

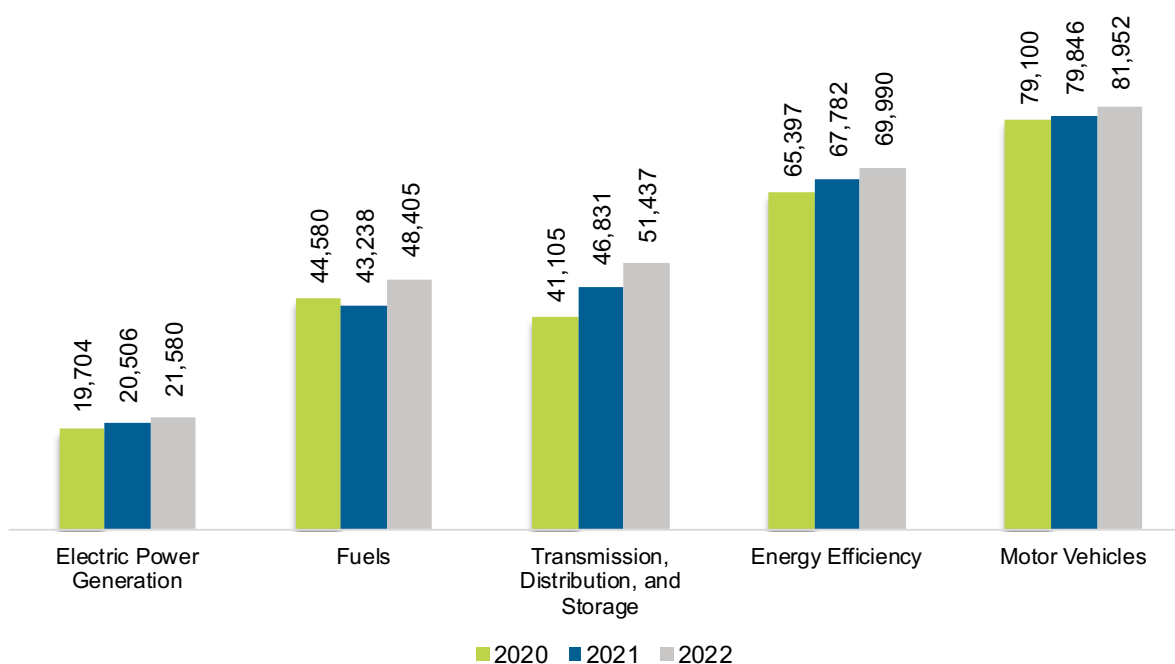
Pennsylvania

U.S. ENERGY AND EMPLOYMENT REPORT — 2023

Overview

Pennsylvania had 273,364 energy workers statewide in 2022, representing 3.4% of all U.S. energy jobs. Of these energy jobs, 21,580 were in electric power generation; 48,405 in fuels; 51,437 in transmission, distribution, and storage; 69,990 in energy efficiency; and 81,952 in motor vehicles. From 2021 to 2022, energy jobs in the state increased 15,162 jobs, or 5.9% (Figure PA-1). The energy sector in Pennsylvania represented 4.6% of total state employment.

