

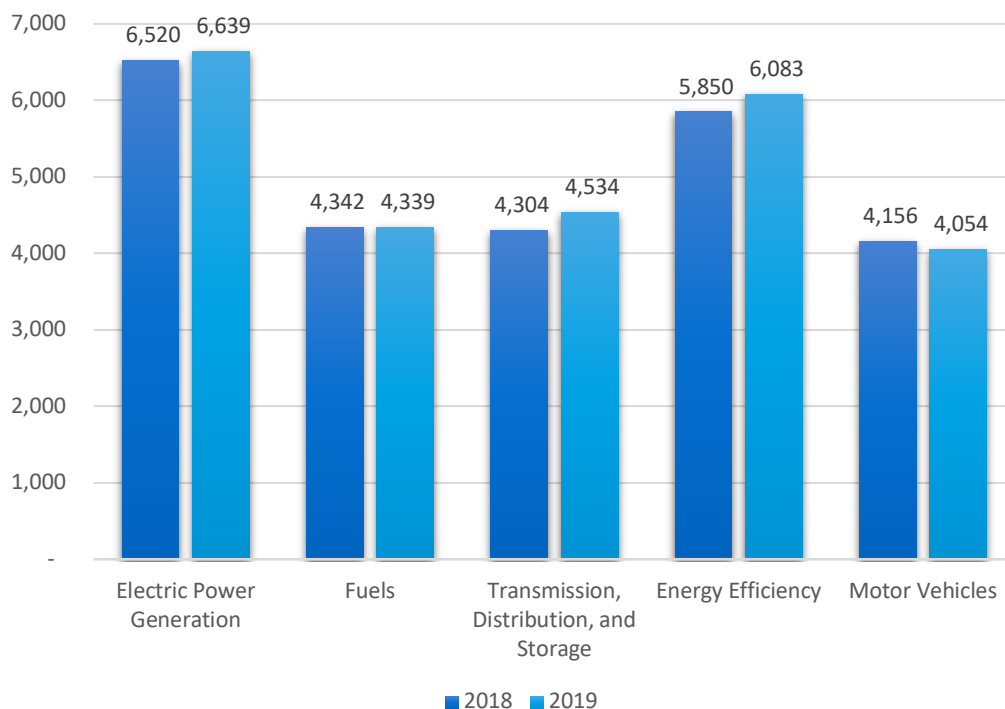
Hawaii

ENERGY AND EMPLOYMENT — 2020

Overview

Hawaii has an average concentration of energy employment, with 15,512 Traditional Energy workers statewide (representing 0.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 6,639 are in Electric Power Generation, 4,339 are in Fuels, and 4,534 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Hawaii is 2.4 percent of total state employment (compared to 2.3 percent of national employment). Hawaii has an additional 6,083 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 4,054 jobs in Motor Vehicles (0.2 percent of all U.S. Motor Vehicle jobs).

Figure HI-1.
Employment by Major Energy Technology Application



Overall, Traditional Energy jobs grew by 2.3 percent since the 2019 report, increasing by 346 jobs over the period. Energy Efficiency jobs added 233 jobs (4.0 percent) and motor vehicles lost 102 jobs (-2.5 percent).

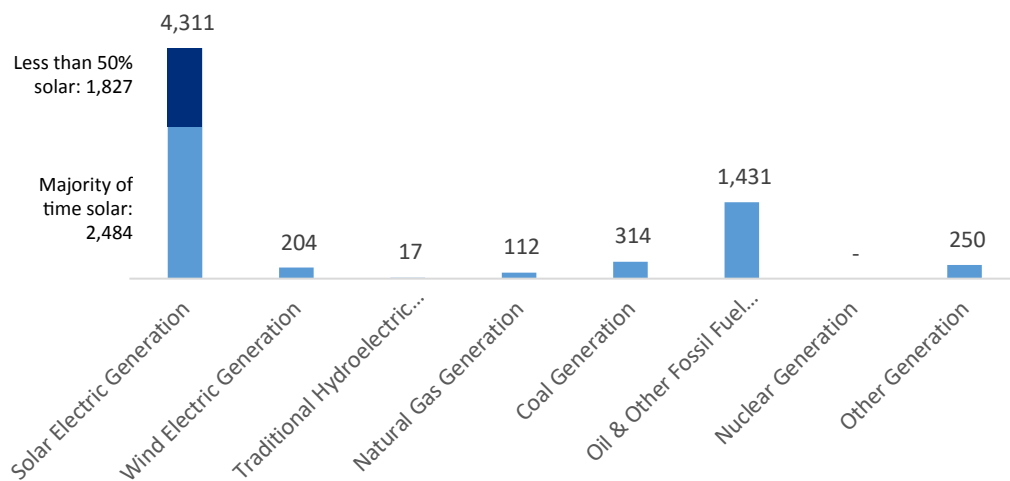
Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 6,639 workers in Hawaii, 0.7 percent of the national total and adding 119 jobs over the past year (1.8 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 4,311 jobs (up 4.2 percent), followed by traditional fossil fuel generation at 1,858 jobs (down -4.7 percent).

