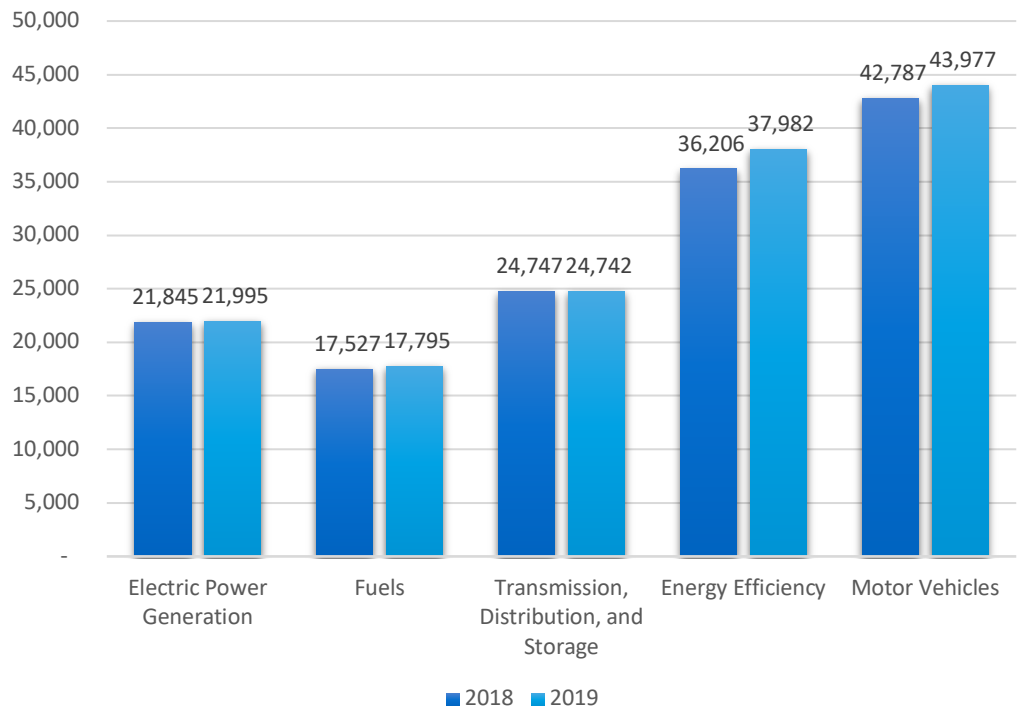
New Jersey

ENERGY AND EMPLOYMENT — 2020

Overview

New Jersey has a low concentration of energy employment, with 64,532 Traditional Energy workers statewide (representing 1.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 21,995 are in Electric Power Generation, 17,795 are in Fuels, and 24,742 are in Transmission, Distribution, and Storage. The Traditional Energy sector in New Jersey is 1.5 percent of total state employment (compared to 2.3 percent of national employment). New Jersey has an additional 37,982 jobs in Energy Efficiency (1.6 percent of all U.S. Energy Efficiency jobs) and 43,977 jobs in Motor Vehicles (1.7 percent of all U.S. Motor Vehicle jobs).

Figure NJ-1.
Employment by Major Energy Technology Application



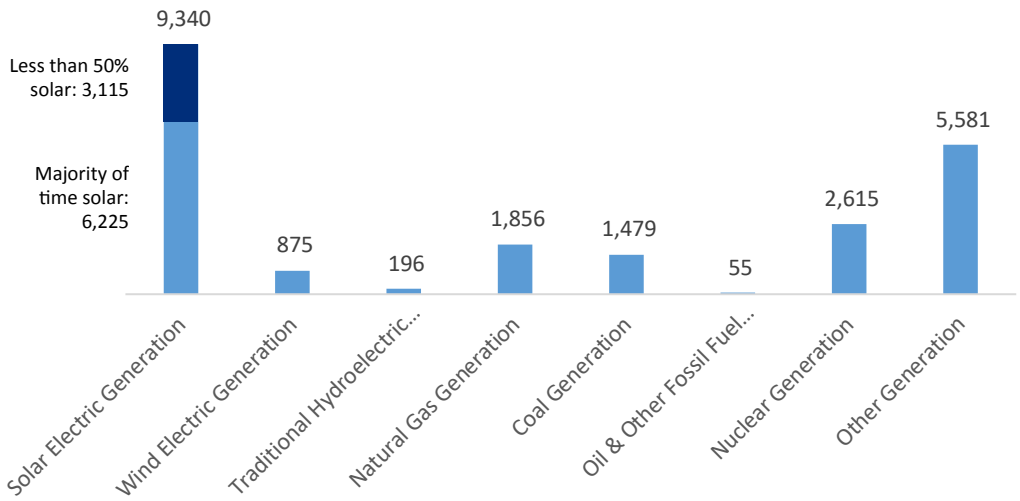
Overall, Traditional Energy jobs grew by 0.6 percent since the 2019 report, increasing by 413 jobs over the period. Energy Efficiency jobs added 1,776 jobs (4.9 percent) and motor vehicles added 1,190 jobs (2.8 percent).