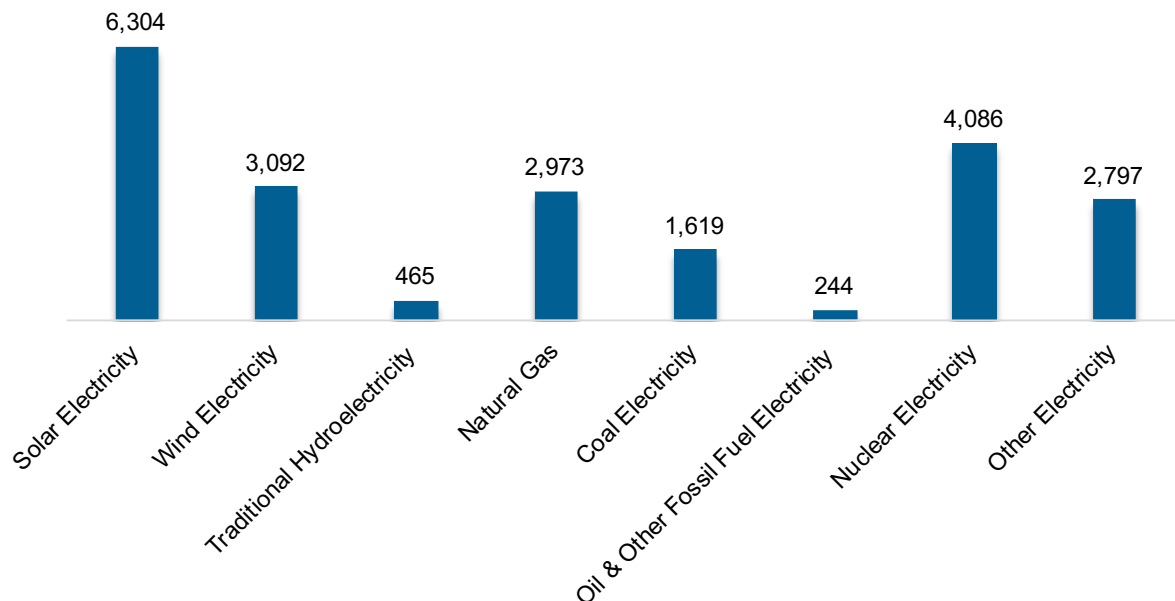
Figure PA-1. Employment by Major Energy Technology Application



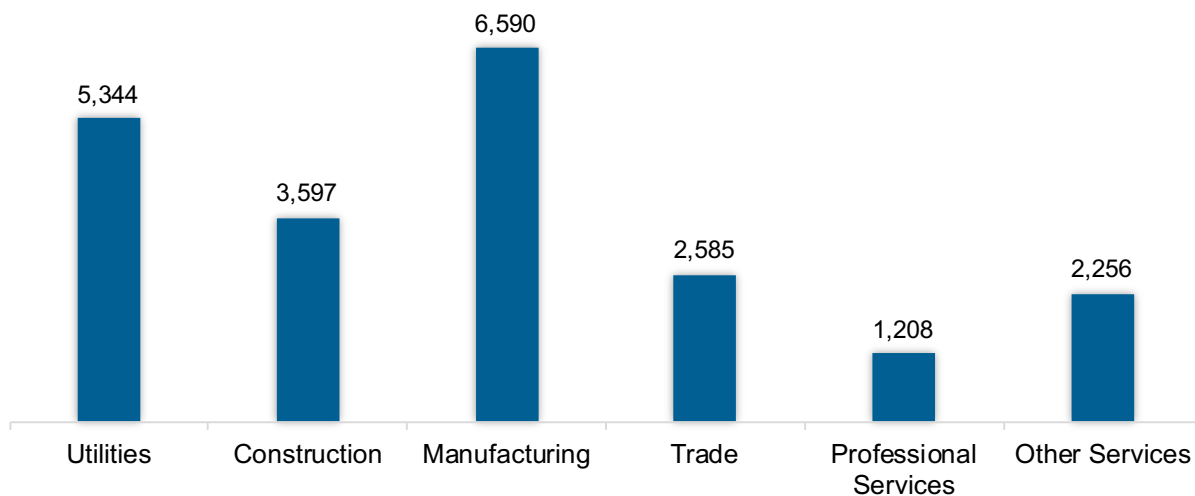
Breakdown by Technology Applications

Electric Power Generation

As shown in Figure PA-2, the electric power generation sector employed 21,580 workers in Pennsylvania, 2.4% of the national electricity total, and added 1,074 jobs from 2021 to 2022 (5.2%).

