

Arizona

Energy Efficiency Jobs in America



Clean energy workers are a huge and important part of America's workforce. We know from our country's last economic crisis that clean energy can lead the way to recovery.

Hundreds of thousands of workers are ready to return to work to build a better, cleaner, more equitable economy for tomorrow. With innovative policies we could get these workers back on the job today. Congress can start by spurring investments in energy efficiency (EE) and help the economy recover and grow for years to come.

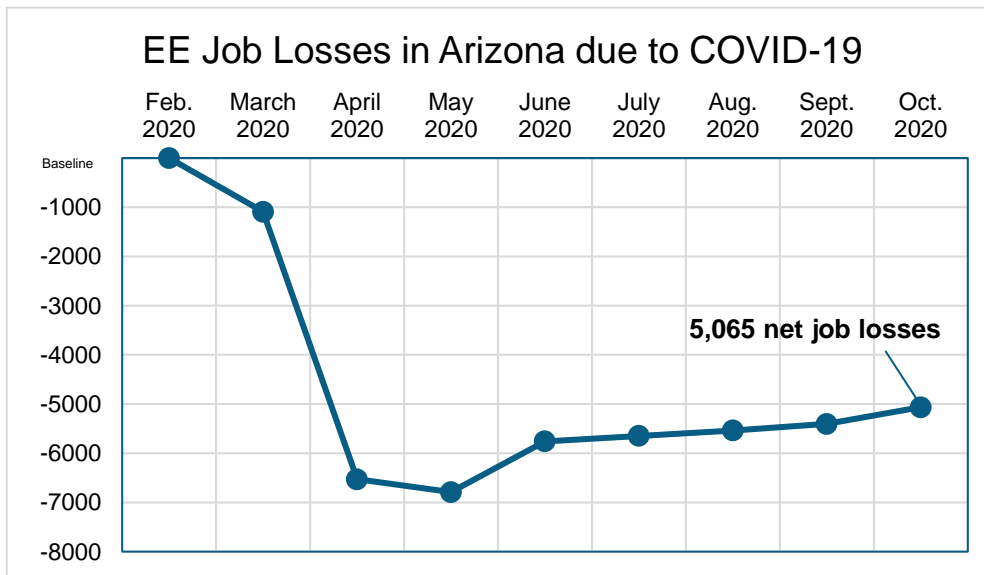
COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Arizona's energy efficiency industry lost as many as 5,065 jobs since its onset, a 11.3% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

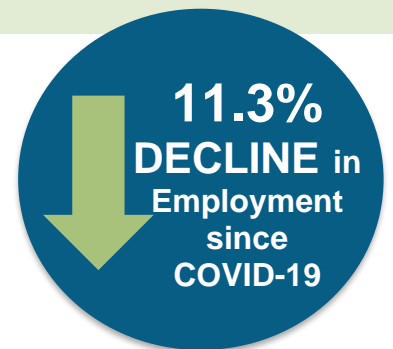
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Arizona EE workforce grew steadily, gaining 10.1% since 2016.**

As the U.S. advances our economic recovery, policy solutions must create conditions to return to work laid-off/furloughed EE workers and to create a pathway for new workers to join this vital sector.



*Source: [Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis, March 2020-October 2020](#).
**first available sector-specific data



Presented by:



What are EE Jobs?

Jobs that deliver goods and services that lower energy use by improving technologies, appliances, buildings, and energy systems.

