

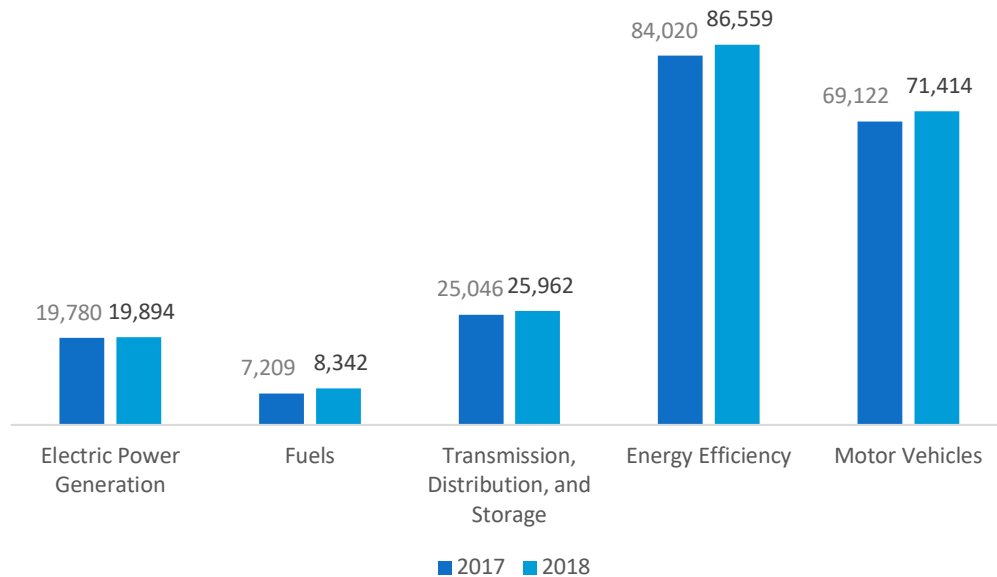
# North Carolina

## ENERGY AND EMPLOYMENT — 2019

### Overview

North Carolina has a low concentration of energy employment, with 54,198 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 19,894 are in Electric Power Generation, 8,342 are in Fuels, and 25,962 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 86,559 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 71,414 jobs in Motor Vehicles (2.8 percent of all U.S. Motor Vehicle jobs).

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



Overall, Traditional Energy jobs grew by 4.2 percent since the 2018 report, increasing by 2,164 jobs over the period. Energy Efficiency jobs added 2,539 jobs (3.0 percent) and motor vehicles added 2,292 jobs (3.3 percent).

