

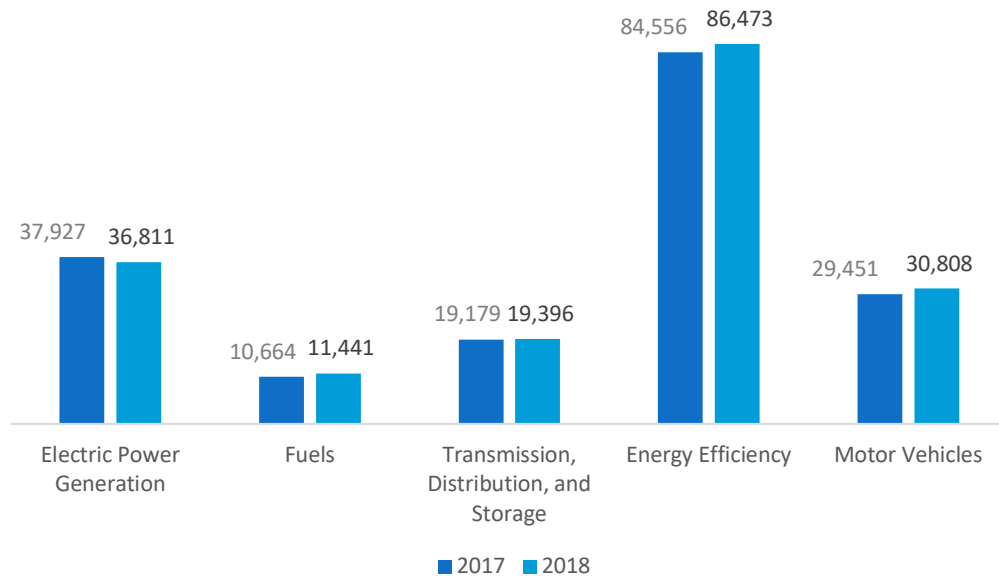
Massachusetts

ENERGY AND EMPLOYMENT – 2019

Overview

Massachusetts has a low concentration of energy employment, with 67,648 Traditional Energy workers statewide (representing 2.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 36,811 are in Electric Power Generation, 11,441 are in Fuels, and 19,396 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Massachusetts is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Massachusetts has an additional 86,473 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 30,808 jobs in Motor Vehicles (1.2 percent of all U.S. Motor Vehicle jobs).

Figure MA-1.
Employment by Major Energy Technology Application



Overall, Traditional Energy jobs declined by 0.2 percent since the 2018 report, decreasing by 123 jobs over the period. Energy Efficiency jobs added 1,917 jobs (2.3 percent) and motor vehicles added 1,357 jobs (4.6 percent).

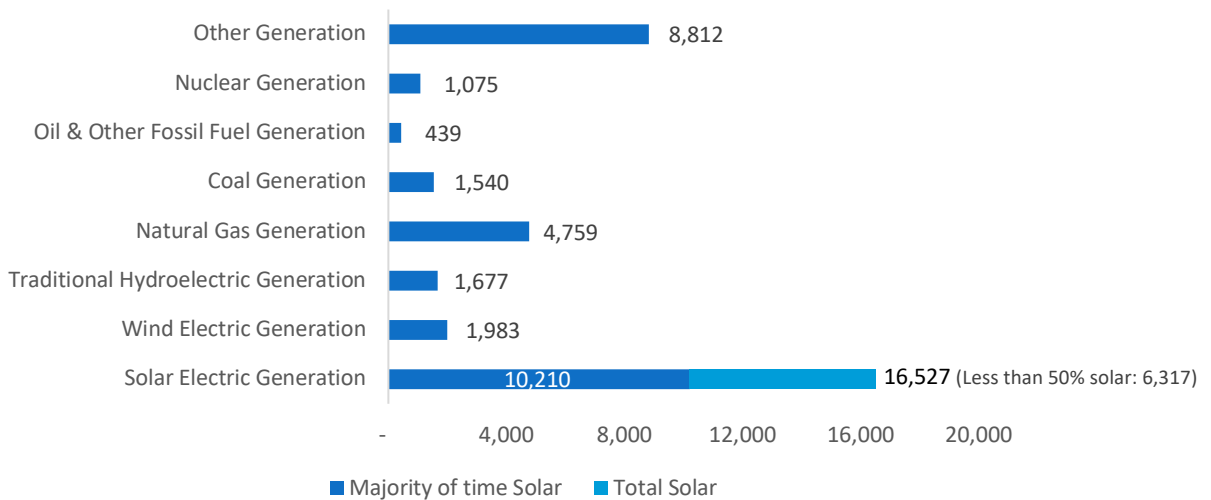
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 36,811 workers in Massachusetts, 4.2 percent of the national total and losing 1,116 jobs over the past year (-2.9 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 16,527 jobs (down 7.5 percent), followed by traditional fossil fuel generation at 6,738 jobs (up 2.9 percent).

