North Carolina

U.S. ENERGY AND EMPLOYMENT REPORT - 2023

Overview

North Carolina had 209,127 energy workers statewide in 2022, representing 2.6% of all U.S. energy jobs. Of these energy jobs, 20,565 were in electric power generation; 8,397 in fuels; 24,346 in transmission, distribution, and storage; 78,338 in energy efficiency; and 77,481 in motor vehicles. From 2021 to 2022, energy jobs in the state increased 4,314 jobs, or 2.1% (Figure NC-1). The energy sector in North Carolina represented 4.4% of total state employment.

Figure NC-1. Employment by Major Energy Technology Application



Breakdown by Technology Applications

Electric Power Generation

As shown in Figure NC-2, the electric power generation sector employed 20,565 workers in North Carolina, 2.3% of the national electricity total, and added 724 jobs from 2021 to 2022 (3.6%).



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

Professional and business services was the largest industry sector in the electric power generation sector, with 31.8% of jobs. Construction was second largest with 30.7% (Figure NC-3).

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



Fuels

The Fuel sector employed 8,397 workers in North Carolina, 0.8% of the national total in fuels (Figure NC-4). The sector gained 809 jobs and increased 10.7% from 2021 to 2022.

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Figure NC-4. Fuels Employment by Detailed Technology Application

Wholesale trade jobs represented 42.8% of fuel jobs in North Carolina (Figure NC-5).

Figure NC-5. Fuels Employment by Industry Sector



Transmission, Distribution and Storage

The transmission, distribution, and storage (TDS) sector employed 24,346 workers in North Carolina, 0.8% of the national TDS total (Figure NC-6). The sector gained 1,039 jobs and increased 4.5% from 2021 to 2022.

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



Utilities was the largest proportion of TDS jobs in North Carolina, accounting for 43.9% of the sector's jobs statewide (Figure NC-7).

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



Energy Efficiency

The energy efficiency (EE) sector employed 78,338 workers in North Carolina, 3.5% of the national EE total. The EE sector added 320 jobs and increased 0.4% from 2021 to 2022 (Figure NC-8).

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

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





Motor Vehicles and Component Parts

The motor vehicles and component sector employed 77,481 workers in North Carolina, 3.0% of the national total for the sector. Motor vehicles and component parts added 1,422 jobs and increased 1.9% from 2021 to 2022. Repair and maintenance is the largest proportion of motor vehicle jobs (Figure NC-10).





Clean Energy Jobs

In 2022, there were 123,369 jobs in clean energy in North Carolina if traditional transmission and distribution is included and 105,151 jobs if it is not.³⁴ These increased under either definition, growing 2.2% with traditional transmission and distribution and 1.9% without.

Employer Perspectives

Expected Growth

Employers in North Carolina were less optimistic than their peers across the country about energy sector job growth over the next year (Table NC-1).

Technology	State Expected Growth Next 12 Months (percent)	U.S. Expected Growth Next 12 Months (percent)	
Electric Power Generation	5.2	6.0	
Electric Power Transmission, Distribution, and Storage	4.1	3.9	
Energy Efficiency	5.4	6.4	
Fuels	3.0	1.6	
Motor Vehicles	4.9	5.5	

Table NC-1 Expected Growth by Major Technology Application

³⁴ 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 North Carolina reported 51% overall hiring difficulty (Table NC-2).

Hiring Difficulty	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Did not hire (percent)	Overall Hiring Difficulty
Overall	24	27	8	41	51

Table NC-2 Hiring Difficulty by Major Technology Application