

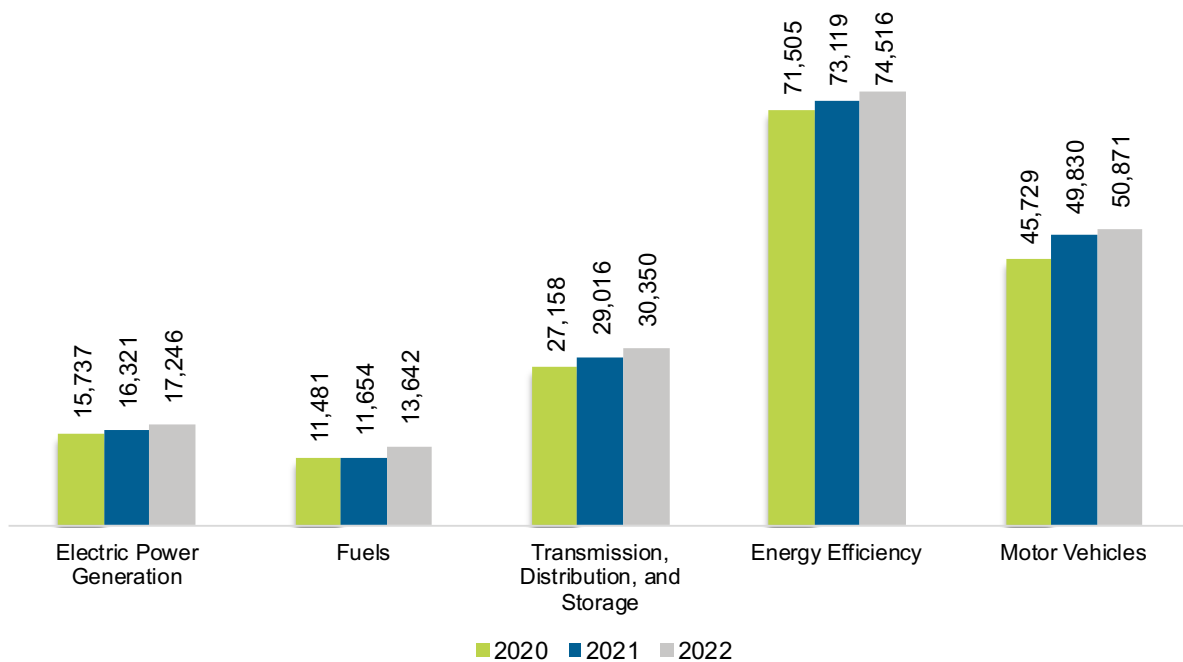
Virginia

U.S. ENERGY AND EMPLOYMENT REPORT — 2023

Overview

Virginia had 186,624 energy workers statewide in 2022, representing 2.3% of all U.S. energy jobs. Of these energy jobs, 17,246 were in electric power generation; 13,642 in fuels; 30,350 in transmission, distribution, and storage; 74,516 in energy efficiency; and 50,871 in motor vehicles. From 2021 to 2022, energy jobs in the state increased 6,684 jobs, or 3.7% (Figure VA-1). The energy sector in Virginia represented 4.7% of total state employment.