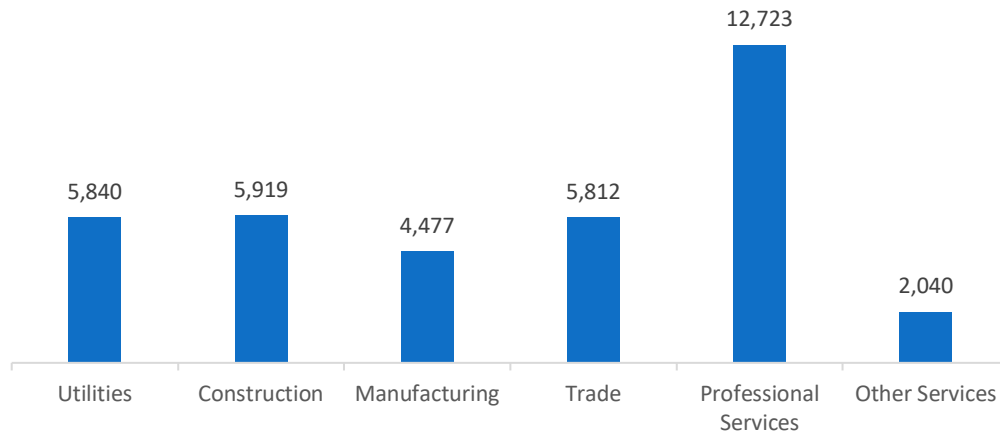
Figure MA-2.

Electric Power Generation Employment by Detailed Technology Application



Professional and business services are the largest industry sector in Electric Power Generation, with 34.6 percent of jobs. Construction is next with 16.1 percent.

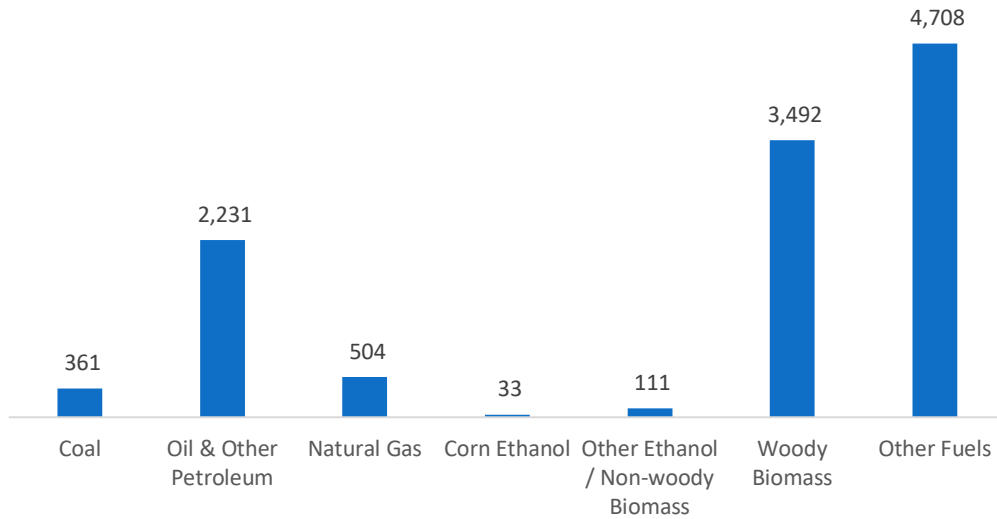
Figure MA-3.



