

The United States Energy and Employment Report (USEER) captures employment, workforce, industry, occupation, unionization, demographic, and hiring information by energy industry technology groups. These groups represent the fields of electric power generation; transmission, distribution, and storage; fuels; energy efficiency; and motor vehicles and component parts.

The national report, along with companion reports giving state-level details, are available at energy.gov/useer



EMPLOYMENT TRENDS

In 2021, the Energy sector employed more than **7.8 million Americans.**

7.8 MILLION JOBS



 = 1 million jobs

4.0%

Total energy employment rose by 4.0% from 2020 to 2021.

2.8%


Energy jobs grew faster than the U.S. workforce overall, which rose 2.8% in 2021.



JOBS IN NET-ZERO ALIGNED AREAS

There were **3,086,467 jobs** in net-zero aligned areas, making up **41%** of total energy jobs in 2021.



 - Net zero aligned job

Jobs in net-zero aligned areas are defined as jobs related to: renewable energy; grid technologies and storage; traditional transmission and distribution; nuclear energy; a subset of energy efficiency; biofuels; and plug-in hybrid, fully electric, and hydrogen fuel cell vehicles and components.



UNIONIZATION

Across all energy jobs in 2021, **10%** of workers were represented by a union or project labor agreement, compared to **6%** in the private sector.

Energy
Workers

10%

Private
Sector Overall

6%

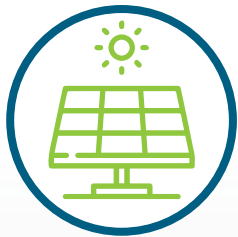
2021 ENERGY JOBS

ELECTRIC POWER GENERATION

The Electric Power Generation sector employed **857,579** people in 2021, an increase of **24,006 jobs (+2.9%)**.

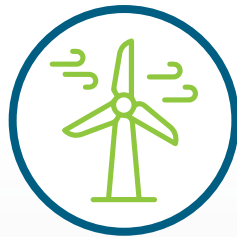
Nearly all subtechnologies added jobs from 2020 through 2021. Wind energy was one of the few industries that did not lose jobs in 2020.

An increase of
24,006 JOBS,
UP 2.9%,
from 2020 to 2021.



Solar

+17,212 jobs
(+5.4%)



Wind

+3,347 jobs
(+2.9%)



Coal

-572 jobs
(-0.8%)



Nuclear

-2,440 jobs
(-4.2%)



Hydropower

+1,383 jobs
(+2.2%)



Combined Heat and Power

+996 jobs
(+3.5)



Bioenergy

+349 jobs
(+2.9%)



Geothermal

+220 jobs
(+2.8%)

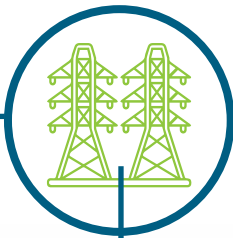


TRANSMISSION, DISTRIBUTION, AND STORAGE

The Transmission, Distribution, and Storage sector employed more than **1.3 million people** in 2021.

All transmission, distribution, and storage technologies experienced job growth in 2021.

An increase of
21,460 JOBS,
UP 1.6%,
from 2020 to 2021.

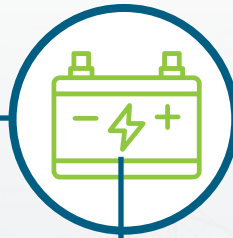


Traditional Transmission and Distribution

+13,008 jobs (+1.4%)



Traditional transmission and distribution added the most TDS jobs.



Batteries

+2,949 jobs (+4.4%)



Batteries saw job increases both in the grid storage and electric vehicles sectors.



Smart Grids

+1,136 jobs (+4.9%)



Smart grids outpaced virtually all other TDS technologies in growth rate.



FUELS

The Fuel sector employed **908,422** people in 2021.

Fossil fuel jobs accounted for most of the fuel jobs lost.

A decrease of
29,270 JOBS,
DOWN 3.1%,
from 2020 to 2021.



Petroleum

-31,593 jobs (-6.4%).



Onshore and offshore petroleum sectors combined led total job losses.



Coal Fuel

-7,125 (-11.8%).



Coal fuel employment declined by the greatest percentage.



