

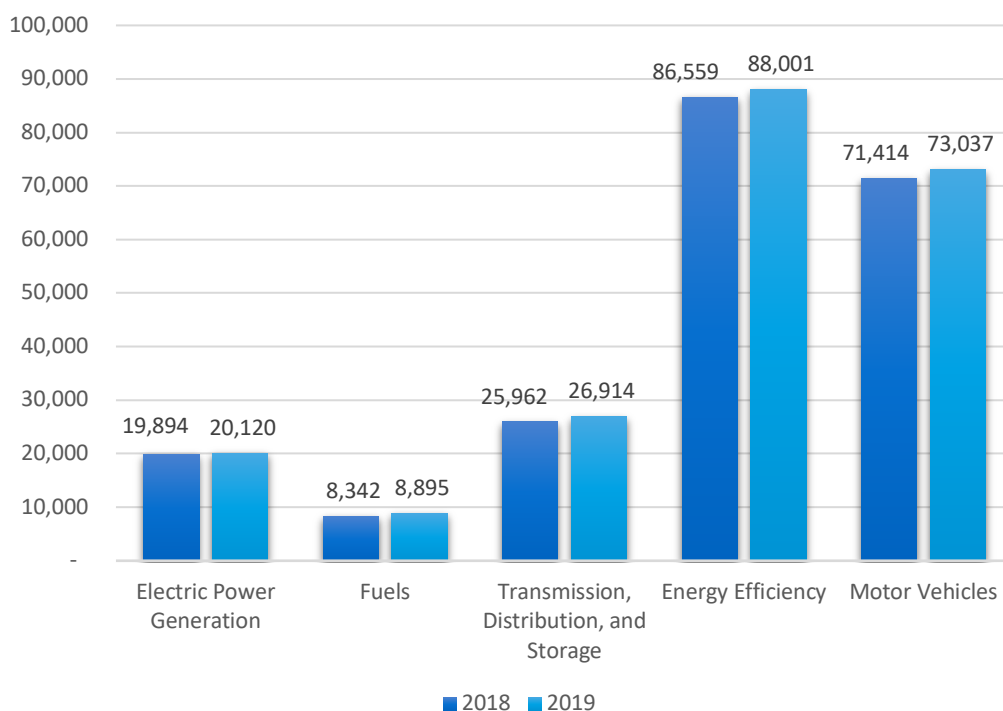
# North Carolina

## ENERGY AND EMPLOYMENT — 2020

### Overview

North Carolina has a low concentration of energy employment, with 55,928 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 20,120 are in Electric Power Generation, 8,895 are in Fuels, and 26,914 are in Transmission, Distribution, and Storage. The Traditional Energy sector in North Carolina is 1.2 percent of total state employment (compared to 2.3 percent of national employment). North Carolina has an additional 88,001 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 73,037 jobs in Motor Vehicles (2.9 percent of all U.S. Motor Vehicle jobs).

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



Overall, Traditional Energy jobs grew by 3.2 percent since the 2019 report, increasing by 1,730 jobs over the period. Energy Efficiency jobs added 1,442 jobs (1.7 percent) and motor vehicles added 1,623 jobs (2.3 percent).

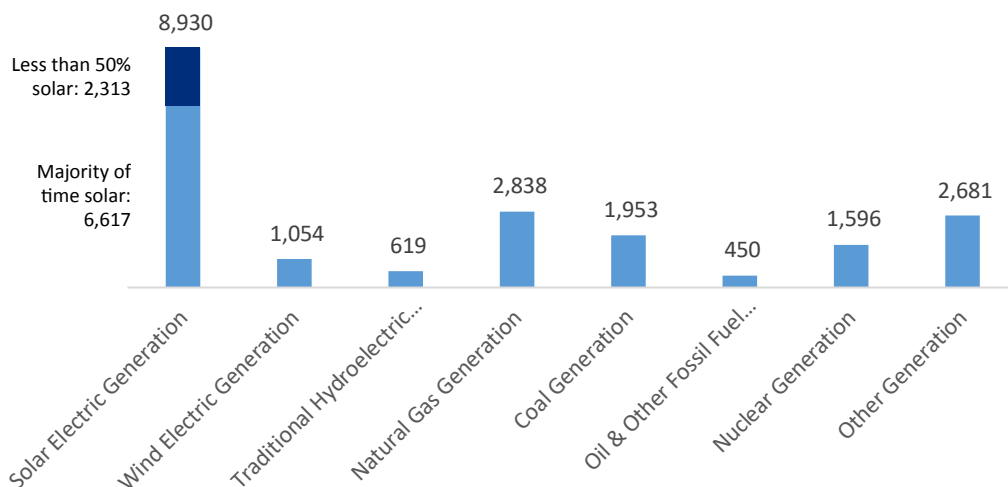
## Breakdown by Technology Applications

### ELECTRIC POWER GENERATION

Electric Power Generation employs 20,120 workers in North Carolina, 2.3 percent of the national total and adding 226 jobs over the past year (1.1 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 8,930 jobs (up 0.2 percent), followed by traditional fossil fuel generation at 5,241 jobs (down -2.3 percent).

