

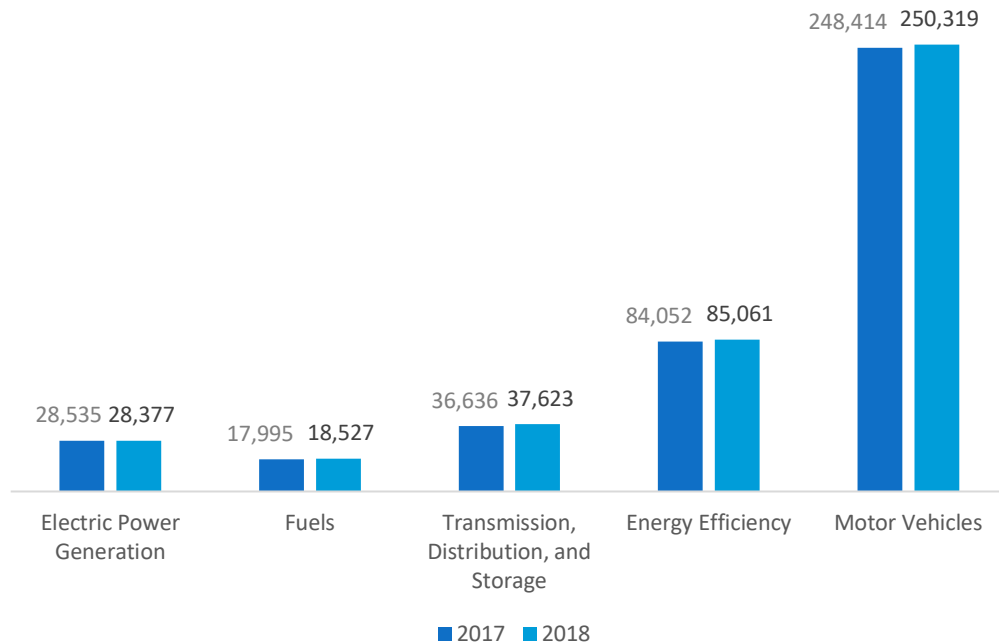
# Michigan

## ENERGY AND EMPLOYMENT — 2019

### Overview

Michigan has a low concentration of energy employment, with 84,528 Traditional Energy workers statewide (representing 2.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 28,377 are in Electric Power Generation, 18,527 are in Fuels, and 37,623 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 85,061 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 250,319 jobs in Motor Vehicles (9.9 percent of all U.S. Motor Vehicle jobs).

**Figure MI-1.**  
Employment by Major Energy Technology Application



Overall, Traditional Energy jobs grew by 1.6 percent since the 2018 report, increasing by 1,362 jobs over the period. Energy Efficiency jobs added 1,009 jobs (1.2 percent) and motor vehicles added 1,905 jobs (0.8 percent).

