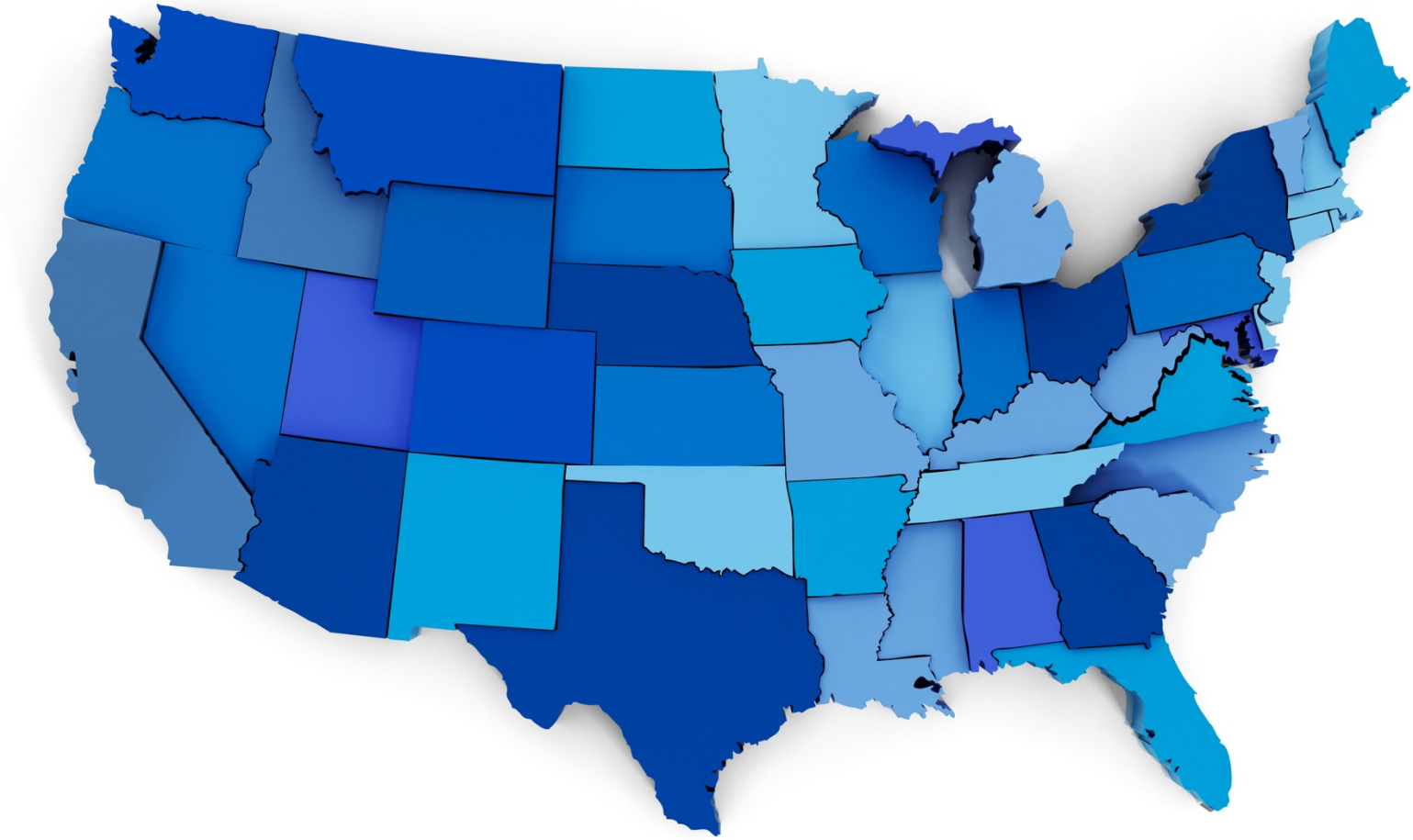


Energy Employment By State

ENERGY FUTURES INITIATIVE

NASEO
National Association of State Energy Officials

May 2018

Definitions of Major Energy Technology Applications

Electric Power Generation covers all utility and non-utility employment across electric generating technologies including fossil fuels, nuclear, and renewable energy technologies. Also included in the employment totals are any firms engaged in facility construction, turbine and other generation equipment manufacturing, as well as wholesale parts distribution of all electric generation technologies.

Fuels employment encompasses all work related to fuel extraction and mining, including petroleum refineries and firms that support coal mining, oil, and gas field machinery manufacturing. Workers across both the forestry and agriculture industries that support fuel production with corn ethanol, biodiesels, and fuel wood are also included in the fuel employment estimates.

Transmission, Distribution, and Storage includes transmission, transportation, and storage of electricity and other energy commodities at wholesale and retail levels but excludes the retail delivery and sale of liquid fuels, including gasoline.

Energy Efficiency employment covers both the production of energy-saving products and the provision of services that reduce end-use energy consumption. These services include not only the manufacture of ENERGY STAR appliances and other ENERGY STAR labeled products, but also building design and contracting services that provide insulation, improve natural lighting, and reduce overall energy consumption across homes and businesses.

Motor Vehicles employment encompasses all work related to the manufacture, wholesale trade, distribution, and transport, repair and maintenance, and professional and business services for cars, light-duty and heavy-duty trucks and component parts for these vehicle

Alabama

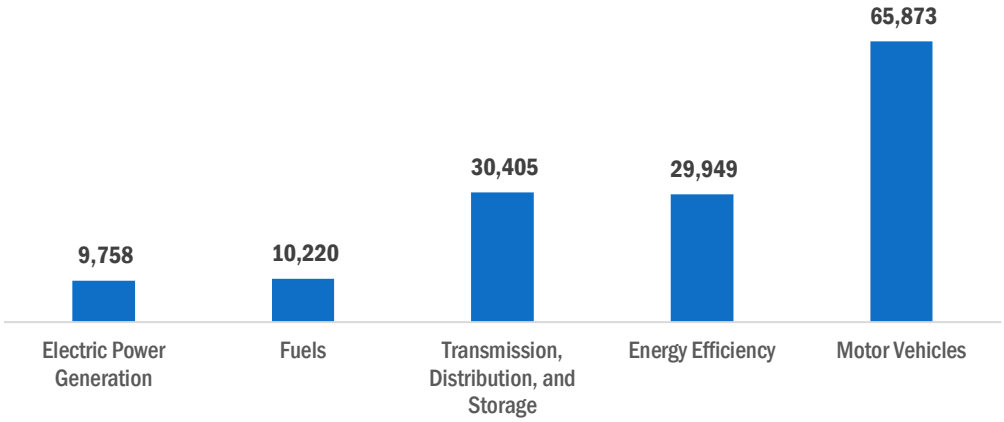
Energy and Employment – 2017

Overview

Alabama has an average concentration of energy employment, with 50,383 Traditional Energy workers statewide (representing 1.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 9,758 are in Electric Power Generation, 10,220 are in Fuels, and 30,405 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Alabama is 2.6 percent of total state employment (compared to 2.3 percent of national employment). Alabama has an additional 29,949 jobs in Energy Efficiency (1.3 percent of all U.S. Energy Efficiency jobs) and 65,873 jobs in Motor Vehicles (2.7 percent of all U.S. Motor Vehicle jobs).

Figure AL-1.

Employment by Major Energy Technology Application

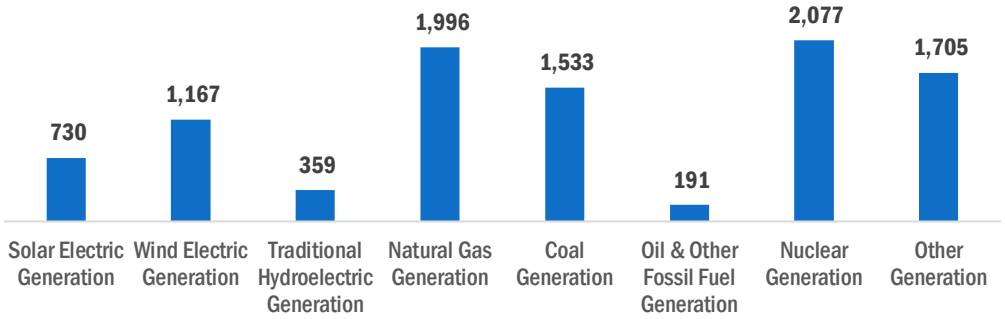


Breakdown by Technology Applications

Electric Power Generation

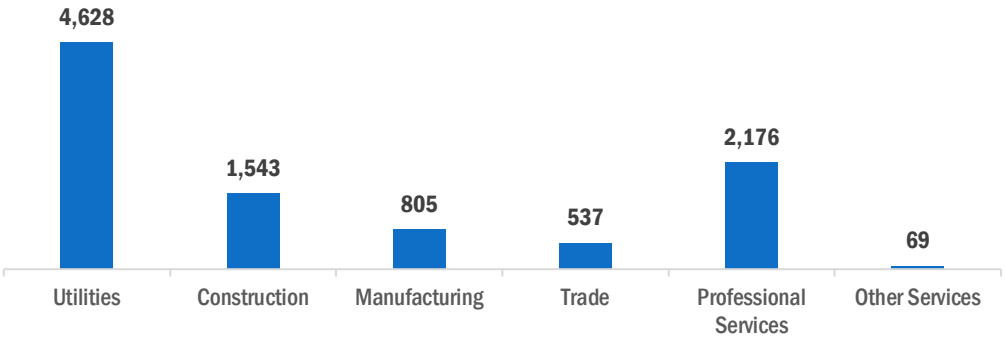
Electric Power Generation employs 9,758 workers in Alabama, 1.1 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 3,720 jobs, followed by nuclear at 2,077 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 47.4 percent of jobs. Professional and business services are next with 22.3 percent.

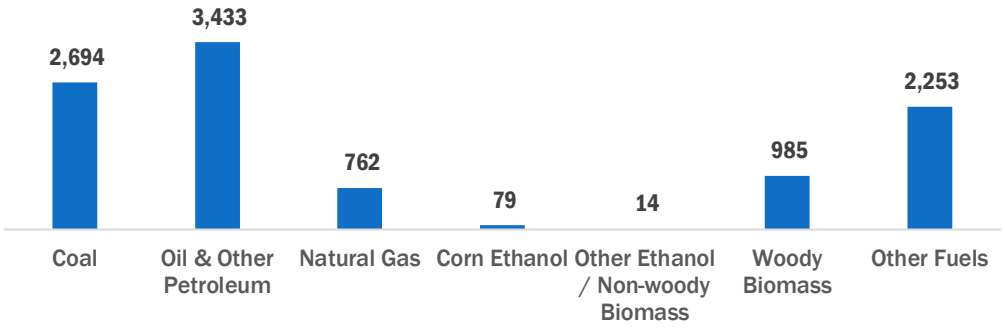
Figure AL-3.



Fuels

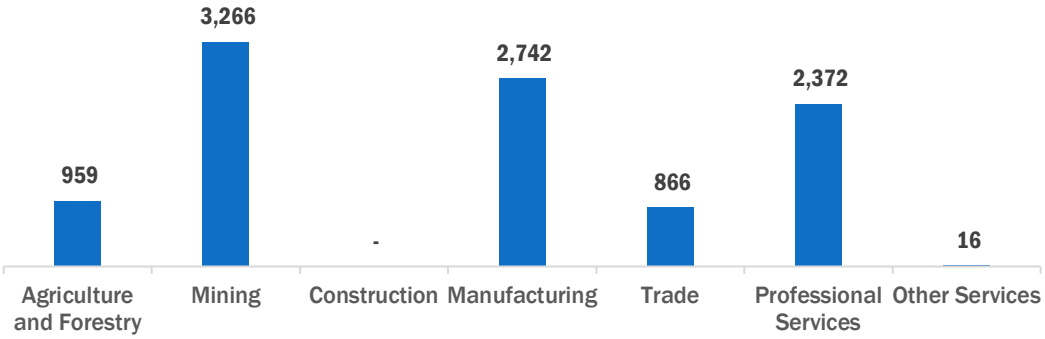
Fuels account for 10,220 jobs in Alabama, 1.0 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,433 jobs.

Figure AL-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 32.0 percent of Fuels jobs in Alabama.

Figure AL-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

Transmission, Distribution, and Storage employs 30,405 workers in Alabama, 2.3 percent of the national total.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Alabama, with 64.9 percent of such jobs statewide.

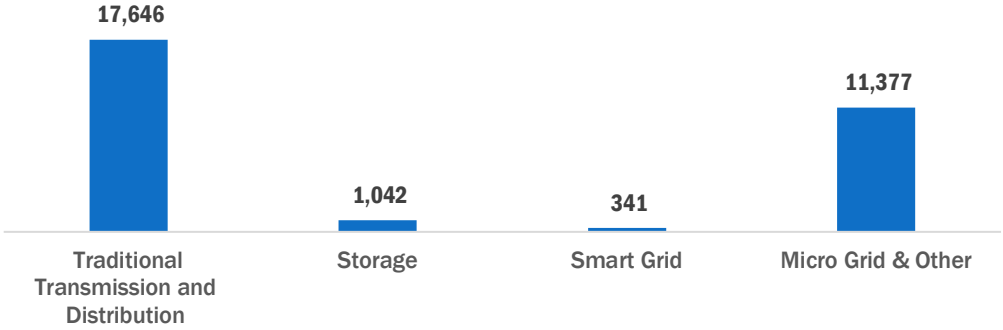
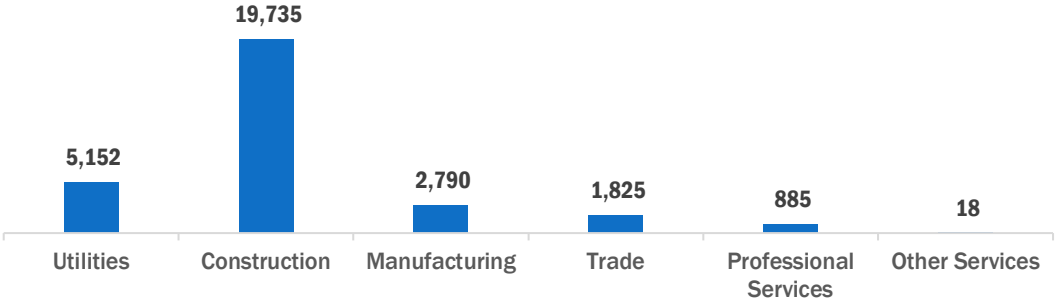


Figure AL-7.
Transmission, Distribution, and Storage Employment by Industry Sector



Energy Efficiency

The 29,949 Energy Efficiency jobs in Alabama represent 1.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

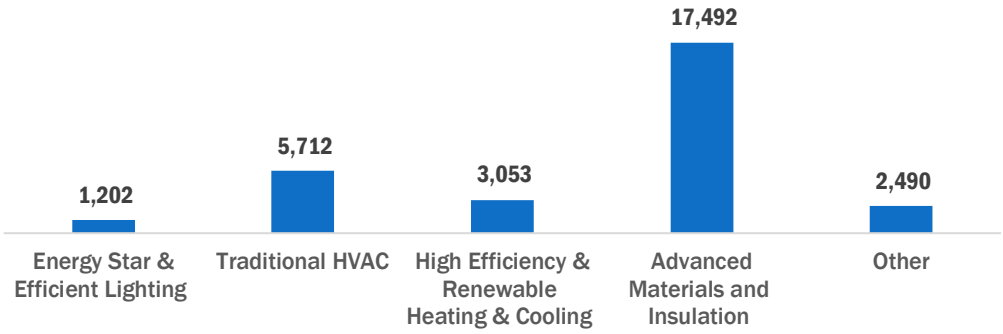
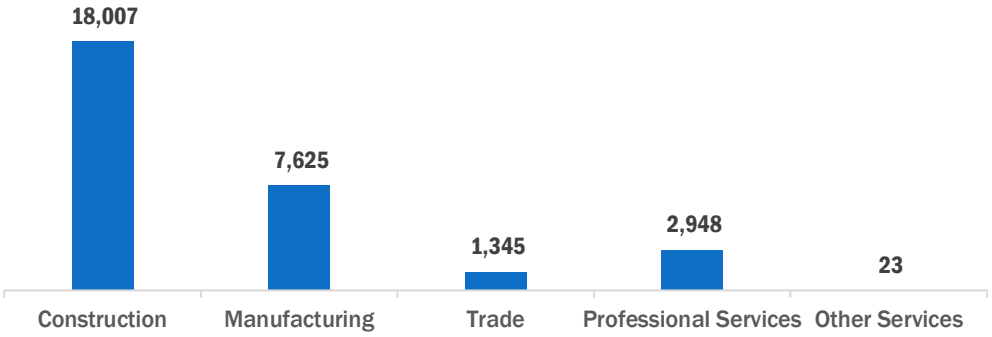


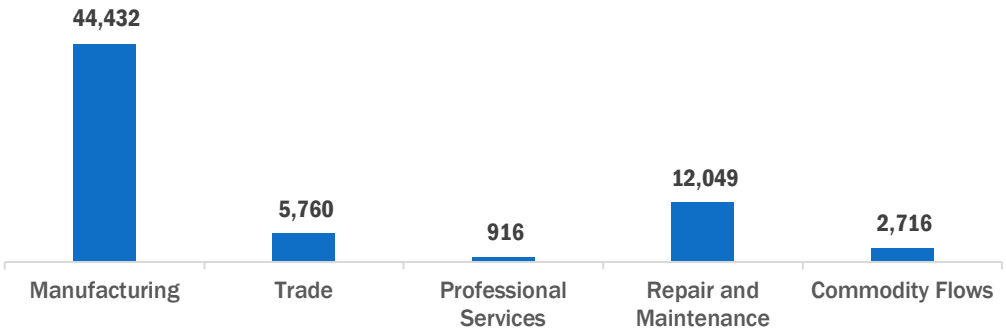
Figure AL-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 65,873 jobs in Alabama. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure AL-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 71.4 percent of energy-related employers in Alabama hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table AL-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	-	63.6	36.4	-
Transmission, Distribution and Storage	-	50.0	50.0	-
Energy Efficiency	33.3	55.6	11.1	-
Fuels	10.0	70.0	10.0	10.0
Motor Vehicles	14.3	71.4	-	14.3

Alaska

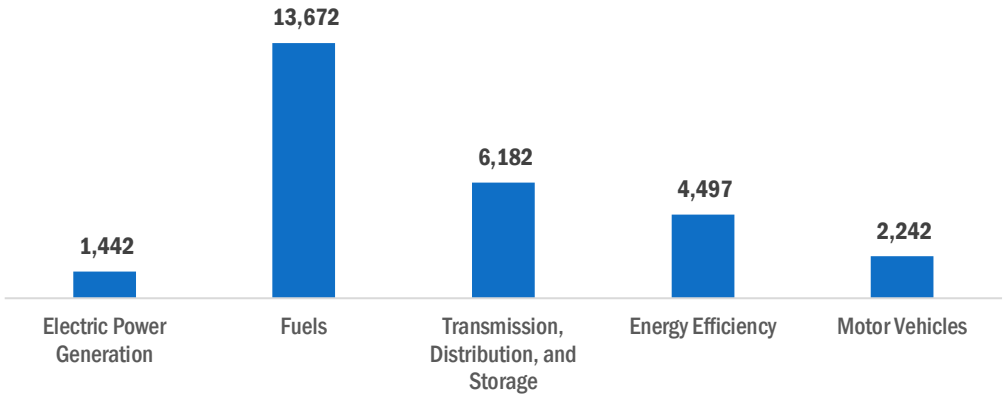
Energy and Employment – 2017

Overview

Alaska has a high concentration of energy employment, with 21,296 Traditional Energy workers statewide (representing 0.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 1,442 are in Electric Power Generation, 13,672 are in Fuels, and 6,182 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Alaska is 6.3 percent of total state employment (compared to 2.3 percent of national employment). Alaska has an additional 4,497 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 2,242 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure AK-1.

Employment by Major Energy Technology Application

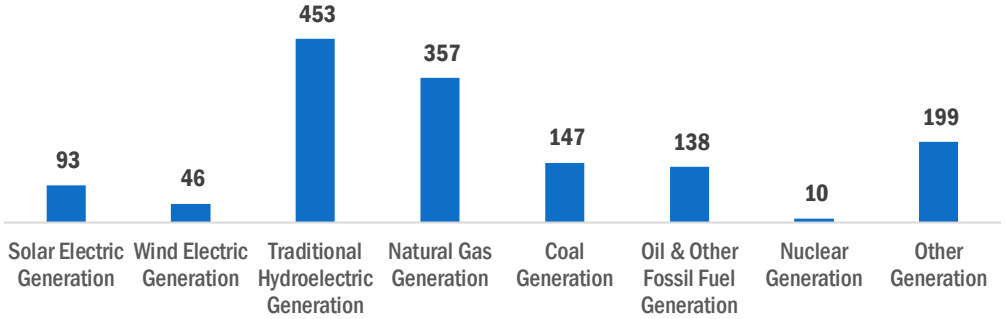


Breakdown by Technology Applications

Electric Power Generation

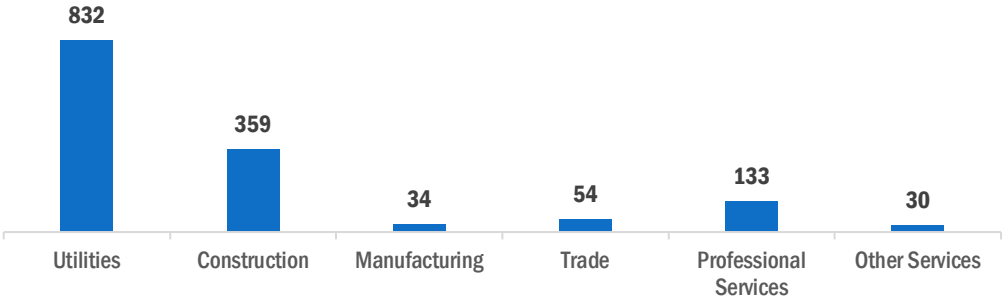
Electric Power Generation employs 1,442 workers in Alaska, 0.2 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 642 jobs, followed by traditional hydroelectric generation at 453 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 57.7 percent of jobs. Construction is next with 24.9 percent.

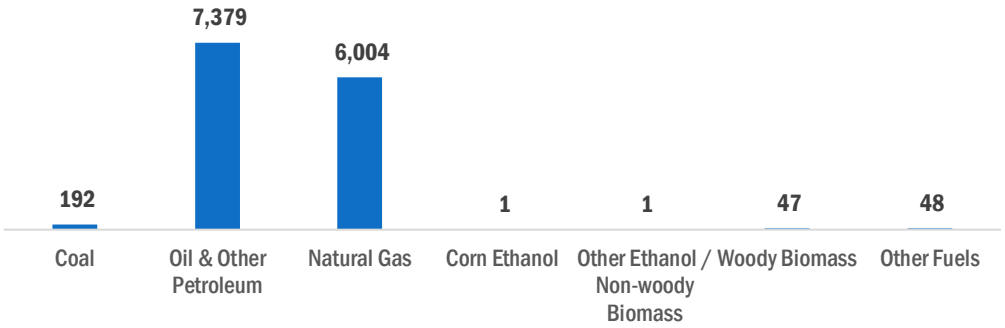
Figure AK-3.
Electric Power Generation Employment by Industry Sector



Fuels

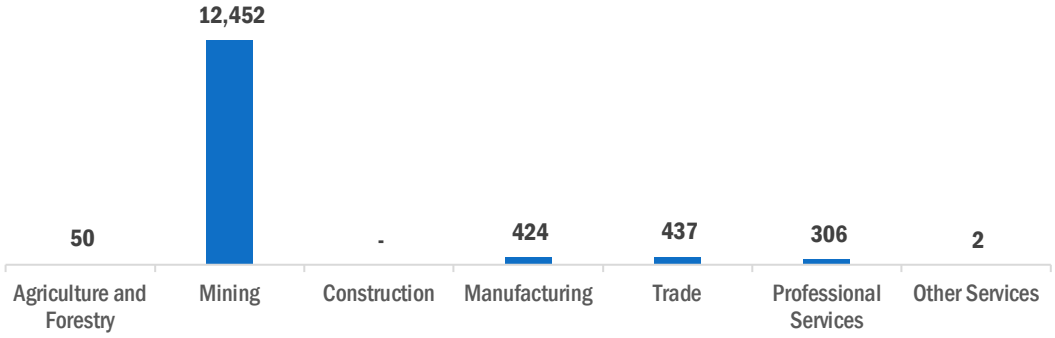
Fuels account for 13,672 jobs in Alaska, 1.3 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 7,379 jobs.

Figure AK-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 91.1 percent of Fuels jobs in Alaska.

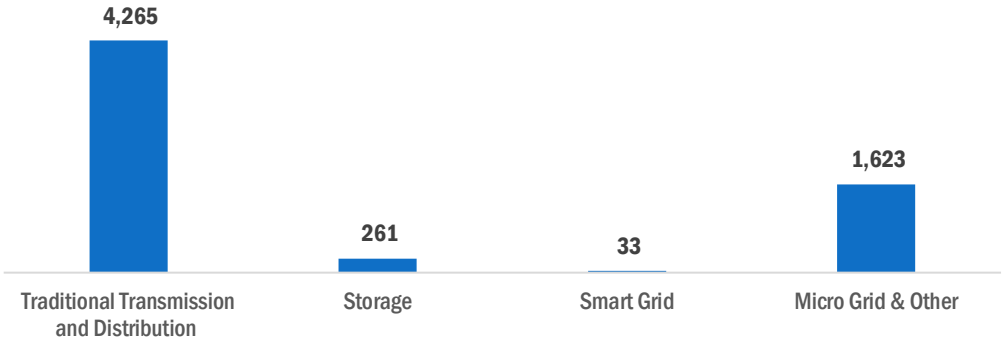
Figure AK-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

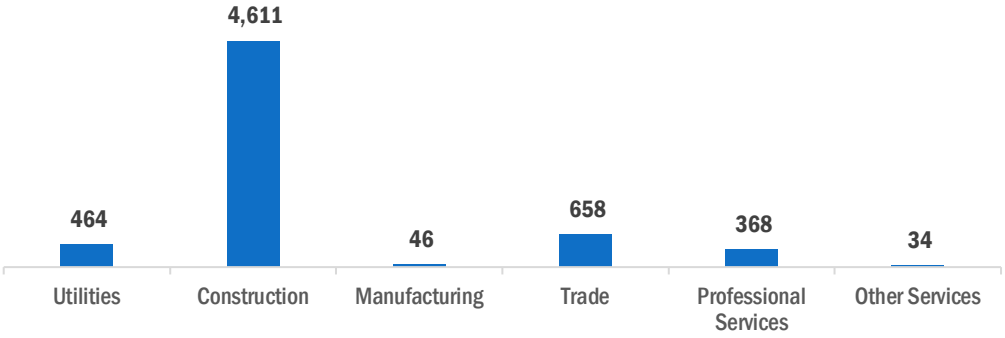
Transmission, Distribution, and Storage employs 6,182 workers in Alaska, 0.5 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Alaska, with 74.6 percent of such jobs statewide.

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



Energy Efficiency

The 4,497 Energy Efficiency jobs in Alaska represent 0.2 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by advanced materials and insulation. Energy Efficiency employment is primarily found in the construction industry.

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

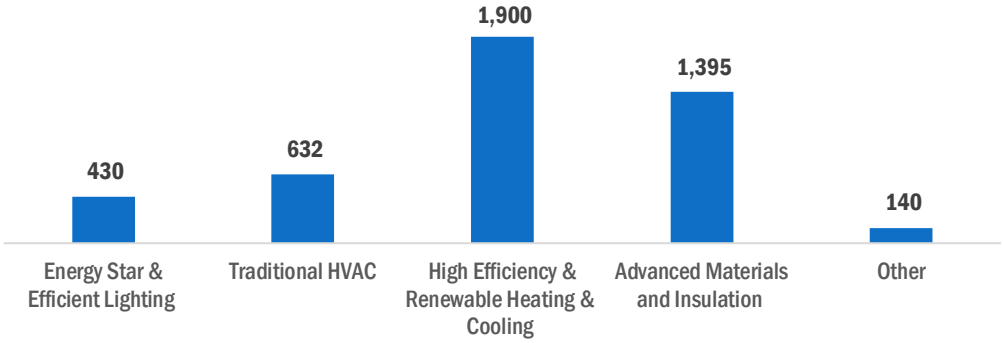
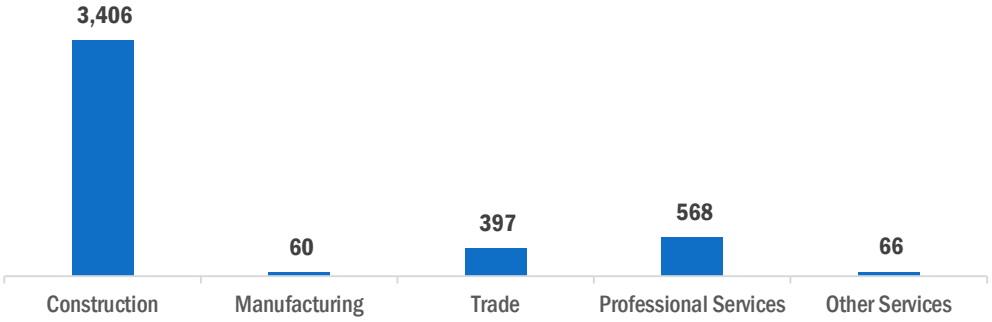


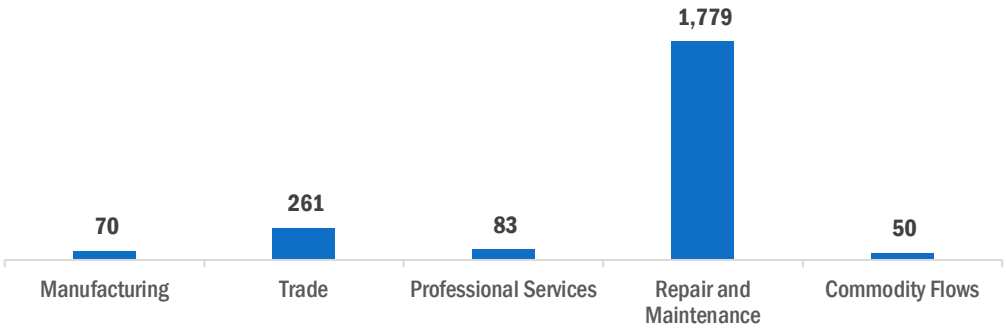
Figure AK-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 2,242 jobs in Alaska. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure AK-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 42.9 percent of energy-related employers in Alaska hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table AK-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.2	45.5	27.3	9.1
Transmission, Distribution and Storage	20.0	50.0	20.0	10.0
Energy Efficiency	38.5	30.8	23.1	7.7
Fuels	22.2	44.4	22.2	11.1
Motor Vehicles	62.5	25.0	12.5	-

Arizona

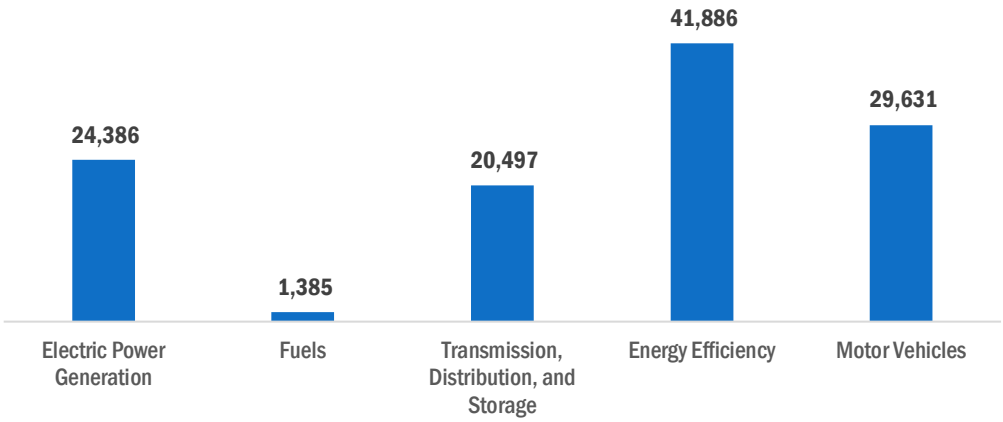
Energy and Employment – 2017

Overview

Arizona has a low concentration of energy employment, with 46,268 Traditional Energy workers statewide (representing 1.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 24,386 are in Electric Power Generation, 1,385 are in Fuels, and 20,497 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Arizona is 1.7 percent of total state employment (compared to 2.3 percent of national employment). Arizona has an additional 41,886 jobs in Energy Efficiency (1.9 percent of all U.S. Energy Efficiency jobs) and 29,631 jobs in Motor Vehicles (1.2 percent of all U.S. Motor Vehicle jobs).

Figure AZ-1.

Employment by Major Energy Technology Application

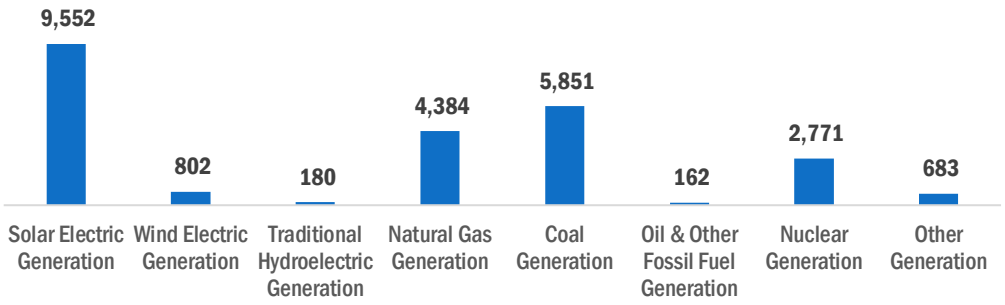


Breakdown by Technology Applications

Electric Power Generation

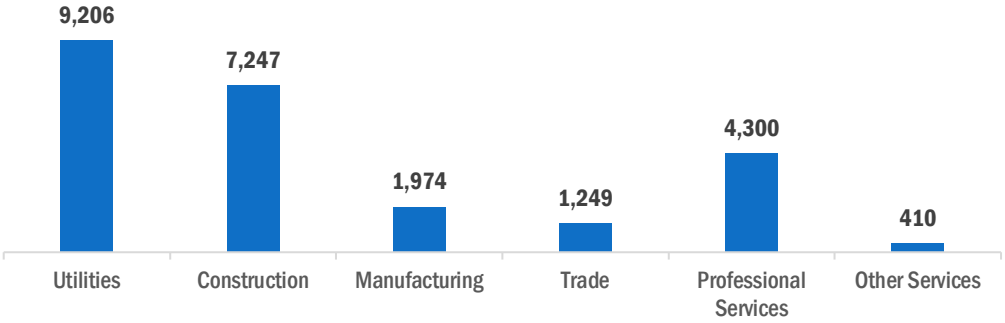
Electric Power Generation employs 24,386 workers in Arizona, 2.8 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 10,398 jobs, followed by solar at 9,552 jobs.

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



Utilities is the largest industry sector in Electric Power Generation, with 37.8 percent of jobs. Construction is next with 29.7 percent.

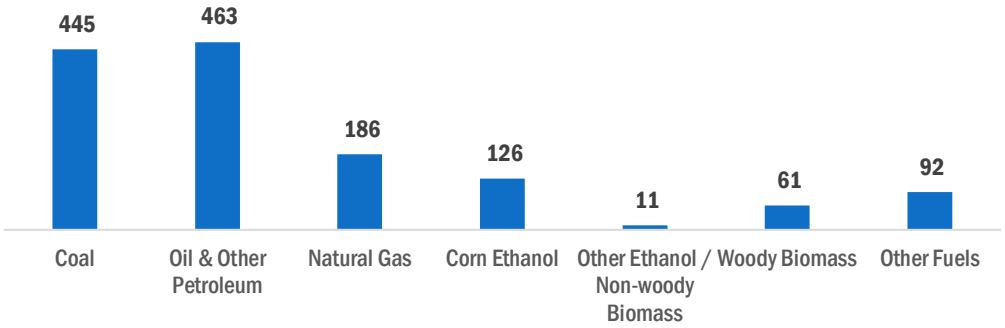
Figure AZ-3.
Electric Power Generation Employment by Industry Sector



Fuels

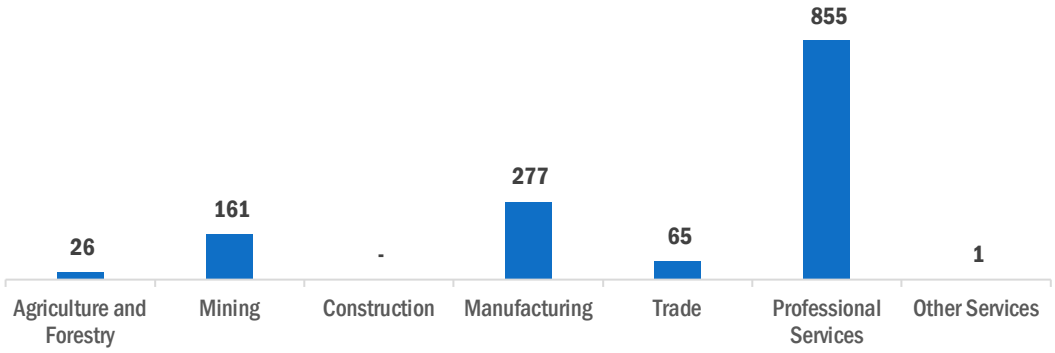
Fuels account for 1,385 jobs in Arizona, 0.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 463 jobs.

Figure AZ-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 61.7 percent of Fuels jobs in Arizona.

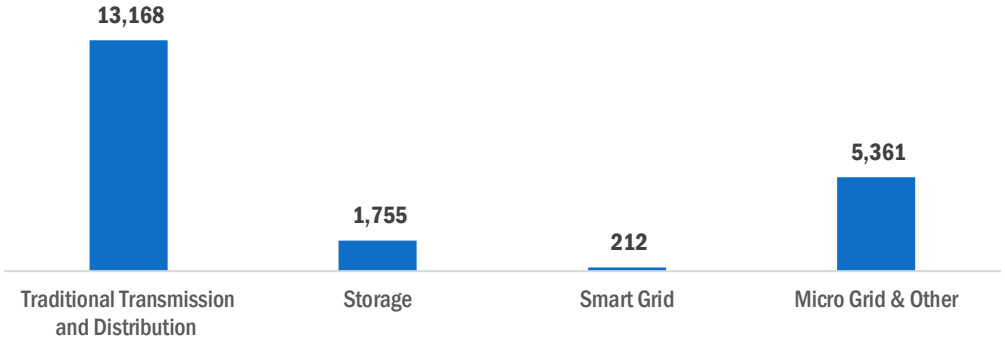
Figure AZ-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

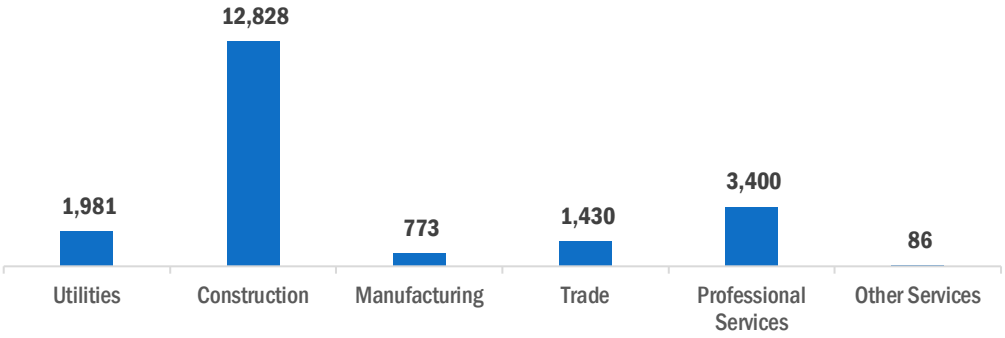
Transmission, Distribution, and Storage employs 20,497 workers in Arizona, 1.5 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Arizona, with 62.6 percent of such jobs statewide.

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



Energy Efficiency

The 41,886 Energy Efficiency jobs in Arizona represent 1.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

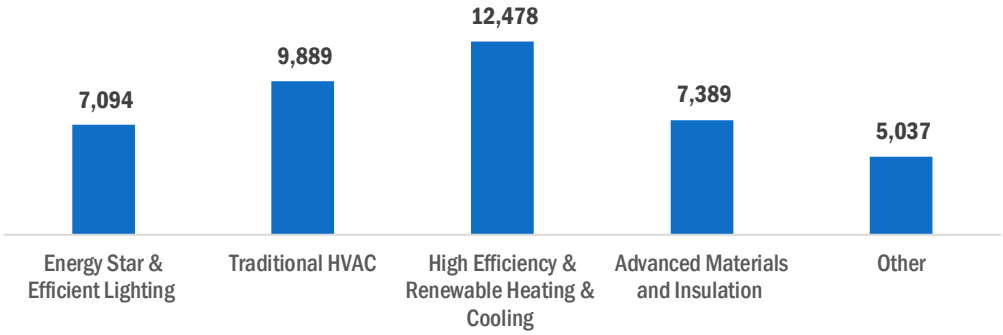
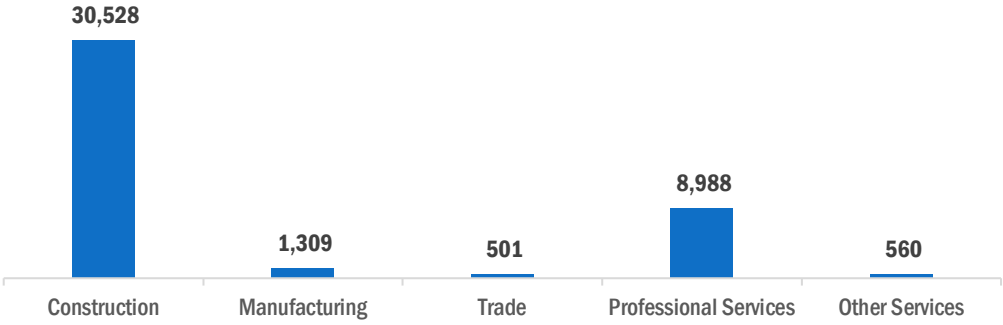


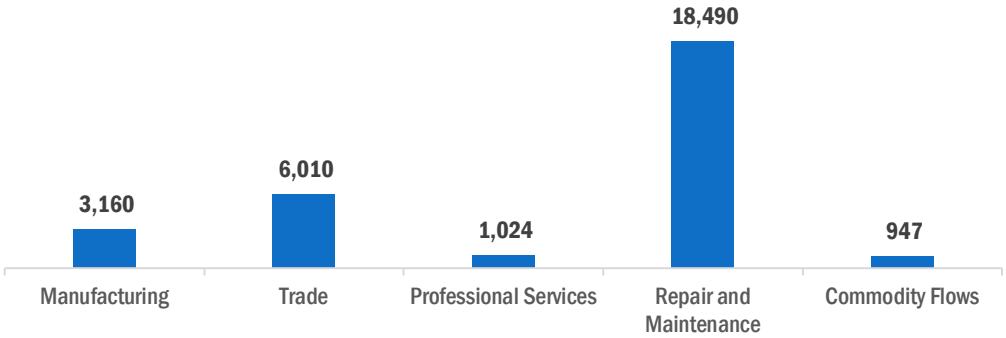
Figure AZ-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 29,631 jobs in Arizona. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure AZ-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 64.7 percent of energy-related employers in Arizona hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table AZ-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	23.9	50.7	22.4	3.0
Transmission, Distribution and Storage	30.4	30.4	34.8	4.3
Energy Efficiency	35.9	46.9	15.6	1.6
Fuels	33.3	33.3	33.3	-
Motor Vehicles	30.0	50.0	20.0	-

Arkansas

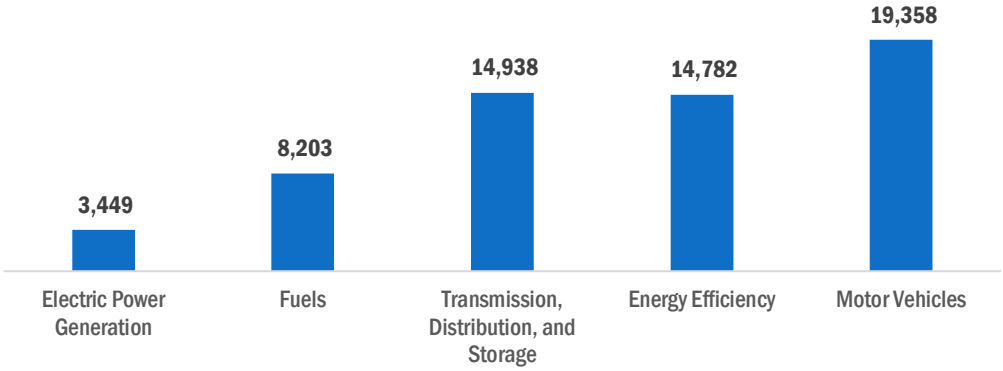
Energy and Employment – 2017

Overview

Arkansas has an average concentration of energy employment, with 26,590 Traditional Energy workers statewide (representing 0.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,449 are in Electric Power Generation, 8,203 are in Fuels, and 14,938 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Arkansas is 2.2 percent of total state employment (compared to 2.3 percent of national employment). Arkansas has an additional 14,782 jobs in Energy Efficiency (0.7 percent of all U.S. Energy Efficiency jobs) and 19,358 jobs in Motor Vehicles (0.8 percent of all U.S. Motor Vehicle jobs).

Figure AR-1.

Employment by Major Energy Technology Application

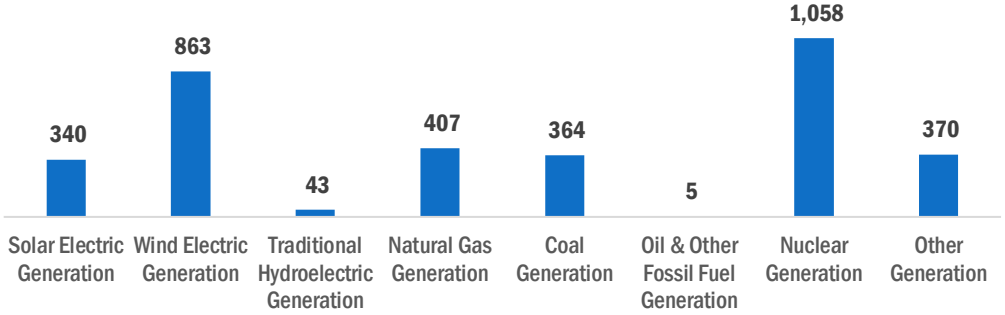


Breakdown by Technology Applications

Electric Power Generation

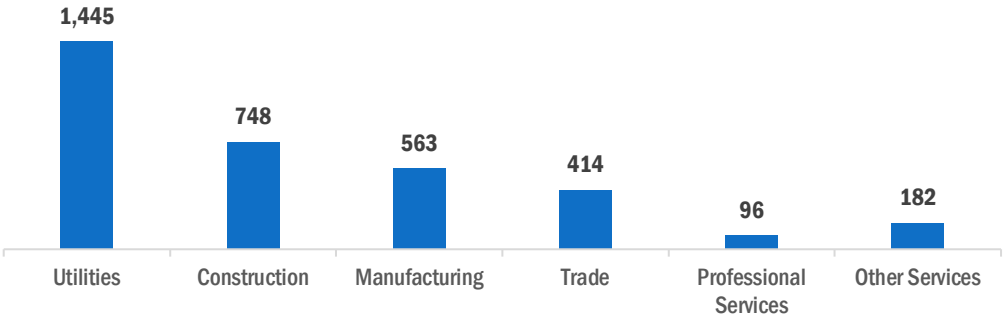
Electric Power Generation employs 3,449 workers in Arkansas, 0.4 percent of the national total. Nuclear generation makes up the largest segment of employment related to Electric Power Generation, with 1,058 jobs, followed by wind at 863 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 41.9 percent of jobs. Construction is next with 21.7 percent.

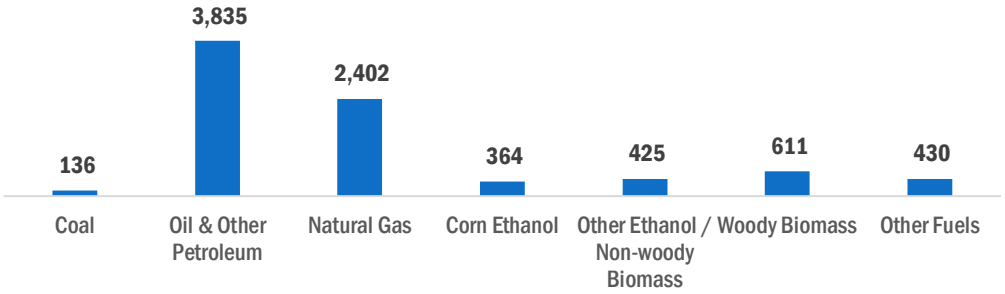
Figure AR-3.
Electric Power Generation Employment by Industry Sector



Fuels

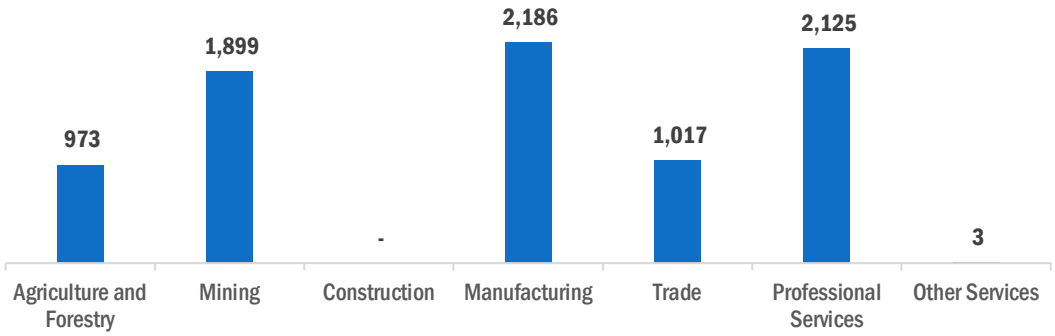
Fuels account for 8,203 jobs in Arkansas, 0.8 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,835 jobs.

Figure AR-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 26.6 percent of Fuels jobs in Arkansas.

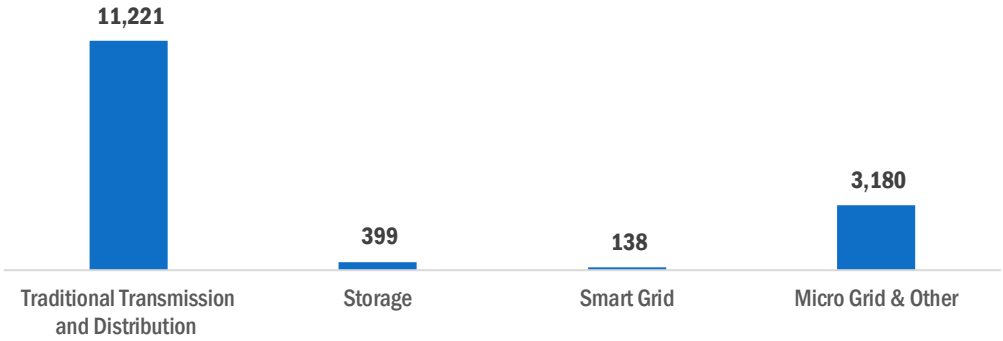
Figure AR-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

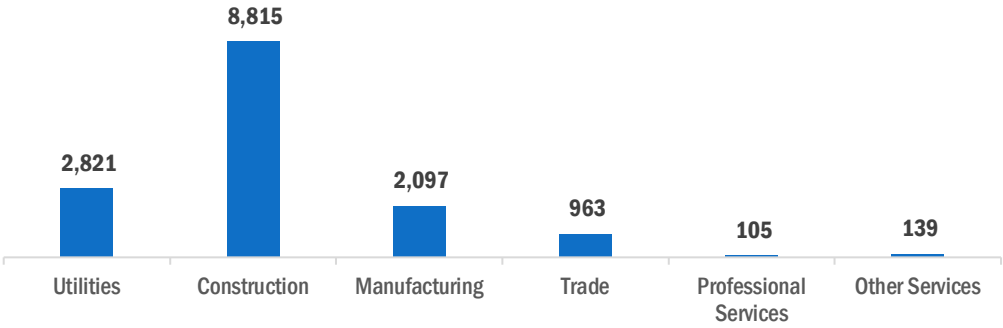
Transmission, Distribution, and Storage employs 14,938 workers in Arkansas, 1.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Arkansas, with 59.0 percent of such jobs statewide.

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



Energy Efficiency

The 14,782 Energy Efficiency jobs in Arkansas represent 0.7 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in other energy efficiency products and services firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

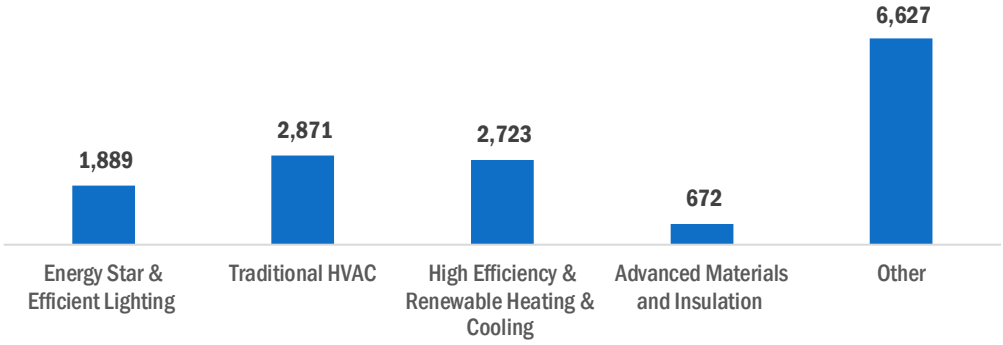
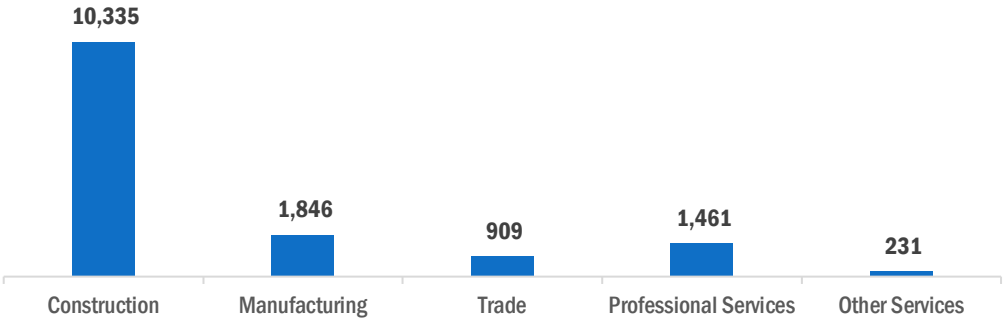


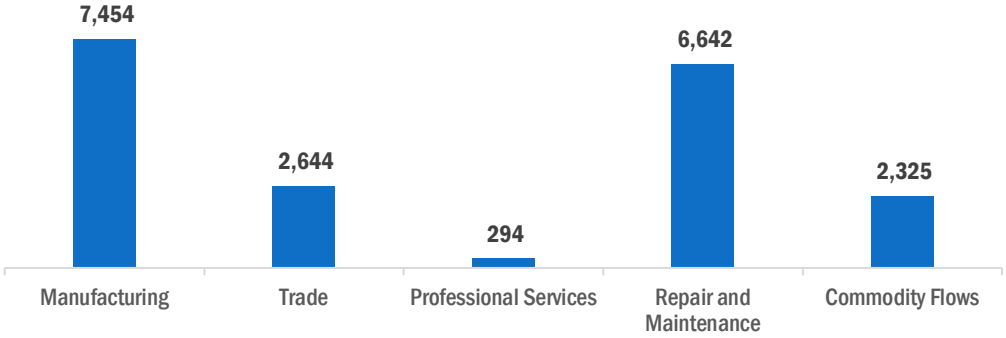
Figure AR-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 19,358 jobs in Arkansas. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure AR-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 77.8 percent of energy-related employers in Arkansas hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table AR-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	12.5	87.5	-	-
Transmission, Distribution and Storage	50.0	25.0	25.0	-
Energy Efficiency	37.5	43.7	18.7	-
Fuels	20.0	26.7	46.7	6.7
Motor Vehicles	NA	NA	NA	NA

California

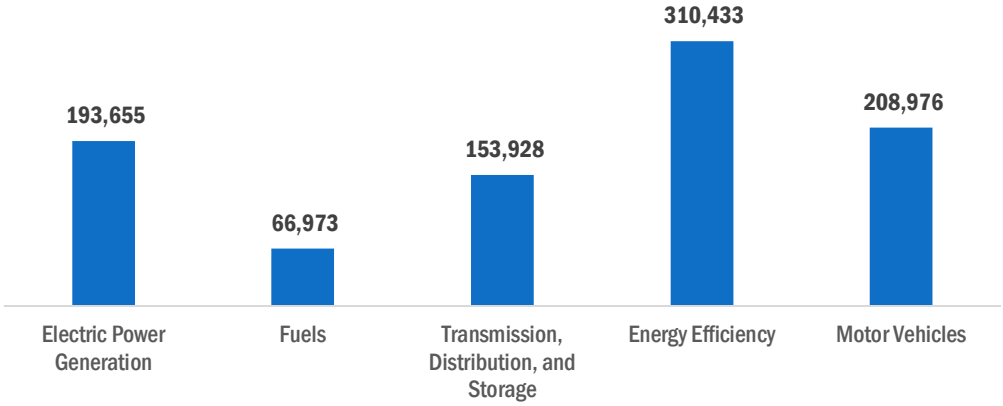
Energy and Employment – 2017

Overview

California has an average concentration of energy employment, with 414,555 Traditional Energy workers statewide (representing 12.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 193,655 are in Electric Power Generation, 66,973 are in Fuels, and 153,928 are in Transmission, Distribution, and Storage. The Traditional Energy sector in California is 2.4 percent of total state employment (compared to 2.3 percent of national employment). California has an additional 310,433 jobs in Energy Efficiency (13.8 percent of all U.S. Energy Efficiency jobs) and 208,976 jobs in Motor Vehicles (8.5 percent of all U.S. Motor Vehicle jobs).

Figure CA-1.

Employment by Major Energy Technology Application

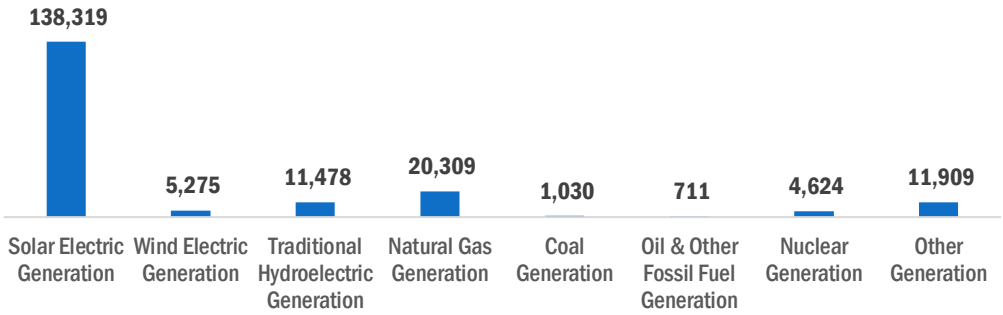


Breakdown by Technology Applications

Electric Power Generation

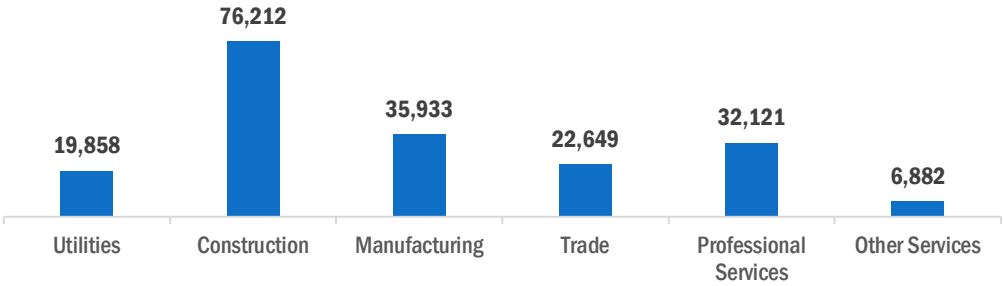
Electric Power Generation employs 193,655 workers in California, 21.9 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 138,319 jobs, followed by traditional fossil fuel generation at 22,050 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 39.4 percent of jobs. Manufacturing is next with 18.6 percent.

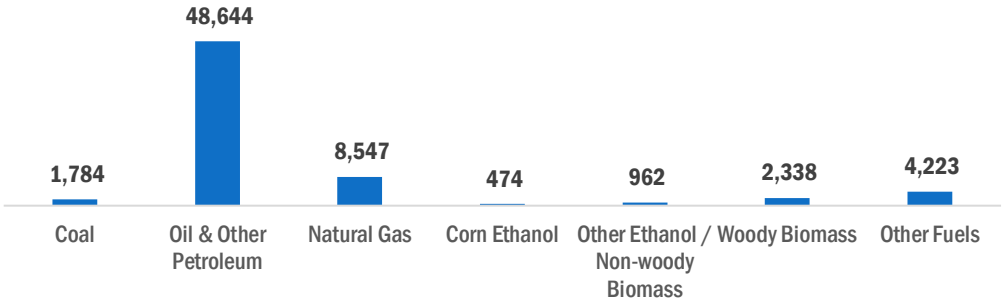
Figure CA-3.
Electric Power Generation Employment by Industry Sector



Fuels

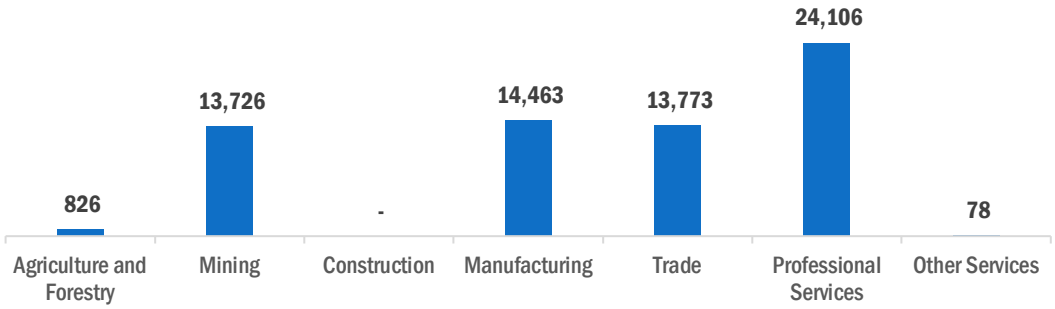
Fuels account for 66,973 jobs in California, 6.2 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 48,644 jobs.

Figure CA-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 36.0 percent of Fuels jobs in California.

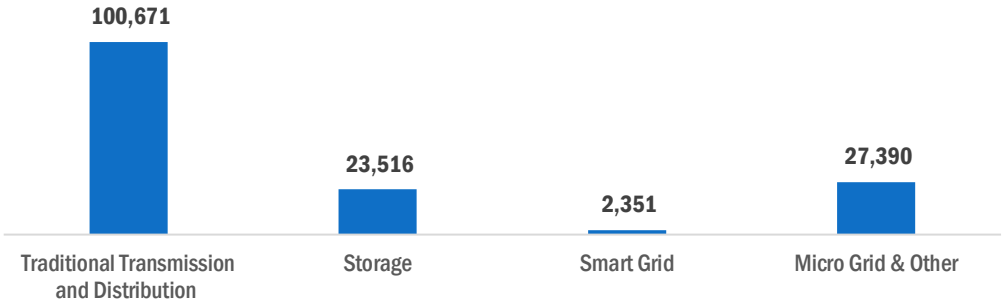
Figure CA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

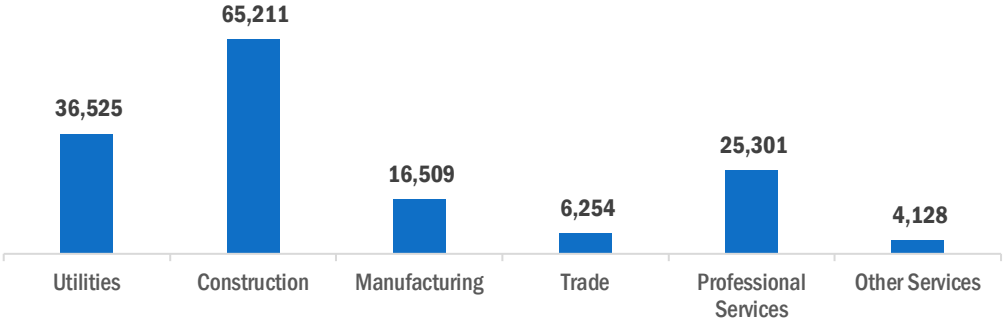
Transmission, Distribution, and Storage employs 153,928 workers in California, 11.5 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in California, with 42.4 percent of such jobs statewide.

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



Energy Efficiency

The 310,433 Energy Efficiency jobs in California represent 13.8 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

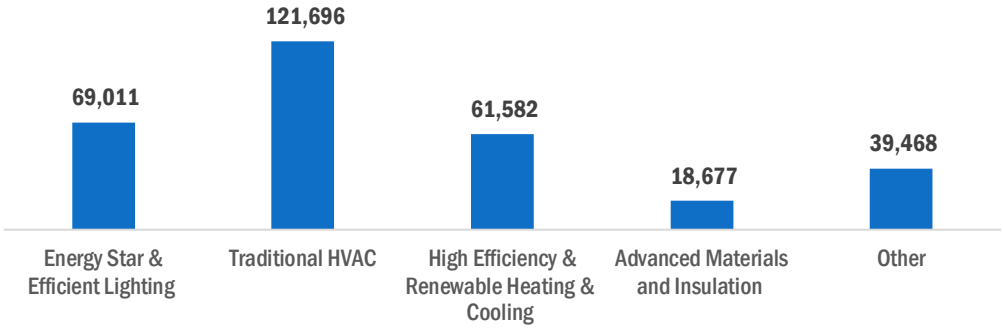
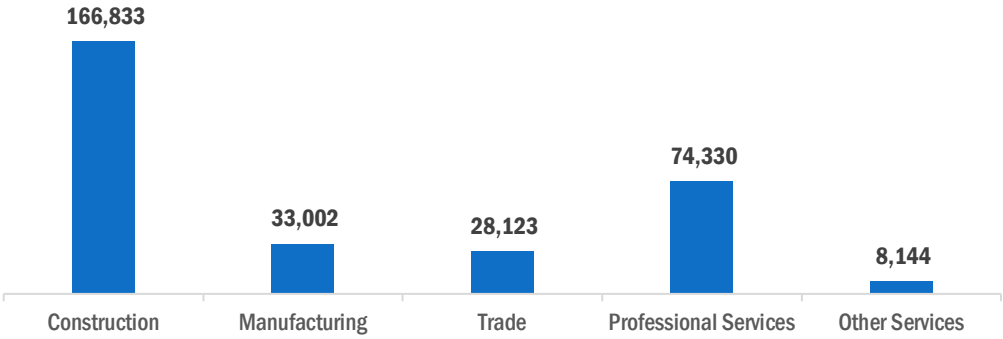


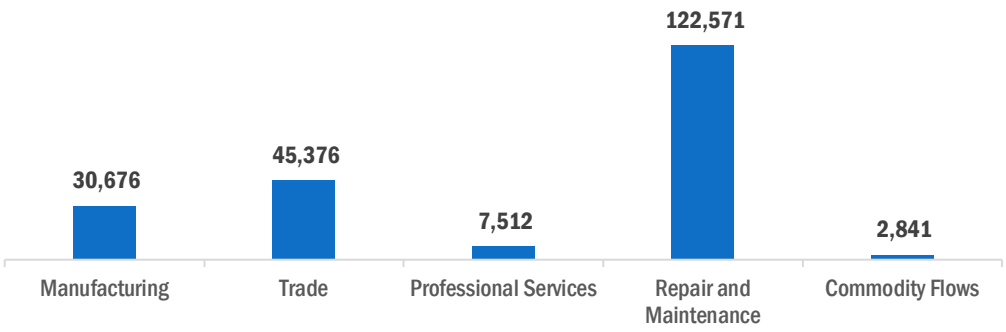
Figure CA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 208,976 jobs in California. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure CA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 59.9 percent of energy-related employers in California hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table CA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.6	57.3	21.1	2.9
Transmission, Distribution and Storage	21.8	56.9	18.3	3.0
Energy Efficiency	29.6	47.6	20.3	2.5
Fuels	28.6	37.5	33.9	-
Motor Vehicles	27.6	41.4	28.7	2.3

Colorado

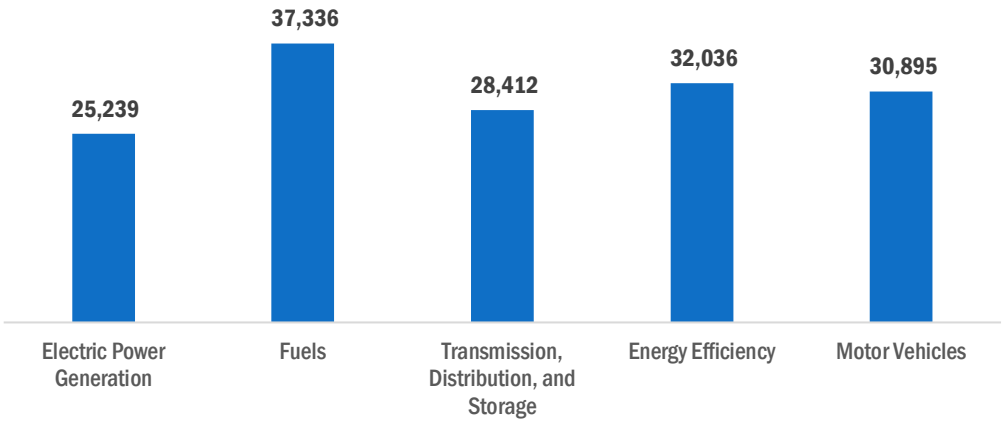
Energy and Employment – 2017

Overview

Colorado has a high concentration of energy employment, with 90,987 Traditional Energy workers statewide (representing 2.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 25,239 are in Electric Power Generation, 37,336 are in Fuels, and 28,412 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Colorado is 3.4 percent of total state employment (compared to 2.3 percent of national employment). Colorado has an additional 32,036 jobs in Energy Efficiency (1.4 percent of all U.S. Energy Efficiency jobs) and 30,895 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

Figure CO-1.

Employment by Major Energy Technology Application

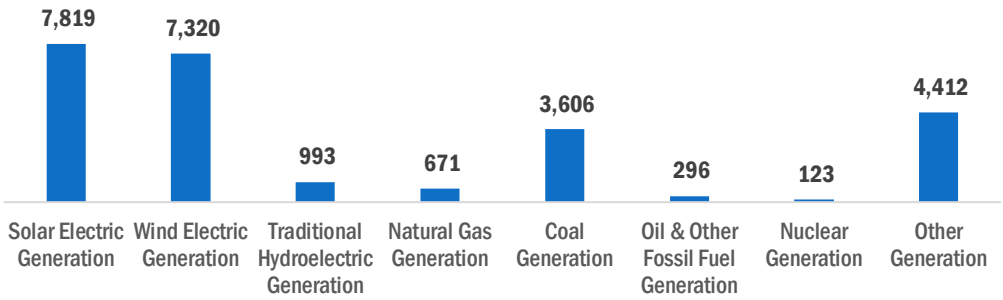


Breakdown by Technology Applications

Electric Power Generation

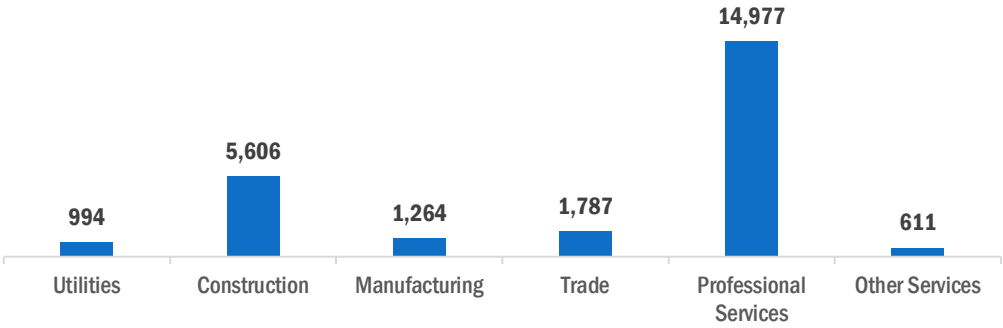
Electric Power Generation employs 25,239 workers in Colorado, 2.9 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 7,819 jobs, followed by wind at 7,320 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 59.3 percent of jobs. Construction is next with 22.2 percent.

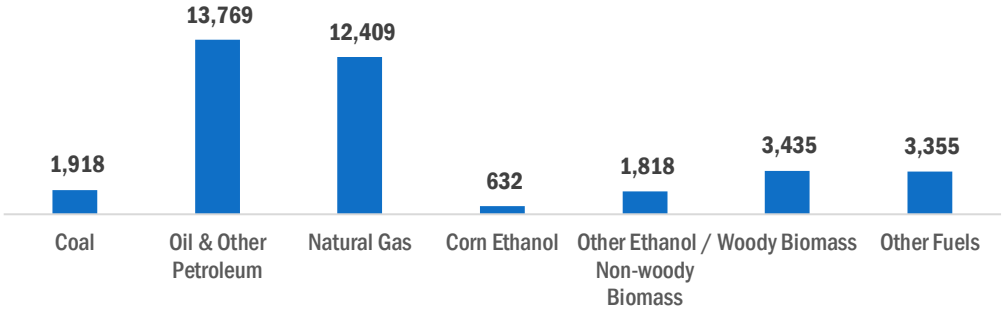
Figure CO-3.
Electric Power Generation Employment by Industry Sector



Fuels

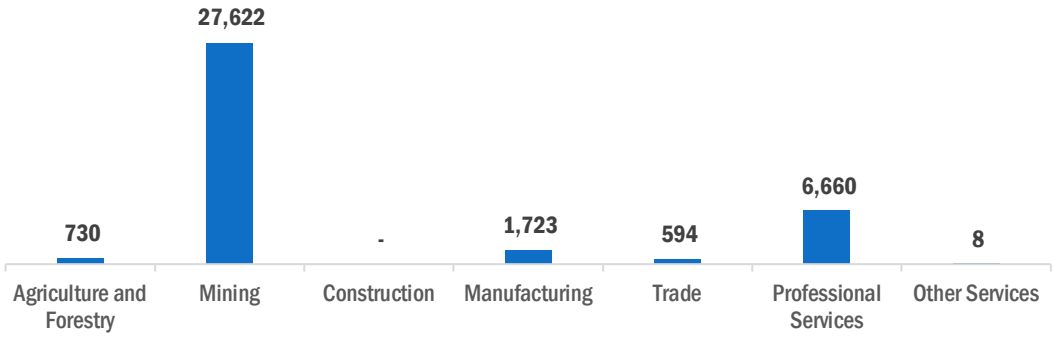
Fuels account for 37,336 jobs in Colorado, 3.5 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 13,769 jobs.

Figure CO-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 74.0 percent of Fuels jobs in Colorado.

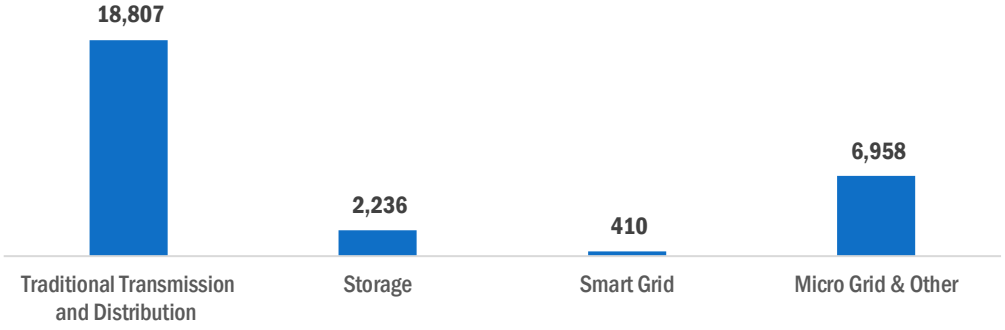
Figure AL-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

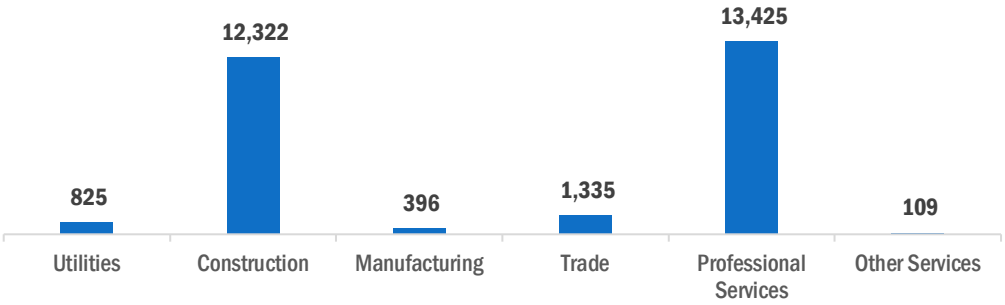
Transmission, Distribution, and Storage employs 28,412 workers in Colorado, 2.1 percent of the national total.

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



Professional and business services are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Colorado, with 47.3 percent of such jobs statewide.

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



Energy Efficiency

The 32,036 Energy Efficiency jobs in Colorado represent 1.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

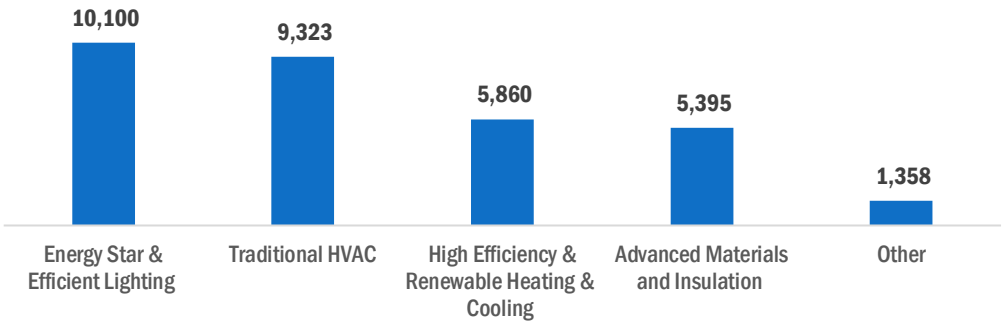
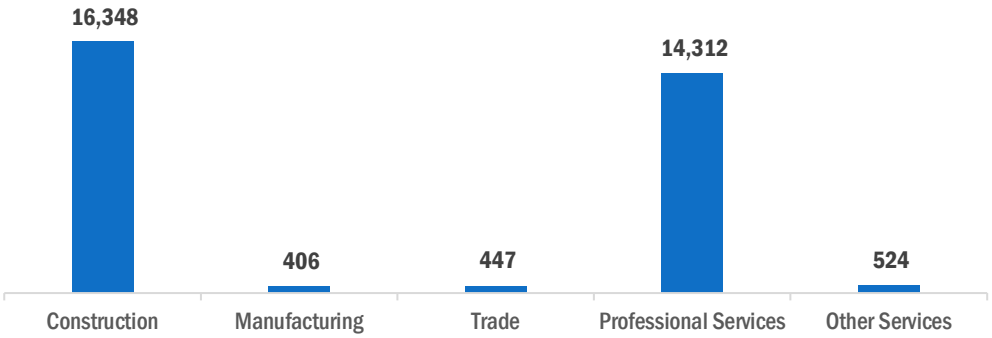


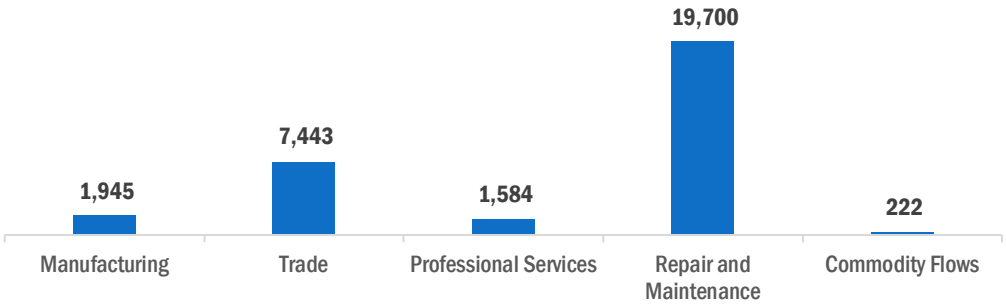
Figure CO-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 30,895 jobs in Colorado. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure CO-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 53.8 percent of energy-related employers in Colorado hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table CO-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	16.9	65.1	15.7	2.4
Transmission, Distribution and Storage	28.1	46.9	25.0	-
Energy Efficiency	43.8	39.6	16.7	-
Fuels	24.1	48.3	24.1	3.4
Motor Vehicles	18.7	50.0	31.3	-

Connecticut

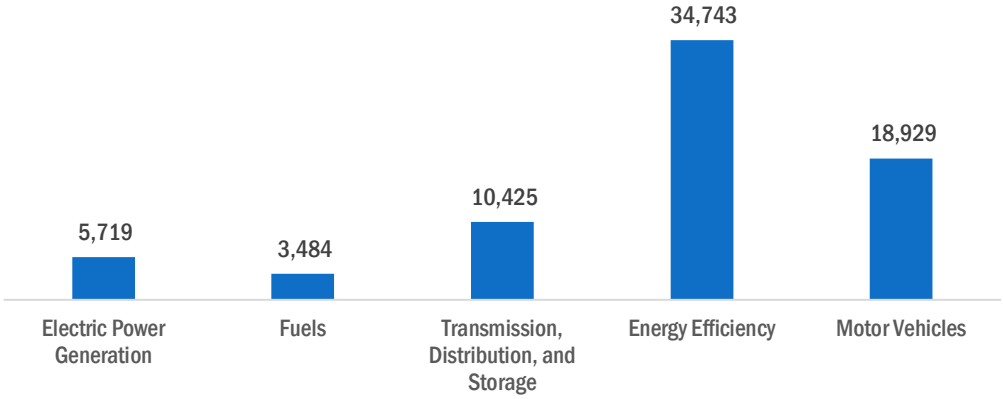
Energy and Employment – 2017

Overview

Connecticut has a low concentration of energy employment, with 19,629 Traditional Energy workers statewide (representing 0.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 5,719 are in Electric Power Generation, 3,484 are in Fuels, and 10,425 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Connecticut is 1.2 percent of total state employment (compared to 2.3 percent of national employment). Connecticut has an additional 34,743 jobs in Energy Efficiency (1.5 percent of all U.S. Energy Efficiency jobs) and 18,929 jobs in Motor Vehicles (0.8 percent of all U.S. Motor Vehicle jobs).

Figure CT-1.

