

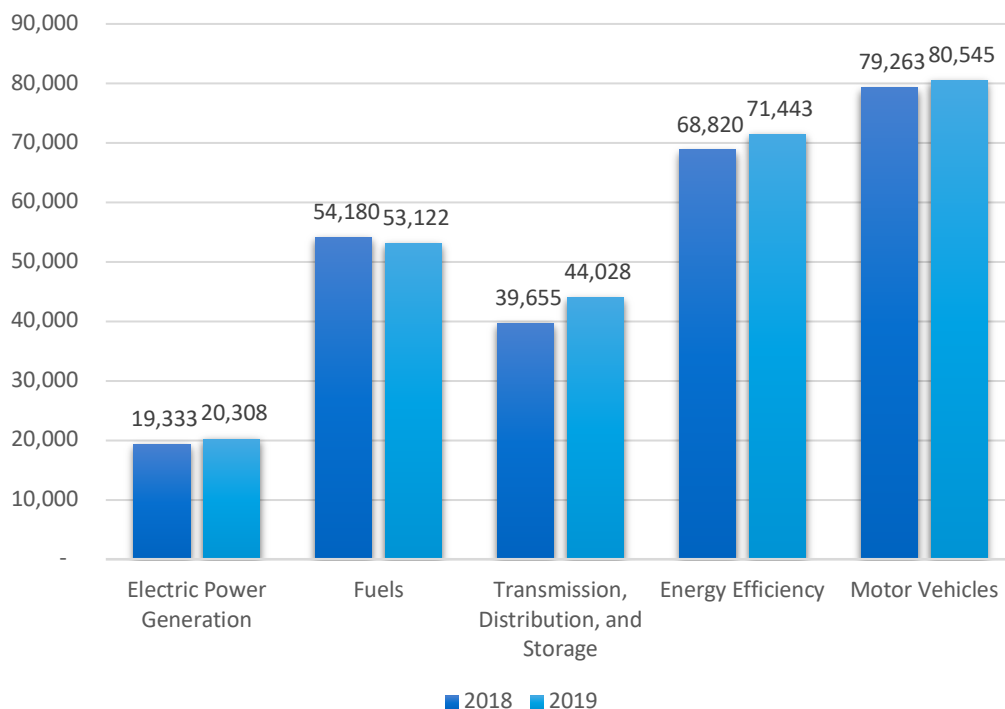
# Pennsylvania

## ENERGY AND EMPLOYMENT — 2020

### Overview

Pennsylvania has an average concentration of energy employment, with 117,458 Traditional Energy workers statewide (representing 3.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 20,308 are in Electric Power Generation, 53,122 are in Fuels, and 44,028 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Pennsylvania is 2.0 percent of total state employment (compared to 2.3 percent of national employment). Pennsylvania has an additional 71,443 jobs in Energy Efficiency (3.0 percent of all U.S. Energy Efficiency jobs) and 80,545 jobs in Motor Vehicles (3.2 percent of all U.S. Motor Vehicle jobs).

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



Overall, Traditional Energy jobs grew by 3.8 percent since the 2019 report, increasing by 4,290 jobs over the period. Energy Efficiency jobs added 2,623 jobs (3.8 percent) and motor vehicles added 1,282 jobs (1.6 percent).

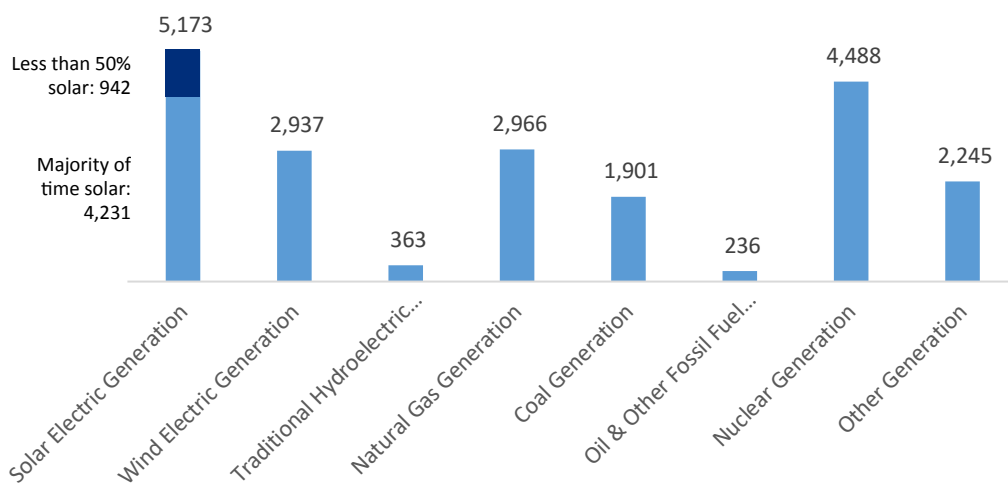
## Breakdown by Technology Applications

### ELECTRIC POWER GENERATION

Electric Power Generation employs 20,308 workers in Pennsylvania, 2.3 percent of the national total and adding 975 jobs over the past year (5.0 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 5,173 jobs (up 6.7 percent), followed by traditional fossil fuel generation at 5,103 jobs (up 3.4 percent).