Breakdown by Technology Applications

ELECTRIC POWER GENERATION

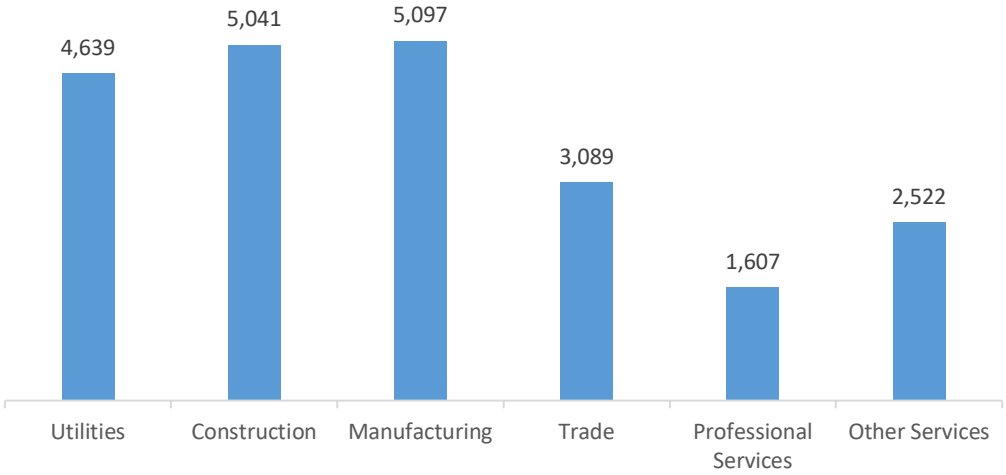
Electric Power Generation employs 21,995 workers in New Jersey, 2.5 percent of the national total and adding 150 jobs over the past year (0.7 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 9,340 jobs (up 0.6 percent), followed by traditional fossil fuel generation at 3,389 jobs (down -1.3 percent).

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



Manufacturing is the largest industry sector in Electric Power Generation, with 23.2 percent of jobs. Construction is next with 22.9 percent.

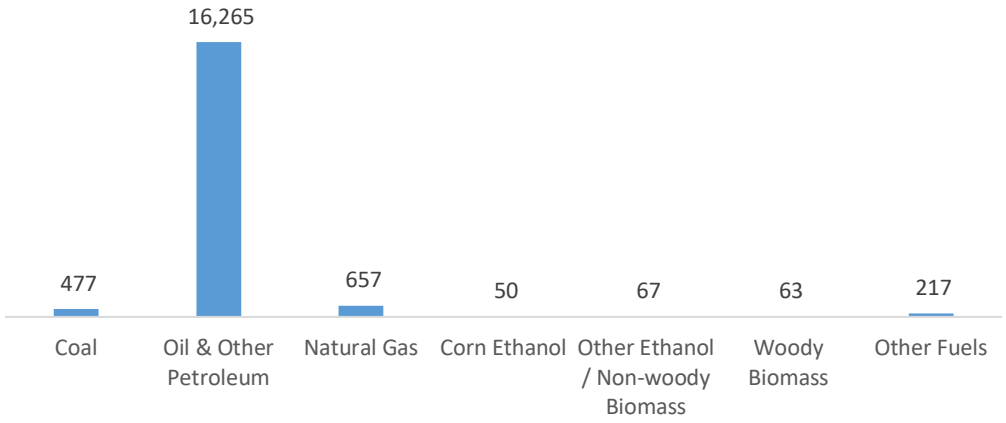
Figure NJ-3.
Electric Power Generation by Industry Sector