Figure VA-1. Employment by Major Energy Technology Application

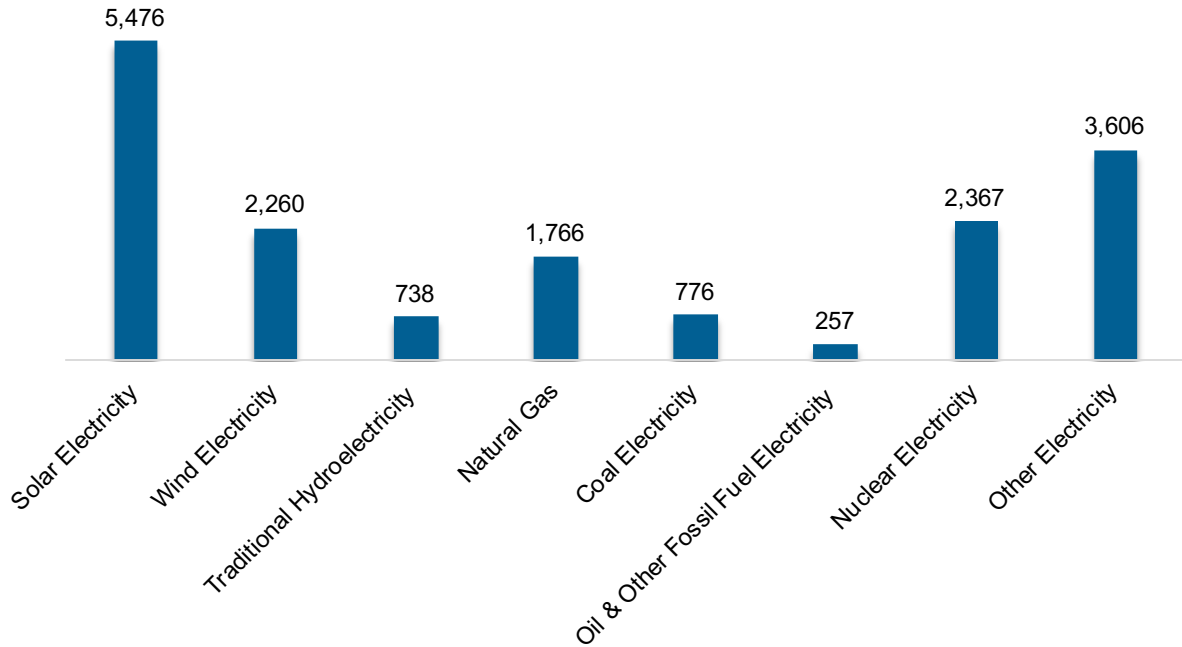


Breakdown by Technology Applications

Electric Power Generation

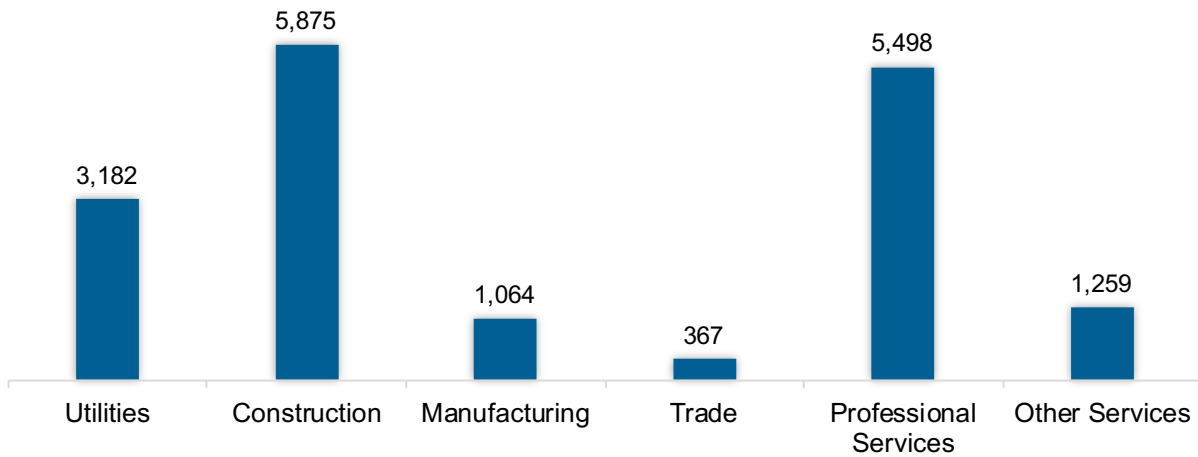
As shown in Figure VA-2, the electric power generation sector employed 17,246 workers in Virginia, 2.0% of the national electricity total, and added 925 jobs from 2021 to 2022 (5.7%).

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



Construction was the largest industry sector in the electric power generation sector, with 34.1% of jobs. Professional and business services was second largest with 31.9% (Figure VA-3).