Biofuels

+1,180 jobs (+6.7%)



Renewable diesel fuels, biodiesel fuels, and waste fuels all added jobs.



ENERGY EFFICIENCY

The Energy Efficiency sector employed **2,164,914** people in 2021 in the design, installation, and manufacturing of energy efficiency products and services.

An increase of
57,741 JOBS,
UP 2.7%,
from 2020 to 2021.

All energy efficiency technologies experienced job growth in 2021.



Traditional Heating, Ventilation, and Air Conditioning (HVAC):
+17,740 jobs (+3.3%).



ENERGY STAR® Appliances, Products, and Services:
+12,941 (+2.4%).



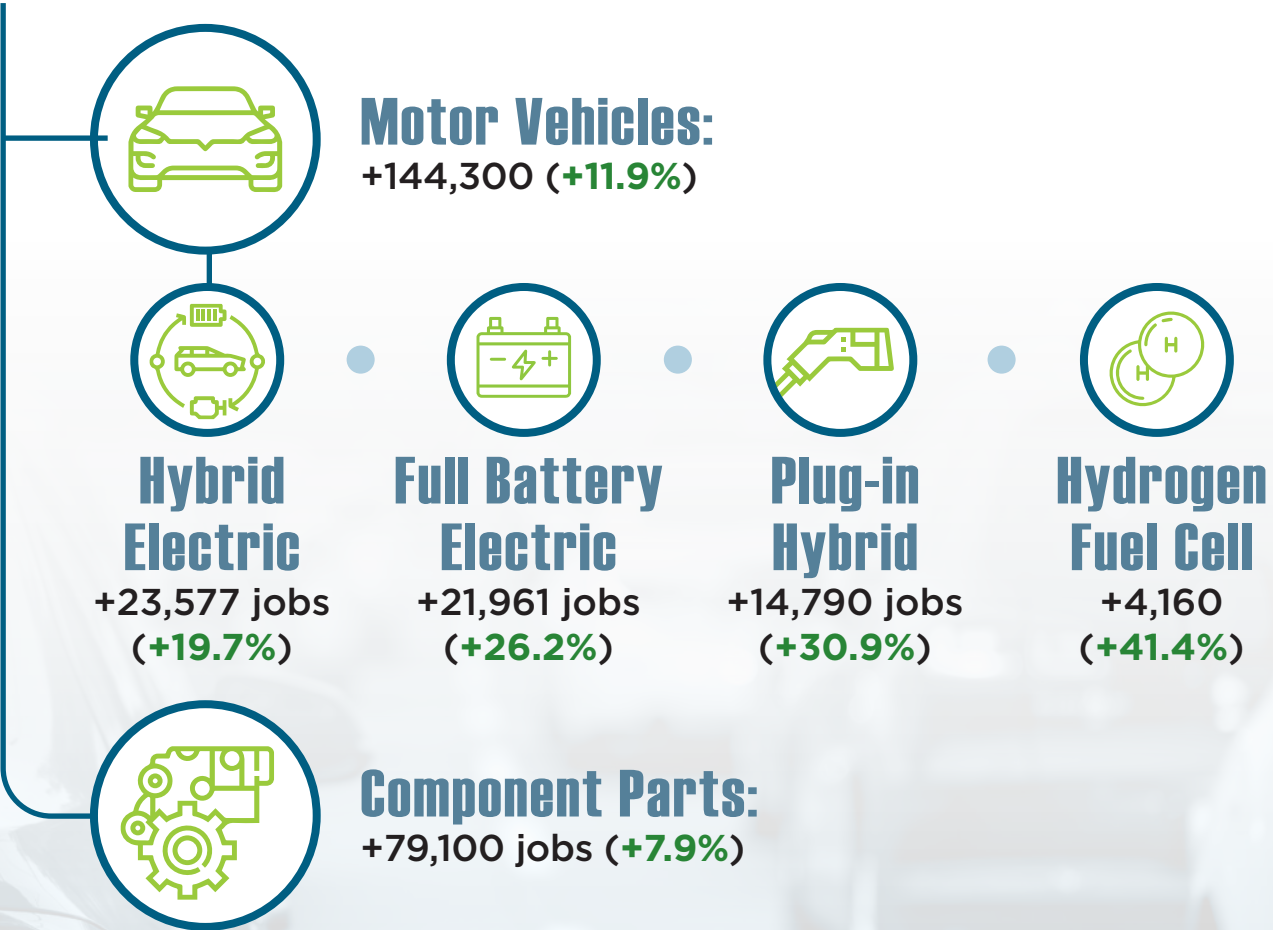
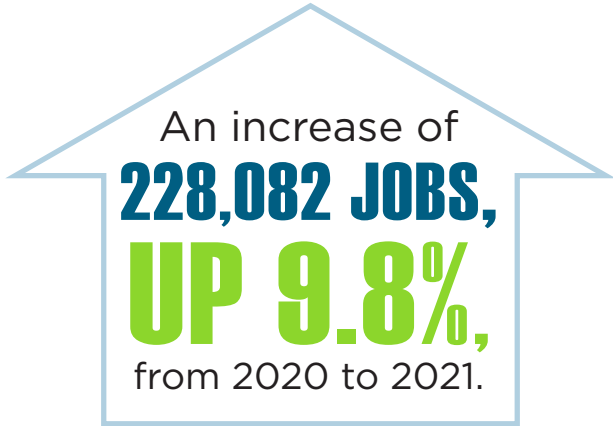
Renewable Heating and Cooling:
+4,027 jobs (+3.5%)