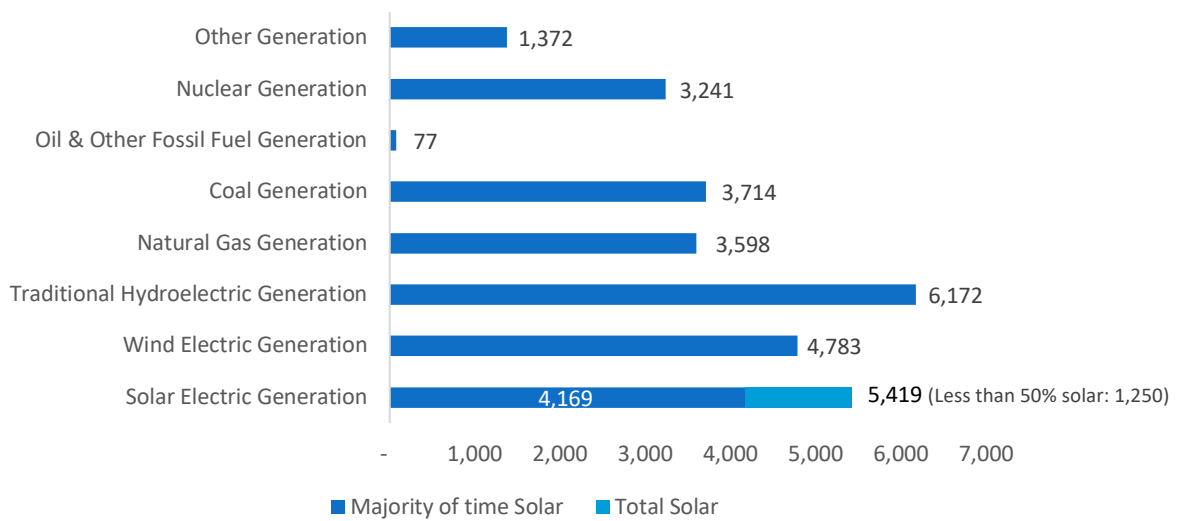
## Breakdown by Technology Applications

### Electric Power Generation

Electric Power Generation employs 28,377 workers in Michigan, 3.2 percent of the national total and losing 158 jobs over the past year (-0.6 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 7,390 jobs (down 0.2 percent), followed by traditional hydroelectric generation at 6,172 jobs (down 4.8 percent).

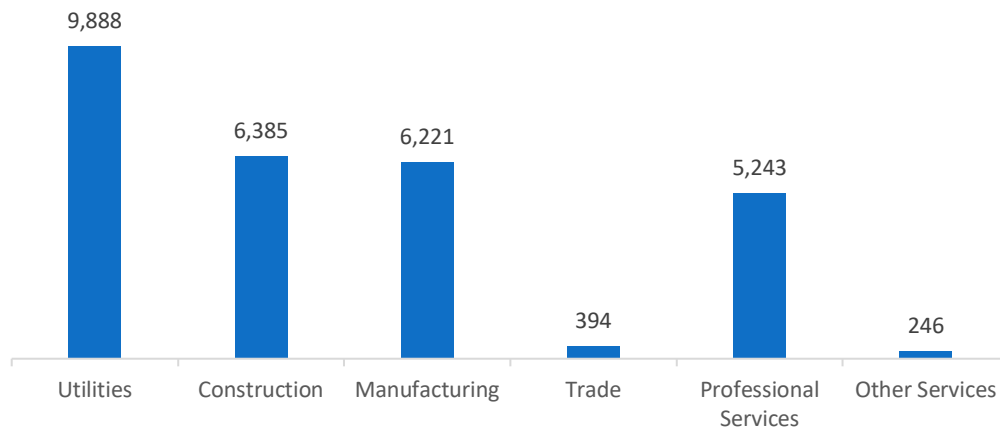
**Figure MI-2.**

Electric Power Generation Employment by Detailed Technology Application



Utilities are the largest industry sector in Electric Power Generation, with 34.8 percent of jobs. Construction is next with 22.5 percent.