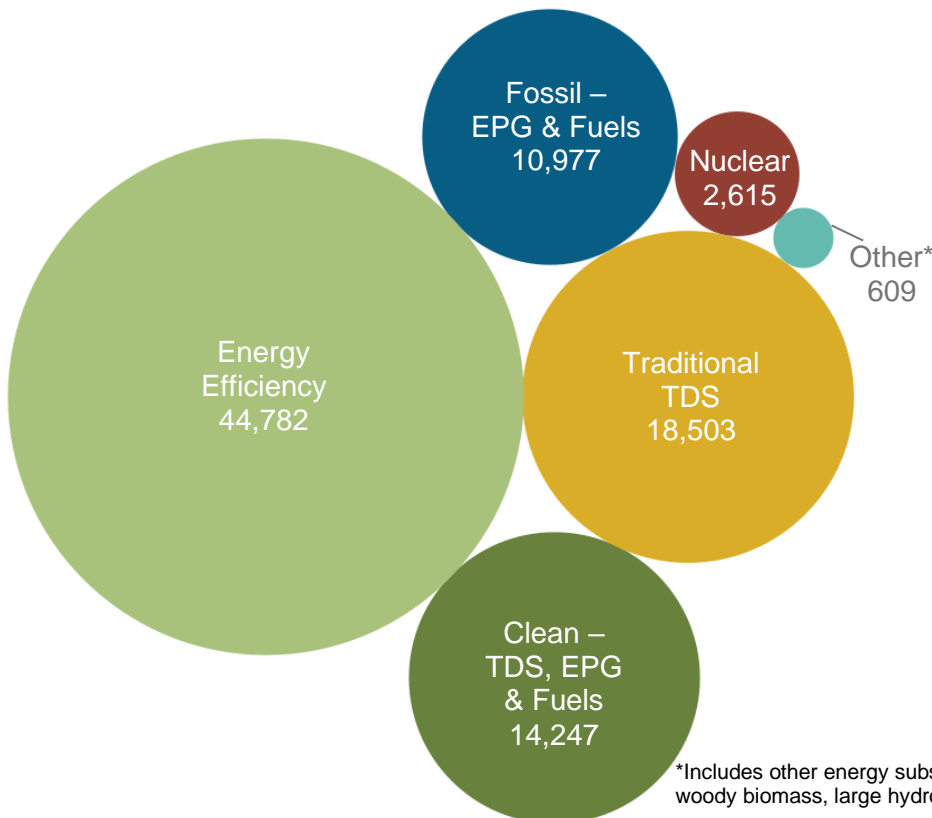
What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
- Design and construct high performance buildings such as those earning LEED certification
- Upgrade and repair heating, air conditioning and ventilation (HVAC) and water heating equipment
- Educate property owners and managers on building improvements to unlock savings for businesses, homeowners, schools, states, municipalities, military bases and more
- Analyze building energy data using software to maximize savings through targeted performance improvements and behavioral changes
- Review and approve loans to finance energy savings performance contracts to improve the comfort, health and operational costs of buildings

All EE jobs counted in this report enhance energy efficiency. The above descriptions provide illustrative examples of what some EE workers do, and should not be considered an exhaustive list of all efficiency work.

How does EE compare in Arizona?

Energy efficiency is the largest energy sector in Arizona.

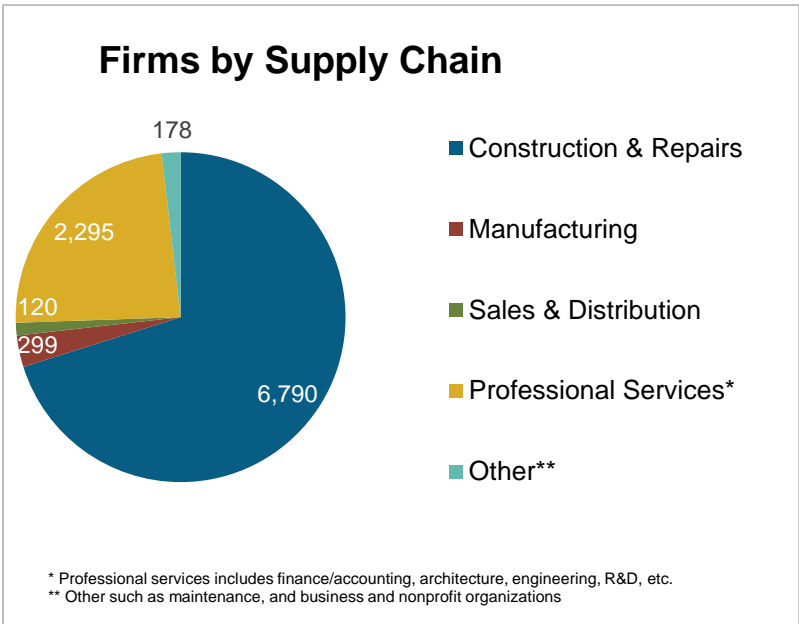
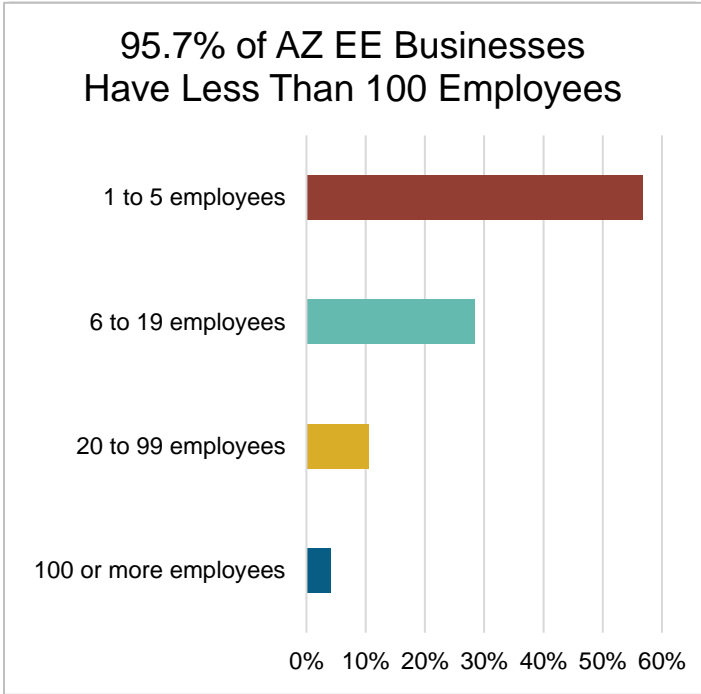