Employment by Major Energy Technology Application

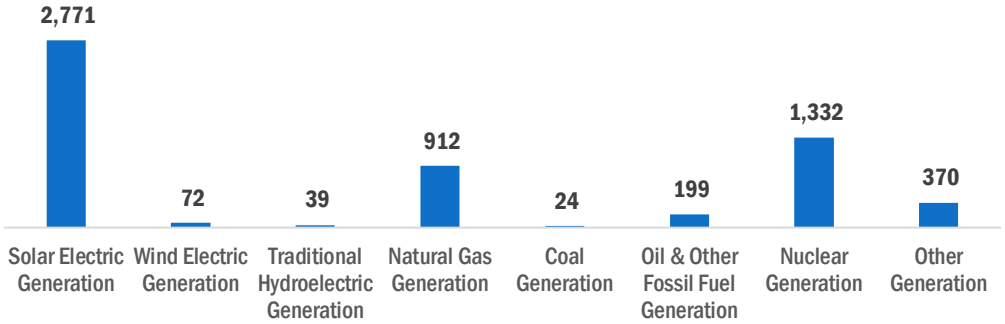


Breakdown by Technology Applications

Electric Power Generation

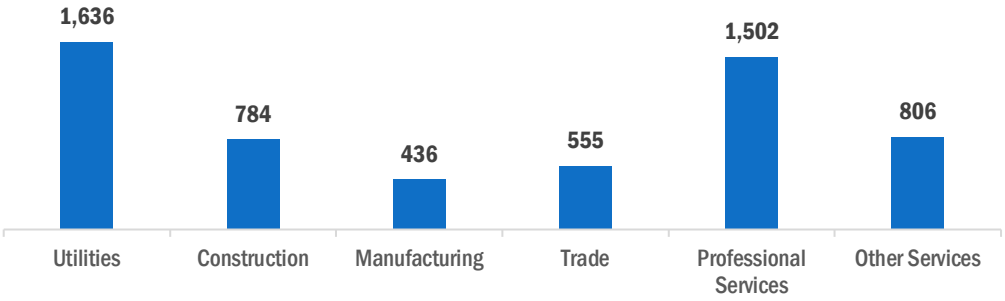
Electric Power Generation employs 5,719 workers in Connecticut, 0.6 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 2,771 jobs, followed by nuclear generation at 1,332 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 28.6 percent of jobs. Professional and business services are next with 26.3 percent.

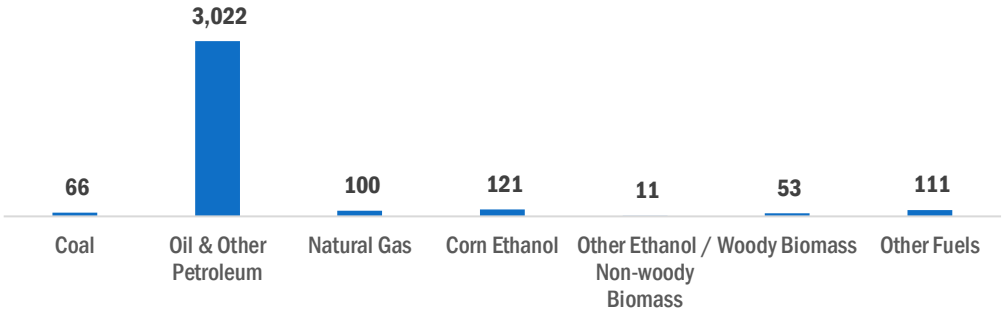
Figure CT-3.
Electric Power Generation Employment by Industry Sector



Fuels

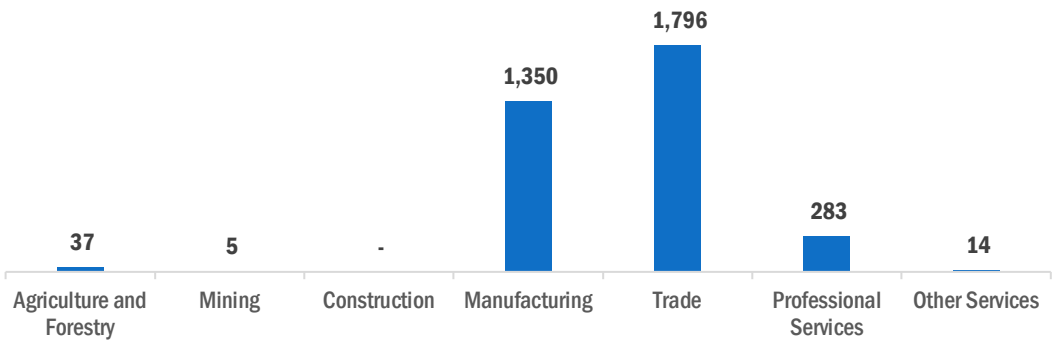
Fuels account for 3,484 jobs in Connecticut, 0.3 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,022 jobs.

Figure CT-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 51.6 percent of Fuels jobs in Connecticut.

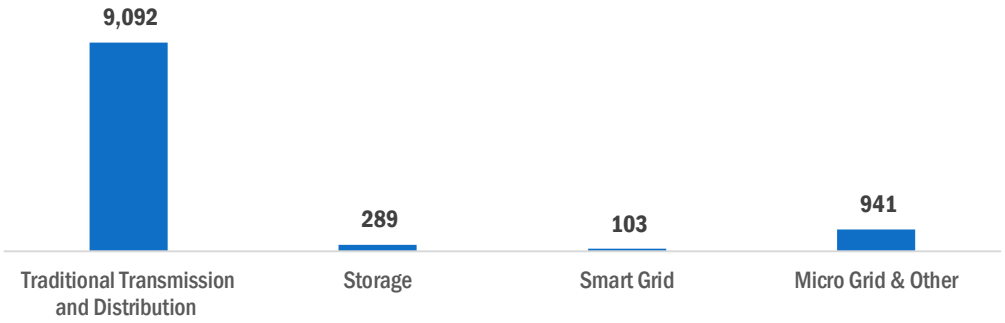
Figure CT-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

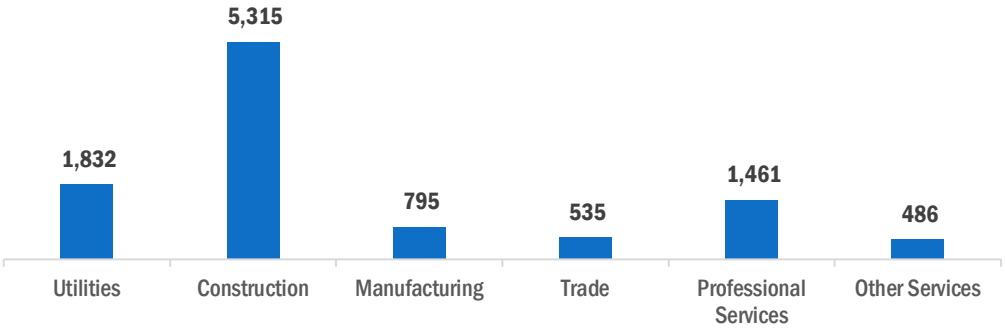
Transmission, Distribution, and Storage employs 10,425 workers in Connecticut, 0.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Connecticut, with 51.0 percent of such jobs statewide.

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



Energy Efficiency

The 34,743 Energy Efficiency jobs in Connecticut represent 1.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

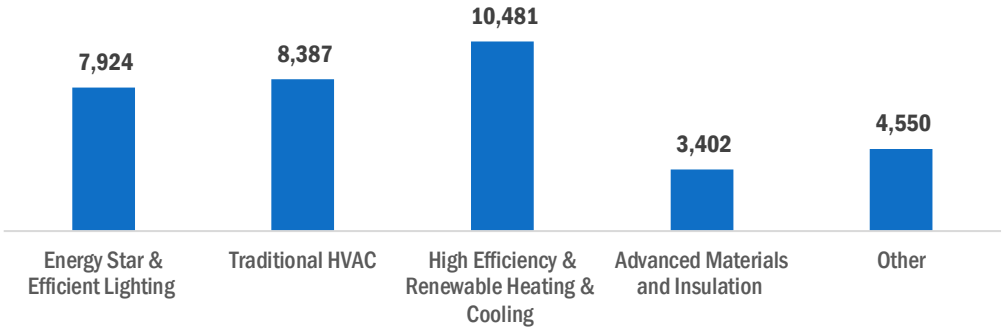
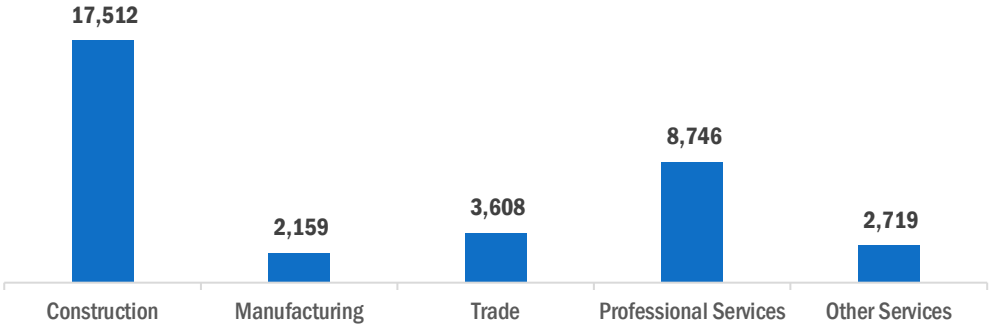


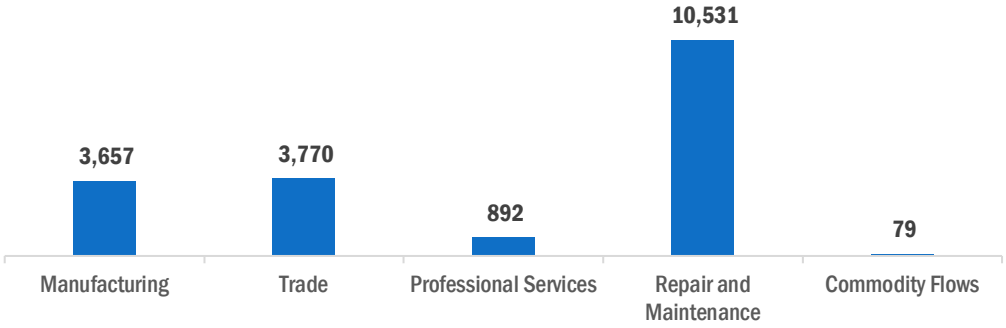
Figure CT-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 18,929 jobs in Connecticut. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure CT-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 72.7 percent of energy-related employers in Connecticut hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table CT-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	24.1	51.7	13.8	10.3
Transmission, Distribution and Storage	16.7	66.7	-	16.7
Energy Efficiency	30.8	57.7	7.7	3.8
Fuels	37.5	50.0	12.5	-
Motor Vehicles	42.9	42.9	14.3	-

Delaware

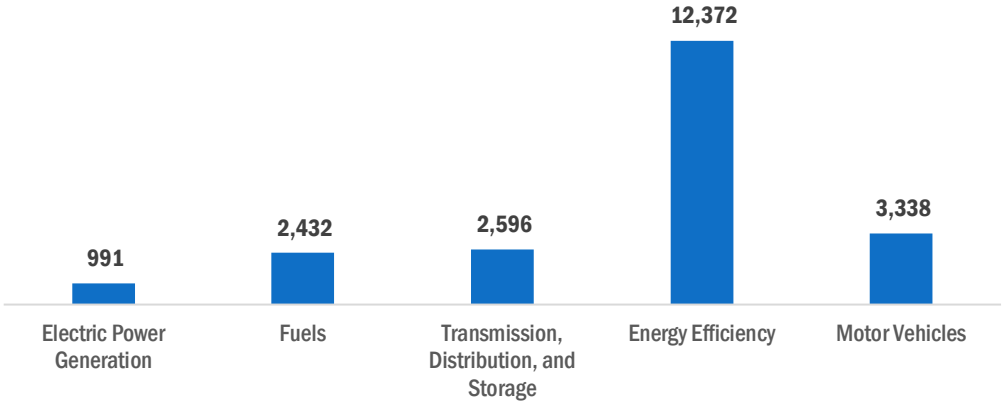
Energy and Employment – 2017

Overview

Delaware has a low concentration of energy employment, with 6,019 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 991 are in Electric Power Generation, 2,432 are in Fuels, and 2,596 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Delaware is 1.3 percent of total state employment (compared to 2.3 percent of national employment). Delaware has an additional 12,372 jobs in Energy Efficiency (0.6 percent of all U.S. Energy Efficiency jobs) and 3,338 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure DE-1.

Employment by Major Energy Technology Application

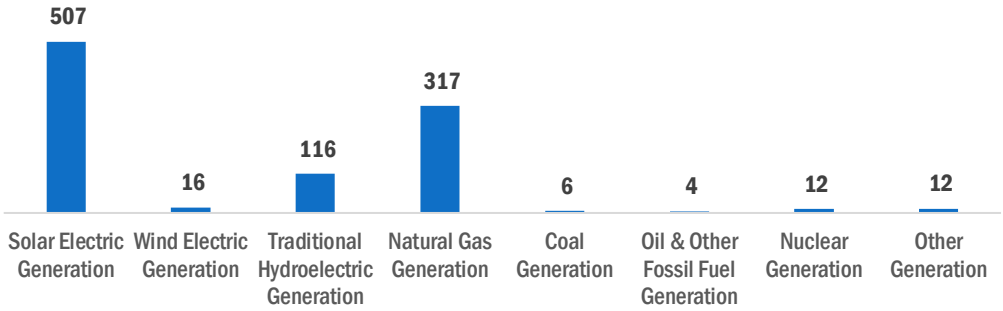


Breakdown by Technology Applications

Electric Power Generation

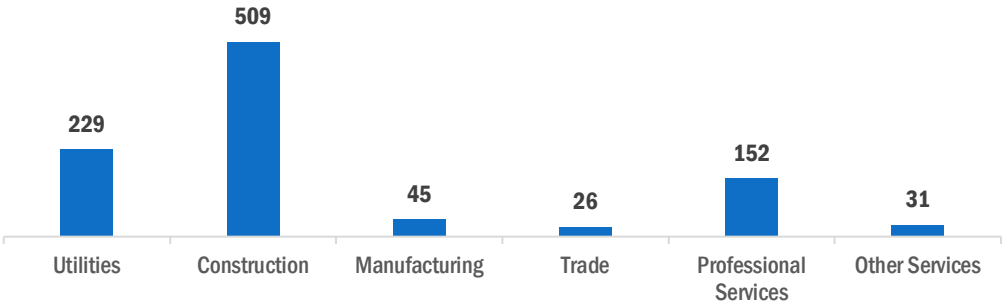
Electric Power Generation employs 991 workers in Delaware, 0.1 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 507 jobs, followed by traditional fossil fuel generation at 327 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 51.3 percent of jobs. Utilities are next with 23.1 percent.

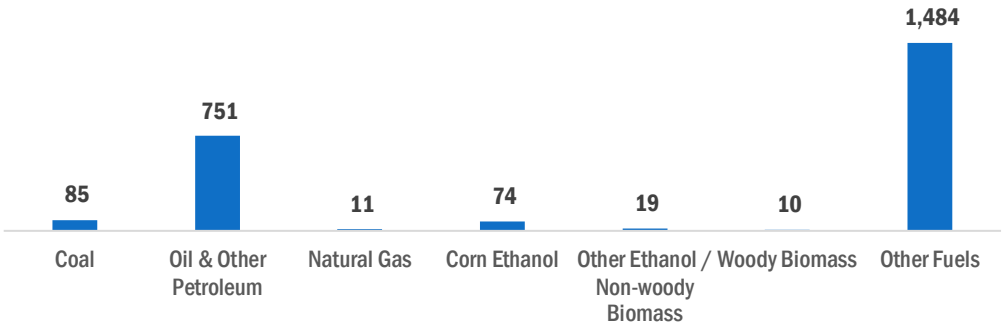
Figure DE-3.
Electric Power Generation Employment by Industry Sector



Fuels

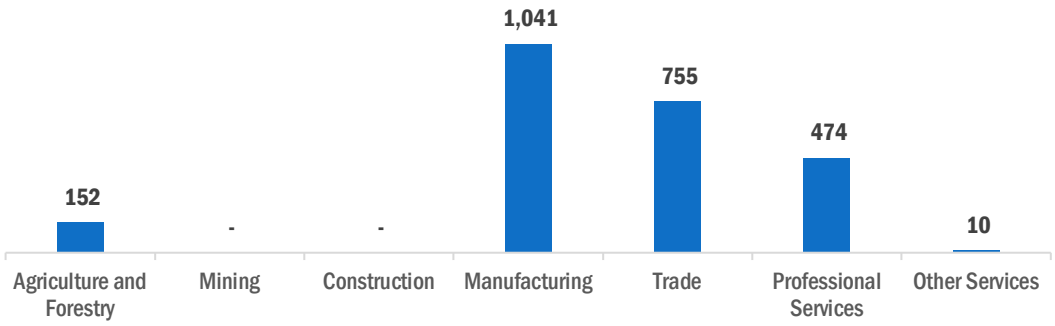
Fuels account for 2,432 jobs in Delaware, 0.2 percent of the national total. Other fuels represent the largest segment of Fuels employment, with 1,484 jobs.

Figure DE-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 42.8 percent of Fuels jobs in Delaware.

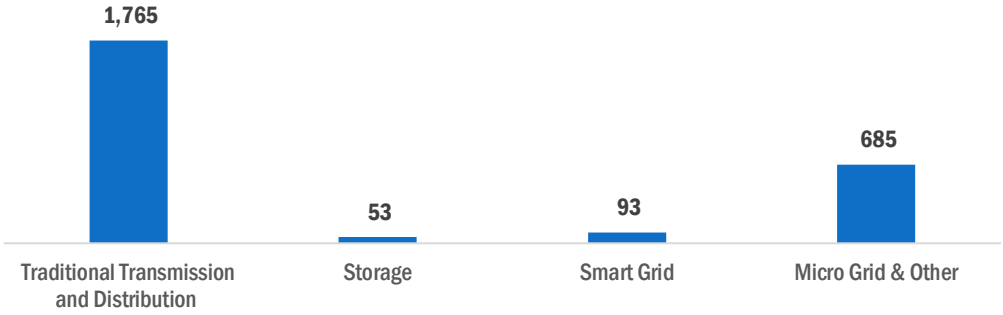
Figure AL-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

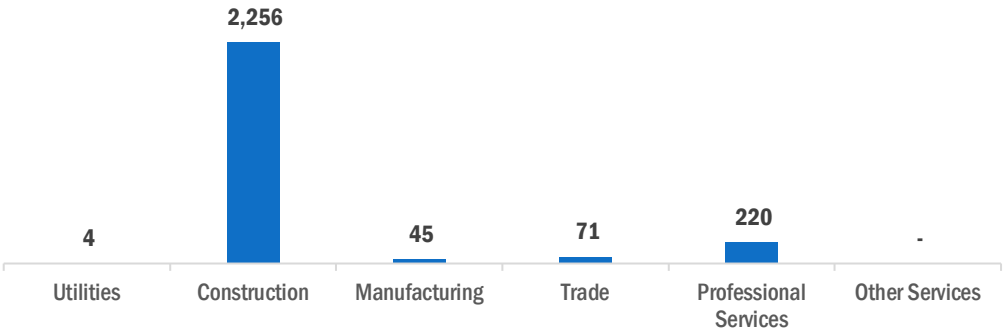
Transmission, Distribution, and Storage employs 2,596 workers in Delaware, 0.2 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Delaware, with 86.9 percent of such jobs statewide.

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



Energy Efficiency

The 12,372 Energy Efficiency jobs in Delaware represent 0.6 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

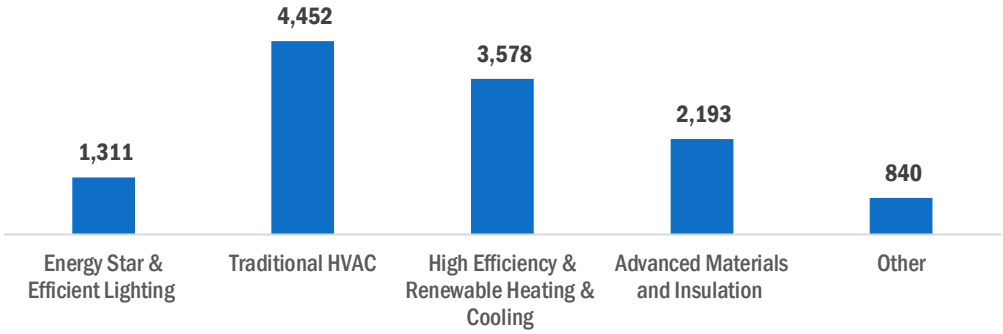
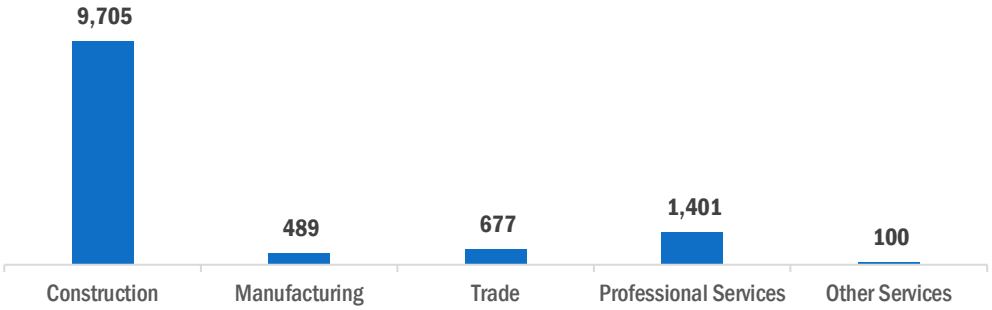


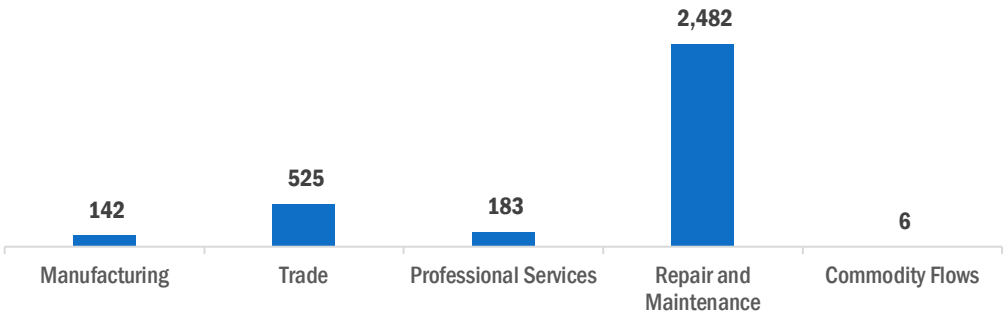
Figure DE-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 3,338 jobs in Delaware. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure DE-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 80.0 percent of energy-related employers in Delaware hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table DE-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	50.0	50.0	-	-
Transmission, Distribution and Storage	NA	NA	NA	NA
Energy Efficiency	66.7	33.3	-	-
Fuels	NA	NA	NA	NA
Motor Vehicles	NA	NA	NA	NA

District of Columbia

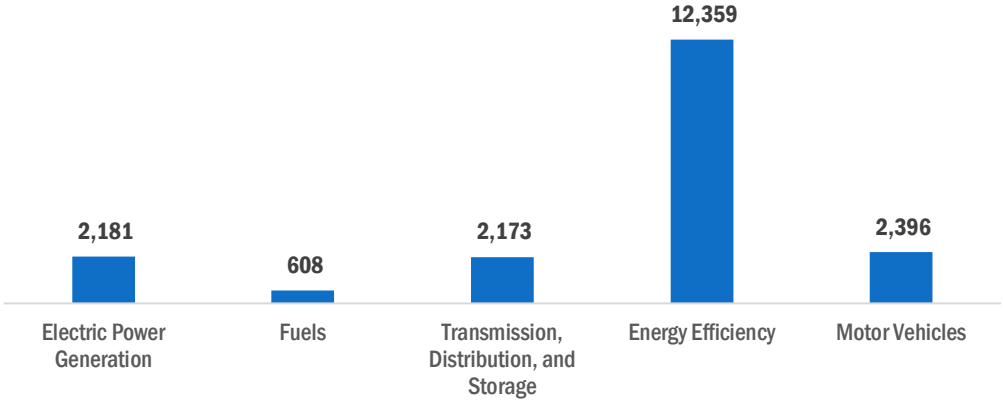
Energy and Employment – 2017

Overview

The District of Columbia has a low concentration of energy employment, with 4,961 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 2,181 are in Electric Power Generation, 608 are in Fuels, and 2,173 are in Transmission, Distribution, and Storage. The Traditional Energy sector in the District of Columbia is 0.6 percent of total state employment (compared to 2.3 percent of national employment). District of Columbia has an additional 12,359 jobs in Energy Efficiency (0.5 percent of all U.S. Energy Efficiency jobs) and 2,396 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure DC-1.

Employment by Major Energy Technology Application

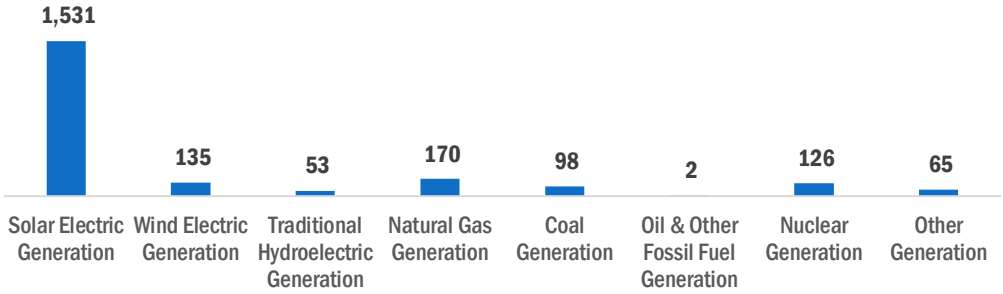


Breakdown by Technology Applications

Electric Power Generation

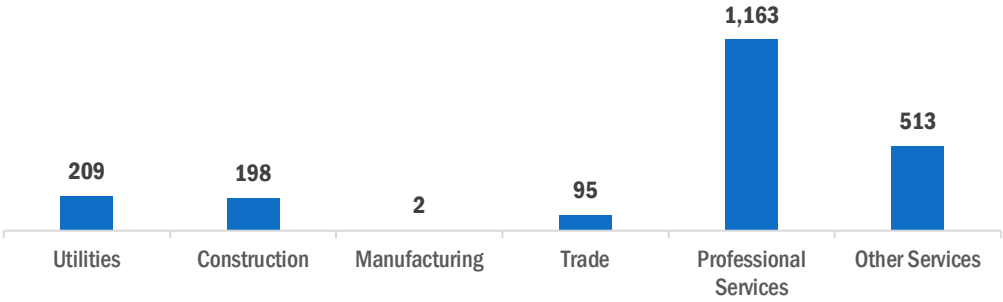
Electric Power Generation employs 2,181 workers in the District of Columbia, 0.2 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 1,531 jobs, followed by traditional fossil fuel generation at 270 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 53.3 percent of jobs. Other services are next with 23.5 percent.

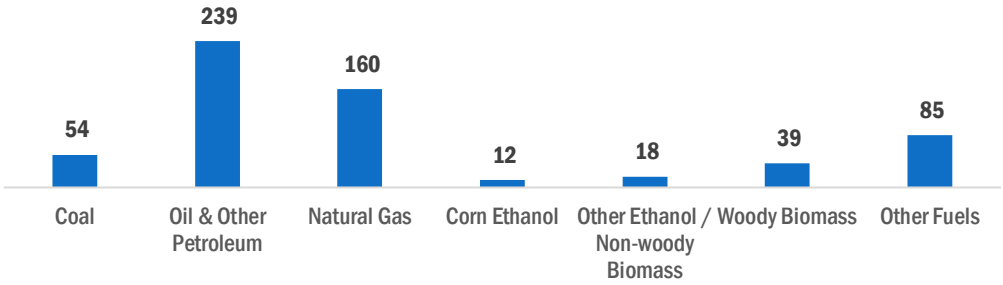
Figure DC-3.
Electric Power Generation Employment by Industry Sector



Fuels

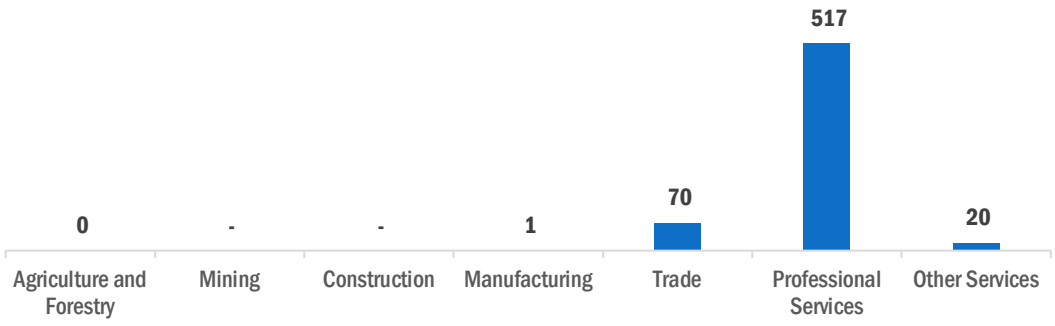
Fuels account for 608 jobs in the District of Columbia, 0.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 239 jobs.

Figure DC-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 85.0 percent of Fuels jobs in District of Columbia.

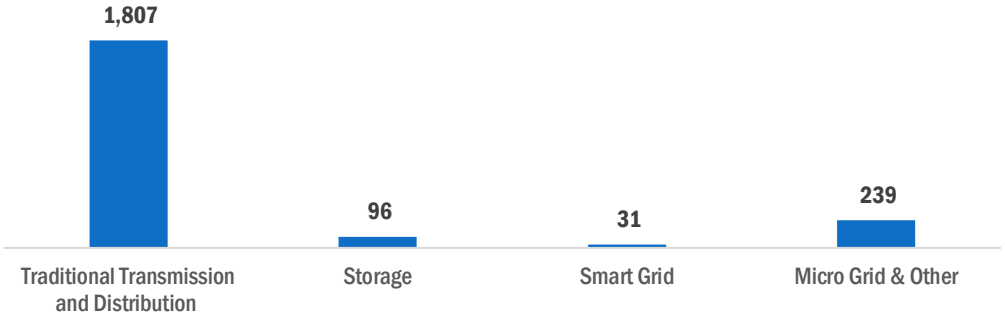
Figure DC-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

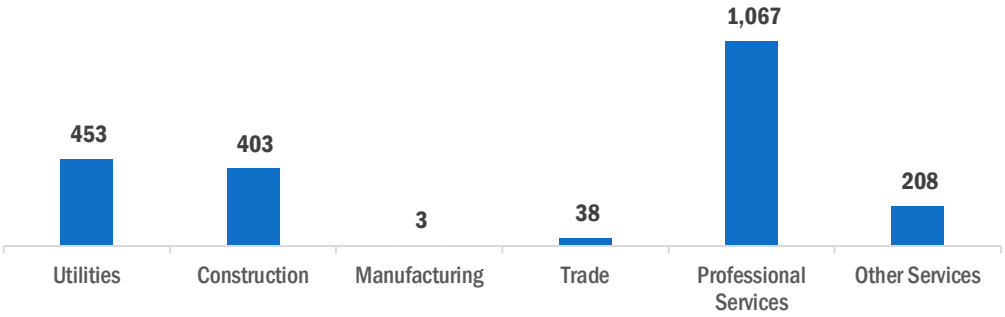
Transmission, Distribution, and Storage employs 2,173 workers in District of Columbia, 0.2 percent of the national total.

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



Professional and business services are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in District of Columbia, with 49.1 percent of such jobs statewide.

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



Energy Efficiency

The 12,359 Energy Efficiency jobs in District of Columbia represent 0.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by other efficiency products and services. Energy Efficiency employment is primarily found in the construction industry.

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

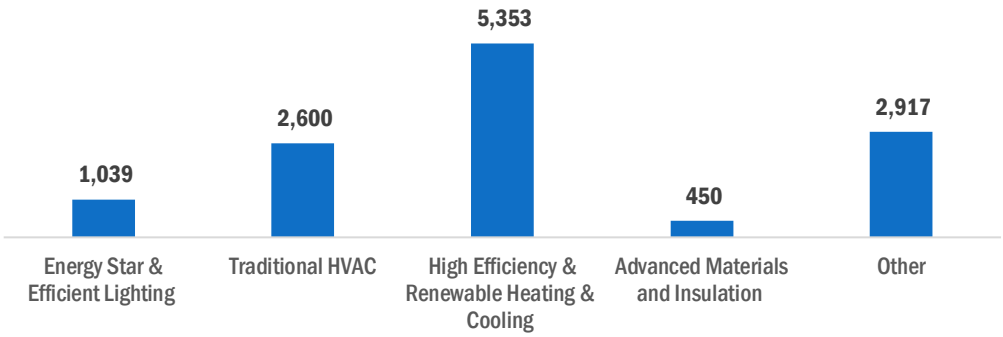
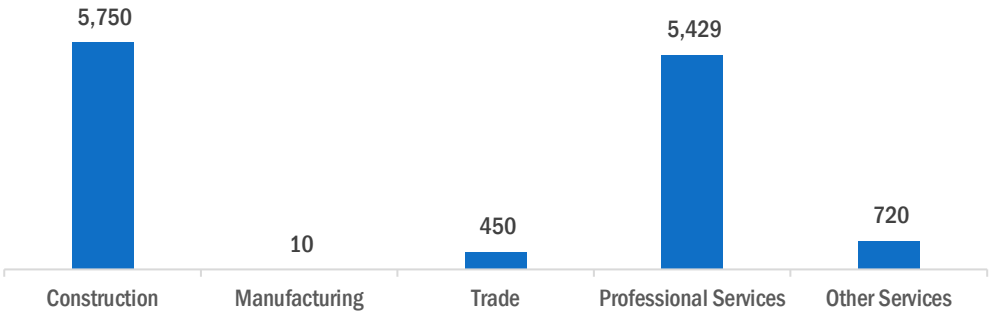


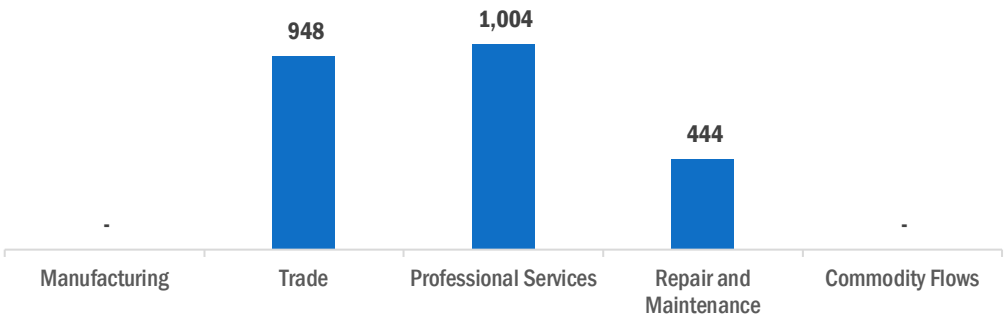
Figure DC-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 2,396 jobs in District of Columbia. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is professional and business services.

Figure DC-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 75.0 percent of energy-related employers in the District of Columbia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels and Transmission, Distribution and Storage.

Table DC-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	-	65.5	31.0	3.4
Transmission, Distribution and Storage	-	85.7	14.3	-
Energy Efficiency	6.7	66.7	26.7	-
Fuels	-	85.7	14.3	-
Motor Vehicles	NA	NA	NA	NA

Florida

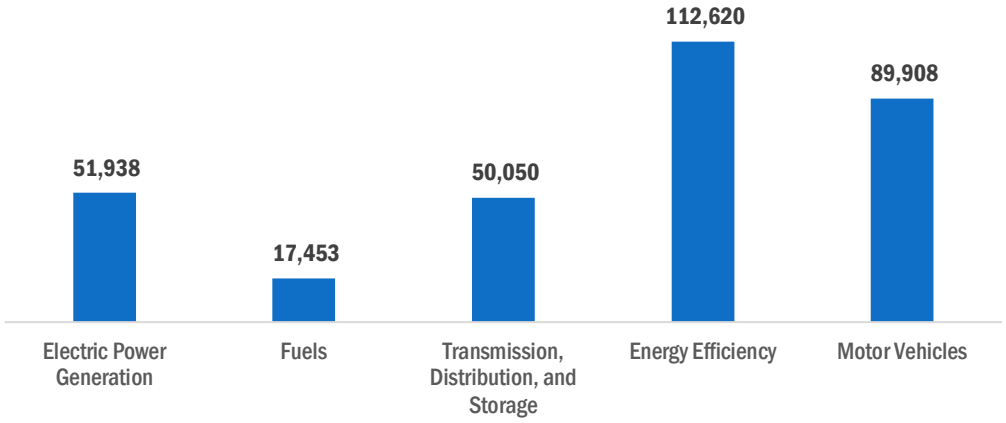
Energy and Employment – 2017

Overview

Florida has a low concentration of energy employment, with 119,441 Traditional Energy workers statewide (representing 3.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 51,938 are in Electric Power Generation, 17,453 are in Fuels, and 50,050 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Florida is 1.4 percent of total state employment (compared to 2.3 percent of national employment). Florida has an additional 112,620 jobs in Energy Efficiency (5.0 percent of all U.S. Energy Efficiency jobs) and 89,908 jobs in Motor Vehicles (3.7 percent of all U.S. Motor Vehicle jobs).

Figure FL-1.

Employment by Major Energy Technology Application

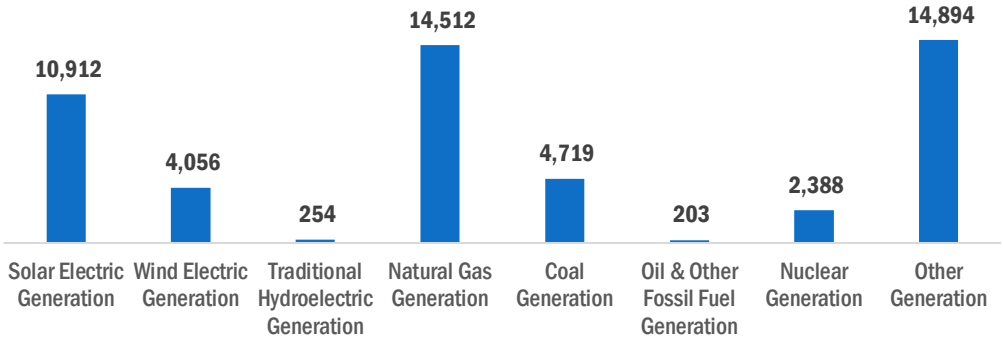


Breakdown by Technology Applications

Electric Power Generation

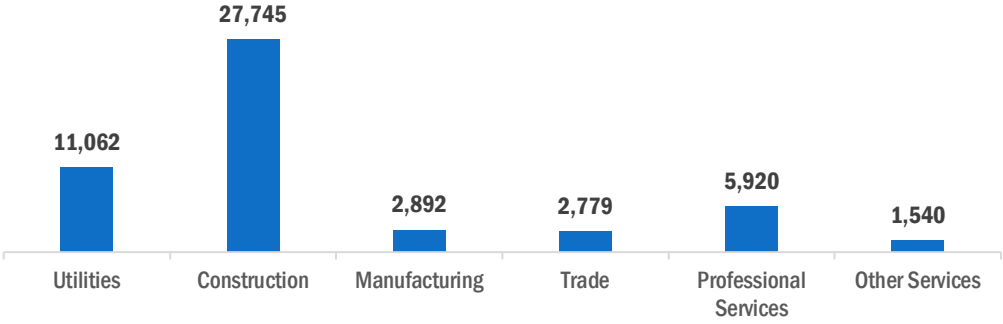
Electric Power Generation employs 51,938 workers in Florida, 5.9 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 19,434 jobs, followed by other generation at 14,894 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 53.4 percent of jobs. Utilities are next with 21.3 percent.

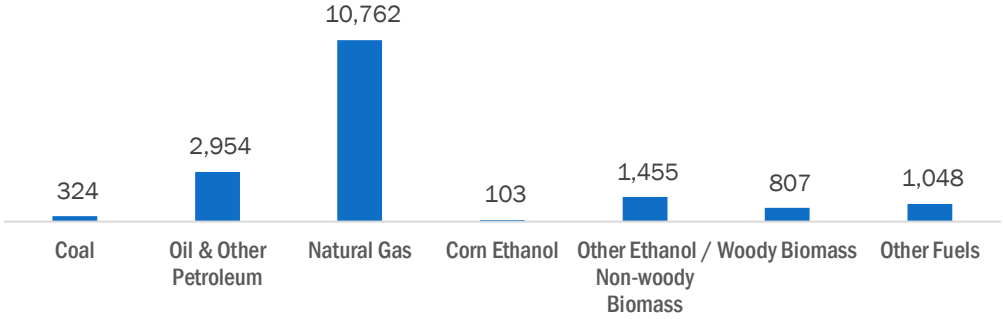
Figure FL-3.
Electric Power Generation Employment by Industry Sector



Fuels

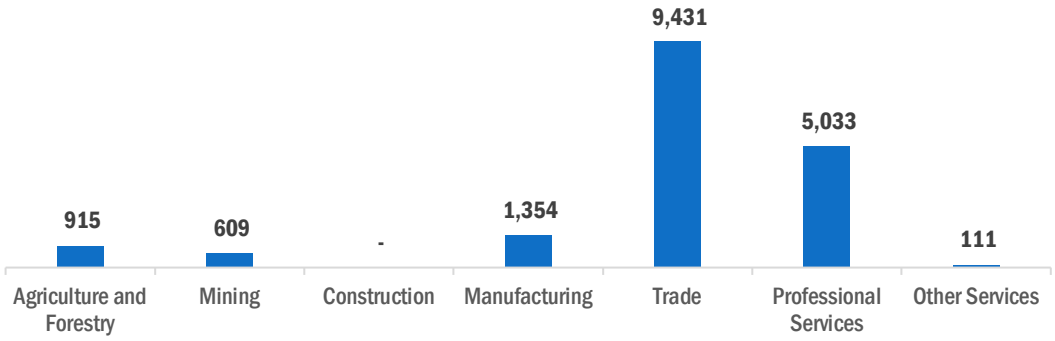
Fuels account for 17,453 jobs in Florida, 1.6 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 10,762 jobs.

Figure FL-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 54.0 percent of Fuels jobs in Florida.

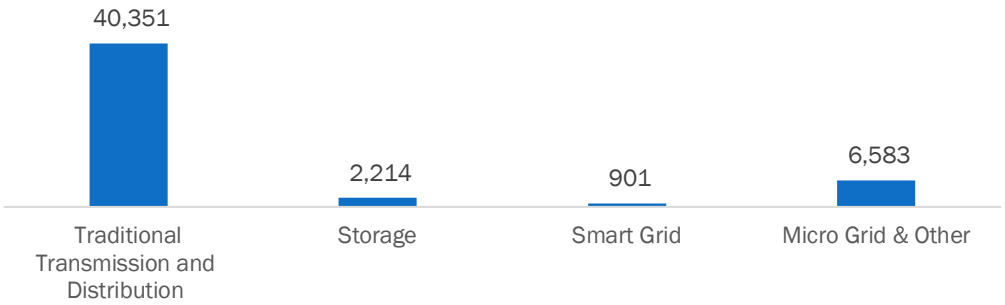
Figure FL-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

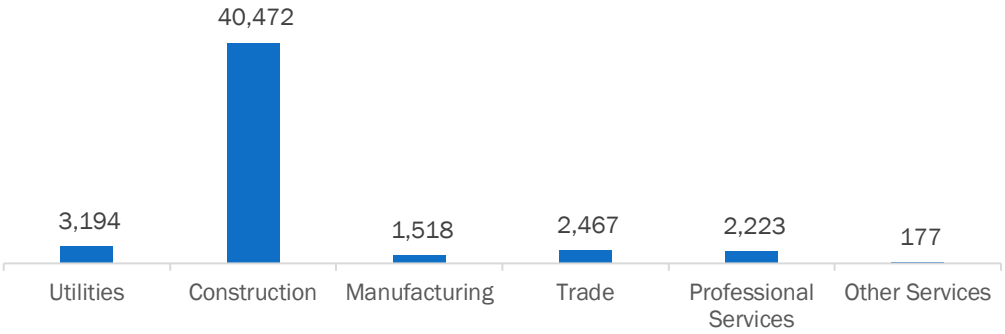
Transmission, Distribution, and Storage employs 50,050 workers in Florida, 3.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Florida, with 80.9 percent of such jobs statewide.

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



Energy Efficiency

The 112,620 Energy Efficiency jobs in Florida represent 5.0 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

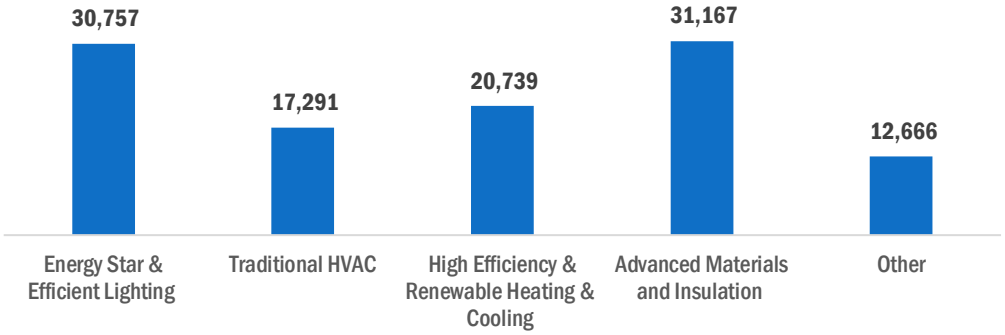
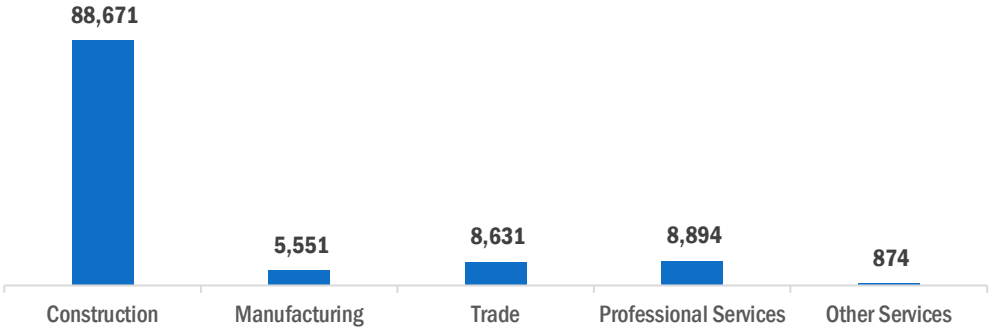


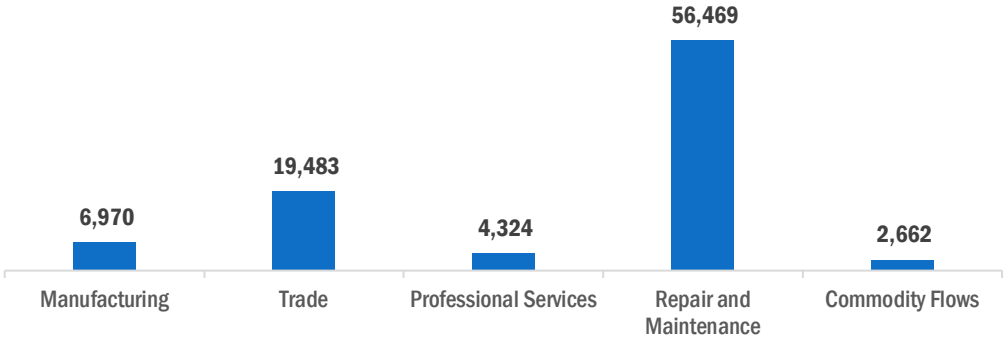
Figure FL-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 89,908 jobs in Florida. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure FL-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 71.2 percent of energy-related employers in Florida hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels and Transmission, Distribution and Storage.

Table FL-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	19.7	54.9	18.3	7.0
Transmission, Distribution and Storage	19.4	61.3	12.9	6.5
Energy Efficiency	27.2	43.5	26.1	3.3
Fuels	31.8	31.8	31.8	4.5
Motor Vehicles	29.7	35.1	32.4	2.7

Georgia

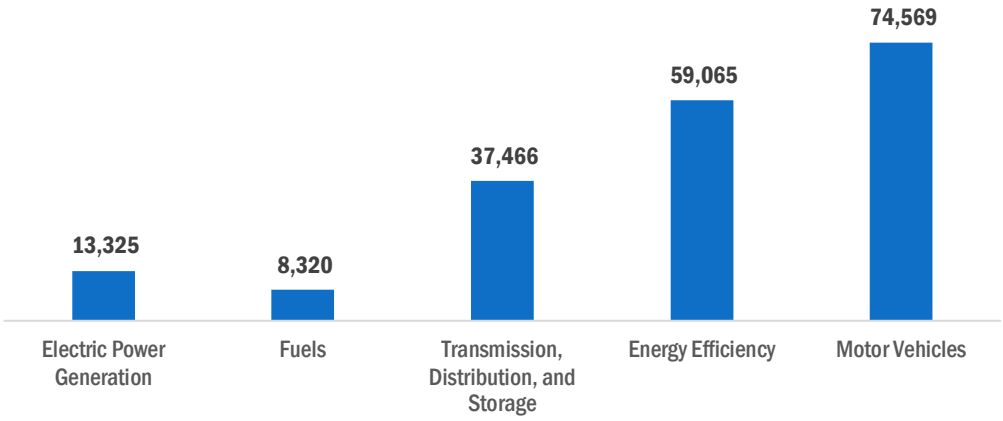
Energy and Employment – 2017

Overview

Georgia has a low concentration of energy employment, with 59,112 Traditional Energy workers statewide (representing 1.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 13,325 are in Electric Power Generation, 8,320 are in Fuels, and 37,466 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Georgia is 1.4 percent of total state employment (compared to 2.3 percent of national employment). Georgia has an additional 59,065 jobs in Energy Efficiency (2.6 percent of all U.S. Energy Efficiency jobs) and 74,569 jobs in Motor Vehicles (3.0 percent of all U.S. Motor Vehicle jobs).

Figure GA-1.

Employment by Major Energy Technology Application

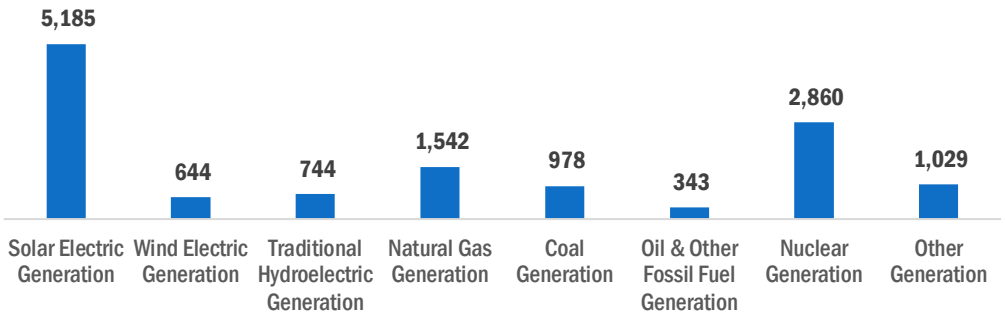


Breakdown by Technology Applications

Electric Power Generation

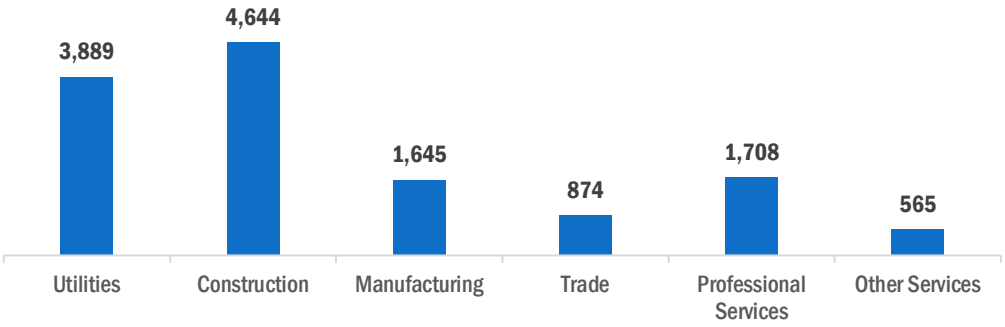
Electric Power Generation employs 13,325 workers in Georgia, 1.5 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 5,185 jobs, followed by nuclear generation at 2,860 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 34.9 percent of jobs. Utilities are next with 29.2 percent.

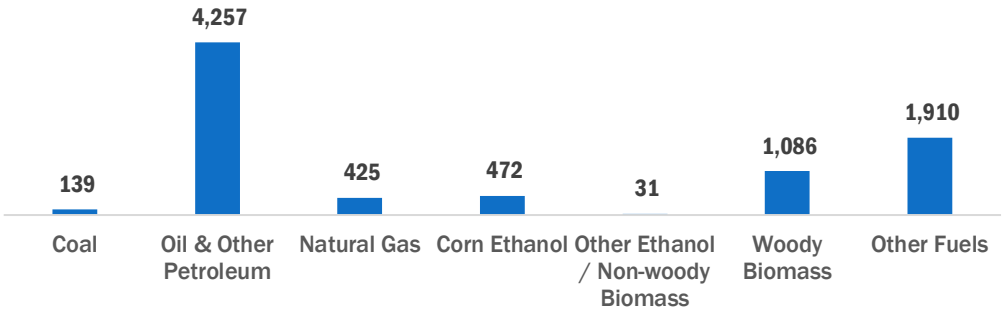
Figure GA-3.
Electric Power Generation Employment by Industry Sector



Fuels

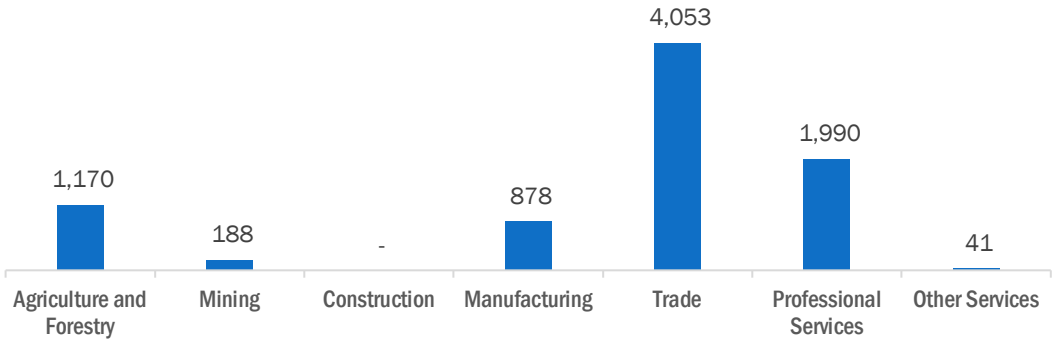
Fuels account for 8,320 jobs in Georgia, 0.8 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 4,257 jobs.

Figure GA-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 48.7 percent of Fuels jobs in *Georgia.*

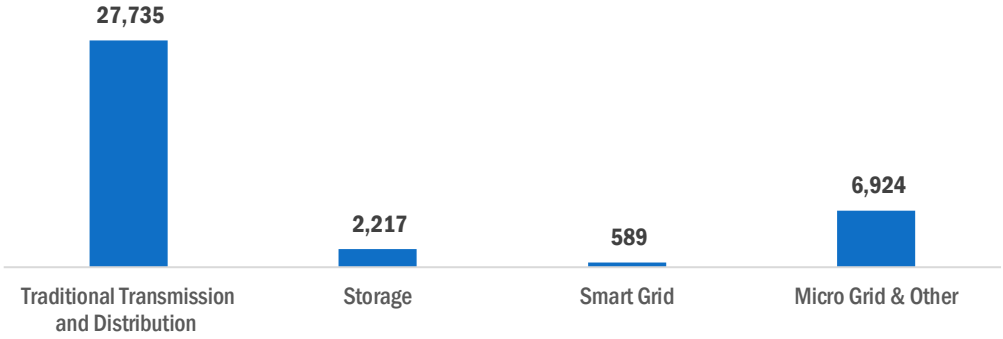
Figure GA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

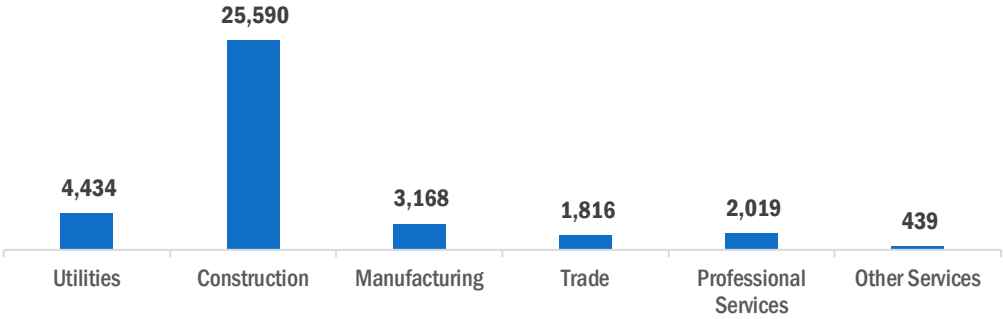
Transmission, Distribution, and Storage employs 37,466 workers in Georgia, 2.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Georgia, with 68.3 percent of such jobs statewide.

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



Energy Efficiency

The 59,065 Energy Efficiency jobs in Georgia represent 2.6 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

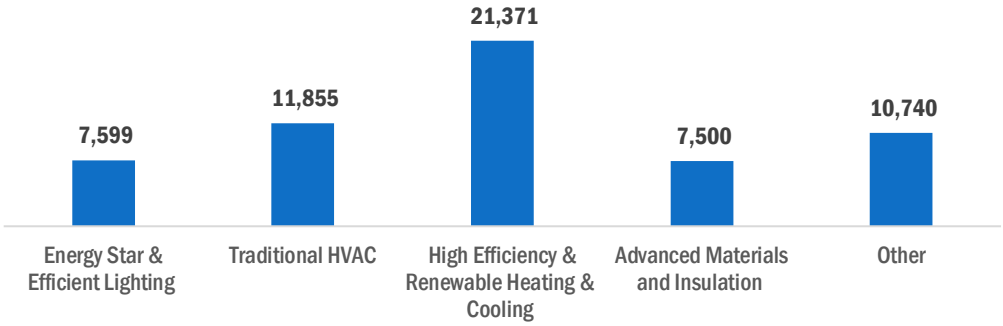
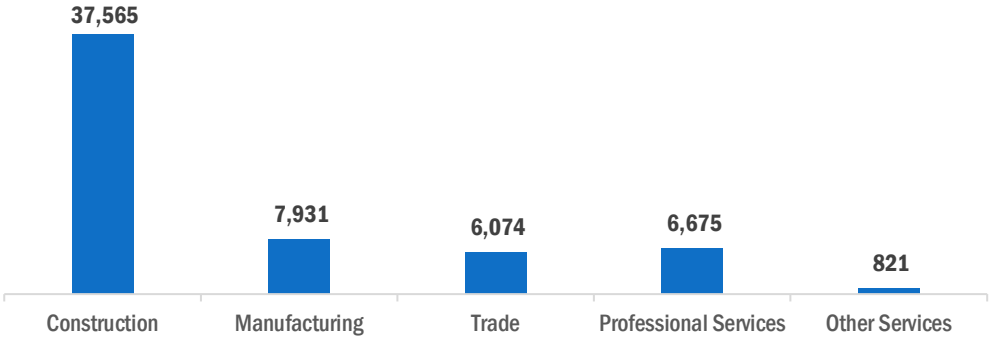


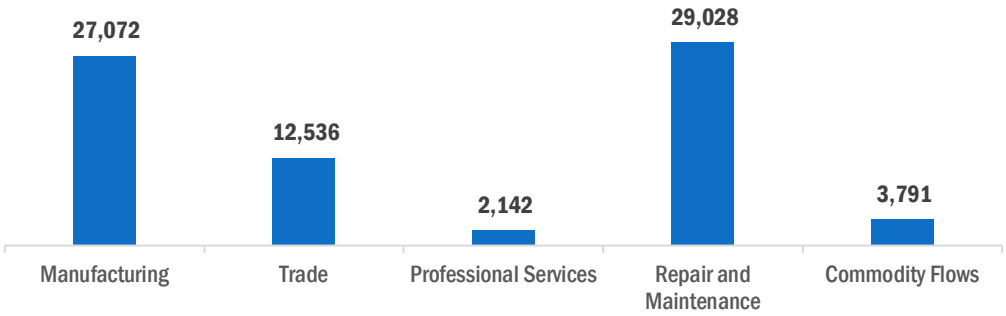
Figure GA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 74,569 jobs in Georgia. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure GA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 58.0 percent of energy-related employers in Georgia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table GA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	17.2	41.4	37.9	3.4
Transmission, Distribution and Storage	20.0	40.0	40.0	-
Energy Efficiency	32.4	47.9	18.3	1.4
Fuels	25.0	43.8	25.0	6.3
Motor Vehicles	47.1	47.1	5.9	-

Hawaii

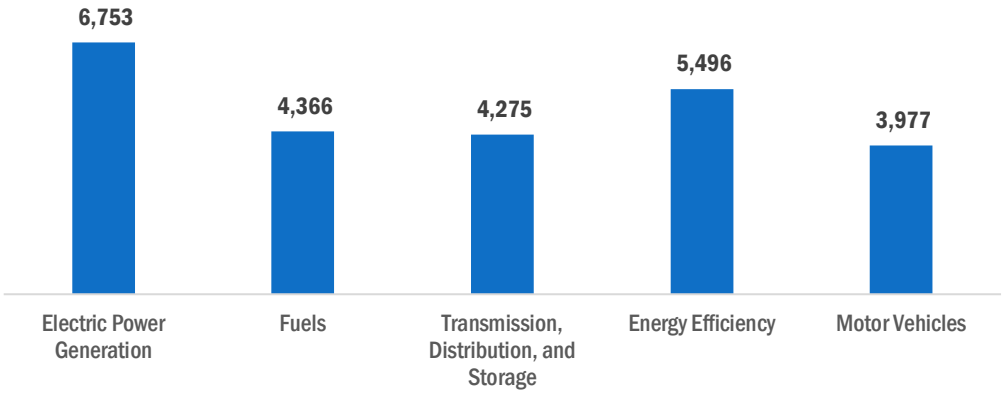
Energy and Employment – 2017

Overview

Hawaii has an average concentration of energy employment, with 15,394 Traditional Energy workers statewide (representing 0.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 6,753 are in Electric Power Generation, 4,366 are in Fuels, and 4,275 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 5,496 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 3,977 jobs in Motor Vehicles (0.2 percent of all U.S. Motor Vehicle jobs).

Figure HI-1.

Employment by Major Energy Technology Application

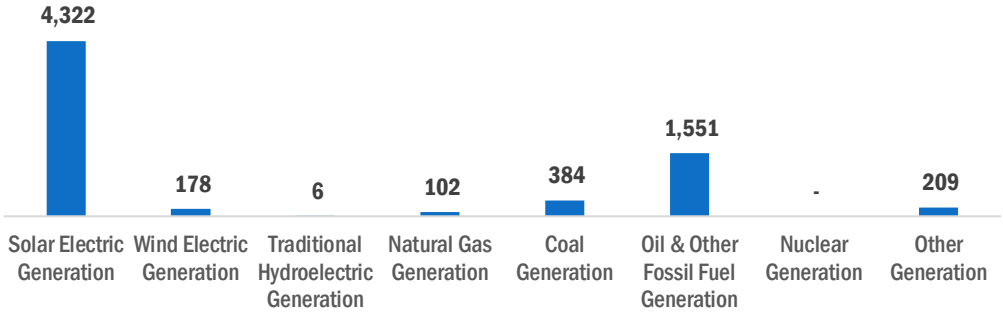


Breakdown by Technology Applications

Electric Power Generation

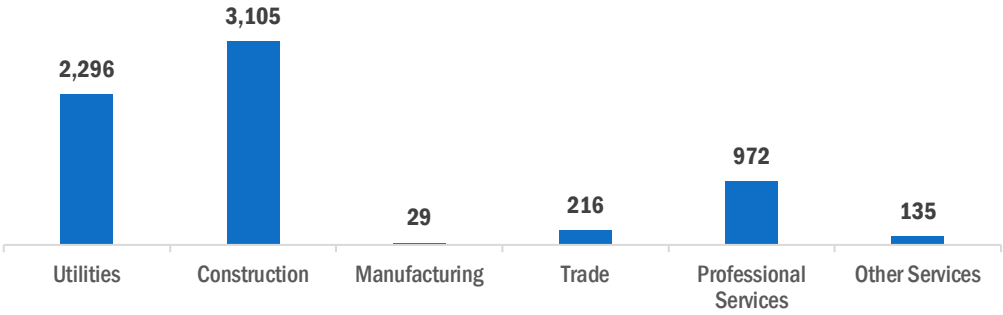
Electric Power Generation employs 6,753 workers in Hawaii, 0.8 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 4,322 jobs, followed by traditional fossil fuel generation at 2,038 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 46.0 percent of jobs. Utilities are next with 34.0 percent.

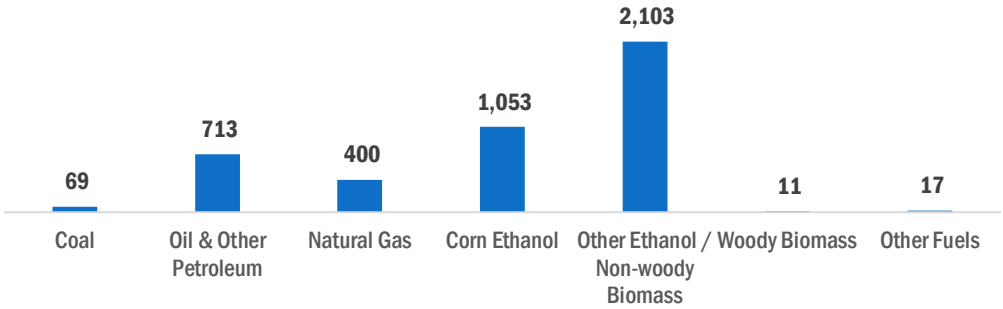
Figure HI-3.
Electric Power Generation Employment by Industry Sector



Fuels

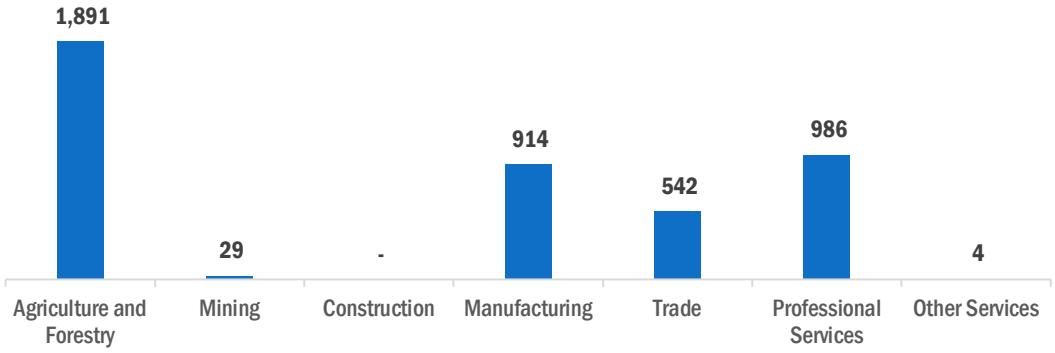
Fuels account for 4,366 jobs in Hawaii, 0.4 percent of the national total. Other ethanol/non-Woody biomass represents, including biodiesel represents represents the largest segment of Fuels employment, with 2,103 jobs.

Figure HI-4.
Fuels Employment by Detailed Technology Application



Agriculture jobs represent 43.3 percent of Fuels jobs in Hawaii.

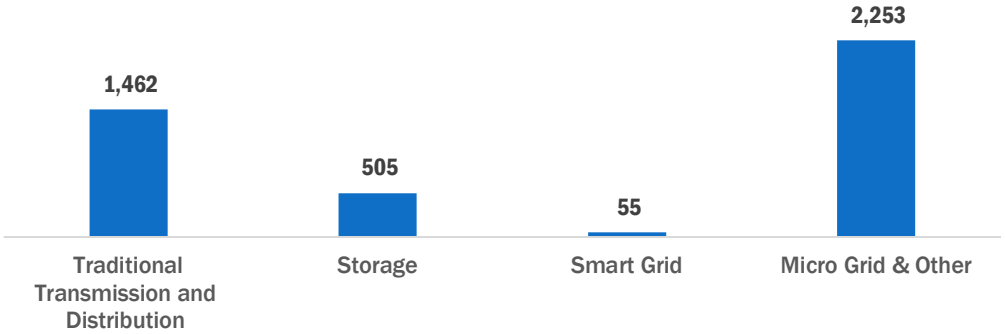
Figure HI-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

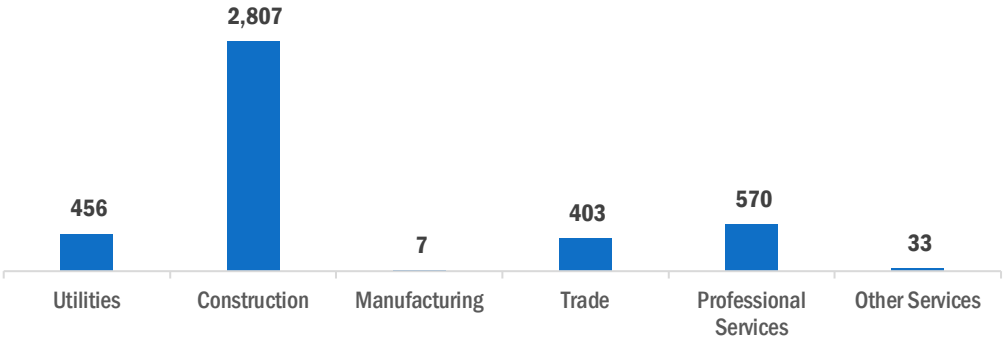
Transmission, Distribution, and Storage employs 4,275 workers in Hawaii, 0.3 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Hawaii, with 65.7 percent of such jobs statewide.

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



Energy Efficiency

The 5,496 Energy Efficiency jobs in Hawaii represent 0.2 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

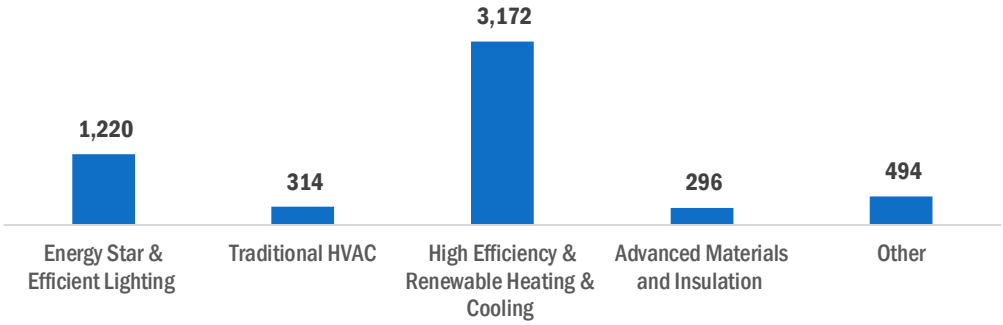
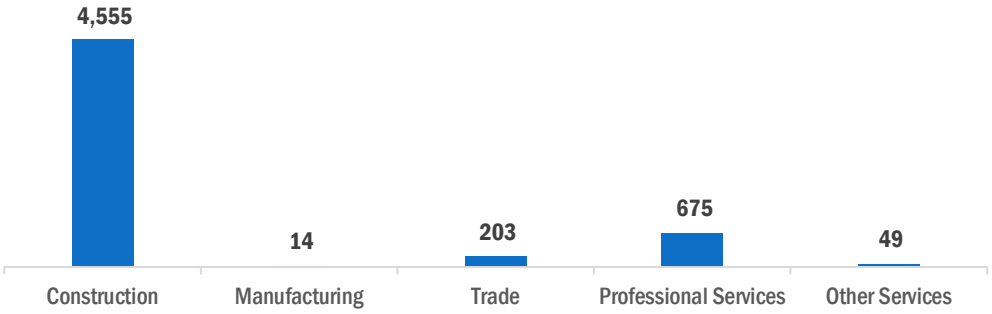


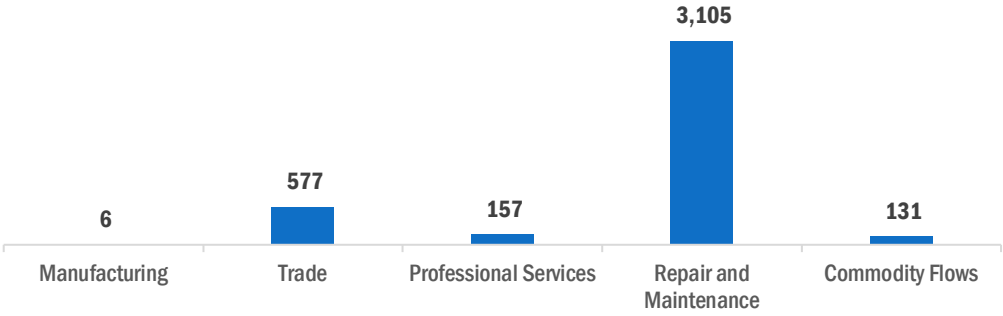
Figure HI-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 3,977 jobs in Hawaii. 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

Hiring Difficulty

Over the last year, 83.3 percent of energy-related employers in Hawaii hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table HI-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	20.0	60.0	10.0	10.0
Transmission, Distribution and Storage	16.7	50.0	33.3	-
Energy Efficiency	53.3	40.0	6.7	-
Fuels	25.0	50.0	25.0	-
Motor Vehicles	NA	NA	NA	NA

Idaho

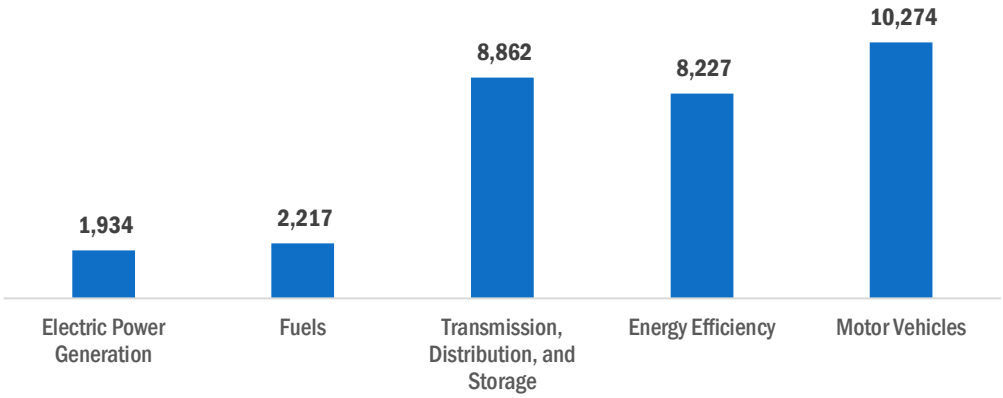
Energy and Employment – 2017

Overview

Idaho has a low concentration of energy employment, with 13,013 Traditional Energy workers statewide (representing 0.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 1,934 are in Electric Power Generation, 2,217 are in Fuels, and 8,862 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Idaho is 1.8 percent of total state employment (compared to 2.3 percent of national employment). Idaho has an additional 8,227 jobs in Energy Efficiency (0.4 percent of all U.S. Energy Efficiency jobs) and 10,274 jobs in Motor Vehicles (0.4 percent of all U.S. Motor Vehicle jobs).

Figure ID-1.

Employment by Major Energy Technology Application

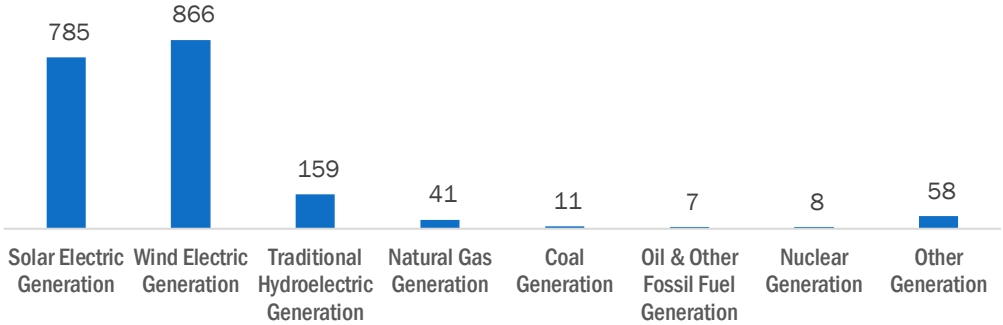


Breakdown by Technology Applications

Electric Power Generation

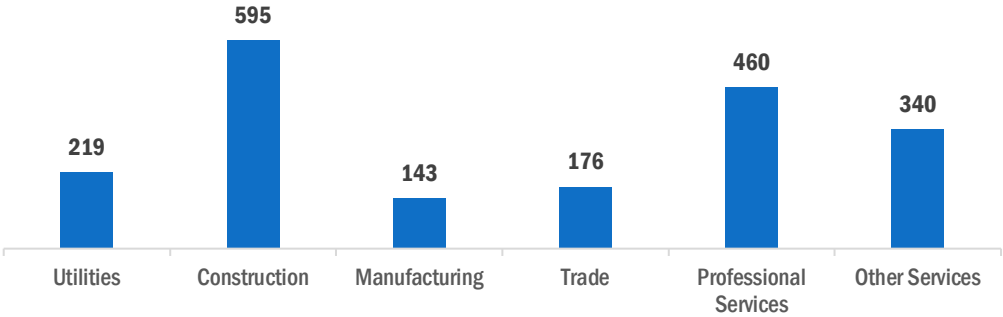
Electric Power Generation employs 1,934 workers in Idaho, 0.2 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 866 jobs, followed by solar at 785 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 30.8 percent of jobs. Professional and business services are next with 23.8 percent.

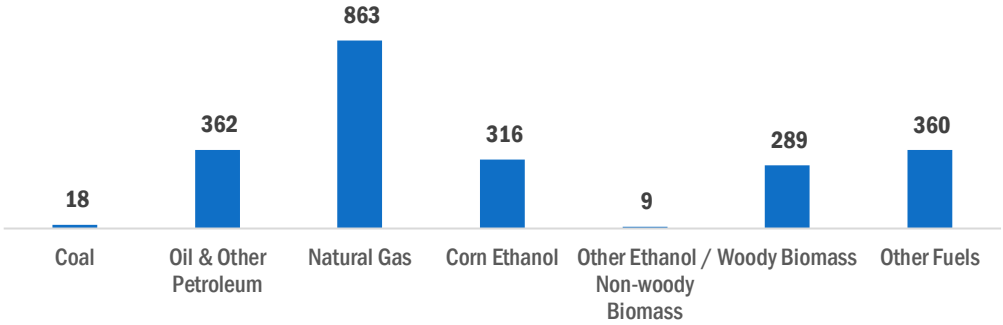
Figure ID-3.
Electric Power Generation Employment by Industry Sector



Fuels

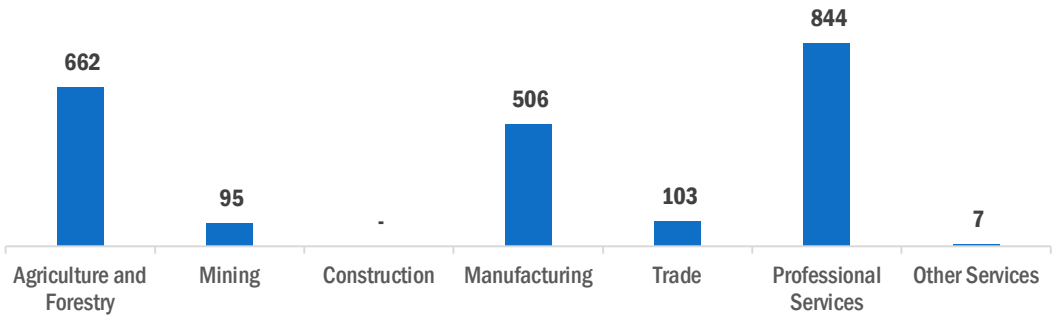
Fuels account for 2,217 jobs in Idaho, 0.2 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 863 jobs.

Figure ID-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 38.1 percent of Fuels jobs in Idaho.

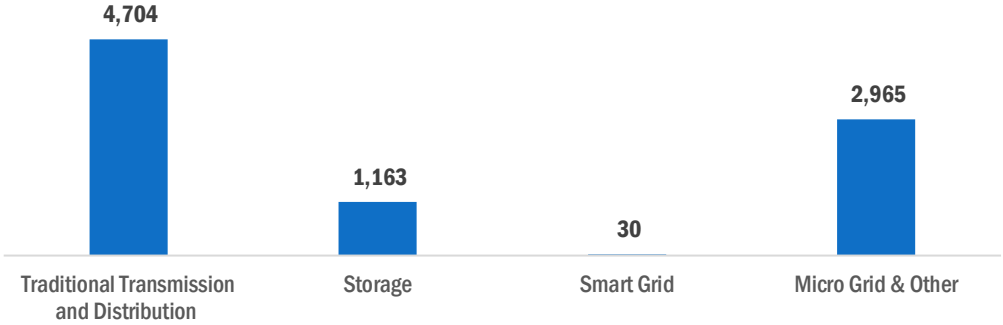
Figure ID-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

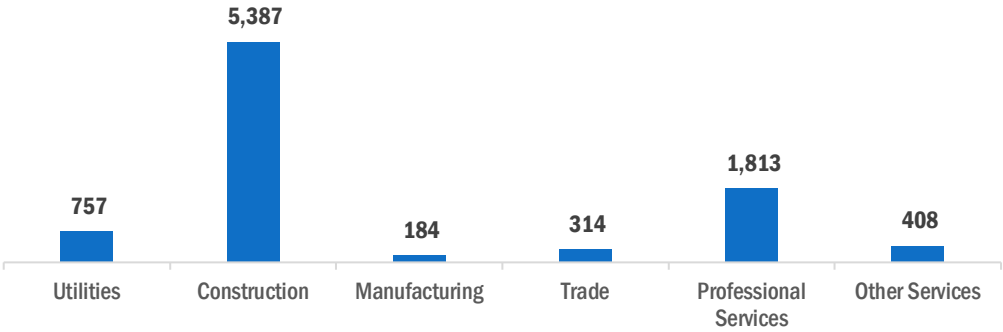
Transmission, Distribution, and Storage employs 8,862 workers in Idaho, 0.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Idaho, with 60.8 percent of such jobs statewide.