**Figure PA-2.**

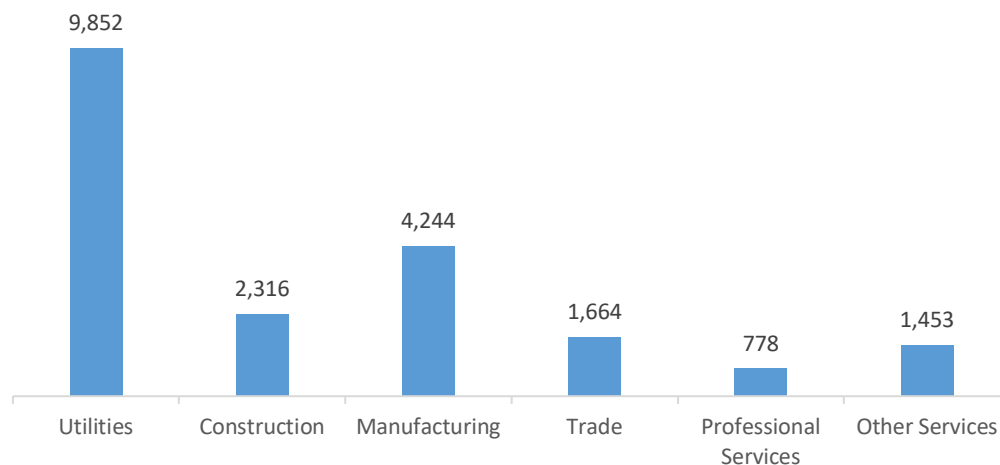
**Electric Power Generation Employment by Detailed Technology Application**



Utilities are the largest industry sector in Electric Power Generation, with 48.5 percent of jobs. Manufacturing is next with 20.9 percent.

**Figure PA-3.**

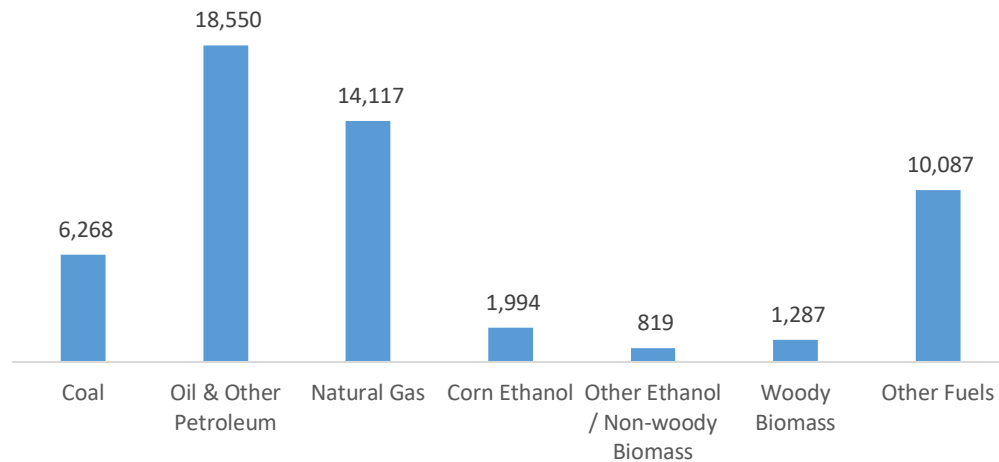
**Electric Power Generation by Industry Sector**



## FUELS

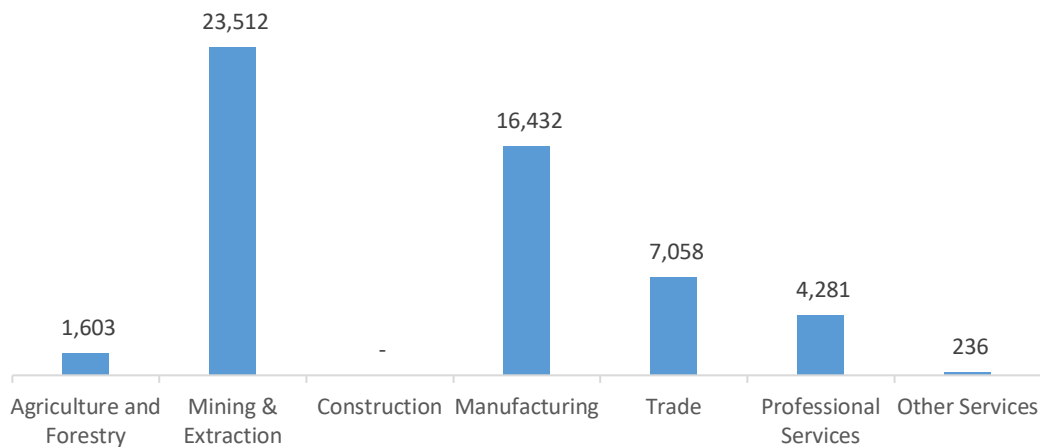
Fuels employs 53,122 workers in Pennsylvania, 4.6 percent of the national total, down -2.0 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