**Figure NC-2.**

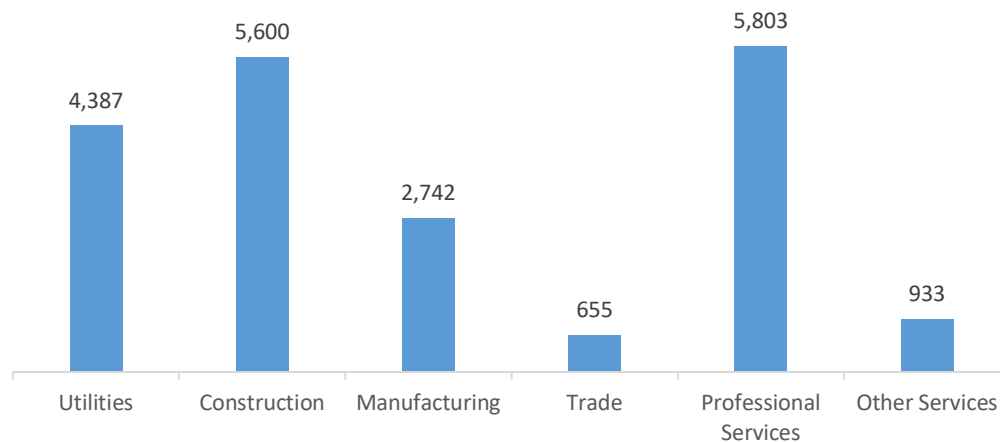
**Electric Power Generation Employment by Detailed Technology Application**



Professional and business services are the largest industry sector in Electric Power Generation, with 28.8 percent of jobs. Construction is next with 27.8 percent.

**Figure NC-3.**

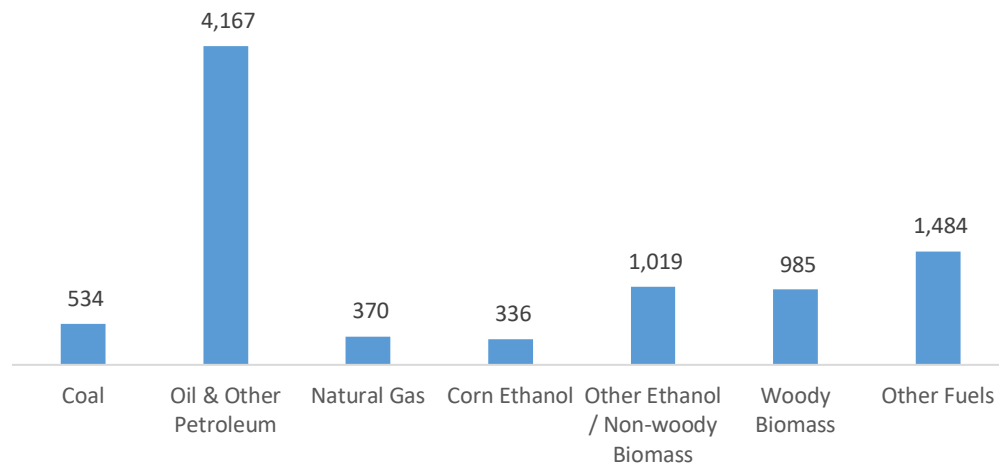
**Electric Power Generation by Industry Sector**



## FUELS

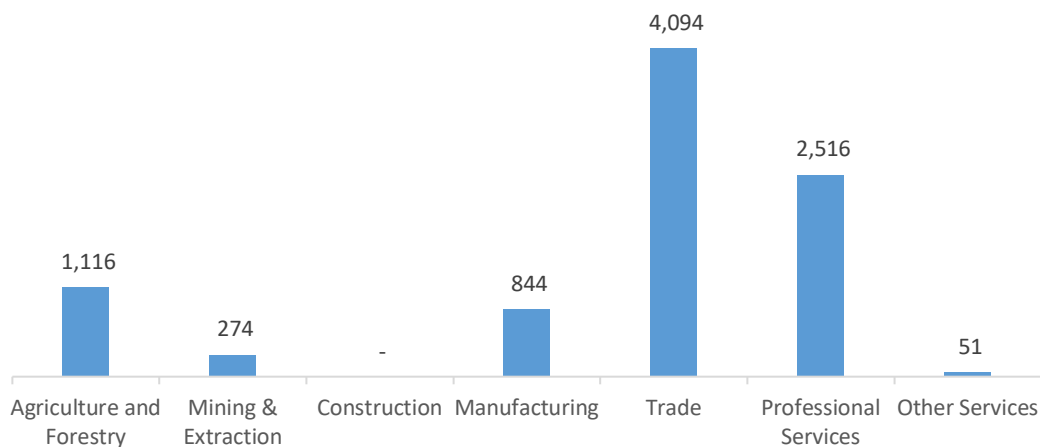
Fuels employs 8,895 workers in North Carolina, 0.8 percent of the national total, up 6.6 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

