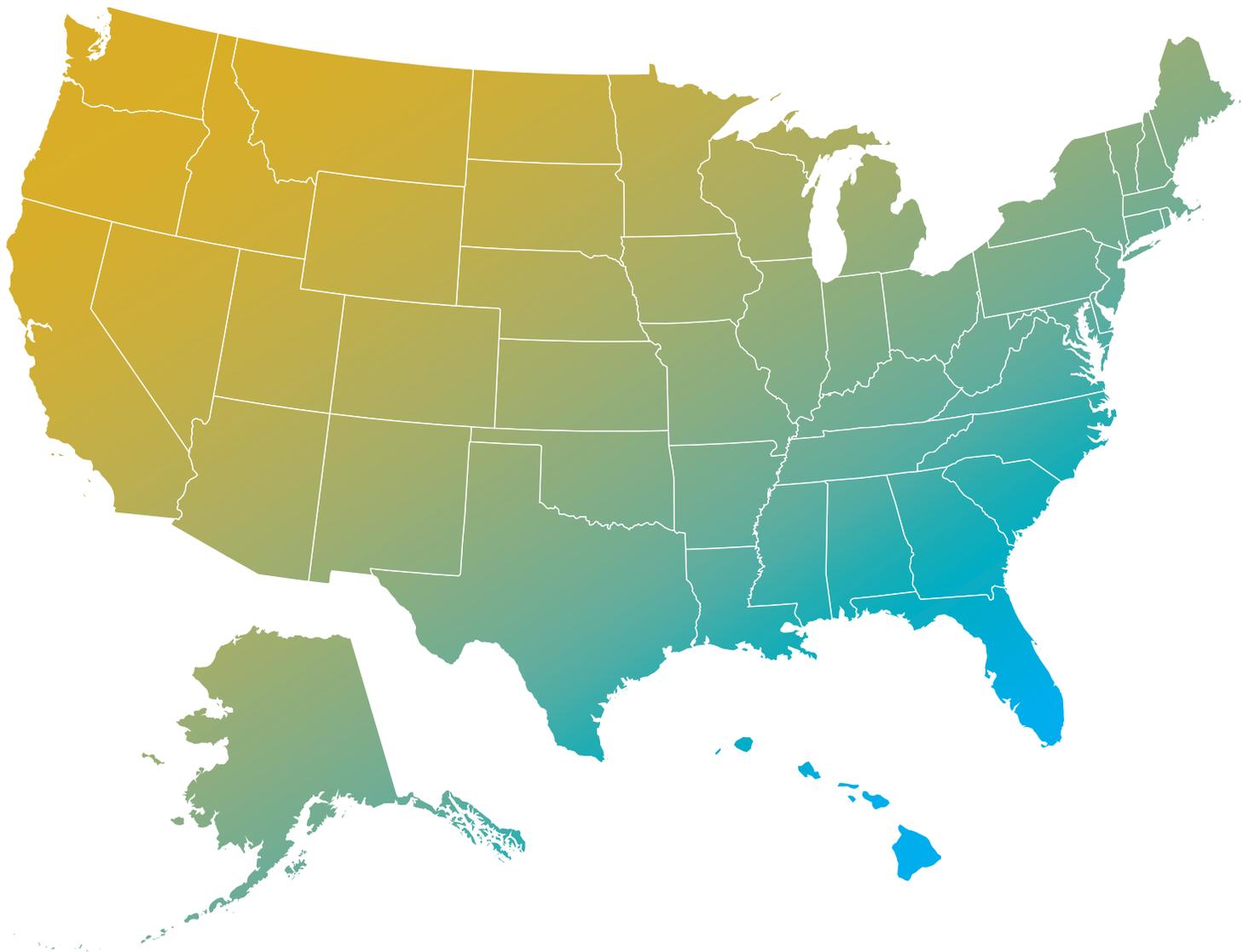


# Energy Efficiency Jobs in America

**NOVEMBER 2020**



**#FacesOfEE**

# Energy Efficiency Jobs in America

October 2020:

2,057,018

December 2019:

2,378,893

The EE workforce was projected to grow 3% in 2020. Instead, it shrank 13.5%.

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Introduction and Overview

Alabama

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# INTRODUCTION

Energy Efficiency (EE)—the largest U.S. energy sector—can repower America’s economy as we work to overcome the economic effects of the pandemic.

As lawmakers and policymakers seek to get America back to work after the COVID-19 health and economic crisis, every job matters. From 2015 to 2019, the energy efficiency sector became one of the biggest, fastest-growing, and most beneficial sectors for both our economy and our environment.

This report details the size of this important employment sector, the troubles it is facing due to COVID-19, and how focusing recovery policies on efficiency can help boost America’s economy—quickly and for the long run.

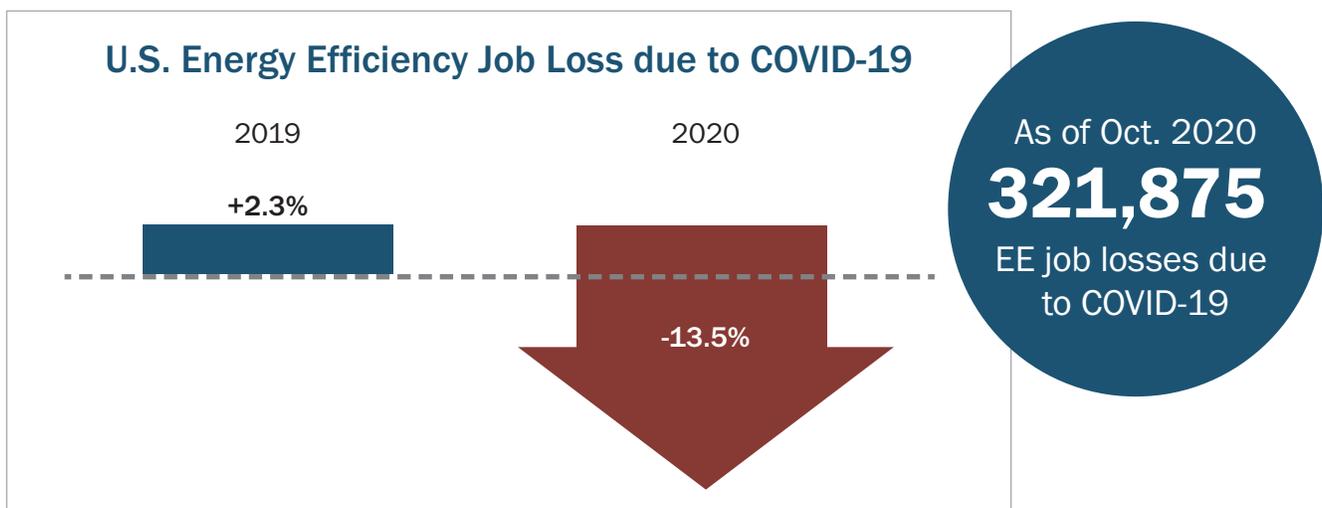
History shows that energy efficiency is a proven job growth catalyst in the aftermath of economic meltdown. After the 2009 financial collapse, Recovery Act investments led to the weatherization

of more than 1 million homes, expanding efficiency work across the country. Electricians, HVAC technicians and other construction workers—as well as manufacturers of building supplies and ENERGY STAR® appliances—quickly returned to work. Consumers and businesses saved billions of dollars, our environment benefitted, and our nation became more energy secure.

Now with the right stimulus policies, we can do it again, but better. Key experience was gained and strategies evolved over the past decade when the industry grew into one of America’s largest employment sectors. Among the many benefits of focusing federal and state economic recovery efforts on efficiency is that we can preserve and create new jobs in every state, in rural and urban areas, and across a wide variety of occupations.

## National impacts of COVID-19 on Energy Efficiency Jobs

State of the industry (current unemployment numbers<sup>1</sup>)



<sup>1</sup> Source: *Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis*, March 2020–October 2020. <https://www.bwresearch.com/covid/>.



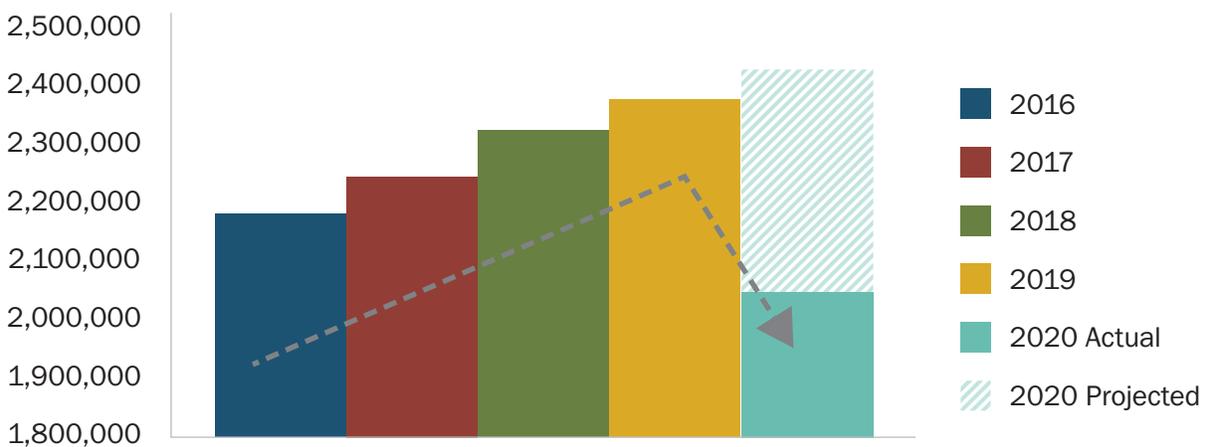
Photo by Marcela Gara, Resource Media

Energy efficiency has historically been a job-creation powerhouse, growing two times faster than overall nationwide employment since 2017 to reach nearly 2.4 million workers at the end of 2019. The industry was projected to add another 3% (~71,000 jobs)<sup>2</sup> to the economy in 2020. But when COVID-19 struck

last spring, efficiency lost ~345,000 workers along with the expected employment growth.

Overall, the total COVID-related impact to date is nearly 393,000 EE jobs—erasing over five years of job growth.

### U.S. Energy Efficiency Jobs: History



<sup>2</sup> Source: 2019 U.S. Energy and Employment Report (USEER). <https://www.usenergyjobs.org/previous-reports>.

# THE CASE FOR ENERGY EFFICIENCY AS A STIMULUS INVESTMENT<sup>3</sup>

Energy efficiency is a proven catalyst for broad economic recovery that can create solid careers in every state and county for years to come. A model of a robust stimulus package for retrofits of existing buildings illustrates how such a stimulus would create jobs, save money, reduce energy dependence and spur economic growth, all while reducing pollution and climate emissions.

**\$61 billion in federal stimulus would leverage  
\$149.2 billion in private investment to create:**



Jobs for **700,000+** EE workers **every year** for five years



**\$30+ billion** in energy bill savings annually



Achieving **25%** of all possible energy savings from existing buildings



Annual energy savings comparable to energy used in **51 million homes**<sup>4</sup>



Carbon dioxide emissions reduced by **96 million metric tons** annually



GDP increased by **\$51.3 billion** annually



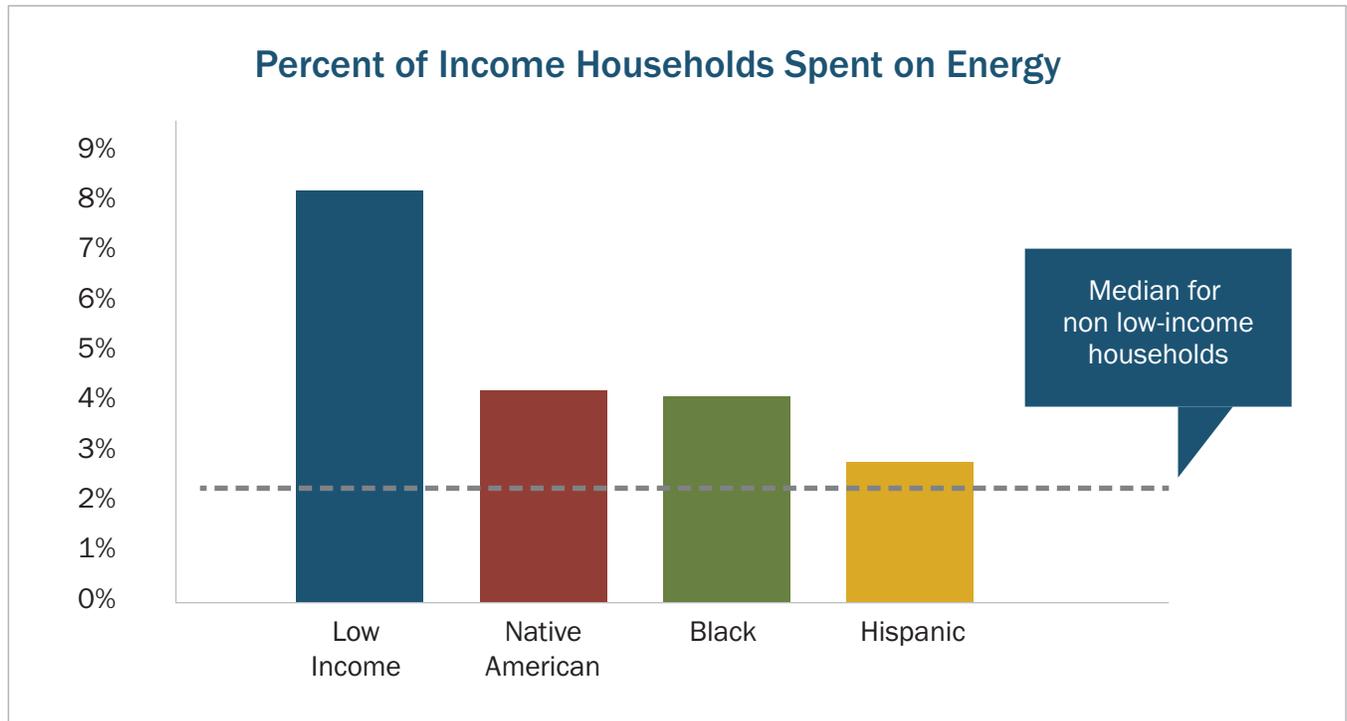
1.9 quadrillion BTUs of **energy saved** annually

<sup>3</sup> Unless otherwise noted all figures are derived from E4TheFuture's *Build Back Better, Faster* report or ACEEE's *Halfway There: Energy Efficiency Can Cut Energy Use and Greenhouse Gas Emissions in Half by 2050*

# ENERGY COSTS; EQUITY CHALLENGES

Across the country low income households and households of color consistently spend a greater portion of their income on energy.

As of 2015, one in three U.S. households faced challenges paying their utility bills and keeping the lights on.<sup>4</sup> With the economic effects of the pandemic, more households will risk disconnection by utility providers.



## Press Release: Electric and Gas Residential Arrearages are Growing Rapidly

October 1, 2020

Residential arrearages projected to grow from \$9.8 billion as of July 31 to \$24.3 billion by year end.

Millions of Americans are falling behind on their home energy bills as a result of job losses due to the pandemic. Utilities across the nation are reporting significant increases in the number of households in debt. While the data are still being reported, the pattern is clear – the average amount owed to utilities is increasing and as summer cooling bills are reported and the winter heating season begins, the amount in arrears is expected to grow significantly.

<https://neada.org/covidarrearspr>

Efficiency and weatherization can reduce energy costs by

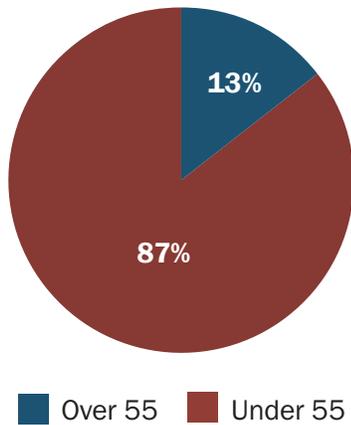
**25%.<sup>5</sup>**

<sup>4</sup>Source: U.S. Energy Information Administration. <https://www.eia.gov/consumption/residential/data/2015/hc/php/hc11.1.php>

<sup>5</sup>Source: American Council for an Energy Efficiency Economy. <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>

# WORKFORCE DEVELOPMENT AND JOB QUALITY

EE Workers by Age



Workforce development is vital to future economic health. The energy efficiency industry grew 1.7 times as fast as the national workforce 2016-2019; 13% of current efficiency professionals are 55 and older (source: USEER). High growth and retirements provide ideal conditions for workforce development, particularly with programs designed to promote greater racial and gender diversity.

Energy efficiency jobs are a great option for those previously employed by contracting energy sectors and those in industries struggling to rebound from the COVID-19 pandemic. These are high quality jobs offering above average wages and, in many cases, benefits for young people and mid-career individuals entering the workforce.



Entry level wages in all sectors of EE jobs exceed the national average.

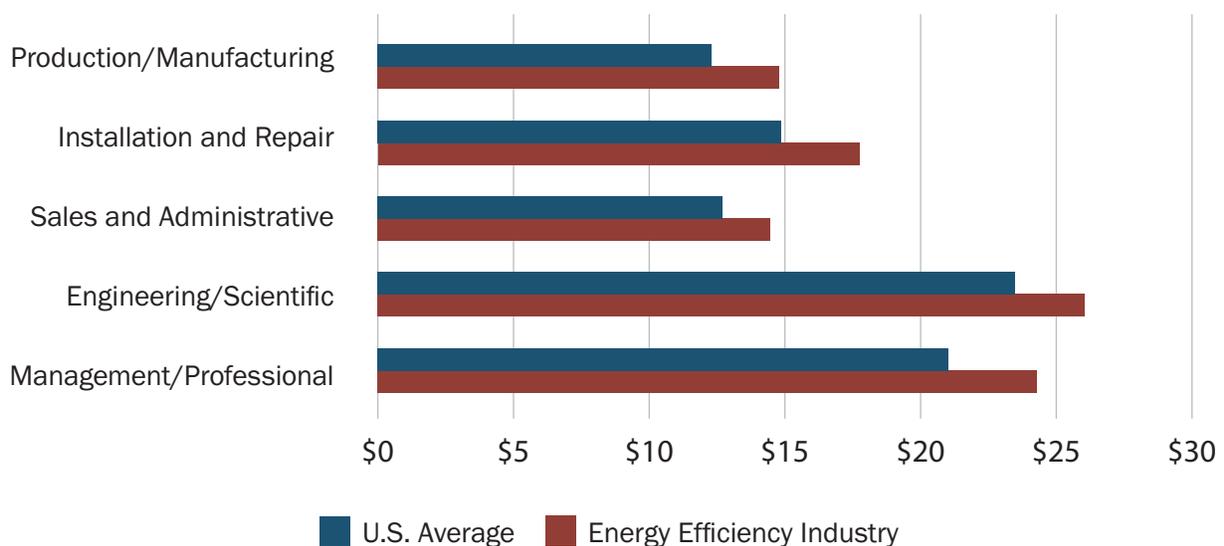


More than 80% of EE employers contribute to health insurance.



More than 78% of EE employers contribute to retirement accounts.

Entry Level Wages by Sector: EE Jobs vs. National Average



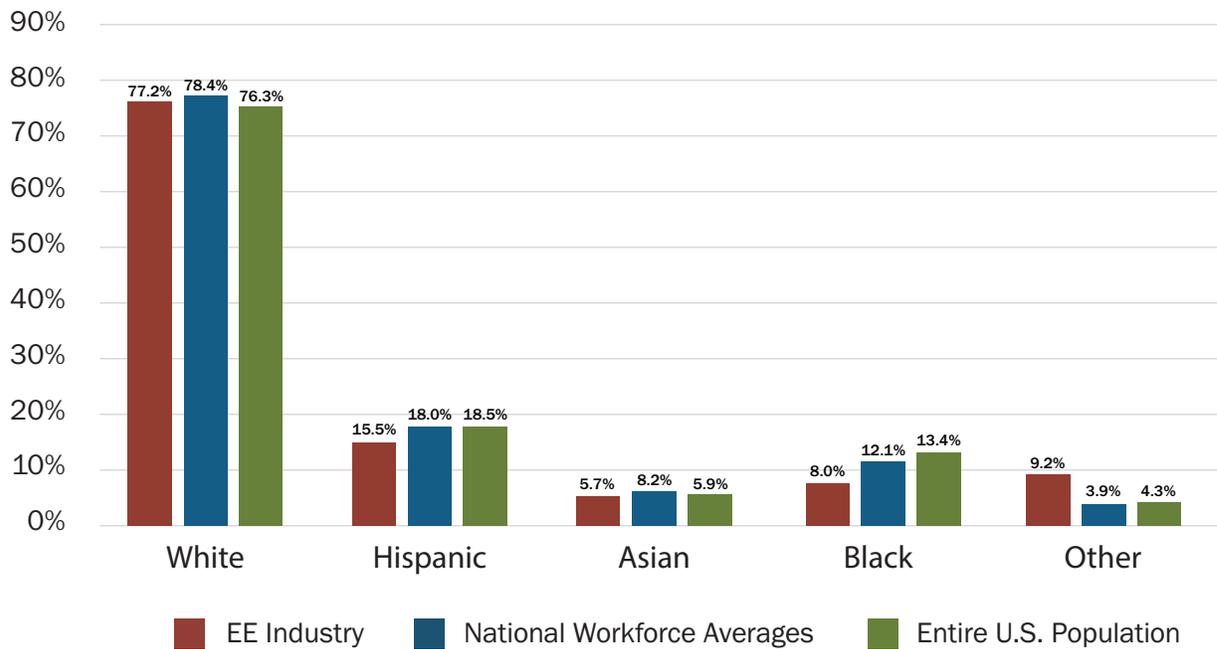
# DEMOGRAPHICS



Demographic data is crucial for measuring progress in the energy efficiency industry. By increasing diversity in the efficiency sector, we can create a more robust and more inclusive industry. Diversity in hiring will be key to maintaining a future workforce of talented professionals and ensuring that communities across the nation are represented in the efficiency sector.

Note: The U.S. Bureau of Labor Statistics (BLS) includes only two genders in their survey, excluding other gender identities.

### National EE Industry by Race and Ethnicity



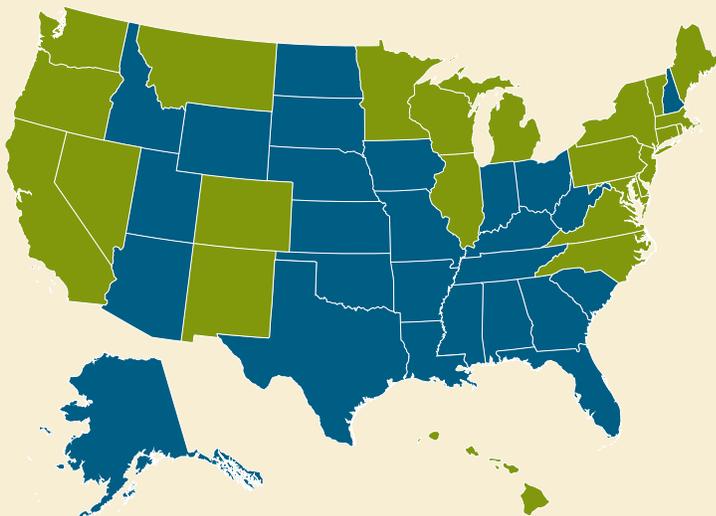
# CLIMATE BENEFITS OF ENERGY EFFICIENCY<sup>6</sup>

Efficiency is the most cost-effective solution to reduce emissions in the power sector.

Efficiency can account for nearly half of emissions reductions needed.

Efficiency is poised to help states and utilities meet ambitious climate goals.

Energy efficiency reduces emissions regardless of geography or regional resource mix. Efficiency enables all states, municipalities, and utilities to be part of the climate solution.



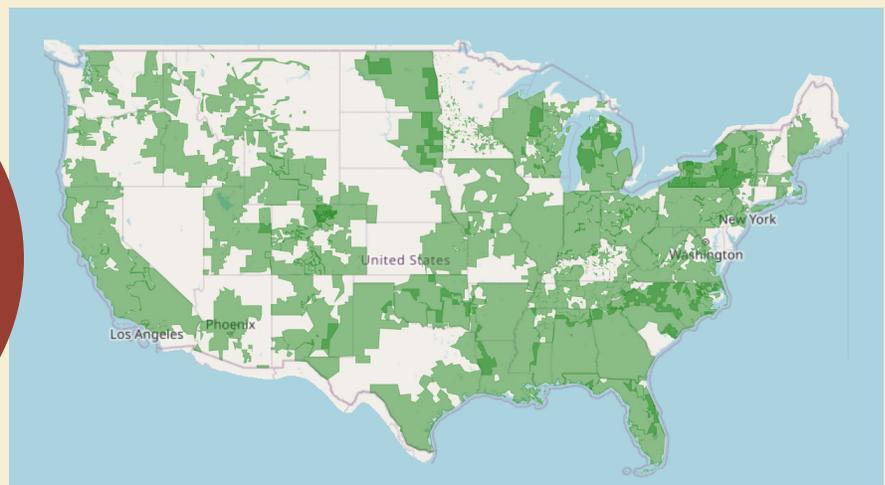
Source: U.S. Climate Alliance. <http://www.usclimatealliance.org/>

**24**

Governors have pledged to meet emissions goals established by the Paris Agreement.

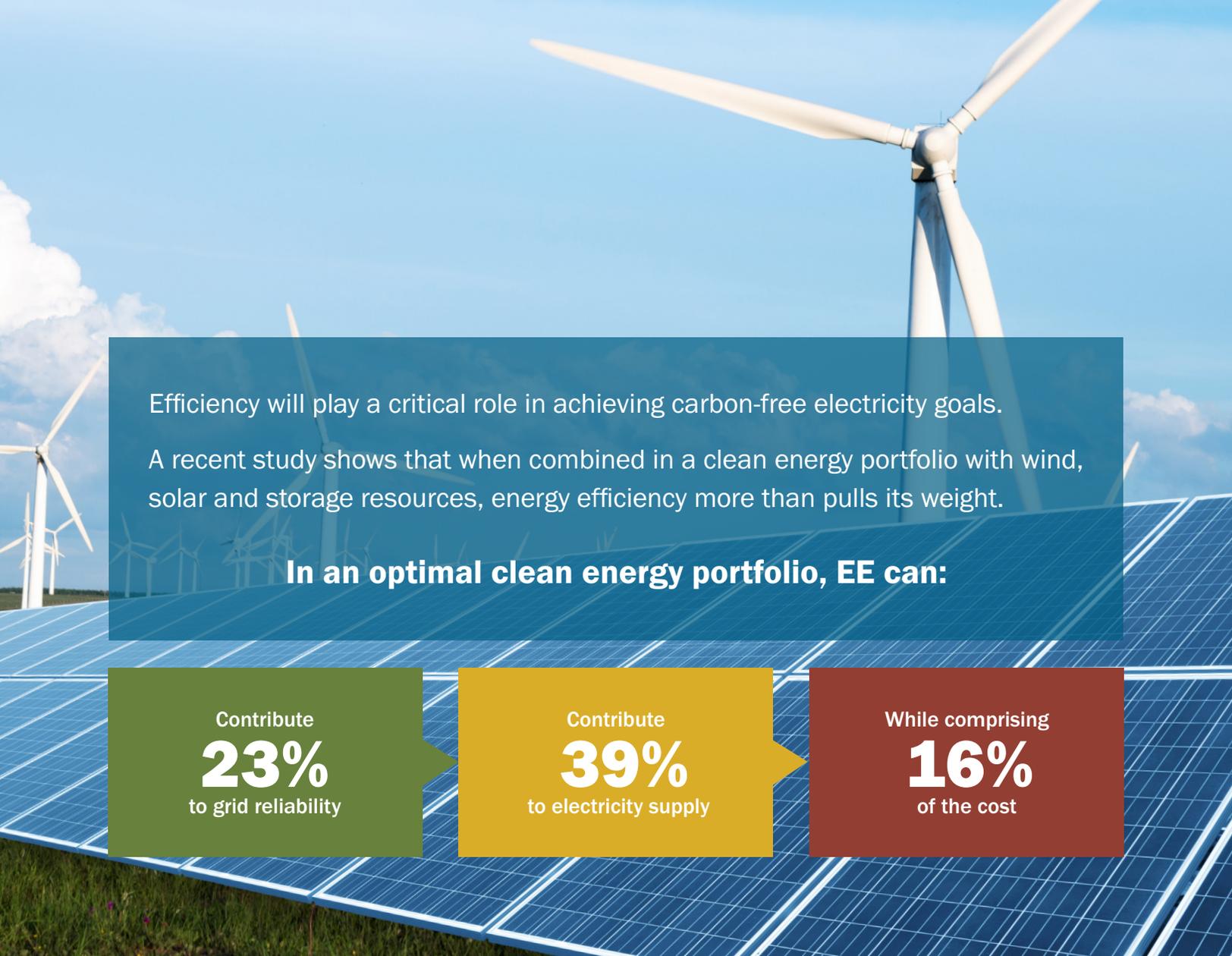
**68%**

of customers are served by a utility with a carbon or emissions reduction goal.



Source: Smart Electric Power Alliance. <https://sepapower.org/utility-transformation-challenge/utility-carbon-reduction-tracker/>

<sup>6</sup> Sources: American Council for an Energy-Efficient Economy <https://www.aceee.org/blog/2018/12/renewables-are-getting-cheaper-energy>; U.S. Energy Information Administration <https://www.iea.org/reports/energy-efficiency-2018>.



Efficiency will play a critical role in achieving carbon-free electricity goals.

A recent study shows that when combined in a clean energy portfolio with wind, solar and storage resources, energy efficiency more than pulls its weight.

**In an optimal clean energy portfolio, EE can:**

Contribute  
**23%**  
to grid reliability

Contribute  
**39%**  
to electricity supply

While comprising  
**16%**  
of the cost

## GOOD USA JOBS & GLOBAL COMPETITIVENESS

- Energy efficiency jobs are inherently local; the vast majority cannot be offshored. With on-site work required to improve homes and buildings, it's likely you know efficiency workers.
- A robust domestic manufacturing industry of energy efficient products supports nearly 325k U.S. jobs.
- These products are installed and maintained by trained professionals in your community.

<sup>7</sup> Analysis by E4TheFuture based on data provided, <https://rmi.org/a-bridge-backward-the-risky-economics-of-new-natural-gas-infrastructure-in-the-united-states/>

# REACTIONS FROM THE FRONTLINES

Despite historical growth in the energy efficiency industry, the COVID-19 pandemic has posed setbacks for businesses and efficiency professionals across the country. Examples of how the crisis has impacted professionals who represent the Faces of EE:<sup>8</sup>



**Griffin Hagle**  
*Tagiugmiullu  
Nunamiullu Housing  
Authority  
Utqiagvik, AK*

“We have experienced travel restrictions that keep our staff from moving freely to the outlying villages of our region, delays in meeting grant project deadlines, vendor and supply chain delays and shortages, and a complete realignment of our budget priorities. We closed our office to the public and will keep it closed through at least December.”



**Derrick Blue**  
*Tampa Hillsborough  
Action Plan  
Tampa, FL*

“For a while we were unable to provide services. We recognized that there was a need to build capacity around technology and understanding CDC/OSHA guidelines. Now, we have contractors who are trained and prepared to work safe and continue to make weatherization work in Florida.”



**Elena Chrimat**  
*Ideal Energy  
Phoenix, AZ*

“We had an extraordinarily busy summer this year due to it being so hot in Phoenix. Now with the temperatures declining, new lead call volume is substantially down. Luckily, the summer was so busy for us, we are booked out with construction through mid-December.”



**James Correira**  
*CT WAP Technical  
Consultant  
Old Mystic, CT*

“The pandemic shut down WAP service delivery for over 120 days and resulted in hundreds of delayed home service deliveries. Unemployment has increased dependency on LIHEAP energy assistance and weatherization services. The known training resource deficiency has become even more apparent.”



<sup>8</sup> <https://e4thefuture.org/how-we-help/faces-of-ee/>

# POLICY LEADERSHIP

Energy efficiency addresses the public health and economic challenges of the COVID-19 pandemic, while tackling climate change and saving money.

***Federal Policy leadership is essential to ensure that both indoor air quality and energy efficiency are addressed to benefit property owners, occupants, and the country.***

**Continue funding for federal energy efficiency programs with a proven track record.**

- State energy programs
- Weatherization programs
- Energy efficiency and conservation grants

**Support initiatives that incentivize existing building owners to make smart indoor air quality and energy efficiency upgrades to their properties.**

- Commercial and residential building tax credits
- Residential energy efficiency rebate programs to drive job creation for local contractors
- Programs to encourage greater efficiency and sustainability in the U.S. housing supply
- Programs focused on resilience, energy efficiency, and air quality in public buildings

**Support programs that move the country forward on indoor air quality and energy efficiency.**

- Strengthen building and appliance efficiency standards with training and enforcement
- Direct the Federal Emergency Management Agency (FEMA) to ensure rebuilding projects after natural disasters meet the most current international building codes
- Fund energy audits, technical assistance, and financing options for large manufacturers

**Advance equity, diversity, and inclusion in federal energy efficiency programs.**

- Strengthen workforce development and apprenticeship programs for the energy efficiency sector while prioritizing equity, diversity, and inclusion
- Create a workforce grant program to help organizations and small businesses hire and train new energy efficiency employees with a focus on equity, diversity, and inclusion

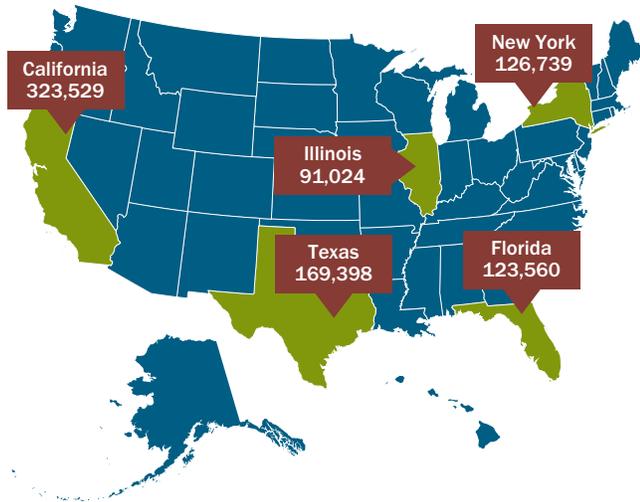
***State and local leaders can keep energy efficiency jobs growing by:***

- Adopting efficiency and indoor air quality standards for new construction and existing buildings
- Adopting energy benchmarking and reporting requirements for existing buildings
- Incorporating broader use of performance contracting in public buildings
- Advancing commercial and residential property assessed clean energy (PACE) programs
- Modernizing regulation to align utilities' incentives with energy efficiency investments and assure transparent and comprehensive cost-effectiveness evaluation
- Investing in related infrastructure to enable interval data analytics and efficiency building upgrades to boost resilience

# TOP STATES

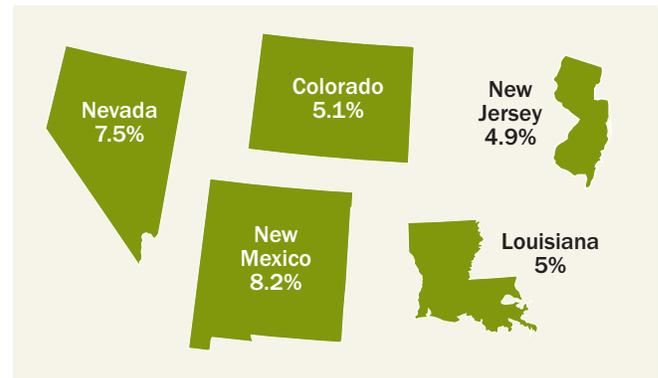
States continued their strong employment trajectories for energy efficiency until the pandemic struck. In 2019, California led energy-efficiency employment with 323,529 jobs (up from 318,500), followed by Texas with 169,398 (up from 162,800), New York with 126,739 (up from 123,300), Florida with 123,560 (up from 118,400), and Illinois with 91,024 (up from 89,400).

## Overall Jobs



## Top Growth

The number of efficiency jobs grew fastest in New Mexico, Nevada, Colorado, Louisiana, and New Jersey from 2018 to 2019.



# ABOUT THE REPORT

The 2019 job numbers come from the national 2020 U.S. Energy and Employment Report (USEER), which focuses on all energy jobs. The USEER analyzes data from the U.S. Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) to track employment across many energy production, transmission, and distribution subsectors. In addition, the 2020 USEER relies on a unique supplemental survey of 25,000 business representatives across the U.S. Created and conducted by BW Research and approved by the Office of Management and Budget and U.S. Department of Energy (DOE), this survey is used to identify energy-related employment within key subsectors of the broader industries as classified by the BLS and to assign them into their component energy and energy efficiency sectors. Numbers for 2020 come from BLS data analysis by BW Research and U.S. Dept. of Labor unemployment weekly summaries, used to calculate the labor impacts for each month.

For questions regarding this report, visit the *Energy Efficiency Jobs in America* FAQ at: [www.e2.org/reports/energy-efficiency-jobs-in-america-faq](http://www.e2.org/reports/energy-efficiency-jobs-in-america-faq) or contact E4TheFuture or E2 directly.



### ABOUT E4TheFuture

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](http://www.E4TheFuture.org)



### ABOUT E2

E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



### ABOUT BW Research

BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies, including the United States Energy and Employment Report (USEER), National Solar Jobs Census, wind industry analyses for the National Renewable Energy Laboratory and the Natural Resources Defense Council, and state-level clean energy reports for Massachusetts, New York, Illinois, Vermont, Iowa, Rhode Island, Florida, Connecticut, Pennsylvania, and Missouri, among others.

# Alabama

## 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.*

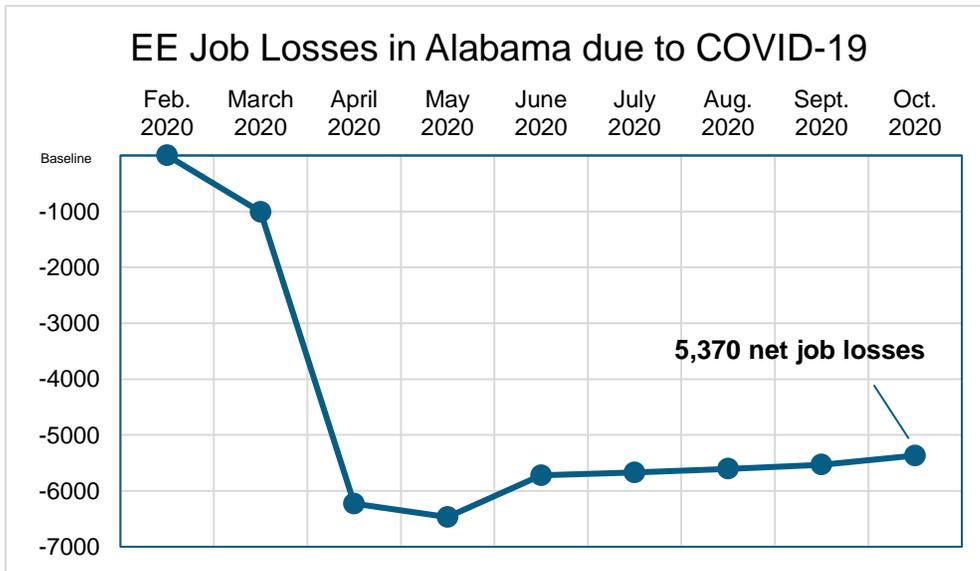
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Alabama's energy efficiency industry lost as many as 5,370 jobs since its onset, a 17.0% 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 Alabama EE workforce grew steadily, gaining 4.4% 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.



Presented by:



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

# What are EE Jobs?

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

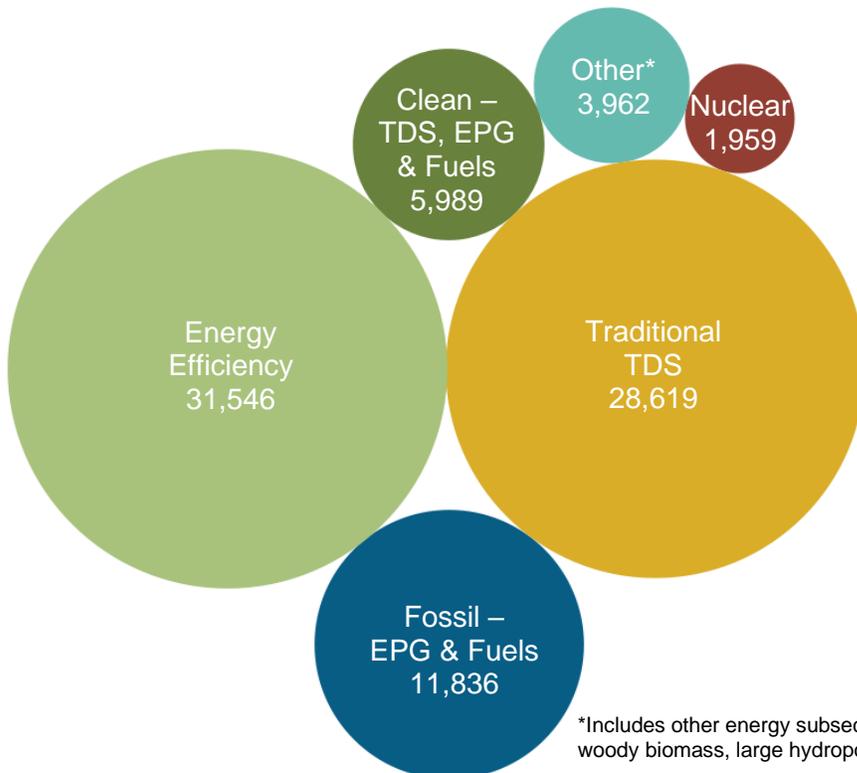
## What type of work are EE workers doing?

- 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 Alabama?

*Energy efficiency is the largest energy sector in Alabama.*

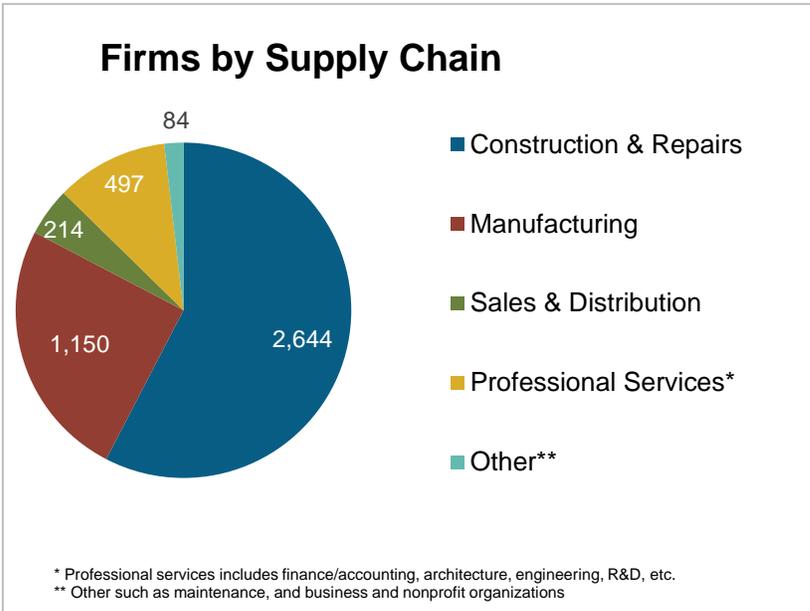
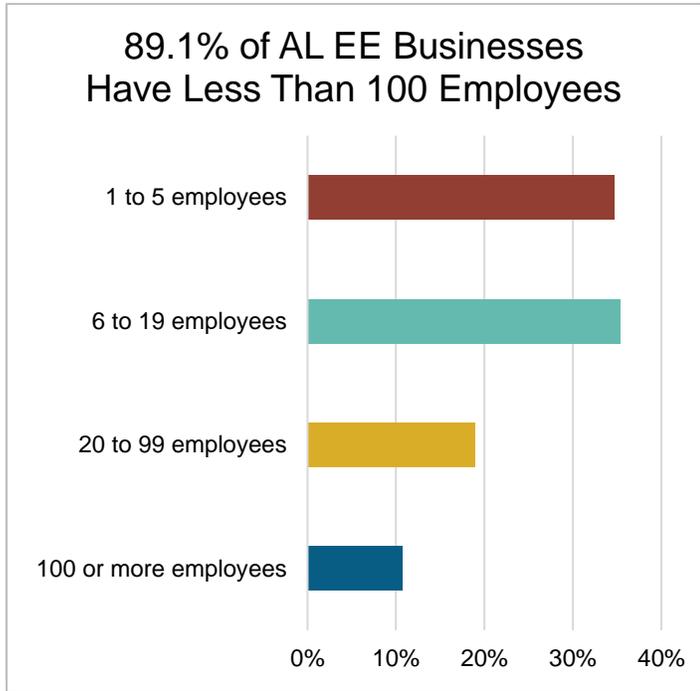


Energy efficiency in Alabama has seen consistent, reliable job growth – 4.4 percent since 2016.

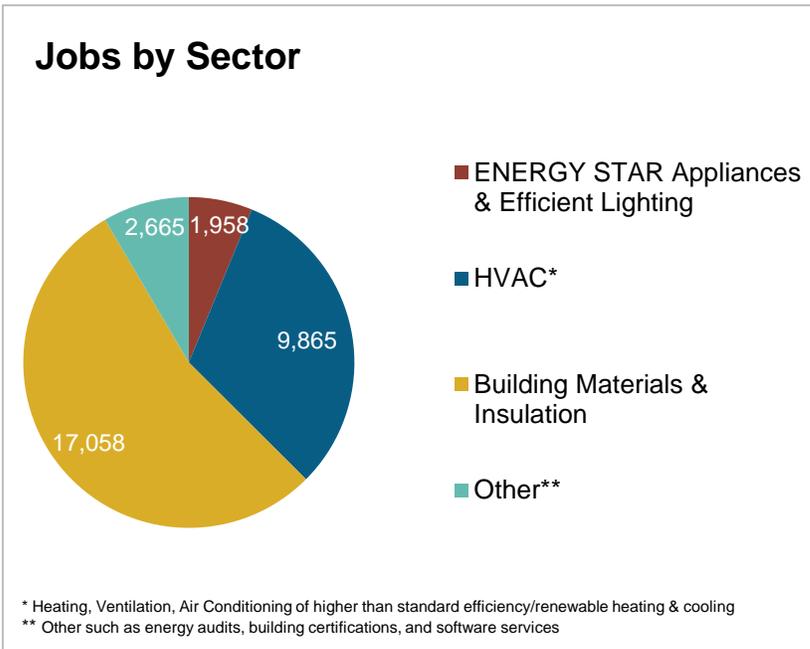
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Alabama?

EE Sector =  
**4,588**  
 Businesses in AL  
 (Dec. 2019)  
 ↑ **100** over 2018




**6.8%**  
 of Alabama  
 residents employed  
 in EE are **Veterans**

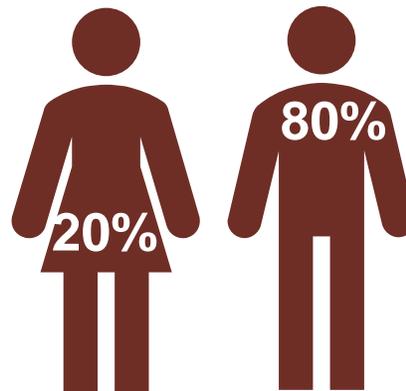
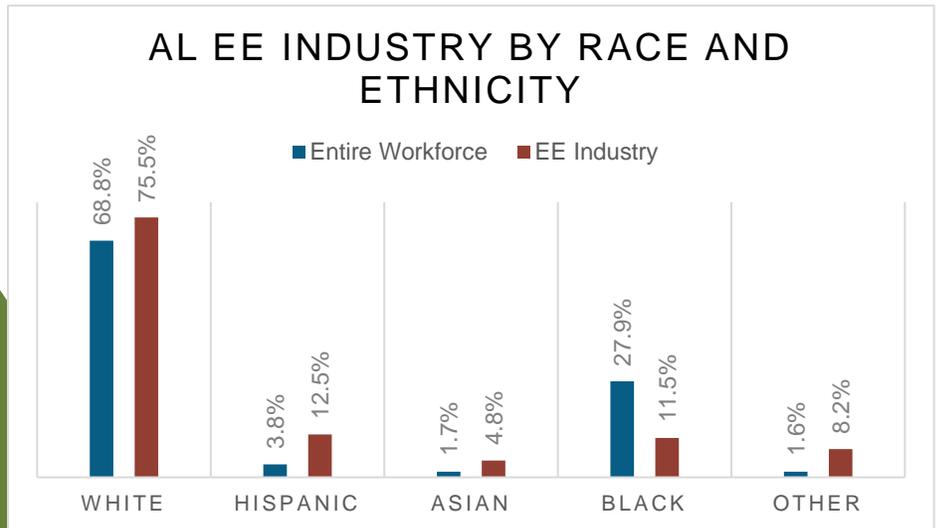



**Energy Efficiency  
 Construction Workers  
 Make Up 19% of AL  
 Construction Workers**

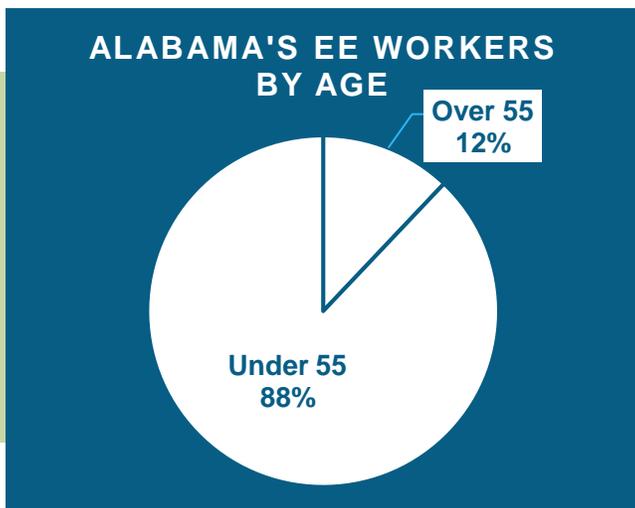
# How is EE Doing regarding Diversity in Alabama?

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 Alabama 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.



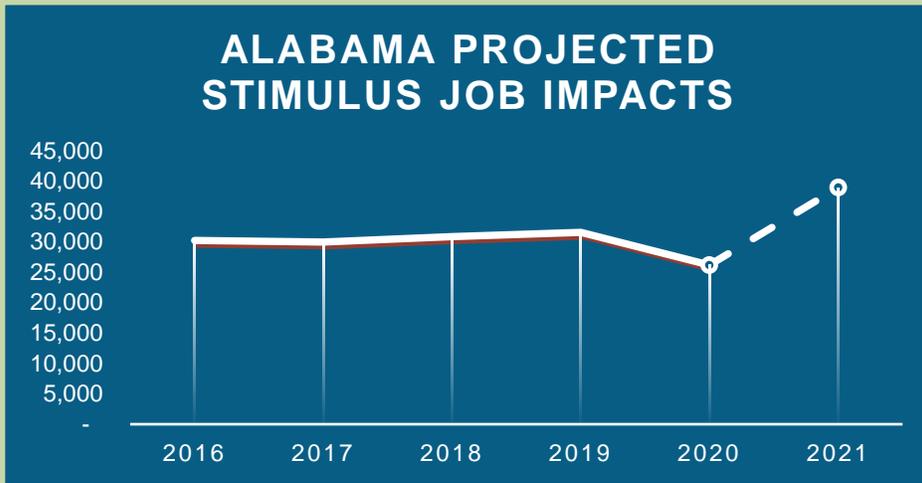
A significant portion of the Alabama efficiency workforce is in the “55+” category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

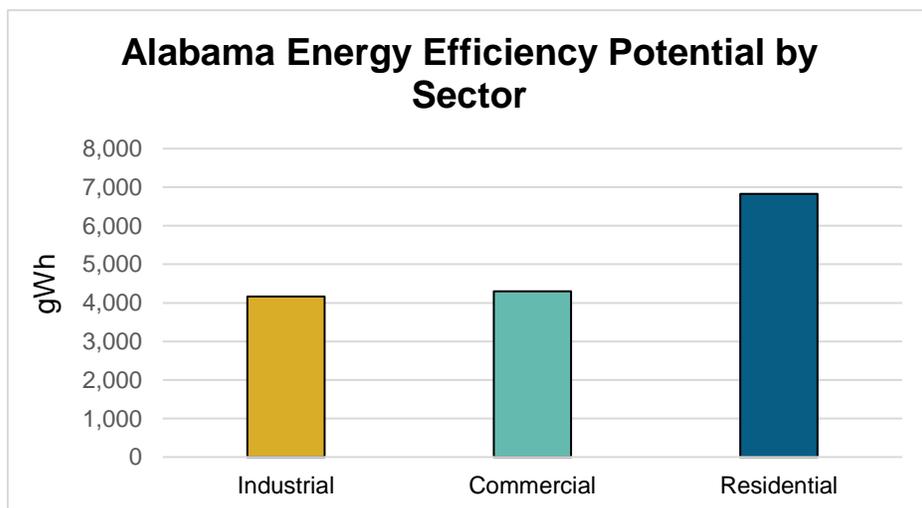


Source: [Build Back Better, Faster.](#)

Modeling finds that federal investment would create **12,729 full-time direct, indirect, and induced AL jobs** that will last for at least five years: Over **63,645 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$750 million in GDP** each year for the next five years – resulting in **\$3.7 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?



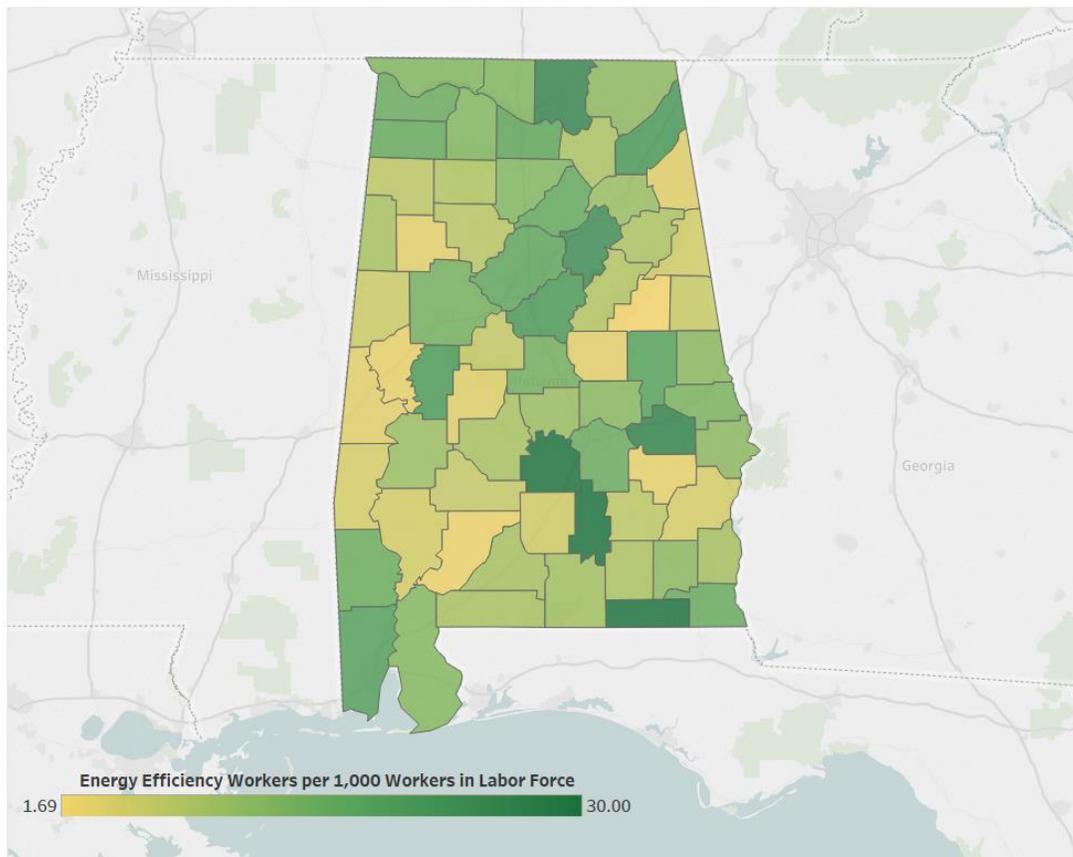
Source: [State and Local Planning for Energy \(SLOPE\) Platform.](#)

Combined, this would displace the annual electricity consumption of **1,060,874 homes.**

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,522	Anniston-Oxford	571
2	4,800	Auburn-Opelika	716
3	3,613	Birmingham-Hoover	9,518
4	3,677	Columbus	223
5	4,653	Decatur	894
6	6,630	Dothan	1,055
7	2,650	Florence-Muscle Shoals	992
		Gadsden	541
		Huntsville	3,328
		Mobile	3,423
		Montgomery	2,765
		Tuscaloosa	1,252
		Rural	6,270

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,674	11	1,674	21	957	31	107
2	768	12	570	22	1,409	32	836
3	1,155	13	1,111	23	474	33	2,300
4	932	14	999	24	180	34	735
5	758	15	2,974	25	2,352	35	367
6	415	16	158	26	68		
7	1,152	17	563	27	287		
8	554	18	2,677	28	1,114		
9	472	19	112	29	581		
10	693	20	<5	30	363		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	584	28	539	55	120	82	98
2	306	29	104	56	192	83	11
3	456	30	257	57	13	84	216
4	832	31	449	58	<5	85	796
5	32	32	727	59	<5	86	155
6	1,217	33	86	60	<5	87	176
7	78	34	72	61	786	88	<5
8	<5	35	21	62	304	89	302
9	405	36	81	63	<5	90	141
10	310	37	245	64	1,085	91	21
11	576	38	522	65	335	92	157
12	35	39	79	66	241	93	10
13	323	40	<5	67	252	94	248
14	69	41	857	68	75	95	244
15	965	42	363	69	365	96	332
16	458	43	1,386	70	<5	97	1,320
17	75	44	686	71	71	98	118
18	71	45	495	72	30	99	443
19	241	46	799	73	<5	100	342
20	1,076	47	<5	74	1,108	101	357
21	37	48	<5	75	14	102	10
22	184	49	86	76	676	103	409
23	128	50	71	77	71	104	48
24	255	51	116	78	10	105	38
25	<5	52	729	79	371		
26	96	53	<5	80	35		
27	21	54	1,724	81	72		



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](http://www.E4TheFuture.org)



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# Alaska

## 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. Alaska's energy efficiency industry lost as many as 981 jobs since its onset, a 20.9% 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 Alaska EE workforce grew steadily, gaining 6.3% 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.



Presented by:



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

# What are EE Jobs?

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

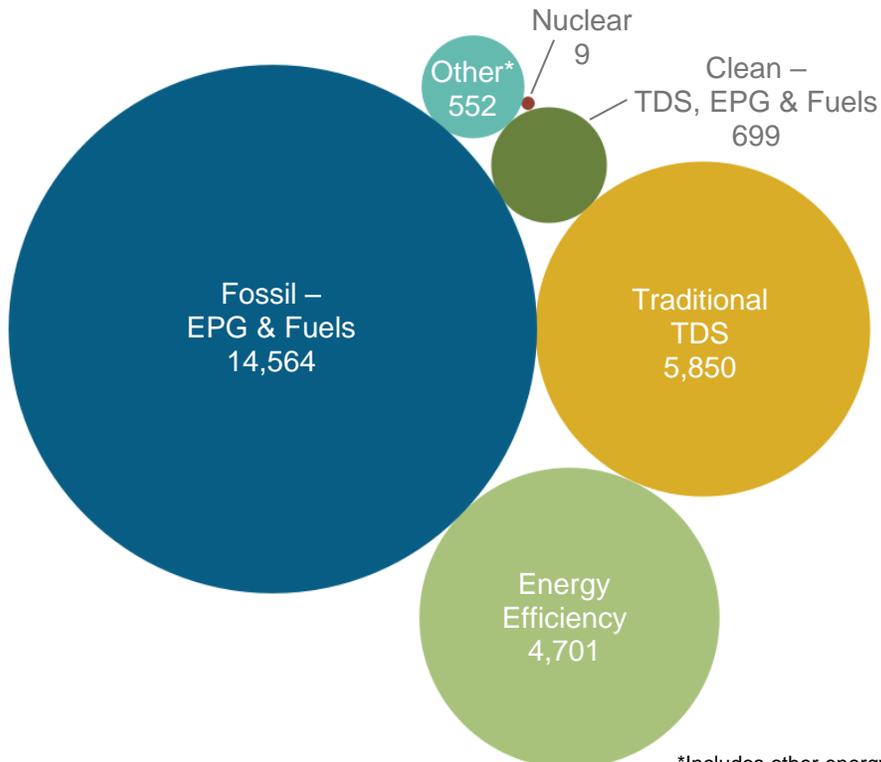
## What type of work are EE workers doing?

- 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 Alaska?

Energy efficiency is the third largest energy sector in Alaska.

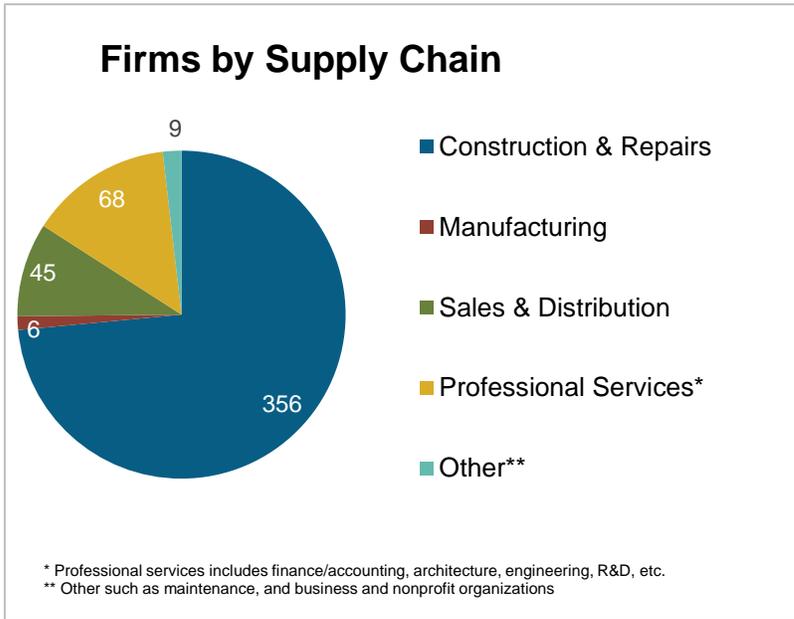
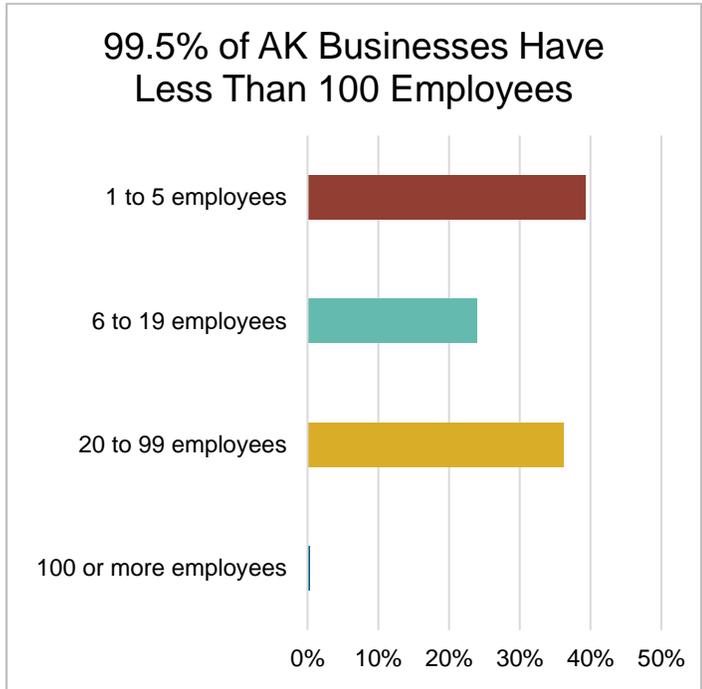


Fossil fuel jobs are historically key to Alaska's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 6.3% from 2016-2019, adding 281 jobs.

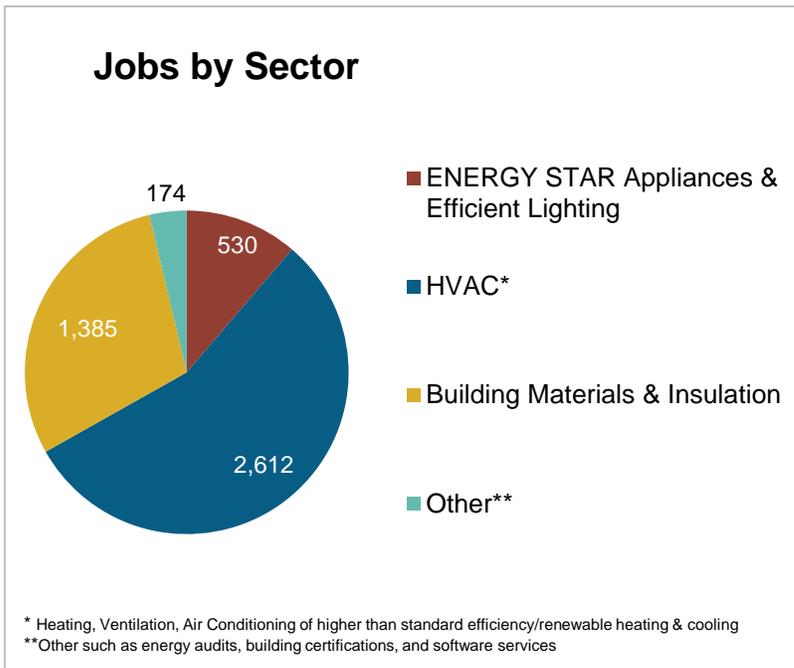
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Alaska?

EE Sector =  
**485**  
 Businesses in AK  
 (Dec. 2019)  
 ↑ **10** over 2018




**10.5%**  
 of Alaska  
 residents employed  
 in EE are **Veterans**

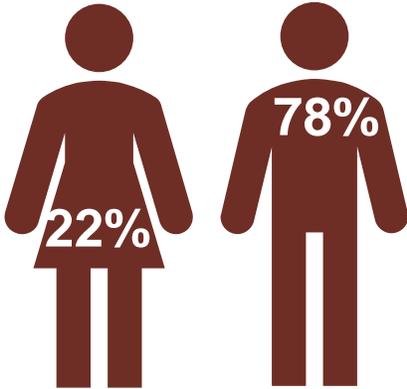
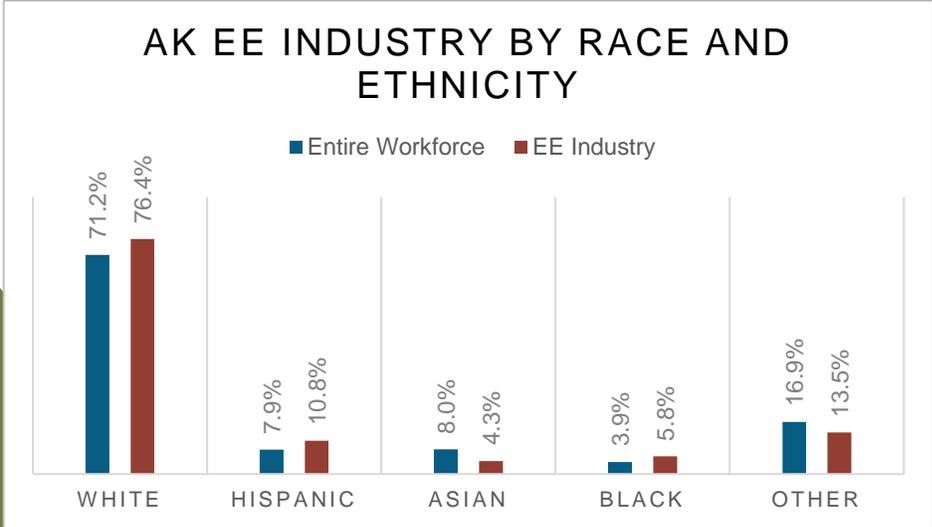



**Energy Efficiency  
 Construction Workers  
 Make Up 18% of AK  
 Construction Workers**

# How is EE Doing regarding Diversity in Alaska?

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 Alaska 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 Alabama efficiency workforce is in the “55+” category. 12% 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.

## ALASKA PROJECTED STIMULUS JOB IMPACTS



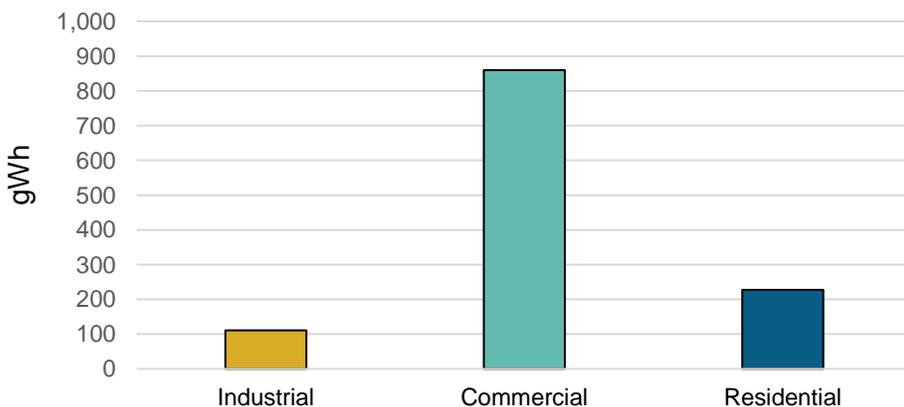
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,544 full-time direct, indirect, and induced AK jobs** that will last for at least five years: Over **22,720 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$342 million in GDP** each year for the next five years – resulting in **\$1.7 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### Alaska Energy Efficiency Potential by Sector



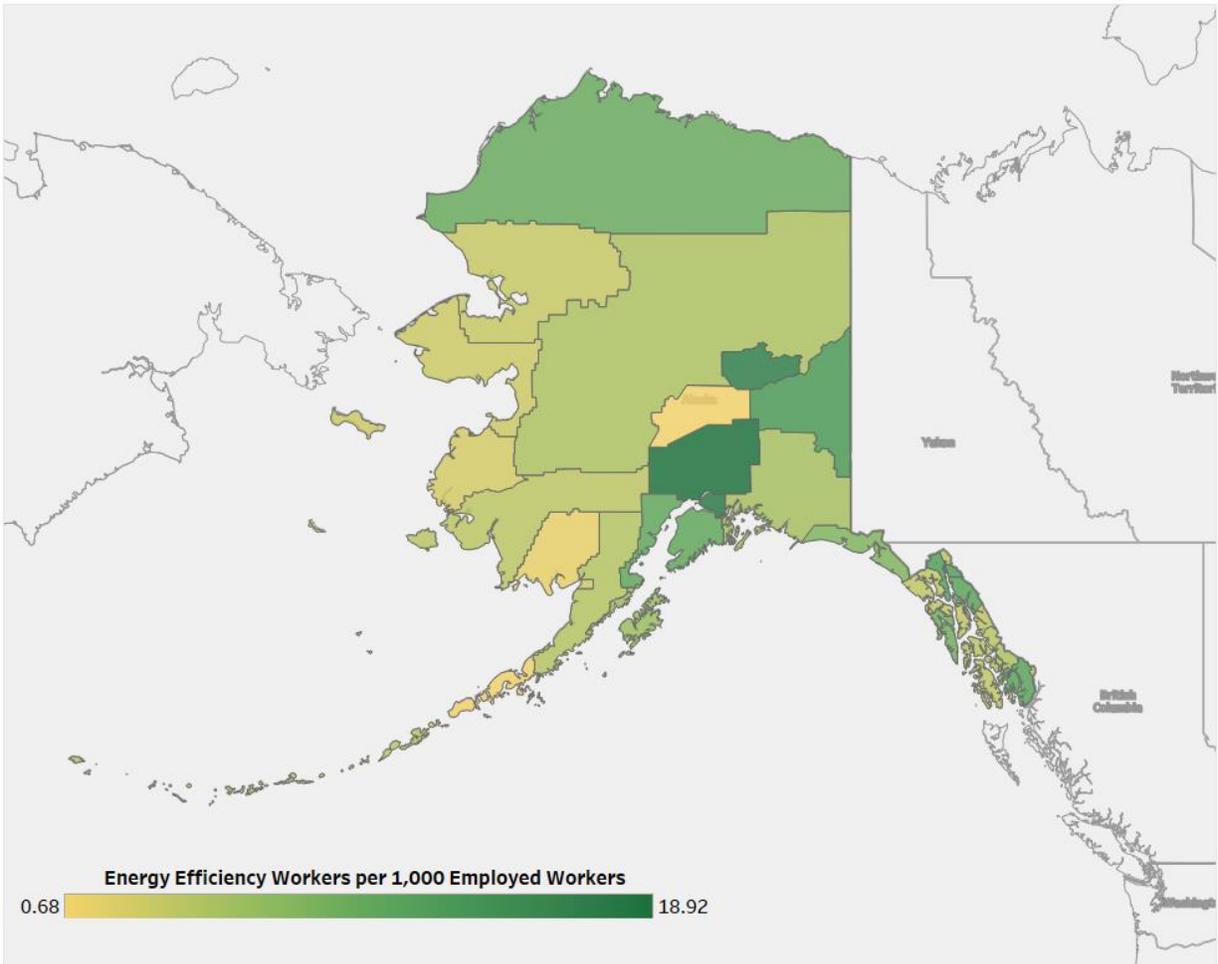
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **179,922** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,701	Anchorage	2,773
		Fairbanks	585
		Rural	1,343

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs
00H	892	00T	123
00I	554	00A	561
00D	503	00B	8
00L	268	00C	93
00G	207	00O	281
00K	227	00P	193
00M	84	00Q	302
00E	18	00R	244
00N	11	00S	98
00F	33		

## State House of Representatives

District	Jobs	District	Jobs
1	438	28	11
2	122	29	281
3	<5	30	<5
4	8	31	93
5	<5	32	100
6	89	33	302
7	469	34	<5
8	34	35	120
9	14	36	124
10	5	37	58
11	<5	38	40
12	33	39	45
13	207	40	78
14	<5		
15	624		
16	266		
17	<5		
18	553		
19	<5		
20	<5		
21	92		
22	140		
23	267		
24	<5		
25	<5		
26	84		
27	<5		



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# 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.*

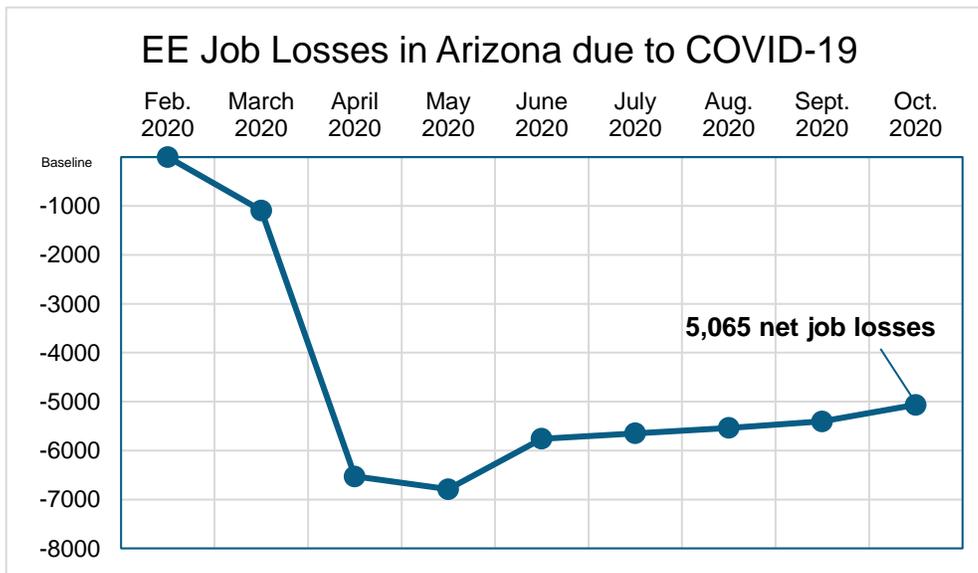
### COVID-19 Impacts on the EE Job Sector

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.

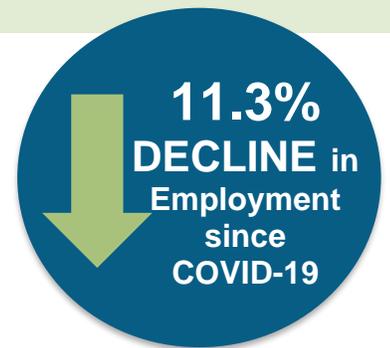
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

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.

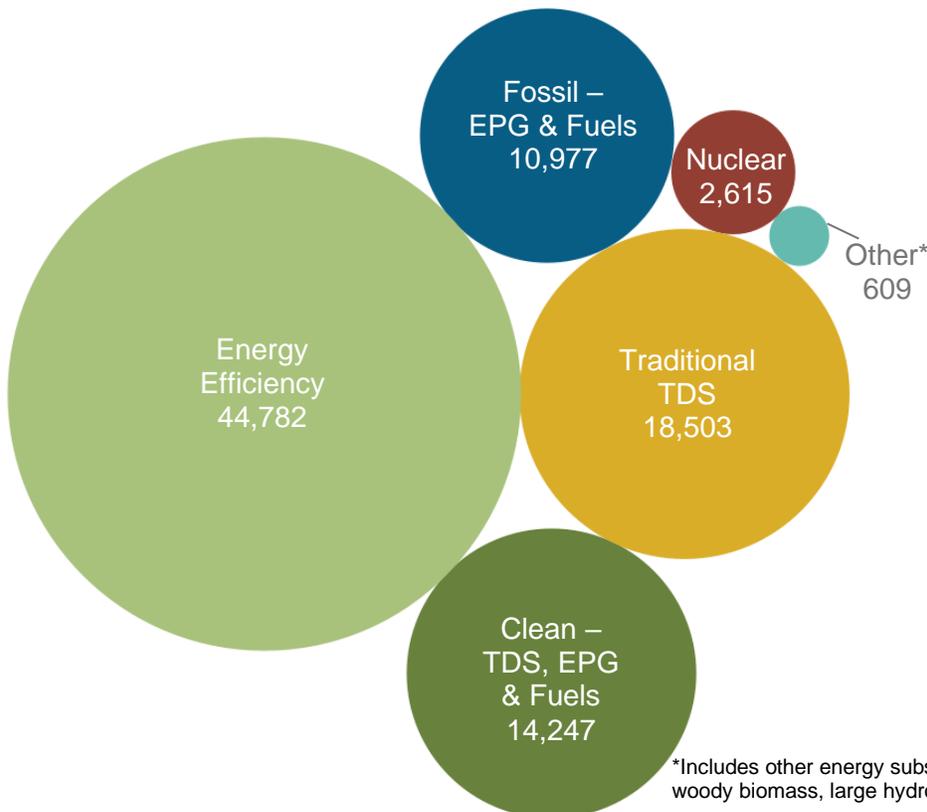
## What type of work are EE workers doing?

- 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
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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.

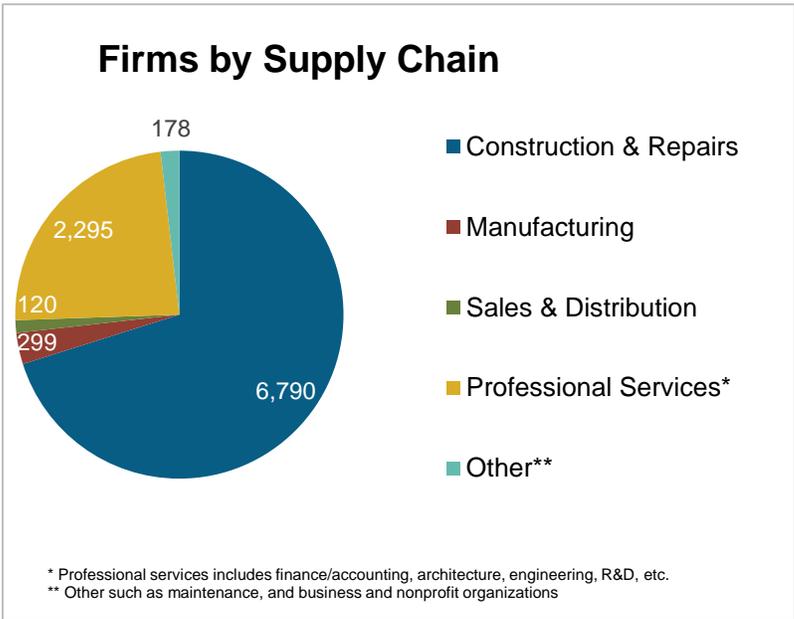
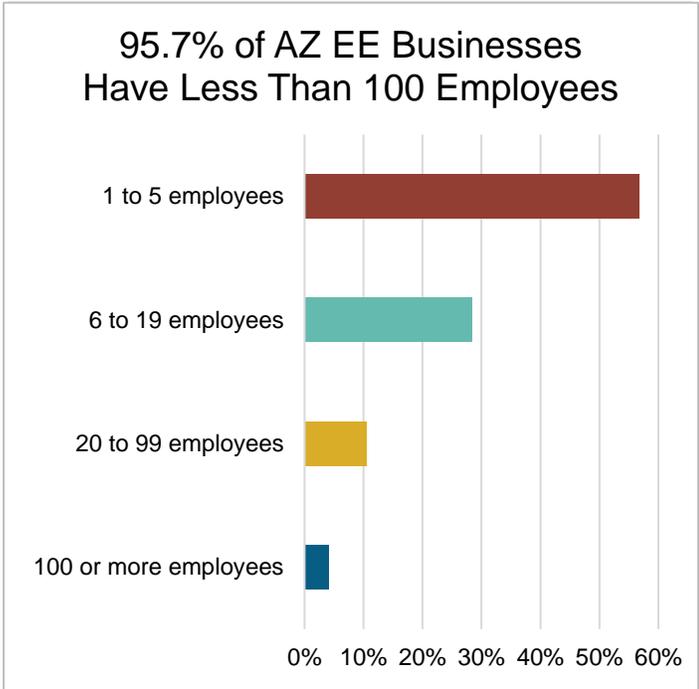


Energy efficiency in Arizona has seen consistent, reliable job growth – 10.1 percent since 2016.

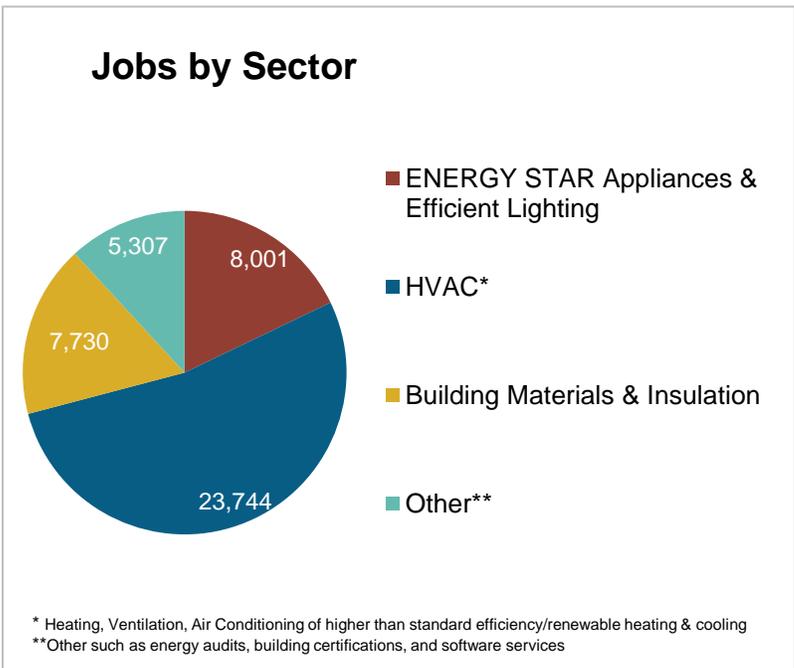
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# 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**

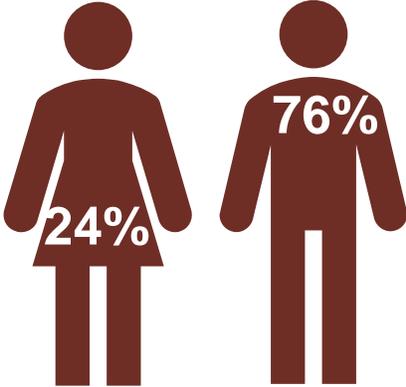
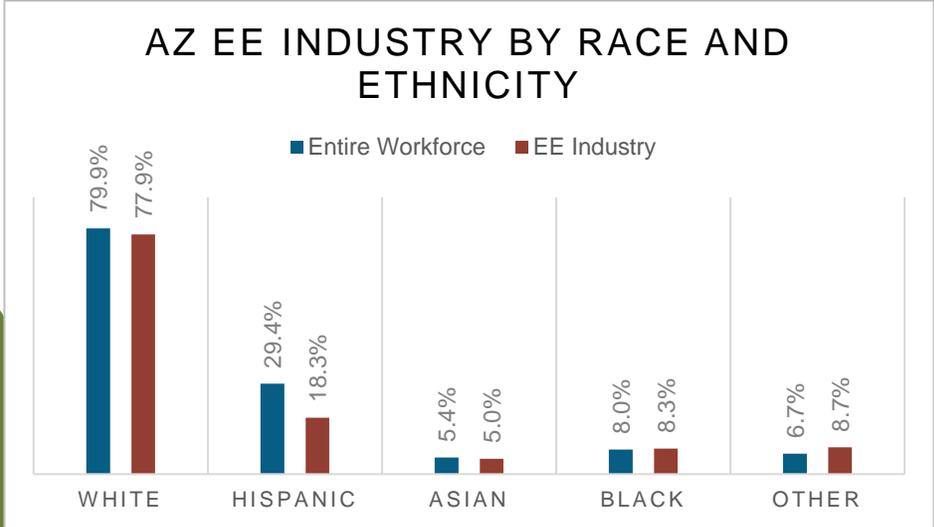


**Energy Efficiency  
 Construction Workers  
 Make Up 18% of AZ  
 Construction Workers**

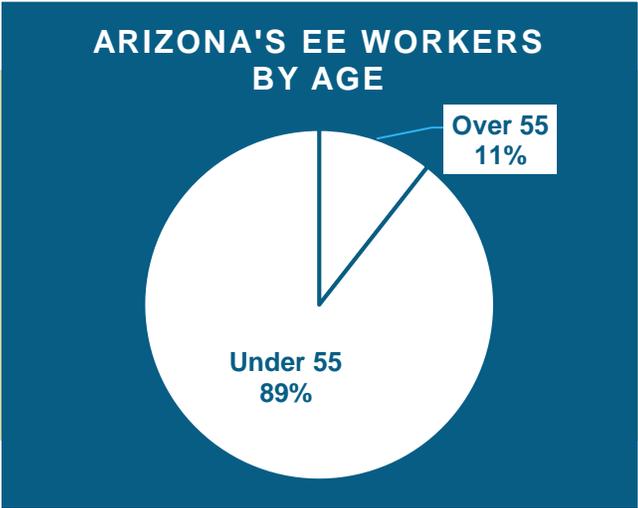
# How is EE Doing regarding Diversity in Arizona?

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.

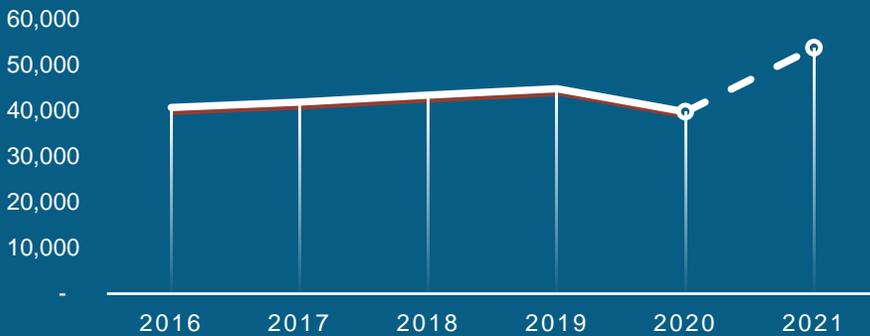
# Why invest in EE?

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.

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## ARIZONA PROJECTED STIMULUS JOB IMPACTS



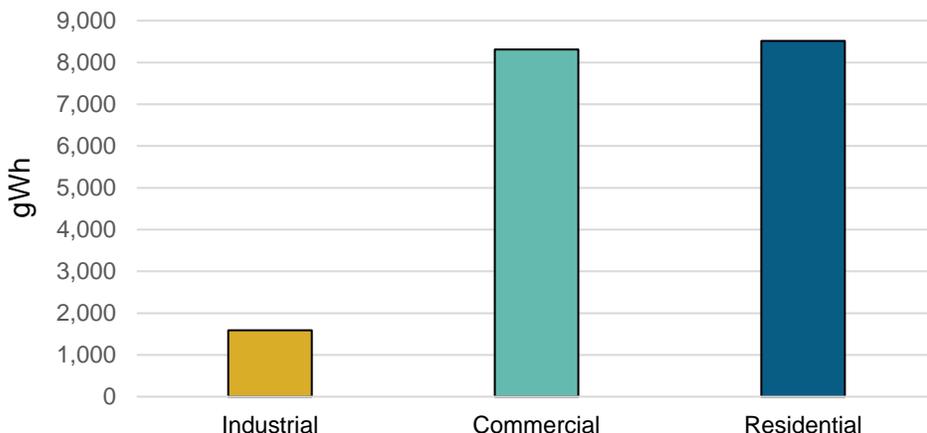
Source: [Build Back Better, Faster](#).

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



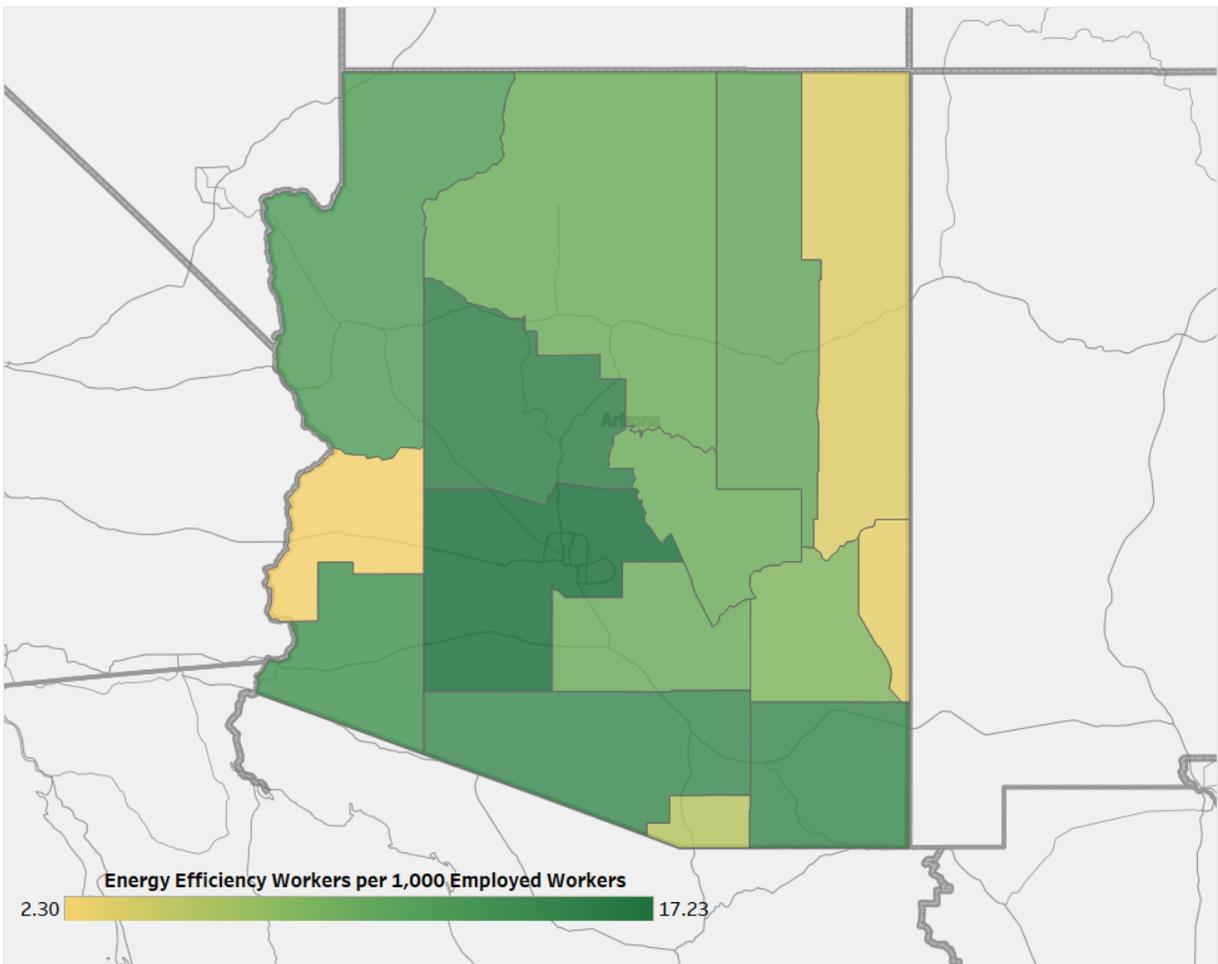
Combined, this would displace the annual electricity consumption of **1,513,430 homes**.

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		



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# Arkansas

## 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.*

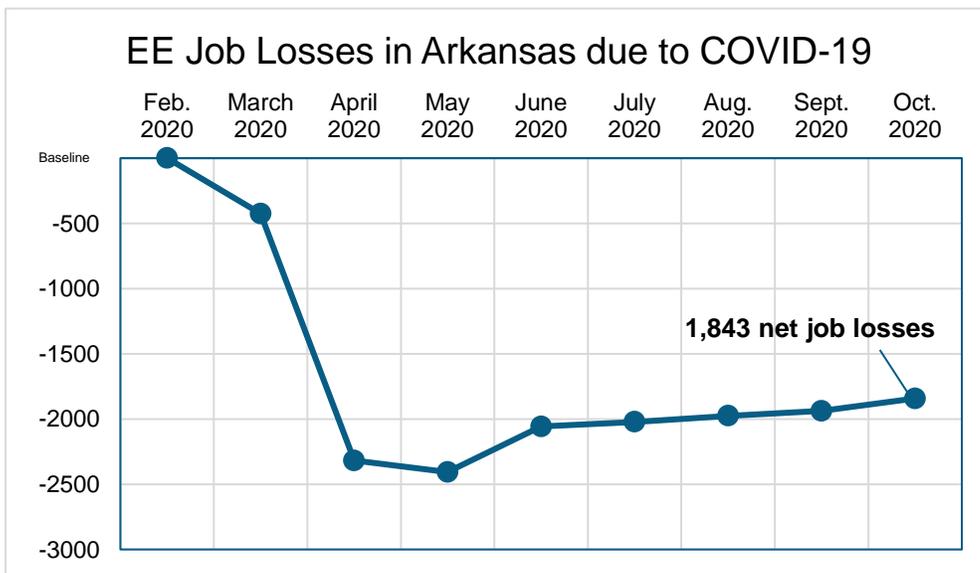
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Arkansas's energy efficiency industry lost as many as 1,843 jobs since its onset, a 11.9% 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 Arkansas EE workforce grew steadily, gaining 4.4% 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.



Presented by:



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

# What are EE Jobs?

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

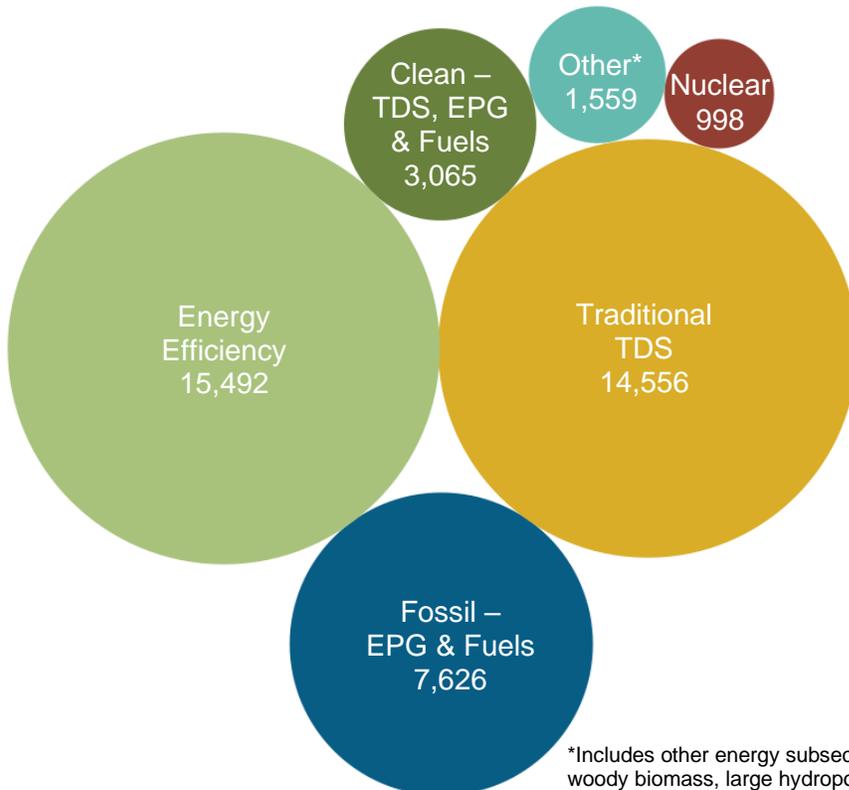
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## How does EE compare in Arkansas?

Energy efficiency is the largest energy sector in Arkansas.

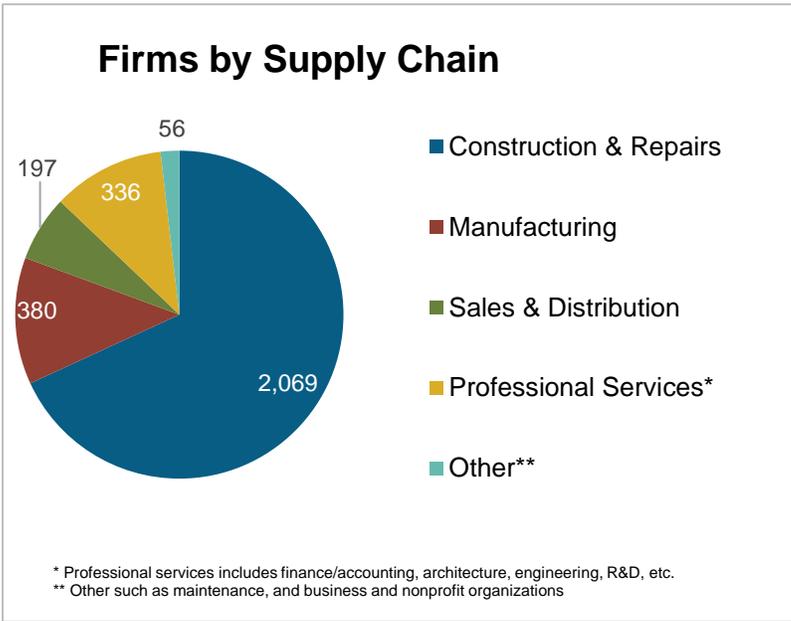
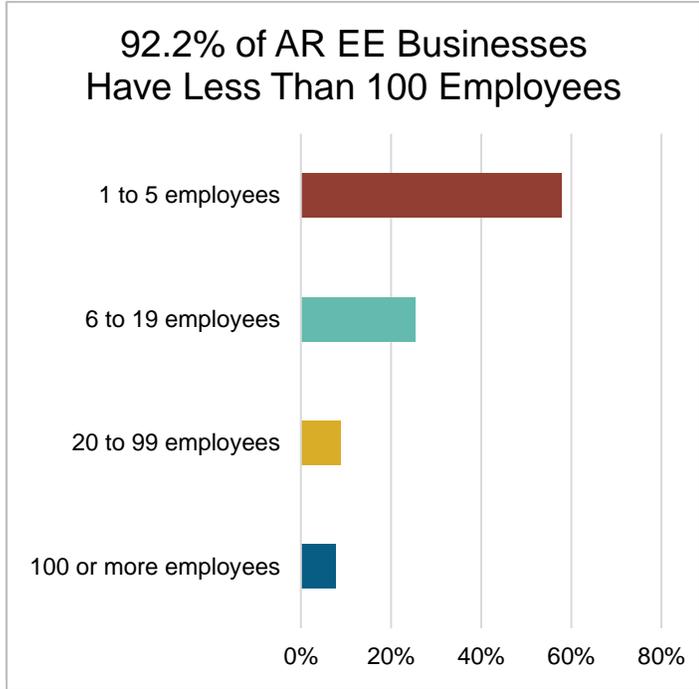


Energy efficiency in Arkansas has seen consistent, reliable job growth – 4.4 percent since 2016.

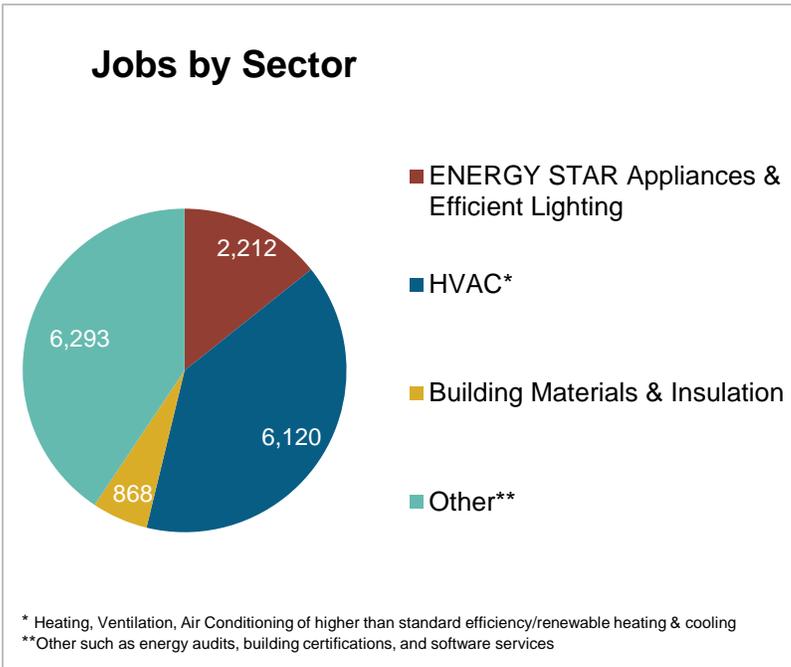
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# What do the EE businesses look like in Arkansas?