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



Mining and extraction jobs represent 44.3 percent of Fuels jobs in Pennsylvania.

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

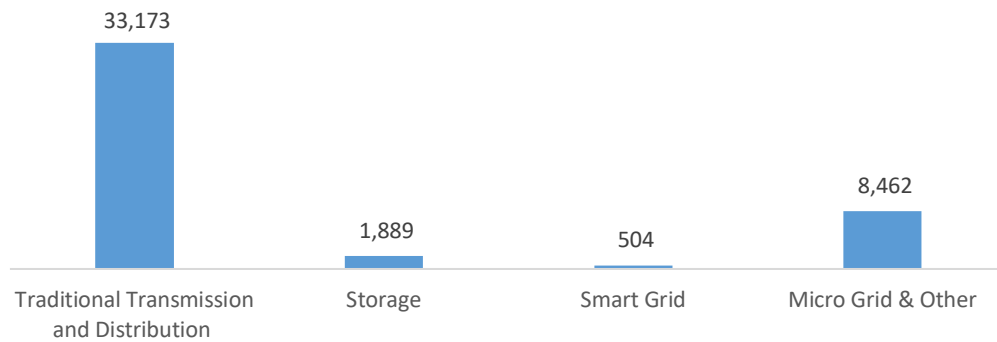


## TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 44,028 workers in Pennsylvania, 3.2 percent of the national total, up 11.0 percent or 4,373 jobs since the 2018 report.

**Figure PA-6.**

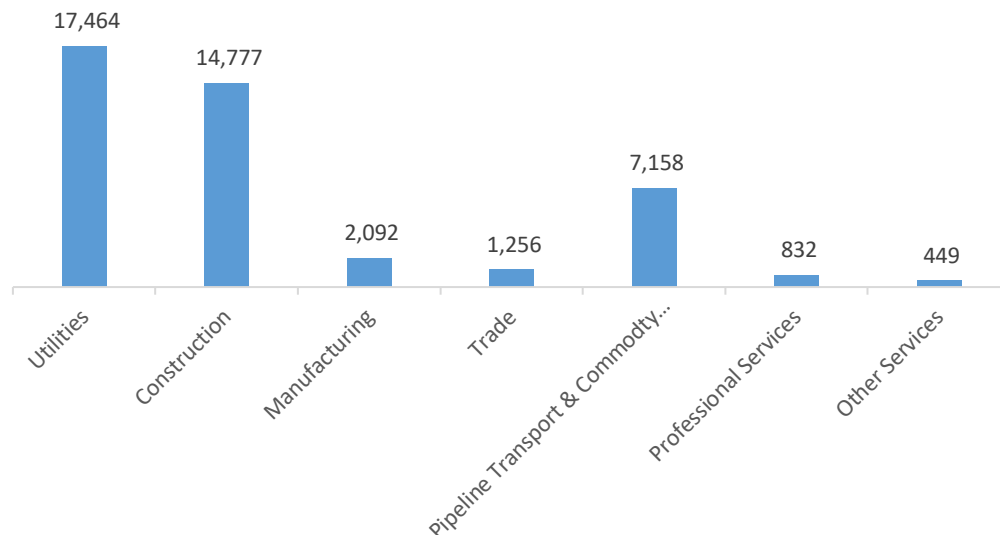
### Transmission, Distribution and Storage Employment by Detailed Technology



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Pennsylvania, with 39.7 percent of such jobs statewide.

