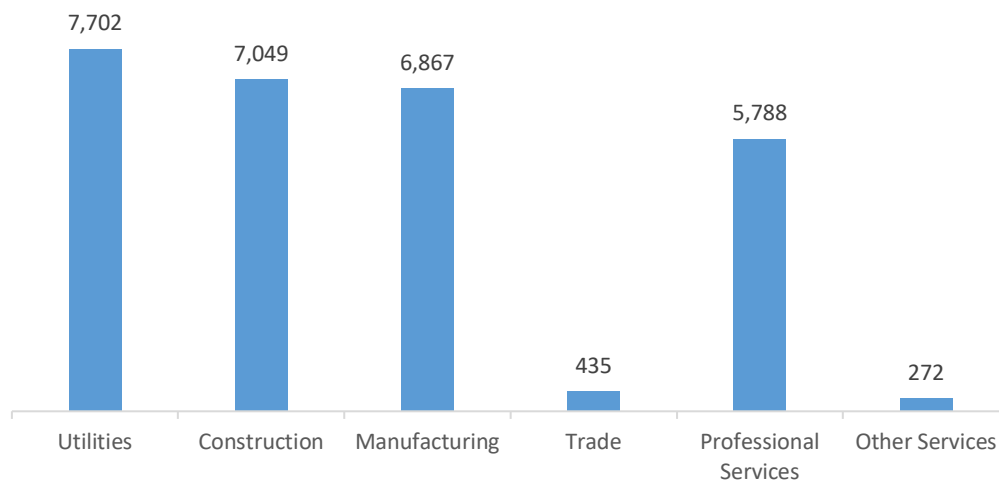
Electric Power Generation Employment by Detailed Technology Application



Utilities are the largest industry sector in Electric Power Generation, with 27.4 percent of jobs. Construction is next with 25.1 percent.

Figure MI-3.

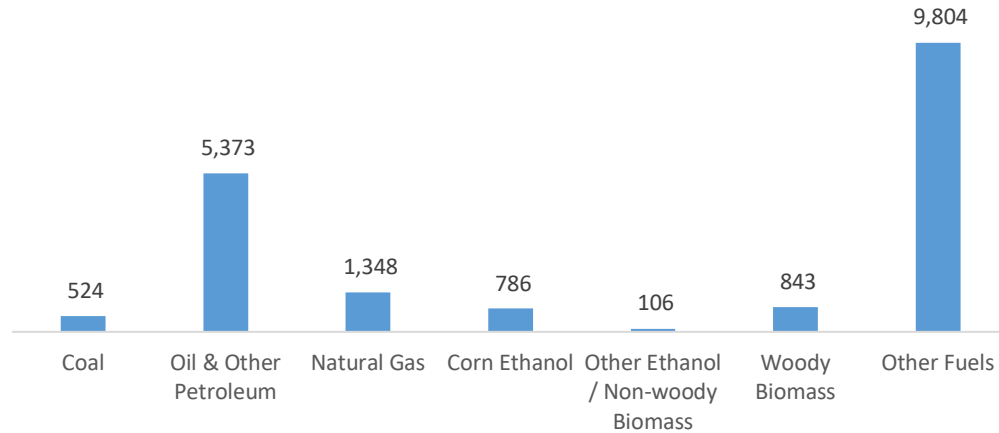
Electric Power Generation by Industry Sector



FUELS

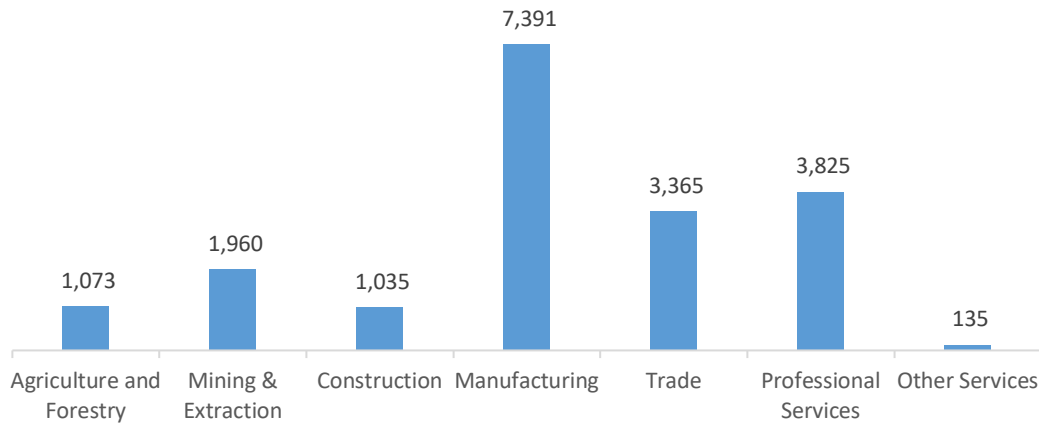
Fuels employs 18,784 workers in Michigan, 1.6 percent of the national total, up 1.4 percent over the past year. Other fuels makes up the largest segment of employment related to Fuels.

