Tennessee

ENERGY AND EMPLOYMENT - 2020

Overview

Tennessee has a low concentration of energy employment, with 54,953 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 12,143 are in Electric Power Generation, 7,749 are in Fuels, and 35,061 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Tennessee is 1.8 percent of total state employment (compared to 2.3 percent of national employment). Tennessee has an additional 53,916 jobs in Energy Efficiency (2.3 percent of all U.S. Energy Efficiency jobs) and 104,279 jobs in Motor Vehicles (4.1 percent of all U.S. Motor Vehicle jobs).



Figure TN-1.

2018 2019 Overall, Traditional Energy jobs declined by 0.5 percent since the 2019 report, decreasing by 294 jobs over the period. Energy Efficiency jobs

Employment by Major Energy Technology Application

added 909 jobs (1.7 percent) and motor vehicles lost 312 jobs (-0.3 percent).

Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 12,143 workers in Tennessee, 1.4 percent of the national total and adding 242 jobs over the past year (2.0 percent). Traditional hydroelectric generation makes up the largest segment of employment related to Electric Power Generation, with 5,268 jobs (up 1.5 percent), followed by solar at 4,927 jobs (down -2.4 percent).

Figure TN-2.





Utilities are the largest industry sector in Electric Power Generation, with 50.8 percent of jobs. Professional and business services are next with 19.0 percent.

Figure TN-3.





FUELS

Fuels employs 7,749 workers in Tennessee, 0.7 percent of the national total, up 0.6 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure TN-4.





Professional and business services jobs represent 35.1 percent of Fuels jobs in Tennessee.



Figure TN-5. Fuels Employment by Industry Sector

TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 35,061 workers in Tennessee, 2.5 percent of the national total, down 1.6 percent or 583 jobs since the 2018 report.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Tennessee, with 47.3 percent of such jobs statewide.





ENERGY EFFICIENCY

The 53,916 Energy Efficiency jobs in Tennessee represent 2.3 percent of all U.S. Energy Efficiency jobs, adding 909 jobs (1.7 percent) since last year. The largest number of these employees work in (high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting.

Figure TN-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 104,279 jobs in Tennessee, down 312 jobs over the past year (-0.3 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure TN-10. Motor Vehicle Employment by Industry Sector



Workforce Characteristics

EMPLOYER GROWTH

Employers in Tennessee are less optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (2.6 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 1,305 jobs in Energy Efficiency (2.4 percent) and Motor Vehicles employers expect to add 2,733 jobs (2.6 percent) over the next year.

Table TN-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	7.2	4.8
Electric Power Transmission, Distribution, and Storage	0.8	3.5
Energy Efficiency	2.4	3.0
Fuels	3.8	1.7
Motor Vehicles	2.6	3.1

HIRING DIFFICULTY

Over the last year, 25.0 percent of energy-related employers in Tennessee hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table TN-2

Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	22.5	68.2	9.3
Electric Power Transmission, Distribution, and Storage	25.0	64.7	10.3
Energy Efficiency	39.1	47.7	13.2
Fuels	24.2	43.2	32.6
Motor Vehicles	29.1	58.1	12.8

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

- 1. Competition/ small applicant pool
- 2. Insufficient qualifications (certifications or education)
- 3. Cannot provide competitve wages

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

- 1. Technician or mechanical support \$21.99 median hourly wage
- 2. Management (directors, supervisors, vice presidents) \$39.94 median hourly wage
- 3. Sales, marketing, or customer service \$32.38 median hourly wage