EE Sector =  
**3,038**  
 Businesses in AR  
 (Dec. 2019)  
 ↑ **70** over 2018



**8.7%**  
 of Arkansas  
 residents employed  
 in EE are **Veterans**

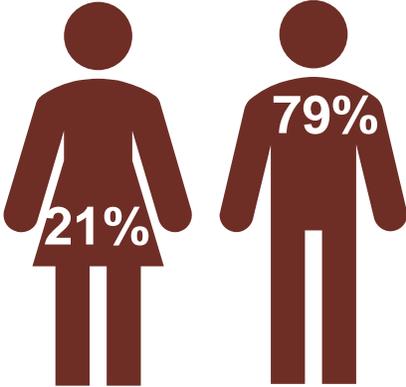
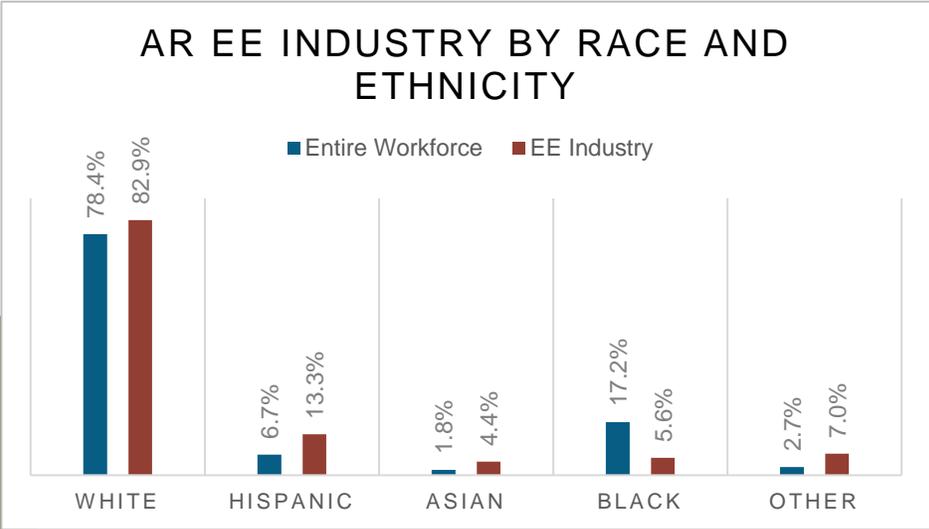


**Energy Efficiency  
 Construction Workers  
 Make Up 19% of AR  
 Construction Workers**

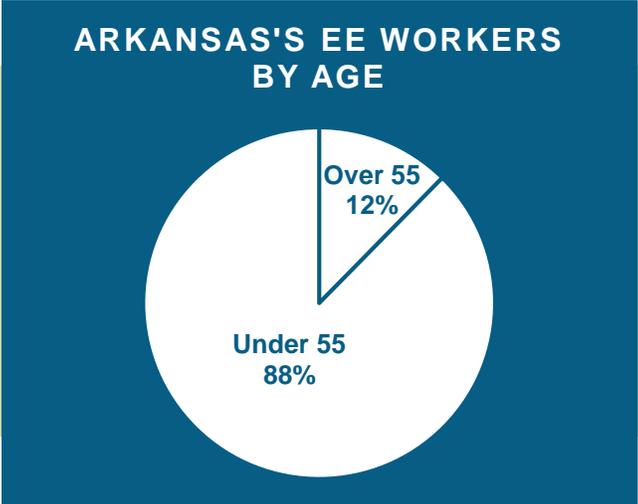
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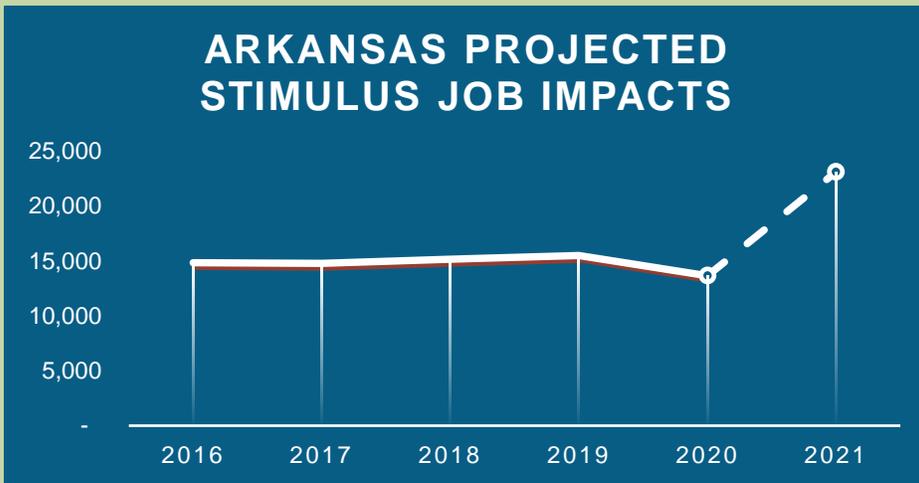
A significant portion of the Arkansas efficiency workforce is in the “55+” category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# Why invest in EE?

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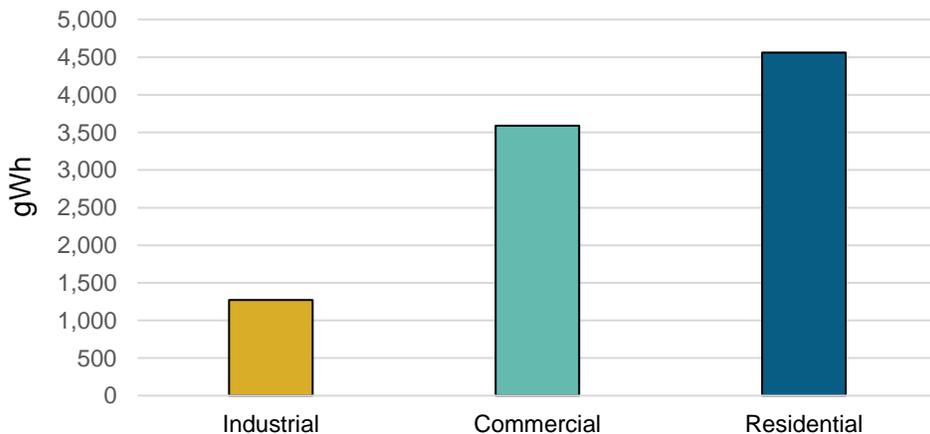
Source: [Build Back Better, Faster.](#)

Modeling finds that federal investment would create **9,448 full-time direct, indirect, and induced AR jobs** that will last for at least five years: Over **47,242 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$527 million in GDP** each year for the next five years – resulting in **\$2.6 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### Arkansas Energy Efficiency Potential by Sector



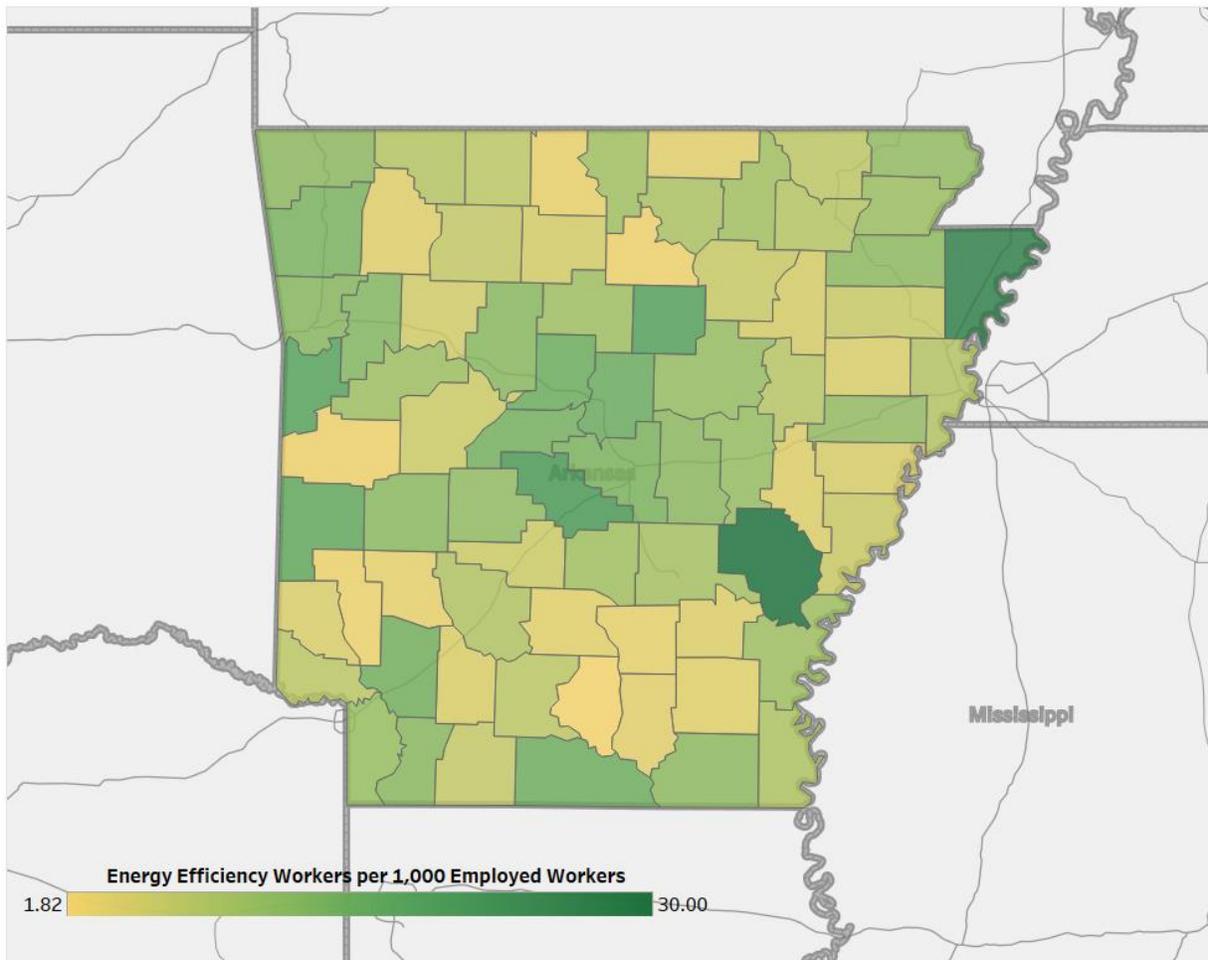
Combined, this would displace the annual electricity consumption of **702,352** homes.

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

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	3,858	Fayetteville-Springdale-Rogers	2,732
2	4,526	Fort Smith	1,061
3	4,539	Hot Springs	623
4	2,568	Jonesboro	784
		Little Rock-North Little Rock-Conway	4,519
		Memphis	453
		Pine Bluff	364
		Texarkana	225
		Rural	4,731

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,511	11	332	21	155	31	255
2	182	12	295	22	331	32	316
3	370	13	983	23	332	33	<5
4	630	14	118	24	299	34	130
5	470	15	1,311	25	544	35	<5
6	246	16	509	26	356		
7	<5	17	292	27	252		
8	785	18	492	28	149		
9	77	19	359	29	155		
10	379	20	793	30	2,084		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	212	28	<5	55	<5	82	71
2	213	29	300	56	202	83	329
3	174	30	526	57	<5	84	349
4	77	31	176	58	<5	85	<5
5	73	32	134	59	<5	86	<5
6	256	33	1,191	60	97	87	<5
7	13	34	<5	61	170	88	<5
8	311	35	<5	62	98	89	<5
9	25	36	<5	63	<5	90	739
10	191	37	592	64	223	91	34
11	143	38	126	65	147	92	77
12	251	39	<5	66	38	93	289
13	321	40	421	67	<5	94	<5
14	548	41	<5	68	129	95	33
15	229	42	<5	69	94	96	<5
16	179	43	<5	70	<5	97	38
17	<5	44	52	71	139	98	8
18	353	45	17	72	<5	99	76
19	17	46	<5	73	63	100	17
20	78	47	126	74	88		
21	286	48	159	75	246		
22	416	49	100	76	342		
23	82	50	216	77	309		
24	<5	51	<5	78	<5		
25	<5	52	374	79	<5		
26	<5	53	649	80	549		
27	30	54	221	81	634		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# California

## 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.*

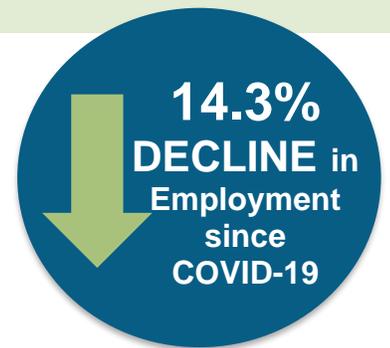
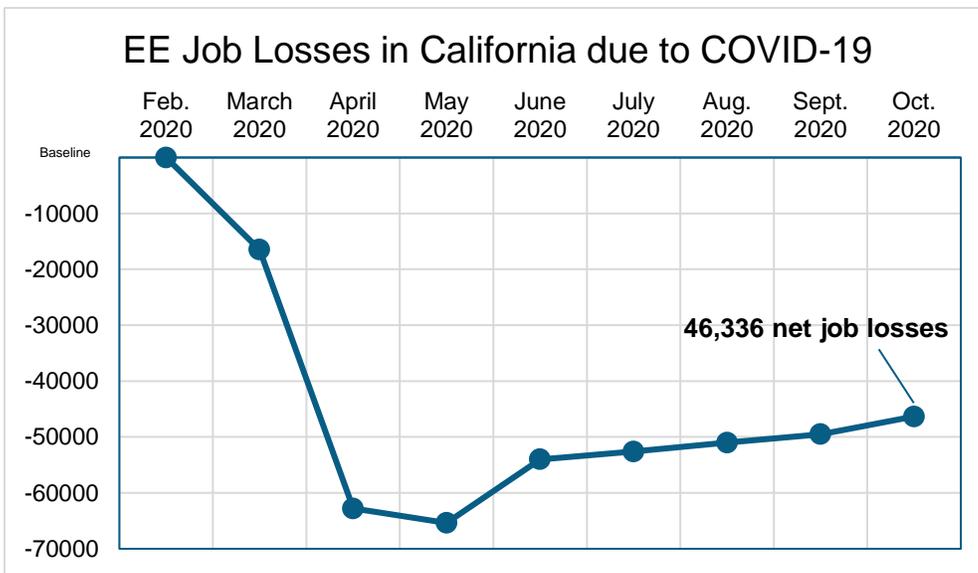
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. California's energy efficiency industry lost as many as 46,336 jobs since its onset, a 14.3% 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 California EE workforce grew steadily, gaining 7.4% 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.



Presented by:



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

# What are EE Jobs?

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

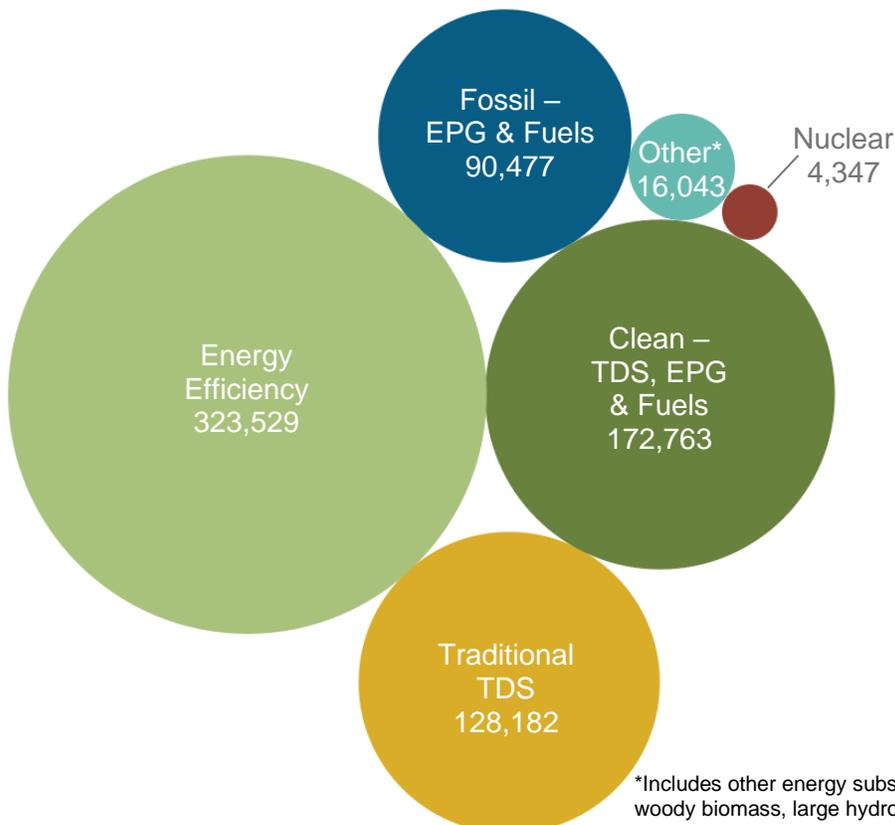
## What type of work are EE workers doing?

- 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 California?

Energy efficiency is the largest energy sector in California.

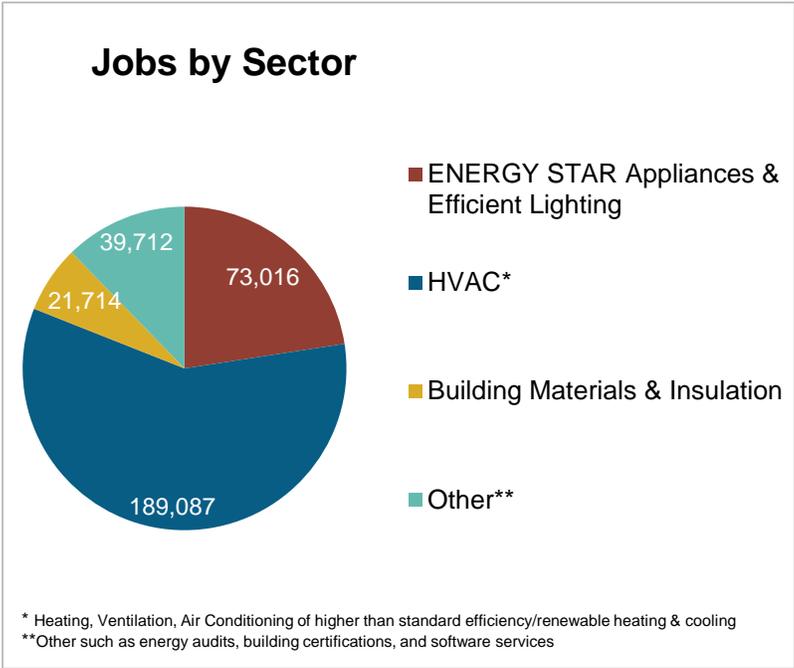
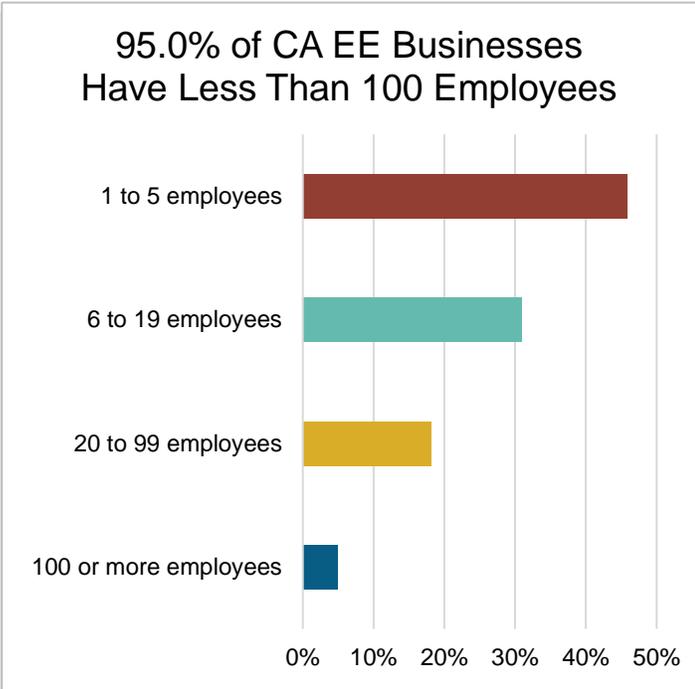
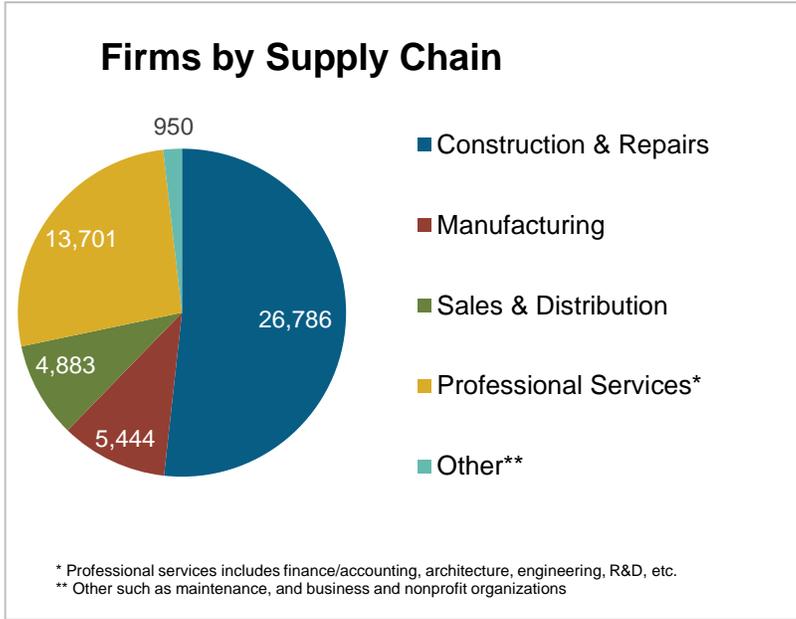


Energy efficiency in California has seen consistent, reliable job growth – 7.4 percent since 2016.

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

# What do the EE businesses look like in California?

EE Sector =  
**51,765**  
 Businesses in CA  
 (Dec. 2019)  
 ↑ **800** over 2018




**7.6%**  
 of California  
 residents employed  
 in EE are **Veterans**

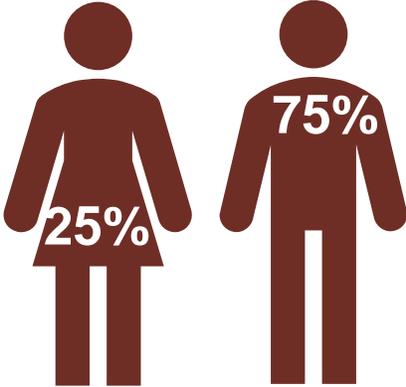
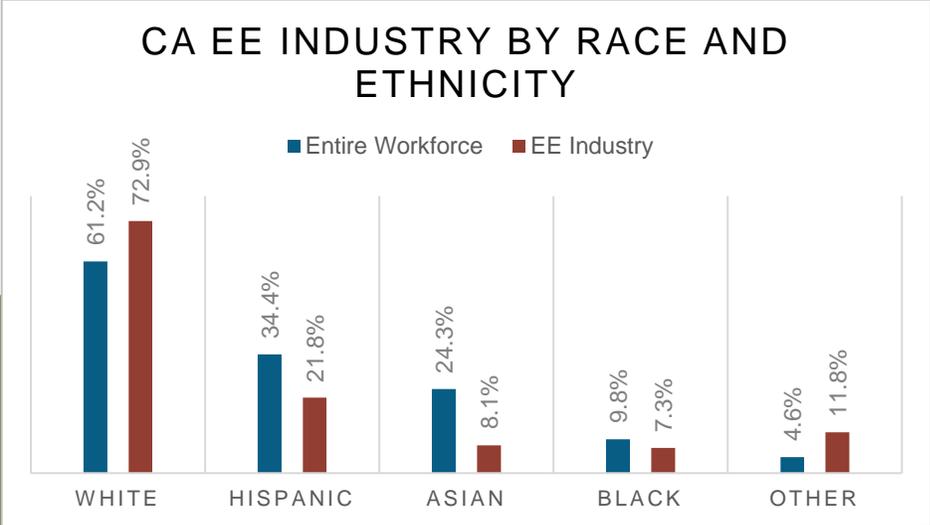


**Energy Efficiency  
 Construction Workers  
 Make Up 18% of CA  
 Construction Workers**

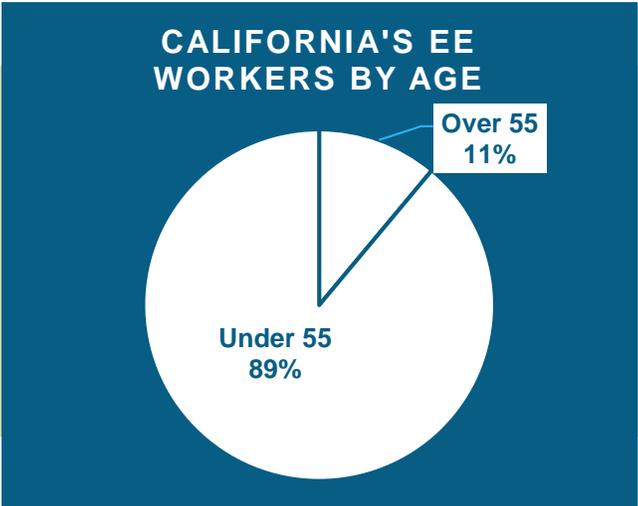
# How is EE Doing regarding Diversity in California?

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 California 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.



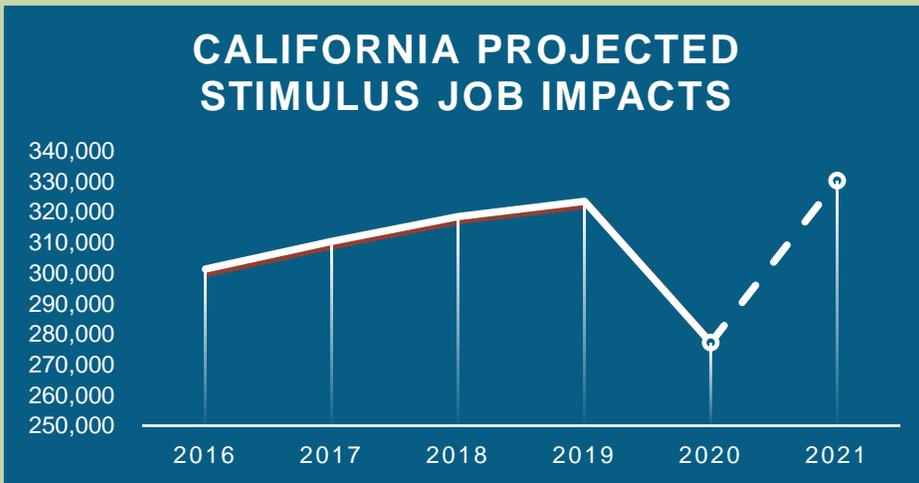
A significant portion of the California efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

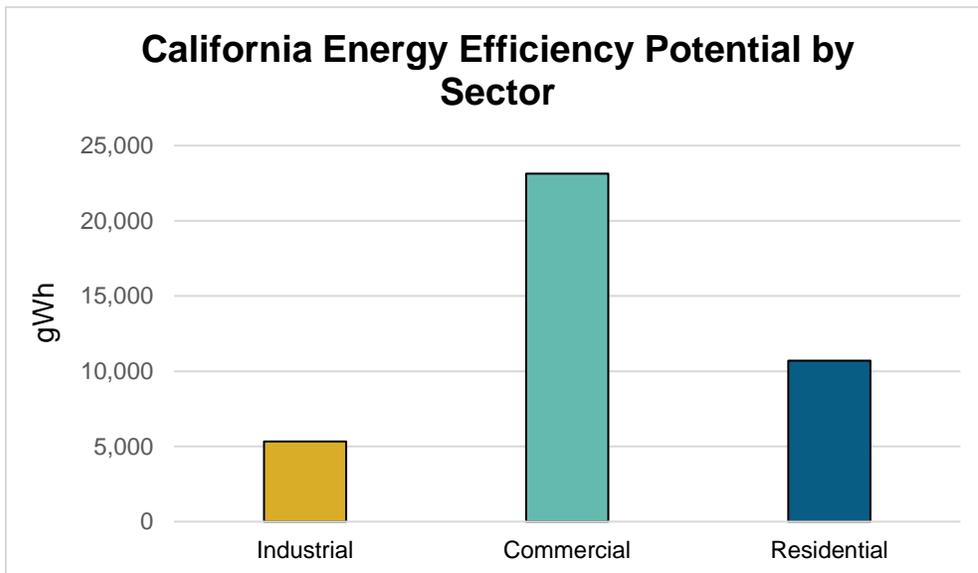


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **53,071 full-time direct, indirect, and induced CA jobs** that will last for at least five years: Over **265,357 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$4.4 billion in GDP** each year for the next five years — resulting in **\$22.4 billion in economic activity**, more than 5.4 times the investment.

## How much energy efficiency is untapped in your state?



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

Combined, this would displace the annual electricity consumption of **6,135,602 homes**.

## Where are EE Jobs?

Congressional				Metropolitan Areas	
District	Jobs	District	Jobs	Area	Jobs
1	8,252	28	8,083	Bakersfield	4,960
2	12,170	29	2,477	Chico	2,056
3	6,612	30	5,689	El Centro	750
4	7,724	31	2,467	Fresno	6,311
5	4,485	32	3,850	Hanford-Corcoran	415
6	6,310	33	11,248	Los Angeles-Long Beach-Santa Ana	95,604
7	3,519	34	5,214	Madera	700
8	4,407	35	5,063	Merced	852
9	4,687	36	5,533	Modesto	2,943
10	3,784	37	3,849	Napa	1,489
11	11,186	38	4,227	Oxnard-Thousand Oaks-Ventura	6,252
12	19,661	39	7,119	Redding	1,725
13	8,779	40	2,772	Riverside-San Bernardino-Ontario	24,249
14	6,722	41	5,810	Sacramento-Arden-Arcade-Roseville	19,776
15	6,151	42	3,575	Salinas	2,893
16	5,016	43	3,452	San Diego-Carlsbad-San Marcos	35,594
17	10,673	44	1,772	San Francisco-Oakland-Fremont	60,873
18	6,764	45	13,671	San Jose-Sunnyvale-Santa Clara	19,942
19	2,994	46	2,858	San Luis Obispo-Paso Robles	5,968
20	3,539	47	4,836	Santa Barbara-Santa Maria-Goleta	5,373
21	3,932	48	5,449	Santa Cruz-Watsonville	2,637
22	2,691	49	11,701	Santa Rosa-Petaluma	6,576
23	3,731	50	4,708	Stockton	3,822
24	11,352	51	5,558	Vallejo-Fairfield	1,963
25	4,627	52	10,236	Visalia-Porterville	1,958
26	3,460	53	1,644	Yuba City	799
27	7,440			Rural	7,048



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	12,705	11	20,447	21	3,894	31	4,013
2	10,972	12	4,051	22	6,511	32	3,989
3	11,998	13	9,388	23	4,720	33	5,910
4	5,468	14	5,865	24	8,460	34	8,997
5	5,875	15	5,577	25	4,762	35	3,910
6	6,435	16	4,325	26	11,719	36	12,524
7	7,962	17	10,786	27	7,594	37	9,936
8	8,000	18	8,141	28	7,137	38	10,093
9	11,875	19	8,116	29	7,884	39	13,334
10	14,702	20	7,513	30	5,247	40	2,693

## State Assembly

District	Jobs	District	Jobs	District	Jobs
1	6,509	31	1,117	61	3,020
2	5,020	32	1,955	62	2,455
3	2,027	33	2,832	63	3,105
4	7,216	34	2,035	64	2,216
5	3,581	35	7,332	65	3,867
6	6,553	36	2,380	66	1,961
7	7,691	37	7,280	67	2,855
8	1,234	38	4,617	68	8,768
9	1,035	39	2,596	69	2,896
10	4,975	40	2,955	70	2,410
11	2,162	41	5,153	71	4,717
12	3,865	42	4,648	72	2,474
13	1,852	43	3,586	73	3,956
14	7,827	44	2,139	74	5,318
15	6,502	45	5,705	75	4,280
16	2,721	46	2,009	76	3,611
17	19,752	47	1,271	77	13,339
18	5,503	48	2,528	78	7,924
19	1,873	49	1,914	79	1,649
20	5,303	50	9,201	80	81
21	1,203	51	2,783		
22	5,145	52	4,477		
23	5,336	53	3,360		
24	6,338	54	2,870		
25	9,428	55	3,956		
26	2,963	56	937		
27	1,642	57	2,988		
28	2,955	58	806		
29	4,873	59	467		
30	1,705	60	1,941		



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# Colorado

## Energy Efficiency Jobs in America

Oct 2020

33,356\*

Dec 2019

36,092

*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

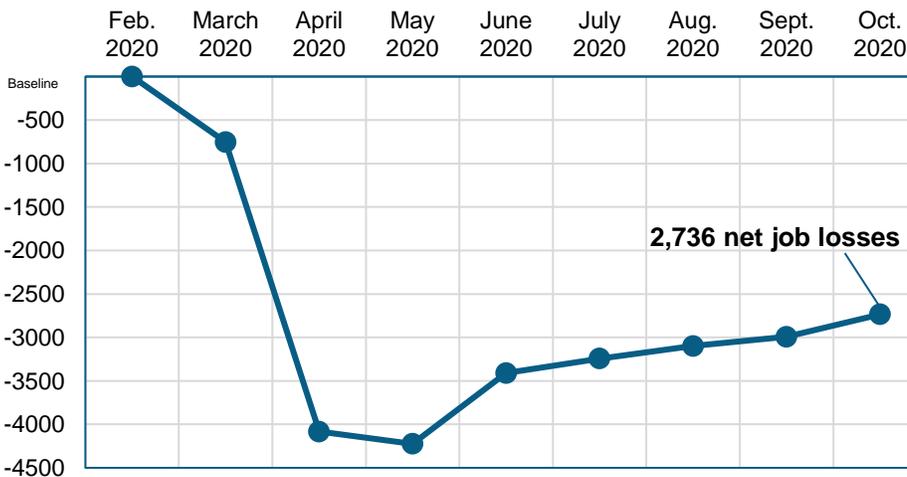
The 2020 pandemic shocked our nation's labor market with massive job losses. Colorado's energy efficiency industry lost as many as 2,736 jobs since its onset, a 7.6% decrease compared to total jobs in December 2019—wiping out the last year of gains.

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.

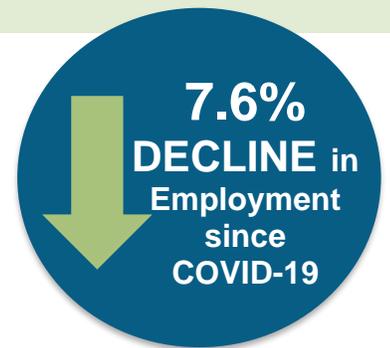
The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Colorado EE workforce grew steadily, gaining 21.3% since 2016.\*\*

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.

#### EE Job Losses in Colorado due to COVID-19



\*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.

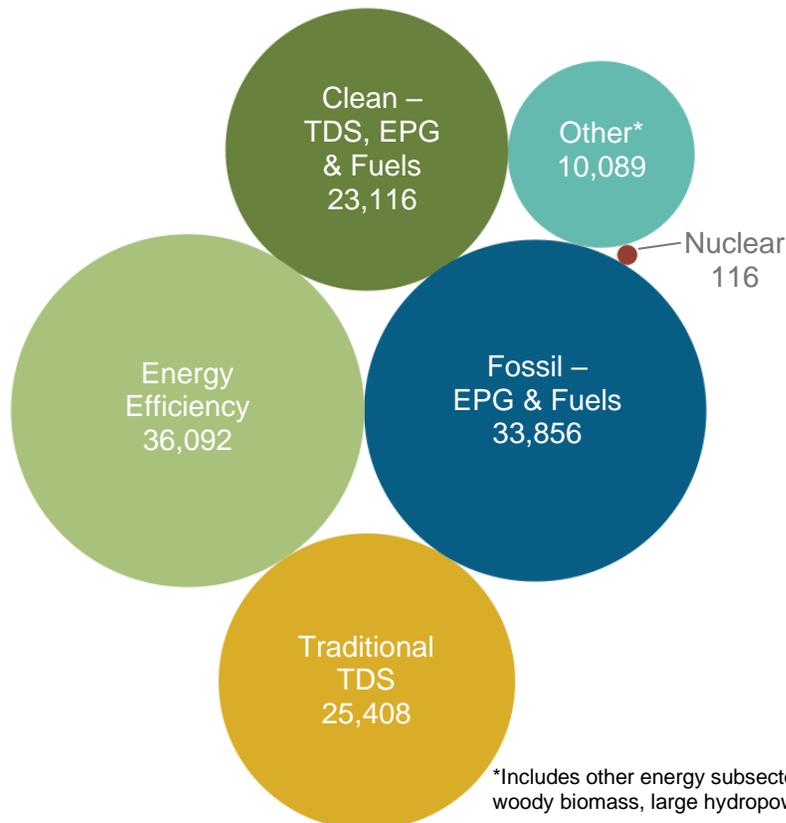
## What type of work are EE workers doing?

- 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
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- 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 Colorado?

Energy efficiency is the largest energy sector in Colorado.

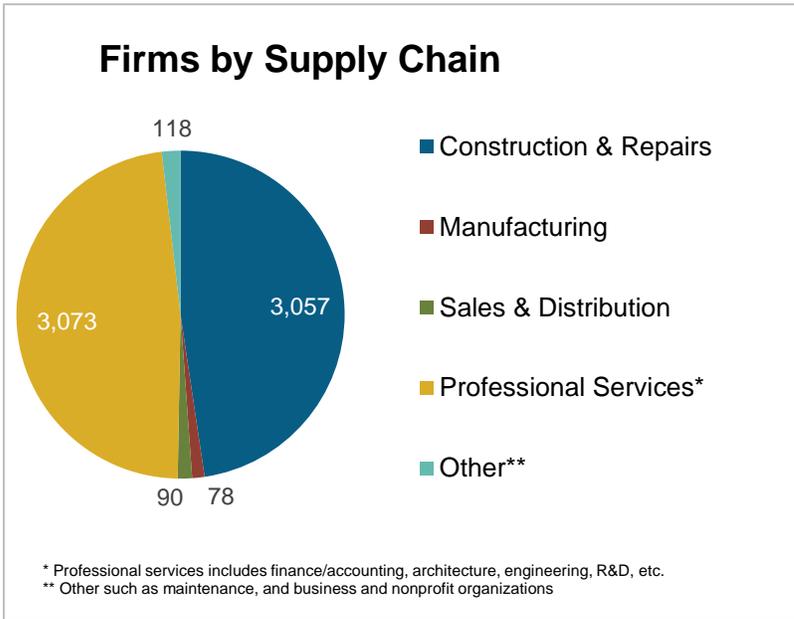
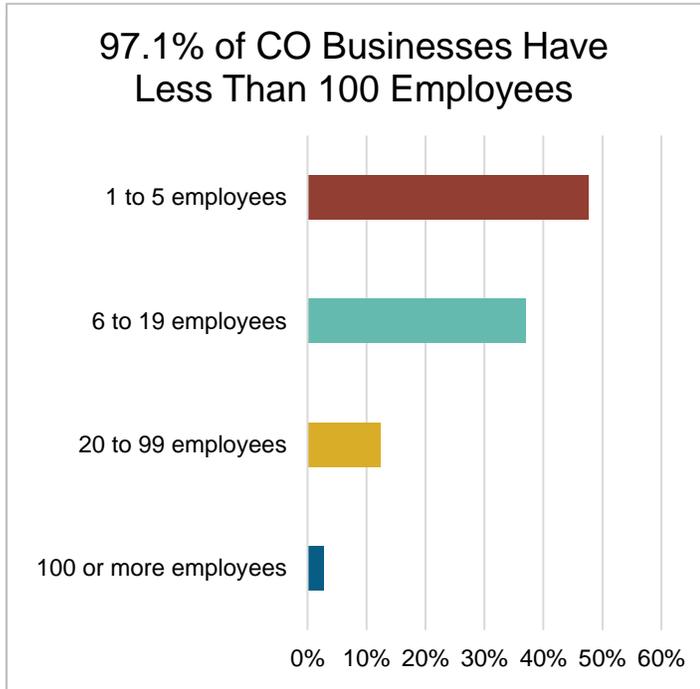


Energy efficiency in Colorado has seen consistent, reliable job growth – 21.3 percent since 2016.

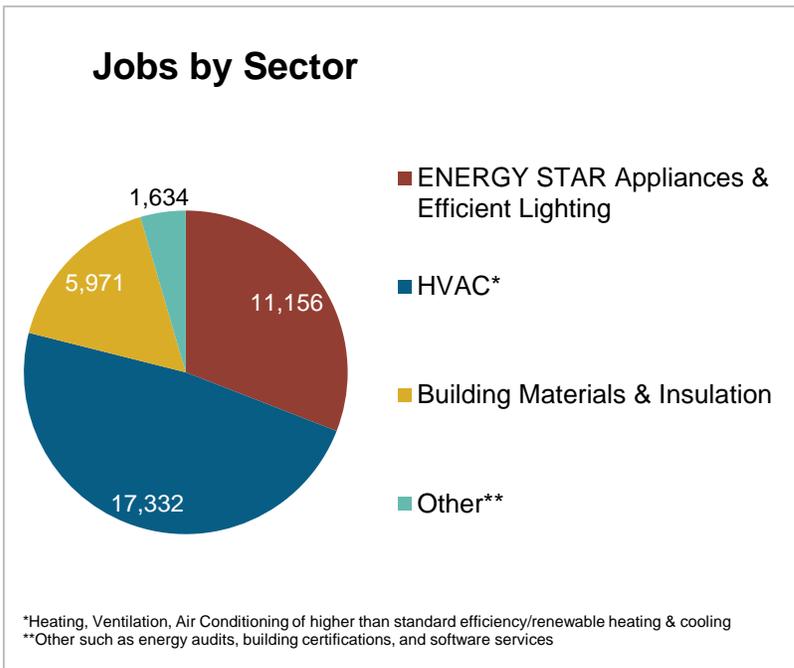
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Colorado?

EE Sector =  
**6,416**  
 Businesses in CO  
 (Dec. 2019)  
 ↑ **300** over 2018



**6.9%**  
 of Colorado  
 residents employed  
 in EE are **Veterans**



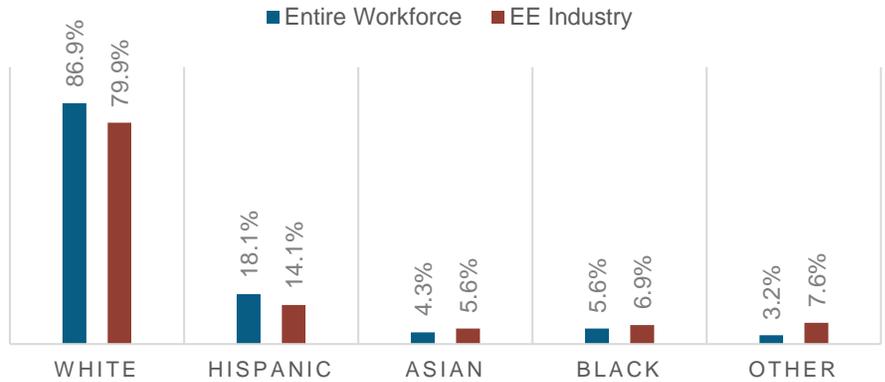

**Energy Efficiency  
 Construction Workers  
 Make Up 9% of CO  
 Construction Workers**

# How is EE Doing regarding Diversity in Colorado?

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 Colorado communities are represented in the EE sector.

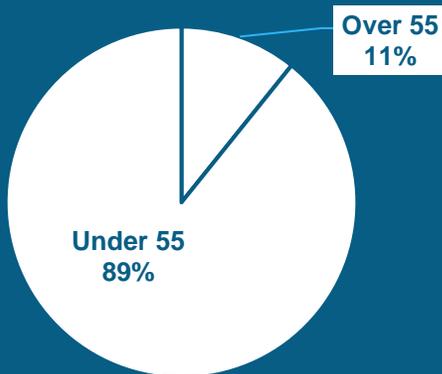
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## CO EE INDUSTRY BY RACE AND ETHNICITY



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.

## COLORADO'S EE WORKERS BY AGE



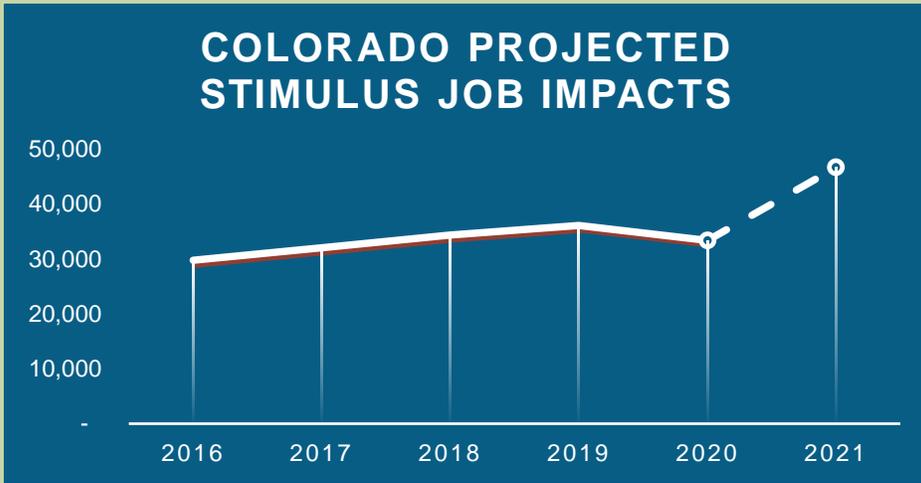
A significant portion of the Colorado efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

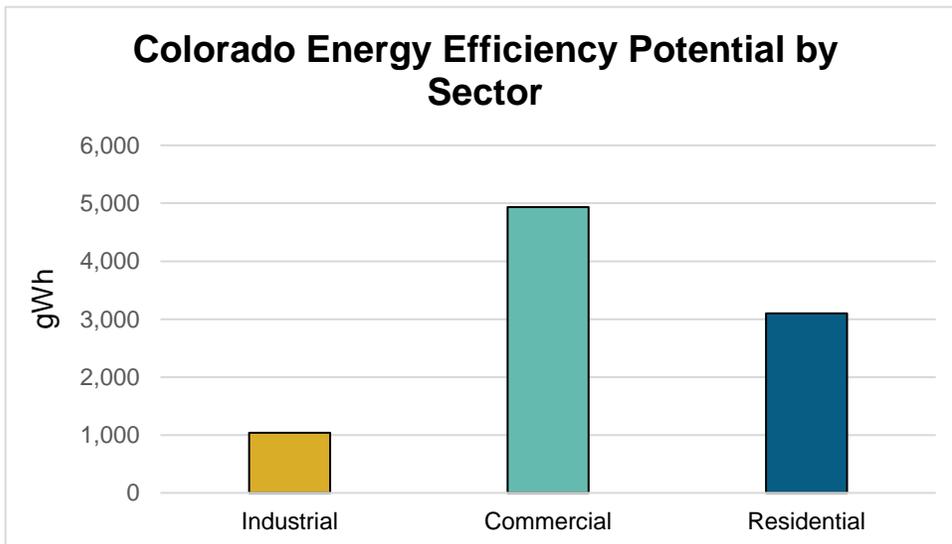


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **13,284 full-time direct, indirect, and induced CO jobs** that will last for at least five years: Over **66,421 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$990 million in GDP** each year for the next five years – resulting in **\$4.9 billion in economic activity**, more than 5 times the investment.

## How much energy efficiency is untapped in your state?



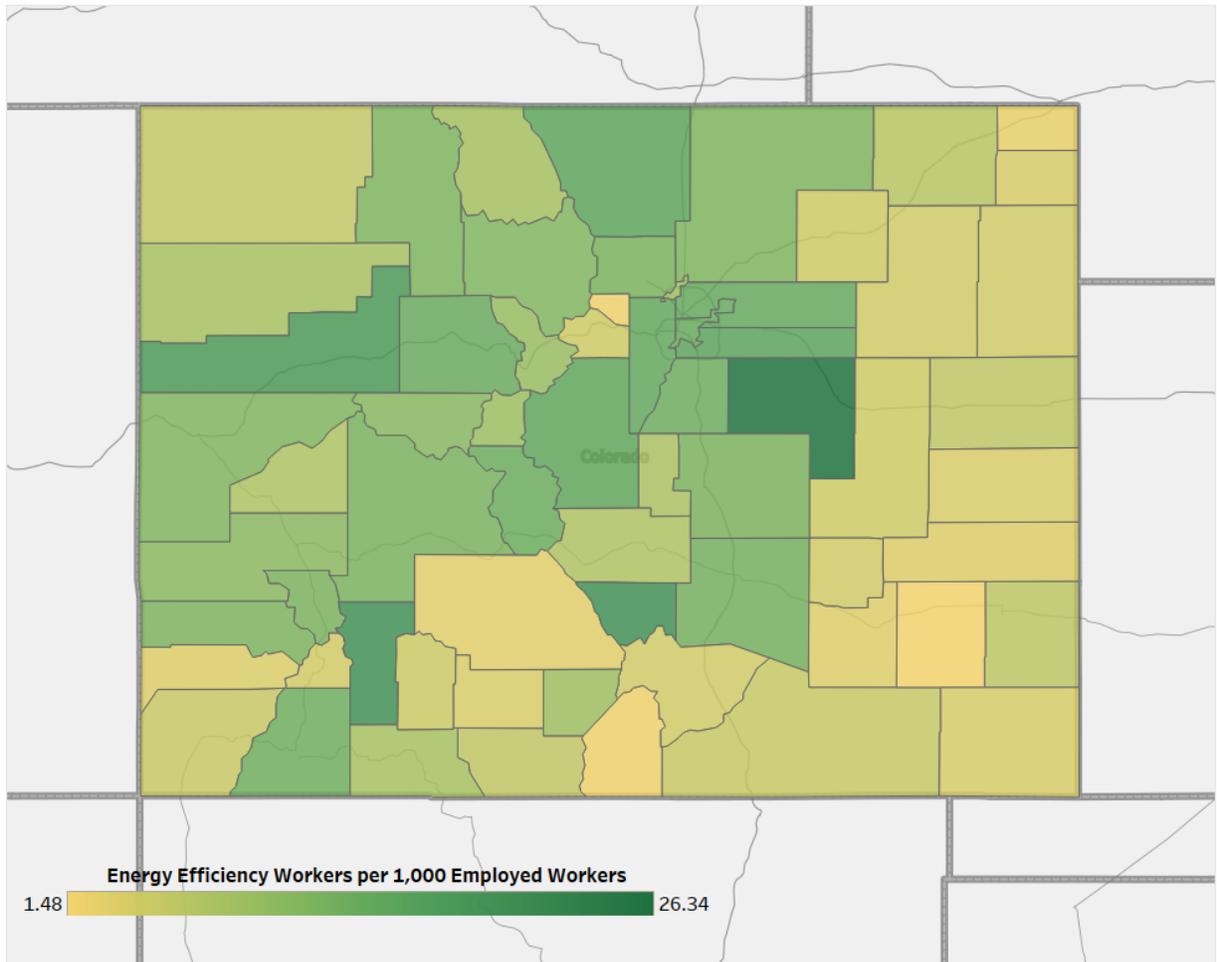
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,108,468 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	11,314	Boulder	3,905
2	9,669	Colorado Springs	2,995
3	4,582	Denver-Aurora	19,396
4	4,600	Fort Collins-Loveland	2,227
5	3,203	Grand Junction	801
6	1,121	Greeley	1,271
7	1,603	Pueblo	559
		Rural	4,938

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,922	11	727	21	1,969	31	2,035
2	1,095	12	24	22	<5	32	1,135
3	500	13	453	23	117	33	624
4	1,915	14	711	24	170	34	3,206
5	1,602	15	1,291	25	318	35	438
6	1,052	16	3,410	26	2,119		
7	811	17	2,034	27	<5		
8	1,210	18	1,199	28	125		
9	1,312	19	1,276	29	92		
10	273	20	663	30	266		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs
1	1,323	28	<5	55	<5
2	1,686	29	172	56	128
3	2,358	30	1,291	57	443
4	1,171	31	49	58	476
5	2,999	32	57	59	804
6	1,244	33	256	60	210
7	940	34	25	61	839
8	<5	35	<5	62	212
9	317	36	242	63	110
10	3,004	37	<5	64	320
11	523	38	286	65	247
12	864	39	1,283		
13	514	40	<5		
14	679	41	<5		
15	417	42	<5		
16	593	43	<5		
17	834	44	<5		
18	147	45	<5		
19	256	46	401		
20	16	47	278		
21	8	48	1,668		
22	311	49	1,346		
23	1,449	50	62		
24	644	51	<5		
25	180	52	<5		
26	955	53	<5		
27	565	54	893		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)

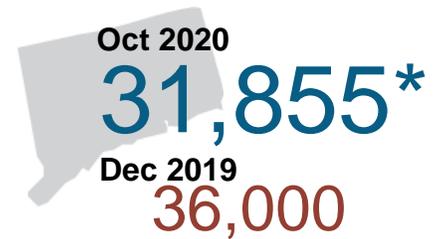


BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Connecticut

## 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.*

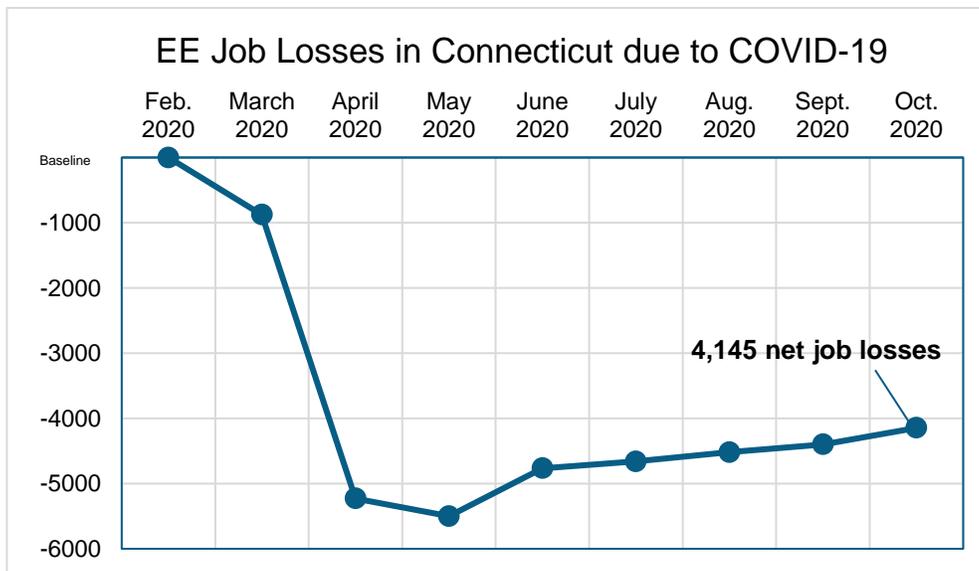
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Connecticut’s energy efficiency industry lost as many as 4,145 jobs since its onset, a 11.5% 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 Connecticut EE workforce grew steadily, gaining 6.0% 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.



Presented by:



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

# What are EE Jobs?

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

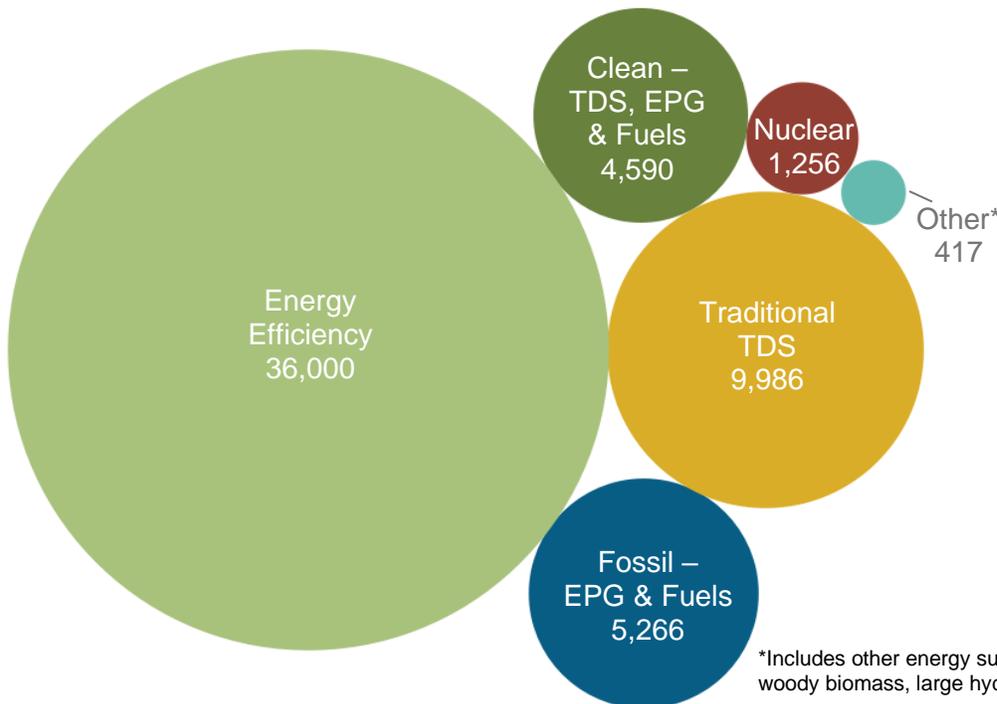
## What type of work are EE workers doing?

- 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 Connecticut?

Energy efficiency is the largest energy sector in Connecticut.

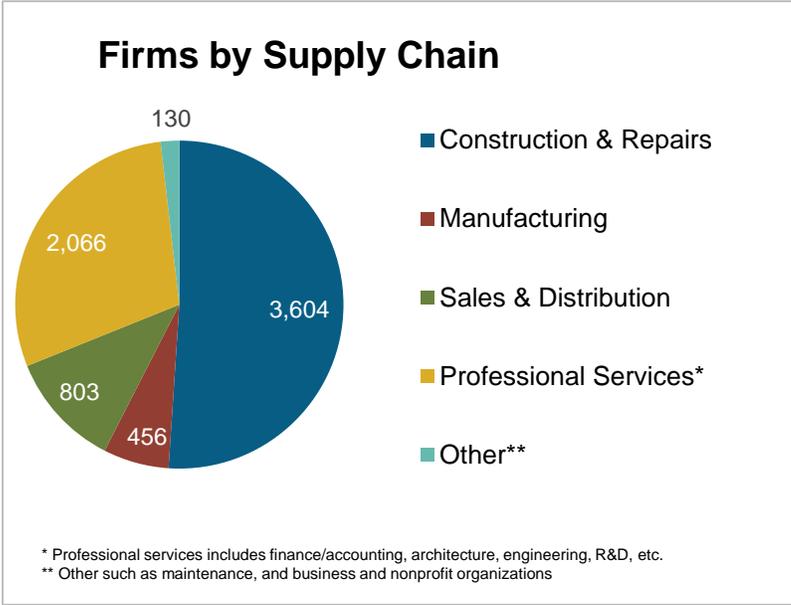
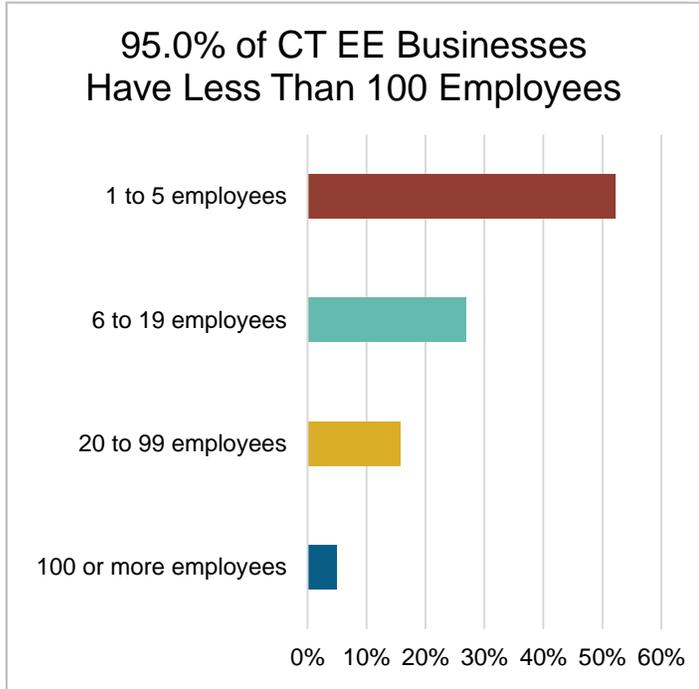


Energy efficiency in Connecticut has seen consistent, reliable job growth – 6.0 percent since 2016.

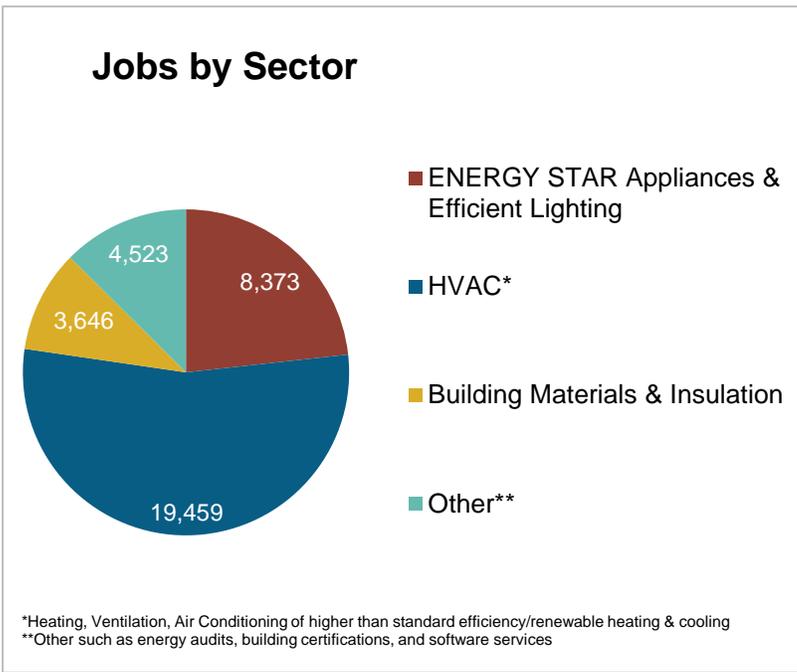
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Connecticut?

EE Sector =  
**7,059**  
 Businesses in CT  
 (Dec. 2019)  
 ↑ **80** over 2018




**7.1%**  
 of Connecticut  
 residents employed  
 in EE are **Veterans**

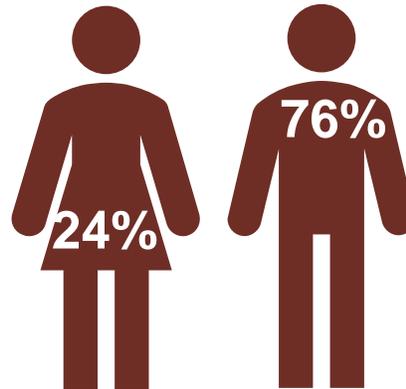
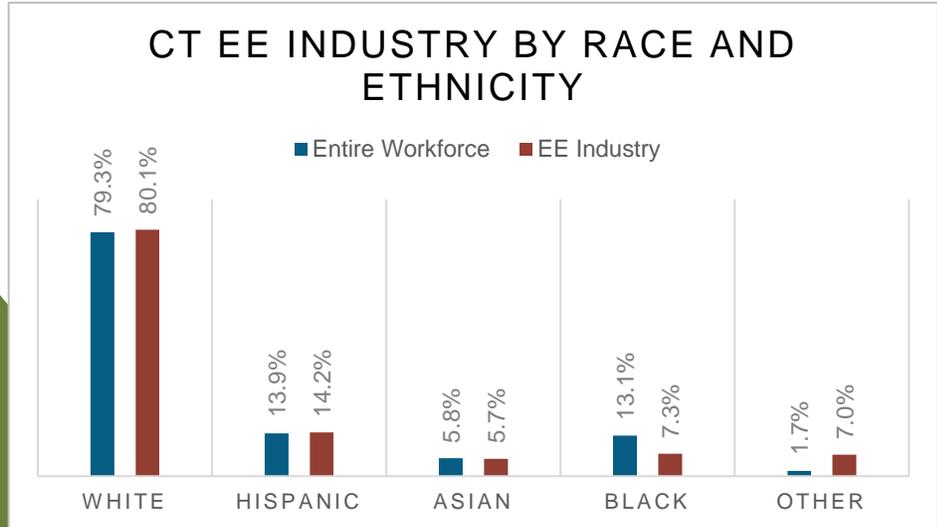



**Energy Efficiency  
 Construction Workers  
 Make Up 29% of CT  
 Construction Workers**

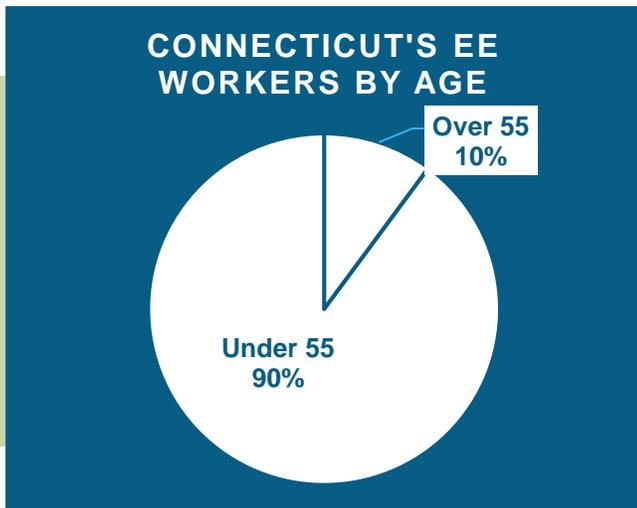
# How is EE Doing regarding Diversity in Connecticut?

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 Connecticut 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.



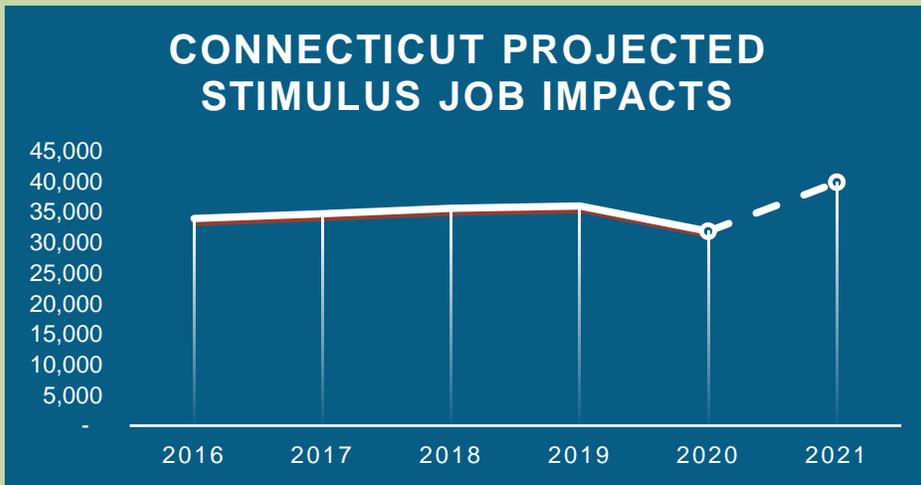
A significant portion of the Connecticut efficiency workforce is in the “55+” category. 10% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

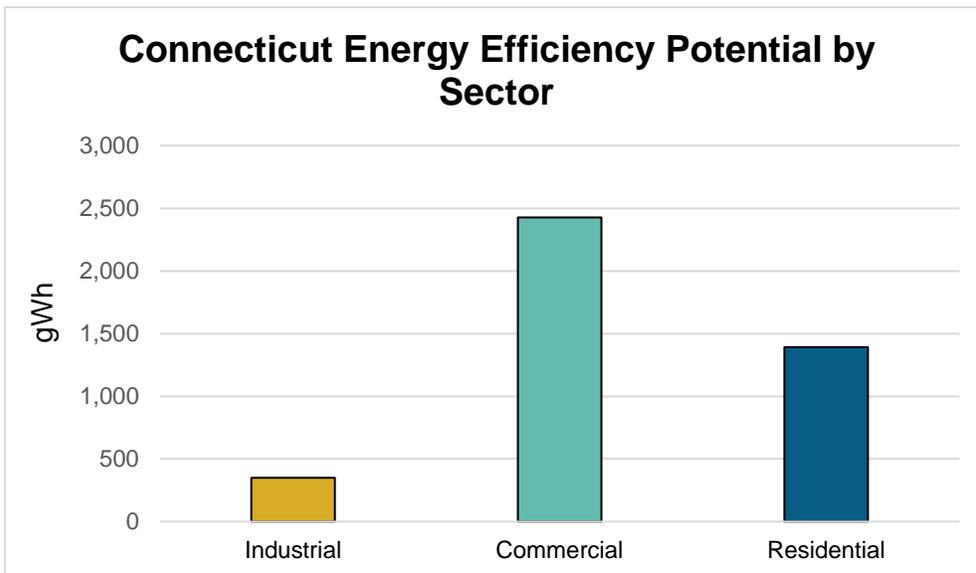


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **8,010 full-time direct, indirect, and induced CT jobs** that will last for at least five years: Over **40,050 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$663 million in GDP** each year for the next five years – resulting in **\$3.3 billion in economic activity**, more than 3.9 times the investment.

## How much energy efficiency is untapped in your state?



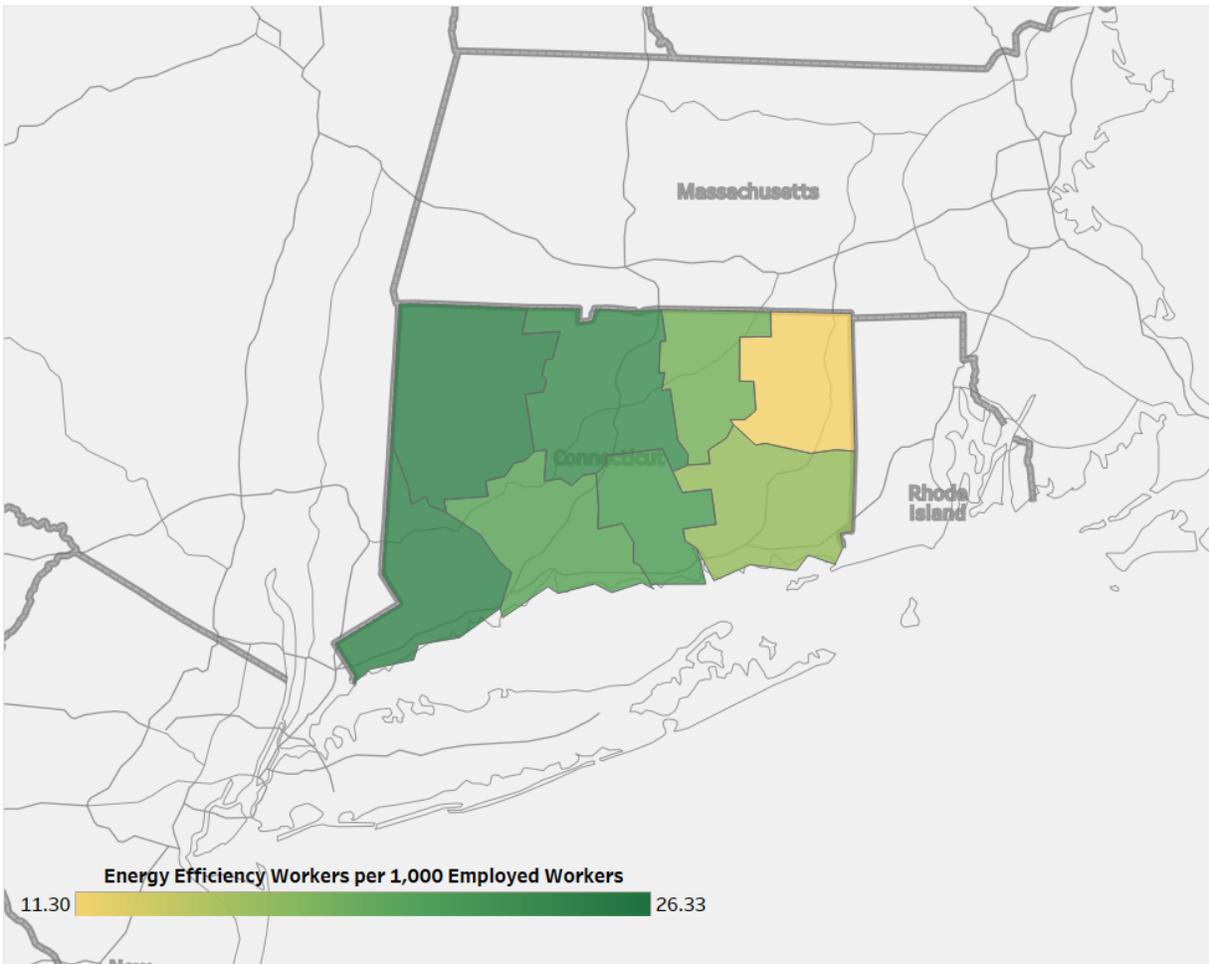
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **504,234 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	9,405	Bridgeport-Stamford-Norwalk	12,113
2	5,160	Hartford-West Hartford-East Hartford	12,259
3	7,011	New Haven-Milford	7,030
4	9,134	Norwich-New London	2,033
5	5,290	Rural	2,565

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,971	11	1,137	21	1,600	31	742
2	796	12	1,002	22	646	32	774
3	1,351	13	1,122	23	71	33	906
4	1,003	14	962	24	1,849	34	<5
5	1,121	15	933	25	2,191	35	356
6	475	16	580	26	1,345	36	1,292
7	754	17	260	27	2,339		
8	1,125	18	834	28	1,165		
9	1,468	19	673	29	459		
10	1,160	20	1,040	30	497		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	208	32	197	63	569	94	<5	125	638
2	1,624	33	614	64	247	95	138	126	165
3	504	34	283	65	<5	96	<5	127	<5
4	1,032	35	204	66	445	97	104	128	136
5	208	36	412	67	277	98	358	129	<5
6	<5	37	120	68	190	99	<5	130	<5
7	63	38	497	69	269	100	<5	131	163
8	372	39	<5	70	199	101	211	132	784
9	981	40	355	71	127	102	<5	133	<5
10	<5	41	<5	72	292	103	<5	134	746
11	477	42	237	73	152	104	177	135	126
12	<5	43	121	74	<5	105	138	136	<5
13	481	44	174	75	<5	106	94	137	1,087
14	<5	45	39	76	87	107	261	138	<5
15	497	46	286	77	400	108	90	139	25
16	443	47	209	78	81	109	<5	140	<5
17	183	48	111	79	<5	110	<5	141	374
18	436	49	28	80	97	111	520	142	<5
19	362	50	219	81	93	112	217	143	<5
20	<5	51	99	82	273	113	457	144	1,639
21	81	52	112	83	<5	114	279	145	688
22	243	53	17	84	<5	115	204	146	<5
23	445	54	<5	85	998	116	<5	147	<5
24	456	55	163	86	373	117	574	148	<5
25	<5	56	<5	87	<5	118	152	149	1,072
26	<5	57	275	88	402	119	<5	150	208
27	<5	58	255	89	467	120	437	151	<5
28	202	59	<5	90	<5	121	65		
29	523	60	107	91	<5	122	300		
30	525	61	245	92	581	123	<5		
31	34	62	217	93	368	124	407		



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# Delaware

## Energy Efficiency Jobs in America

Oct 2020

10,926\*

Dec 2019

12,543

*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

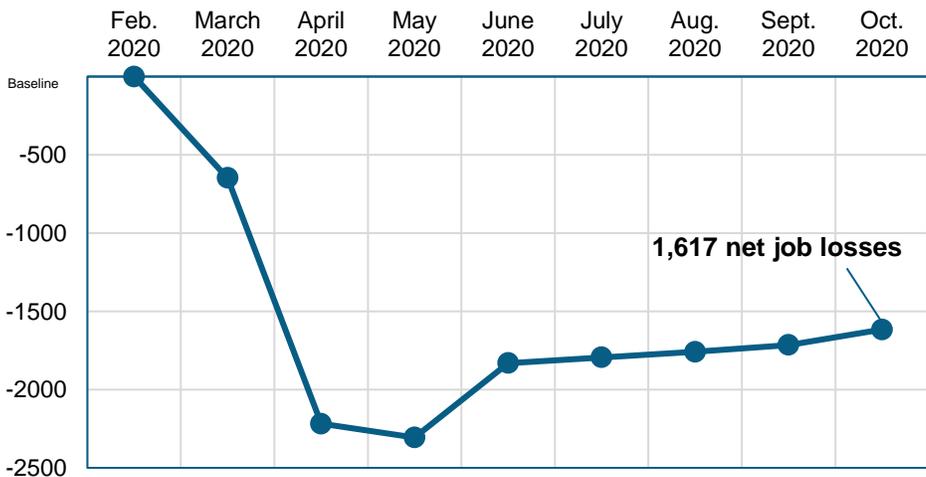
The 2020 pandemic shocked our nation's labor market with massive job losses. Delaware's energy efficiency industry lost as many as 1,617 jobs since its onset, a 12.9% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Delaware EE workforce grew steadily, gaining 2.5% 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.

EE Job Losses in Delaware due to COVID-19



\*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.*

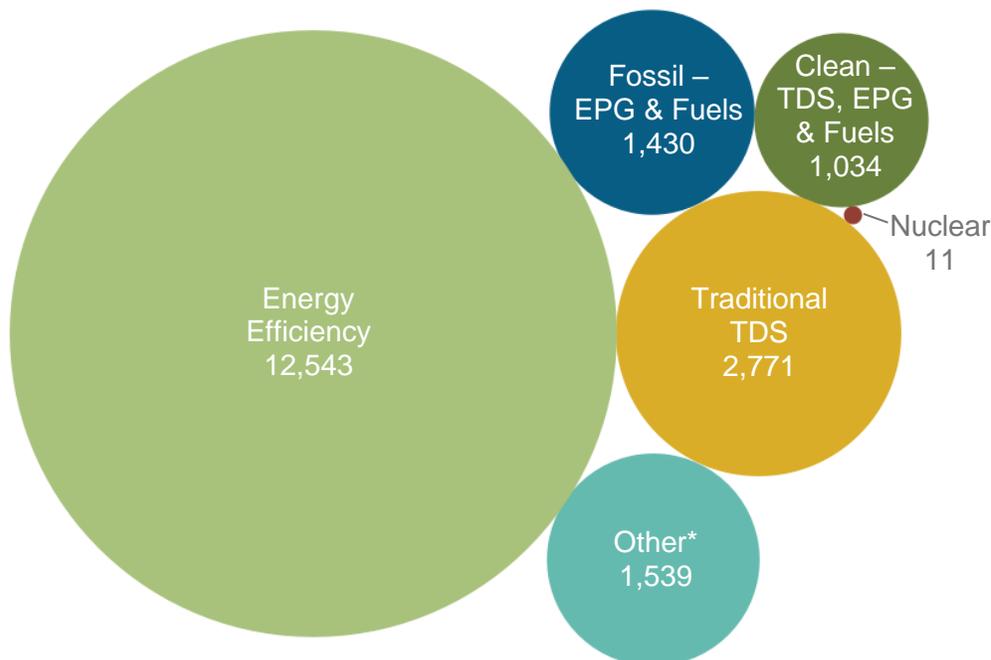
## What type of work are EE workers doing?

- 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
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- Analyze building energy data using software to maximize savings through targeted performance improvements and behavioral changes
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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 Delaware?

*Energy efficiency is the largest energy sector in Delaware.*

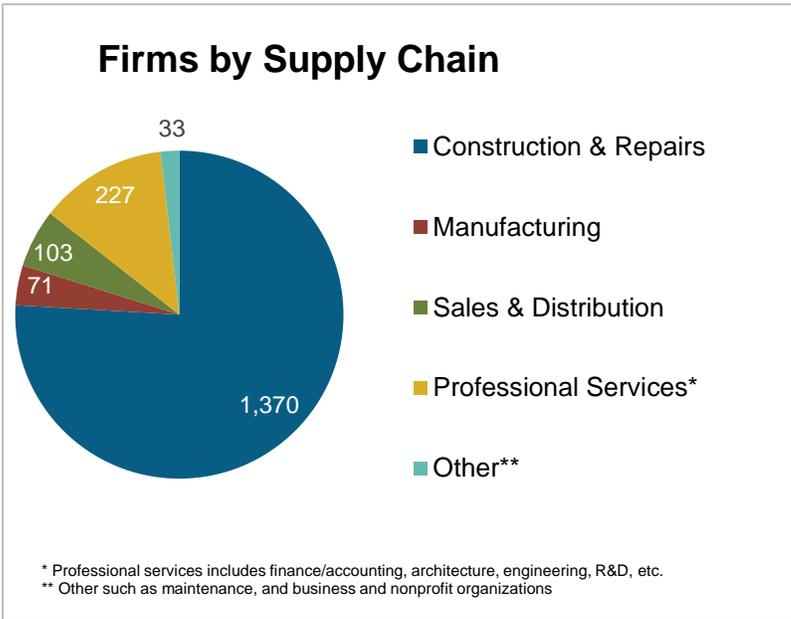
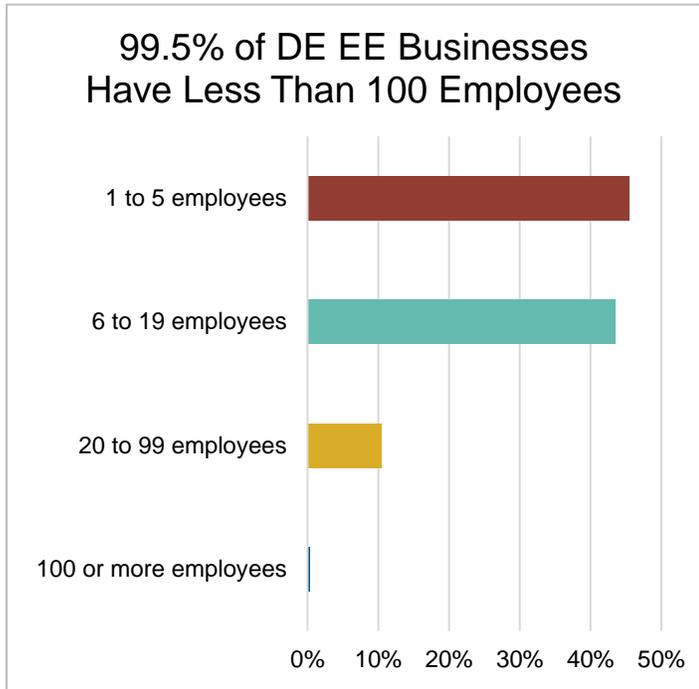


Energy efficiency in Delaware has seen consistent, reliable job growth – 2.5 percent since 2016.

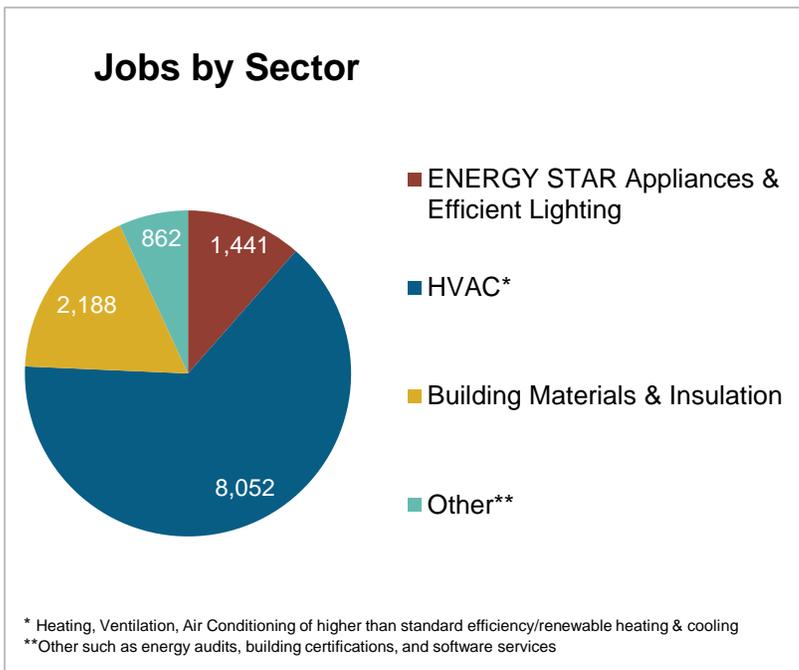
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Delaware?

EE Sector =  
**1,805**  
 Businesses in DE  
 (Dec. 2019)  
 ↑ **5** over 2018



**9.6%**  
 of Delaware  
 residents employed  
 in EE are **Veterans**

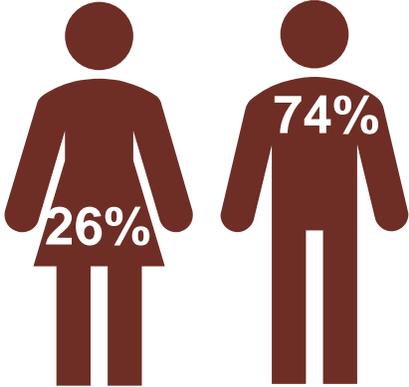
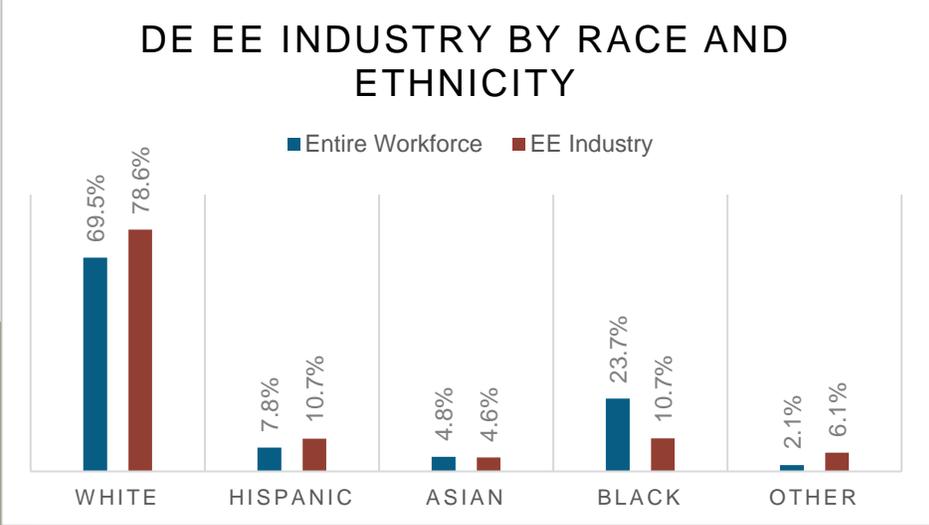


**Energy Efficiency  
 Construction Workers  
 Make Up 32% of DE  
 Construction Workers**

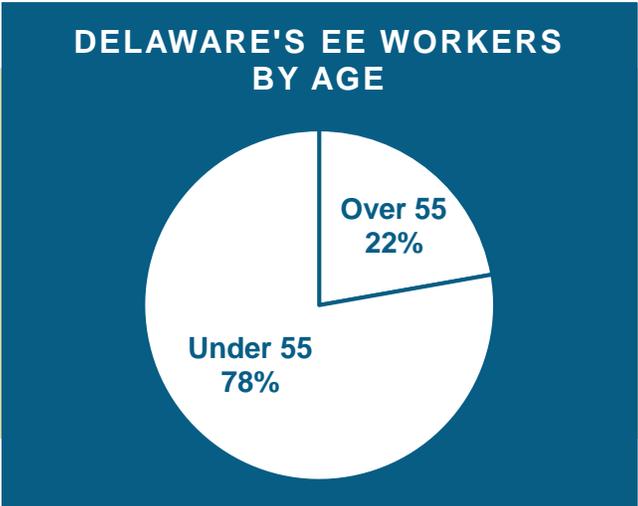
# How is EE Doing regarding Diversity in Delaware?

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 Delaware 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.



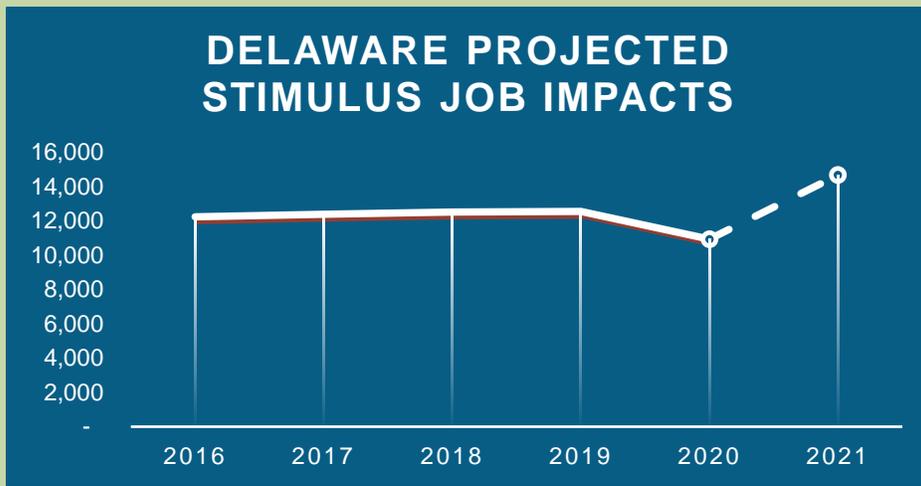
Delaware's percentage of "55+" workers is the third highest for any state's EE workforce. 22% of the energy efficiency workers are likely to retire within the next ten years, providing career growth opportunities for both current and future professionals.

# 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.



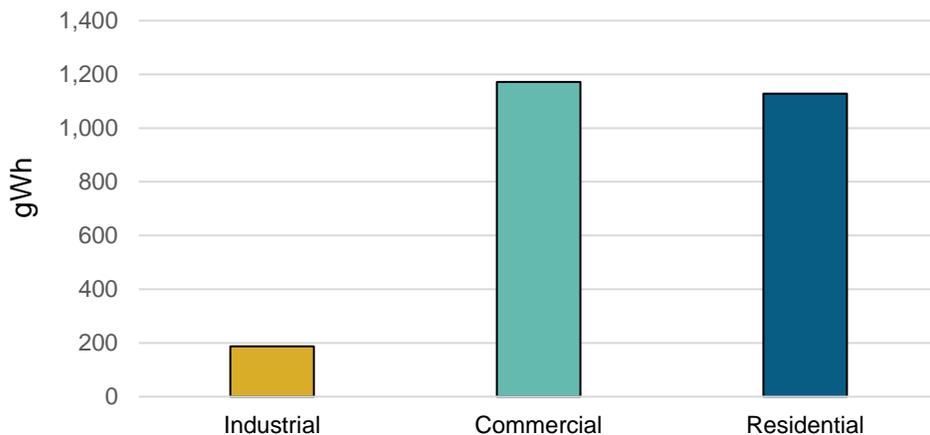
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **3,738 full-time direct, indirect, and induced DE jobs** that will last for at least five years: Over **18,688 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$307 million in GDP** each year for the next five years – resulting in **\$1.5 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### Delaware Energy Efficiency Potential by Sector



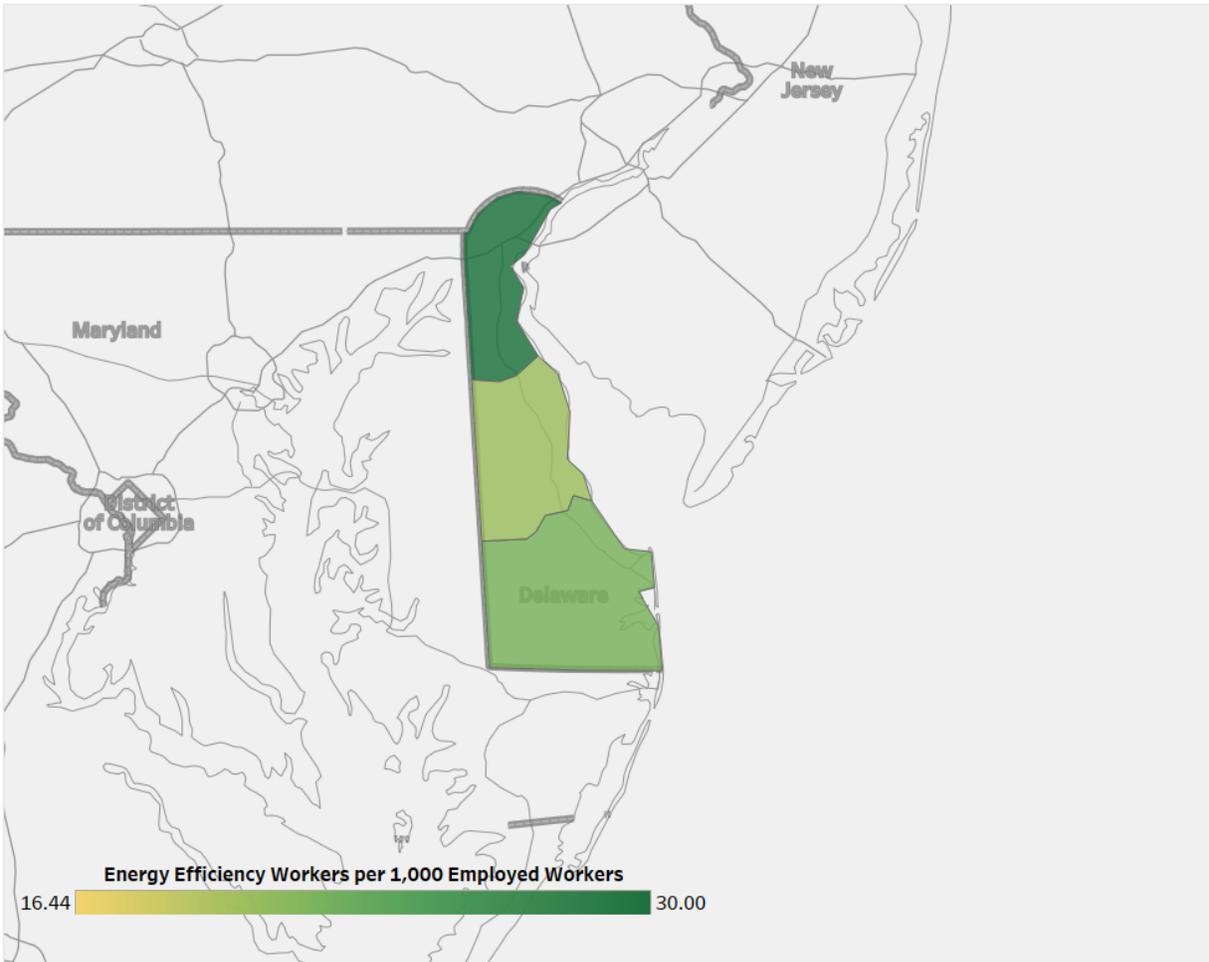
Combined, this would displace the annual electricity consumption of **218,189** homes.

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

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	12,543	Dover	1,444
		Philadelphia-Camden-Wilmington	8,001
		Rural	3,098

## Energy Efficiency Jobs by County



State Senate					
District	Jobs		District	Jobs	
1	1,592		11	<5	21
2	1,896		12	61	232
3	549		13	<5	
4	1,291		14	807	
5	251		15	835	
6	1,665		16	365	
7	<5		17	<5	
8	439		18	288	
9	546		19	329	
10	746		20	650	

State House of Representatives					
District	Jobs		District	Jobs	
1	908		28	425	
2	2,796		29	12	
3	181		30	647	
4	704		31	<5	
5	946		32	74	
6	368		33	<5	
7	<5		34	<5	
8	500		35	677	
9	220		36	<5	
10	<5		37	<5	
11	636		38	643	
12	7		39	<5	
13	<5		40	74	
14	841		41	<5	
15	60				
16	<5				
17	401				
18	<5				
19	<5				
20	830				
21	560				
22	<5				
23	32				
24	<5				
25	<5				
26	<5				
27	<5				



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# District of Columbia

## Energy Efficiency Jobs in America

Oct 2020

11,043\*

Dec 2019

12,982

*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.*

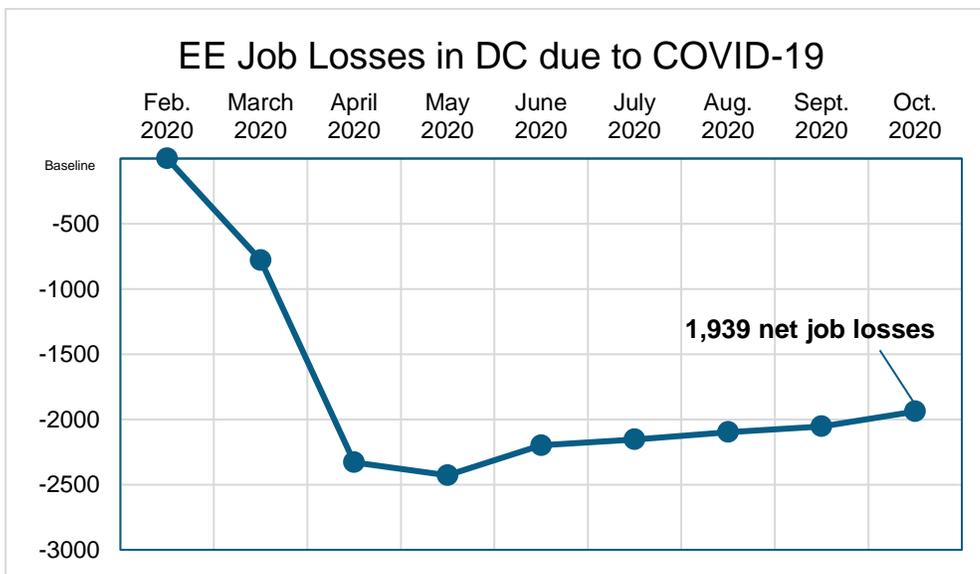
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. District of Columbia's energy efficiency industry lost as many as 1,939 jobs since its onset, a 14.9% 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 District of Columbia EE workforce grew steadily, gaining 8.3% 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.

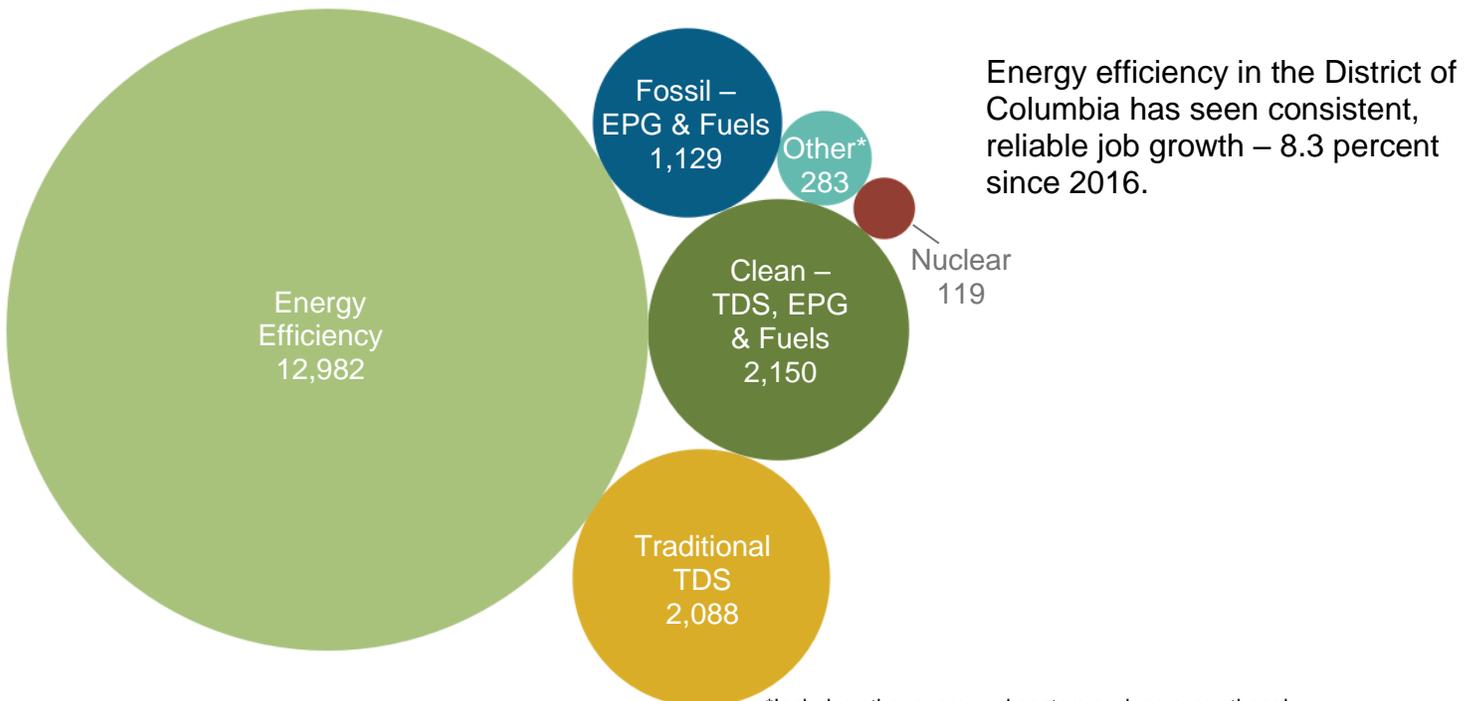
## What type of work are EE workers doing?

- 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
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- 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 District of Columbia?

Energy efficiency is the largest energy sector in District of Columbia.

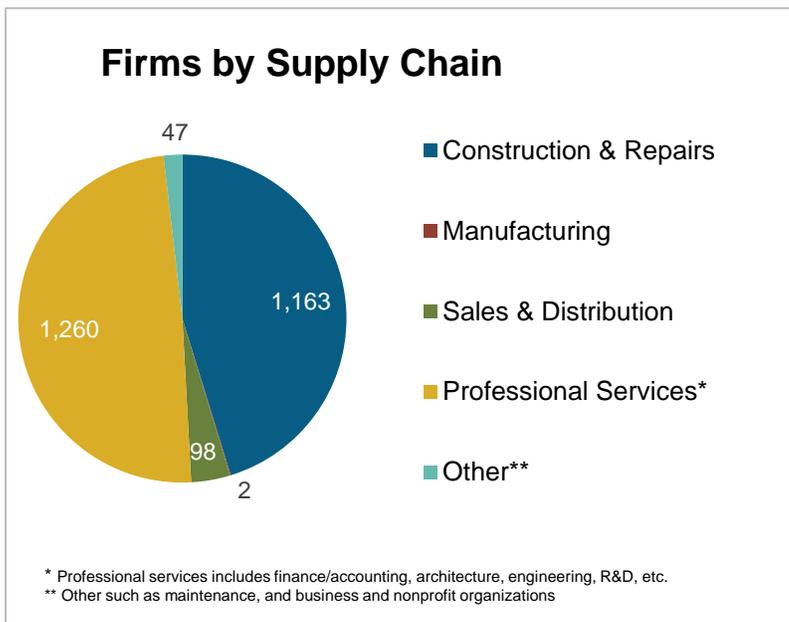
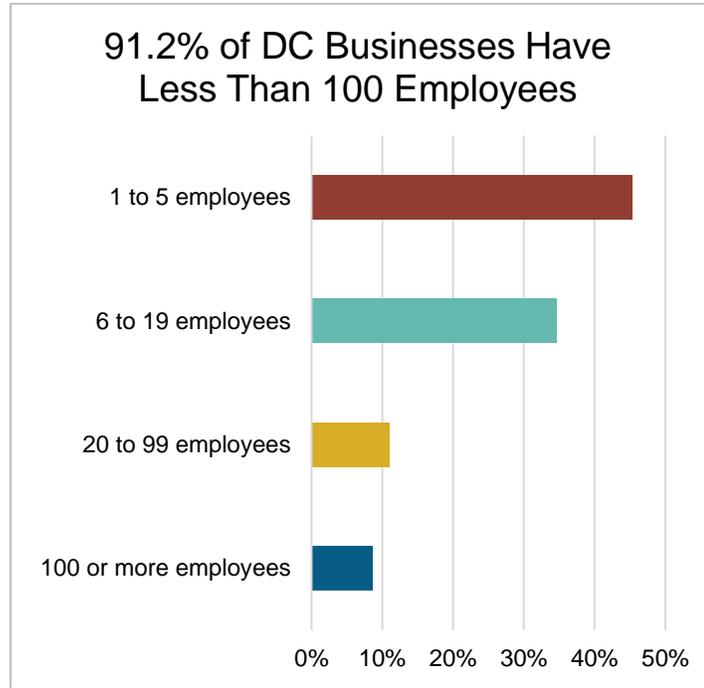


Energy efficiency in the District of Columbia has seen consistent, reliable job growth – 8.3 percent since 2016.