Fuels

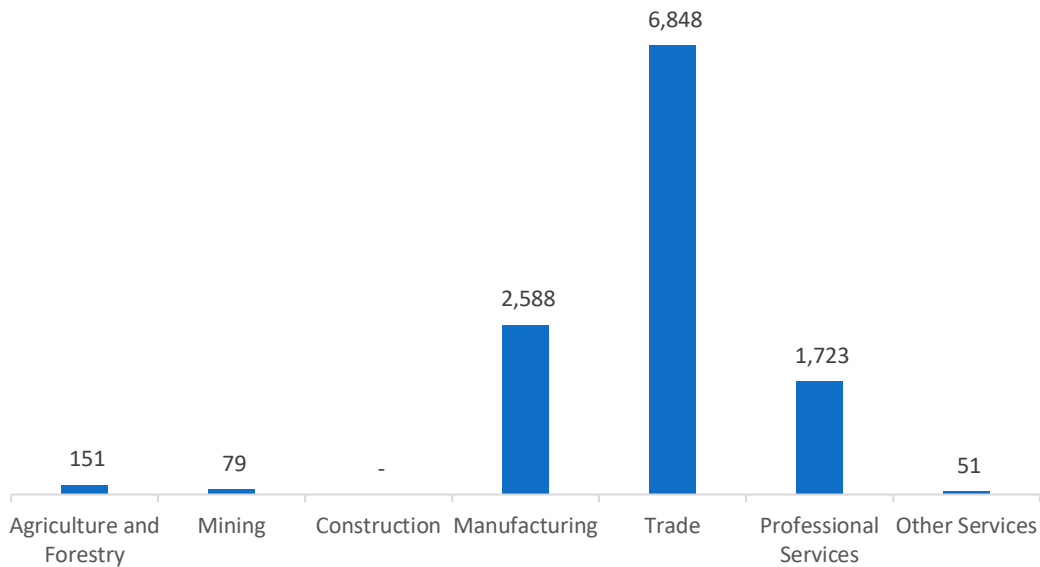
Fuels employs 11,441 workers in Massachusetts, 1.0 percent of the national total, up 7.3 percent over the past year. Other fuels makes up the largest segment of employment related to Fuels.

Figure MA-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 59.9 percent of Fuels jobs in Massachusetts.

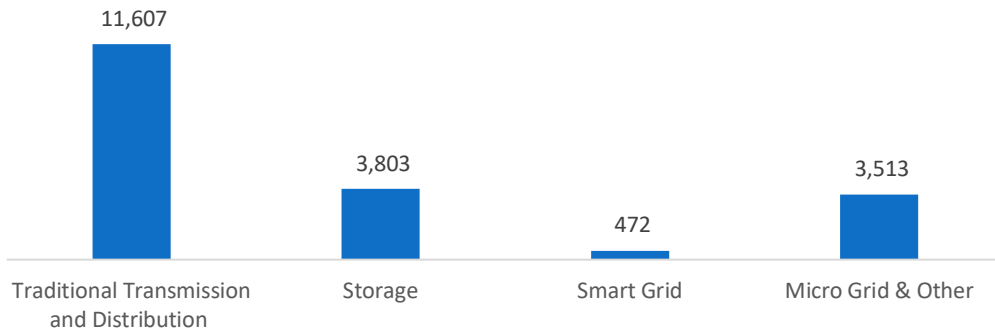
Figure MA-5.
Fuels Employment by Industry Sector