FUELS

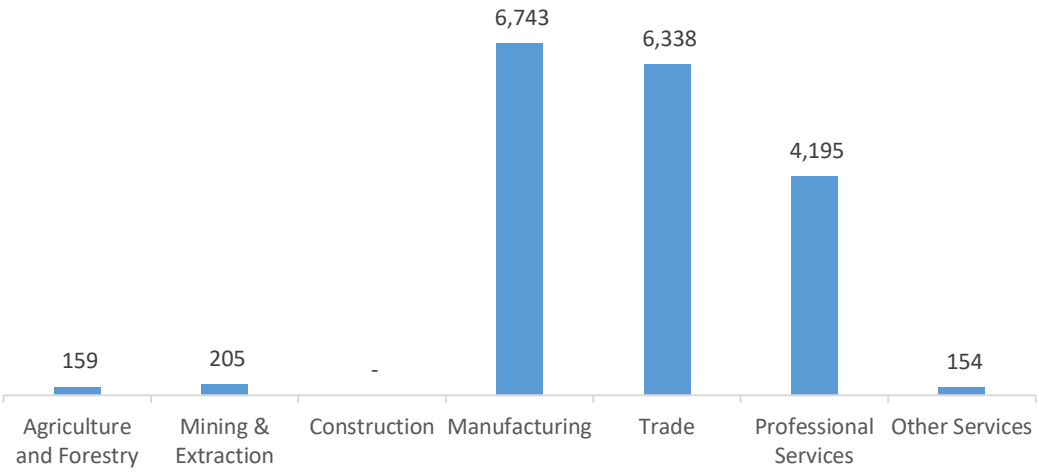
Fuels employs 17,795 workers in New Jersey, 1.5 percent of the national total, up 1.5 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure NJ-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 37.9 percent of Fuels jobs in New Jersey.

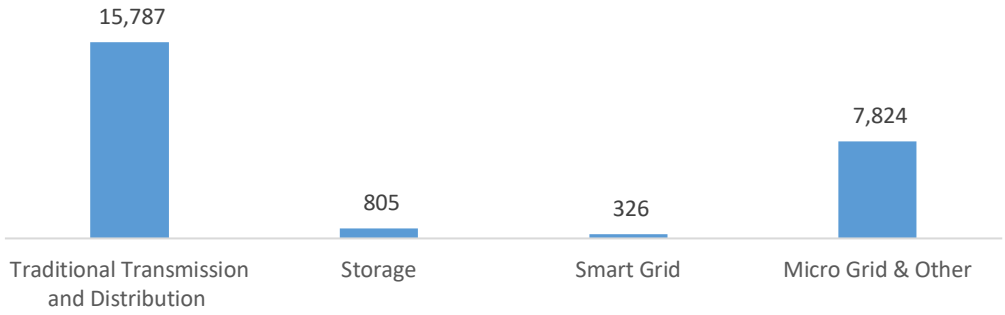
Figure NJ-5.
Fuels Employment by Industry Sector



TRANSMISSION, DISTRIBUTION AND STORAGE

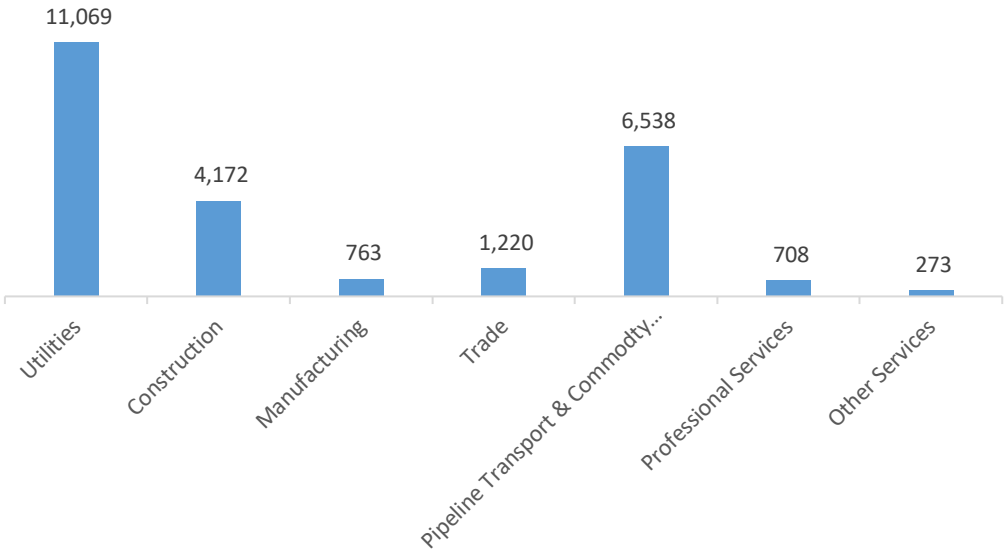
Transmission, Distribution, and Storage employs 24,742 workers in New Jersey, 1.8 percent of the national total, down 0.0 percent or 5 jobs since the 2018 report.

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



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in New Jersey, with 44.7 percent of such jobs statewide.