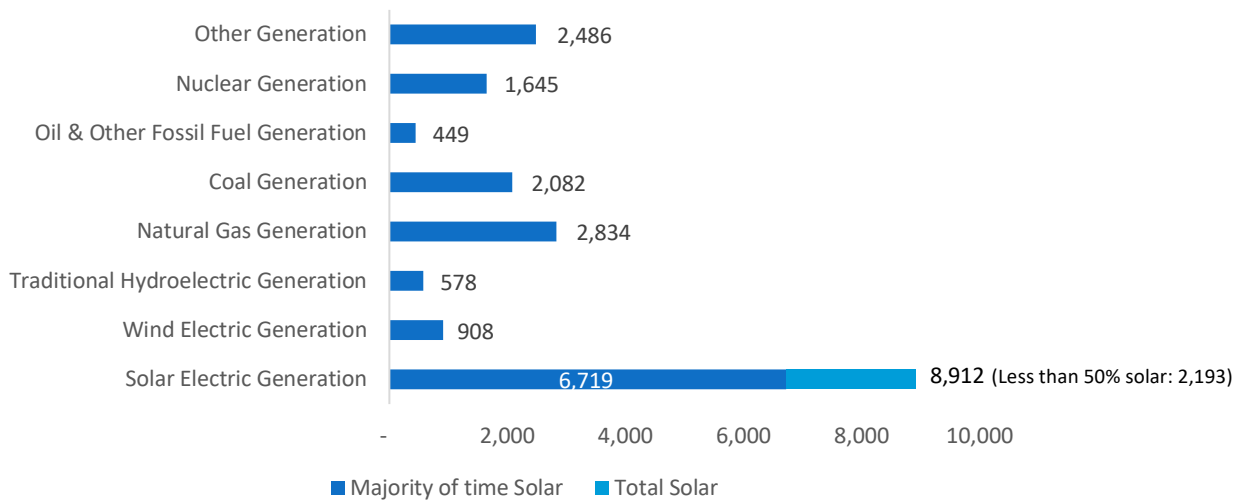
## Breakdown by Technology Applications

### Electric Power Generation

Electric Power Generation employs 19,894 workers in North Carolina, 2.3 percent of the national total and adding 115 jobs over the past year (0.6 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 8,912 jobs (down 2.8 percent), followed by traditional fossil fuel generation at 5,365 jobs (up 0.8 percent).

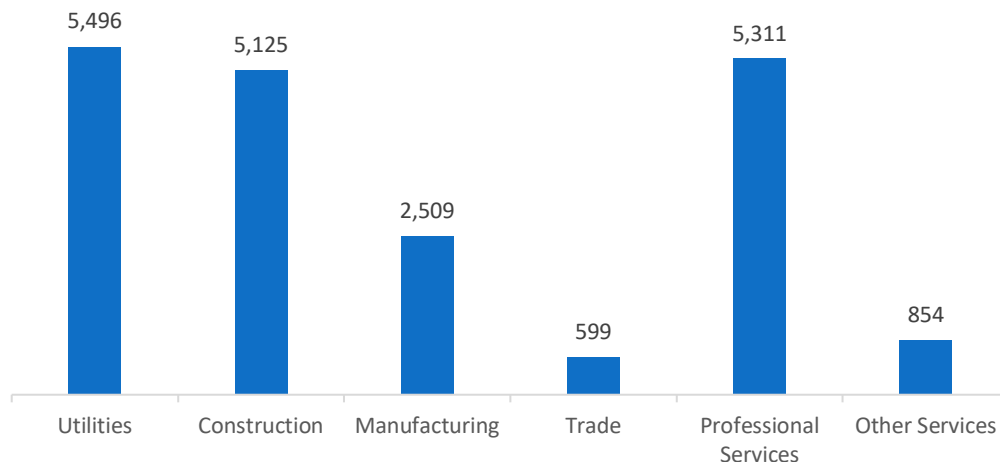
**Figure NC-2.**

Electric Power Generation Employment by Detailed Technology Application



Utilities are the largest industry sector in Electric Power Generation, with 27.6 percent of jobs. Professional and business services are next with 26.7 percent.