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



Energy Efficiency

The 8,227 Energy Efficiency jobs in Idaho represent 0.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

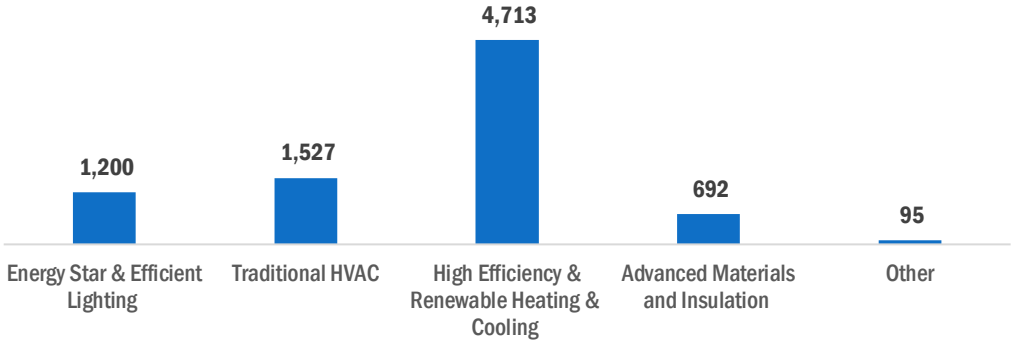
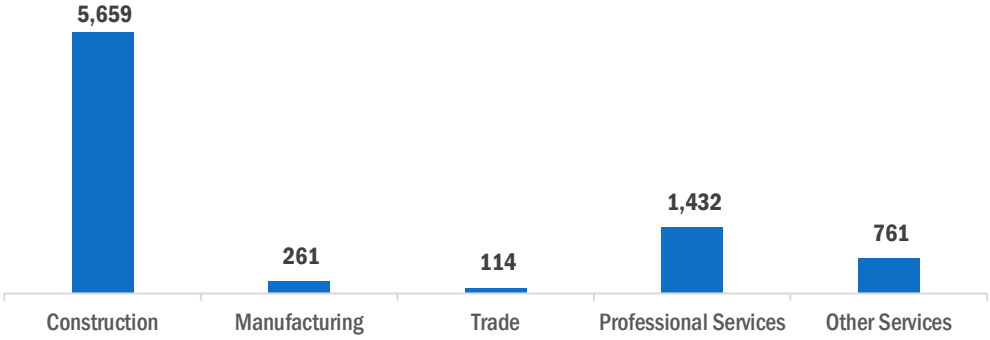


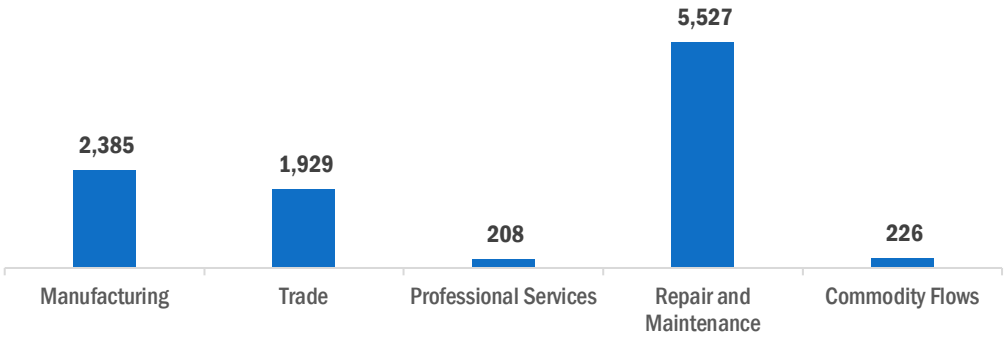
Figure ID-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 10,274 jobs in Idaho. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure ID-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 55.6 percent of energy-related employers in Idaho hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table ID-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	37.5	50.0	12.5	-
Transmission, Distribution and Storage	14.3	71.4	14.3	-
Energy Efficiency	42.1	52.6	5.3	-
Fuels	NA	NA	NA	NA
Motor Vehicles	66.7	16.7	16.7	-

Illinois

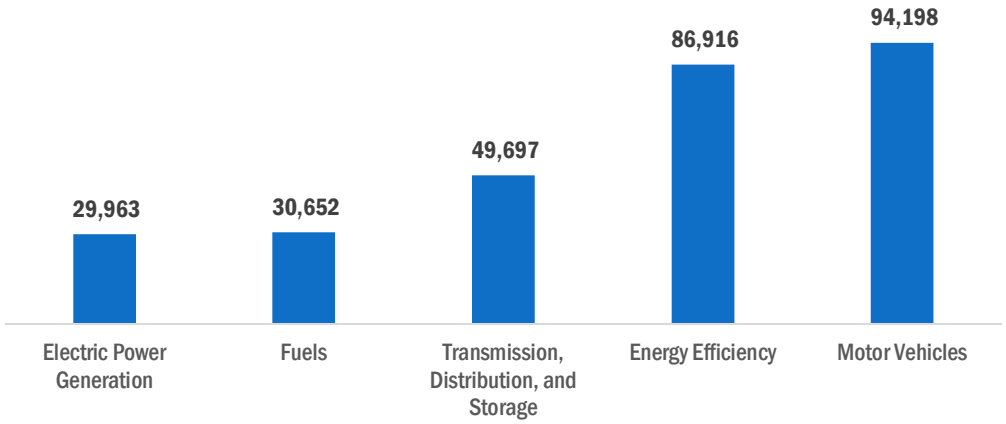
Energy and Employment – 2017

Overview

Illinois has a low concentration of energy employment, with 110,312 Traditional Energy workers statewide (representing 3.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 29,963 are in Electric Power Generation, 30,652 are in Fuels, and 49,697 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Illinois is 1.8 percent of total state employment (compared to 2.3 percent of national employment). Illinois has an additional 86,916 jobs in Energy Efficiency (3.9 percent of all U.S. Energy Efficiency jobs) and 94,198 jobs in Motor Vehicles (3.8 percent of all U.S. Motor Vehicle jobs).

Figure IL-1.

Employment by Major Energy Technology Application

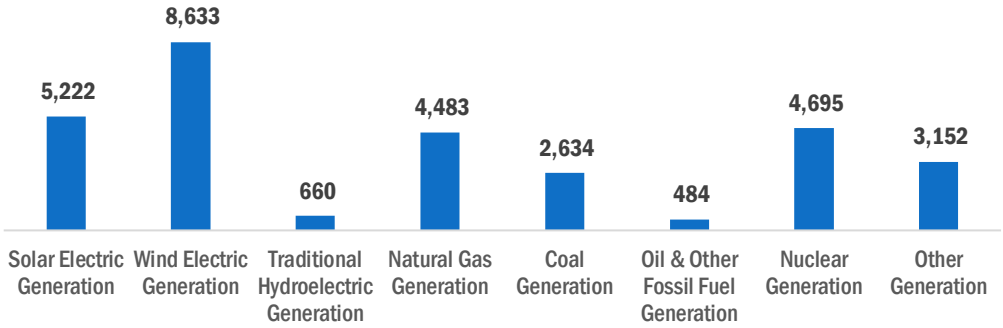


Breakdown by Technology Applications

Electric Power Generation

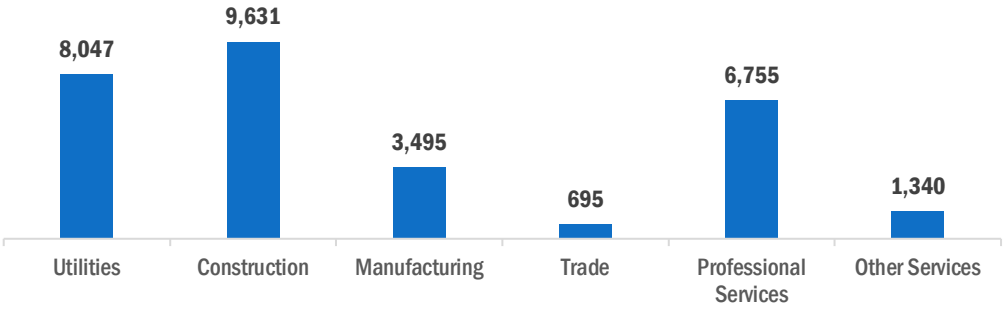
Electric Power Generation employs 29,963 workers in Illinois, 3.4 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 8,633 jobs, followed by fossil fuel generation at 7,602 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 32.1 percent of jobs. Utilities are next with 26.9 percent.

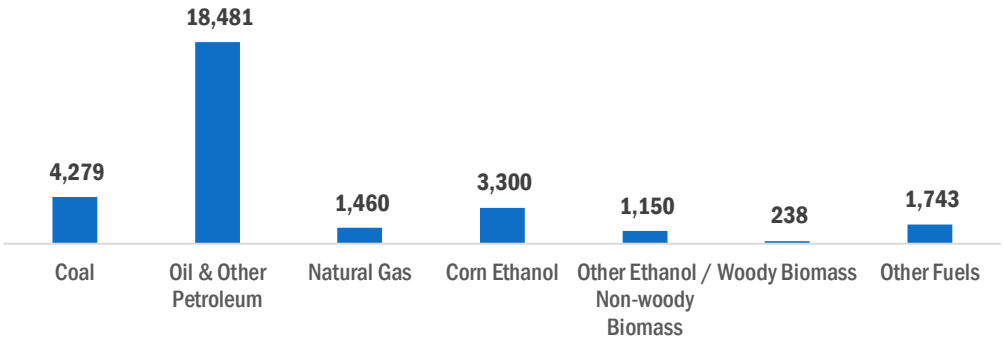
Figure IL-3.
Electric Power Generation Employment by Industry Sector



Fuels

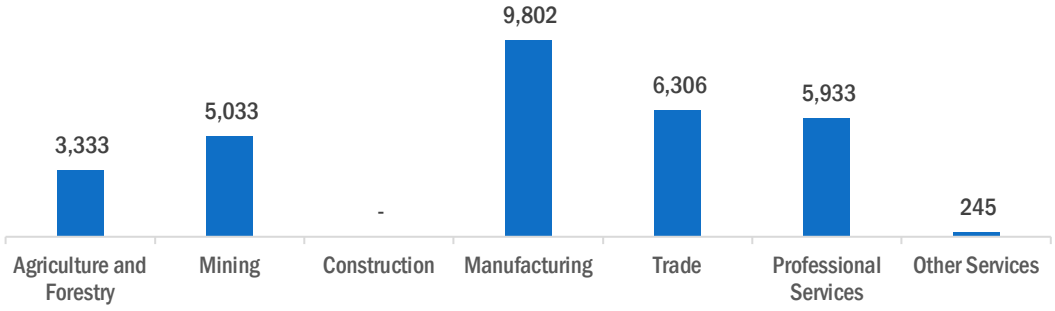
Fuels account for 30,652 jobs in Illinois, 2.9 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 18,481 jobs.

Figure IL-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 32.0 percent of Fuels jobs in Illinois.

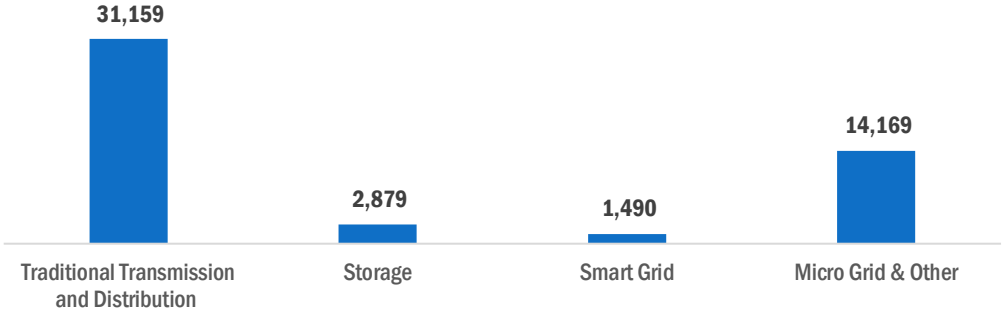
Figure IL-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

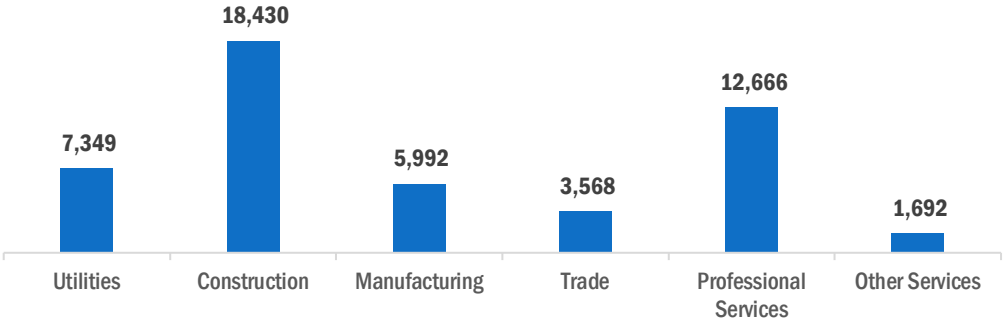
Transmission, Distribution, and Storage employs 49,697 workers in Illinois, 3.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Illinois, with 37.1 percent of such jobs statewide.

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



Energy Efficiency

The 86,916 Energy Efficiency jobs in Illinois represent 3.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

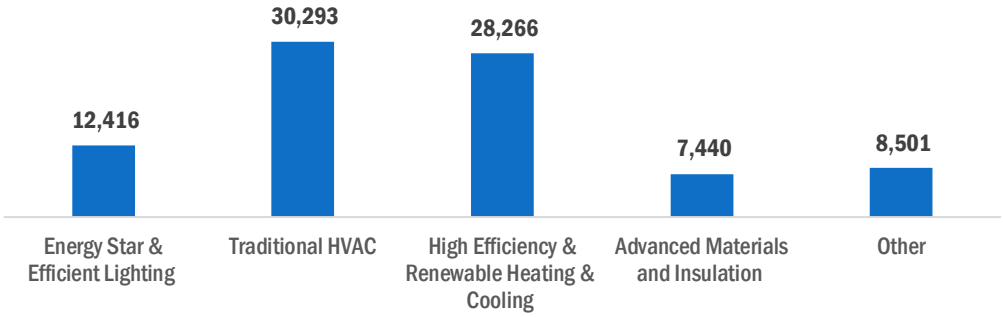
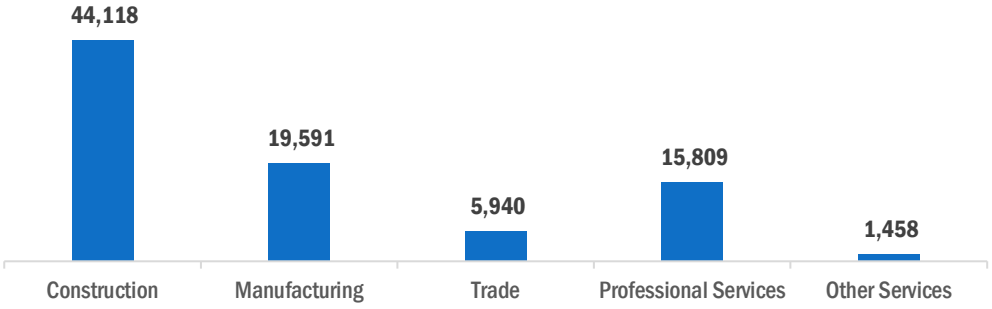


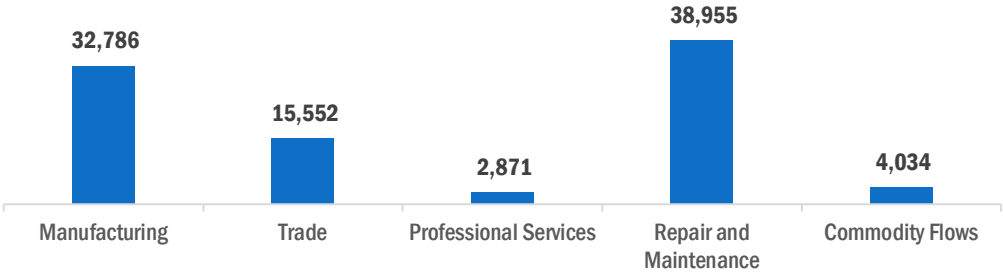
Figure IL-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 94,198 jobs in Illinois. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure IL-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 57.3 percent of energy-related employers in Illinois hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table IL-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	28.8	50.0	17.3	3.8
Transmission, Distribution and Storage	26.5	47.1	20.6	5.9
Energy Efficiency	23.8	45.7	25.7	4.8
Fuels	11.1	40.7	44.4	3.7
Motor Vehicles	29.0	29.0	35.5	6.5

Indiana

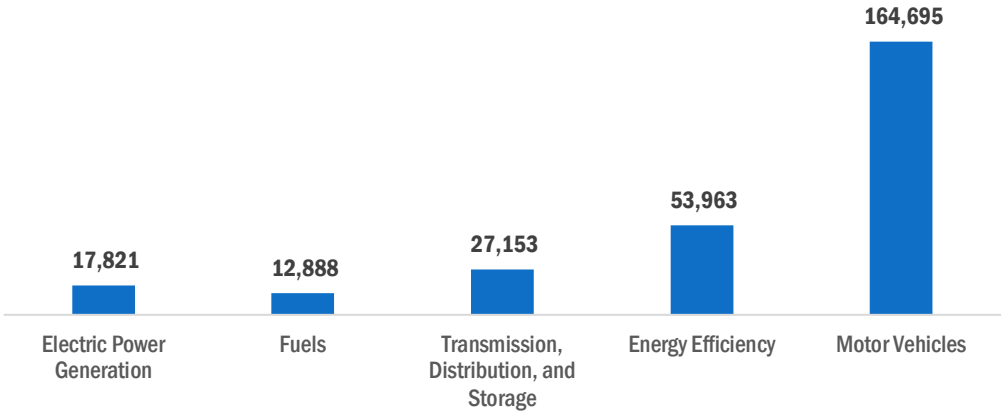
Energy and Employment – 2017

Overview

Indiana has a low concentration of energy employment, with 57,862 Traditional Energy workers statewide (representing 1.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 17,821 are in Electric Power Generation, 12,888 are in Fuels, and 27,153 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Indiana is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Indiana has an additional 53,963 jobs in Energy Efficiency (2.4 percent of all U.S. Energy Efficiency jobs) and 164,695 jobs in Motor Vehicles (6.7 percent of all U.S. Motor Vehicle jobs).

Figure IN-1.

Employment by Major Energy Technology Application

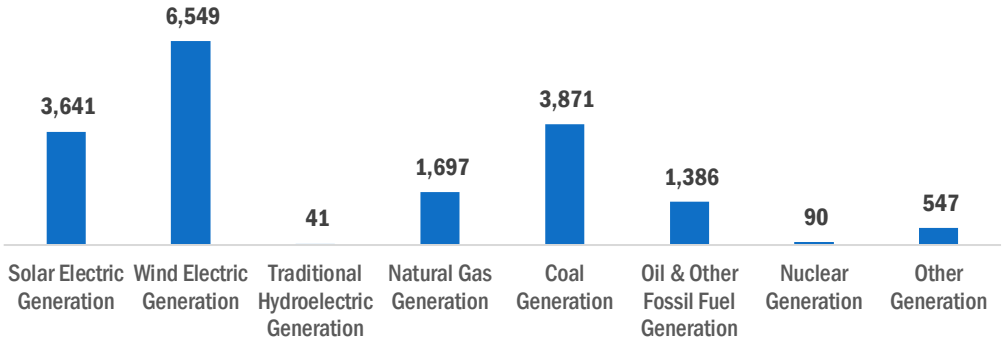


Breakdown by Technology Applications

Electric Power Generation

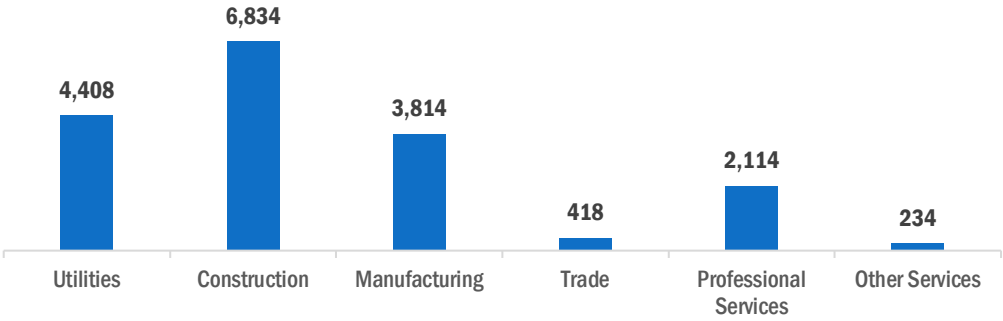
Electric Power Generation employs 17,821 workers in Indiana, 2.0 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 6,953 jobs, followed by wind at 6,549 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 38.3 percent of jobs. Utilities are next with 24.7 percent.

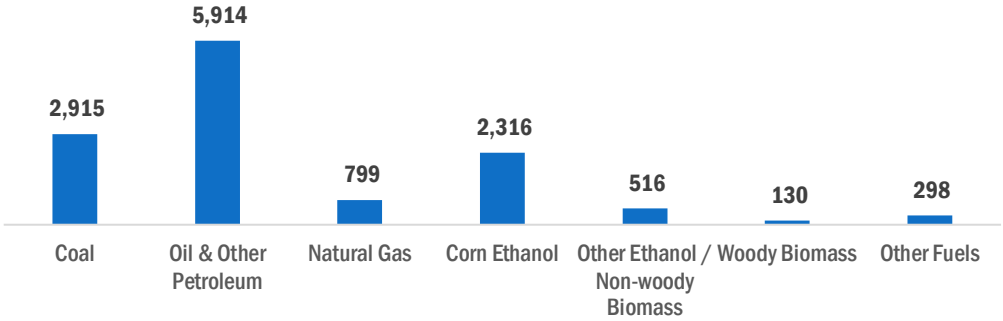
Figure IN-3.
Electric Power Generation Employment by Industry Sector



Fuels

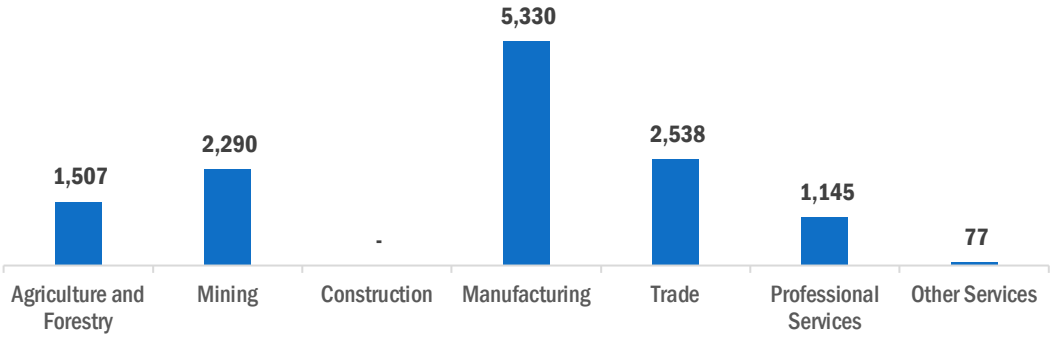
Fuels account for 12,888 jobs in Indiana, 1.2 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 5,914 jobs.

Figure IN-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 41.4 percent of Fuels jobs in Indiana.

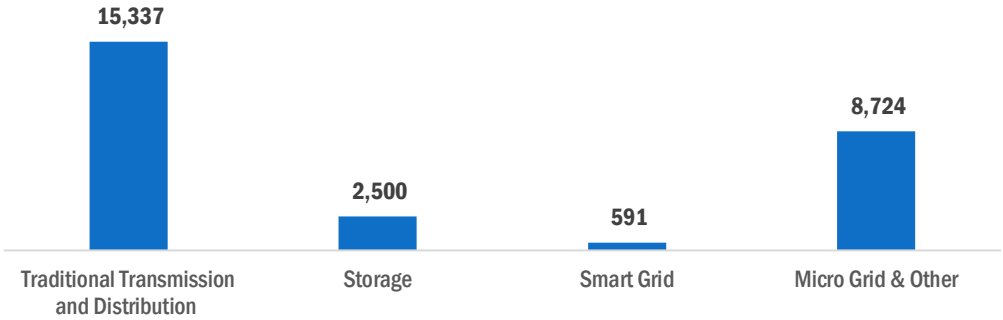
Figure IN-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

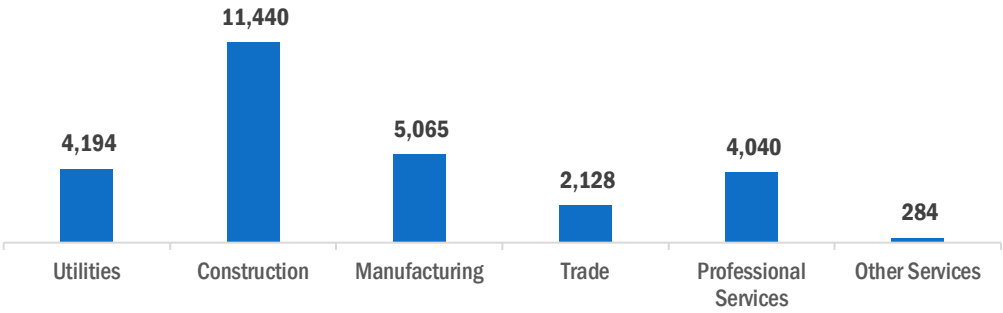
Transmission, Distribution, and Storage employs 27,153 workers in Indiana, 2.0 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Indiana, with 42.1 percent of such jobs statewide.

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



Energy Efficiency

The 53,963 Energy Efficiency jobs in Indiana represent 2.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

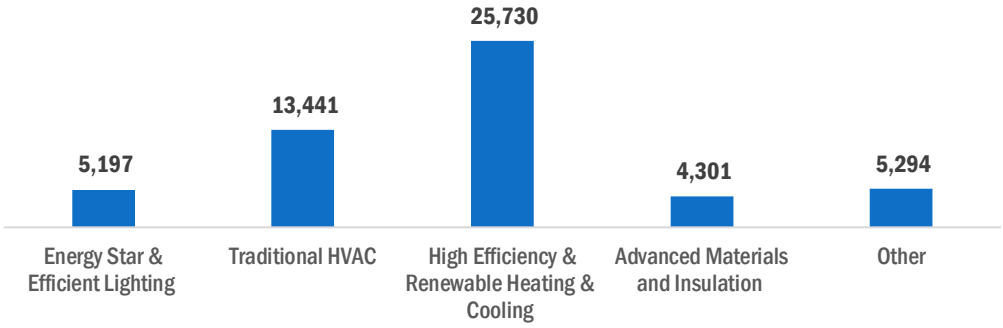
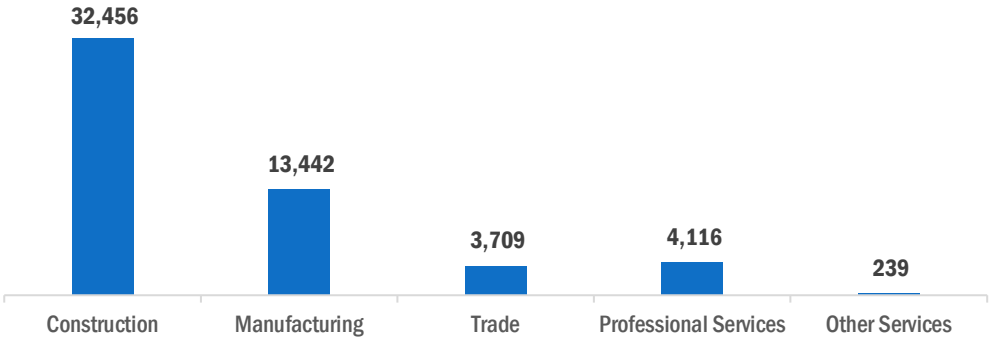


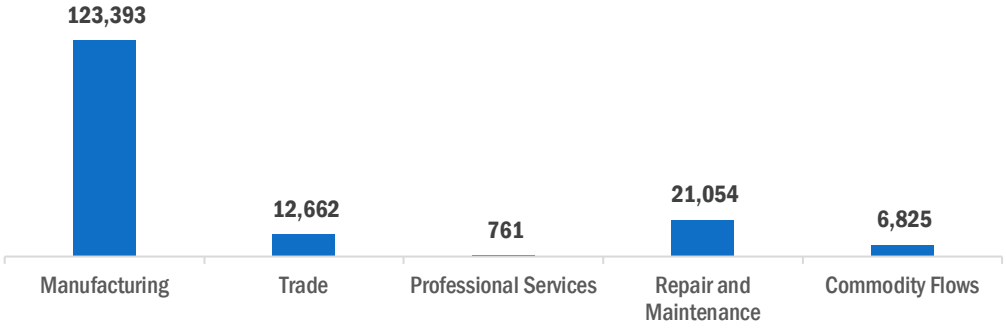
Figure IN-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 164,695 jobs in Indiana. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure IN-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 75.0 percent of energy-related employers in Indiana hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table IN-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	27.3	59.1	13.6	-
Transmission, Distribution and Storage	38.5	53.8	7.7	-
Energy Efficiency	25.8	67.7	6.5	-
Fuels	18.2	50.0	27.3	4.5
Motor Vehicles	38.9	33.3	27.8	-

Iowa

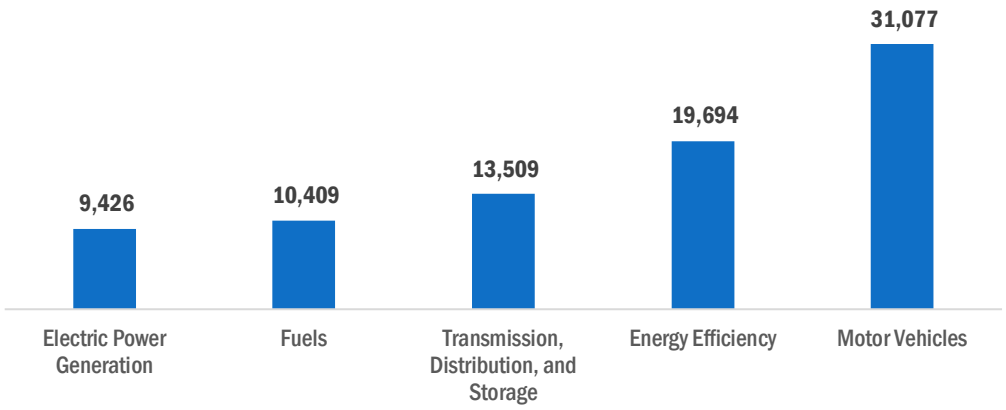
Energy and Employment – 2017

Overview

Iowa has an average concentration of energy employment, with 33,344 Traditional Energy workers statewide (representing 1.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 9,426 are in Electric Power Generation, 10,409 are in Fuels, and 13,509 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Iowa is 2.1 percent of total state employment (compared to 2.3 percent of national employment). Iowa has an additional 19,694 jobs in Energy Efficiency (0.9 percent of all U.S. Energy Efficiency jobs) and 31,077 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

Figure IA-1.

Employment by Major Energy Technology Application

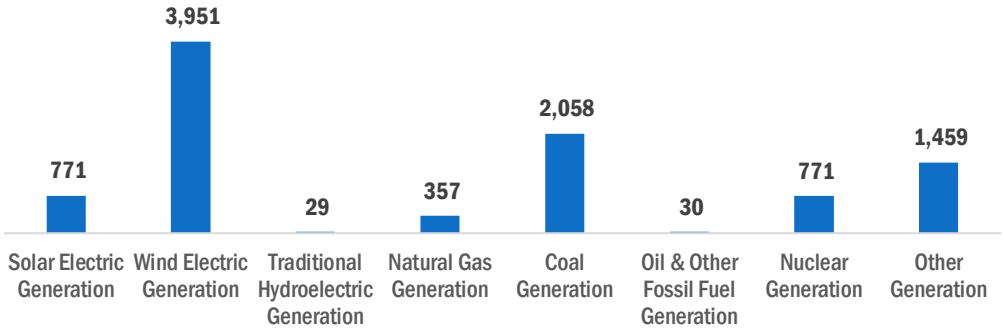


Breakdown by Technology Applications

Electric Power Generation

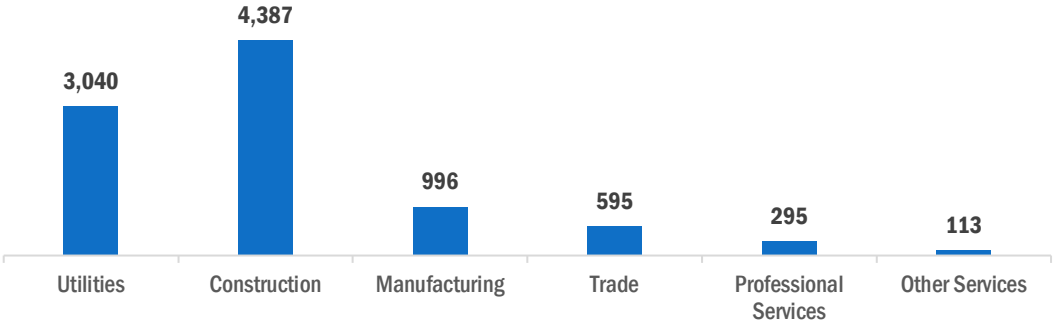
Electric Power Generation employs 9,426 workers in Iowa, 1.1 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 3,951 jobs, followed by traditional fossil fuel generation at 2,445 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 46.5 percent of jobs. Utilities are next with 32.3 percent.

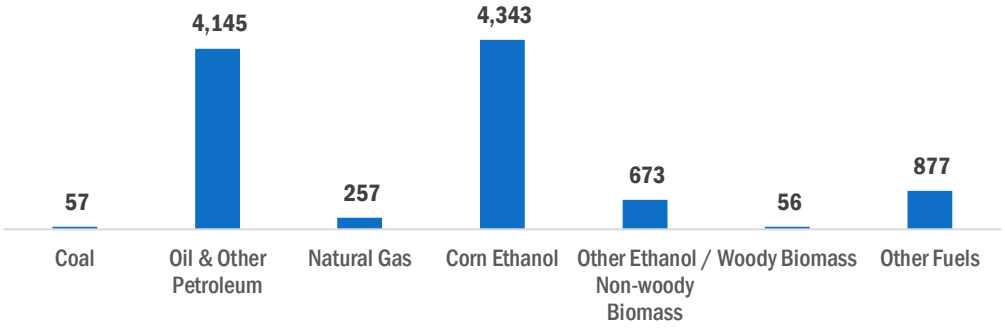
Figure IA-3.
Electric Power Generation Employment by Industry Sector



Fuels

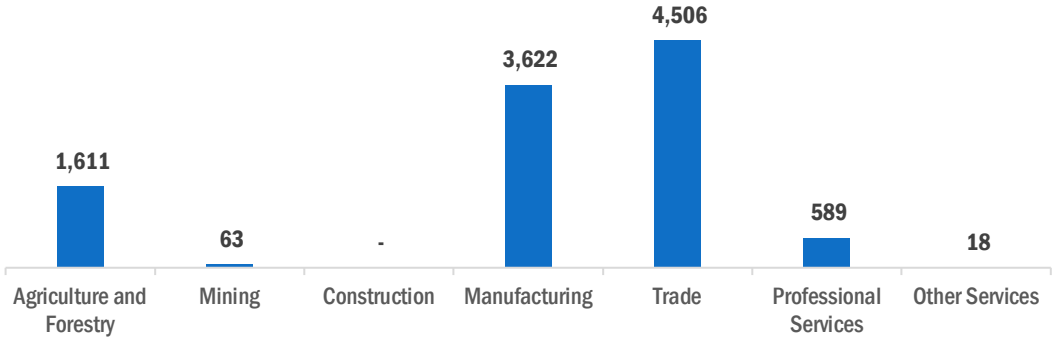
Fuels account for 10,409 jobs in Iowa, 1.0 percent of the national total. Corn ethanol represents the largest segment of Fuels employment, with 4,343 jobs.

Figure IA-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 43.3 percent of Fuels jobs in Iowa.

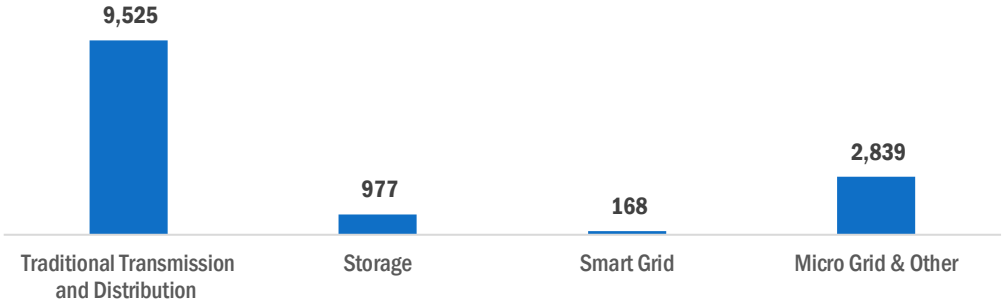
Figure IA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

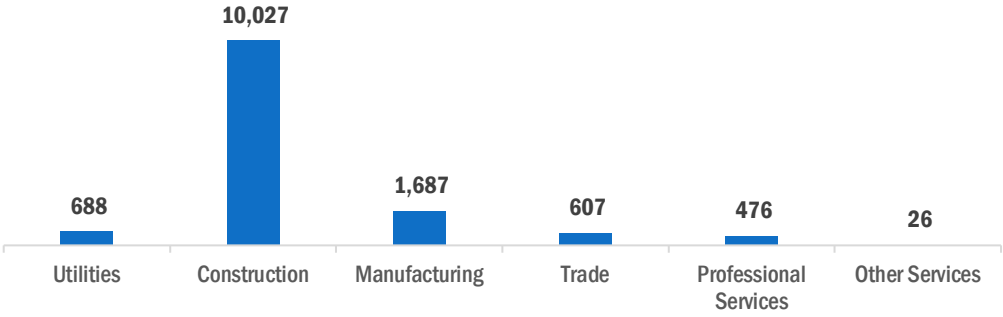
Transmission, Distribution, and Storage employs 13,509 workers in Iowa, 1.0 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Iowa, with 74.2 percent of such jobs statewide.

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



Energy Efficiency

The 19,694 Energy Efficiency jobs in Iowa represent 0.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

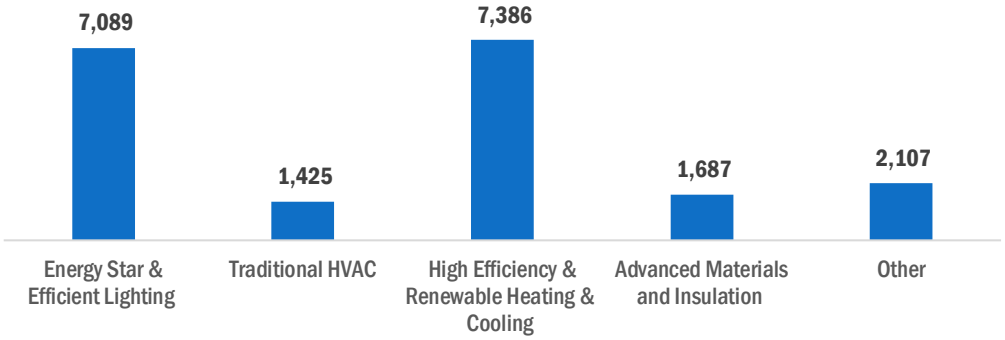
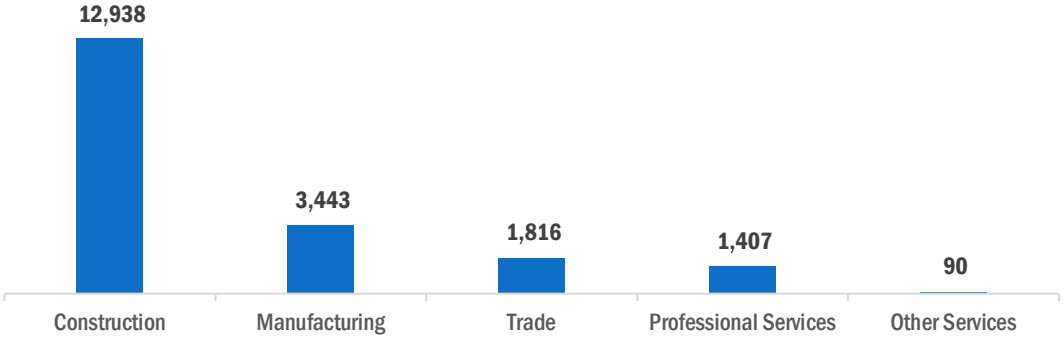


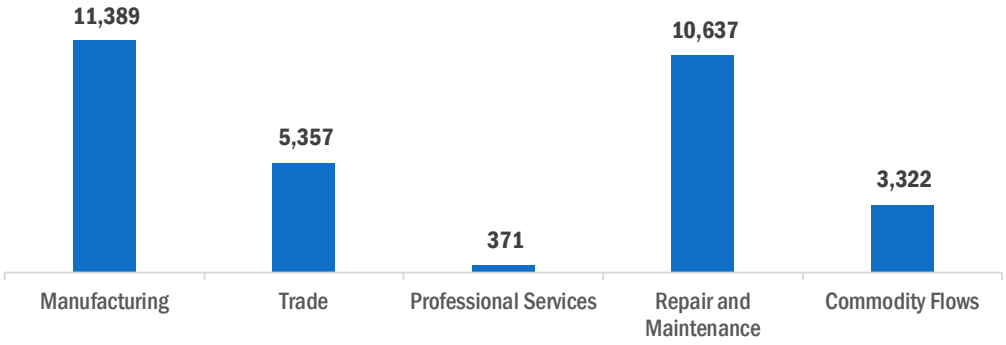
Figure IA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 31,077 jobs in Iowa. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure IA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 70.0 percent of energy-related employers in Iowa hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table IA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	33.3	57.1	4.8	4.8
Transmission, Distribution and Storage	25.0	66.7	8.3	-
Energy Efficiency	41.2	52.9	5.9	-
Fuels	25.0	62.5	12.5	-
Motor Vehicles	26.3	68.4	5.3	-

Kansas

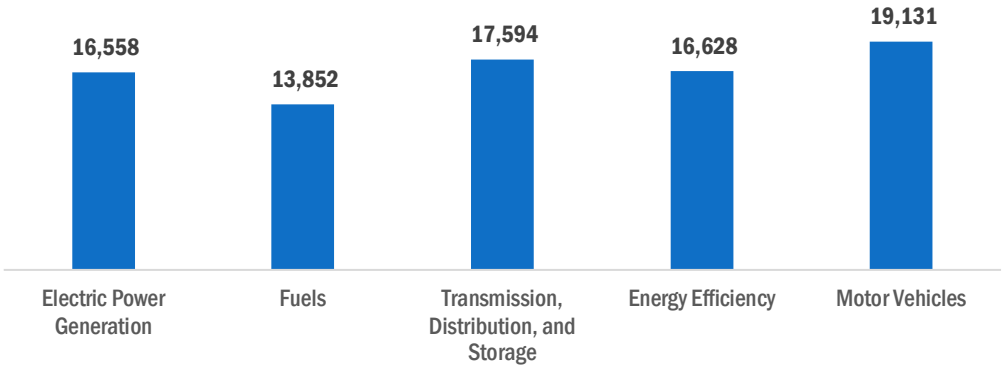
Energy and Employment – 2017

Overview

Kansas has a high concentration of energy employment, with 48,004 Traditional Energy workers statewide (representing 1.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 16,558 are in Electric Power Generation, 13,852 are in Fuels, and 17,594 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Kansas is 3.5 percent of total state employment (compared to 2.3 percent of national employment). Kansas has an additional 16,628 jobs in Energy Efficiency (0.7 percent of all U.S. Energy Efficiency jobs) and 19,131 jobs in Motor Vehicles (0.8 percent of all U.S. Motor Vehicle jobs).

Figure KS-1.

Employment by Major Energy Technology Application

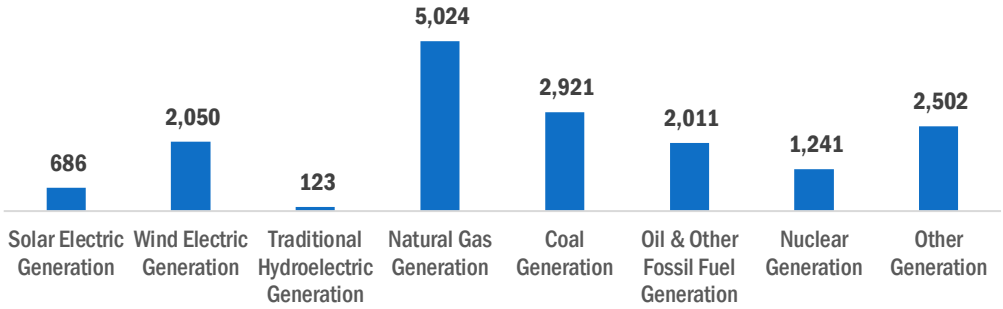


Breakdown by Technology Applications

Electric Power Generation

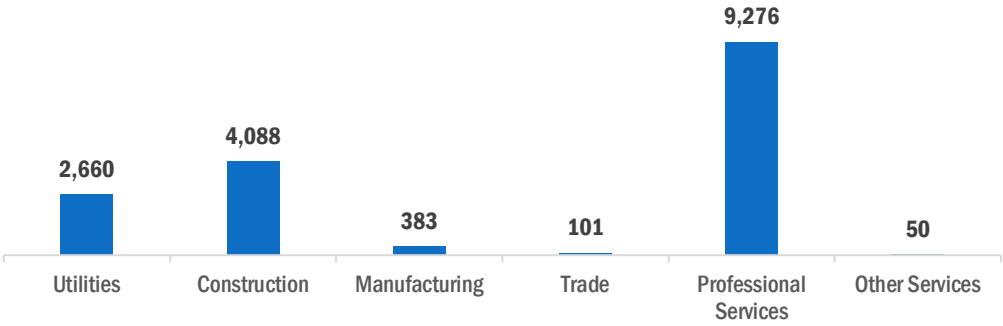
Electric Power Generation employs 16,558 workers in Kansas, 1.9 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 9,956 jobs, followed by other generation at 2,502 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 56.0 percent of jobs. Construction is next with 24.7 percent.

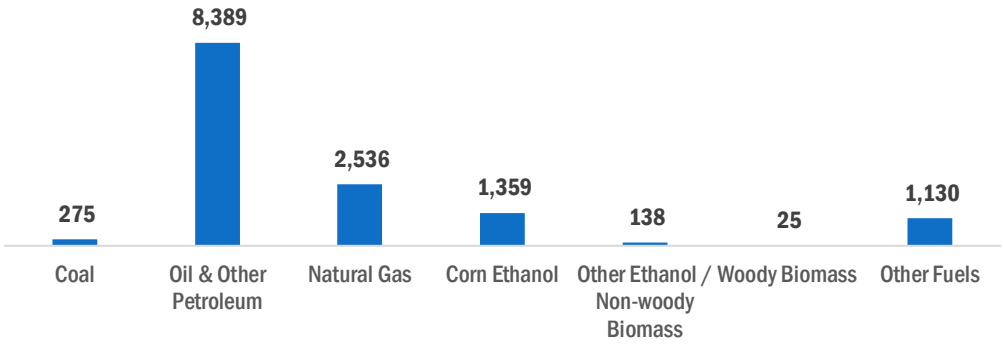
Figure KS-3.
Electric Power Generation Employment by Industry Sector



Fuels

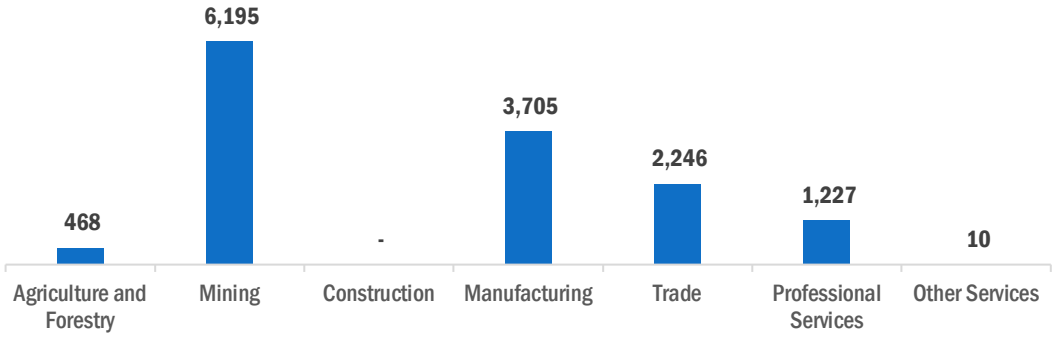
Fuels account for 13,852 jobs in Kansas, 1.3 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 8,389 jobs.

Figure KS-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 44.7 percent of Fuels jobs in Kansas.

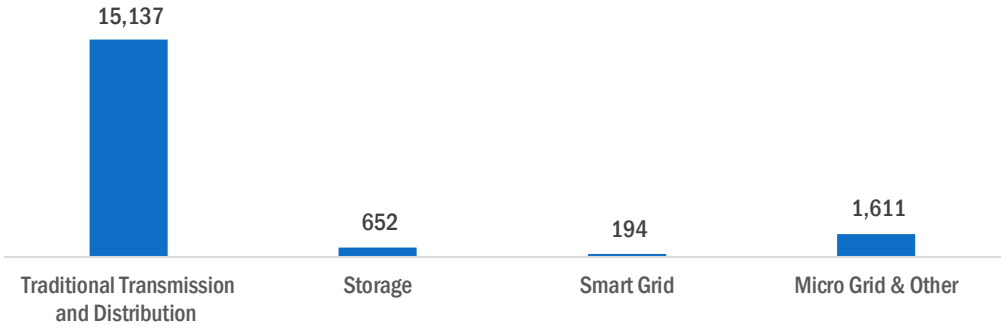
Figure KS-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

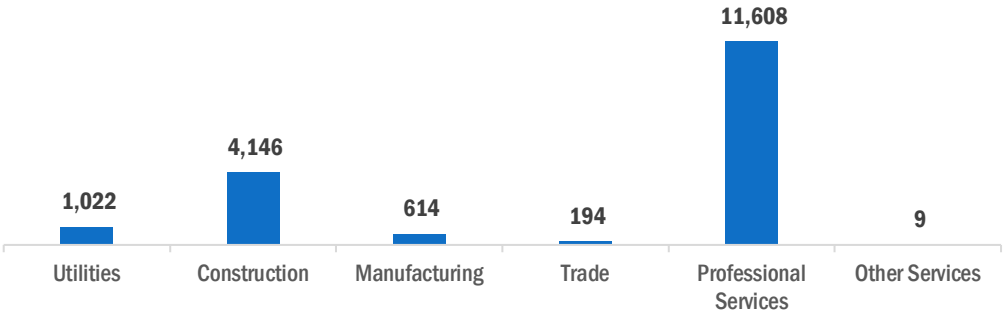
Transmission, Distribution, and Storage employs 17,594 workers in Kansas, 1.3 percent of the national total.

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



Professional and business services are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Kansas, with 66.0 percent of such jobs statewide.

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



Energy Efficiency

The 16,628 Energy Efficiency jobs in Kansas represent 0.7 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in other energy efficiency products and services firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the professional and business services industry.

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

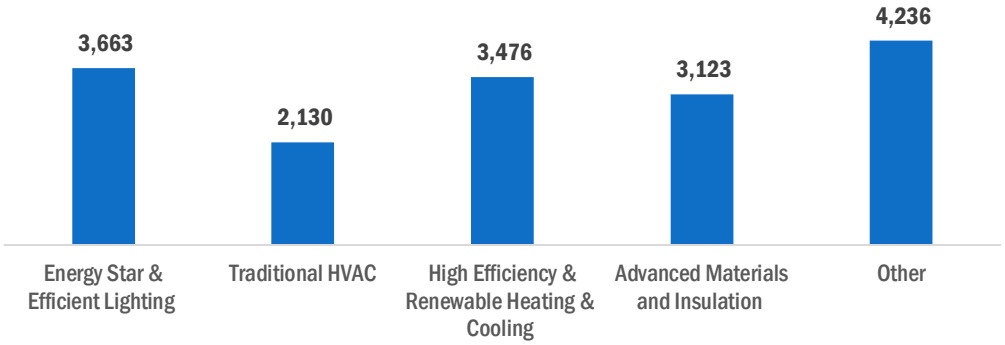
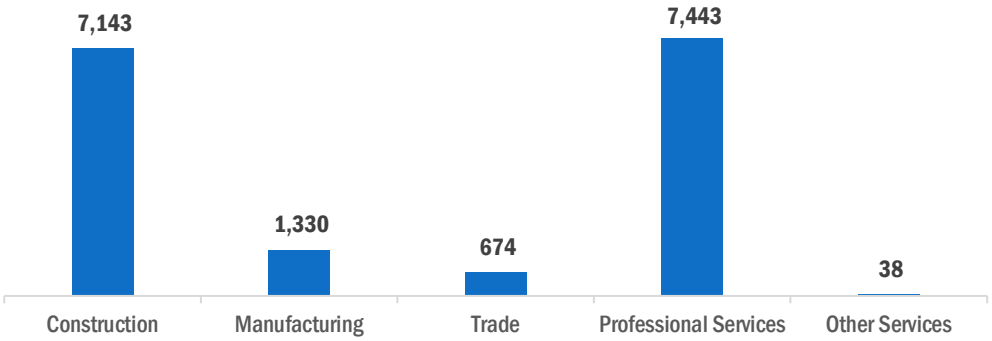


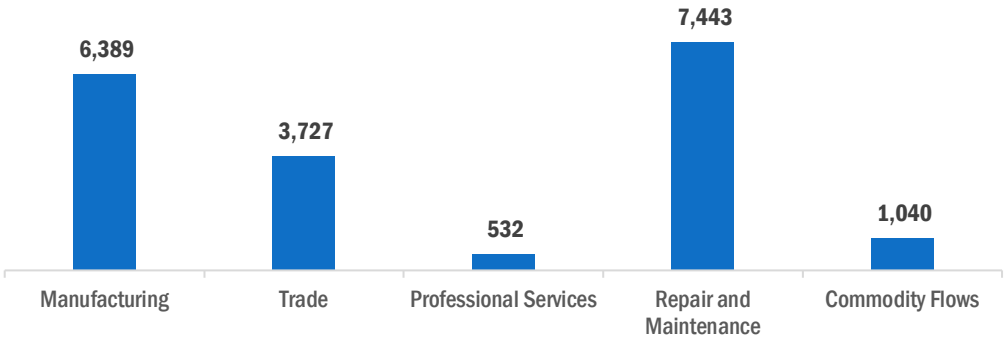
Figure KS-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 19,131 jobs in Kansas. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure KS-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 40.0 percent of energy-related employers in Kansas hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table KS-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	25.0	50.0	12.5	12.5
Transmission, Distribution and Storage	16.7	50.0	16.7	16.7
Energy Efficiency	33.3	60.0	6.7	-
Fuels	20.0	53.3	26.7	-
Motor Vehicles	20.0	40.0	40.0	-

Kentucky

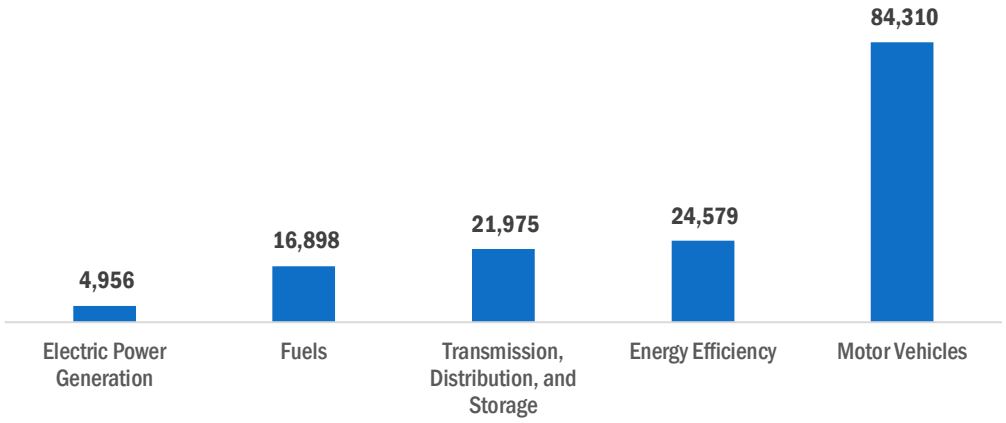
Energy and Employment – 2017

Overview

Kentucky has an average concentration of energy employment, with 43,830 Traditional Energy workers statewide (representing 1.3 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 4,956 are in Electric Power Generation, 16,898 are in Fuels, and 21,975 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Kentucky is 2.3 percent of total state employment (compared to 2.3 percent of national employment). Kentucky has an additional 24,579 jobs in Energy Efficiency (1.1 percent of all U.S. Energy Efficiency jobs) and 84,310 jobs in Motor Vehicles (3.4 percent of all U.S. Motor Vehicle jobs).

Figure KY-1.

Employment by Major Energy Technology Application

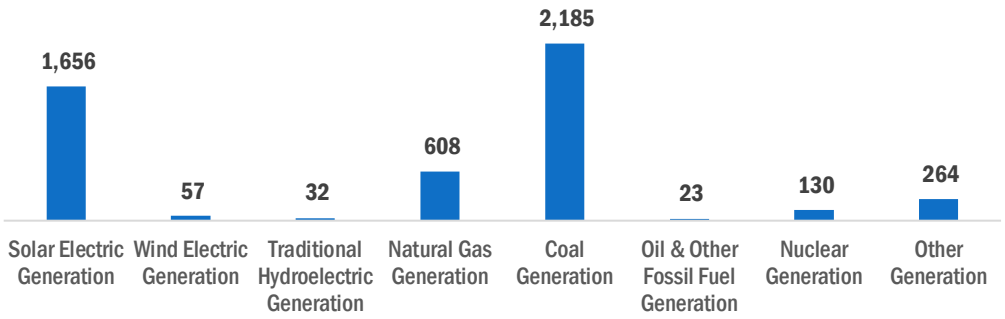


Breakdown by Technology Applications

Electric Power Generation

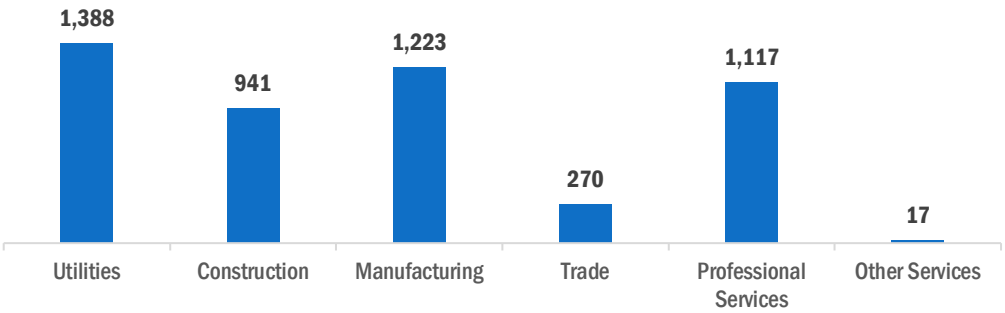
Electric Power Generation employs 4,956 workers in Kentucky, 0.6 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 2,817 jobs, followed by solar at 1,656 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 28.0 percent of jobs. Manufacturing is next with 24.7 percent.

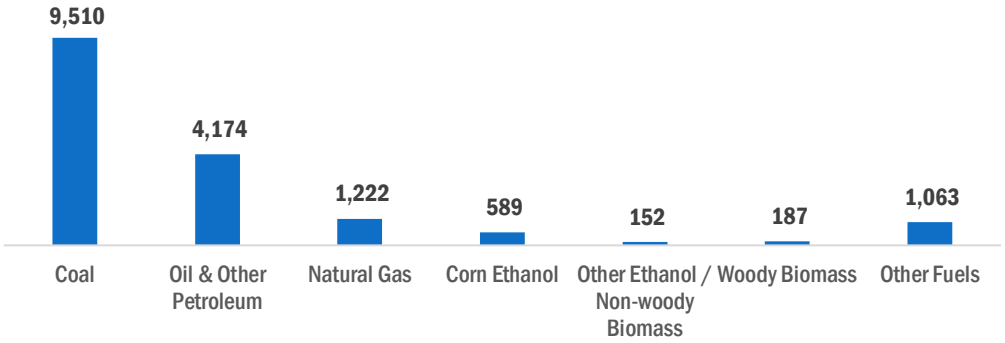
Figure KY-3.
Electric Power Generation Employment by Industry Sector



Fuels

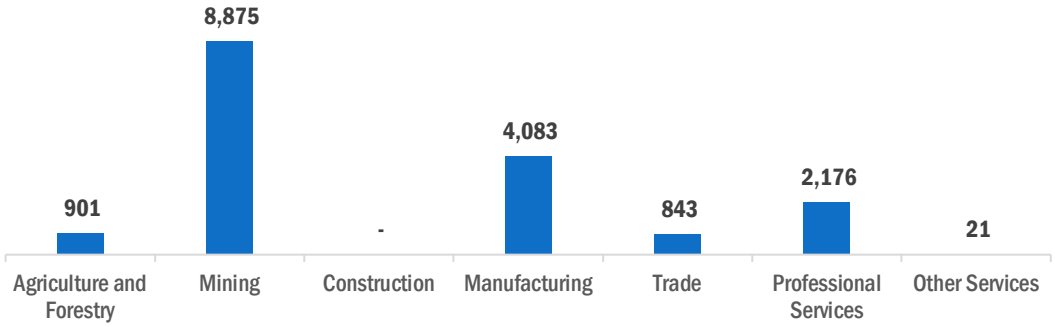
Fuels account for 16,898 jobs in Kentucky, 1.6 percent of the national total. Coal represents the largest segment of Fuels employment, with 9,510 jobs.

Figure KY-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 52.5 percent of Fuels jobs in Kentucky.

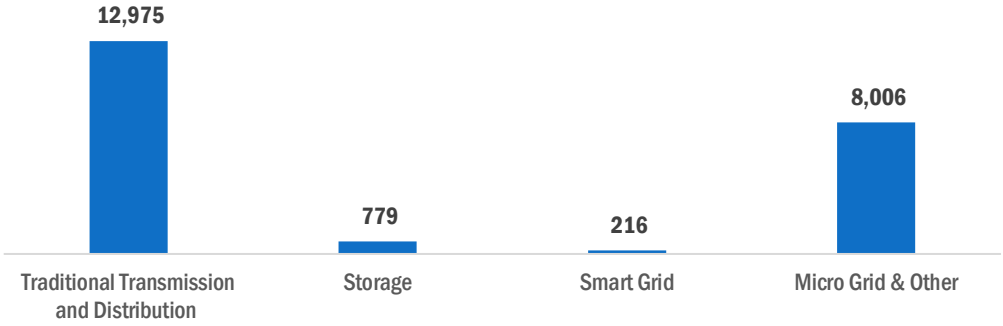
Figure KY-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

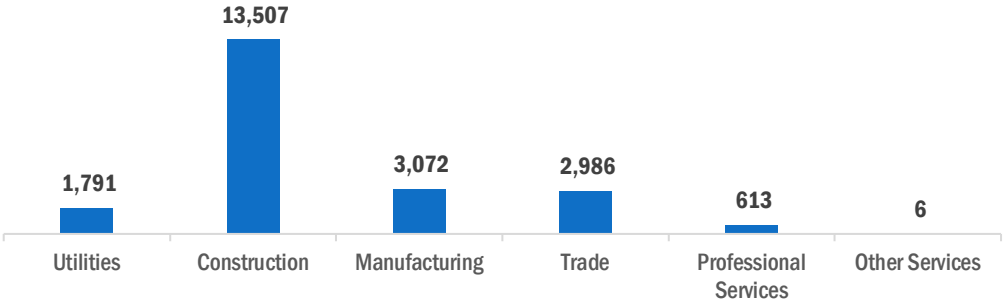
Transmission, Distribution, and Storage employs 21,975 workers in Kentucky, 1.6 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Kentucky, with 61.5 percent of such jobs statewide.

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



Energy Efficiency

The 24,579 Energy Efficiency jobs in Kentucky represent 1.1 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

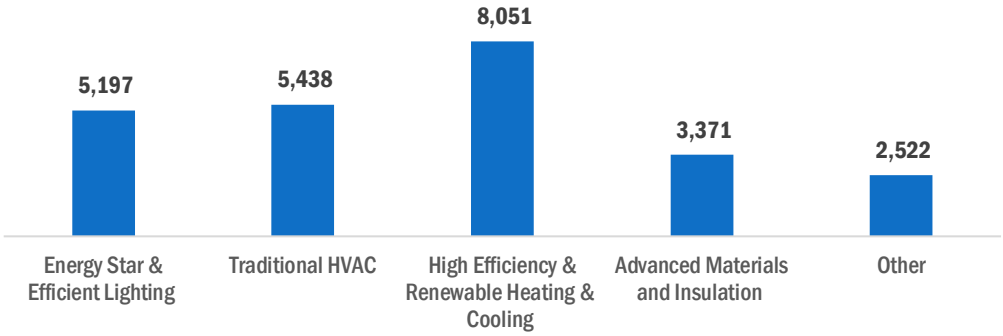
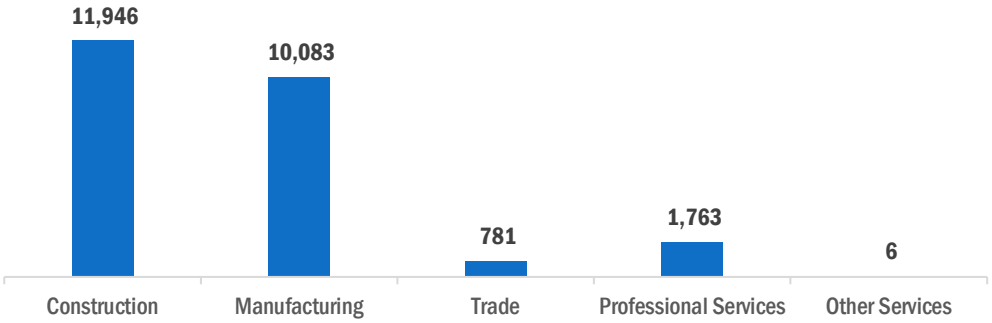


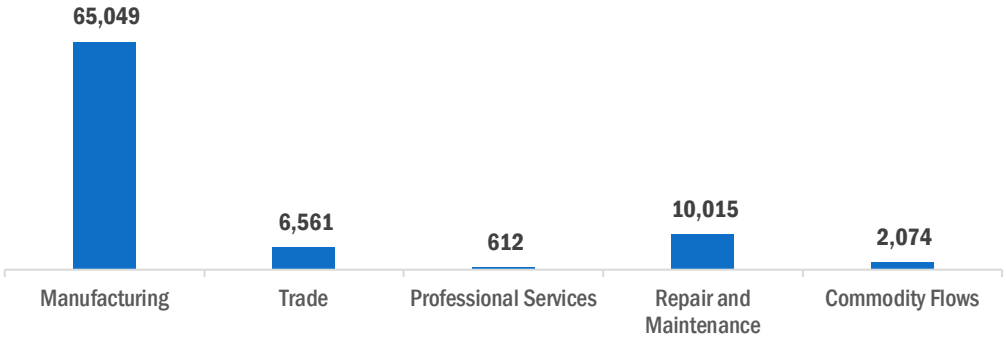
Figure KY-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 84,310 jobs in Kentucky. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure KY-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 41.2 percent of energy-related employers in Kentucky hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table KY-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	36.4	36.4	27.3	-
Transmission, Distribution and Storage	33.3	33.3	33.3	-
Energy Efficiency	40.0	40.0	20.0	-
Fuels	46.2	30.8	23.1	-
Motor Vehicles	16.7	33.3	50.0	-

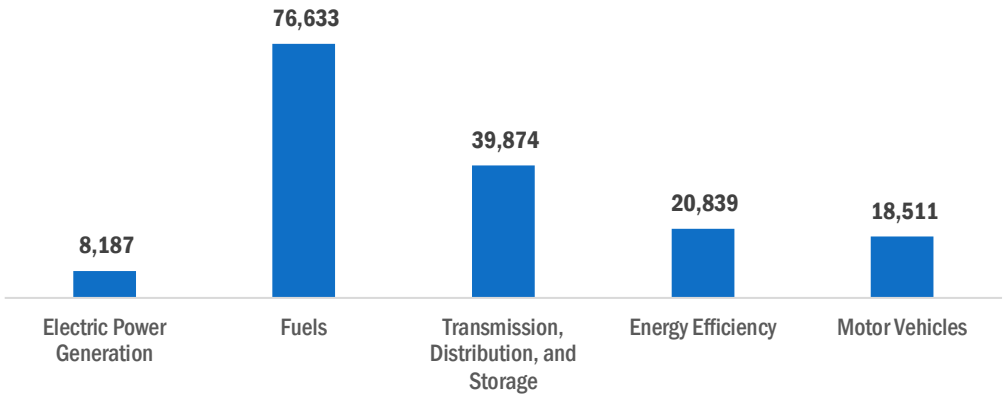
Louisiana

Energy and Employment – 2017

Overview

Louisiana has a high concentration of energy employment, with 124,694 Traditional Energy workers statewide (representing 3.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 8,187 are in Electric Power Generation, 76,633 are in Fuels, and 39,874 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Louisiana is 6.5 percent of total state employment (compared to 2.3 percent of national employment). Louisiana has an additional 20,839 jobs in Energy Efficiency (0.9 percent of all U.S. Energy Efficiency jobs) and 18,511 jobs in Motor Vehicles (0.8 percent of all U.S. Motor Vehicle jobs).

Figure LA-1.
Employment by Major Energy Technology Application

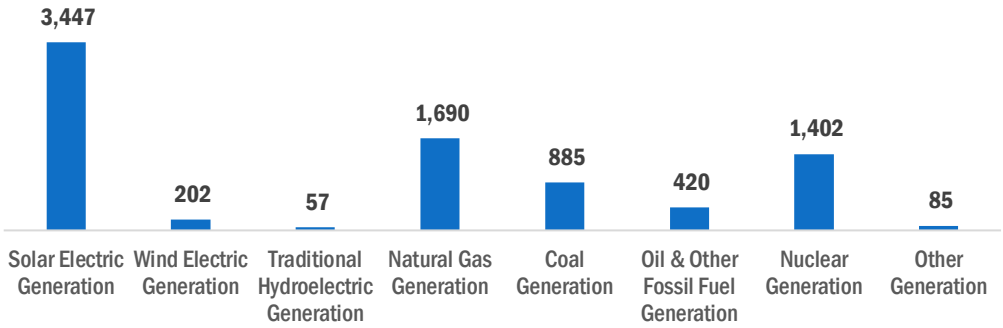


Breakdown by Technology Applications

Electric Power Generation

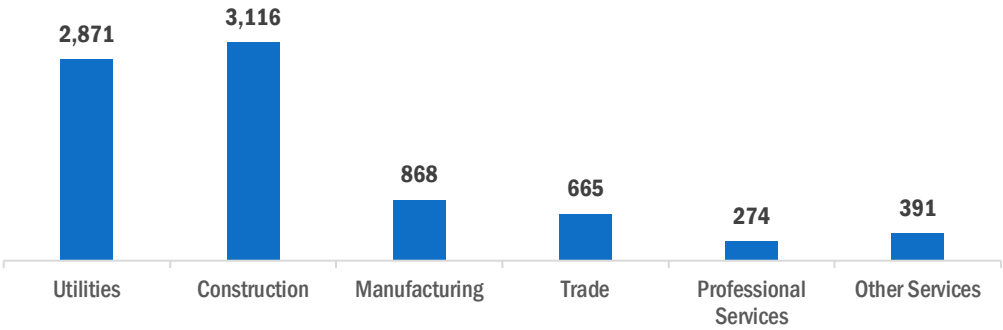
Electric Power Generation employs 8,187 workers in Louisiana, 0.9 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 3,447 jobs, followed by traditional fossil fuel generation at 2,994 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 38.1 percent of jobs. Utilities are next with 35.1 percent.

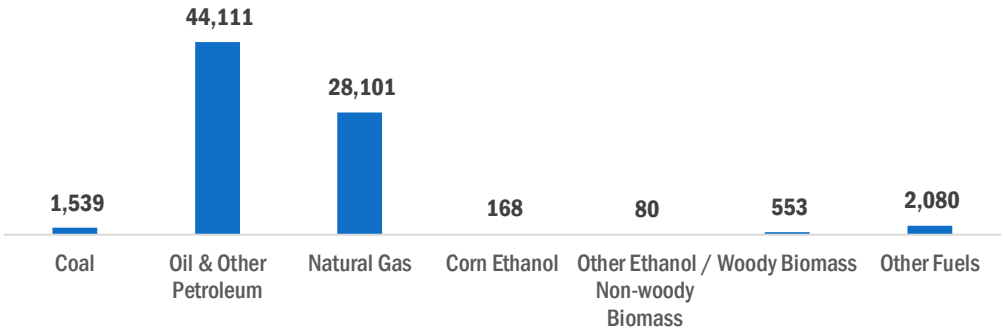
Figure LA-3.
Electric Power Generation Employment by Industry Sector



Fuels

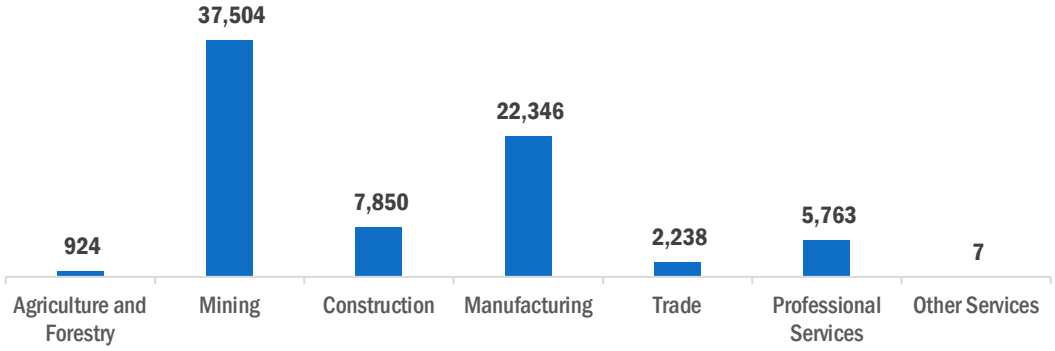
Fuels account for 76,633 jobs in Louisiana, 7.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 44,111 jobs.

Figure LA-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 48.9 percent of Fuels jobs in Louisiana.

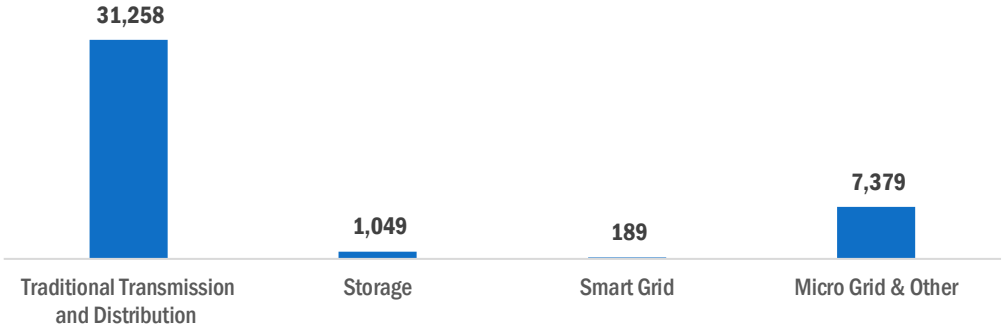
Figure LA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

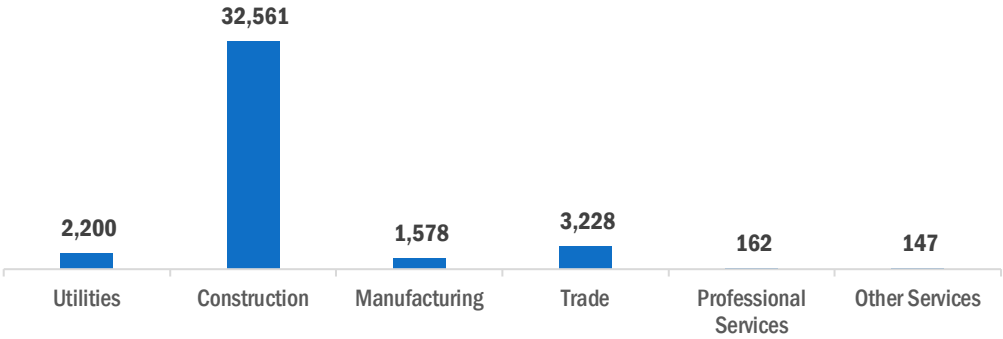
Transmission, Distribution, and Storage employs 39,874 workers in Louisiana, 3.0 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Louisiana, with 81.7 percent of such jobs statewide.

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



Energy Efficiency

The 20,839 Energy Efficiency jobs in Louisiana represent 0.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by advanced materials and insulation. Energy Efficiency employment is primarily found in the construction industry.

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

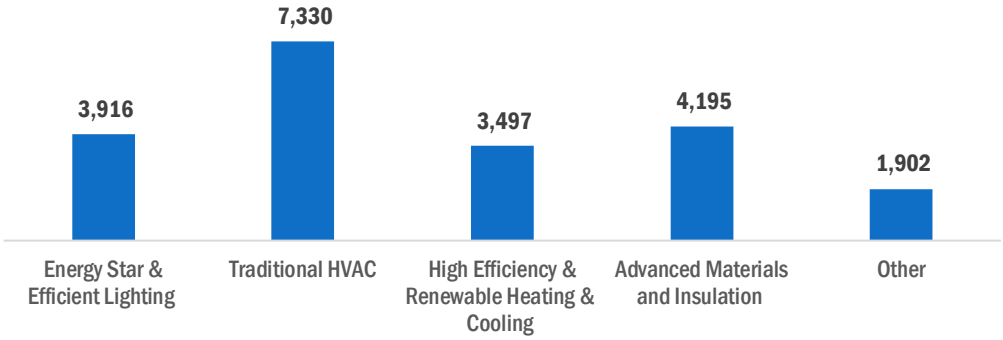
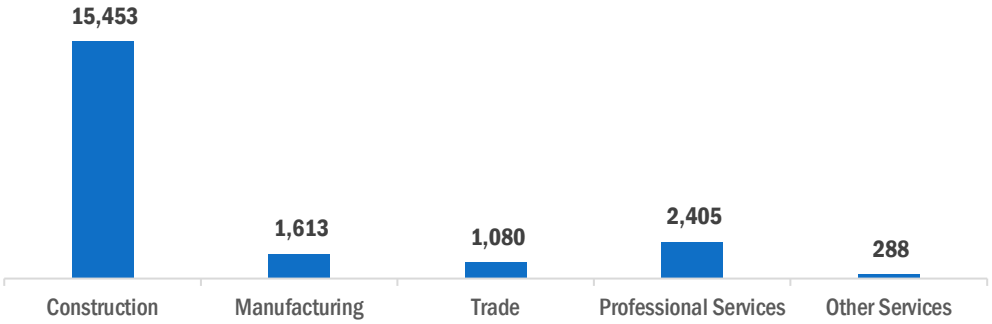


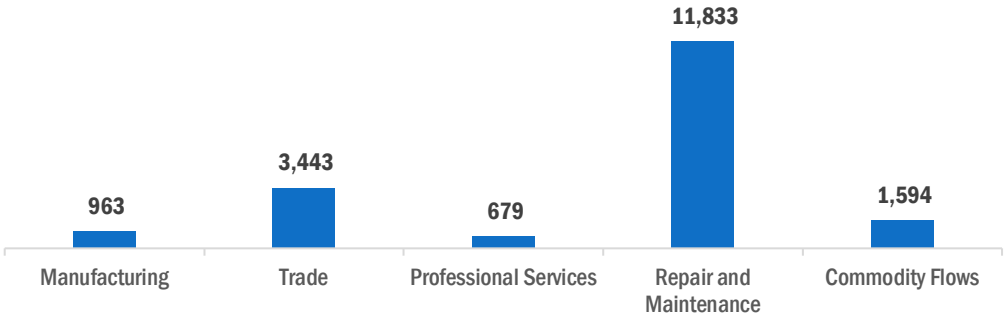
Figure LA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 18,511 jobs in Louisiana. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure LA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 60.0 percent of energy-related employers in Louisiana hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table LA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	30.8	46.2	23.1	-
Transmission, Distribution and Storage	-	62.5	37.5	-
Energy Efficiency	35.0	55.0	10.0	-
Fuels	23.1	34.6	38.5	3.8
Motor Vehicles	25.0	37.5	37.5	-

Maine

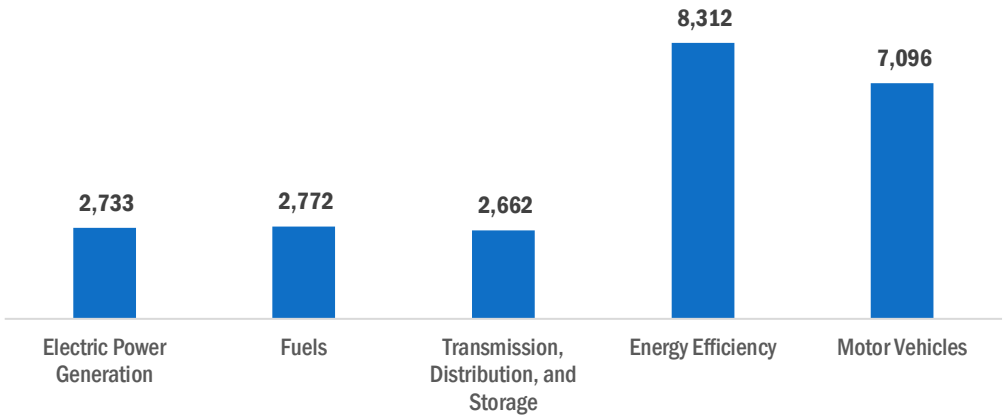
Energy and Employment – 2017

Overview

Maine has a low concentration of energy employment, with 8,168 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 2,733 are in Electric Power Generation, 2,772 are in Fuels, and 2,662 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Maine is 1.3 percent of total state employment (compared to 2.3 percent of national employment). Maine has an additional 8,312 jobs in Energy Efficiency (0.4 percent of all U.S. Energy Efficiency jobs) and 7,096 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure ME-1.

Employment by Major Energy Technology Application

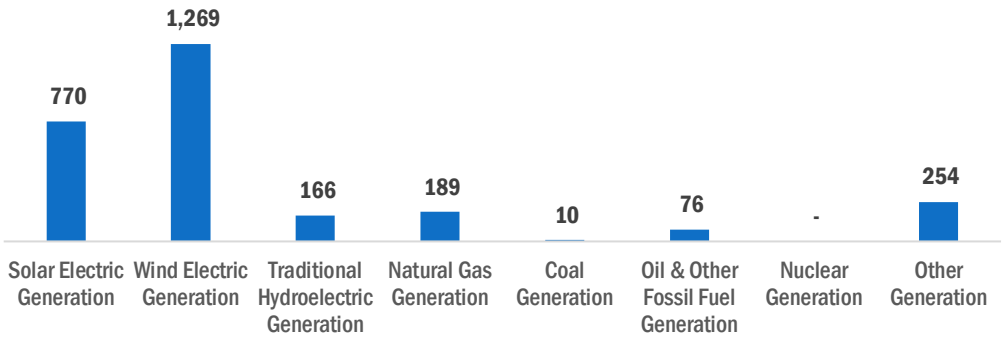


Breakdown by Technology Applications

Electric Power Generation

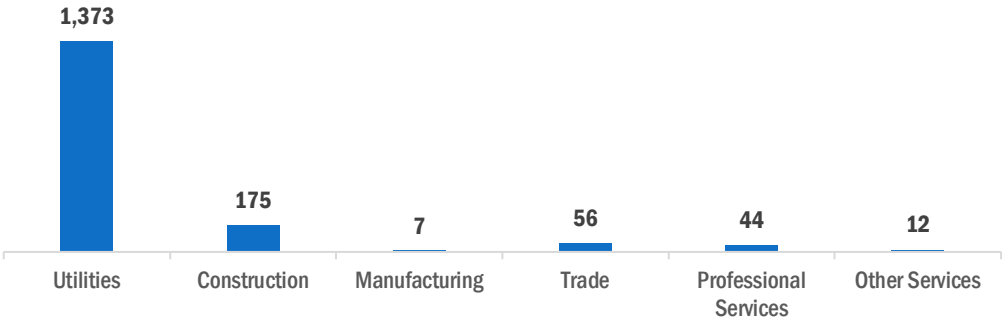
Electric Power Generation employs 2,733 workers in Maine, 0.3 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 1,269 jobs, followed by solar at 770 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 28.6 percent of jobs. Professional and business services is next with 25.7 percent.