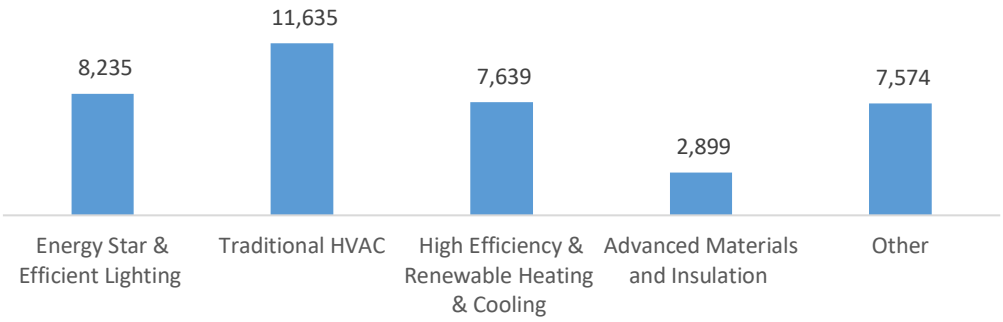
Figure NJ-7.
Transmission, Distribution and Storage Employment by Industry Sector



ENERGY EFFICIENCY

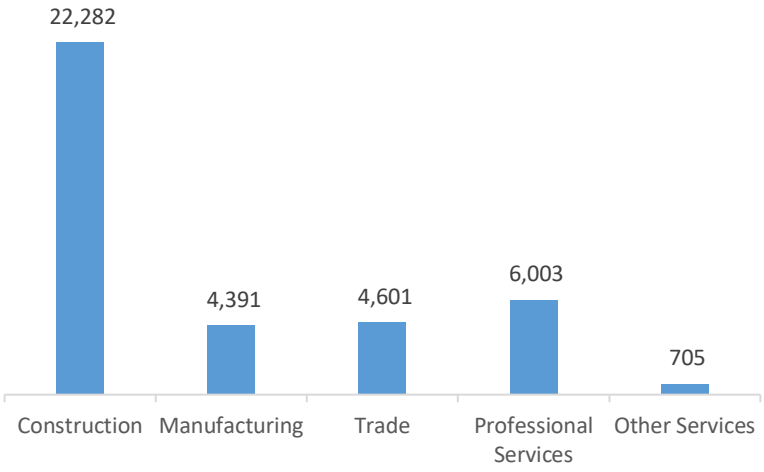
The 37,982 Energy Efficiency jobs in New Jersey represent 1.6 percent of all U.S. Energy Efficiency jobs, adding 1,776 jobs (4.9 percent) since last year. The largest number of these employees work in (traditional HVAC firms, followed by ENERGY STAR and efficient lighting.

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



Energy Efficiency employment is primarily found in the construction industry.

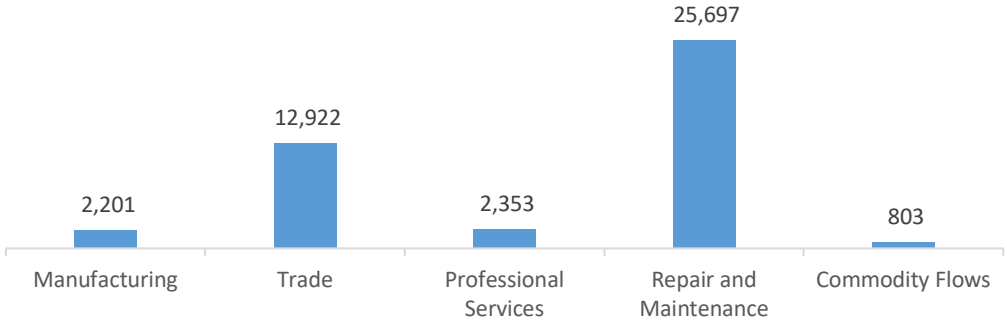
Figure NJ-9.
Energy Efficiency Employment by Industry Sector



MOTOR VEHICLES

Motor Vehicle employment accounts for 43,977 jobs in New Jersey, up 1,190 jobs over the past year (2.8 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NJ-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

EMPLOYER GROWTH

Employers in New Jersey are less optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (2.7 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 2,376 jobs in Energy Efficiency (6.3 percent) and Motor Vehicles employers expect to add 2,615 jobs (5.9 percent) over the next year.

Table NJ-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	5.9	4.8
Electric Power Transmission, Distribution, and Storage	(0.6)	3.5
Energy Efficiency	6.3	3.0
Fuels	3.5	1.7
Motor Vehicles	5.9	3.1

HIRING DIFFICULTY

Over the last year, 31.3 percent of energy-related employers in New Jersey hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table NJ-2
Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	30.4	51.9	17.7
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	37.3	47.4	15.2

Employers in New Jersey 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) — $51.21 median hourly wage
2. Engineers/scientists — $41.11 median hourly wage
3. Installation workers — $28.63 median hourly wage