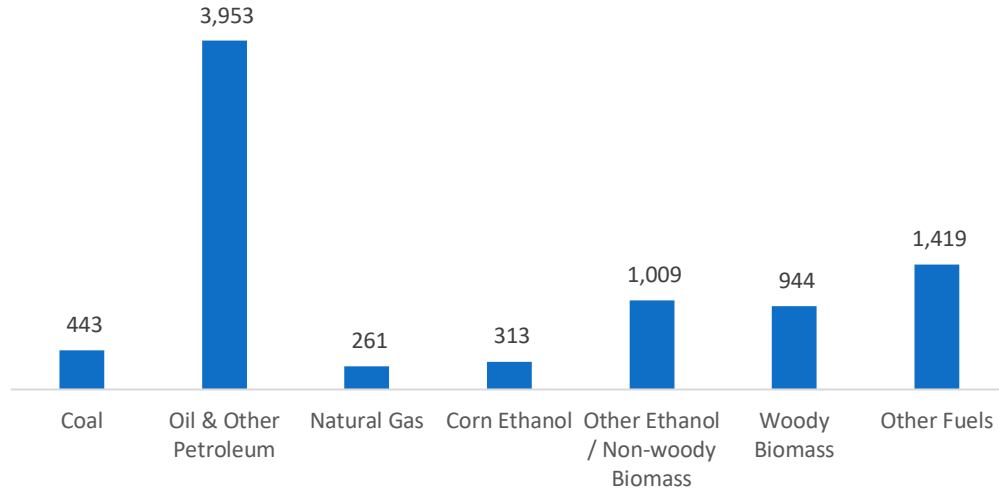
**Figure NC-3.**



## Fuels

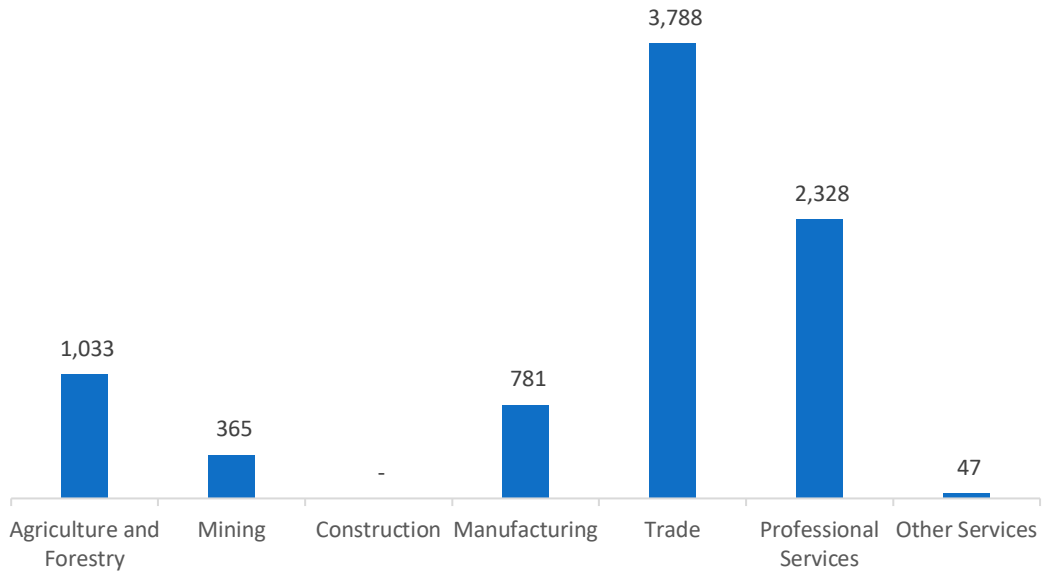
Fuels employs 8,342 workers in North Carolina, 0.7 percent of the national total, up 15.7 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

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



Wholesale trade jobs represent 45.4 percent of Fuels jobs in North Carolina.

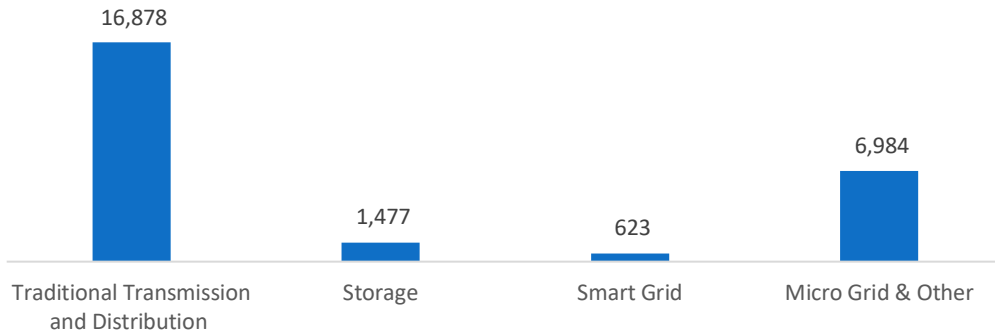
**Figure NC-5.**  
Fuels Employment by Industry Sector