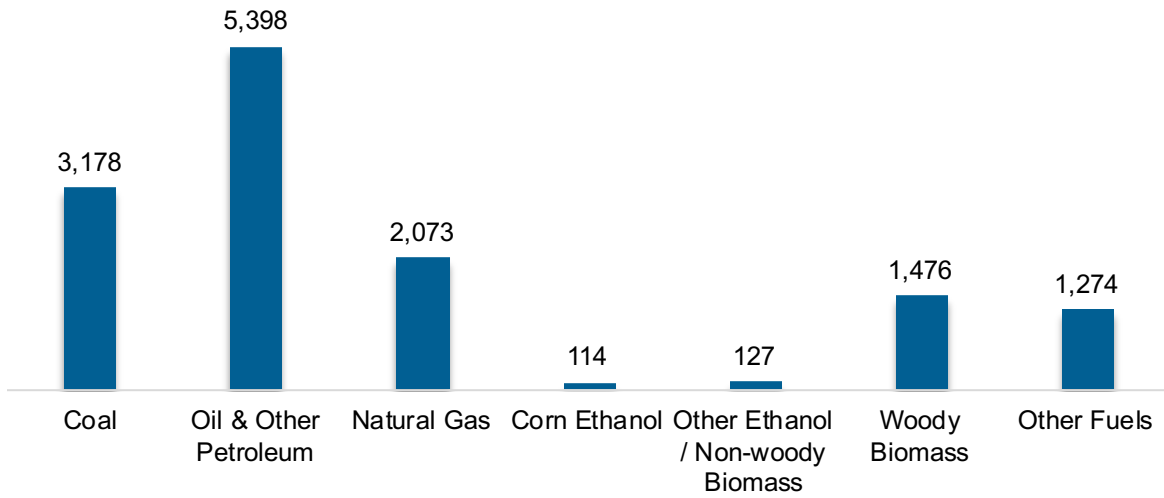
Figure VA-3. Electric Power Generation Employment by Industry Sector



Fuels

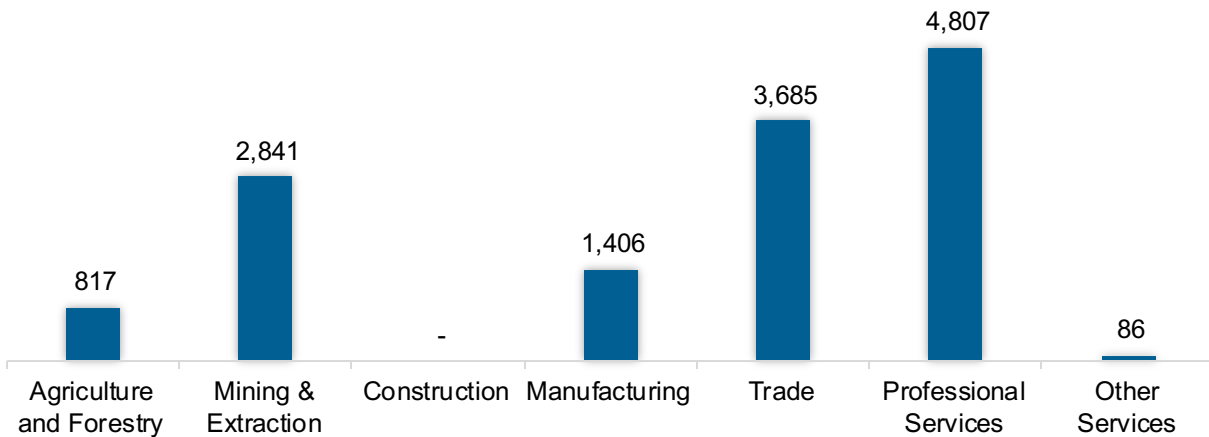
The Fuel sector employed 13,642 workers in Virginia, 1.3% of the national total in fuels (Figure VA-4). The sector gained 1,988 jobs and increased 17.1% from 2021 to 2022.

Figure VA-4. Fuels Employment by Detailed Technology Application



Professional and business services jobs represented 35.2% of fuel jobs in Virginia (Figure VA-5).