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



Wholesale trade jobs represent 46.0 percent of Fuels jobs in North Carolina.

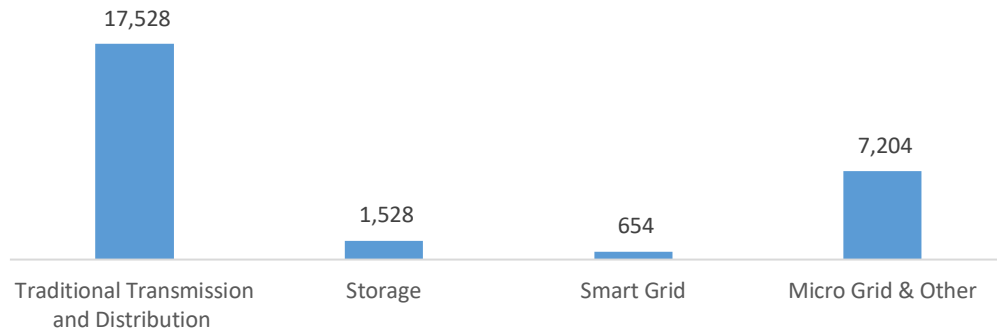
**Figure NC-5.**  
**Fuels Employment by Industry Sector**



## TRANSMISSION, DISTRIBUTION AND STORAGE

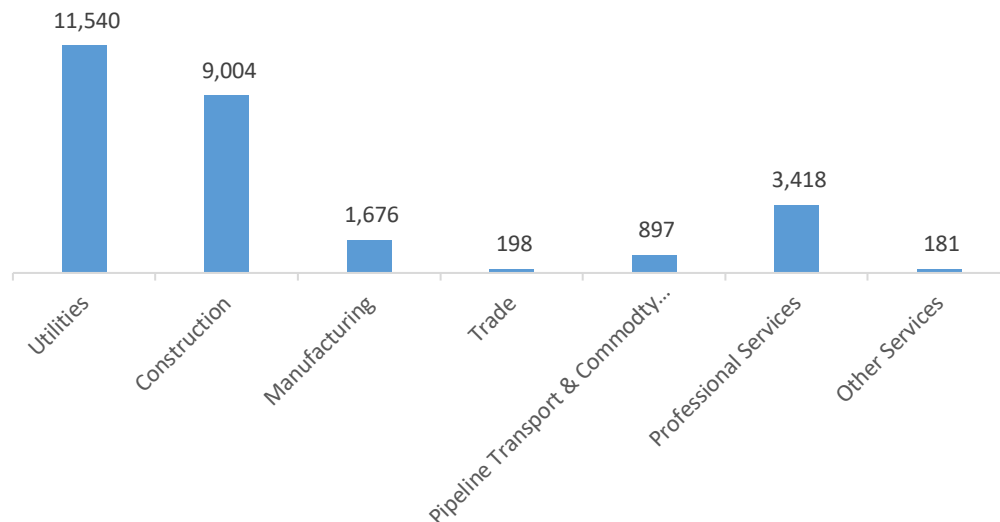
Transmission, Distribution, and Storage employs 26,914 workers in North Carolina, 1.9 percent of the national total, up 3.7 percent or 952 jobs since the 2018 report.

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



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in North Carolina, with 42.9 percent of such jobs statewide.

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

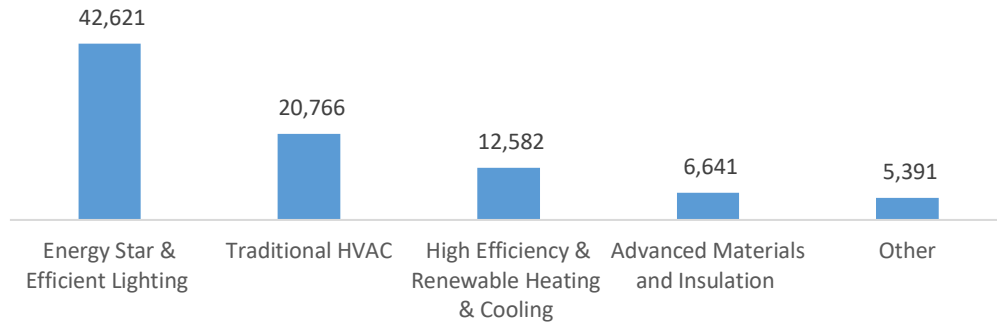


## ENERGY EFFICIENCY

The 88,001 Energy Efficiency jobs in North Carolina represent 3.7 percent of all U.S. Energy Efficiency jobs, adding 1,442 jobs (1.7 percent) since last year. The largest number of these employees work in (ENERGY STAR and efficient lighting firms, followed by traditional HVAC.