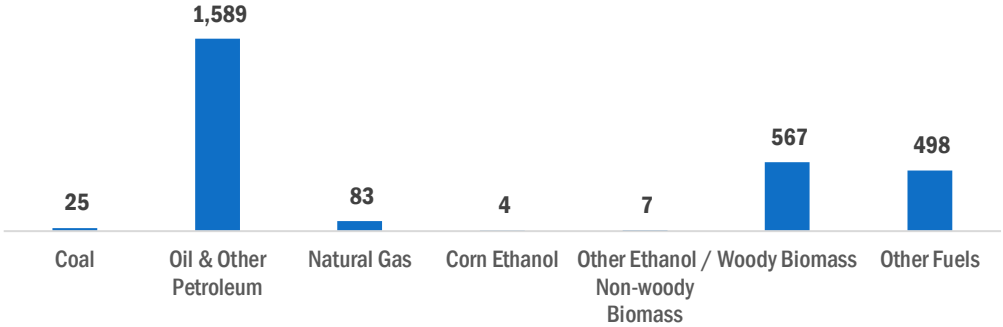
Figure ME-3.
Electric Power Generation Employment by Industry Sector



Fuels

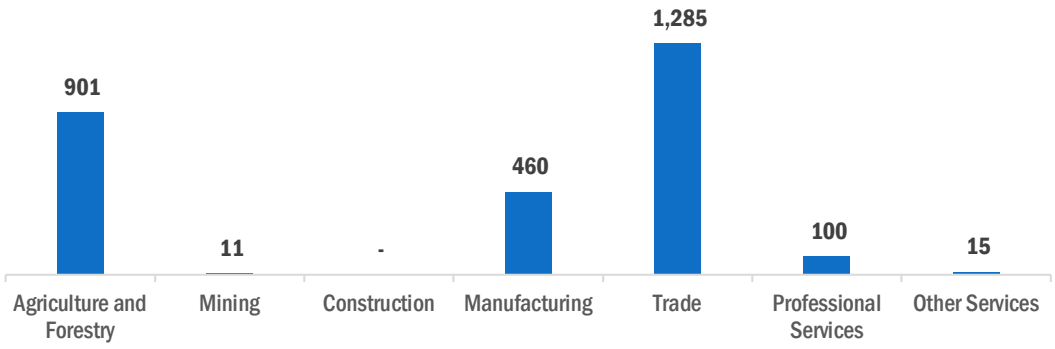
Fuels account for 2,772 jobs in Maine, 0.3 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 1,589 jobs.

Figure ME-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 46.4 percent of Fuels jobs in Maine.

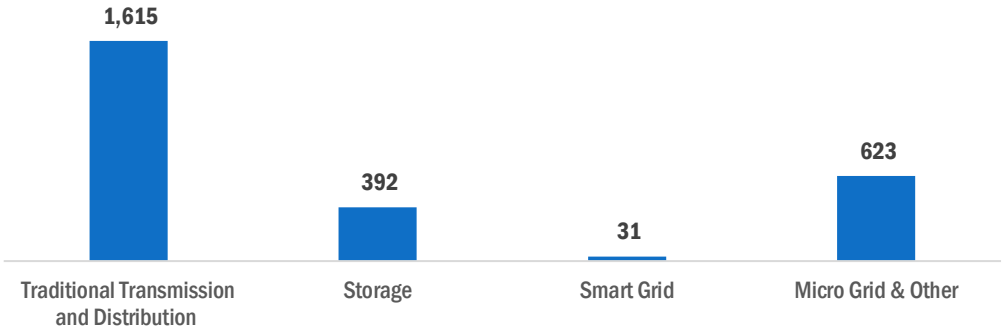
Figure ME-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

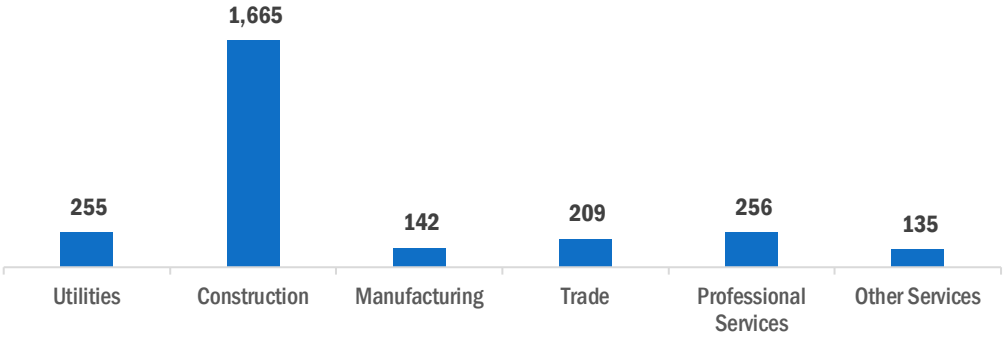
Transmission, Distribution, and Storage employs 2,662 workers in Maine, 0.2 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Maine, with 62.6 percent of such jobs statewide.

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



Energy Efficiency

The 8,312 Energy Efficiency jobs in Maine represent 0.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by other energy efficiency products and services. Energy Efficiency employment is primarily found in the construction industry.

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

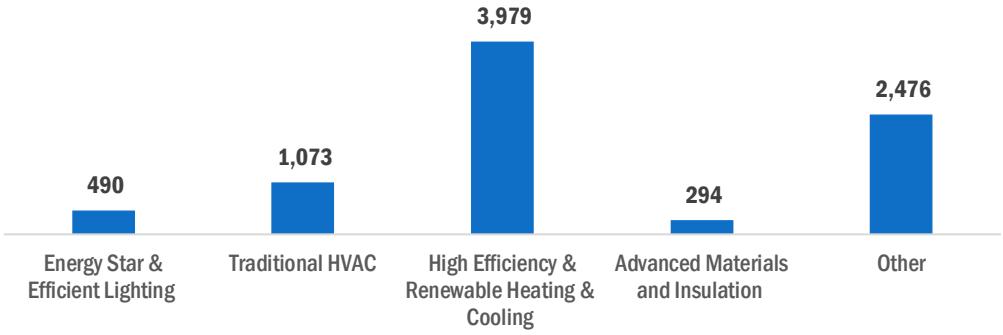
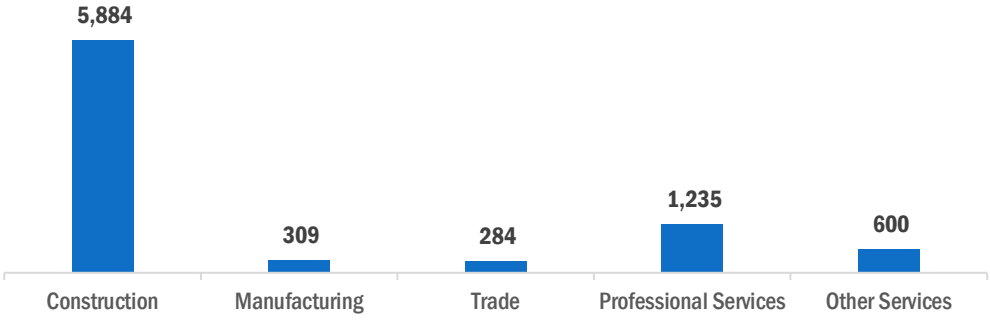


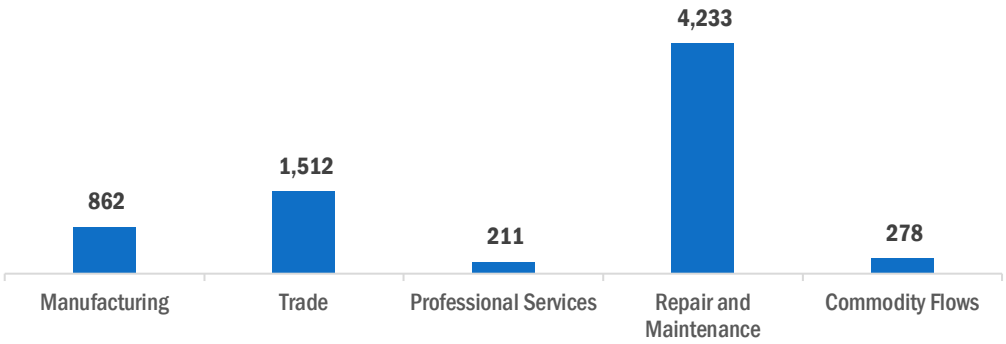
Figure ME-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 7,096 jobs in Maine. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure ME-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 72.4 percent of energy-related employers in Maine hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table ME-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	65.0	30.0	5.0	-
Transmission, Distribution and Storage	57.1	42.9	-	-
Energy Efficiency	32.1	39.3	21.4	7.1
Fuels	33.3	33.3	33.3	-
Motor Vehicles	-	75.0	25.0	-

Maryland

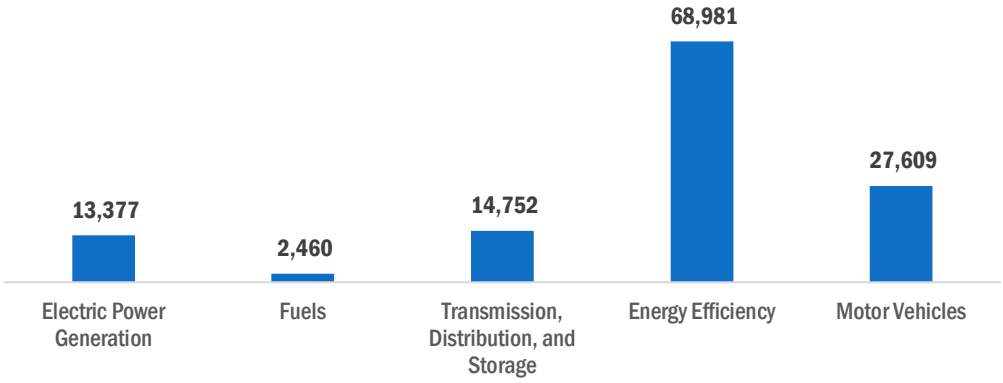
Energy and Employment – 2017

Overview

Maryland has a low concentration of energy employment, with 30,590 Traditional Energy workers statewide (representing 0.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 13,377 are in Electric Power Generation, 2,460 are in Fuels, and 14,752 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Maryland is 1.1 percent of total state employment (compared to 2.3 percent of national employment). Maryland has an additional 68,981 jobs in Energy Efficiency (3.1 percent of all U.S. Energy Efficiency jobs) and 27,609 jobs in Motor Vehicles (1.1 percent of all U.S. Motor Vehicle jobs).

Figure MD-1.

Employment by Major Energy Technology Application

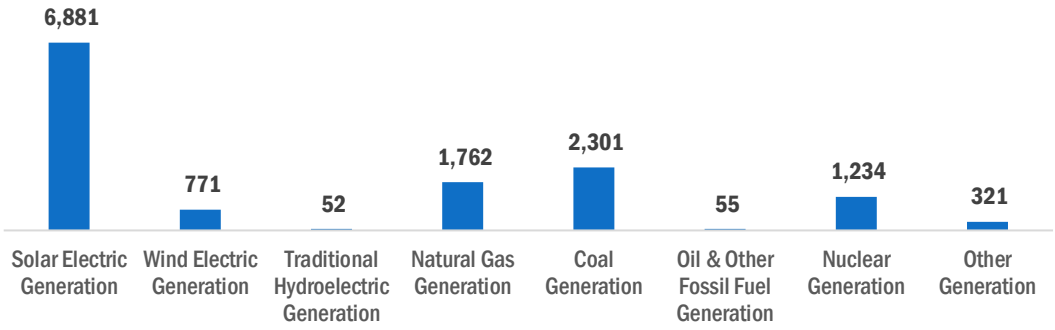


Breakdown by Technology Applications

Electric Power Generation

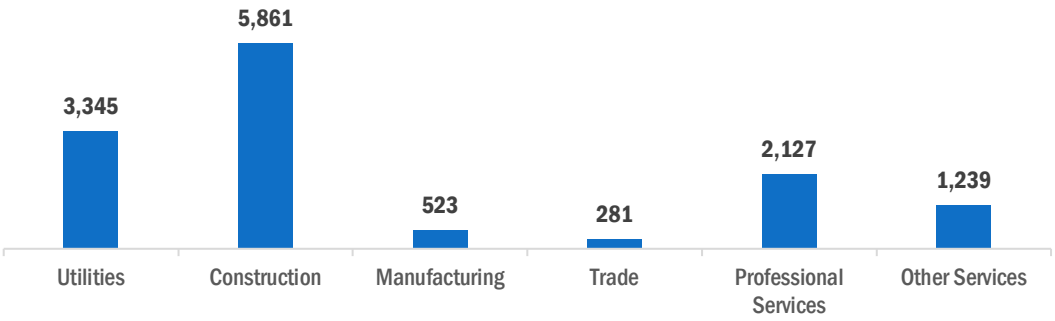
Electric Power Generation employs 13,377 workers in Maryland, 1.5 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 6,881 jobs, followed by traditional fossil fuel generation at 4,118 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 43.8 percent of jobs. Utilities are next with 25.0 percent.

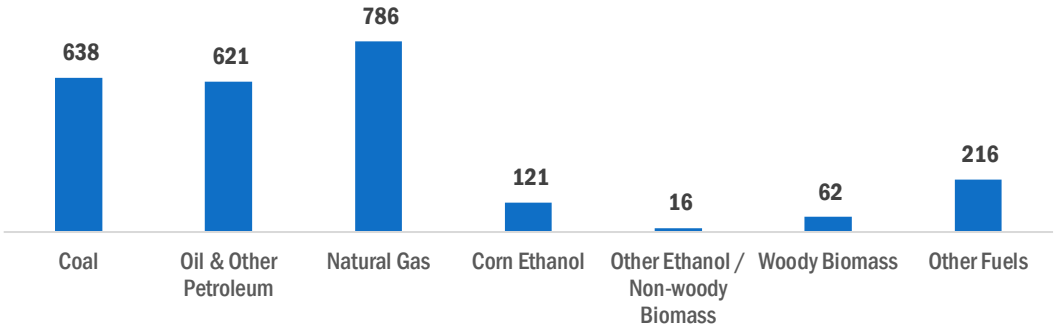
Figure MD-3.
Electric Power Generation Employment by Industry Sector



Fuels

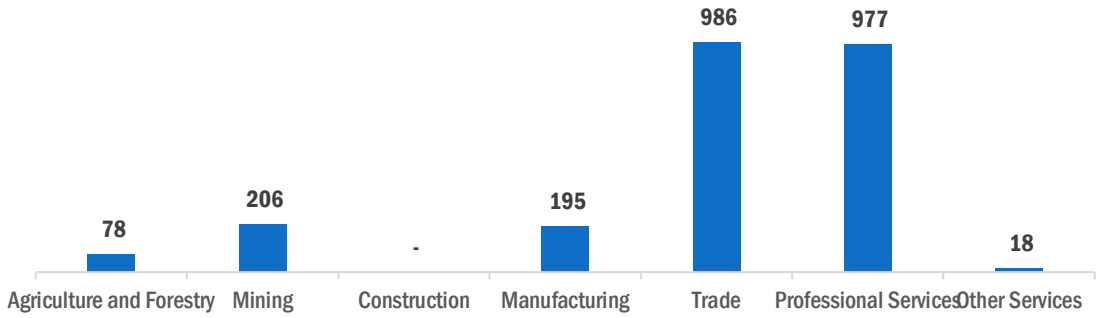
Fuels account for 2,460 jobs in Maryland, 0.2 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 786 jobs.

Figure MD-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 40.1 percent of Fuels jobs in Maryland.

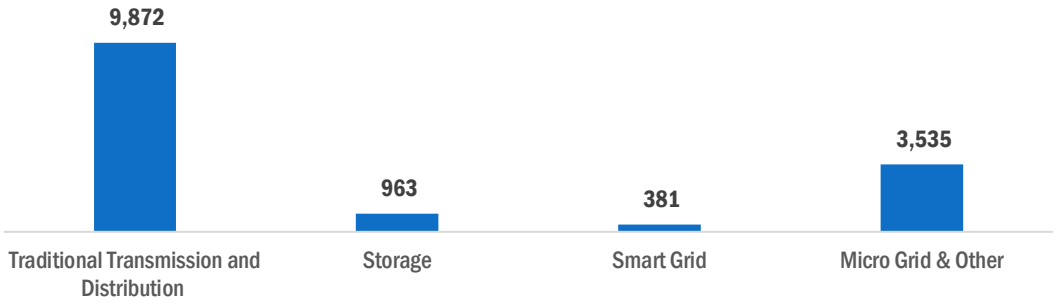
Figure MD-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

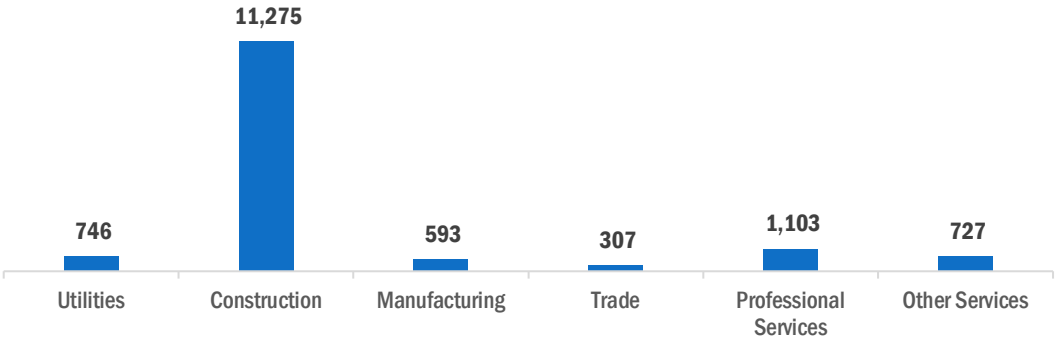
Transmission, Distribution, and Storage employs 14,752 workers in Maryland, 1.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Maryland, with 76.0 percent of such jobs statewide.

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



Energy Efficiency

The 68,981 Energy Efficiency jobs in Maryland represent 3.1 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

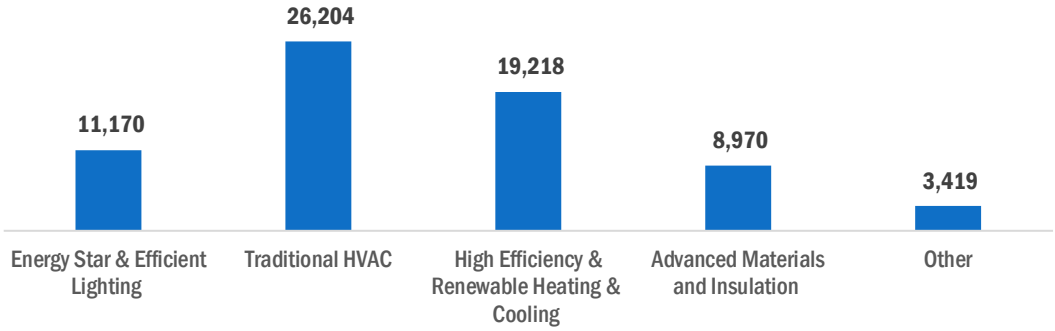
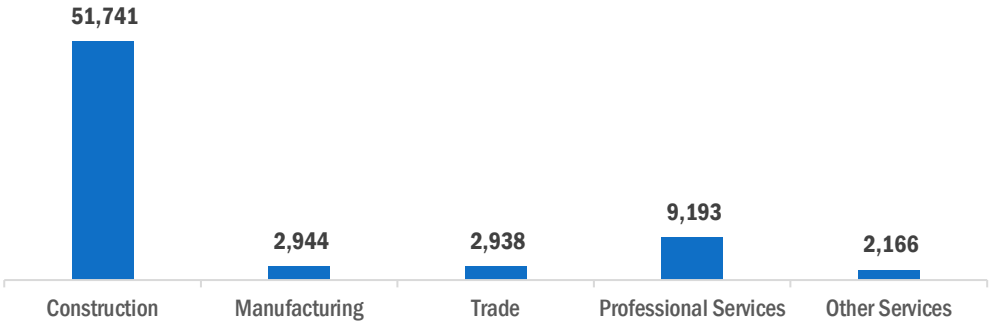


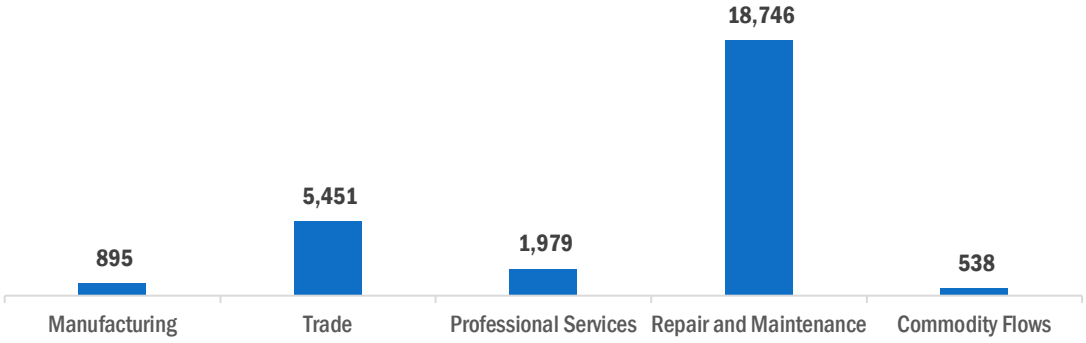
Figure MD-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 27,609 jobs in Maryland. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MD-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 70.6 percent of energy-related employers in Maryland hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table MD-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.2	54.5	21.2	6.1
Transmission, Distribution and Storage	9.1	63.6	18.2	9.1
Energy Efficiency	29.7	37.8	27.0	5.4
Fuels	NA	NA	NA	NA
Motor Vehicles	55.6	22.2	22.2	-

Massachusetts

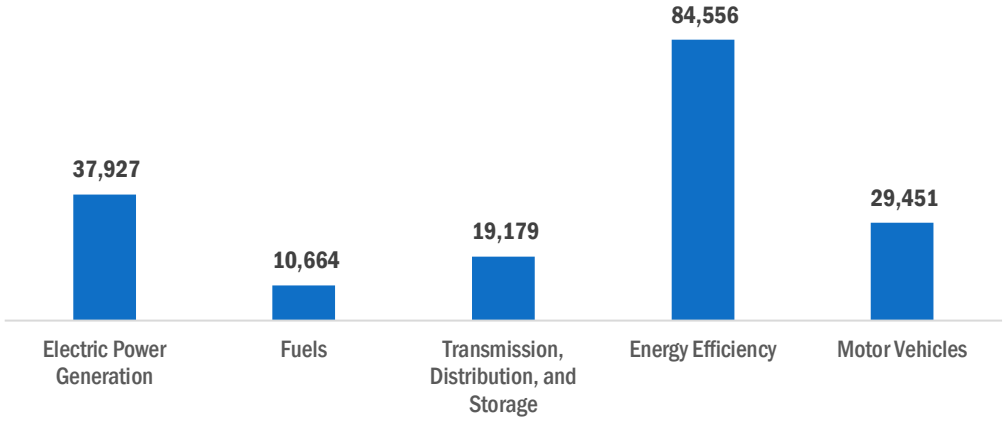
Energy and Employment – 2017

Overview

Massachusetts has a low concentration of energy employment, with 67,771 Traditional Energy workers statewide (representing 2.1 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 37,927 are in Electric Power Generation, 10,664 are in Fuels, and 19,179 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Massachusetts is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Massachusetts has an additional 84,556 jobs in Energy Efficiency (3.8 percent of all U.S. Energy Efficiency jobs) and 29,451 jobs in Motor Vehicles (1.2 percent of all U.S. Motor Vehicle jobs).

Figure MA-1.

Employment by Major Energy Technology Application

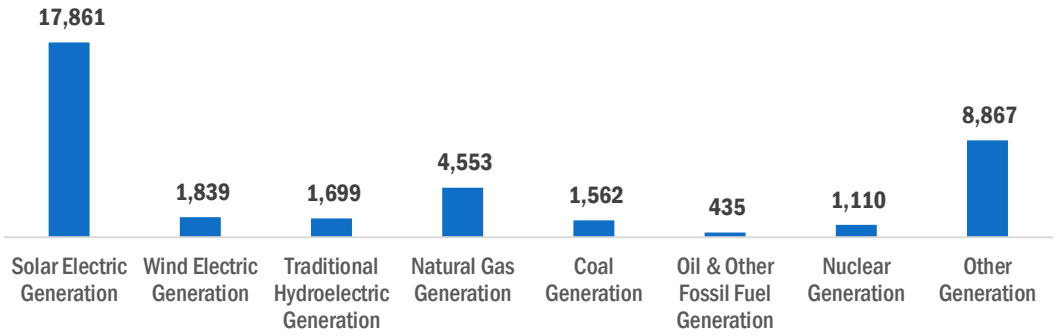


Breakdown by Technology Applications

Electric Power Generation

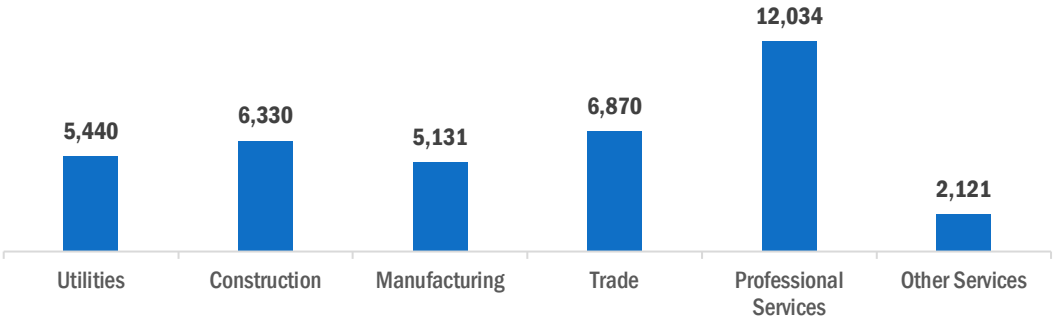
Electric Power Generation employs 37,927 workers in Massachusetts, 4.3 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 17,861 jobs, followed by other generation at 8,867 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 31.7 percent of jobs. Wholesale trade is next with 18.1 percent.

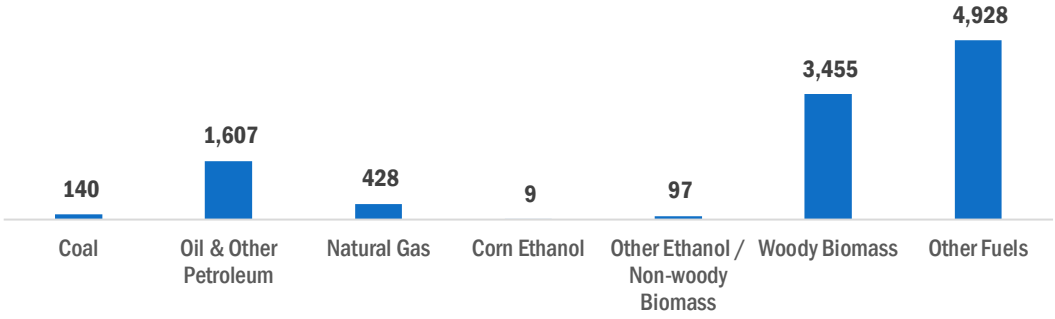
Figure MA-3.
Electric Power Generation Employment by Industry Sector



Fuels

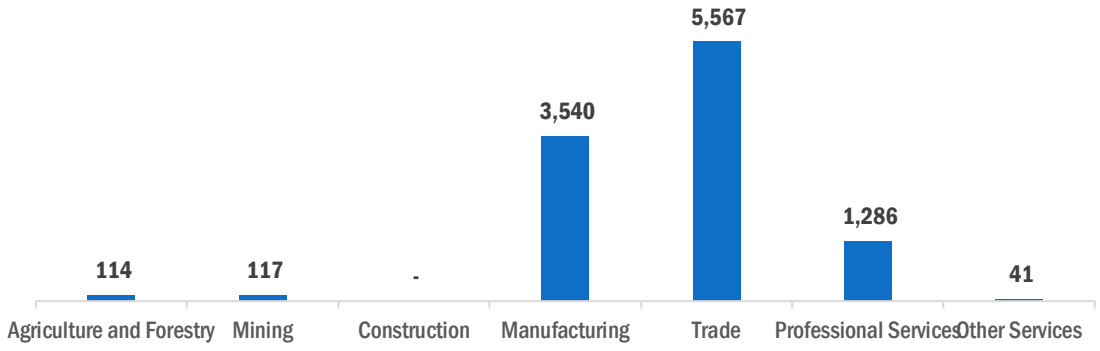
Fuels account for 10,664 jobs in Massachusetts, 1.0 percent of the national total. Other fuels represent the largest segment of Fuels employment, with 4,928 jobs.

Figure MA-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 52.2 percent of Fuels jobs in Massachusetts.

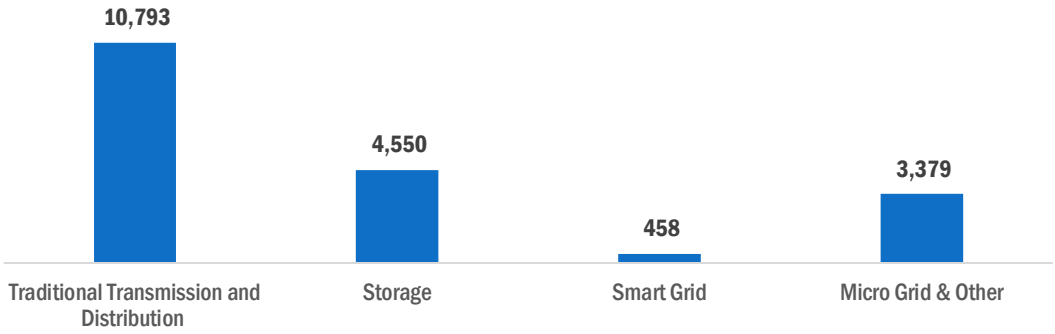
Figure MA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

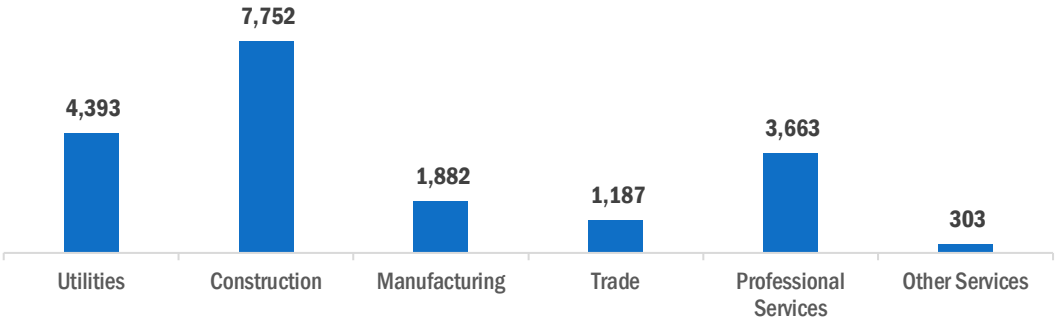
Transmission, Distribution, and Storage employs 19,179 workers in Massachusetts, 1.4 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Massachusetts, with 40.4 percent of such jobs statewide.

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



Energy Efficiency

The 84,556 Energy Efficiency jobs in Massachusetts represent 3.8 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

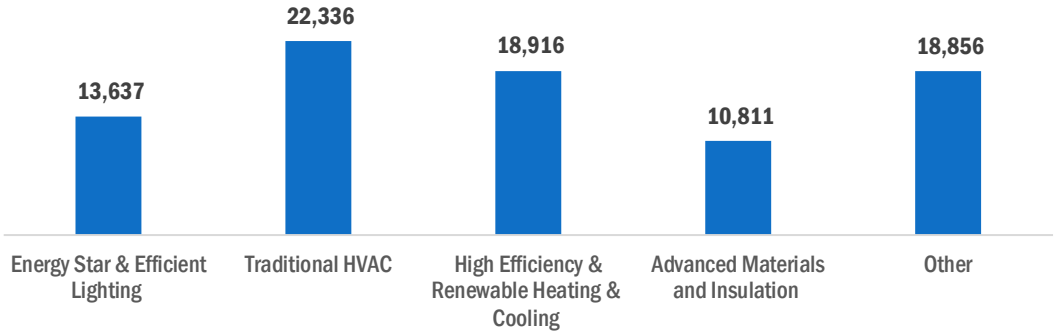
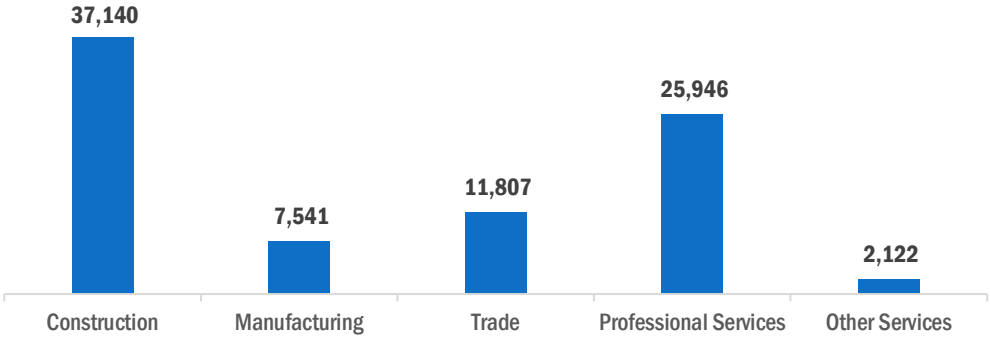


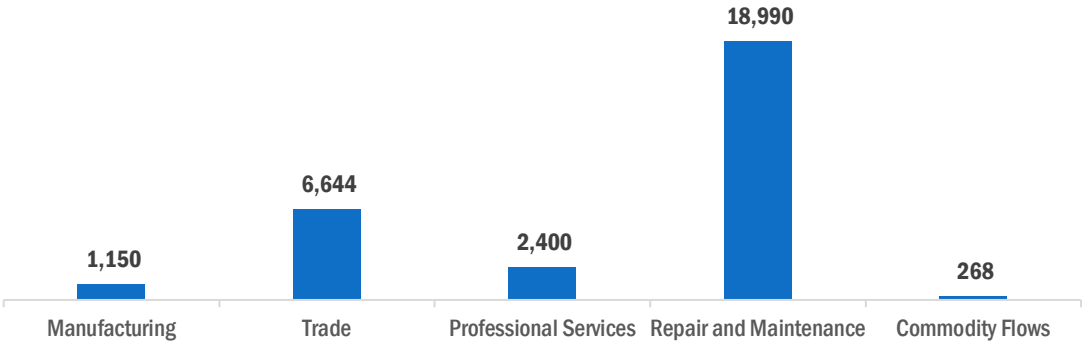
Figure MA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 29,451 jobs in Massachusetts. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 57.1 percent of energy-related employers in Massachusetts hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table MA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	17.3	60.6	18.3	3.8
Transmission, Distribution and Storage	27.5	42.5	22.5	7.5
Energy Efficiency	29.8	46.5	23.7	-
Fuels	50.0	16.7	33.3	-
Motor Vehicles	28.6	42.9	28.6	-

Michigan

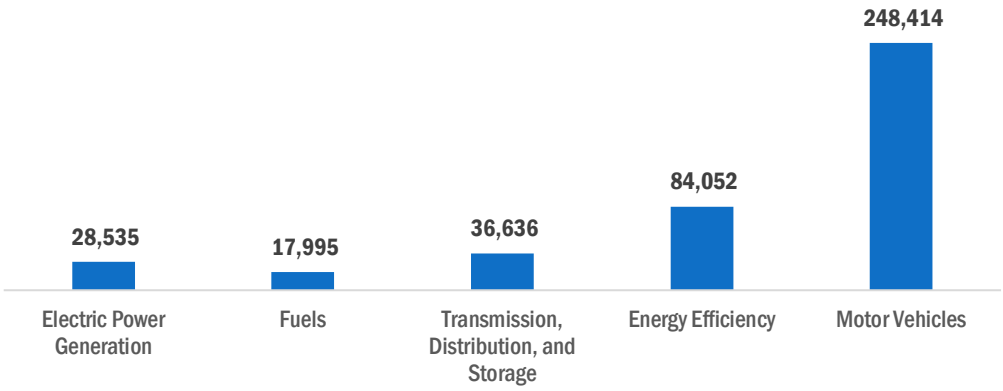
Energy and Employment – 2017

Overview

Michigan has a low concentration of energy employment, with 83,166 Traditional Energy workers statewide (representing 2.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 28,535 are in Electric Power Generation, 17,995 are in Fuels, and 36,636 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Michigan is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Michigan has an additional 84,052 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 248,414 jobs in Motor Vehicles (10.1 percent of all U.S. Motor Vehicle jobs).

Figure MI-1.

Employment by Major Energy Technology Application

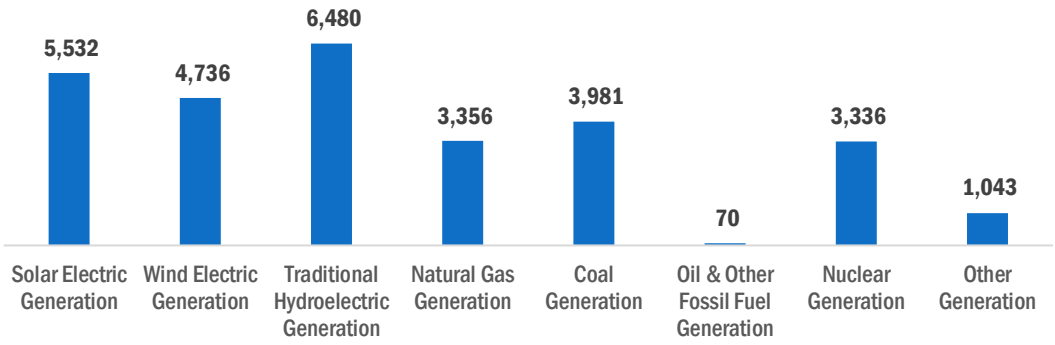


Breakdown by Technology Applications

Electric Power Generation

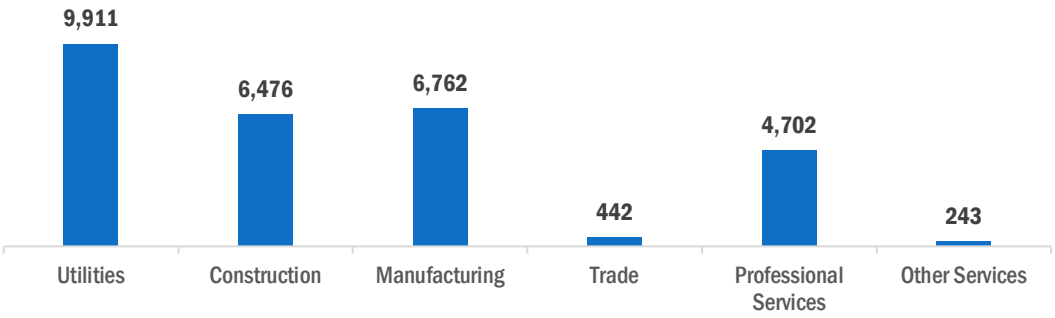
Electric Power Generation employs 28,535 workers in Michigan, 3.2 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 7,407 jobs, followed by traditional hydroelectric generation at 6,480 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 34.7 percent of jobs. Manufacturing is next with 23.7 percent.

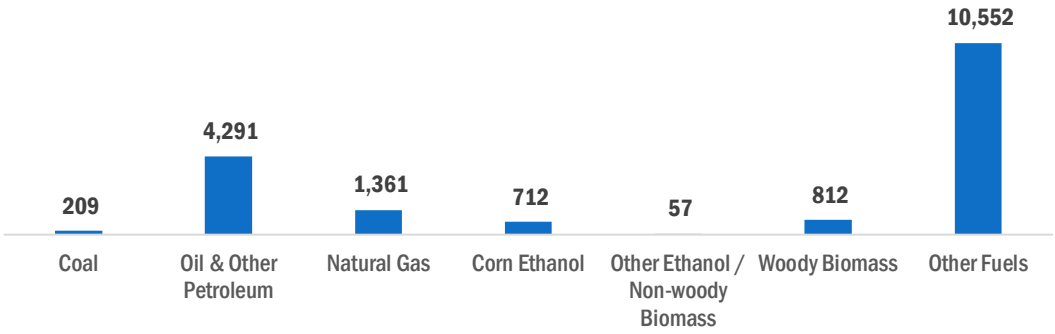
Figure MI-3.
Electric Power Generation Employment by Industry Sector



Fuels

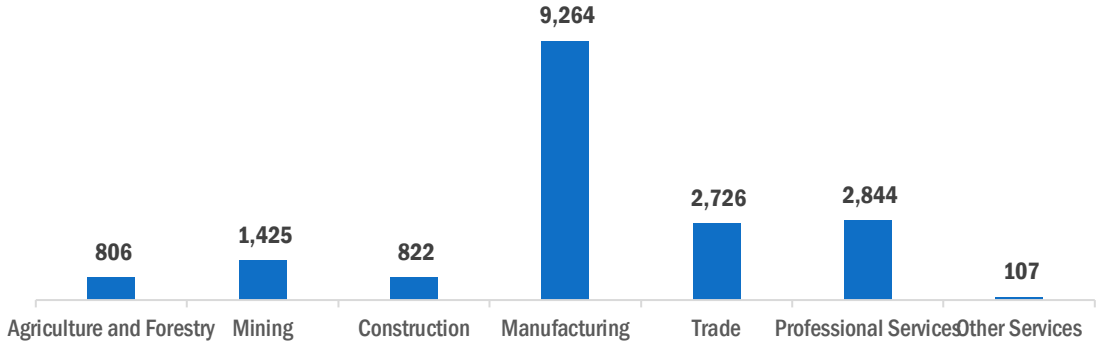
Fuels account for 17,995 jobs in Michigan, 1.7 percent of the national total. Other fuels represent the largest segment of Fuels employment, with 10,552 jobs.

Figure MI-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 51.5 percent of Fuels jobs in Michigan.

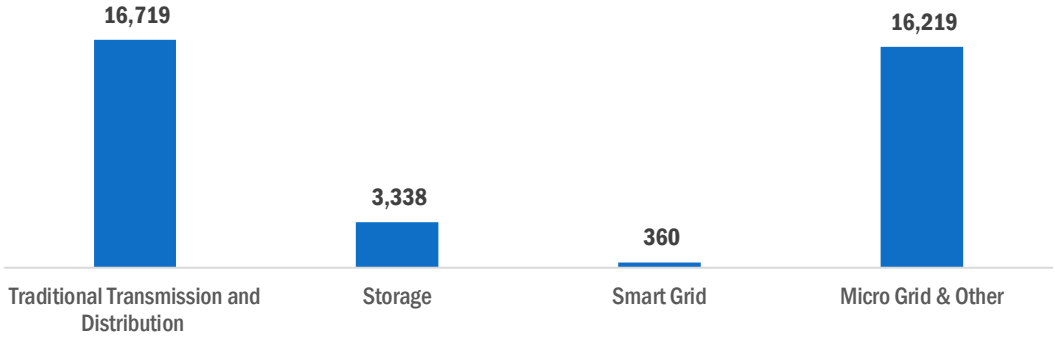
Figure MI-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

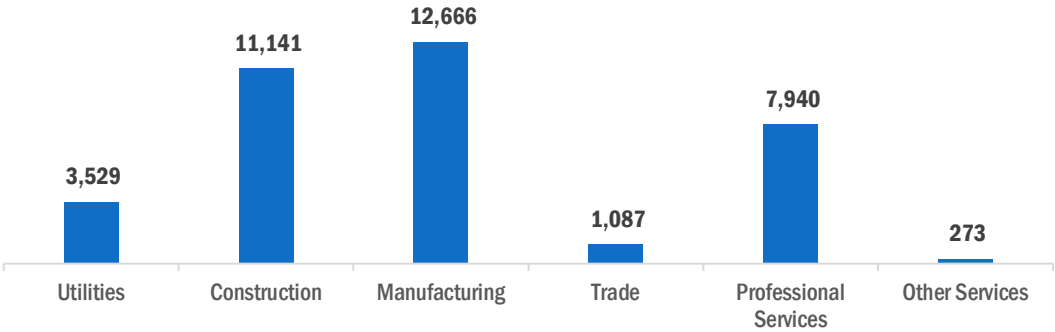
Transmission, Distribution, and Storage employs 36,636 workers in Michigan, 2.7 percent of the national total.

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



Manufacturing is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Michigan, with 34.6 percent of such jobs statewide.

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



Energy Efficiency

The 84,052 Energy Efficiency jobs in Michigan represent 3.7 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the manufacturing industry.

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

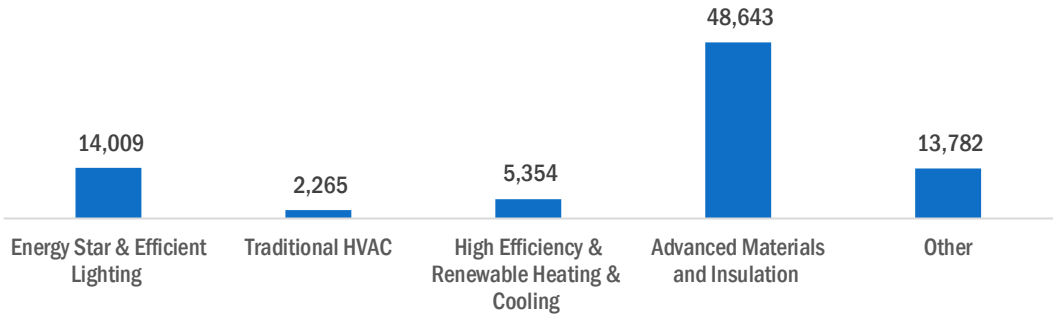
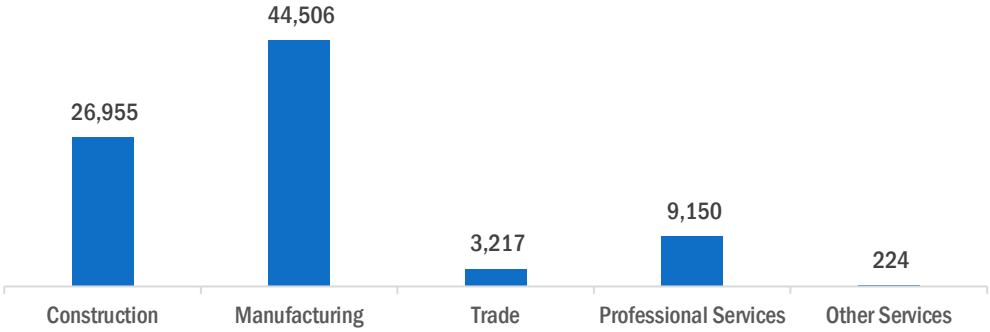


Figure MI-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 248,414 jobs in Michigan. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure MI-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Hiring Difficulty

Over the last year, 75.0 percent of energy-related employers in Massachusetts hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table MI-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	44.4	29.6	22.2	3.7
Transmission, Distribution and Storage	50.0	20.0	30.0	-
Energy Efficiency	31.0	26.2	40.5	2.4
Fuels	45.0	20.0	35.0	-
Motor Vehicles	32.1	39.3	21.4	7.1

Minnesota

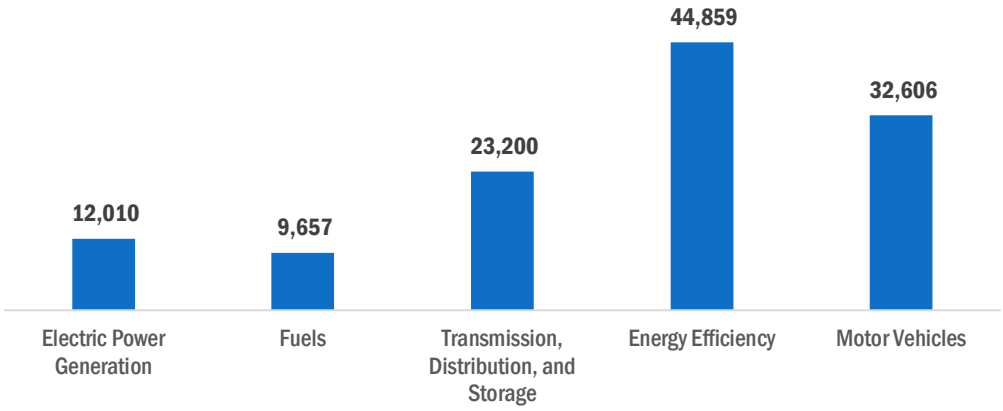
Energy and Employment – 2017

Overview

Minnesota has a low concentration of energy employment, with 44,867 Traditional Energy workers statewide (representing 1.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 12,010 are in Electric Power Generation, 9,657 are in Fuels, and 23,200 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Minnesota is 1.5 percent of total state employment (compared to 2.3 percent of national employment). Minnesota has an additional 44,859 jobs in Energy Efficiency (2.0 percent of all U.S. Energy Efficiency jobs) and 32,606 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

Figure MN-1.

Employment by Major Energy Technology Application

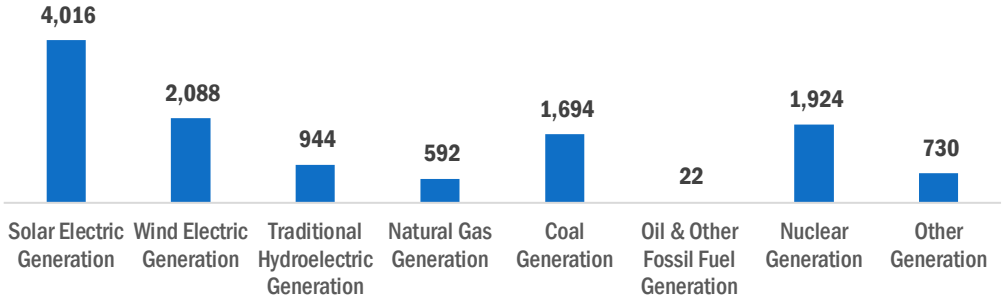


Breakdown by Technology Applications

Electric Power Generation

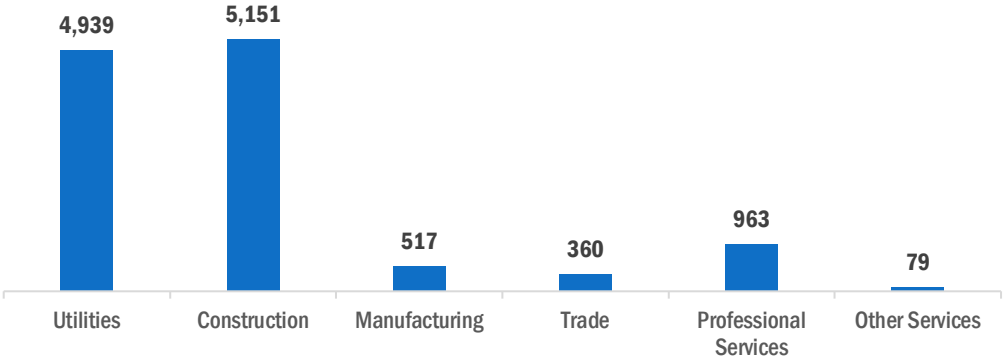
Electric Power Generation employs 12,010 workers in Minnesota, 1.4 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 4,016 jobs, followed by traditional fossil fuel generation at 2,309 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 42.9 percent of jobs. Utilities are next with 41.1 percent.

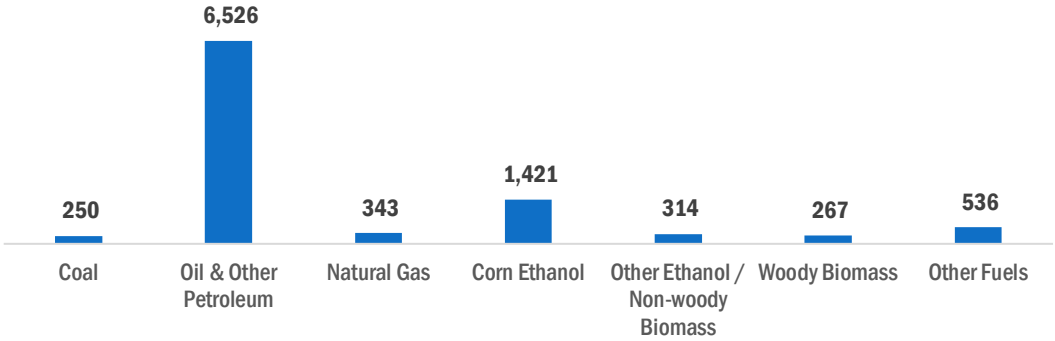
Figure MN-3.
Electric Power Generation Employment by Industry Sector



Fuels

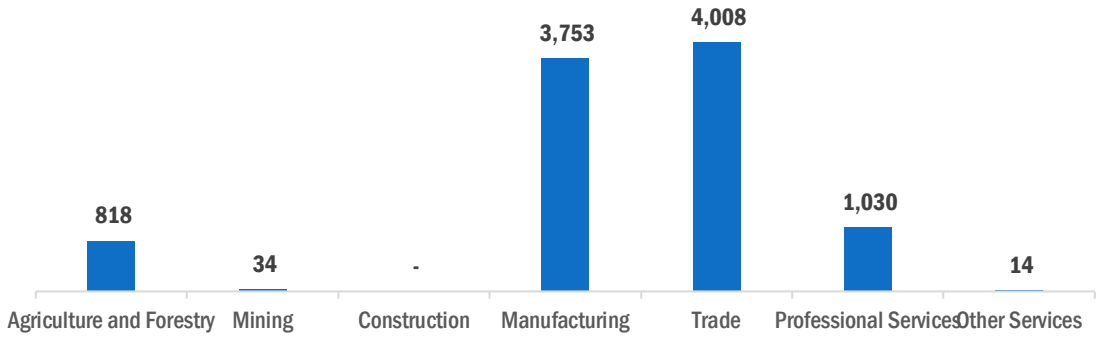
Fuels account for 9,657 jobs in Minnesota, 0.9 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 6,526 jobs.

Figure MN-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 41.5 percent of Fuels jobs in Minnesota.

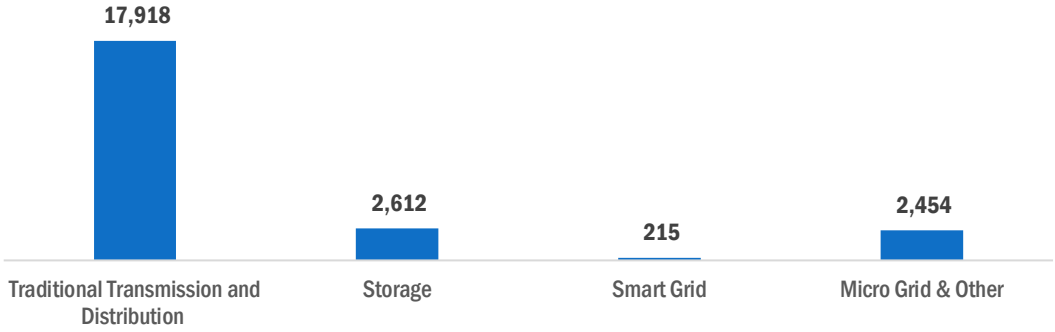
Figure MN-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

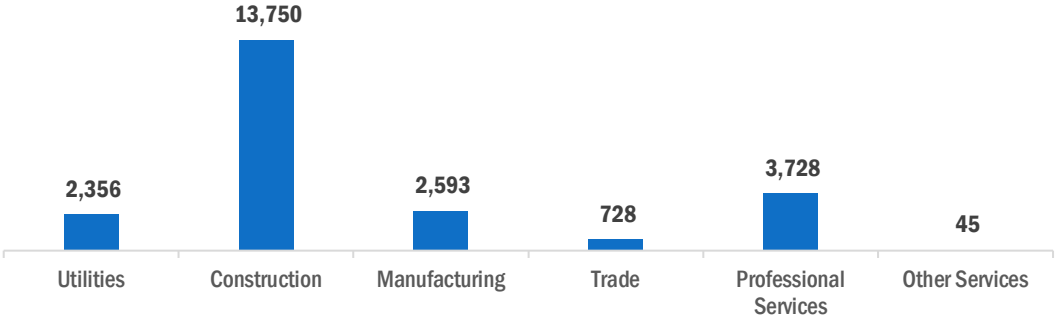
Transmission, Distribution, and Storage employs 23,200 workers in Minnesota, 1.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Minnesota, with 59.3 percent of such jobs statewide.

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



Energy Efficiency

The 44,859 Energy Efficiency jobs in Minnesota represent 2.0 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

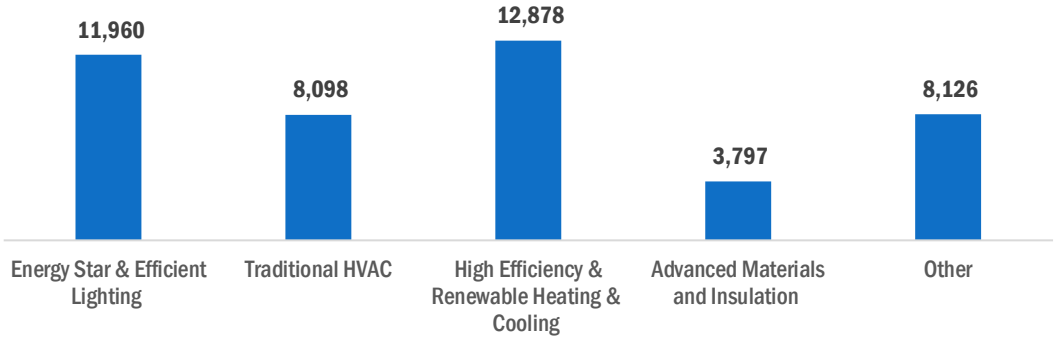
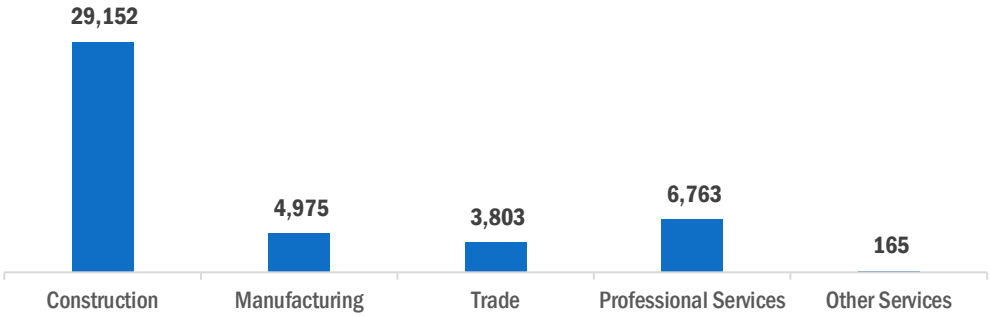


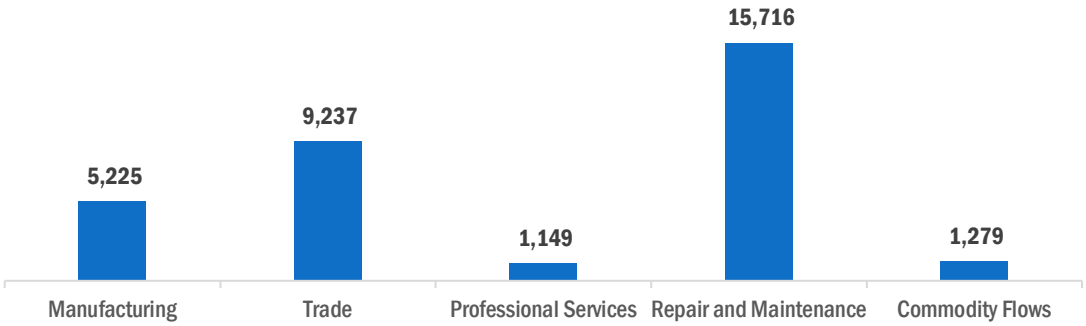
Figure MN-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 32,606 jobs in Minnesota. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MN-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 58.8 percent of energy-related employers in Minnesota hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table MN-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	30.6	46.9	20.4	2.0
Transmission, Distribution and Storage	44.4	44.4	11.1	-
Energy Efficiency	33.3	45.2	19.0	2.4
Fuels	27.3	50.0	22.7	-
Motor Vehicles	57.9	21.1	21.1	-

Mississippi

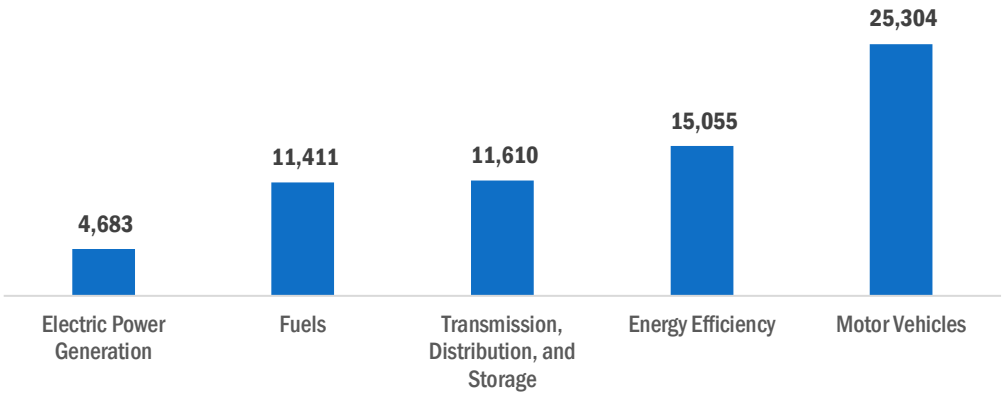
Energy and Employment – 2017

Overview

Mississippi has an average concentration of energy employment, with 27,704 Traditional Energy workers statewide (representing 0.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 4,683 are in Electric Power Generation, 11,411 are in Fuels, and 11,610 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Mississippi is 2.5 percent of total state employment (compared to 2.3 percent of national employment). Mississippi has an additional 15,055 jobs in Energy Efficiency (0.7 percent of all U.S. Energy Efficiency jobs) and 25,304 jobs in Motor Vehicles (1.0 percent of all U.S. Motor Vehicle jobs).

Figure MS-1.

Employment by Major Energy Technology Application

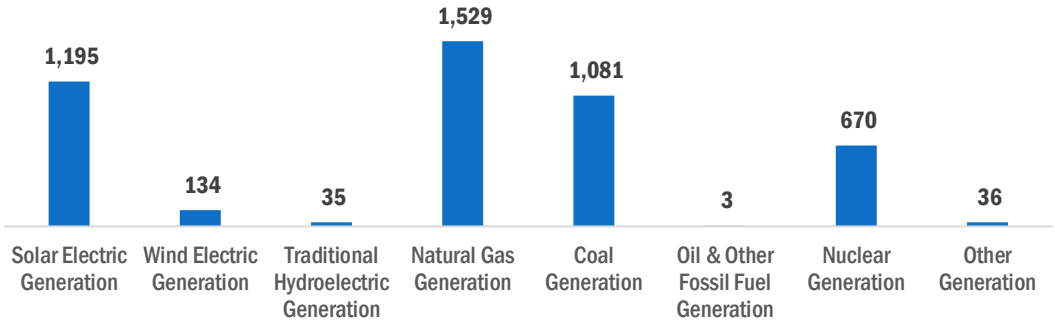


Breakdown by Technology Applications

Electric Power Generation

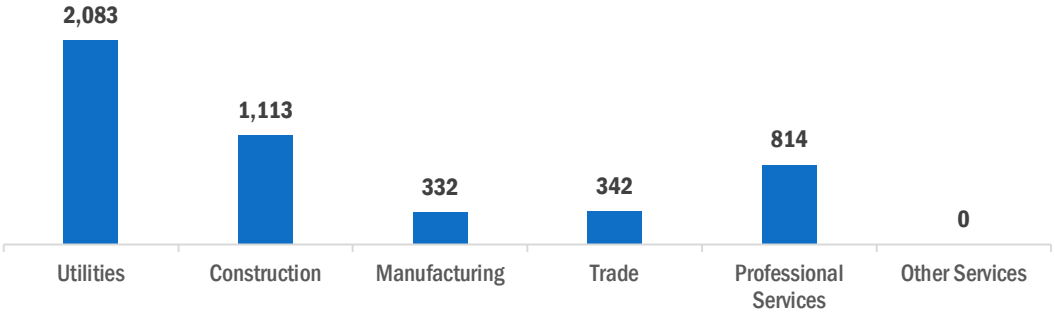
Electric Power Generation employs 4,683 workers in Mississippi, 0.5 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 2,613 jobs, followed by solar at 1,195 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 44.5 percent of jobs. Construction is next with 23.8 percent.

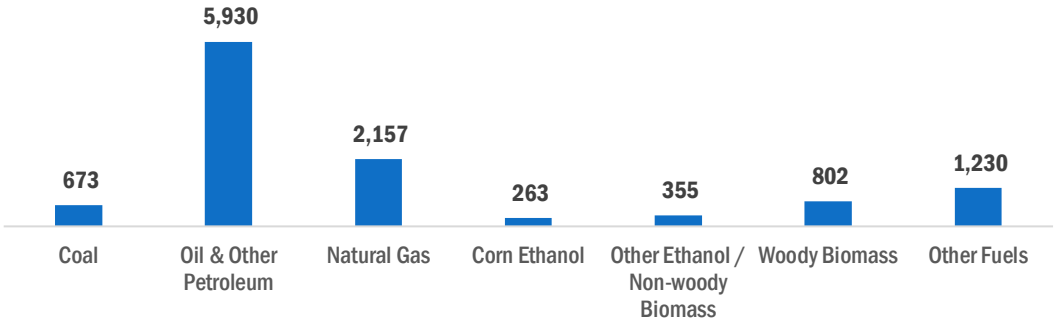
Figure MS-3.
Electric Power Generation Employment by Industry Sector



Fuels

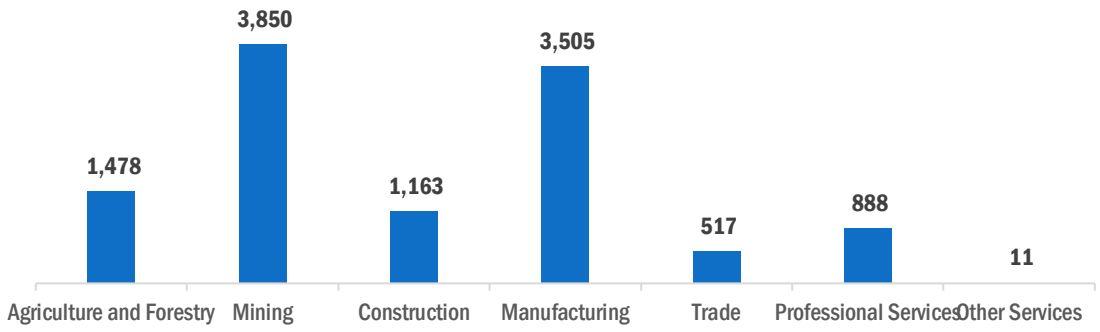
Fuels account for 11,411 jobs in Mississippi, 1.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 5,930 jobs.

Figure MS-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 33.7 percent of Fuels jobs in Mississippi.

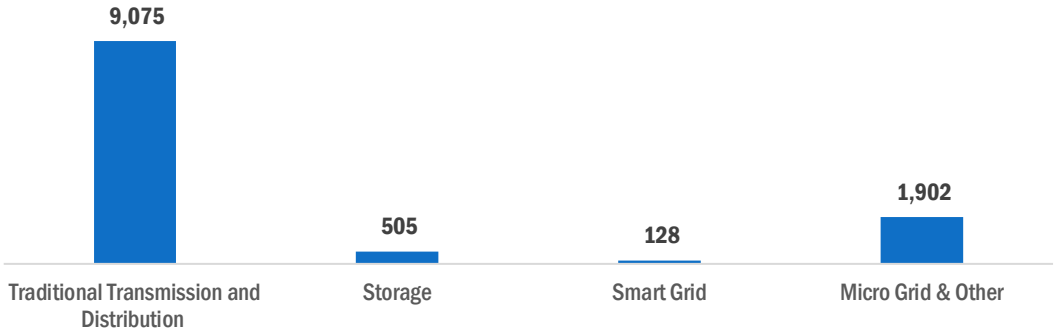
Figure MS-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

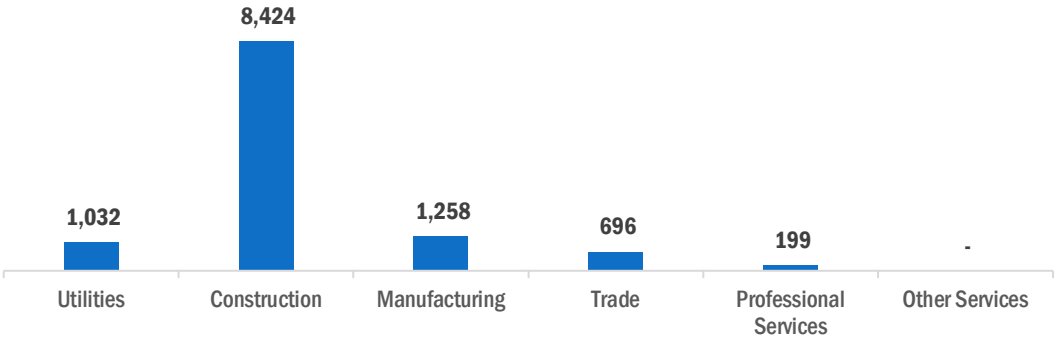
Transmission, Distribution, and Storage employs 11,610 workers in Mississippi, 0.9 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Mississippi, with 72.6 percent of such jobs statewide.

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



Energy Efficiency

The 15,055 Energy Efficiency jobs in Mississippi represent 0.7 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in other energy efficiency products and services firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

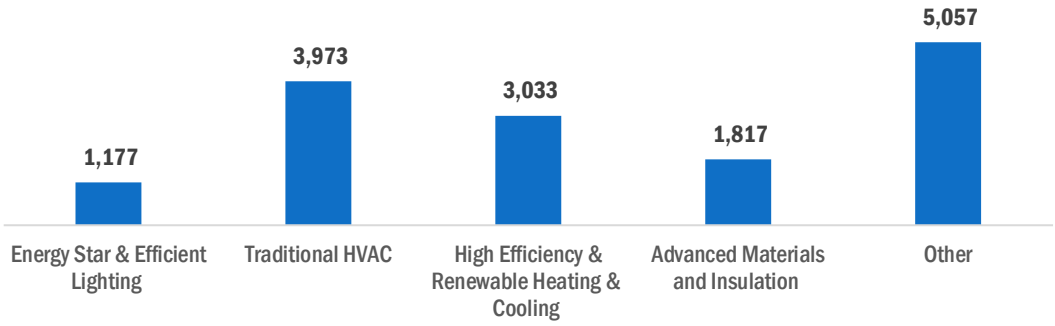
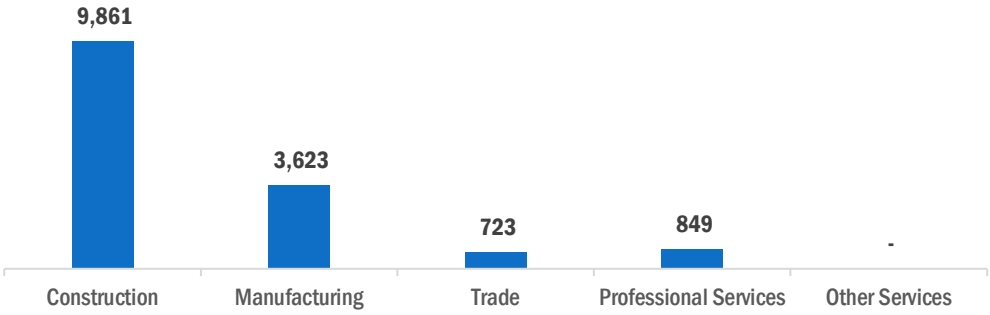


Figure MS-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 25,304 jobs in Mississippi. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure MS-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Hiring Difficulty

Over the last year, 61.5 percent of energy-related employers in Mississippi hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table MS-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	NA	NA	NA	NA
Transmission, Distribution and Storage	NA	NA	NA	NA
Energy Efficiency	33.3	40.0	26.7	-
Fuels	26.7	33.3	40.0	-
Motor Vehicles	14.3	71.4	14.3	-

Missouri

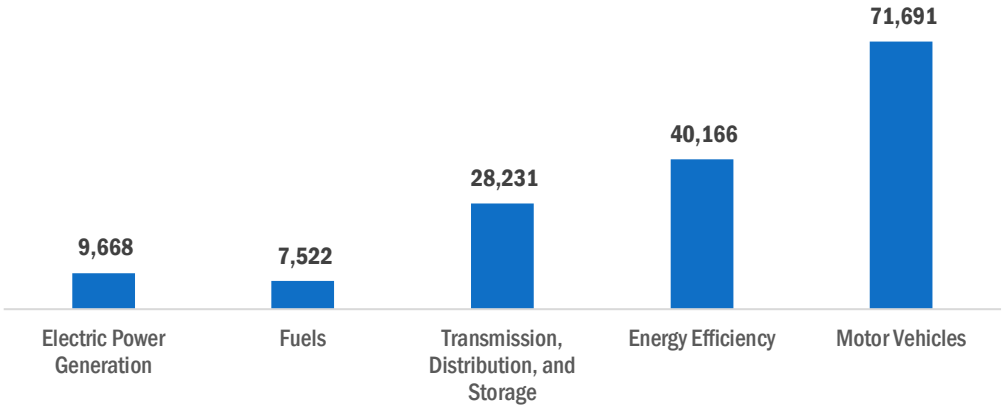
Energy and Employment – 2017

Overview

Missouri has a low concentration of energy employment, with 45,421 Traditional Energy workers statewide (representing 1.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 9,668 are in Electric Power Generation, 7,522 are in Fuels, and 28,231 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Missouri is 1.6 percent of total state employment (compared to 2.3 percent of national employment). Missouri has an additional 40,166 jobs in Energy Efficiency (1.8 percent of all U.S. Energy Efficiency jobs) and 71,691 jobs in Motor Vehicles (2.9 percent of all U.S. Motor Vehicle jobs).

Figure MO-1.

Employment by Major Energy Technology Application

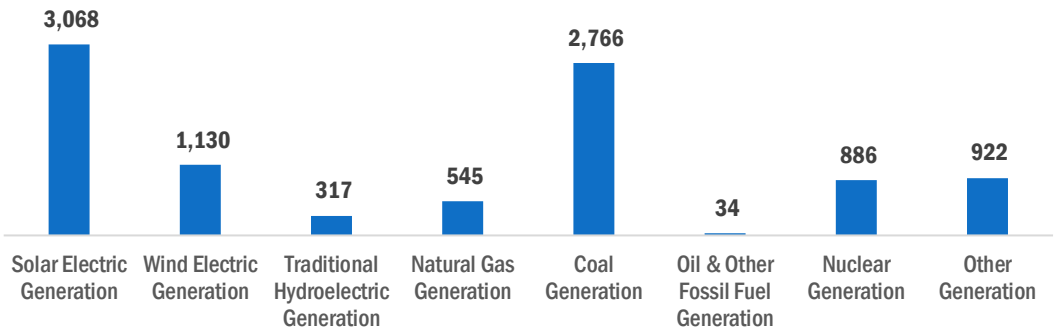


Breakdown by Technology Applications

Electric Power Generation

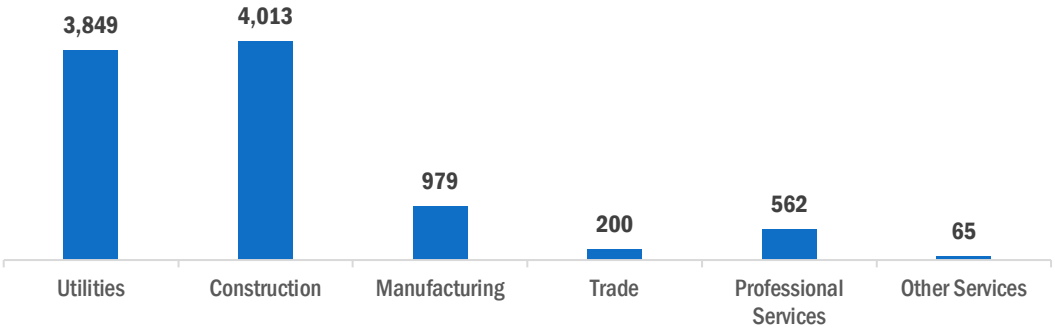
Electric Power Generation employs 9,668 workers in Missouri, 1.1 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 3,345 jobs, followed by solar at 3,068 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 41.5 percent of jobs. Utilities are next with 39.8 percent.

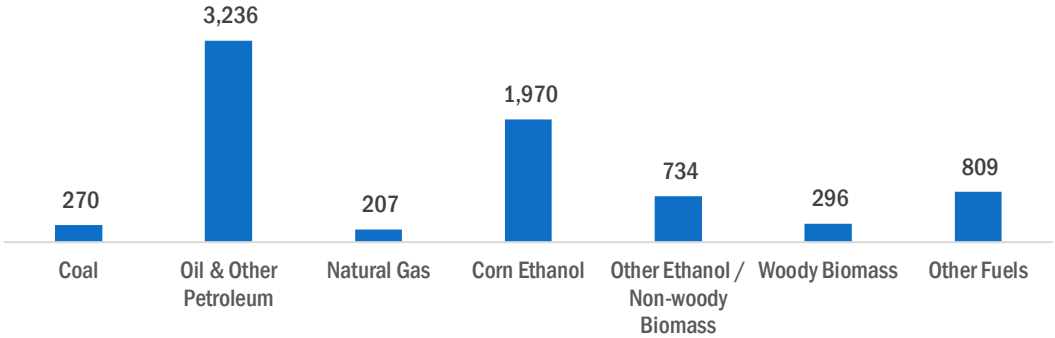
Figure MO-3.
Electric Power Generation Employment by Industry Sector



Fuels

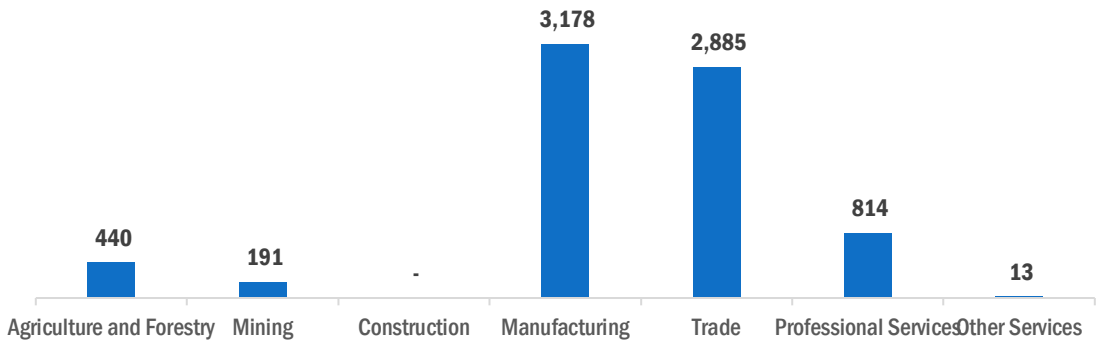
Fuels account for 7,522 jobs in Missouri, 0.7 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,236 jobs.

Figure MO-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 42.3 percent of Fuels jobs in Missouri.

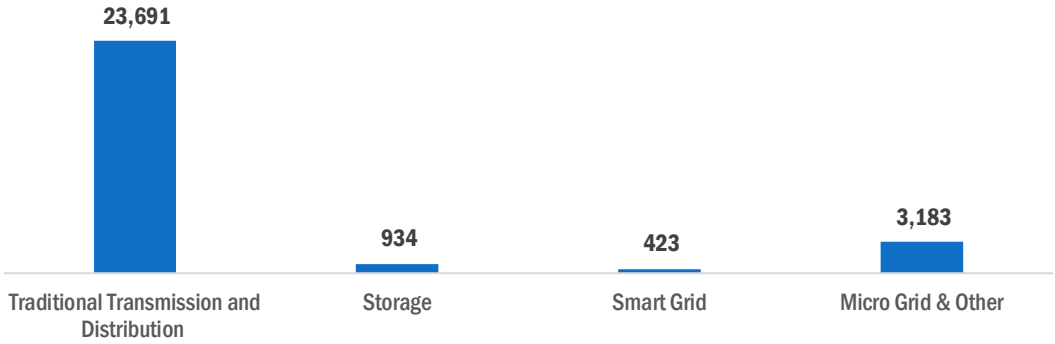
Figure MO-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

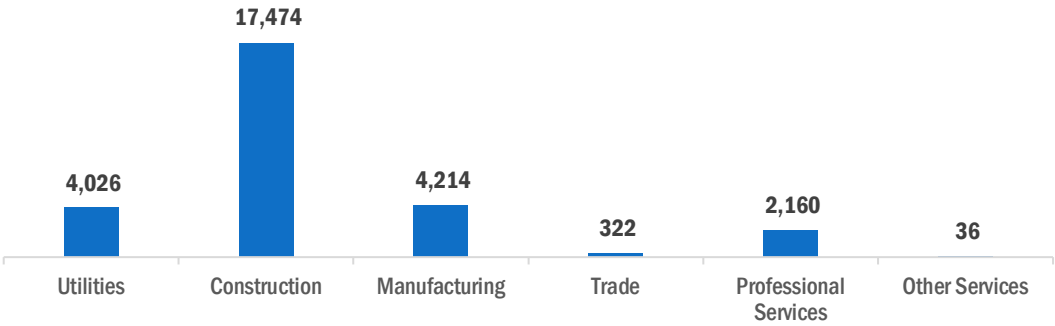
Transmission, Distribution, and Storage employs 28,231 workers in Missouri, 2.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Missouri, with 61.9 percent of such jobs statewide.