Transmission, Distribution and Storage

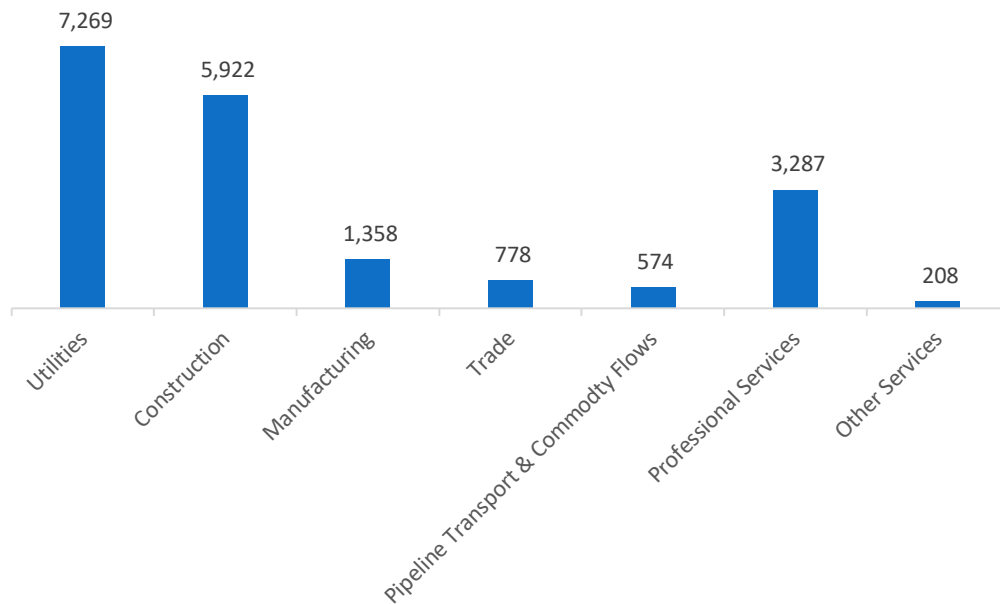
Transmission, Distribution, and Storage employs 19,396 workers in Massachusetts, 1.4 percent of the national total, up 1.1 percent or 216 jobs since the 2018 report.

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



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Massachusetts, with 37.5 percent of such jobs statewide.

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

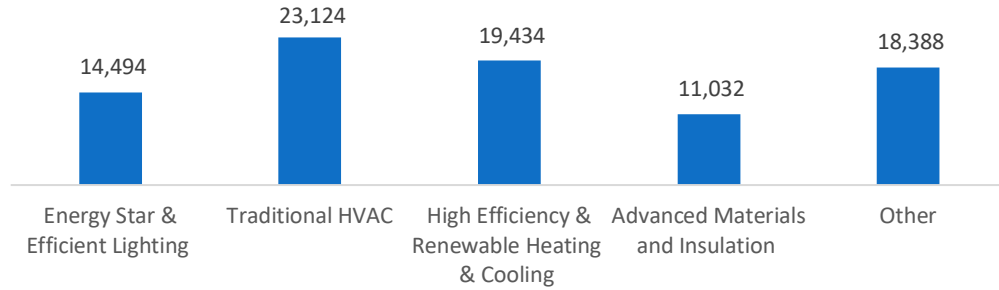


Energy Efficiency

The 86,473 Energy Efficiency jobs in Massachusetts represent 3.7 percent of all U.S. Energy Efficiency jobs, adding 1,917 jobs (2.3 percent) since last year. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling.

Figure MA-8.

