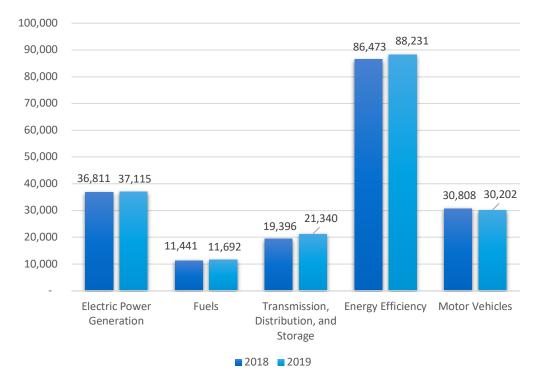
# Massachusetts

ENERGY AND EMPLOYMENT - 2020

## **Overview**

Massachusetts has a low concentration of energy employment, with 70,147 Traditional Energy workers statewide (representing 2.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 37,115 are in Electric Power Generation, 11,692 are in Fuels, and 21,340 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 88,231 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 30,202 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 grew by 1.8 percent since the 2019 report, increasing by 1,269 jobs over the period. Energy Efficiency jobs added 1,758 jobs (2.0 percent) and motor vehicles lost 606 jobs (-2.0 percent).

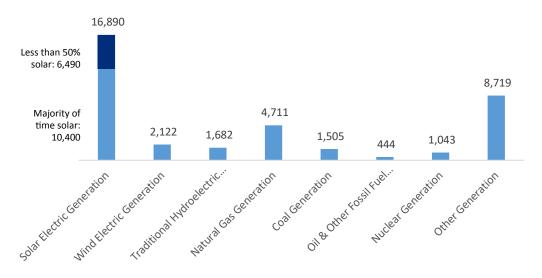
### **Breakdown by Technology Applications**

#### **ELECTRIC POWER GENERATION**

Electric Power Generation employs 37,115 workers in Massachusetts, 4.2 percent of the national total and adding 303 jobs over the past year (0.8 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 16,890 jobs (up 2.2 percent), followed by traditional fossil fuel generation at 6,659 jobs (down -1.2 percent).

Figure MA-2.

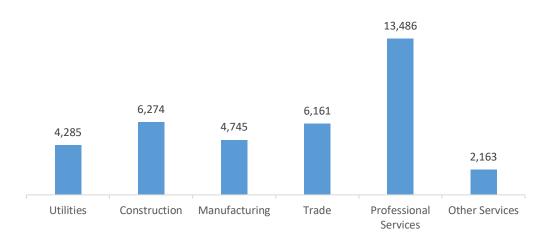




Professional and business services are the largest industry sector in Electric Power Generation, with 36.3 percent of jobs. Construction is next with 16.9 percent.

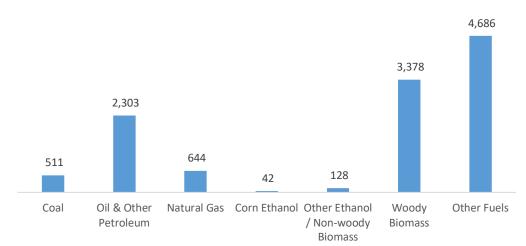
#### Figure MA-3.

**Electric Power Generation by Industry Sector** 



#### FUELS

Fuels employs 11,692 workers in Massachusetts, 1.0 percent of the national total, up 2.2 percent over the past year. Other fuels makes up the largest segment of employment related to Fuels.





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

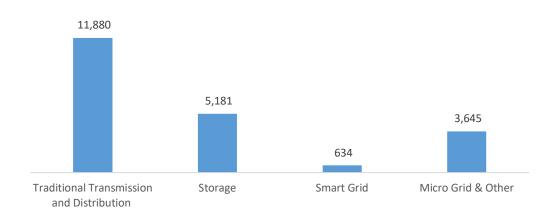
#### Figure MA-5. Fuels Employment by Industry Sector



#### TRANSMISSION, DISTRIBUTION AND STORAGE

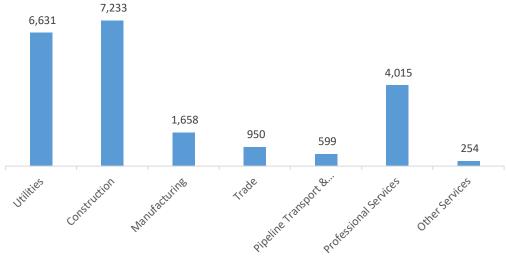
Transmission, Distribution, and Storage employs 21,340 workers in Massachusetts, 1.5 percent of the national total, up 3.5 percent or 714 jobs since the 2018 report.

#### 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 33.9 percent of such jobs statewide.

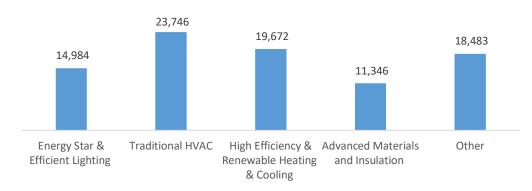




#### ENERGY EFFICIENCY

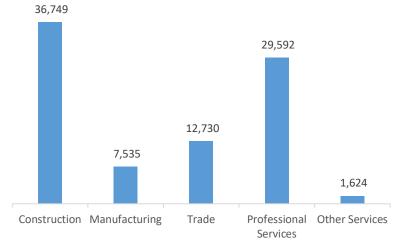
The 88,231 Energy Efficiency jobs in Massachusetts represent 3.7 percent of all U.S. Energy Efficiency jobs, adding 1,758 jobs (2.0 percent) since last year. The largest number of these employees work in (traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling.

#### Figure MA-8. Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.



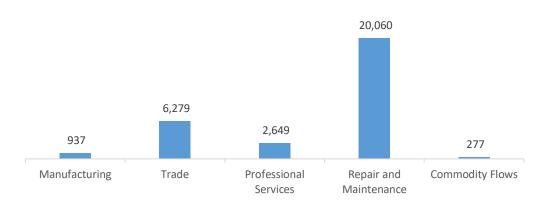


#### MOTOR VEHICLES

Motor Vehicle employment accounts for 30,202 jobs in Massachusetts, down 606 jobs over the past year (-2.0 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

#### Figure MA-10.





## **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 (5.6 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 4,501 jobs in Energy Efficiency (5.1 percent) and Motor Vehicles employers expect to add 924 jobs (3.1 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	7.8	4.8
Electric Power Transmission, Distribution, and Storage	1.8	3.5
Energy Efficiency	5.1	3.0
Fuels	5.6	1.7
Motor Vehicles	3.1	3.1

#### HIRING DIFFICULTY

Over the last year, 43.5 percent of energy-related employers in Massachusetts hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

#### Table MA-2

#### Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	27.6	60.9	11.5
Electric Power Transmission, Distribution, and Storage	26.2	58.4	15.4
Energy Efficiency	37.7	42.6	19.7
Fuels	31.1	39.2	29.7
Motor Vehicles	49.3	33.7	17.0

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

- 1. Lack of experience, training, or technical skills
- 2. Competition/ small applicant pool
- 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) \$48.41 median hourly wage
- 2. Sales, marketing, or customer service \$37.81 median hourly wage
- 3. Electrician/construction workers \$29.02 median hourly wage