## Transmission, Distribution and Storage

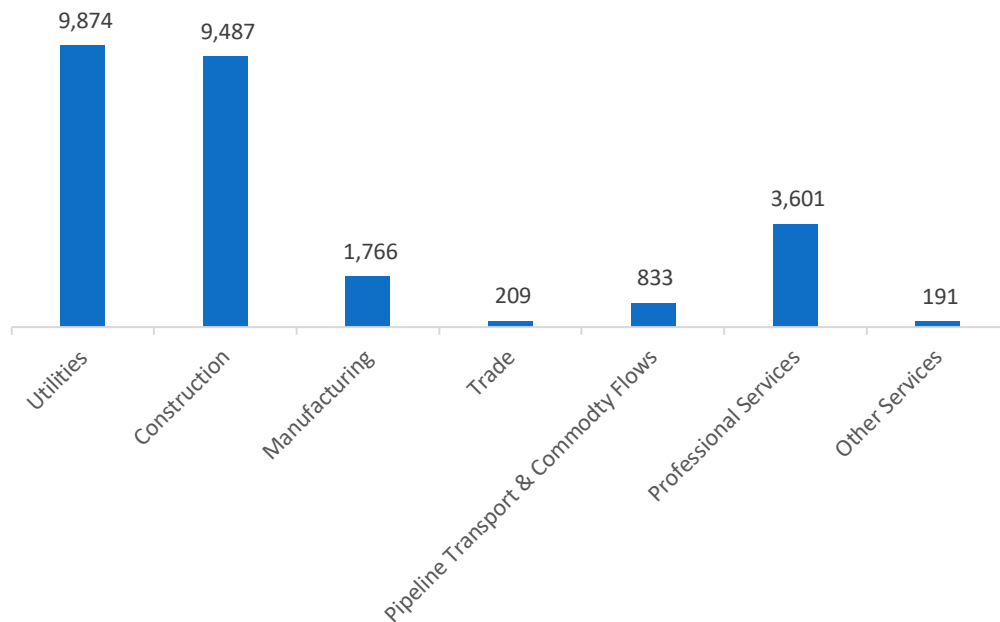
Transmission, Distribution, and Storage employs 25,962 workers in North Carolina, 1.9 percent of the national total, up 3.7 percent or 916 jobs since the 2018 report.

**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 38.0 percent of such jobs statewide.

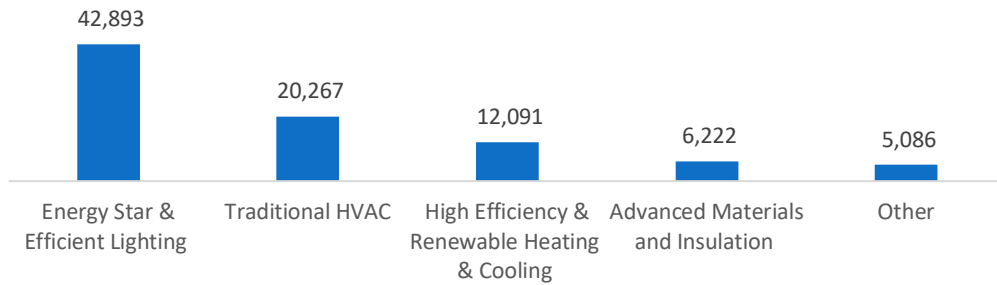
**Figure NC-7.**  
Transmission, Distribution and Storage Employment by Industry Sector