Figure MI-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 39.3 percent of Fuels jobs in Michigan.

Figure MI-5.
Fuels Employment by Industry Sector

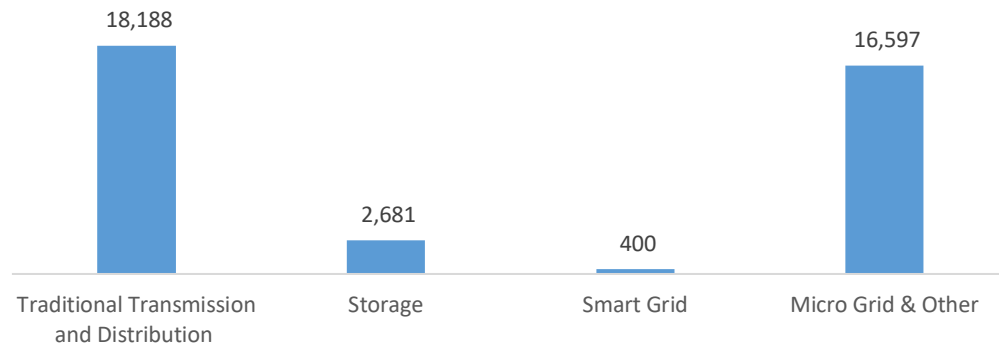


TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 37,867 workers in Michigan, 2.7 percent of the national total, up 0.6 percent or 244 jobs since the 2018 report.

Figure MI-6.

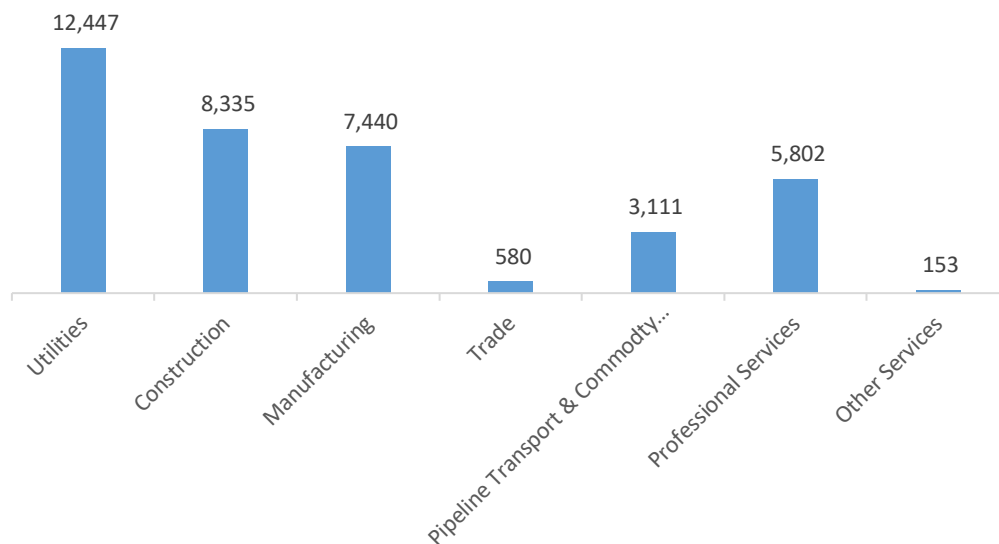
Transmission, Distribution and Storage Employment by Detailed Technology



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Michigan, with 32.9 percent of such jobs statewide.

Figure MI-7.

Transmission, Distribution and Storage Employment by Industry Sector

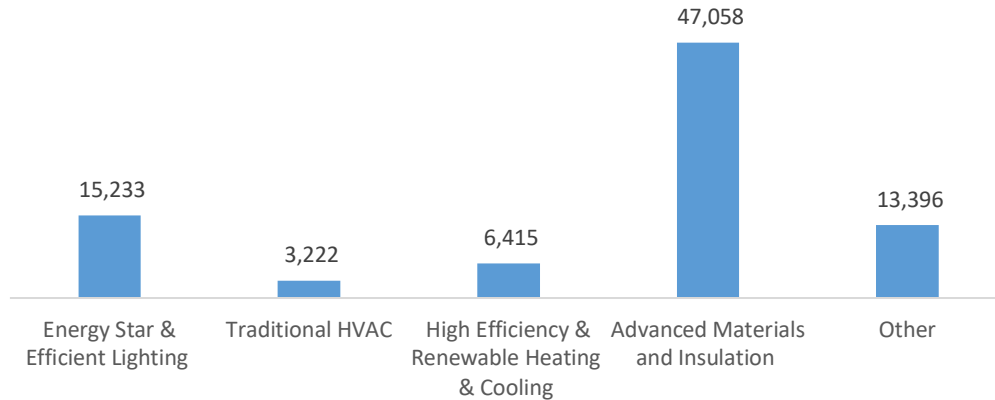


ENERGY EFFICIENCY

The 85,323 Energy Efficiency jobs in Michigan represent 3.6 percent of all U.S. Energy Efficiency jobs, adding 262 jobs (0.3 percent) since last year. The largest number of these employees work in (advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting.