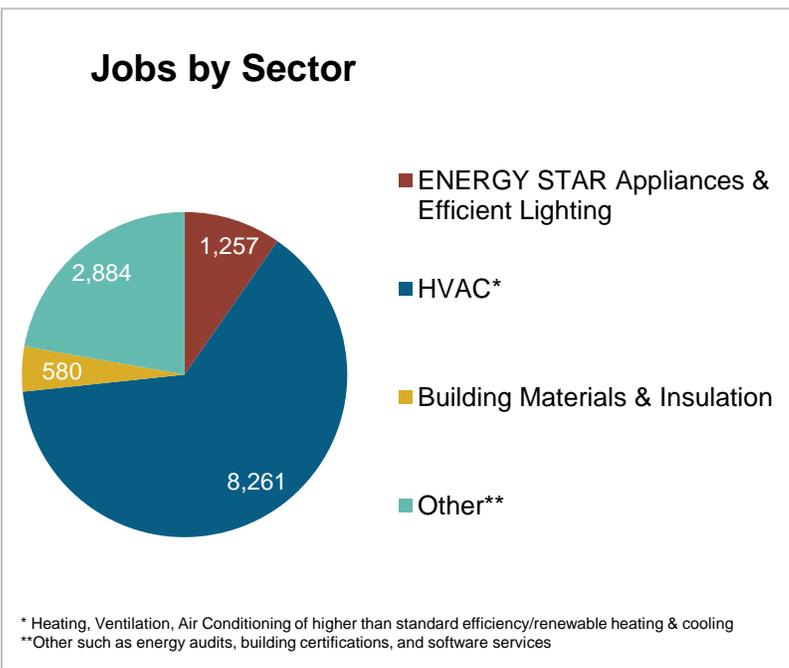
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in District of Columbia?

EE Sector =  
**2,571**  
 Businesses in DC  
 (Dec. 2019)  
 ↑ **40** over 2018




**6.4%**  
 of District of Columbia  
 residents employed  
 in EE are **Veterans**

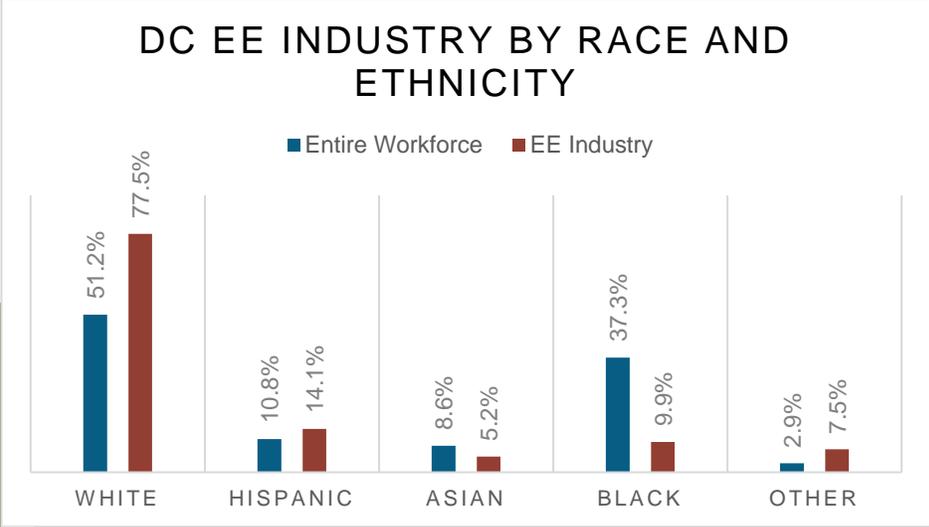



**Energy Efficiency  
 Construction Workers  
 Make Up 38% of DC  
 Construction Workers**

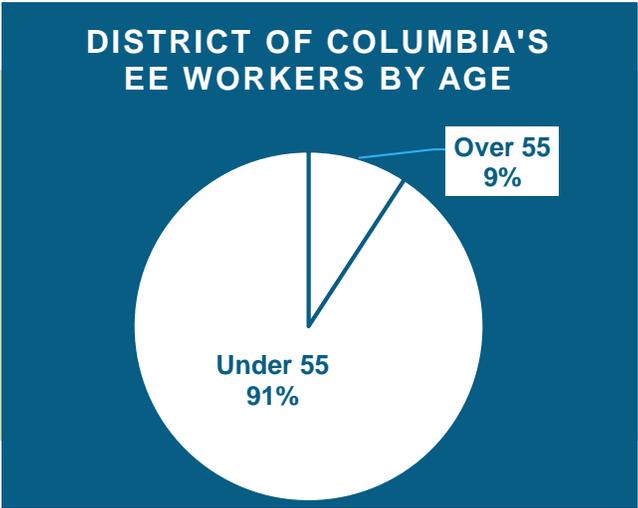
# How is EE Doing regarding Diversity in District of Columbia?

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 District of Columbia 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.



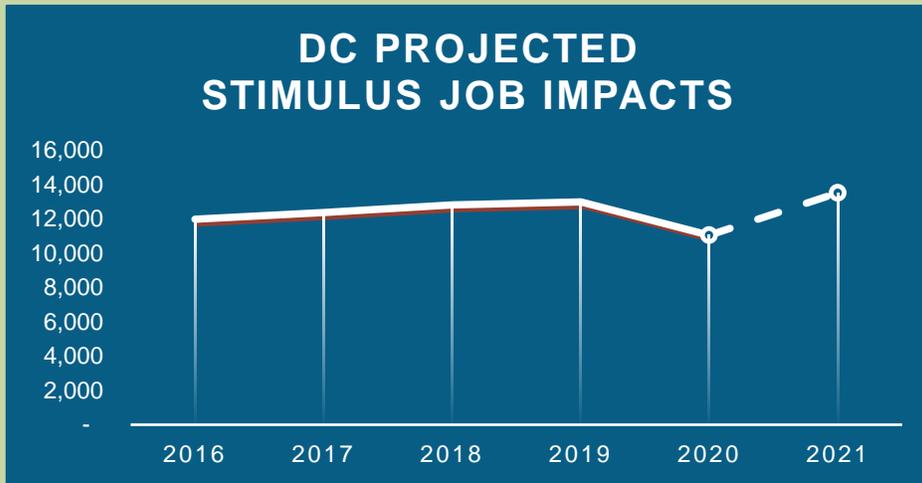
A significant portion of the District of Columbia efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

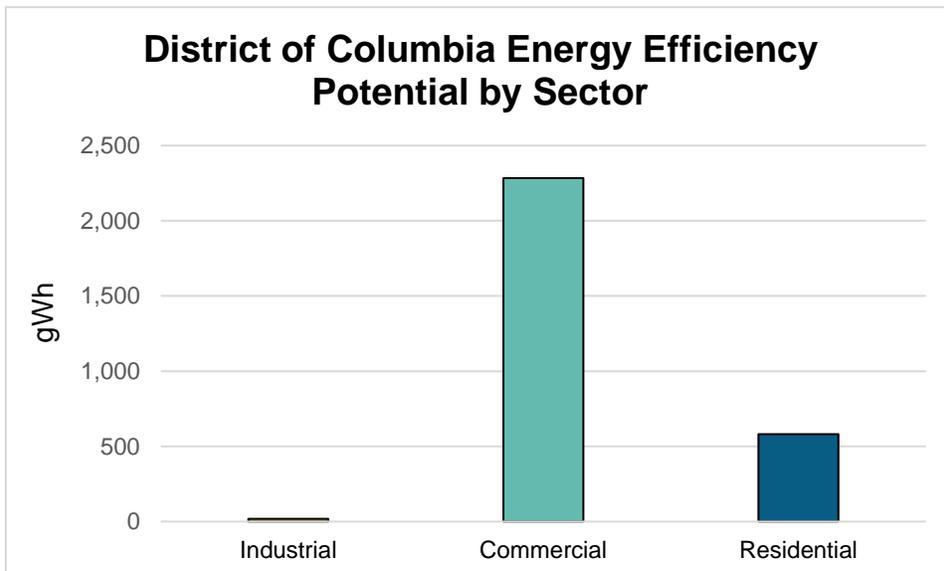


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **2,466 full-time direct, indirect, and induced DC jobs** that will last for at least five years: Over **12,330 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$231 million in GDP** each year for the next five years – resulting in **\$1.2 billion in economic activity**, more than 2.8 times the investment.

## How much energy efficiency is untapped in your state?



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

Combined, this would displace the annual electricity consumption of **319,488** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	12,982	Washington-Arlington-Alexandria	12,982

DC State Upper House					
District	Jobs	District	Jobs	District	Jobs
1	2,443	4	158	7	331
2	8,698	5	294	8	120
3	467	6	471		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Florida

## Energy Efficiency Jobs in America

Oct 2020  
**105,450\***  
Dec 2019  
**123,560**

*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.*

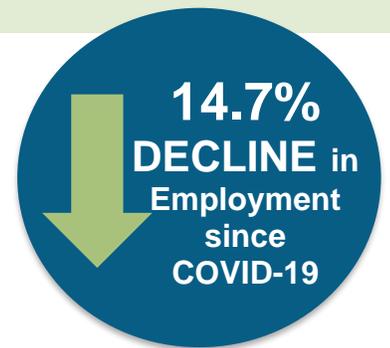
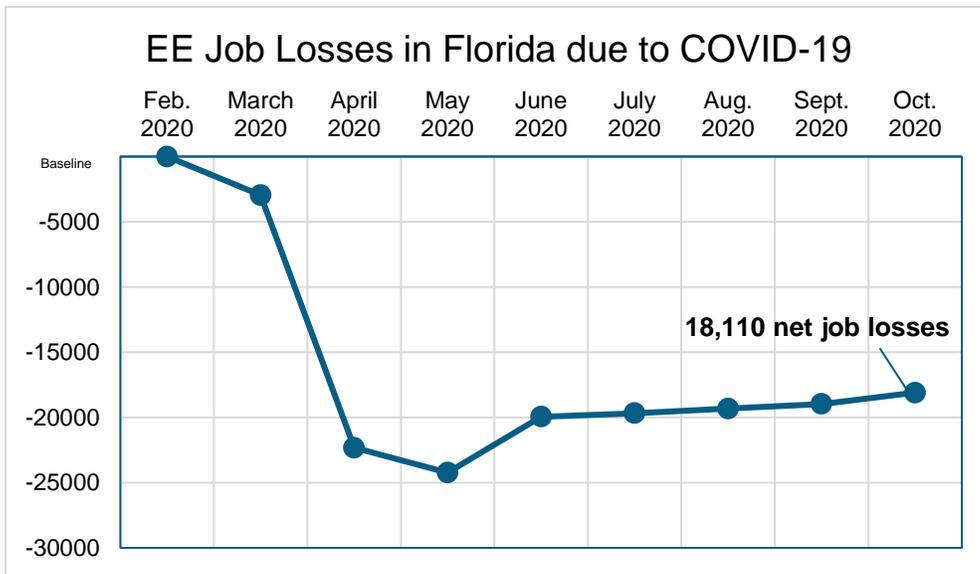
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Florida's energy efficiency industry lost as many as 18,110 jobs since its onset, a 14.7% 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 Florida EE workforce grew steadily, gaining 13.7% 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.



Presented by:



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

# What are EE Jobs?

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

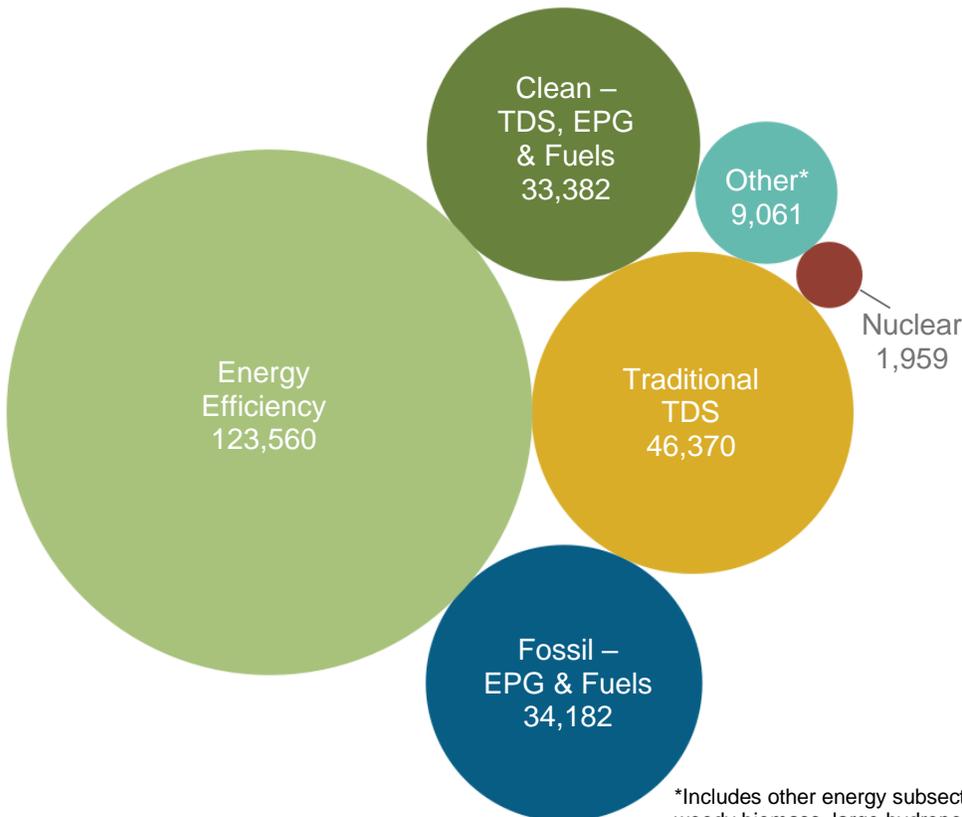
## What type of work are EE workers doing?

- 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 Florida?

Energy efficiency is the largest energy sector in Florida.

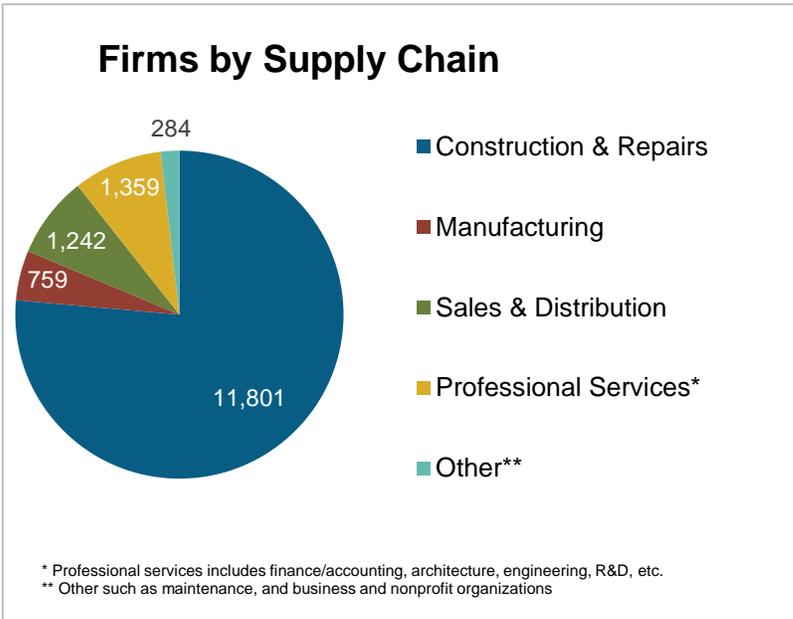
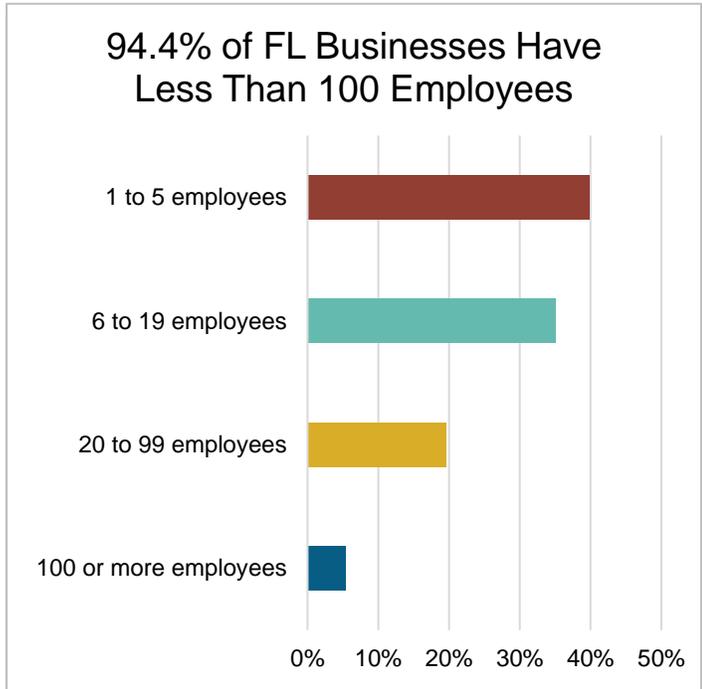


Energy efficiency in Florida has seen consistent, reliable job growth – 13.7 percent since 2016.

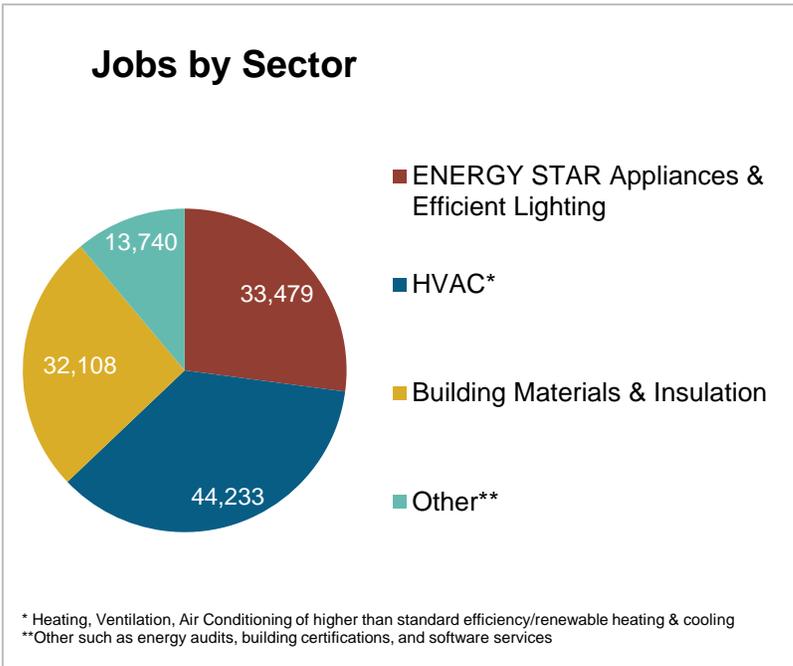
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Florida?

EE Sector =  
**15,445**  
 Businesses in FL  
 (Dec. 2019)  
 ↑ **645** over 2018




**10.7%**  
 of Florida  
 residents employed  
 in EE are **Veterans**

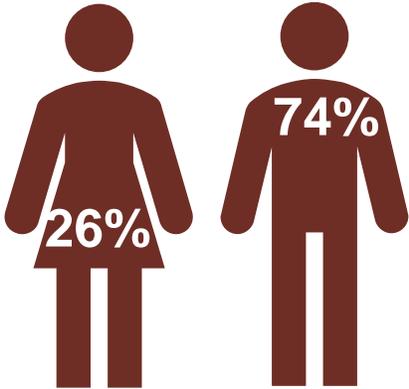
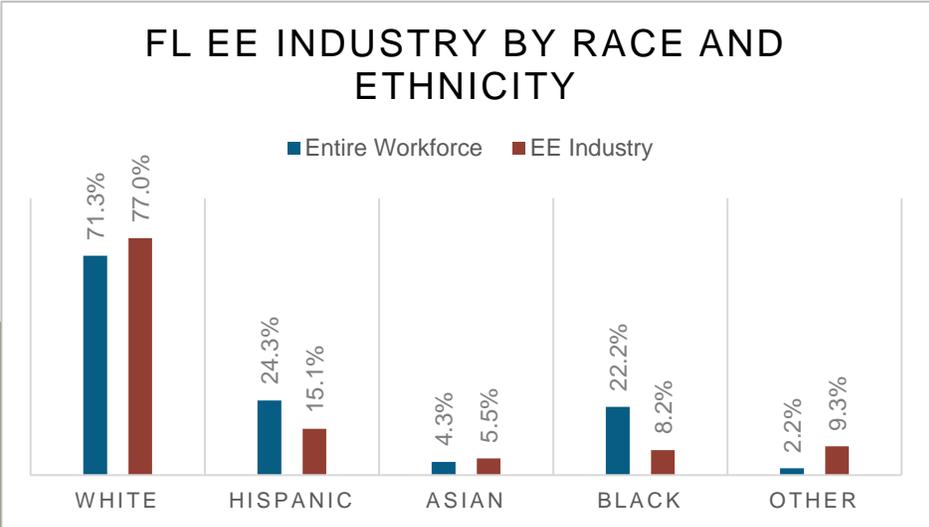



**Energy Efficiency  
 Construction Workers  
 Make Up 16% of FL  
 Construction Workers**

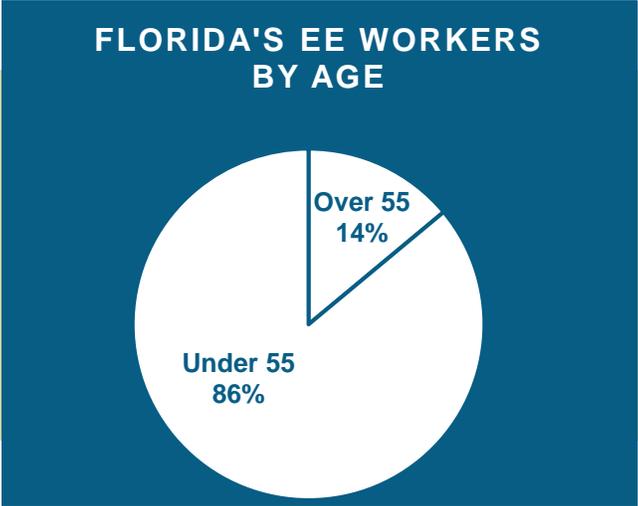
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Demographic data is crucial for benchmarks and to measure progress in the energy efficiency industry. In striving for more diversity in EE jobs, we can create a stronger and more inclusive industry. Promoting diversity in hiring is key to maintaining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



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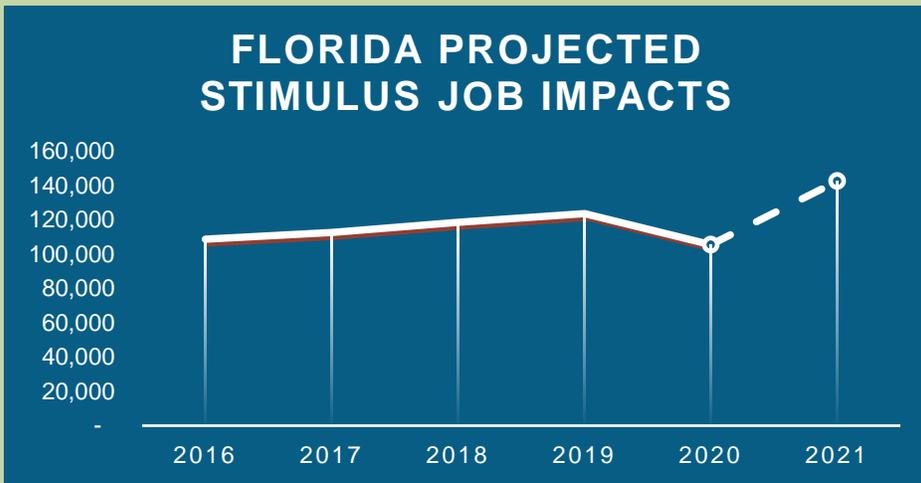
A significant portion of the Florida efficiency workforce is in the "55+" category. 14% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

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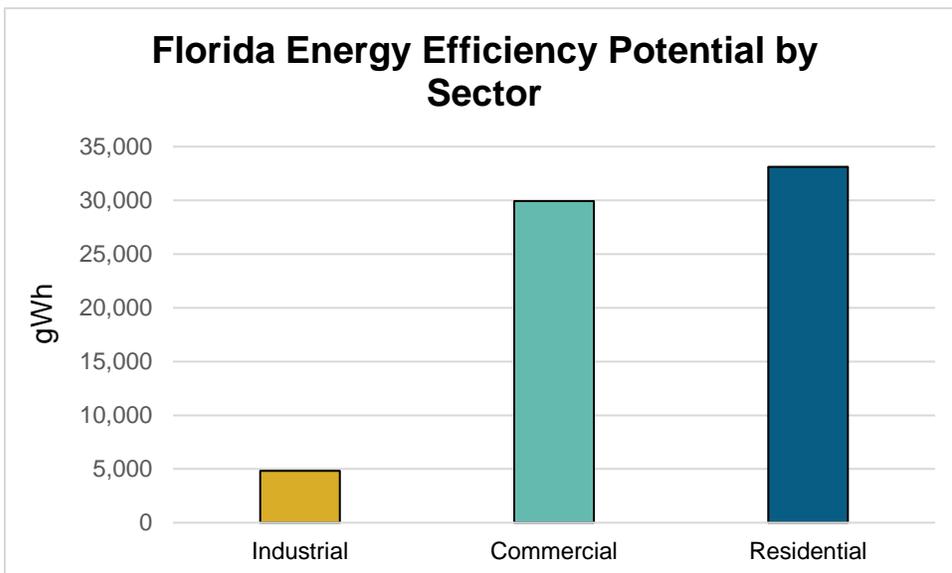


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **36,969 full-time direct, indirect, and induced FL jobs** that will last for at least five years: Over **184,846 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$2.2 billion in GDP** each year for the next five years — resulting in **\$11.1 billion in economic activity**, more than 4.9 times the investment.

## How much energy efficiency is untapped in your state?



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

Combined, this would displace the annual electricity consumption of **5,105,521 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,232	Cape Coral-Fort Myers	5,134
2	4,060	Deltona-Daytona Beach-Ormond Beach	2,510
3	3,951	Fort Walton Beach-Crestview-Destin	1,259
4	6,153	Gainesville	1,646
5	6,133	Jacksonville	8,429
6	3,682	Lakeland	2,087
7	3,679	Miami-Fort Lauderdale-Pompano Beach	44,918
8	4,330	Naples-Marco Island	2,743
9	2,067	Ocala	1,635
10	2,204	Orlando-Kissimmee	12,442
11	2,698	Palm Bay-Melbourne-Titusville	3,234
12	5,272	Palm Coast	360
13	3,724	Panama City-Lynn Haven	1,032
14	5,664	Pensacola-Ferry Pass-Brent	2,483
15	1,706	Port St. Lucie	2,943
16	5,140	Punta Gorda	970
17	2,842	Sarasota-Bradenton-Venice	5,044
18	11,343	Sebastian-Vero Beach	1,018
19	6,618	Tallahassee	2,468
20	9,317	Tampa-St. Petersburg-	16,258
21	2,148	Rural	4,948
22	5,595		
23	5,379		
24	4,210		
25	4,180		
26	3,409		
27	3,824		



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,999	11	2,180	21	2,409	31	5,103
2	2,535	12	4,088	22	1,322	32	2,269
3	2,836	13	2,189	23	4,840	33	3,116
4	5,918	14	1,373	24	757	34	4,056
5	2,430	15	1,696	25	8,057	35	8,258
6	3,214	16	2,982	26	2,046	36	1,389
7	2,005	17	4,472	27	3,636	37	2,288
8	2,131	18	1,675	28	3,516	38	2,873
9	444	19	5,337	29	4,387	39	2,339
10	3,618	20	3,360	30	3,078	40	340

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,183	32	1,014	63	<5	94	1,874
2	899	33	396	64	1,143	95	622
3	606	34	1,016	65	721	96	709
4	933	35	435	66	1,334	97	723
5	1,006	36	1,013	67	732	98	707
6	877	37	1,097	68	1,050	99	1,625
7	893	38	507	69	412	100	1,190
8	1,307	39	1,598	70	1,987	101	479
9	627	40	321	71	700	102	1,130
10	759	41	173	72	1,065	103	1,907
11	1,644	42	886	73	378	104	29
12	1,720	43	43	74	873	105	909
13	1,267	44	1,004	75	1,125	106	868
14	562	45	545	76	2,257	107	671
15	434	46	1,925	77	908	108	1,181
16	945	47	1,004	78	1,910	109	793
17	1,095	48	186	79	240	110	245
18	550	49	465	80	1,492	111	816
19	430	50	301	81	1,666	112	4,667
20	1,906	51	1,346	82	6,299	113	492
21	420	52	1,356	83	1,245	114	1,005
22	785	53	285	84	281	115	1,403
23	206	54	1,245	85	1,581	116	216
24	1,257	55	667	86	1,754	117	369
25	887	56	339	87	805	118	<5
26	484	57	1,181	88	1,096	119	63
27	336	58	1,643	89	2,867	120	828
28	1,996	59	71	90	150		
29	827	60	3,332	91	97		
30	1,584	61	415	92	3,675		
31	653	62	801	93	2,504		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.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.

# Georgia

## 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.*

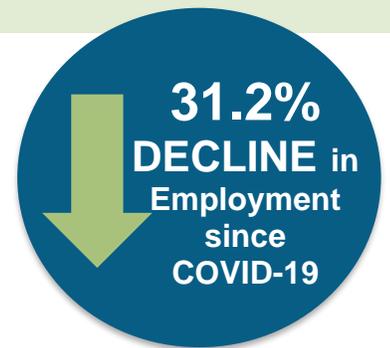
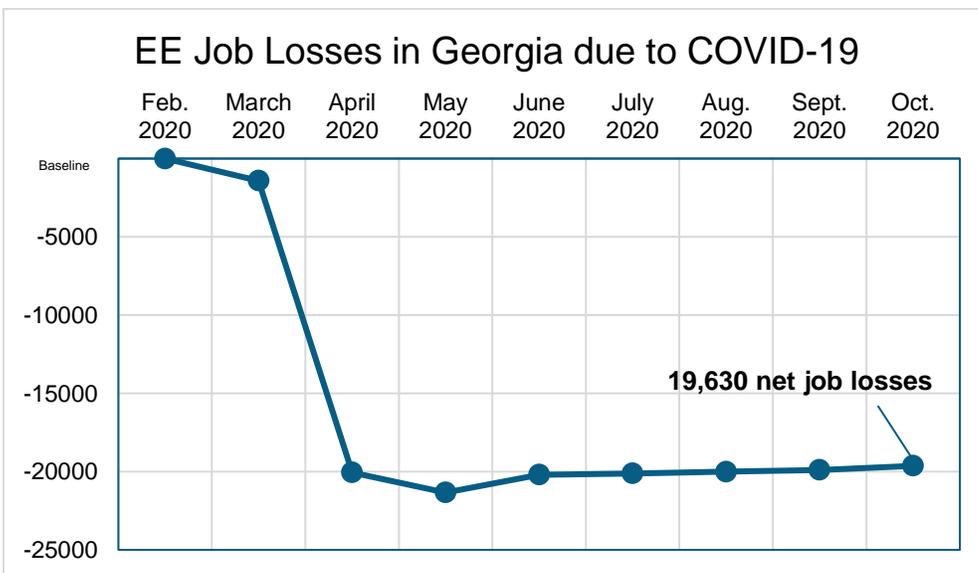
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Georgia's energy efficiency industry lost as many as 19,630 jobs since its onset, a 31.2% 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 Georgia EE workforce grew steadily, gaining 9.5% 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.



Presented by:



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

# What are EE Jobs?

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

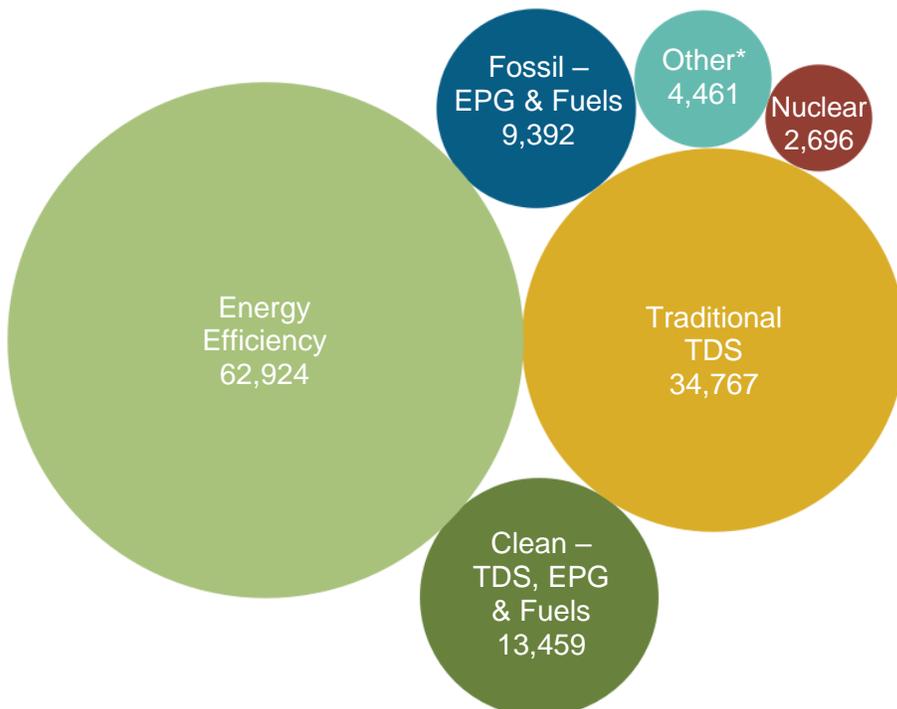
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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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 Georgia?

*Energy efficiency is the largest energy sector in Georgia.*



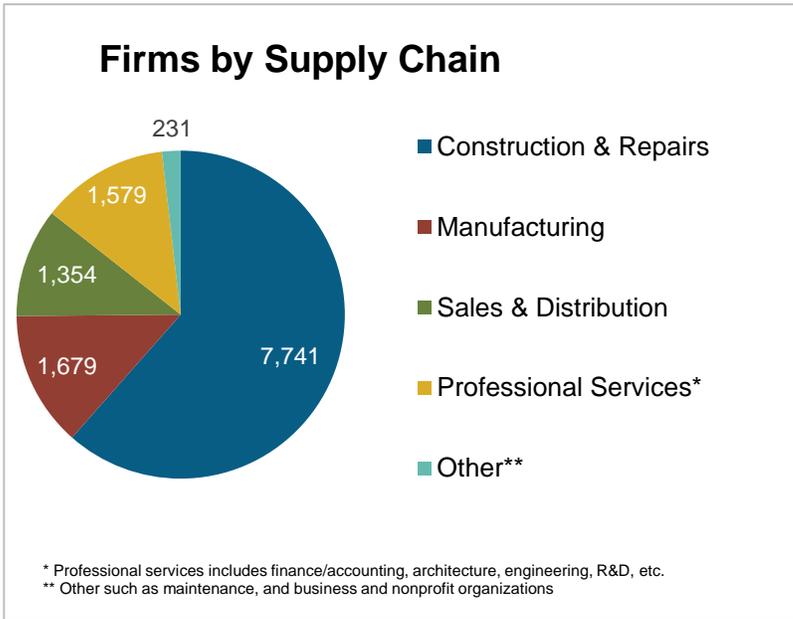
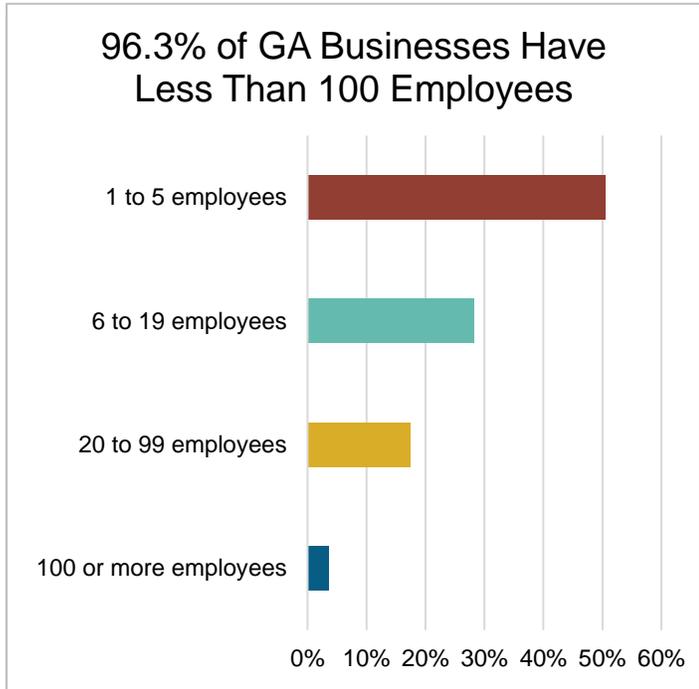
Energy efficiency in Georgia has seen consistent, reliable job growth – 9.5 percent since 2016.

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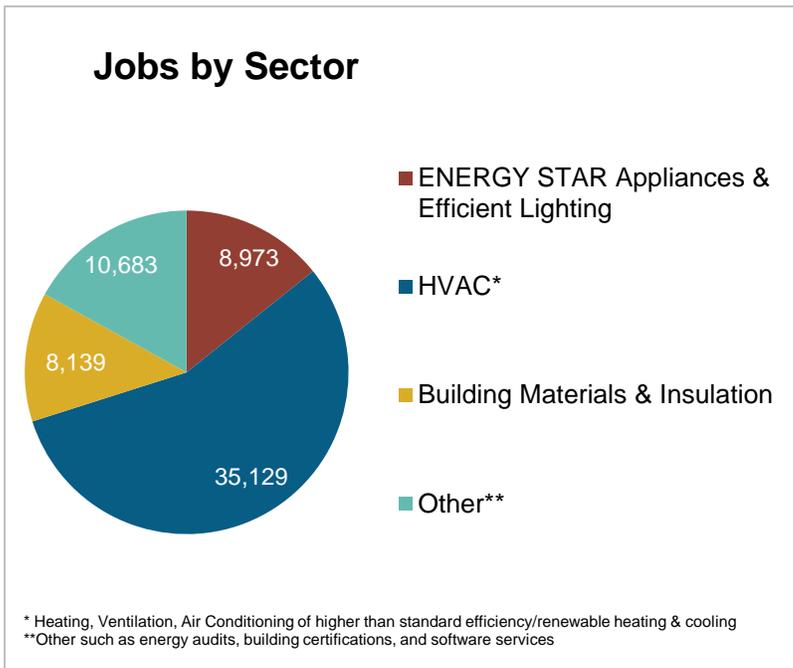


# What do the EE businesses look like in Georgia?

EE Sector =  
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 Businesses in GA  
 (Dec. 2019)  
 ↑ **350** over 2018



**13.6%**  
 of Georgia  
 residents employed  
 in EE are **Veterans**

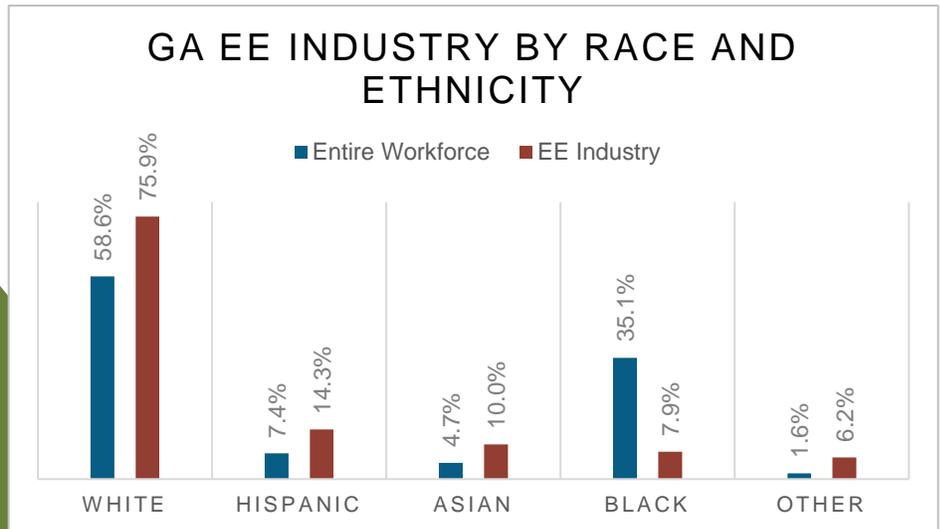


**Energy Efficiency  
 Construction Workers  
 Make Up 18% of GA  
 Construction Workers**

# How is EE Doing regarding Diversity in Georgia?

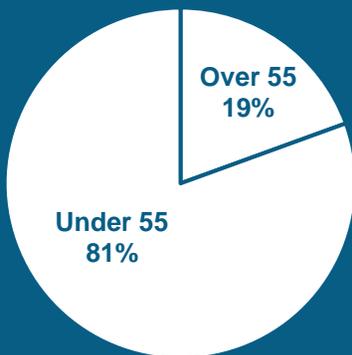
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The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.



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.

## GEORGIA'S EE WORKERS BY AGE



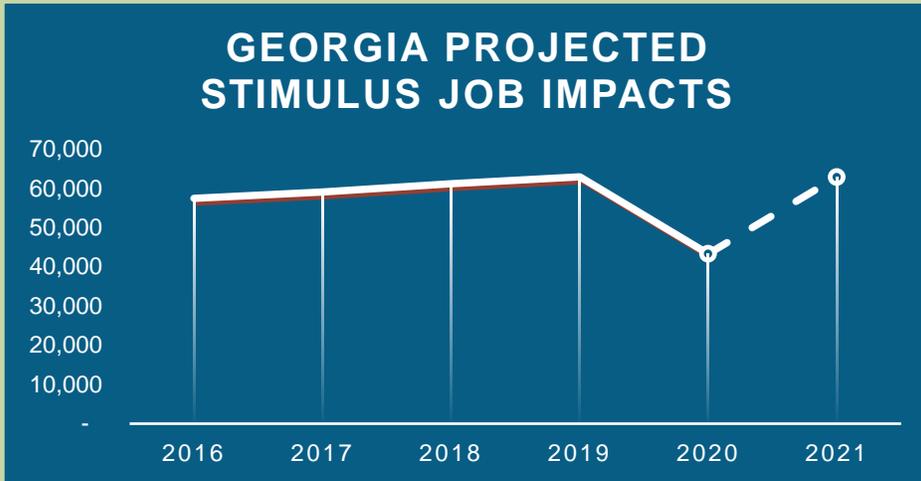
A significant portion of the Georgia efficiency workforce is in the "55+" category. 19% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

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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.

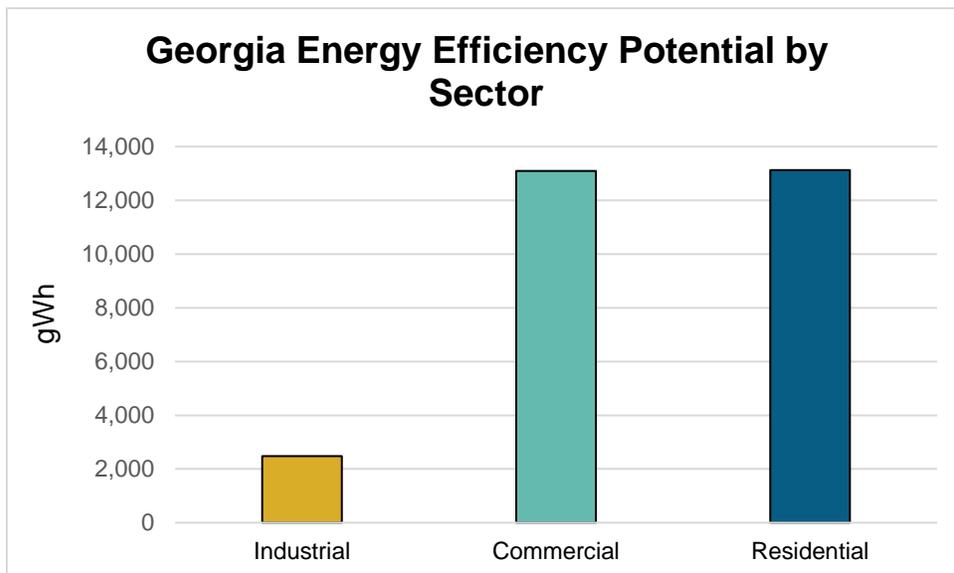


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **19,560 full-time direct, indirect, and induced GA jobs** that will last for at least five years: Over **97,800 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.3 billion in GDP** each year for the next five years — resulting in **\$6.4 billion in economic activity**, more than 4.4 times the investment.

## How much energy efficiency is untapped in your state?



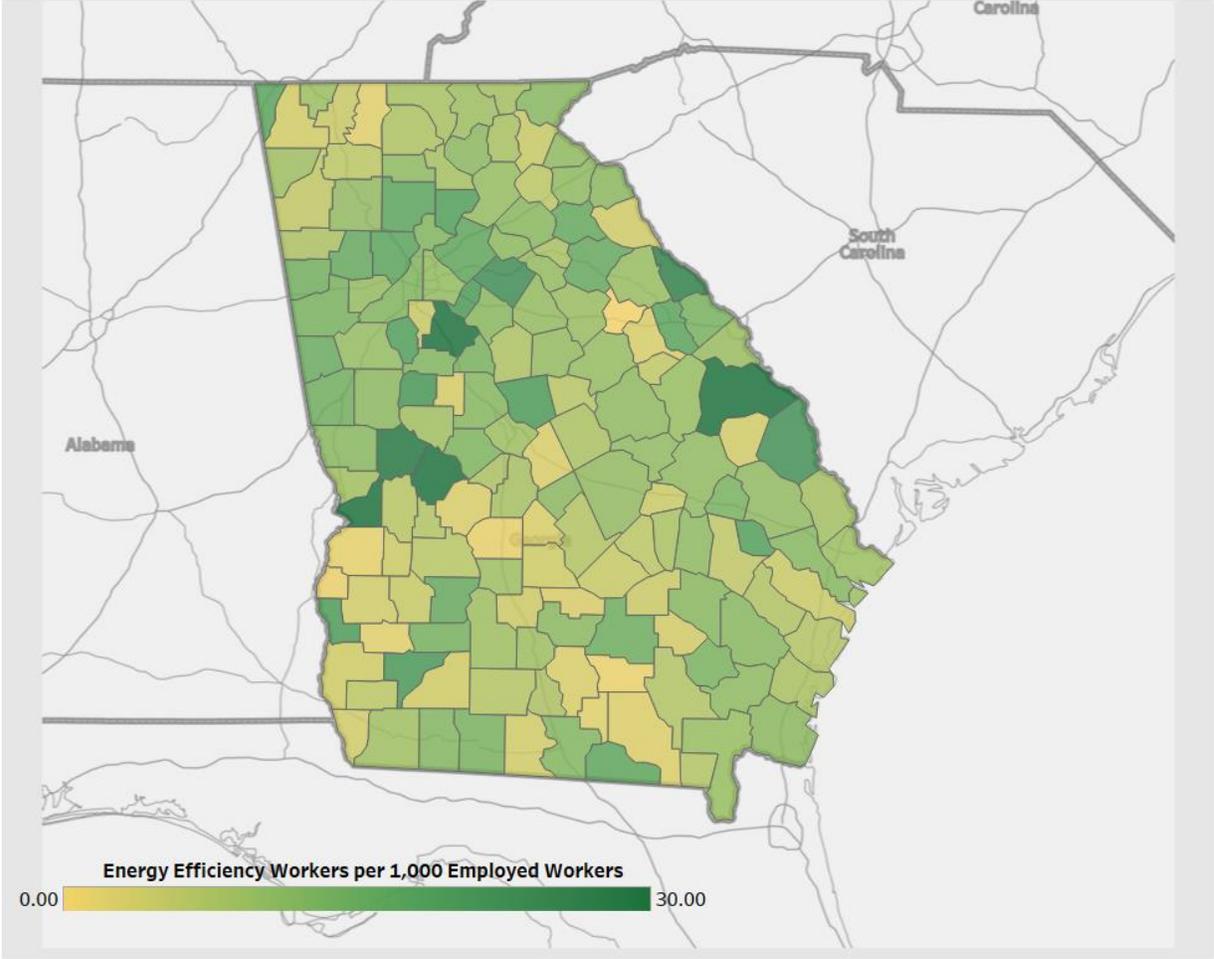
Combined, this would displace the annual electricity consumption of **2,133,592 homes**.

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

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	3,977	Albany	874
2	4,722	Athens-Clark County	1,117
3	4,086	Atlanta-Sandy Springs-Marietta	41,035
4	6,842	Augusta-Richmond County	1,980
5	8,800	Brunswick	799
6	11,946	Chattanooga	590
7	3,879	Columbus	1,102
8	2,403	Dalton	671
9	4,271	Gainesville	1,065
10	1,945	Hinesville-Fort Stewart	159
11	3,940	Macon	1,759
12	2,946	Rome	497
13	1,284	Savannah	2,175
14	1,883	Valdosta	851
		Warner Robins	534
		Rural	7,715

# Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,623	15	976	29	273	43	490
2	542	16	1,829	30	966	44	17
3	1,071	17	911	31	448	45	556
4	936	18	1,570	32	1,582	46	1,042
5	4,139	19	377	33	887	47	232
6	7,306	20	253	34	963	48	<5
7	835	21	3,215	35	367	49	1,154
8	1,238	22	1,505	36	3,733	50	479
9	1,875	23	426	37	172	51	703
10	1,922	24	855	38	139	52	528
11	709	25	975	39	129	53	546
12	964	26	530	40	2,001	54	653
13	338	27	2,258	41	540		
14	3,217	28	1,486	42	441		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	352	46	<5	91	340	136	<5
2	552	47	1,383	92	309	137	44
3	6	48	<5	93	704	138	90
4	288	49	<5	94	212	139	225
5	297	50	<5	95	507	140	254
6	6	51	1,302	96	<5	141	490
7	990	52	1,177	97	<5	142	235
8	379	53	1,386	98	802	143	483
9	191	54	1,060	99	<5	144	557
10	113	55	1,149	100	242	145	<5
11	24	56	1,567	101	315	146	24
12	315	57	384	102	<5	147	6
13	30	58	344	103	197	148	165
14	598	59	318	104	160	149	129
15	475	60	740	105	96	150	172
16	186	61	350	106	<5	151	309
17	442	62	320	107	<5	152	873
18	295	63	792	108	<5	153	<5
19	324	64	489	109	63	154	12
20	1,045	65	53	110	279	155	446
21	191	66	<5	111	<5	156	149
22	1,704	67	42	112	246	157	228
23	<5	68	13	113	<5	158	410
24	310	69	645	114	184	159	235
25	1,771	70	127	115	<5	160	97
26	167	71	110	116	8	161	782
27	665	72	18	117	739	162	440
28	311	73	334	118	6	163	511
29	54	74	411	119	<5	164	202
30	623	75	25	120	237	165	73
31	336	76	321	121	617	166	67
32	354	77	<5	122	289	167	796
33	429	78	17	123	353	168	13
34	2,675	79	1,413	124	543	169	103
35	<5	80	240	125	72	170	111
36	<5	81	2,654	126	132	171	338
37	97	82	532	127	44	172	357
38	414	83	206	128	293	173	82
39	646	84	149	129	246	174	787
40	1,348	85	498	130	55	175	343
41	<5	86	50	131	414	176	6
42	789	87	352	132	19	177	<5
43	<5	88	<5	133	375	178	98
44	<5	89	<5	134	673	179	6
45	834	90	652	135	50	180	104



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# Hawaii

## Energy Efficiency Jobs in America

Oct 2020

4,515\*

Dec 2019

6,083

*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.*

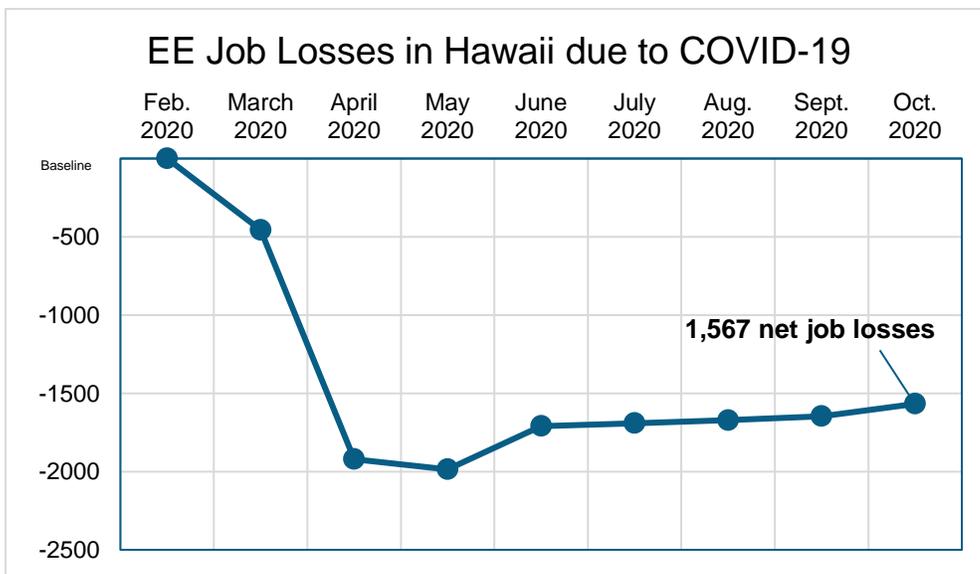
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Hawaii's energy efficiency industry lost as many as 1,567 jobs since its onset, a 25.8% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

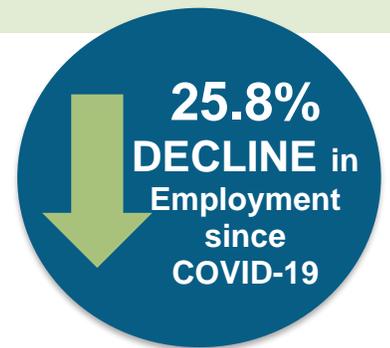
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Hawaii EE workforce grew steadily, gaining 18.9% 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.*

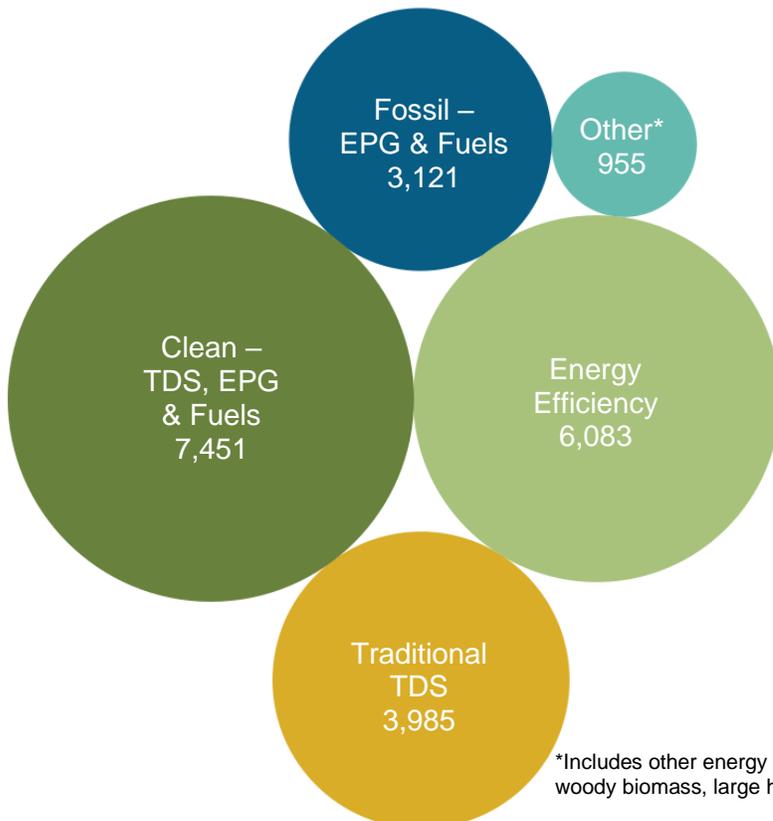
## What type of work are EE workers doing?

- 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 Hawaii?

*Energy efficiency is the second largest energy sector in Hawaii.*

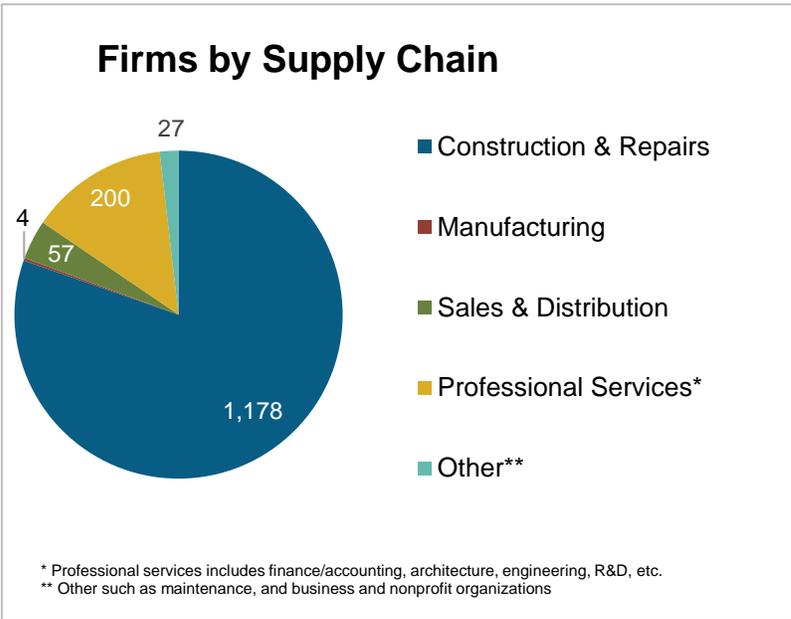
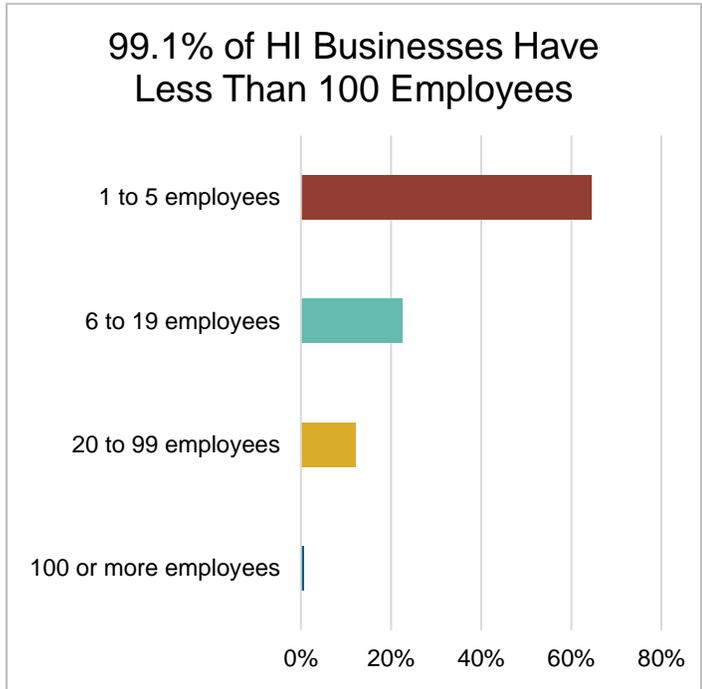


Energy efficiency in Hawaii has seen consistent, reliable job growth – 18.9 percent since 2016.

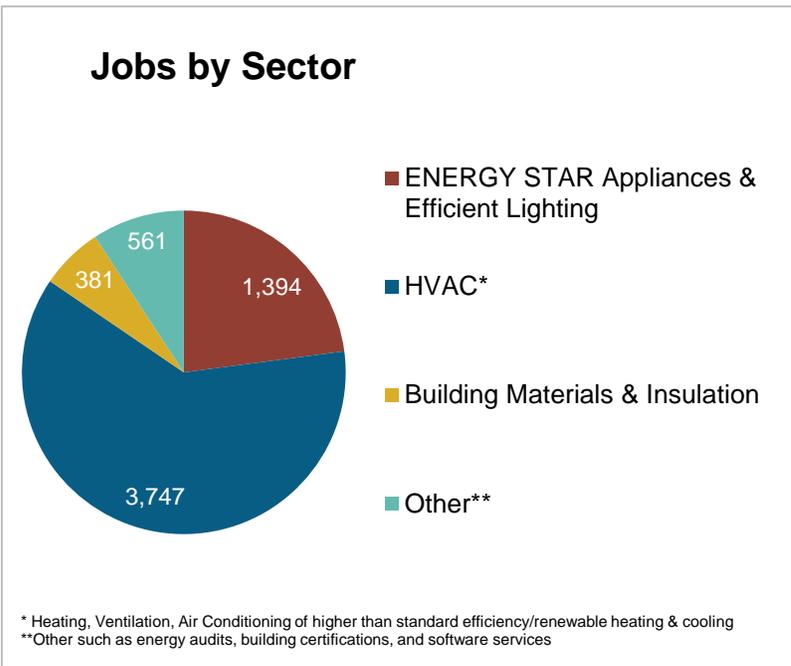
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Hawaii?

EE Sector =  
**1,466**  
 Businesses in HI (Dec. 2019)  
 ↑ **60** over 2018



**8.4%**  
 of Hawaii  
 residents employed  
 in EE are **Veterans**

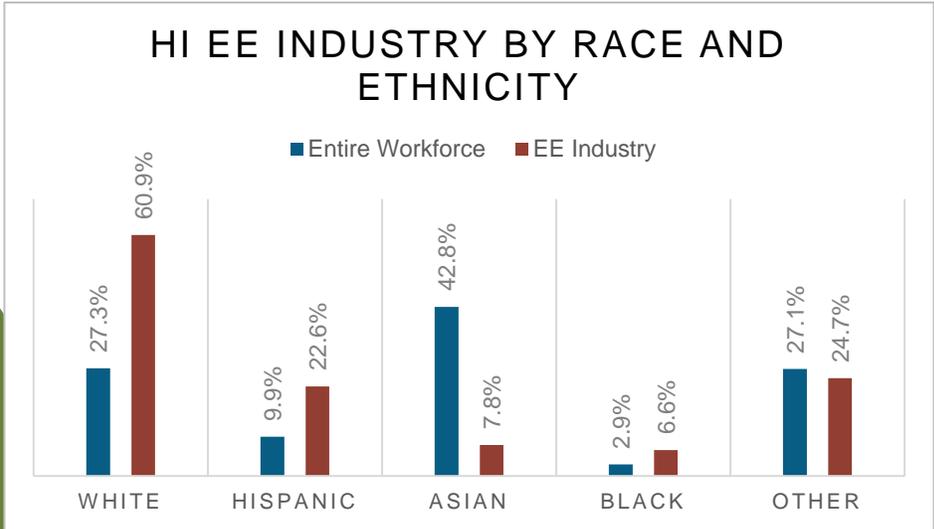


**Energy Efficiency  
 Construction Workers  
 Make Up 13% of HI  
 Construction Workers**

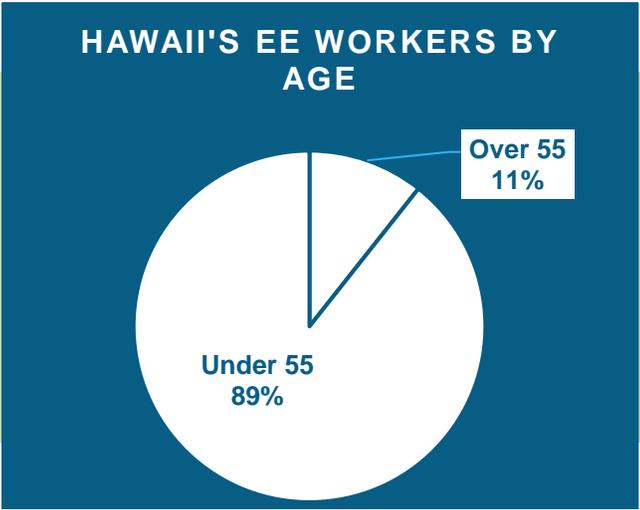
# How is EE Doing regarding Diversity in Hawaii?

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 Hawaii 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.



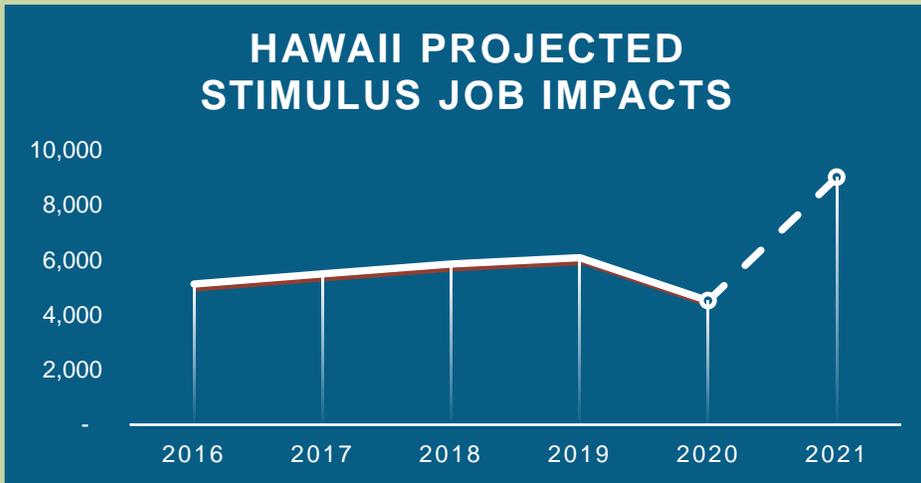
A significant portion of the Hawaii efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.



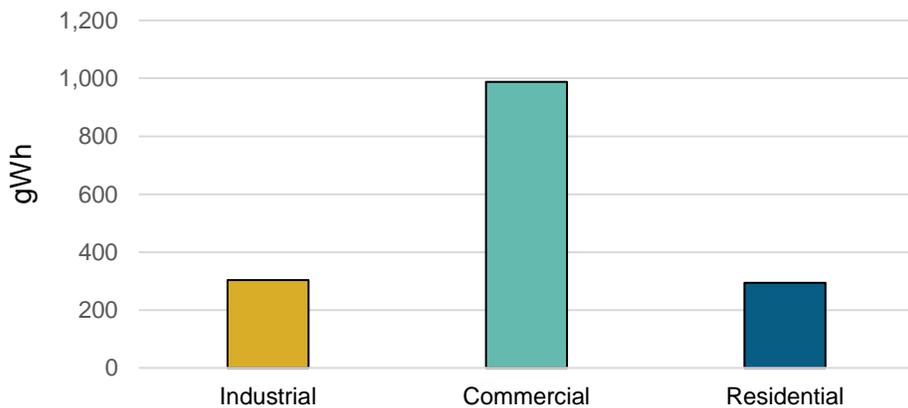
Source: [Build Back Better, Faster.](#)

Modeling finds that federal investment would create **4,490 full-time direct, indirect, and induced HI jobs** that will last for at least five years: Over **22,449 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$341 million in GDP** each year for the next five years – resulting in **\$1.7 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?

### Hawaii Energy Efficiency Potential by Sector



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

Combined, this would displace the annual electricity consumption of **251,586 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,146	Honolulu	4,455
2	1,937	Rural	1,628

## Energy Efficiency Jobs by County



State Senate							
District	Jobs		District	Jobs		District	Jobs
1	273		11	1,086		21	32
2	48		12	<5		22	29
3	270		13	197		23	119
4	147		14	468		24	129
5	306		15	1,502		25	12
6	208		16	79			
7	104		17	199			
8	275		18	93			
9	292		19	39			
10	83		20	90			

State House of Representatives			
District	Jobs	District	Jobs
1	375	28	333
2	<5	29	<5
3	48	30	252
4	<5	31	<5
5	274	32	<5
6	<5	33	<5
7	36	34	<5
8	305	35	203
9	<5	36	101
10	188	37	<5
11	16	38	<5
12	77	39	126
13	25	40	<5
14	76	41	<5
15	160	42	<5
16	33	43	32
17	70	44	<5
18	142	45	43
19	74	46	<5
20	<5	47	103
21	82	48	<5
22	2,538	49	127
23	34	50	<5
24	<5	51	12
25	195		
26	<5		
27	<5		



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# Idaho

## 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.*

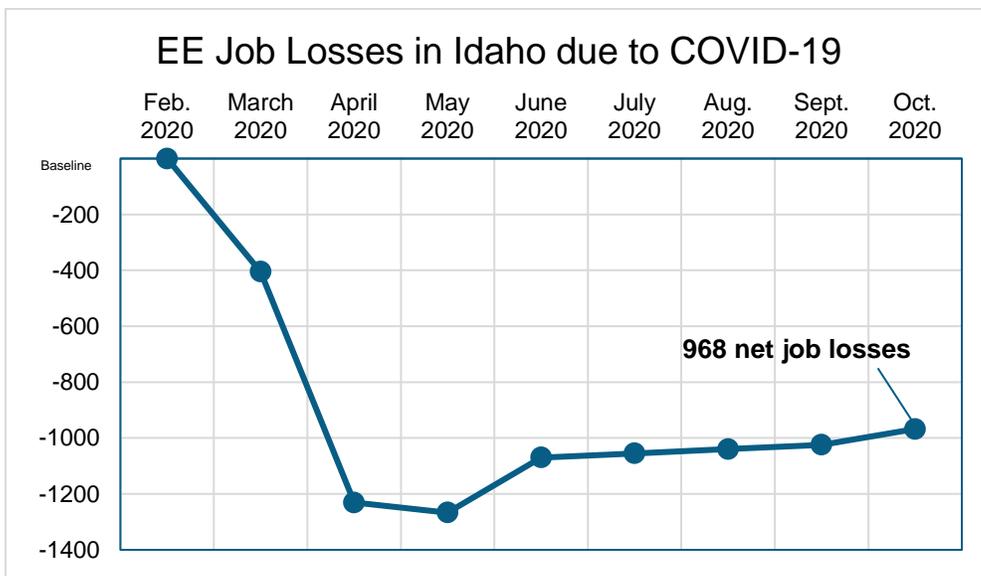
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Idaho’s energy efficiency industry lost as many as 968 jobs since its onset, a 10.7% decrease compared to total jobs in December 2019—wiping out the last 2 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 Idaho EE workforce grew steadily, gaining 18.8% 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.



Presented by:



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# What are EE Jobs?

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

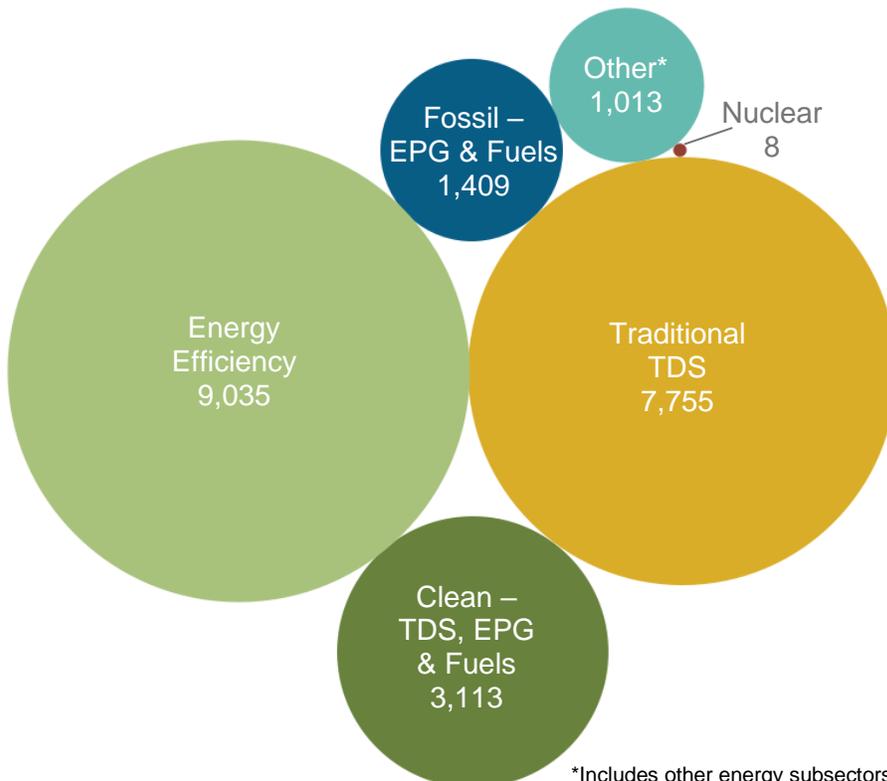
## What type of work are EE workers doing?

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## How does EE compare in Idaho?

*Energy efficiency is the largest energy sector in Idaho.*



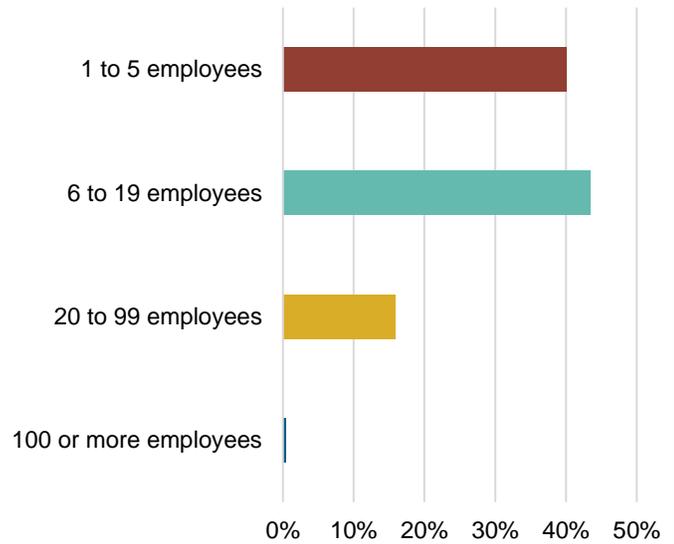
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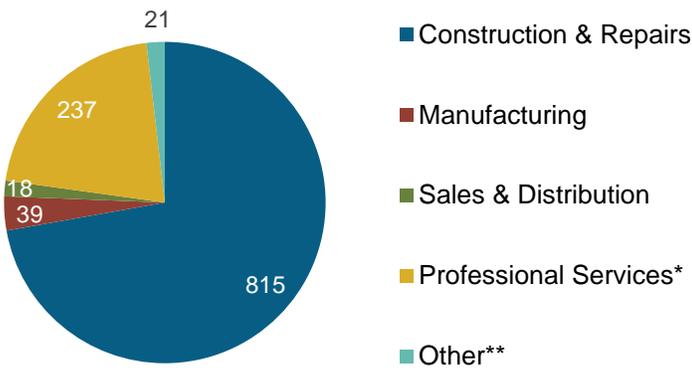
# What do the EE businesses look like in Idaho?

EE Sector =  
**1,129**  
 Businesses in ID (Dec. 2019)  
 ↑ **40** over 2018

99.3% of ID Businesses Have Less Than 100 Employees



## Firms by Supply Chain

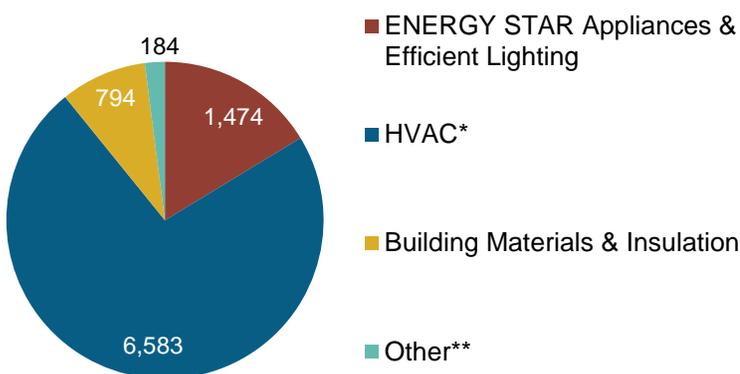


\* Professional services includes finance/accounting, architecture, engineering, R&D, etc.  
 \*\* Other such as maintenance, and business and nonprofit organizations



**6.3%**  
 of Idaho  
 residents employed  
 in EE are **Veterans**

## Jobs by Sector



\* Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling  
 \*\*Other such as energy audits, building certifications, and software services

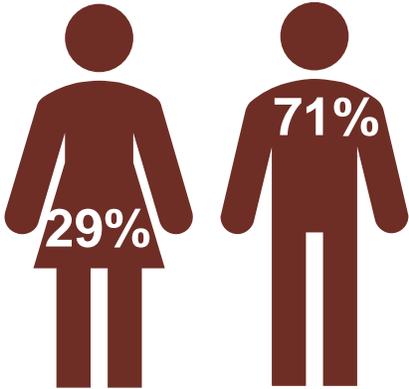
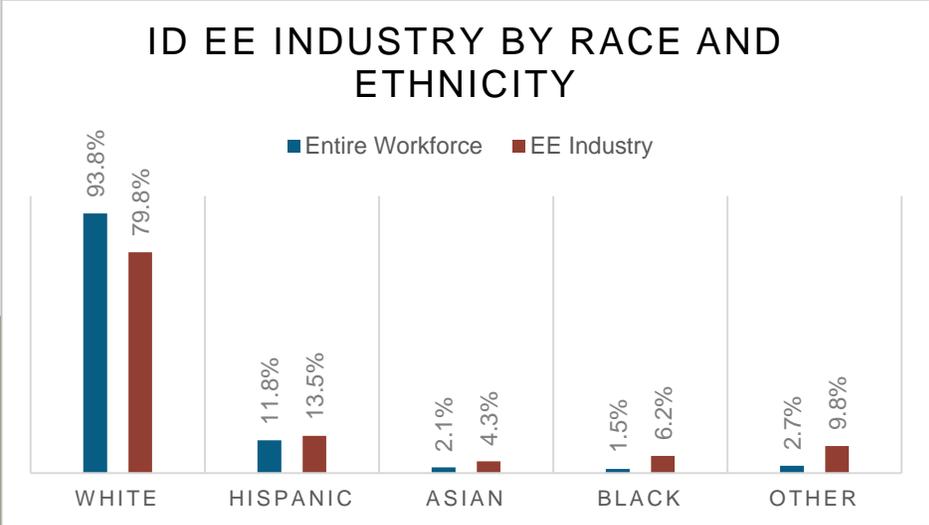


**Energy Efficiency  
 Construction Workers  
 Make Up 12% of ID  
 Construction Workers**

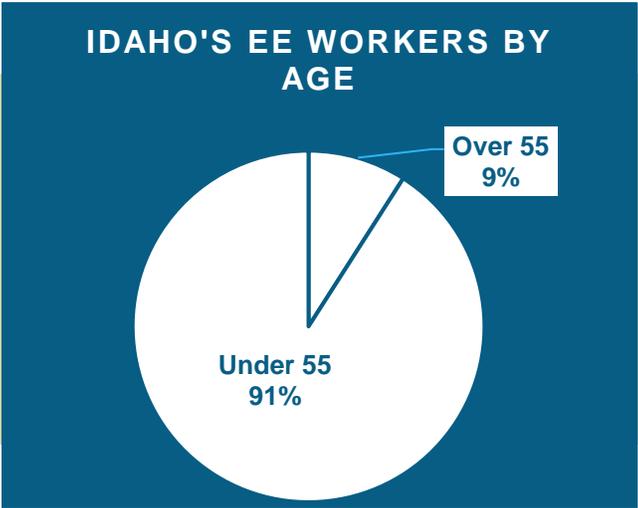
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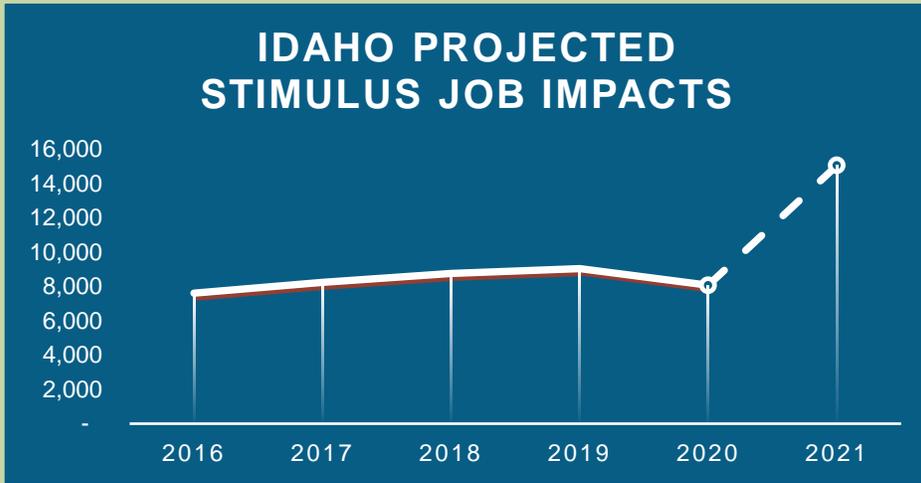
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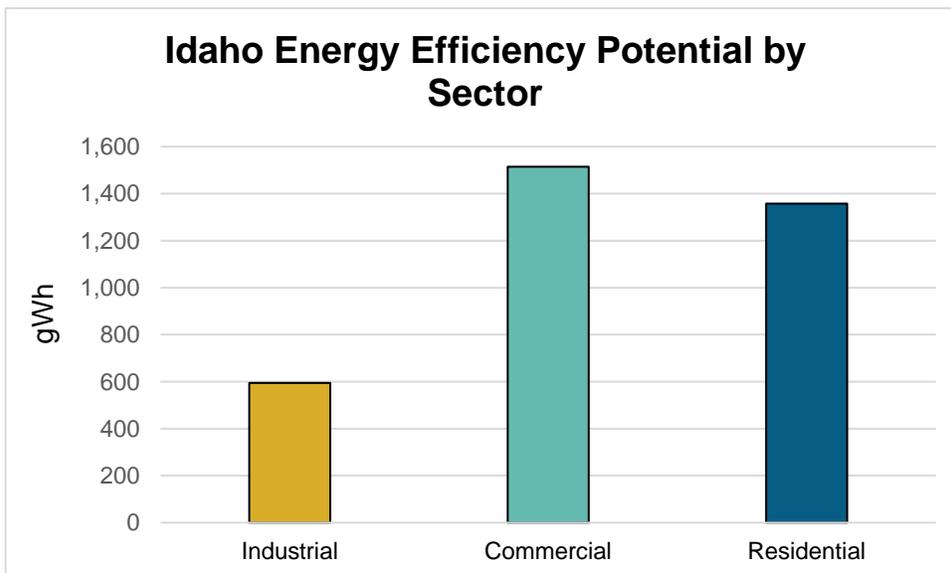


Source: [Build Back Better, Faster.](#)

Modeling finds that federal investment would create **6,973 full-time direct, indirect, and induced ID jobs** that will last for at least five years: Over **34,863 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$386 million in GDP** each year for the next five years – resulting in **\$1.9 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?



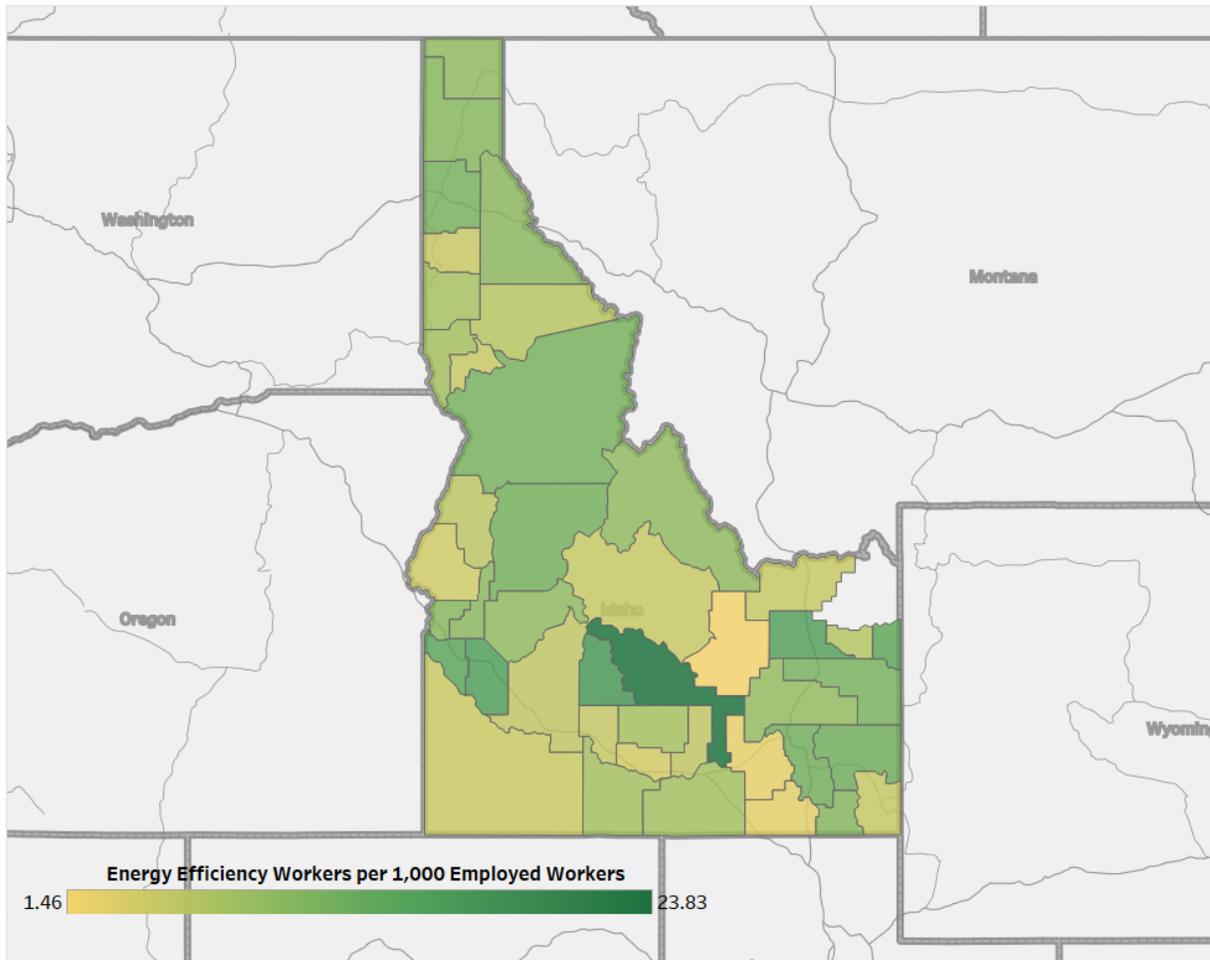
Combined, this would displace the annual electricity consumption of **304,444** homes.

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

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,397	Boise City-Nampa	3,713
2	3,638	Coeur d'Alene	904
		Idaho Falls	809
		Lewiston	270
		Logan	48
		Pocatello	511
		Rural	2,781

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	361	11	242	21	<5	31	100
2	911	12	<5	22	<5	32	187
3	<5	13	<5	23	157	33	<5
4	<5	14	836	24	437	34	193
5	152	15	436	25	178	35	132
6	320	16	244	26	411		
7	225	17	190	27	192		
8	1,251	18	45	28	477		
9	184	19	<5	29	<5		
10	439	20	<5	30	733		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs
1	360	28	476	55	<5
2	909	29	<5	56	<5
3	<5	30	732	57	<5
4	<5	31	99	58	<5
5	152	32	187	59	<5
6	319	33	<5	60	<5
7	224	34	192	61	<5
8	1,274	35	131	62	<5
9	184	36	<5	63	<5
10	437	37	<5	64	<5
11	242	38	<5	65	<5
12	<5	39	<5	66	<5
13	<5	40	<5	67	<5
14	833	41	<5	68	<5
15	434	42	<5	69	<5
16	243	43	<5	70	<5
17	189	44	<5		
18	45	45	<5		
19	<5	46	<5		
20	<5	47	<5		
21	<5	48	<5		
22	<5	49	<5		
23	156	50	<5		
24	436	51	<5		
25	178	52	<5		
26	411	53	<5		
27	192	54	<5		



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# Illinois

## 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.*

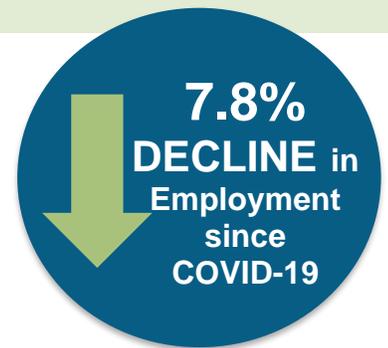
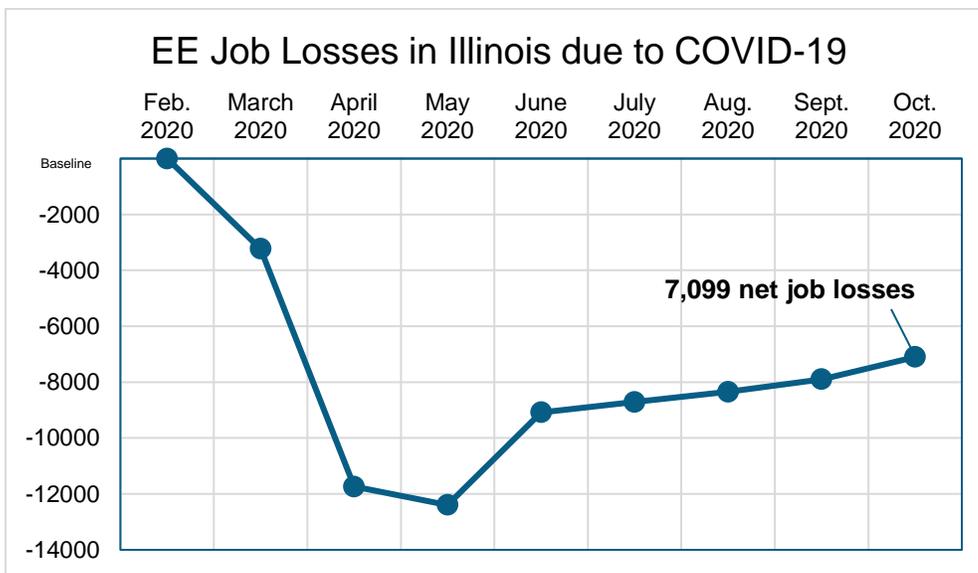
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The 2020 pandemic shocked our nation's labor market with massive job losses. Illinois's energy efficiency industry lost as many as 7,099 jobs since its onset, a 7.8% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Illinois EE workforce grew steadily, gaining 8.4% 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.



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# What are EE Jobs?

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

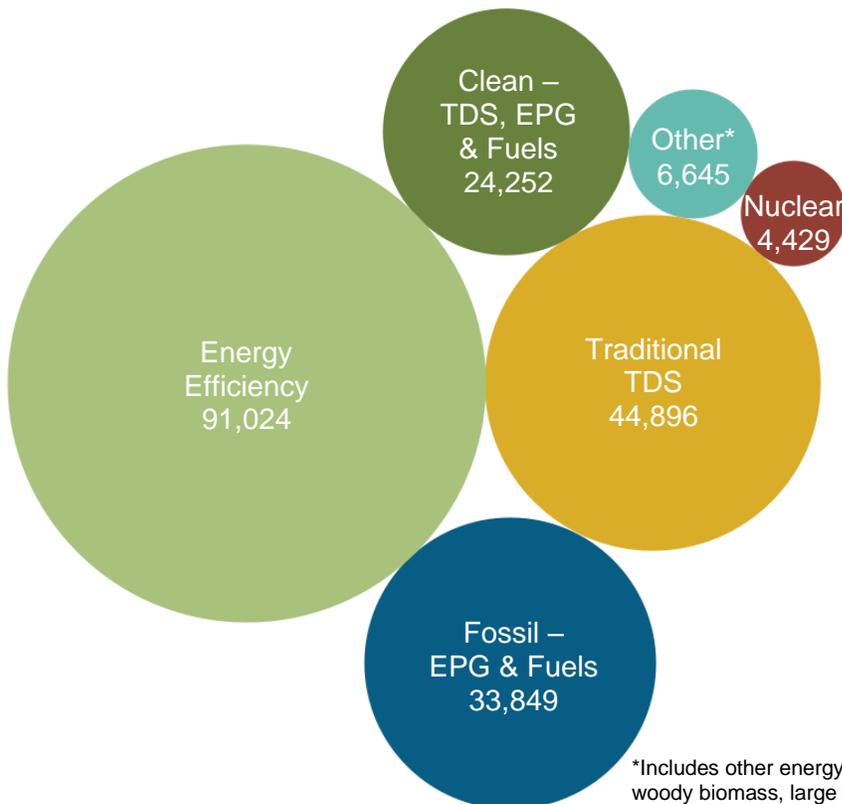
## What type of work are EE workers doing?

- 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 Illinois?

Energy efficiency is the largest energy sector in Illinois.

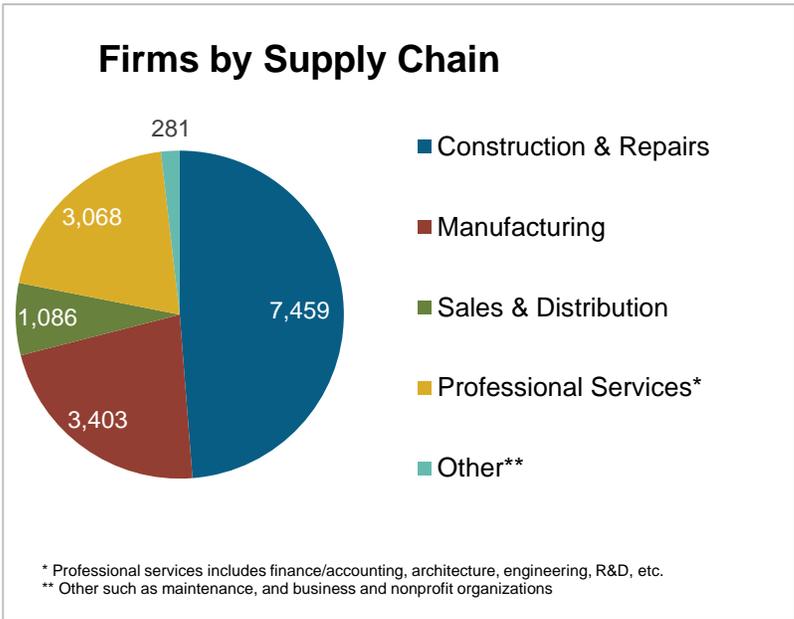
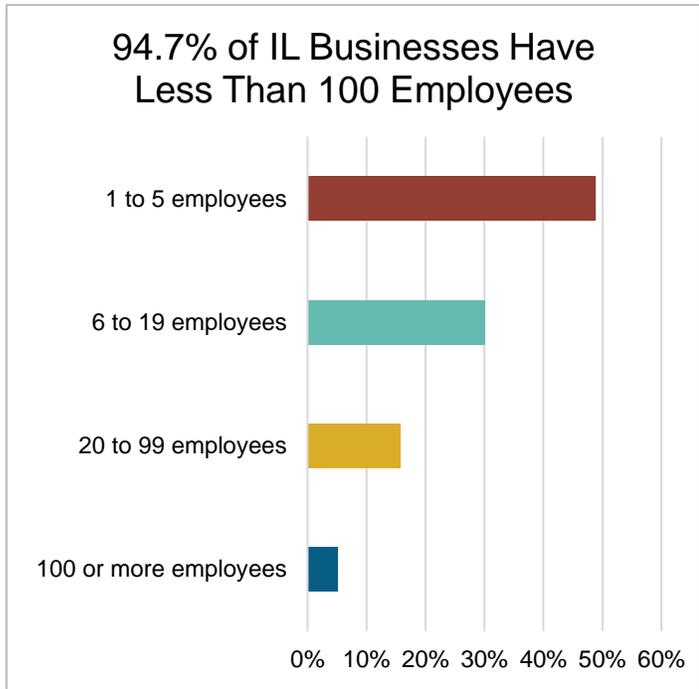


Energy efficiency in Illinois has seen consistent, reliable job growth – 8.4 percent since 2016.

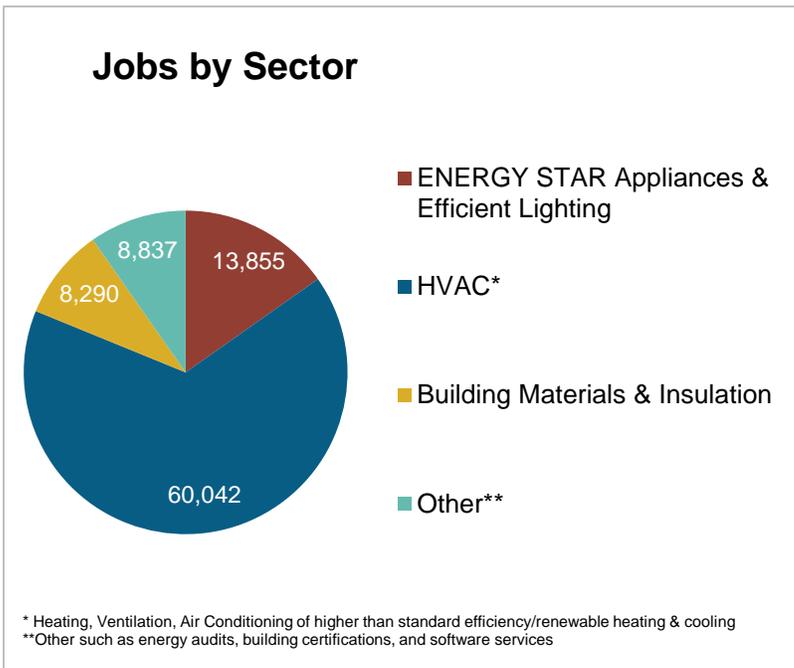
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Illinois?

EE Sector =  
**15,298**  
 Businesses in IL (Dec. 2019)  
 ↑ **260** over 2018



**7.1%**  
 of Illinois  
 residents employed  
 in EE are **Veterans**

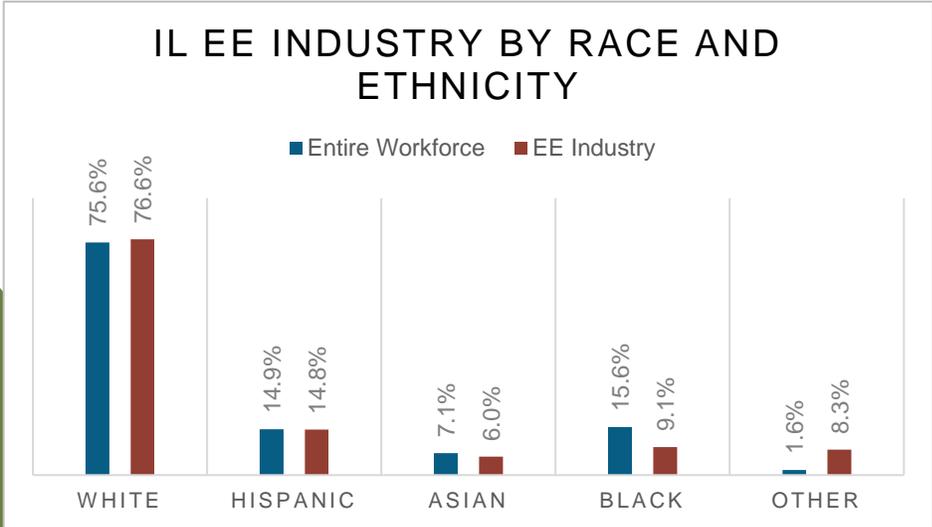


**Energy Efficiency  
 Construction Workers  
 Make Up 18% of IL  
 Construction Workers**

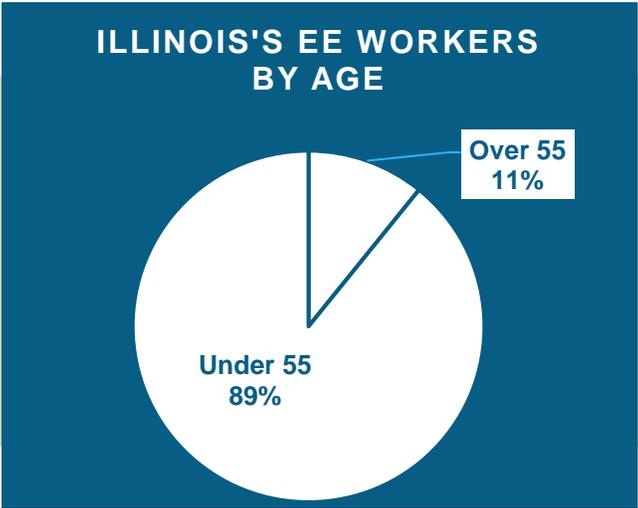
# How is EE Doing regarding Diversity in Illinois?

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 Illinois 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.



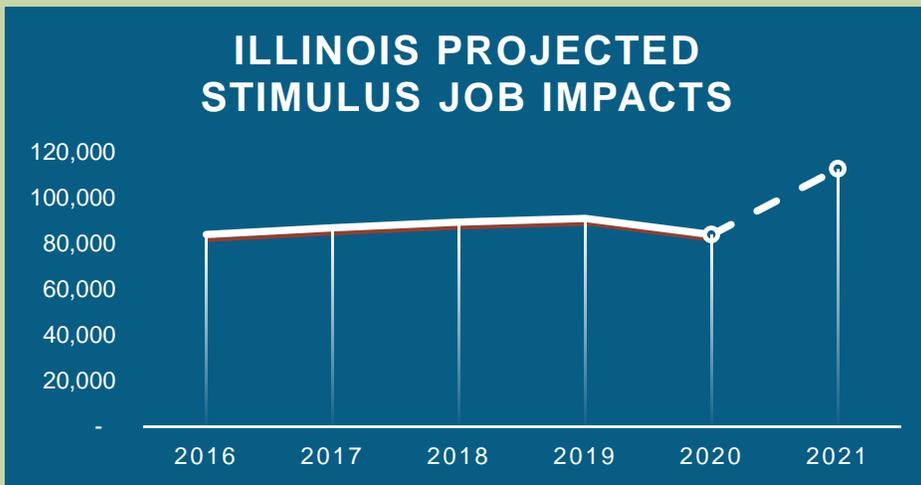
A significant portion of the Illinois efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

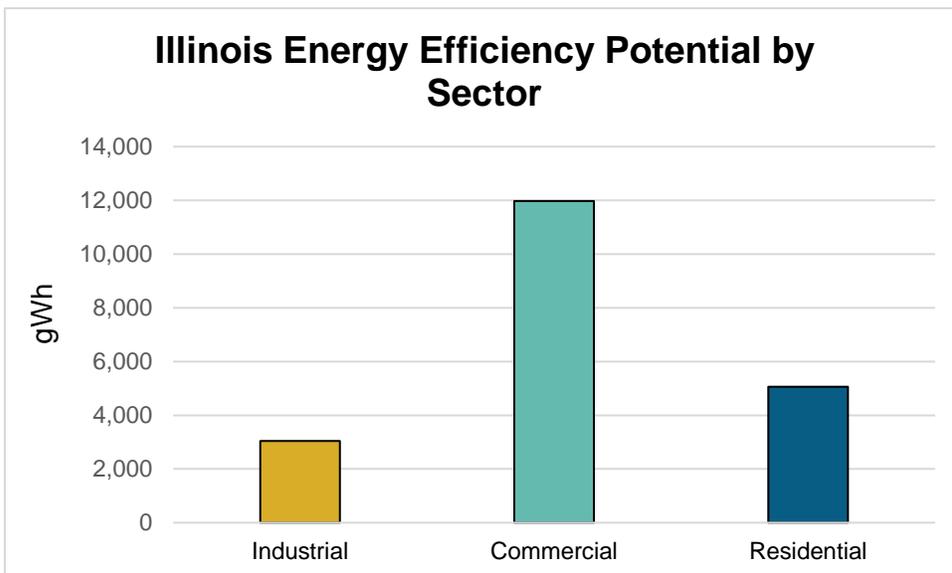


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **28,756 full-time direct, indirect, and induced IL jobs** that will last for at least five years: Over **143,781 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$2.3 billion in GDP** each year for the next five years — resulting in **\$11.3 billion in economic activity**, more than 4.8 times the investment.