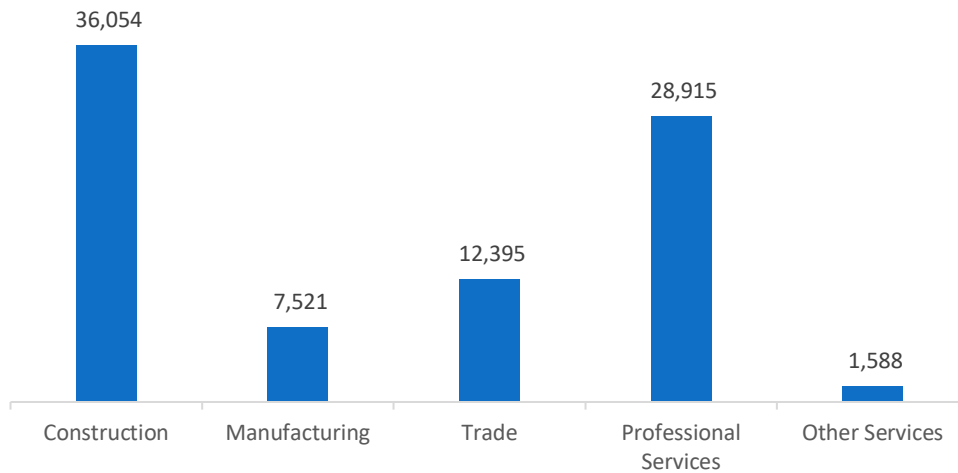
Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

Figure MA-9.

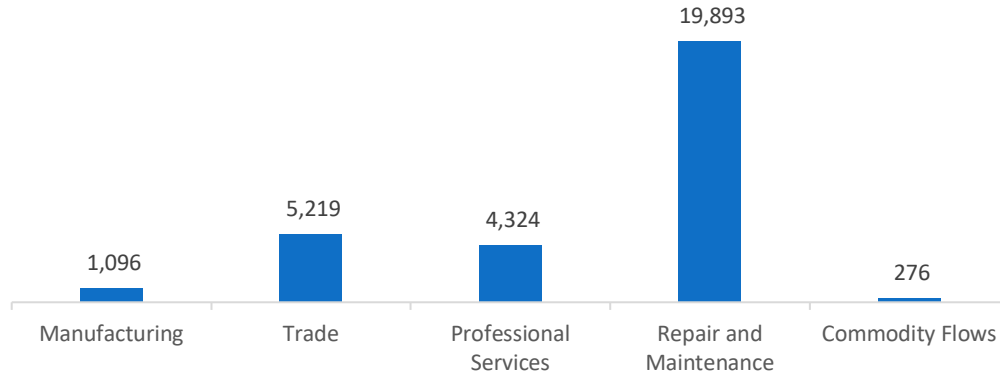
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 30,808 jobs in Massachusetts, up 1,357 jobs over the past year (4.6 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Employer Growth

Employers in Massachusetts are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (4.9 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 1,534 jobs in Energy Efficiency (1.8 percent) and Motor Vehicles employers expect to add 918 jobs (3.0 percent) over the next year.

Table MA-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	7.6	7.1
Electric Power Transmission, Distribution and Storage	0.1	3.2
Energy Efficiency	1.8	7.8
Fuels	4.2	3.0
Motor Vehicles	3.0	2.2

Hiring Difficulty

Over the last year, 46.2 percent of energy-related employers in Massachusetts hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

Table MA-2
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (%)		Somewhat Difficult (%)	
	State	National	State	National
Electric Power Generation	23.4	20.7	61.7	54.8
Electric Power Transmission, Distribution and Storage	20.0	21.9	40.0	46.1
Energy Efficiency	18.8	21.3	68.8	48.1
Fuels	75.0	37.9	25.0	43.0
Motor Vehicles	--	30.0	80.0	46.4

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

1. Lack of experience, training, or technical skills
2. Insufficient qualifications (certifications or education)
3. Difficulty finding industry-specific knowledge, skills, and interest

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

1. Management (directors, supervisors, vice presidents) – \$47.98 median hourly wage
2. Sales, marketing, or customer service – \$58.71 median hourly wage
3. Electrician/construction laborers – \$29.11 median hourly wage