Figure MI-8.

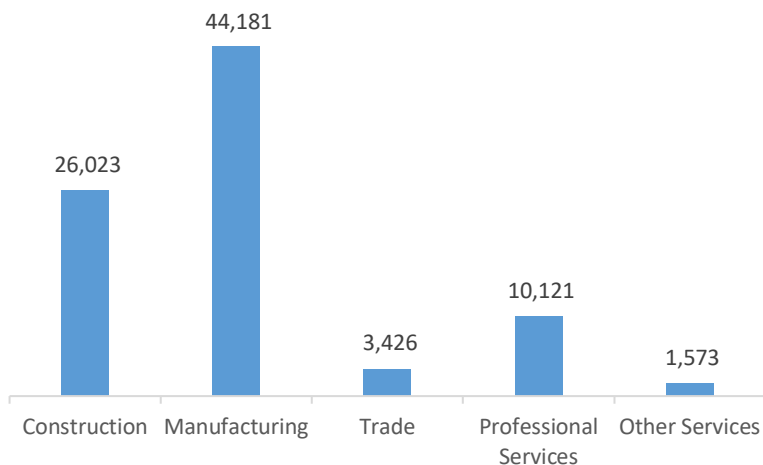
Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the manufacturing industry.

Figure MI-9.

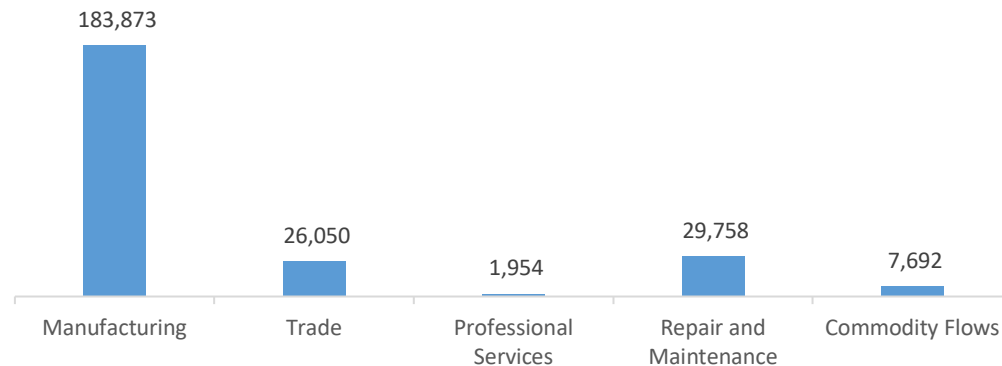
Energy Efficiency Employment by Industry Sector



MOTOR VEHICLES

Motor Vehicle employment accounts for 249,328 jobs in Michigan, down 991 jobs over the past year (-0.4 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure MI-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

EMPLOYER GROWTH

Employers in Michigan are similarly optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (3.3 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 3,377 jobs in Energy Efficiency (4.0 percent) and Motor Vehicles employers expect to add 5,533 jobs (2.2 percent) over the next year.

Table MI-1
Projected Growth by Major Technology Application.

Technology	State Projected Growth Next 12 Months (percent)	U.S. Projected Growth Next 12 Months (percent)
Electric Power Generation	5.1	4.8
Electric Power Transmission, Distribution, and Storage	1.9	3.5
Energy Efficiency	4.0	3.0
Fuels	3.4	1.7
Motor Vehicles	2.2	3.1

HIRING DIFFICULTY

Over the last year, 27.1 percent of energy-related employers in Michigan hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table MI-2
Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	11.3	52.8	35.9
Electric Power Transmission, Distribution, and Storage	11.3	57.8	30.9
Energy Efficiency	51.4	38.9	9.6
Fuels	26.9	45.0	28.1
Motor Vehicles	36.3	53.4	10.2

Employers in Michigan gave the following as the top three reasons for their reported difficulty:

1. Difficulty finding industry-specific knowledge, skills, and interest
2. Competition/ small applicant pool
3. Insufficient non-technical skills (work ethic, dependability, critical thinking)

Employers reported the following as the three most difficult occupations to hire for:

1. Technician or mechanical support — \$21.25 median hourly wage
2. Engineers/scientists — \$37.16 median hourly wage
3. Management (directors, supervisors, vice presidents) — \$43.21 median hourly wage