The 2020 U.S. Energy & Employment Report

The Energy Futures Initiative, a nonprofit think tank based in Washington, D.C., and the National Association of State Energy Officials, a nonprofit association representing the 56 energy offices of the states, territories, and District of Columbia, are excited to release the 2020 U.S. Energy and Employment Report (USEER).

First published in 2016 and 2017 by the U.S. Department of Energy, the USEER offers unique insights into the people who meet the country's energy needs, and identifies important trends and skill sets for the 21st Century energy workforce. It serves as an important and consistent tool for policymakers at the state and federal level, trade associations, labor unions, and other key stakeholders.

As the fifth installment of the report, the 2020 USEER includes an exclusive five-year summary of U.S. energy jobs trends. The 2020 USEER analyzes the following five sectors of the U.S. economy:

- Fuels
- Electric Power Generation (EPG)
- Transmission, Distribution, and Storage (TDS)
- Energy Efficiency (EE)
- Motor Vehicles (MV)

Summary: Key Findings

The **Traditional Energy** and **Energy Efficiency** sectors **employed 6.8 million people** at the end of 2019, adding **over 120,300 new jobs** in total, *outperforming the rest of the economy in job creation.*

Fuels, which includes oil, gas, coal, nuclear and various biofuels, added **over 26,100 new jobs in 2019**. Most of these were in oil and gas, which added **18,000 new jobs**.

Electric Power Generation increased overall employment by **2.5%** and stood at **897,000 jobs** (this includes 97,000 jobs in solar in which employees spend less than half their time on solar work).

Transmission, Distribution, and Storage added **33,000 jobs** overall, and employs **1.4 million Americans** (this does not include retail sales in gasoline stations).

Energy Efficiency now employs **2.38 million Americans**, adding **54,000 new jobs**, *the most of any sector*. Energy Efficiency has added **300,000 new jobs in the last 4 years**.

The **Motor Vehicles** sector added **20,000 new employees in 2019**.

Overall, employers in these five sectors **predicted growth of 3.1% in 2020.**

Summary: Five Year Trends

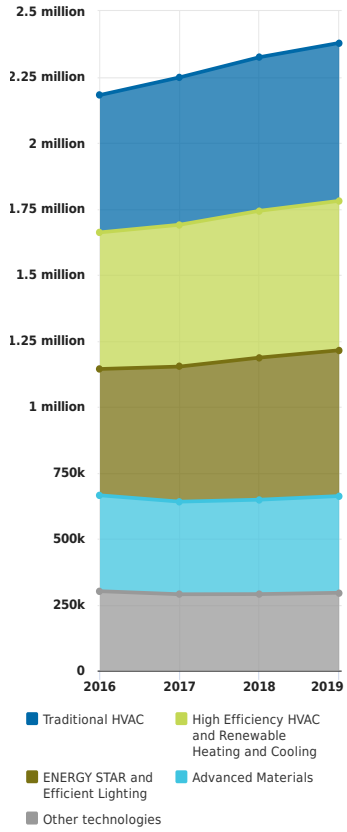
In 2019, U.S. energy, energy efficiency, and motor vehicles firms employed more than 8.27 million Americans, comprising 5.4 percent of the U.S. workforce. The traditional sectors—focused on the production of fuels and electricity and their transmission and distribution to end users—employ 3.3 million Americans. Working downstream are the energy efficiency and motor vehicle sectors, focused increasingly during the last five years on reducing consumption of the fuels and electricity produced upstream.

In spite of these contradictory tendencies, employment in these five sectors of the economy has grown 12.4 percent from 2015-2019, outpacing the general economy's employment growth rate (6.0 percent). In total, these sectors added nearly 915,000 jobs to the US economy over the past 5 years, representing more than 10.7 percent of all new employment.

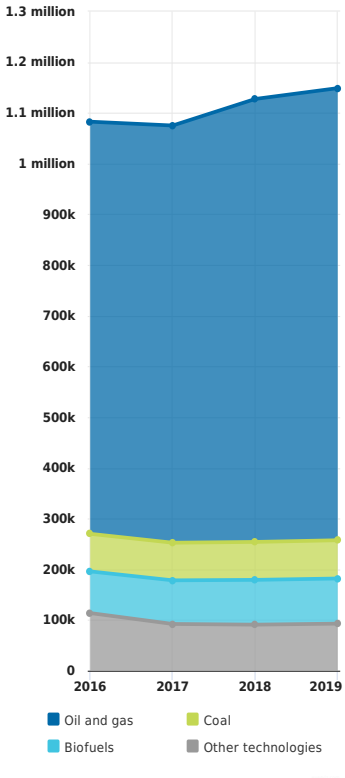
Other important trends include:

1. The decoupling of energy consumption from job growth.
2. The deployment of new technologies in all five sectors has driven net job growth, even while the displacement of old technologies has led to job loss in specific subsectors. The transition from coal-fired generation as the largest source of electricity in the U.S. in 2015 to natural gas in 2016 is the clearest example of such displacement and will be explored later in this summary.
3. The role of energy efficiency, both in the built environment and in transportation, cannot be overstated as a contributor to job growth. While fuel efficiency jobs' data in the motor vehicles' sector was not collected in 2015, energy efficiency and fuel efficiency contributed to over 400,000 new jobs in the last five years.

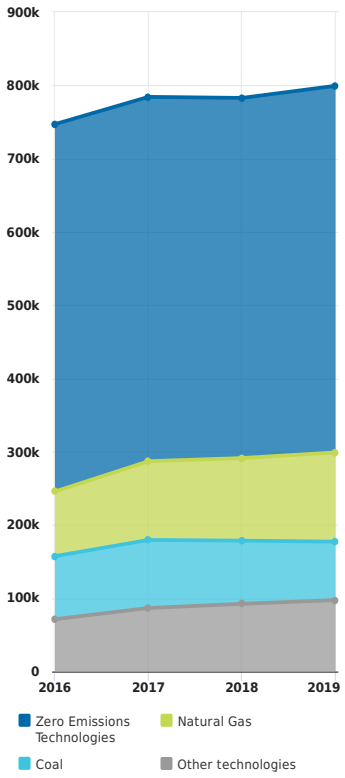
Jobs in Energy Efficiency Sector



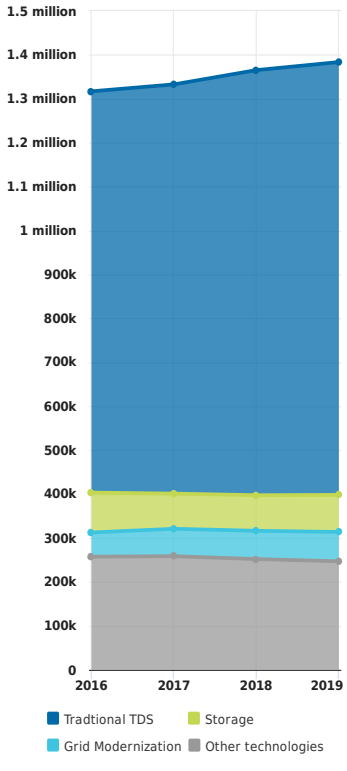
Jobs in Fuels Sector



Jobs in Electric Power Generation Sector



Jobs in Transmission, Distribution, and Storage Sector



Jobs in Motor Vehicles Sector