**Figure PA-7.**

### Transmission, Distribution and Storage Employment by Industry Sector

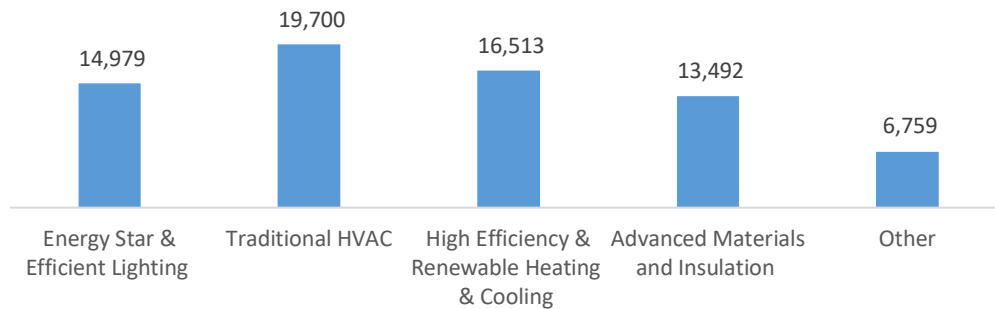


## ENERGY EFFICIENCY

The 71,443 Energy Efficiency jobs in Pennsylvania represent 3.0 percent of all U.S. Energy Efficiency jobs, adding 2,623 jobs (3.8 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 PA-8.**

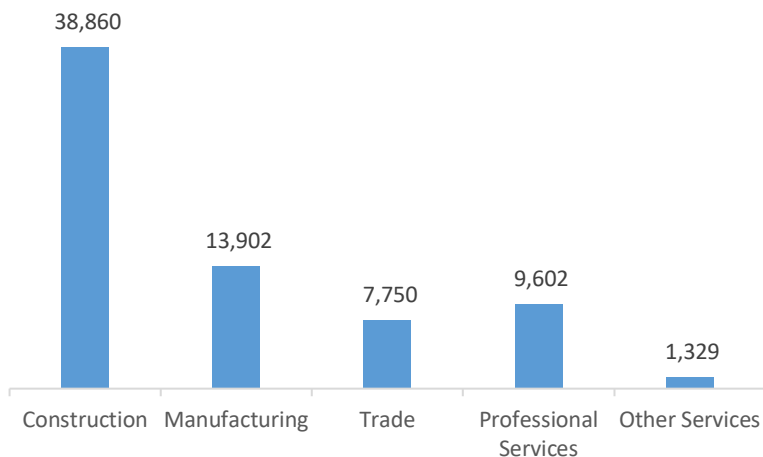
### Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

**Figure PA-9.**

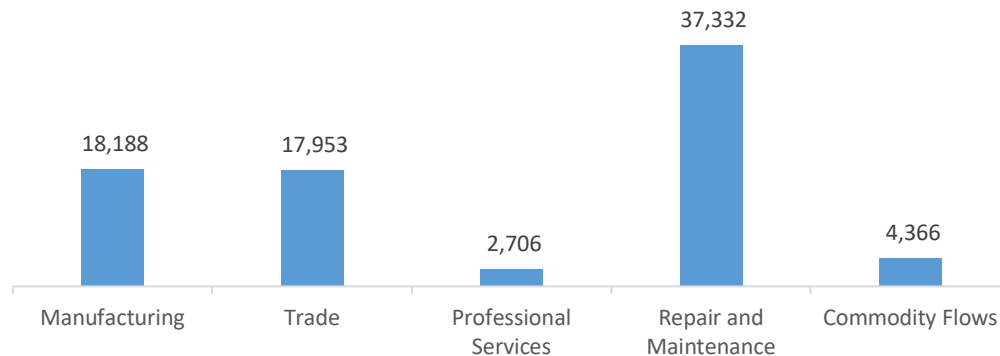
### Energy Efficiency Employment by Industry Sector



## MOTOR VEHICLES

Motor Vehicle employment accounts for 80,545 jobs in Pennsylvania, up 1,282 jobs over the past year (1.6 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

**Figure PA-10.**  
**Motor Vehicle Employment by Industry Sector**



## Workforce Characteristics

### EMPLOYER GROWTH

Employers in Pennsylvania are similarly optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (3.4 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 4,452 jobs in Energy Efficiency (6.2 percent) and Motor Vehicles employers expect to add 5,589 jobs (6.9 percent) over the next year.

**Table PA-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	5.6	4.8
Electric Power Transmission, Distribution, and Storage	2.3	3.5
Energy Efficiency	6.2	3.0
Fuels	3.5	1.7
Motor Vehicles	6.9	3.1

## HIRING DIFFICULTY

Over the last year, 51.3 percent of energy-related employers in Pennsylvania hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

**Table PA-2**  
**Hiring Difficulty by Major Technology Application.**

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	28.8	52.7	18.5
Electric Power Transmission, Distribution, and Storage	26.5	57.3	16.2
Energy Efficiency	21.7	65.0	13.3
Fuels	27.7	39.9	32.4
Motor Vehicles	33.6	52.7	13.7

Employers in Pennsylvania 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. Sales, marketing, or customer service — \$35.59 median hourly wage
2. Management (directors, supervisors, vice presidents) — \$51.21 median hourly wage
3. Technician or mechanical support — \$23.03 median hourly wage