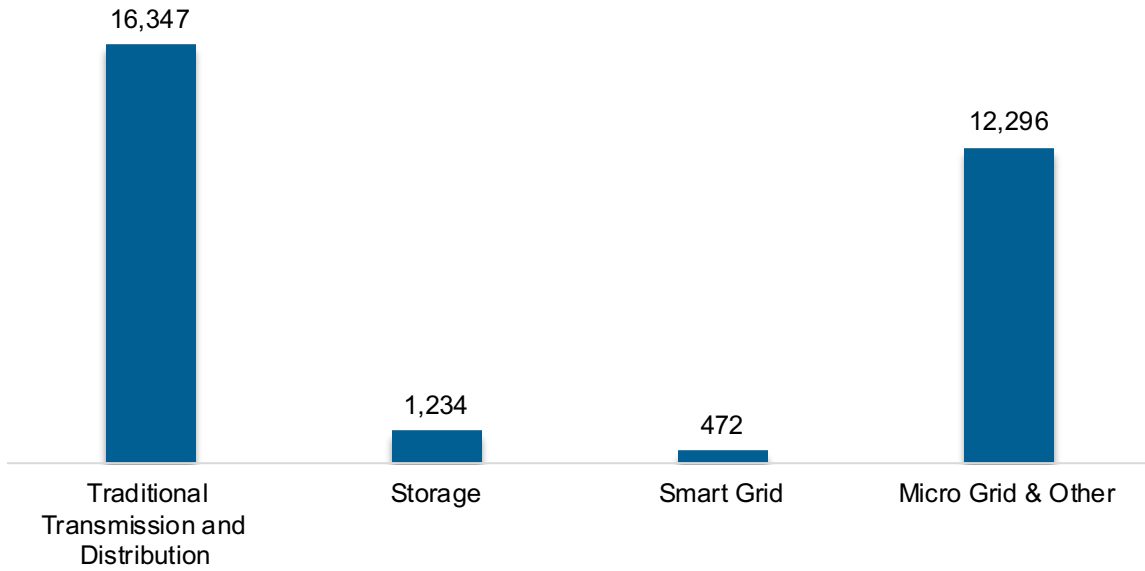
Figure VA-5. Fuels Employment by Industry Sector



Transmission, Distribution and Storage

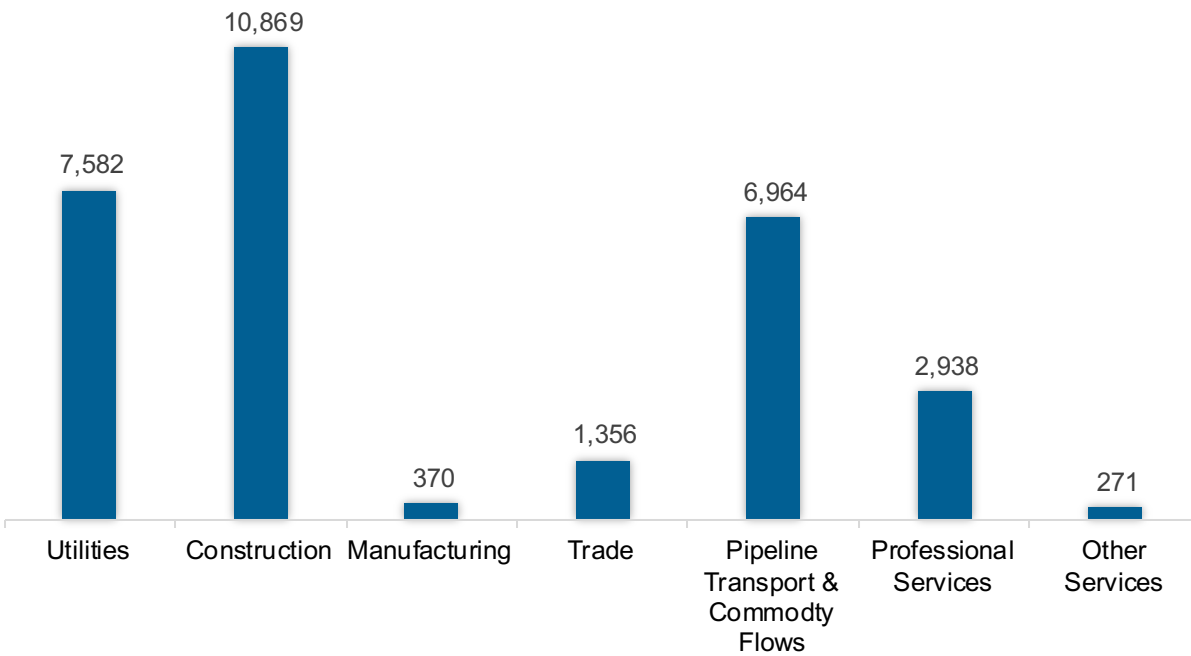
The transmission, distribution, and storage (TDS) sector employed 30,350 workers in Virginia, 1.3% of the national TDS total (Figure VA-6). The sector gained 1,334 jobs and increased 4.6% from 2021 to 2022.