## How much energy efficiency is untapped in your state?



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

Combined, this would displace the annual electricity consumption of **2,359,973 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,237	Bloomington-Normal	925
2	2,162	Cape Girardeau-Jackson	14
3	4,206	Champaign-Urbana	1,436
4	4,180	Chicago-Naperville-Joliet	64,224
5	7,748	Danville	511
6	10,750	Davenport-Moline-Rock Island	1,331
7	13,256	Decatur	708
8	3,100	Kankakee-Bradley	616
9	4,311	Peoria	2,634
10	4,374	Rockford	2,318
11	2,870	Springfield	1,849
12	5,179	St. Louis	4,518
13	5,393	Rural	9,938
14	2,835		
15	3,659		
16	4,814		
17	4,336		
18	2,614		



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,393	16	691	31	757	46	787
2	2,241	17	527	32	967	47	1,164
3	13,200	18	190	33	387	48	2,363
4	2,561	19	1,537	34	1,990	49	105
5	631	20	<5	35	786	50	813
6	1,411	21	3,419	36	1,545	51	1,843
7	663	22	2,782	37	2,419	52	988
8	2,870	23	4,071	38	1,696	53	569
9	2,761	24	2,195	39	392	54	1,894
10	1,170	25	2,936	40	229	55	1,376
11	292	26	3,843	41	659	56	866
12	259	27	2,635	42	7	57	664
13	145	28	<5	43	670	58	1,314
14	2,079	29	1,070	44	2,510	59	1,036
15	1,475	30	361	45	823		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	910	32	<5	63	912	94	623
2	480	33	<5	64	53	95	1,133
3	1,256	34	508	65	386	96	1,227
4	978	35	190	66	<5	97	104
5	8,928	36	<5	67	1,285	98	<5
6	4,414	37	1,336	68	699	99	314
7	2,020	38	197	69	321	100	498
8	535	39	<5	70	458	101	748
9	630	40	<5	71	1,208	102	1,091
10	<5	41	1,995	72	335	103	506
11	1,128	42	1,420	73	1,704	104	480
12	285	43	1,870	74	711	105	152
13	452	44	906	75	1,215	106	415
14	213	45	2,676	76	471	107	813
15	2,531	46	1,390	77	8	108	1,082
16	343	47	2,190	78	383	109	875
17	2,260	48	<5	79	230	110	497
18	496	49	1,599	80	<5	111	407
19	267	50	1,335	81	482	112	457
20	901	51	2,742	82	174	113	481
21	73	52	1,100	83	<5	114	182
22	218	53	1,399	84	7	115	840
23	259	54	1,237	85	247	116	472
24	<5	55	<5	86	421	117	665
25	144	56	<5	87	1,584	118	369
26	<5	57	<5	88	924		
27	1,532	58	1,068	89	730		
28	541	59	201	90	91		
29	1,288	60	159	91	270		
30	183	61	524	92	518		
31	690	62	233	93	538		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Indiana

## 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.*

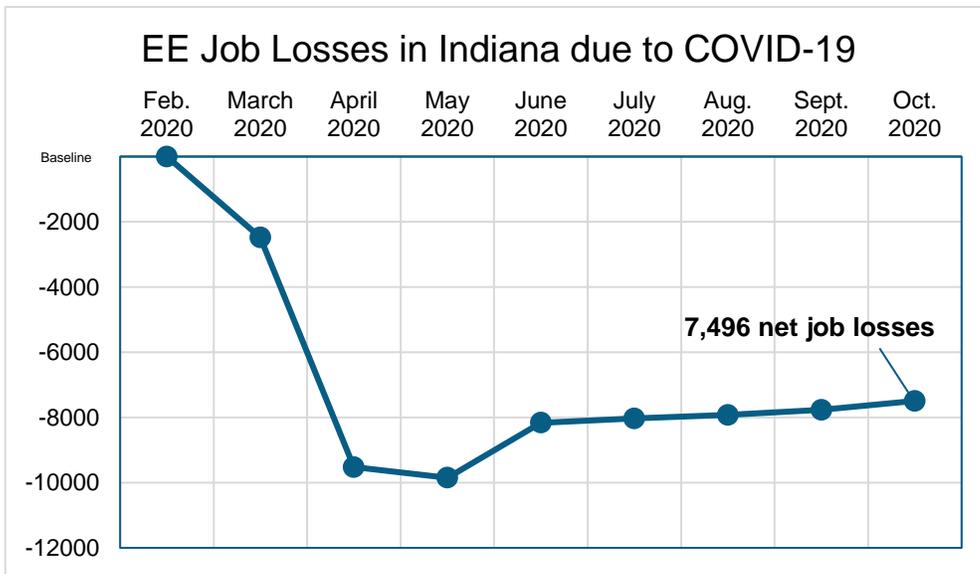
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Indiana’s energy efficiency industry lost as many as 7,496 jobs since its onset, a 13.5% 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 Indiana EE workforce grew steadily, gaining 5.9% 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.



Presented by:



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

# What are EE Jobs?

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

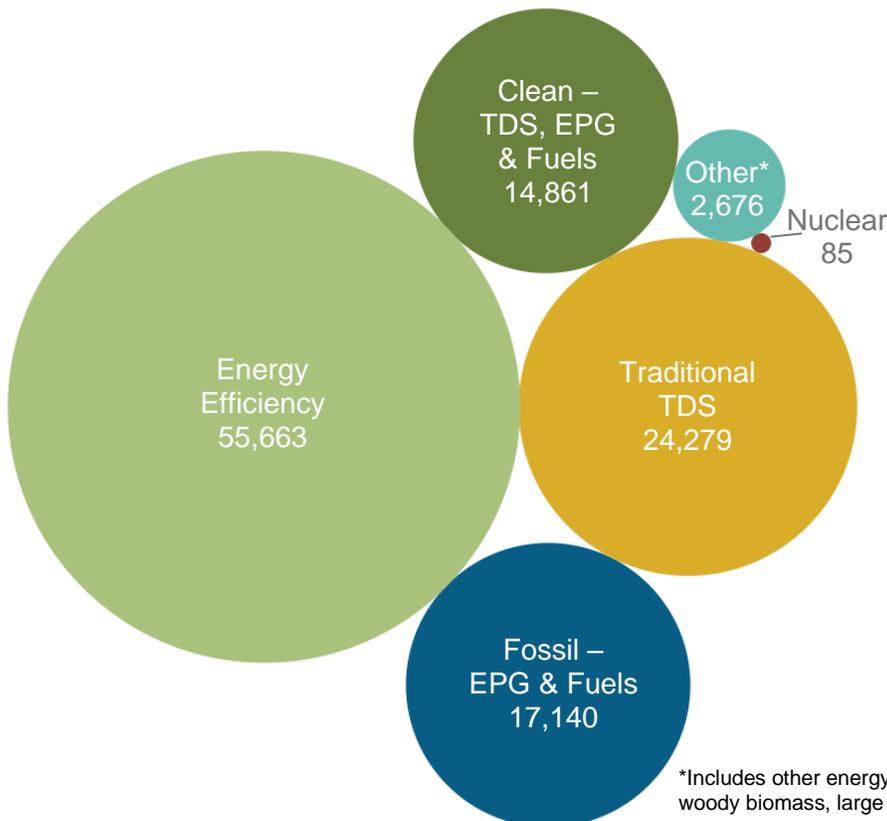
## What type of work are EE workers doing?

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## How does EE compare in Indiana?

Energy efficiency is the largest energy sector in Indiana.

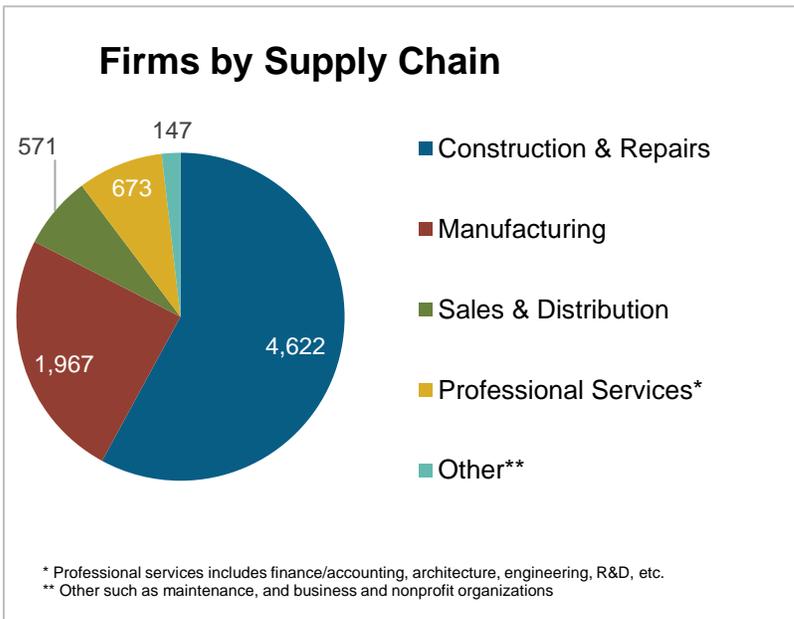
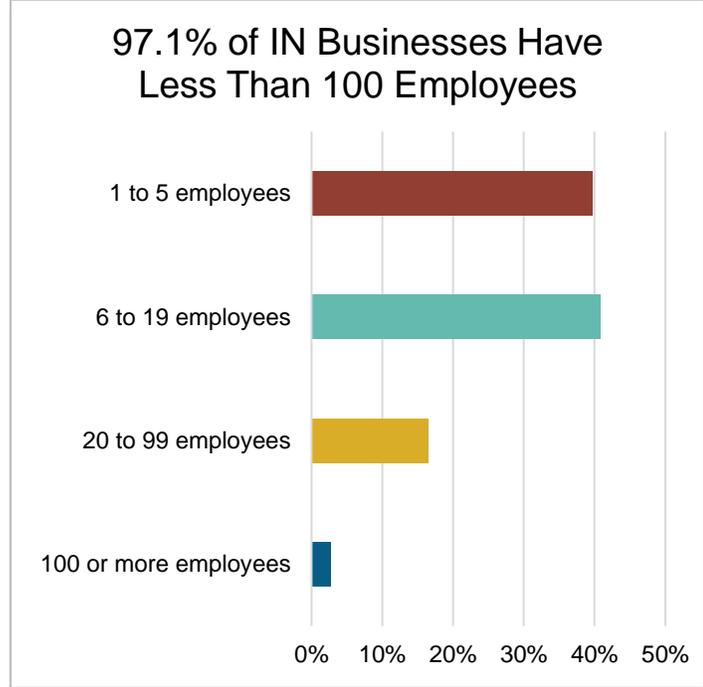


Energy efficiency in Indiana has seen consistent, reliable job growth – 5.9 percent since 2016.

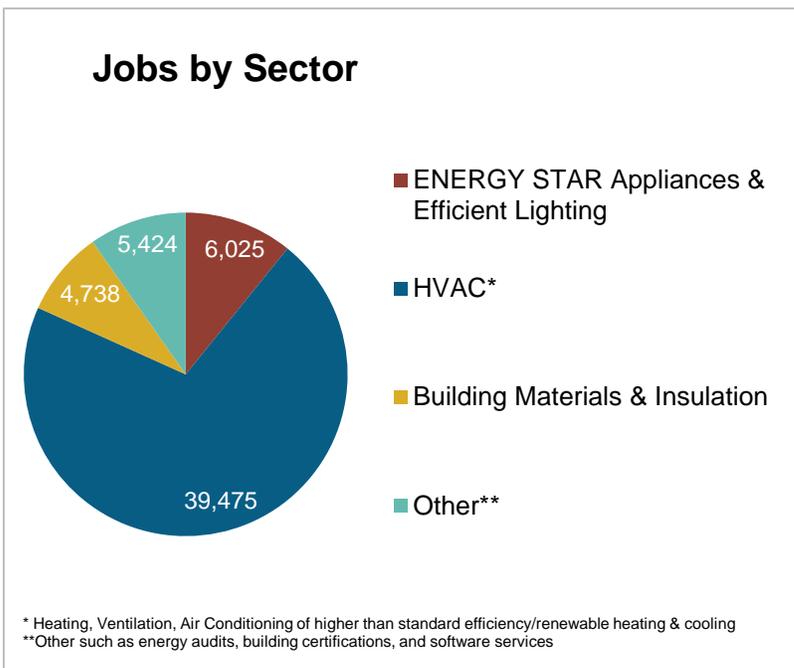
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# What do the EE businesses look like in Indiana?

EE Sector =  
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 Businesses in IN (Dec. 2019)  
 ↑ **80** over 2018



**6.5%**  
 of Indiana  
 residents employed  
 in EE are **Veterans**

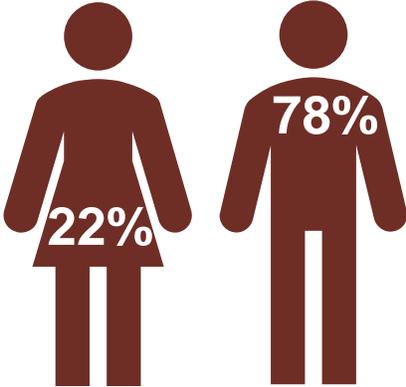


**Energy Efficiency  
 Construction Workers  
 Make Up 21% of IN  
 Construction Workers**

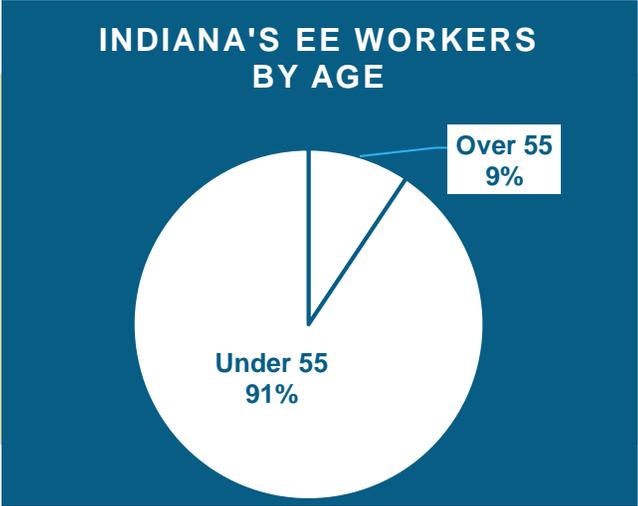
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The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.



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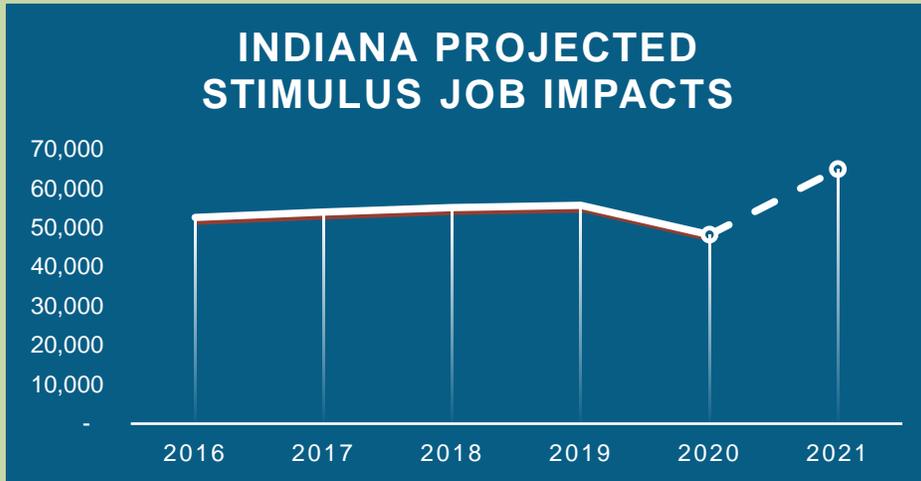
A significant portion of the Indiana efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

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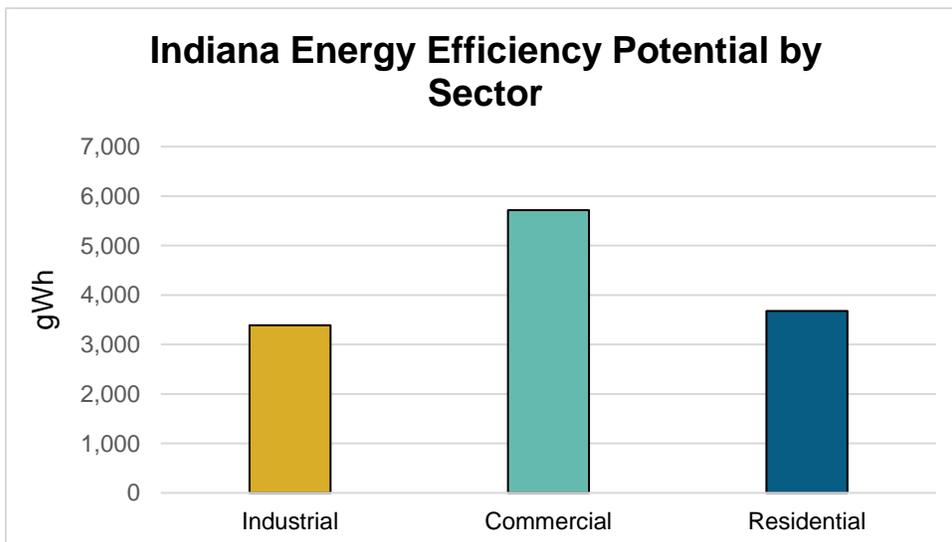


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **16,690 full-time direct, indirect, and induced IN jobs** that will last for at least five years: Over **83,451 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.1 billion in GDP** each year for the next five years — resulting in **\$5.3 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?



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

Combined, this would displace the annual electricity consumption of **1,109,581 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,781	Anderson	746
2	6,988	Bloomington	1,402
3	8,099	Chicago-Naperville-Joliet	6,653
4	5,778	Cincinnati-Middletown	595
5	7,799	Columbus	774
6	5,660	Elkhart-Goshen	1,649
7	4,510	Evansville	2,676
8	6,709	Fort Wayne	5,473
9	4,338	Indianapolis-Carmel	15,578
		Kokomo	804
		Lafayette	1,284
		Louisville/Jefferson County	2,468
		Michigan City-La Porte	749
		Muncie	639
		South Bend-Mishawaka	2,576
		Terre Haute	1,268
		Rural	10,329



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,760	16	1,147	31	295	46	123
2	1,316	17	1,190	32	1,065	47	992
3	197	18	1,736	33	2,044	48	801
4	2,146	19	607	34	<5	49	1,633
5	586	20	2,455	35	832	50	528
6	444	21	455	36	947		
7	2,298	22	88	37	790		
8	968	23	1,184	38	848		
9	2,263	24	1,084	39	1,849		
10	1,411	25	1,143	40	554		
11	657	26	533	41	867		
12	314	27	1,092	42	487		
13	3,315	28	1,711	43	925		
14	1,766	29	1,171	44	318		
15	679	30	2,513	45	1,534		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	502	28	1,071	55	582	82	2,114
2	453	29	1,029	56	482	83	76
3	338	30	413	57	1,406	84	398
4	1,553	31	549	58	<5	85	87
5	1,071	32	242	59	273	86	876
6	1,155	33	365	60	494	87	237
7	491	34	120	61	235	88	207
8	1,009	35	223	62	239	89	1,067
9	<5	36	505	63	624	90	<5
10	400	37	1,087	64	1,174	91	603
11	775	38	50	65	292	92	385
12	459	39	1,188	66	544	93	<5
13	1,368	40	141	67	660	94	52
14	539	41	26	68	105	95	280
15	<5	42	625	69	50	96	2,097
16	618	43	575	70	1,002	97	210
17	432	44	694	71	1,132	98	<5
18	1,091	45	695	72	<5	99	<5
19	<5	46	541	73	193	100	<5
20	36	47	1,193	74	369		
21	1,212	48	68	75	433		
22	403	49	139	76	250		
23	716	50	1,970	77	959		
24	2,666	51	661	78	<5		
25	480	52	1,423	79	276		
26	17	53	458	80	322		
27	449	54	406	81	188		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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# Iowa

## Energy Efficiency Jobs in America

Oct 2020

18,598\*

Dec 2019

21,165

*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.*

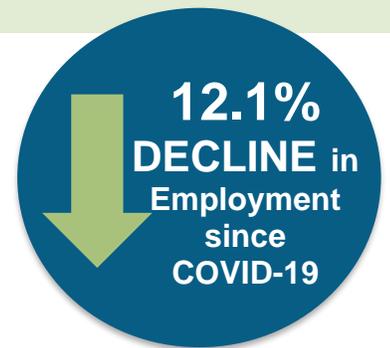
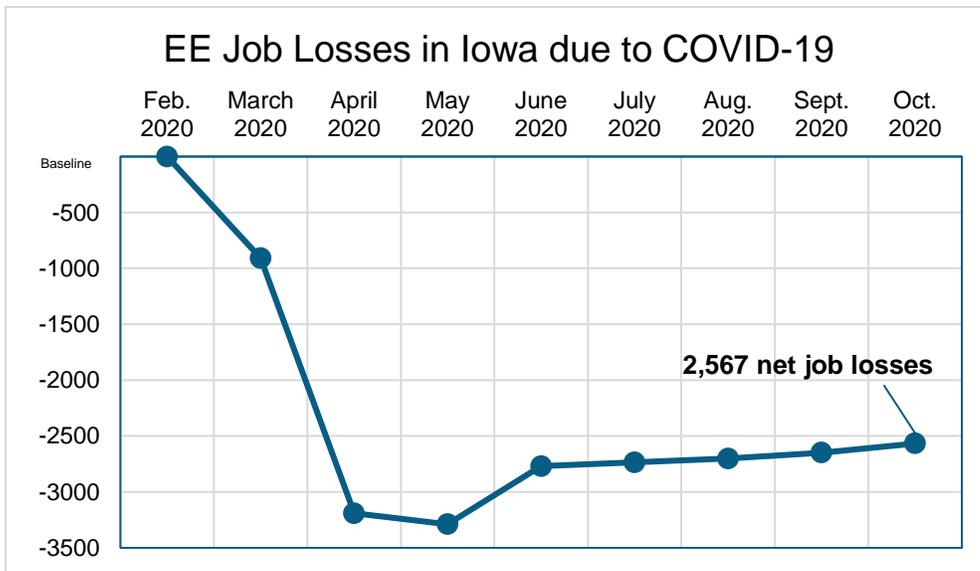
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The 2020 pandemic shocked our nation's labor market with massive job losses. Iowa's energy efficiency industry lost as many as 2,567 jobs since its onset, a 12.1% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Iowa EE workforce grew steadily, gaining 12.3% 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.



Presented by:



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

# What are EE Jobs?

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

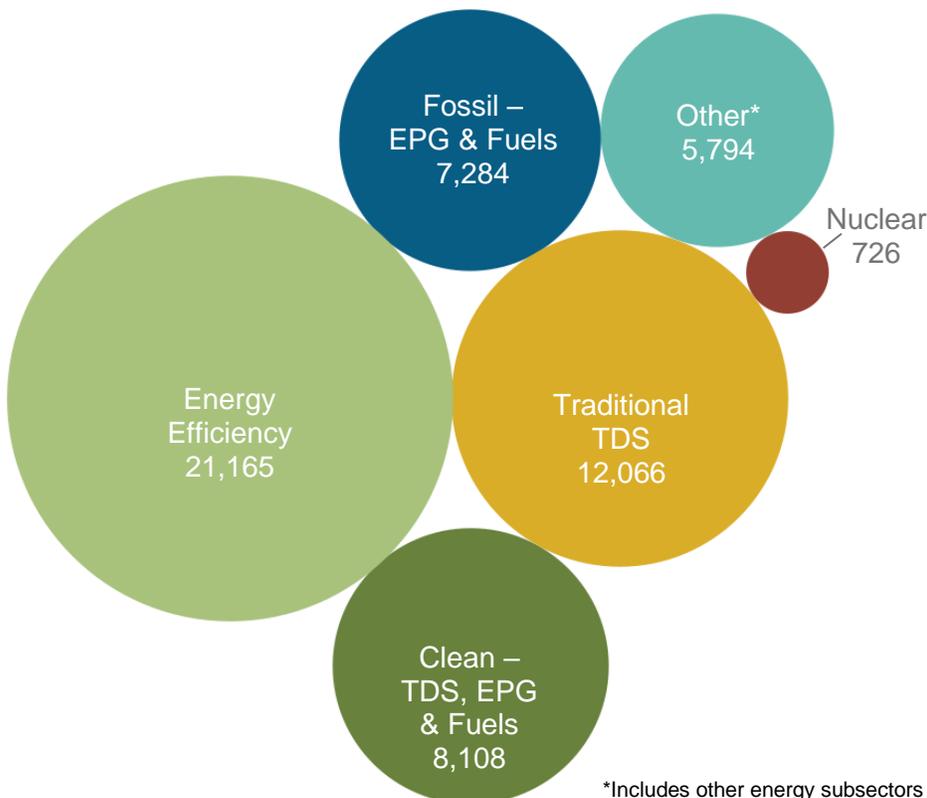
## What type of work are EE workers doing?

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- Design and construct high performance buildings such as those earning LEED certification
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## How does EE compare in Iowa?

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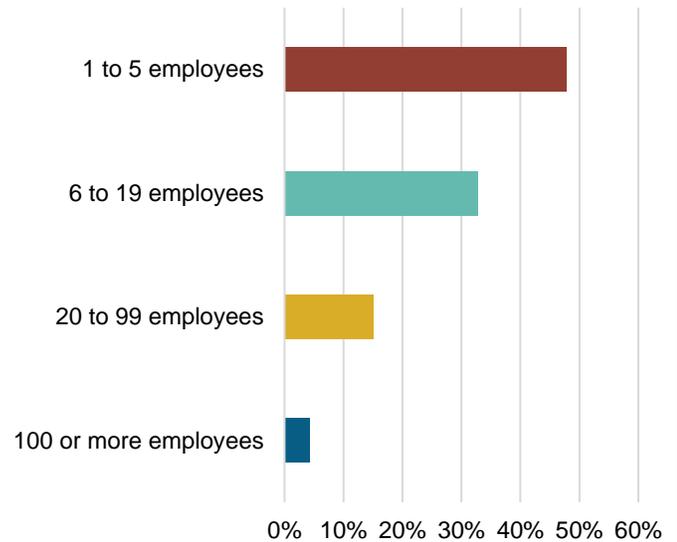
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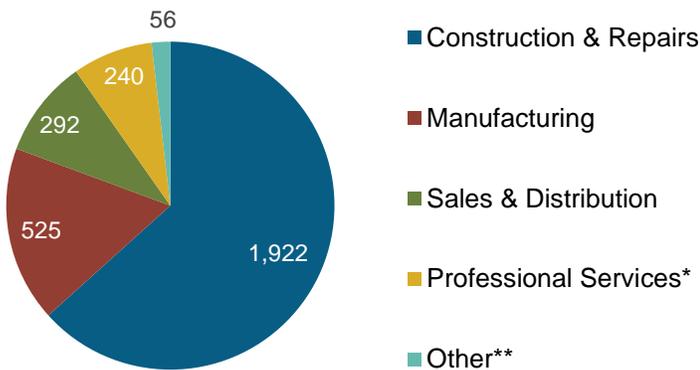
# What do the EE businesses look like in Iowa?

EE Sector =  
**3,034**  
 Businesses in IA (Dec. 2019)  
 ↑ **80** over 2018

95.7% of IA Businesses Have  
 Less Than 100 Employees



## Firms by Supply Chain

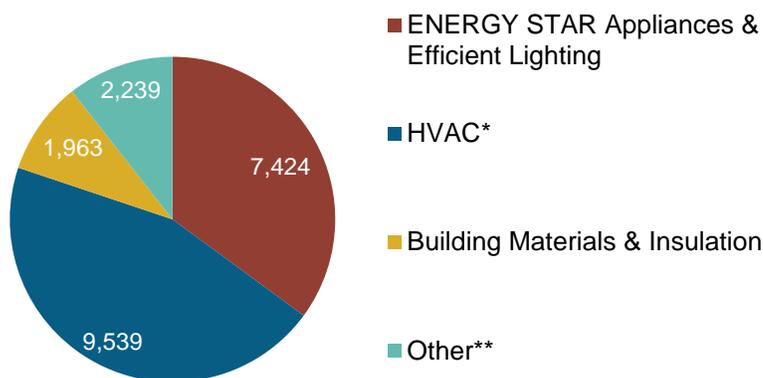


\* Professional services includes finance/accounting, architecture, engineering, R&D, etc.  
 \*\* Other such as maintenance, and business and nonprofit organizations



**7.9%**  
 of Iowa  
 residents employed  
 in EE are **Veterans**

## Jobs by Sector



\* Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling  
 \*\*Other such as energy audits, building certifications, and software services

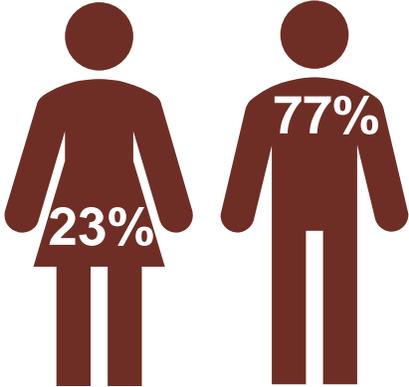
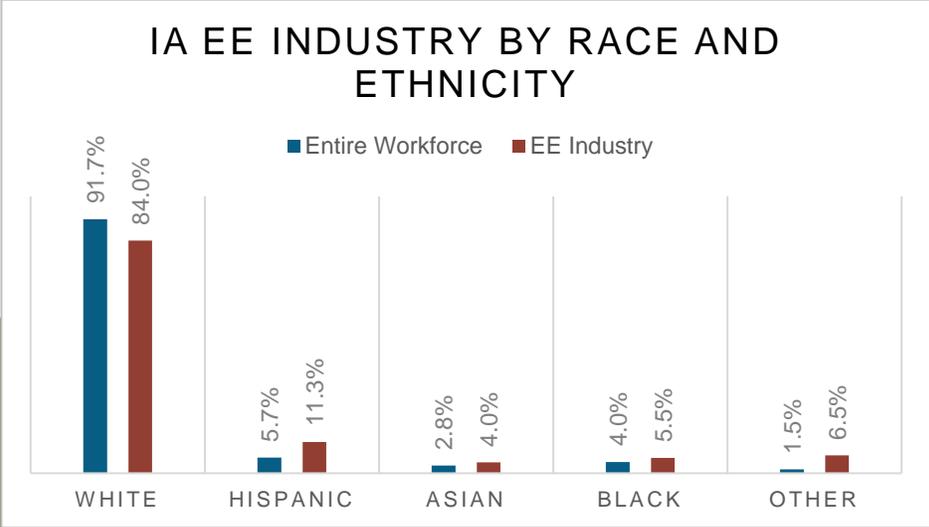


**Energy Efficiency  
 Construction Workers  
 Make Up 16% of IA  
 Construction Workers**

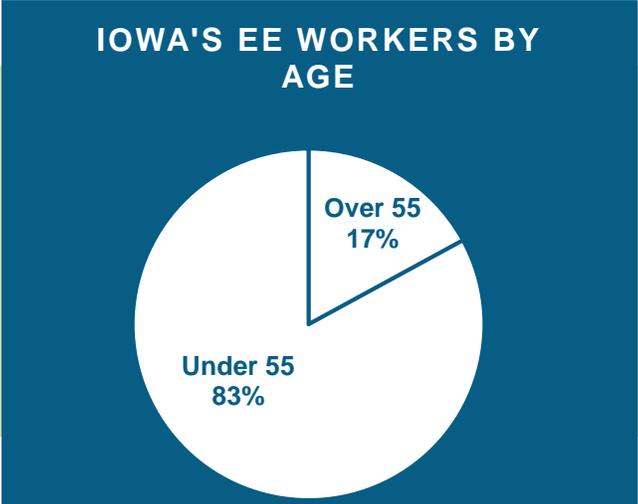
# How is EE Doing regarding Diversity in Iowa?

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 Iowa 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.



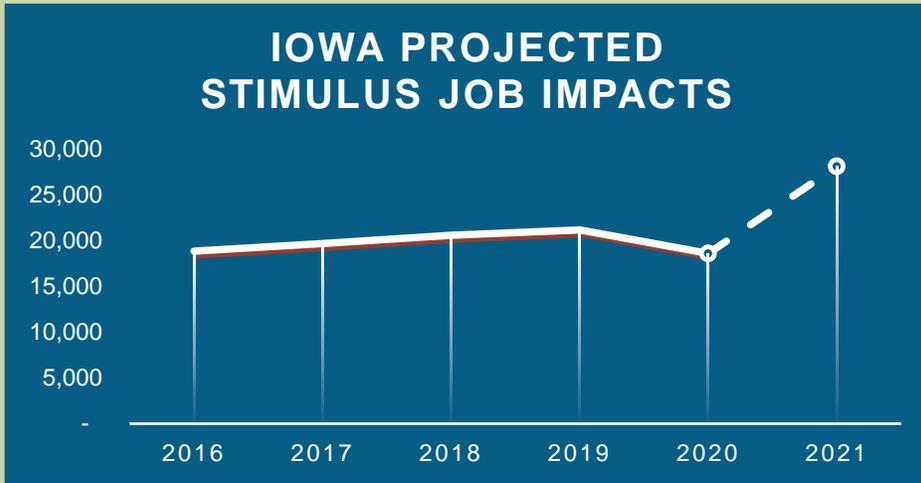
A significant portion of the Iowa efficiency workforce is in the "55+" category. 17% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

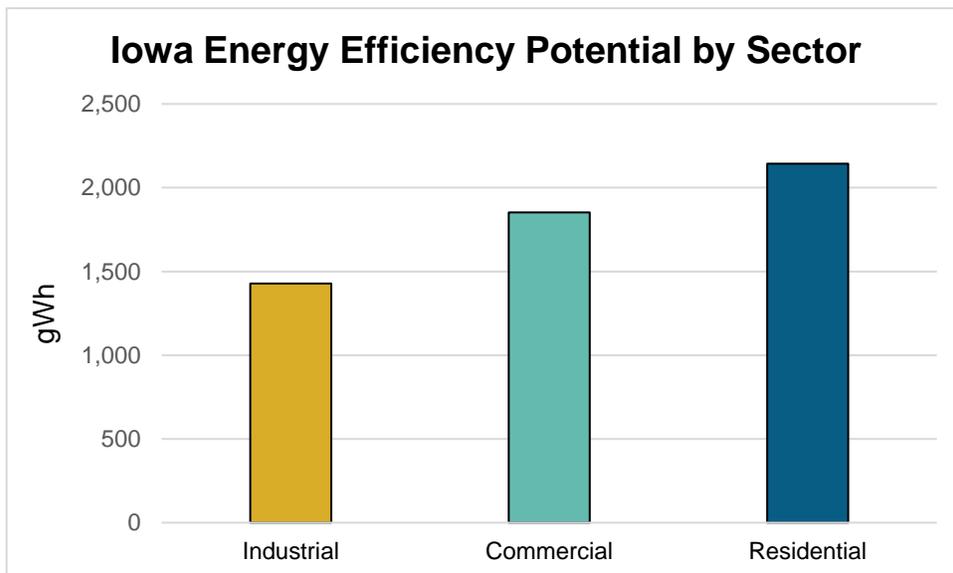


Source: [Build Back Better, Faster.](#)

Modeling finds that federal investment would create **9,508 full-time direct, indirect, and induced IA jobs** that will last for at least five years: Over **47,542 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$634 million in GDP** each year for the next five years – resulting in **\$3.2 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?



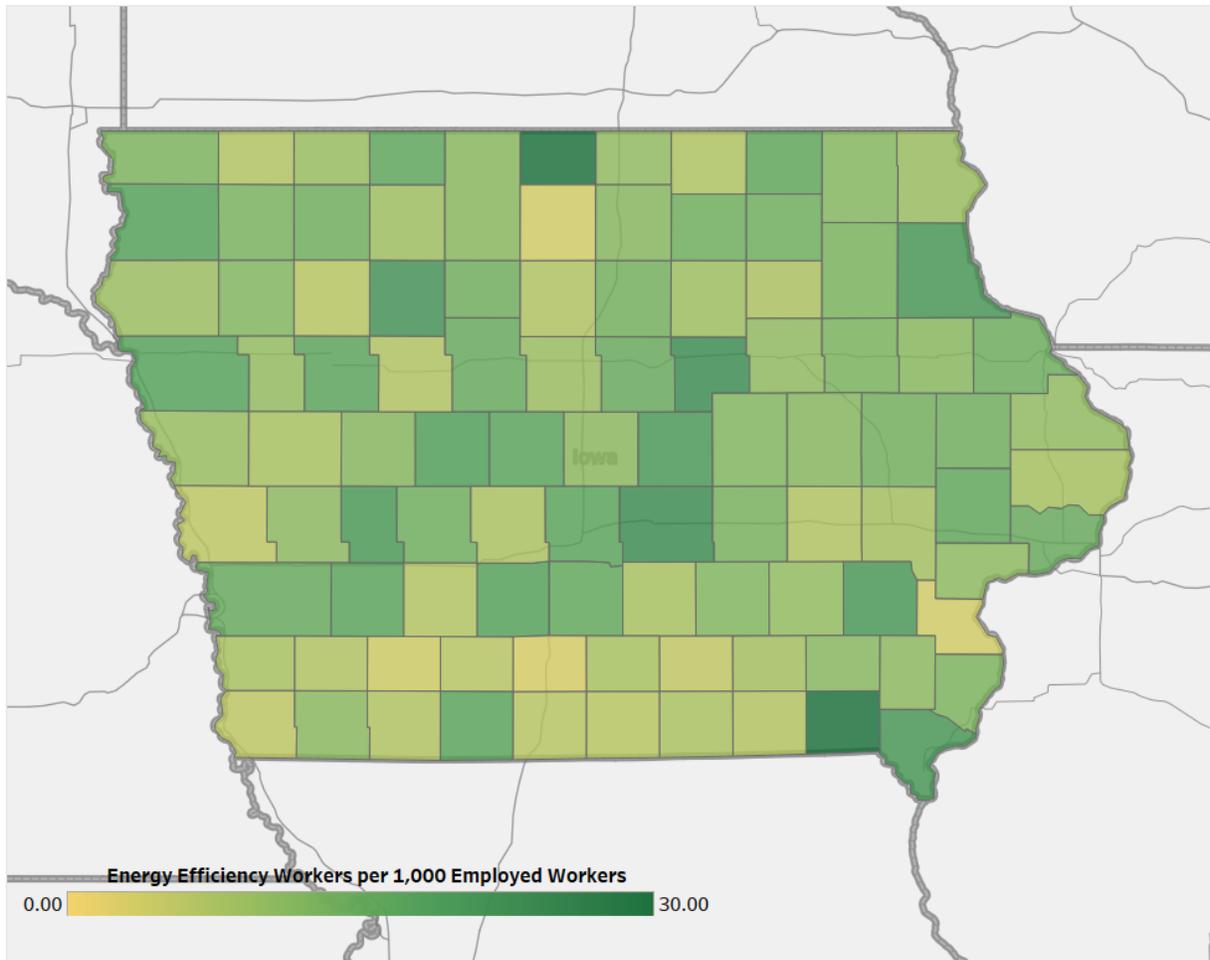
Combined, this would displace the annual electricity consumption of **521,332** homes.

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

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,528	Ames	633
2	4,570	Cedar Rapids	1,810
3	5,626	Davenport-Moline-Rock Island	1,013
4	5,441	Des Moines-West Des Moines	4,411
		Dubuque	581
		Iowa City	1,020
		Omaha-Council Bluffs	738
		Sioux City	608
		Waterloo-Cedar Falls	974
		Rural	9,378

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	899	14	554	27	123	40	329
2	447	15	478	28	352	41	445
3	667	16	887	29	979	42	298
4	658	17	184	30	305	43	6
5	380	18	753	31	222	44	447
6	669	19	160	32	365	45	455
7	53	20	<5	33	1,192	46	296
8	315	21	513	34	185	47	259
9	364	22	68	35	73	48	127
10	1,365	23	543	36	351	49	244
11	269	24	318	37	976	50	<5
12	256	25	574	38	388		
13	279	26	865	39	233		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	561	28	428	55	182	82	379
2	304	29	32	56	169	83	170
3	260	30	445	57	597	84	127
4	184	31	78	58	381	85	6
5	160	32	811	59	<5	86	<5
6	504	33	105	60	303	87	193
7	474	34	79	61	221	88	255
8	182	35	321	62	<5	89	280
9	245	36	435	63	168	90	173
10	132	37	160	64	195	91	21
11	209	38	<5	65	989	92	274
12	462	39	<5	66	199	93	237
13	52	40	<5	67	169	94	21
14	<5	41	<5	68	17	95	37
15	314	42	512	69	73	96	90
16	<5	43	68	70	<5	97	237
17	191	44	<5	71	255	98	5
18	170	45	539	72	95	99	<5
19	1,103	46	11	73	602	100	<5
20	258	47	206	74	395		
21	215	48	111	75	299		
22	53	49	91	76	116		
23	107	50	480	77	75		
24	148	51	340	78	156		
25	205	52	521	79	80		
26	74	53	<5	80	248		
27	123	54	123	81	89		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Kansas

## Energy Efficiency Jobs in America

Oct 2020

16,020\*

Dec 2019

17,848

*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.*

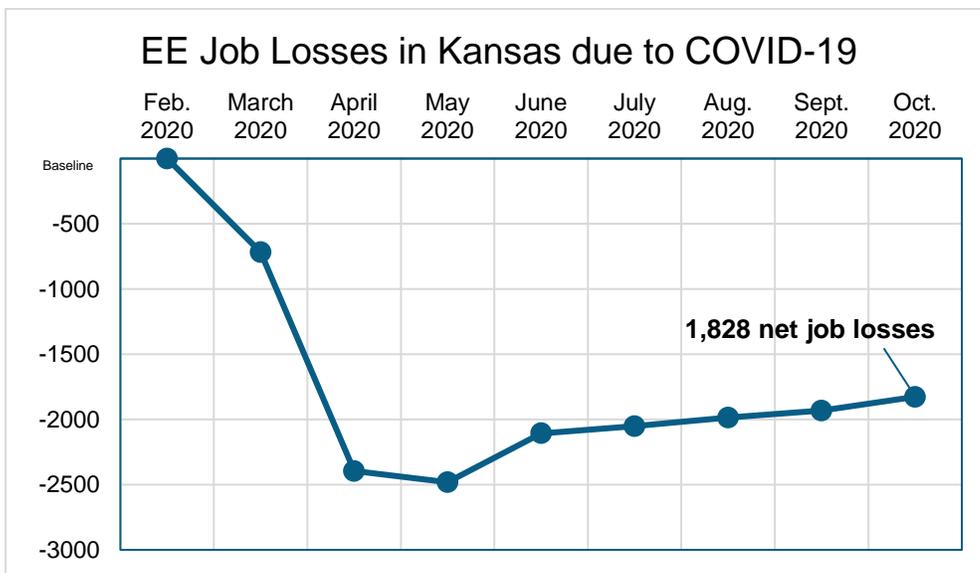
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Kansas's energy efficiency industry lost as many as 1,828 jobs since its onset, a 10.2% 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 Kansas EE workforce grew steadily, gaining 9.2% 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:

**E4** THE FUTURE



# What are EE Jobs?

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

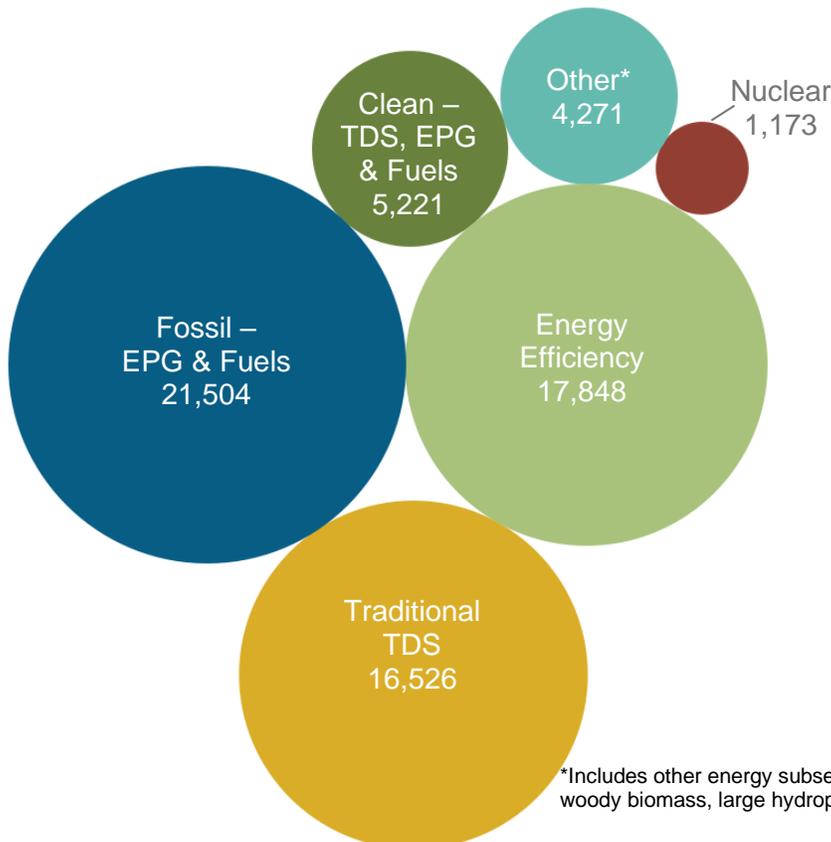
## What type of work are EE workers doing?

- 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 Kansas?

Energy efficiency is the second largest energy sector in Kansas.



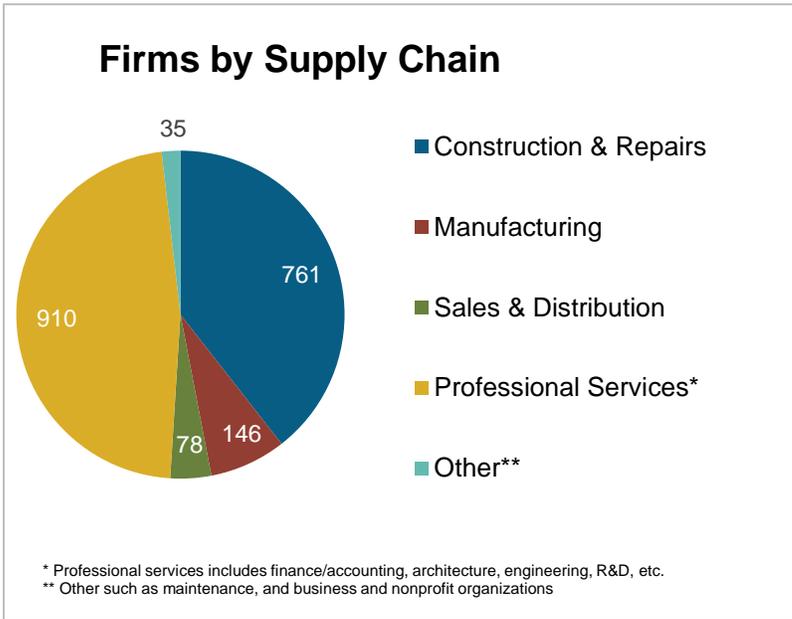
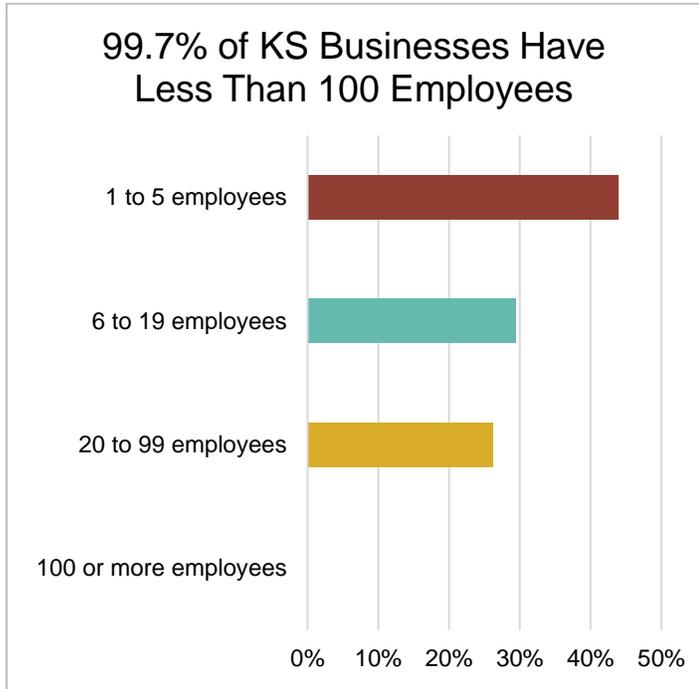
Energy efficiency in Kansas has seen consistent, reliable job growth – 9.2 percent since 2016.

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

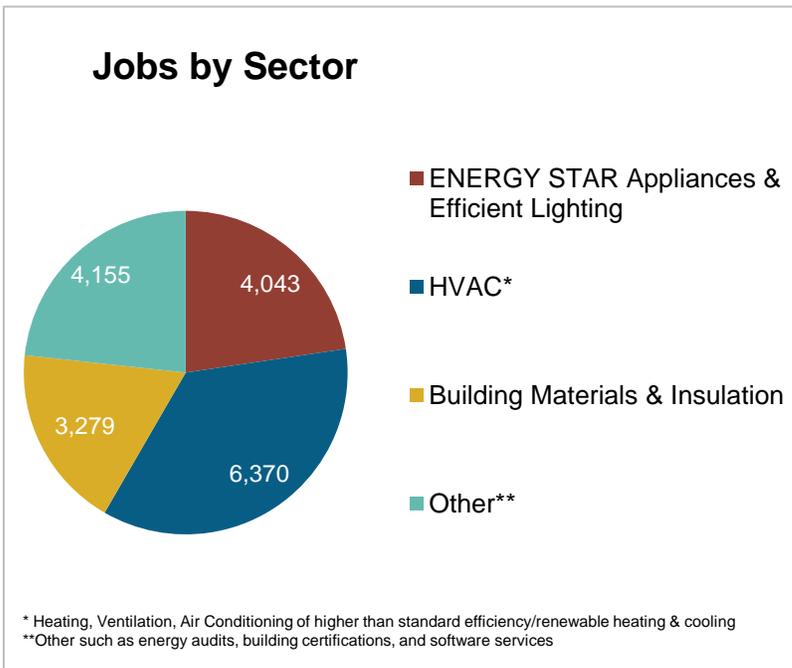


# What do the EE businesses look like in Kansas?

EE Sector =  
**1,930**  
 Businesses in KS  
 (Dec. 2019)  
 ↑ **60** over 2018



**6.5%**  
 of Kansas  
 residents employed  
 in EE are **Veterans**

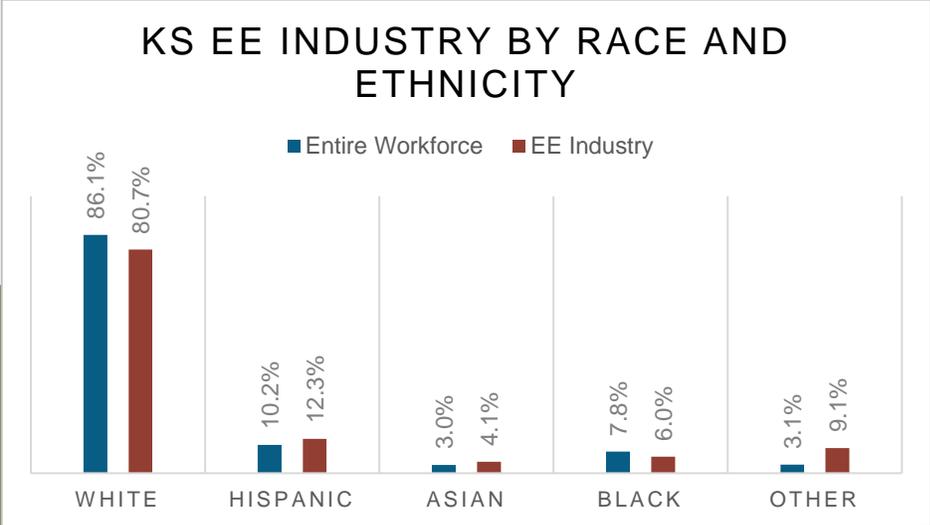


**Energy Efficiency  
 Construction Workers  
 Make Up 10% of KS  
 Construction Workers**

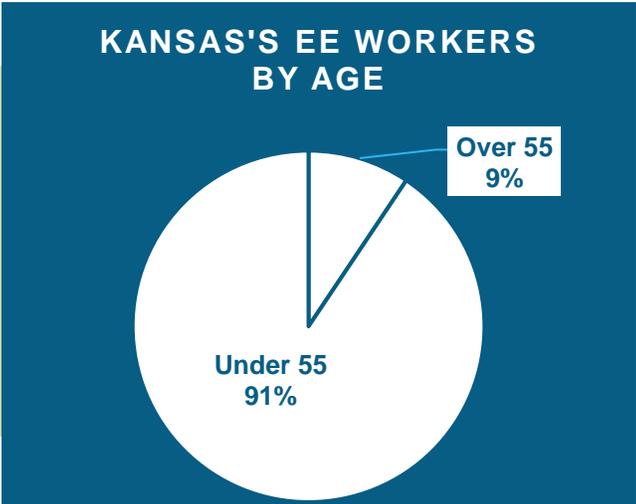
# How is EE Doing regarding Diversity in Kansas?

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 Kansas 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.



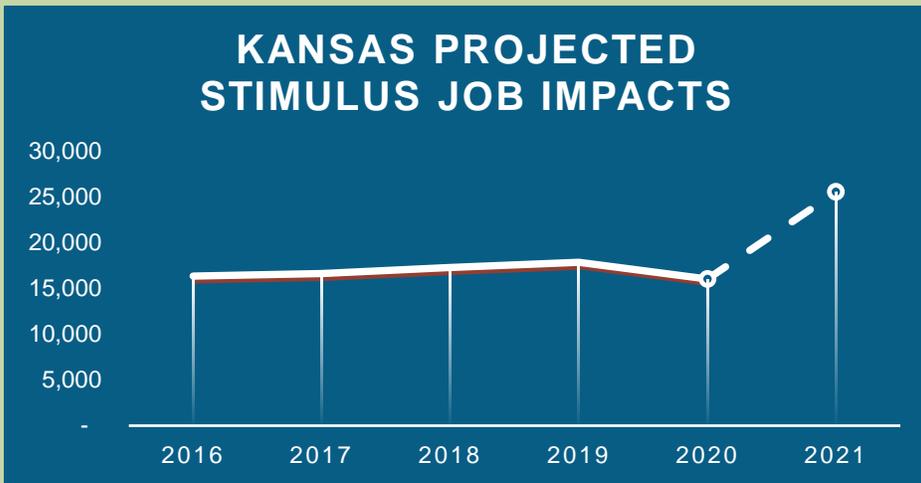
A significant portion of the Kansas efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

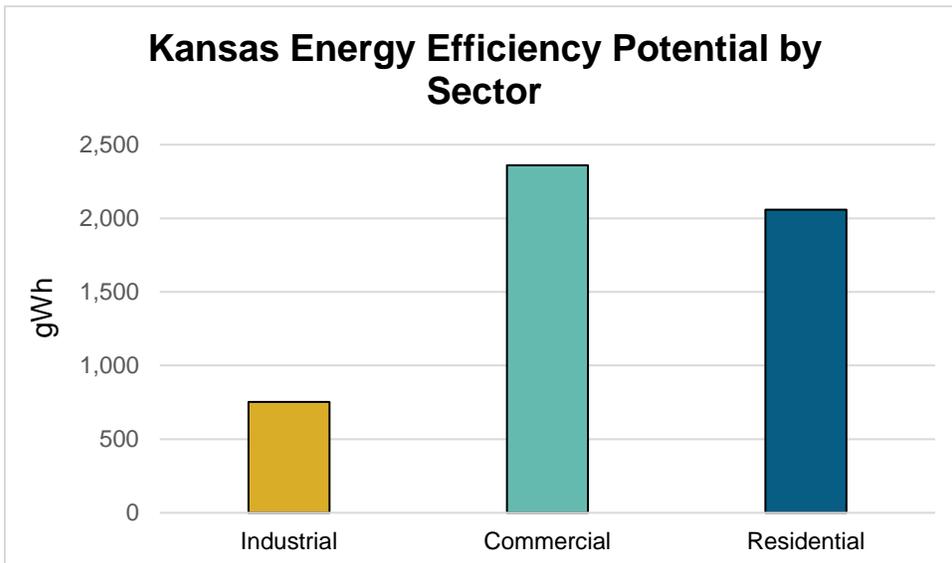


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **9,500 full-time direct, indirect, and induced KS jobs** that will last for at least five years: Over **47,499 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$643 million in GDP** each year for the next five years – resulting in **\$3.2 billion in economic activity**, more than 4.1 times the investment.

## How much energy efficiency is untapped in your state?



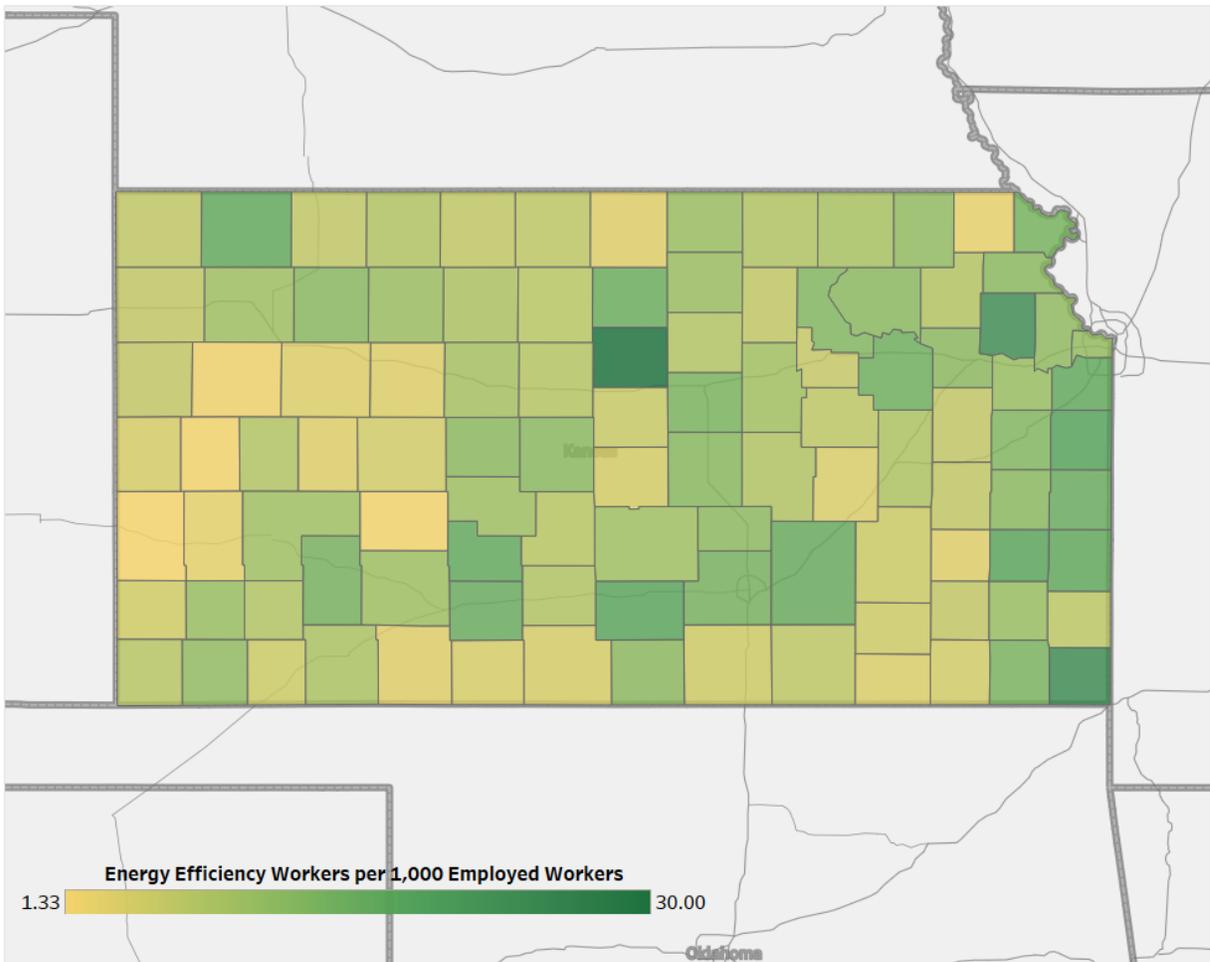
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **483,734** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,133	Kansas City	6,098
2	3,548	Lawrence	638
3	5,268	Manhattan	593
4	3,899	St. Joseph	40
		Topeka	1,274
		Wichita	3,610
		Rural	5,596

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	862	14	873	27	132	40	680
2	654	15	165	28	66		
3	337	16	732	29	814		
4	331	17	336	30	<5		
5	45	18	725	31	94		
6	583	19	301	32	301		
7	706	20	28	33	797		
8	1,305	21	32	34	357		
9	1,472	22	221	35	349		
10	160	23	<5	36	398		
11	643	24	455	37	66		
12	508	25	975	38	375		
13	340	26	332	39	295		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	268	33	176	65	6	97	<5
2	264	34	28	66	6	98	<5
3	<5	35	<5	67	<5	99	<5
4	66	36	<5	68	45	100	<5
5	248	37	<5	69	405	101	350
6	94	38	209	70	67	102	<5
7	170	39	17	71	<5	103	<5
8	504	40	6	72	205	104	<5
9	55	41	11	73	255	105	<5
10	280	42	350	74	82	106	154
11	28	43	<5	75	22	107	144
12	400	44	95	76	44	108	134
13	68	45	38	77	131	109	295
14	1,199	46	11	78	<5	110	374
15	<5	47	210	79	159	111	<5
16	984	48	<5	80	39	112	<5
17	115	49	<5	81	320	113	161
18	131	50	372	82	<5	114	29
19	565	51	657	83	385	115	428
20	539	52	<5	84	653	116	58
21	87	53	94	85	198	117	112
22	<5	54	78	86	175	118	267
23	<5	55	252	87	<5	119	<5
24	234	56	119	88	<5	120	167
25	60	57	<5	89	115	121	16
26	66	58	<5	90	149	122	194
27	191	59	17	91	77	123	<5
28	<5	60	<5	92	222	124	234
29	<5	61	50	93	297	125	<5
30	<5	62	164	94	321		
31	189	63	39	95	<5		
32	238	64	319	96	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Kentucky

## 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.*

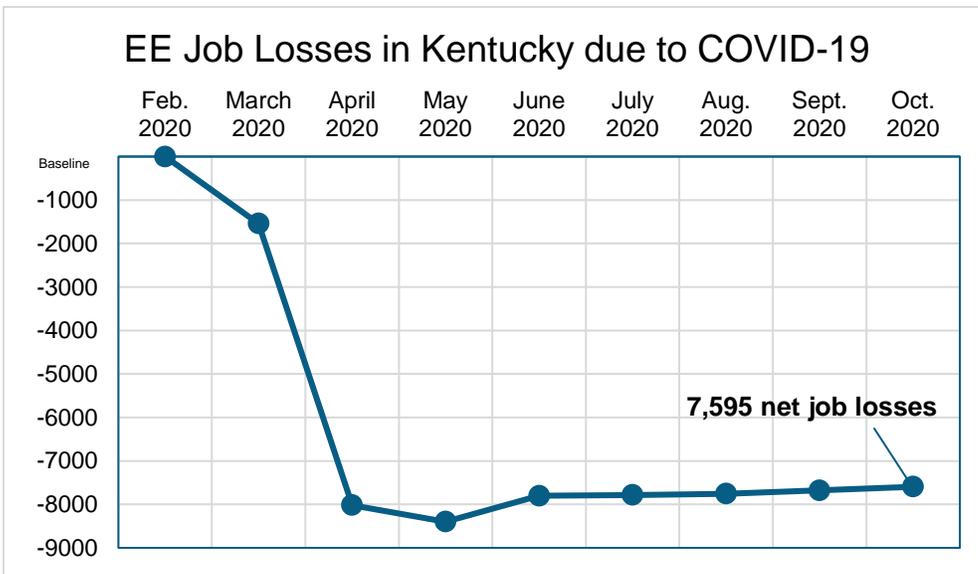
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Kentucky's energy efficiency industry lost as many as 7,595 jobs since its onset, a 29.0% 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 Kentucky EE workforce grew steadily, gaining 10.7% 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.



Presented by:



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

# What are EE Jobs?

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

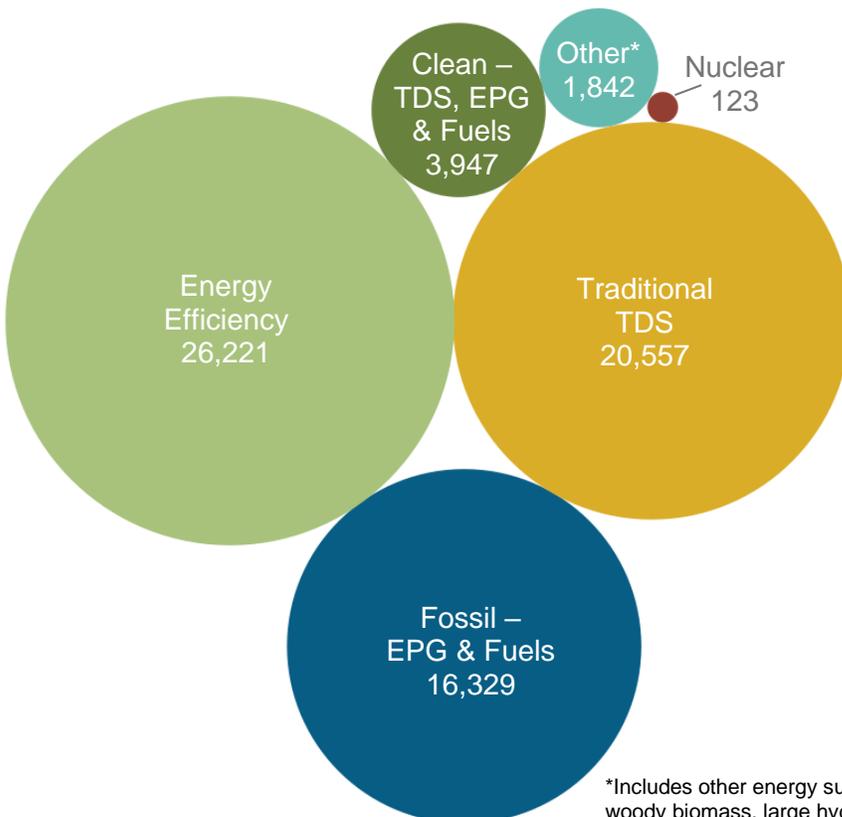
## What type of work are EE workers doing?

- 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 Kentucky?

Energy efficiency is the largest energy sector in Kentucky.

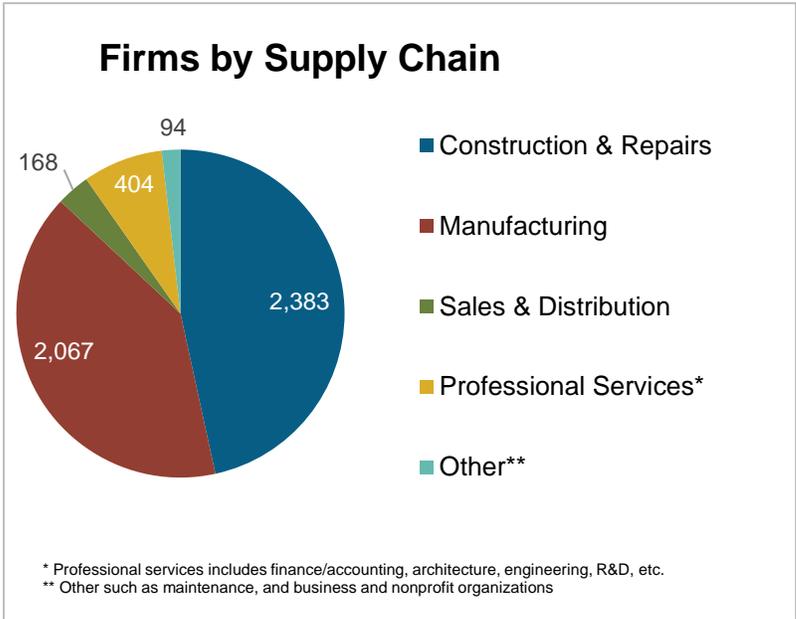
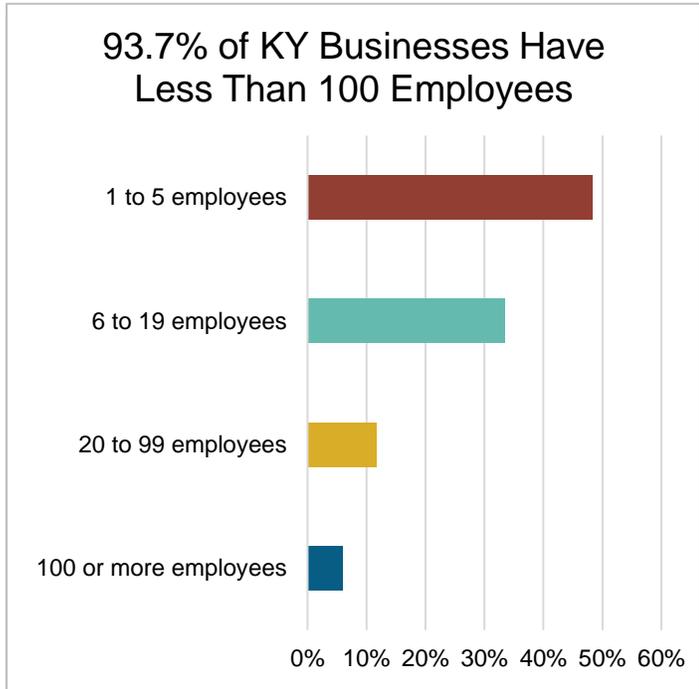


Energy efficiency in Kentucky has seen consistent, reliable job growth – 10.7 percent since 2016.

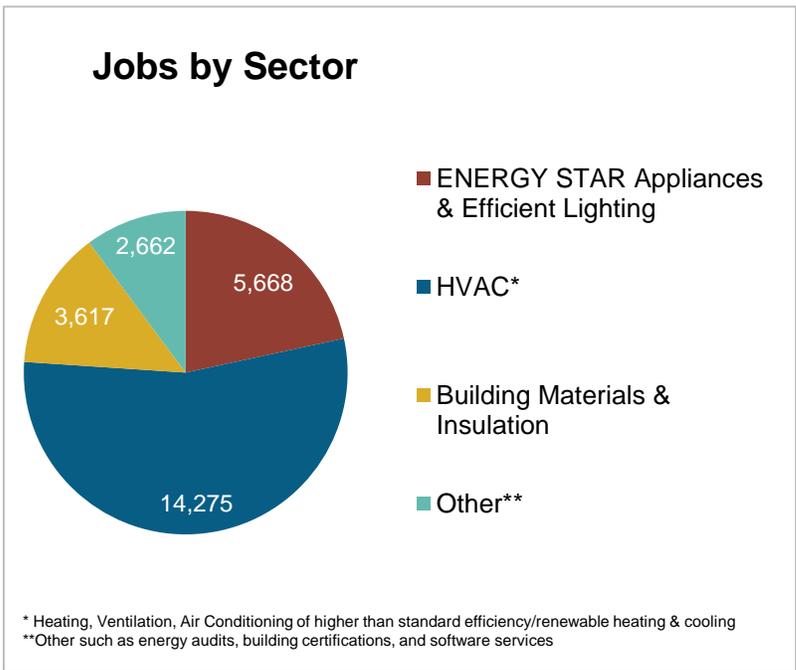
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Kentucky?

EE Sector =  
**5,116**  
 Businesses in KY  
 (Dec. 2019)  
 ↑ **135** over 2018



**10.1%**  
 of Kentucky  
 residents employed  
 in EE are **Veterans**



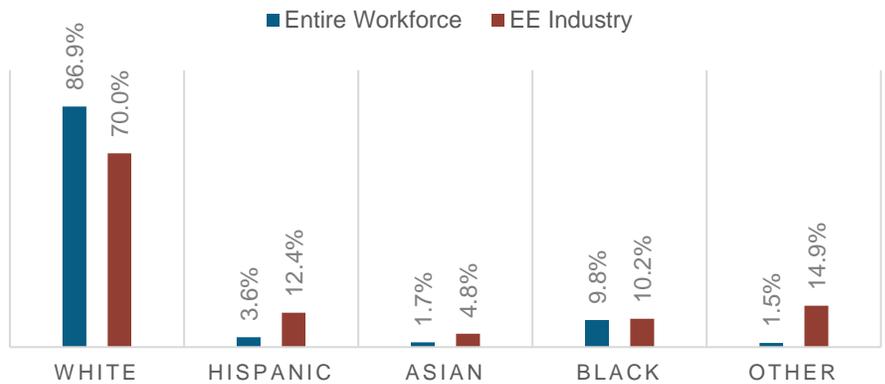
**Energy Efficiency  
 Construction Workers  
 Make Up 14% of KY  
 Construction Workers**

# How is EE Doing regarding Diversity in Kentucky?

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 Kentucky communities are represented in the EE sector.

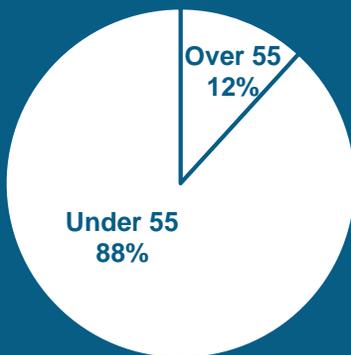
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## KY EE INDUSTRY BY RACE AND ETHNICITY



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.

## KENTUCKY'S EE WORKERS BY AGE



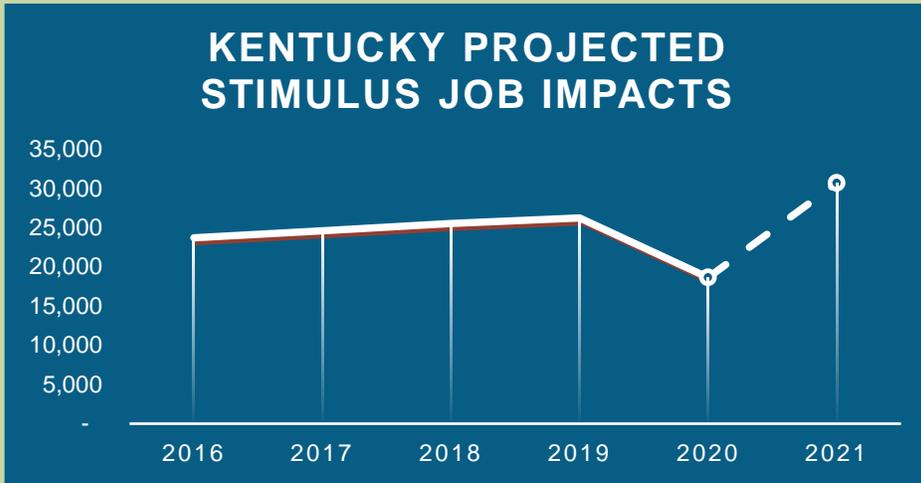
A significant portion of the Kentucky efficiency workforce is in the “55+” category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

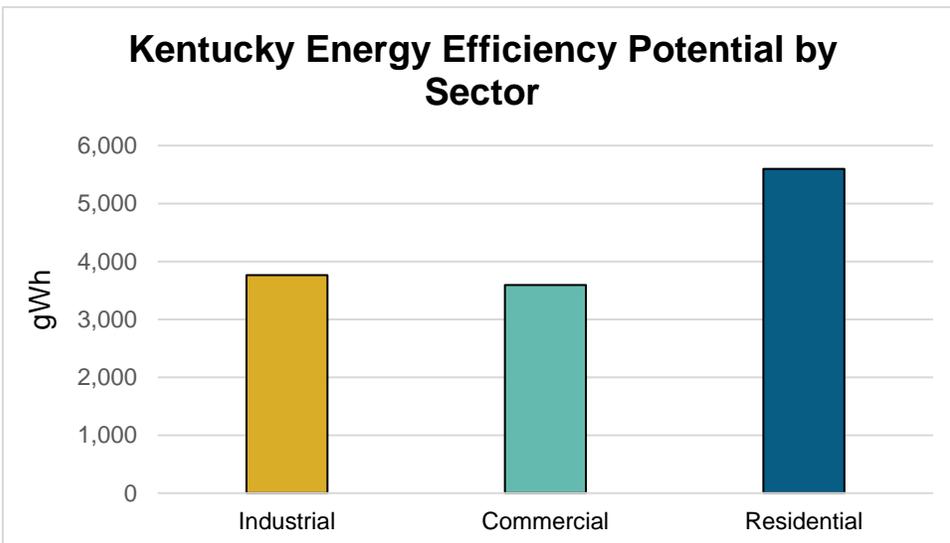


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **12,039 full-time direct, indirect, and induced KY jobs** that will last for at least five years: Over **60,195 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$698 million in GDP** each year for the next five years – resulting in **\$3.5 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?



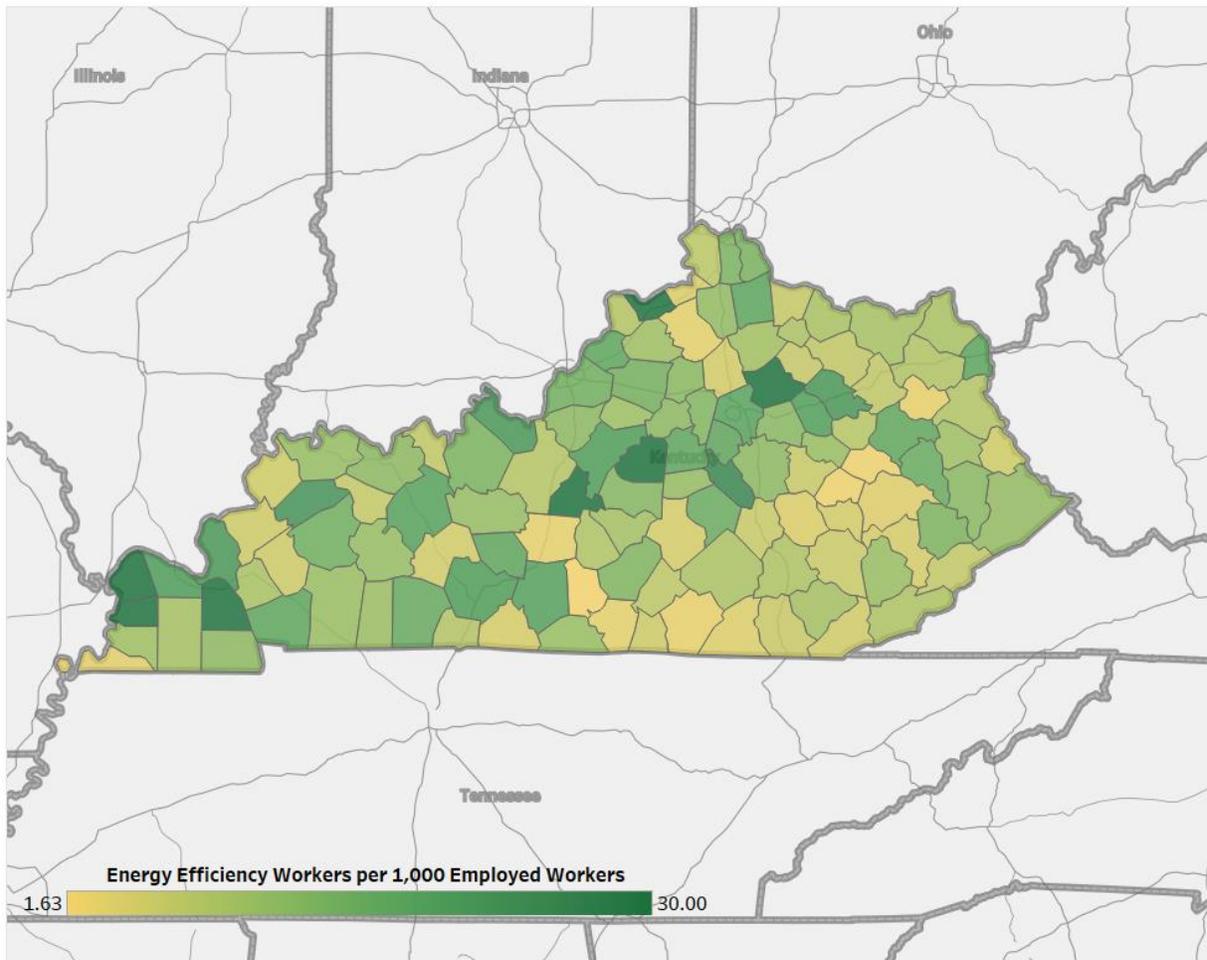
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **970,859** homes.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,812	Bowling Green	917
2	4,860	Cincinnati-Middletown	2,459
3	5,610	Clarksville	415
4	4,230	Elizabethtown	747
5	2,801	Evansville	325
6	3,908	Huntington-Ashland	462
		Lexington-Fayette	3,585
		Louisville/Jefferson County	7,745
		Owensboro	697
		Rural	8,868

### Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	735	11	997	21	852	31	479
2	926	12	1,353	22	491	32	140
3	706	13	1,181	23	313	33	1,828
4	760	14	1,676	24	496	34	374
5	1,277	15	677	25	201	35	74
6	539	16	462	26	721	36	448
7	772	17	682	27	441	37	118
8	360	18	668	28	227	38	228
9	640	19	2,195	29	596		
10	664	20	666	30	258		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	871	28	331	55	275	82	313
2	514	29	826	56	358	83	91
3	<5	30	830	57	<5	84	274
4	420	31	500	58	43	85	207
5	89	32	878	59	28	86	53
6	126	33	459	60	727	87	75
7	970	34	308	61	440	88	<5
8	32	35	153	62	16	89	16
9	252	36	21	63	809	90	66
10	888	37	28	64	165	91	128
11	<5	38	145	65	15	92	376
12	41	39	831	66	<5	93	104
13	<5	40	131	67	242	94	70
14	121	41	1,586	68	29	95	219
15	130	42	<5	69	<5	96	254
16	878	43	<5	70	306	97	151
17	385	44	<5	71	549	98	416
18	37	45	312	72	627	99	68
19	58	46	<5	73	227	100	<5
20	<5	47	716	74	94		
21	220	48	150	75	822		
22	67	49	64	76	324		
23	280	50	235	77	<5		
24	326	51	206	78	<5		
25	<5	52	647	79	<5		
26	546	53	294	80	36		
27	71	54	233	81	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.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.

# Louisiana

## 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

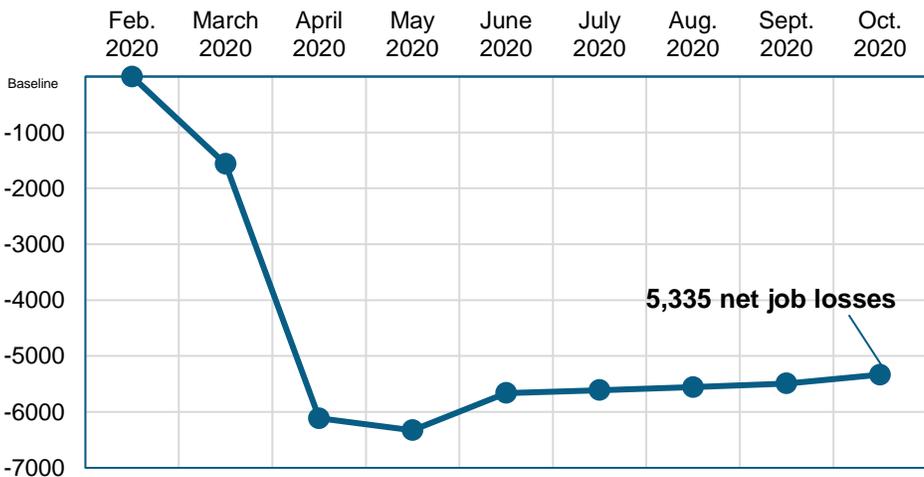
The 2020 pandemic shocked our nation's labor market with massive job losses. Louisiana's energy efficiency industry lost as many as 5,335 jobs since its onset, a 22.9% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Louisiana EE workforce grew steadily, gaining 18.3% 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.

EE Job Losses in Louisiana due to COVID-19



Presented by:



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

# What are EE Jobs?

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

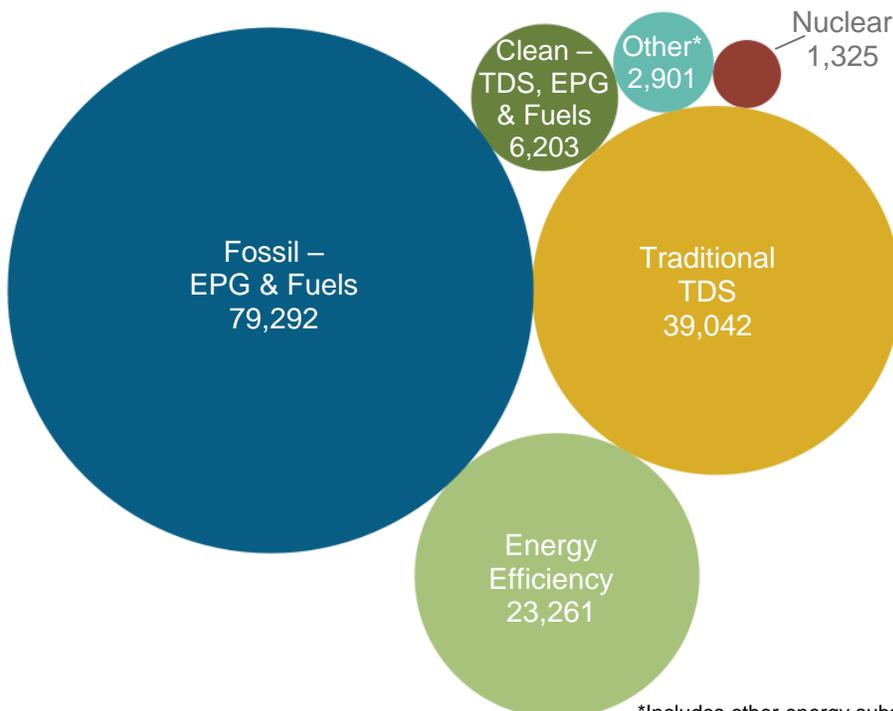
## What type of work are EE workers doing?

- 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 Louisiana?

Energy efficiency is the third largest energy sector in Louisiana.

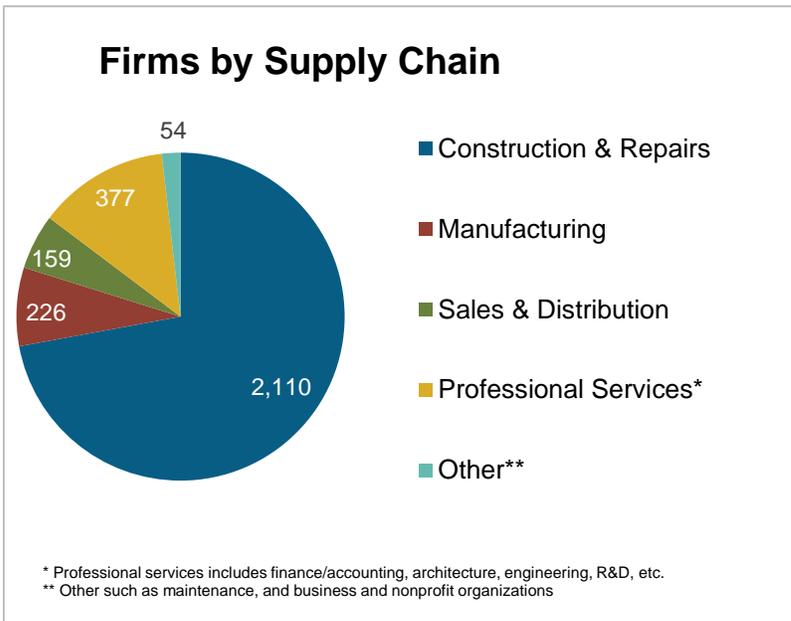
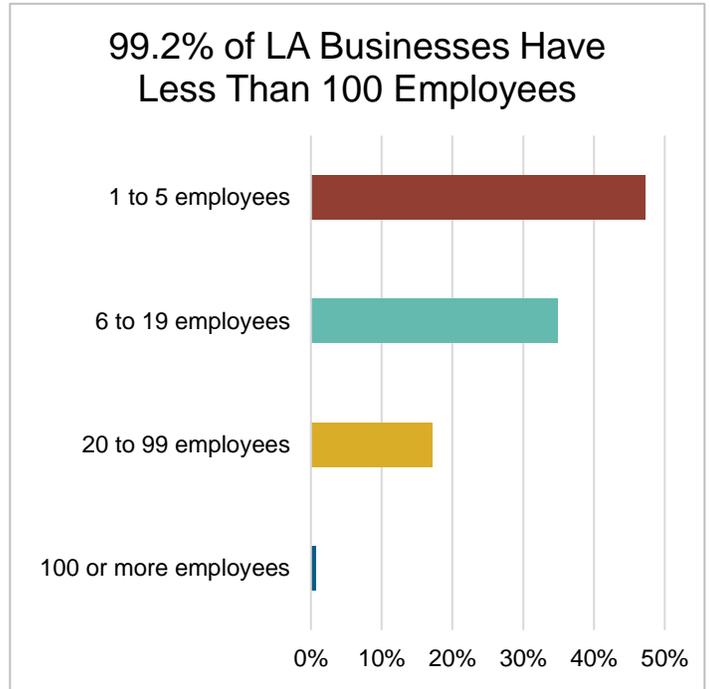


Fossil fuel jobs are historically key to Louisiana's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 18.3% from 2016-2019, adding 3,605 jobs.

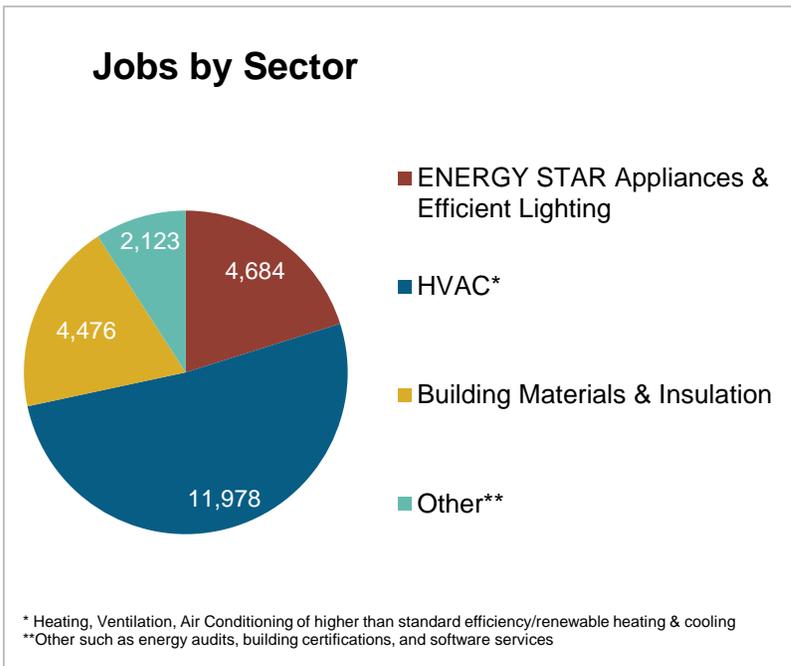
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Louisiana?

EE Sector =  
**2,926**  
 Businesses in LA  
 (Dec. 2019)  
 ↑ **140** over 2018



**8.8%**  
 of Louisiana  
 residents employed  
 in EE are **Veterans**



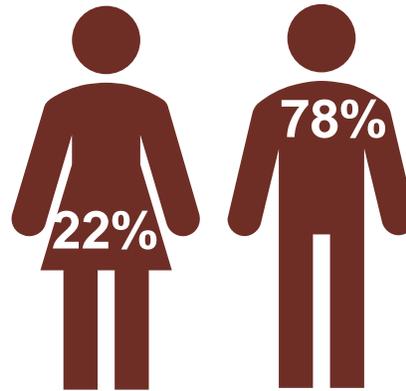
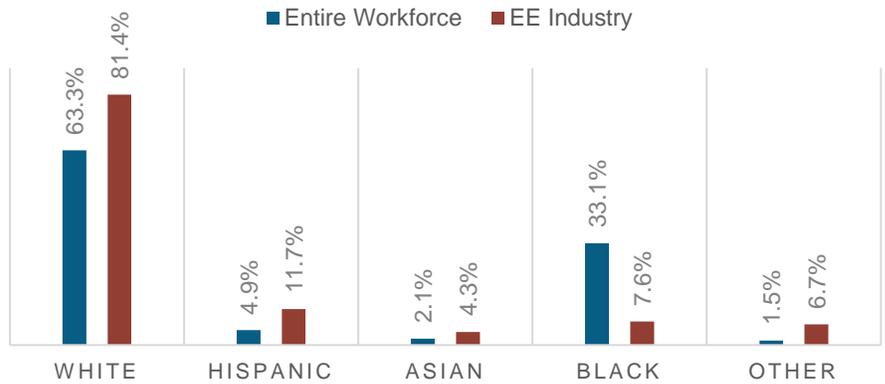
**Energy Efficiency  
 Construction Workers  
 Make Up 11% of LA  
 Construction Workers**

# How is EE Doing regarding Diversity in Louisiana?

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 Louisiana communities are represented in the EE sector.

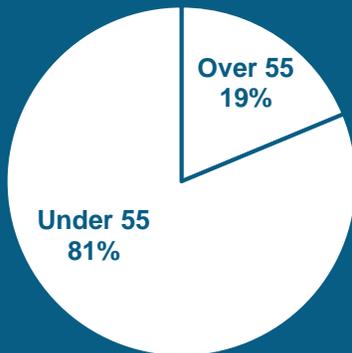
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## LA EE INDUSTRY BY RACE AND ETHNICITY



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.

## LOUISIANA'S EE WORKERS BY AGE



A significant portion of the Louisiana efficiency workforce is in the "55+" category. 19% 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.

## LOUISIANA PROJECTED STIMULUS JOB IMPACTS



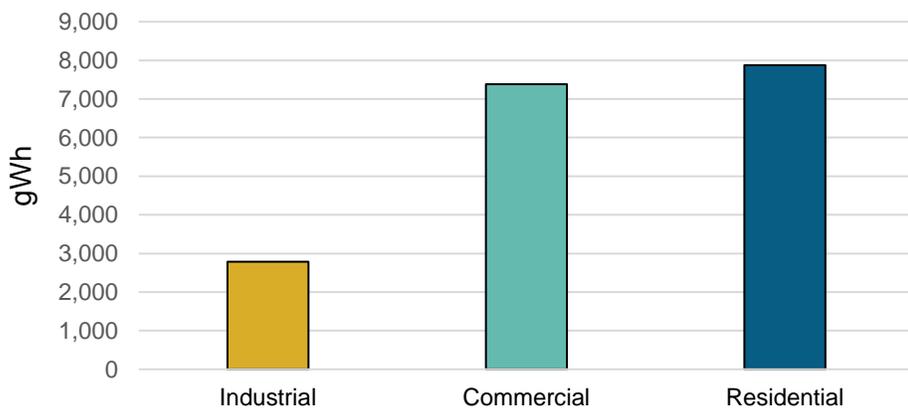
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **15,900 full-time direct, indirect, and induced LA jobs** that will last for at least five years: Over **79,500 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$998 million in GDP** each year for the next five years – resulting in **\$5.0 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?

### Louisiana Energy Efficiency Potential by Sector



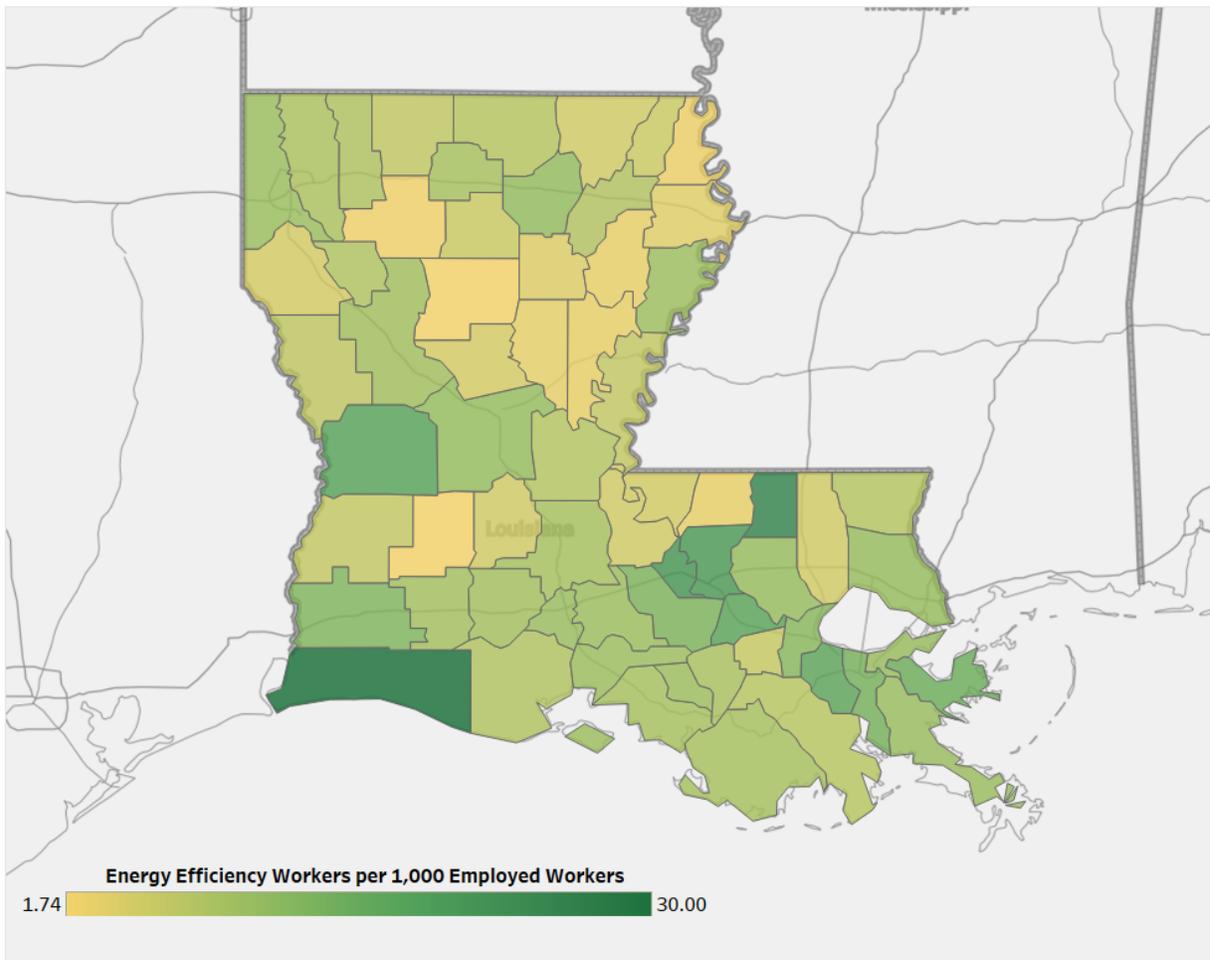
Combined, this would displace the annual electricity consumption of **1,220,404 homes**.

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

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	6,767	Alexandria	679
2	4,079	Baton Rouge	4,215
3	4,269	Houma-Bayou Cane-Thibodaux	1,020
4	3,189	Lafayette	1,919
5	2,405	Lake Charles	1,048
6	2,552	Monroe	795
		New Orleans-Metairie-Kenner	7,816
		Shreveport-Bossier City	2,066
		Rural	3,704

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	765	11	1,020	21	430	31	207
2	1,022	12	127	22	679	32	473
3	901	13	274	23	1,354	33	826
4	1,367	14	1,837	24	263	34	50
5	1,285	15	305	25	1,111	35	7
6	1,231	16	<5	26	140	36	644
7	286	17	339	27	286	37	1,120
8	27	18	224	28	192	38	339
9	955	19	285	29	1,022	39	94
10	760	20	775	30	240		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	439	28	69	55	<5	82	327
2	1,153	29	358	56	287	83	135
3	257	30	<5	57	40	84	220
4	<5	31	1,188	58	402	85	210
5	34	32	63	59	156	86	12
6	<5	33	459	60	23	87	<5
7	112	34	288	61	495	88	<5
8	<5	35	15	62	151	89	165
9	<5	36	152	63	13	90	81
10	127	37	110	64	305	91	1,222
11	229	38	264	65	358	92	<5
12	68	39	232	66	955	93	517
13	314	40	<5	67	330	94	129
14	574	41	93	68	<5	95	8
15	21	42	9	69	<5	96	<5
16	<5	43	257	70	<5	97	34
17	69	44	191	71	<5	98	<5
18	275	45	<5	72	335	99	64
19	138	46	80	73	466	100	30
20	111	47	197	74	522	101	<5
21	43	48	277	75	<5	102	105
22	142	49	36	76	347	103	132
23	15	50	236	77	65	104	<5
24	264	51	829	78	778		
25	510	52	48	79	118		
26	<5	53	49	80	1,193		
27	65	54	80	81	100		



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# Maine

## Energy Efficiency Jobs in America



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*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.*

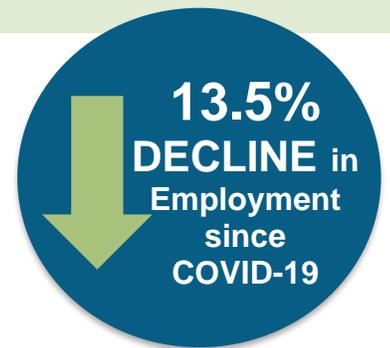
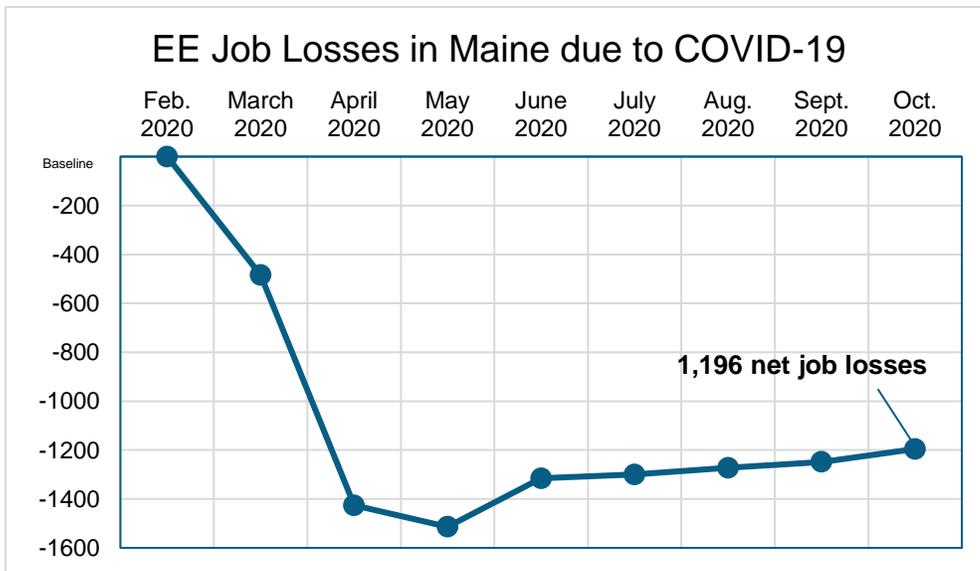
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Maine's energy efficiency industry lost as many as 1,196 jobs since its onset, a 13.5% 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 Maine EE workforce grew steadily, gaining 9.8% 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.