## Energy Efficiency

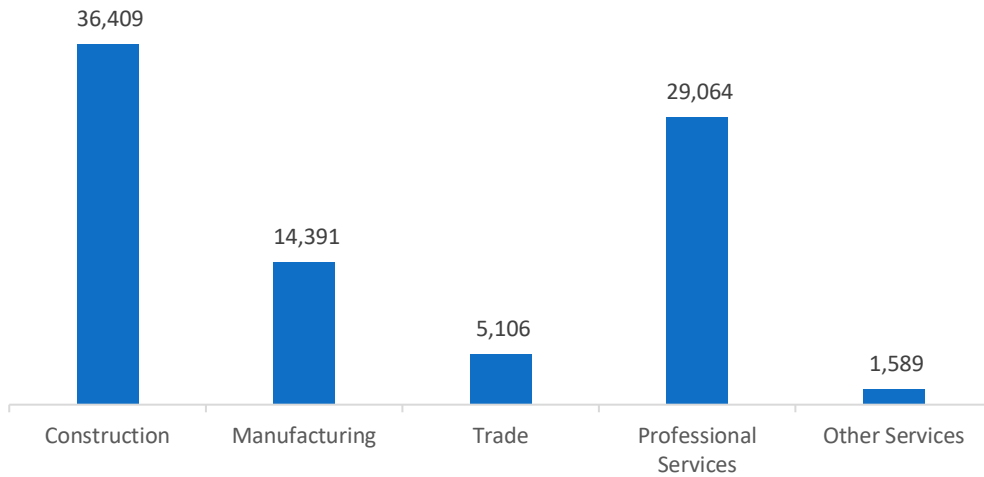
The 86,559 Energy Efficiency jobs in North Carolina represent 3.7 percent of all U.S. Energy Efficiency jobs, adding 2,539 jobs (3.0 percent) since last year. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by traditional HVAC.

**Figure NC-8.**  
Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

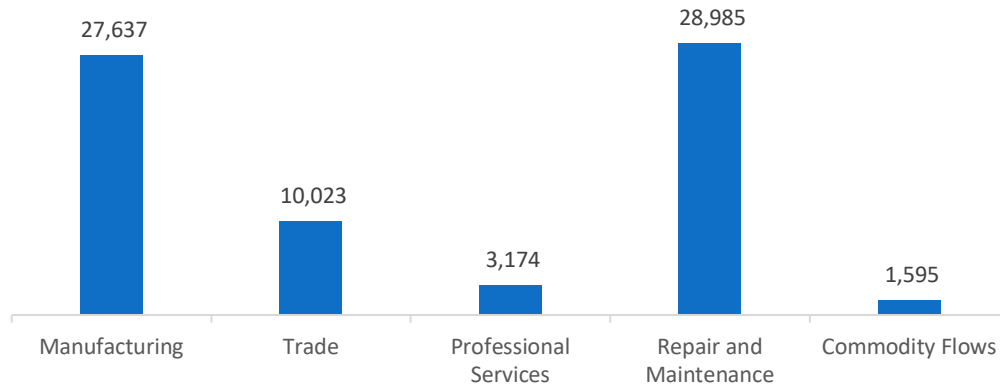
**Figure NC-9.**  
Energy Efficiency Employment by Industry Sector



## Motor Vehicles

Motor Vehicle employment accounts for 71,414 jobs in North Carolina, up 2,292 jobs over the past year (3.3 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 (5.0 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 7,162 jobs in Energy Efficiency (8.3 percent) and Motor Vehicles employers expect to add 1,414 jobs (2.0 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	7.5	7.1
Electric Power Transmission, Distribution and Storage	3.4	3.2
Energy Efficiency	8.3	7.8
Fuels	4.3	3.0
Motor Vehicles	2.0	2.2

## Hiring Difficulty

Over the last year, 27.3 percent of energy-related employers in North Carolina hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

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

Technology	Very Difficult (%)		Somewhat Difficult (%)	
	State	National	State	National
Electric Power Generation	17.9	20.7	64.3	54.8
Electric Power Transmission, Distribution and Storage	14.3	21.9	28.6	46.1
Energy Efficiency	60.0	21.3	26.7	48.1
Fuels	--	37.9	50.0	43.0
Motor Vehicles	12.5	30.0	62.5	46.4

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. Competition/ small applicant pool
3. Insufficient non-technical skills (work ethic, dependability, critical thinking)

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

1. Technician or mechanical support – \$16.06 median hourly wage
2. Management (directors, supervisors, vice presidents) – \$37.29 median hourly wage
3. Sales, marketing, or customer service – \$30.48 median hourly wage