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



Construction was the largest proportion of TDS jobs in Virginia, accounting for 35.8% of the sector's jobs statewide (Figure VA-7).

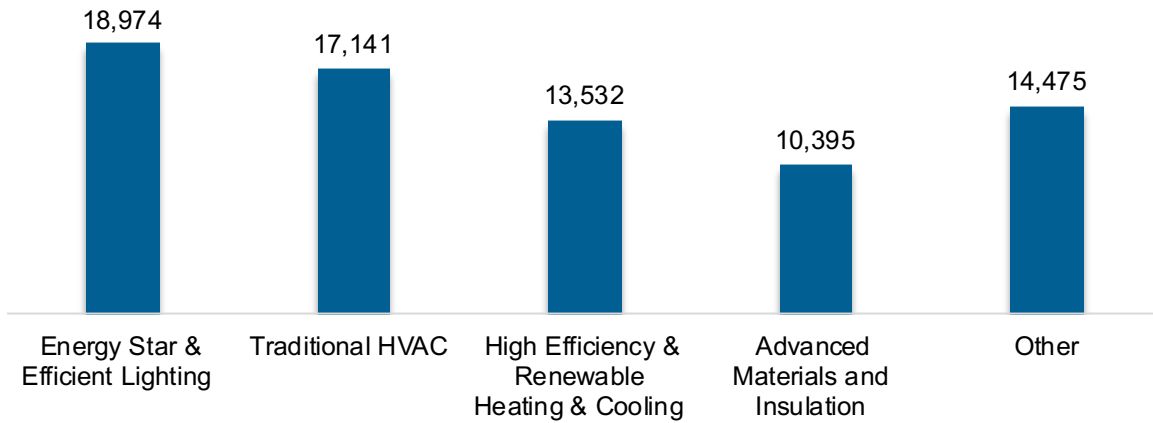
Figure VA-7. Transmission, Distribution and Storage Employment by Industry Sector



Energy Efficiency

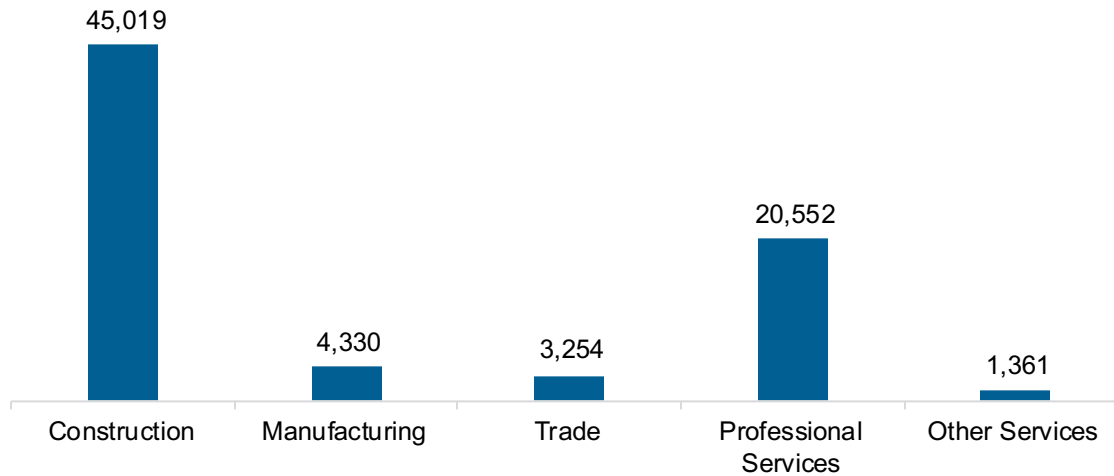
The energy efficiency (EE) sector employed 74,516 workers in Virginia, 3.4% of the national EE total. The EE sector added 1,397 jobs and increased 1.9% from 2021 to 2022 (Figure VA-8).