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



Energy Efficiency

The 40,166 Energy Efficiency jobs in Missouri represent 1.8 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

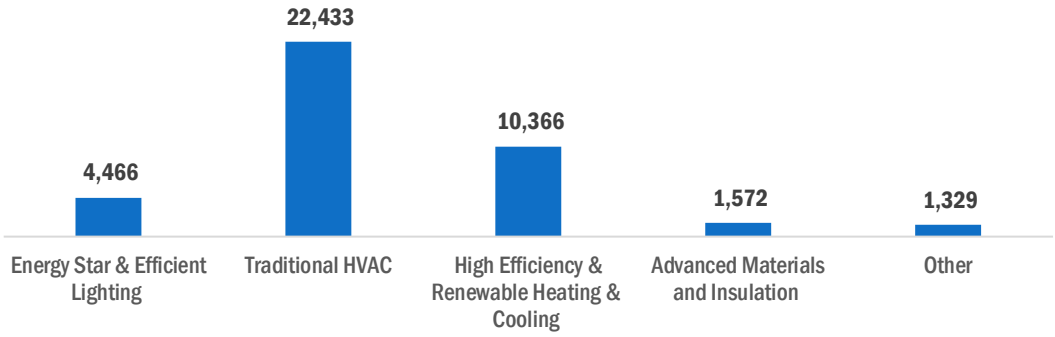
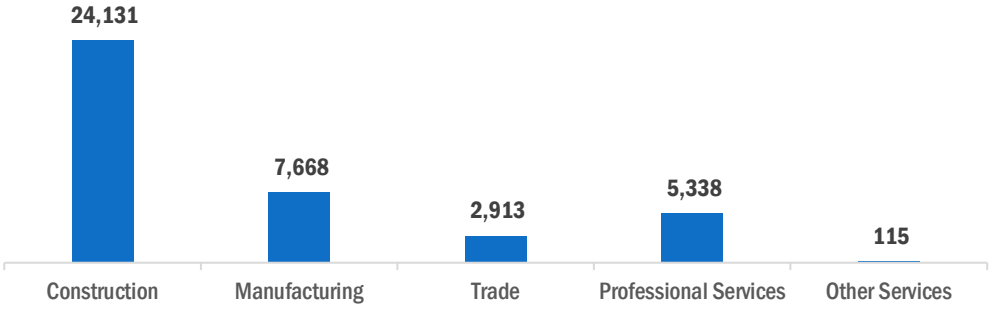


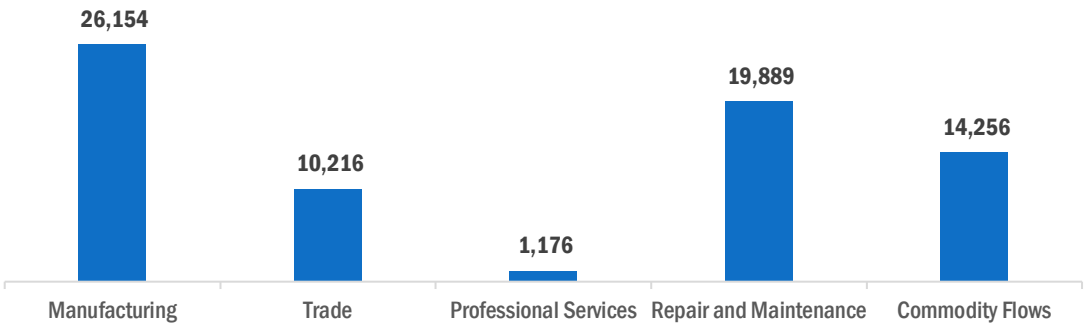
Figure MO-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 71,691 jobs in Missouri. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure MO-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 50.0 percent of energy-related employers in Missouri hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table MO-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.5	51.9	22.2	7.4
Transmission, Distribution and Storage	7.7	61.5	30.8	-
Energy Efficiency	20.4	51.0	24.5	4.1
Fuels	16.7	38.9	38.9	5.6
Motor Vehicles	42.9	33.3	23.8	-

Montana

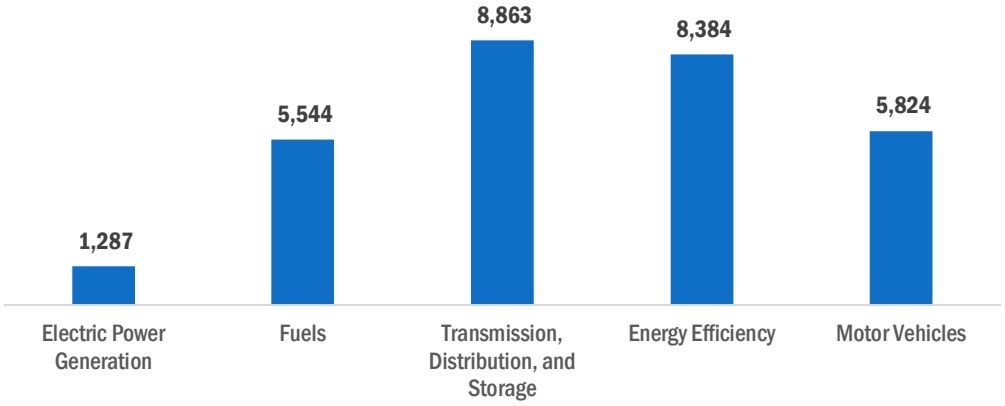
Energy and Employment – 2017

Overview

Montana has a high concentration of energy employment, with 15,695 Traditional Energy workers statewide (representing 0.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 1,287 are in Electric Power Generation, 5,544 are in Fuels, and 8,863 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Montana is 3.3 percent of total state employment (compared to 2.3 percent of national employment). Montana has an additional 8,384 jobs in Energy Efficiency (0.4 percent of all U.S. Energy Efficiency jobs) and 5,824 jobs in Motor Vehicles (0.2 percent of all U.S. Motor Vehicle jobs).

Figure MT-1.

Employment by Major Energy Technology Application

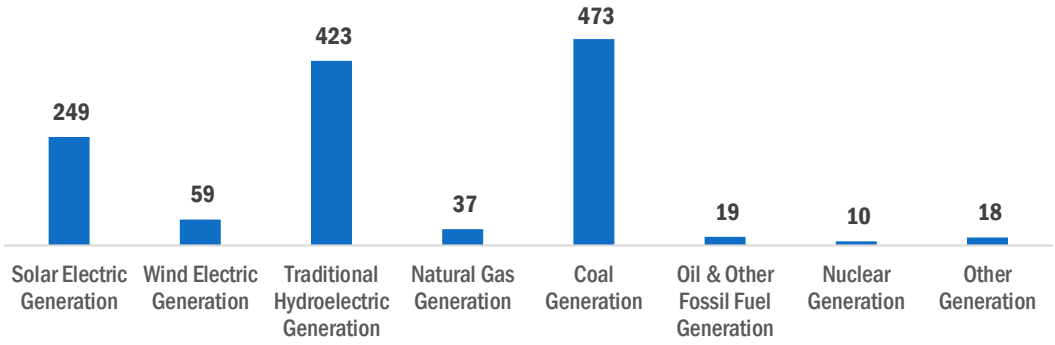


Breakdown by Technology Applications

Electric Power Generation

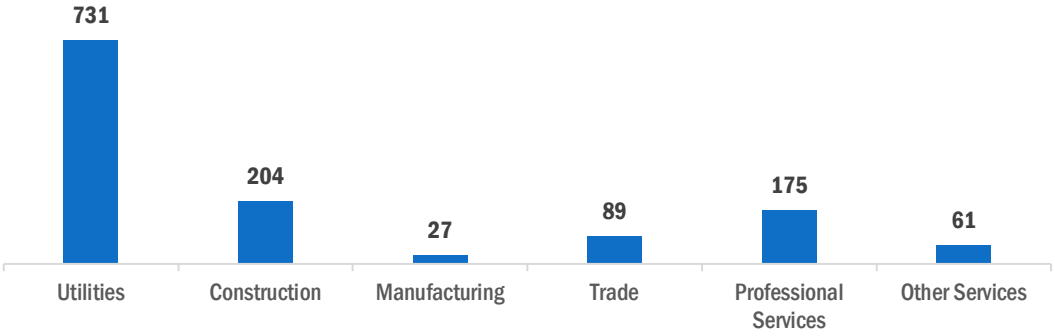
Electric Power Generation employs 1,287 workers in Montana, 0.1 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 529 jobs, followed by traditional hydroelectric generation at 423 jobs.

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



Utilities is the largest industry sector in Electric Power Generation, with 56.8 percent of jobs. Construction is next with 15.9 percent.

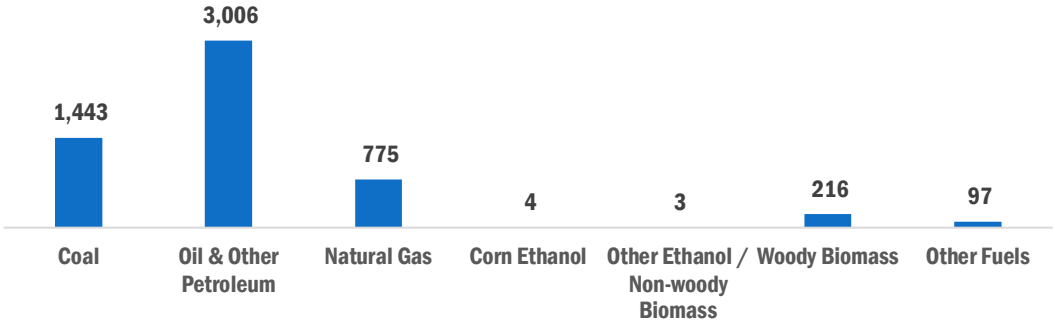
Figure MT-3.
Electric Power Generation Employment by Industry Sector



Fuels

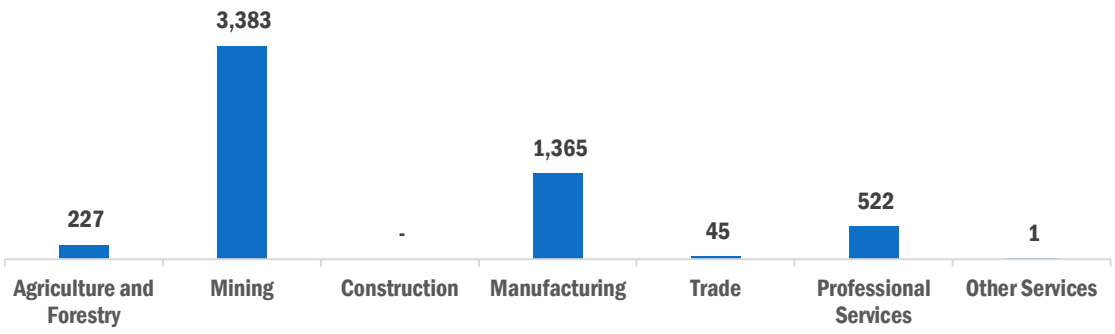
Fuels account for 5,544 jobs in Montana, 0.5 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,006 jobs.

Figure MT-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 61.0 percent of Fuels jobs in Montana.

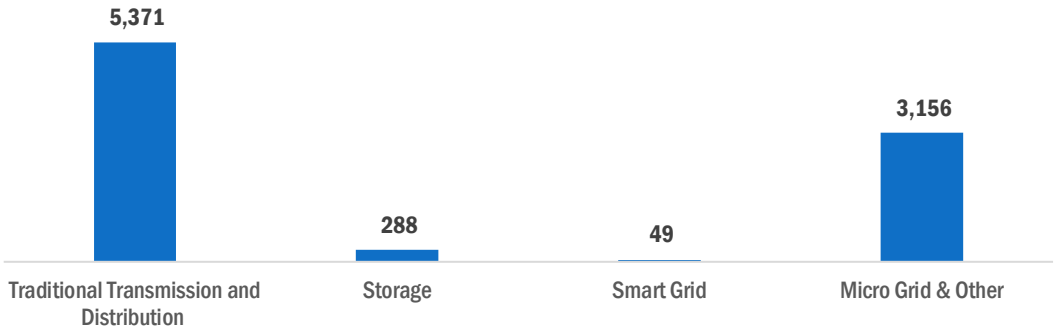
Figure MT-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

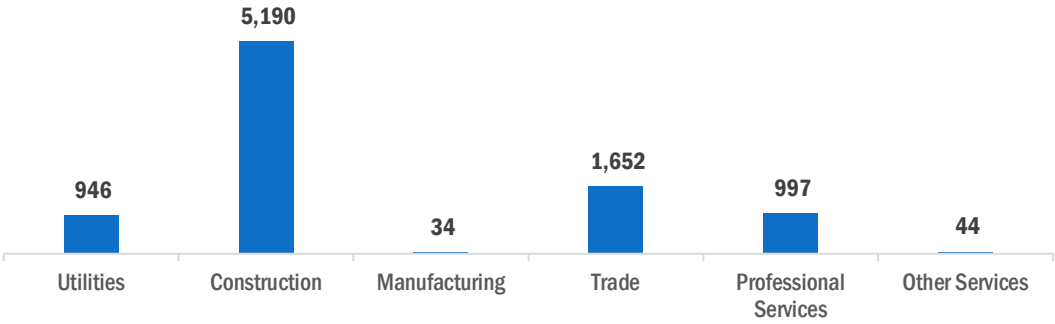
Transmission, Distribution, and Storage employs 8,863 workers in Montana, 0.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Montana, with 58.6 percent of such jobs statewide.

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



Energy Efficiency

The 8,384 Energy Efficiency jobs in Montana represent 0.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

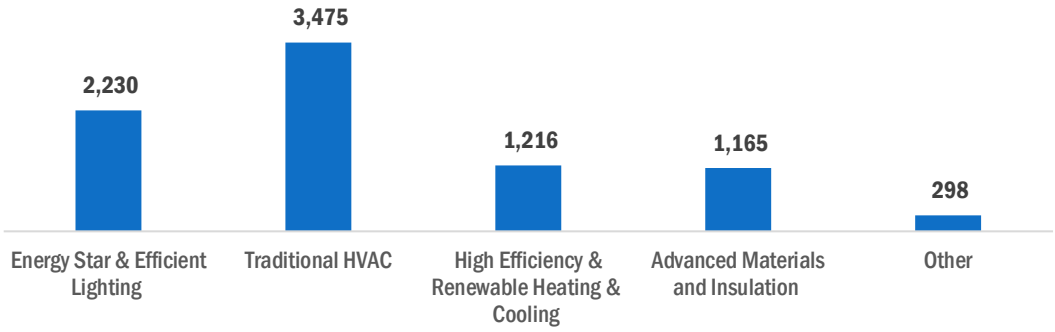
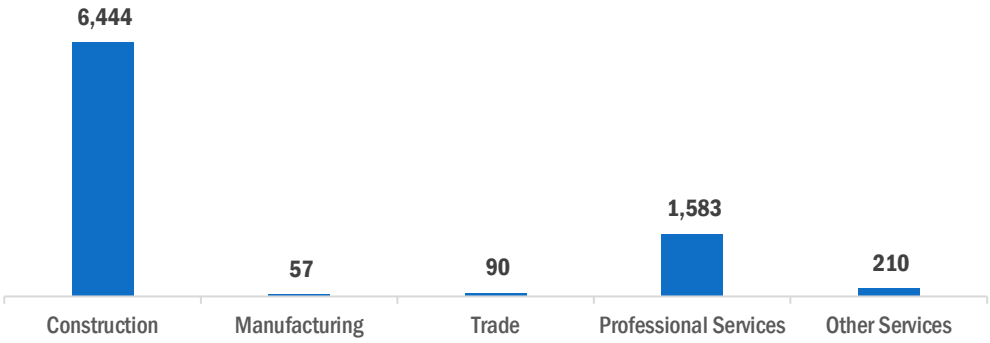


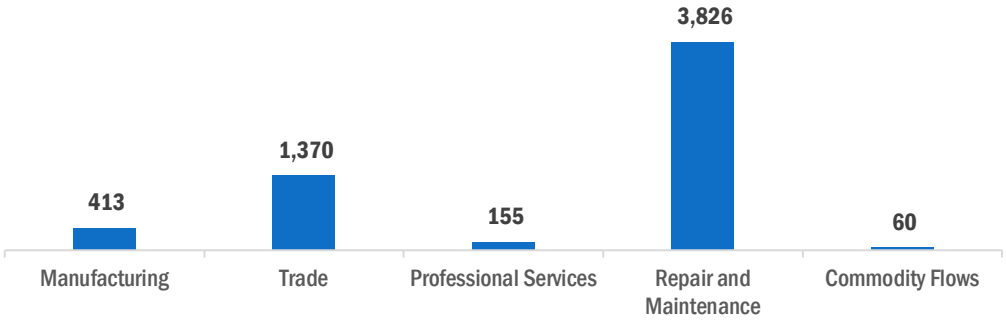
Figure MT-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 5,824 jobs in Montana. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MT-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 62.5 percent of energy-related employers in Montana hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table MT-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	-	100.0	-	-
Transmission, Distribution and Storage	-	75.0	25.0	-
Energy Efficiency	30.8	38.5	30.8	-
Fuels	25.0	75.0	-	-
Motor Vehicles	50.0	50.0	-	-

Nebraska

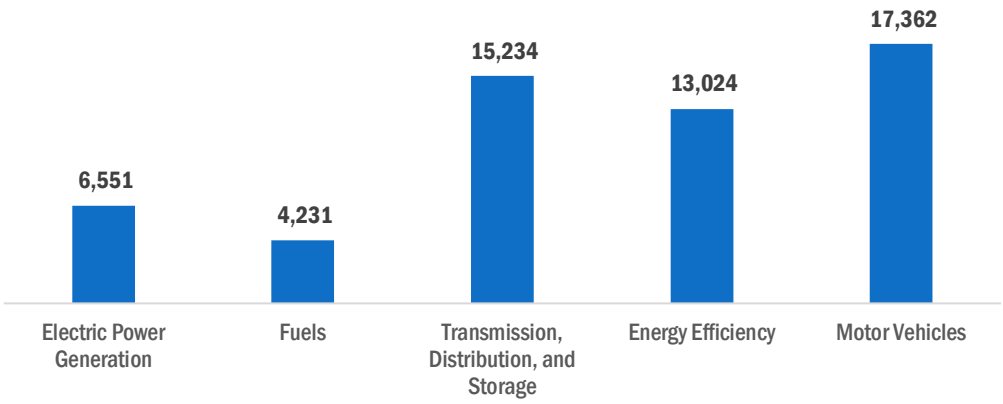
Energy and Employment – 2017

Overview

Nebraska has an average concentration of energy employment, with 26,016 Traditional Energy workers statewide (representing 0.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 6,551 are in Electric Power Generation, 4,231 are in Fuels, and 15,234 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Nebraska is 2.6 percent of total state employment (compared to 2.3 percent of national employment). Nebraska has an additional 13,024 jobs in Energy Efficiency (0.6 percent of all U.S. Energy Efficiency jobs) and 17,362 jobs in Motor Vehicles (0.7 percent of all U.S. Motor Vehicle jobs).

Figure NE-1.

Employment by Major Energy Technology Application

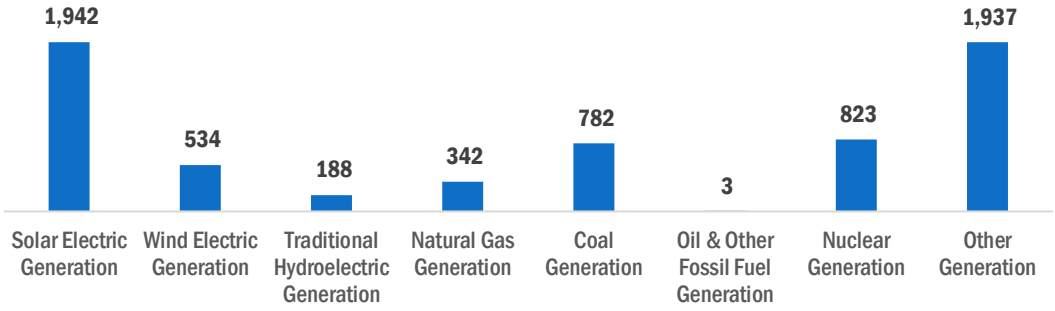


Breakdown by Technology Applications

Electric Power Generation

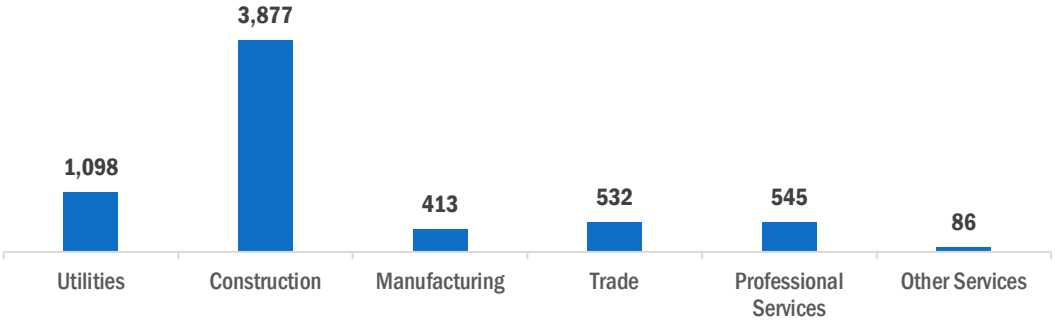
Electric Power Generation employs 6,551 workers in Nebraska, 0.7 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 1,942 jobs, followed by other generation at 1,937 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 59.2 percent of jobs. Utilities are next with 16.8 percent.

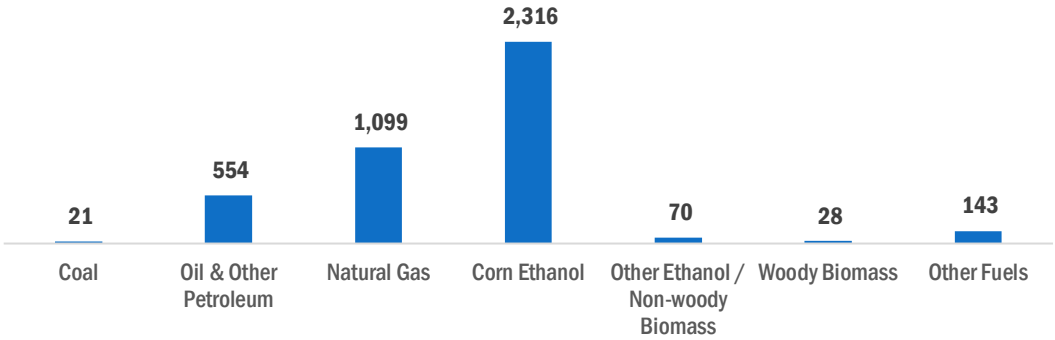
Figure NE-3.
Electric Power Generation Employment by Industry Sector



Fuels

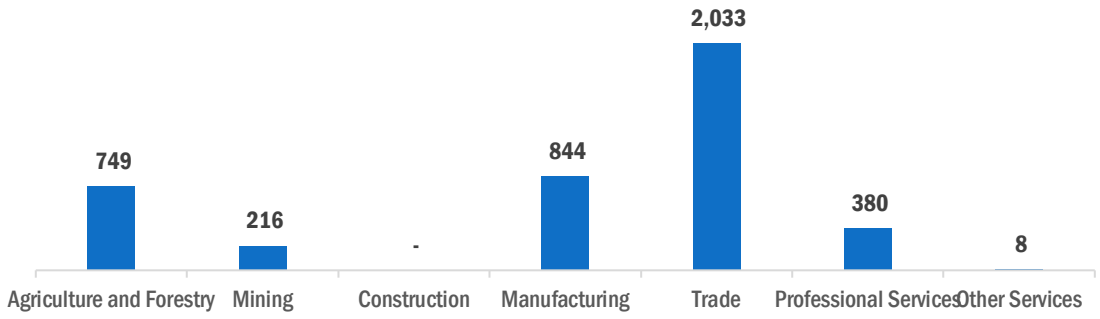
Fuels account for 4,231 jobs in Nebraska, 0.4 percent of the national total. Corn ethanol represents the largest segment of Fuels employment, with 2,316 jobs.

Figure NE-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 48.1 percent of Fuels jobs in Nebraska.

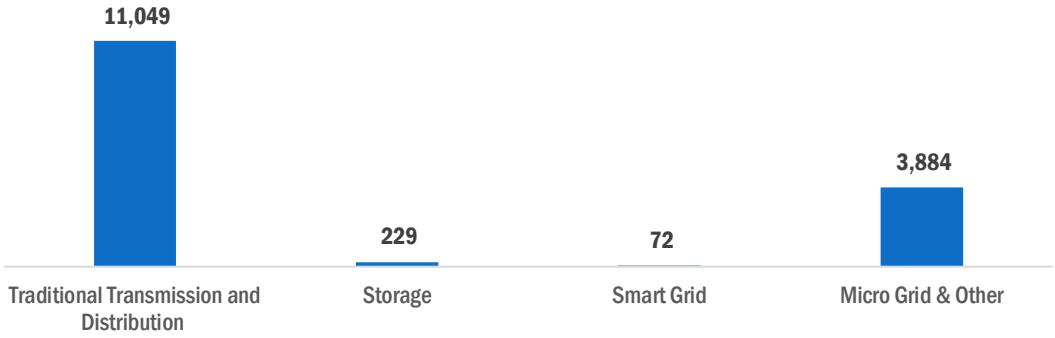
Figure NE-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

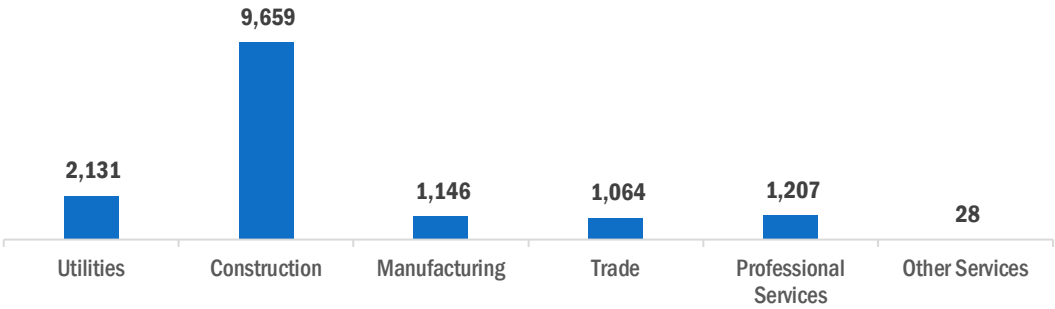
Transmission, Distribution, and Storage employs 15,234 workers in Nebraska, 1.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Nebraska, with 63.4 percent of such jobs statewide.

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



Energy Efficiency

The 13,024 Energy Efficiency jobs in Nebraska represent 0.6 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

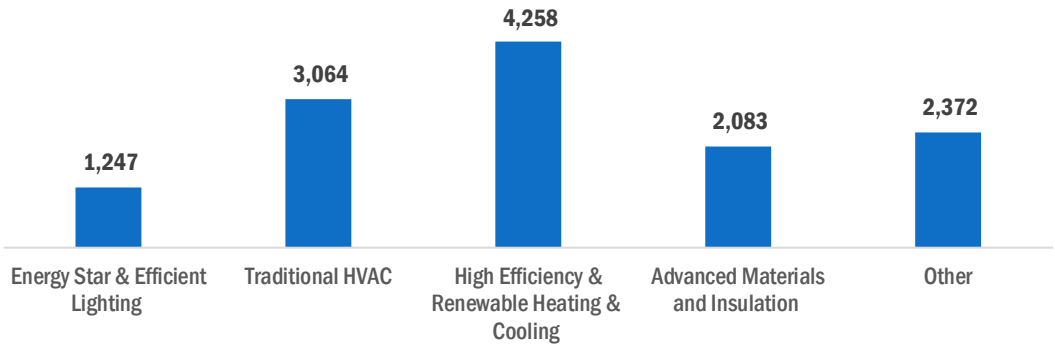
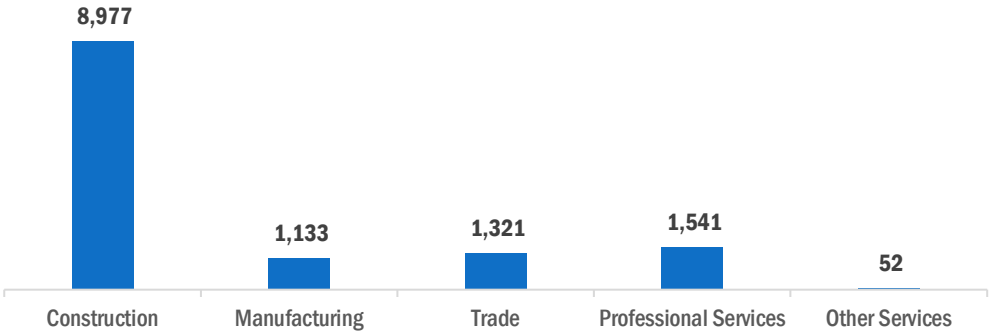


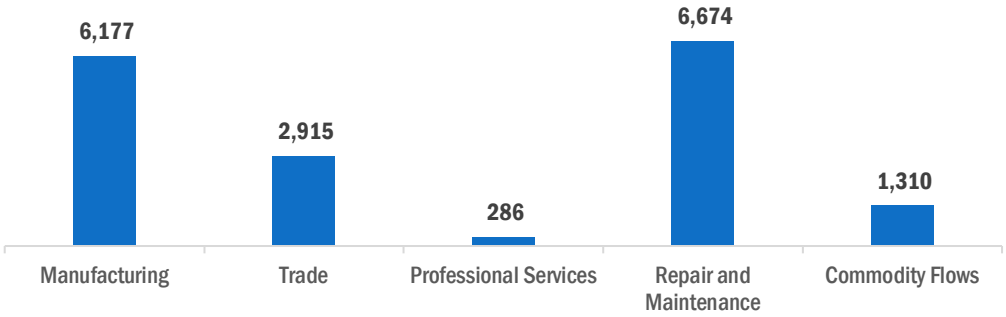
Figure NE-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 17,362 jobs in Nebraska. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NE-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 45.0 percent of energy-related employers in Nebraska hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

Table NE-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	-	20.0	80.0	-
Transmission, Distribution and Storage	9.1	9.1	81.8	-
Energy Efficiency	33.3	33.3	33.3	-
Fuels	33.3	61.1	5.6	-
Motor Vehicles	66.7	-	33.3	-

Nevada

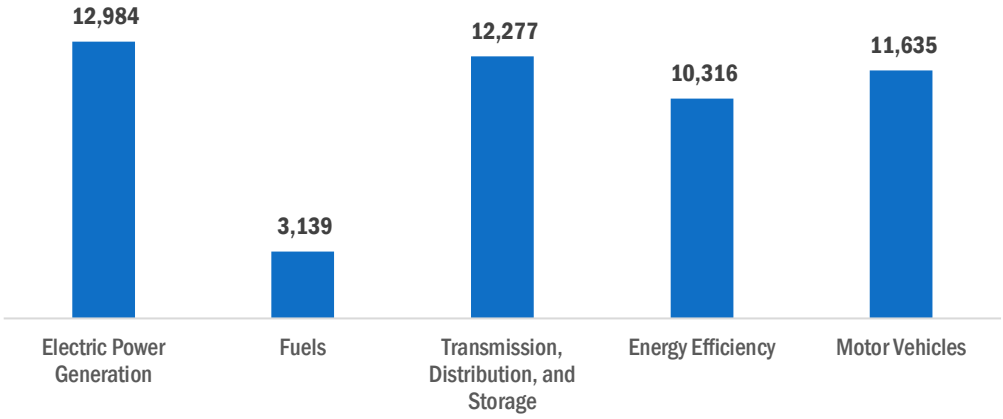
Energy and Employment – 2017

Overview

Nevada has an average concentration of energy employment, with 28,400 Traditional Energy workers statewide (representing 0.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 12,984 are in Electric Power Generation, 3,139 are in Fuels, and 12,277 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Nevada is 2.1 percent of total state employment (compared to 2.3 percent of national employment). Nevada has an additional 10,316 jobs in Energy Efficiency (0.5 percent of all U.S. Energy Efficiency jobs) and 11,635 jobs in Motor Vehicles (0.5 percent of all U.S. Motor Vehicle jobs).

Figure NV-1.

Employment by Major Energy Technology Application

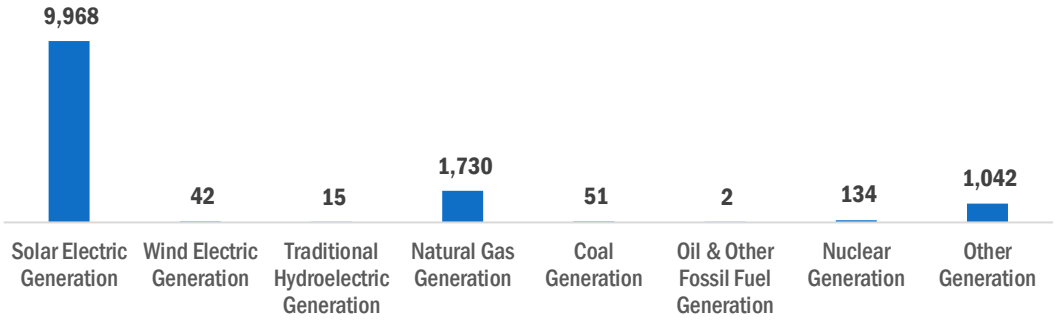


Breakdown by Technology Applications

Electric Power Generation

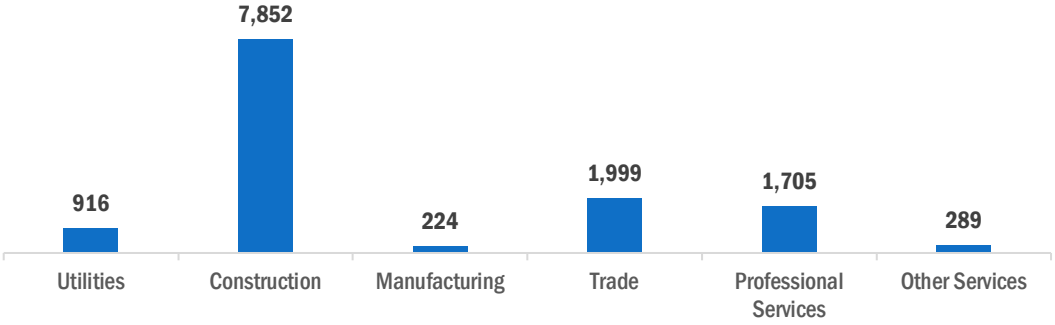
Electric Power Generation employs 12,984 workers in Nevada, 1.5 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 9,968 jobs, followed by traditional fossil fuel generation at 1,783 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 60.5 percent of jobs. Wholesale trade is next with 15.4 percent.

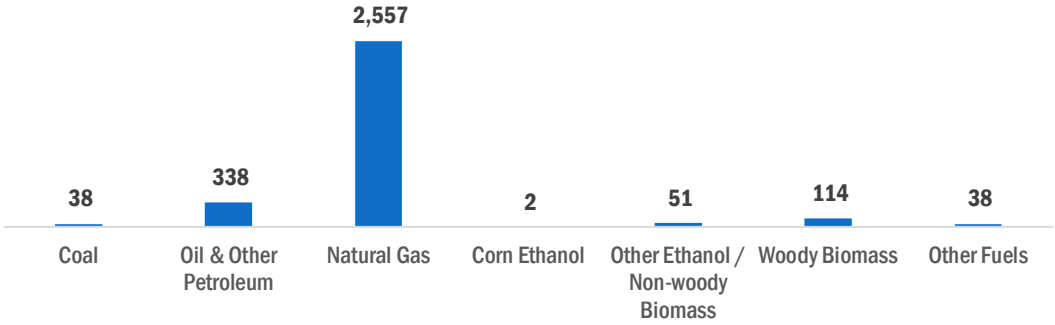
Figure NV-3.
Electric Power Generation Employment by Industry Sector



Fuels

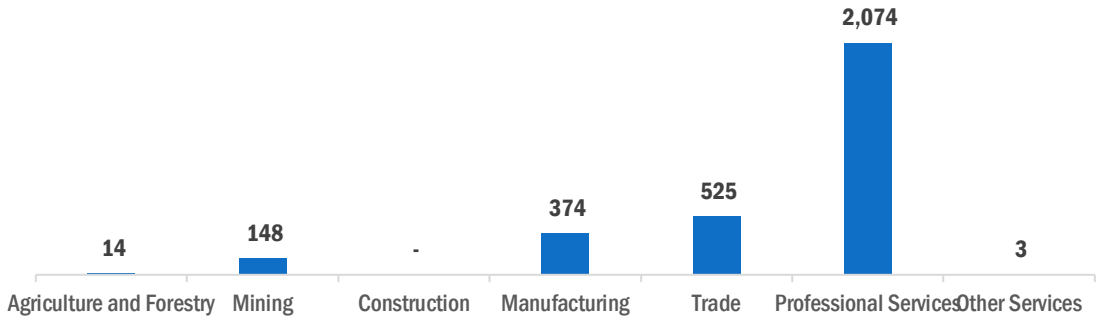
Fuels account for 3,139 jobs in Nevada, 0.3 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 2,557 jobs.

Figure NV-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 66.1 percent of Fuels jobs in Nevada.

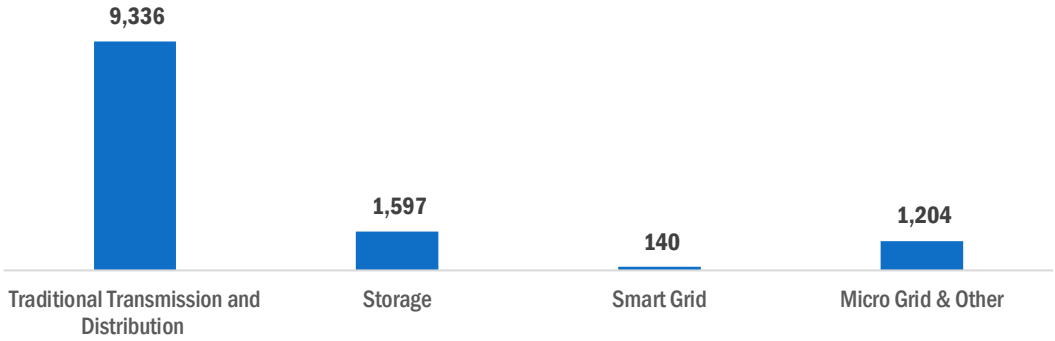
Figure NV-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

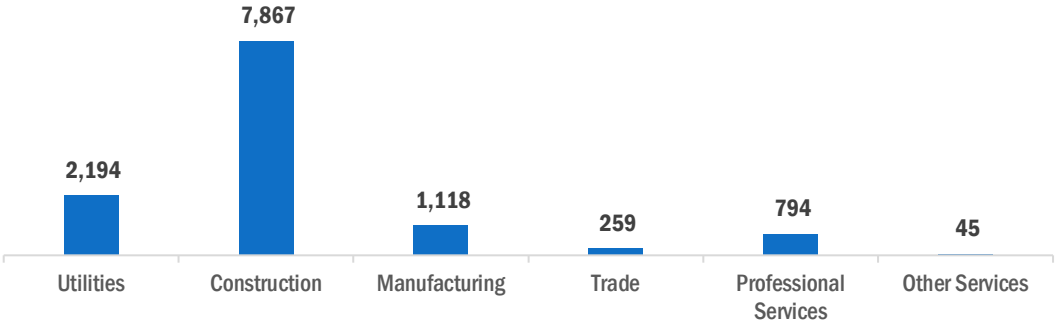
Transmission, Distribution, and Storage employs 12,277 workers in Nevada, 0.9 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Nevada, with 64.1 percent of such jobs statewide.

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



Energy Efficiency

The 10,316 Energy Efficiency jobs in Nevada represent 0.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by advanced materials and insulation. Energy Efficiency employment is primarily found in the construction industry.

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

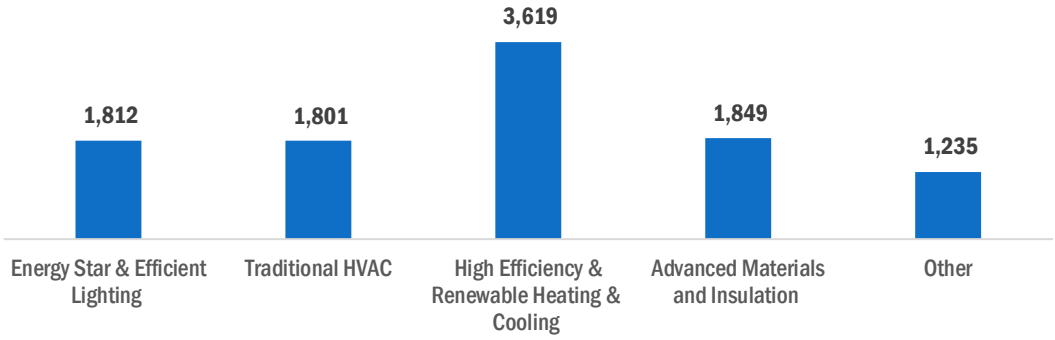
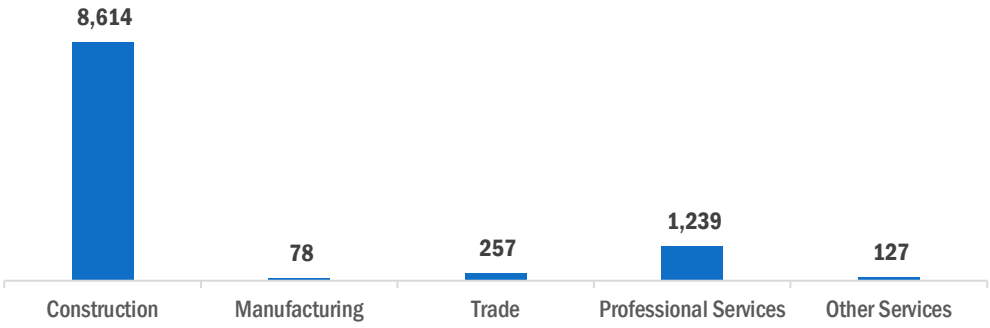


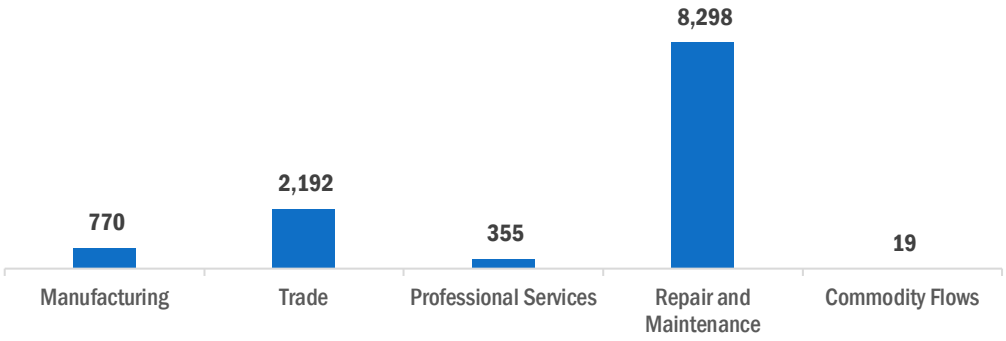
Figure NV-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 11,635 jobs in Nevada. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NV-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 72.7 percent of energy-related employers in Nevada hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table NV-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.8	43.8	37.5	-
Transmission, Distribution and Storage	50.0	33.3	16.7	-
Energy Efficiency	20.0	60.0	20.0	-
Fuels	25.0	25.0	50.0	-
Motor Vehicles	25.0	25.0	50.0	-

New Hampshire

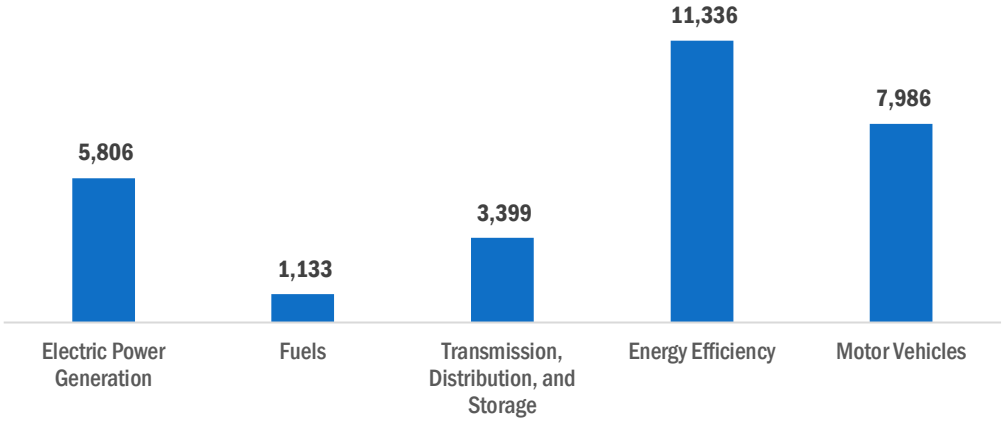
Energy and Employment – 2017

Overview

New Hampshire has a low concentration of energy employment, with 10,338 Traditional Energy workers statewide (representing 0.3 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 5,806 are in Electric Power Generation, 1,133 are in Fuels, and 3,399 are in Transmission, Distribution, and Storage. The Traditional Energy sector in New Hampshire is 1.6 percent of total state employment (compared to 2.3 percent of national employment). New Hampshire has an additional 11,336 jobs in Energy Efficiency (0.5 percent of all U.S. Energy Efficiency jobs) and 7,986 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure NH-1.

Employment by Major Energy Technology Application

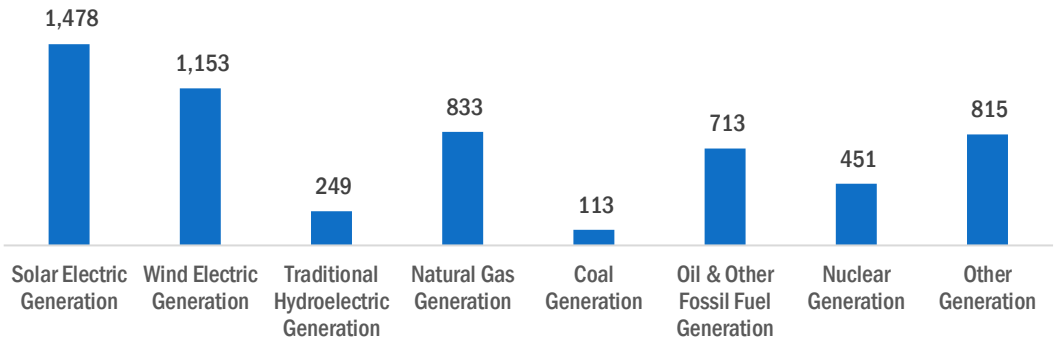


Breakdown by Technology Applications

Electric Power Generation

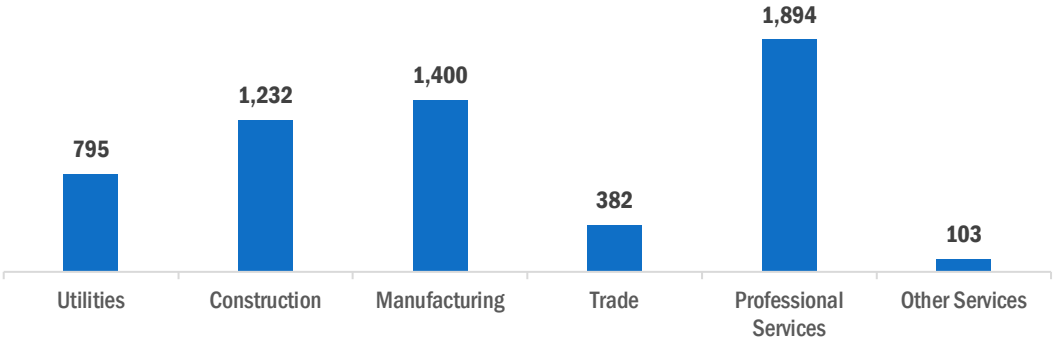
Electric Power Generation employs 5,806 workers in New Hampshire, 0.7 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 1,659 jobs, followed by solar at 1,478 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 32.6 percent of jobs. Manufacturing is next with 24.1 percent.

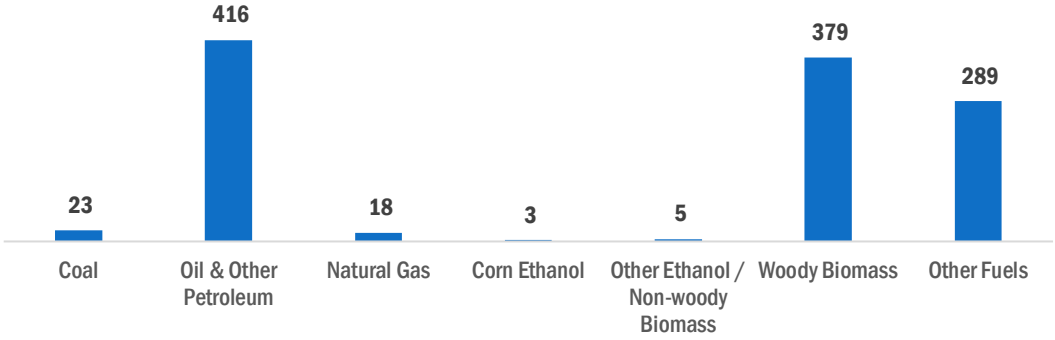
Figure NH-3.
Electric Power Generation Employment by Industry Sector



Fuels

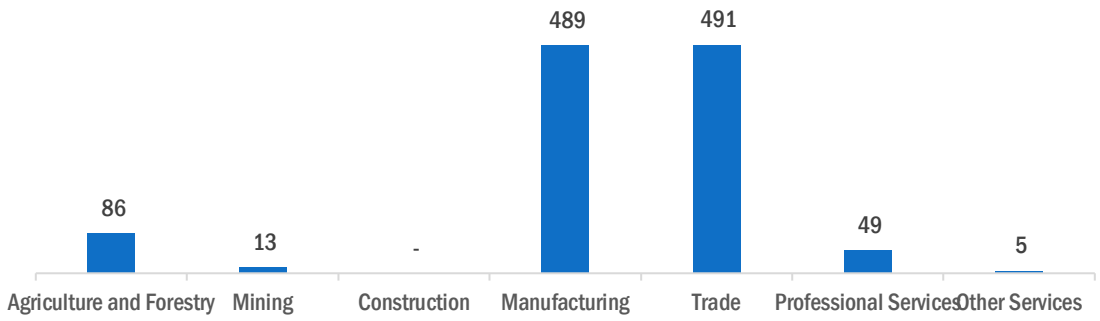
Fuels account for 1,133 jobs in New Hampshire, 0.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 416 jobs.

Figure NH-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 43.3 percent of Fuels jobs in New Hampshire.

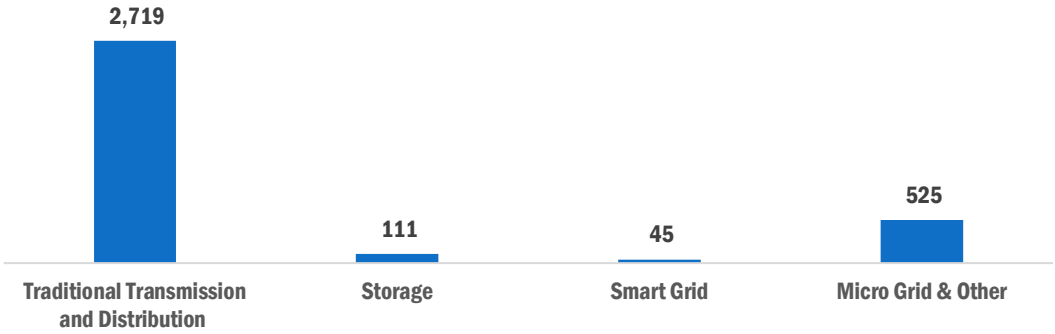
Figure NH-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

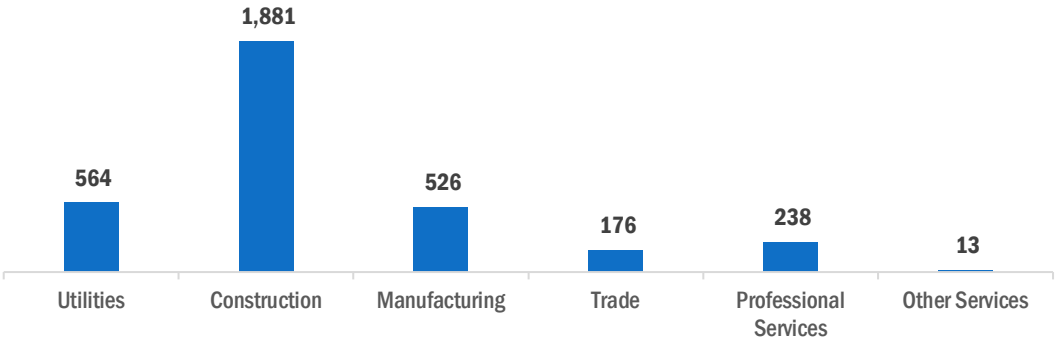
Transmission, Distribution, and Storage employs 3,399 workers in New Hampshire, 0.3 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in New Hampshire, with 55.4 percent of such jobs statewide.

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



Energy Efficiency

The 11,336 Energy Efficiency jobs in New Hampshire represent 0.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

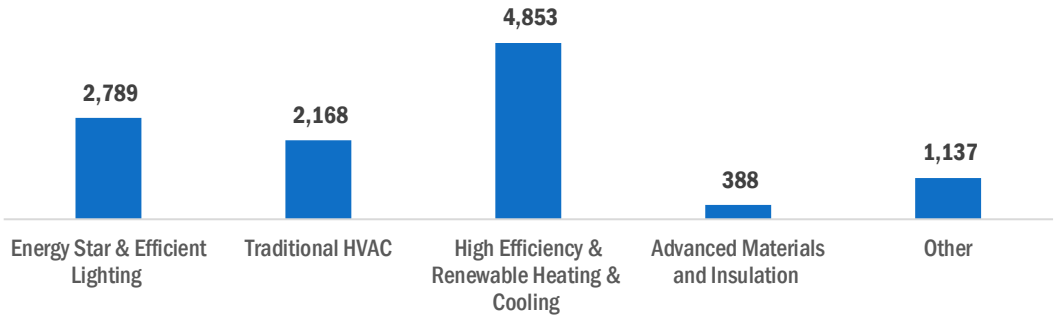
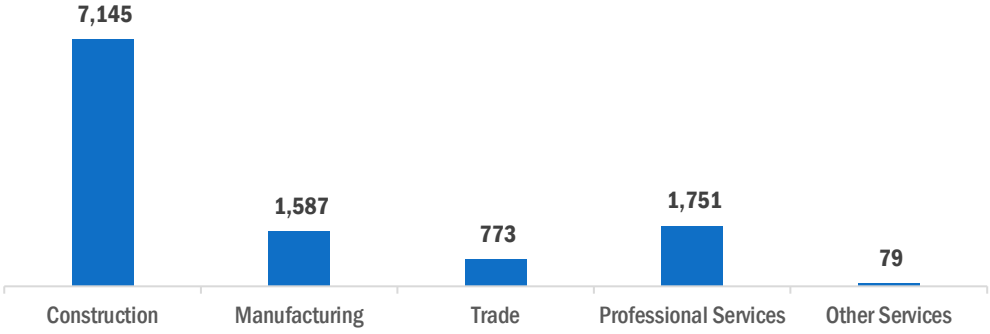


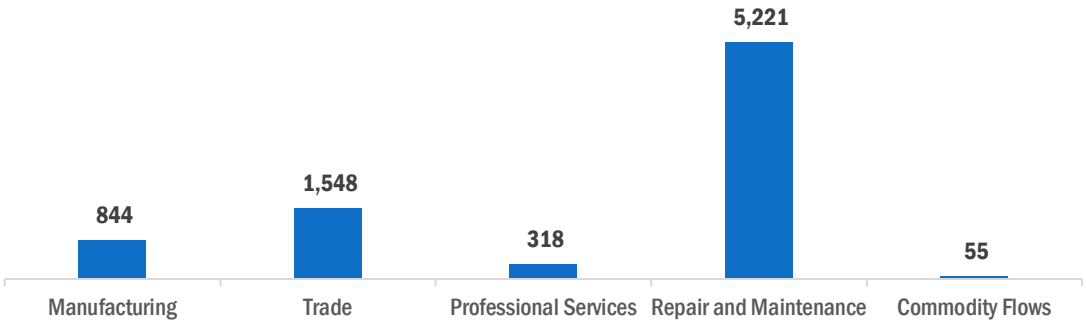
Figure NH-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 7,986 jobs in New Hampshire. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NH-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 45.0 percent of energy-related employers in New Hampshire hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table NH-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	57.1	28.6	14.3	-
Transmission, Distribution and Storage	42.9	57.1	-	-
Energy Efficiency	40.0	33.3	26.7	-
Fuels	-	50.0	50.0	-
Motor Vehicles	75.0	-	25.0	-

New Jersey

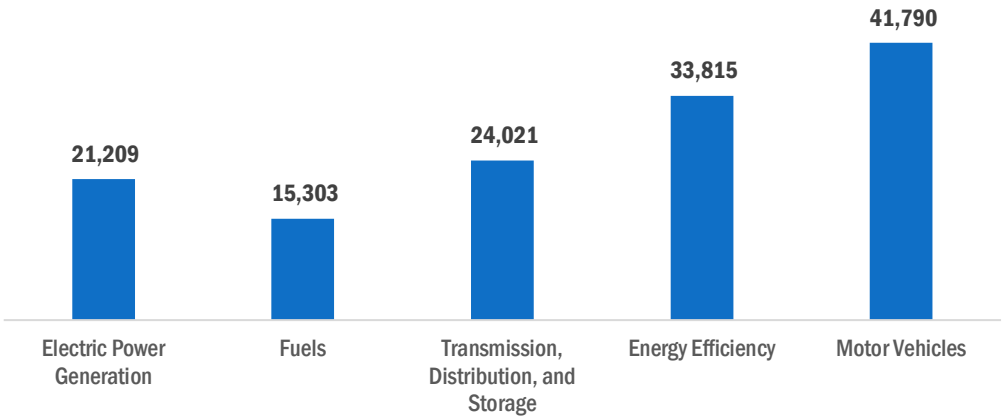
Energy and Employment – 2017

Overview

New Jersey has a low concentration of energy employment, with 60,533 Traditional Energy workers statewide (representing 1.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 21,209 are in Electric Power Generation, 15,303 are in Fuels, and 24,021 are in Transmission, Distribution, and Storage. The Traditional Energy sector in New Jersey is 1.5 percent of total state employment (compared to 2.3 percent of national employment). New Jersey has an additional 33,815 jobs in Energy Efficiency (1.5 percent of all U.S. Energy Efficiency jobs) and 41,790 jobs in Motor Vehicles (1.7 percent of all U.S. Motor Vehicle jobs).

Figure NJ-1.

Employment by Major Energy Technology Application

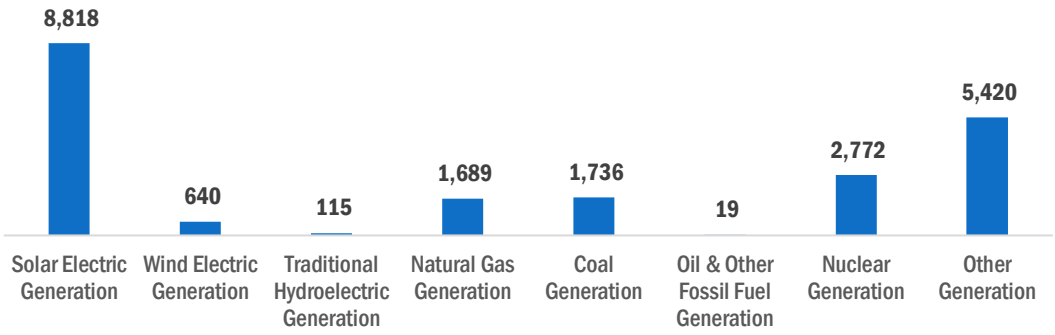


Breakdown by Technology Applications

Electric Power Generation

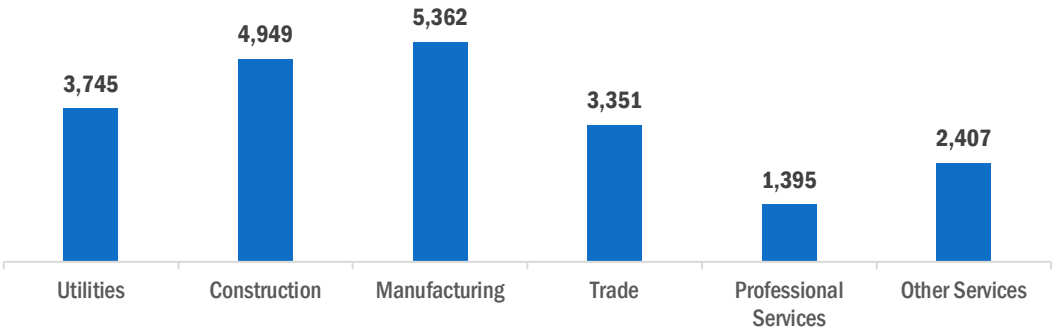
Electric Power Generation employs 21,209 workers in New Jersey, 2.4 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 8,818 jobs, followed by other generation at 5,420 jobs.

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



Manufacturing is the largest industry sector in Electric Power Generation, with 25.3 percent of jobs. Construction is next with 23.3 percent.

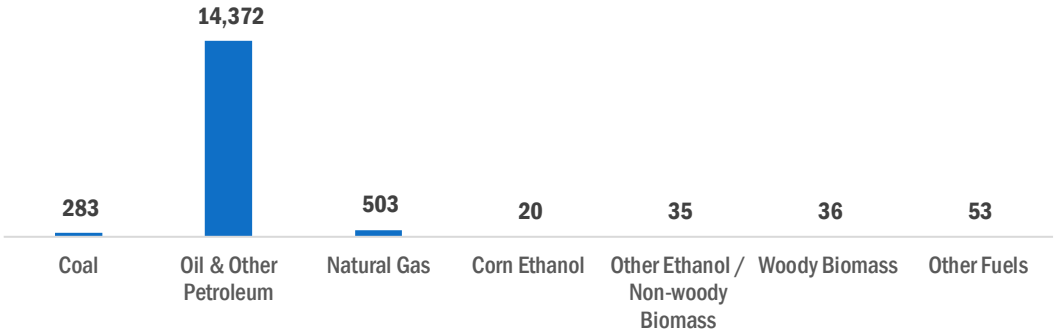
Figure NJ-3.
Electric Power Generation Employment by Industry Sector



Fuels

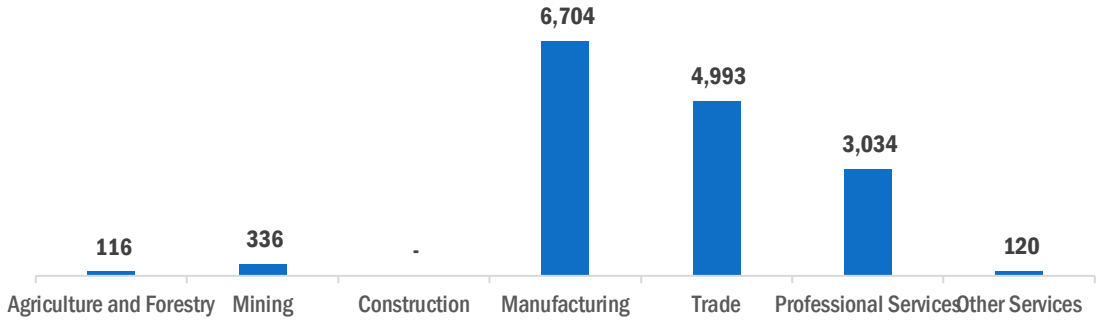
Fuels account for 15,303 jobs in New Jersey, 1.4 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 14,372 jobs.

Figure NJ-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 43.8 percent of Fuels jobs in New Jersey.

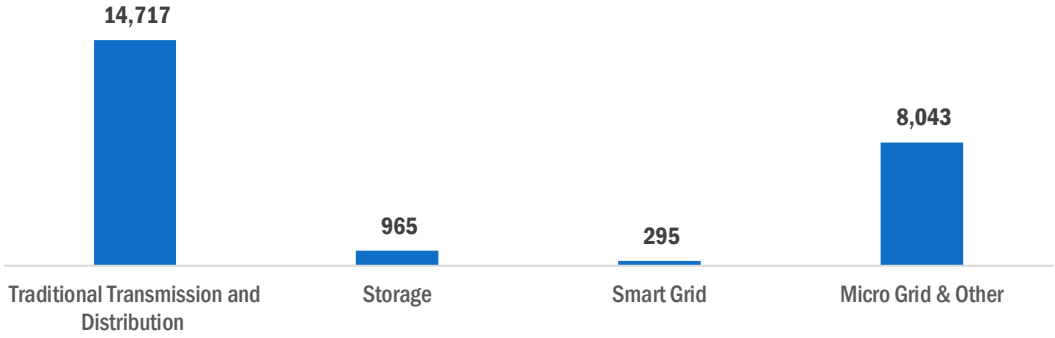
Figure NJ-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

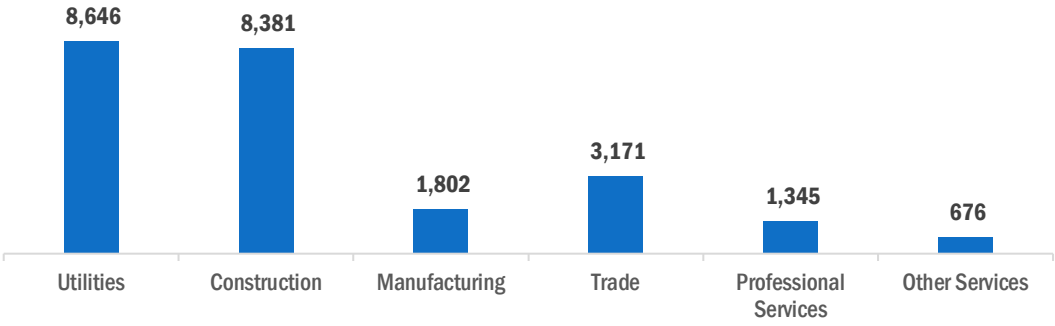
Transmission, Distribution, and Storage employs 24,021 workers in New Jersey, 1.8 percent of the national total.

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



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in New Jersey, with 36.0 percent of such jobs statewide.

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



Energy Efficiency

The 33,815 Energy Efficiency jobs in New Jersey represent 1.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by other energy efficiency products and services. Energy Efficiency employment is primarily found in the construction industry.

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

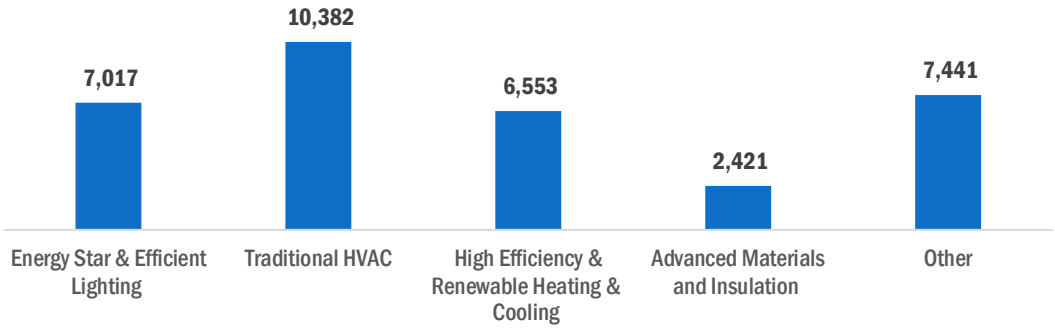
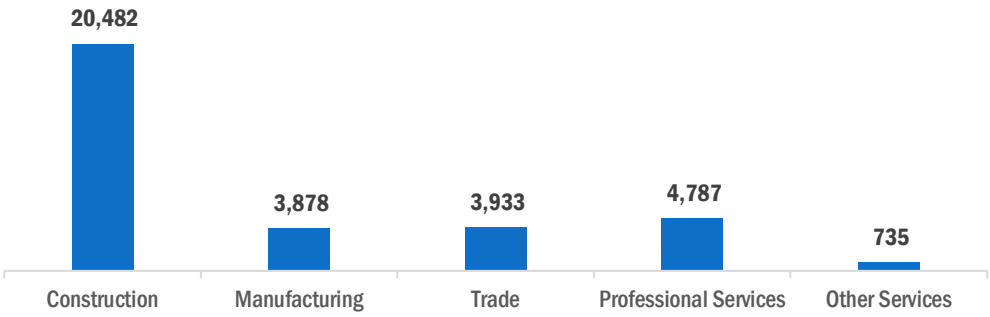


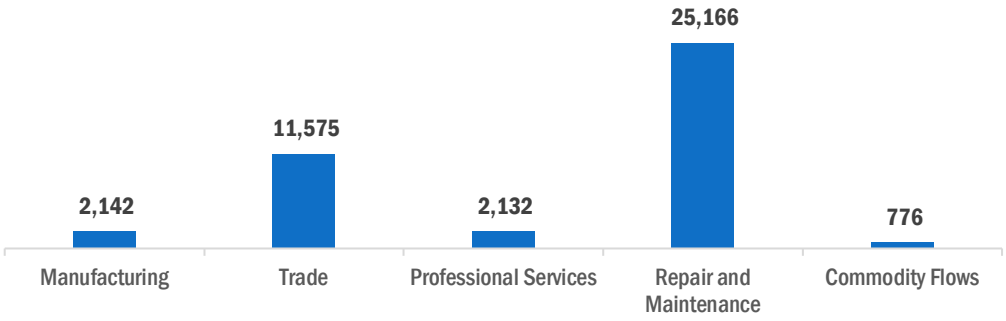
Figure NJ-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 41,790 jobs in New Jersey. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NJ-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 50.0 percent of energy-related employers in New Jersey hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table NJ-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	20.0	62.0	16.0	2.0
Transmission, Distribution and Storage	18.2	54.5	27.3	-
Energy Efficiency	18.9	51.4	27.0	2.7
Fuels	NA	NA	NA	NA
Motor Vehicles	42.9	-	57.1	-

New Mexico

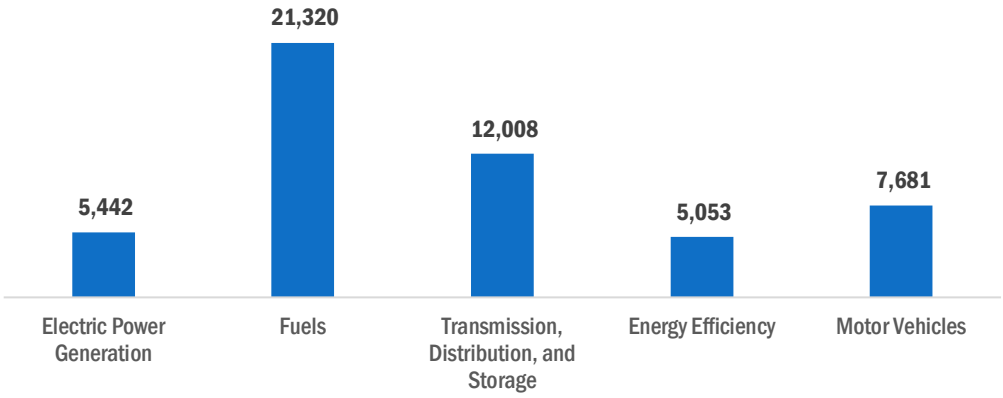
Energy and Employment – 2017

Overview

New Mexico has a high concentration of energy employment, with 38,770 Traditional Energy workers statewide (representing 1.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 5,442 are in Electric Power Generation, 21,320 are in Fuels, and 12,008 are in Transmission, Distribution, and Storage. The Traditional Energy sector in New Mexico is 4.8 percent of total state employment (compared to 2.3 percent of national employment). New Mexico has an additional 5,053 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 7,681 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure NM-1.

Employment by Major Energy Technology Application

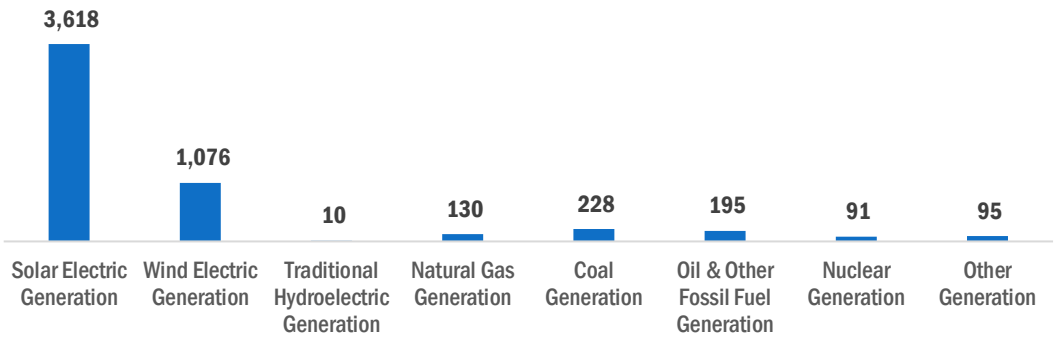


Breakdown by Technology Applications

Electric Power Generation

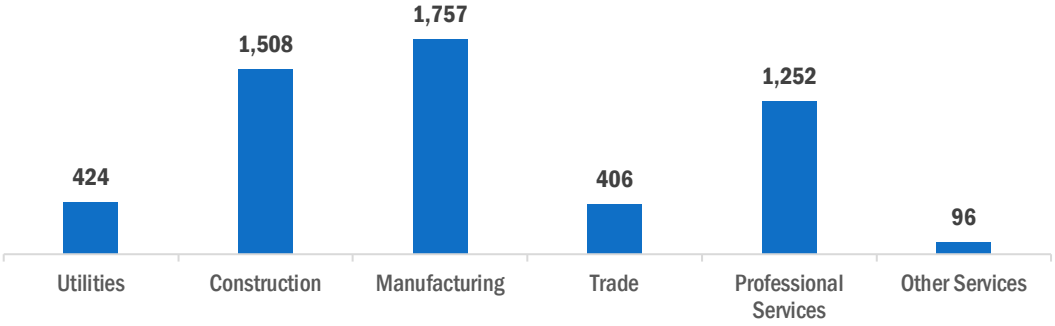
Electric Power Generation employs 5,442 workers in New Mexico, 0.6 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 3,618 jobs, followed by wind at 1,076 jobs.

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



Manufacturing is the largest industry sector in Electric Power Generation, with 32.3 percent of jobs. Construction is next with 27.7 percent.

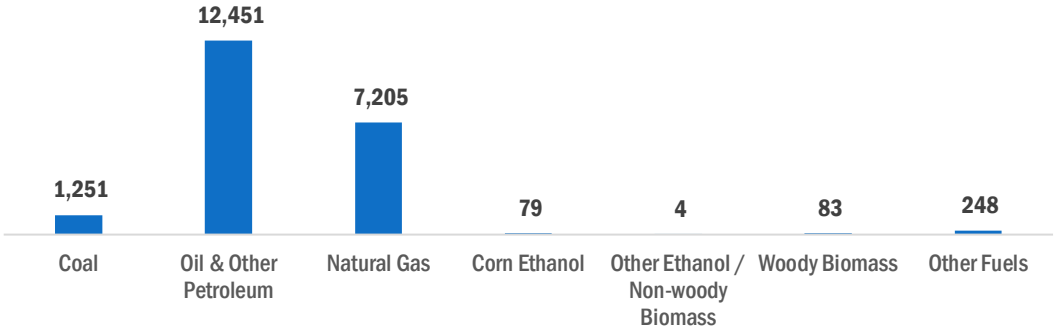
Figure NM-3.
Electric Power Generation Employment by Industry Sector



Fuels

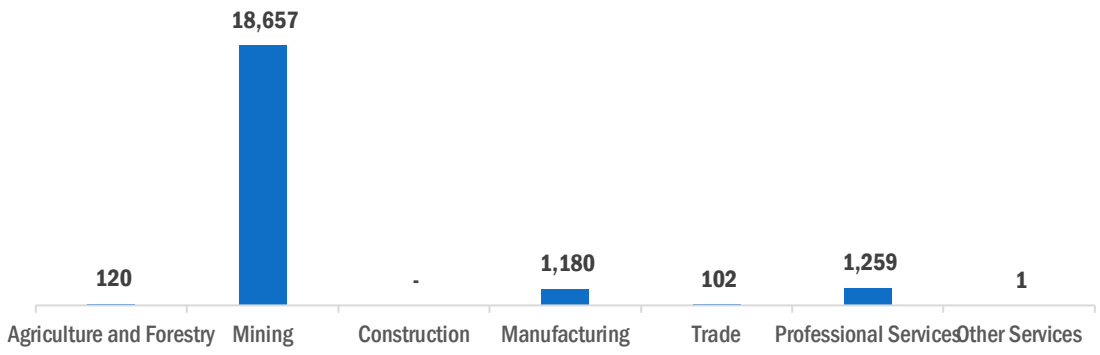
Fuels account for 21,320 jobs in New Mexico, 2.0 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 12,451 jobs.

Figure NM-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 87.5 percent of Fuels jobs in New Mexico.

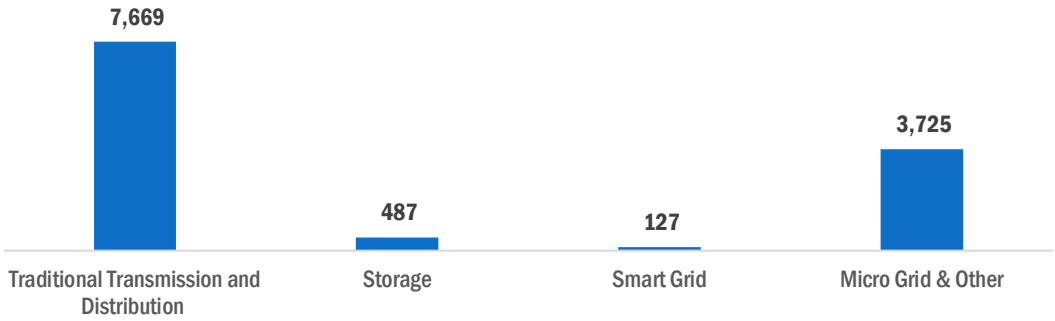
Figure NM-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

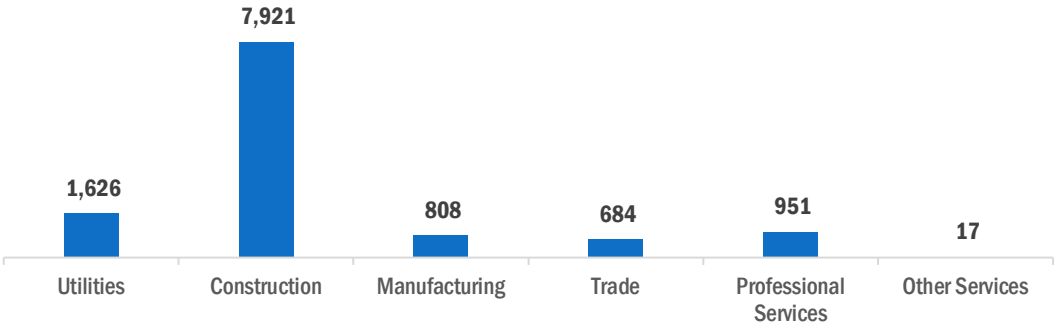
Transmission, Distribution, and Storage employs 12,008 workers in New Mexico, 0.9 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in New Mexico, with 66.0 percent of such jobs statewide.

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



Energy Efficiency

The 5,053 Energy Efficiency jobs in New Mexico represent 0.2 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

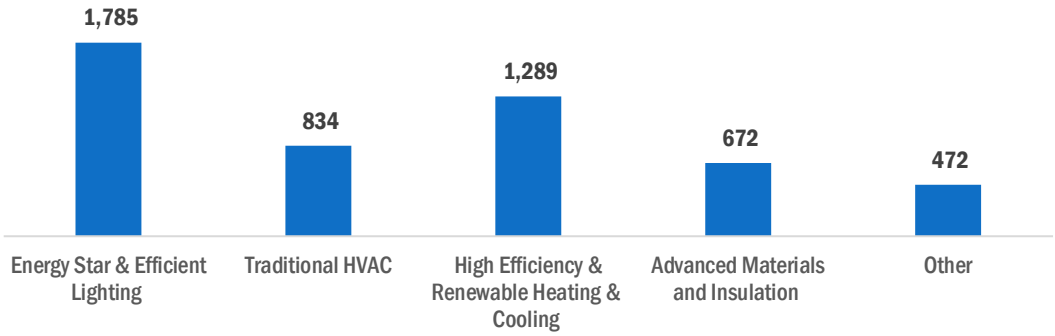
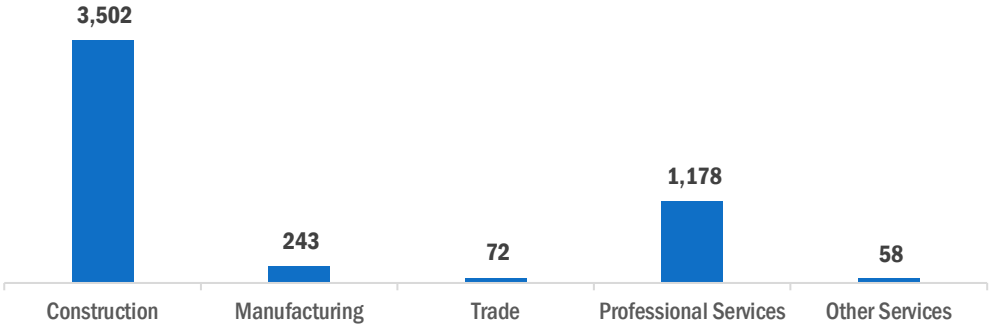


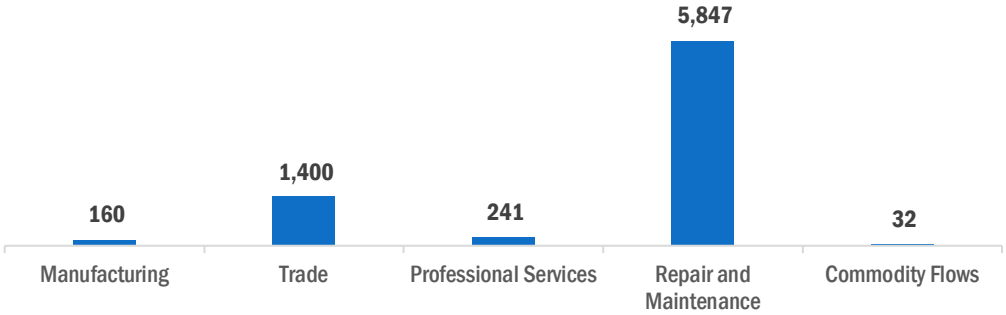
Figure NM-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 7,681 jobs in New Mexico. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure NM-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 53.3 percent of energy-related employers in New Mexico hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table NM-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	26.1	65.2	8.7	-
Transmission, Distribution and Storage	35.7	57.1	7.1	-
Energy Efficiency	29.4	58.8	11.8	-
Fuels	27.3	27.3	45.5	-
Motor Vehicles	13.3	73.3	13.3	-

New York

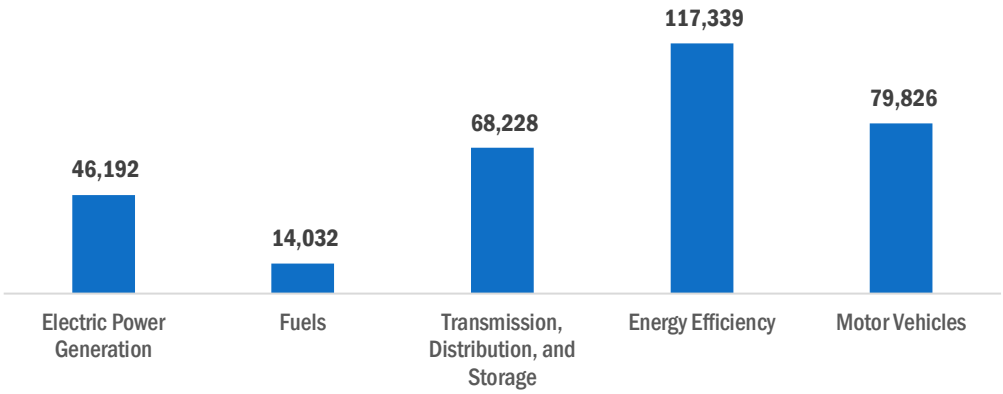
Energy and Employment – 2017

Overview

New York has a low concentration of energy employment, with 128,452 Traditional Energy workers statewide (representing 3.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 46,192 are in Electric Power Generation, 14,032 are in Fuels, and 68,228 are in Transmission, Distribution, and Storage. The Traditional Energy sector in New York is 1.4 percent of total state employment (compared to 2.3 percent of national employment). New York has an additional 117,339 jobs in Energy Efficiency (5.2 percent of all U.S. Energy Efficiency jobs) and 79,826 jobs in Motor Vehicles (3.2 percent of all U.S. Motor Vehicle jobs).