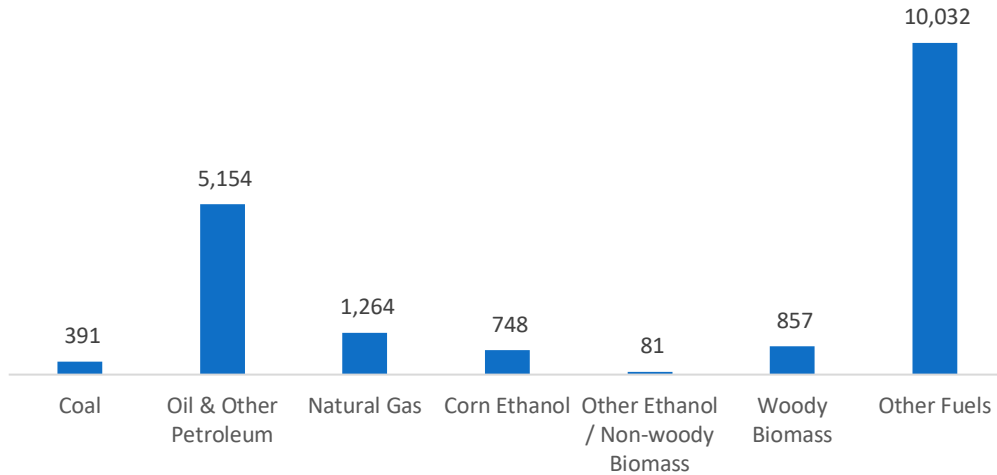
**Figure MI-3.**



## Fuels

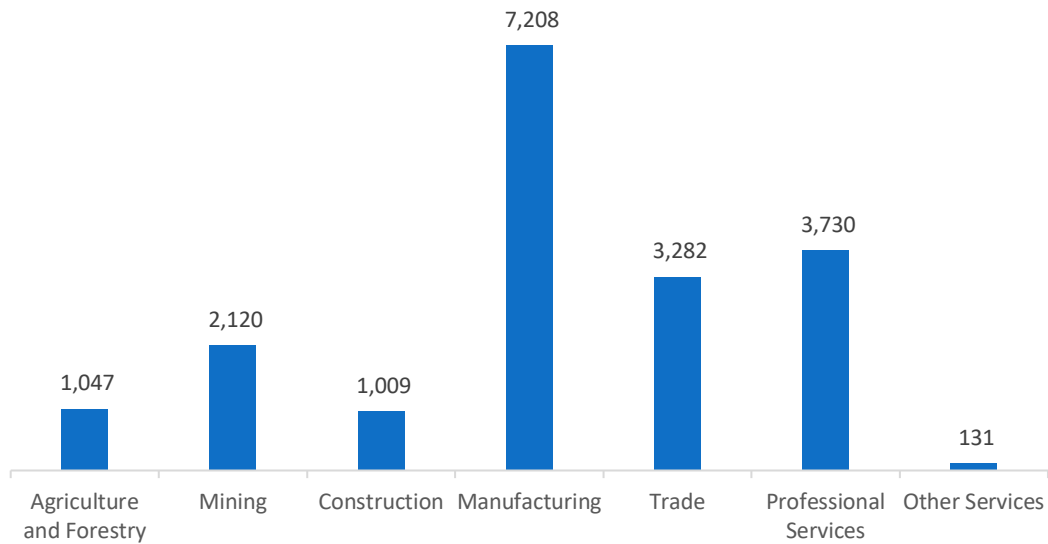
Fuels employs 18,527 workers in Michigan, 1.6 percent of the national total, up 3.0 percent over the past year. Other fuels makes up the largest segment of employment related to Fuels.

**Figure MI-4.**  
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 38.9 percent of Fuels jobs in Michigan.

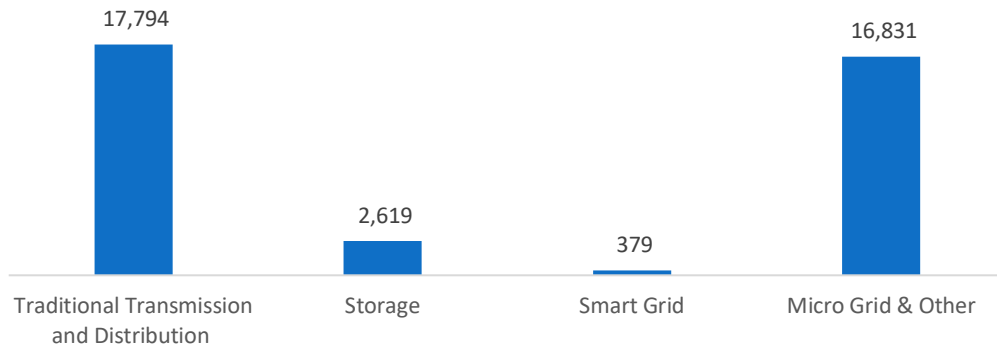
**Figure MI-5.**  
Fuels Employment by Industry Sector