Presented by:



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

# What are EE Jobs?

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

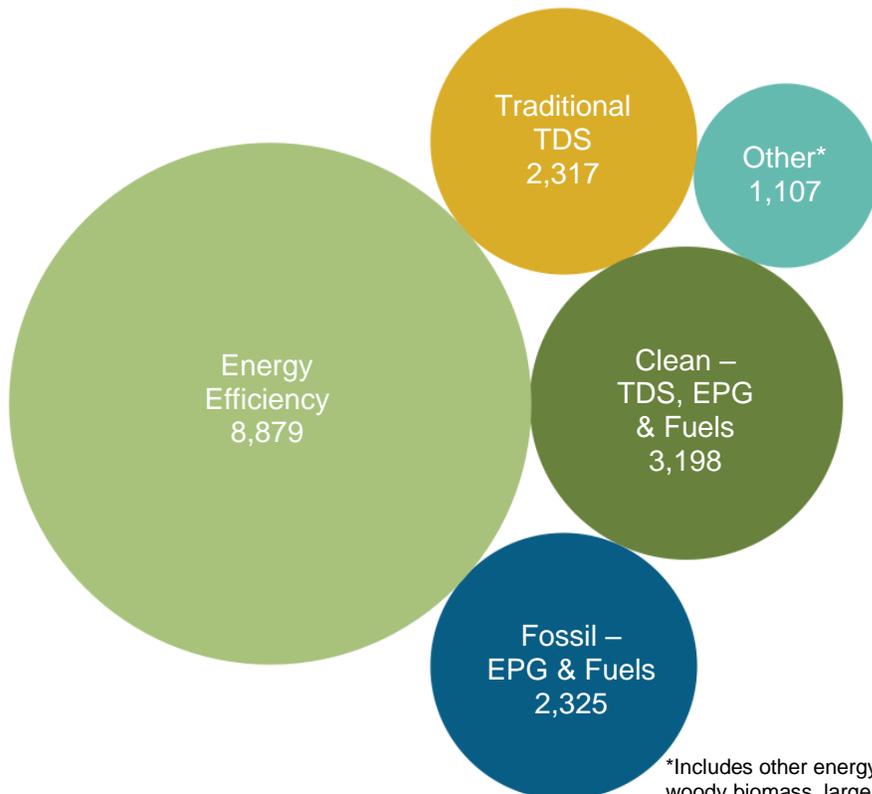
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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## How does EE compare in Maine?

Energy efficiency is the largest energy sector in Maine.

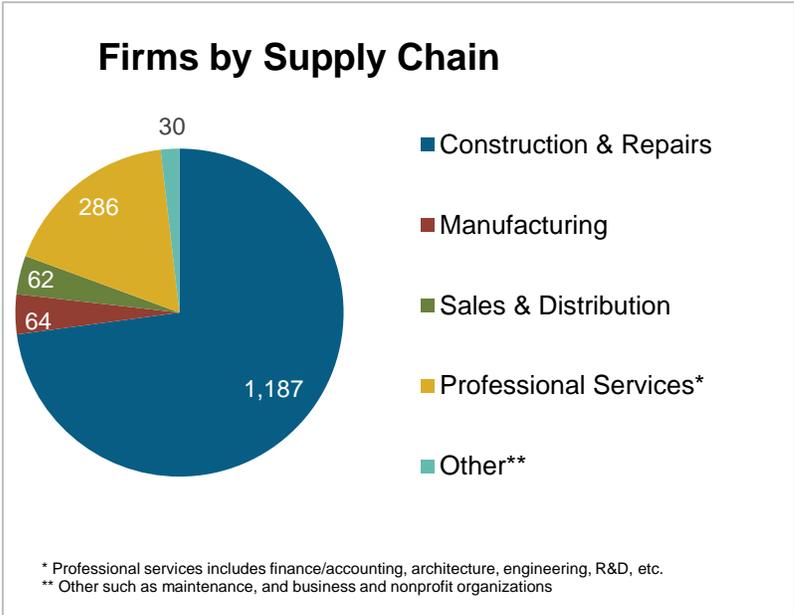
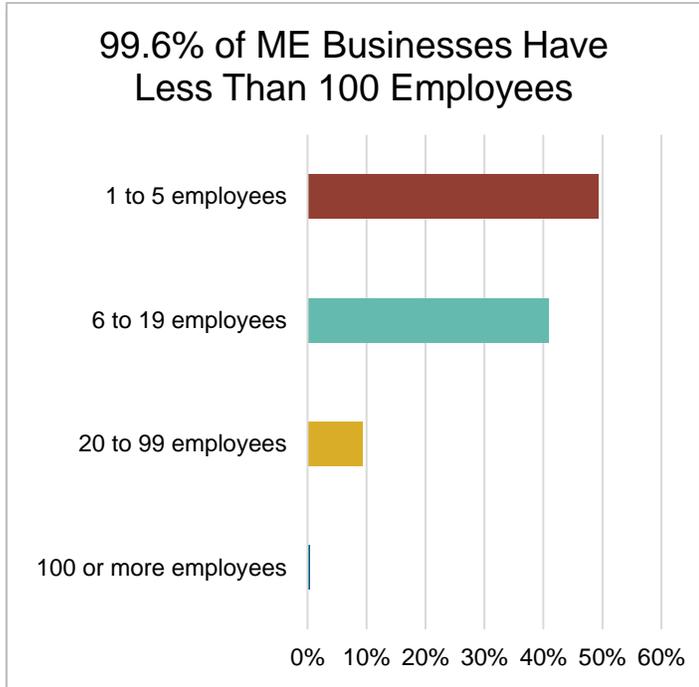


Energy efficiency in Maine has seen consistent, reliable job growth – 9.8 percent since 2016.

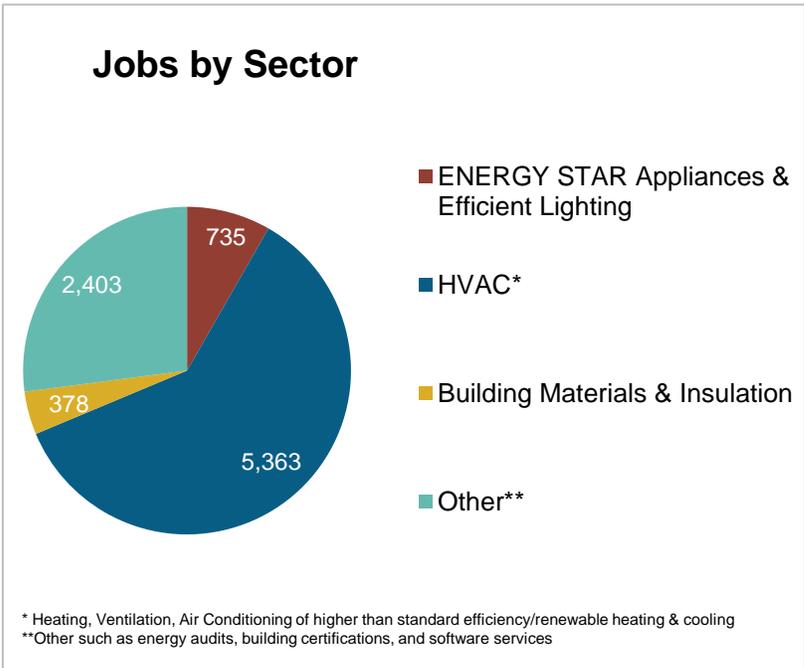
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Maine?

EE Sector =  
**1,629**  
 Businesses in ME  
 (Dec. 2019)  
 ↑ **40** over 2018



**7.8%**  
 of Maine  
 residents employed  
 in EE are **Veterans**

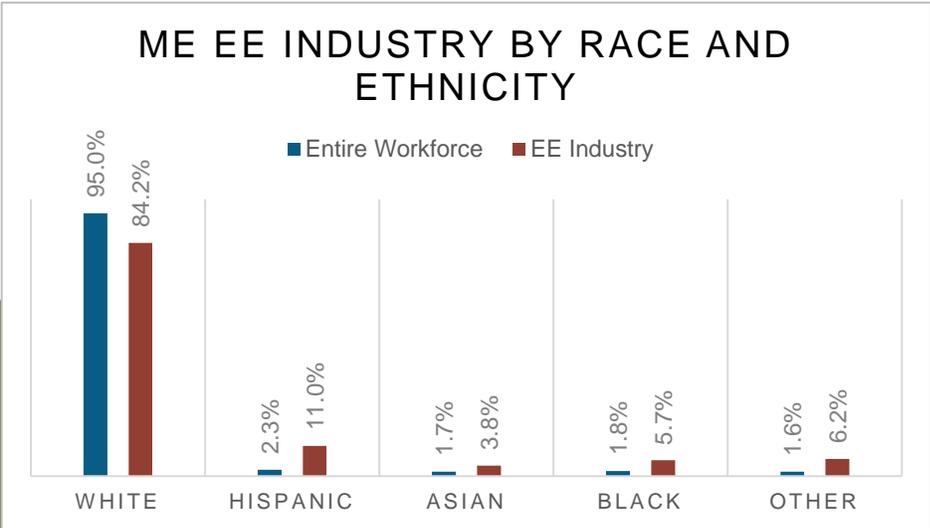



**Energy Efficiency  
 Construction Workers  
 Make Up 20% of ME  
 Construction Workers**

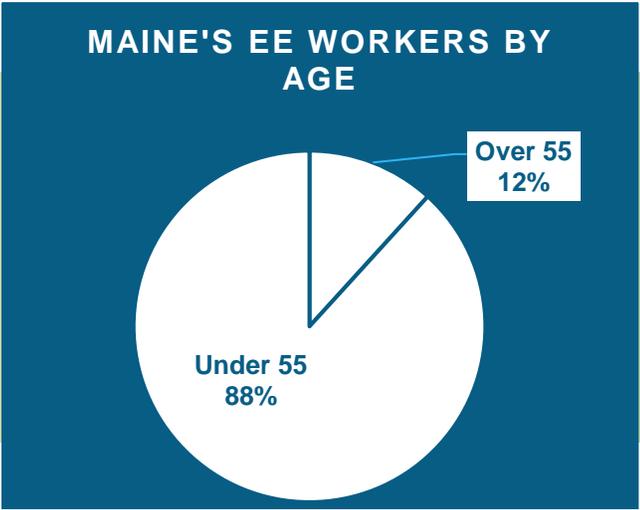
# How is EE Doing regarding Diversity in Maine?

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 Maine 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.



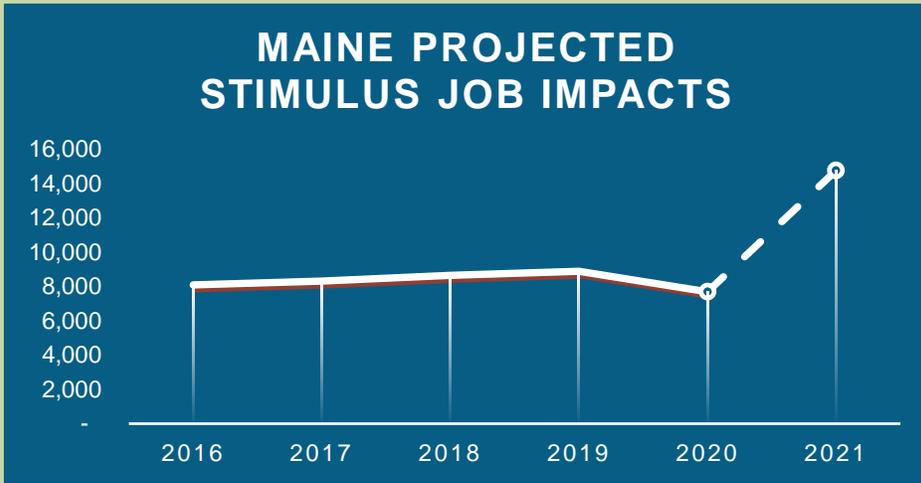
A significant portion of the Maine efficiency workforce is in the "55+" category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

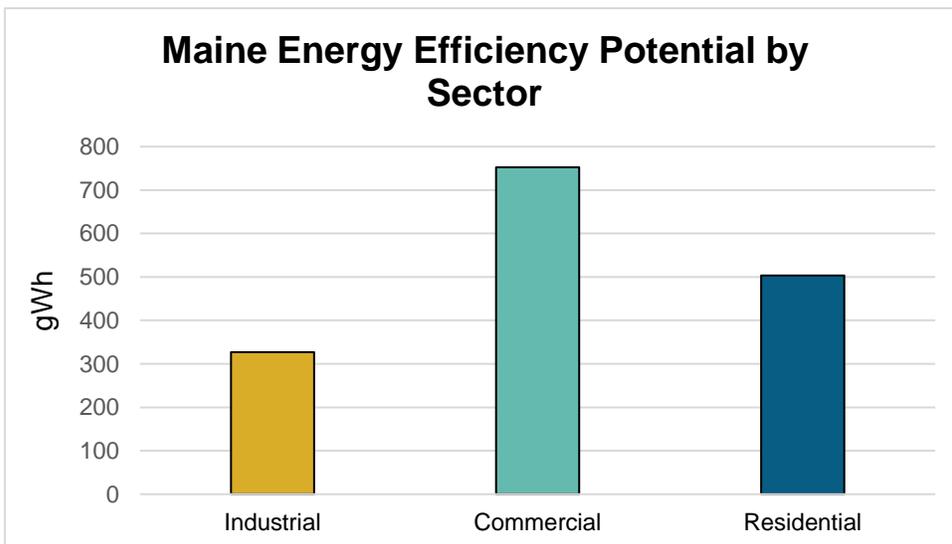


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **7,070 full-time direct, indirect, and induced ME jobs** that will last for at least five years: Over **35,351 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$412 million in GDP** each year for the next five years – resulting in **\$2.1 billion in economic activity**, more than 3.8 times the investment.

## How much energy efficiency is untapped in your state?



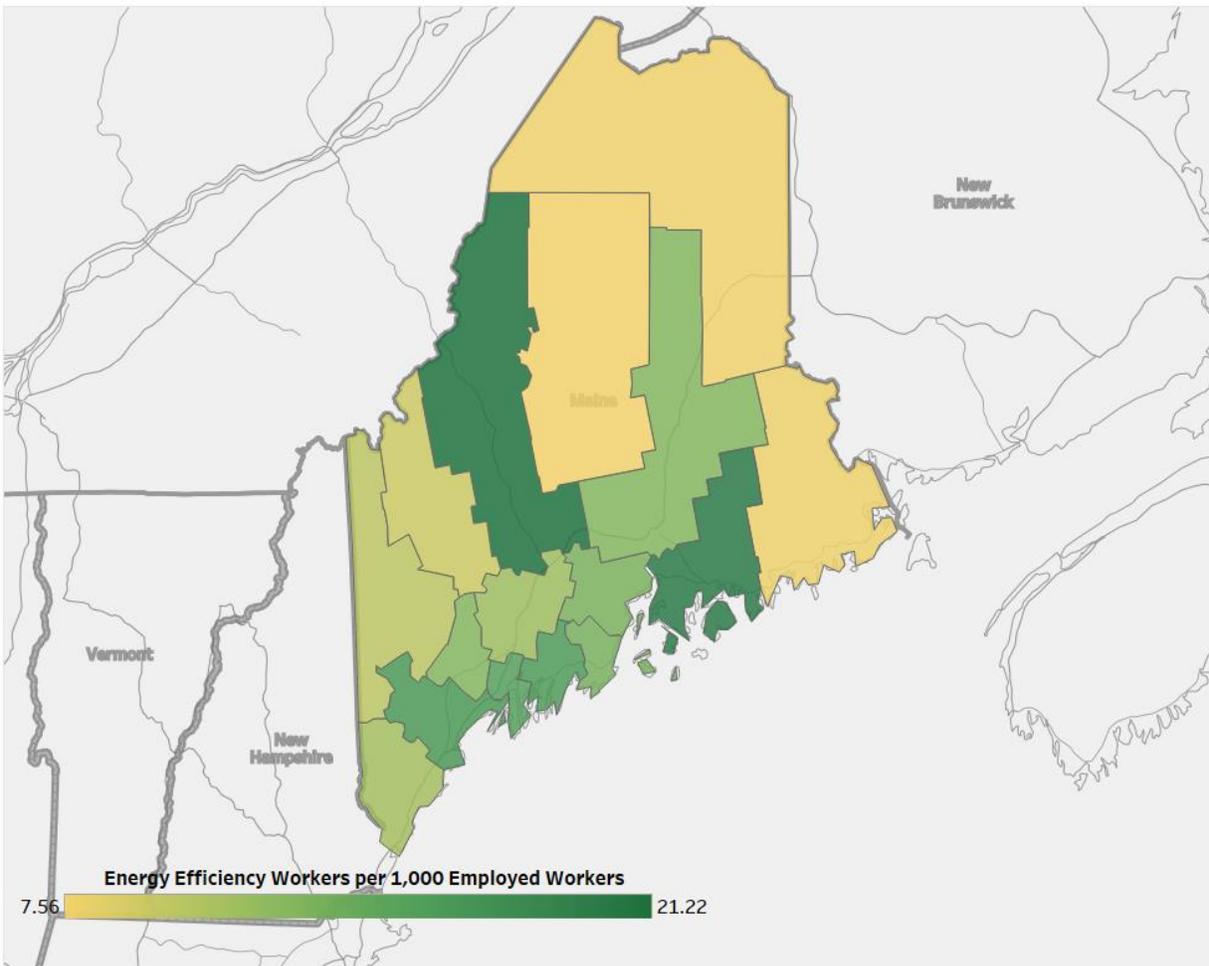
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **234,715** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,125	Bangor	876
2	3,755	Lewiston-Auburn	541
		Portland- South Portland	3,896
		Rural	3,567

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	141	11	558	21	175	31	193
2	221	12	316	22	182	32	402
3	226	13	300	23	241	33	228
4	149	14	486	24	377	34	139
5	439	15	27	25	504	35	282
6	193	16	182	26	64		
7	435	17	176	27	743		
8	173	18	223	28	<5		
9	51	19	208	29	351		
10	135	20	211	30	149		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	128	40	<5	79	39	118	32
2	25	41	<5	80	26	119	76
3	129	42	<5	81	117	120	<5
4	167	43	80	82	6	121	30
5	63	44	<5	83	24	122	19
6	<5	45	141	84	19	123	21
7	<5	46	30	85	<5	124	<5
8	91	47	62	86	<5	125	<5
9	246	48	105	87	36	126	<5
10	61	49	133	88	13	127	<5
11	<5	50	<5	89	78	128	79
12	<5	51	91	90	120	129	46
13	29	52	<5	91	74	130	41
14	120	53	69	92	47	131	171
15	<5	54	65	93	88	132	<5
16	62	55	91	94	98	133	59
17	28	56	33	95	51	134	106
18	27	57	69	96	328	135	78
19	<5	58	173	97	89	136	73
20	65	59	<5	98	68	137	72
21	18	60	<5	99	22	138	32
22	67	61	<5	100	59	139	34
23	46	62	134	101	395	140	45
24	150	63	<5	102	59	141	44
25	<5	64	15	103	<5	142	<5
26	104	65	49	104	41	143	8
27	296	66	22	105	27	144	77
28	138	67	<5	106	56	145	16
29	<5	68	50	107	66	146	56
30	37	69	84	108	60	147	63
31	<5	70	62	109	<5	148	28
32	<5	71	35	110	<5	149	<5
33	<5	72	39	111	<5	150	58
34	<5	73	50	112	107	151	6
35	<5	74	39	113	43	152	<5
36	500	75	49	114	<5	153	<5
37	<5	76	70	115	27		
38	330	77	258	116	16		
39	6	78	116	117	58		



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# Maryland

## Energy Efficiency Jobs in America

Oct 2020

63,536\*

Dec 2019

71,337

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### COVID-19 Impacts on the EE Job Sector

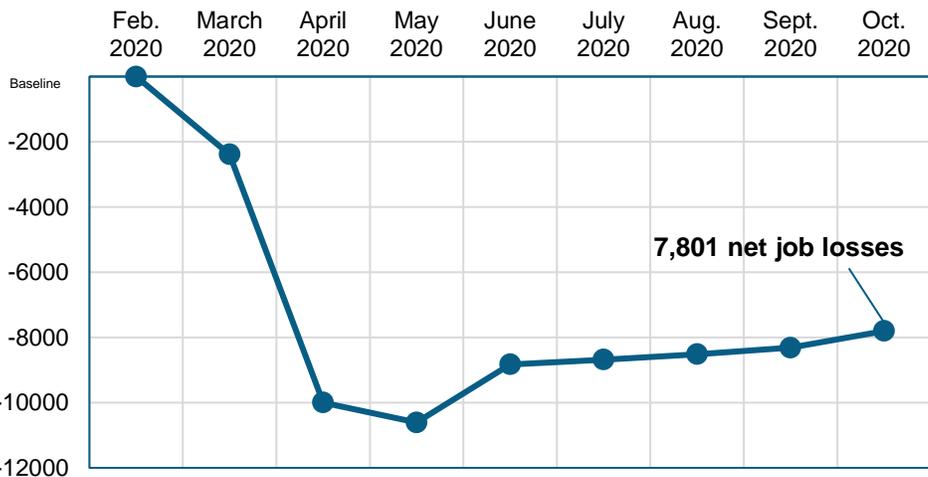
The 2020 pandemic shocked our nation's labor market with massive job losses. Maryland's energy efficiency industry lost as many as 7,801 jobs since its onset, a 10.9% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Maryland EE workforce grew steadily, gaining 6.4% 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.

#### EE Job Losses in Maryland due to COVID-19



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



Presented by:

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# What are EE Jobs?

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

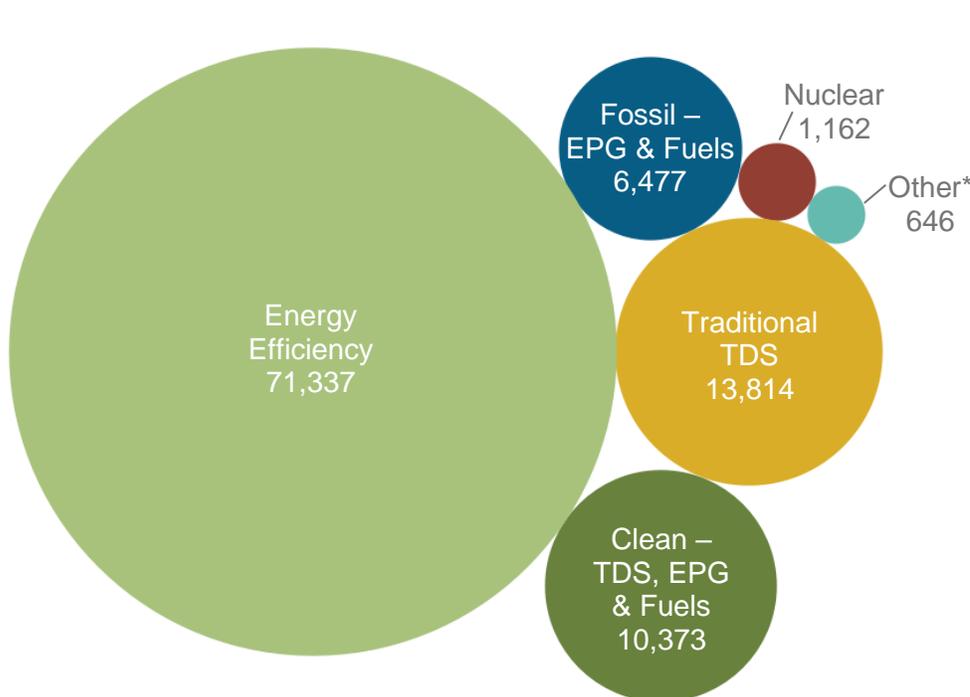
## What type of work are EE workers doing?

- 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 Maryland?

Energy efficiency is the largest energy sector in Maryland.

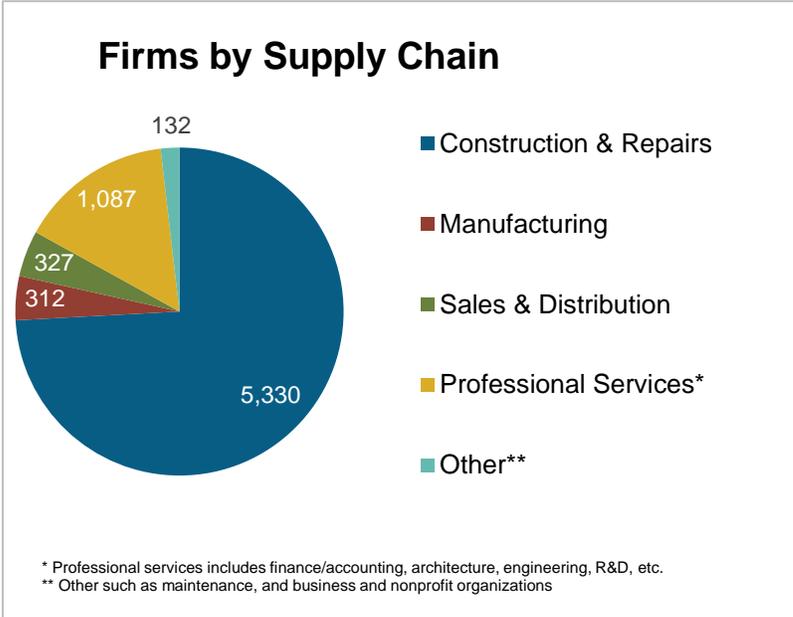
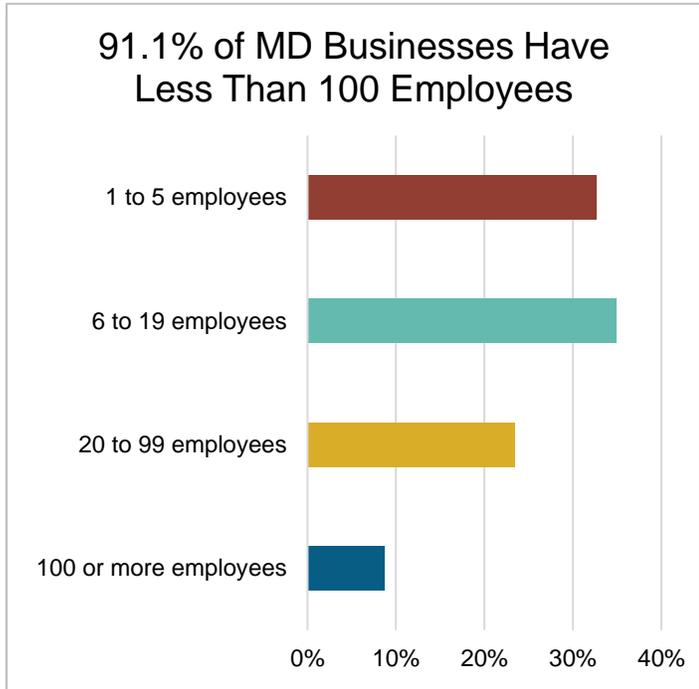


Energy efficiency in Maryland has seen consistent, reliable job growth – 6.4 percent since 2016.

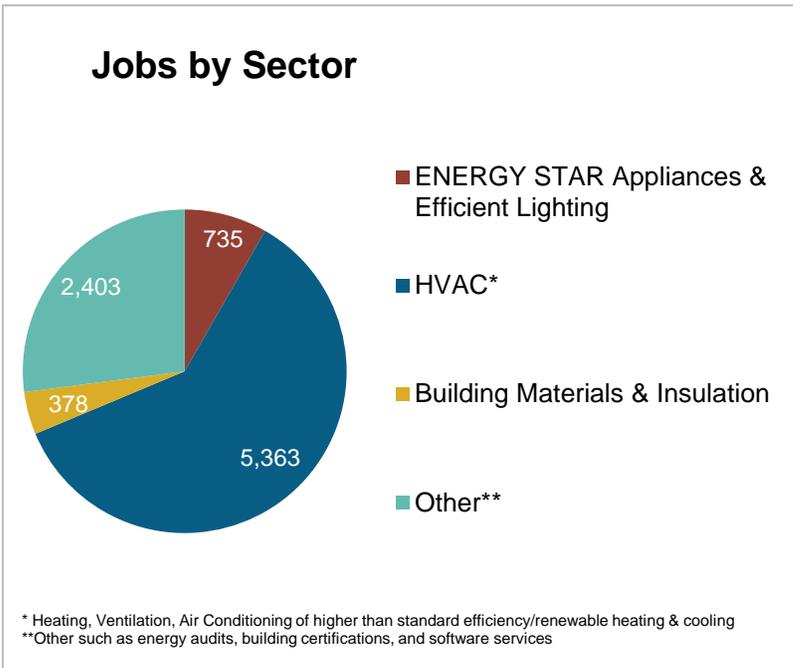
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Maryland?

EE Sector =  
**7,188**  
 Businesses in MD  
 (Dec. 2019)  
 ↑ **80** over 2018



**7.6%**  
 of Maryland  
 residents employed  
 in EE are **Veterans**

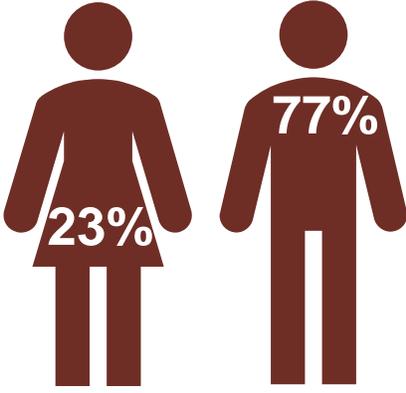
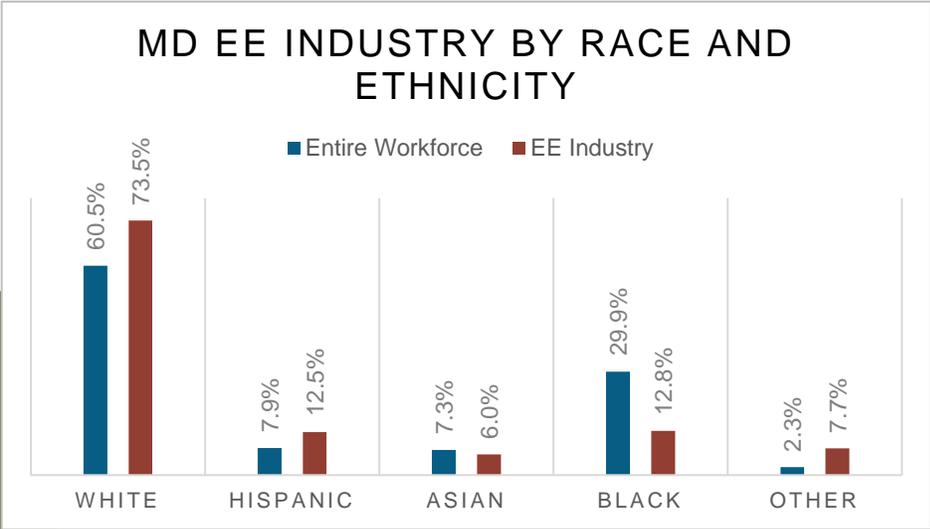


**Energy Efficiency  
 Construction Workers  
 Make Up 31% of MD  
 Construction Workers**

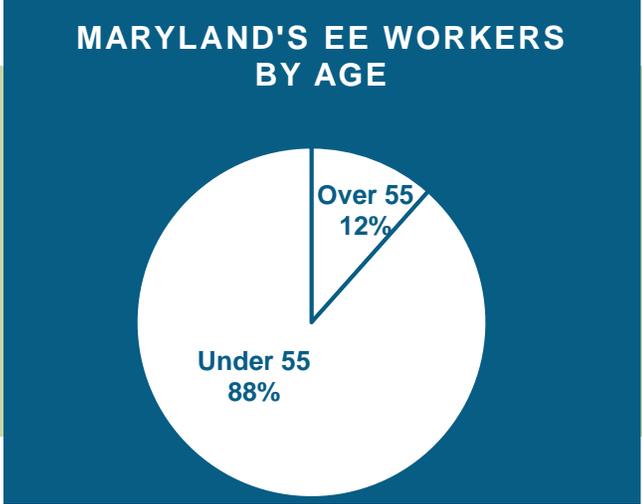
# How is EE Doing regarding Diversity in Maryland?

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 Maryland 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 Maryland efficiency workforce is in the “55+” category. 12% 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.

## MARYLAND PROJECTED STIMULUS JOB IMPACTS



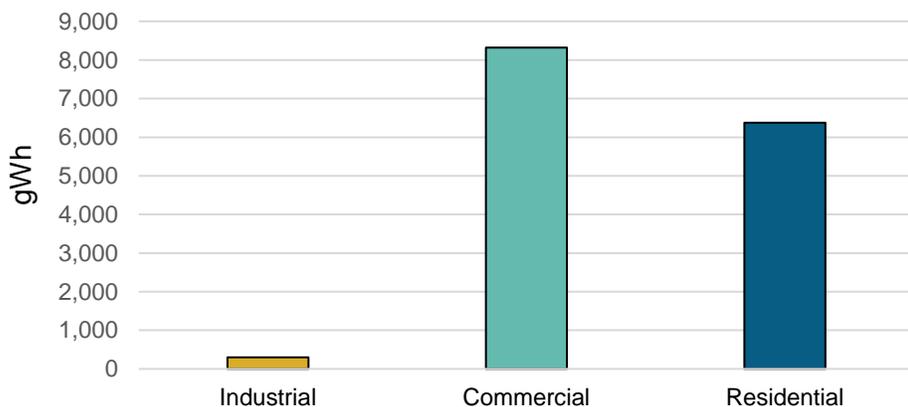
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **10,160 full-time direct, indirect, and induced MD jobs** that will last for at least five years: Over **50,800 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$805 million in GDP** each year for the next five years — resulting in **\$4.0 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?

### Maryland Energy Efficiency Potential by Sector



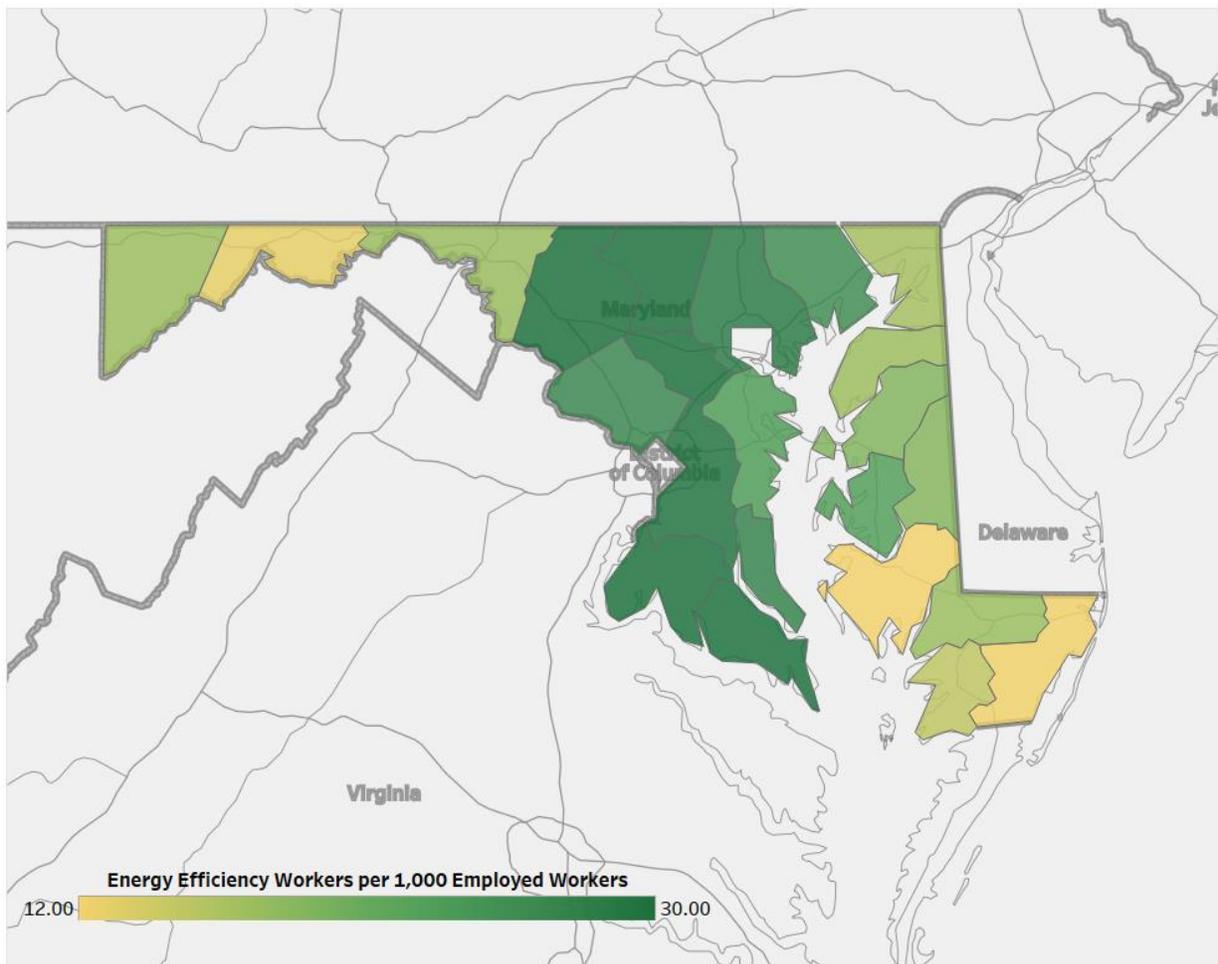
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,281,676 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	13,380	Baltimore-Towson	32,622
2	12,890	Cumberland	651
3	14,136	Hagerstown-Martinsburg	1,511
4	6,081	Philadelphia-Camden-Wilmington	2,065
5	4,882	Salisbury	1,233
6	12,622	Washington-Arlington-Alexandria	28,990
7	1,730	Rural	4,265
8	5,616		

### Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,171	15	4,270	29	760	43	263
2	619	16	3,722	30	2,862	44	<5
3	2,865	17	2,169	31	2,916	45	241
4	2,209	18	1,326	32	40	46	<5
5	1,613	19	188	33	362	47	127
6	2,102	20	1,485	34	592		
7	2,991	21	2,036	35	871		
8	986	22	2,025	36	1,740		
9	2,998	23	964	37	2,451		
10	1,995	24	716	38	1,011		
11	3,556	25	679	39	<5		
12	2,500	26	366	40	4,300		
13	1,421	27	1,048	41	<5		
14	2,231	28	1,387	42	164		

## State House of Delegates

District	Jobs	District	Jobs	District	Jobs	District	Jobs
4	5,188	22	2,038	03B	15	37B	1,114
5	1,589	24	706	09A	79	38A	456
6	2,119	25	1,226	23A	195	38B	128
7	2,947	26	361	23B	201	38C	416
8	969	28	1,509	27A	79	42A	13
10	2,163	32	1,547	27B	419	42B	144
11	3,629	33	2,953	27C	489	47A	126
12	4,712	36	2,325	29A	267		
13	1,799	40	4,234	29B	459		
14	2,303	43	264	29C	27		
15	4,290	45	237	30A	345		
16	3,675	46	294	30B	257		
17	2,143	01A	980	31A	743		
18	1,341	01B	26	34A	583		
19	186	01C	1,143	35A	156		
20	1,669	02A	289	35B	110		
21	2,021	03A	314	37A	1,328		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Massachusetts

## Energy Efficiency Jobs in America

Oct 2020

77,786\*

Dec 2019

88,231

*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.*

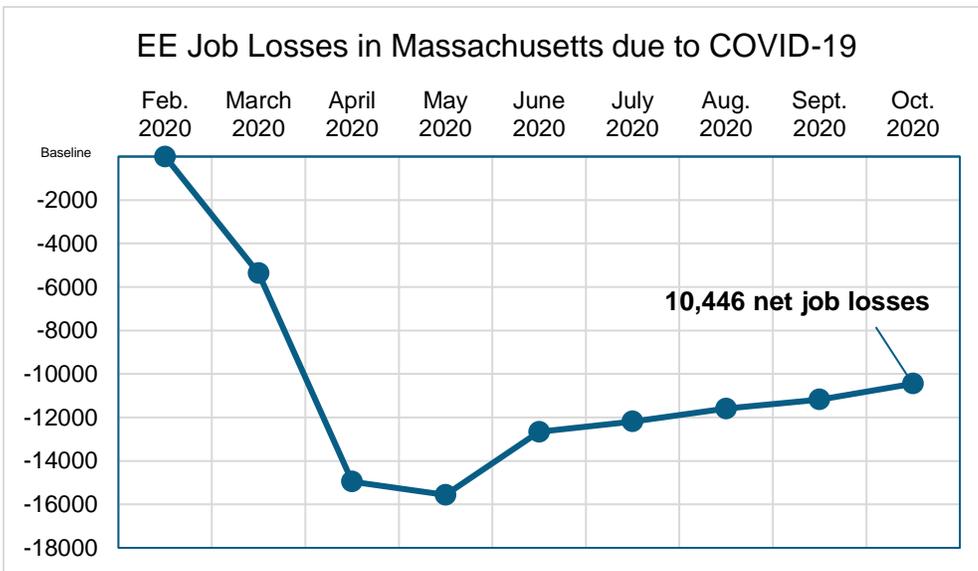
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Massachusetts's energy efficiency industry lost as many as 10,446 jobs since its onset, a 11.8% 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 Massachusetts EE workforce grew steadily, gaining 9.8% 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:

E4 THE FUTURE



# What are EE Jobs?

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

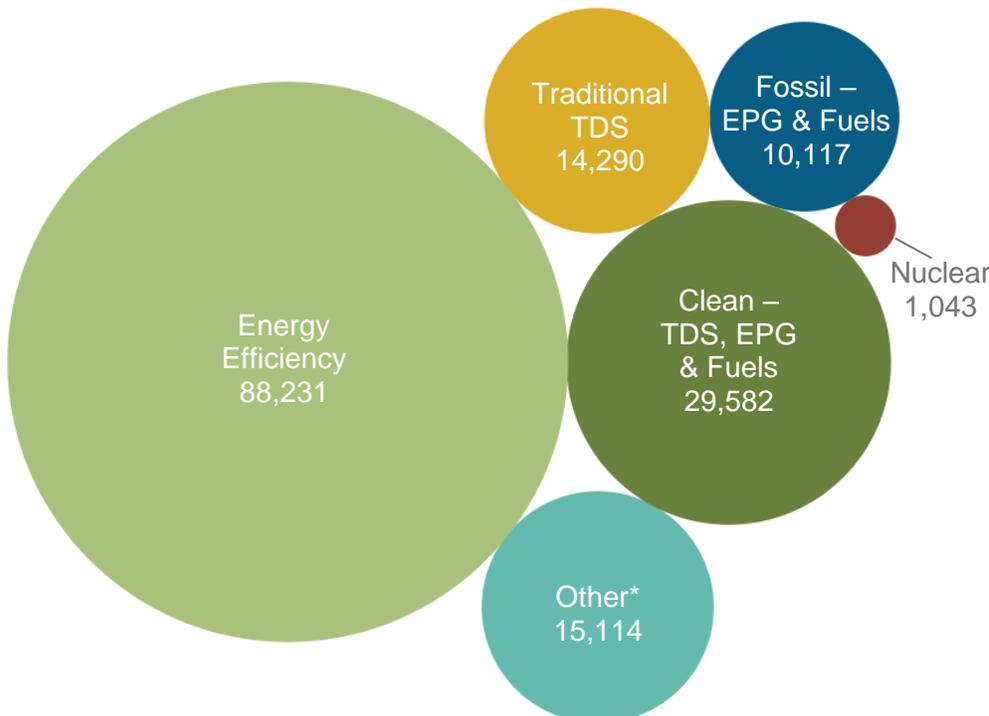
## What type of work are EE workers doing?

- 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 Massachusetts?

Energy efficiency is the largest energy sector in Massachusetts.

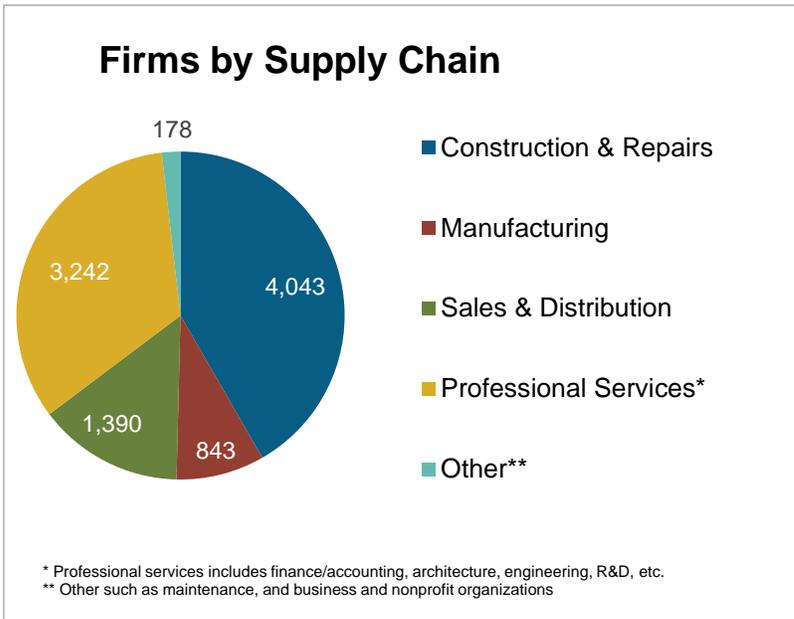
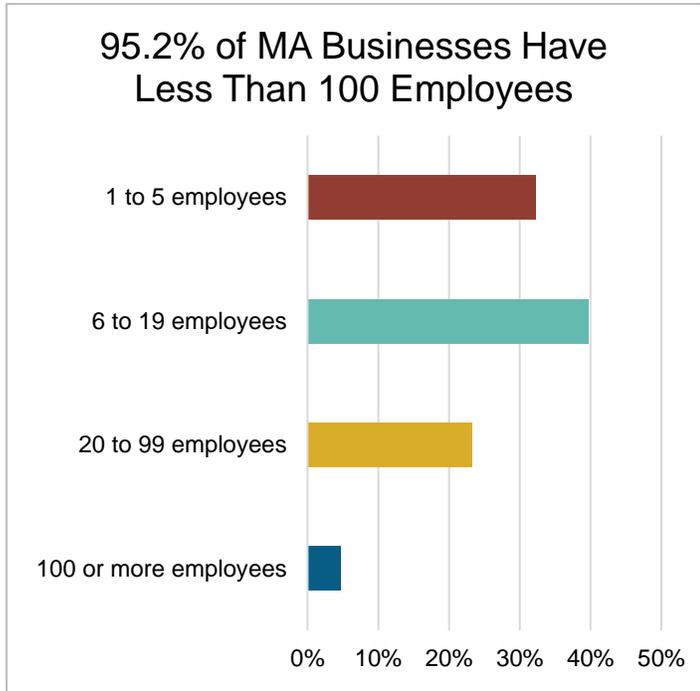


Energy efficiency in Massachusetts has seen consistent, reliable job growth – 9.8 percent since 2016.

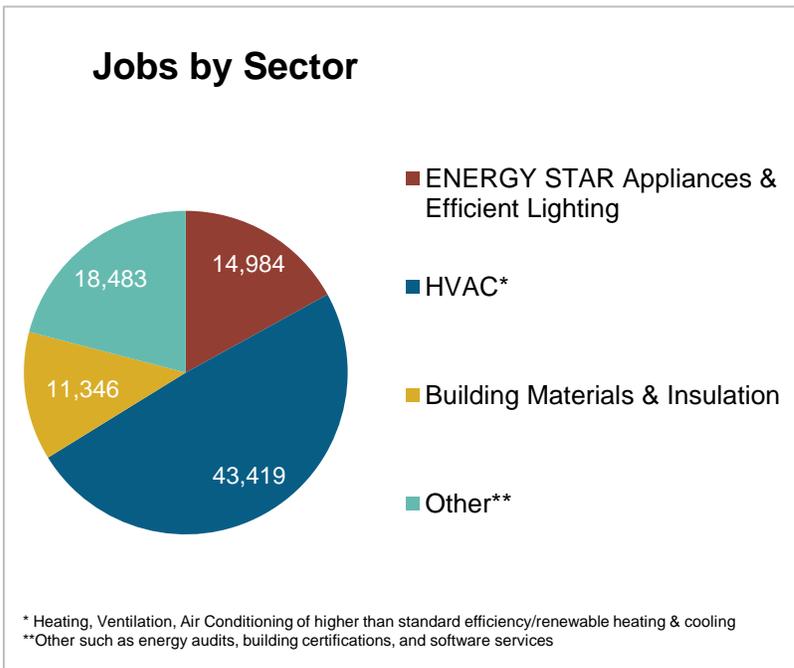
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Massachusetts?

EE Sector =  
**9,696**  
 Businesses in MA  
 (Dec. 2019)  
 ↑ **190** over 2018




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

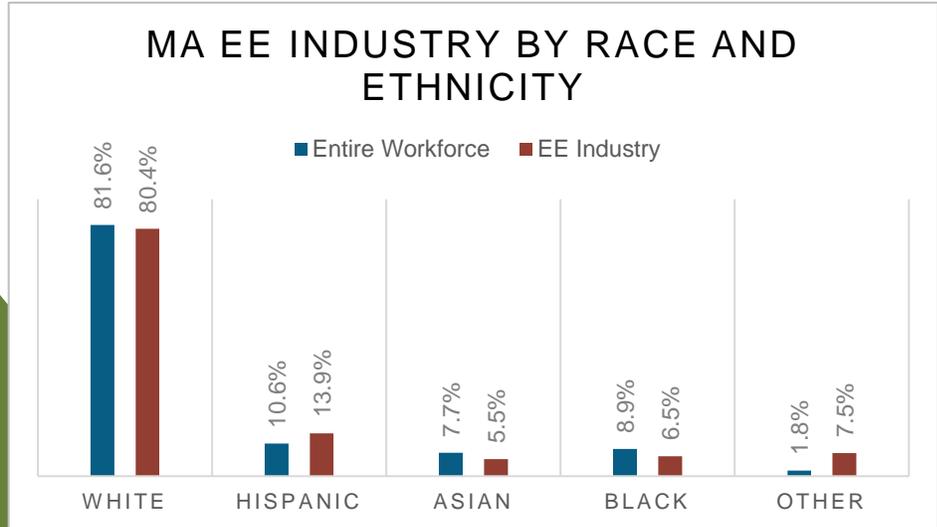



**Energy Efficiency  
 Construction Workers  
 Make Up 21% of MA  
 Construction Workers**

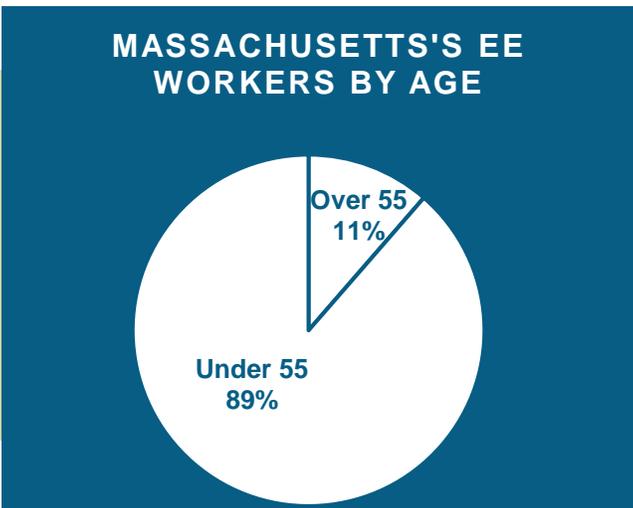
# How is EE Doing regarding Diversity in Massachusetts?

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 Massachusetts 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 Massachusetts 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.

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## MASSACHUSETTS PROJECTED STIMULUS JOB IMPACTS



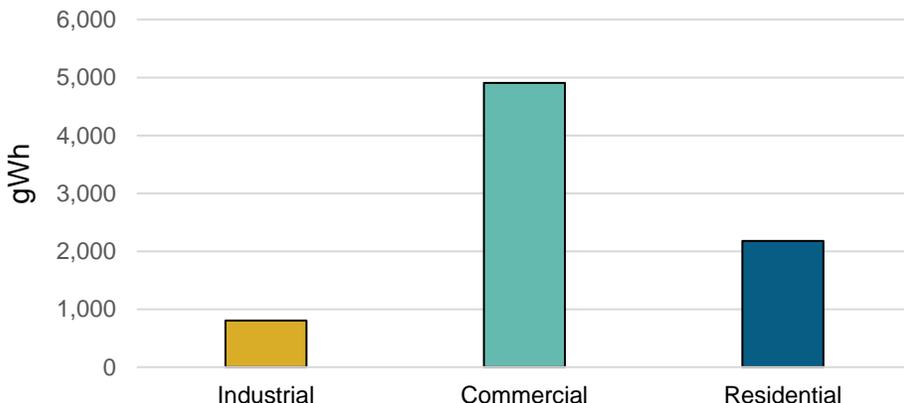
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **12,572 full-time direct, indirect, and induced MA jobs** that will last for at least five years: Over **62,861 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.2 billion in GDP** each year for the next five years — resulting in **\$5.8 billion in economic activity**, more than 4.6 times the investment.

## How much energy efficiency is untapped in your state?

### Massachusetts Energy Efficiency Potential by Sector



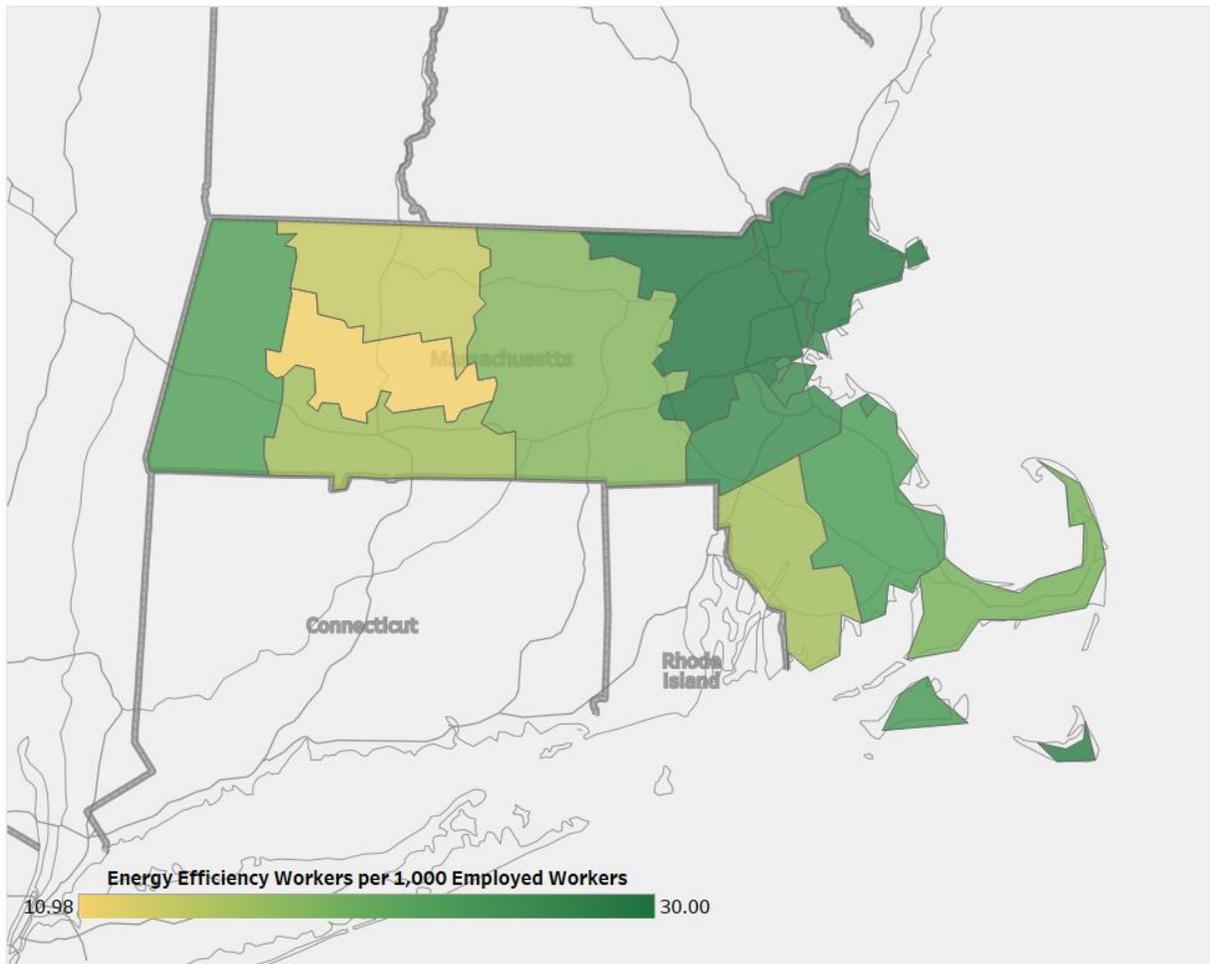
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,145,431 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	7,525	Barnstable Town	3,724
2	7,636	Boston-Cambridge-Quincy	62,899
3	12,087	Pittsfield	1,547
4	10,812	Providence-New Bedford-Fall River	5,418
5	10,396	Springfield	6,941
6	10,806	Worcester	7,147
7	9,499	Rural	555
8	10,940		
9	8,531		

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,627	12	941	23	3,585	34	1,753
2	2,623	13	2,560	24	1,580	35	1,138
3	2,083	14	4,232	25	1,551	36	2,246
4	1,997	15	3,222	26	3,021	37	1,434
5	976	16	3,495	27	5,719	38	1,196
6	1,860	17	2,561	28	864	39	2,405
7	1,215	18	4,222	29	1,751	40	2,708
8	1,220	19	2,394	30	1,343		
9	1,252	20	2,903	31	1,632		
10	2,465	21	2,841	32	2,732		
11	1,135	22	946	33	1,804		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
60	1,437	101	452	143	907	189	748
61	240	102	649	144	217	190	230
62	762	103	451	145	574	192	445
63	472	104	363	147	192	193	142
64	916	105	337	148	227	200	415
65	917	106	234	149	171	201	<5
66	639	107	835	153	421	203	323
68	553	108	365	154	520	204	125
69	712	109	209	155	283	206	458
70	354	110	161	156	1,347	207	191
71	1,052	111	911	157	1,497	208	325
72	405	114	243	159	520	209	723
73	118	115	826	160	490	210	487
74	936	116	265	161	524	211	562
75	38	117	5	162	1,115	212	90
76	500	118	510	164	419	213	418
77	549	119	1,428	165	619	214	299
78	417	120	552	166	534	215	658
79	48	121	1,976	167	716	216	97
80	471	122	1,183	168	424	217	569
81	37	123	667	169	637	218	114
82	253	124	304	170	903	219	45
83	780	125	1,054	171	478		
84	990	126	1,582	172	<5		
85	123	127	785	173	337		
86	402	128	929	174	391		
87	765	129	92	175	281		
88	595	130	310	176	884		
89	877	131	967	177	394		
90	421	132	1,981	178	330		
91	1,159	133	770	179	284		
92	133	134	1,015	180	613		
93	9	136	1,194	181	173		
94	678	137	560	183	219		
95	637	138	933	184	386		
96	2,597	139	350	185	481		
98	136	140	721	186	8,996		
99	1,462	141	1,106	187	710		
100	653	142	667	188	367		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Michigan

## 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.*

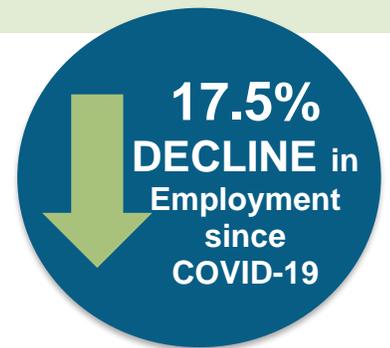
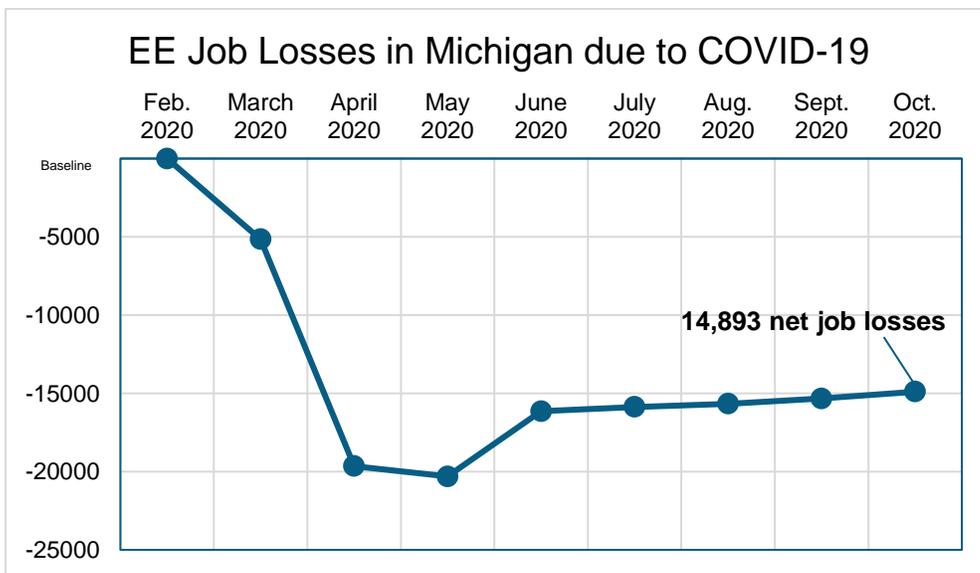
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Michigan's energy efficiency industry lost as many as 14,893 jobs since its onset, a 17.5% decrease compared to total jobs in December 2019—wiping out the last 2 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 Michigan EE workforce grew steadily, gaining 0.3% since 2018.\*\*

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.



Presented by:



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

# What are EE Jobs?

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

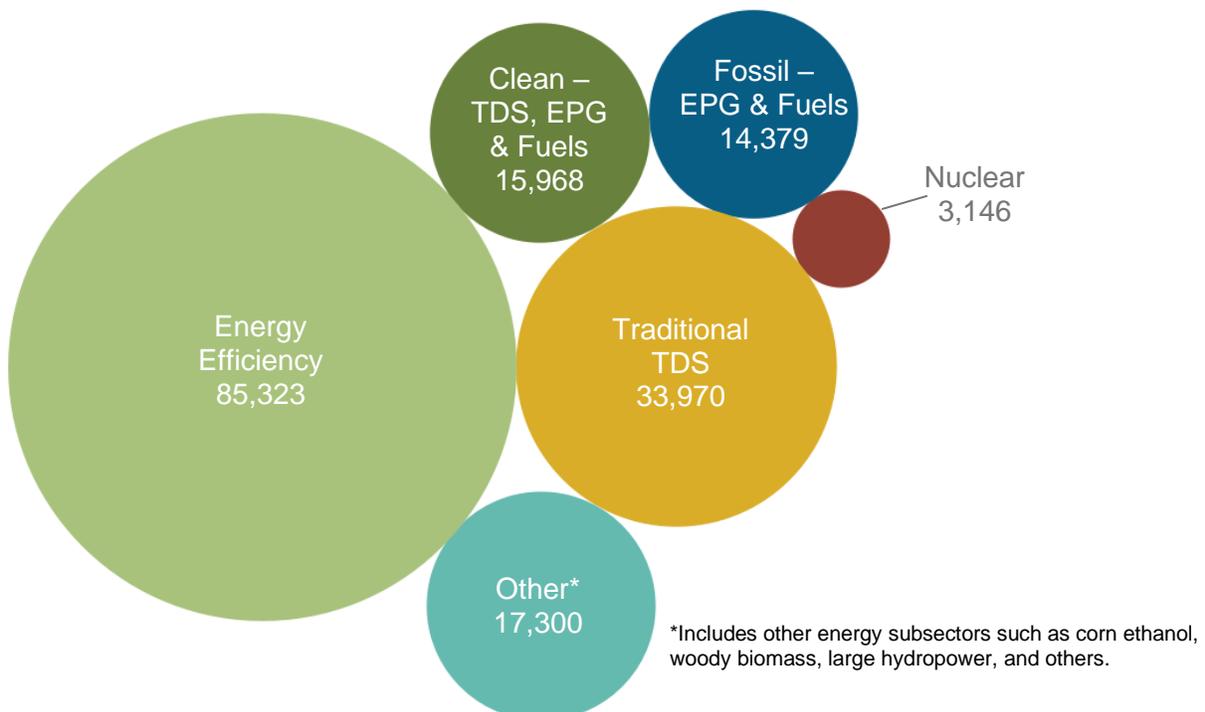
## What type of work are EE workers doing?

- 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
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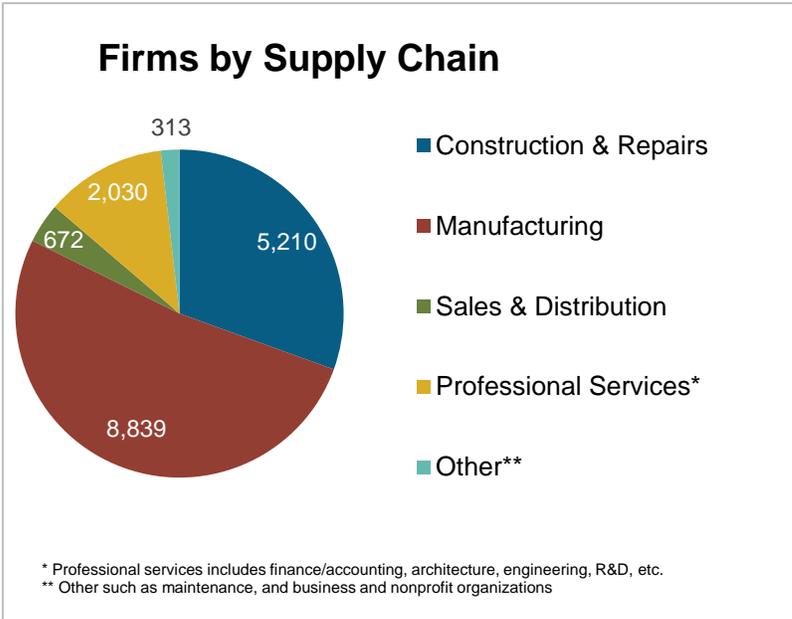
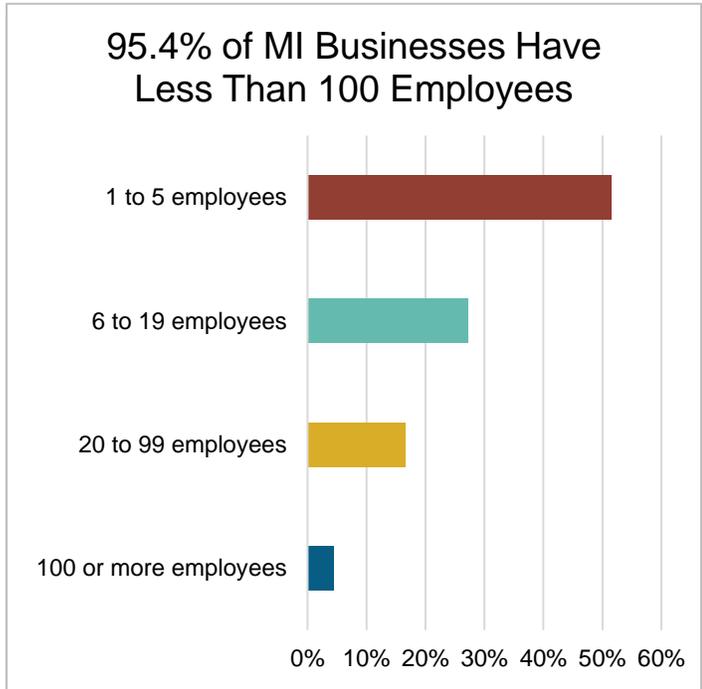
## How does EE compare in Michigan?

Energy efficiency is the largest energy sector in Michigan.

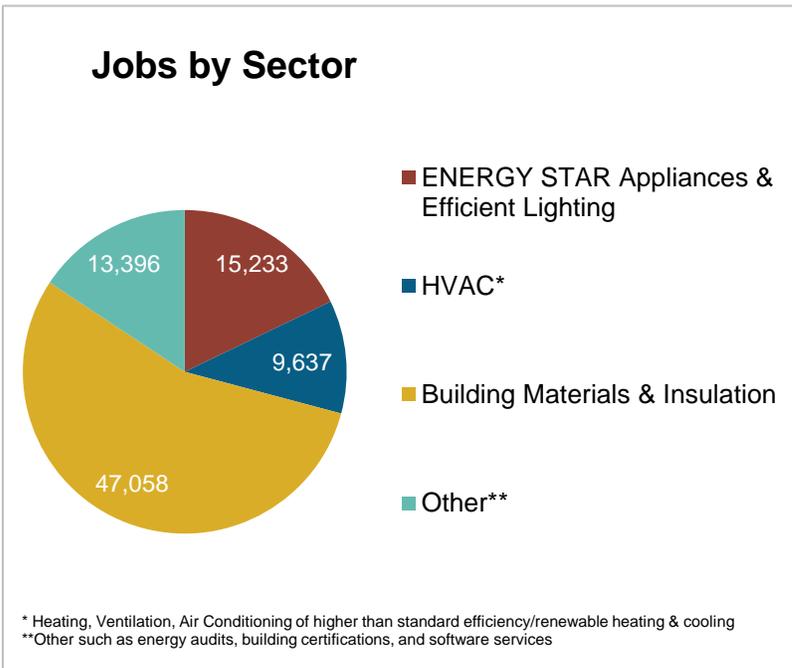


# What do the EE businesses look like in Michigan?

EE Sector =  
**17,065**  
 Businesses in MI  
 (Dec. 2019)  
 ↑ **50** over 2018



**6.6%**  
 of Michigan  
 residents employed  
 in EE are **Veterans**

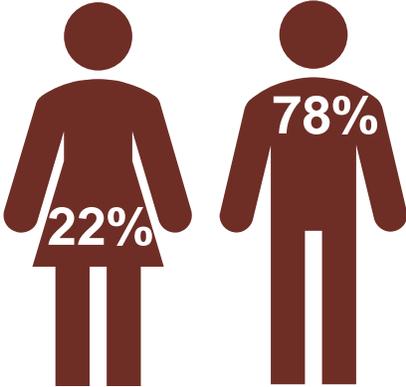
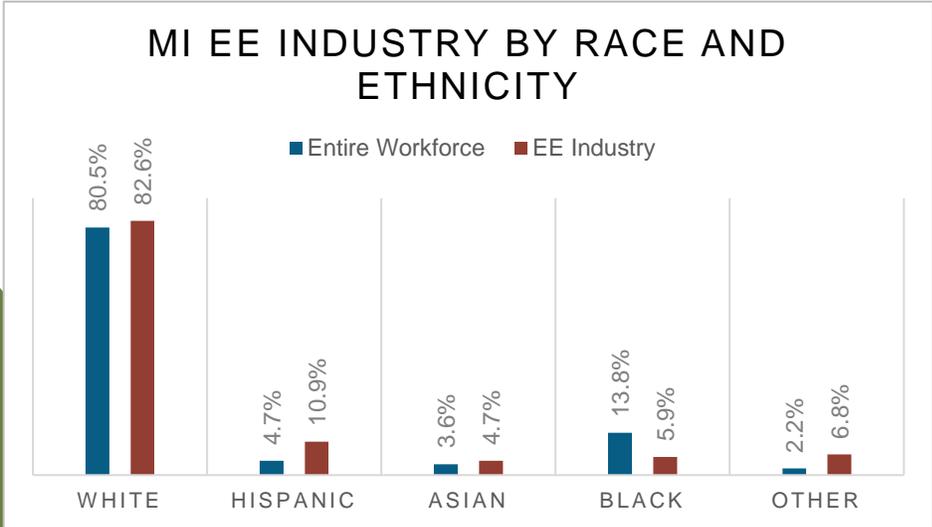


**Energy Efficiency  
 Construction Workers  
 Make Up 14% of MI  
 Construction Workers**

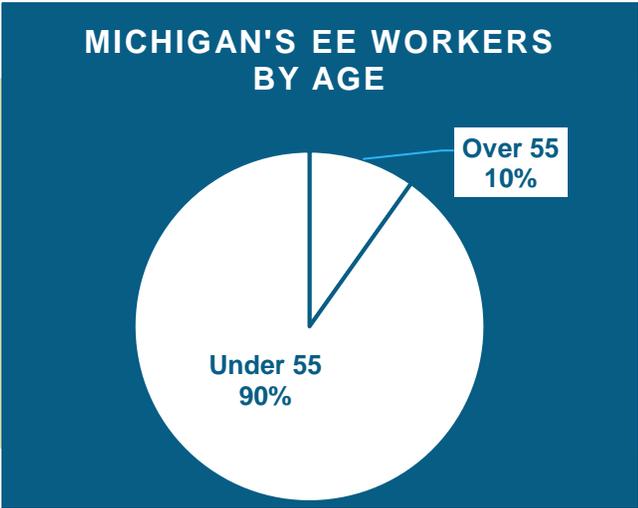
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The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.



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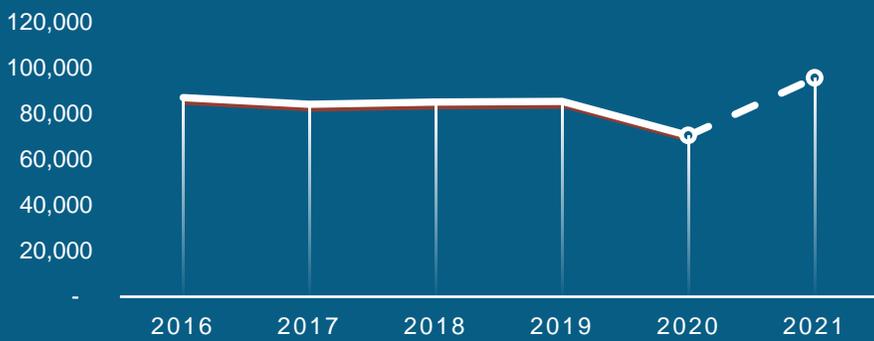
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## MICHIGAN PROJECTED STIMULUS JOB IMPACTS



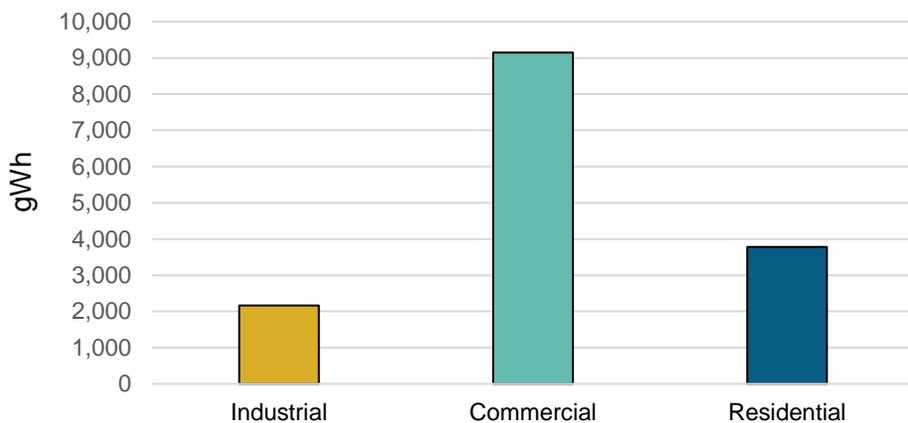
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **25,205 full-time direct, indirect, and induced MI jobs** that will last for at least five years: Over **126,024 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.6 billion in GDP** each year for the next five years — resulting in **\$8.2 billion in economic activity**, more than 4.3 times the investment.

## How much energy efficiency is untapped in your state?

### Michigan Energy Efficiency Potential by Sector



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

Combined, this would displace the annual electricity consumption of **1,974,566 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,499	Ann Arbor	3,320
2	9,018	Battle Creek	1,007
3	4,368	Bay City	661
4	6,462	Detroit-Warren-Livonia	37,524
5	3,947	Flint	2,600
6	5,793	Grand Rapids-Wyoming	7,239
7	8,347	Holland-Grand Haven	2,434
8	5,547	Jackson	1,114
9	10,195	Kalamazoo-Portage	2,752
10	5,307	Lansing-East Lansing	3,637
11	6,259	Monroe	930
12	3,836	Muskegon-Norton Shores	1,145
13	4,088	Niles-Benton Harbor	1,846
14	3,656	Saginaw-Saginaw Township North	1,717
		South Bend-Mishawaka	350
		Rural	17,046



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	3,391	11	5,675	21	2,616	31	2,157
2	702	12	4,437	22	2,202	32	1,249
3	1,966	13	3,047	23	2,770	33	1,789
4	339	14	1,966	24	1,048	34	1,462
5	696	15	2,170	25	2,278	35	3,185
6	1,274	16	2,265	26	3,844	36	1,807
7	2,744	17	1,947	27	1,225	37	2,435
8	3,726	18	2,606	28	4,064	38	2,575
9	1,806	19	2,568	29	411		
10	1,302	20	2,194	30	1,386		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	598	35	2,299	69	54	103	986
2	296	36	588	70	804	104	495
3	576	37	1,961	71	245	105	1,414
4	662	38	1,930	72	2,287	106	1,042
5	823	39	415	73	2,542	107	653
6	965	40	1,413	74	1,385	108	969
7	102	41	1,329	75	378	109	769
8	553	42	1,442	76	<5	110	846
9	196	43	563	77	116		
10	<5	44	399	78	564		
11	1,214	45	465	79	448		
12	1,199	46	493	80	1,292		
13	800	47	919	81	1,012		
14	489	48	598	82	583		
15	97	49	105	83	477		
16	<5	50	370	84	600		
17	799	51	157	85	697		
18	1,248	52	1,984	86	292		
19	645	53	855	87	229		
20	1,534	54	461	88	760		
21	<5	55	<5	89	625		
22	614	56	459	90	<5		
23	136	57	870	91	1,018		
24	1,030	58	760	92	125		
25	805	59	1,192	93	407		
26	2,024	60	1,835	94	1,270		
27	739	61	94	95	287		
28	541	62	1,109	96	380		
29	1,968	63	411	97	779		
30	974	64	877	98	740		
31	516	65	169	99	459		
32	550	66	1,135	100	574		
33	352	67	1,506	101	1,722		
34	1,181	68	1,215	102	397		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Minnesota

## Energy Efficiency Jobs in America

Oct 2020

40,201\*

Dec 2019

47,114

*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

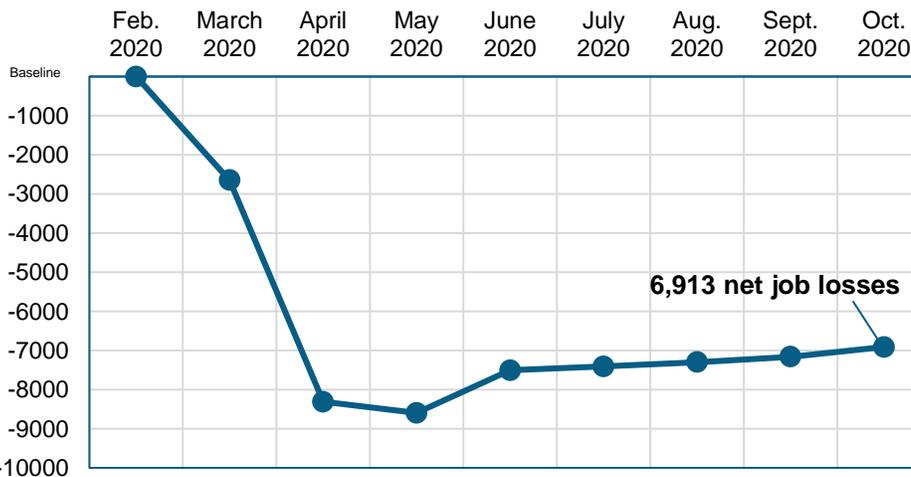
The 2020 pandemic shocked our nation's labor market with massive job losses. Minnesota's energy efficiency industry lost as many as 6,913 jobs since its onset, a 14.7% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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.

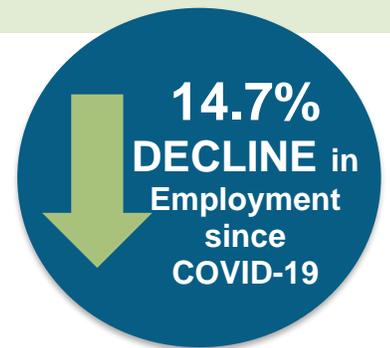
The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Minnesota EE workforce grew steadily, gaining 7.5% since 2016.\*\*

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.

EE Job Losses in Minnesota due to COVID-19



\*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.

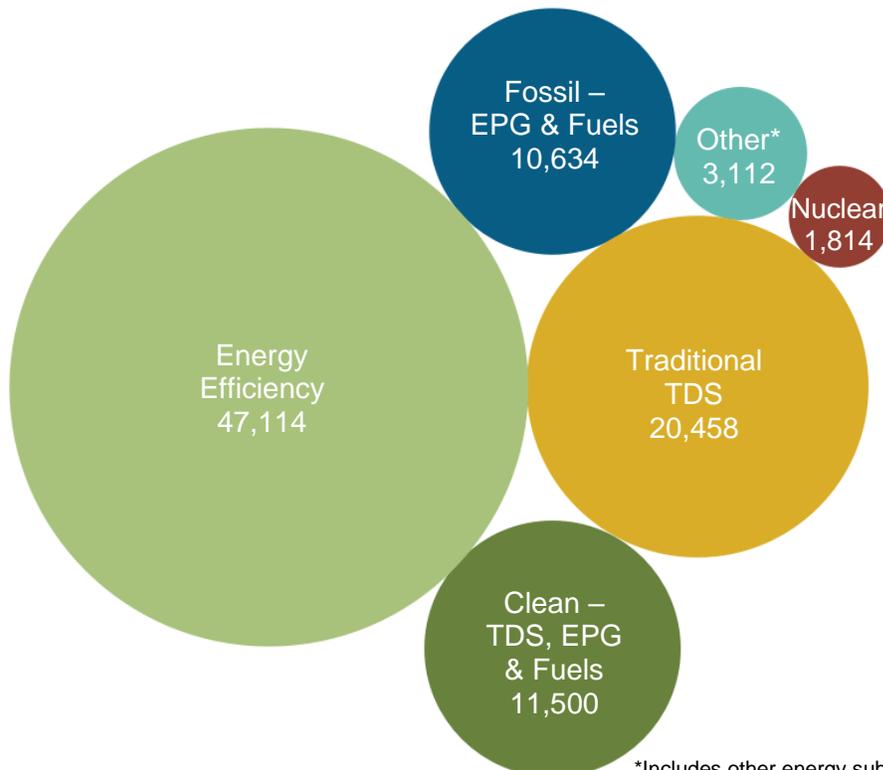
## What type of work are EE workers doing?

- 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 Minnesota?

*Energy efficiency is the largest energy sector in Minnesota.*

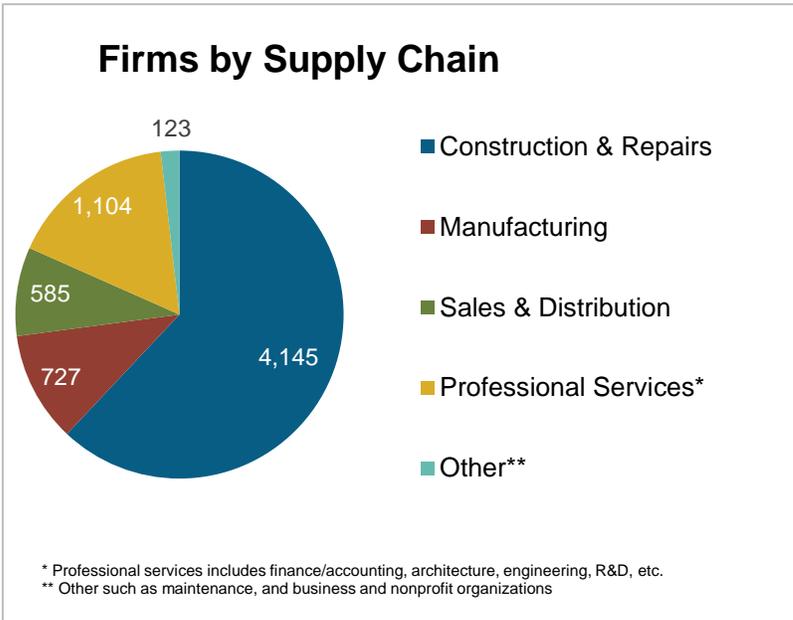
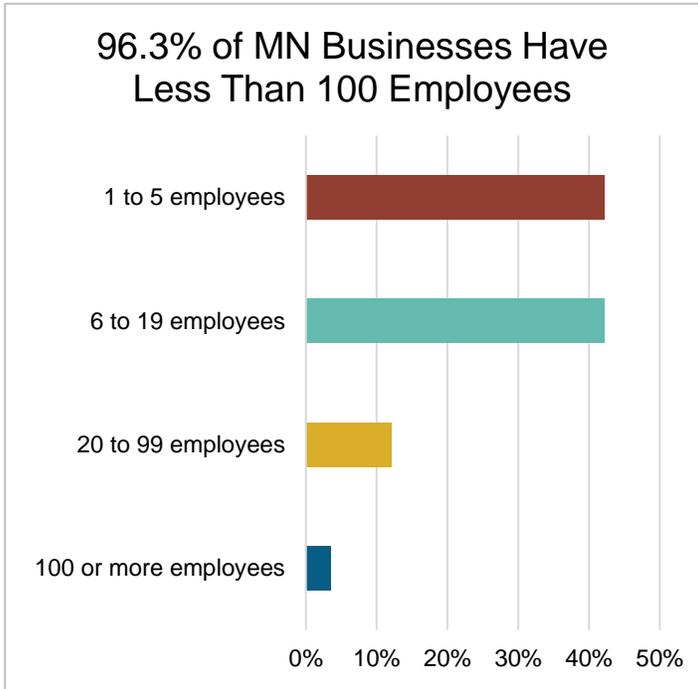


Energy efficiency in Minnesota has seen consistent, reliable job growth – 7.5 percent since 2016.

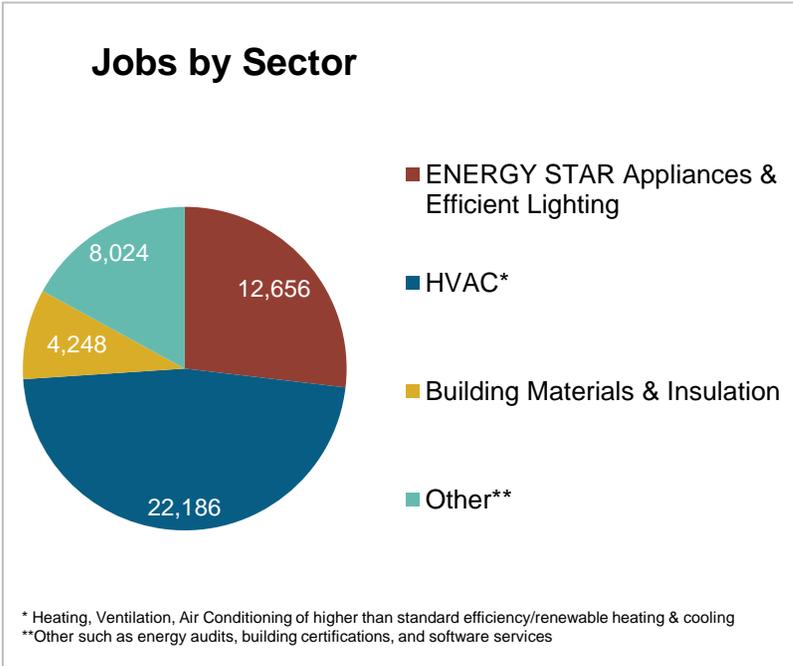
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Minnesota?

EE Sector =  
**6,683**  
 Businesses in MN  
 (Dec. 2019)  
 ↑ **130** over 2018




**7.5%**  
 of Minnesota  
 residents employed  
 in EE are **Veterans**

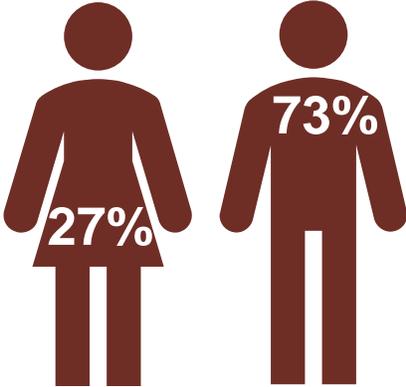
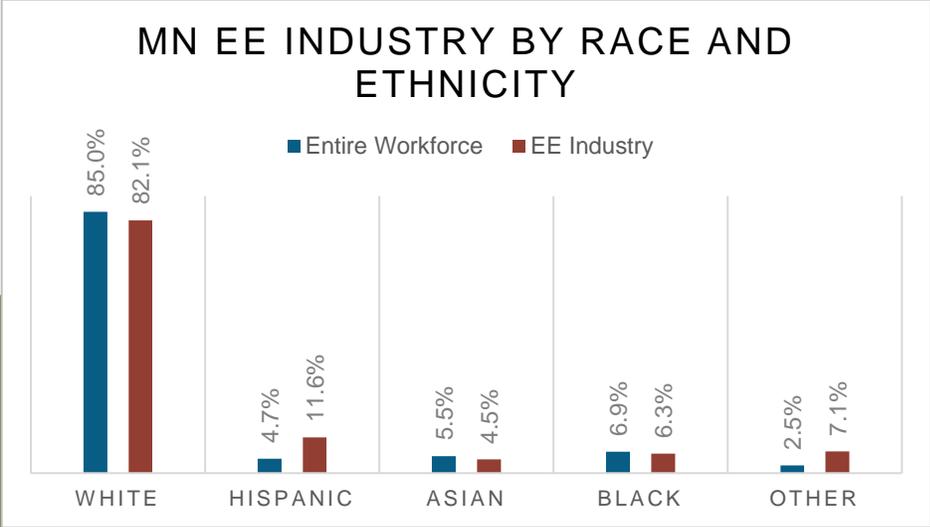



**Energy Efficiency  
 Construction Workers  
 Make Up 20% of MN  
 Construction Workers**

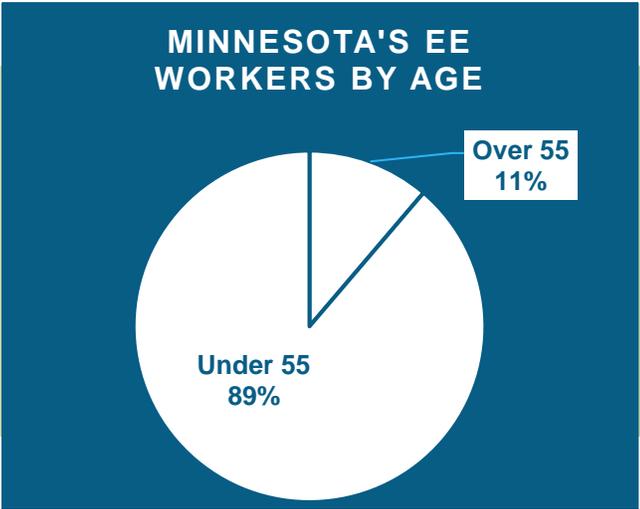
# How is EE Doing regarding Diversity in Minnesota?

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 Minnesota 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.



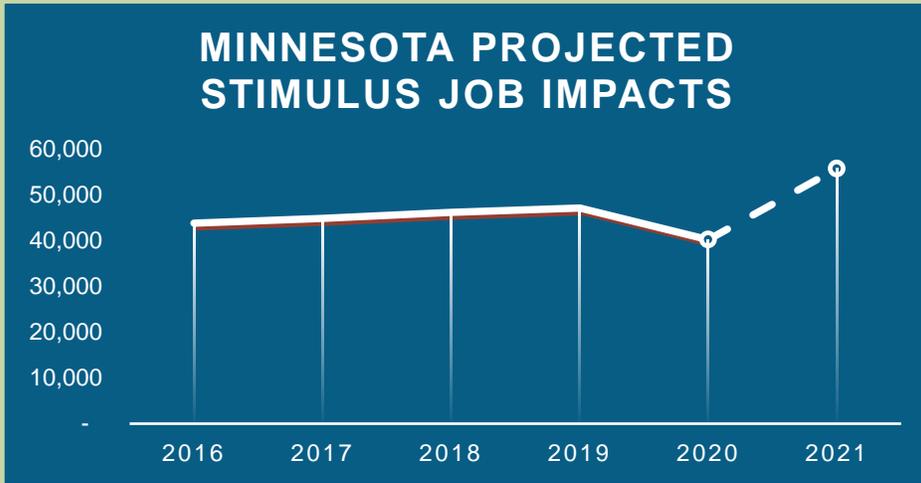
A significant portion of the Minnesota efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

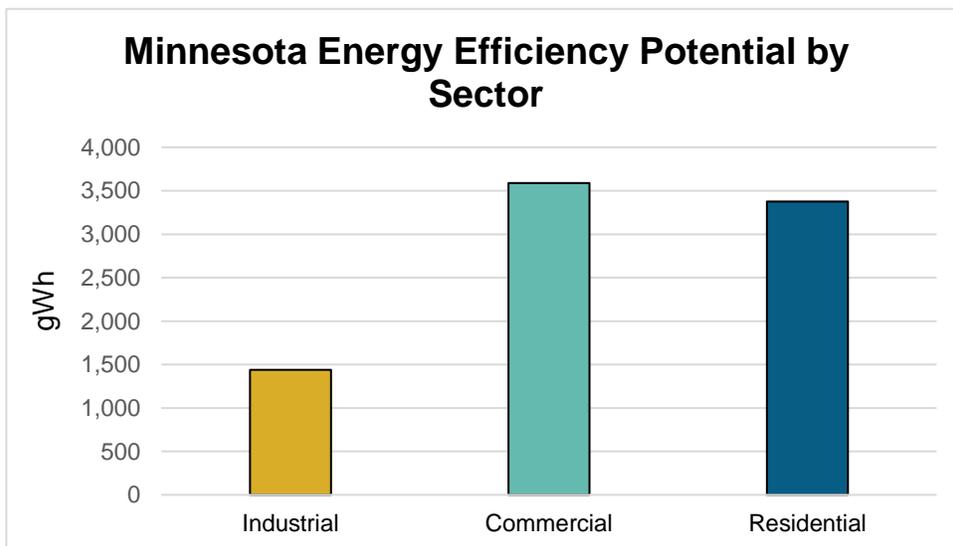


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **15,521 full-time direct, indirect, and induced MN jobs** that will last for at least five years: Over **77,604 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.1 billion in GDP** each year for the next five years — resulting in **\$5.6 billion in economic activity**, more than 4.5 times the investment.

## How much energy efficiency is untapped in your state?



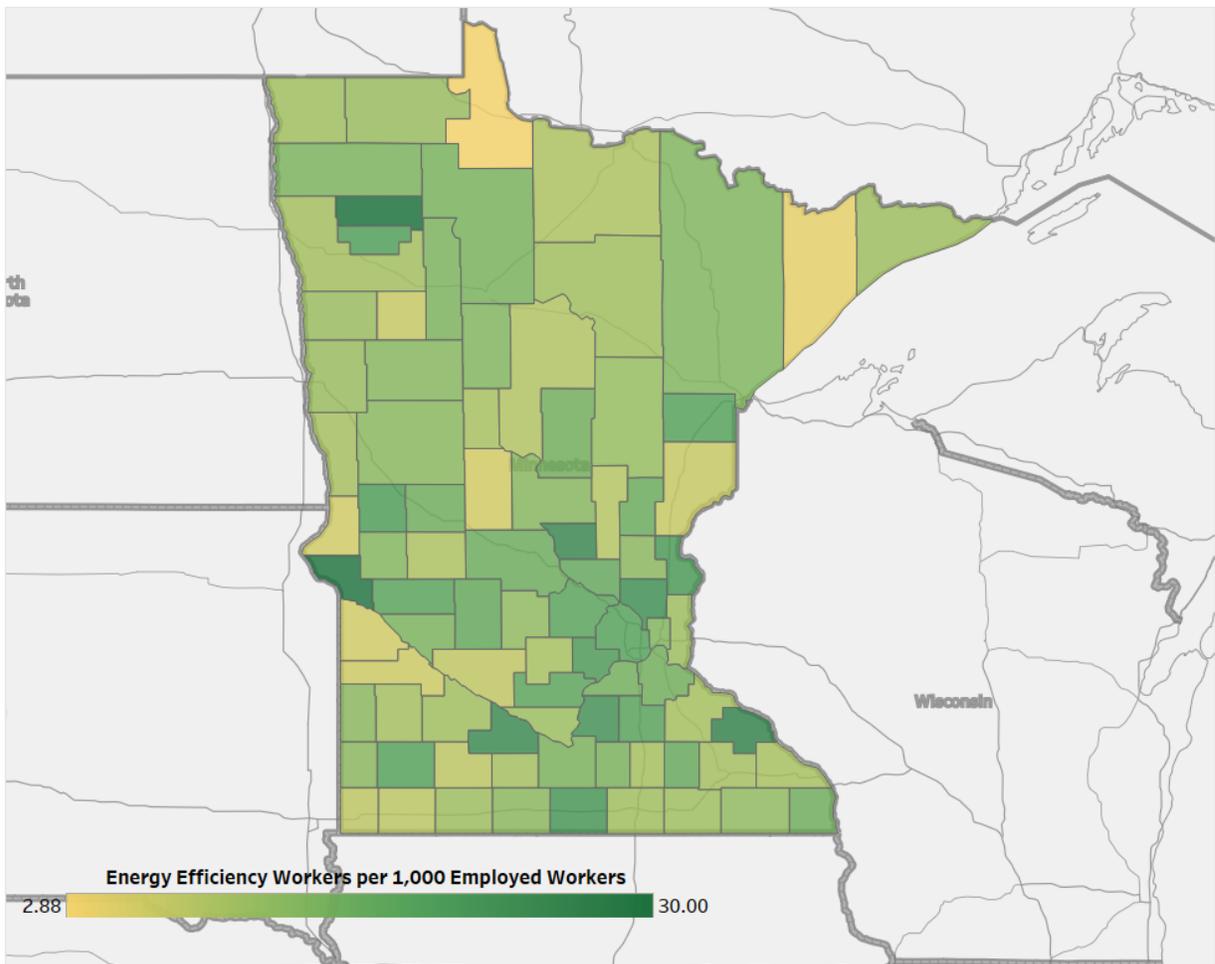
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **922,716** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	6,085	Duluth	1,515
2	3,451	Fargo	421
3	10,821	Grand Forks	222
4	5,793	La Crosse	148
5	6,553	Mankato-North Mankato	737
6	4,743	Minneapolis-St. Paul-Bloomington	28,832
7	5,819	Rochester	1,416
8	3,849	St. Cloud	2,431
		Rural	11,391

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	605	18	525	35	134	52	514
2	930	19	626	36	554	53	202
3	852	20	1,192	37	702	54	133
4	432	21	1,168	38	662	55	334
5	550	22	825	39	637	56	111
6	424	23	827	40	3,178	57	441
7	379	24	404	41	773	58	7
8	1,003	25	620	42	790	59	2,343
9	827	26	374	43	188	60	568
10	315	27	511	44	2,063	61	387
11	357	28	308	45	263	62	98
12	1,541	29	648	46	615	63	15
13	1,220	30	1,591	47	328	64	1,338
14	<5	31	1,134	48	813	65	684
15	814	32	256	49	1,880	66	<5
16	1,083	33	1,498	50	431	67	<5
17	897	34	382	51	812		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
01A	307	18A	202	36A	241	53A	166
01B	293	18B	320	36B	313	53B	35
02A	441	19A	623	37A	567	54A	118
02B	487	20A	705	37B	131	54B	14
03A	409	20B	484	38A	526	55A	332
03B	440	21A	510	38B	133	55B	<5
04A	234	21B	658	39A	300	56A	<5
04B	188	22A	472	39B	337	56B	110
05A	199	22B	348	40A	352	57A	438
05B	348	23A	510	40B	2,168	58B	7
06A	338	23B	312	41A	610	59A	14
06B	84	24A	292	41B	159	59B	2,326
07A	321	24B	110	42A	<5	60A	372
07B	56	25A	630	42B	830	60B	202
08A	383	26A	214	43A	111	61A	176
08B	643	26B	159	43B	76	61B	235
09A	574	27A	348	44A	827	62A	97
09B	249	27B	121	44B	1,150	62B	<5
10A	139	28A	104	45A	207	63A	<5
10B	174	28B	202	45B	56	63B	14
11A	90	29A	406	46A	481	64A	1,210
11B	264	29B	286	46B	155	64B	96
12A	528	30A	<5	47A	327	65A	84
12B	1,184	30B	1,590	47B	<5	65B	604
13A	884	31A	620	48A	861	66A	<5
13B	345	31B	508	48B	<5	66B	<5
14A	<5	32A	124	49A	1,057	67A	<5
14B	<5	32B	131	49B	747	67B	<5
15A	407	33A	1,880	50A	464		
15B	403	33B	175	50B	<5		
16A	425	34A	346	51A	808		
16B	652	34B	34	51B	<5		
17A	548	35A	<5	52A	381		
17B	345	35B	134	52B	150		



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E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.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.

# Mississippi

## Energy Efficiency Jobs in America

Oct 2020

13,232\*

Dec 2019

15,668

*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

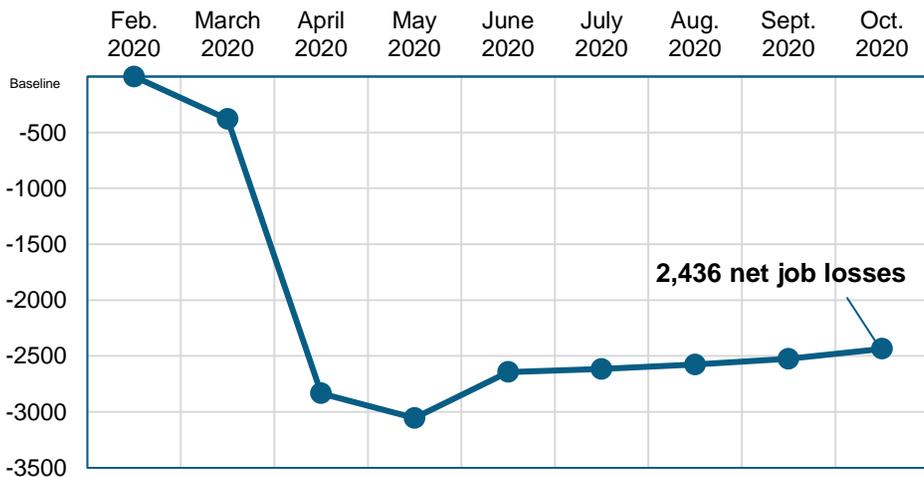
The 2020 pandemic shocked our nation's labor market with massive job losses. Mississippi's energy efficiency industry lost as many as 2,436 jobs since its onset, a 15.5% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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.