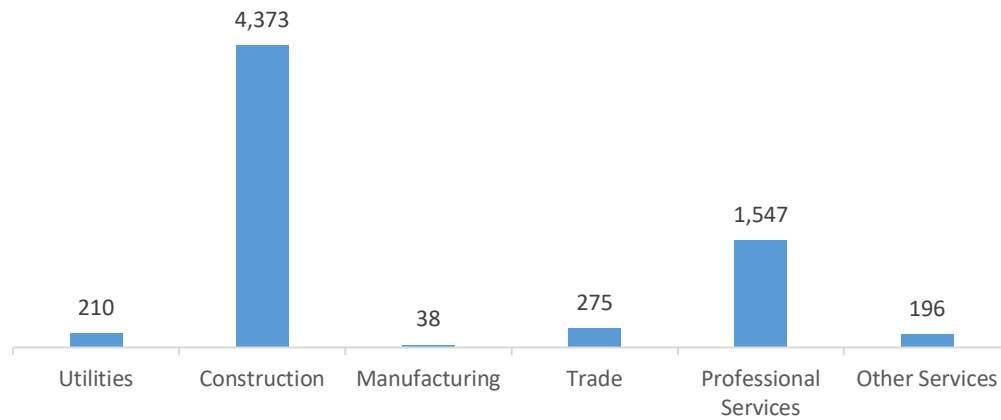
Figure HI-2.

Electric Power Generation Employment by Detailed Technology Application



Construction is the largest industry sector in Electric Power Generation, with 65.9 percent of jobs. Professional and business services are next with 23.3 percent.

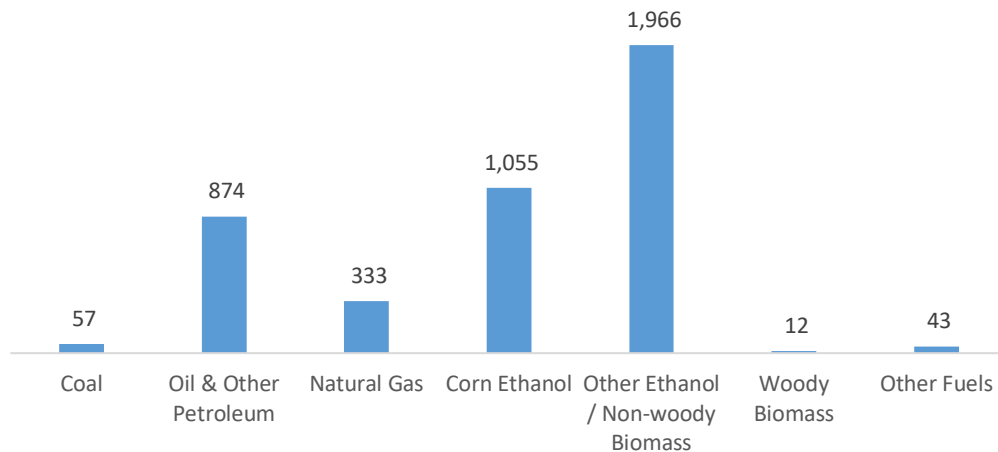
Figure HI-3.
Electric Power Generation by Industry Sector



FUELS

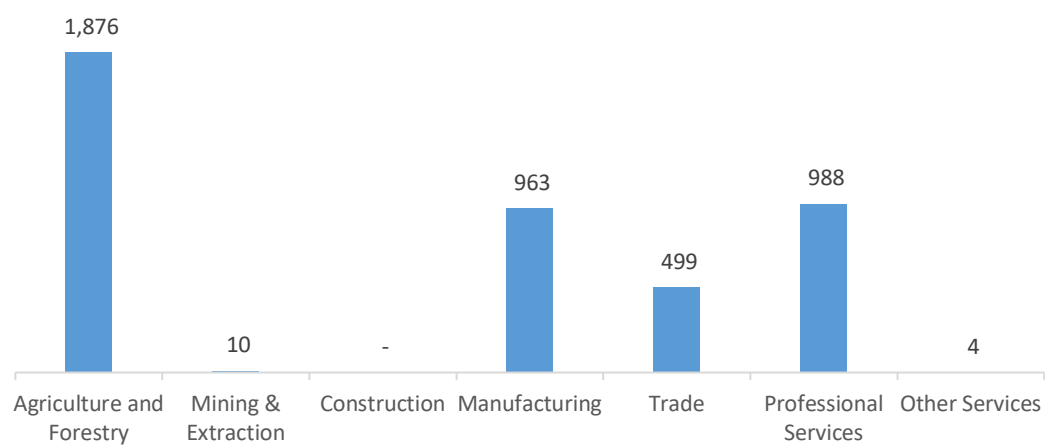
Fuels employs 4,339 workers in Hawaii, 0.4 percent of the national total, down -0.1 percent over the past year. Other ethanol/non-Woody biomass, including biodiesel makes up the largest segment of employment related to Fuels.