## Transmission, Distribution and Storage

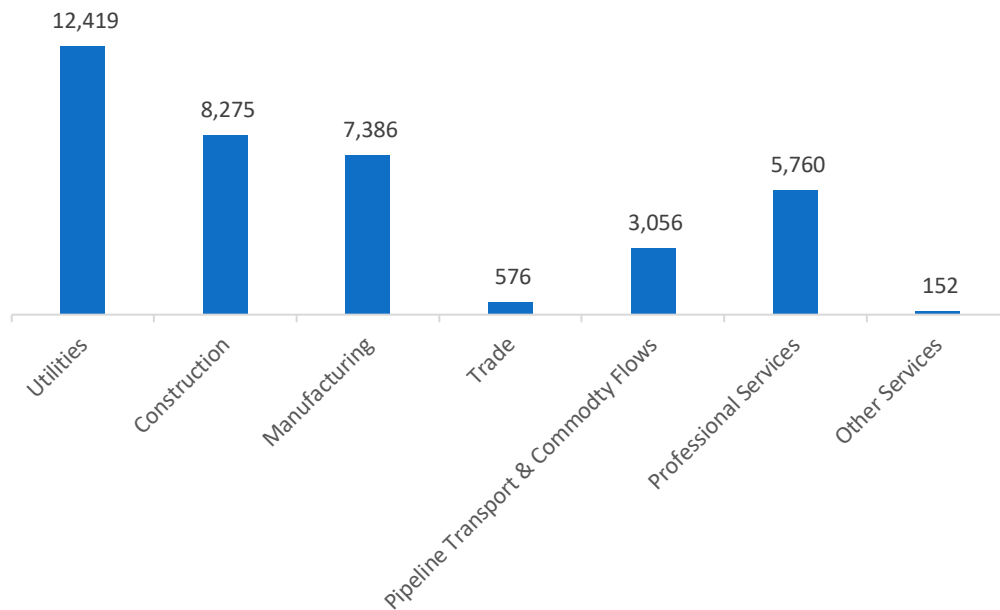
Transmission, Distribution, and Storage employs 37,623 workers in Michigan, 2.8 percent of the national total, up 2.7 percent or 987 jobs since the 2018 report.

**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 33.0 percent of such jobs statewide.

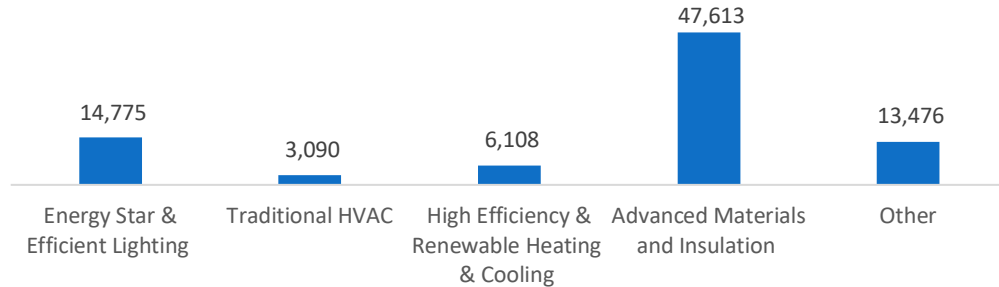
**Figure MI-7.**  
Transmission, Distribution and Storage Employment by Industry Sector