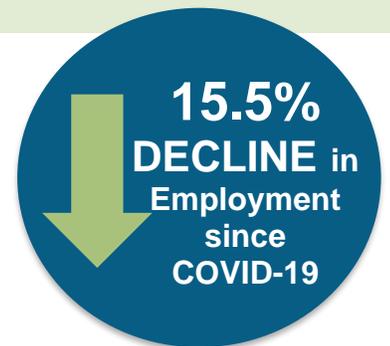
The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Mississippi EE workforce grew steadily, gaining 4.2% since 2016.\*\*

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.

#### EE Job Losses in Mississippi due to COVID-19



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



Presented by:

E4 THE FUTURE



# What are EE Jobs?

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

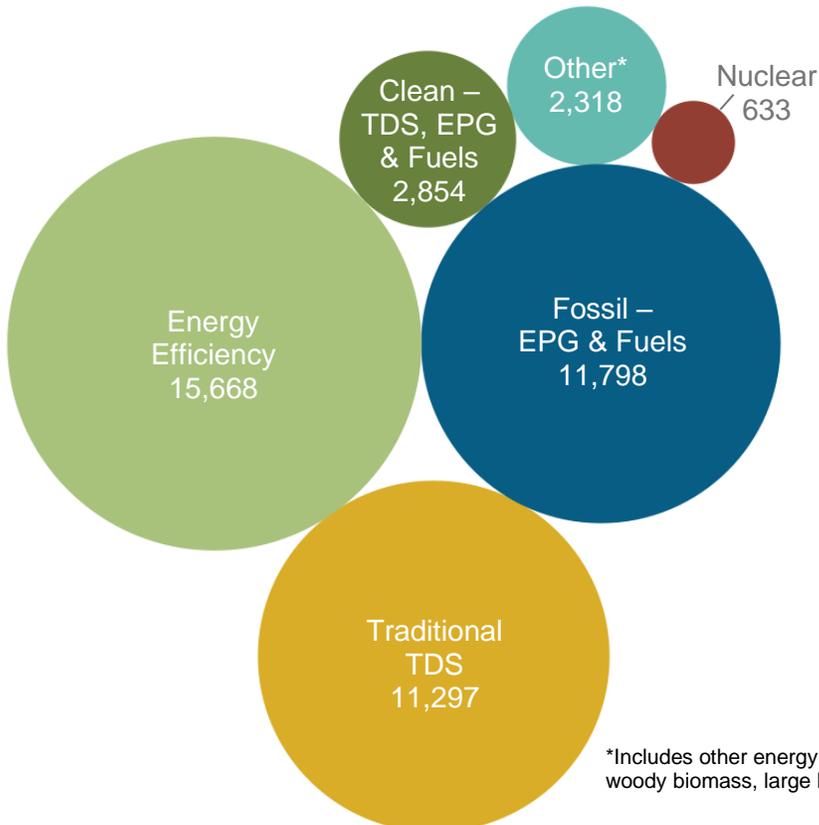
## What type of work are EE workers doing?

- 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 Mississippi?

*Energy efficiency is the largest energy sector in Mississippi.*

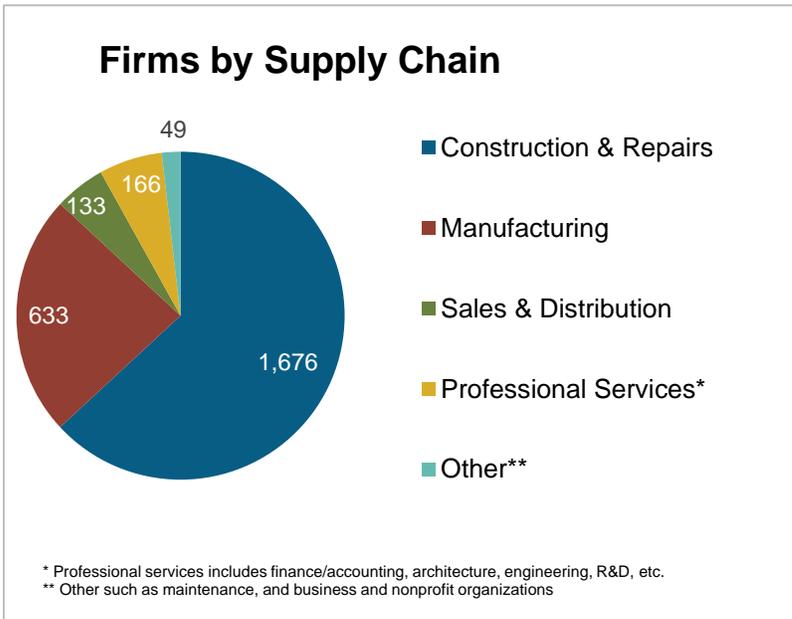
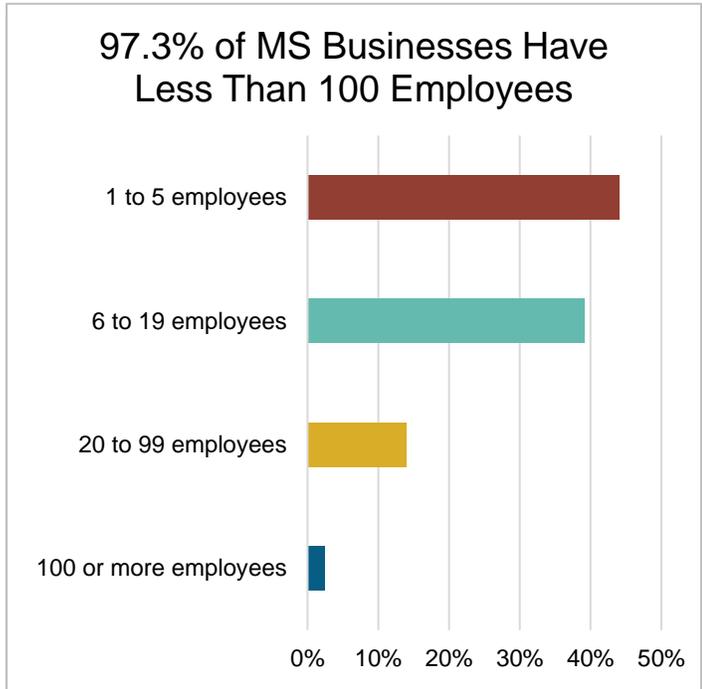


Energy efficiency in Mississippi has seen consistent, reliable job growth – 4.2 percent since 2016.

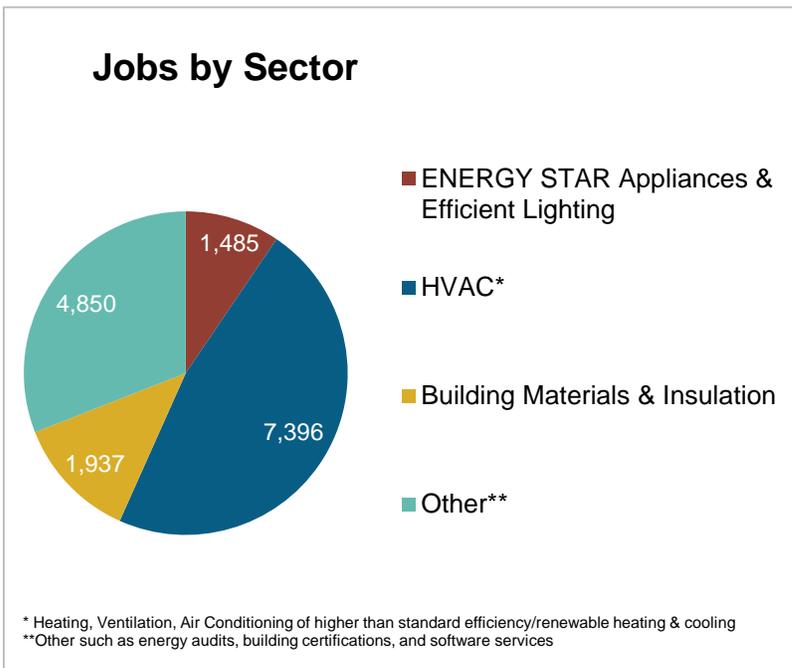
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Mississippi?

EE Sector =  
**2,656**  
 Businesses in MS  
 (Dec. 2019)  
 ↑ **45** over 2018




**8.7%**  
 of Mississippi  
 residents employed  
 in EE are **Veterans**



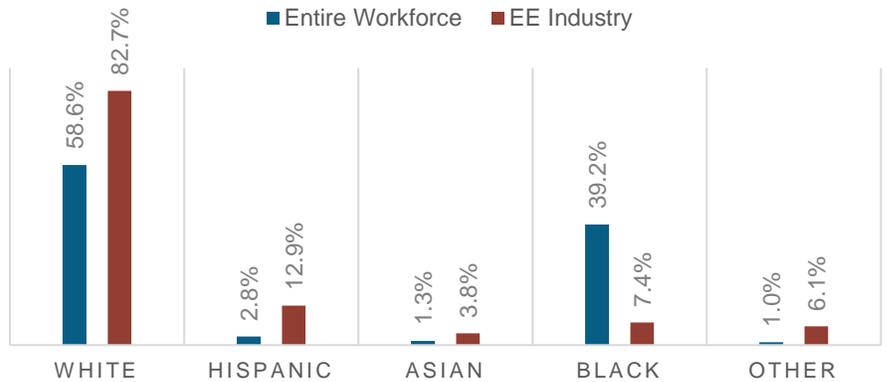

**Energy Efficiency  
 Construction Workers  
 Make Up 21% of MS  
 Construction Workers**

# How is EE Doing regarding Diversity in Mississippi?

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 Mississippi communities are represented in the EE sector.

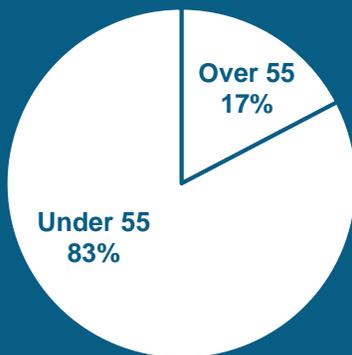
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## MS EE INDUSTRY BY RACE AND ETHNICITY



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.

## MISSISSIPPI'S EE WORKERS BY AGE



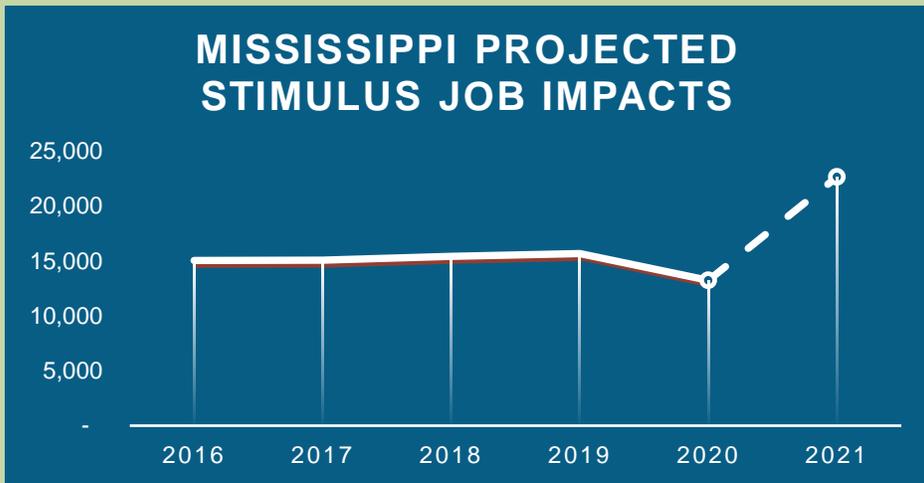
A significant portion of the Mississippi efficiency workforce is in the "55+" category. 17% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

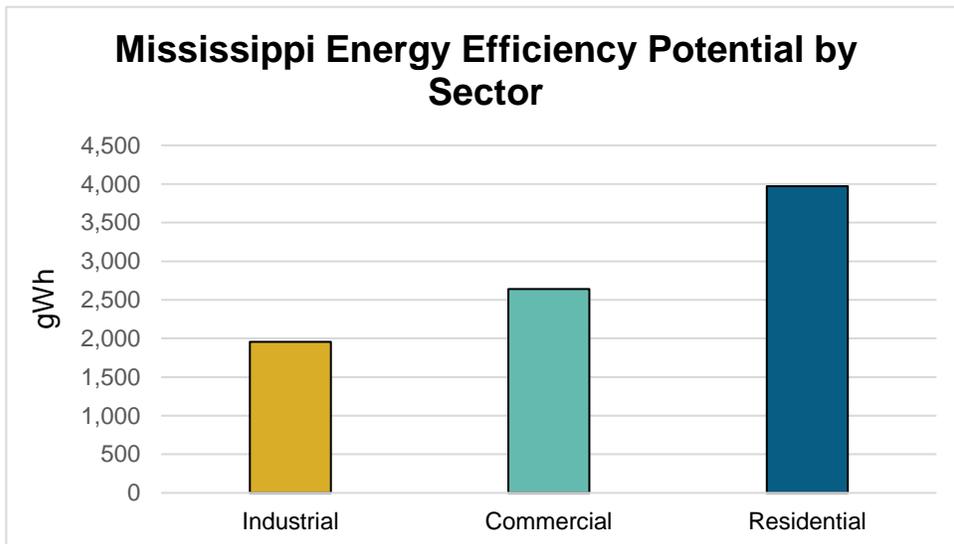


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **9,415 full-time direct, indirect, and induced MS jobs** that will last for at least five years: Over **47,075 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$488 million in GDP** each year for the next five years – resulting in **\$2.4 billion in economic activity**, more than 3.3 times the investment.

## How much energy efficiency is untapped in your state?



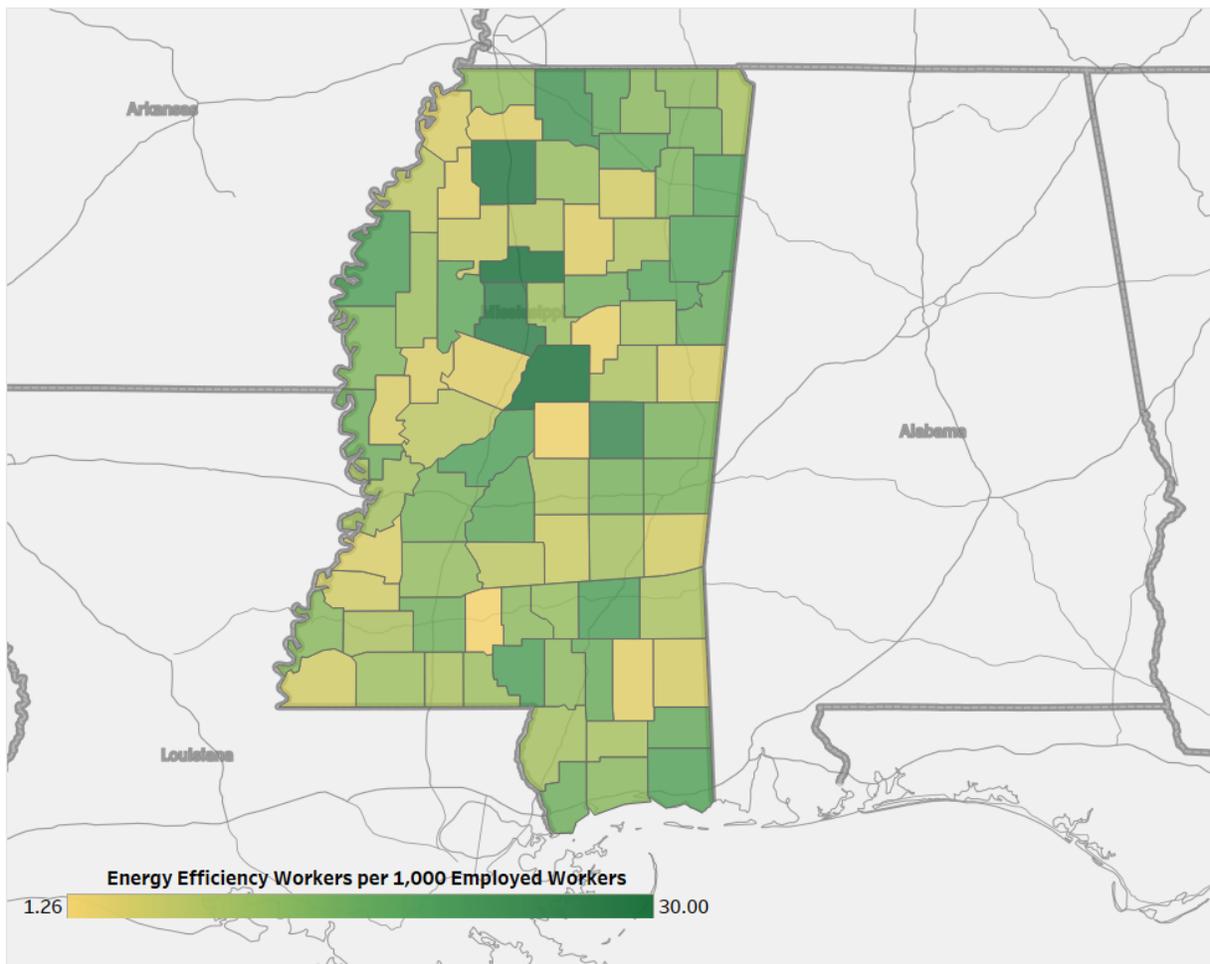
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **591,970 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	3,965	Gulfport-Biloxi	1,913
2	4,570	Hattiesburg	912
3	3,431	Jackson	3,679
4	3,702	Memphis	1,307
		Pascagoula	875
		Rural	6,982

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	872	15	247	29	565	43	182
2	<5	16	469	30	200	44	61
3	656	17	32	31	220	45	92
4	241	18	247	32	394	46	784
5	99	19	<5	33	124	47	560
6	265	20	742	34	1,162	48	639
7	253	21	489	35	147	49	120
8	146	22	239	36	371	50	75
9	419	23	275	37	439	51	417
10	143	24	12	38	45	52	<5
11	164	25	666	39	68		
12	355	26	507	40	431		
13	90	27	<5	41	90		
14	508	28	218	42	126		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	178	32	145	63	138	94	223
2	8	33	9	64	292	95	705
3	95	34	51	65	154	96	167
4	70	35	245	66	171	97	<5
5	522	36	83	67	5	98	<5
6	300	37	633	68	308	99	32
7	218	38	5	69	<5	100	<5
8	42	39	18	70	125	101	<5
9	254	40	<5	71	<5	102	6
10	75	41	<5	72	<5	103	<5
11	14	42	8	73	<5	104	<5
12	<5	43	8	74	<5	105	138
13	91	44	48	75	82	106	<5
14	20	45	423	76	95	107	<5
15	100	46	37	77	96	108	<5
16	497	47	54	78	62	109	234
17	<5	48	<5	79	220	110	183
18	91	49	148	80	286	111	340
19	70	50	23	81	86	112	<5
20	120	51	<5	82	<5	113	<5
21	21	52	<5	83	<5	114	211
22	47	53	457	84	<5	115	332
23	204	54	278	85	26	116	<5
24	271	55	<5	86	41	117	408
25	31	56	880	87	821	118	<5
26	12	57	<5	88	212	119	92
27	262	58	372	89	<5	120	<5
28	<5	59	541	90	103	121	<5
29	125	60	289	91	29	122	47
30	12	61	<5	92	<5		
31	165	62	184	93	330		



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# Missouri

## 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.

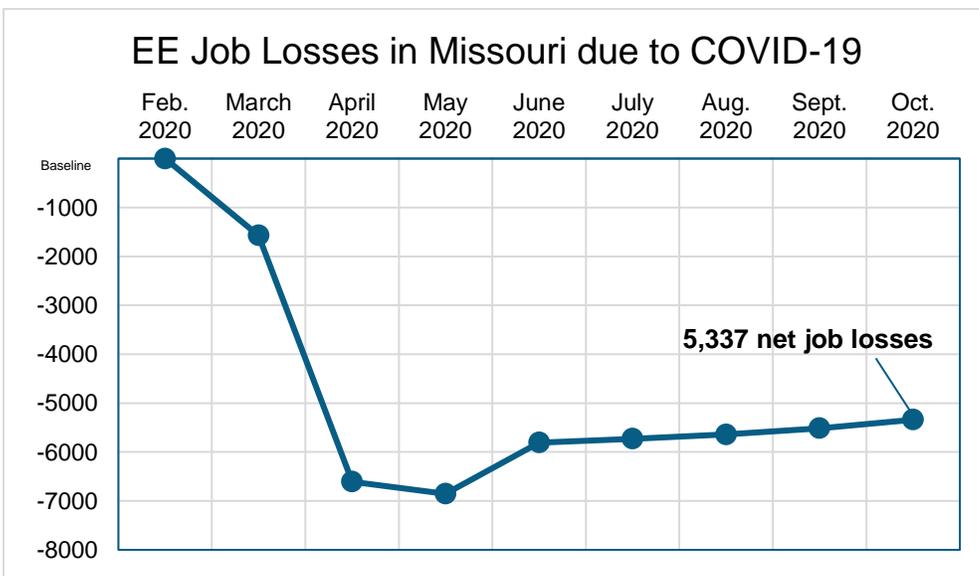
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Missouri’s energy efficiency industry lost as many as 5,337 jobs since its onset, a 12.5% 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 Missouri EE workforce grew steadily, gaining 12.4% 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.



Presented by:



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

# What are EE Jobs?

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

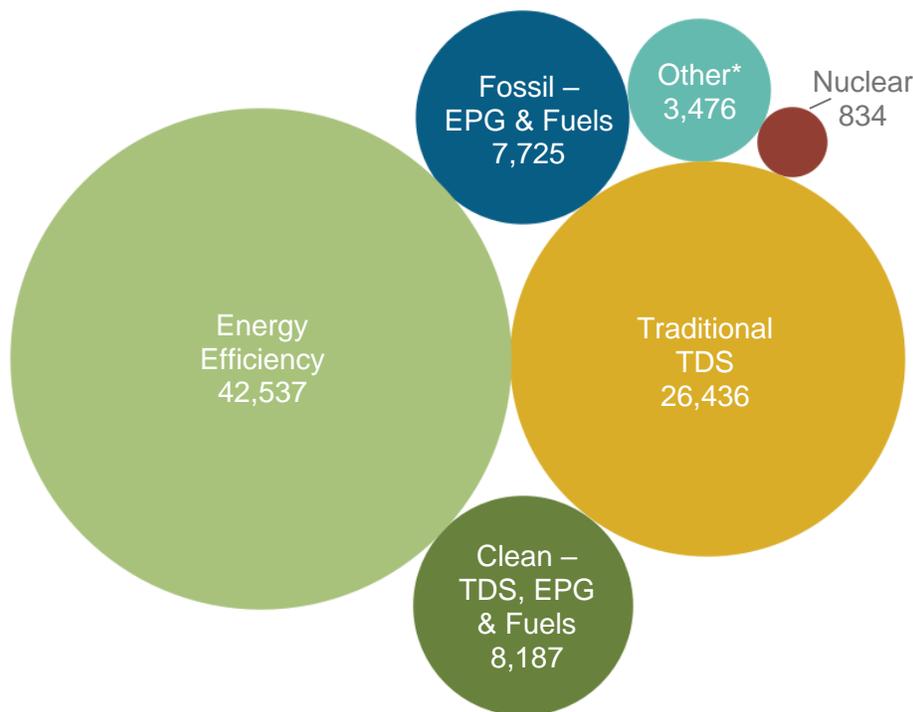
## What type of work are EE workers doing?

- 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 Missouri?

Energy efficiency is the largest energy sector in Missouri.

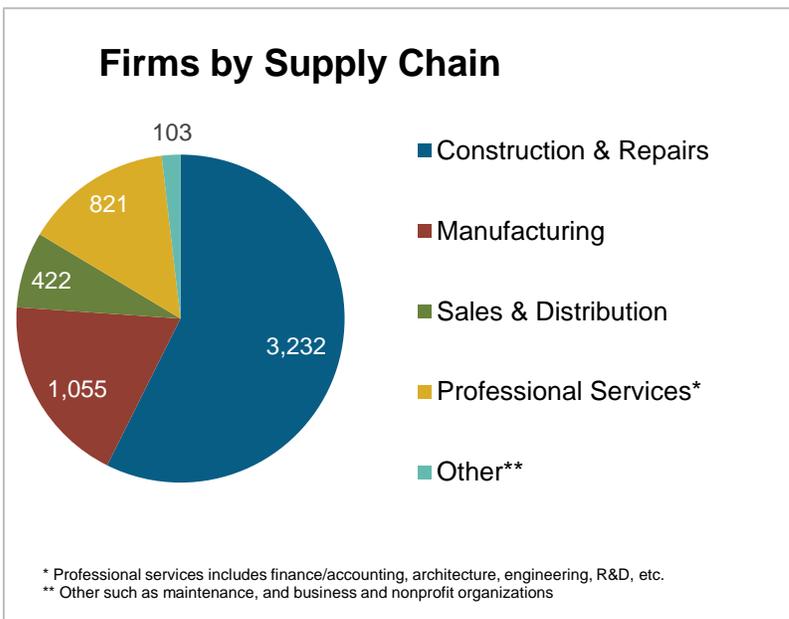
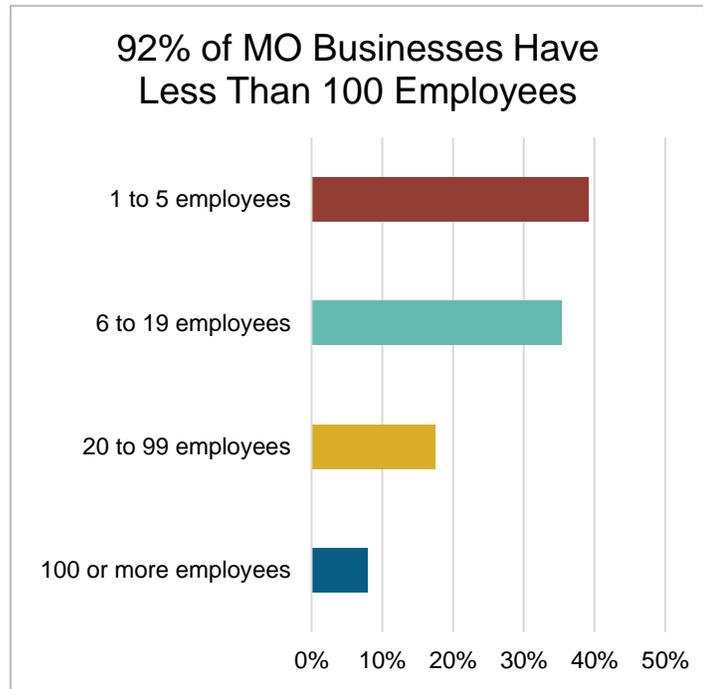


Energy efficiency in Missouri has seen consistent, reliable job growth – 12.4 percent since 2016.

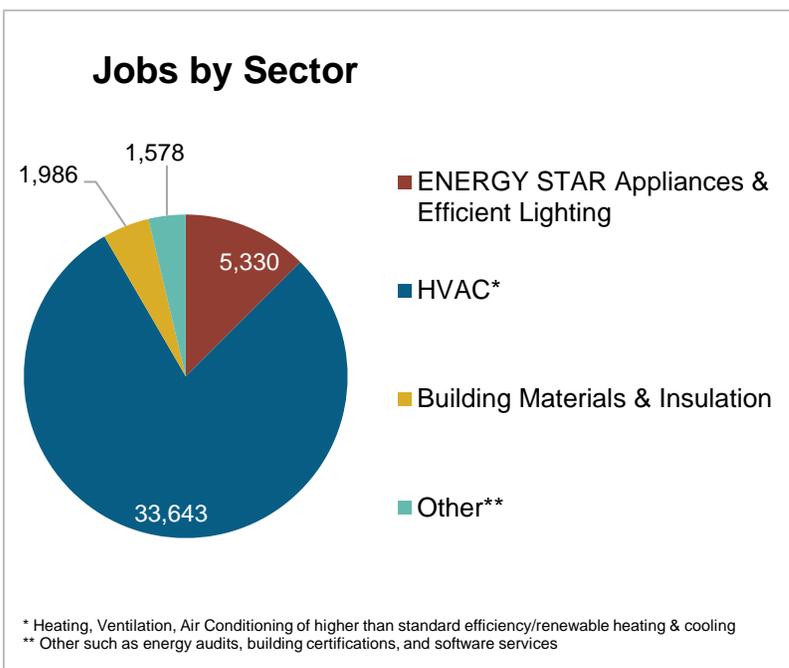
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Missouri?

EE Sector =  
**5,634**  
 Businesses in MO  
 (Dec. 2019)  
 ↑ **90** over 2018



**7.6%**  
 of Missouri  
 residents employed  
 in EE are **Veterans**

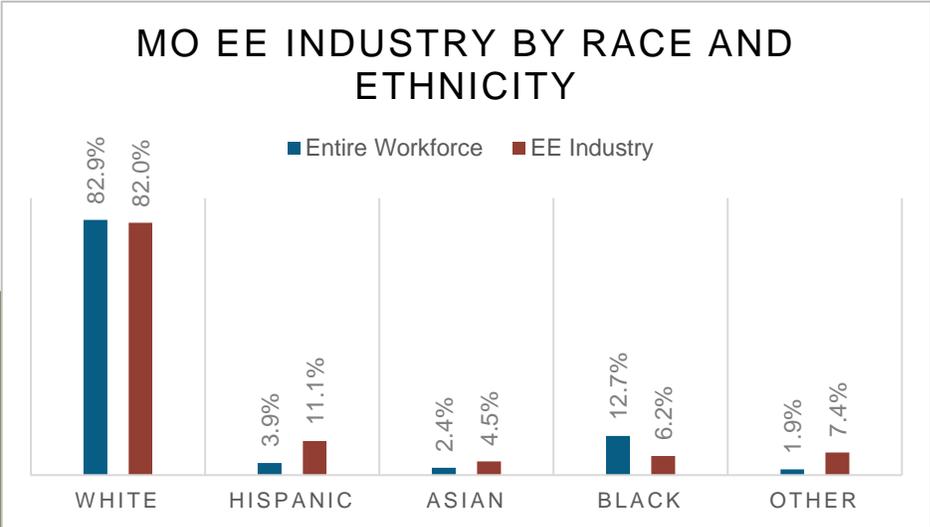



**Energy Efficiency  
 Construction Workers  
 Make Up 18% of MO  
 Construction Workers**

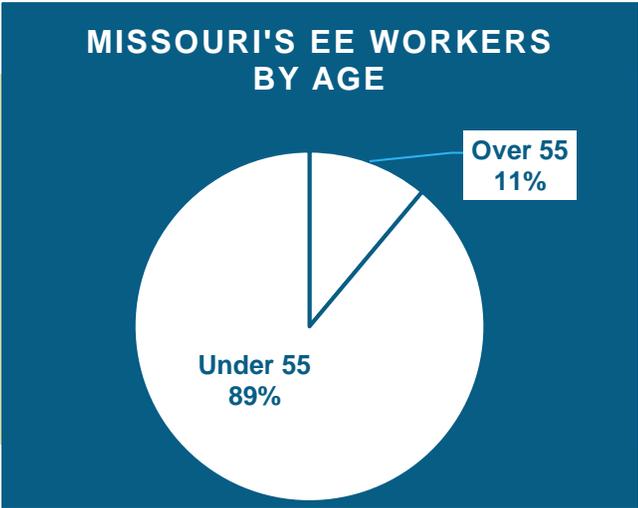
# How is EE Doing regarding Diversity in Missouri?

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 Missouri 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 Missouri 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.

## MISSOURI PROJECTED STIMULUS JOB IMPACTS



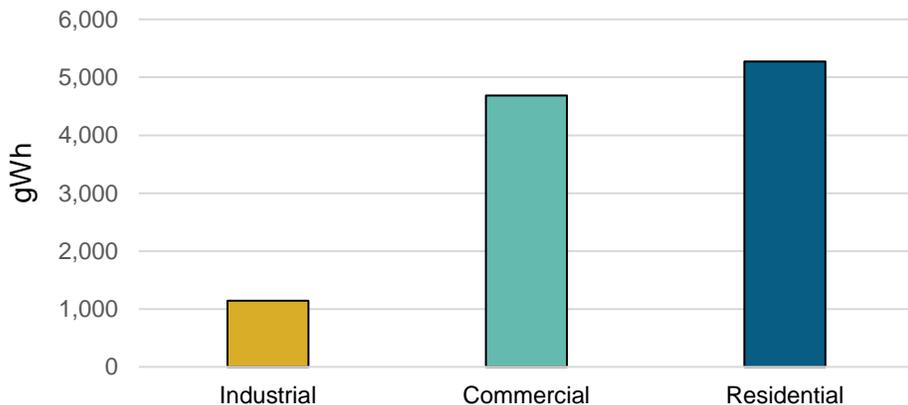
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **14,724 full-time direct, indirect, and induced MO jobs** that will last for at least five years: Over **73,621 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$920 million in GDP** each year for the next five years — resulting in **\$4.6 billion in economic activity**, more than 3.9 times the investment.

## How much energy efficiency is untapped in your state?

### Missouri Energy Efficiency Potential by Sector



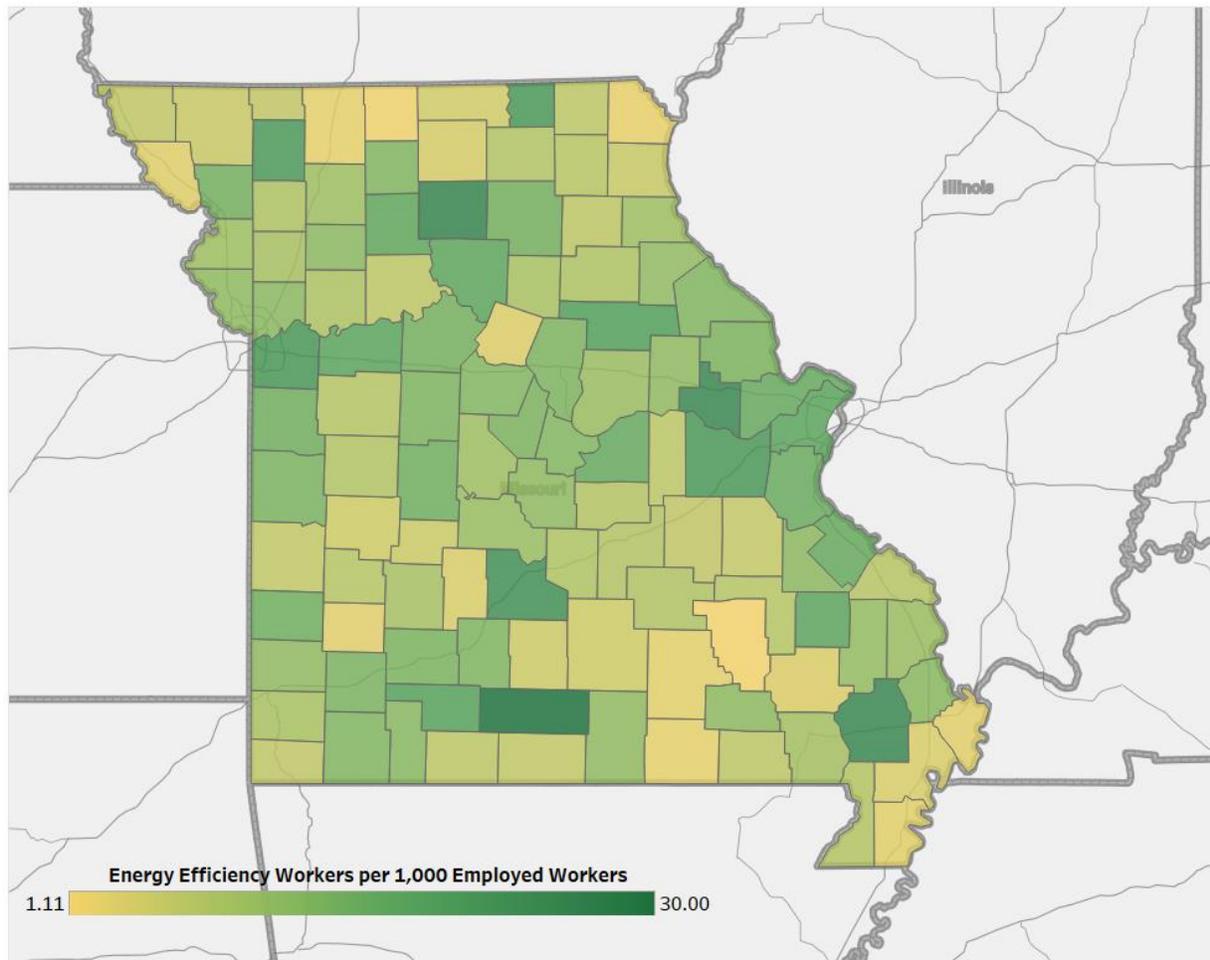
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **874,379 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,658	Cape Girardeau-Jackson	720
2	4,952	Columbia	1,241
3	5,157	Fayetteville-Springdale-Rogers	136
4	4,311	Jefferson City	1,033
5	6,969	Joplin	1,093
6	3,581	Kansas City	9,007
7	5,239	Springfield	3,428
8	3,670	St. Joseph	632
		St. Louis	15,801
		Rural	9,444

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,930	10	1,855	19	506	28	941
2	1,843	11	428	20	2,967	29	1,133
3	1,155	12	1,768	21	1,011	30	289
4	2,270	13	506	22	641	31	833
5	1,878	14	1,310	23	<5	32	869
6	2,108	15	2,103	24	974	33	745
7	3,279	16	789	25	1,113	34	883
8	1,712	17	799	26	539		
9	562	18	936	27	861		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	265	43	834	85	<5	127	488
2	324	44	<5	86	<5	128	215
3	300	45	345	87	<5	129	23
4	221	46	<5	88	231	130	1,409
5	230	47	126	89	375	131	<5
6	225	48	517	90	191	132	1,030
7	416	49	730	91	144	133	59
8	187	50	89	92	196	134	<5
9	403	51	246	93	115	135	58
10	147	52	15	94	189	136	221
11	143	53	212	95	<5	137	141
12	515	54	41	96	473	138	659
13	396	55	233	97	313	139	21
14	982	56	38	98	183	140	25
15	121	57	267	99	36	141	201
16	38	58	360	100	<5	142	224
17	116	59	14	101	24	143	344
18	<5	60	<5	102	182	144	51
19	835	61	571	103	<5	145	91
20	637	62	450	104	<5	146	493
21	174	63	37	105	<5	147	213
22	320	64	1,116	106	<5	148	315
23	612	65	<5	107	<5	149	133
24	1,111	66	205	108	<5	150	91
25	488	67	212	109	158	151	163
26	45	68	<5	110	<5	152	256
27	162	69	350	111	264	153	<5
28	<5	70	1,687	112	96	154	21
29	217	71	1,273	113	<5	155	86
30	295	72	70	114	206	156	22
31	70	73	182	115	432	157	248
32	80	74	<5	116	276	158	121
33	661	75	<5	117	44	159	305
34	275	76	145	118	191	160	174
35	<5	77	1,250	119	64	161	343
36	186	78	982	120	119	162	66
37	38	79	<5	121	76	163	<5
38	81	80	154	122	60		
39	239	81	101	123	489		
40	420	82	519	124	244		
41	401	83	1,059	125	207		
42	399	84	1,210	126	232		



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# Montana

## Energy Efficiency Jobs in America



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*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

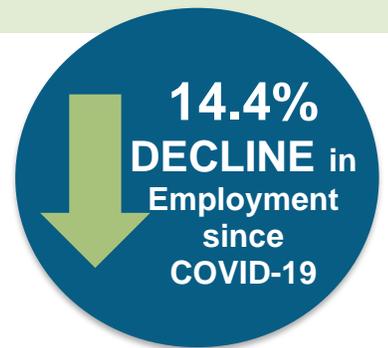
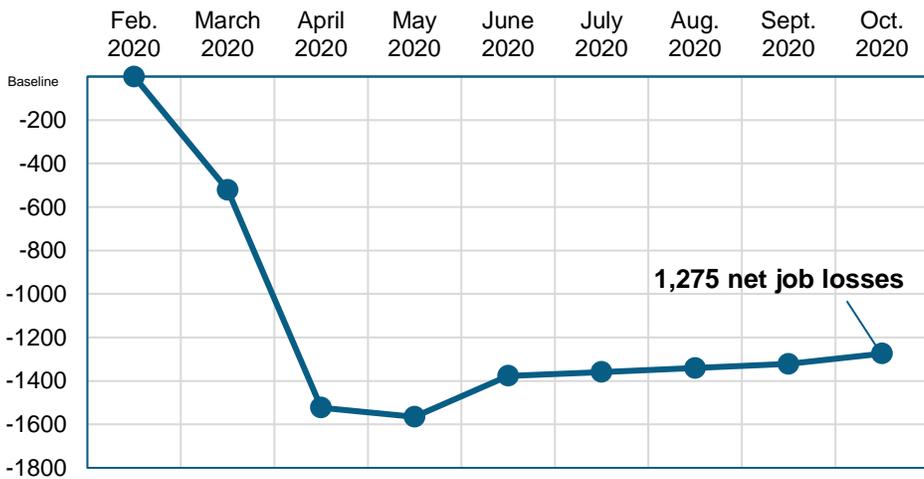
The 2020 pandemic shocked our nation's labor market with massive job losses. Montana's energy efficiency industry lost as many as 1,275 jobs since its onset, a 14.4% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Montana EE workforce grew steadily, gaining 9.8% 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.

#### EE Job Losses in Montana due to COVID-19



Presented by:



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

# What are EE Jobs?

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

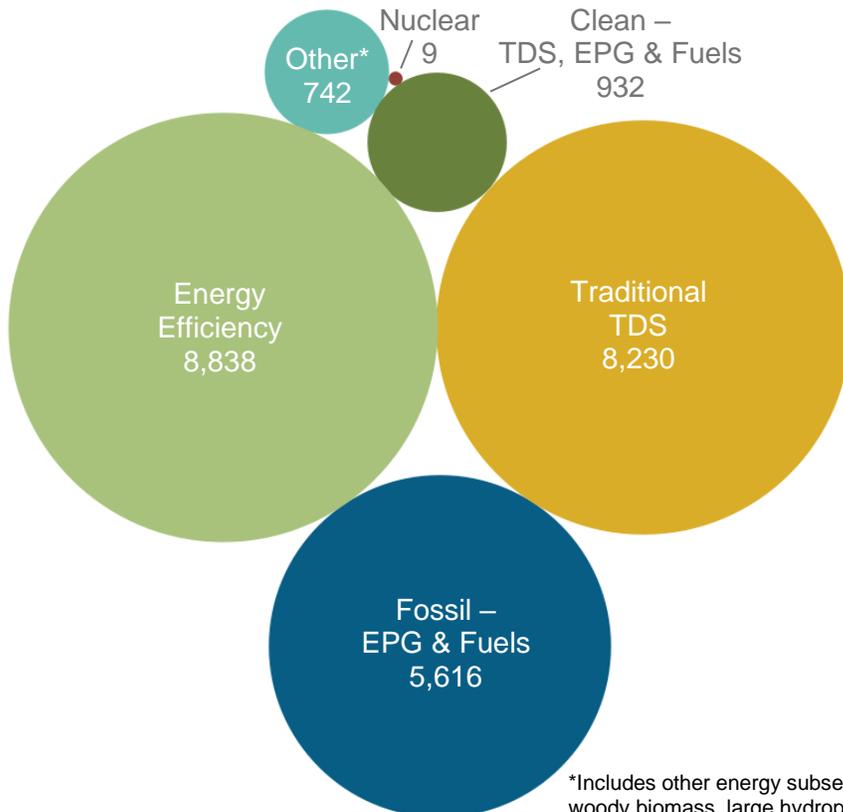
## What type of work are EE workers doing?

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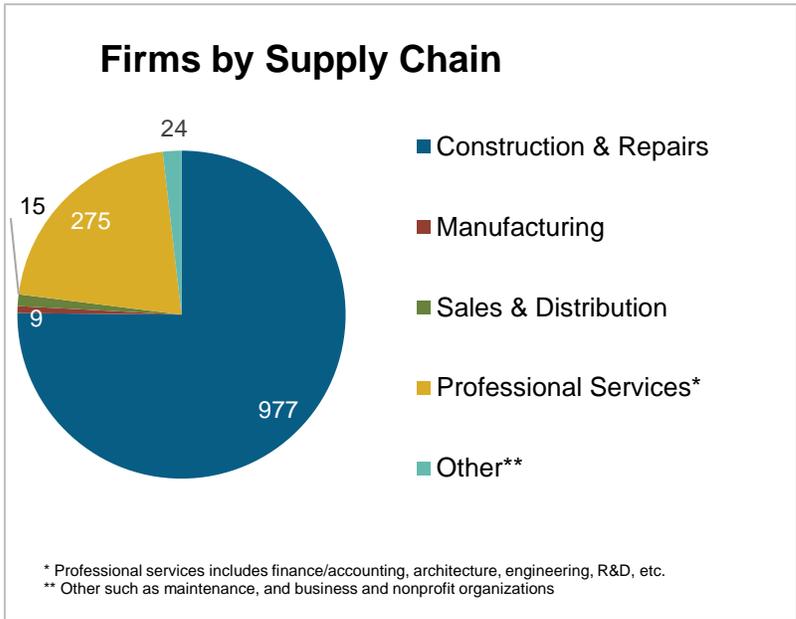
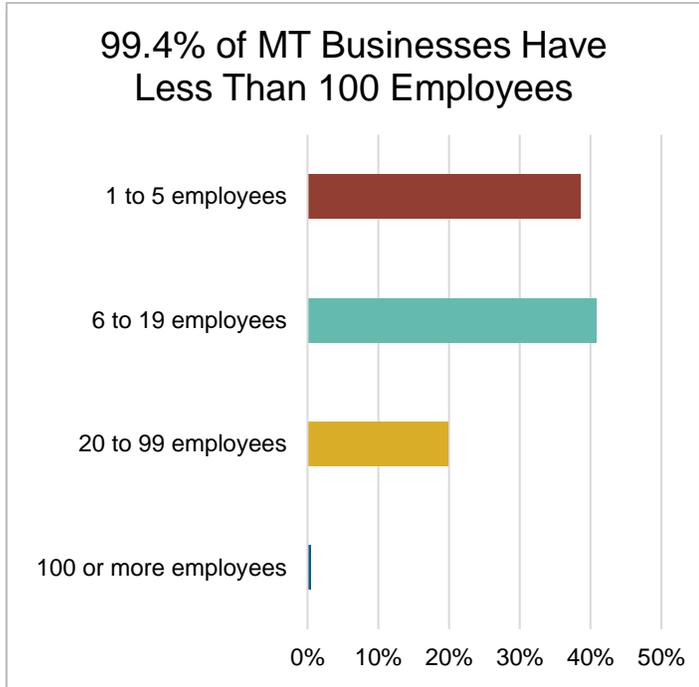


Energy efficiency in Montana has seen consistent, reliable job growth – 9.8 percent since 2016.

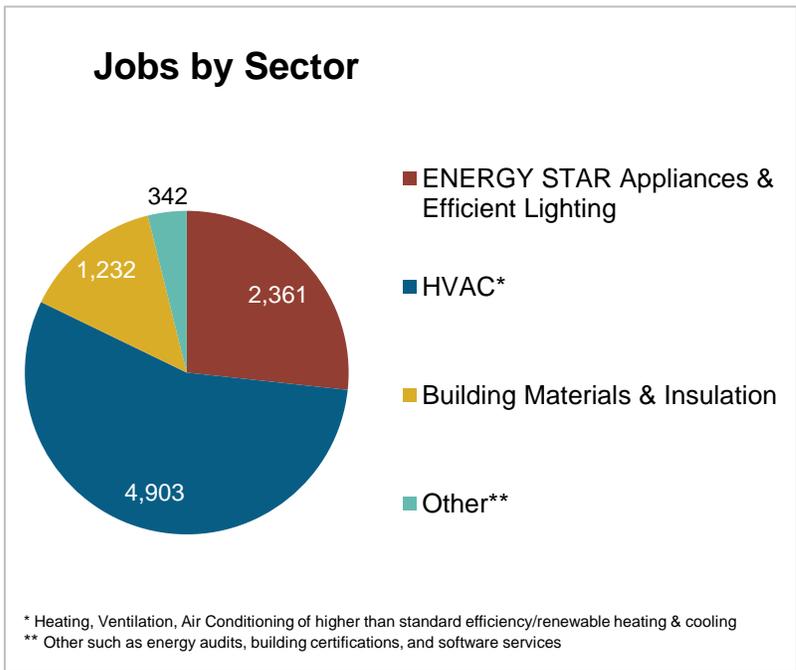
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 in EE are **Veterans**

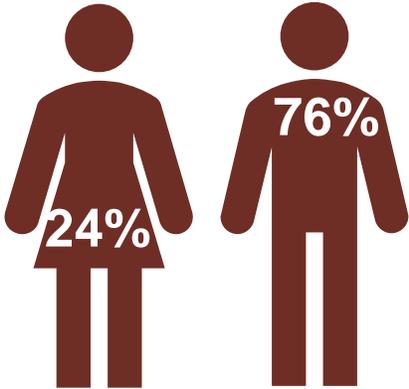
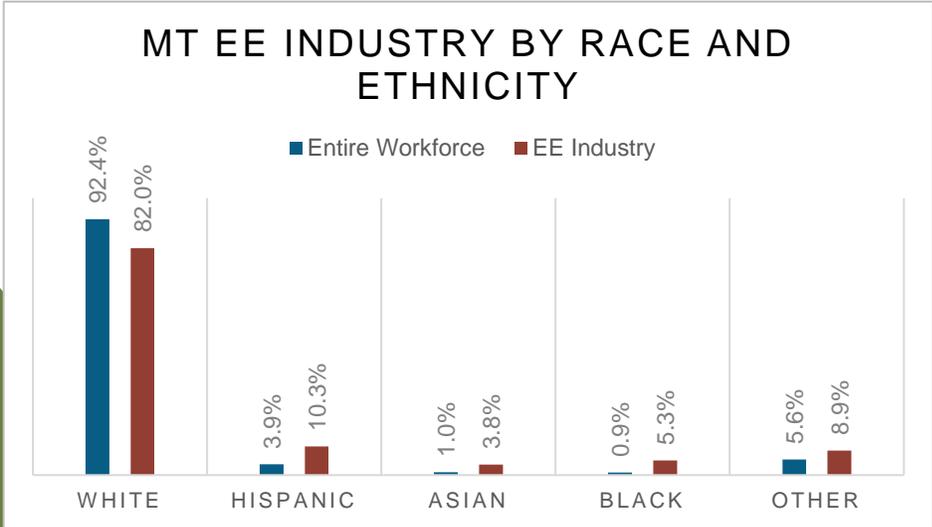



**Energy Efficiency  
 Construction Workers  
 Make Up 20% of MT  
 Construction Workers**

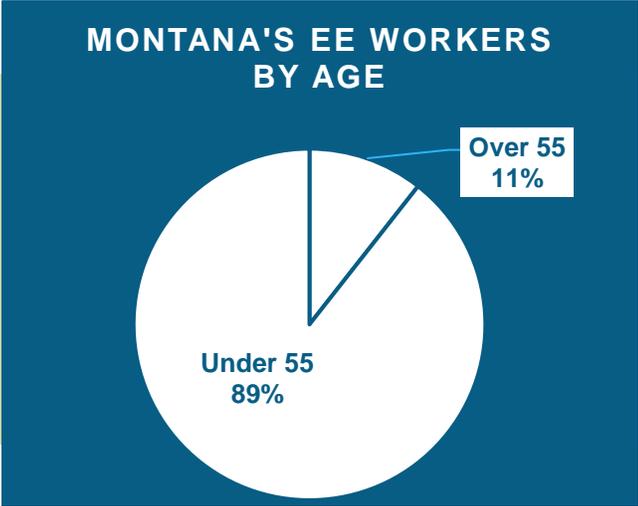
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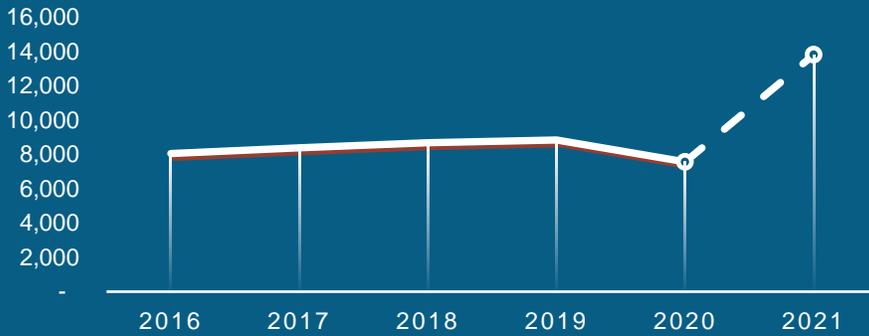
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## MONTANA PROJECTED STIMULUS JOB IMPACTS



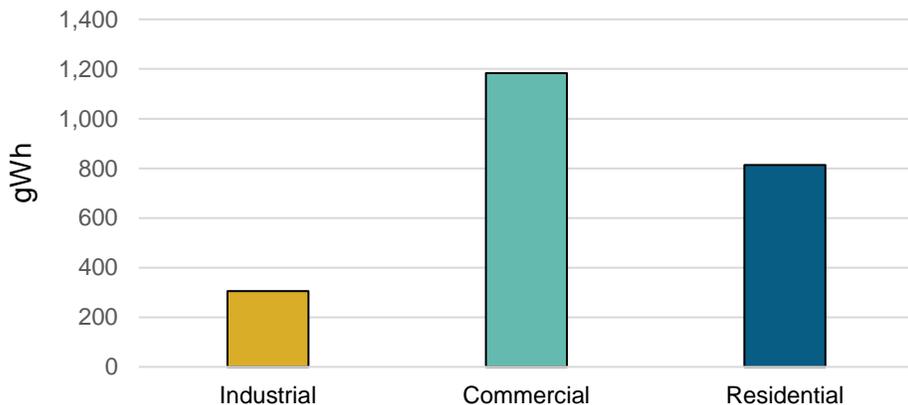
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **6,239 full-time direct, indirect, and induced MT jobs** that will last for at least five years: Over **31,196 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$336 million in GDP** each year for the next five years – resulting in **\$1.7 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### Montana Energy Efficiency Potential by Sector



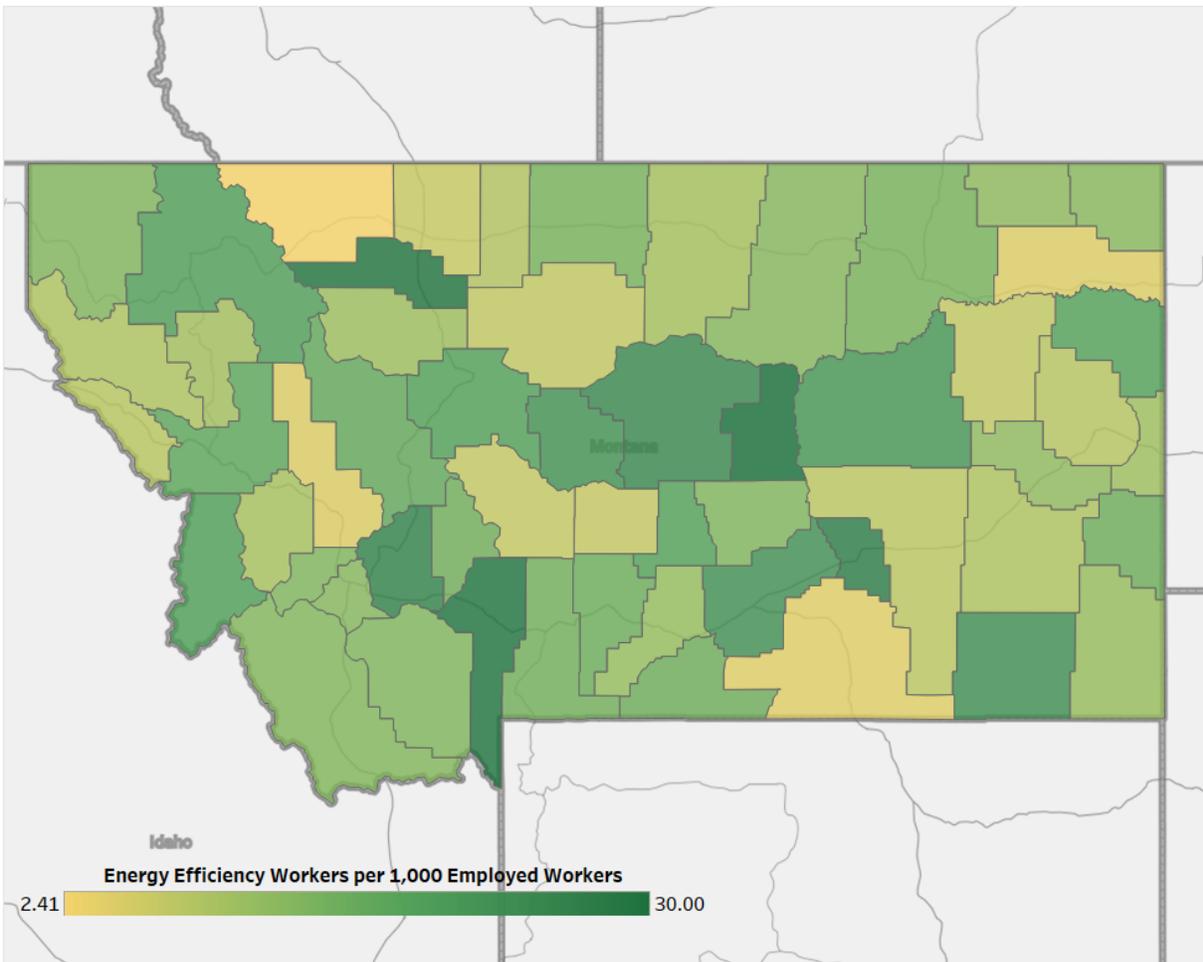
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **223,843** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,838	Billings	1,852
		Great Falls	530
		Missoula	1,047
		Rural	5,409

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	170	16	140	31	291	46	231
2	908	17	62	32	97	47	<5
3	6	18	217	33	<5	48	35
4	<5	19	150	34	<5	49	<5
5	129	20	465	35	130	50	<5
6	90	21	810	36	439		
7	129	22	<5	37	<5		
8	120	23	569	38	511		
9	148	24	<5	39	58		
10	270	25	<5	40	39		
11	244	26	<5	41	<5		
12	<5	27	<5	42	<5		
13	<5	28	23	43	325		
14	190	29	171	44	34		
15	178	30	761	45	701		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	86	26	<5	51	<5	76	<5
2	84	27	190	52	<5	77	34
3	239	28	<5	53	<5	78	23
4	666	29	126	54	<5	79	<5
5	<5	30	51	55	23	80	39
6	6	31	88	56	<5	81	<5
7	18	32	52	57	107	82	<5
8	<5	33	6	58	64	83	<5
9	<5	34	55	59	765	84	<5
10	129	35	155	60	<5	85	330
11	<5	36	61	61	290	86	<5
12	90	37	150	62	<5	87	<5
13	70	38	<5	63	<5	88	34
14	40	39	64	64	96	89	704
15	85	40	400	65	<5	90	<5
16	34	41	37	66	<5	91	<5
17	105	42	772	67	<5	92	232
18	42	43	<5	68	<5	93	<5
19	269	44	<5	69	11	94	<5
20	<5	45	<5	70	119	95	35
21	244	46	570	71	373	96	<5
22	<5	47	<5	72	67	97	<5
23	<5	48	<5	73	<5	98	<5
24	<5	49	<5	74	<5	99	<5
25	<5	50	<5	75	509	100	<5



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# Nebraska

## Energy Efficiency Jobs in America

Oct 2020

12,248\*

Dec 2019

13,949

*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

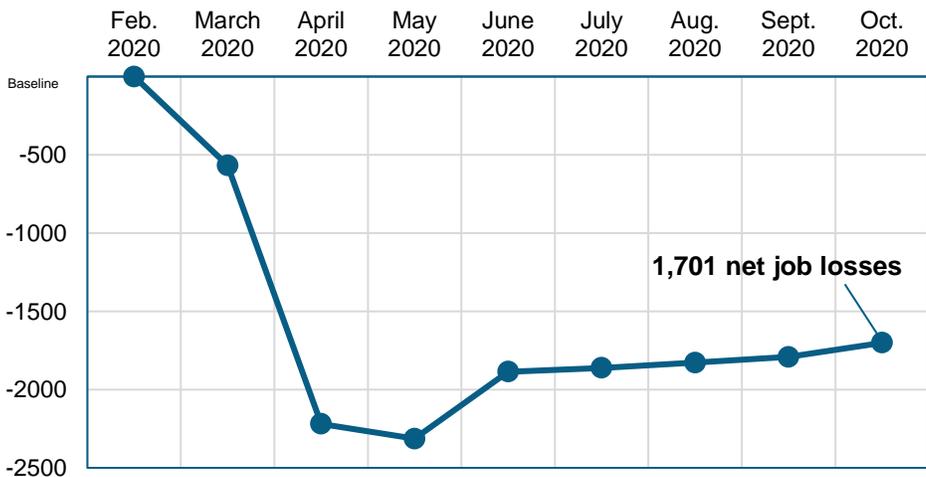
The 2020 pandemic shocked our nation's labor market with massive job losses. Nebraska's energy efficiency industry lost as many as 1,701 jobs since its onset, a 12.2% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Nebraska EE workforce grew steadily, gaining 10.2% 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.

EE Job Losses in Nebraska due to COVID-19



\*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.

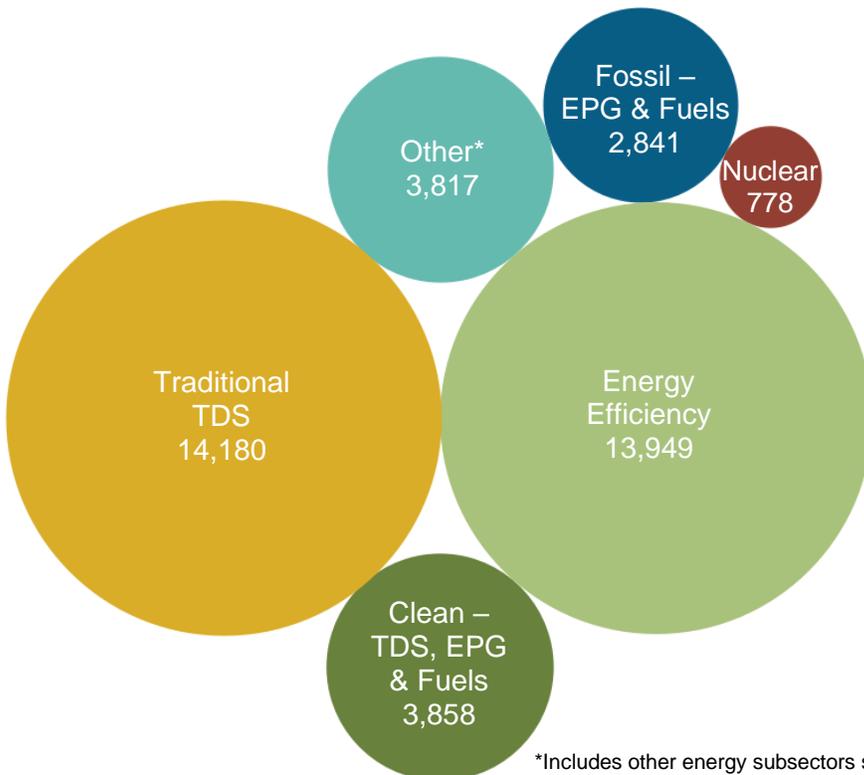
## What type of work are EE workers doing?

- 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 Nebraska?

Energy efficiency is the second largest energy sector in Nebraska.

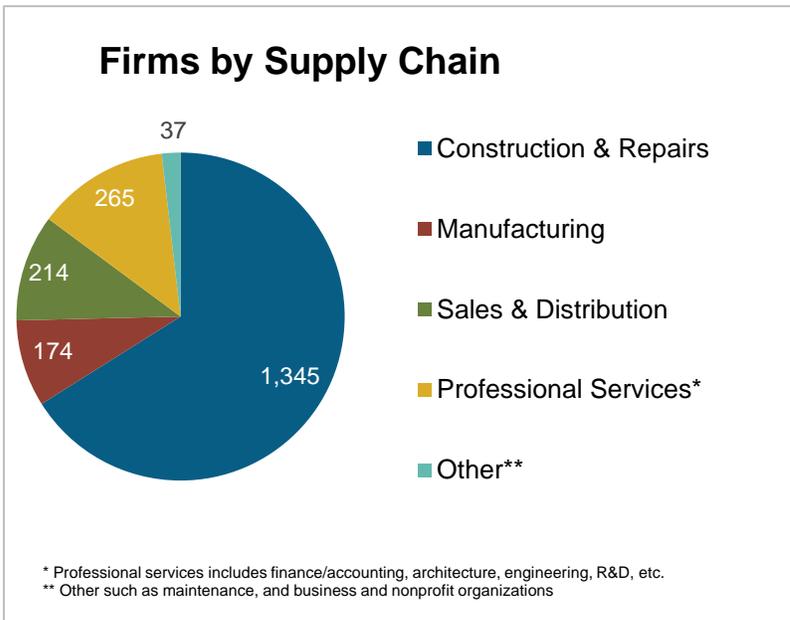
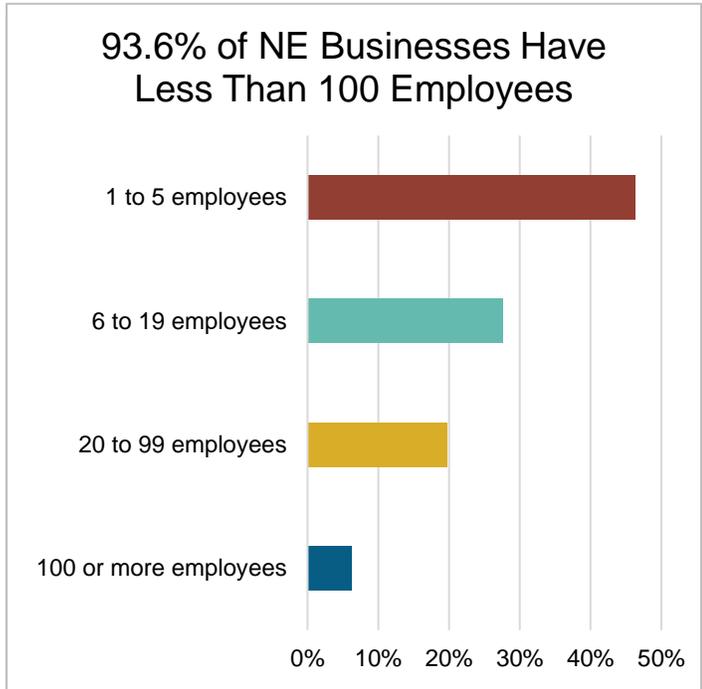


Energy efficiency in Nebraska has seen consistent, reliable job growth – 10.2 percent since 2016.

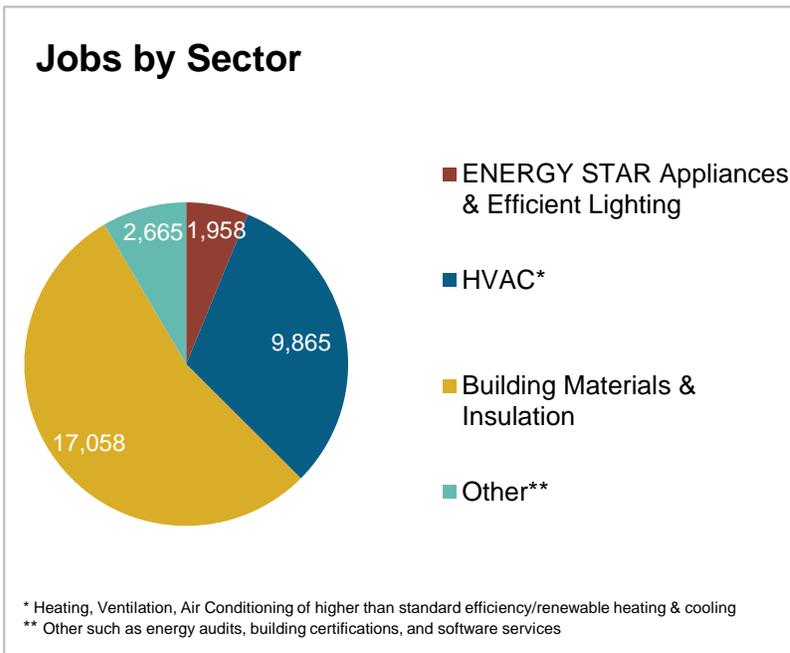
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Nebraska?

EE Sector =  
**2,036**  
 Businesses in NE  
 (Dec. 2019)  
 ↑ **60** over 2018




**8.0%**  
 of Nebraska  
 residents employed  
 in EE are **Veterans**



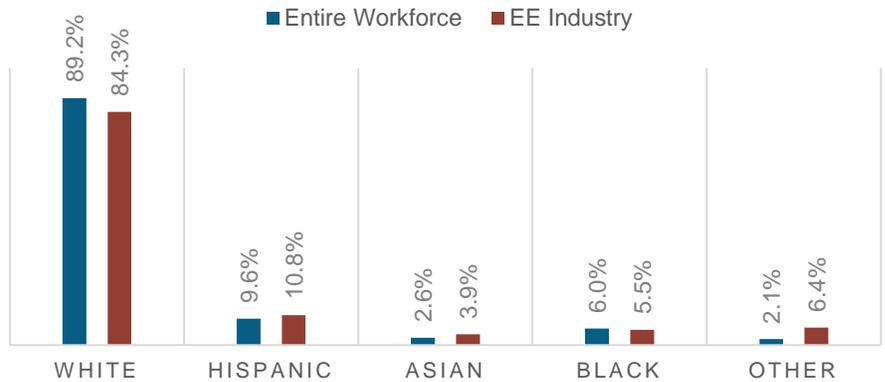

**Energy Efficiency  
 Construction Workers  
 Make Up 16% of NE  
 Construction Workers**

# How is EE Doing regarding Diversity in Nebraska?

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 Nebraska communities are represented in the EE sector.

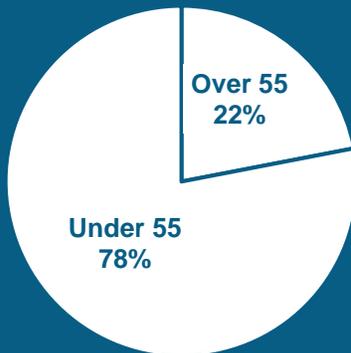
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## NE EE INDUSTRY BY RACE AND ETHNICITY



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.

## NEBRASKA'S EE WORKERS BY AGE



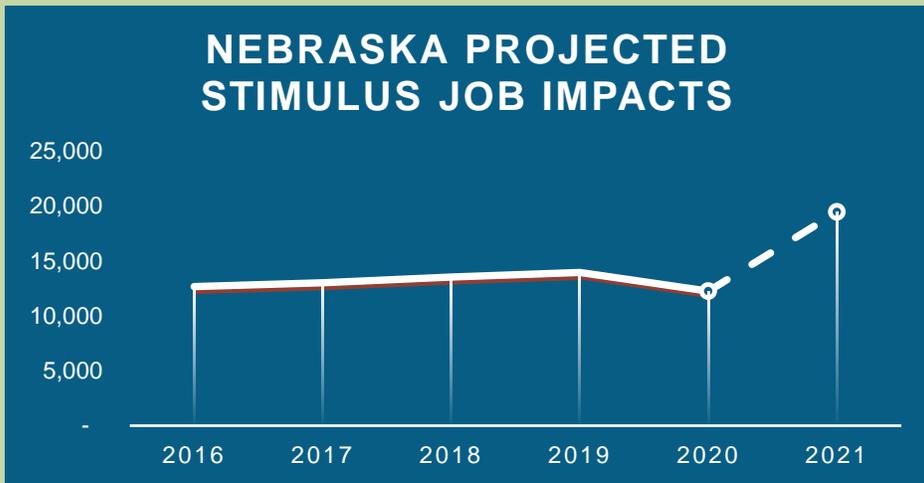
Nebraska's percentage of "55+" workers is the fourth highest for any state's EE workforce. 22% of the energy efficiency workers are likely to retire within the next ten years, providing career growth opportunities for both current and future professionals.

# 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.

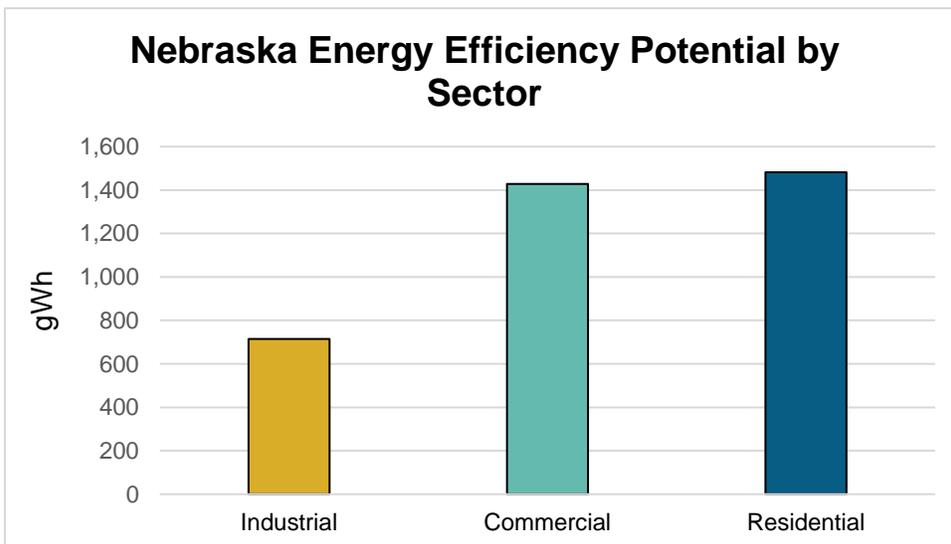


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **7,194 full-time direct, indirect, and induced NE jobs** that will last for at least five years: Over **35,968 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$483 million in GDP** each year for the next five years – resulting in **\$2.4 billion in economic activity**, more than 3.8 times the investment.

## How much energy efficiency is untapped in your state?



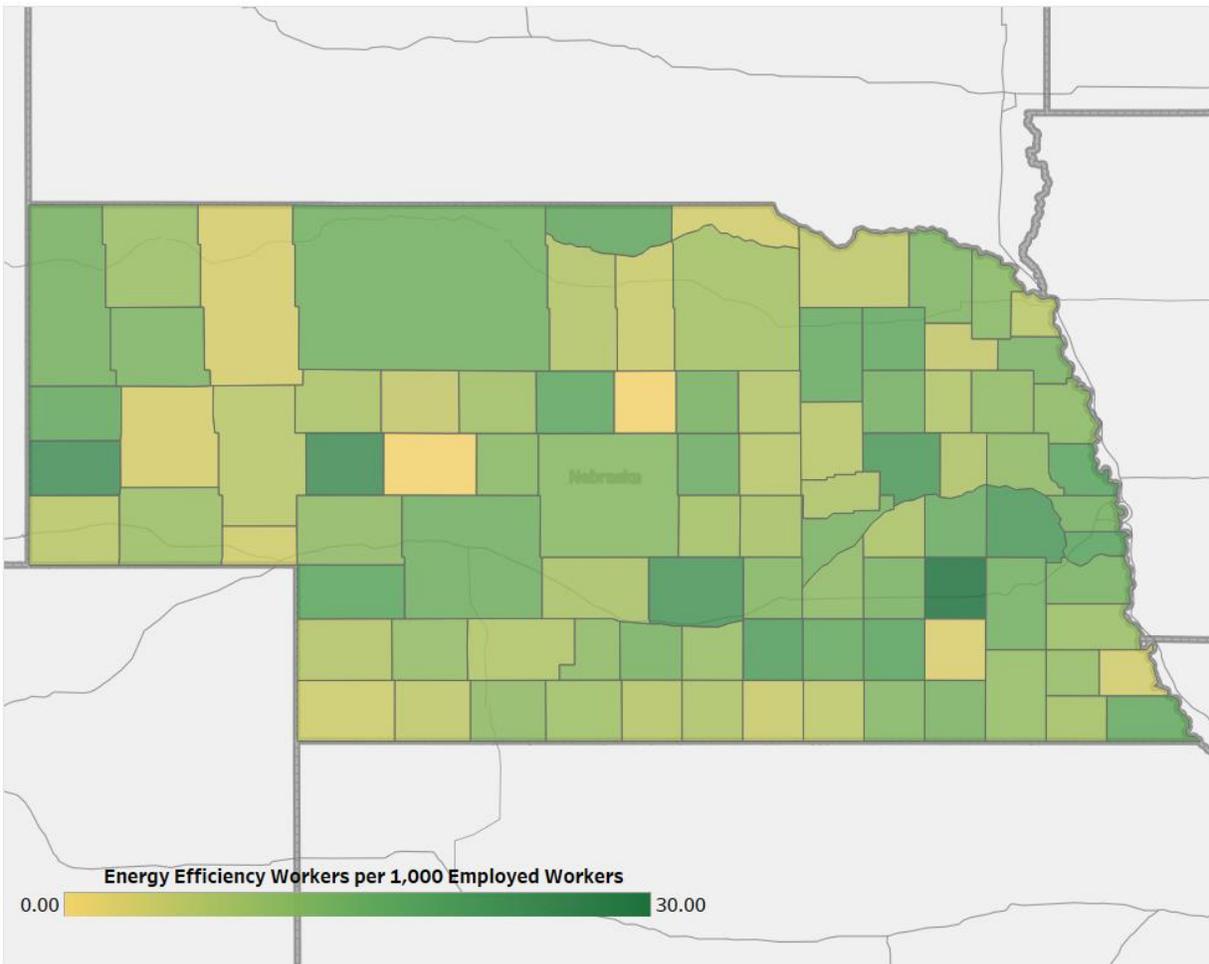
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **300,887** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,714	Lincoln	2,315
2	4,710	Omaha-Council Bluffs	5,569
3	4,525	Sioux City	107
		Rural	5,958

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	332	14	182	27	277	40	263
2	545	15	316	28	<5	41	281
3	112	16	321	29	23	42	274
4	1,338	17	207	30	265	43	280
5	687	18	<5	31	52	44	258
6	932	19	388	32	221	45	69
7	590	20	<5	33	340	46	<5
8	91	21	932	34	564	47	489
9	<5	22	326	35	<5	48	7
10	224	23	178	36	367	49	59
11	<5	24	326	37	361		
12	285	25	722	38	194		
13	88	26	136	39	48		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Nevada

## Energy Efficiency Jobs in America

Oct 2020

10,490\*

Dec 2019

11,988

*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

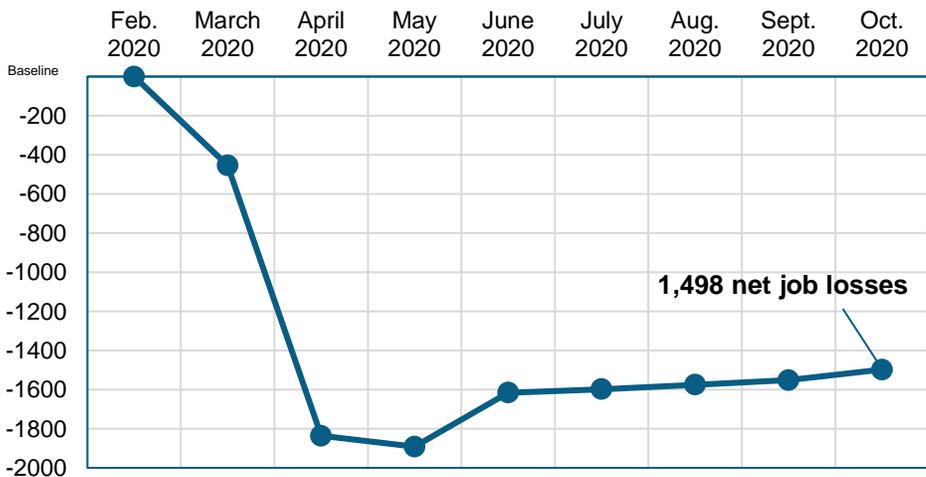
The 2020 pandemic shocked our nation's labor market with massive job losses. Nevada's energy efficiency industry lost as many as 1,498 jobs since its onset, a 12.5% decrease compared to total jobs in December 2019—wiping out the last year of gains.

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.

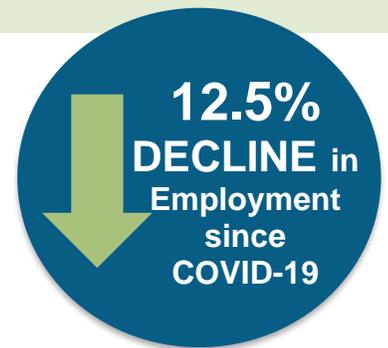
The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Nevada EE workforce grew steadily, gaining 25.4% since 2016.\*\*

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.

#### EE Job Losses in Nevada due to COVID-19



\*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.

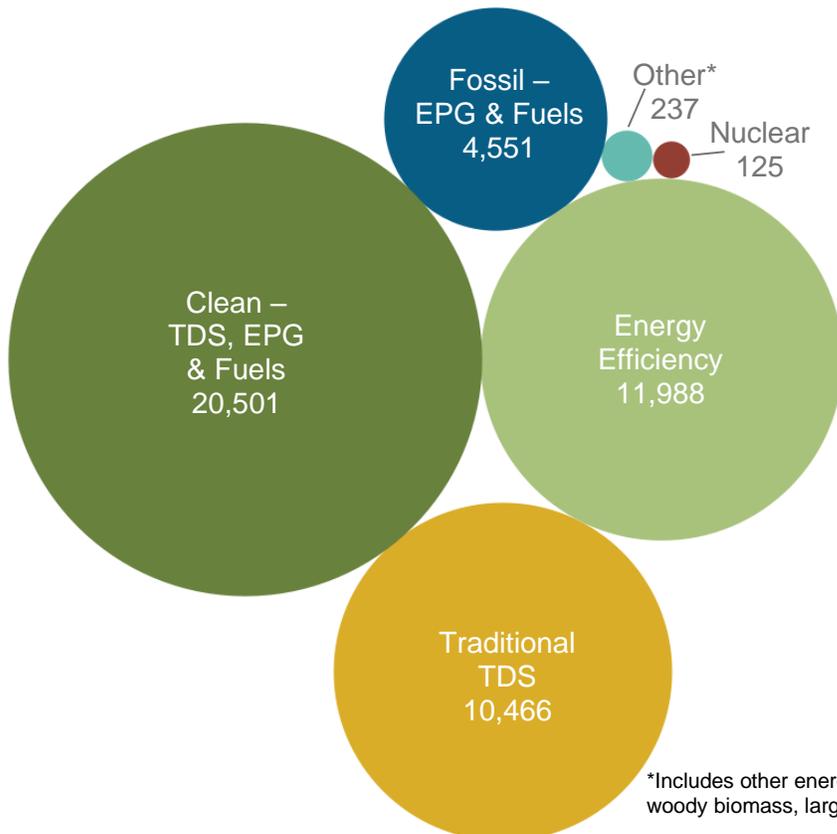
## What type of work are EE workers doing?

- 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
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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 Nevada?

Energy efficiency is the second largest energy sector in Nevada.

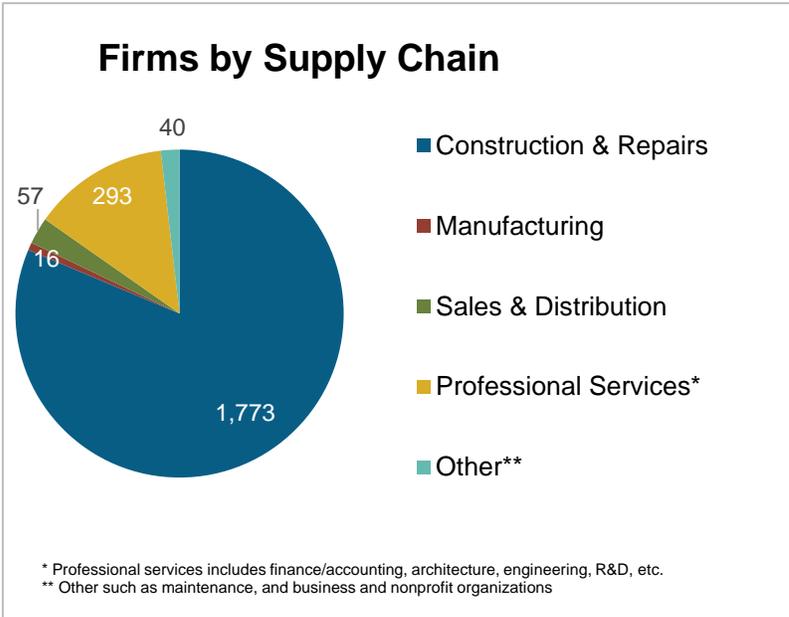
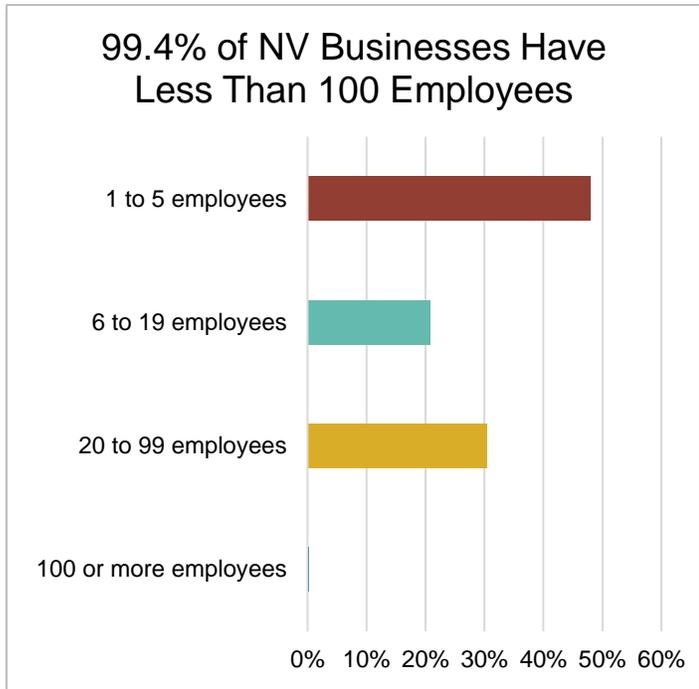


Energy efficiency in Nevada has seen consistent, reliable job growth – 25.4 percent since 2016.

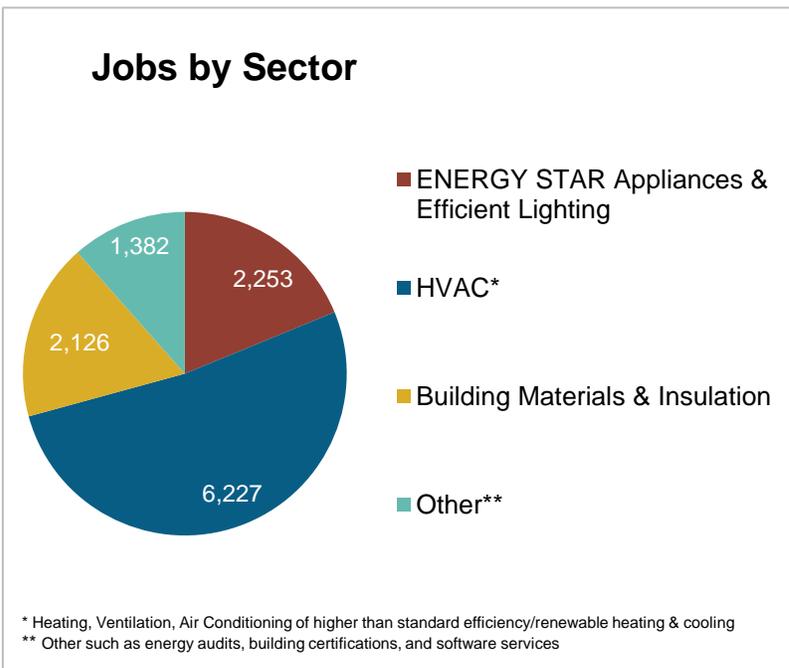
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Nevada?

EE Sector =  
**2,180**  
 Businesses in NV  
 (Dec. 2019)  
 ↑ **150** over 2018



**6.7%**  
 of Nevada  
 residents employed  
 in EE are **Veterans**

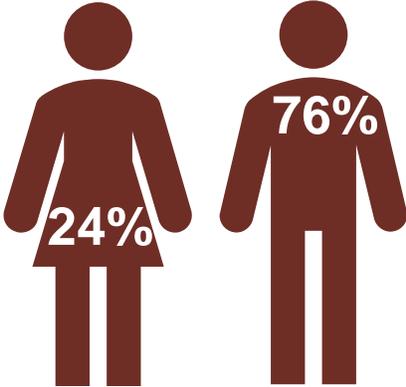
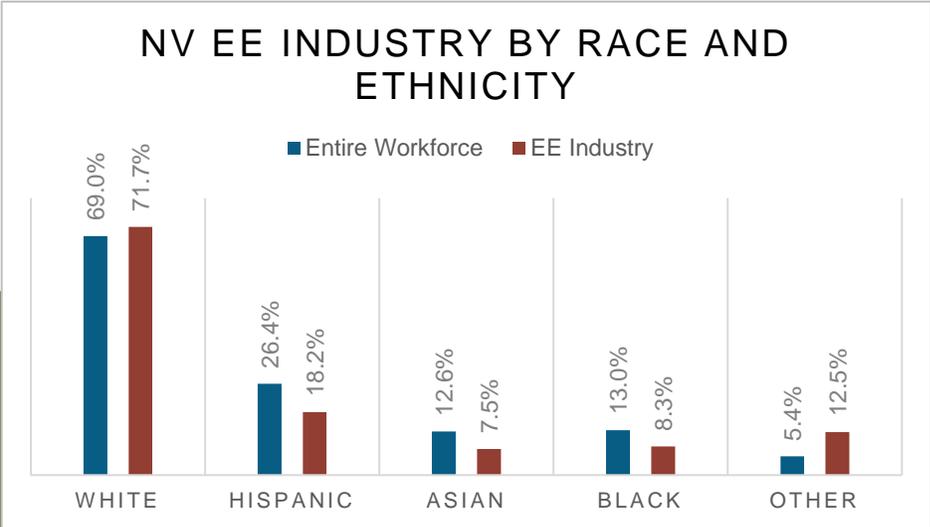


**Energy Efficiency  
 Construction Workers  
 Make Up 9% of NV  
 Construction Workers**

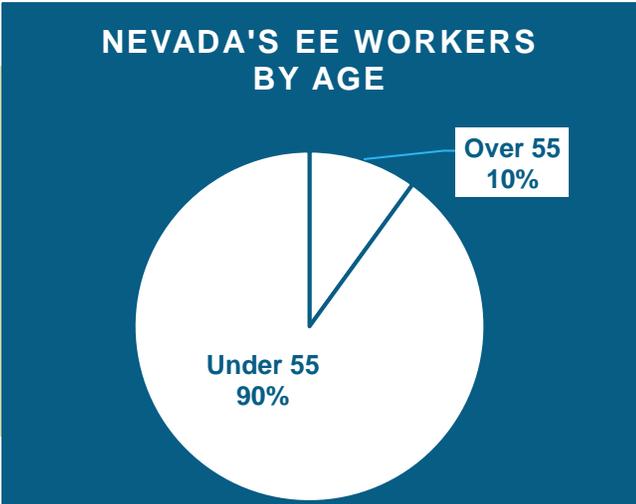
# How is EE Doing regarding Diversity in Nevada?

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 Nevada 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.



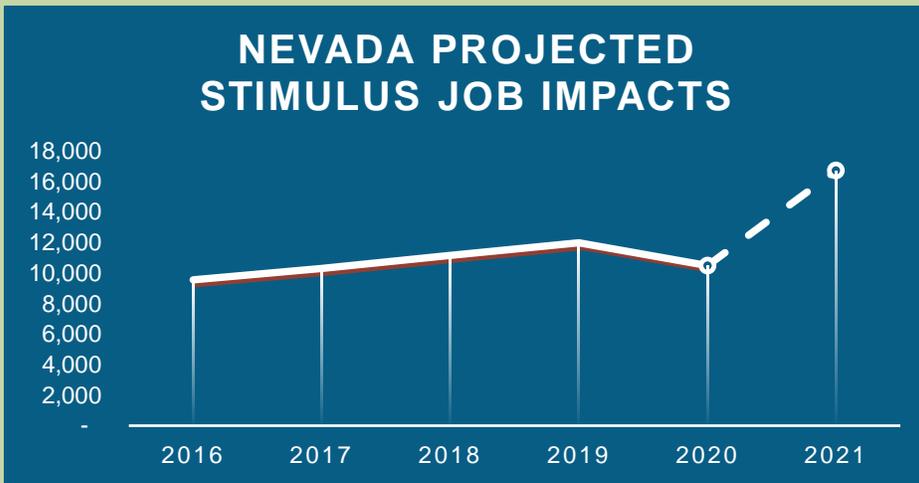
A significant portion of the Nevada efficiency workforce is in the “55+” category. 10% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.



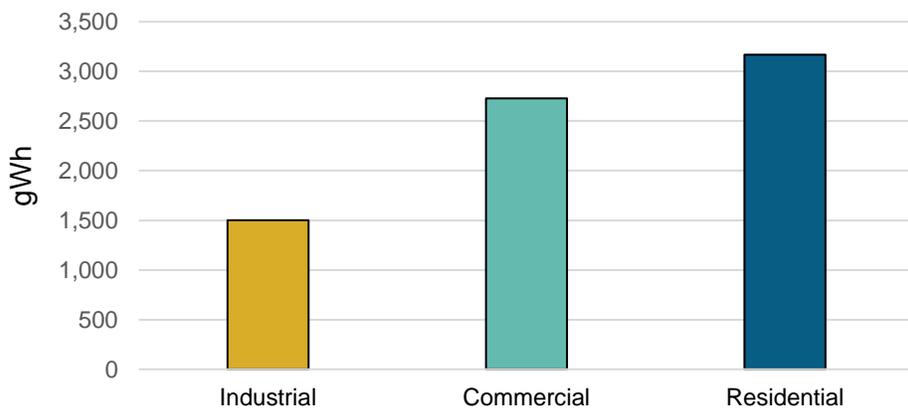
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **6,224 full-time direct, indirect, and induced NV jobs** that will last for at least five years: Over **31,118 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$447 million in GDP** each year for the next five years – resulting in **\$2.2 billion in economic activity**, more than 3.8 times the investment.

## How much energy efficiency is untapped in your state?

### Nevada Energy Efficiency Potential by Sector



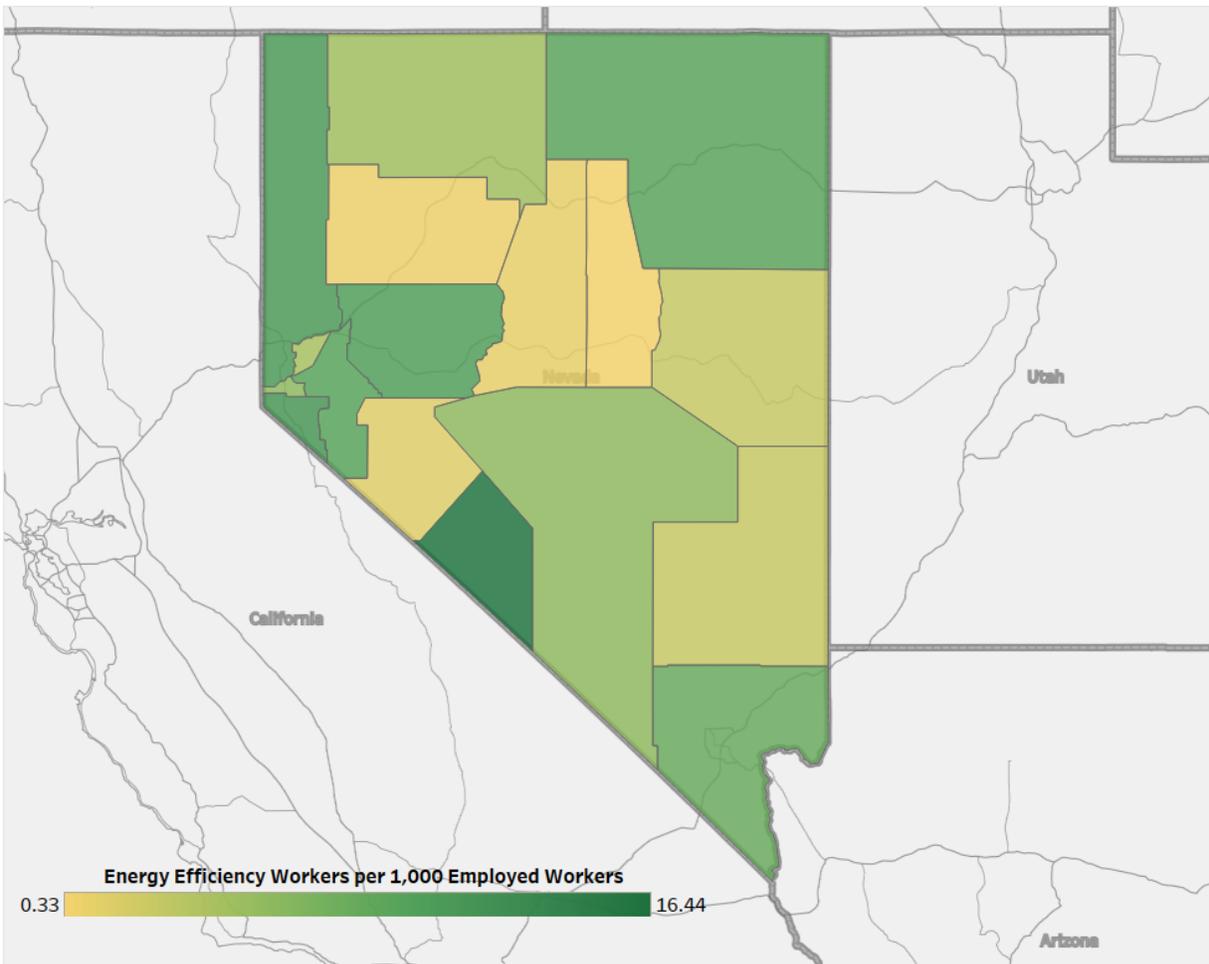
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **692,611** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	6,938	Carson City	233
2	2,723	Las Vegas-Paradise	7,139
3	1,598	Reno-Sparks	4,111
4	729	Rural	506

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	722	7	457	13	1,355	19	254
2	904	8	491	14	179	20	56
3	1,581	9	476	15	186	21	16
4	<5	10	1,001	16	497		
5	2,170	11	207	17	379		
6	633	12	415	18	7		

## State Assembly

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	251	13	<5	25	523	37	<5
2	632	14	<5	26	205	38	155
3	558	15	1,092	27	31	39	404
4	198	16	<5	28	<5	40	273
5	96	17	5	29	<5	41	<5
6	802	18	484	30	351	42	<5
7	287	19	179	31	<5		
8	1,417	20	160	32	117		
9	187	21	242	33	243		
10	707	22	235	34	215		
11	266	23	67	35	46		
12	538	24	972	36	45		



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# New Hampshire

## Energy Efficiency Jobs in America

Oct 2020

10,951\*

Dec 2019

11,913

*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.*

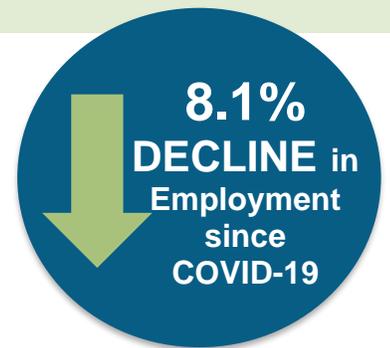
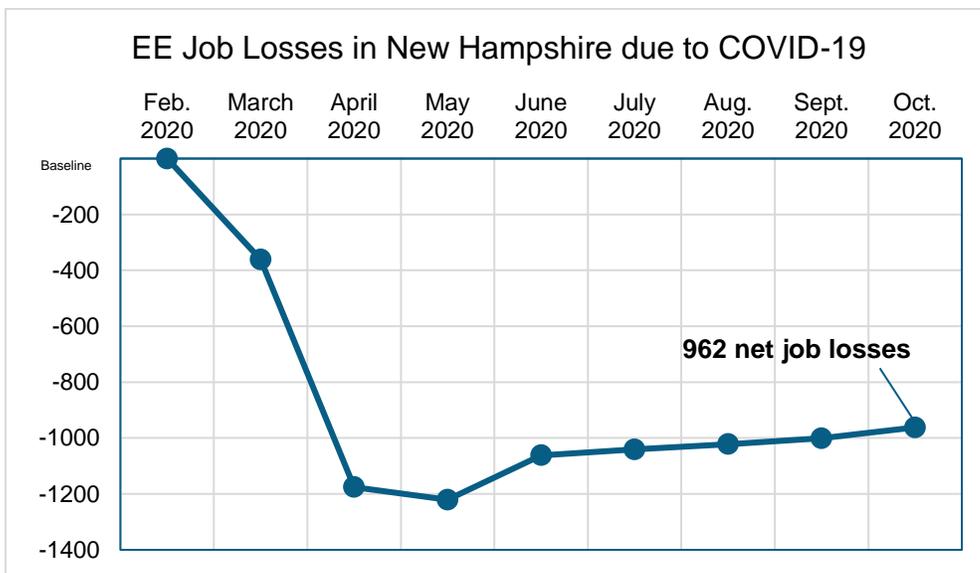
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. New Hampshire's energy efficiency industry lost as many as 962 jobs since its onset, an 8.1% decrease compared to total jobs in December 2019—wiping out the last 2 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 New Hampshire EE workforce grew steadily, gaining 9.6% 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.