Figure HI-4.
Fuels Employment by Detailed Technology Application



Agriculture jobs represent 43.2 percent of Fuels jobs in Hawaii.

Figure HI-5.
Fuels Employment by Industry Sector

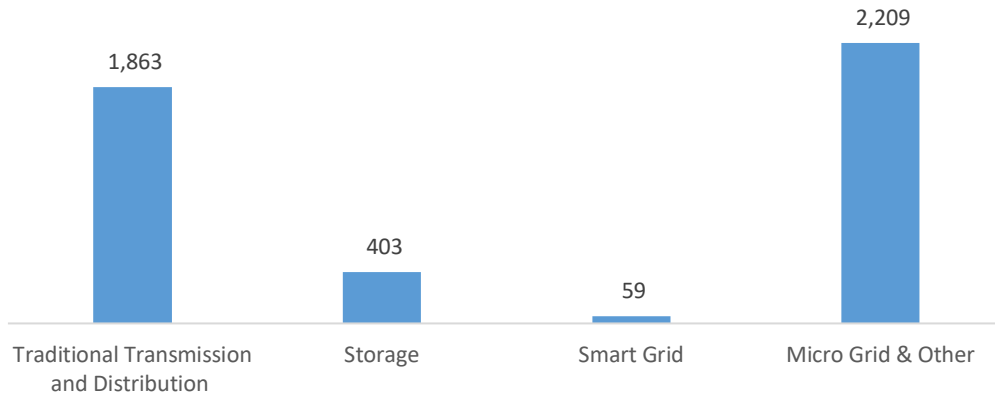


TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 4,534 workers in Hawaii, 0.3 percent of the national total, up 5.3 percent or 230 jobs since the 2018 report.

Figure HI-6.

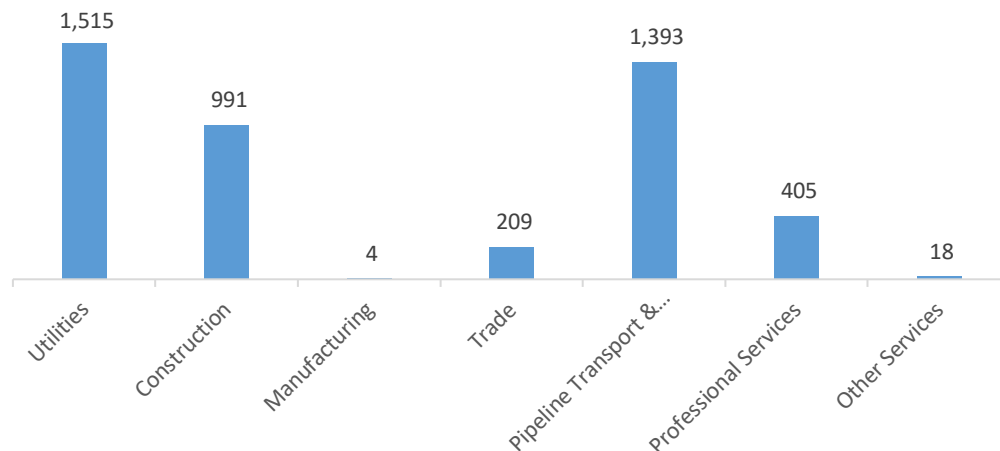
Transmission, Distribution and Storage Employment by Detailed Technology



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Hawaii, with 33.4 percent of such jobs statewide.

Figure HI-7.