## Energy Efficiency

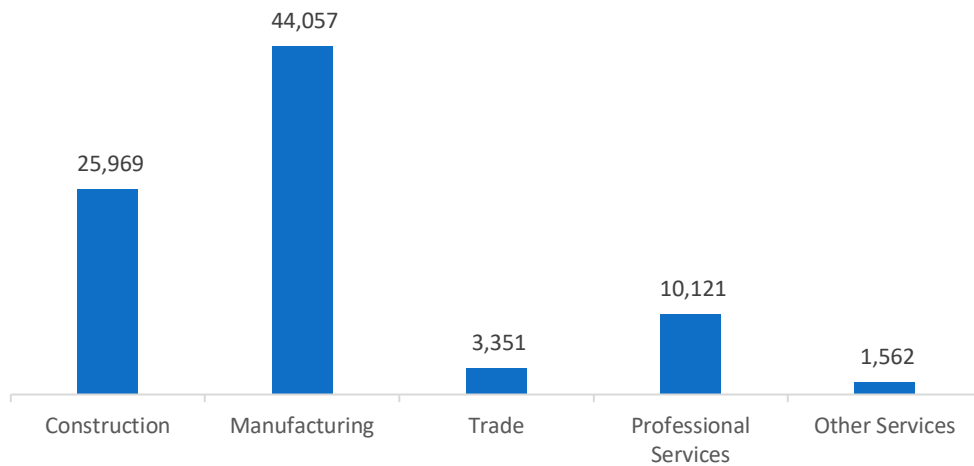
The 85,061 Energy Efficiency jobs in Michigan represent 3.7 percent of all U.S. Energy Efficiency jobs, adding 1,009 jobs (1.2 percent) since last year. The largest number of these employees work in advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting.

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



Energy Efficiency employment is primarily found in the manufacturing industry.

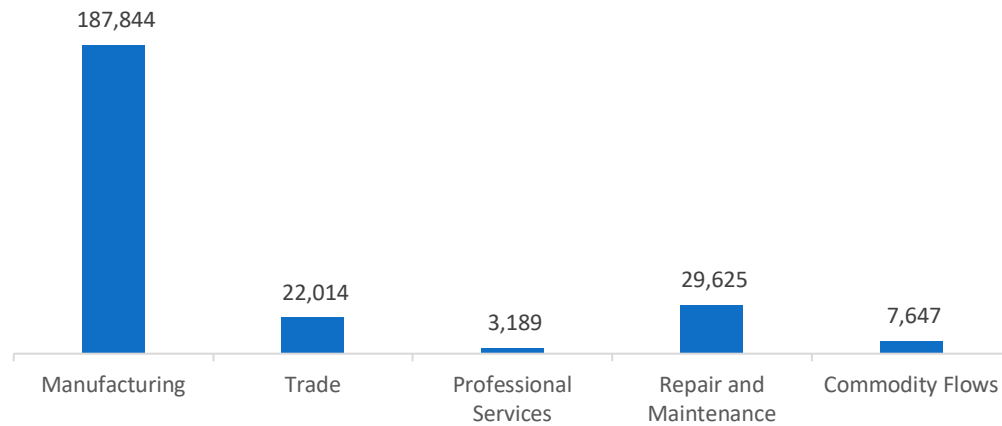
**Figure MI-9.**  
Energy Efficiency Employment by Industry Sector



## Motor Vehicles

Motor Vehicle employment accounts for 250,319 jobs in Michigan, up 1,905 jobs over the past year (0.8 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 more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (6.0 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 6,969 jobs in Energy Efficiency (8.2 percent) and Motor Vehicles employers expect to add 5,567 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	9.3	7.1
Electric Power Transmission, Distribution and Storage	4.8	3.2
Energy Efficiency	8.2	7.8
Fuels	3.2	3.0
Motor Vehicles	2.2	2.2

## Hiring Difficulty

Over the last year, 67.7 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 (%)		Somewhat Difficult (%)	
	State	National	State	National
Electric Power Generation	14.3	20.7	50.0	54.8
Electric Power Transmission, Distribution and Storage	12.5	21.9	62.5	46.1
Energy Efficiency	30.0	21.3	60.0	48.1
Fuels	50.0	37.9	--	43.0
Motor Vehicles	25.0	30.0	41.7	46.4

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

1. Lack of experience, training, or technical skills
2. Insufficient non-technical skills (work ethic, dependability, critical thinking)
3. Competition/ small applicant pool

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

1. Technician or mechanical support – \$23.95 median hourly wage
2. Electrician/construction laborers – \$21.67 median hourly wage
3. Sales, marketing, or customer service – \$34.01 median hourly wage