Energy efficiency in Arizona has seen consistent, reliable job growth – 10.1 percent since 2016.

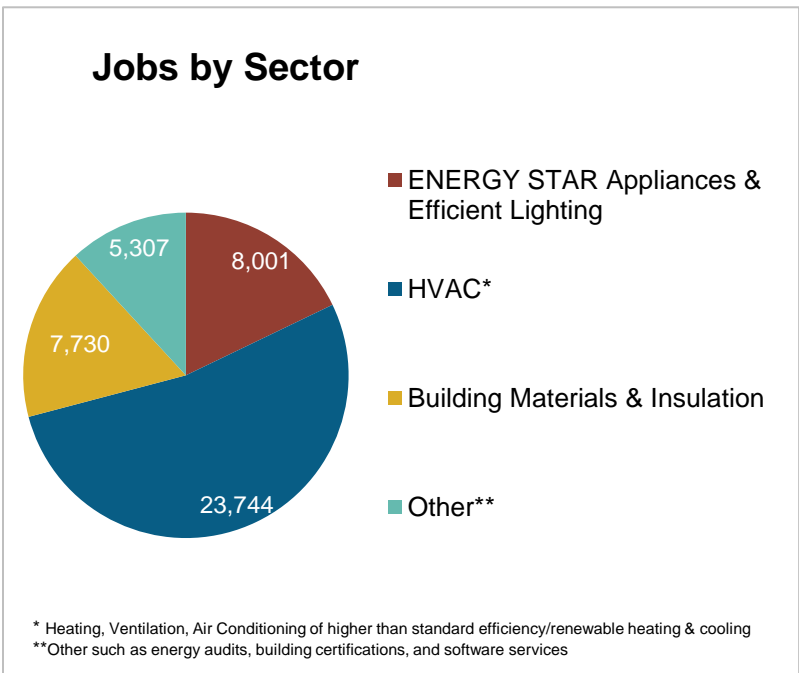
*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

What do the EE businesses look like in Arizona?