Transmission, Distribution and Storage Employment by Industry Sector

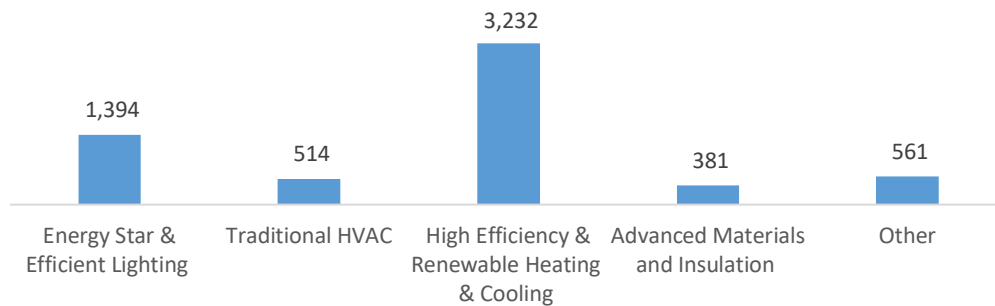


ENERGY EFFICIENCY

The 6,083 Energy Efficiency jobs in Hawaii represent 0.3 percent of all U.S. Energy Efficiency jobs, adding 233 jobs (4.0 percent) since last year. The largest number of these employees work in (high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting.

Figure HI-8.

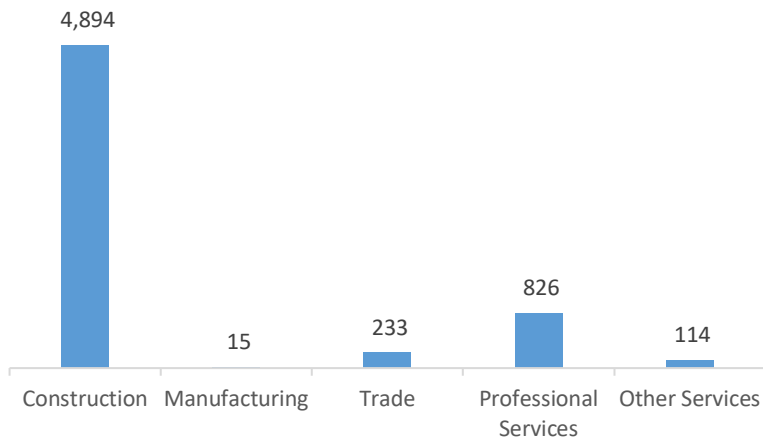
Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

Figure HI-9.

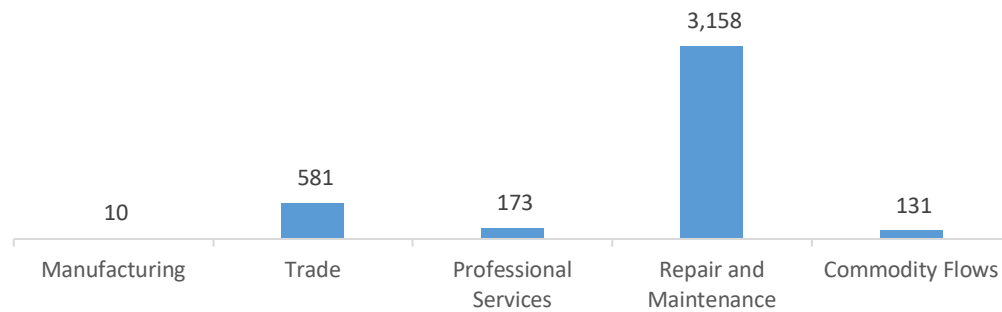
Energy Efficiency Employment by Industry Sector



MOTOR VEHICLES

Motor Vehicle employment accounts for 4,054 jobs in Hawaii, down 102 jobs over the past year (-2.5 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure HI-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

EMPLOYER GROWTH

Employers in Hawaii are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (5.5 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 274 jobs in Energy Efficiency (4.5 percent) and Motor Vehicles employers expect to add 141 jobs (3.5 percent) over the next year.

Table HI-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	7.9	4.8
Electric Power Transmission, Distribution, and Storage	3.9	3.5
Energy Efficiency	4.5	3.0
Fuels	3.4	1.7
Motor Vehicles	3.5	3.1

HIRING DIFFICULTY

Over the last year, 25.9 percent of energy-related employers in Hawaii hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Transmission, Distribution, and Storage.

Table HI-2
Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	23.1	63.7	13.2
Electric Power Transmission, Distribution, and Storage	20.6	68.7	10.7
Energy Efficiency	37.1	49.7	13.2
Fuels	27.1	50.7	22.2
Motor Vehicles	41.2	46.3	12.4

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

1. Competition/ small applicant pool
2. Lack of experience, training, or technical skills
3. Difficulty finding industry-specific knowledge, skills, and interest

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

1. Sales, marketing, or customer service — \$35.35 median hourly wage
2. Electrician/construction workers — \$28.59 median hourly wage
3. Installation workers — \$27.91 median hourly wage