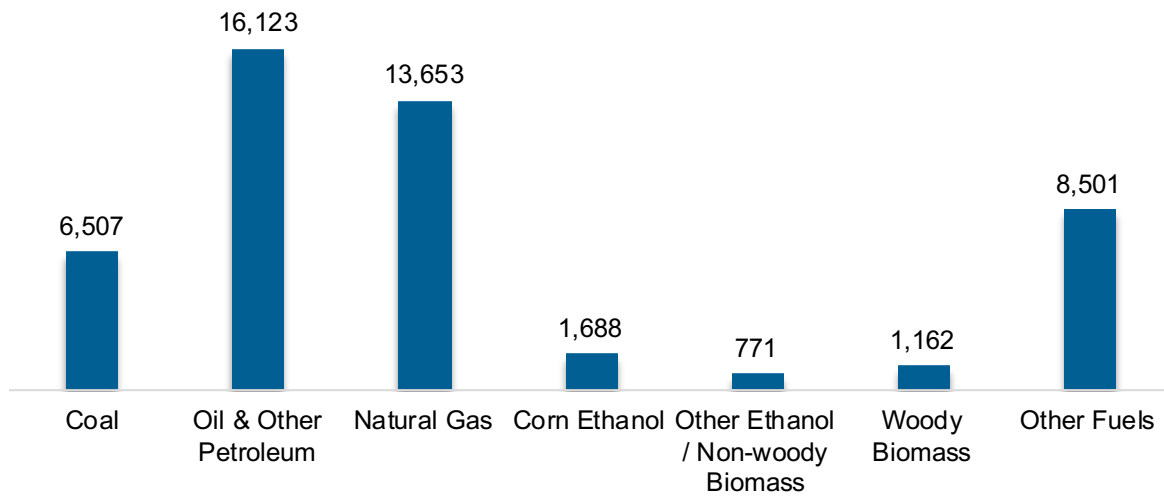
Figure PA-2. Electric Power Generation Employment by Detailed Technology Application

Manufacturing was the largest industry sector in the electric power generation sector, with 30.5% of jobs. Utilities was second largest with 24.8% (Figure PA-3).

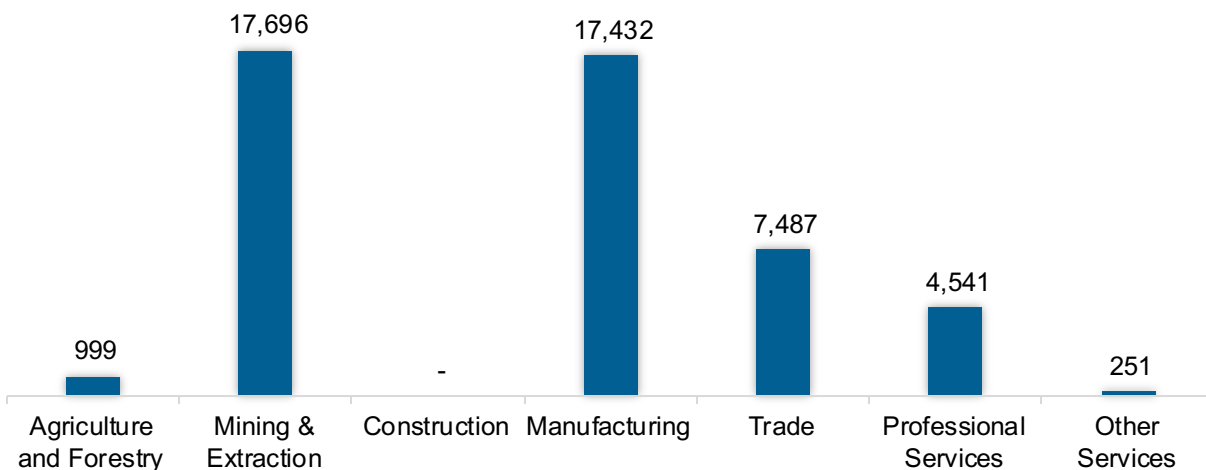
Figure PA-3. Electric Power Generation Employment by Industry Sector

Fuels

The Fuel sector employed 48,405 workers in Pennsylvania, 4.7% of the national total in fuels (Figure PA-4). The sector gained 5,167 jobs and increased 12.0% from 2021 to 2022.