EE Sector =
9,683
 Businesses in AZ
 (Dec. 2019)
 ↑ **300** over 2018



7.0%
 of Arizona
 residents employed
 in EE are **Veterans**

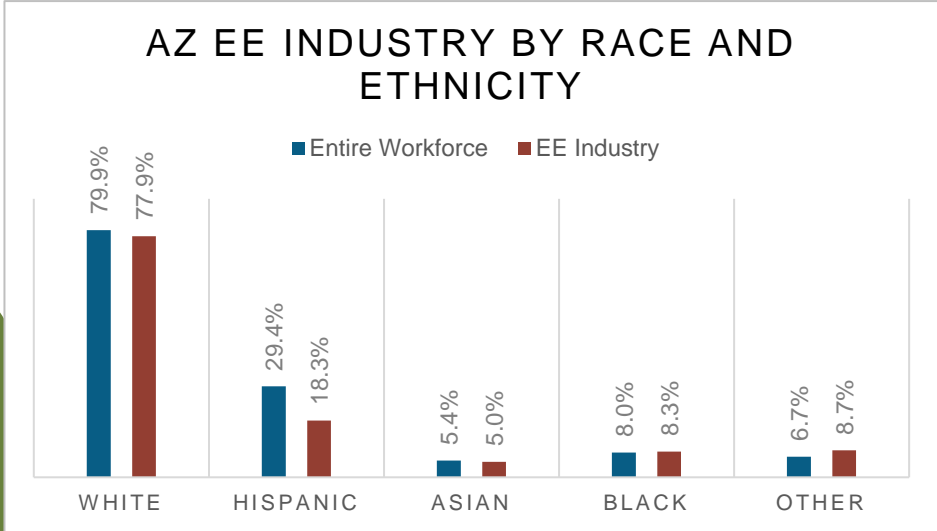



**Energy Efficiency
 Construction Workers
 Make Up 18% of AZ
 Construction Workers**

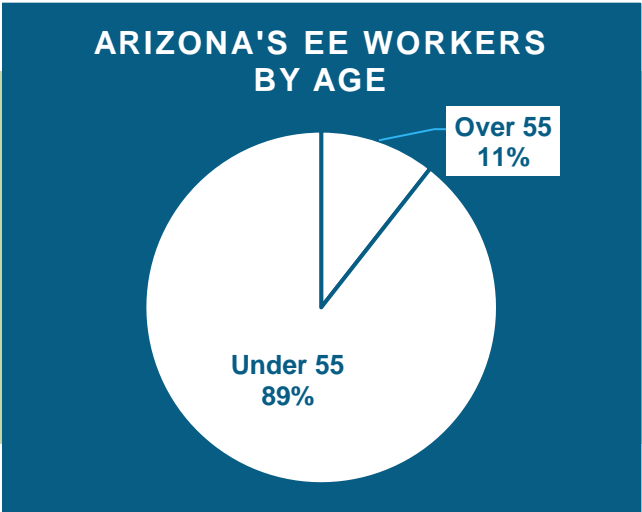
How is EE Doing regarding Diversity in Arizona?

Demographic data is crucial for benchmarks and to measure progress in the energy efficiency industry. In striving for more diversity in EE jobs, we can create a stronger and more inclusive industry. Promoting diversity in hiring is key to maintaining a future workforce of talented professionals and ensuring all Arizona communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.



Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.



A significant portion of the Arizona efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

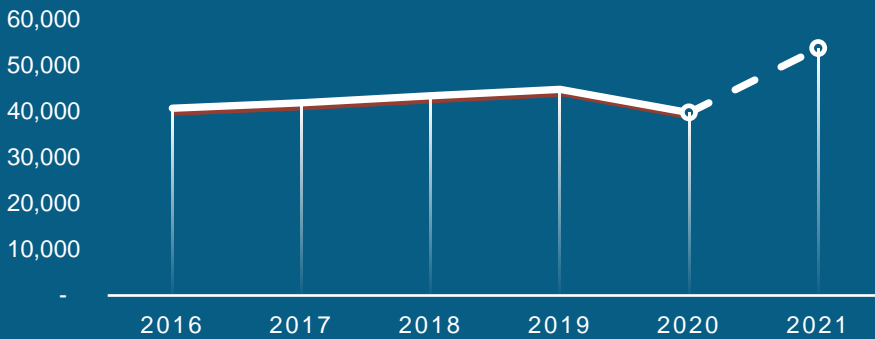
Why invest in EE?

Economic benefits of a federal energy efficiency stimulus package include high-quality jobs for U.S. residents, worker income, boosts to local, state, and federal tax revenues, contributions to Gross Domestic Product (GDP), and energy cost savings.

All these benefits ultimately translate to greater cash flow and stronger local economies. Energy efficiency jobs are proven to be sustainable wage positions that are accessible to all localities nationwide — regardless of geography or politics — providing new jobs that cannot be outsourced.

Updates to U.S. energy infrastructure are investments in the collective economic future of Americans; the creation of a more resilient energy system is vital to economic growth and security.