Presented by:



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

# What are EE Jobs?

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

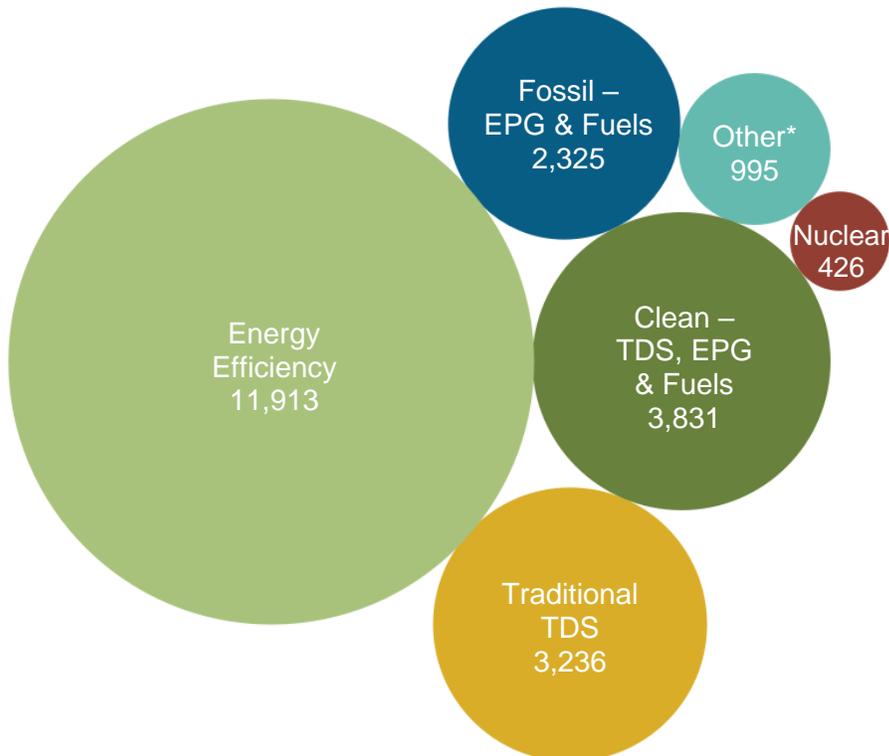
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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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 New Hampshire?

Energy efficiency is the largest energy sector in New Hampshire.

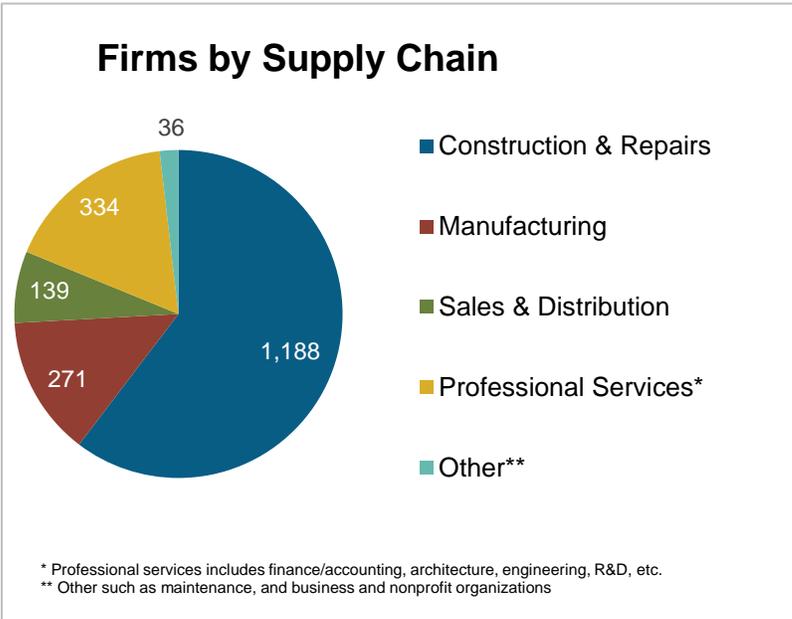
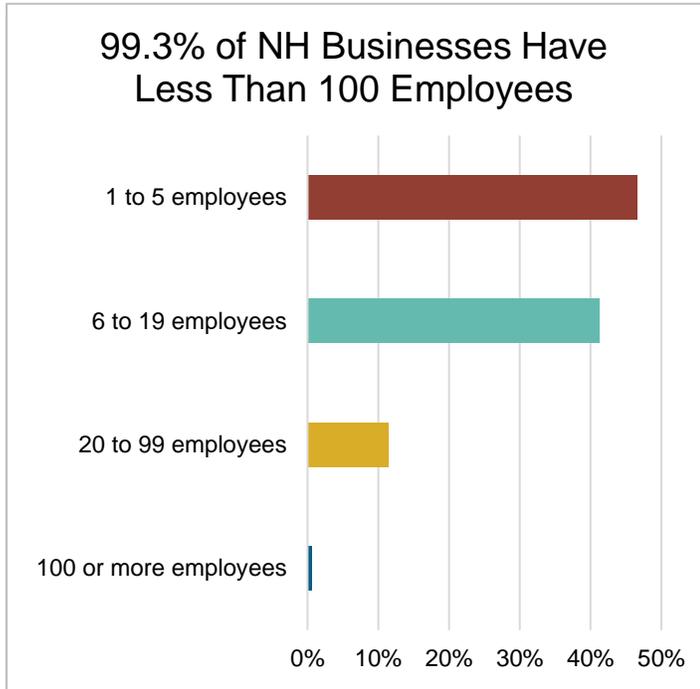


Energy efficiency in New Hampshire has seen consistent, reliable job growth – 9.6 percent since 2016.

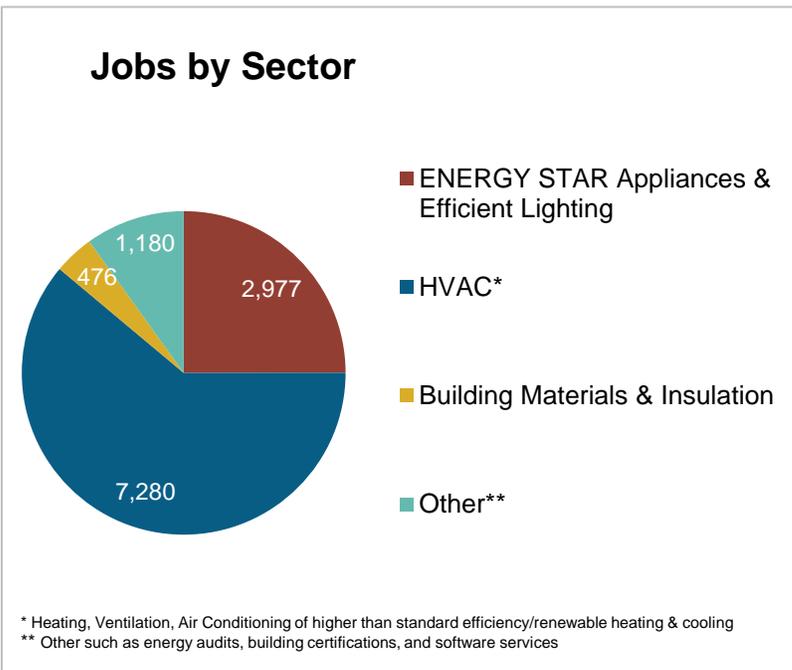
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in New Hampshire?

EE Sector =  
**1,969**  
 Businesses in NH  
 (Dec. 2019)  
 ↑ **30** over 2018




**8.3%**  
 of New Hampshire  
 residents employed  
 in EE are **Veterans**

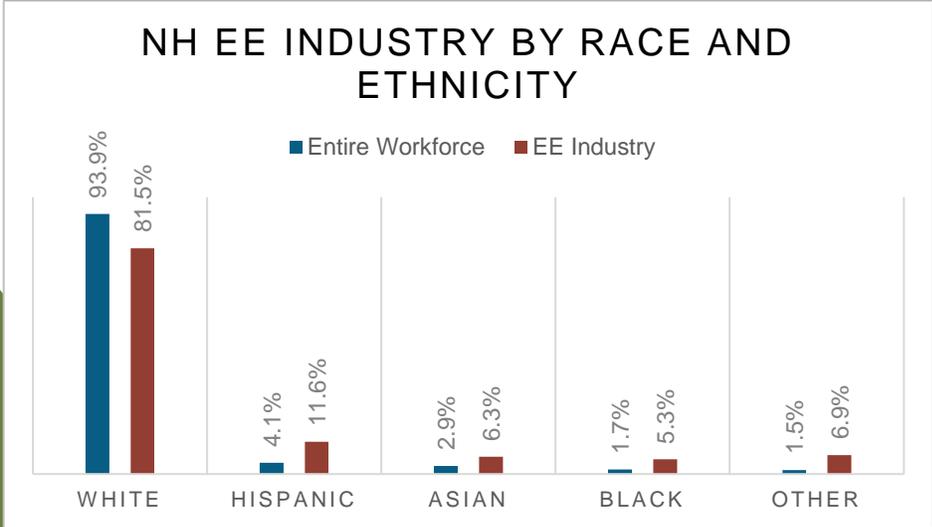



**Energy Efficiency  
 Construction Workers  
 Make Up 25% of NH  
 Construction Workers**

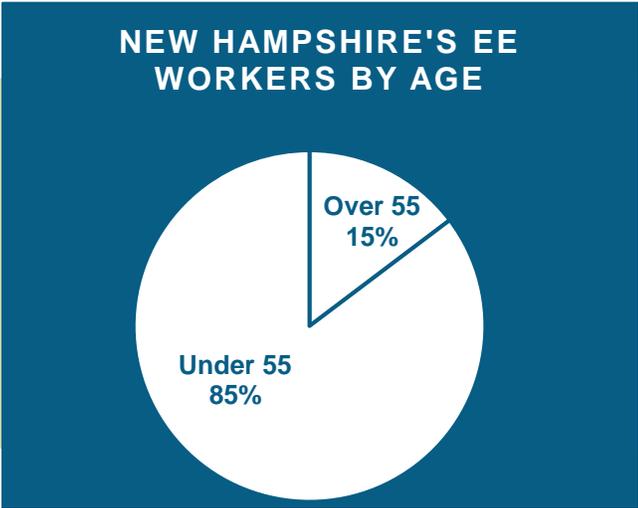
# How is EE Doing regarding Diversity in New Hampshire?

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 New Hampshire 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 New Hampshire efficiency workforce is in the “55+” category. 15% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

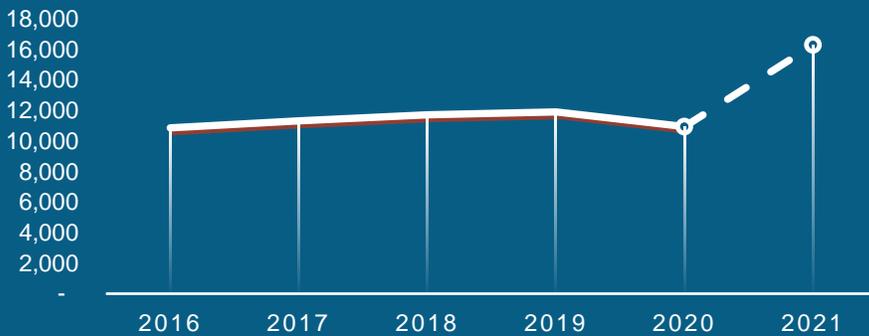
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All these benefits ultimately translate to greater cash flow and stronger local economies. Energy efficiency jobs are proven to be sustainable wage positions that are accessible to all localities nationwide — regardless of geography or politics — providing 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.

## NEW HAMPSHIRE PROJECTED STIMULUS JOB IMPACTS



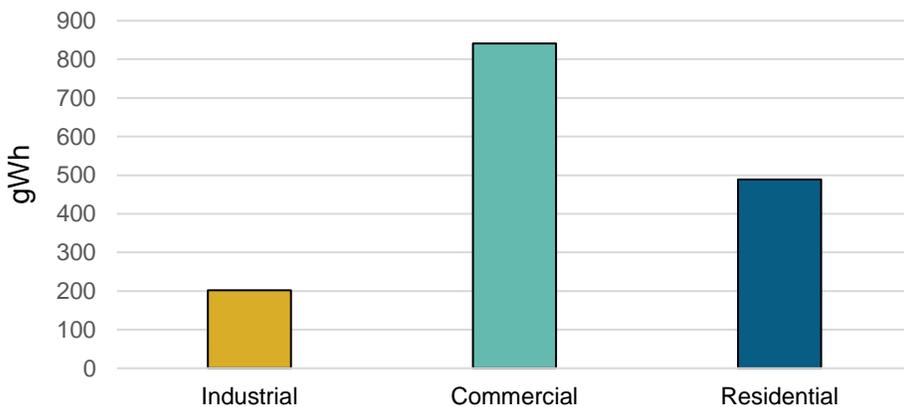
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **5,345 full-time direct, indirect, and induced NH jobs** that will last for at least five years: Over **26,727 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$393 million in GDP** each year for the next five years – resulting in **\$2.0 billion in economic activity**, more than 3.8 times the investment.

## How much energy efficiency is untapped in your state?

### New Hampshire Energy Efficiency Potential by Sector



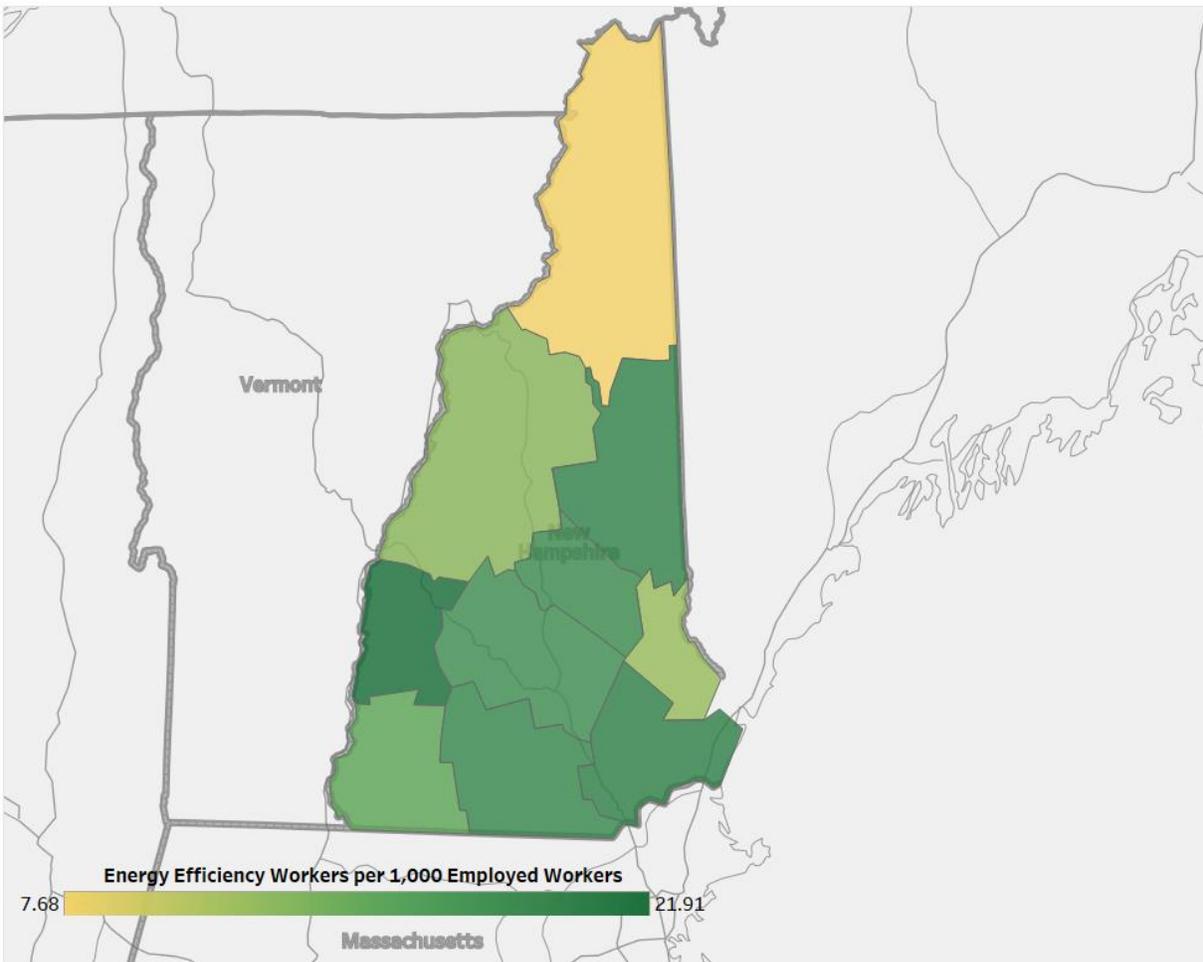
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **213,111 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	6,469	Boston-Cambridge-Quincy	5,352
2	5,444	Manchester-Nashua	2,865
		Rural	3,695

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	455	7	583	13	303	19	250
2	552	8	534	14	1,097	20	334
3	570	9	577	15	612	21	611
4	458	10	369	16	561	22	547
5	393	11	567	17	404	23	497
6	286	12	615	18	185	24	553

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	122	405	35	602	9	722	72
2	279	406	107	604	121	723	449
4	88	408	77	605	<5	724	58
5	52	409	75	606	51	801	22
6	82	410	131	607	71	802	40
7	22	412	64	609	97	803	50
101	99	413	40	610	566	804	118
102	115	501	107	620	159	805	24
103	65	502	80	623	113	806	298
104	175	503	39	624	135	807	155
105	86	504	201	701	52	817	71
117	8	505	17	702	158	818	29
201	91	506	242	704	216	901	64
202	199	507	250	705	483	902	116
203	25	508	147	706	45	903	88
209	191	510	464	707	81	906	38
211	62	512	198	708	326	907	23
212	83	520	285	709	102		
301	55	521	398	710	353		
302	37	523	124	712	34		
303	50	525	12	713	55		
304	19	526	123	714	97		
305	15	528	166	715	41		
306	29	529	66	716	37		
401	96	530	300	717	19		
402	53	531	123	719	135		
403	39	537	119	720	127		
404	18	601	143	721	124		



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](http://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.

# New Jersey

## Energy Efficiency Jobs in America

Oct 2020

31,781\*

Dec 2019

37,982

*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.*

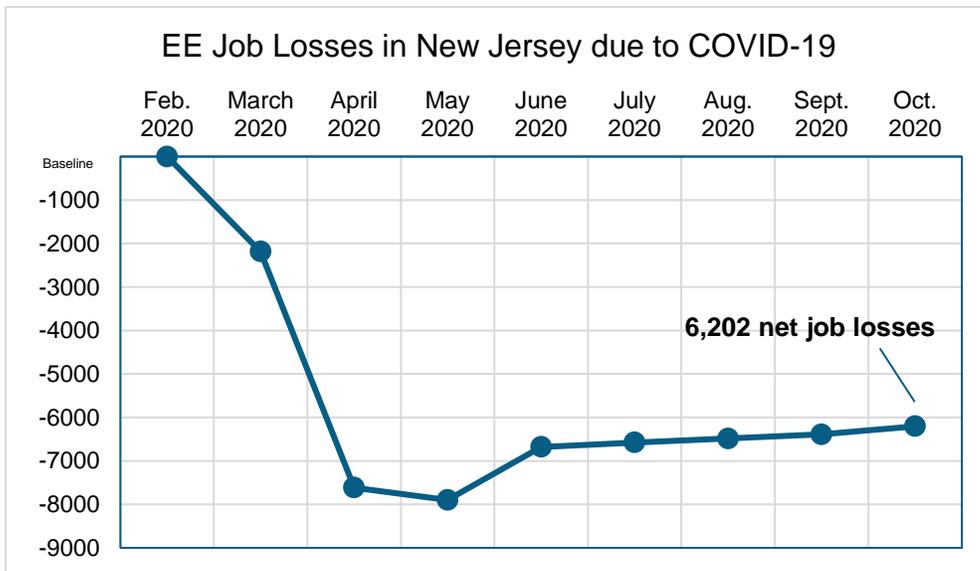
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. New Jersey's energy efficiency industry lost as many as 6,202 jobs since its onset, a 16.3% decrease compared to total jobs in December 2019—wiping out the last 2 years of gains.

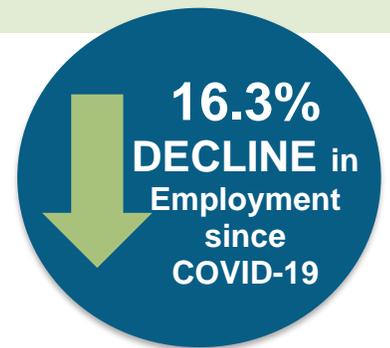
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the New Jersey EE workforce grew steadily, gaining 19.9% 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.

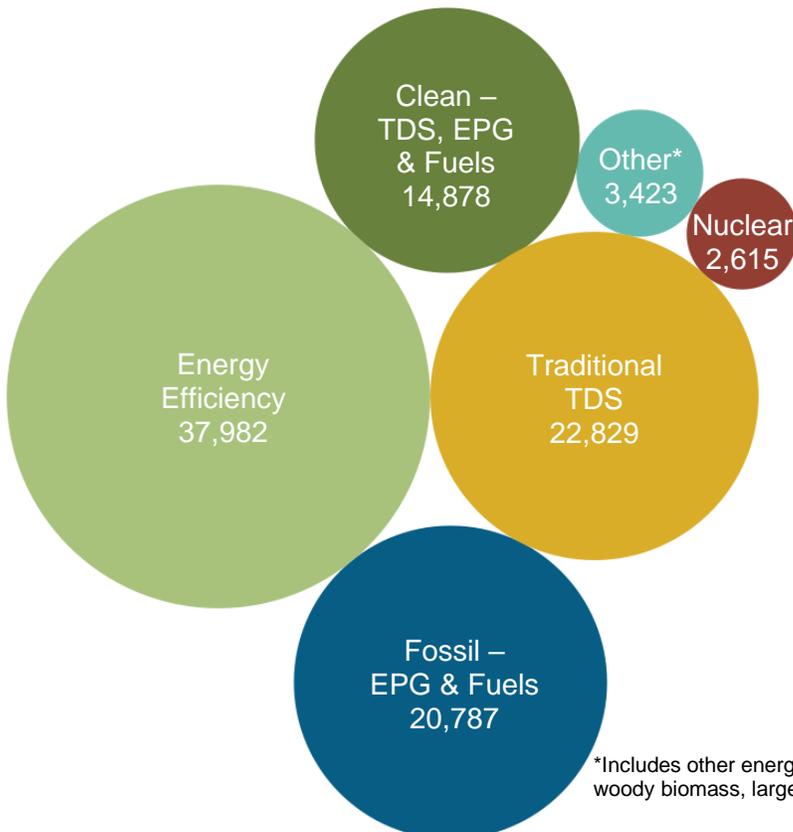
## What type of work are EE workers doing?

- 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 New Jersey?

Energy efficiency is the largest energy sector in New Jersey.

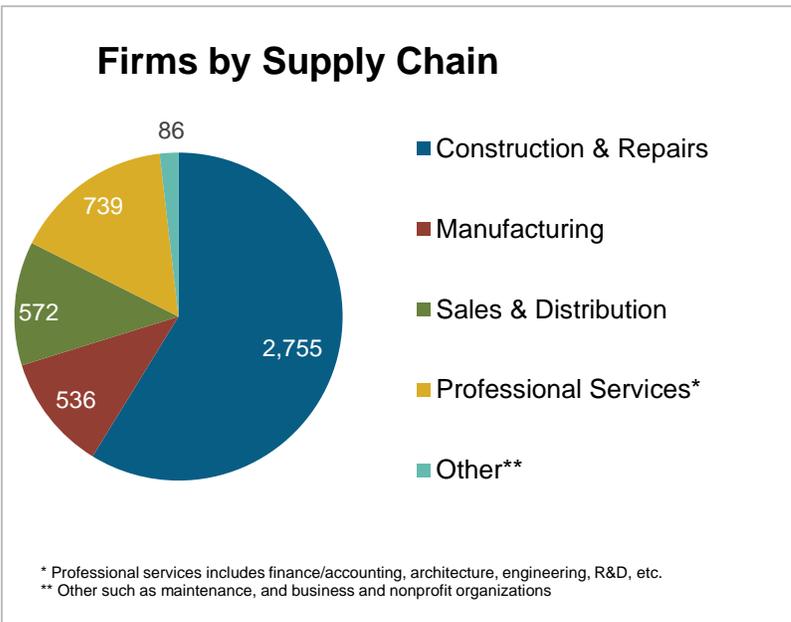
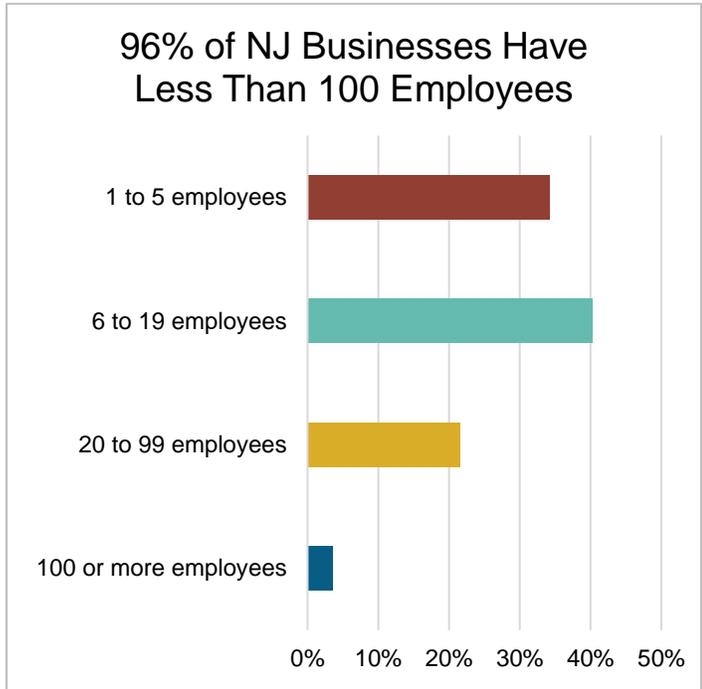


Energy efficiency in New Jersey has seen consistent, reliable job growth – 19.9 percent since 2016.

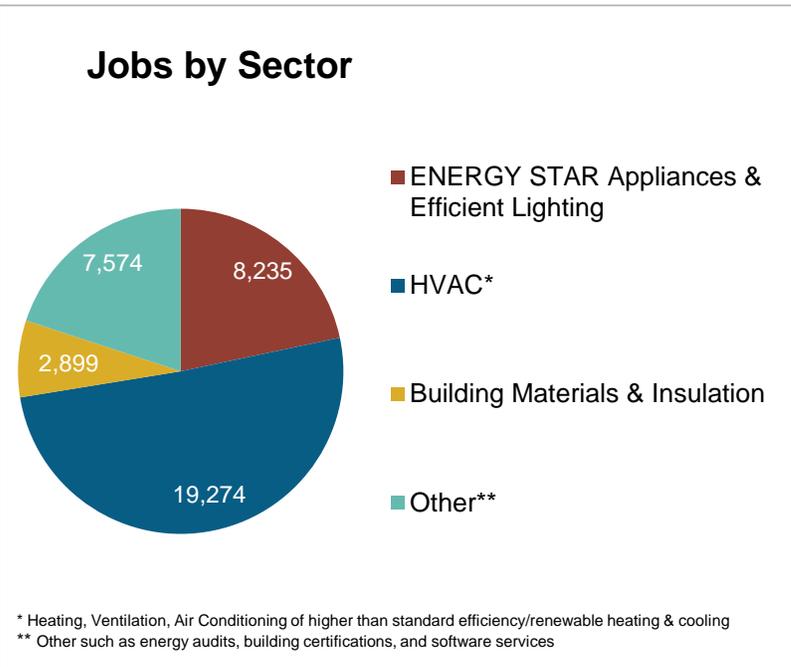
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in New Jersey?

EE Sector =  
**4,689**  
 Businesses in NJ  
 (Dec. 2019)  
 ↑ **220** over 2018



**6.9%**  
 of New Jersey  
 residents employed  
 in EE are **Veterans**

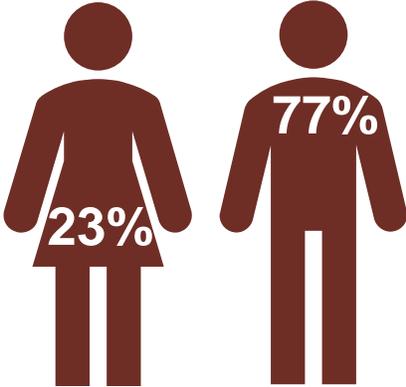
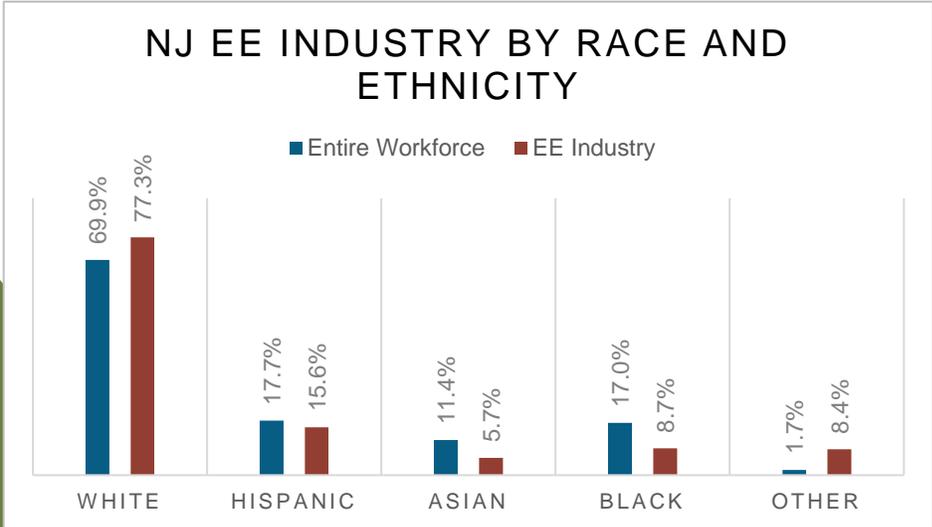



**Energy Efficiency  
 Construction Workers  
 Make Up 13% of NJ  
 Construction Workers**

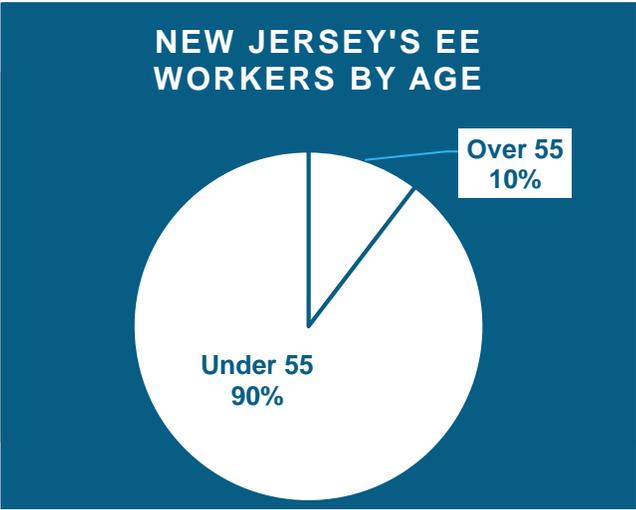
# How is EE Doing regarding Diversity in New Jersey?

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 New Jersey 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 New Jersey efficiency workforce is in the “55+” category. 10% 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.

## NEW JERSEY PROJECTED STIMULUS JOB IMPACTS



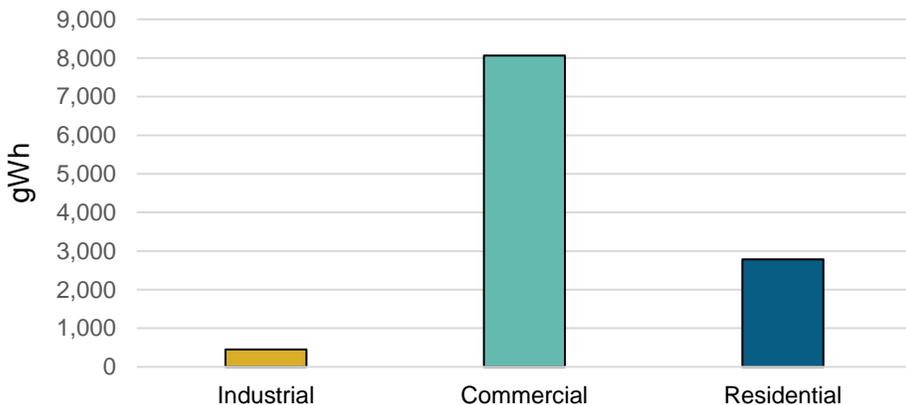
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **15,839 full-time direct, indirect, and induced NJ jobs** that will last for at least five years: Over **79,193 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.3 billion in GDP** each year for the next five years — resulting in **\$6.5 billion in economic activity**, more than 4 times the investment.

## How much energy efficiency is untapped in your state?

### New Jersey Energy Efficiency Potential by Sector



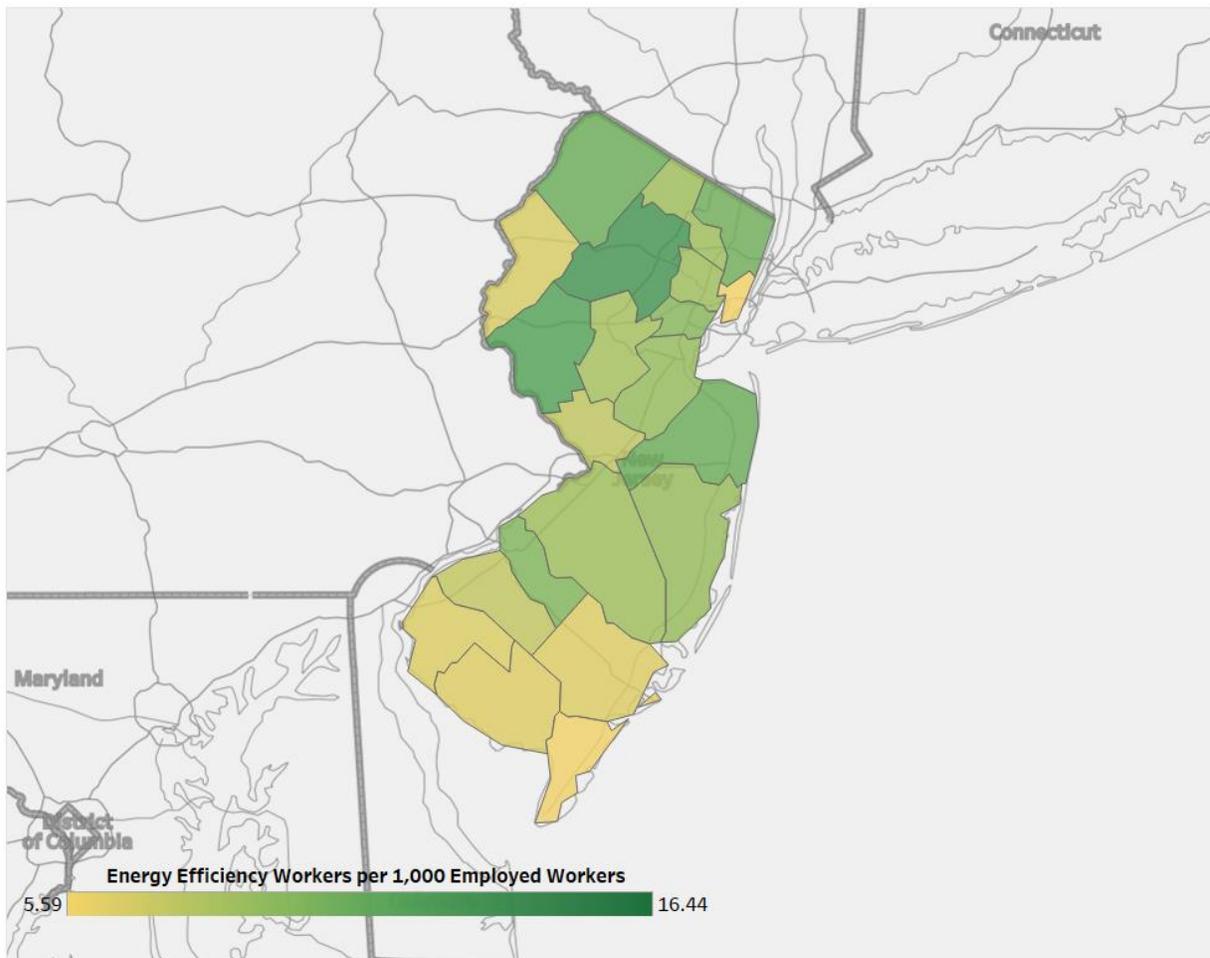
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,420,204 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	2,794	Allentown-Bethlehem-Easton	472
2	2,475	Atlantic City	775
3	3,878	New York-Northern New Jersey-Long Island	28,977
4	4,122	Ocean City	462
5	4,173	Philadelphia-Camden-Wilmington	5,292
6	2,378	Trenton-Ewing	1,655
7	5,451	Vineland-Millville-Bridgeton	349
8	2,790		
9	3,098		
10	976		
11	3,578		
12	2,270		

### Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	974	11	1,925	21	1,459	31	703
2	911	12	1,180	22	765	32	563
3	665	13	676	23	887	33	456
4	630	14	1,102	24	1,014	34	683
5	797	15	950	25	1,465	35	855
6	707	16	1,629	26	1,580	36	690
7	1,146	17	947	27	901	37	1,429
8	852	18	630	28	596	38	1,028
9	1,161	19	534	29	711	39	1,322
10	1,310	20	615	30	577	40	961

## State General Assembly

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	948	11	2,257	21	1,416	31	673
2	974	12	1,192	22	733	32	550
3	641	13	649	23	887	33	457
4	655	14	1,106	24	1,039	34	623
5	791	15	973	25	1,406	35	833
6	686	16	1,570	26	1,602	36	693
7	1,189	17	1,036	27	870	37	1,437
8	866	18	604	28	571	38	1,036
9	1,123	19	506	29	683	39	1,268
10	1,360	20	588	30	570	40	919



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# New Mexico

## Energy Efficiency Jobs in America

Oct 2020

5,119\*

Dec 2019

6,099

*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.*

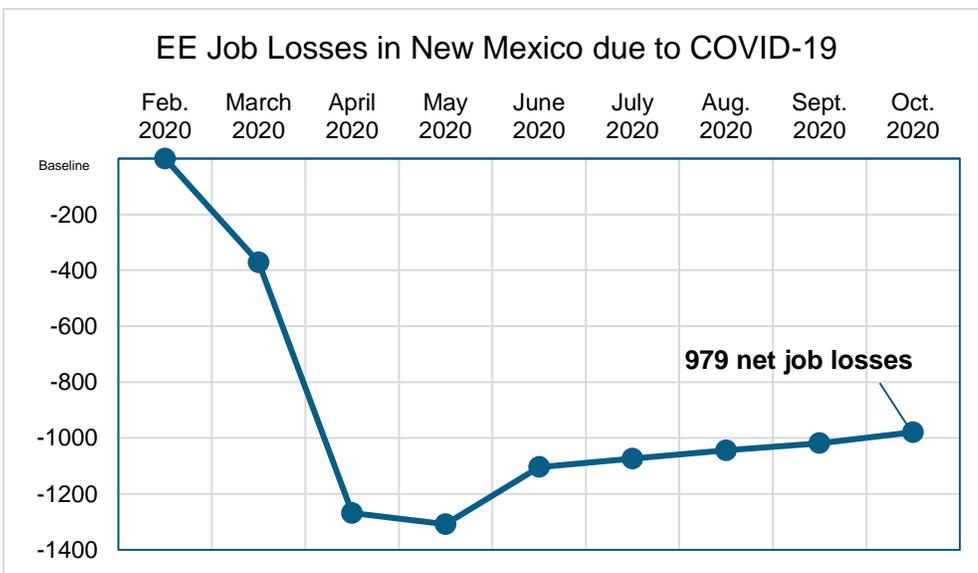
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. New Mexico's energy efficiency industry lost as many as 979 jobs since its onset, a 16.1% decrease compared to total jobs in December 2019—wiping out the last year of gains.

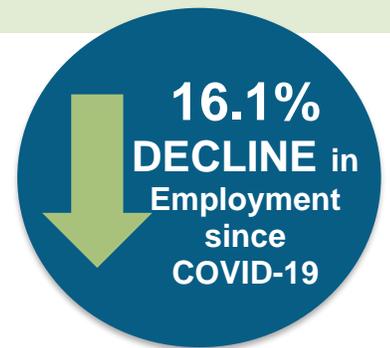
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the New Mexico EE workforce grew steadily, gaining 35.9% 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.

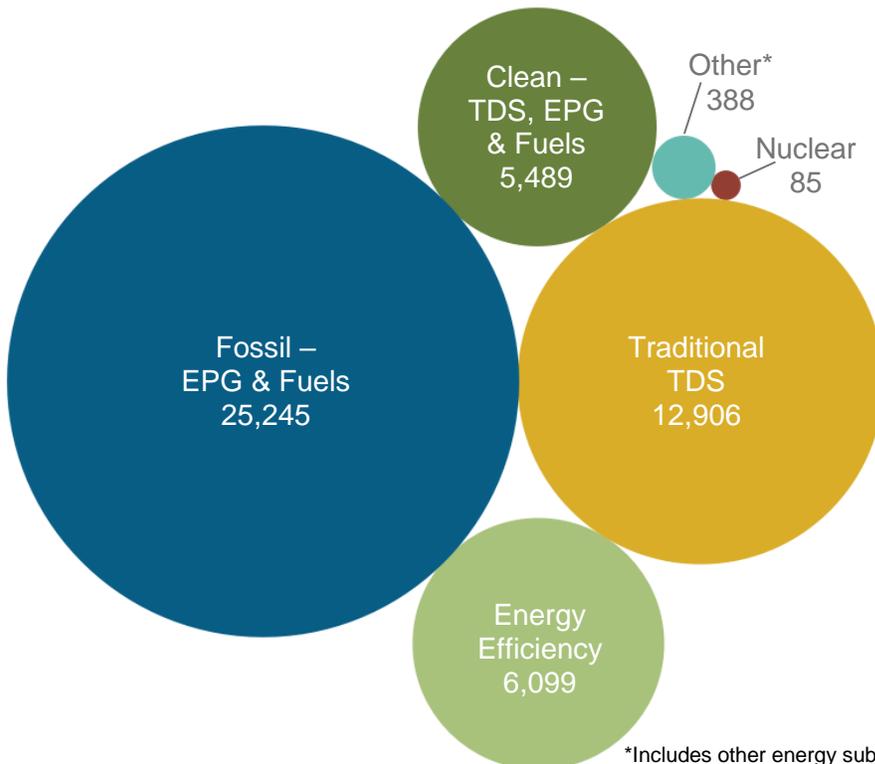
## What type of work are EE workers doing?

- 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 New Mexico?

Energy efficiency is the third largest energy sector in New Mexico.

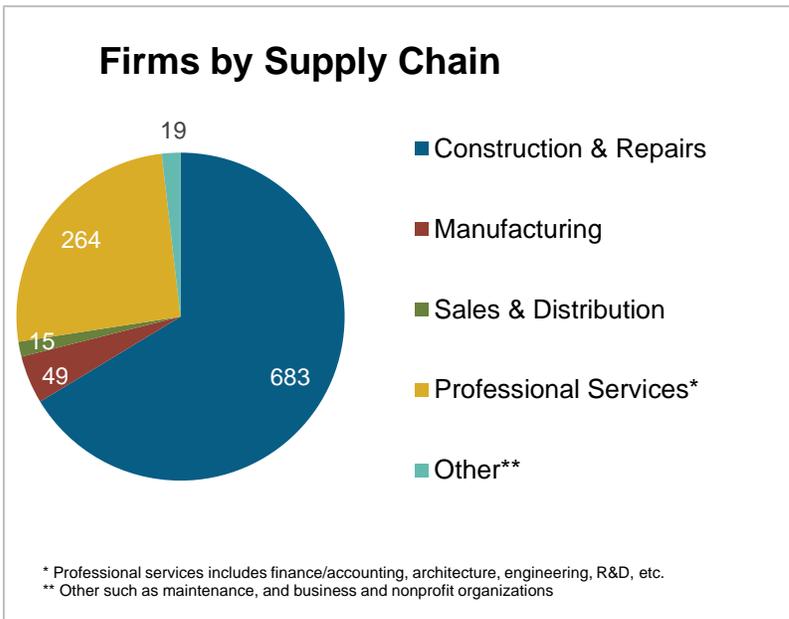
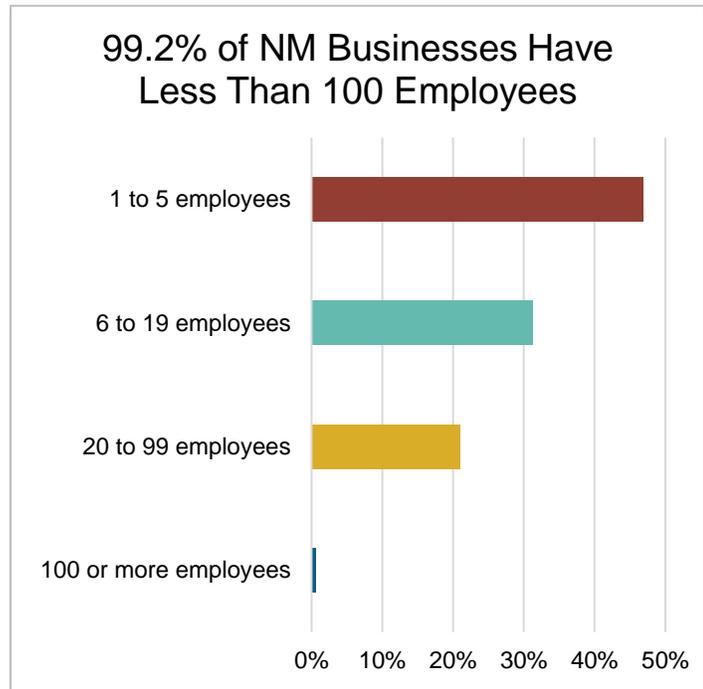


Fossil fuel jobs are historically key to New Mexico’s energy economy, but the current job total doesn’t tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 35.9% from 2016-2019, adding 1,611 jobs.

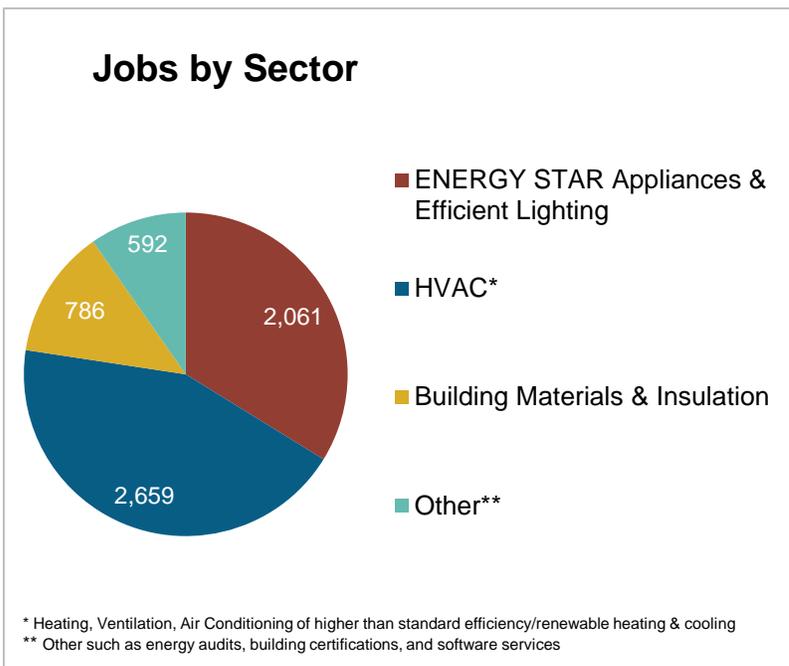
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in New Mexico?

EE Sector =  
**1,029**  
 Businesses in NM  
 (Dec. 2019)  
 ↑ **80** over 2018




**8.1%**  
 of New Mexico  
 residents employed  
 in EE are **Veterans**

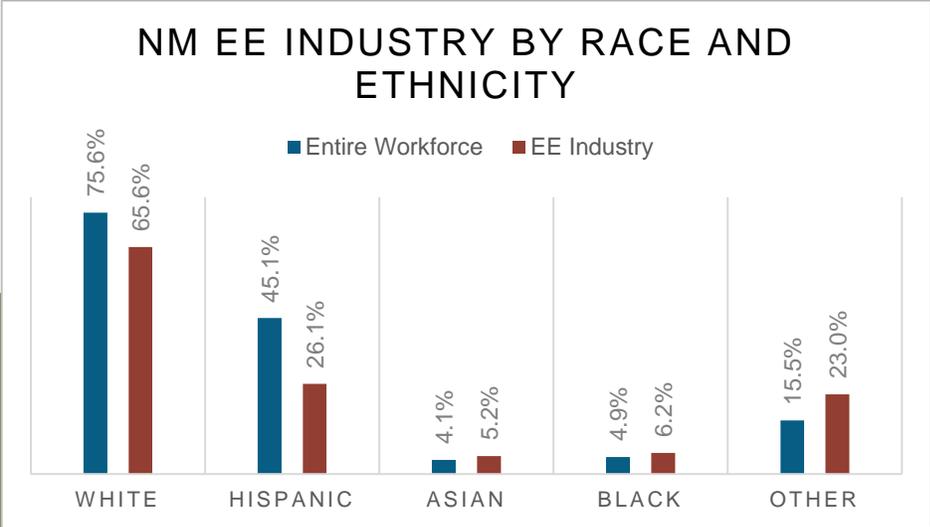



**Energy Efficiency  
 Construction Workers  
 Make Up 7% of NM  
 Construction Workers**

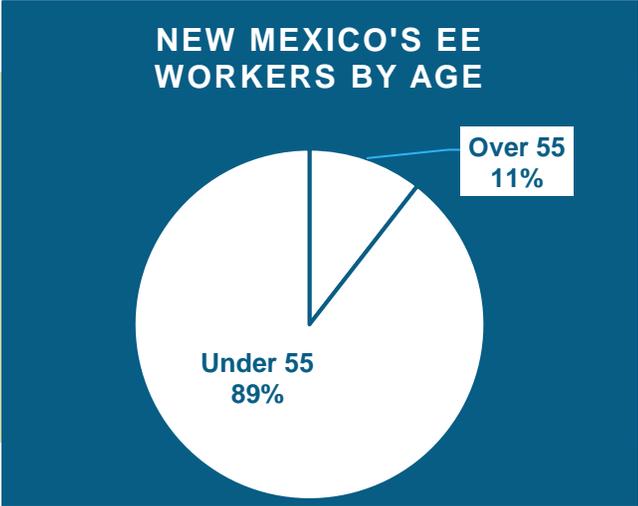
# How is EE Doing regarding Diversity in New Mexico?

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 New Mexico 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 New Mexico 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.

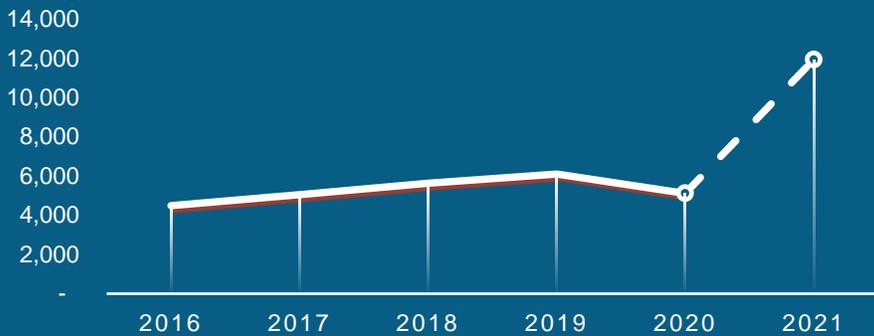
# Why invest in EE?

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.

## NEW MEXICO PROJECTED STIMULUS JOB IMPACTS



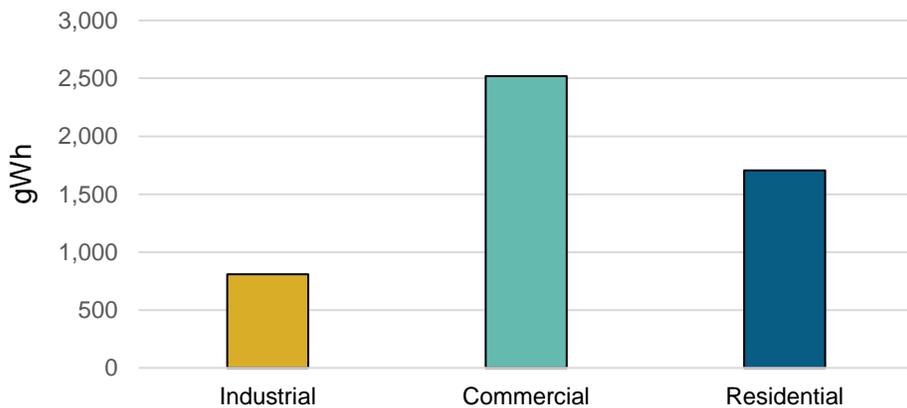
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **6,815 full-time direct, indirect, and induced NM jobs** that will last for at least five years: Over **34,076 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$414 million in GDP** each year for the next five years – resulting in **\$2.1 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### New Mexico Energy Efficiency Potential by Sector



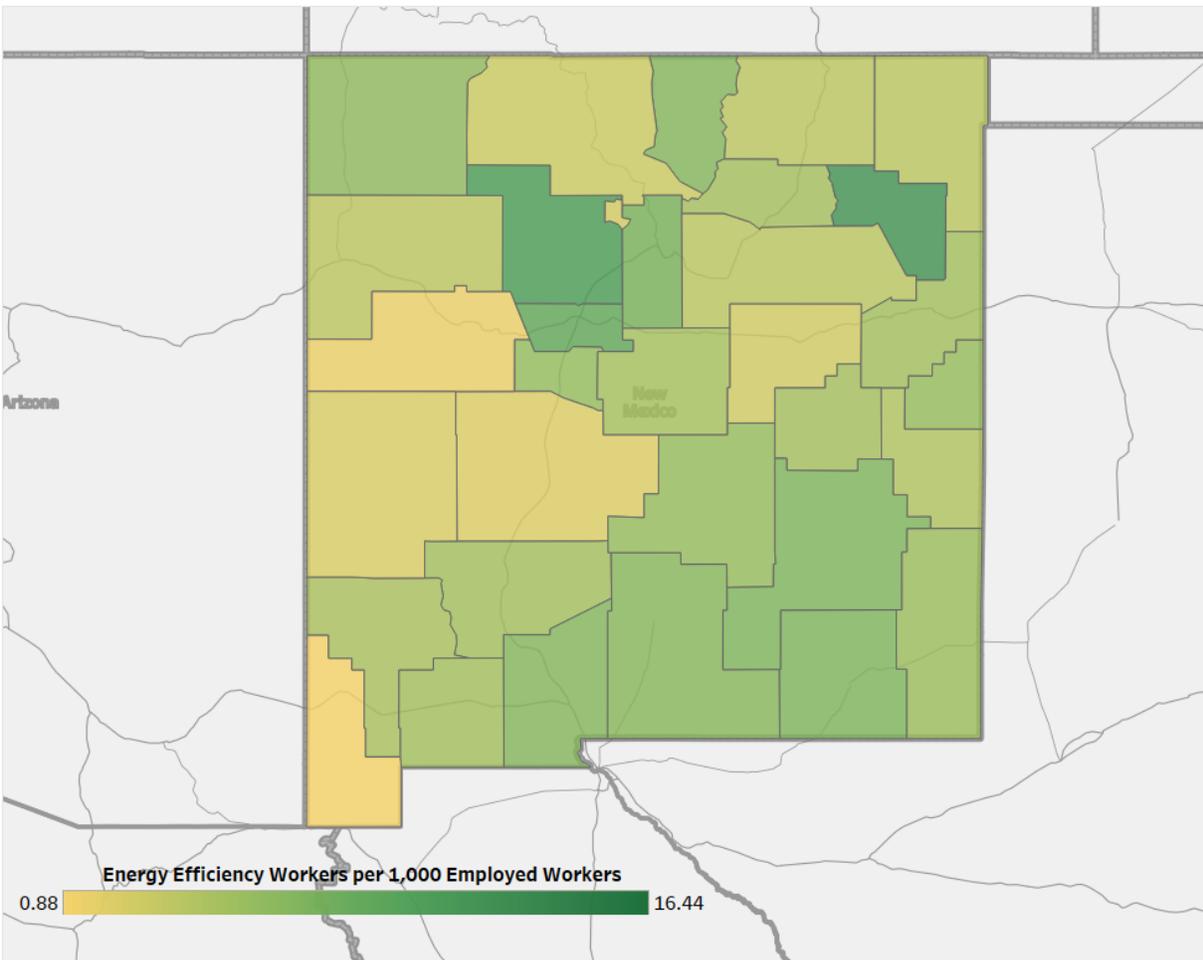
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **655,348** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	3,285	Albuquerque	3,440
2	1,185	Farmington	333
3	1,629	Las Cruces	300
		Santa Fe	766
		Rural	1,260

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	287	12	930	23	<5	34	107
2	57	13	885	24	712	35	84
3	62	14	<5	25	7	36	18
4	50	15	341	26	<5	37	<5
5	82	16	150	27	206	38	<5
6	121	17	<5	28	87	39	11
7	112	18	<5	29	81	40	<5
8	89	19	65	30	<5	41	172
9	355	20	39	31	245	42	15
10	354	21	<5	32	62		
11	154	22	10	33	146		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	279	19	<5	37	<5	55	9
2	36	20	146	38	26	56	44
3	<5	21	<5	39	<5	57	<5
4	15	22	72	40	123	58	90
5	75	23	139	41	90	59	21
6	34	24	206	42	8	60	<5
7	77	25	<5	43	326	61	196
8	<5	26	<5	44	31	62	6
9	<5	27	38	45	300	63	110
10	1,006	28	<5	46	150	64	<5
11	300	29	<5	47	<5	65	<5
12	<5	30	<5	48	<5	66	12
13	<5	31	<5	49	29	67	37
14	<5	32	68	50	20	68	<5
15	1,157	33	235	51	89	69	<5
16	<5	34	37	52	<5	70	<5
17	<5	35	15	53	13		
18	221	36	8	54	189		



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# New York

## 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

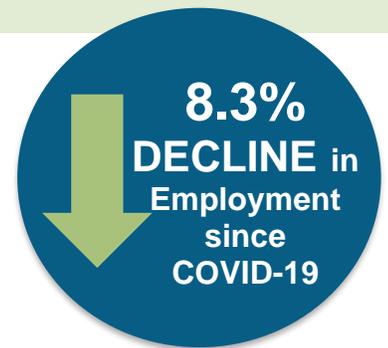
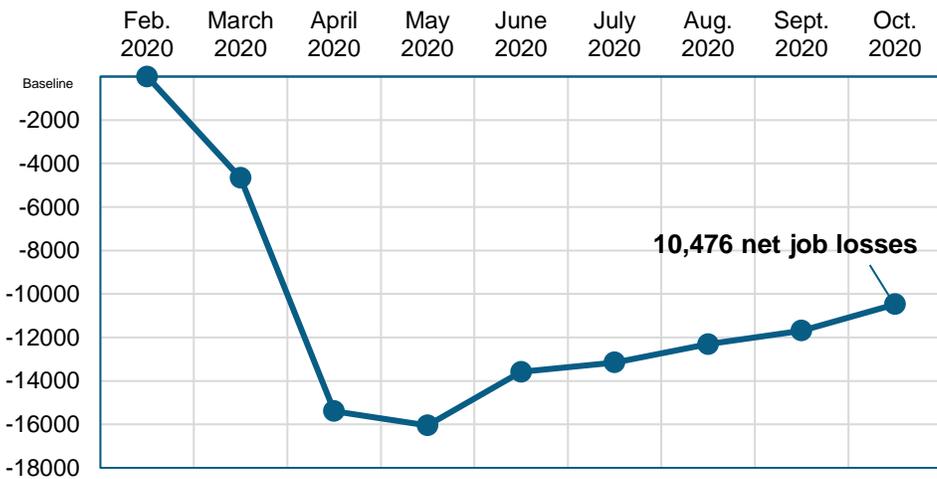
The 2020 pandemic shocked our nation’s labor market with massive job losses. New York’s energy efficiency industry lost as many as 10,476 jobs since its onset, a 8.3% decrease compared to total jobs in December 2019—wiping out the last 2 years of gains.

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 New York EE workforce grew steadily, gaining 14.6% 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.

EE Job Losses in New York due to COVID-19



Presented by:



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

# What are EE Jobs?

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

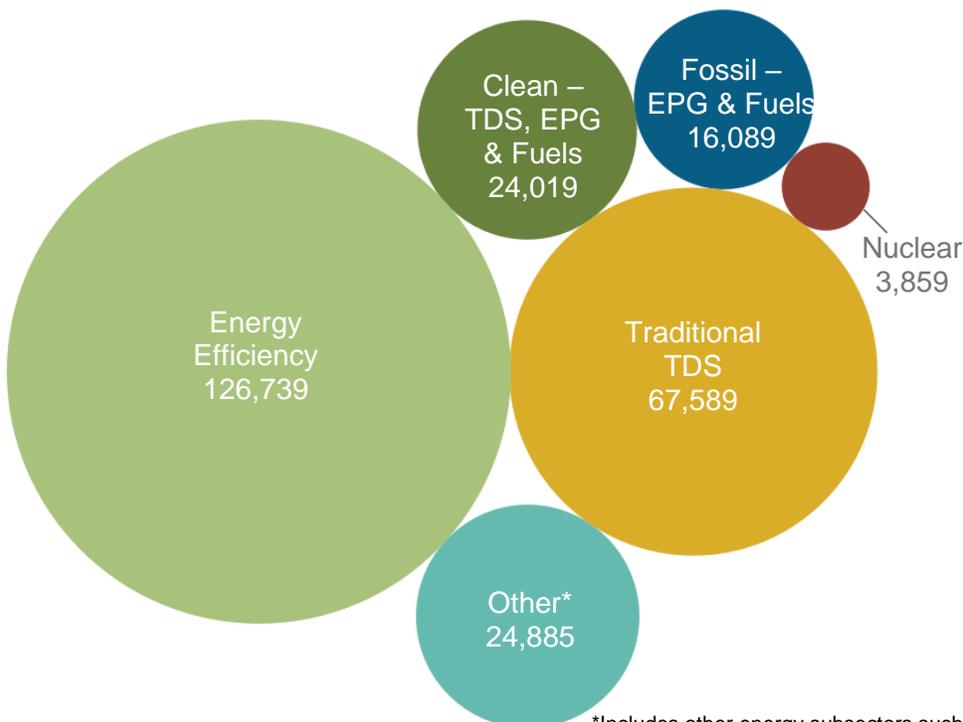
## What type of work are EE workers doing?

- 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 New York?

Energy efficiency is the largest energy sector in New York.

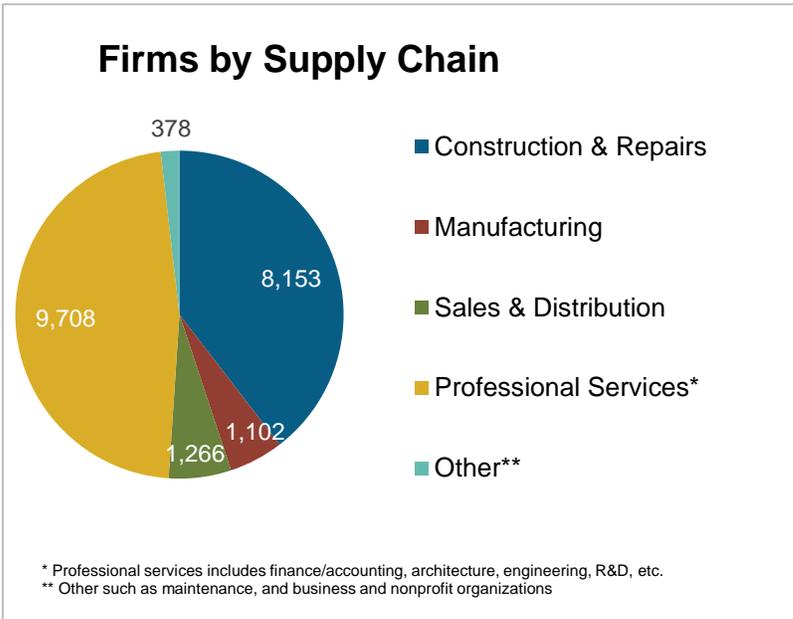
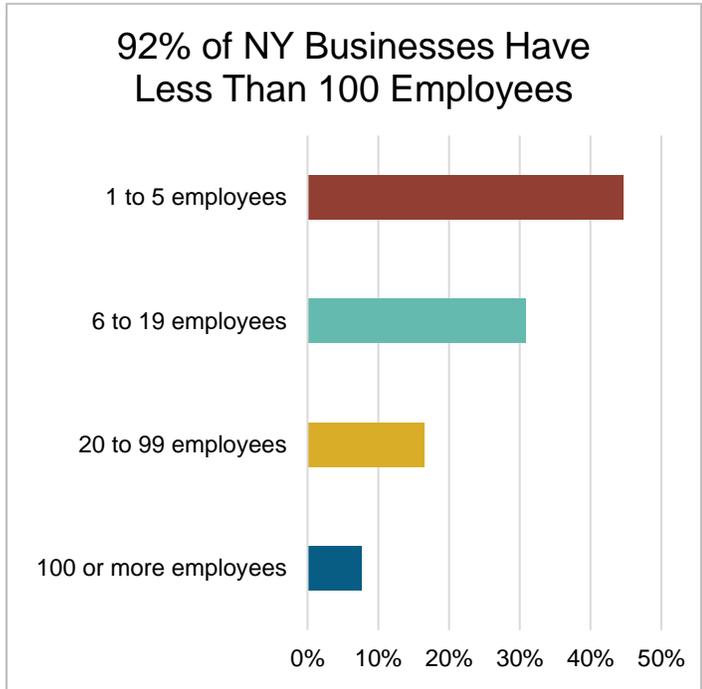


Energy efficiency in New York has seen consistent, reliable job growth – 14.6 percent since 2016.

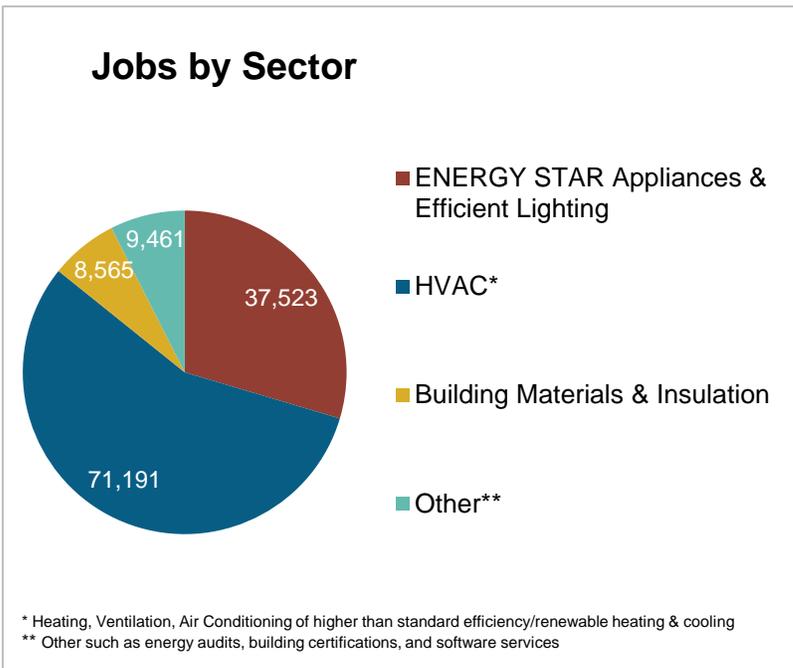
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in New York?

EE Sector =  
**20,608**  
 Businesses in NY  
 (Dec. 2019)  
 ↑ **560** over 2018



**7.3%**  
 of New York  
 residents employed  
 in EE are **Veterans**

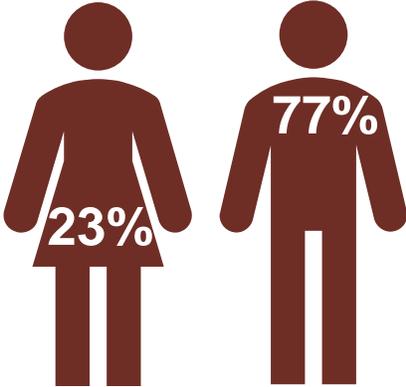
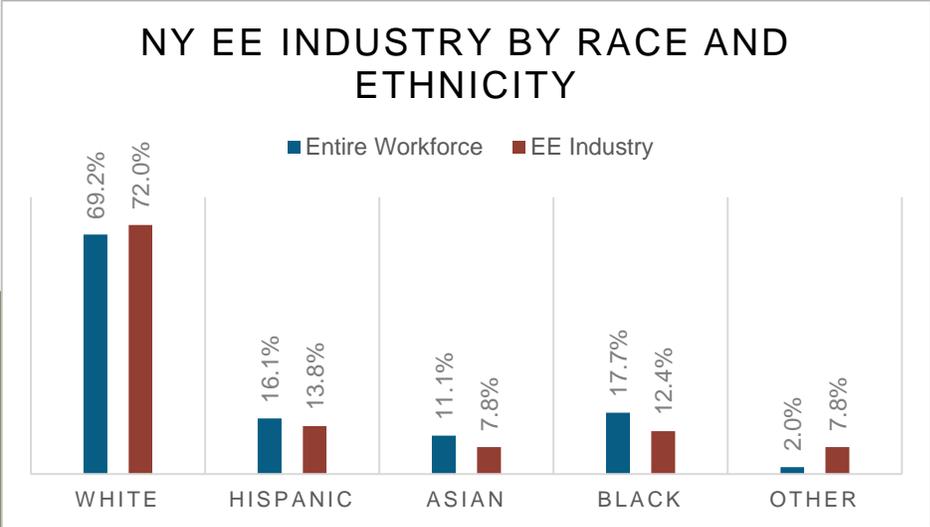


**Energy Efficiency  
 Construction Workers  
 Make Up 12% of NY  
 Construction Workers**

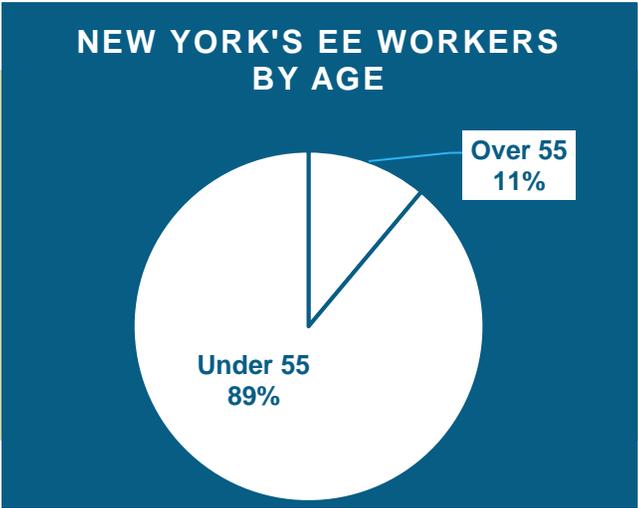
# How is EE Doing regarding Diversity in New York?

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 New York 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.



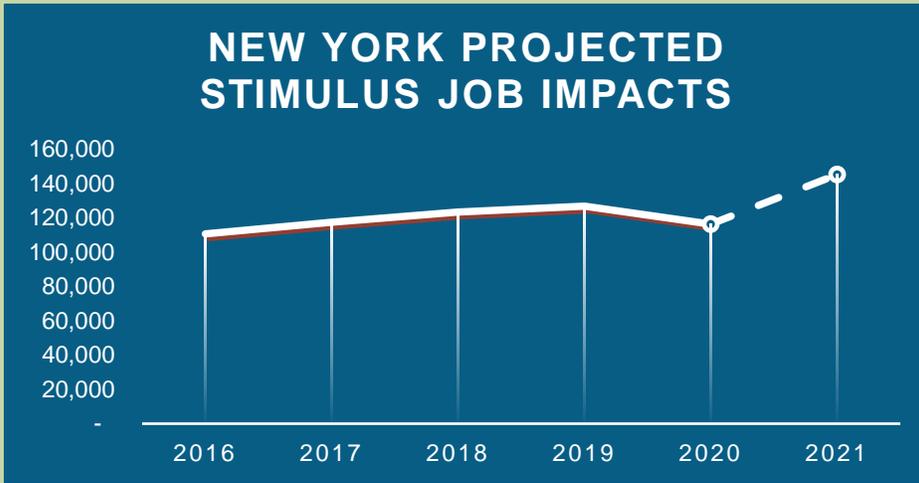
A significant portion of the New York efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

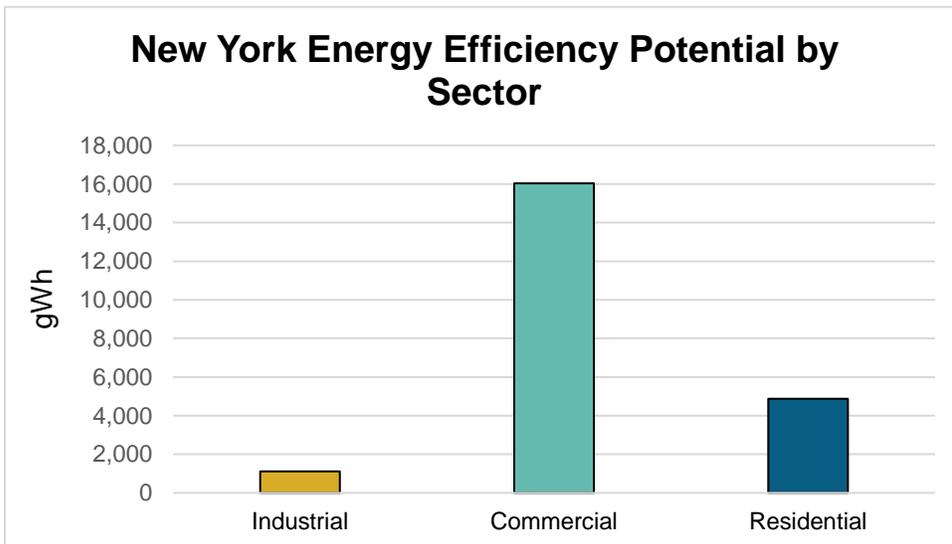


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **28,874 full-time direct, indirect, and induced NY jobs** that will last for at least five years: Over **144,370 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$2.7 billion in GDP** each year for the next five years – resulting in **\$13.3 billion in economic activity**, more than 4.3 times the investment.

## How much energy efficiency is untapped in your state?



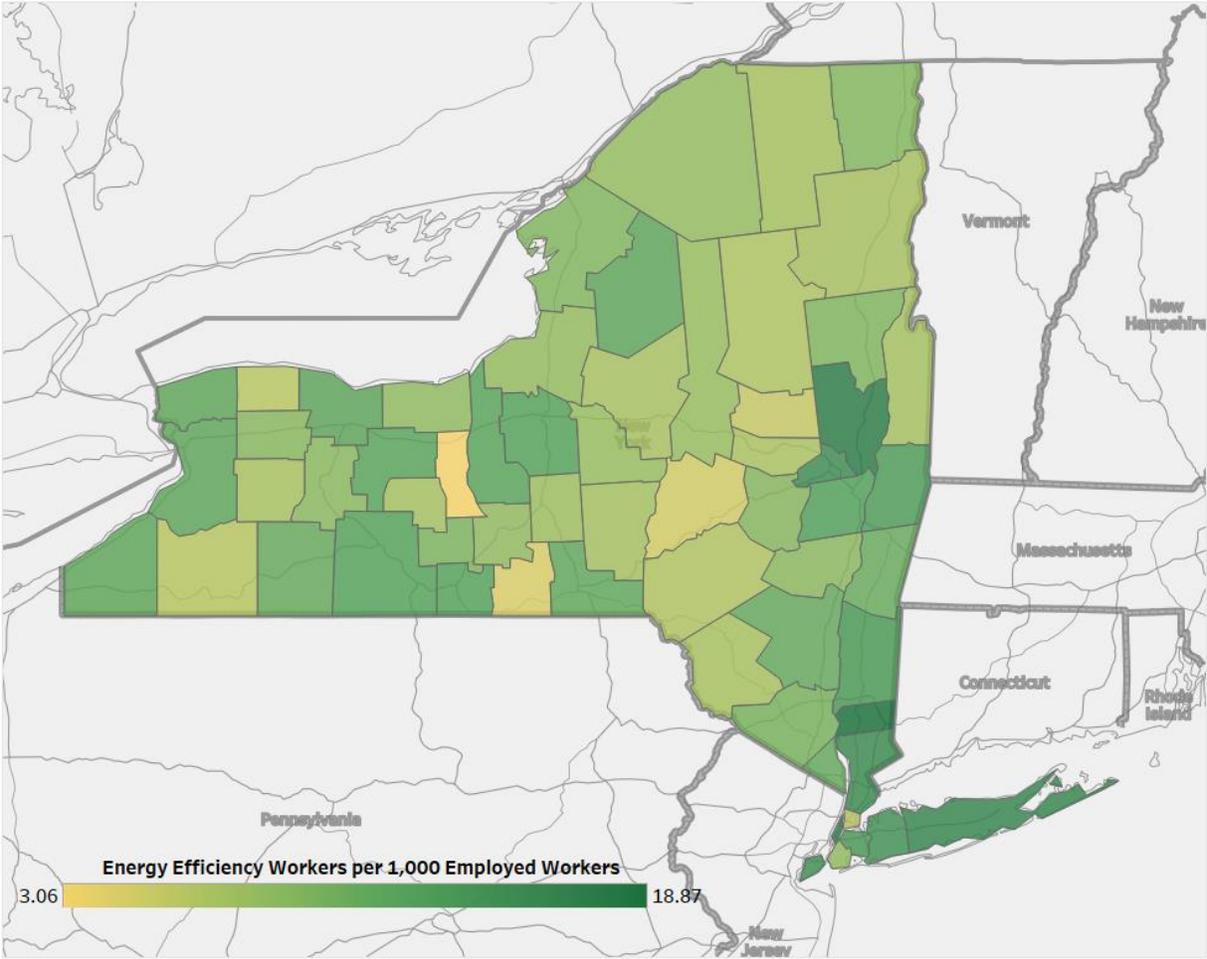
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **3,180,787 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,942	Albany-Schenectady-Troy	6,034
2	4,520	Binghamton	1,320
3	7,367	Buffalo-Niagara Falls	7,079
4	5,533	Elmira	468
5	1,649	Glens Falls	1,494
6	2,834	Ithaca	825
7	7,820	Kingston	1,298
8	1,958	New York-Northern New Jersey-Long Island	83,412
9	888	Poughkeepsie-Newburgh-Middletown	4,596
10	10,537	Rochester	6,720
11	2,279	Syracuse	4,213
12	11,536	Utica-Rome	1,494
13	827	Rural	7,787
14	1,625		
15	1,505		
16	3,451		
17	7,468		
18	5,417		
19	5,122		
20	5,701		
21	4,122		
22	3,747		
23	4,319		
24	5,096		
25	4,352		
26	5,358		
27	2,766		

# Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	3,531	18	1,837	35	4,483	52	1,420
2	5,719	19	377	36	538	53	386
3	2,856	20	1,211	37	2,282	54	2,146
4	890	21	<5	38	2,583	55	1,884
5	3,318	22	395	39	2,410	56	2,445
6	4,682	23	1,300	40	2,215	57	1,773
7	2,139	24	784	41	1,893	58	1,020
8	1,102	25	864	42	1,980	59	3,055
9	1,103	26	6,533	43	3,266	60	2,393
10	1,325	27	15,104	44	2,803	61	1,049
11	1,978	28	1,139	45	2,457	62	1,174
12	2,559	29	1,274	46	1,654	63	216
13	703	30	562	47	1,939		
14	376	31	332	48	787		
15	319	32	1,272	49	774		
16	183	33	165	50	3,691		
17	3,222	34	1,025	51	1,847		

## State Assembly

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,066	39	<5	77	575	115	877
2	837	40	<5	78	606	116	645
3	929	41	1,549	79	185	117	613
4	678	42	372	80	300	118	291
5	1,794	43	334	81	265	119	137
6	1,798	44	795	82	155	120	653
7	1,123	45	513	83	<5	121	518
8	1,022	46	391	84	767	122	1,289
9	1,673	47	<5	85	125	123	214
10	2,231	48	<5	86	<5	124	701
11	136	49	211	87	<5	125	1,017
12	48	50	1,044	88	2,224	126	857
13	3,446	51	455	89	826	127	1,100
14	1,035	52	1,082	90	552	128	1,514
15	456	53	320	91	1,455	129	106
16	2,324	54	455	92	2,089	130	1,450
17	160	55	103	93	1,353	131	1,195
18	1,744	56	<5	94	906	132	579
19	249	57	<5	95	347	133	1,030
20	1,080	58	248	96	2,330	134	1,226
21	560	59	<5	97	254	135	214
22	96	60	23	98	1,179	136	614
23	573	61	1,240	99	1,291	137	1,063
24	913	62	767	100	541	138	45
25	771	63	8	101	1,492	139	509
26	516	64	<5	102	1,221	140	910
27	1,123	65	6,066	103	1,250	141	1,868
28	529	66	959	104	694	142	1,020
29	442	67	3,165	105	672	143	1,497
30	1,756	68	478	106	386	144	641
31	39	69	9	107	1,413	145	486
32	<5	70	113	108	1,450	146	226
33	63	71	194	109	991	147	610
34	209	72	79	110	716	148	553
35	<5	73	8,042	111	458	149	112
36	339	74	795	112	1,632	150	760
37	15	75	4,195	113	1,155		
38	77	76	135	114	750		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# North Carolina

## 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.*

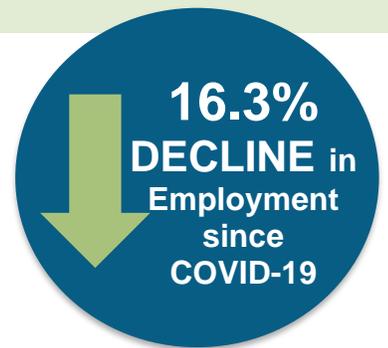
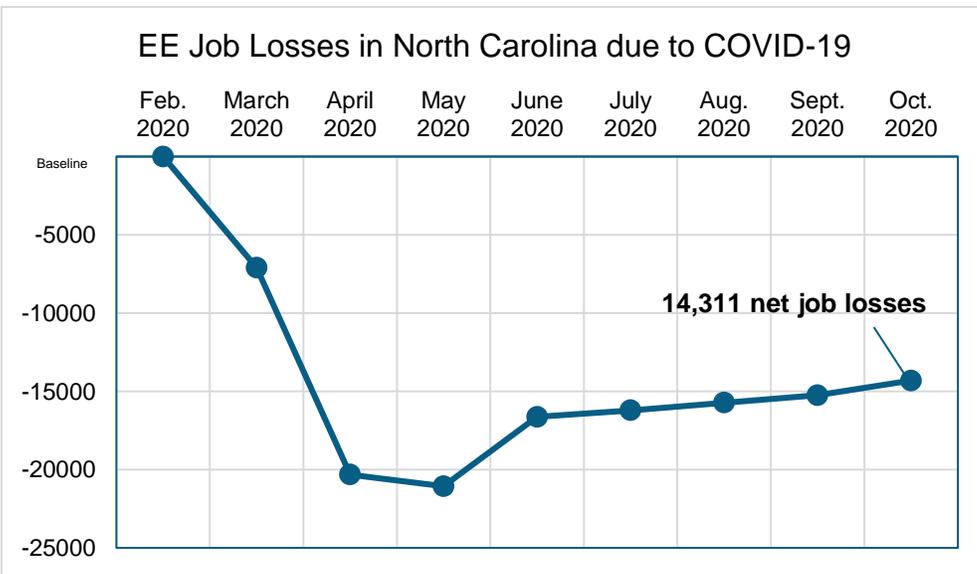
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. North Carolina’s energy efficiency industry lost as many as 14,311 jobs since its onset, a 16.3% 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 North Carolina EE workforce grew steadily, gaining 8.7% 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.



Presented by:



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

# What are EE Jobs?

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

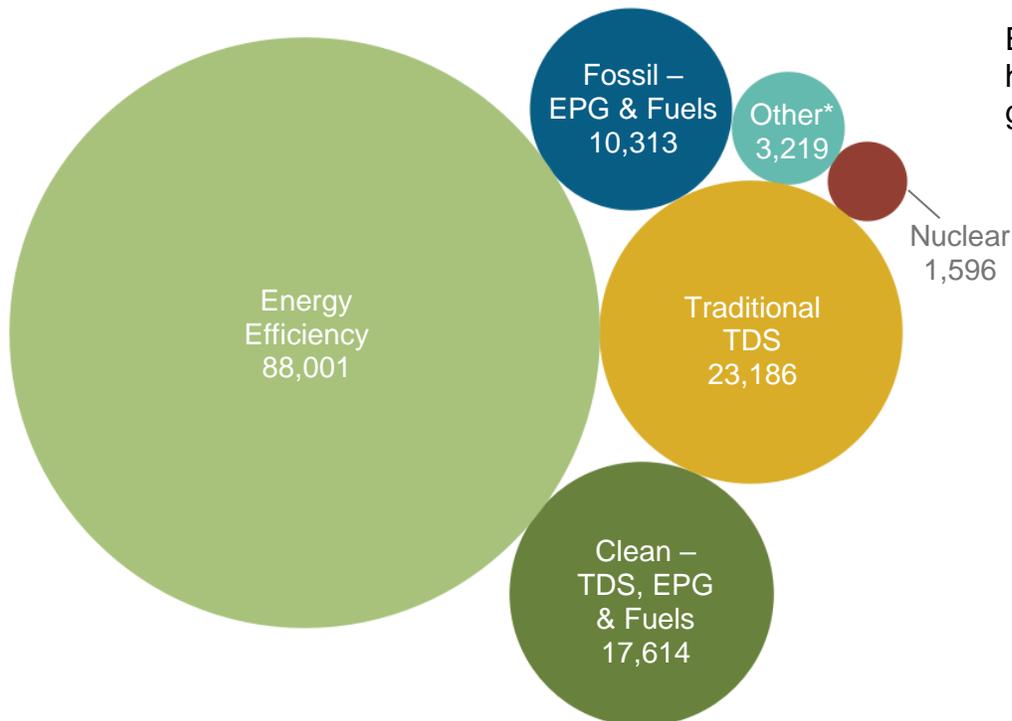
## What type of work are EE workers doing?

- 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 North Carolina?

*Energy efficiency is the largest energy sector in North Carolina.*

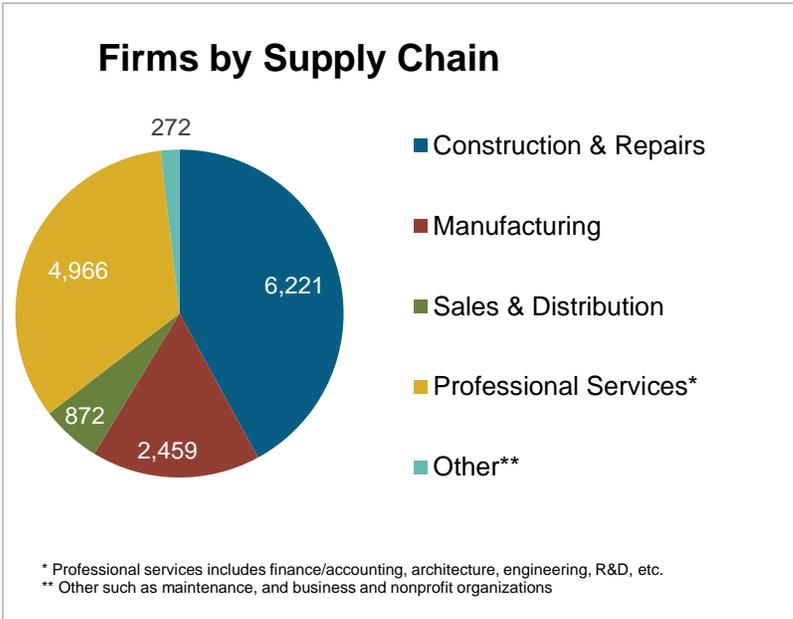
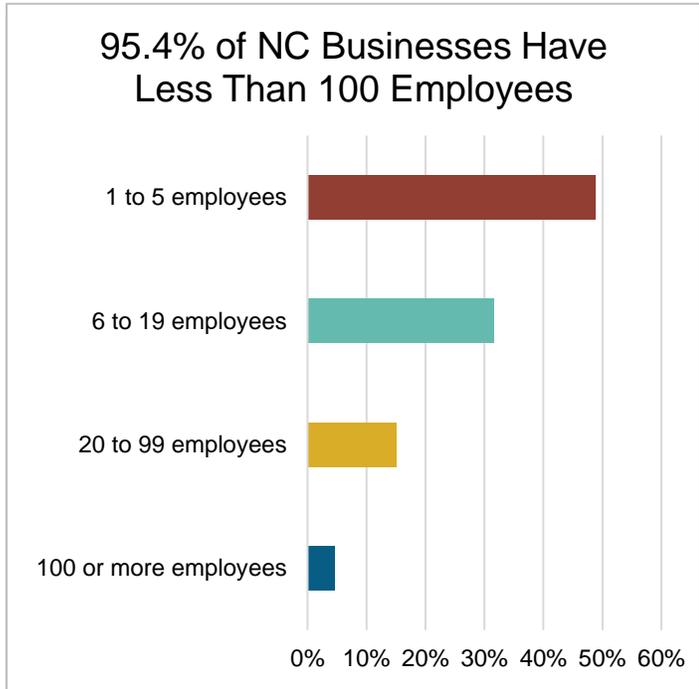


Energy efficiency in North Carolina has seen consistent, reliable job growth – 8.7 percent since 2016.

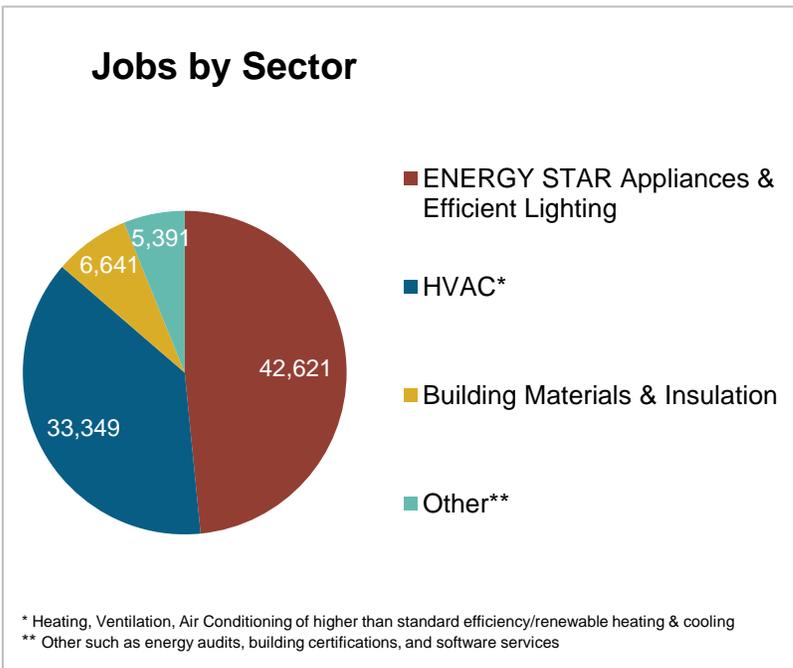
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in North Carolina?

EE Sector =  
**14,790**  
 Businesses in NC  
 (Dec. 2019)  
 ↑ **240** over 2018




**9.8%**  
 of North Carolina  
 residents employed  
 in EE are **Veterans**



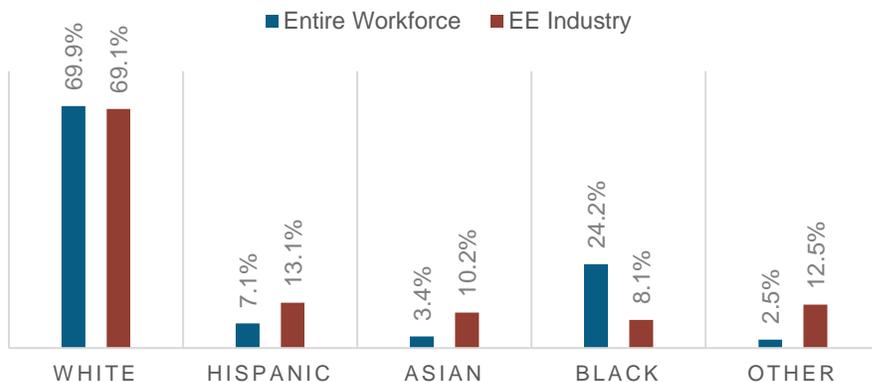

**Energy Efficiency  
 Construction Workers  
 Make Up 16% of NC  
 Construction Workers**

# How is EE Doing regarding Diversity in North Carolina?

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 North Carolina communities are represented in the EE sector.

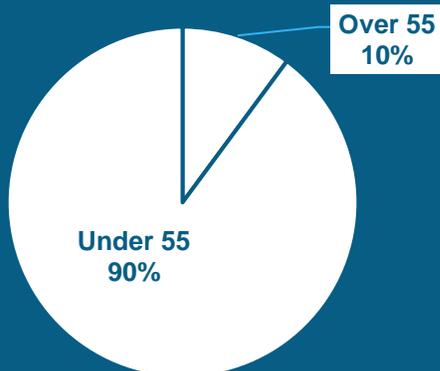
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## NC EE INDUSTRY BY RACE AND ETHNICITY



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.

## NORTH CAROLINA'S EE WORKERS BY AGE



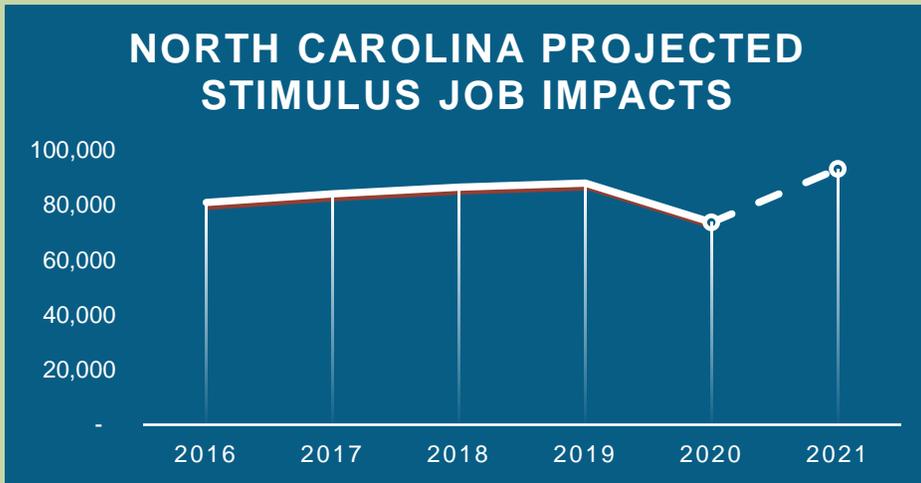
A significant portion of the North Carolina efficiency workforce is in the “55+” category. 10% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

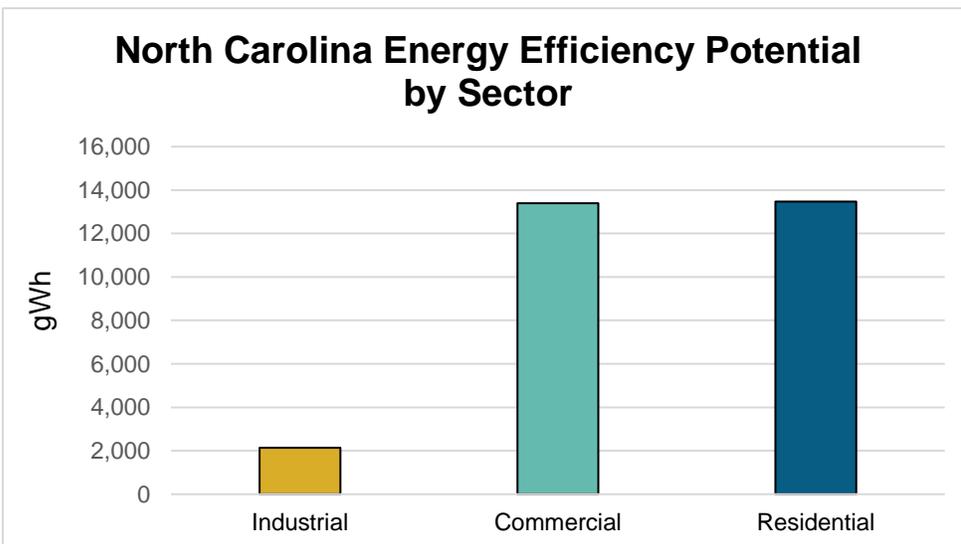


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **19,467 full-time direct, indirect, and induced NC jobs** that will last for at least five years: Over **97,335 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.3 billion in GDP** each year for the next five years — resulting in **\$6.3 billion in economic activity**, more than 4.4 times the investment.

## How much energy efficiency is untapped in your state?



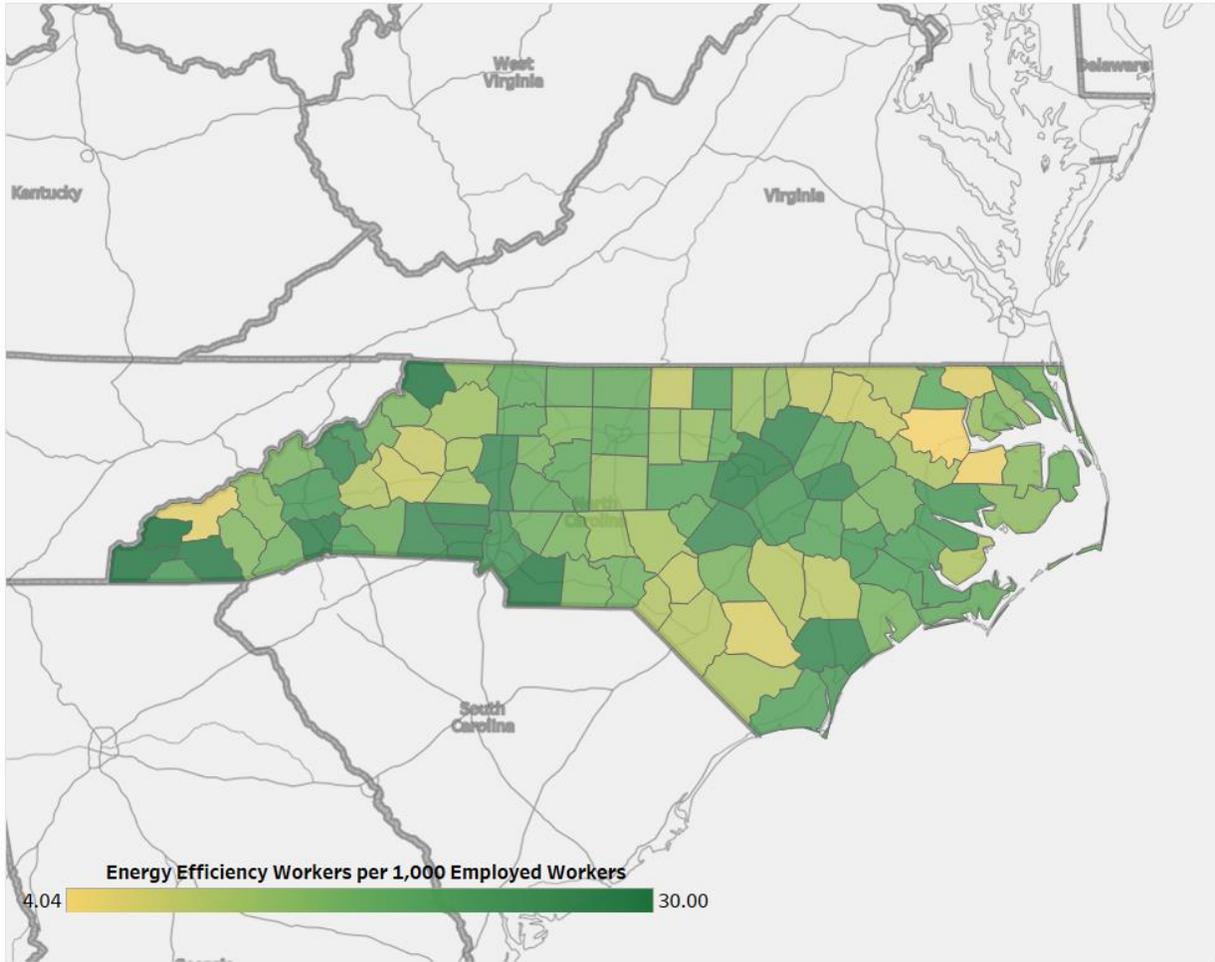
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **2,240,100 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	10,143	Asheville	5,515
2	10,258	Burlington	1,173
3	6,174	Charlotte-Gastonia-Concord	17,455
4	8,689	Durham	5,432
5	9,622	Fayetteville	2,215
6	5,231	Goldsboro	651
7	4,818	Greensboro-High Point	6,221
8	6,004	Greenville	1,364
9	12,514	Hickory-Lenoir-Morganton	2,655
10	8,233	Jacksonville	927
11	4,472	Raleigh-Cary	12,593
12	499	Rocky Mount	1,097
13	1,345	Virginia Beach-Norfolk-Newport News	600
		Wilmington	4,114
		Winston-Salem	3,547
		Rural	22,442

# Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs
1	2,436	18	375	35	1,928
2	1,812	19	1,651	36	3,424
3	996	20	2,281	37	8,517
4	1,657	21	197	38	198
5	1,941	22	2,200	39	715
6	1,025	23	1,154	40	<5
7	169	24	1,451	41	537
8	3,160	25	2,038	42	2,415
9	2,050	26	3,278	43	1,749
10	2,629	27	2,222	44	1,134
11	864	28	<5	45	1,399
12	2,284	29	1,376	46	1,548
13	972	30	1,429	47	1,780
14	4,661	31	2,661	48	2,737
15	2,826	32	<5	49	1,886
16	1,949	33	212	50	1,711
17	363	34	2,004		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	904	39	<5	77	501	115	462
2	1,249	40	456	78	414	116	230
3	1,105	41	20	79	389	117	<5
4	1,170	42	798	80	180	118	620
5	257	43	907	81	10	119	647
6	1,280	44	<5	82	2,628	120	572
7	1,284	45	23	83	<5		
8	721	46	822	84	1,632		
9	581	47	127	85	1,408		
10	531	48	677	86	755		
11	3,003	49	<5	87	81		
12	11	50	1,065	88	5,874		
13	1,076	51	733	89	1,001		
14	689	52	754	90	568		
15	101	53	113	91	23		
16	572	54	451	92	2,091		
17	984	55	1,785	93	651		
18	2,028	56	106	94	136		
19	627	57	2,238	95	<5		
20	<5	58	1,084	96	<5		
21	253	59	804	97	174		
22	2,071	60	1,357	98	561		
23	259	61	490	99	698		
24	10	62	98	100	563		
25	187	63	444	101	<5		
26	1,208	64	<5	102	140		
27	373	65	343	103	<5		
28	237	66	33	104	<5		
29	2,563	67	579	105	<5		
30	1,813	68	432	106	<5		
31	120	69	413	107	<5		
32	195	70	753	108	1,328		
33	1,120	71	1,920	109	<5		
34	3,296	72	238	110	1,166		
35	775	73	1,710	111	84		
36	837	74	231	112	441		
37	33	75	224	113	1,699		
38	<5	76	1,502	114	3,021		



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# North Dakota

## 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.*

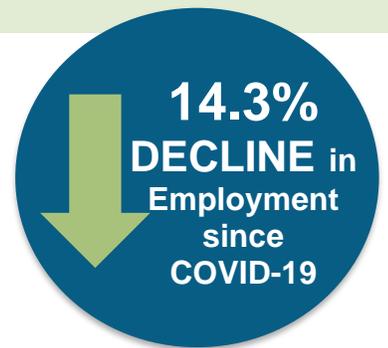
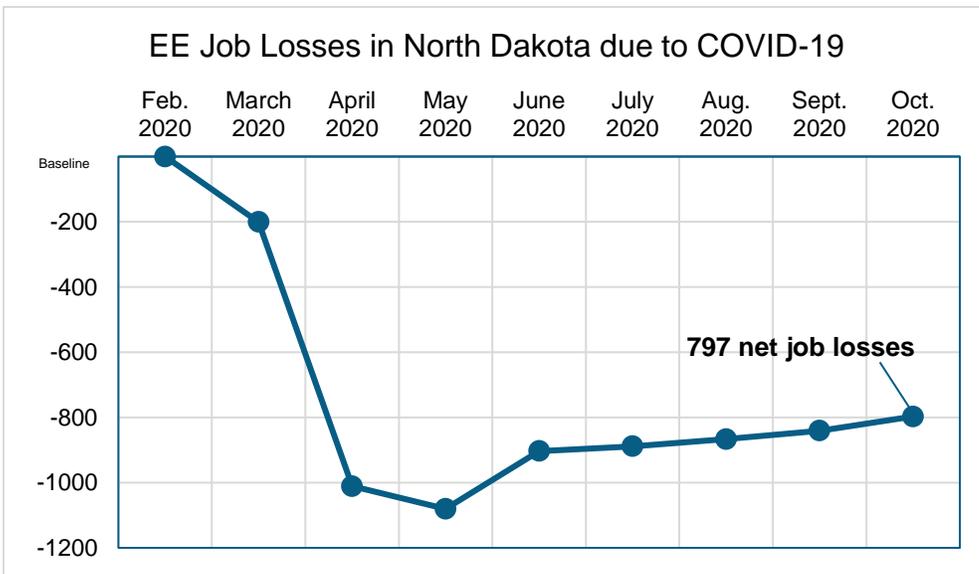
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. North Dakota’s energy efficiency industry lost as many as 797 jobs since its onset, a 14.3% decrease compared to total jobs in December 2019—wiping out the last 2 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 North Dakota EE workforce grew steadily, gaining 17.2% 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.