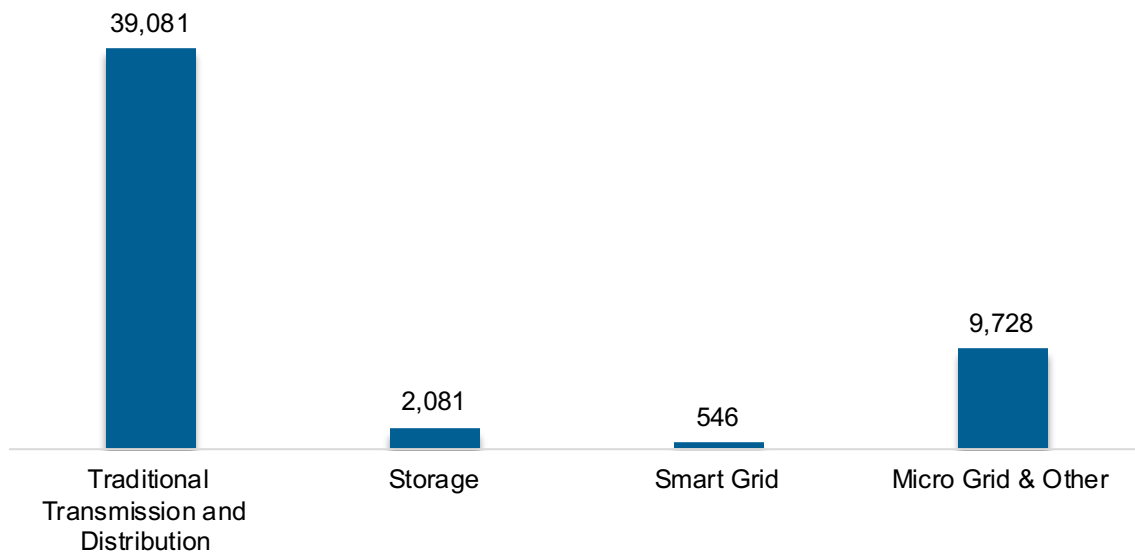
Figure PA-4. Fuels Employment by Detailed Technology Application

Mining and extraction jobs represented 36.6% of fuel jobs in Pennsylvania (Figure PA-5).

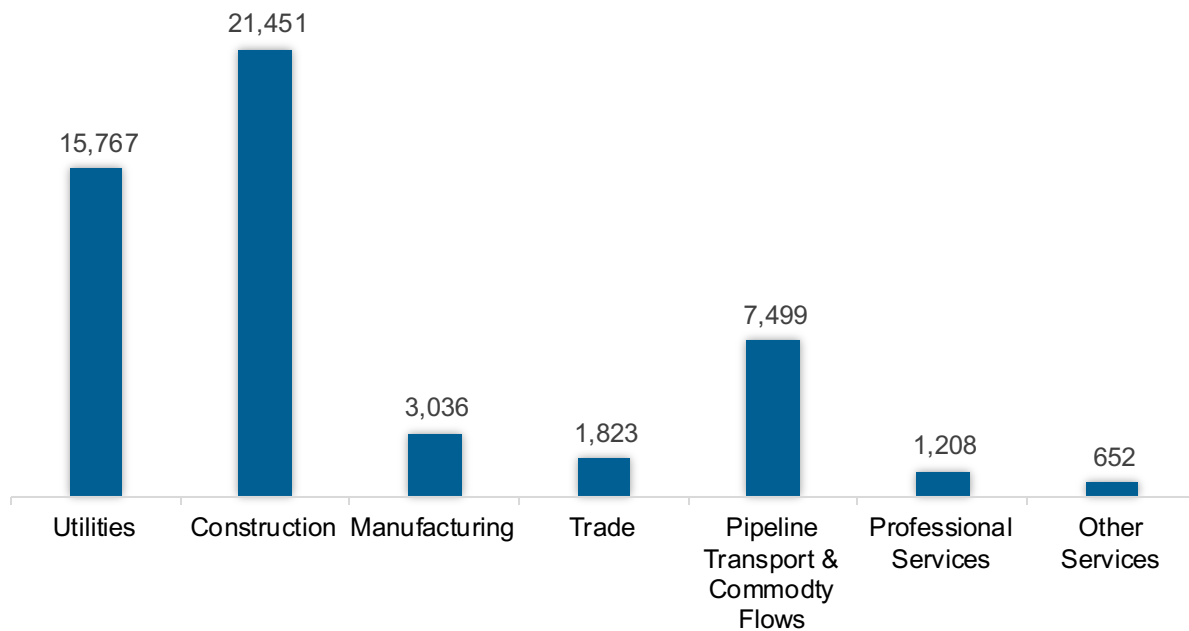
Figure PA-5. Fuels Employment by Industry Sector