ARIZONA PROJECTED STIMULUS JOB IMPACTS



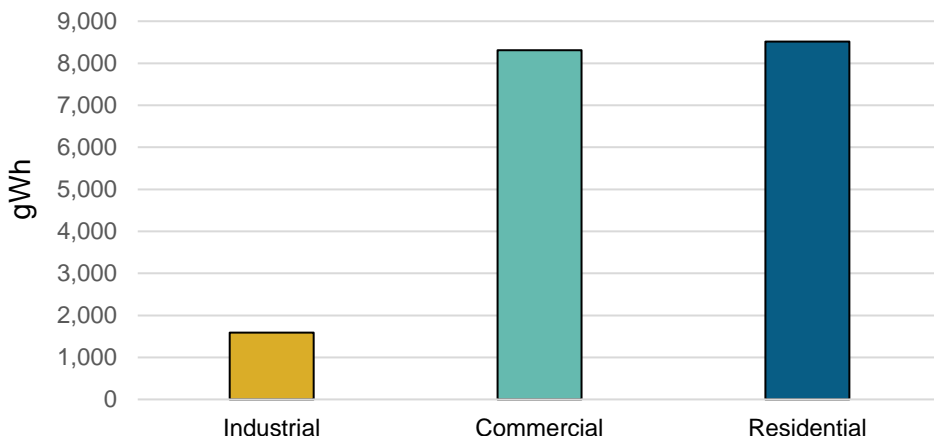
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **13,967 full-time direct, indirect, and induced AZ jobs** that will last for at least five years: Over **69,837 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$909 million in GDP** each year for the next five years – resulting in **\$4.5 billion in economic activity**, more than 4.7 times the investment.

How much energy efficiency is untapped in your state?

Arizona Energy Efficiency Potential by Sector



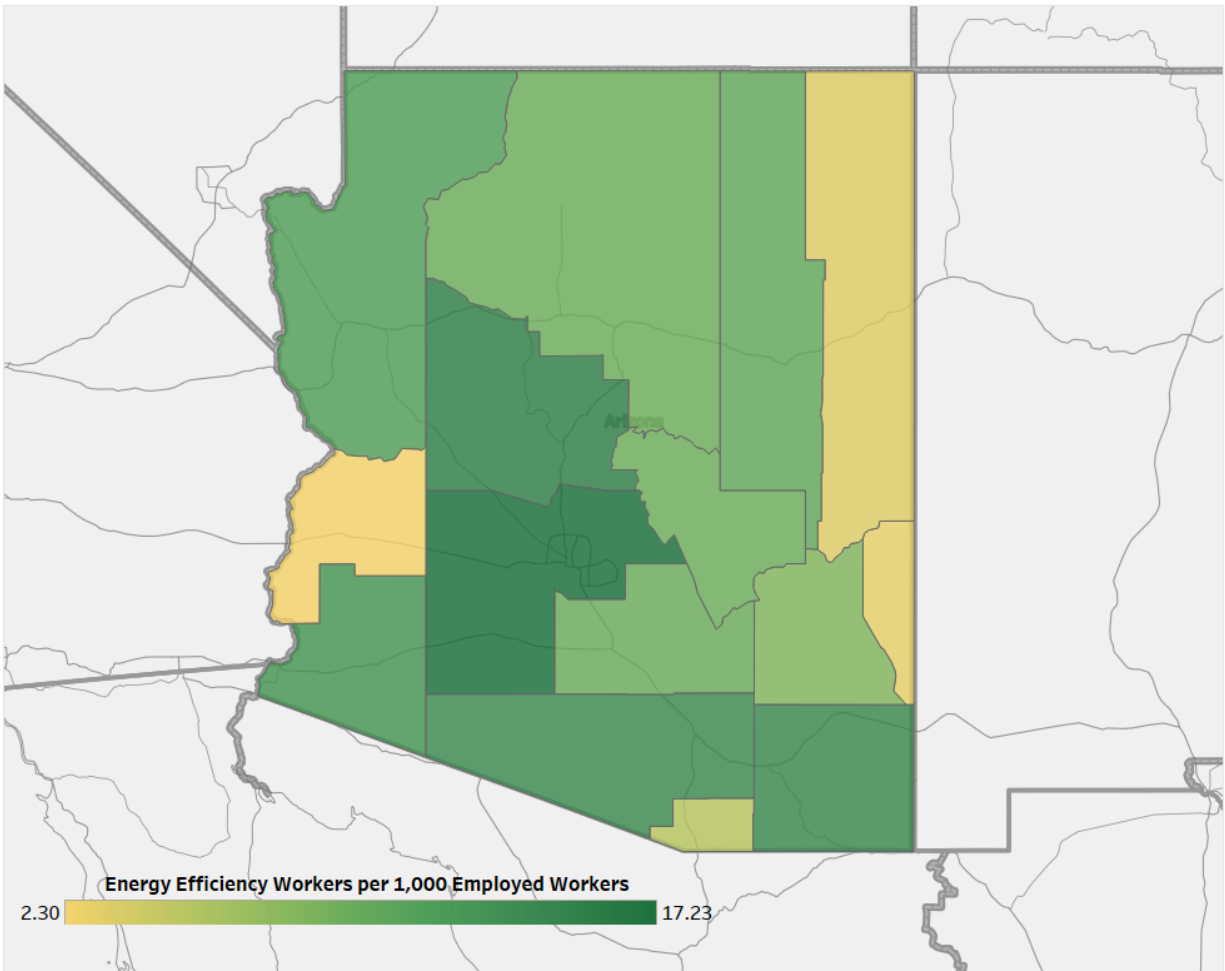
Combined, this would displace the annual electricity consumption of **1,513,430 homes**.

Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Where are EE Jobs?

| Congressional | | Metropolitan Areas | |
|---------------|--------|--------------------------|--------|
| District | Jobs | Area | Jobs |
| 1 | 4,500 | Phoenix-Mesa-Scottsdale | 33,473 |
| 2 | 5,175 | Tucson | 5,812 |
| 3 | 3,513 | Yuma | 597 |
| 4 | 3,872 | Flagstaff | 992 |
| 5 | 4,746 | Lake Havasu City-Kingman | 1,018 |
| 6 | 13,284 | Prescott | 1,280 |
| 7 | 7,957 | Rural | 1,610 |
| 8 | 1,149 | | |
| 9 | 587 | | |

Energy Efficiency Jobs by County



State Senate

| District | Jobs | District | Jobs | District | Jobs |
|----------|-------|----------|-------|----------|-------|
| 1 | 2,445 | 11 | 157 | 21 | 449 |
| 2 | 2,321 | 12 | 3,381 | 22 | 121 |
| 3 | 1,425 | 13 | 608 | 23 | 4,491 |
| 4 | 982 | 14 | 680 | 24 | 7,745 |
| 5 | 1,106 | 15 | 3,333 | 25 | 591 |
| 6 | 1,236 | 16 | 646 | 26 | 1,702 |
| 7 | 344 | 17 | 753 | 27 | <5 |
| 8 | 1,190 | 18 | 2,456 | 28 | 644 |
| 9 | 1,752 | 19 | 1,512 | 29 | 428 |
| 10 | 276 | 20 | 1,669 | 30 | 338 |

State House of Representatives

| District | Jobs | District | Jobs |
|----------|-------|----------|------|
| 1 | 2,438 | 28 | 614 |
| 2 | 2,432 | 29 | 400 |
| 3 | 1,388 | 30 | 316 |
| 4 | 951 | | |
| 5 | 1,093 | | |
| 6 | 1,224 | | |
| 7 | 426 | | |
| 8 | 1,122 | | |
| 9 | 1,719 | | |
| 10 | 270 | | |
| 11 | 152 | | |
| 12 | 3,144 | | |
| 13 | 617 | | |
| 14 | 683 | | |
| 15 | 3,224 | | |
| 16 | 623 | | |
| 17 | 706 | | |
| 18 | 2,366 | | |
| 19 | 2,162 | | |
| 20 | 1,582 | | |
| 21 | 425 | | |
| 22 | 114 | | |
| 23 | 4,428 | | |
| 24 | 7,884 | | |
| 25 | 560 | | |
| 26 | 1,722 | | |
| 27 | <5 | | |



E4TheFuture is dedicated to bringing clean, efficient energy home for every American and promotes energy solutions to advance climate protection and economic fairness. Visit www.E4TheFuture.org



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Data Source: Unless otherwise stated, all data are from the 2020 U.S. Energy and Employment Report, March 2020, by NASEO and EFI (see Appendix A, pages 201-206 for methodology details). This methodology -- adopted by the U.S. Dept. of Energy for its 2017 U.S. Energy and Employment Report, approved by the Office of Management and Budget and grounded on data collected by the U.S. Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.