Figure NY-1.

Employment by Major Energy Technology Application

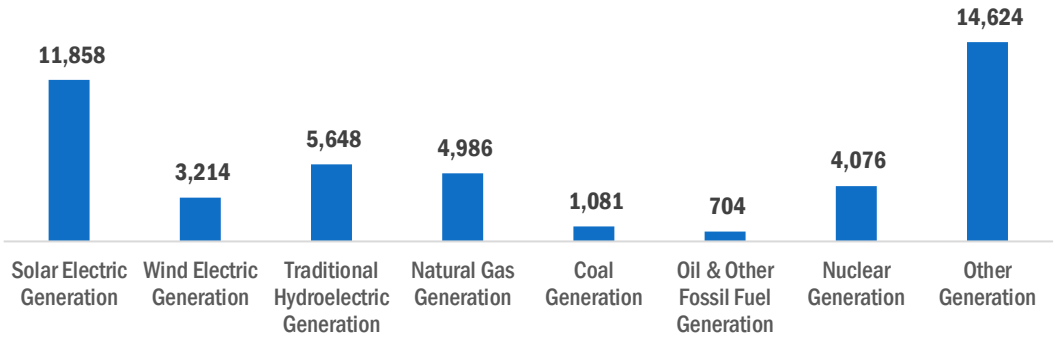


Breakdown by Technology Applications

Electric Power Generation

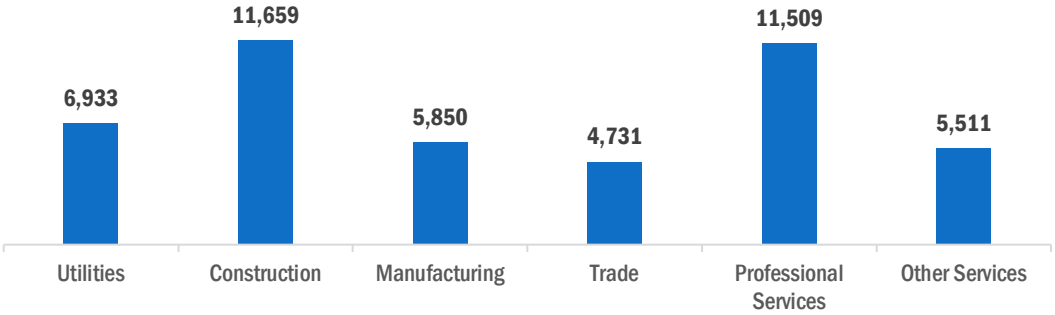
Electric Power Generation employs 46,192 workers in New York, 5.2 percent of the national total. Other generation makes up the largest segment of employment related to Electric Power Generation, with 14,624 jobs, followed by solar at 11,858 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 25.2 percent of jobs. Professional and business services are next with 24.9 percent.

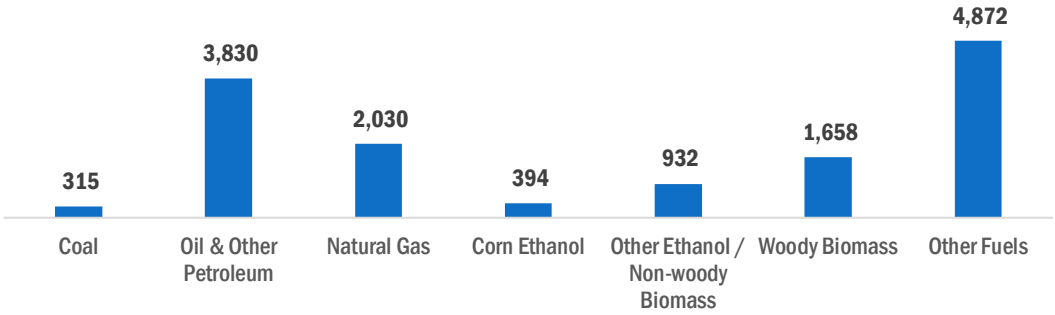
Figure NY-3.
Electric Power Generation Employment by Industry Sector



Fuels

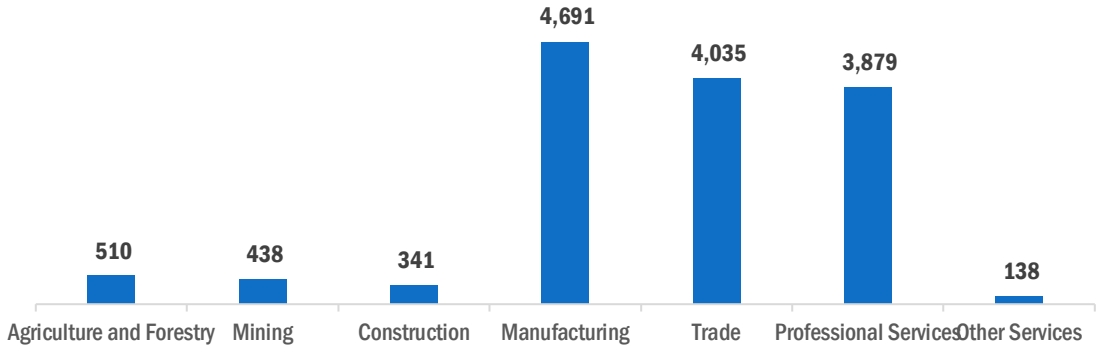
Fuels account for 14,032 jobs in New York, 1.3 percent of the national total. Other fuels represent the largest segment of Fuels employment, with 4,872 jobs.

Figure NY-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 33.4 percent of Fuels jobs in New York.

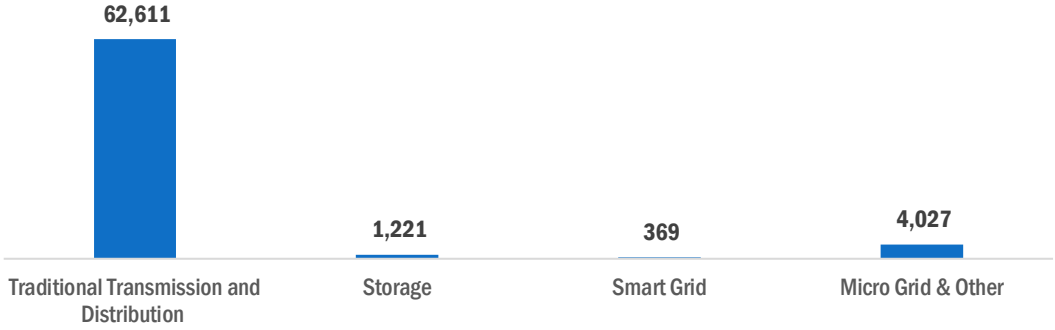
Figure NY-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

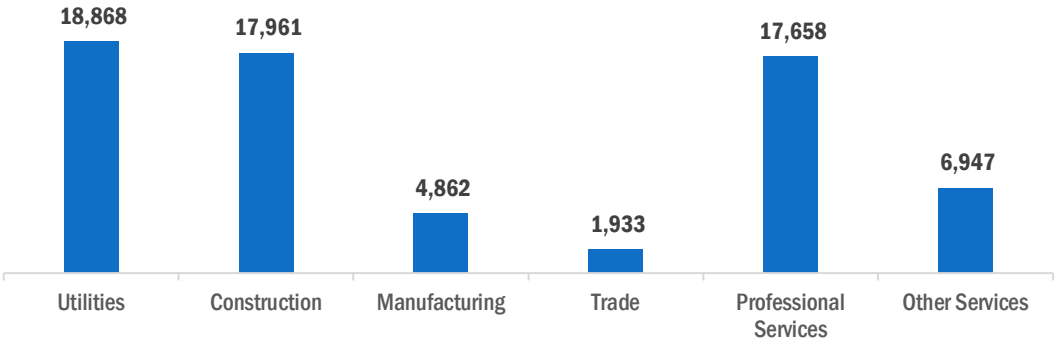
Transmission, Distribution, and Storage employs 68,228 workers in New York, 5.1 percent of the national total.

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



Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in New York, with 27.7 percent of such jobs statewide.

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



Energy Efficiency

The 117,339 Energy Efficiency jobs in New York represent 5.2 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

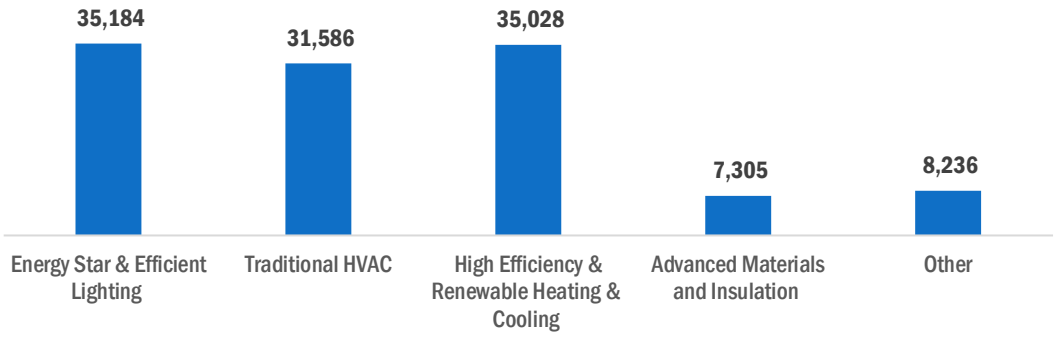
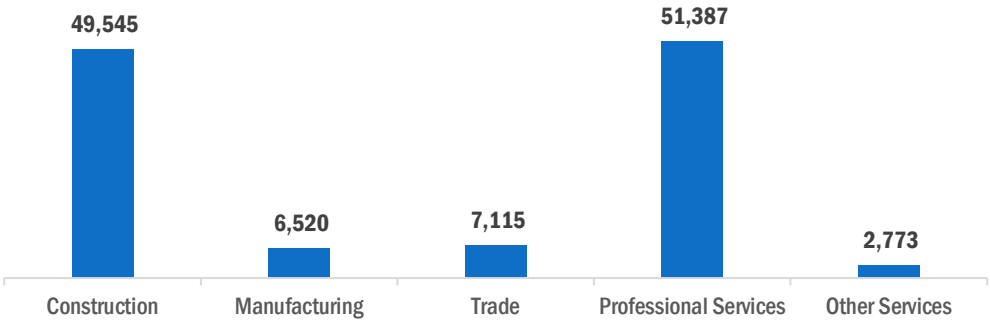


Figure NY-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 79,826 jobs in New York. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

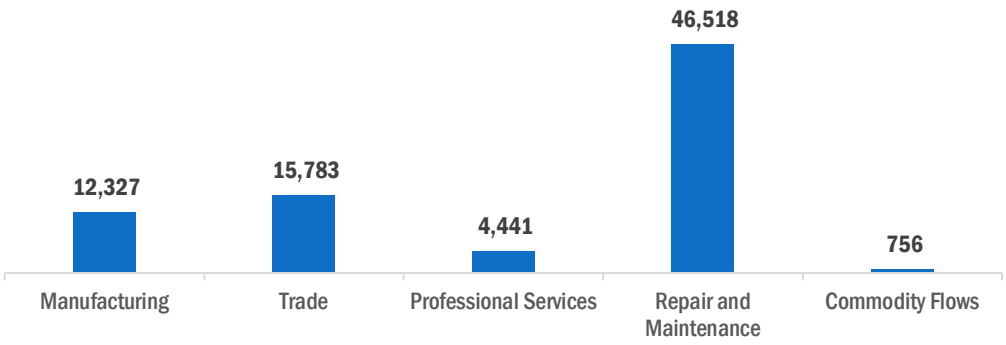


Figure NY-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Hiring Difficulty

Over the last year, 52.5 percent of energy-related employers in New York hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table NY-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	26.1	53.5	18.3	2.1
Transmission, Distribution and Storage	28.6	46.0	23.8	1.6
Energy Efficiency	26.8	45.5	25.4	2.3
Fuels	15.2	51.5	27.3	6.1
Motor Vehicles	31.4	39.2	29.4	-

North Carolina

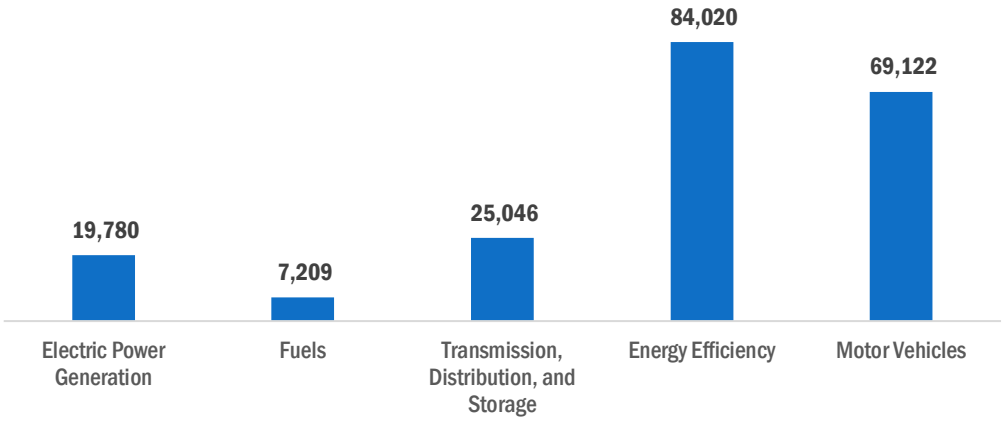
Energy and Employment – 2017

Overview

North Carolina has a low concentration of energy employment, with 52,034 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 19,780 are in Electric Power Generation, 7,209 are in Fuels, and 25,046 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 84,020 jobs in Energy Efficiency (3.7 percent of all U.S. Energy Efficiency jobs) and 69,122 jobs in Motor Vehicles (2.8 percent of all U.S. Motor Vehicle jobs).

Figure NC-1.

Employment by Major Energy Technology Application

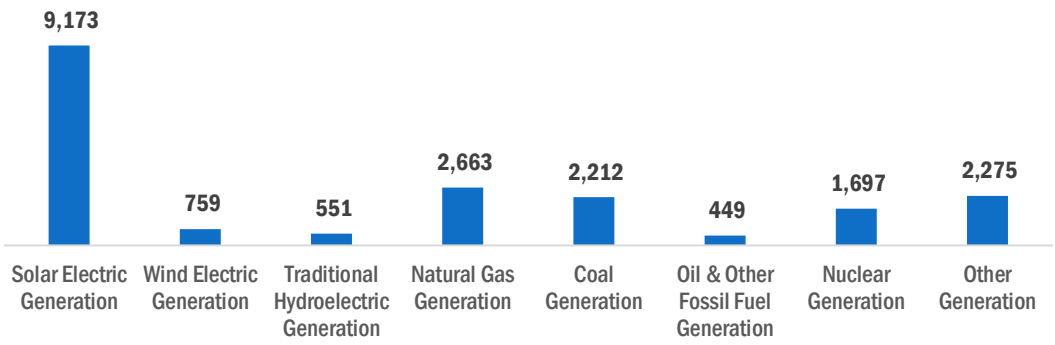


Breakdown by Technology Applications

Electric Power Generation

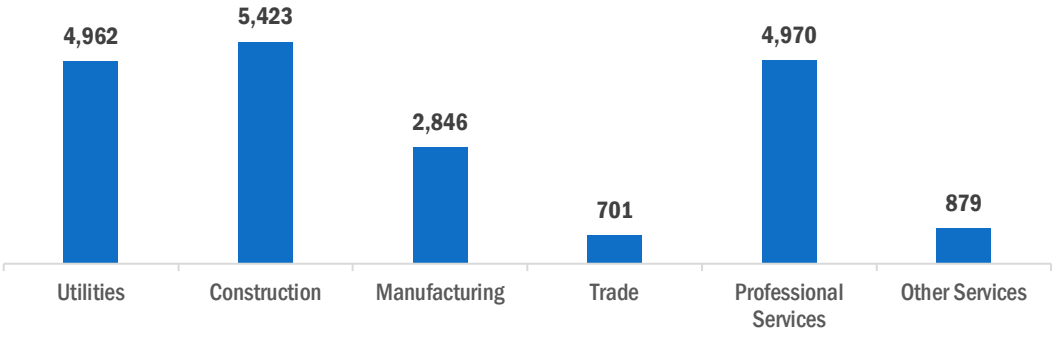
Electric Power Generation employs 19,780 workers in North Carolina, 2.2 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 9,173 jobs, followed by traditional fossil fuel generation at 5,324 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 27.4 percent of jobs. Professional and business services are next with 25.1 percent.

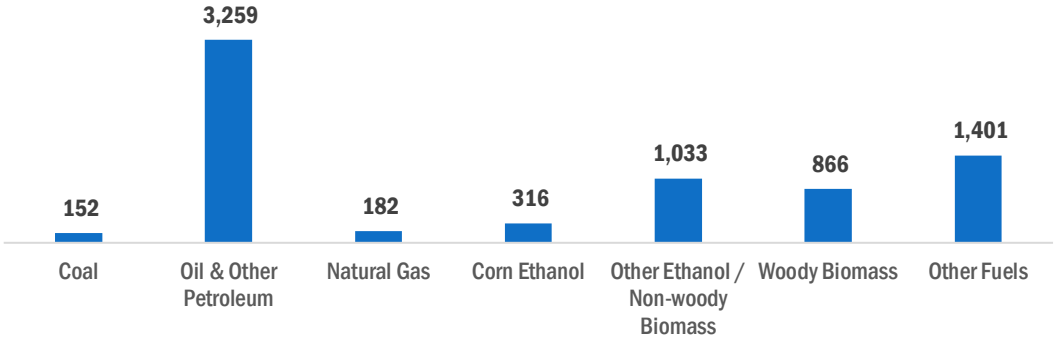
Figure NC-3.
Electric Power Generation Employment by Industry Sector



Fuels

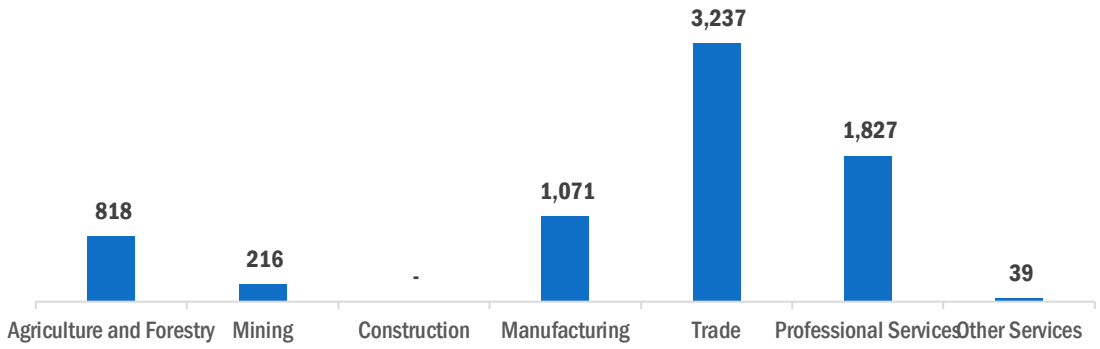
Fuels account for 7,209 jobs in North Carolina, 0.7 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,259 jobs.

Figure NC-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 44.9 percent of Fuels jobs in North Carolina.

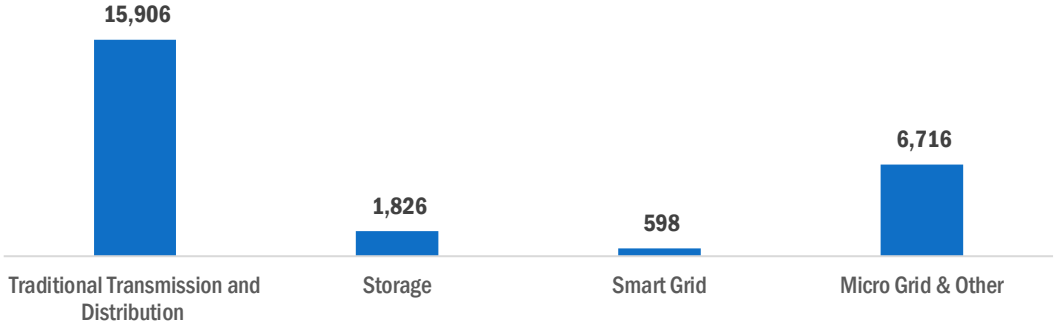
Figure NC-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

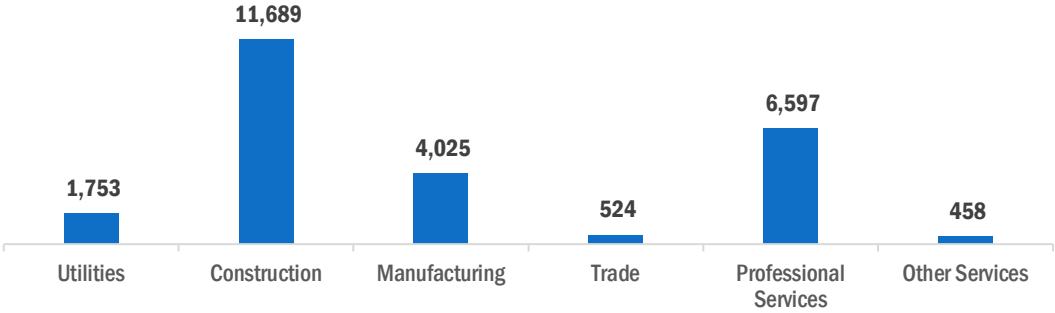
Transmission, Distribution, and Storage employs 25,046 workers in North Carolina, 1.9 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in North Carolina, with 46.7 percent of such jobs statewide.

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



Energy Efficiency

The 84,020 Energy Efficiency jobs in North Carolina represent 3.7 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

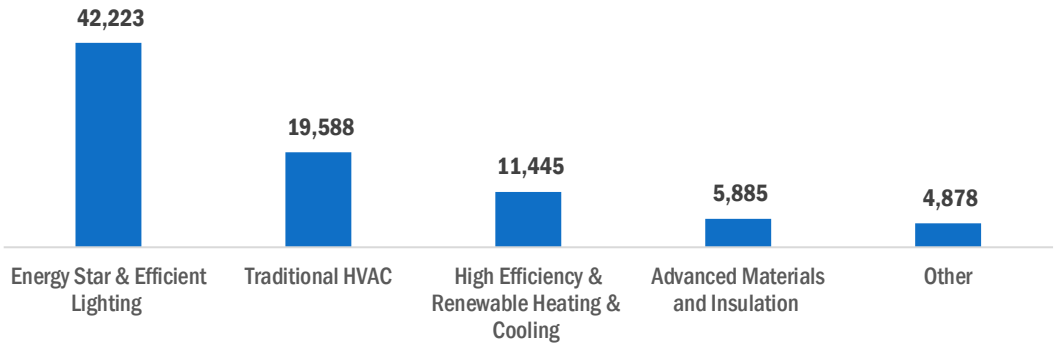
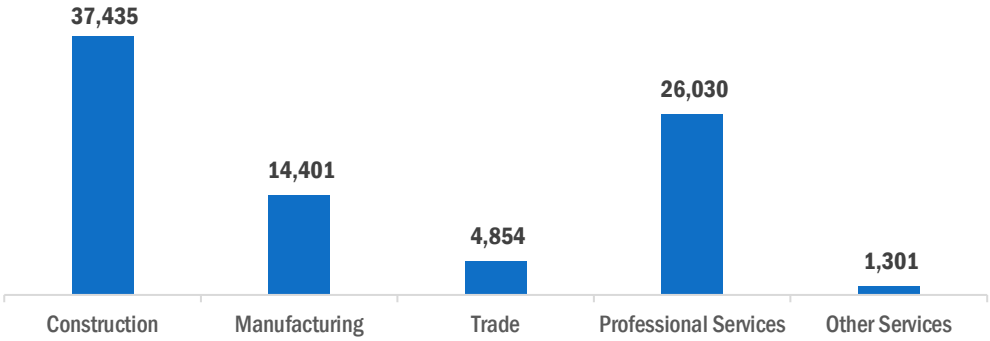


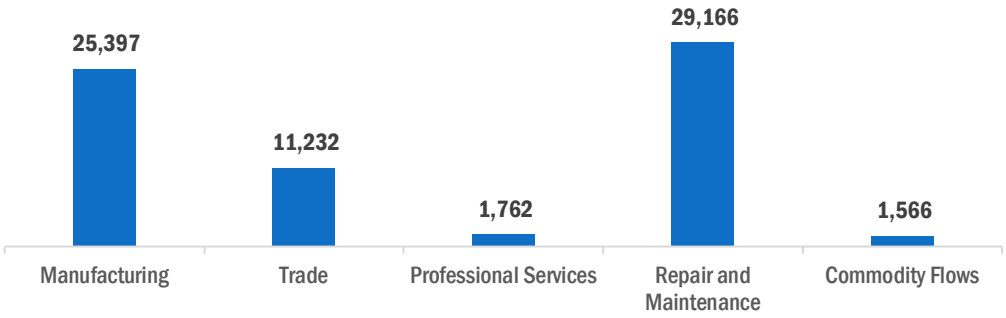
Figure NC-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 69,122 jobs in North Carolina. 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

Hiring Difficulty

Over the last year, 53.5 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-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	16.2	58.1	23.0	2.7
Transmission, Distribution and Storage	20.7	44.8	31.0	3.4
Energy Efficiency	38.9	42.5	18.6	-
Fuels	17.6	47.1	35.3	-
Motor Vehicles	30.0	40.0	30.0	-

North Dakota

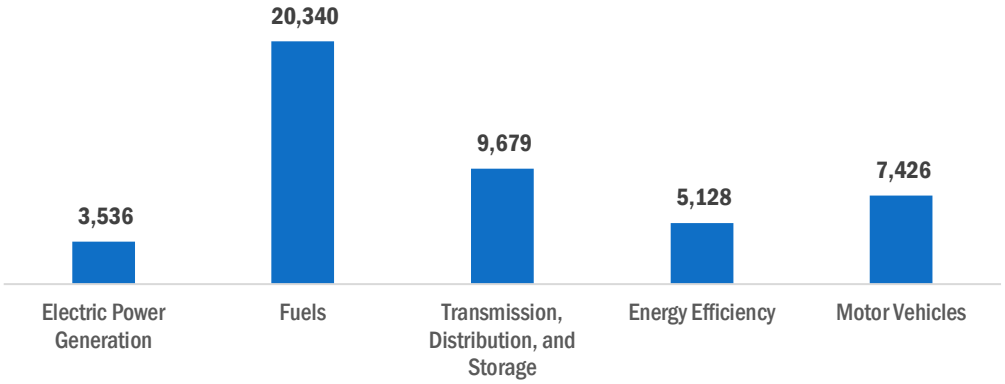
Energy and Employment – 2017

Overview

North Dakota has a high concentration of energy employment, with 33,555 Traditional Energy workers statewide (representing 1.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,536 are in Electric Power Generation, 20,340 are in Fuels, and 9,679 are in Transmission, Distribution, and Storage. The Traditional Energy sector in North Dakota is 7.9 percent of total state employment (compared to 2.3 percent of national employment). North Dakota has an additional 5,128 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 7,426 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure ND-1.

Employment by Major Energy Technology Application

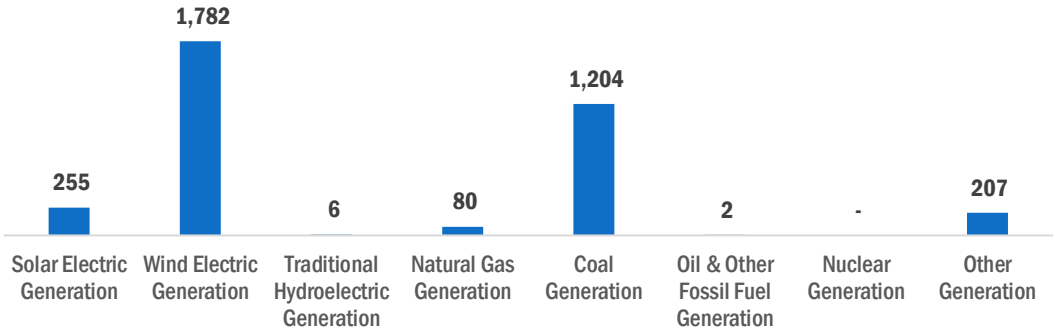


Breakdown by Technology Applications

Electric Power Generation

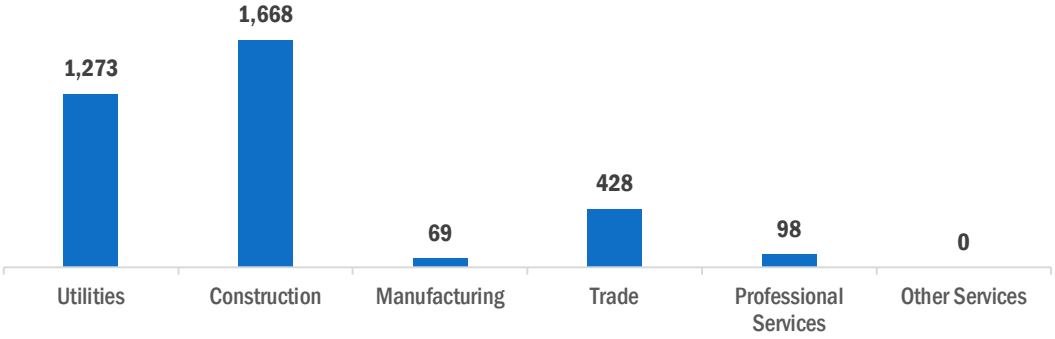
Electric Power Generation employs 3,536 workers in North Dakota, 0.4 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 1,782 jobs, followed by traditional fossil fuel generation at 1,286 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 47.2 percent of jobs. Utilities are next with 36.0 percent.

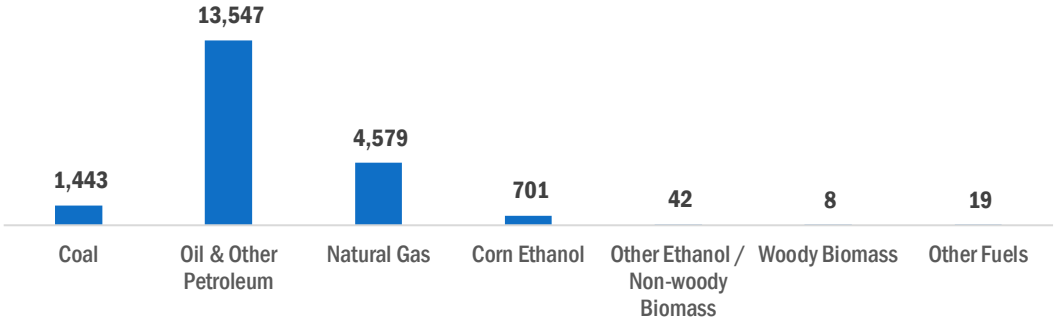
Figure ND-3.
Electric Power Generation Employment by Industry Sector



Fuels

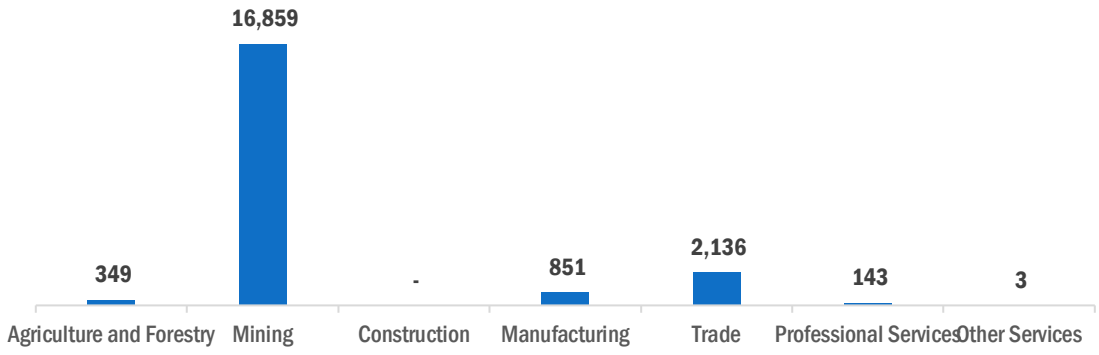
Fuels account for 20,340 jobs in North Dakota, 1.9 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 13,547 jobs.

Figure ND-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 82.9 percent of Fuels jobs in North Dakota.

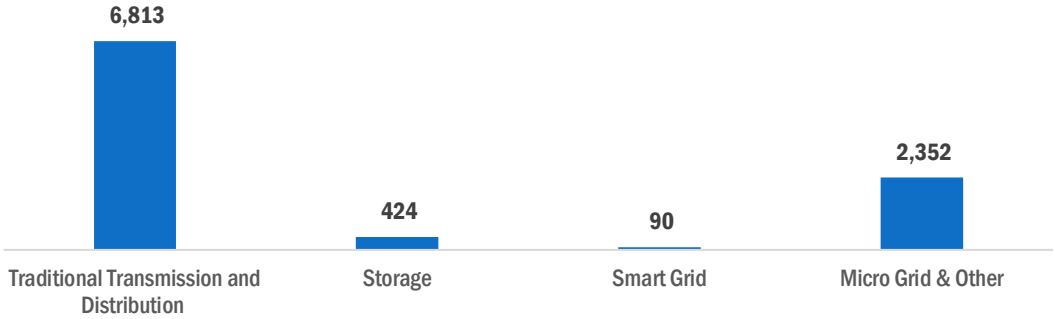
Figure ND-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

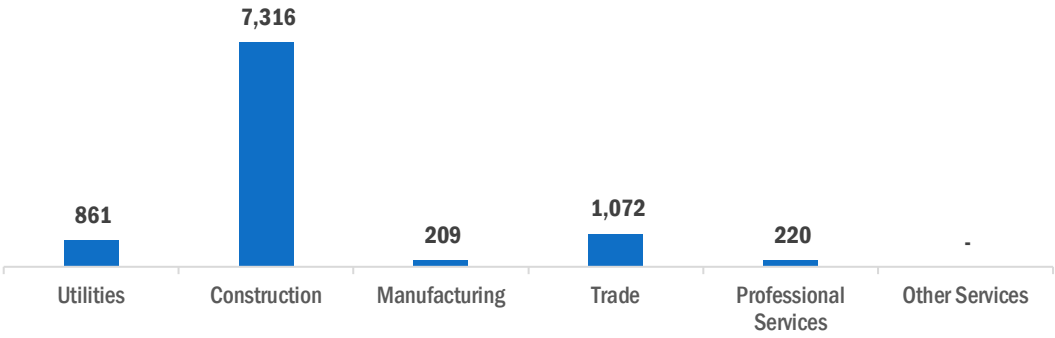
Transmission, Distribution, and Storage employs 9,679 workers in North Dakota, 0.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in North Dakota, with 75.6 percent of such jobs statewide.

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



Energy Efficiency

The 5,128 Energy Efficiency jobs in North Dakota represent 0.2 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

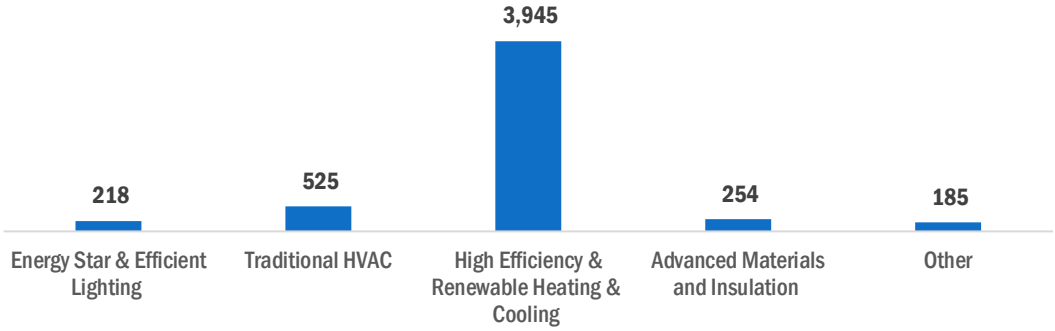
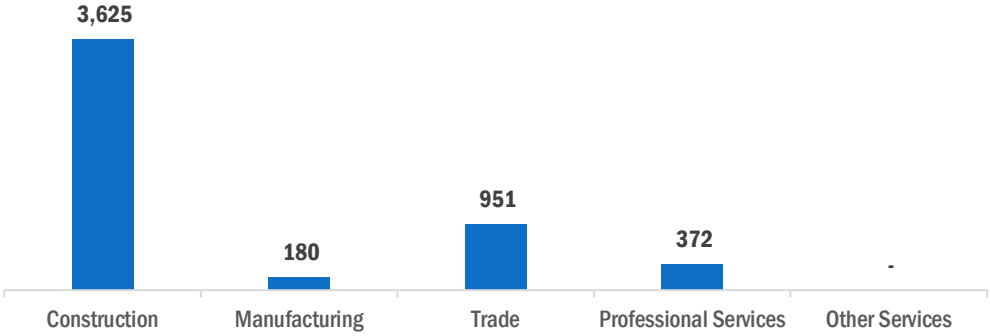


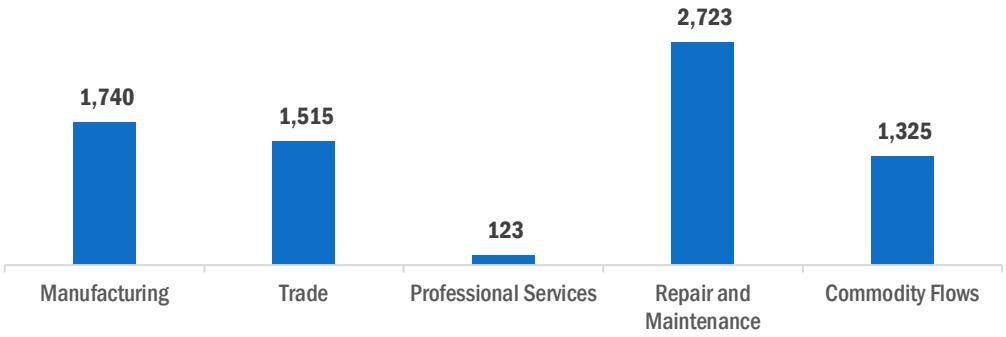
Figure ND-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 7,426 jobs in North Dakota. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure ND-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 41.7 percent of energy-related employers in North Dakota hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table ND-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	25.0	75.0	-	-
Transmission, Distribution and Storage	25.0	50.0	25.0	-
Energy Efficiency	62.5	-	37.5	-
Fuels	16.7	44.4	38.9	-
Motor Vehicles	12.5	50.0	37.5	-

Ohio

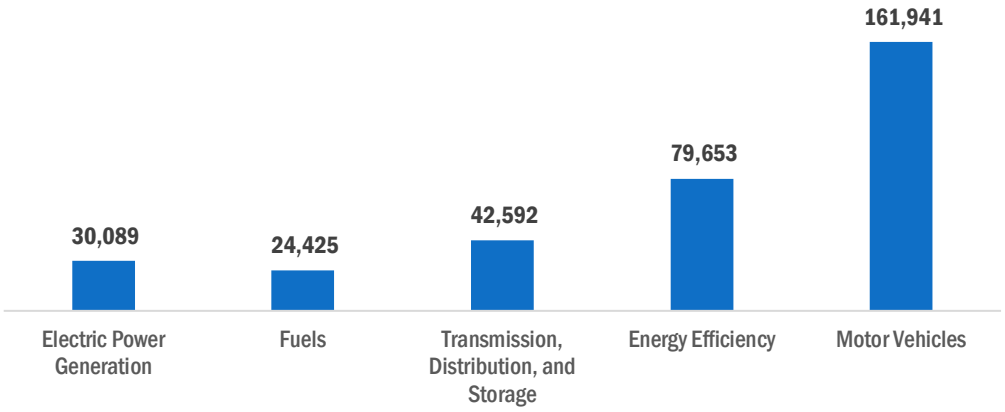
Energy and Employment – 2017

Overview

Ohio has a low concentration of energy employment, with 97,106 Traditional Energy workers statewide (representing 3.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 30,089 are in Electric Power Generation, 24,425 are in Fuels, and 42,592 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Ohio is 1.8 percent of total state employment (compared to 2.3 percent of national employment). Ohio has an additional 79,653 jobs in Energy Efficiency (3.5 percent of all U.S. Energy Efficiency jobs) and 161,941 jobs in Motor Vehicles (6.6 percent of all U.S. Motor Vehicle jobs).

Figure OH-1.

Employment by Major Energy Technology Application

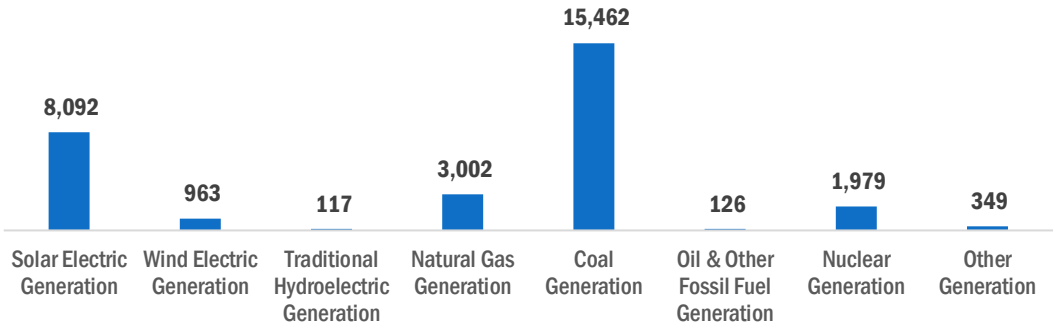


Breakdown by Technology Applications

Electric Power Generation

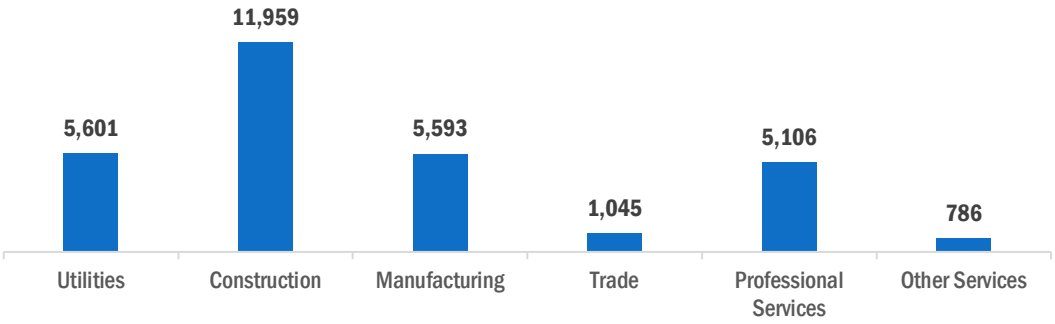
Electric Power Generation employs 30,089 workers in Ohio, 3.4 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 18,590 jobs, followed by solar at 8,092 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 39.7 percent of jobs. Utilities are next with 18.6 percent.

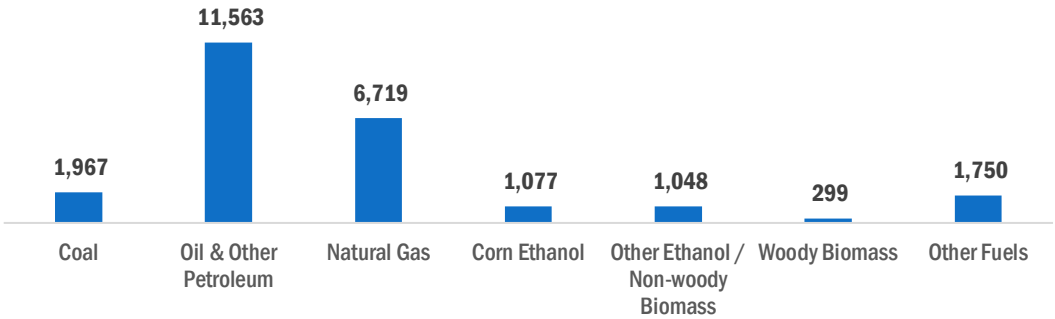
Figure OH-3.
Electric Power Generation Employment by Industry Sector



Fuels

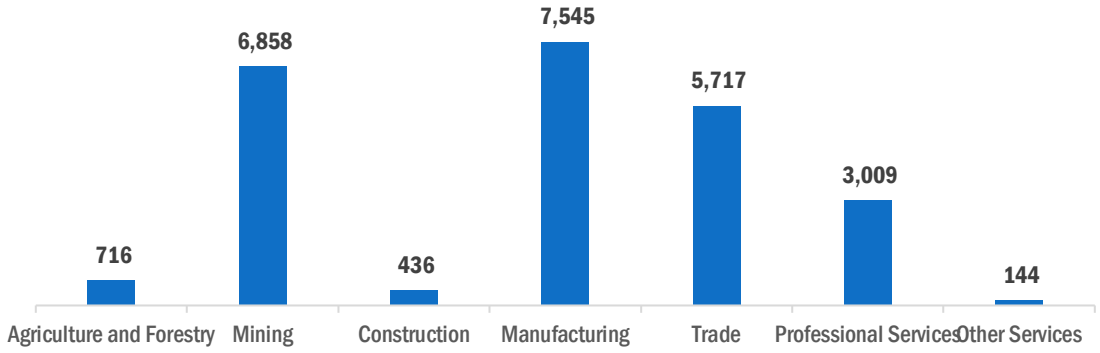
Fuels account for 24,425 jobs in Ohio, 2.3 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 11,563 jobs.

Figure OH-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 30.9 percent of Fuels jobs in Ohio.

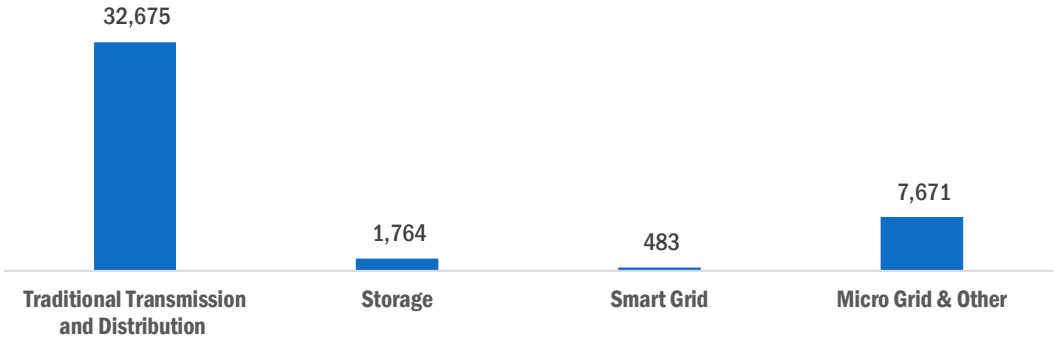
Figure OH-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

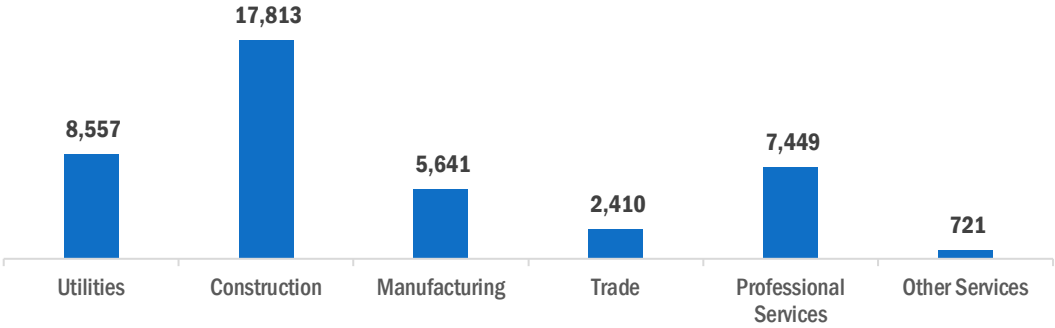
Transmission, Distribution, and Storage employs 42,592 workers in Ohio, 3.2 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Ohio, with 41.8 percent of such jobs statewide.

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



Energy Efficiency

The 79,653 Energy Efficiency jobs in Ohio represent 3.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

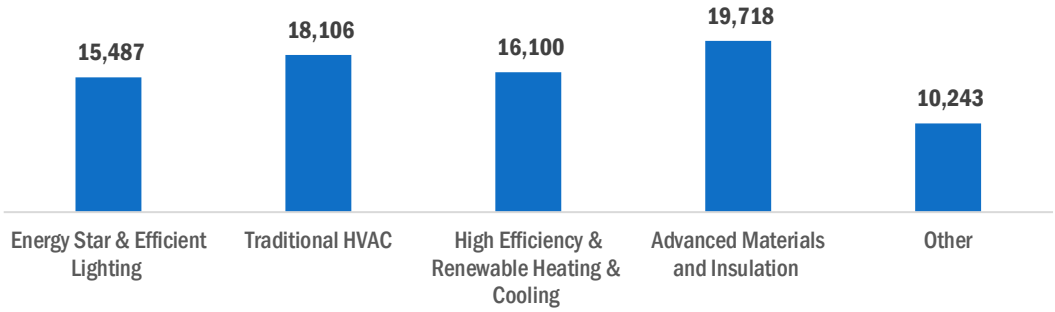
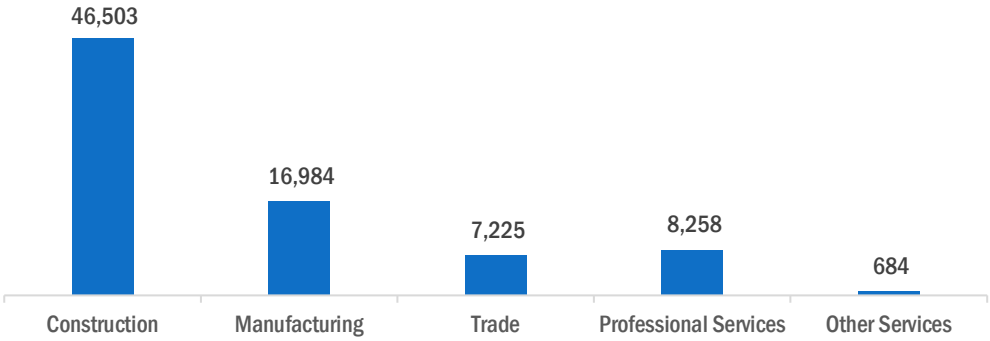


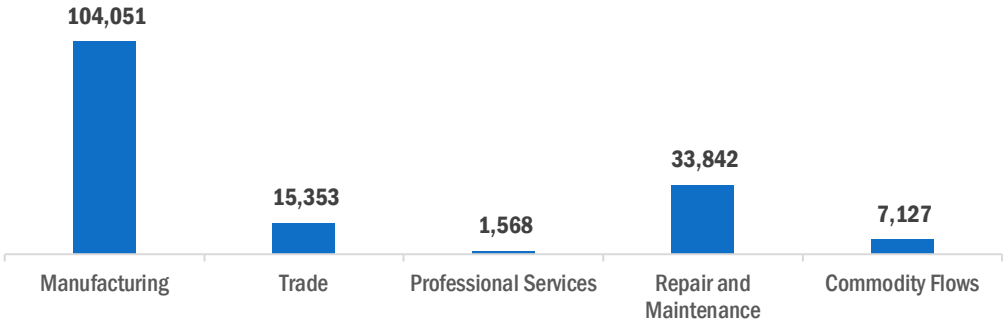
Figure OH-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 161,941 jobs in Ohio. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure OH-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 71.7 percent of energy-related employers in Ohio hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table OH-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	34.4	46.9	18.8	-
Transmission, Distribution and Storage	21.1	63.2	15.8	-
Energy Efficiency	31.0	39.4	29.6	-
Fuels	22.2	33.3	40.7	3.7
Motor Vehicles	41.9	44.2	14.0	-

Oklahoma

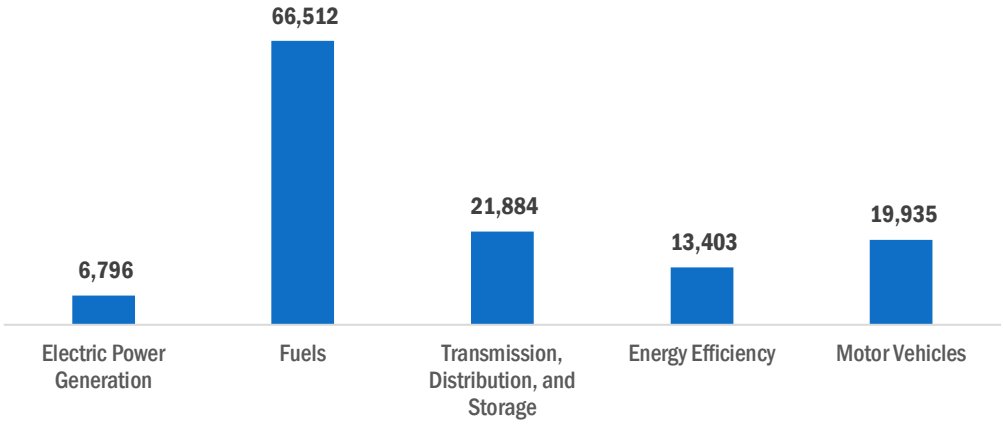
Energy and Employment – 2017

Overview

Oklahoma has a high concentration of energy employment, with 95,192 Traditional Energy workers statewide (representing 2.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 6,796 are in Electric Power Generation, 66,512 are in Fuels, and 21,884 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Oklahoma is 6.0 percent of total state employment (compared to 2.3 percent of national employment). Oklahoma has an additional 13,403 jobs in Energy Efficiency (0.6 percent of all U.S. Energy Efficiency jobs) and 19,935 jobs in Motor Vehicles (0.8 percent of all U.S. Motor Vehicle jobs).

Figure OK-1.

Employment by Major Energy Technology Application

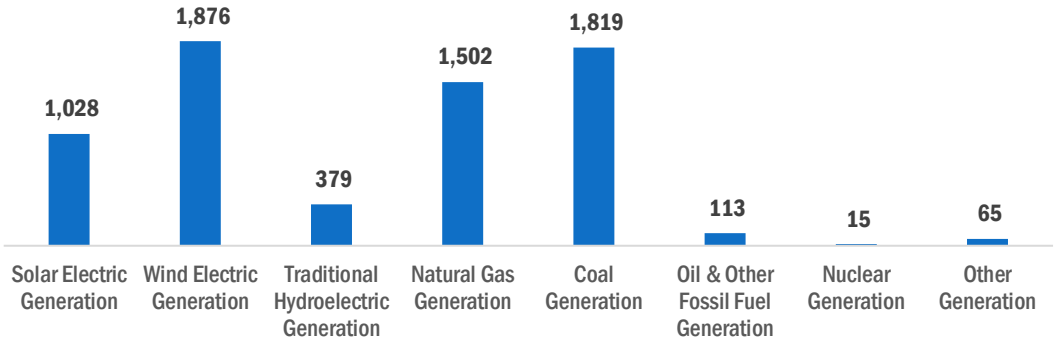


Breakdown by Technology Applications

Electric Power Generation

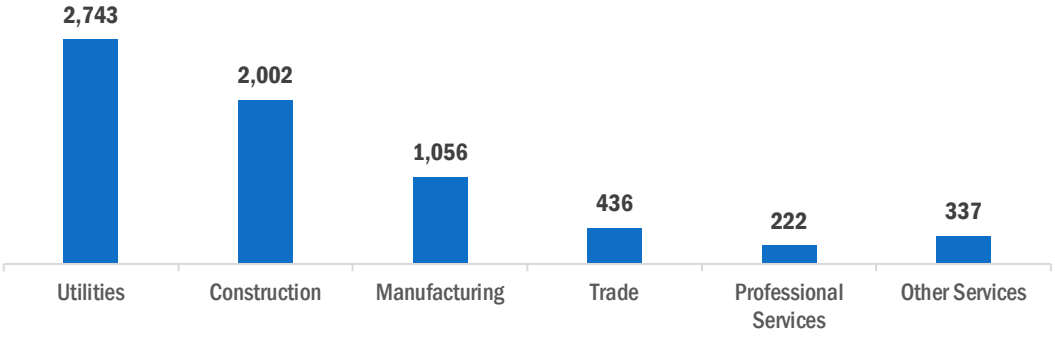
Electric Power Generation employs 6,796 workers in Oklahoma, 0.8 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 3,433 jobs, followed by wind at 1,876 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 40.4 percent of jobs. Construction is next with 29.5 percent.

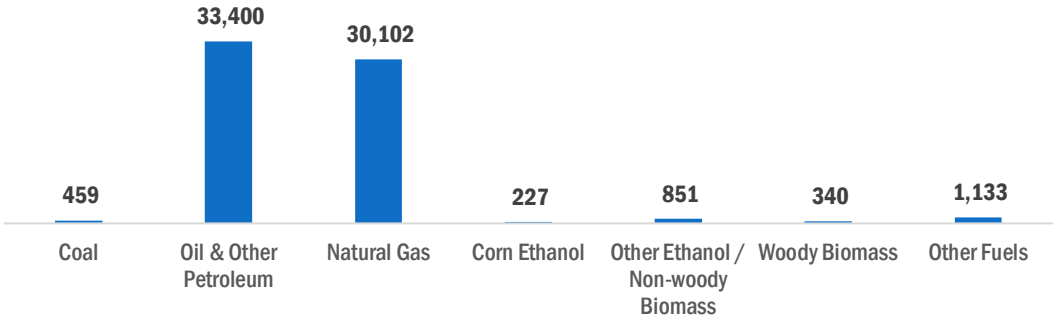
Figure OK-3.
Electric Power Generation Employment by Industry Sector



Fuels

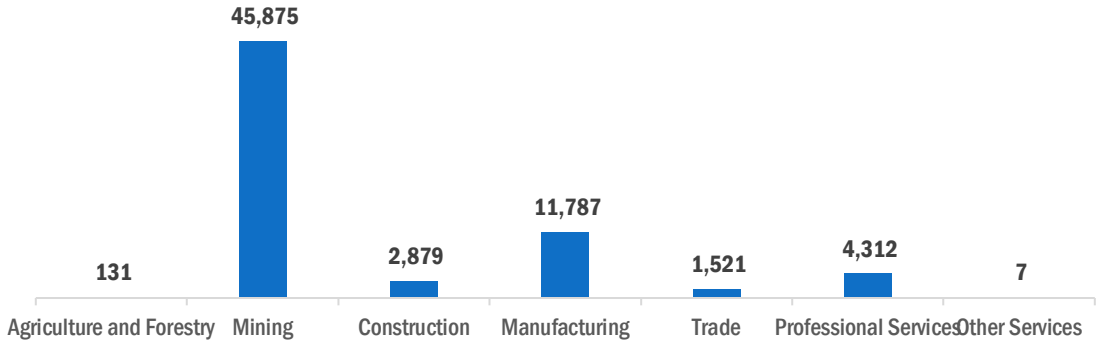
Fuels account for 66,512 jobs in Oklahoma, 6.2 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 33,400 jobs.

Figure OK-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 69.0 percent of Fuels jobs in Oklahoma.

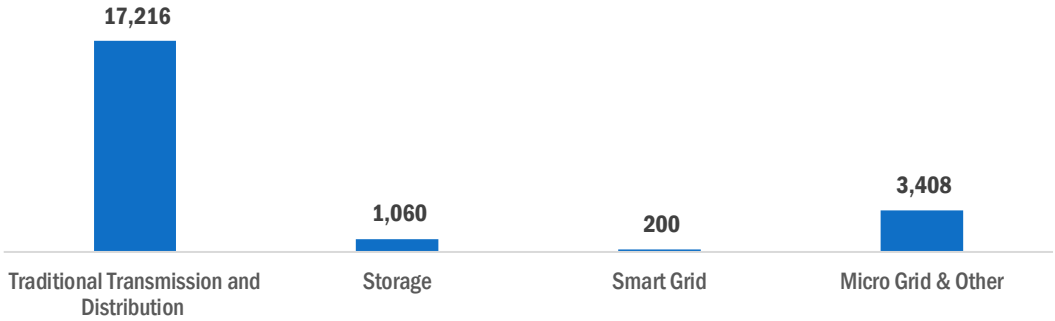
Figure OK-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

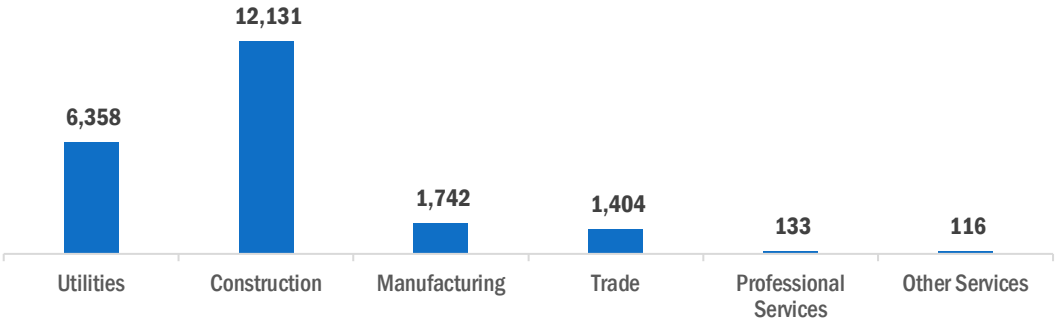
Transmission, Distribution, and Storage employs 21,884 workers in Oklahoma, 1.6 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Oklahoma, with 55.4 percent of such jobs statewide.

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



Energy Efficiency

The 13,403 Energy Efficiency jobs in Oklahoma represent 0.6 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

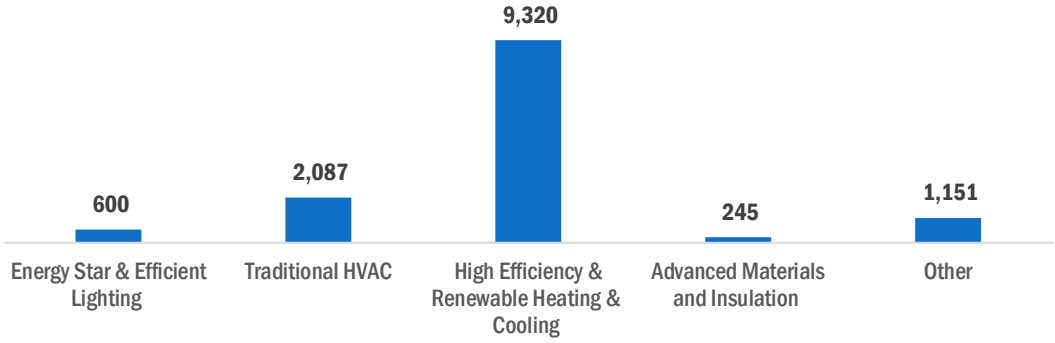
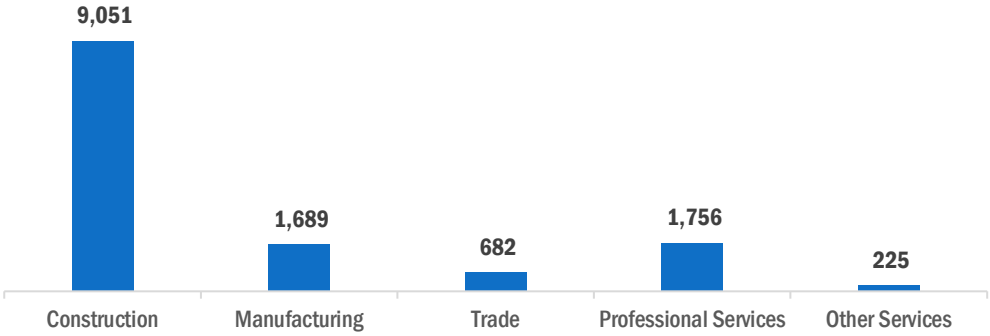


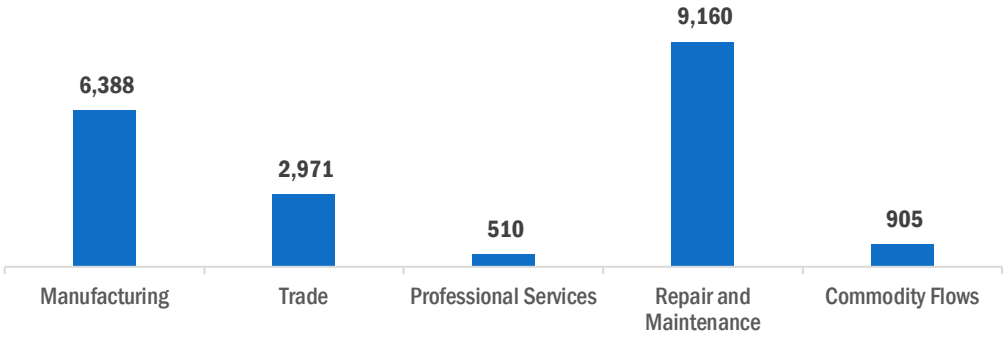
Figure OK-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 19,935 jobs in Oklahoma. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure OK-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 51.6 percent of energy-related employers in Oklahoma hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table OK-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	-	44.4	55.6	-
Transmission, Distribution and Storage	-	100.0	-	-
Energy Efficiency	46.2	38.5	15.4	-
Fuels	17.8	37.8	42.2	2.2
Motor Vehicles	45.5	36.4	18.2	-

Oregon

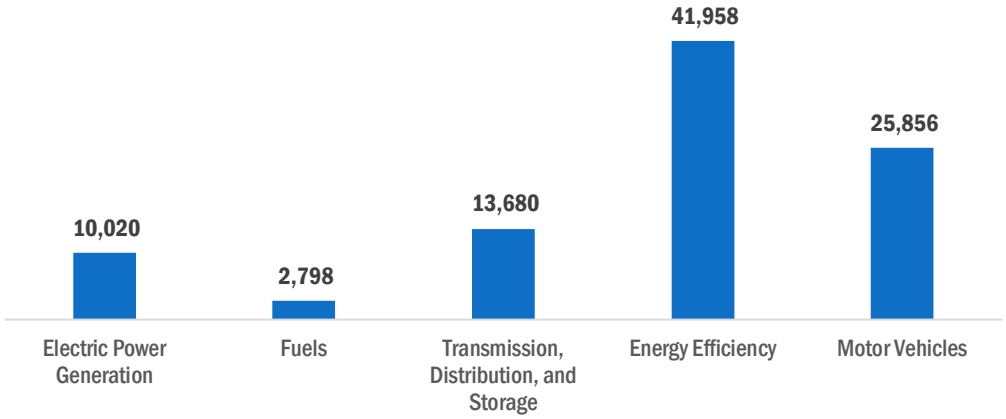
Energy and Employment – 2017

Overview

Oregon has a low concentration of energy employment, with 26,498 Traditional Energy workers statewide (representing 0.8 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 10,020 are in Electric Power Generation, 2,798 are in Fuels, and 13,680 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Oregon is 1.4 percent of total state employment (compared to 2.3 percent of national employment). Oregon has an additional 41,958 jobs in Energy Efficiency (1.9 percent of all U.S. Energy Efficiency jobs) and 25,856 jobs in Motor Vehicles (1.0 percent of all U.S. Motor Vehicle jobs).

Figure OR-1.

Employment by Major Energy Technology Application

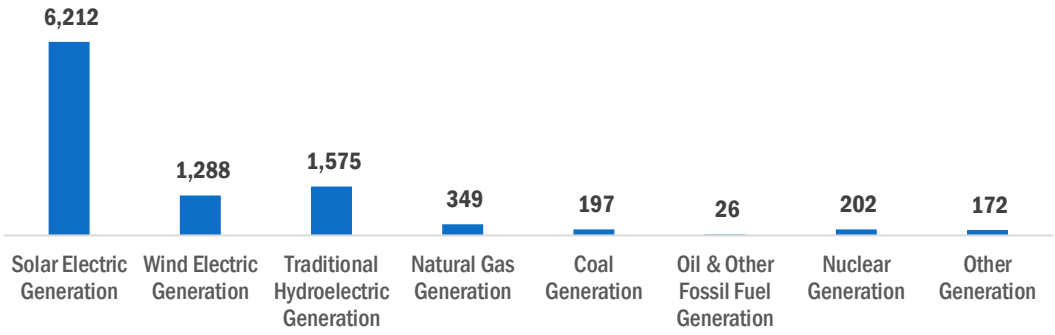


Breakdown by Technology Applications

Electric Power Generation

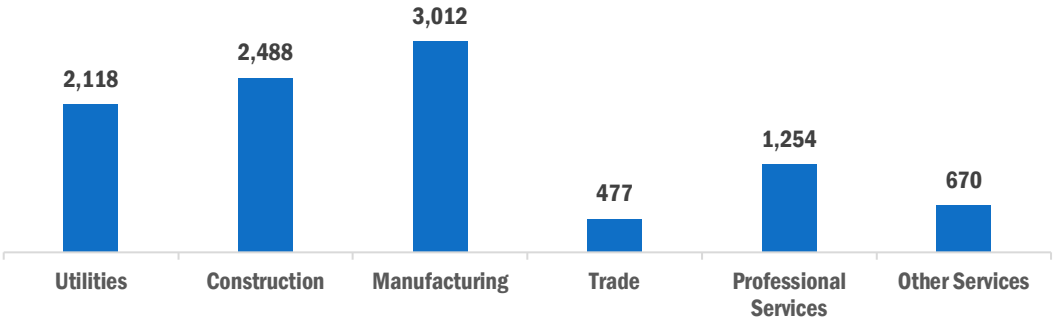
Electric Power Generation employs 10,020 workers in Oregon, 1.1 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 6,212 jobs, followed by traditional hydroelectric generation at 1,575 jobs.

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



Manufacturing is the largest industry sector in Electric Power Generation, with 30.1 percent of jobs. Construction is next with 24.8 percent.

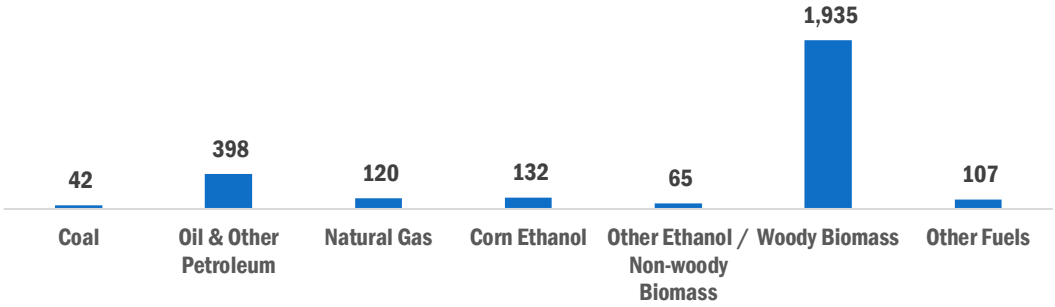
Figure OR-3.
Electric Power Generation Employment by Industry Sector



Fuels

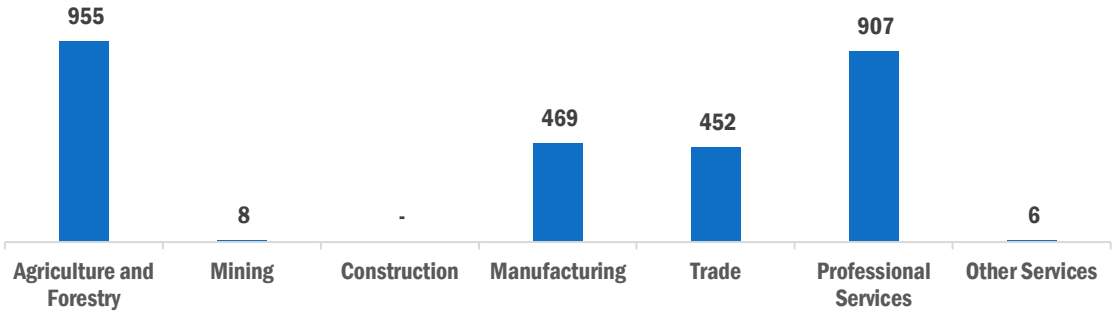
Fuels account for 2,798 jobs in Oregon, 0.3 percent of the national total. Woody biomass represents the largest segment of Fuels employment, with 1,935 jobs.

Figure OR-4.
Fuels Employment by Detailed Technology Application



Agriculture jobs represent 34.1 percent of Fuels jobs in Oregon.

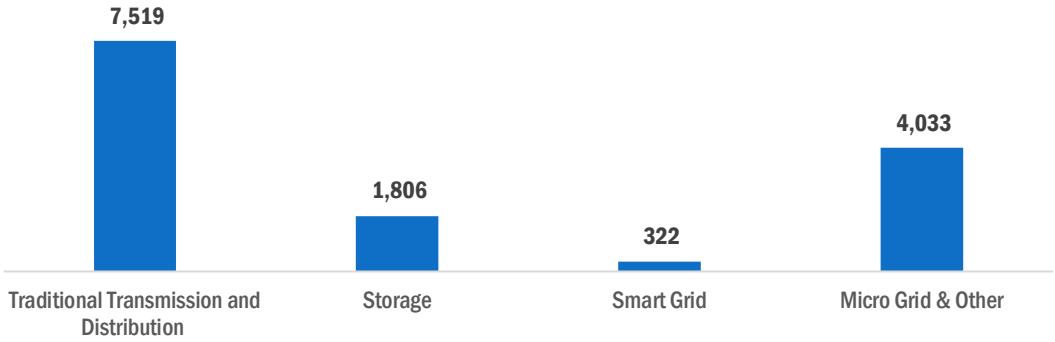
Figure OR-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

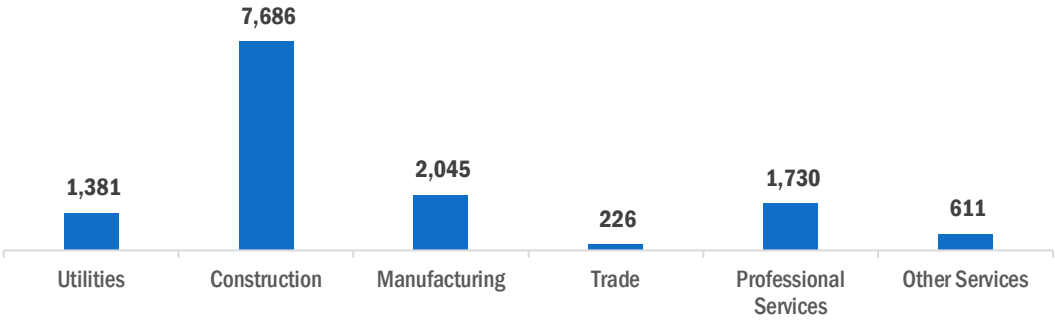
Transmission, Distribution, and Storage employs 13,680 workers in Oregon, 1.0 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Oregon, with 56.2 percent of such jobs statewide.

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



Energy Efficiency

The 41,958 Energy Efficiency jobs in Oregon represent 1.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

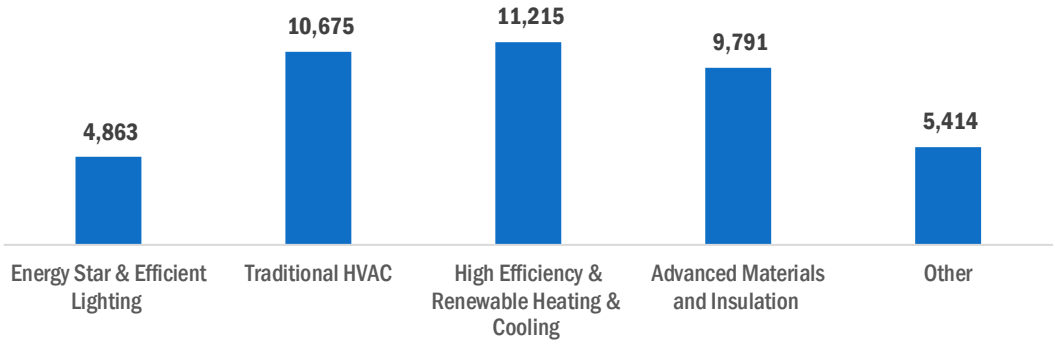
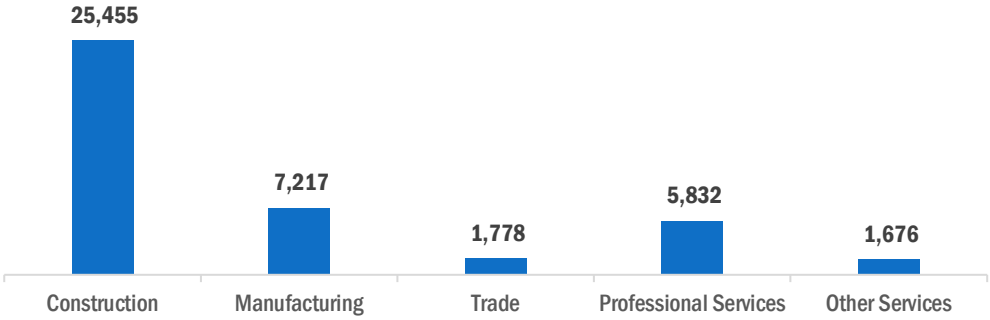


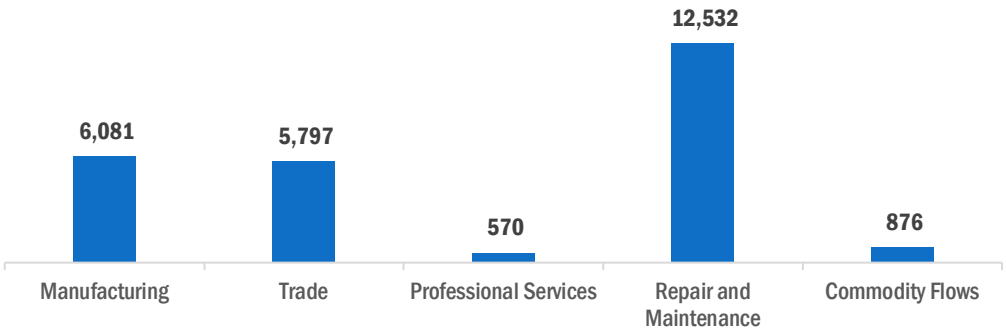
Figure OR-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 25,856 jobs in Oregon. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure OR-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 64.3 percent of energy-related employers in Oregon hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table OR-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	29.7	59.5	8.1	2.7
Transmission, Distribution and Storage	23.1	76.9	-	-
Energy Efficiency	36.8	60.5	2.6	-
Fuels	10.0	60.0	30.0	-
Motor Vehicles	46.2	46.2	7.7	-

Pennsylvania

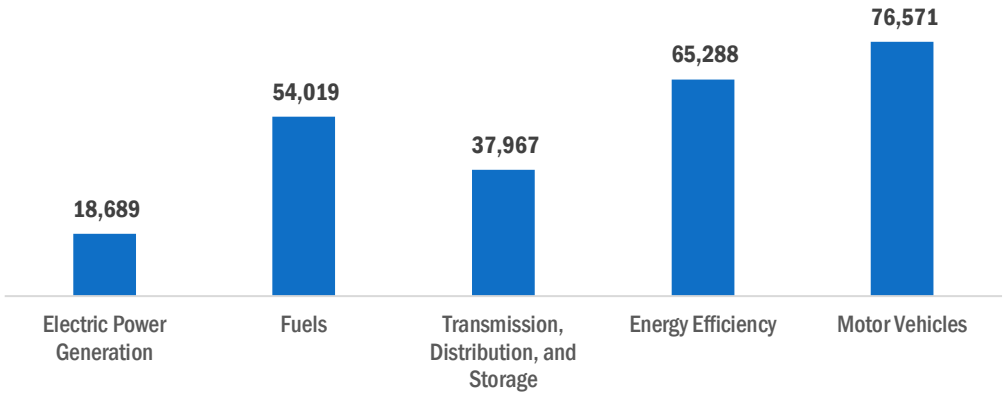
Energy and Employment – 2017

Overview

Pennsylvania has a low concentration of energy employment, with 110,675 Traditional Energy workers statewide (representing 3.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 18,689 are in Electric Power Generation, 54,019 are in Fuels, and 37,967 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Pennsylvania is 1.9 percent of total state employment (compared to 2.3 percent of national employment). Pennsylvania has an additional 65,288 jobs in Energy Efficiency (2.9 percent of all U.S. Energy Efficiency jobs) and 76,571 jobs in Motor Vehicles (3.1 percent of all U.S. Motor Vehicle jobs).

Figure PA-1.

Employment by Major Energy Technology Application

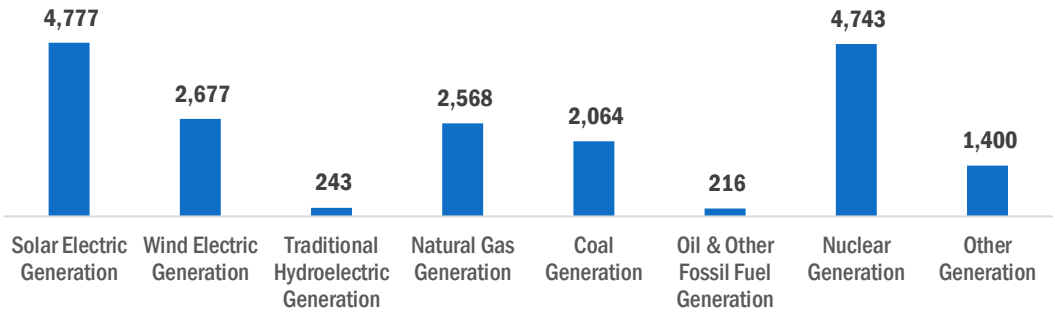


Breakdown by Technology Applications

Electric Power Generation

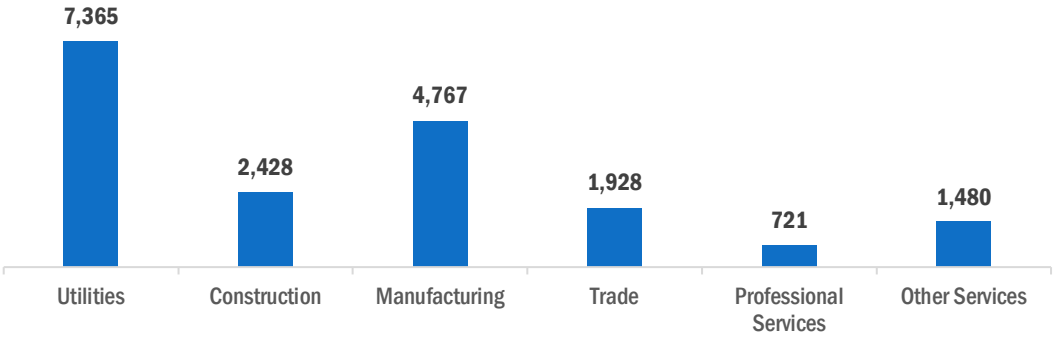
Electric Power Generation employs 18,689 workers in Pennsylvania, 2.1 percent of the national total. Tradtional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 4,849 jobs, followed by solar at 4,777 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 39.4 percent of jobs. Manufacturing is next with 25.5 percent.