Transmission, Distribution and Storage

The transmission, distribution, and storage (TDS) sector employed 51,437 workers in Pennsylvania, 4.7% of the national TDS total (Figure PA-6). The sector gained 4,606 jobs and increased 9.8% from 2021 to 2022.

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

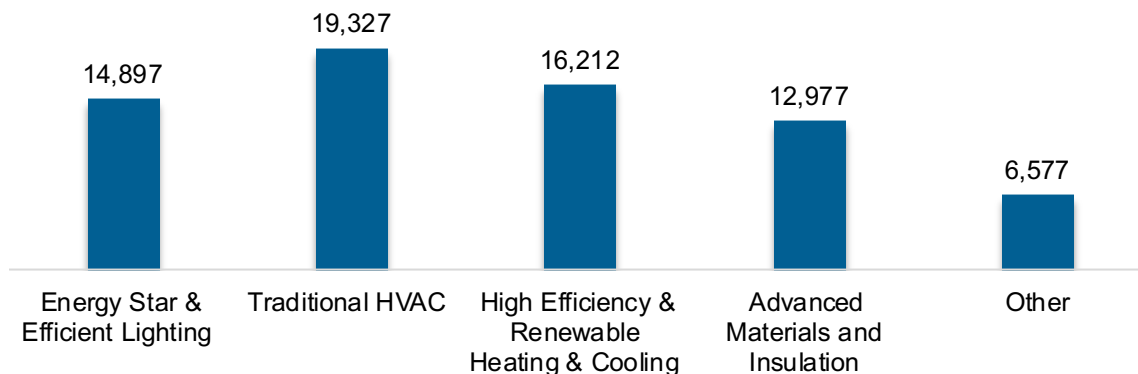
Construction was the largest proportion of TDS jobs in Pennsylvania, accounting for 41.7% of the sector's jobs statewide (Figure PA-7).

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

Energy Efficiency

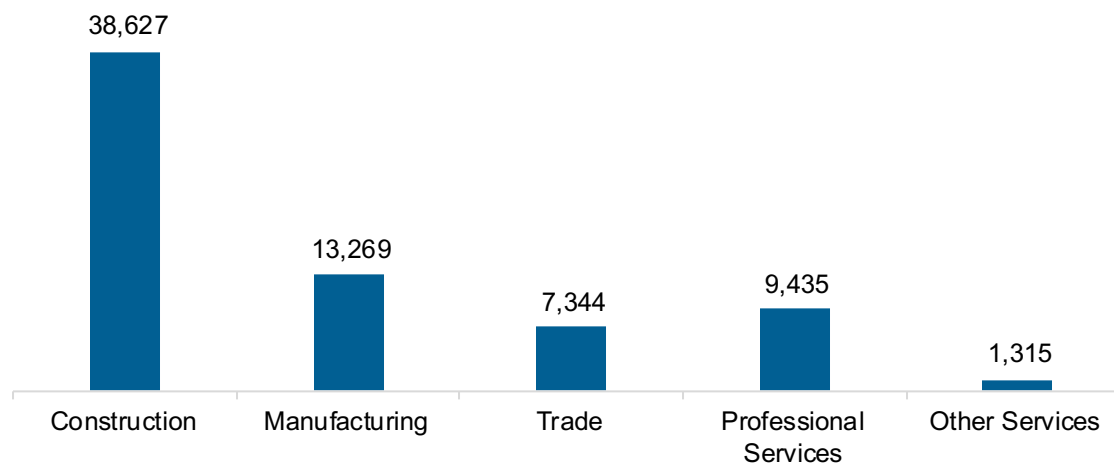
The energy efficiency (EE) sector employed 69,990 workers in Pennsylvania, 3.2% of the national EE total. The EE sector added 2,208 jobs and increased 3.3% from 2021 to 2022 (Figure PA-8).