**Figure NC-8.**

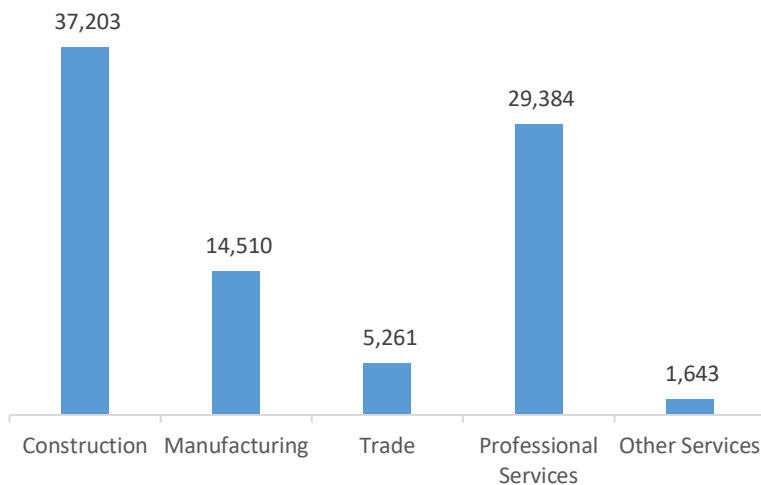
### Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

**Figure NC-9.**

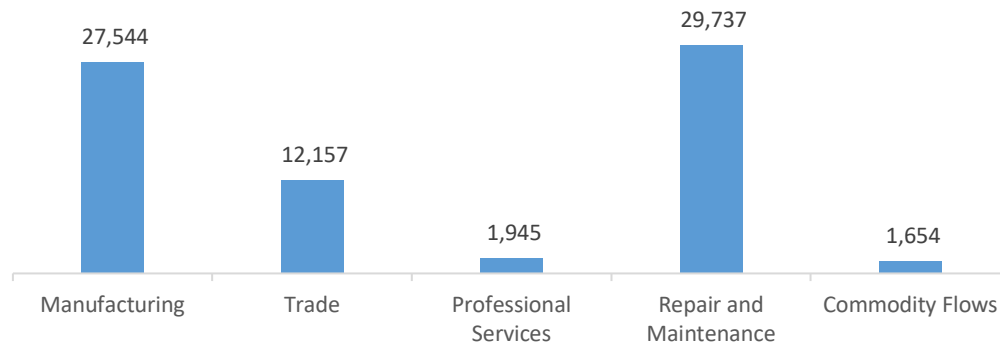
### Energy Efficiency Employment by Industry Sector



## MOTOR VEHICLES

Motor Vehicle employment accounts for 73,037 jobs in North Carolina, up 1,623 jobs over the past year (2.3 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

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



## Workforce Characteristics

### EMPLOYER GROWTH

Employers in North Carolina are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (4.0 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 3,469 jobs in Energy Efficiency (3.9 percent) and Motor Vehicles employers expect to add 5,778 jobs (7.9 percent) over the next year.

**Table NC-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	5.1	4.8
Electric Power Transmission, Distribution, and Storage	3.2	3.5
Energy Efficiency	3.9	3.0
Fuels	4.0	1.7
Motor Vehicles	7.9	3.1

## HIRING DIFFICULTY

Over the last year, 45.5 percent of energy-related employers in North Carolina hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Transmission, Distribution, and Storage.

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

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	27.8	62.3	9.9
Electric Power Transmission, Distribution, and Storage	30.4	61.1	8.5
Energy Efficiency	40.5	45.9	13.6
Fuels	32.7	40.9	26.4
Motor Vehicles	34.2	54.0	11.8

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

1. Lack of experience, training, or technical skills
2. Difficulty finding industry-specific knowledge, skills, and interest
3. Insufficient non-technical skills (work ethic, dependability, critical thinking)

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

1. Management (directors, supervisors, vice presidents) — \$37.13 median hourly wage
2. Technician or mechanical support — \$20.28 median hourly wage
3. Installation workers — \$20.65 median hourly wage