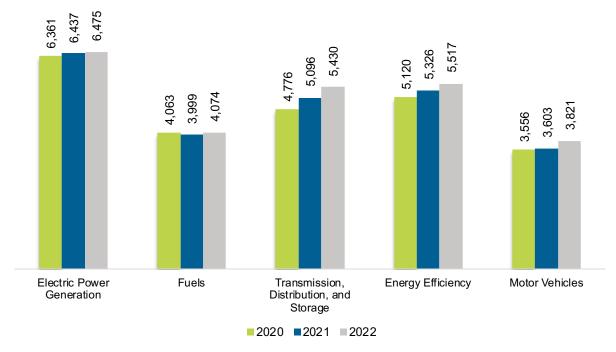
Hawaii

U.S. ENERGY AND EMPLOYMENT REPORT — 2023

Overview

Hawaii had 25,316 energy workers statewide in 2022, representing 0.3% of all U.S. energy jobs. Of these energy jobs, 6,475 were in electric power generation; 4,074 in fuels; 5,430 in transmission, distribution, and storage; 5,517 in energy efficiency; and 3,821 in motor vehicles. From 2021 to 2022, energy jobs in the state increased 856 jobs, or 3.5% (Figure HI-1). The energy sector in Hawaii represented 4.1% of total state employment.

Figure HI-1. Employment by Major Energy Technology Application

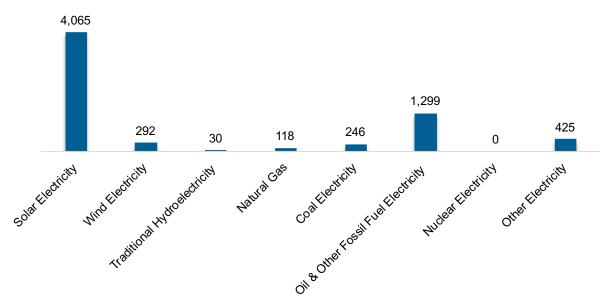


Breakdown by Technology Applications

Electric Power Generation

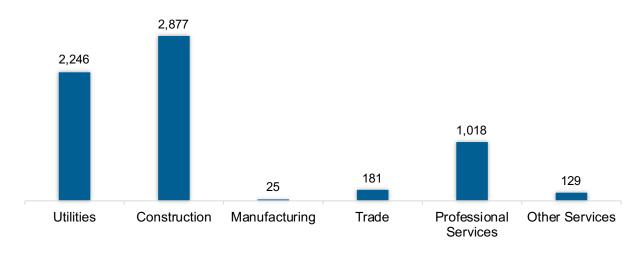
As shown in Figure HI-2, the electric power generation sector employed 6,475 workers in Hawaii, 0.7% of the national electricity total, and added 38 jobs from 2021 to 2022 (0.6%).

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



Construction was the largest industry sector in the electric power generation sector, with 44.4% of jobs. Utilities was second largest with 34.7% (Figure HI-3).

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



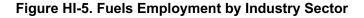
Fuels

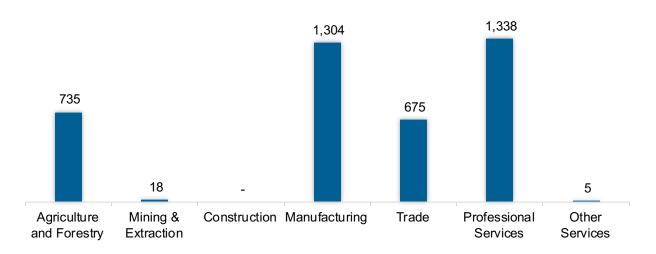
The Fuel sector employed 4,074 workers in Hawaii, 0.4% of the national total in fuels (Figure HI-4). The sector gained 75 jobs and increased 1.9% from 2021 to 2022.

1,741 992 756 286 271 13 15 Natural Gas Corn Ethanol Other Ethanol Other Fuels Coal Oil & Other Woody Petroleum / Non-woody **Biomass Biomass**

Figure HI-4. Fuels Employment by Detailed Technology Application

Professional and business services jobs represented 32.8% of fuel jobs in Hawaii (Figure HI-5).





Transmission, Distribution and Storage

The transmission, distribution, and storage (TDS) sector employed 5,430 workers in Hawaii, 0.4% of the national TDS total (Figure HI-6). The sector gained 334 jobs and increased 6.6% from 2021 to 2022.

2,523
2,440

411
57

Traditional Storage Smart Grid Micro Grid & Other Transmission and Distribution

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

Construction was the largest proportion of TDS jobs in Hawaii, accounting for 33.8% of the sector's jobs statewide (Figure HI-7).

1,835 1,312 1,107 749 387 33 Utilities Construction Manufacturing Trade Pipeline Professional Other Transport & Services Services Commodty

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

Energy Efficiency

The energy efficiency (EE) sector employed 5,517 workers in Hawaii, 0.2% of the national EE total. The EE sector added 191 jobs and increased 3.6% from 2021 to 2022 (Figure HI-8).

Flows

2,722

1,297

599

September 1,297

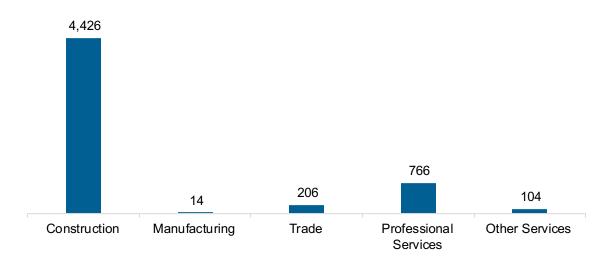
Energy Star & Traditional HVAC High Efficiency & Advanced Materials and Insulation

Efficient Lighting & Cooling Insulation

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

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





Motor Vehicles and Component Parts

The motor vehicles and component sector employed 3,821 workers in Hawaii, 0.1% of the national total for the sector. Motor vehicles and component parts added 217 jobs and increased 6.0% from 2021 to 2022. Repair and maintenance is the largest proportion of motor vehicle jobs (Figure HI-10).

3,130

474

9

Manufacturing Trade Professional Repair and Commodity Flows

Figure HI-10. Motor Vehicle Employment by Industry Sector

Clean Energy Jobs

In 2022, there were 16,468 jobs in clean energy in Hawaii if traditional transmission and distribution is included and 13,924 jobs if it is not.¹² These increased under either definition, growing 3.2% with traditional transmission and distribution and 1.7% without.

Services

Maintenance

Employer Perspectives

Expected Growth

Employers in Hawaii are similarly optimistic than their peers across the country about energy sector job growth over the next year (Table HI-1).

Table HI-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	5.3	6.0
Electric Power Transmission, Distribution, and Storage	4.2	3.9
Energy Efficiency	5.5	6.4
Fuels	3.1	1.6
Motor Vehicles	5.0	5.5

¹² 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.

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Hiring Difficulty

Employers in Hawaii reported 61% overall hiring difficulty (Table HI-2).

Table HI-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	33	28	4	34	61