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



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

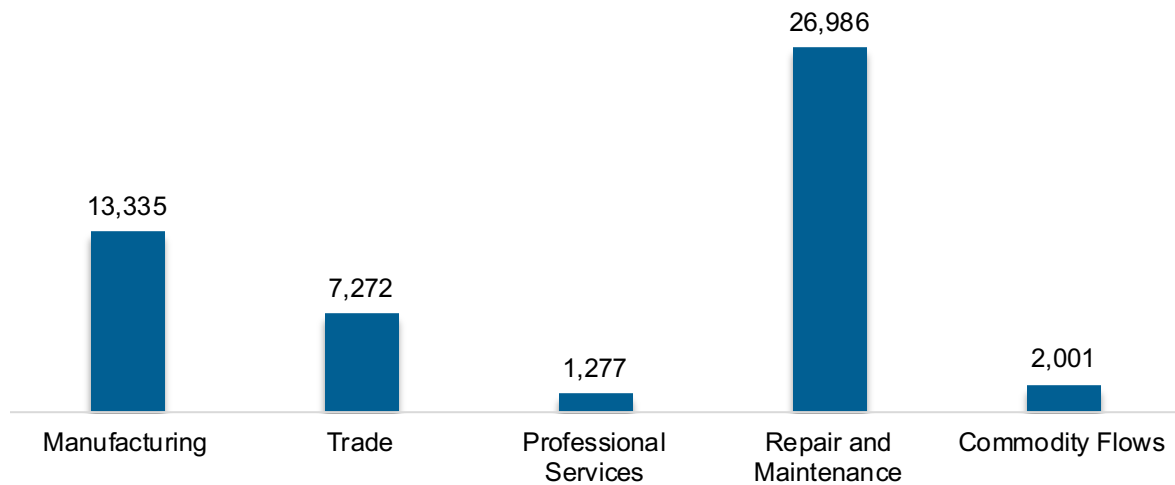
Figure VA-9. Energy Efficiency Employment by Industry Sector



Motor Vehicles and Component Parts

The motor vehicles and component sector employed 50,871 workers in Virginia, 1.9% of the national total for the sector. Motor vehicles and component parts added 1,040 jobs and increased 2.1% from 2021 to 2022. Repair and maintenance is the largest proportion of motor vehicle jobs (Figure VA-10).

Figure VA-10. Motor Vehicle Employment by Industry Sector



Clean Energy Jobs

In 2022, there were 113,565 jobs in clean energy in Virginia if traditional transmission and distribution is included and 97,156 jobs if it is not.⁴⁷ These increased under either definition, growing 4.0% with traditional transmission and distribution and 3.6% without.

Employer Perspectives

Expected Growth

Employers in Virginia were more optimistic than their peers across the country about energy sector job growth over the next year (Table VA-1).

Table VA-1 Expected Growth by Major Technology Application

Technology	State Expected Growth Next 12 Months (percent)	U.S. Expected Growth Next 12 Months (percent)
Electric Power Generation	7.1	6.0
Electric Power Transmission, Distribution, and Storage	6.0	3.9
Energy Efficiency	7.3	6.4
Fuels	4.9	1.6
Motor Vehicles	6.8	5.5

⁴⁷ 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 Virginia reported 53% overall hiring difficulty (Table VA-2).

Table VA-2 Hiring Difficulty by Major Technology Application

Hiring Difficulty	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Did not hire (percent)	Overall Hiring Difficulty
Overall	27	26	6	42	53