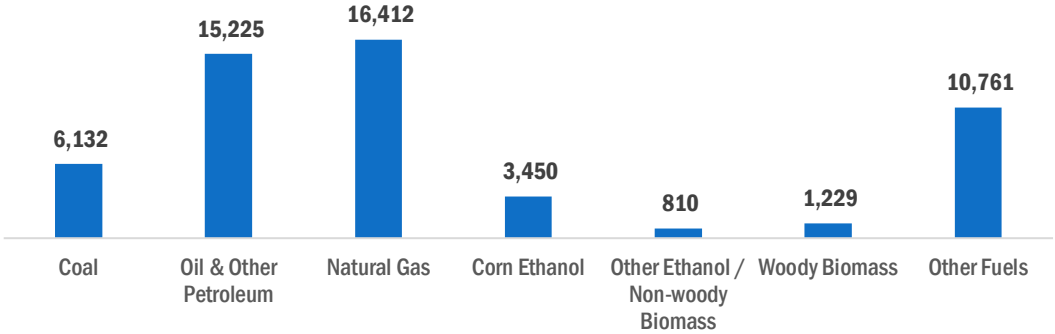
Figure PA-3.
Electric Power Generation Employment by Industry Sector



Fuels

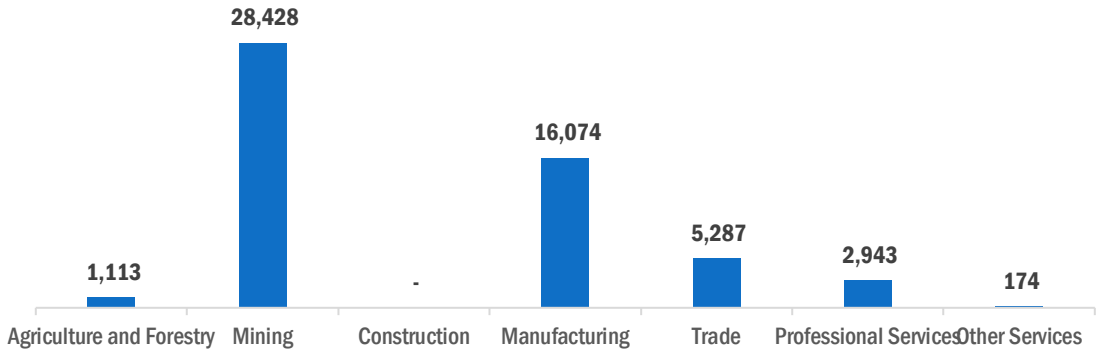
Fuels account for 54,019 jobs in Pennsylvania, 5.0 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 16,412 jobs.

Figure PA-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 52.6 percent of Fuels jobs in Pennsylvania.

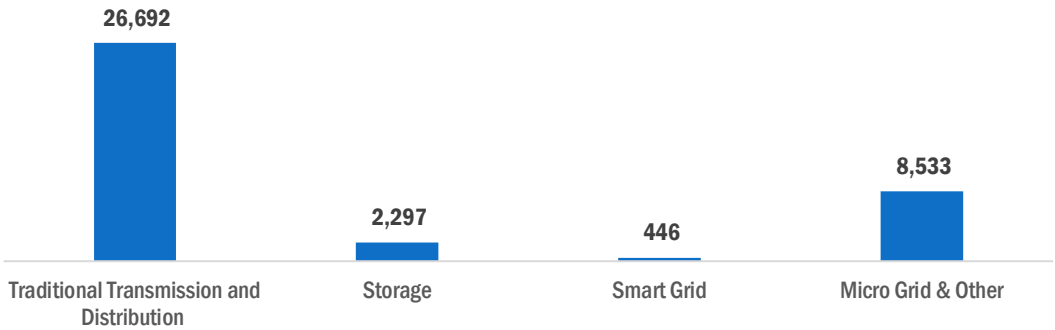
Figure PA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

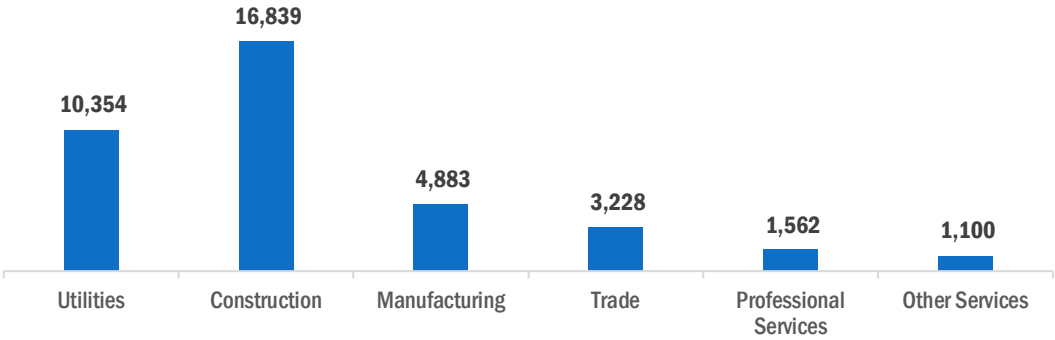
Transmission, Distribution, and Storage employs 37,967 workers in Pennsylvania, 2.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Pennsylvania, with 44.4 percent of such jobs statewide.

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



Energy Efficiency

The 65,288 Energy Efficiency jobs in Pennsylvania represent 2.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

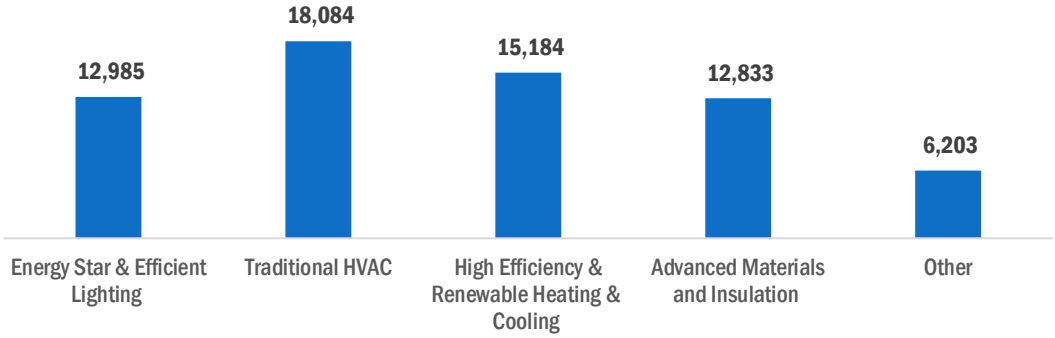
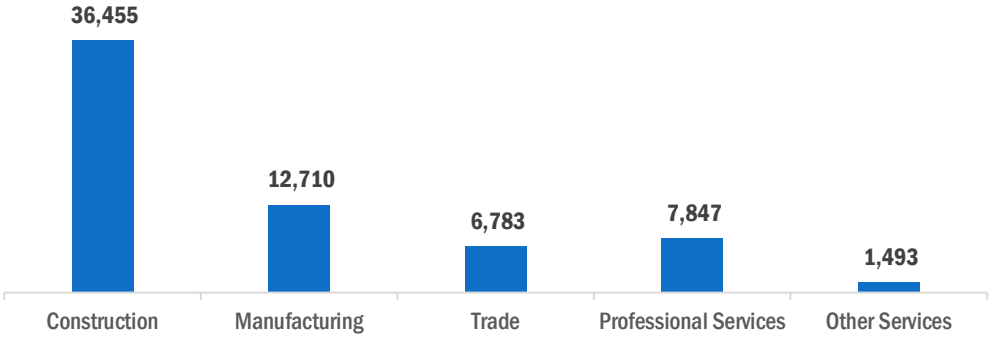


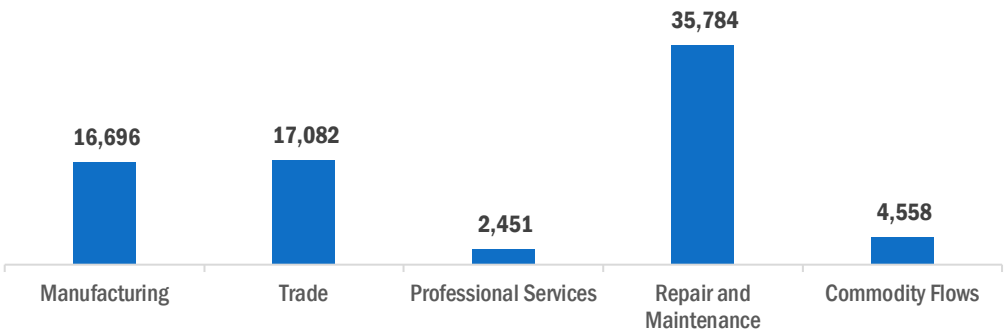
Figure PA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 76,571 jobs in Pennsylvania. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure PA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 51.2 percent of energy-related employers in Pennsylvania hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table PA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	25.6	53.8	20.5	-
Transmission, Distribution and Storage	12.5	75.0	12.5	-
Energy Efficiency	21.9	47.9	26.0	4.1
Fuels	23.1	19.2	57.7	-
Motor Vehicles	43.3	20.0	36.7	-

Rhode Island

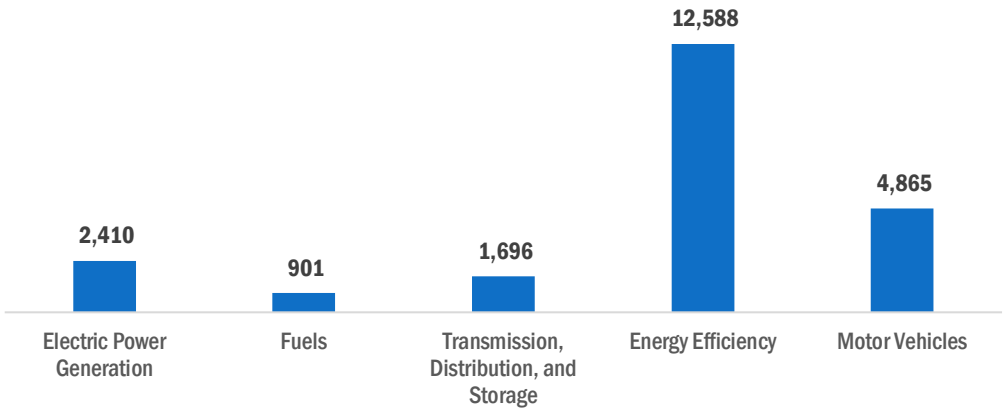
Energy and Employment – 2017

Overview

Rhode Island has a low concentration of energy employment, with 5,007 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 2,410 are in Electric Power Generation, 901 are in Fuels, and 1,696 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Rhode Island is 1.0 percent of total state employment (compared to 2.3 percent of national employment). Rhode Island has an additional 12,588 jobs in Energy Efficiency (0.6 percent of all U.S. Energy Efficiency jobs) and 4,865 jobs in Motor Vehicles (0.2 percent of all U.S. Motor Vehicle jobs).

Figure RI-1.

Employment by Major Energy Technology Application

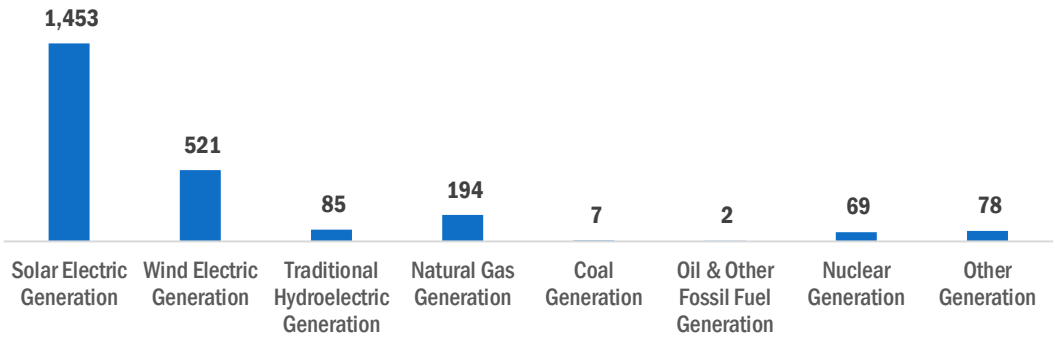


Breakdown by Technology Applications

Electric Power Generation

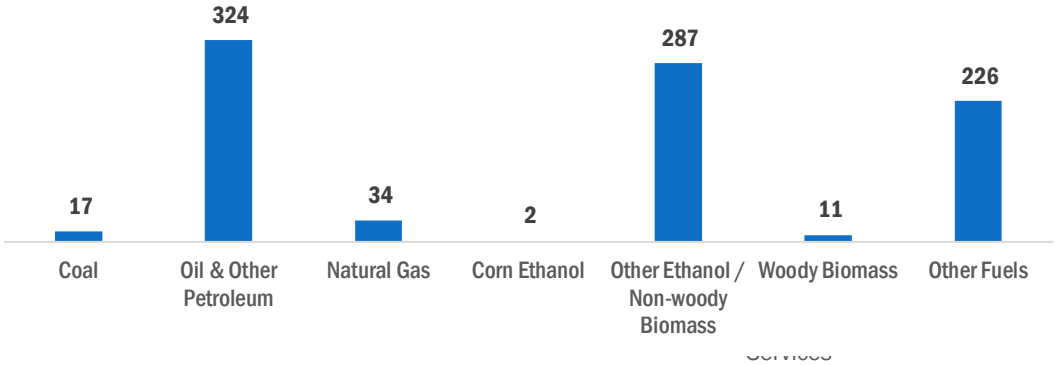
Electric Power Generation employs 2,410 workers in Rhode Island, 0.3 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 1,453 jobs, followed by wind at 521 jobs.

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



Professional and business services are the largest industry sector in Electric Power Generation, with 35.7 percent of jobs. Construction is next with 21.0 percent.

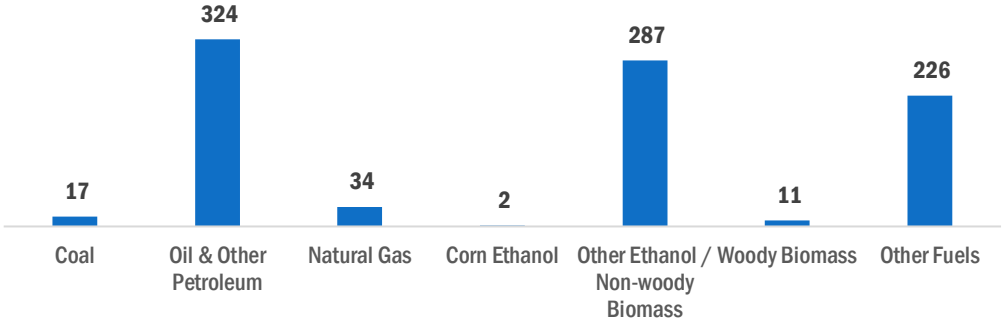
Figure RI-3.
Electric Power Generation Employment by Industry Sector



Fuels

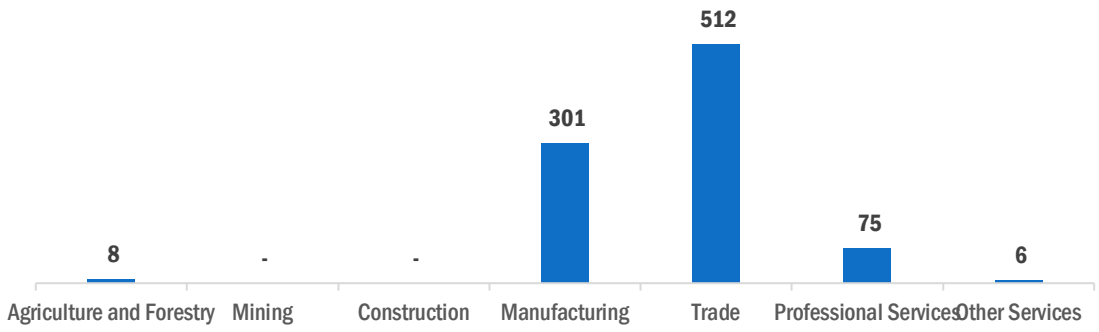
Fuels account for 901 jobs in Rhode Island, 0.1 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 324 jobs.

Figure RI-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 56.8 percent of Fuels jobs in Rhode Island.

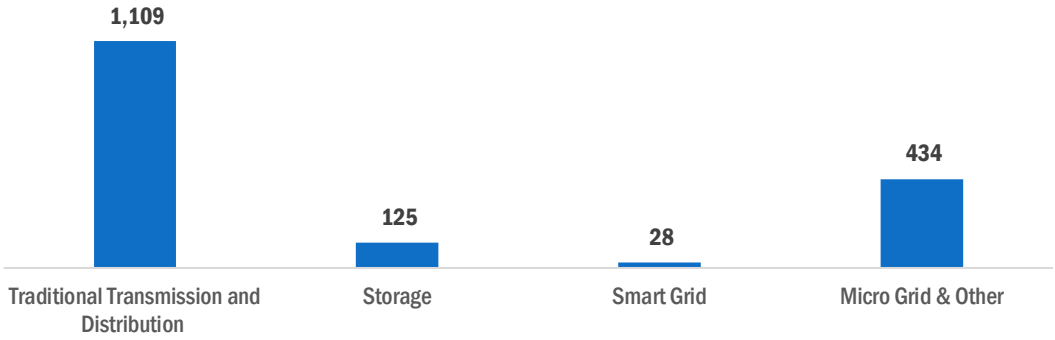
Figure RI-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

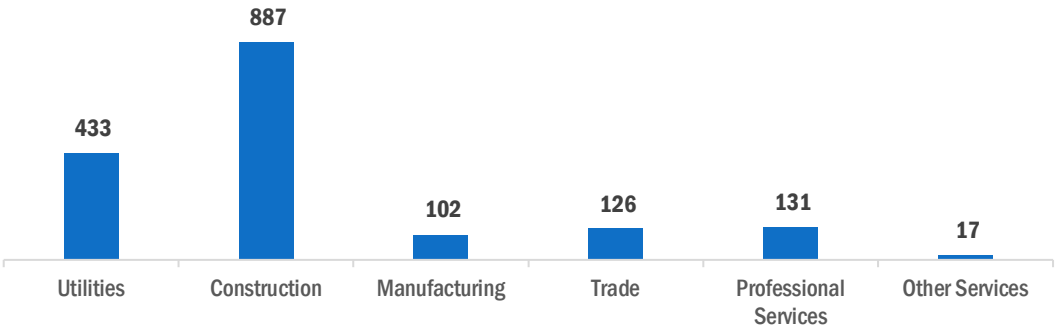
Transmission, Distribution, and Storage employs 1,696 workers in Rhode Island, 0.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Rhode Island, with 52.3 percent of such jobs statewide.

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



Energy Efficiency

The 12,588 Energy Efficiency jobs in Rhode Island represent 0.6 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by advanced materials and insulation. Energy Efficiency employment is primarily found in the construction industry.

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

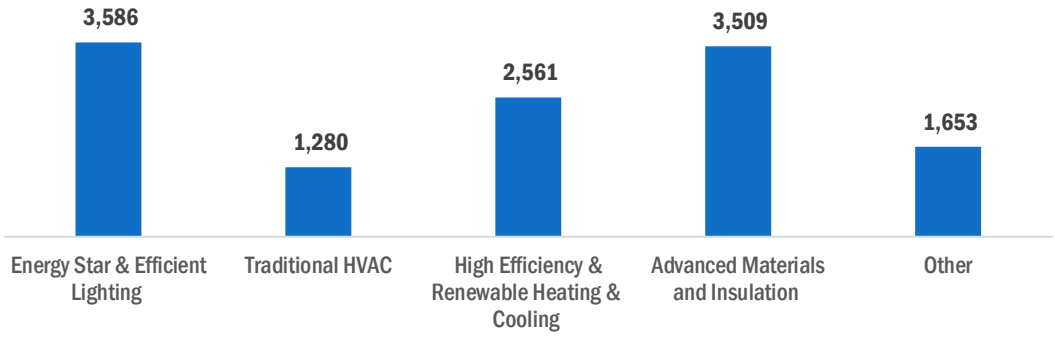
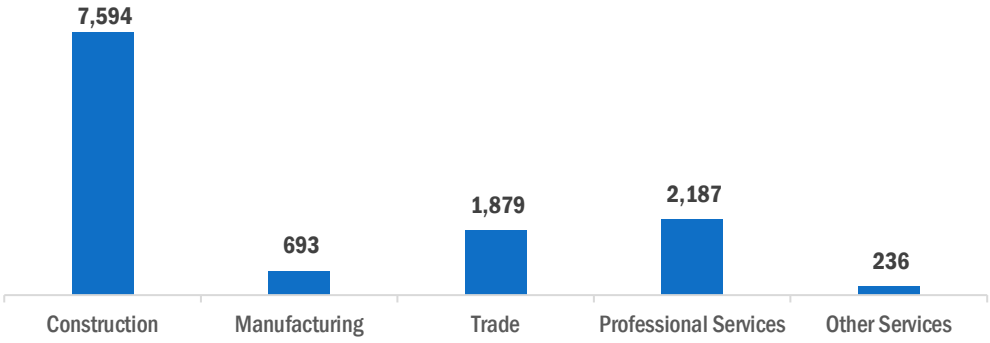


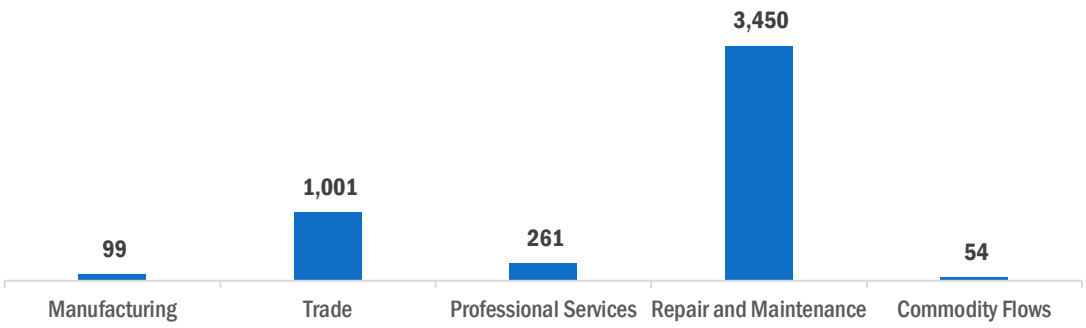
Figure RI-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 4,865 jobs in Rhode Island. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure RI-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 46.7 percent of energy-related employers in Rhode Island hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table RI-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	18.7	25.0	56.3	-
Transmission, Distribution and Storage	NA	NA	NA	NA
Energy Efficiency	35.3	47.1	17.6	-
Fuels	-	60.0	40.0	-
Motor Vehicles	NA	NA	NA	NA

South Carolina

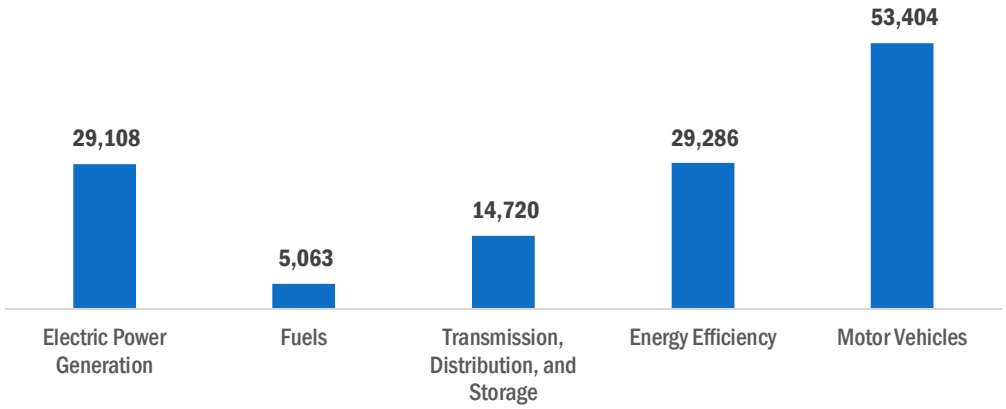
Energy and Employment – 2017

Overview

South Carolina has an average concentration of energy employment, with 48,891 Traditional Energy workers statewide (representing 1.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 29,108 are in Electric Power Generation, 5,063 are in Fuels, and 14,720 are in Transmission, Distribution, and Storage. The Traditional Energy sector in South Carolina is 2.4 percent of total state employment (compared to 2.3 percent of national employment). South Carolina has an additional 29,286 jobs in Energy Efficiency (1.3 percent of all U.S. Energy Efficiency jobs) and 53,404 jobs in Motor Vehicles (2.2 percent of all U.S. Motor Vehicle jobs).

Figure SC-1.

Employment by Major Energy Technology Application

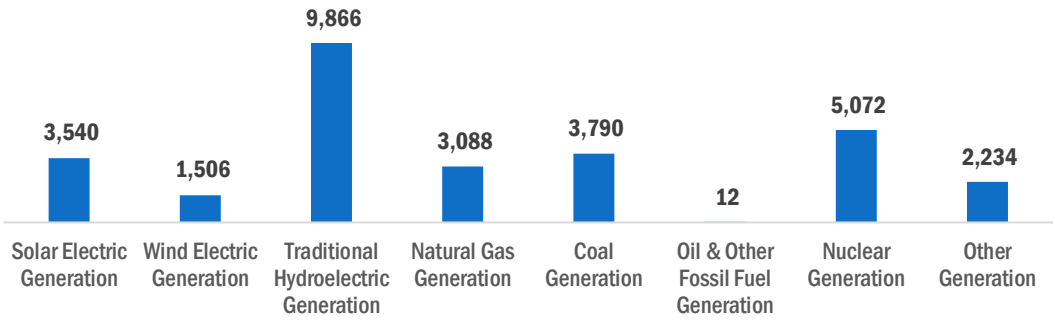


Breakdown by Technology Applications

Electric Power Generation

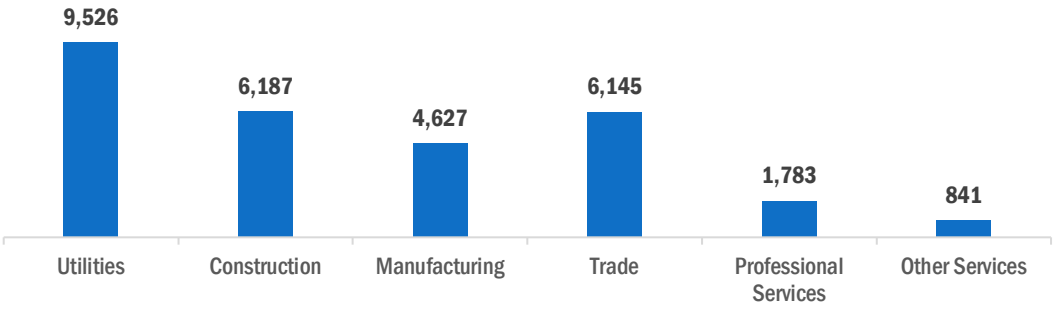
Electric Power Generation employs 29,108 workers in South Carolina, 3.3 percent of the national total. Traditional hydroelectric generation makes up the largest segment of employment related to Electric Power Generation, with 9,866 jobs, followed by traditional fossil fuel generation at 6,890 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 32.7 percent of jobs. Construction is next with 21.3 percent.

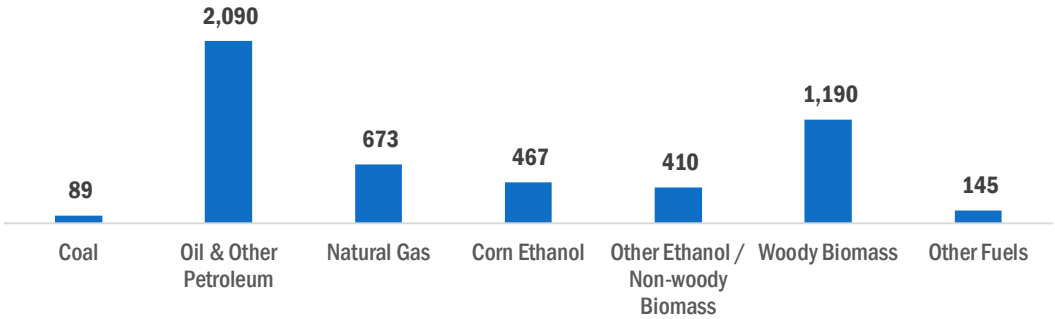
Figure SC-3.
Electric Power Generation Employment by Industry Sector



Fuels

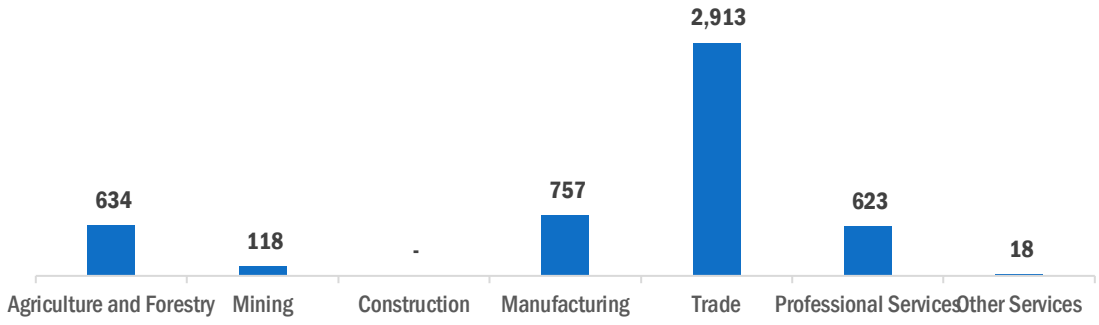
Fuels account for 5,063 jobs in South Carolina, 0.5 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 2,090 jobs.

Figure SC-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 57.5 percent of Fuels jobs in South Carolina.

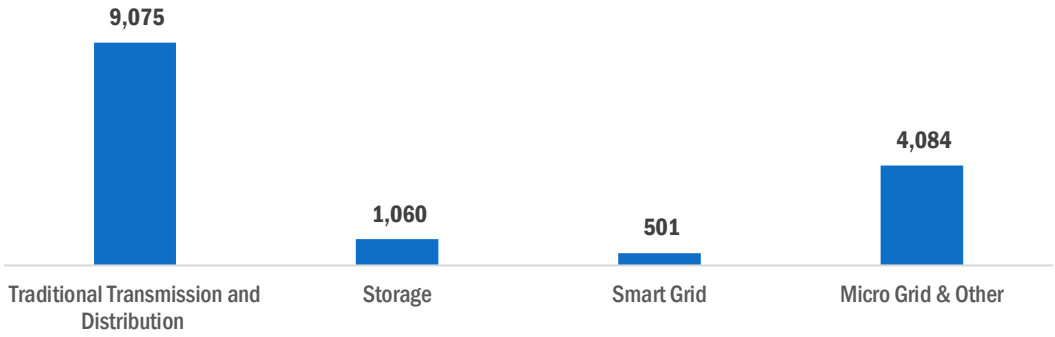
Figure SC-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

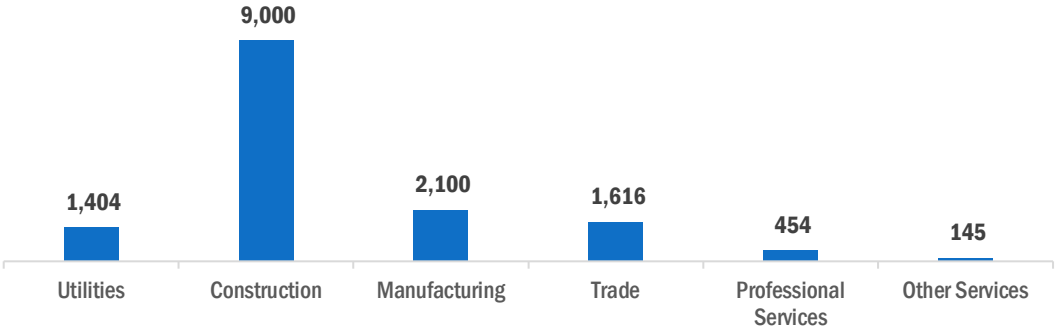
Transmission, Distribution, and Storage employs 14,720 workers in South Carolina, 1.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in South Carolina, with 61.1 percent of such jobs statewide.

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



Energy Efficiency

The 29,286 Energy Efficiency jobs in South Carolina represent 1.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work other energy efficiency products and services firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

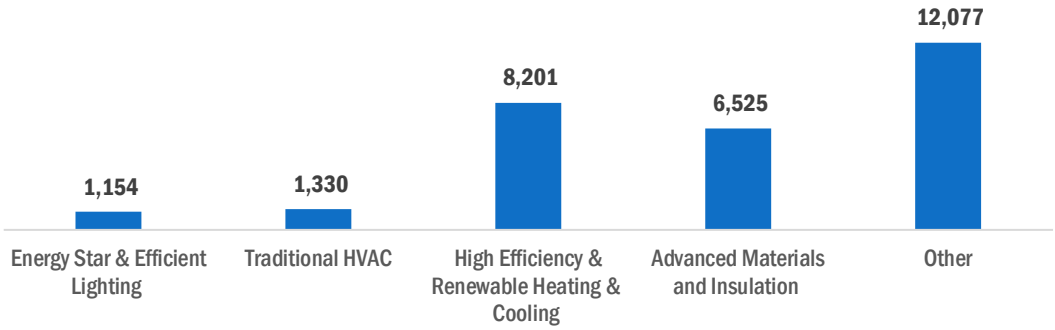
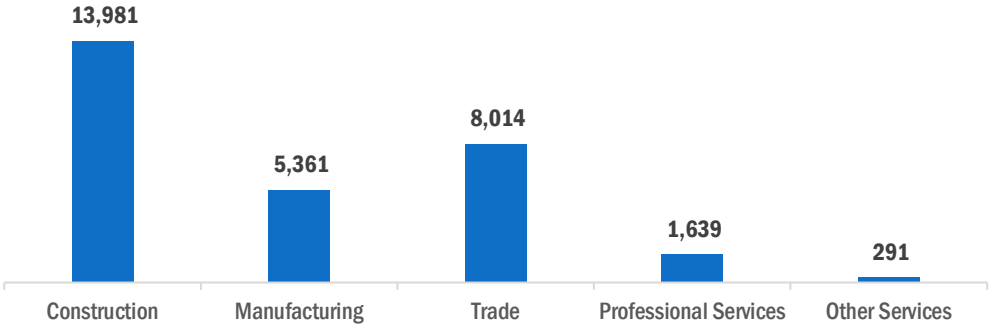


Figure SC-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 53,404 jobs in South Carolina. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure SC-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Hiring Difficulty

Over the last year, 57.1 percent of energy-related employers in South Carolina hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table SC-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	15.4	53.8	23.1	7.7
Transmission, Distribution and Storage	8.3	41.7	41.7	8.3
Energy Efficiency	40.0	33.3	26.7	-
Fuels	26.7	40.0	26.7	6.7
Motor Vehicles	18.2	45.5	36.4	-

South Dakota

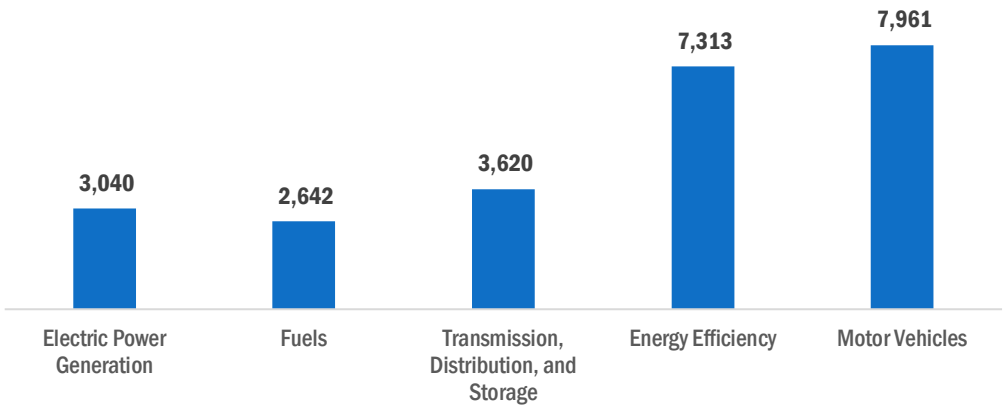
Energy and Employment – 2017

Overview

South Dakota has an average concentration of energy employment, with 9,303 Traditional Energy workers statewide (representing 0.3 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,040 are in Electric Power Generation, 2,642 are in Fuels, and 3,620 are in Transmission, Distribution, and Storage. The Traditional Energy sector in South Dakota is 2.1 percent of total state employment (compared to 2.3 percent of national employment). South Dakota has an additional 7,313 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 7,961 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure SD-1.

Employment by Major Energy Technology Application

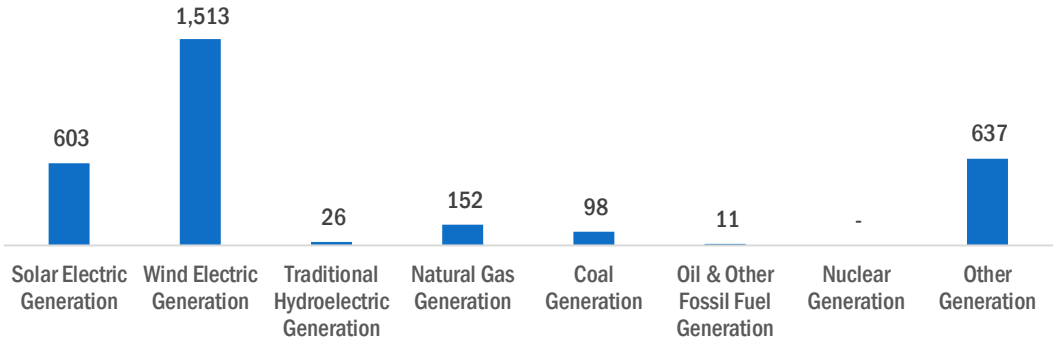


Breakdown by Technology Applications

Electric Power Generation

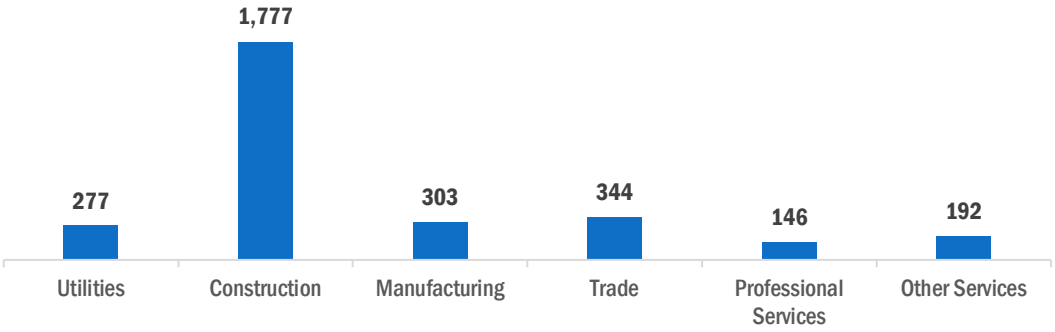
Electric Power Generation employs 3,040 workers in South Dakota, 0.3 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 1,513 jobs, followed by other generation at 637 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 58.4 percent of jobs. Wholesale trade is next with 11.3 percent.

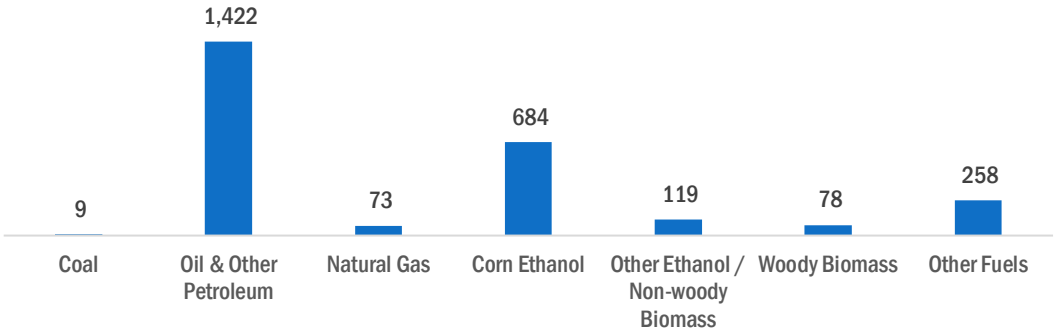
Figure SD-3.
Electric Power Generation Employment by Industry Sector



Fuels

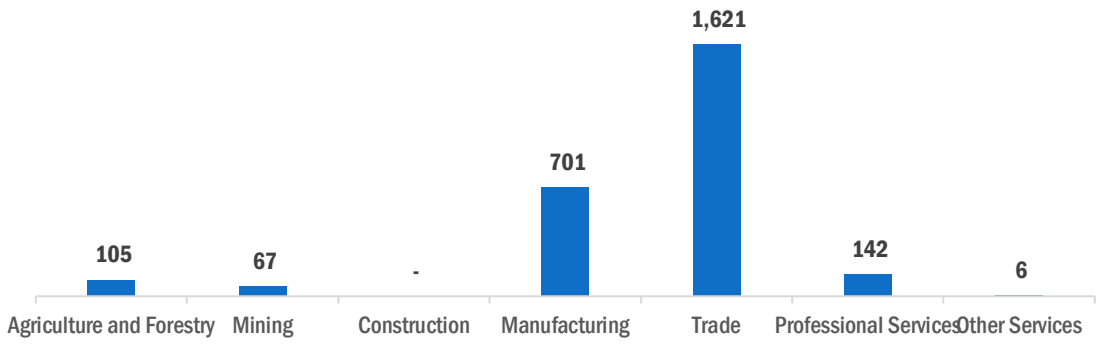
Fuels account for 2,642 jobs in South Dakota, 0.2 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 1,422 jobs.

Figure SD-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 61.4 percent of Fuels jobs in South Dakota.

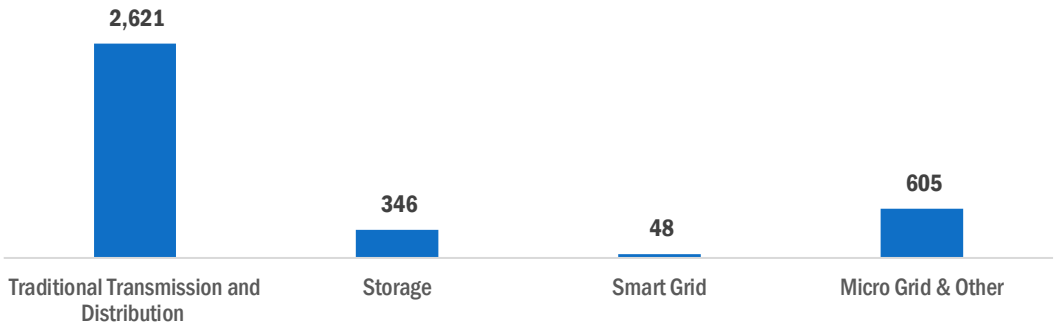
Figure SD-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

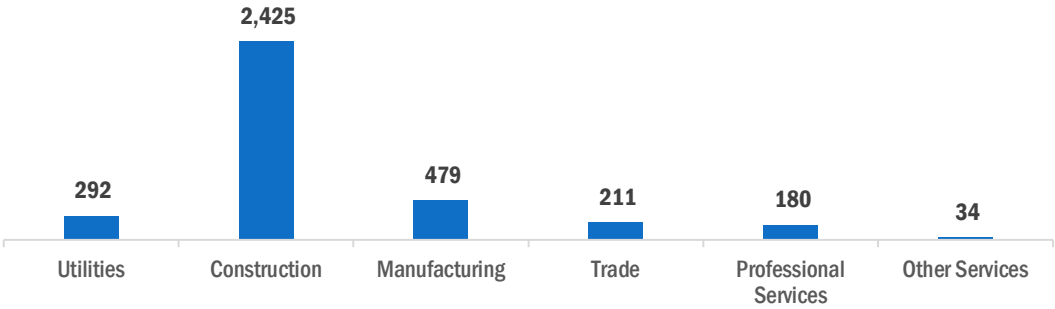
Transmission, Distribution, and Storage employs 3,620 workers in South Dakota, 0.3 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in South Dakota, with 67.0 percent of such jobs statewide.

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



Energy Efficiency

The 7,313 Energy Efficiency jobs in South Dakota represent 0.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

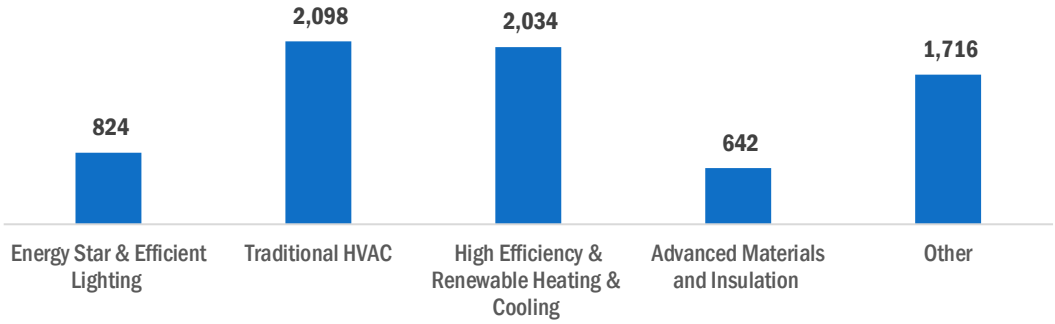
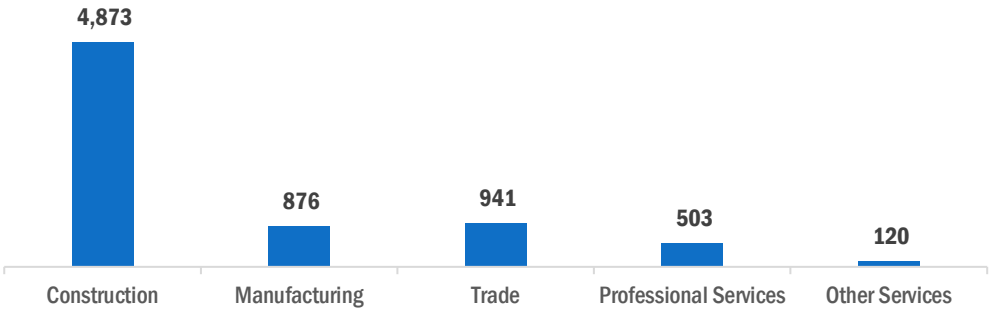


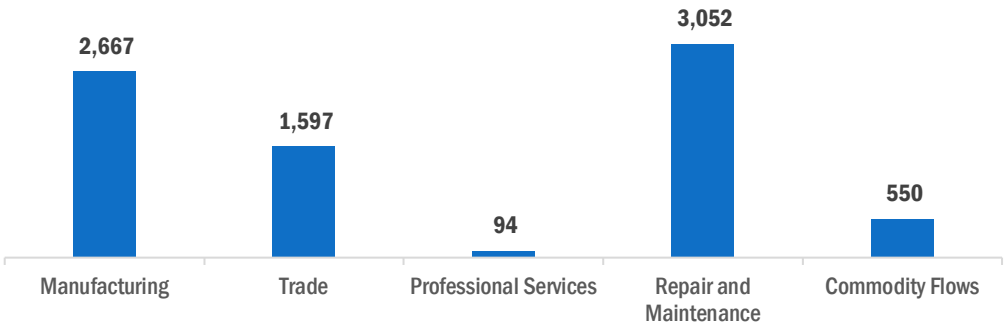
Figure SD-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 7,961 jobs in South Dakota. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure SD-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 70.0 percent of energy-related employers in South Dakota hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table SD-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	66.7	-	33.3	-
Transmission, Distribution and Storage	28.6	28.6	42.9	-
Energy Efficiency	43.7	43.8	12.5	-
Fuels	17.6	41.2	29.4	11.8
Motor Vehicles	28.6	42.9	28.6	-

Tennessee

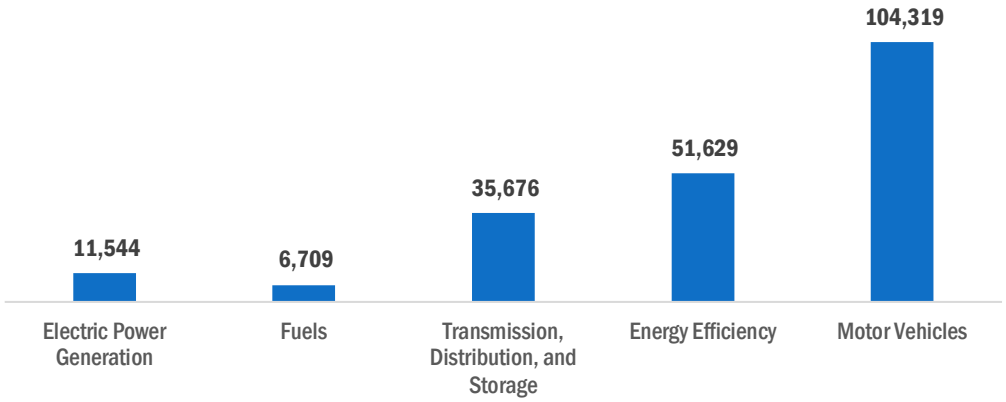
Energy and Employment – 2017

Overview

Tennessee has a low concentration of energy employment, with 53,929 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 11,544 are in Electric Power Generation, 6,709 are in Fuels, and 35,676 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Tennessee is 1.8 percent of total state employment (compared to 2.3 percent of national employment). Tennessee has an additional 51,629 jobs in Energy Efficiency (2.3 percent of all U.S. Energy Efficiency jobs) and 104,319 jobs in Motor Vehicles (4.2 percent of all U.S. Motor Vehicle jobs).

Figure TN-1.

Employment by Major Energy Technology Application

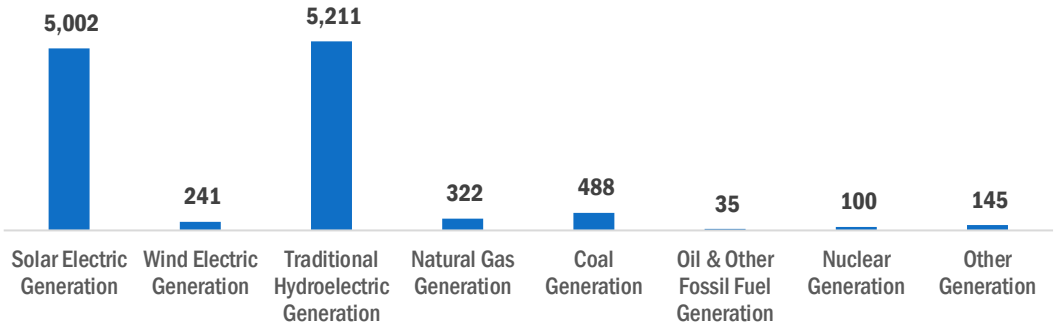


Breakdown by Technology Applications

Electric Power Generation

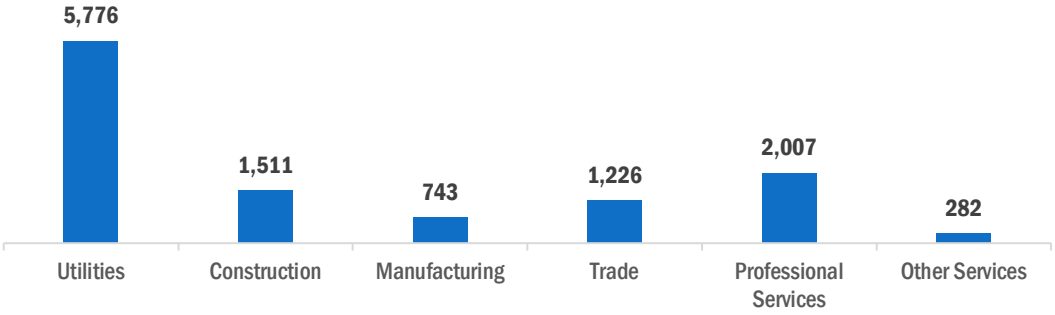
Electric Power Generation employs 11,544 workers in Tennessee, 1.3 percent of the national total. Traditional hydroelectric generation makes up the largest segment of employment related to Electric Power Generation, with 5,211 jobs, followed by solar at 5,002 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 50.0 percent of jobs. Professional and business services are next with 17.4 percent.

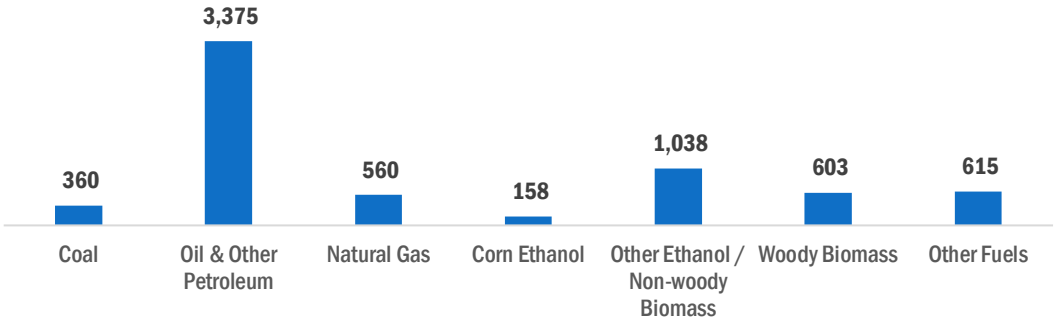
Figure TN-3.
Electric Power Generation Employment by Industry Sector



Fuels

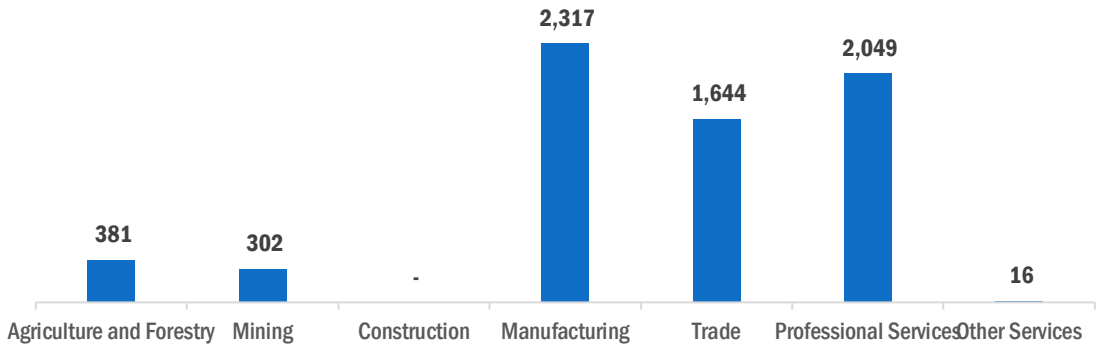
Fuels account for 6,709 jobs in Tennessee, 0.6 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 3,375 jobs.

Figure TN-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 34.5 percent of Fuels jobs in Tennessee.

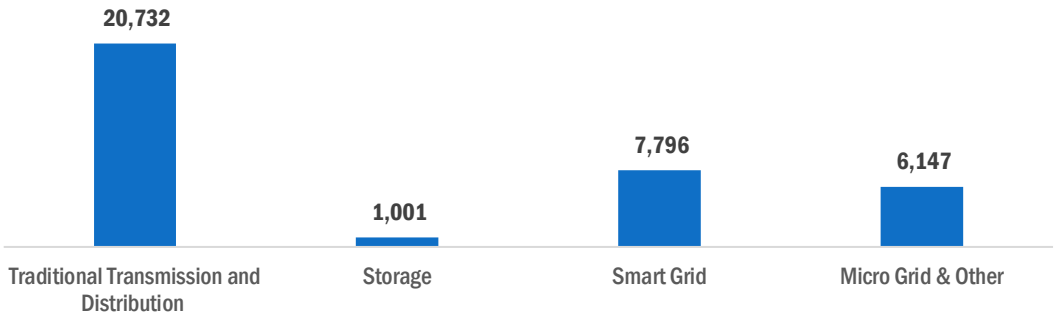
Figure TN-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

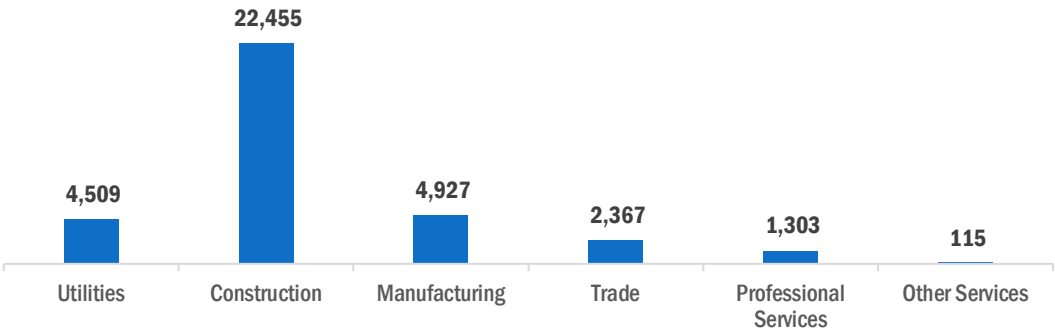
Transmission, Distribution, and Storage employs 35,676 workers in Tennessee, 2.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Tennessee, with 62.9 percent of such jobs statewide.

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



Energy Efficiency

The 51,629 Energy Efficiency jobs in Tennessee represent 2.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

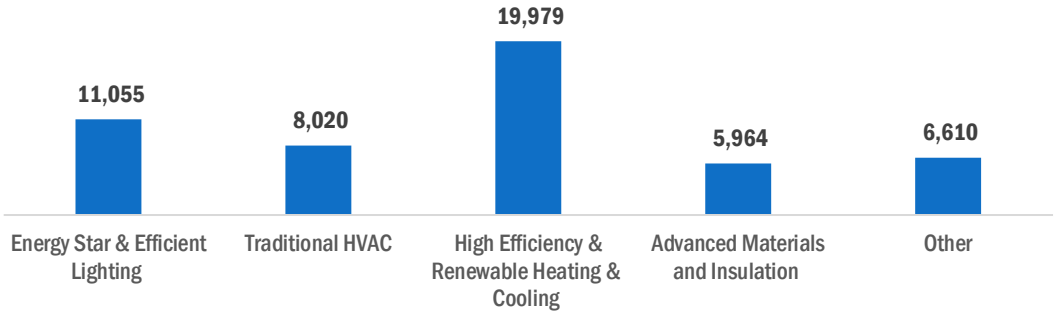
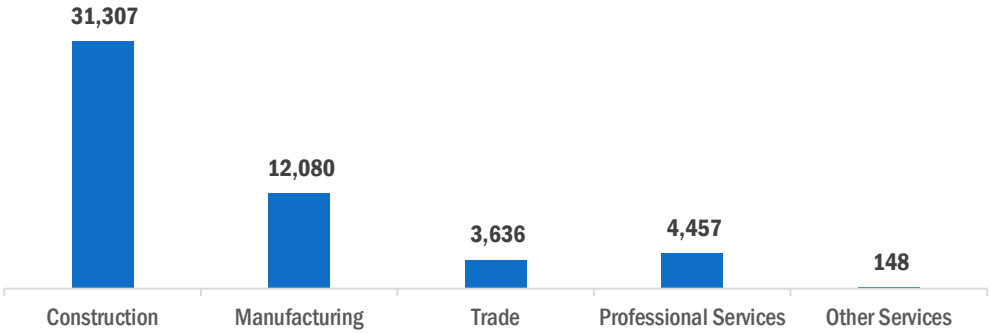


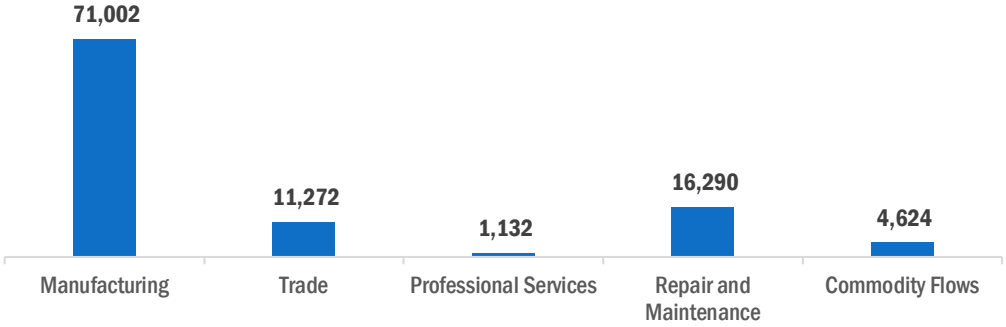
Figure TN-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 104,319 jobs in Tennessee. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure TN-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 72.1 percent of energy-related employers in Tennessee hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table TN-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	20.8	54.2	20.8	4.2
Transmission, Distribution and Storage	20.0	40.0	30.0	10.0
Energy Efficiency	35.3	41.2	20.6	2.9
Fuels	33.3	33.3	33.3	-
Motor Vehicles	37.5	37.5	25.0	-

Texas

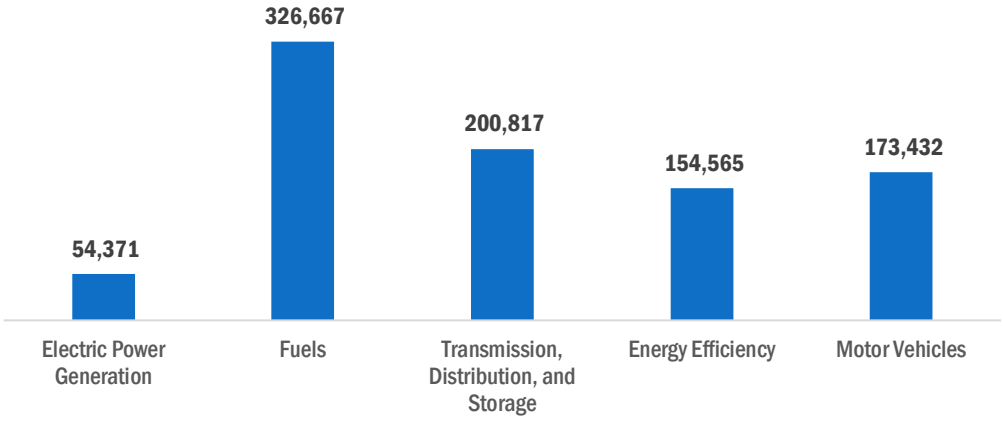
Energy and Employment – 2017

Overview

Texas has a high concentration of energy employment, with 581,854 Traditional Energy workers statewide (representing 17.7 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 54,371 are in Electric Power Generation, 326,667 are in Fuels, and 200,817 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Texas is 4.8 percent of total state employment (compared to 2.3 percent of national employment). Texas has an additional 154,565 jobs in Energy Efficiency (6.9 percent of all U.S. Energy Efficiency jobs) and 173,432 jobs in Motor Vehicles (7.0 percent of all U.S. Motor Vehicle jobs).

Figure TX-1.

Employment by Major Energy Technology Application

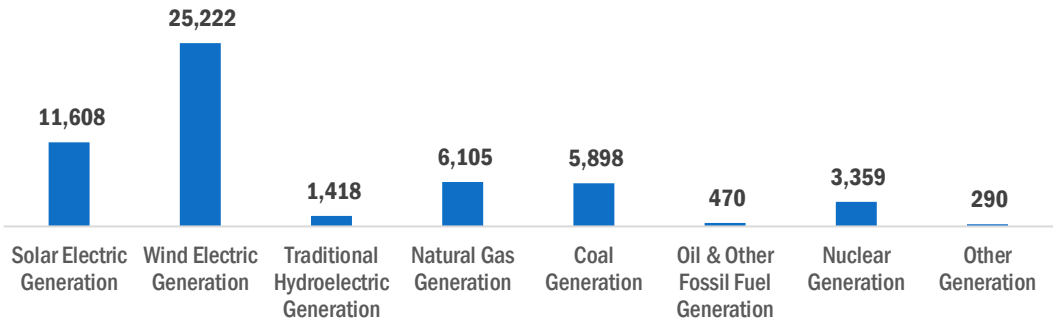


Breakdown by Technology Applications

Electric Power Generation

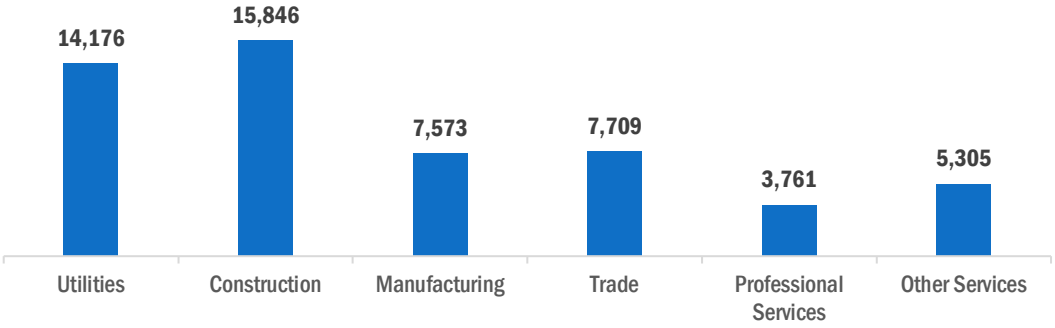
Electric Power Generation employs 54,371 workers in Texas, 6.2 percent of the national total. Wind makes up the largest segment of employment related to Electric Power Generation, with 25,222 jobs, followed by traditional fossil fuel generation at 12,473 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 29.1 percent of jobs. Utilities are next with 26.1 percent.

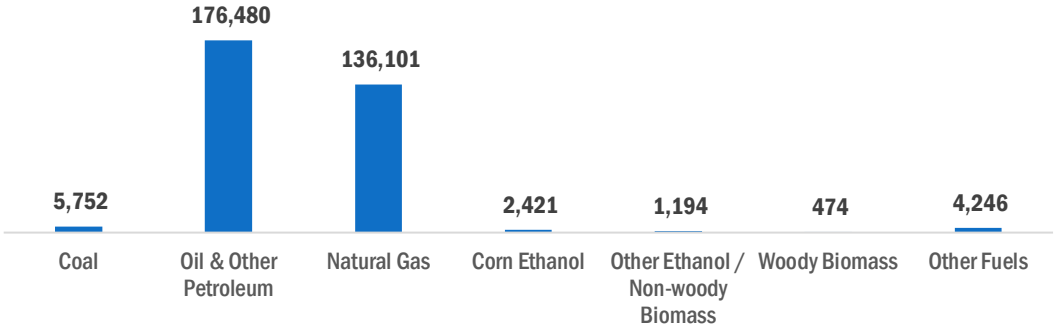
Figure TX-3.
Electric Power Generation Employment by Industry Sector



Fuels

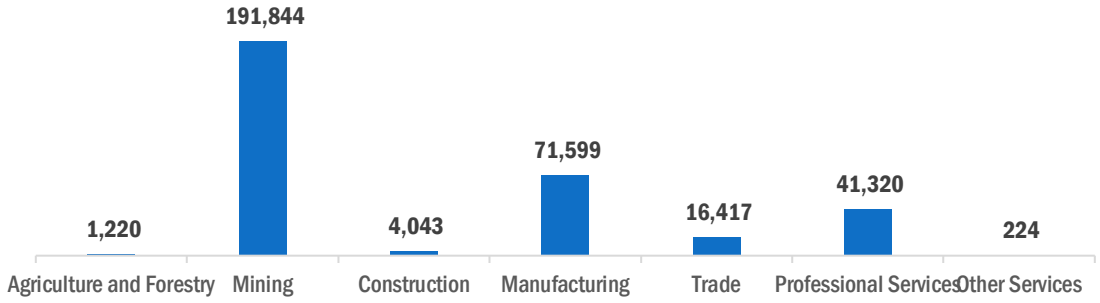
Fuels account for 326,667 jobs in Texas, 30.4 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 176,480 jobs.

Figure TX-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 58.7 percent of Fuels jobs in Texas.

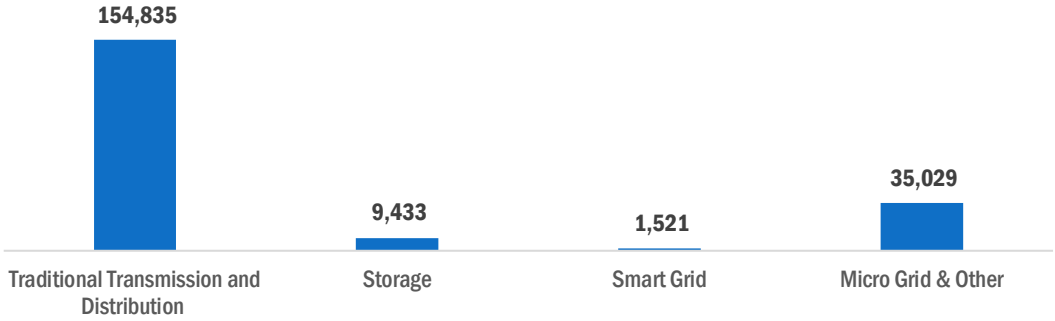
Figure TX-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

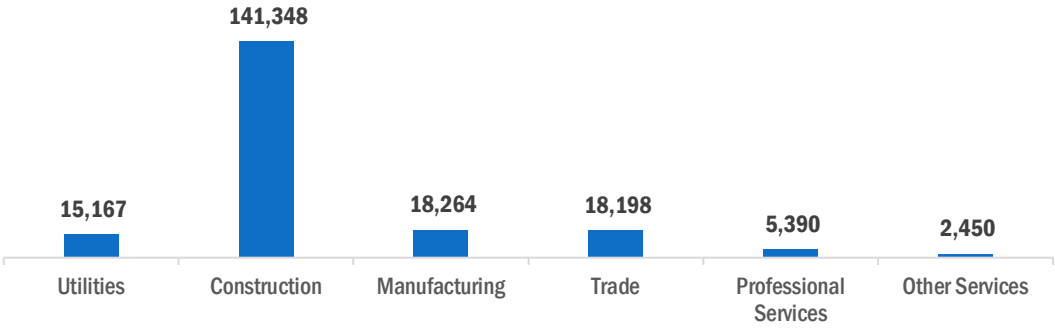
Transmission, Distribution, and Storage employs 200,817 workers in Texas, 15.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Texas, with 70.4 percent of such jobs statewide.

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



Energy Efficiency

The 154,565 Energy Efficiency jobs in Texas represent 6.9 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

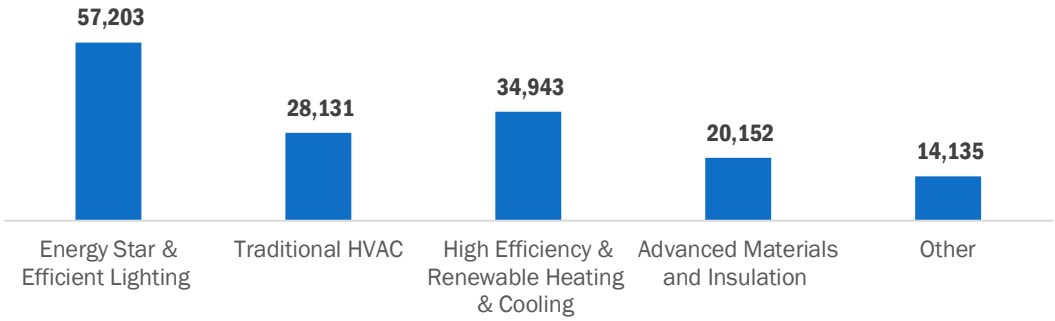
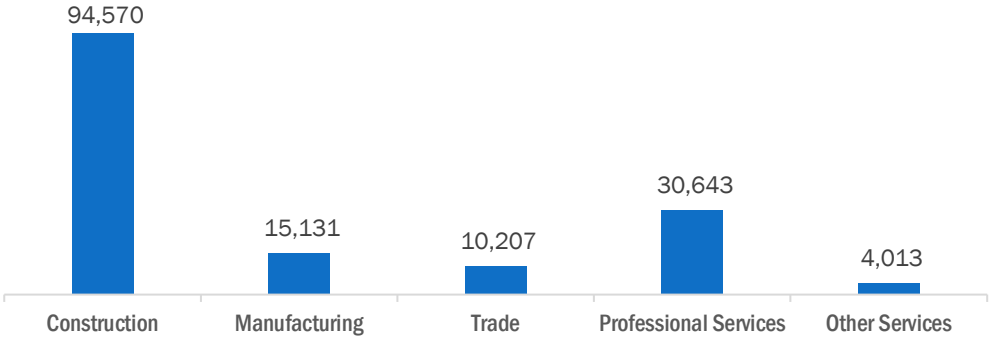


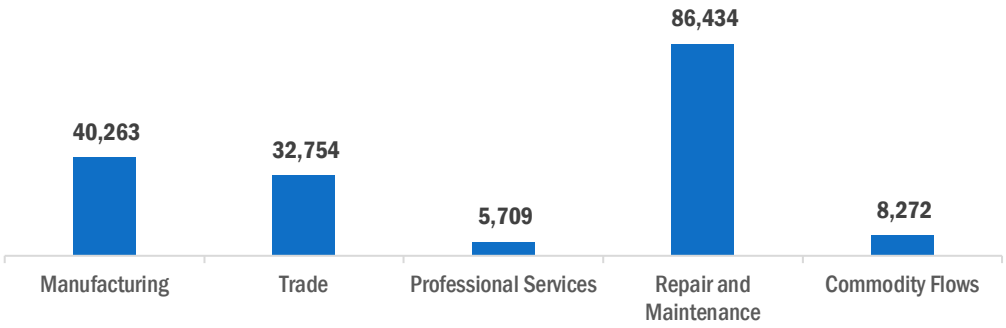
Figure TX-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 173,432 jobs in Texas. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure TX-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 58.4 percent of energy-related employers in Texas hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table TX-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	20.0	50.0	25.7	4.3
Transmission, Distribution and Storage	21.7	43.5	26.1	8.7
Energy Efficiency	31.1	43.3	24.4	1.1
Fuels	20.8	33.8	44.2	1.3
Motor Vehicles	28.2	20.5	48.7	2.6

Utah

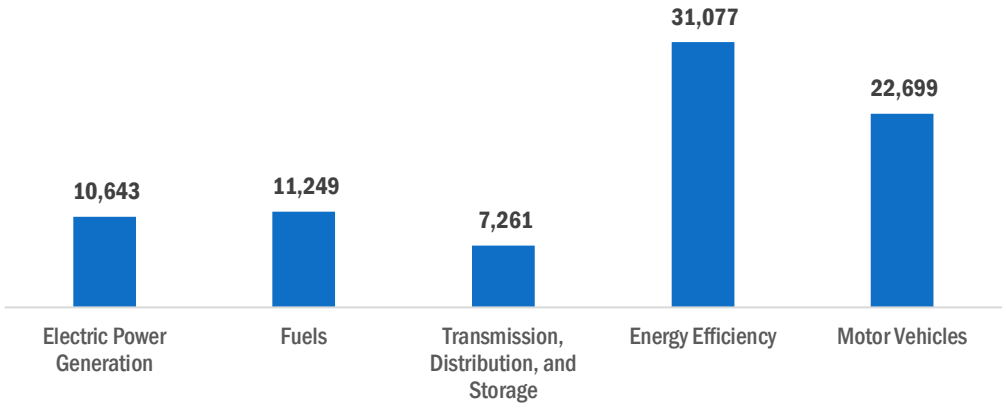
Energy and Employment – 2017

Overview

Utah has an average concentration of energy employment, with 29,152 Traditional Energy workers statewide (representing 0.9 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 10,643 are in Electric Power Generation, 11,249 are in Fuels, and 7,261 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Utah is 2.0 percent of total state employment (compared to 2.3 percent of national employment). Utah has an additional 31,077 jobs in Energy Efficiency (1.4 percent of all U.S. Energy Efficiency jobs) and 22,699 jobs in Motor Vehicles (0.9 percent of all U.S. Motor Vehicle jobs).

Figure UT-1.

Employment by Major Energy Technology Application

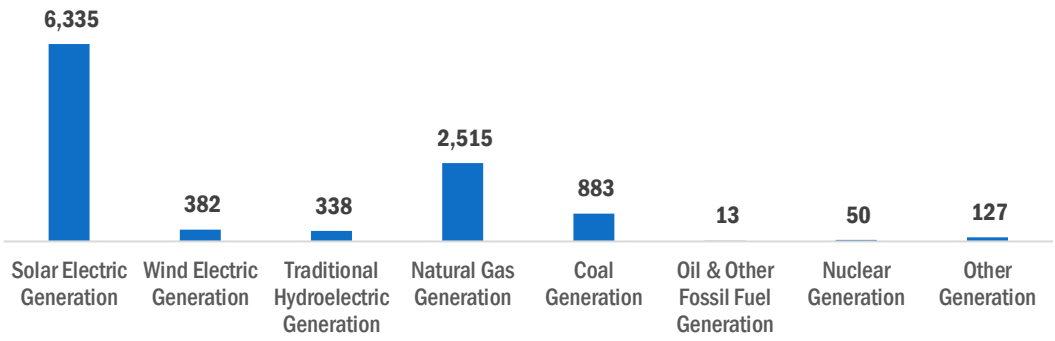


Breakdown by Technology Applications

Electric Power Generation

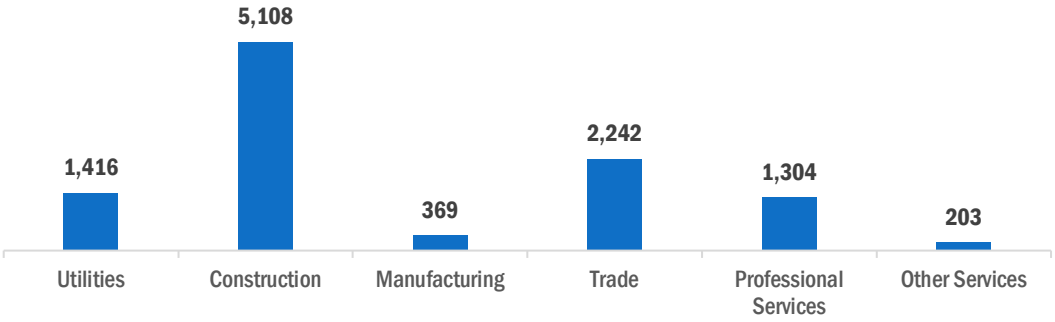
Electric Power Generation employs 10,643 workers in Utah, 1.2 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 6,335 jobs, followed by traditional fossil fuel generation at 3,411 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 48.0 percent of jobs. Wholesale trade is next with 21.1 percent.

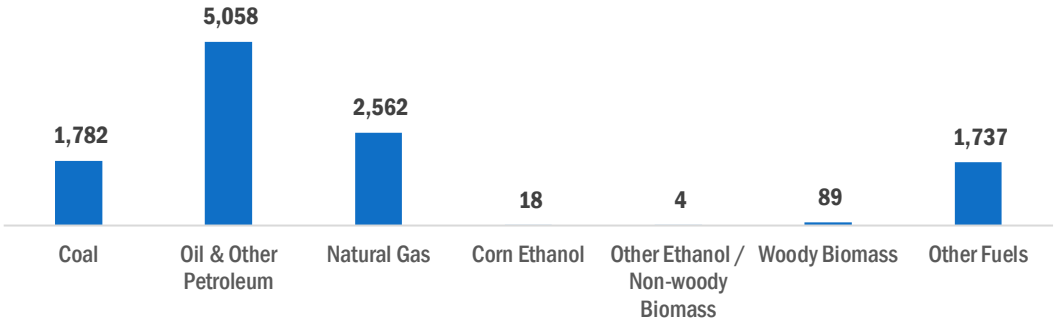
Figure UT-3.
Electric Power Generation Employment by Industry Sector



Fuels

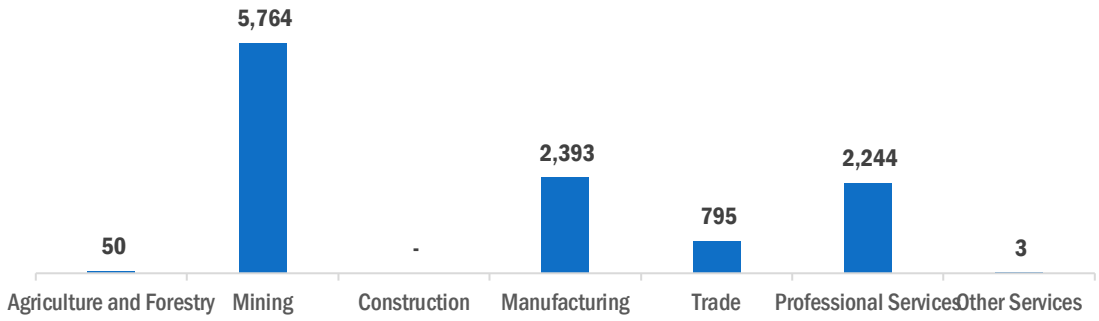
Fuels account for 11,249 jobs in Utah, 1.0 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 5,058 jobs.

Figure UT-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 51.2 percent of Fuels jobs in Utah.

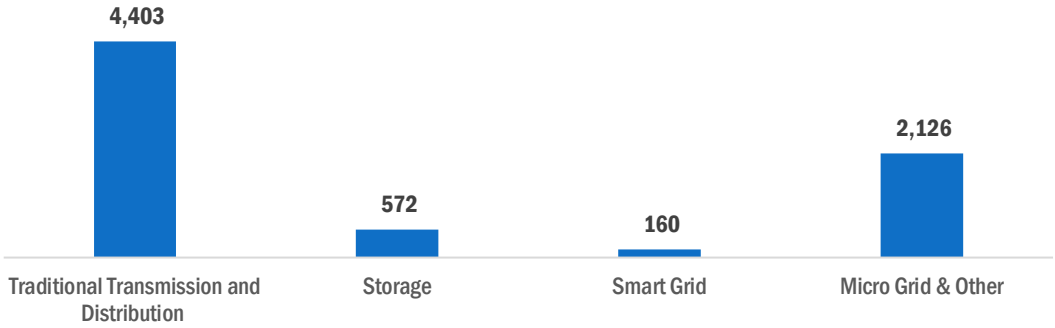
Figure UT-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

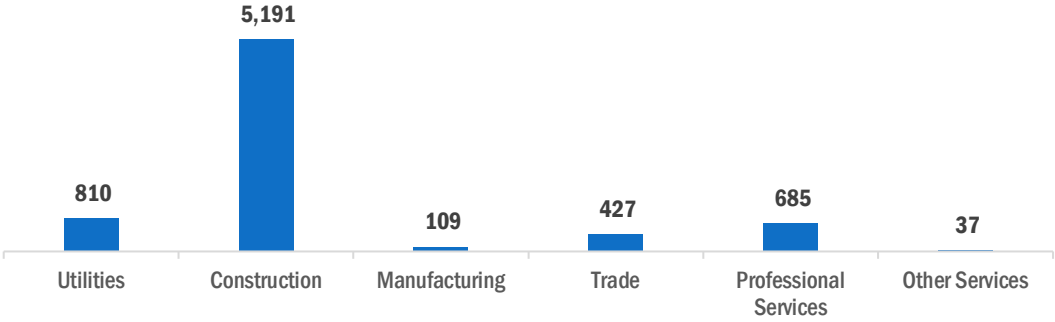
Transmission, Distribution, and Storage employs 7,261 workers in Utah, 0.5 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Utah, with 71.5 percent of such jobs statewide.