Figure PA-8. Energy Efficiency Employment by Detailed Technology Application

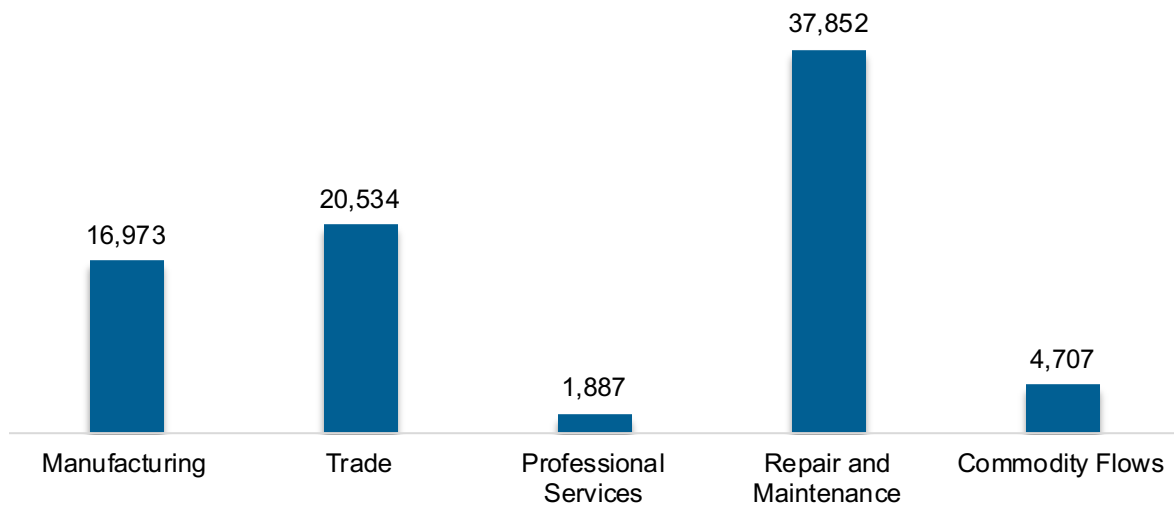


Energy efficiency employment was primarily found in the construction industry (Figure PA-9).

Figure PA-9. Energy Efficiency Employment by Industry Sector

*Motor Vehicles and Component Parts*

The motor vehicles and component sector employed 81,952 workers in Pennsylvania, 3.1% of the national total for the sector. Motor vehicles and component parts added 2,106 jobs and increased 2.6% from 2021 to 2022. Repair and maintenance is the largest proportion of motor vehicle jobs (Figure PA-10).

Figure PA-10. Motor Vehicle Employment by Industry Sector

Clean Energy Jobs

In 2022, there were 139,142 jobs in clean energy in Pennsylvania if traditional transmission and distribution is included and 99,956 jobs if it is not.³⁹ These increased under either definition, growing 6.4% with traditional transmission and distribution and 4.2% without.

Employer Perspectives

Expected Growth

Employers in Pennsylvania are similarly optimistic than their peers across the country about energy sector job growth over the next year (Table PA-1).

Table PA-1 Expected Growth by Major Technology Application

Technology	State Expected Growth Next 12 Months (percent)	U.S. Expected Growth Next 12 Months (percent)
Electric Power Generation	5.7	6.0
Electric Power Transmission, Distribution, and Storage	4.7	3.9
Energy Efficiency	5.9	6.4
Fuels	3.5	1.6
Motor Vehicles	5.5	5.5

³⁹ The definition of “clean energy” at the state level differs from the national definition due to data availability. For more information see Appendix A of the national U.S. Energy and Employment Report.

Hiring Difficulty

Employers in Pennsylvania reported 50% overall hiring difficulty (Table PA-2).

Table PA-2 Hiring Difficulty by Major Technology Application

Hiring Difficulty	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Did not hire (percent)	Overall Hiring Difficulty
Overall	25	25	9	41	50