MOTOR VEHICLES

The Motor Vehicle and Component Parts sector employed **2,553,368** people in 2021.

Motor vehicles and component parts is the largest energy sector.



Jobs in carbon-reducing motor vehicles and component parts technologies grew a collective 25% in 2021, and were among the only subcategories of any type of energy jobs that did NOT decrease in 2020.



STATE LEVEL DATA

Carbon-reducing vehicles, renewable energy, and energy efficiency were a significant source of job growth in many states



Texas gained approximately 31,000 net jobs, which includes roughly 5,000 in carbon-reducing motor vehicles and nearly 7,000 in energy efficiency.



California gained more than 29,000 energy jobs, of which about 11,000 were in carbon-reducing motor vehicles and almost 2,000 were in solar.



Florida gained nearly 15,000 energy jobs, of which, over 5,000 were in energy efficiency.



West Virginia and Pennsylvania fared best nationally for growth in transmission, distribution, and storage, gaining 7,321 and 5,726 new jobs, respectively.

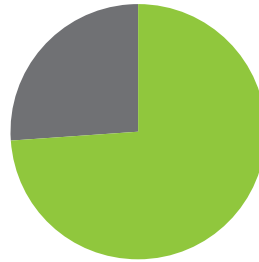


DEMOGRAPHICS

The energy workforce is 74% male vs U.S. workforce average, which is 53% male.

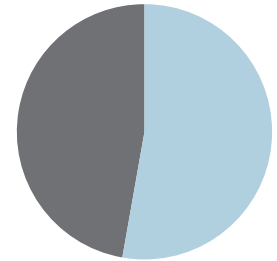
Energy Workforce

74%



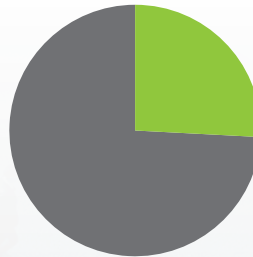
Overall U.S. Workforce

53%

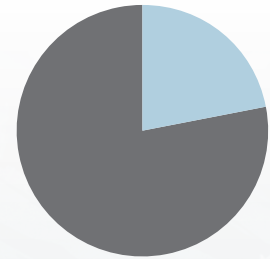


Non-White workers: 26% in energy vs 22% across the US workforce.*

26%

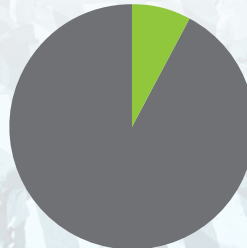


22%

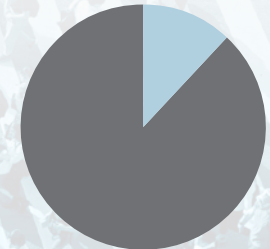


Black or African American: 8% compared to 12% across the U.S. workforce

8%



12%



*Surveys were filled out by employers who do not always have an accurate understanding of the racial and ethnic makeup of their employees