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



Energy Efficiency

The 31,077 Energy Efficiency jobs in Utah represent 1.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by high efficiency HVAC and renewable heating and cooling. Energy Efficiency employment is primarily found in the construction industry.

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

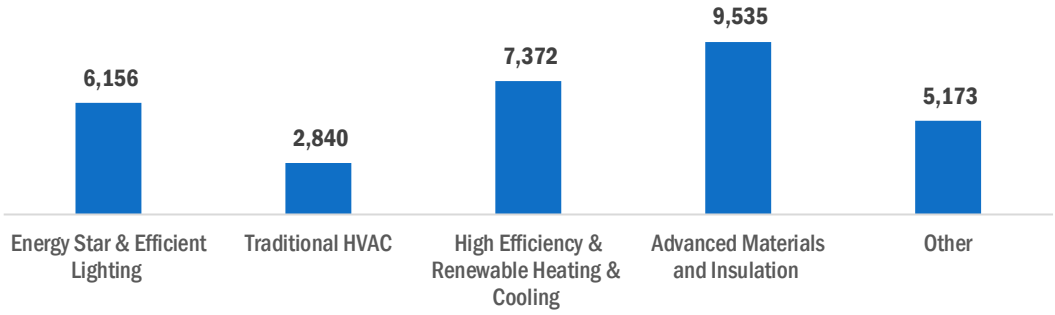
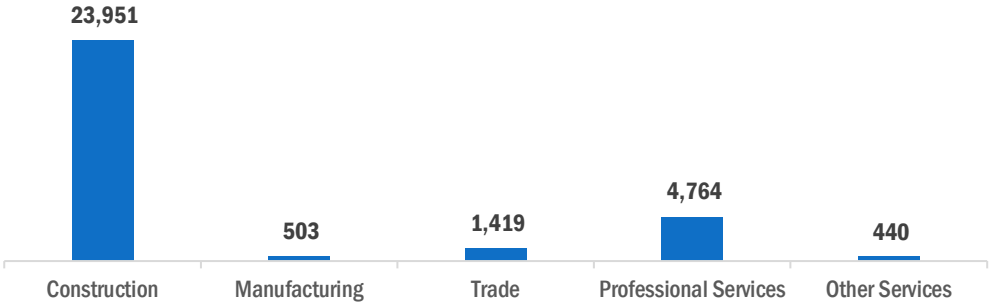


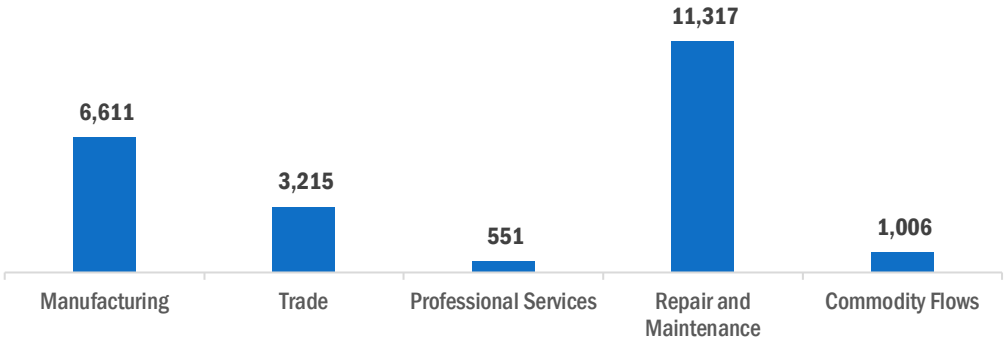
Figure UT-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 22,699 jobs in Utah. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure UT-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 72.2 percent of energy-related employers in Utah hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table UT-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	17.1	73.2	9.8	-
Transmission, Distribution and Storage	18.8	62.5	18.8	-
Energy Efficiency	26.7	56.7	13.3	3.3
Fuels	41.7	41.7	16.7	-
Motor Vehicles	16.7	66.7	16.7	-

Vermont

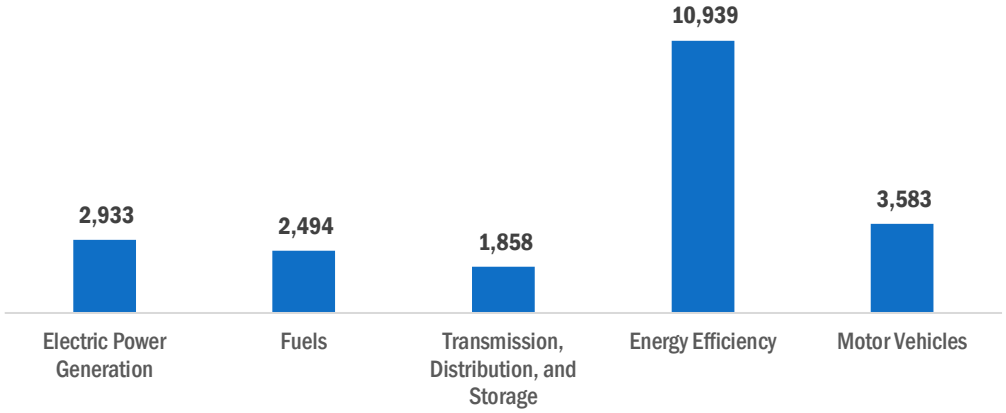
Energy and Employment – 2017

Overview

Vermont has an average concentration of energy employment, with 7,285 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 2,933 are in Electric Power Generation, 2,494 are in Fuels, and 1,858 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Vermont is 2.3 percent of total state employment (compared to 2.3 percent of national employment). Vermont has an additional 10,939 jobs in Energy Efficiency (0.5 percent of all U.S. Energy Efficiency jobs) and 3,583 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure VT-1.

Employment by Major Energy Technology Application

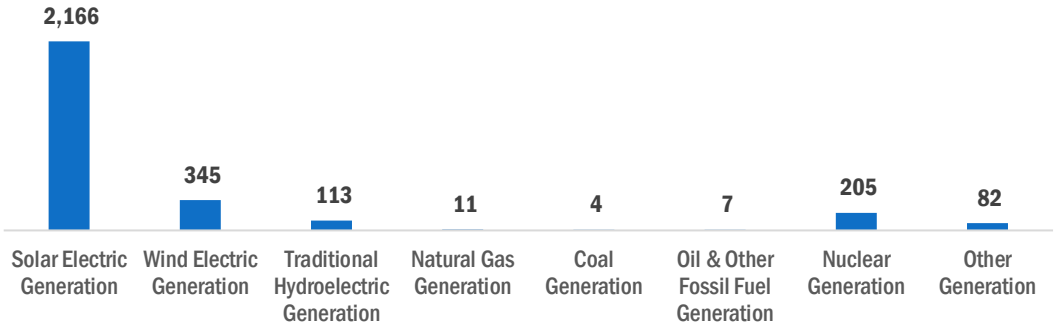


Breakdown by Technology Applications

Electric Power Generation

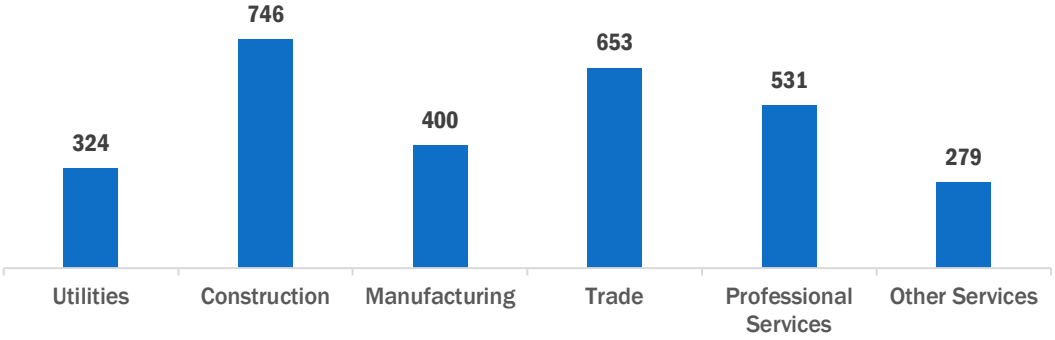
Electric Power Generation employs 2,933 workers in Vermont, 0.3 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 2,166 jobs, followed by wind at 345 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 25.4 percent of jobs. Wholesale trade is next with 22.2 percent.

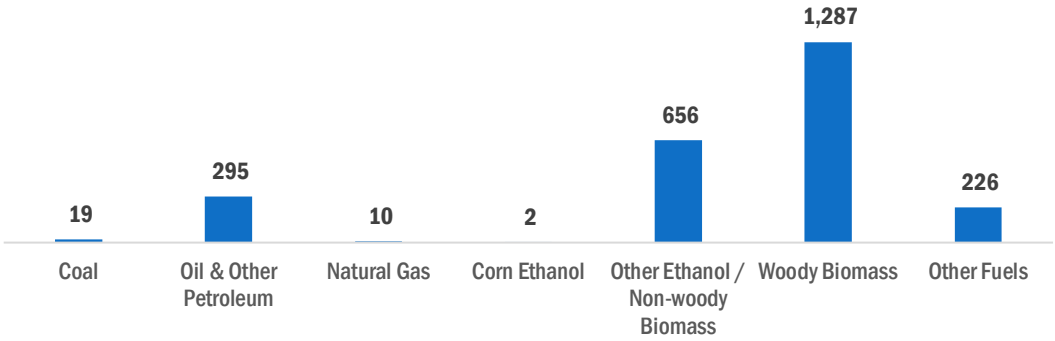
Figure VT-3.
Electric Power Generation Employment by Industry Sector



Fuels

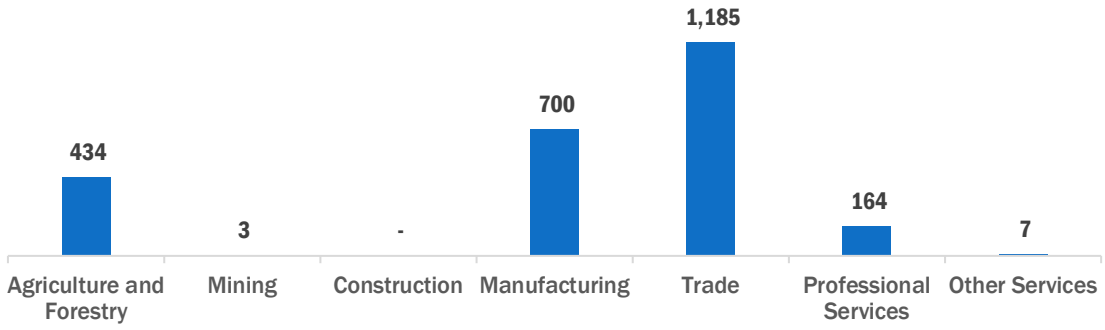
Fuels account for 2,494 jobs in Vermont, 0.2 percent of the national total. Woody biomass represents the largest segment of Fuels employment, with 1,287 jobs.

Figure VT-4.
Fuels Employment by Detailed Technology Application



Wholesale trade jobs represent 47.5 percent of Fuels jobs in Vermont.

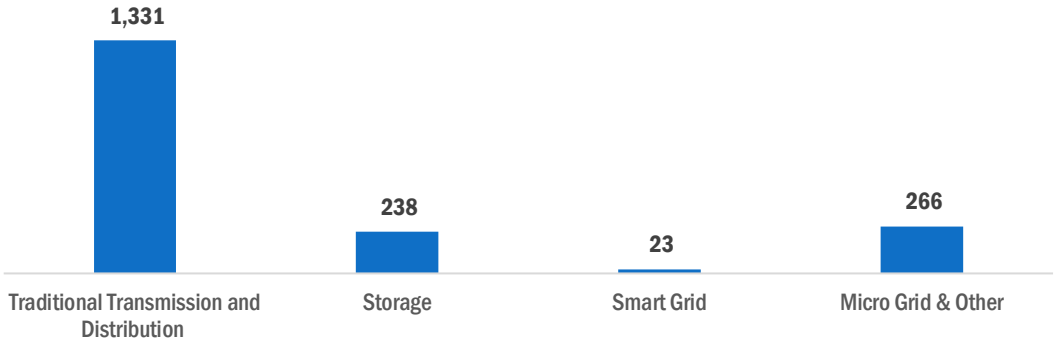
Figure VT-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

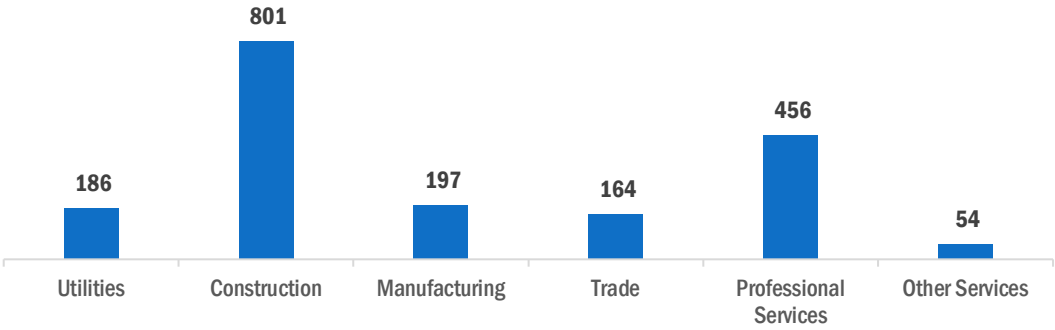
Transmission, Distribution, and Storage employs 1,858 workers in Vermont, 0.1 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Vermont, with 43.1 percent of such jobs statewide.

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



Energy Efficiency

The 10,939 Energy Efficiency jobs in Vermont represent 0.5 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

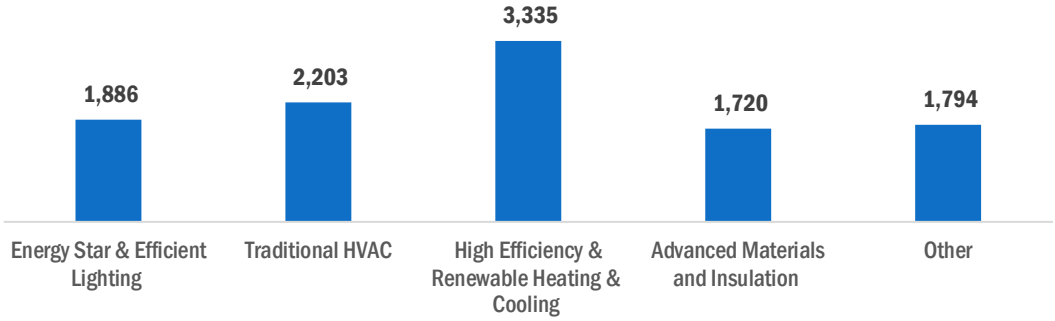
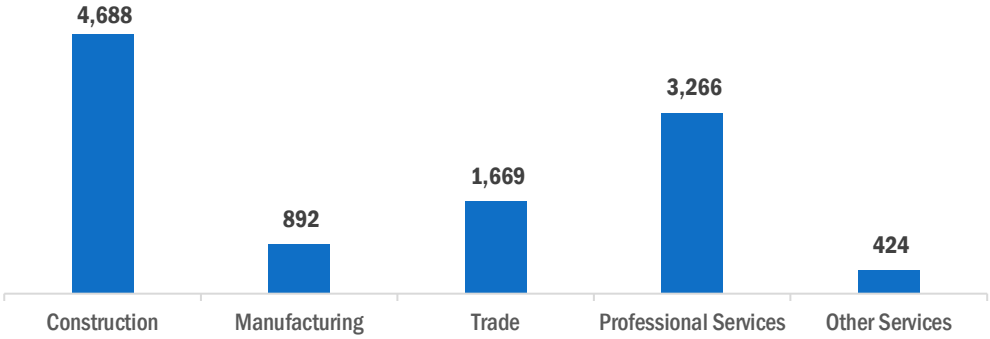


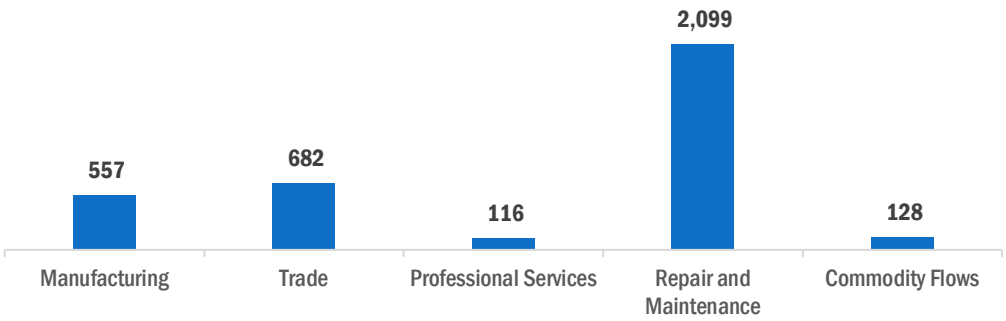
Figure VT-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 3,583 jobs in Vermont. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure VT-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 52.0 percent of energy-related employers in Vermont hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table VT-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	15.4	64.1	17.9	2.6
Transmission, Distribution and Storage	27.3	54.5	18.2	-
Energy Efficiency	36.8	39.5	21.1	2.6
Fuels	21.4	50.0	28.6	-
Motor Vehicles	14.3	42.9	42.9	-

Virginia

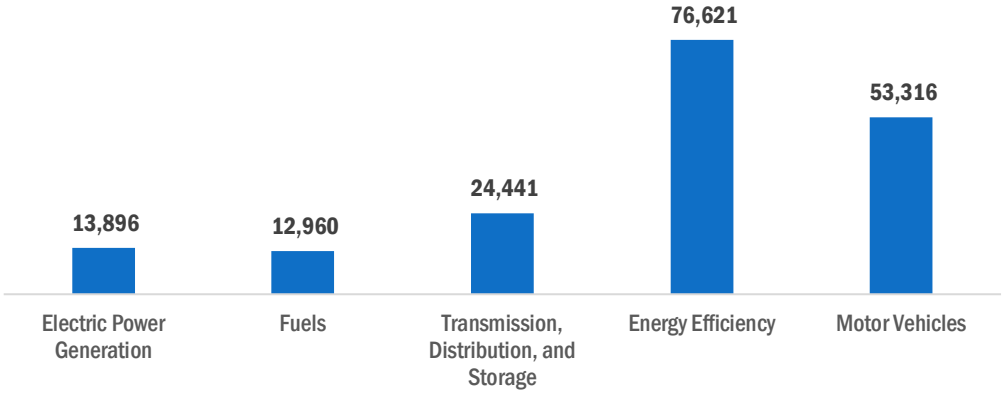
Energy and Employment – 2017

Overview

Virginia has a low concentration of energy employment, with 51,297 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 13,896 are in Electric Power Generation, 12,960 are in Fuels, and 24,441 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Virginia is 1.3 percent of total state employment (compared to 2.3 percent of national employment). Virginia has an additional 76,621 jobs in Energy Efficiency (3.4 percent of all U.S. Energy Efficiency jobs) and 53,316 jobs in Motor Vehicles (2.2 percent of all U.S. Motor Vehicle jobs).

Figure VA-1.

Employment by Major Energy Technology Application

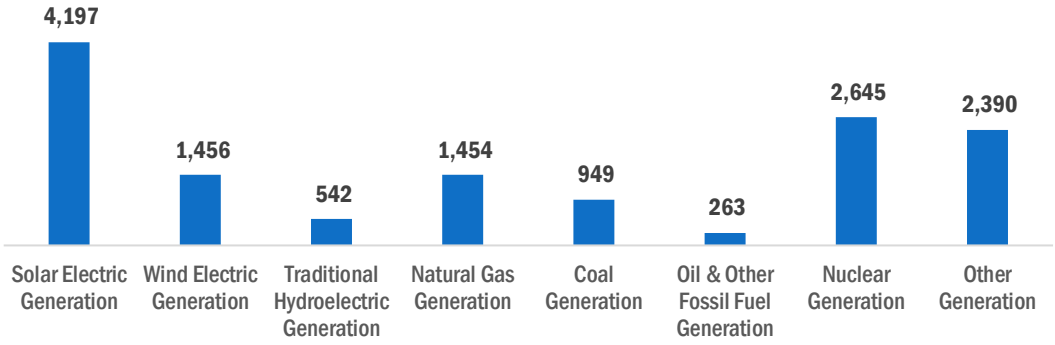


Breakdown by Technology Applications

Electric Power Generation

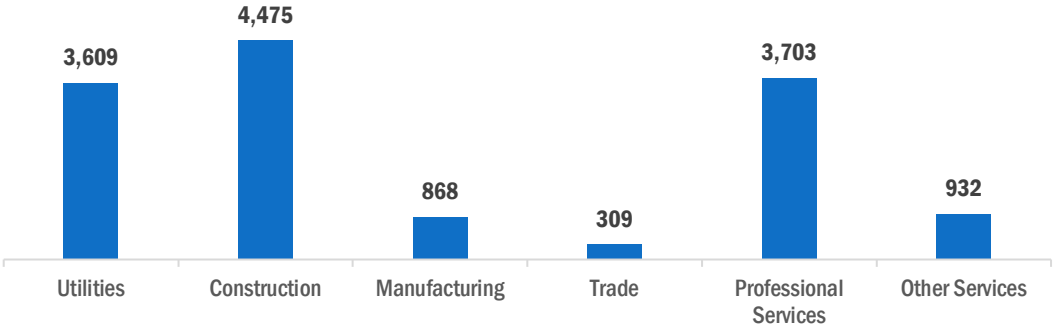
Electric Power Generation employs 13,896 workers in Virginia, 1.6 percent of the national total. Other generation makes up the largest segment of employment related to Electric Power Generation, with 5,035 jobs, followed by solar at 4,197 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 32.2 percent of jobs. Professional and business services are next with 26.7 percent.

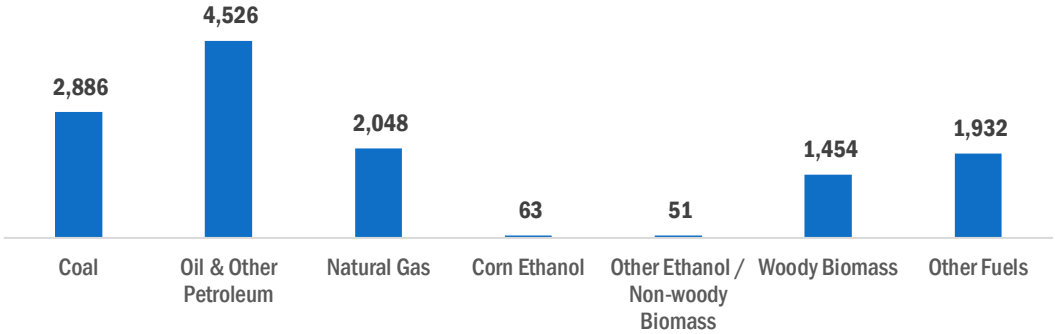
Figure VA-3.
Electric Power Generation Employment by Industry Sector



Fuels

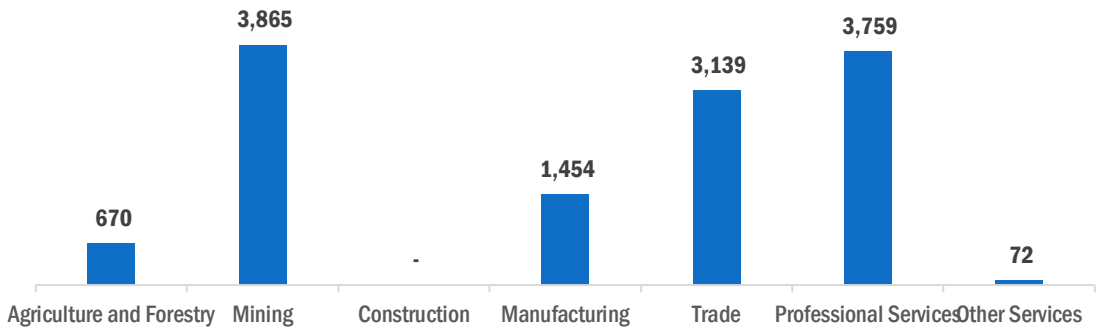
Fuels account for 12,960 jobs in Virginia, 1.2 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 4,526 jobs.

Figure VA-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 29.8 percent of Fuels jobs in Virginia.

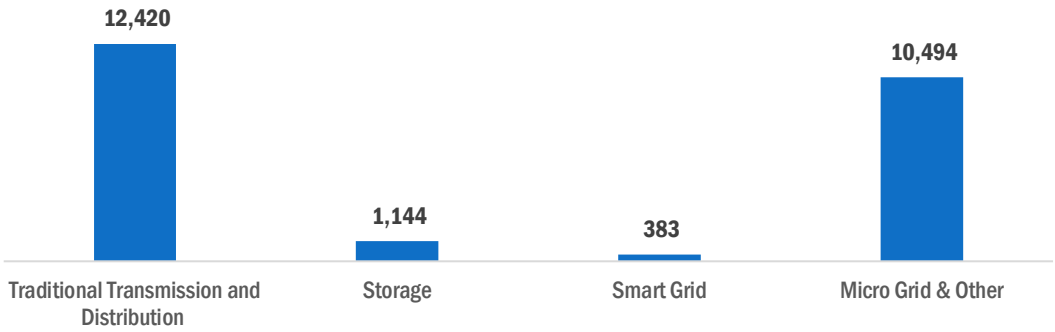
Figure VA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

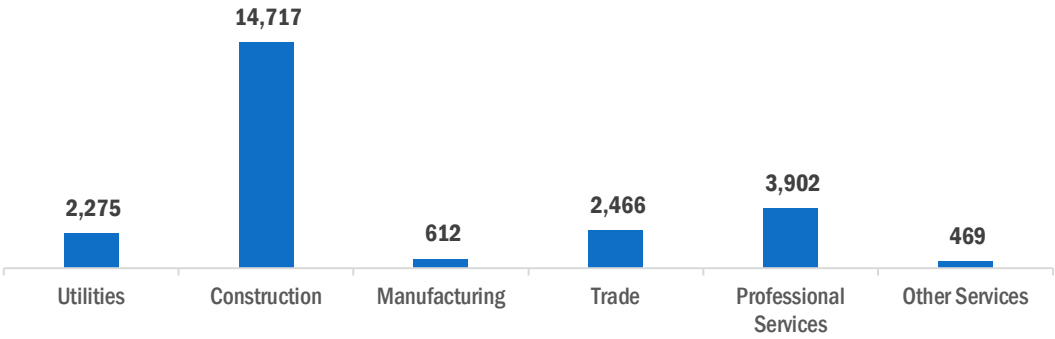
Transmission, Distribution, and Storage employs 24,441 workers in Virginia, 1.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Virginia, with 60.2 percent of such jobs statewide.

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



Energy Efficiency

The 76,621 Energy Efficiency jobs in Virginia represent 3.4 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

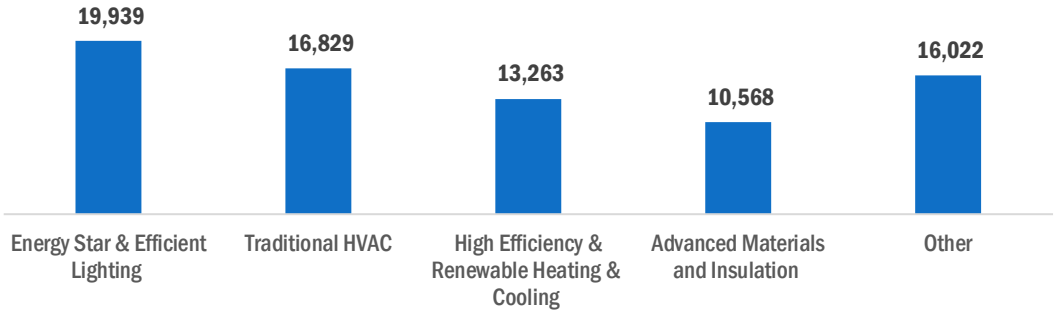
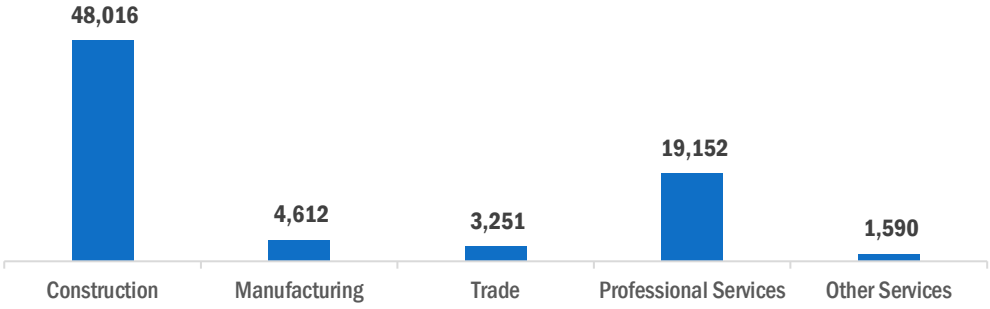


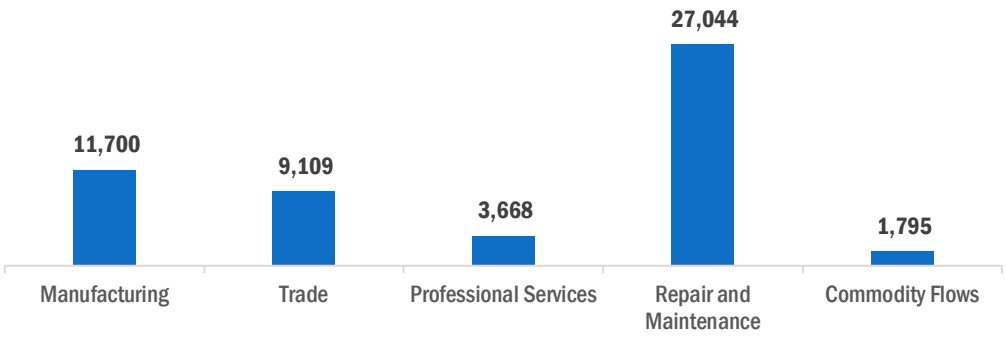
Figure VA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 53,316 jobs in Virginia. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure VA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 62.1 percent of energy-related employers in Virginia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table VA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	25.9	55.6	18.5	-
Transmission, Distribution and Storage	40.0	40.0	20.0	-
Energy Efficiency	41.1	37.9	18.5	2.4
Fuels	23.1	46.2	23.1	7.7
Motor Vehicles	41.7	33.3	25.0	-

Washington

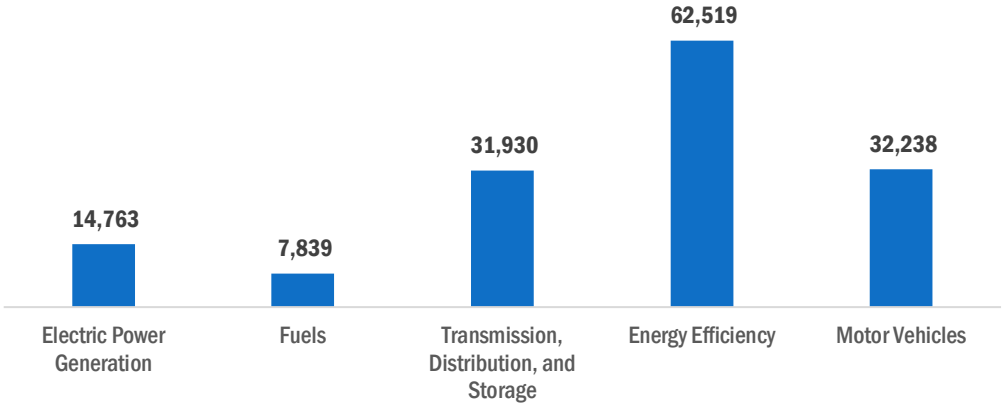
Energy and Employment – 2017

Overview

Washington has a low concentration of energy employment, with 54,532 Traditional Energy workers statewide (representing 1.7 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 14,763 are in Electric Power Generation, 7,839 are in Fuels, and 31,930 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Washington is 1.6 percent of total state employment (compared to 2.3 percent of national employment). Washington has an additional 62,519 jobs in Energy Efficiency (2.8 percent of all U.S. Energy Efficiency jobs) and 32,238 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

Figure WA-1.

Employment by Major Energy Technology Application

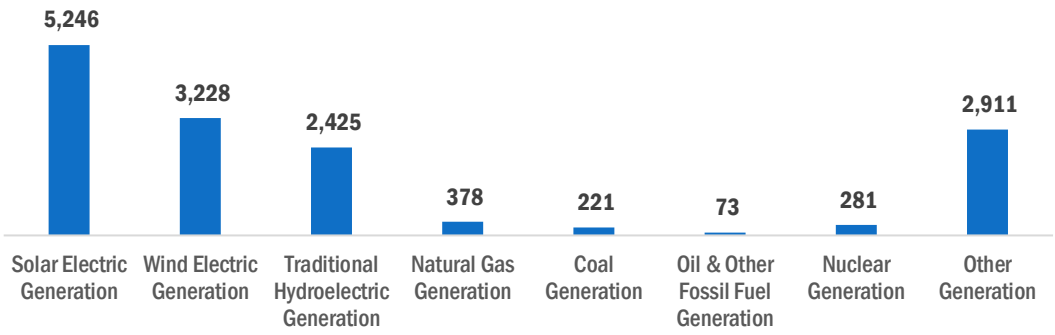


Breakdown by Technology Applications

Electric Power Generation

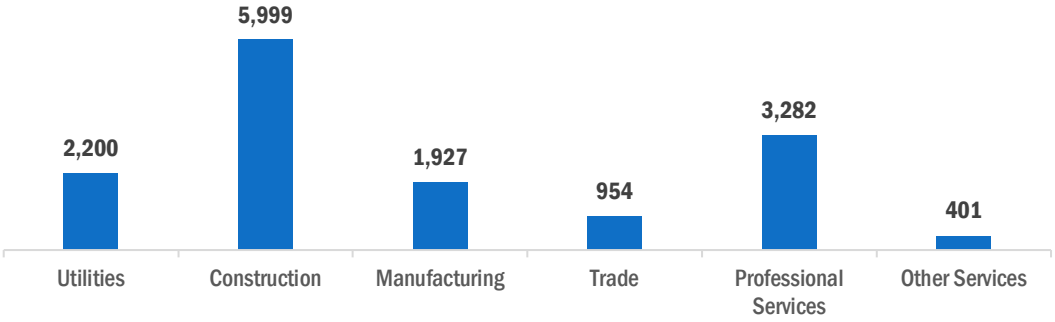
Electric Power Generation employs 14,763 workers in Washington, 1.7 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 5,246 jobs, followed by wind at 3,228 jobs.

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



Construction is the largest industry sector in Electric Power Generation, with 40.6 percent of jobs. Professional and business services are next with 22.2 percent.

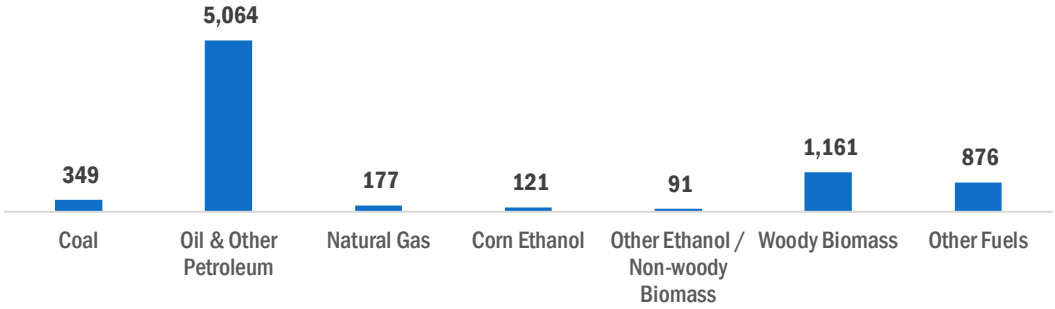
Figure WA-3.
Electric Power Generation Employment by Industry Sector



Fuels

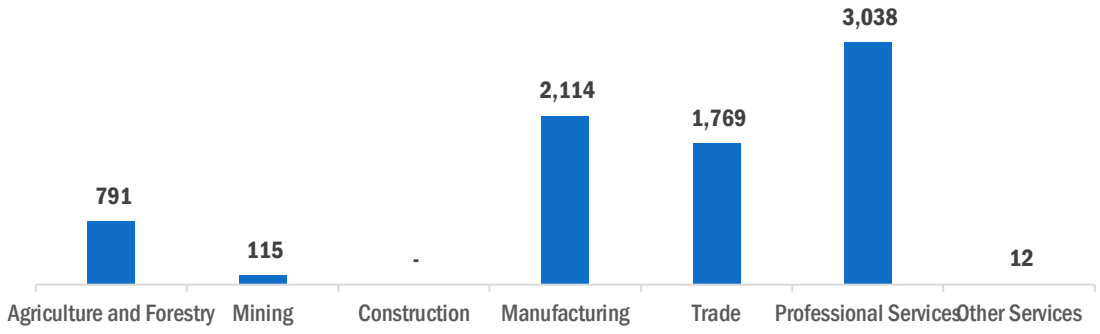
Fuels account for 7,839 jobs in Washington, 0.7 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 5,064 jobs.

Figure WA-4.
Fuels Employment by Detailed Technology Application



Professional and business services jobs represent 38.8 percent of Fuels jobs in Washington.

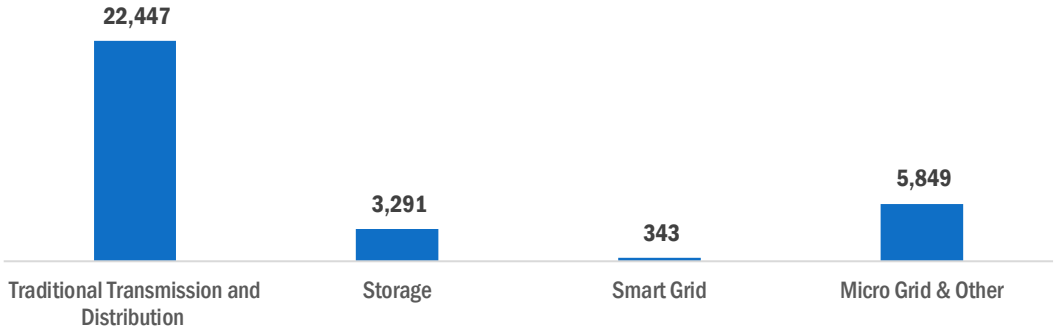
Figure WA-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

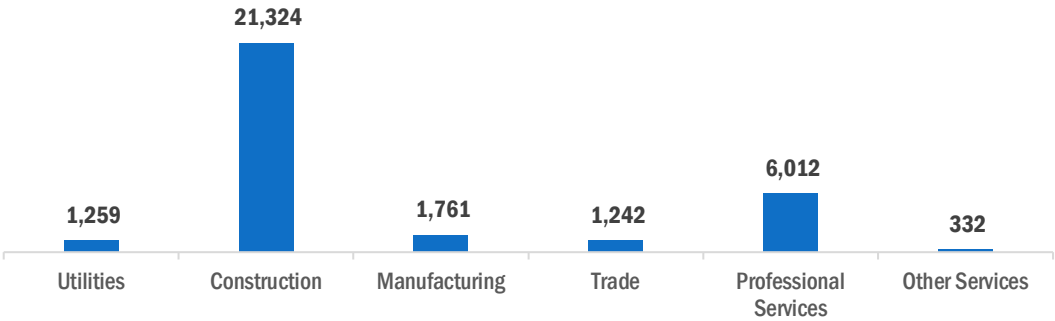
Transmission, Distribution, and Storage employs 31,930 workers in Washington, 2.4 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Washington, with 66.8 percent of such jobs statewide.

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



Energy Efficiency

The 62,519 Energy Efficiency jobs in Washington represent 2.8 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in traditional HVAC firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

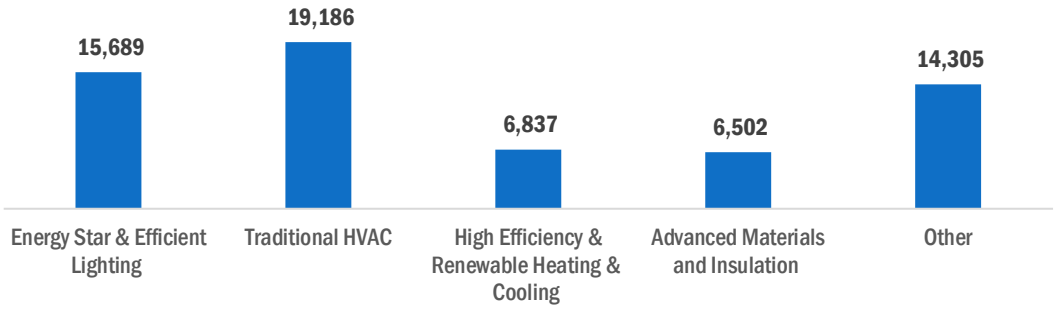
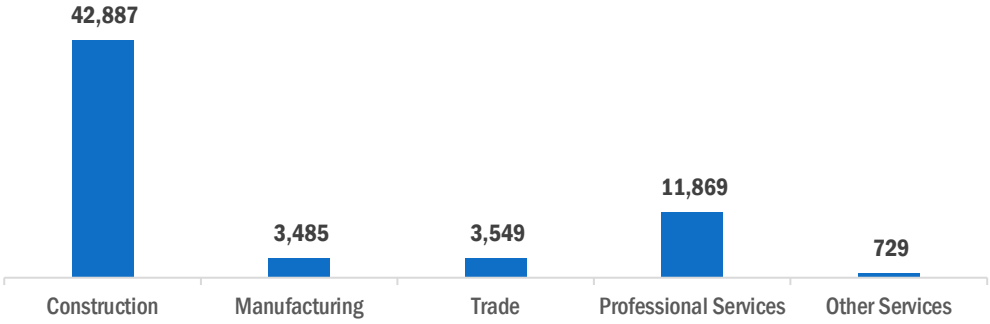


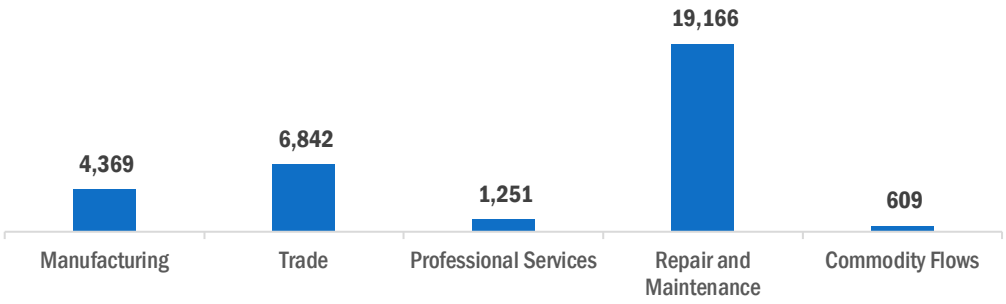
Figure WA-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 32,238 jobs in Washington. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure WA-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 75.0 percent of energy-related employers in Washington hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table WA-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	17.6	55.9	26.5	-
Transmission, Distribution and Storage	26.1	39.1	30.4	4.3
Energy Efficiency	27.3	47.3	23.6	1.8
Fuels	40.0	26.7	33.3	-
Motor Vehicles	21.4	42.9	35.7	-

West Virginia

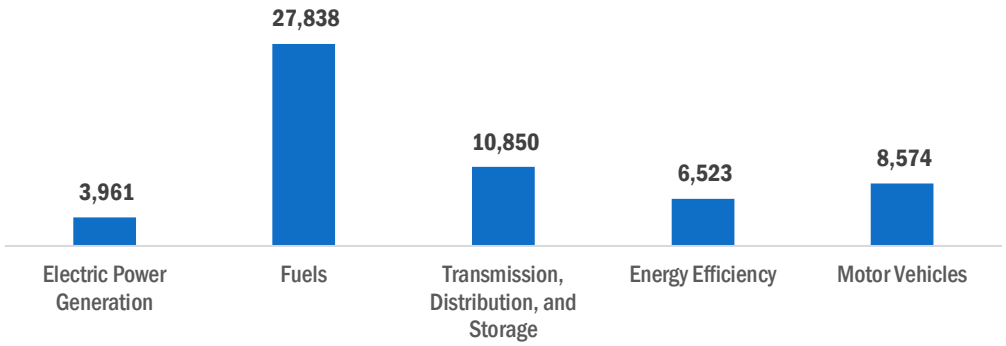
Energy and Employment – 2017

Overview

West Virginia has a high concentration of energy employment, with 42,649 Traditional Energy workers statewide (representing 1.3 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,961 are in Electric Power Generation, 27,838 are in Fuels, and 10,850 are in Transmission, Distribution, and Storage. The Traditional Energy sector in West Virginia is 6.2 percent of total state employment (compared to 2.3 percent of national employment). West Virginia has an additional 6,523 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 8,574 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure WV-1.

Employment by Major Energy Technology Application

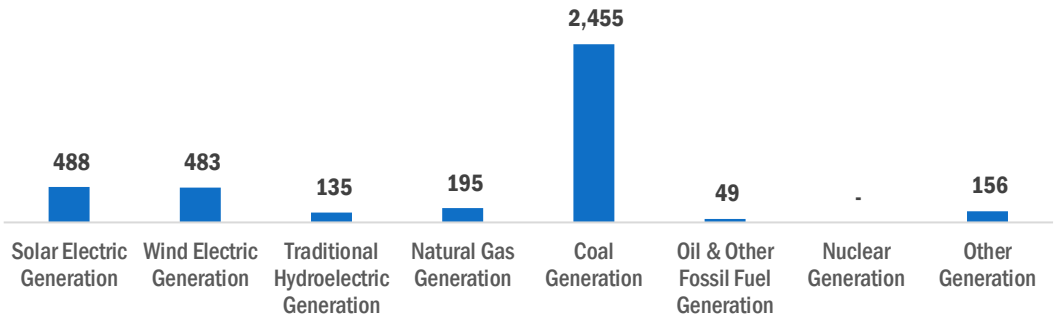


Breakdown by Technology Applications

Electric Power Generation

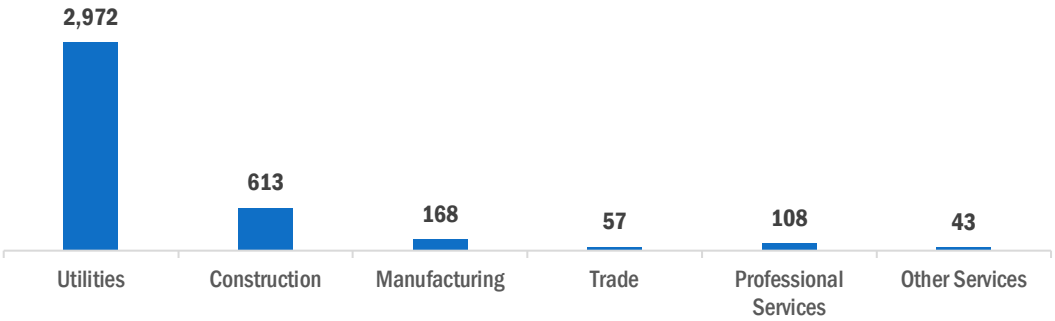
Electric Power Generation employs 3,961 workers in West Virginia, 0.4 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 2,699 jobs, followed by solar at 488 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 75.0 percent of jobs. Construction is next with 15.5 percent.

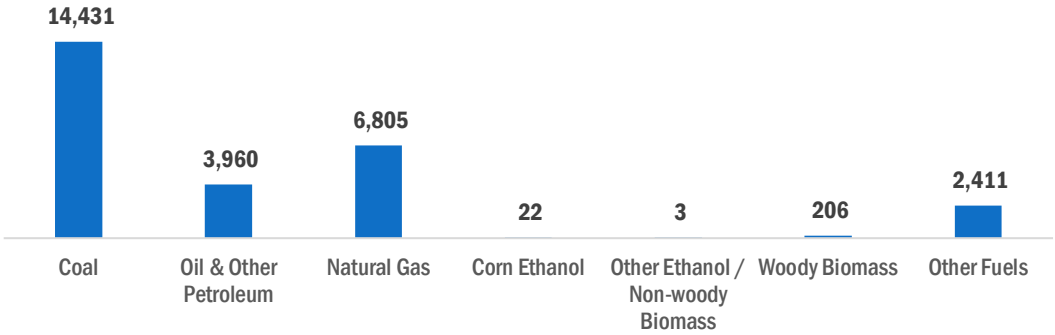
Figure WV-3.
Electric Power Generation Employment by Industry Sector



Fuels

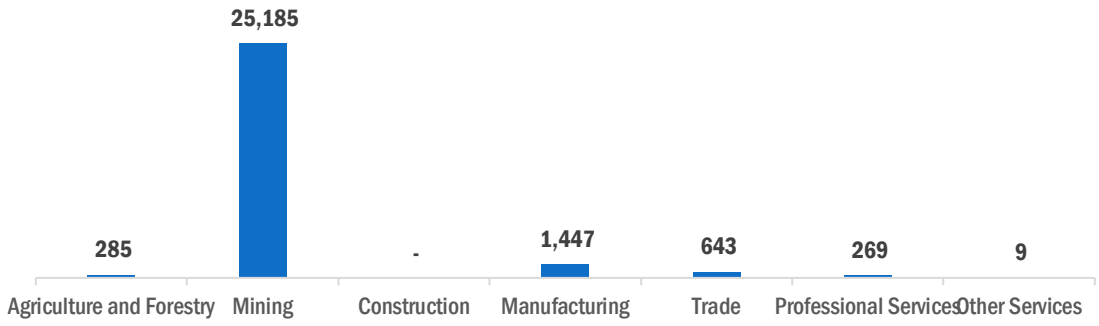
Fuels account for 27,838 jobs in West Virginia, 2.6 percent of the national total. Coal represents the largest segment of Fuels employment, with 14,431 jobs.

Figure WV-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 90.5 percent of Fuels jobs in West Virginia.

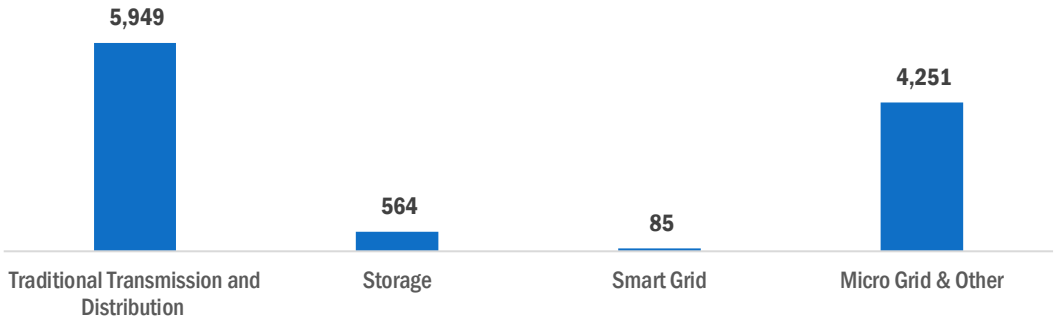
Figure WV-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

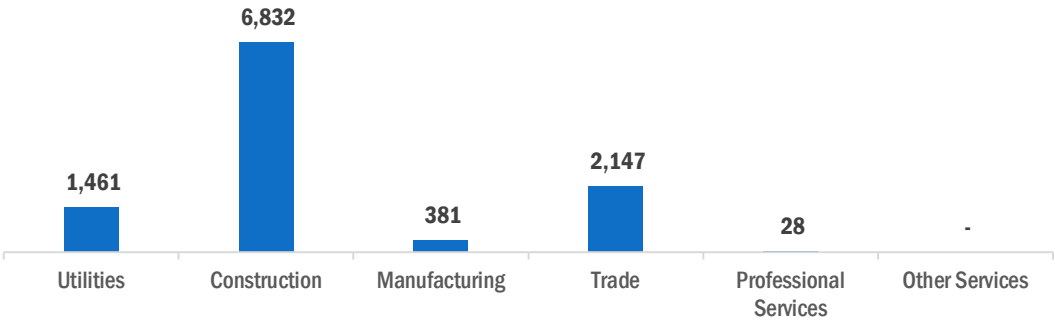
Transmission, Distribution, and Storage employs 10,850 workers in West Virginia, 0.8 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in West Virginia, with 63.0 percent of such jobs statewide.

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



Energy Efficiency

The 6,523 Energy Efficiency jobs in West Virginia represent 0.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting. Energy Efficiency employment is primarily found in the construction industry.

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

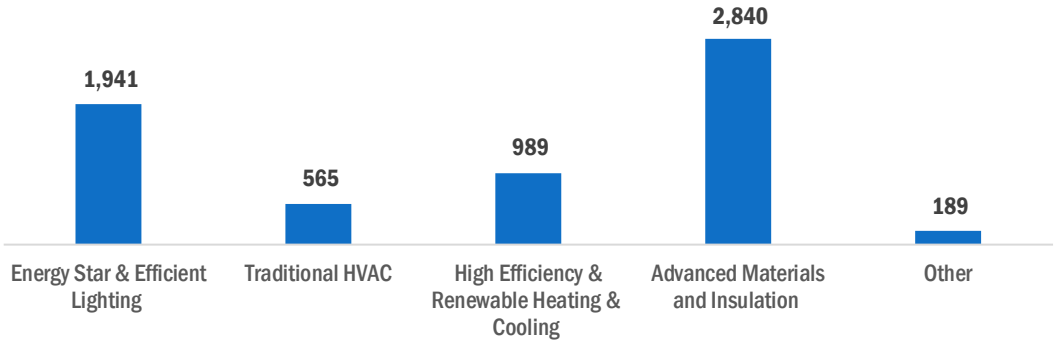
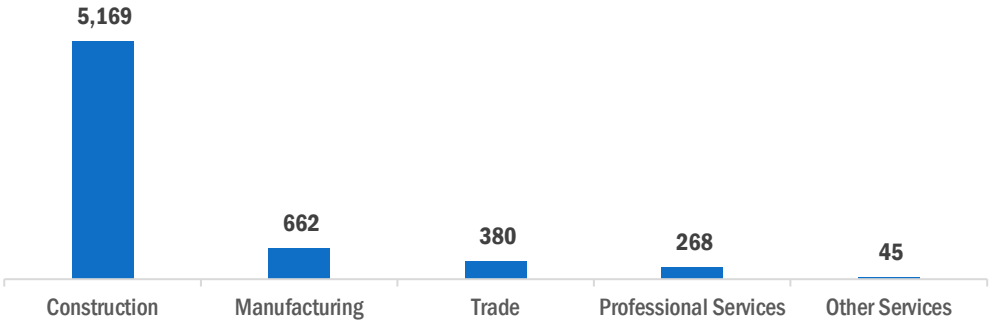


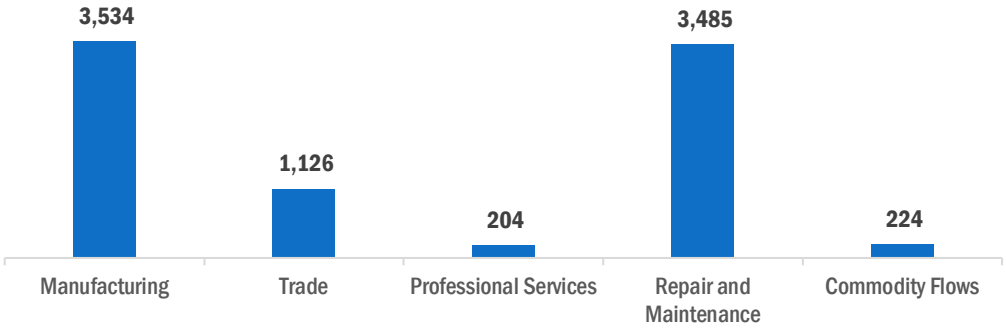
Figure WV-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 8,574 jobs in West Virginia. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure WV-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 83.3 percent of energy-related employers in West Virginia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table WV-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	33.3	25.0	33.3	8.3
Transmission, Distribution and Storage	-	66.7	16.7	16.7
Energy Efficiency	57.1	28.6	14.3	-
Fuels	5.9	47.1	47.1	-
Motor Vehicles	40.0	40.0	20.0	-

Wisconsin

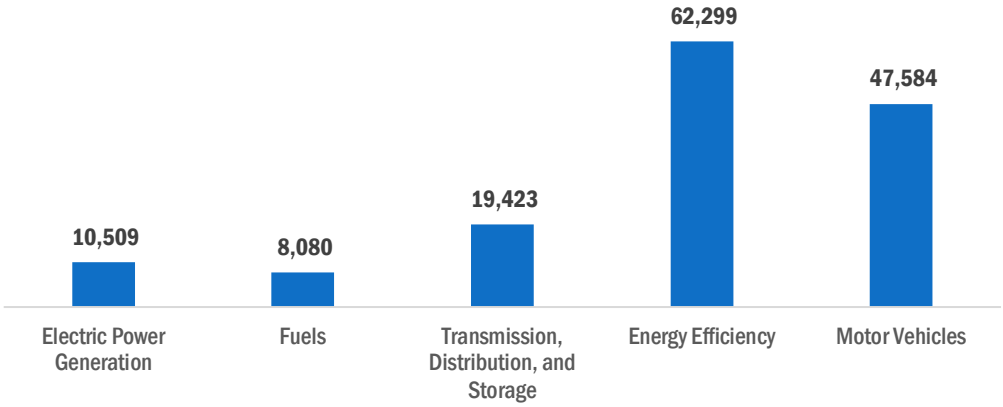
Energy and Employment – 2017

Overview

Wisconsin has a low concentration of energy employment, with 38,012 Traditional Energy workers statewide (representing 1.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 10,509 are in Electric Power Generation, 8,080 are in Fuels, and 19,423 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Wisconsin is 1.3 percent of total state employment (compared to 2.3 percent of national employment). Wisconsin has an additional 62,299 jobs in Energy Efficiency (2.8 percent of all U.S. Energy Efficiency jobs) and 47,584 jobs in Motor Vehicles (1.9 percent of all U.S. Motor Vehicle jobs).

Figure WI-1.

Employment by Major Energy Technology Application

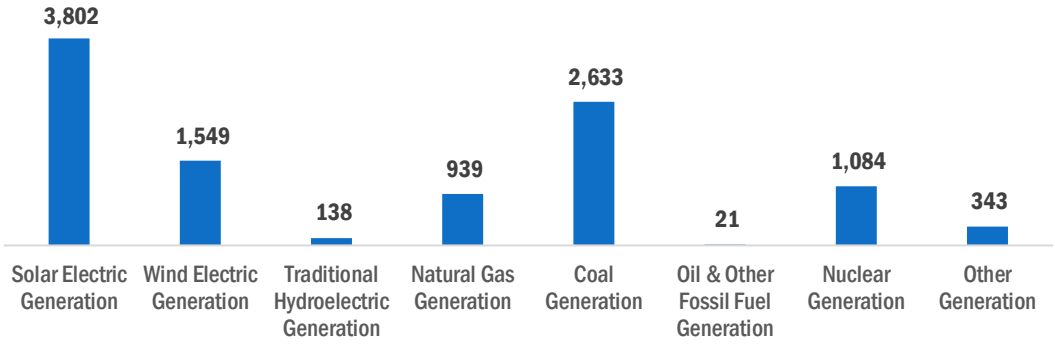


Breakdown by Technology Applications

Electric Power Generation

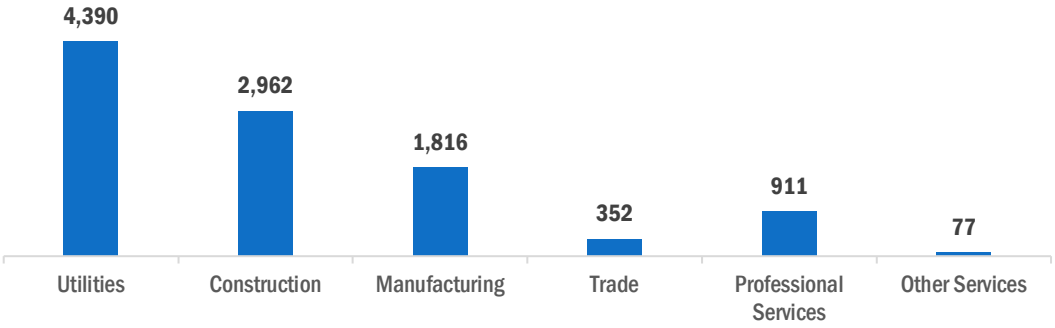
Electric Power Generation employs 10,509 workers in Wisconsin, 1.2 percent of the national total. Solar makes up the largest segment of employment related to Electric Power Generation, with 3,802 jobs, followed by traditional fossil fuel generation at 3,593 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 41.8 percent of jobs. Construction is next with 28.2 percent.

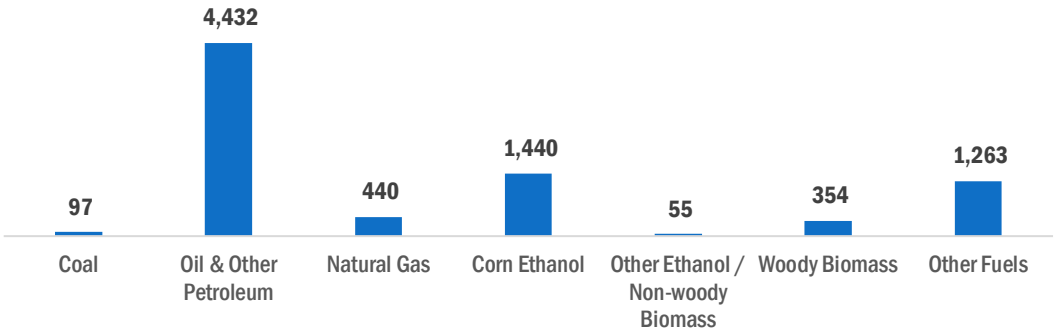
Figure WI-3.
Electric Power Generation Employment by Industry Sector



Fuels

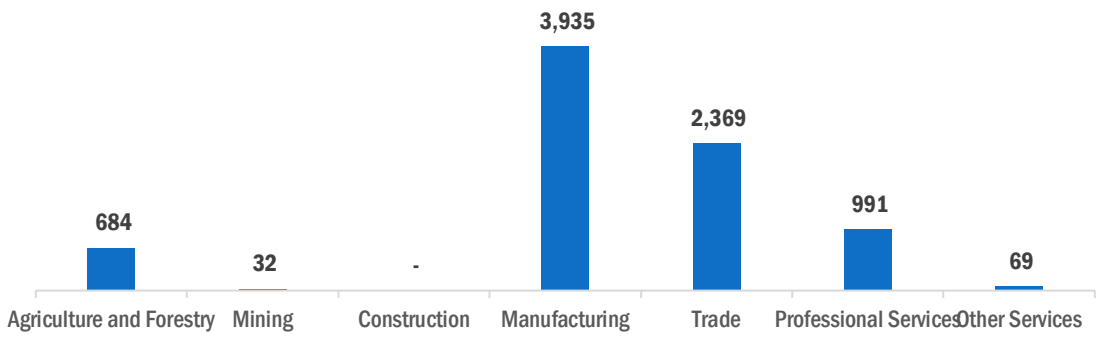
Fuels account for 8,080 jobs in Wisconsin, 0.8 percent of the national total. Oil and other petroleum represents the largest segment of Fuels employment, with 4,432 jobs.

Figure WI-4.
Fuels Employment by Detailed Technology Application



Manufacturing jobs represent 48.7 percent of Fuels jobs in Wisconsin.

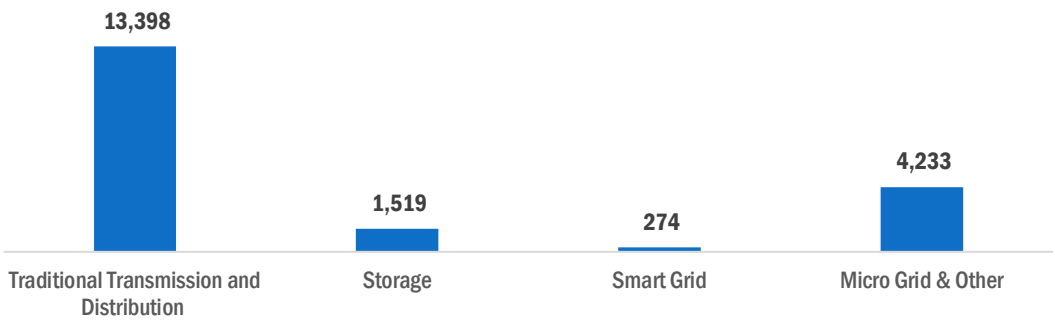
Figure WI-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

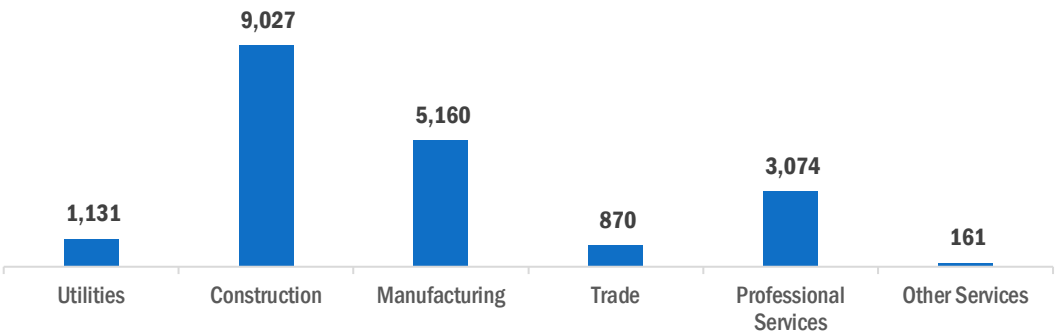
Transmission, Distribution, and Storage employs 19,423 workers in Wisconsin, 1.5 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Wisconsin, with 46.5 percent of such jobs statewide.

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



Energy Efficiency

The 62,299 Energy Efficiency jobs in Wisconsin represent 2.8 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by advanced materials and insulation. Energy Efficiency employment is primarily found in the construction industry.

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

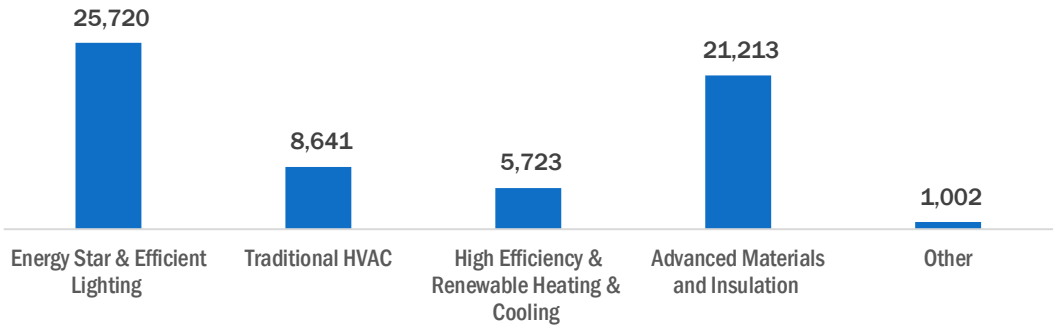
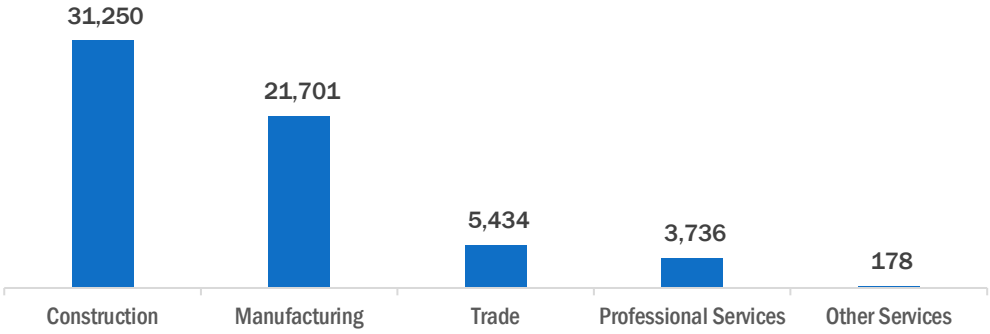


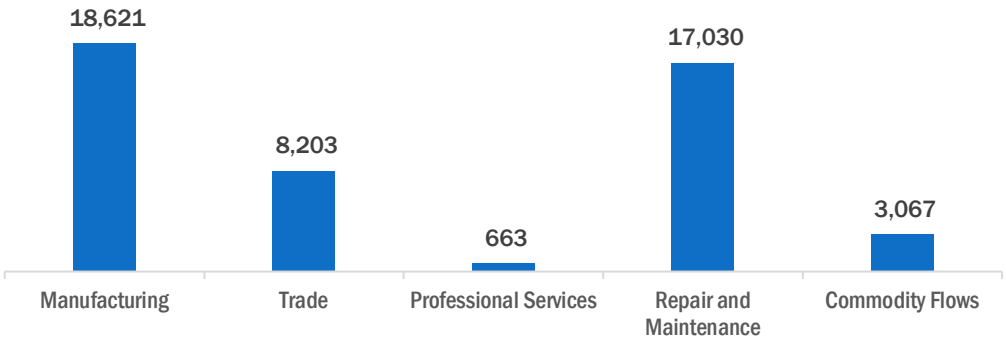
Figure WI-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 47,584 jobs in Wisconsin. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure WI-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 58.1 percent of energy-related employers in Wisconsin hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table WI-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	20.0	50.0	30.0	-
Transmission, Distribution and Storage	15.4	69.2	15.4	-
Energy Efficiency	18.9	60.4	18.9	1.9
Fuels	18.2	59.1	22.7	-
Motor Vehicles	20.0	60.0	20.0	-

Wyoming

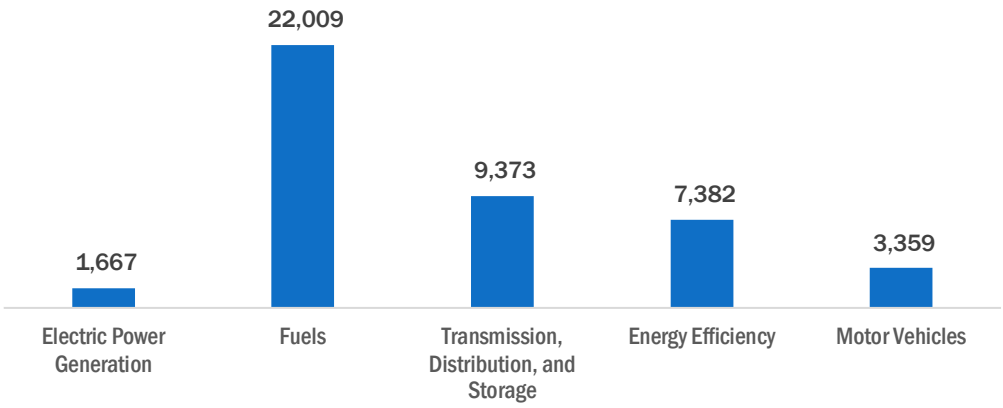
Energy and Employment – 2017

Overview

Wyoming has a high concentration of energy employment, with 33,049 Traditional Energy workers statewide (representing 1.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 1,667 are in Electric Power Generation, 22,009 are in Fuels, and 9,373 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Wyoming is 11.8 percent of total state employment (compared to 2.3 percent of national employment). Wyoming has an additional 7,382 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 3,359 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure WY-1.

Employment by Major Energy Technology Application

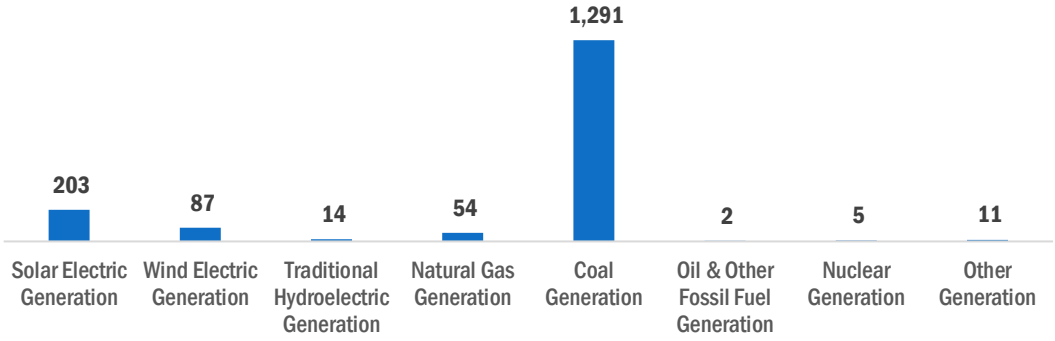


Breakdown by Technology Applications

Electric Power Generation

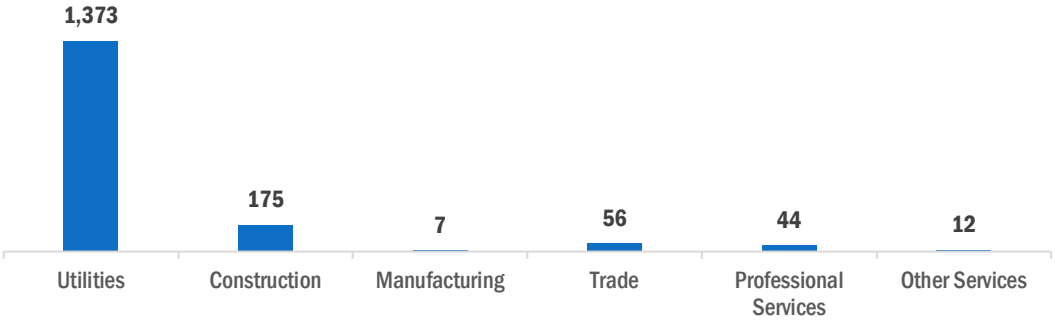
Electric Power Generation employs 1,667 workers in Wyoming, 0.2 percent of the national total. Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 1,346 jobs, followed by solar at 203 jobs.

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



Utilities are the largest industry sector in Electric Power Generation, with 82.4 percent of jobs. Construction is next with 10.5 percent.

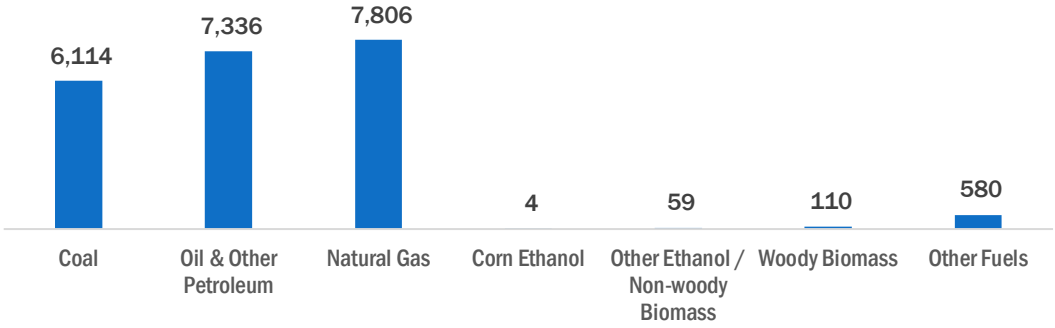
Figure WY-3.
Electric Power Generation Employment by Industry Sector



Fuels

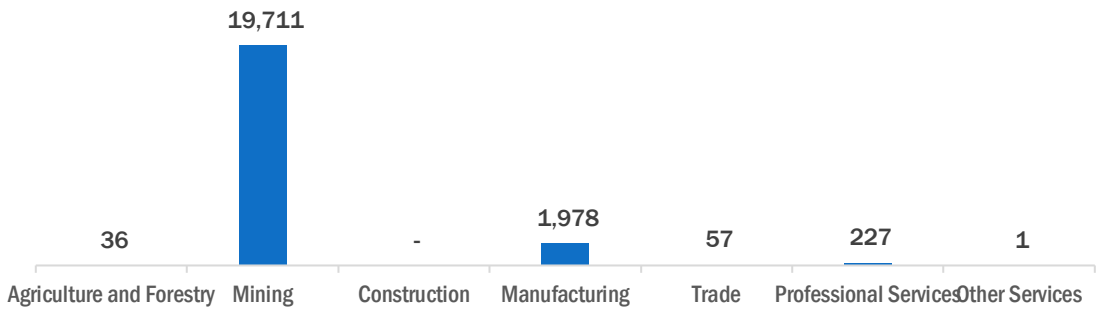
Fuels account for 22,009 jobs in Wyoming, 2.0 percent of the national total. Natural gas represents the largest segment of Fuels employment, with 7,806 jobs.

Figure WY-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 89.6 percent of Fuels jobs in Wyoming.

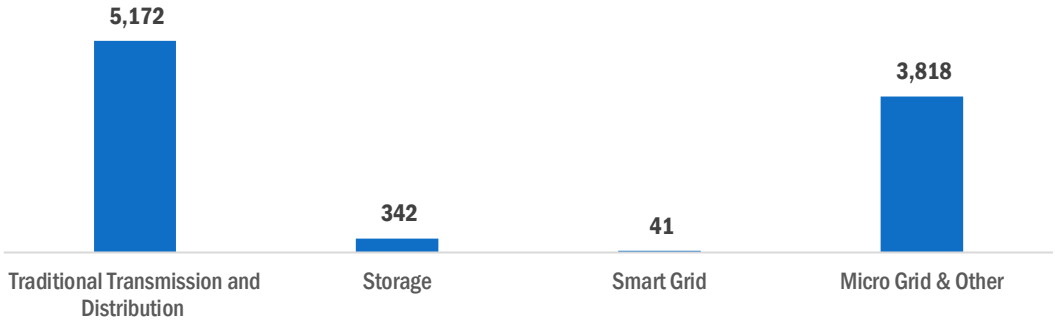
Figure WY-5.
Fuels Employment by Industry Sector



Transmission, Distribution, and Storage

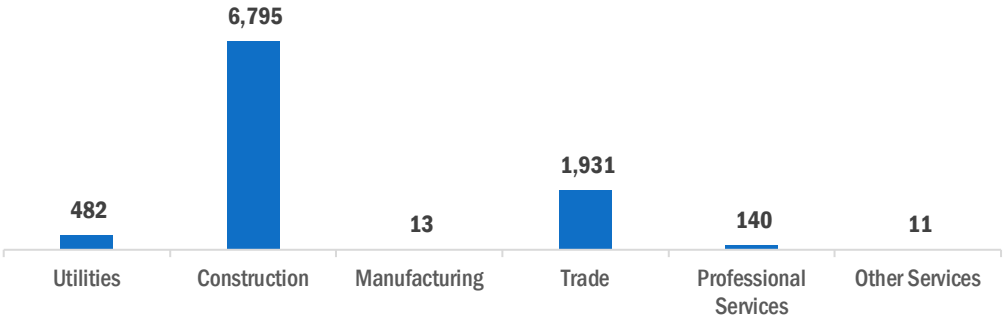
Transmission, Distribution, and Storage employs 9,373 workers in Wyoming, 0.7 percent of the national total.

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



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Wyoming, with 72.5 percent of such jobs statewide.

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



Energy Efficiency

The 7,382 Energy Efficiency jobs in Wyoming represent 0.3 percent of all U.S. Energy Efficiency jobs. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by traditional HVAC. Energy Efficiency employment is primarily found in the construction industry.

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

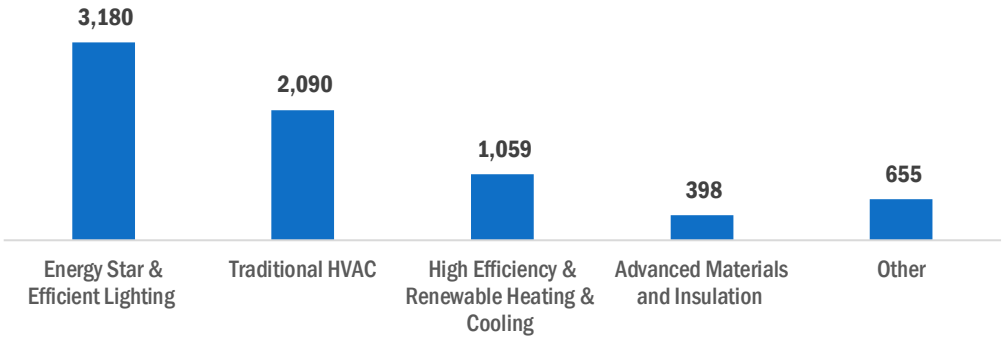
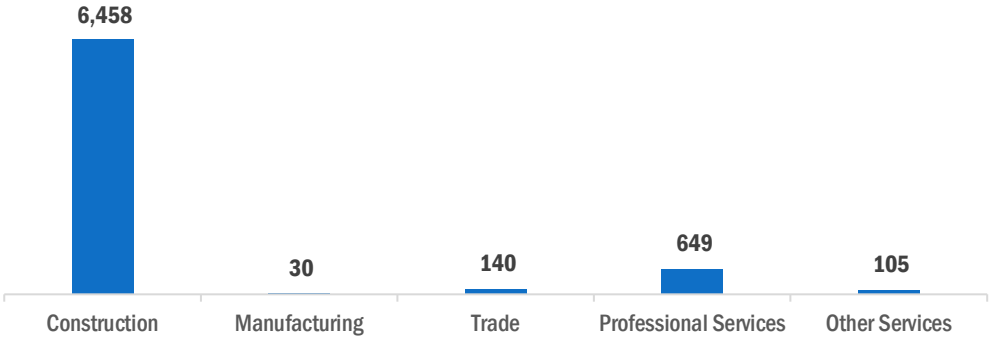


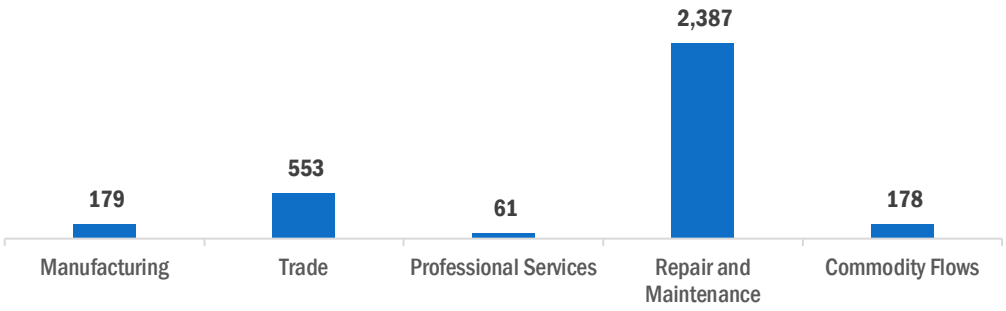
Figure WY-9.
Energy Efficiency Employment by Industry Sector



Motor Vehicles

Motor Vehicle employment accounts for 3,359 jobs in Wyoming. The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure WY-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

Hiring Difficulty

Over the last year, 58.3 percent of energy-related employers in Wyoming hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Transmission, Distribution and Storage.

Table WY-1.
Hiring Difficulty by Major Technology Application

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)	Don't Know / Not Applicable (percent)
Electric Power Generation	40.0	40.0	20.0	-
Transmission, Distribution and Storage	20.0	80.0	-	-
Energy Efficiency	-	66.7	33.3	-
Fuels	13.3	60.0	26.7	-
Motor Vehicles	42.9	28.6	28.6	-