Presented by:



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

# What are EE Jobs?

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

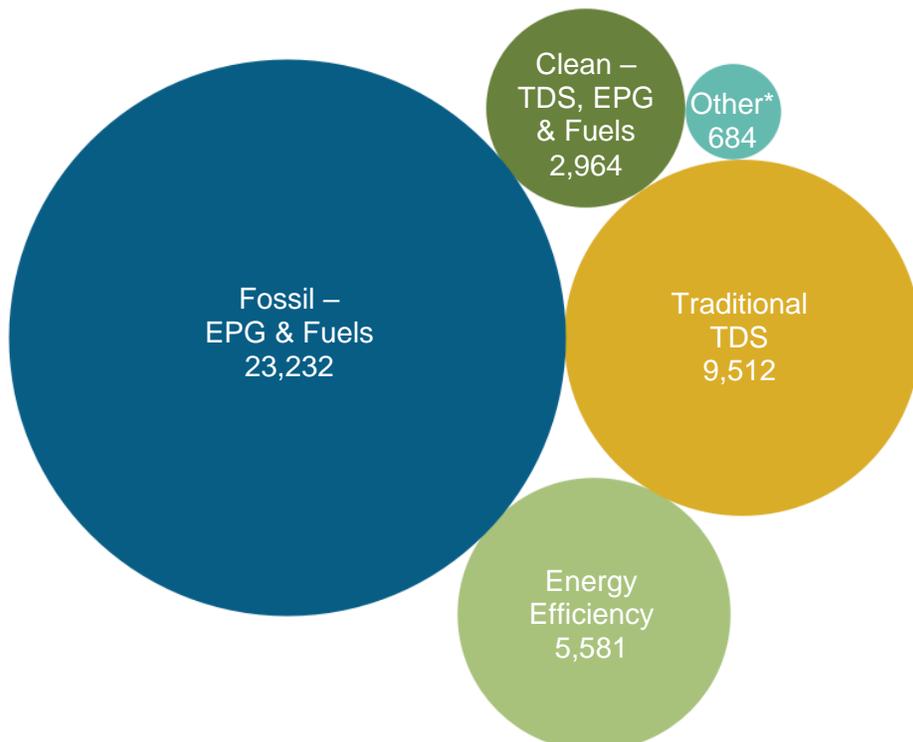
## What type of work are EE workers doing?

- 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 North Dakota?

Energy efficiency is the third largest energy sector in North Dakota.

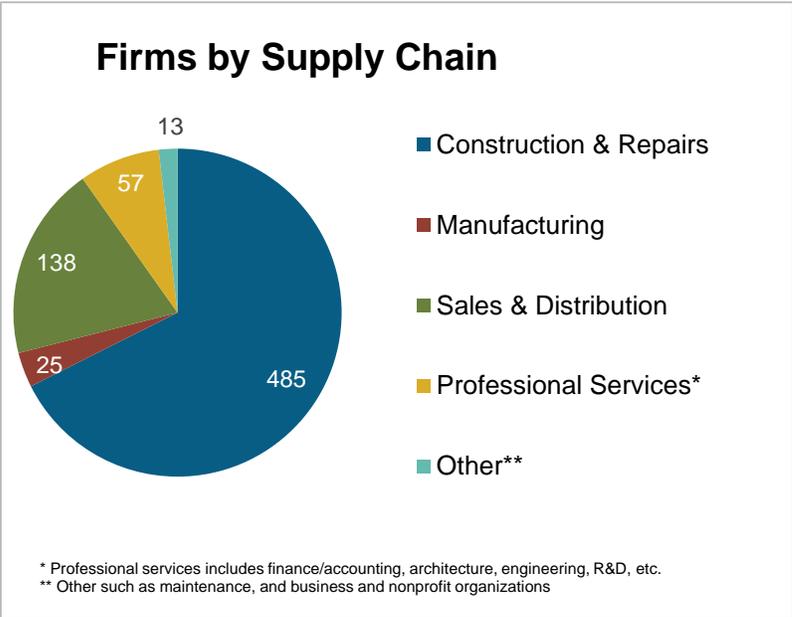
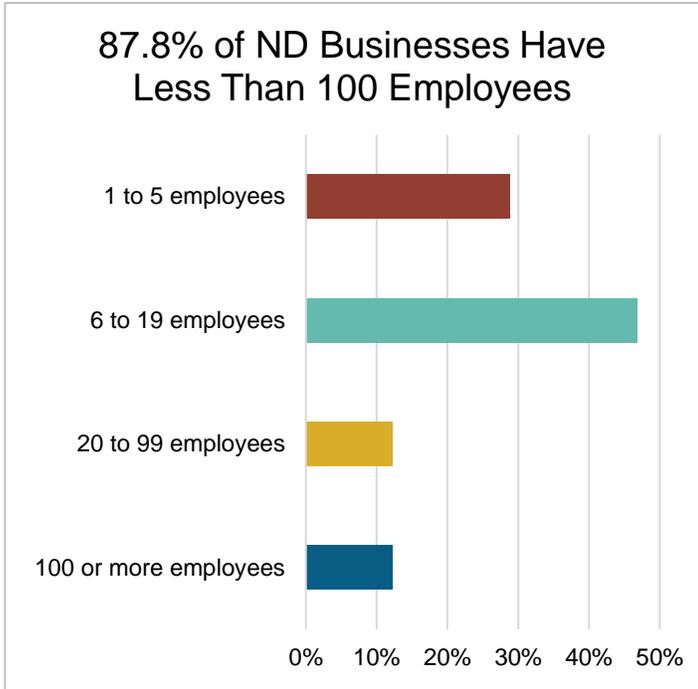


Fossil fuel jobs are historically key to North Dakota's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 17.2% from 2016-2019, adding 818 jobs.

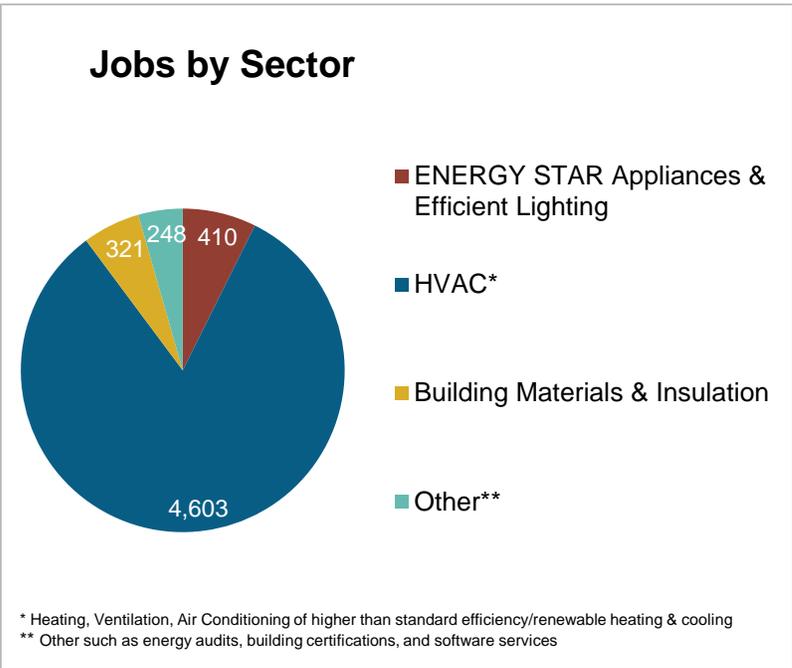
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in North Dakota?

EE Sector =  
**718**  
 Businesses in ND  
 (Dec. 2019)  
 ↑ **20** over 2018



**6.3%**  
 of North Dakota  
 residents employed  
 in EE are **Veterans**



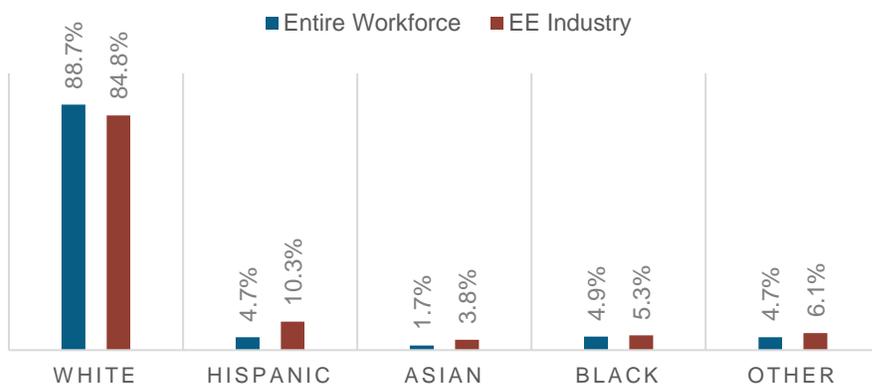
**Energy Efficiency  
 Construction Workers  
 Make Up 12% of ND  
 Construction Workers**

# How is EE Doing regarding Diversity in North Dakota?

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 North Dakota communities are represented in the EE sector.

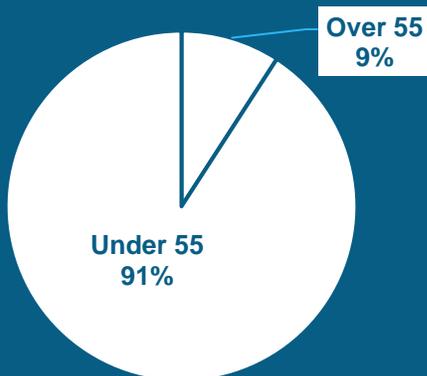
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## ND EE INDUSTRY BY RACE AND ETHNICITY



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.

## NORTH DAKOTA'S EE WORKERS BY AGE



A significant portion of the North Dakota efficiency workforce is in the “55+” category. 9% 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.

## NORTH DAKOTA PROJECTED STIMULUS JOB IMPACTS



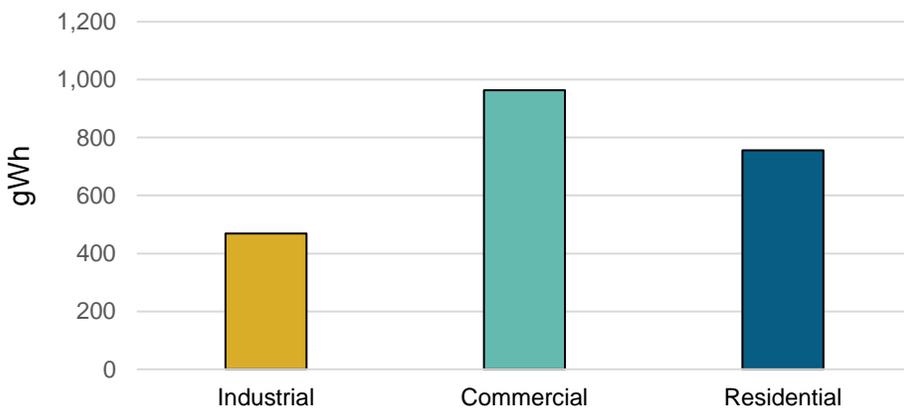
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,428 full-time direct, indirect, and induced ND jobs** that will last for at least five years: Over **22,139 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$316 million in GDP** each year for the next five years – resulting in **\$1.6 billion in economic activity**, more than 3.3 times the investment.

## How much energy efficiency is untapped in your state?

### North Dakota Energy Efficiency Potential by Sector



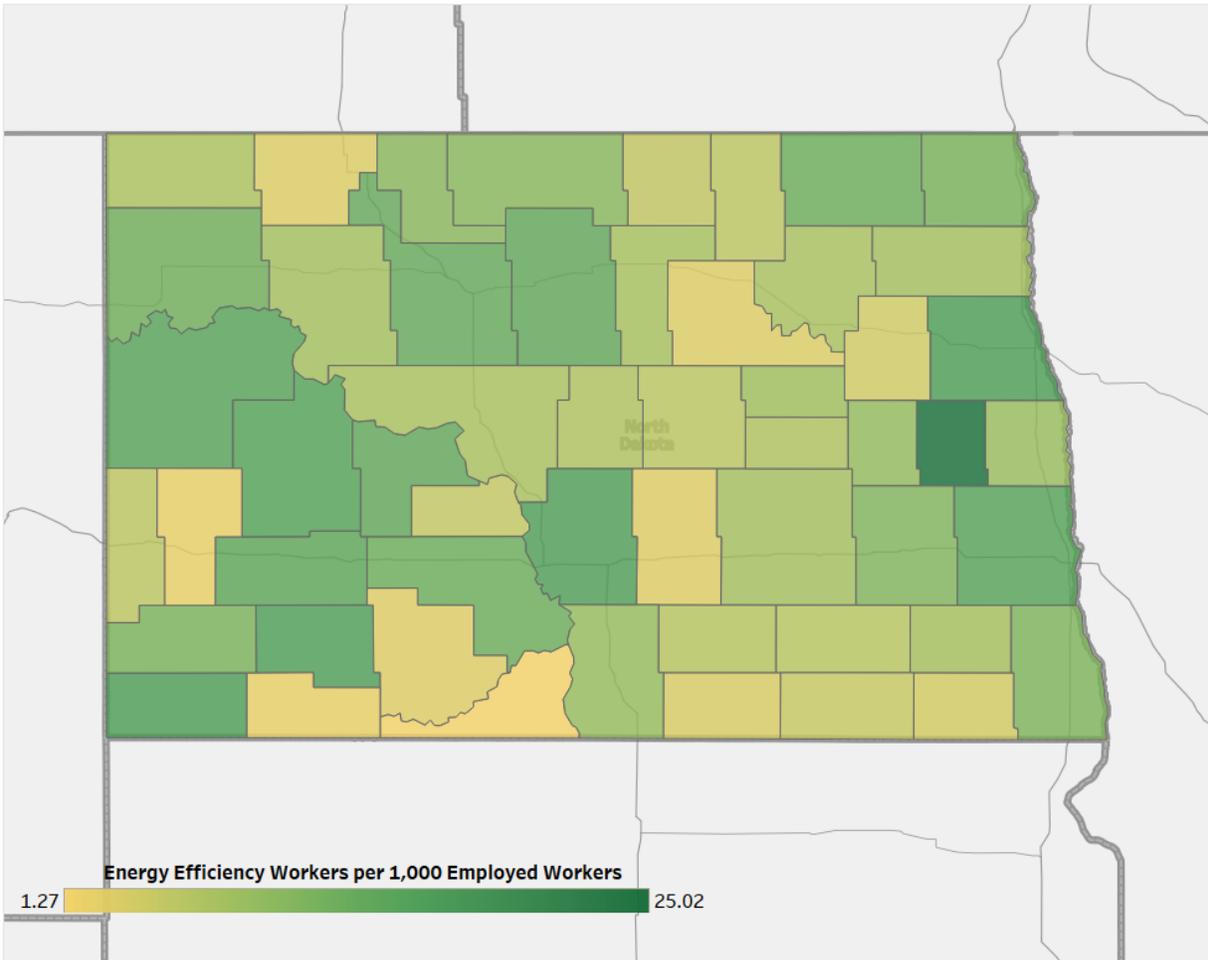
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **164,441 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,581	Bismarck	807
		Fargo	1,361
		Grand Forks	407
		Rural	3,007

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	379	13	342	25	124	37	<5
2	139	14	153	26	118	38	<5
3	448	15	96	27	<5	39	258
4	147	16	162	28	66	40	<5
5	9	17	351	29	24	41	<5
6	120	18	9	30	<5	42	9
7	598	19	89	31	248	43	<5
8	37	20	60	32	<5	44	<5
9	32	21	353	33	28	45	<5
10	110	22	114	34	<5	46	<5
11	374	23	26	35	<5	47	<5
12	102	24	146	36	310		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	374	25	124	49	<5	73	<5
2	140	26	118	50	<5	74	<5
3	449	27	<5	51	<5	75	<5
4	147	28	66	52	<5	76	<5
5	9	29	24	53	<5	77	<5
6	120	30	<5	54	<5	78	<5
7	599	31	248	55	<5	79	<5
8	37	32	<5	56	<5	80	<5
9	32	33	28	57	<5	81	<5
10	110	34	<5	58	<5	82	<5
11	374	35	<5	59	<5	83	<5
12	102	36	310	60	<5	84	<5
13	342	37	<5	61	<5	85	<5
14	154	38	<5	62	<5	86	<5
15	97	39	259	63	<5	87	<5
16	162	40	<5	64	<5	88	<5
17	351	41	<5	65	<5	89	<5
18	9	42	9	66	<5	90	<5
19	89	43	<5	67	<5	91	<5
20	60	44	<5	68	<5	92	<5
21	354	45	<5	69	<5	93	<5
22	114	46	<5	70	<5	94	<5
23	26	47	<5	71	<5		
24	146	48	<5	72	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Ohio

## Energy Efficiency Jobs in America

Oct 2020

72,217\*

Dec 2019

83,165

*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.*

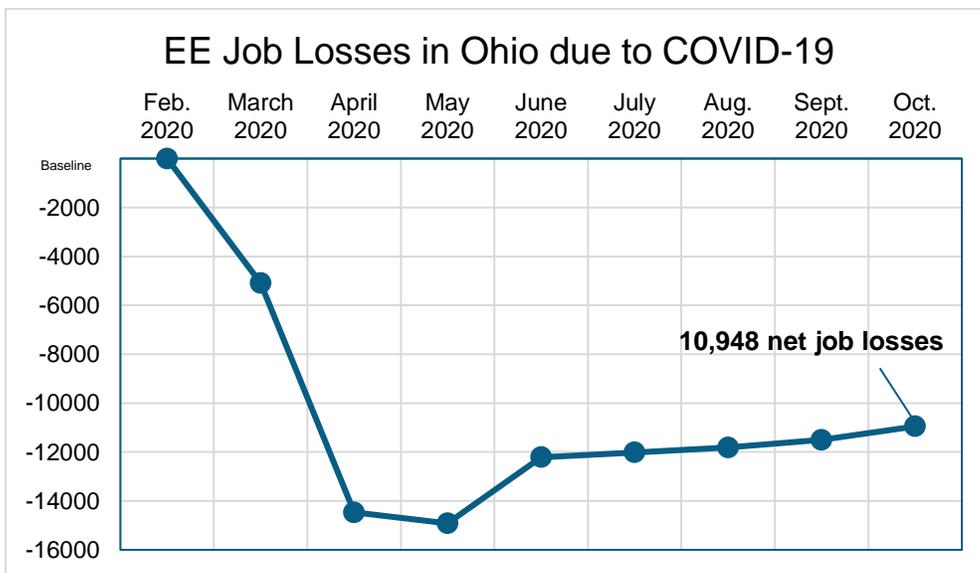
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Ohio's energy efficiency industry lost as many as 10,948 jobs since its onset, a 13.2% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

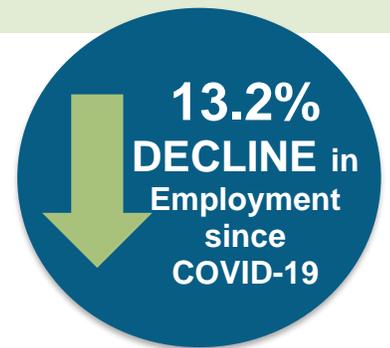
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Ohio EE workforce grew steadily, gaining 5.6% 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.

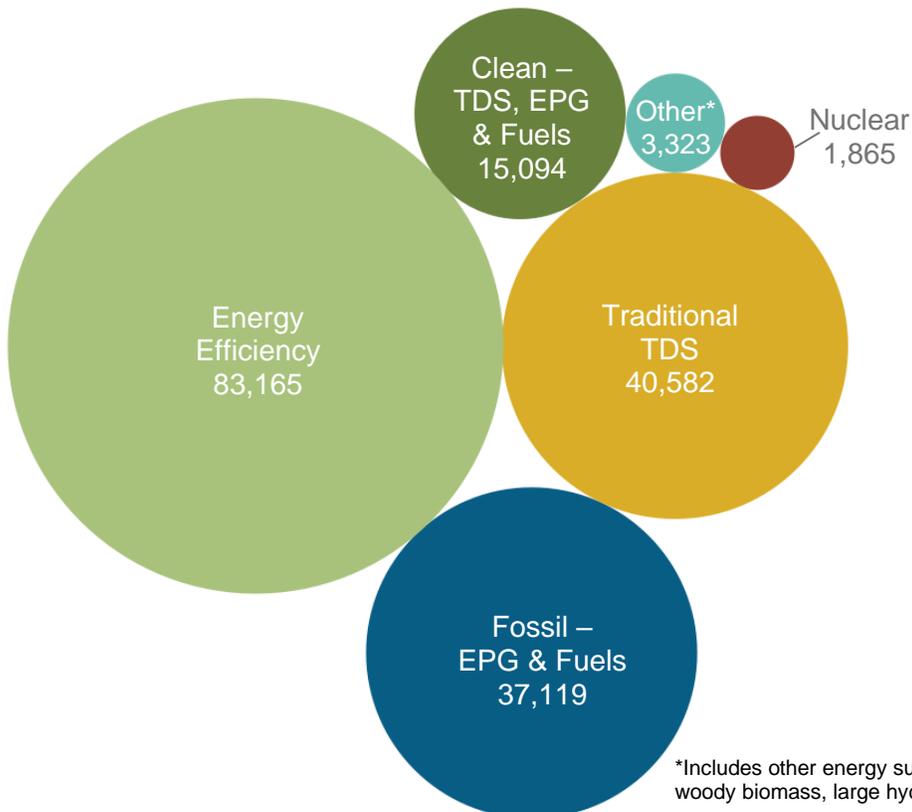
## What type of work are EE workers doing?

- 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 Ohio?

Energy efficiency is the largest energy sector in Ohio.

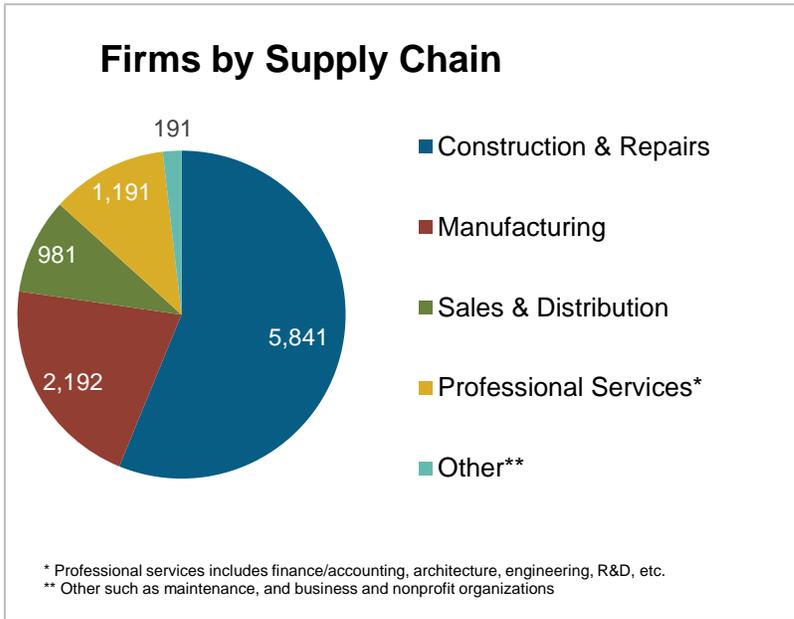
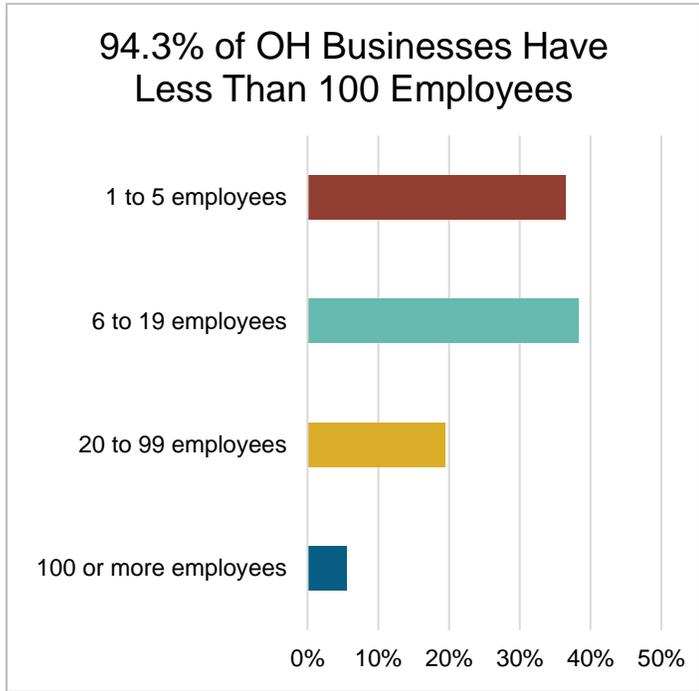


Energy efficiency in Ohio has seen consistent, reliable job growth – 5.6 percent since 2016.

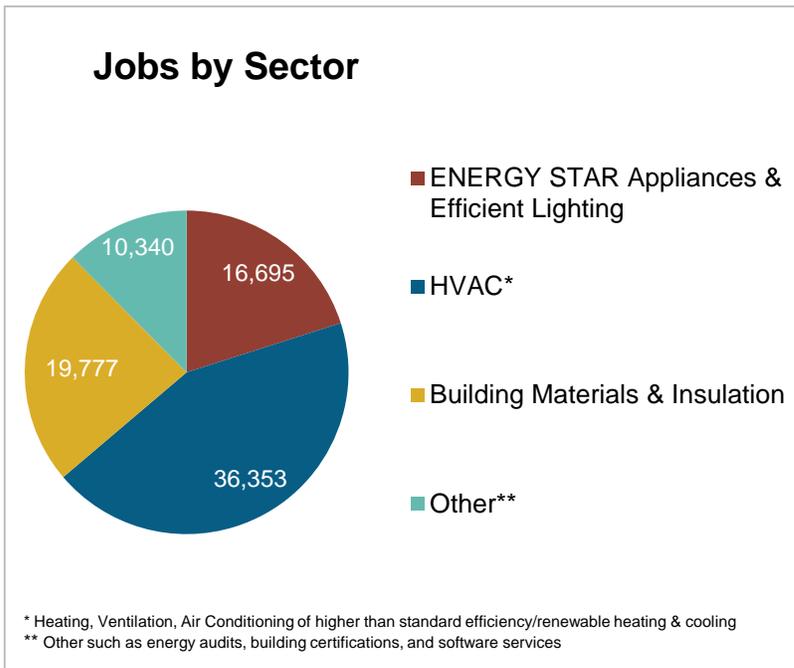
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Ohio?

EE Sector =  
**10,396**  
 Businesses in OH  
 (Dec. 2019)  
 ↑ **190** over 2018




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

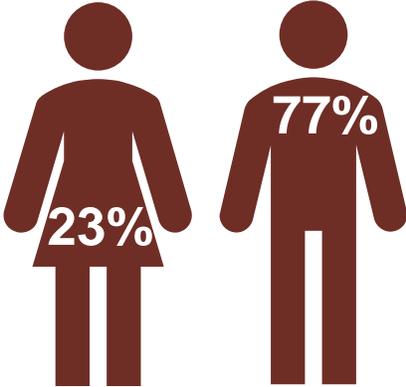
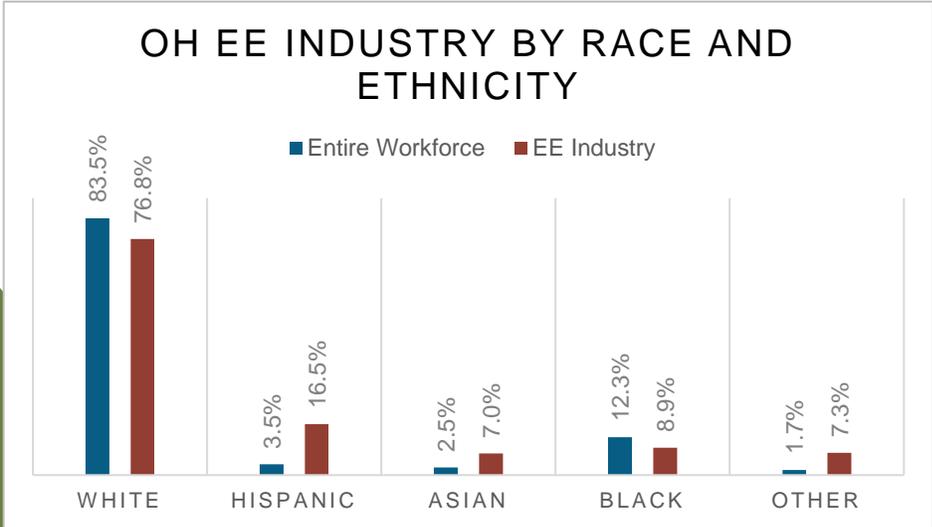



**Energy Efficiency  
 Construction Workers  
 Make Up 19% of OH  
 Construction Workers**

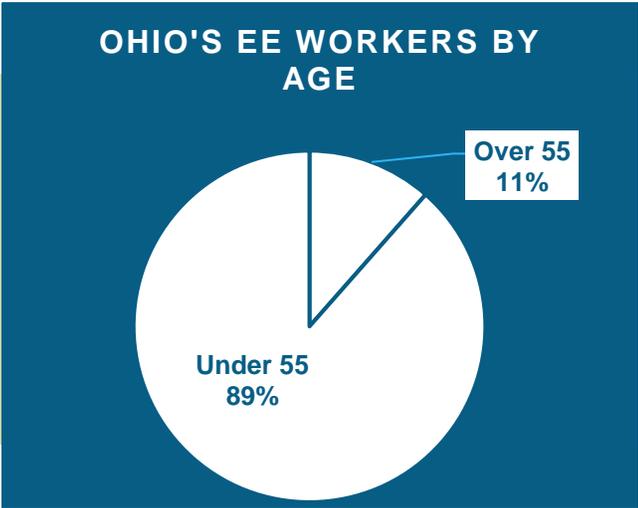
# How is EE Doing regarding Diversity in Ohio?

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 Ohio 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.



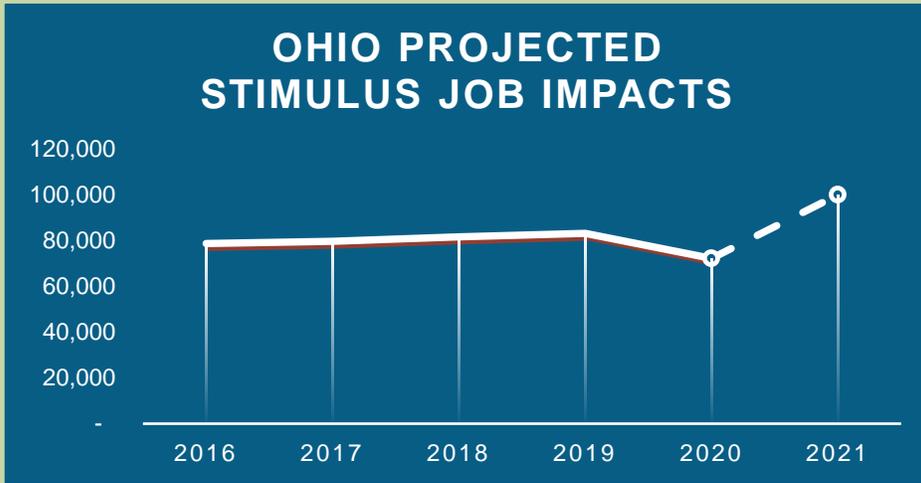
A significant portion of the Ohio efficiency workforce is in the "55+" category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

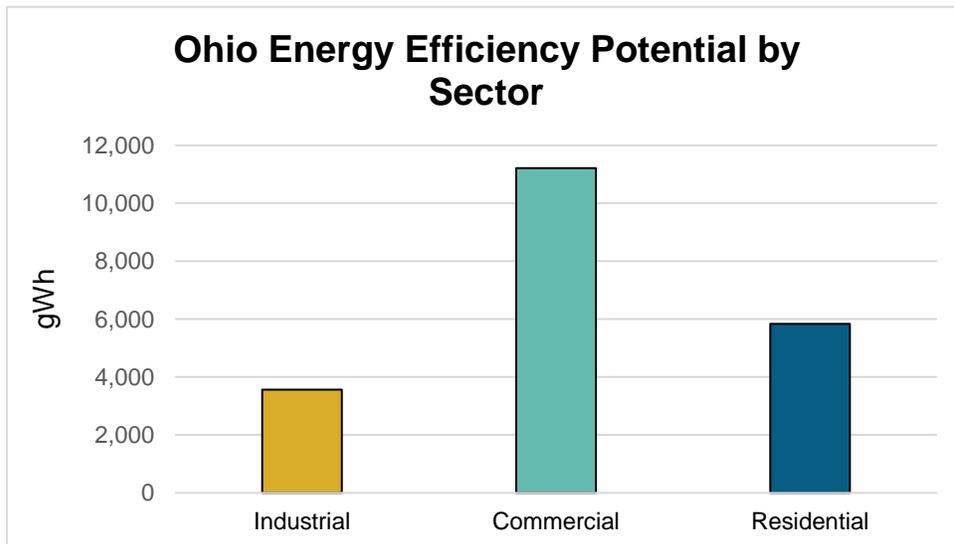


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **27,811 full-time direct, indirect, and induced OH jobs** that will last for at least five years: Over **139,054 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.8 billion in GDP** each year for the next five years — resulting in **\$9.2 billion in economic activity**, more than 4.2 times the investment.

## How much energy efficiency is untapped in your state?



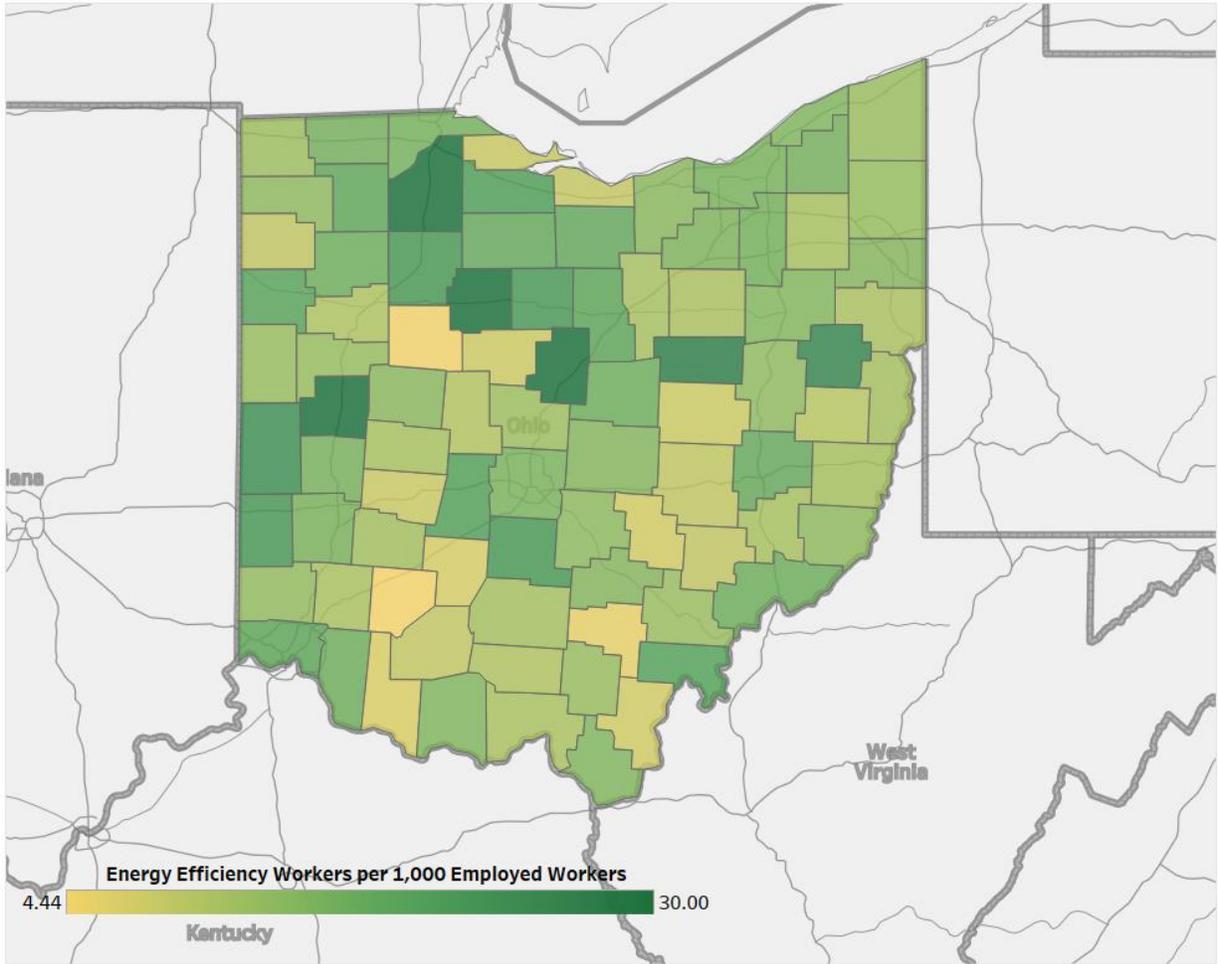
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,965,873 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,874	Akron	5,643
2	2,958	Canton-Massillon	2,709
3	7,567	Cincinnati-Middletown	11,747
4	7,878	Cleveland-Elyria-Mentor	16,345
5	8,796	Columbus	12,688
6	5,321	Dayton	5,460
7	6,634	Huntington-Ashland	217
8	3,403	Lima	722
9	3,535	Mansfield	1,051
10	3,898	Parkersburg-Marietta-Vienna	444
11	10,033	Sandusky	492
12	2,608	Springfield	719
13	4,448	Toledo	8,073
14	4,081	Weirton-Steubenville	267
15	1,684	Wheeling	339
16	1,445	Youngstown-Warren-Boardman	3,160
		Rural	13,089

## Energy Efficiency Jobs by County



State Senate			
District	Jobs	District	Jobs
1	3,333	18	4,959
2	6,466	19	1,816
3	6,288	20	2,006
4	2,548	21	5,151
5	3,659	22	3,596
6	1,751	23	2,488
7	4,653	24	2,910
8	2,544	25	233
9	909	26	1,305
10	2,347	27	2,207
11	1,265	28	1,770
12	1,527	29	1,956
13	2,535	30	1,767
14	1,494	31	1,423
15	694	32	1,758
16	1,811	33	2,459
17	1,539		

State House of Representatives					
District	Jobs	District	Jobs	District	Jobs
1	1,014	39	1,808	77	509
2	1,392	40	1,227	78	938
3	4,571	41	1,097	79	400
4	861	42	387	80	634
5	961	43	369	81	759
6	3,747	44	1,659	82	444
7	777	45	277	83	1,140
8	719	46	735	84	827
9	510	47	687	85	170
10	2,736	48	1,078	86	321
11	147	49	480	87	499
12	<5	50	140	88	565
13	486	51	775	89	650
14	680	52	639	90	564
15	87	53	110	91	584
16	914	54	709	92	203
17	3,258	55	1,176	93	405
18	822	56	363	94	751
19	2,126	57	710	95	640
20	632	58	1,845	96	427
21	2,237	59	440	97	264
22	68	60	1,711	98	526
23	175	61	302	99	448
24	133	62	254		
25	<5	63	752		
26	<5	64	296		
27	3,626	65	451		
28	2,068	66	465		
29	1,163	67	1,199		
30	237	68	545		
31	695	69	274		
32	124	70	162		
33	151	71	881		
34	2,199	72	649		
35	742	73	645		
36	1,150	74	528		
37	1,295	75	375		
38	1,104	76	689		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Oklahoma

## Energy Efficiency Jobs in America

Oct 2020

12,236\*

Dec 2019

15,046

*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

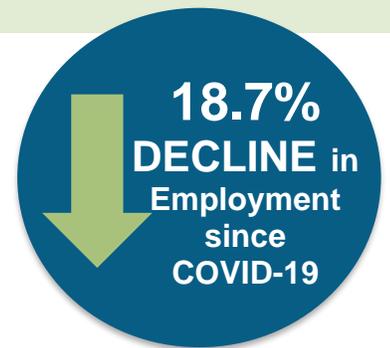
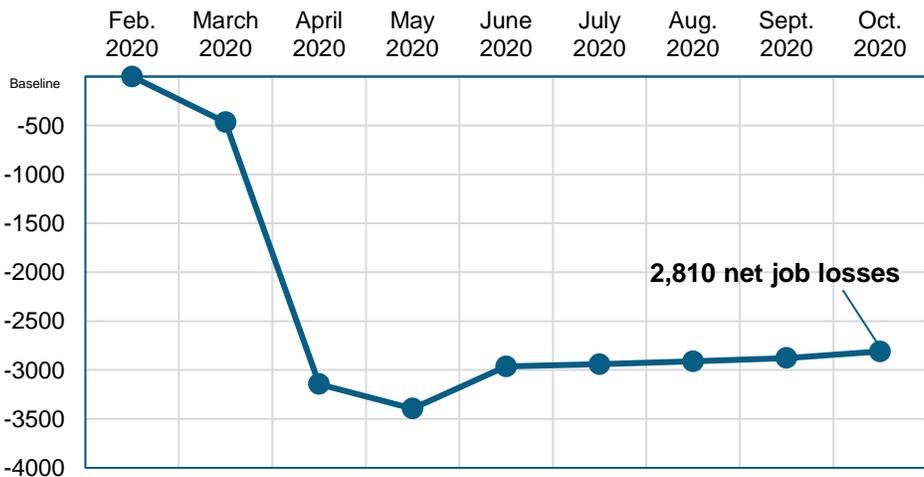
The 2020 pandemic shocked our nation's labor market with massive job losses. Oklahoma's energy efficiency industry lost as many as 2,810 jobs since its onset, a 18.7% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Oklahoma EE workforce grew steadily, gaining 22.4% 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.

EE Job Losses in Oklahoma due to COVID-19



Presented by:

E4 THE FUTURE



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

# What are EE Jobs?

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

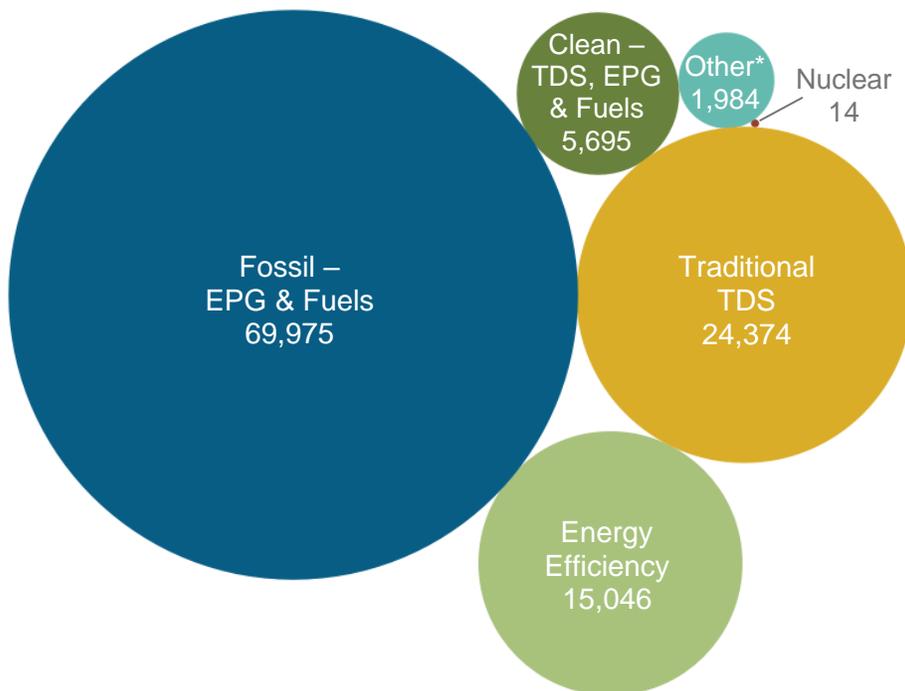
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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- Upgrade and repair heating, air conditioning and ventilation (HVAC) and water heating equipment
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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 Oklahoma?

Energy efficiency is the third largest energy sector in Oklahoma.

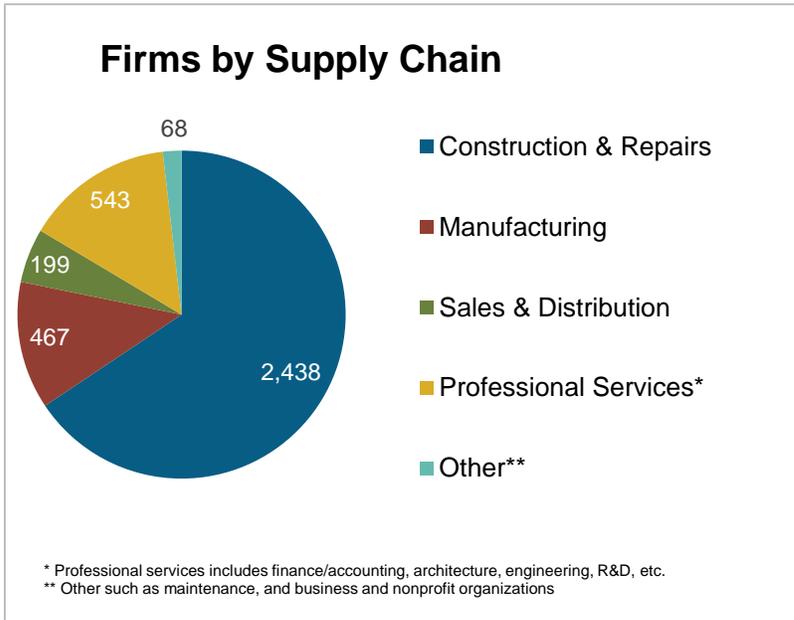
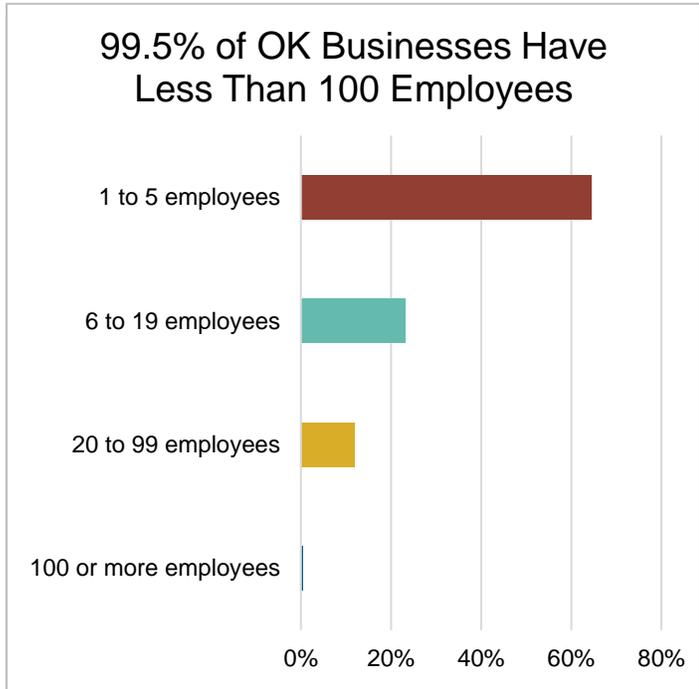


Fossil fuel jobs are historically key to Oklahoma’s energy economy, but the current job total doesn’t tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 22.4% from 2016-2019, adding 2,752 jobs.

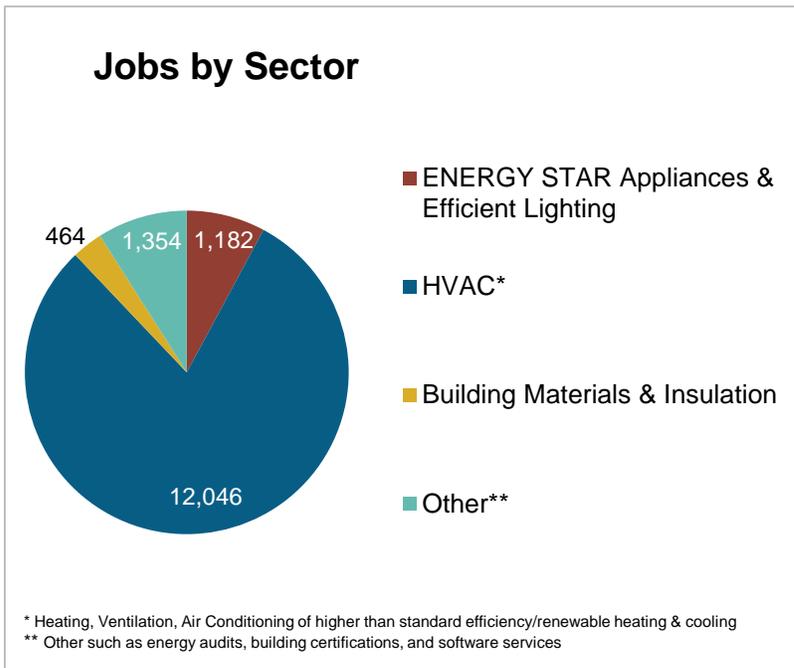
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Oklahoma?

EE Sector =  
**3,715**  
 Businesses in OK  
 (Dec. 2019)  
 ↑ **170** over 2018



**8.8%**  
 of Oklahoma  
 residents employed  
 in EE are **Veterans**



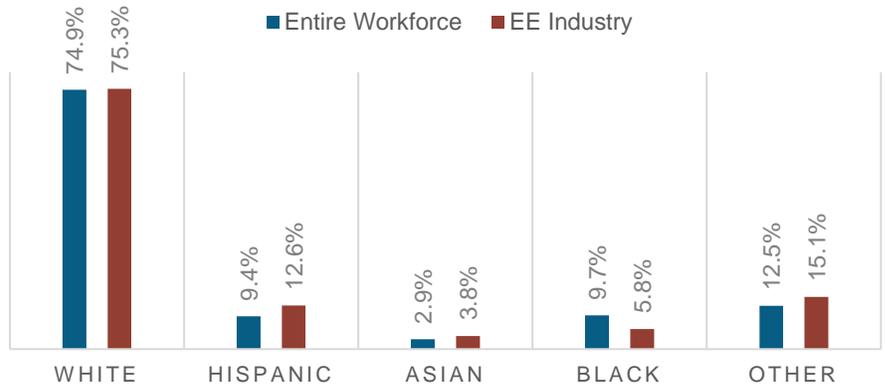
**Energy Efficiency  
 Construction Workers  
 Make Up 11% of OK  
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# How is EE Doing regarding Diversity in Oklahoma?

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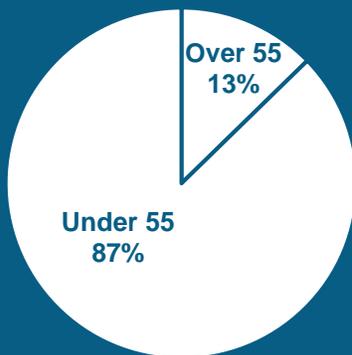
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## OK EE INDUSTRY BY RACE AND ETHNICITY



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.

## OKLAHOMA'S EE WORKERS BY AGE



A significant portion of the Oklahoma efficiency workforce is in the “55+” category. 13% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

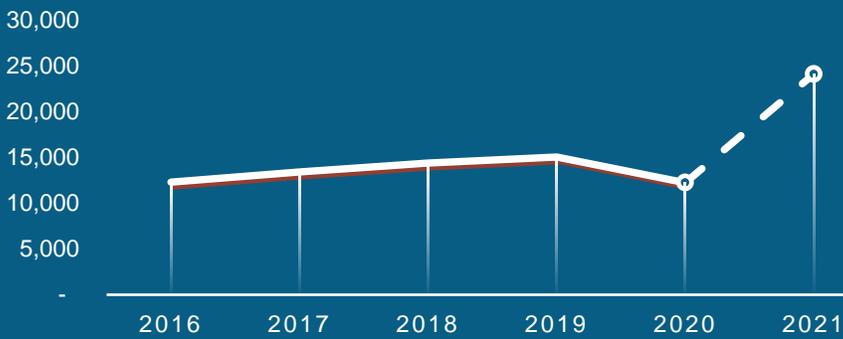
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Updates to U.S. energy infrastructure are investments in the collective economic future of Americans; the creation of a more resilient energy system is vital to economic growth and security.

## OKLAHOMA PROJECTED STIMULUS JOB IMPACTS



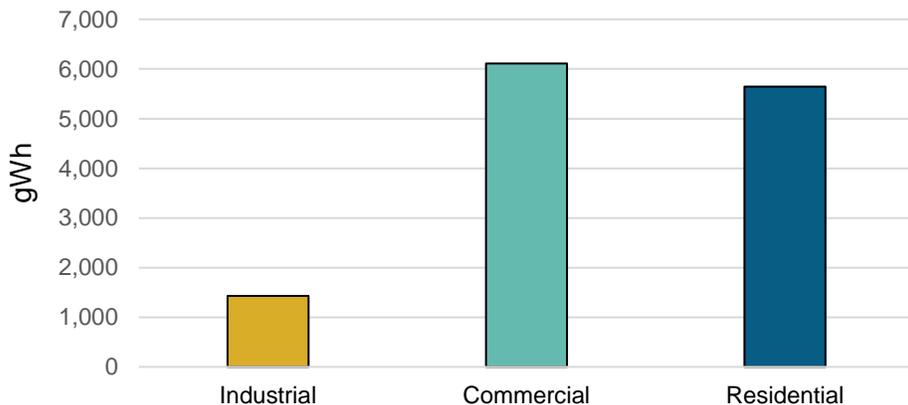
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **11,879 full-time direct, indirect, and induced OK jobs** that will last for at least five years: Over **59,393 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$702 million in GDP** each year for the next five years – resulting in **\$3.5 billion in economic activity**, more than 3.9 times the investment.

## How much energy efficiency is untapped in your state?

### Oklahoma Energy Efficiency Potential by Sector



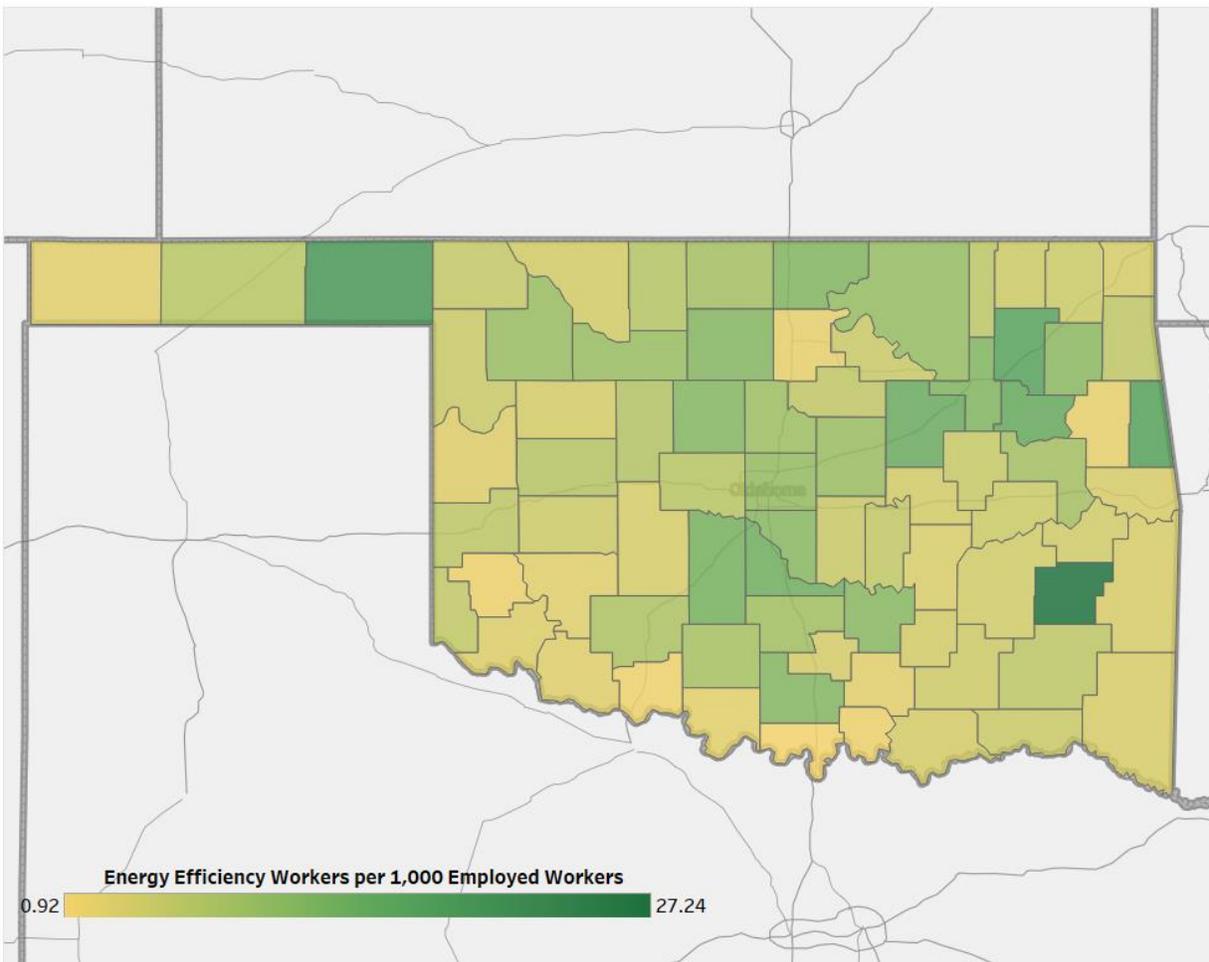
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **984,651 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,216	Fort Smith	129
2	2,175	Lawton	276
3	3,013	Oklahoma City	5,706
4	2,126	Tulsa	4,250
5	3,516	Rural	4,684

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	451	13	410	25	807	37	<5
2	532	14	311	26	348	38	119
3	167	15	770	27	334	39	<5
4	120	16	<5	28	76	40	435
5	158	17	620	29	154	41	<5
6	183	18	438	30	1,046	42	112
7	317	19	371	31	426	43	96
8	212	20	541	32	13	44	1,085
9	107	21	229	33	<5	45	21
10	496	22	485	34	47	46	75
11	963	23	390	35	867	47	60
12	311	24	102	36	26	48	217

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	81	27	328	53	67	79	<5
2	44	28	139	54	369	80	<5
3	62	29	229	55	277	81	144
4	162	30	47	56	70	82	241
5	361	31	343	57	70	83	294
6	240	32	117	58	217	84	484
7	22	33	246	59	11	85	293
8	160	34	12	60	9	86	10
9	195	35	58	61	160	87	<5
10	314	36	44	62	213	88	545
11	<5	37	174	63	68	89	244
12	153	38	363	64	<5	90	38
13	124	39	415	65	23	91	<5
14	8	40	<5	66	504	92	<5
15	83	41	342	67	799	93	<5
16	169	42	55	68	45	94	100
17	184	43	208	69	<5	95	51
18	62	44	237	70	398	96	12
19	175	45	<5	71	<5	97	200
20	432	46	<5	72	363	98	<5
21	10	47	189	73	315	99	44
22	433	48	48	74	<5	100	<5
23	633	49	43	75	<5	101	<5
24	65	50	121	76	<5		
25	<5	51	141	77	<5		
26	200	52	101	78	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Oregon

## 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.*

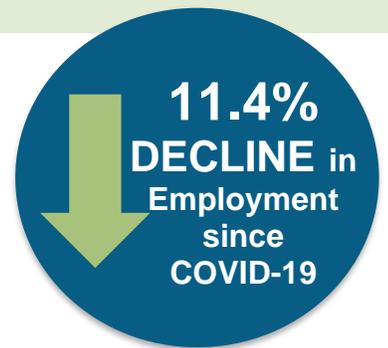
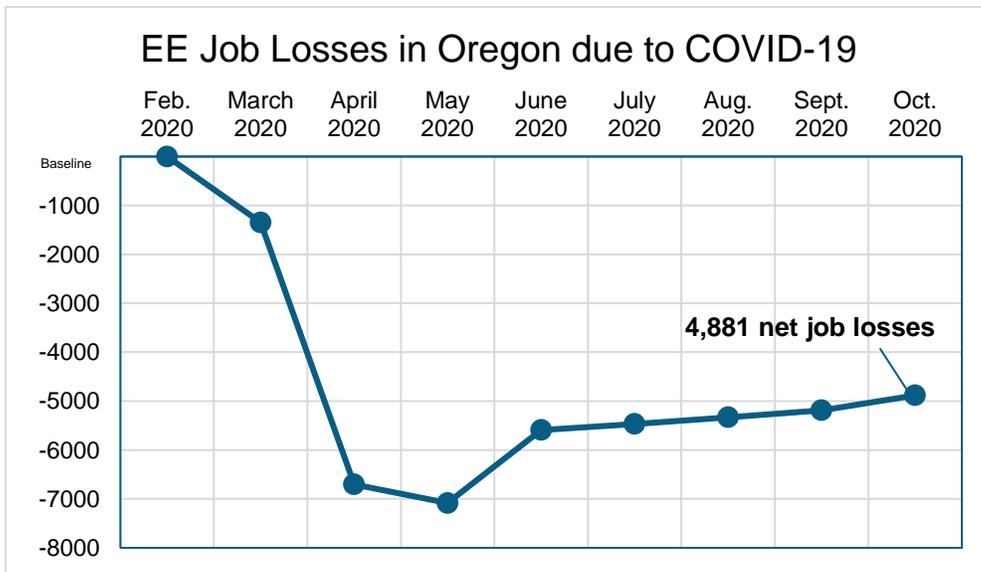
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Oregon’s energy efficiency industry lost as many as 4,881 jobs since its onset, a 11.4% 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 Oregon EE workforce grew steadily, gaining 2.5% 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.



Presented by:



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

# What are EE Jobs?

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

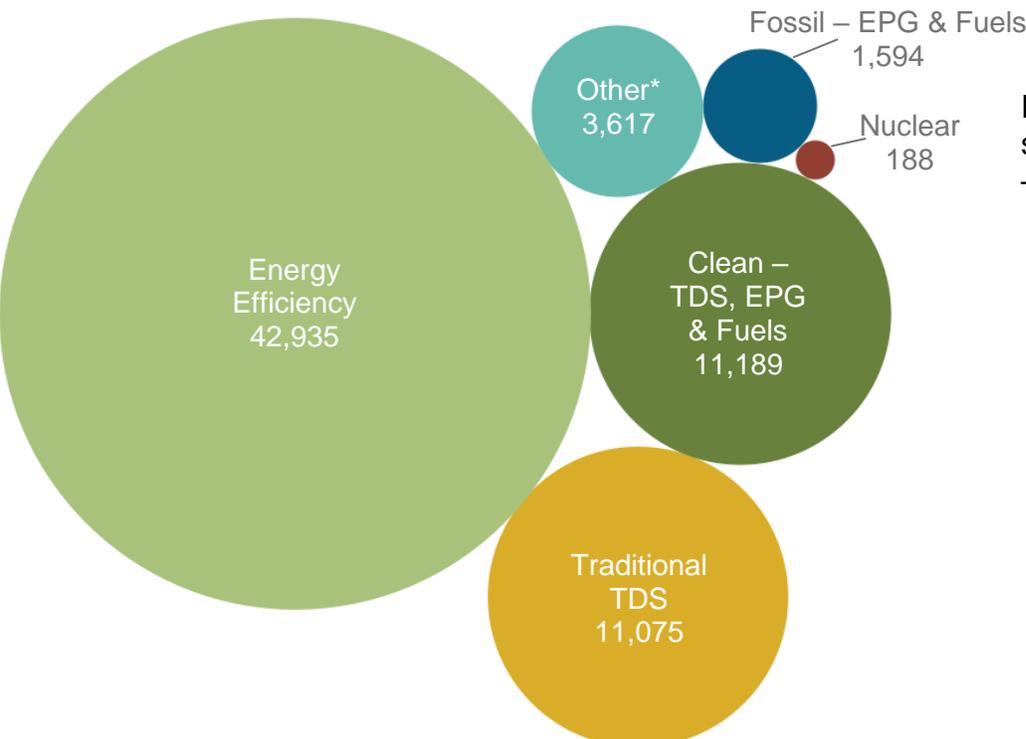
## What type of work are EE workers doing?

- 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 Oregon?

Energy efficiency is the largest energy sector in Oregon.

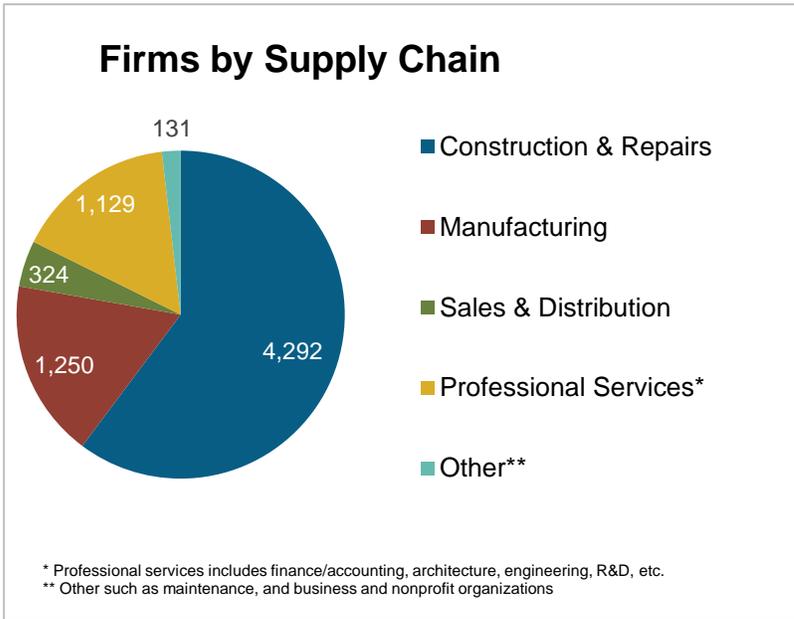
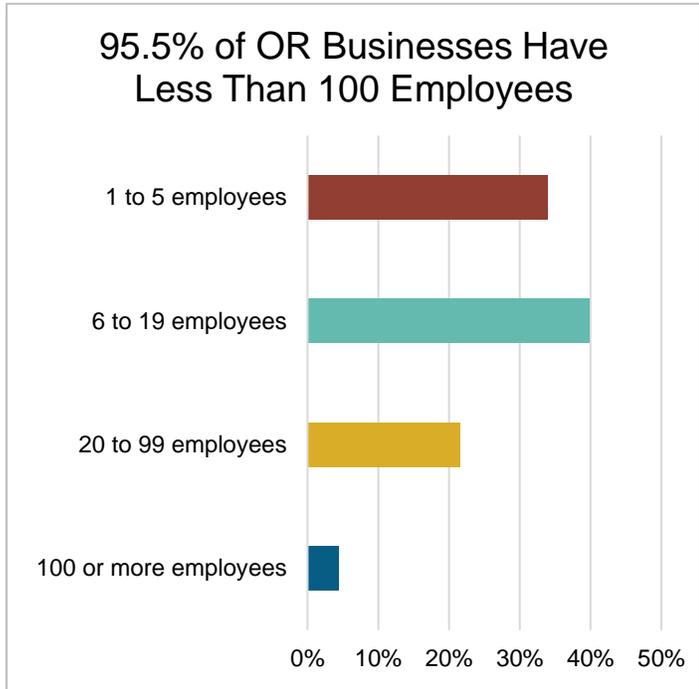


Energy efficiency in Oregon has seen consistent, reliable job growth – 2.5 percent since 2016.

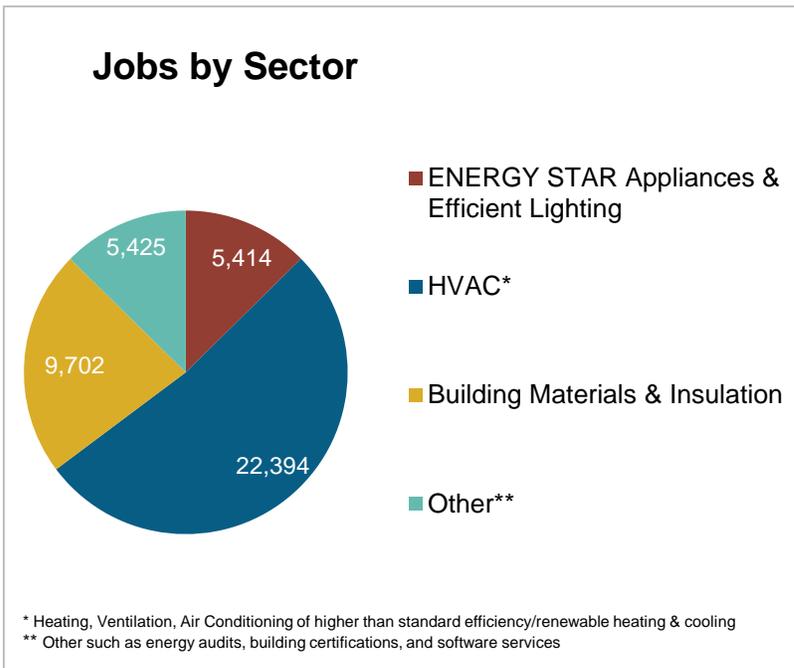
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Oregon?

EE Sector =  
**7,126**  
 Businesses in OR  
 (Dec. 2019)  
 ↑ **60** over 2018



 **6.4%**  
 of Oregon  
 residents employed  
 in EE are **Veterans**

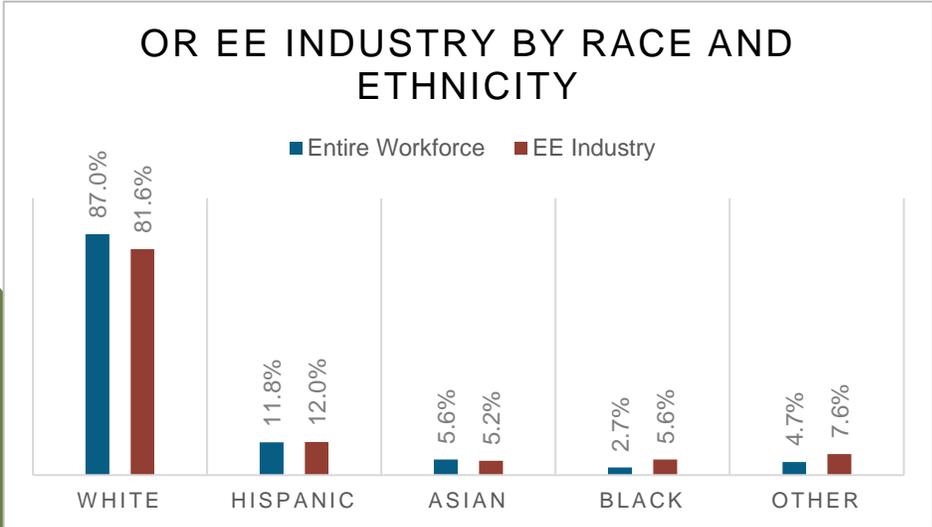


  
**Energy Efficiency  
 Construction Workers  
 Make Up 23% of OR  
 Construction Workers**

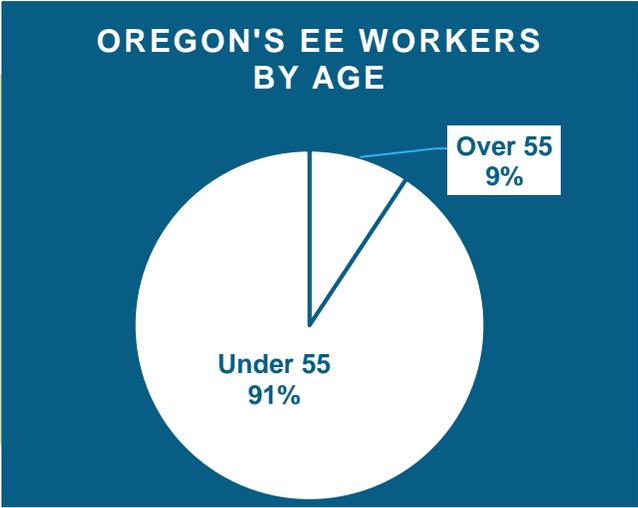
# How is EE Doing regarding Diversity in Oregon?

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 Oregon 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.



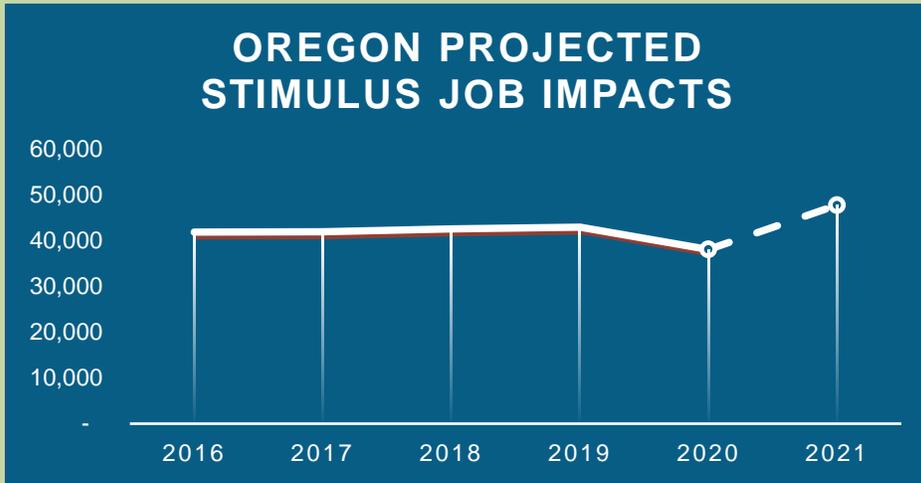
A significant portion of the Oregon efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

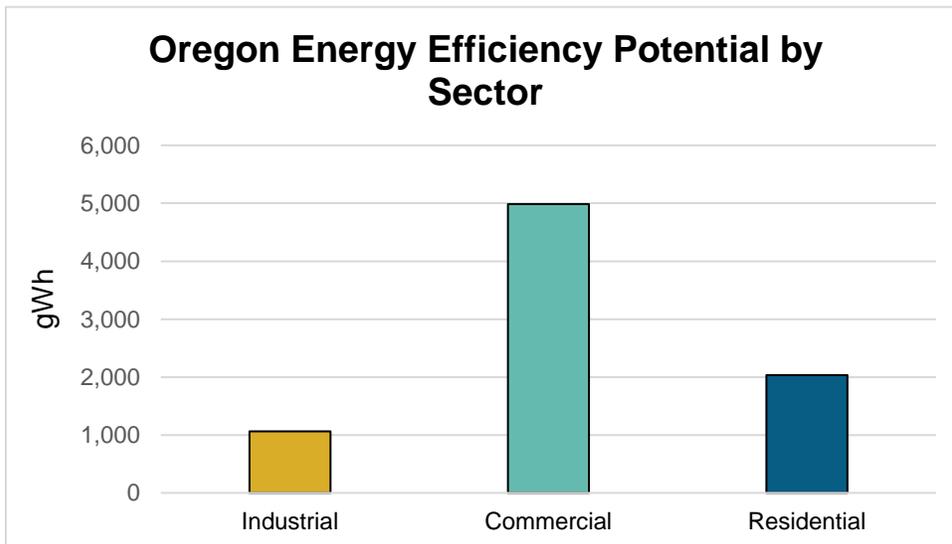


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **9,696 full-time direct, indirect, and induced OR jobs** that will last for at least five years: Over **48,482 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$678 million in GDP** each year for the next five years – resulting in **\$3.4 billion in economic activity**, more than 4.2 times the investment.

## How much energy efficiency is untapped in your state?



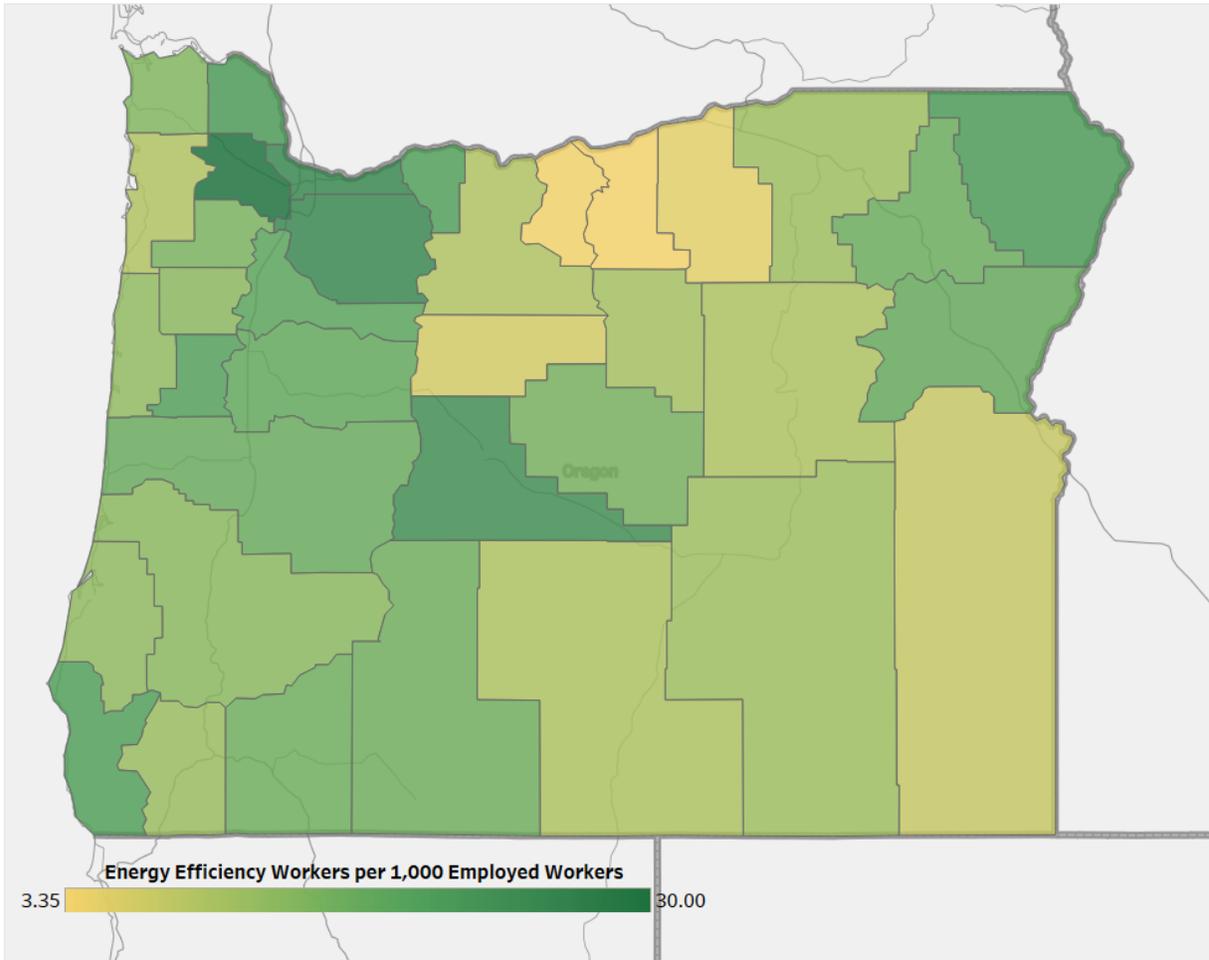
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **739,273** homes.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	13,014	Bend	2,064
2	8,557	Corvallis	755
3	9,043	Eugene-Springfield	3,985
4	8,056	Medford	2,665
5	4,265	Portland-Vancouver-Beaverton	22,125
		Salem	3,102
		Rural	8,239

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,673	9	2,142	17	655	25	631
2	1,289	10	1,632	18	3,175	26	291
3	1,188	11	268	19	1,317	27	1,758
4	3,237	12	1,308	20	1,439	28	1,110
5	1,067	13	2,215	21	2,033	29	1,329
6	1,146	14	1,213	22	2,041	30	600
7	156	15	3,439	23	649		
8	1,385	16	1,238	24	312		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,040	16	51	31	610	46	292
2	629	17	687	32	609	47	193
3	19	18	1,352	33	653	48	118
4	1,266	19	1,362	34	<5	49	519
5	1,193	20	264	35	433	50	110
6	<5	21	<5	36	2,752	51	<5
7	647	22	267	37	1,314	52	289
8	2,596	23	470	38	<5	53	1,768
9	252	24	840	39	1,248	54	<5
10	869	25	13	40	190	55	789
11	1,144	26	2,201	41	937	56	316
12	<5	27	1,210	42	1,099	57	884
13	153	28	<5	43	938	58	440
14	<5	29	3,138	44	1,124	59	185
15	1,330	30	362	45	357	60	412



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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.

# Pennsylvania

## 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.*

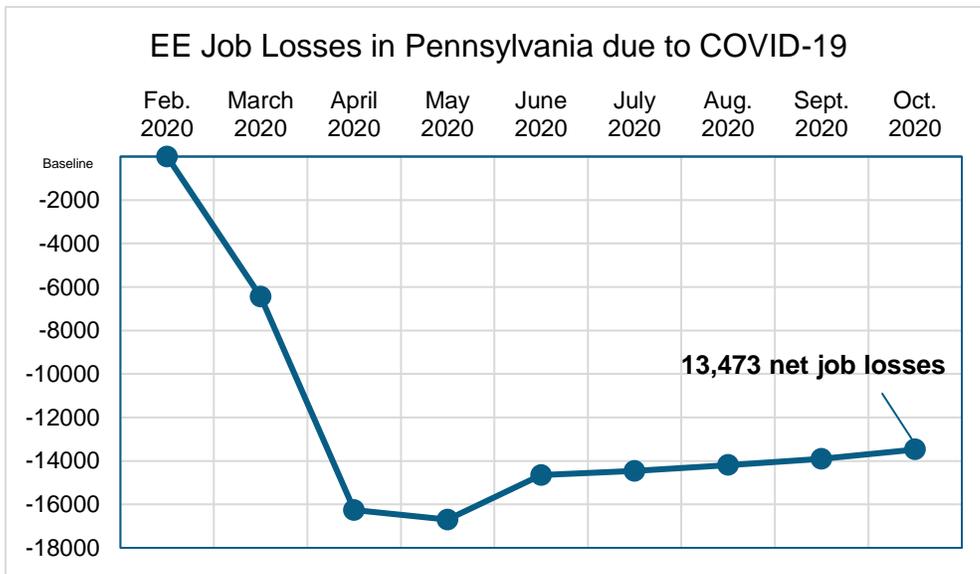
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Pennsylvania’s energy efficiency industry lost as many as 13,473 jobs since its onset, a 18.9% 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 Pennsylvania EE workforce grew steadily, gaining 14.4% 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.



Presented by:



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

# What are EE Jobs?

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

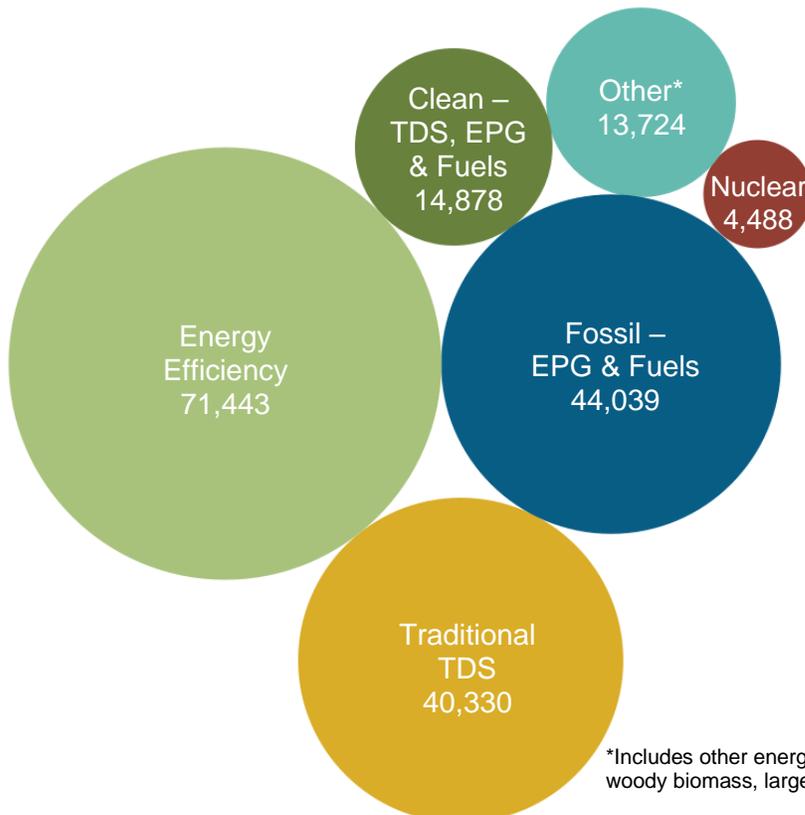
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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## How does EE compare in Pennsylvania?

*Energy efficiency is the largest energy sector in Pennsylvania.*

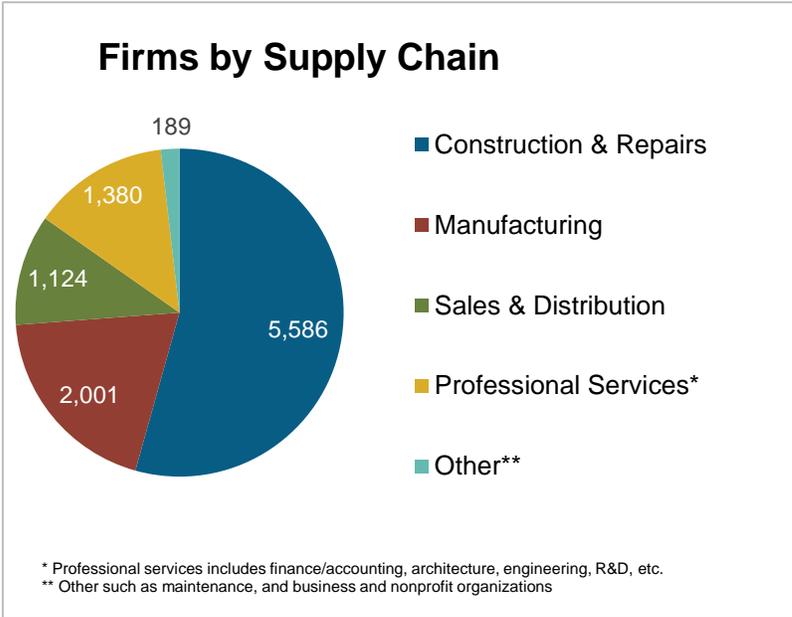
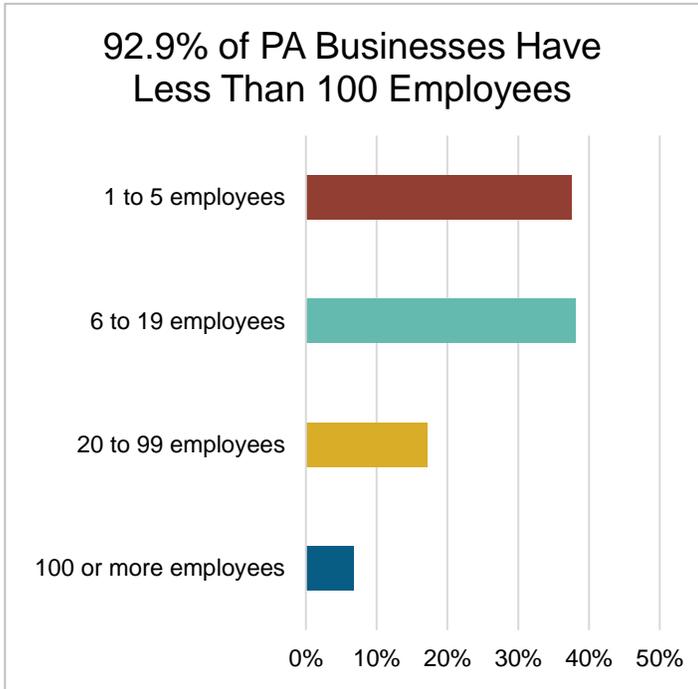


Energy efficiency in Pennsylvania has seen consistent, reliable job growth – 14.4 percent since 2016.

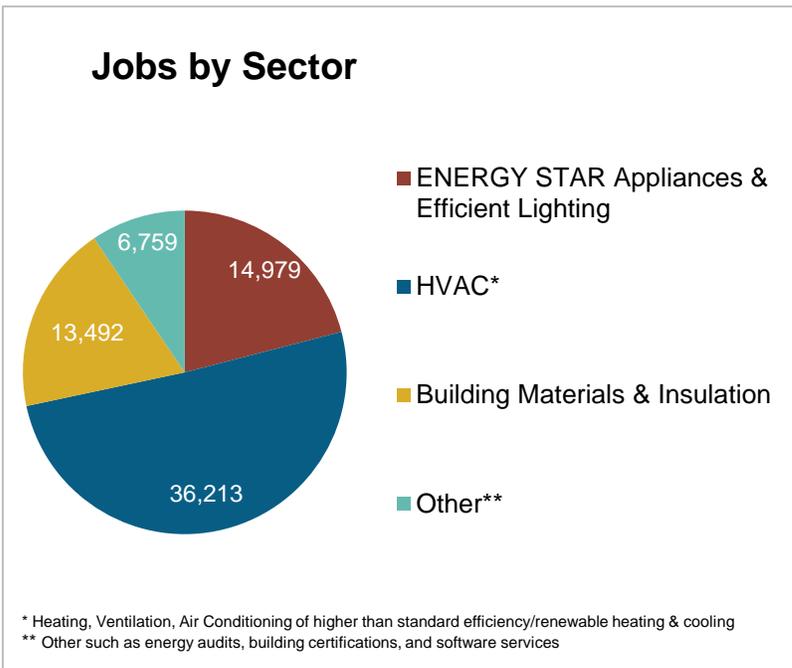
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Pennsylvania?

EE Sector =  
**10,280**  
 Businesses in PA  
 (Dec. 2019)  
 ↑ **380** over 2018




**10.8%**  
 of Pennsylvania  
 residents employed  
 in EE are **Veterans**



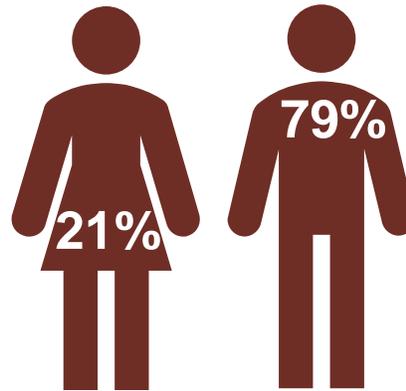
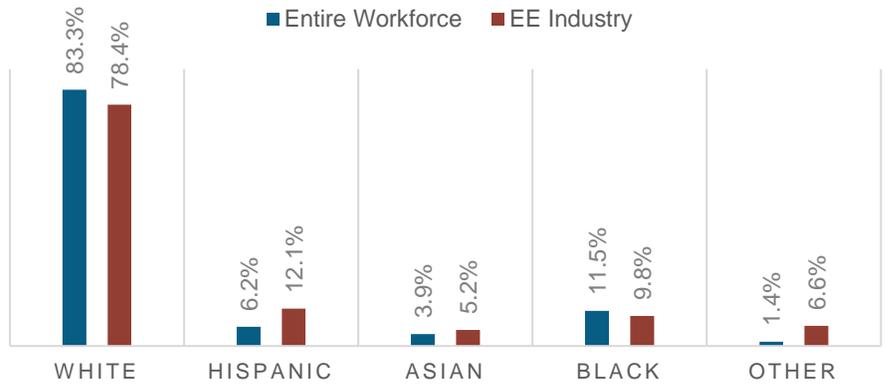

**Energy Efficiency  
 Construction Workers  
 Make Up 14% of PA  
 Construction Workers**

# How is EE Doing regarding Diversity in Pennsylvania?

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 Pennsylvania communities are represented in the EE sector.

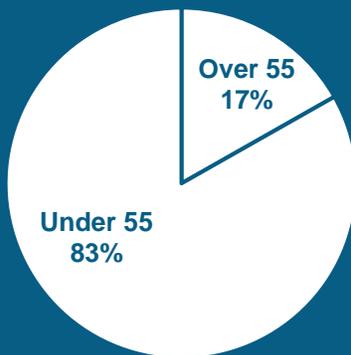
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## PA EE INDUSTRY BY RACE AND ETHNICITY



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.

## PENNSYLVANIA'S EE WORKERS BY AGE



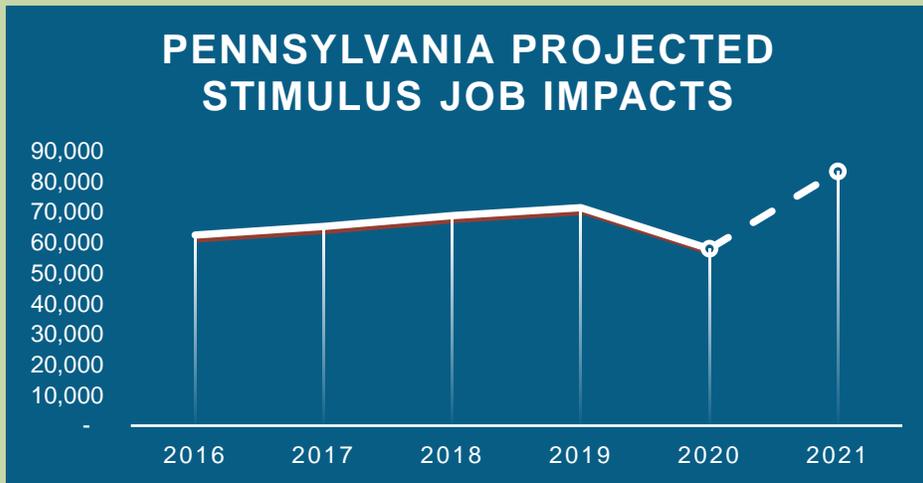
A significant portion of the Pennsylvania efficiency workforce is in the “55+” category. 17% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

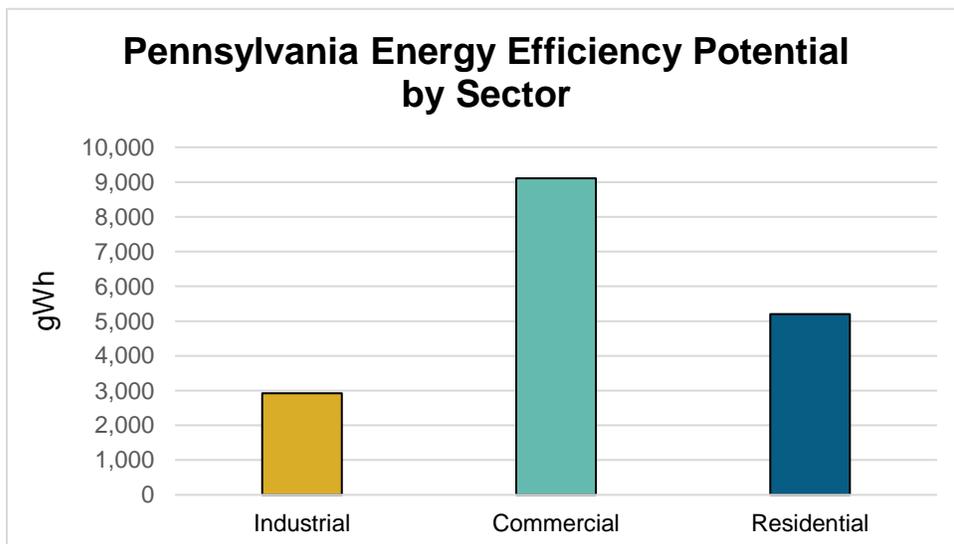


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **25,340 full-time direct, indirect, and induced PA jobs** that will last for at least five years: Over **126,701 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.9 billion in GDP** each year for the next five years — resulting in **\$9.3 billion in economic activity**, more than 4.1 times the investment.

## How much energy efficiency is untapped in your state?



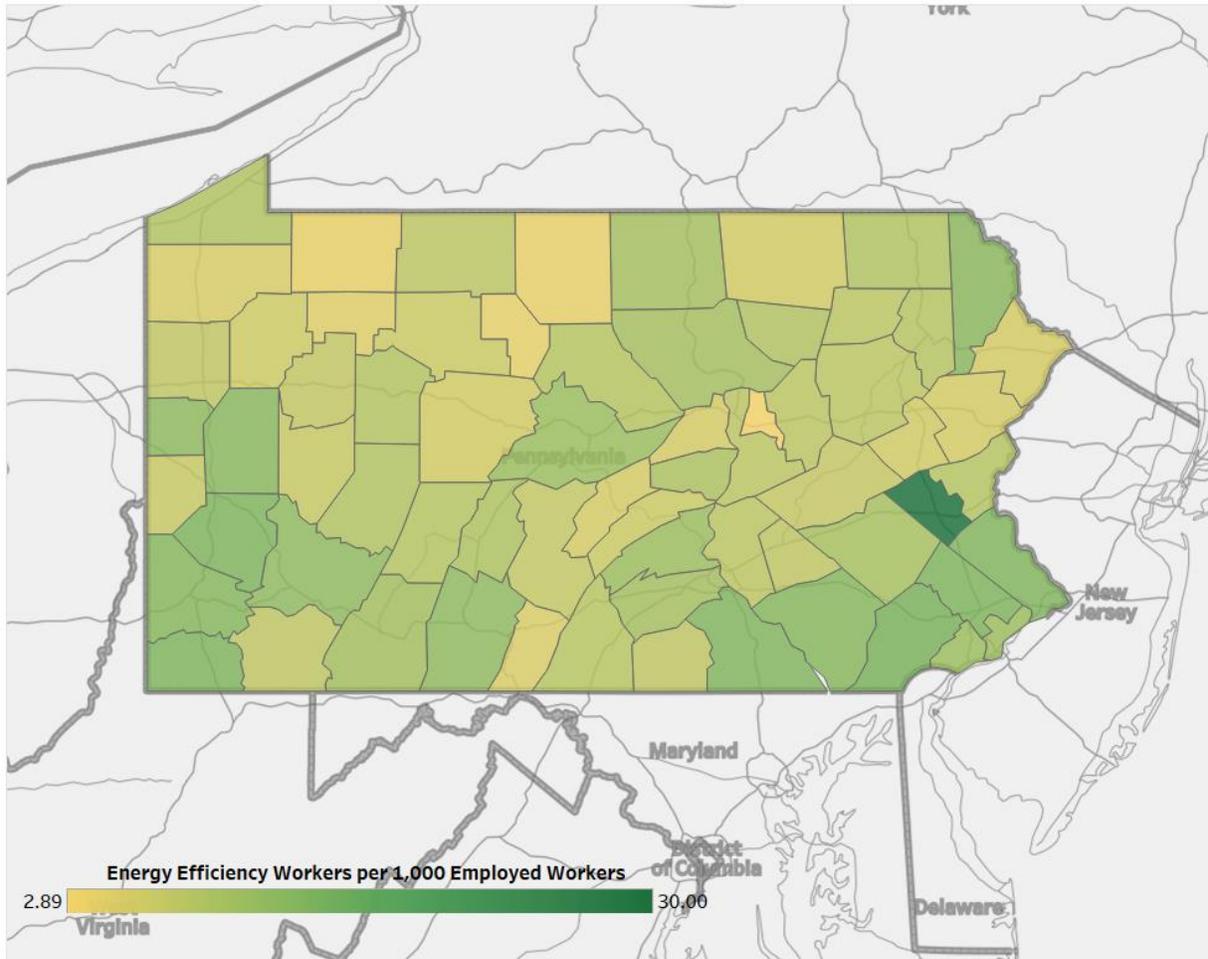
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,715,695 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	4,788	Allentown-Bethlehem-Easton	3,507
2	3,400	Altoona	670
3	4,608	Erie	1,348
4	4,498	Harrisburg-Carlisle	2,958
5	2,770	Johnstown	487
6	7,345	Lancaster	2,976
7	5,049	Lebanon	608
8	5,545	New York-Northern New Jersey-Long	3,703
9	3,920	Philadelphia-Camden-Wilmington	23,265
10	4,228	Pittsburgh	13,552
11	2,863	Reading	2,937
12	5,065	Scranton--Wilkes-Barre	2,929
13	1,102	State College	688
14	5,015	Williamsport	640
15	4,841	York-Hanover	1,953
16	2,500	Youngstown-Warren-Boardman	423
17	1,795	Rural	8,801
18	2,111		

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	3,877	14	1,715	27	924	40	758
2	979	15	1,805	28	1,871	41	1,410
3	286	16	1,986	29	783	42	2,365
4	1,416	17	2,592	30	1,937	43	574
5	189	18	1,189	31	1,267	44	311
6	3,172	19	1,387	32	1,193	45	378
7	1,348	20	1,226	33	648	46	1,191
8	419	21	1,806	34	990	47	1,082
9	3,556	22	1,400	35	869	48	581
10	1,985	23	1,577	36	869	49	1,393
11	2,413	24	830	37	3,608	50	808
12	992	25	1,117	38	1,550		
13	2,341	26	538	39	1,943		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	599	52	189	103	833	154	146
2	516	53	907	104	363	155	376
3	235	54	1,152	105	<5	156	1,771
4	95	55	415	106	<5	157	356
5	832	56	31	107	588	158	282
6	379	57	87	108	38	159	484
7	373	58	88	109	122	160	45
8	569	59	308	110	249	161	762
9	412	60	224	111	494	162	411
10	311	61	998	112	793	163	553
11	249	62	325	113	355	164	<5
12	474	63	239	114	107	165	344
13	617	64	261	115	504	166	<5
14	328	65	227	116	479	167	<5
15	499	66	326	117	281	168	14
16	314	67	175	118	380	169	44
17	14	68	611	119	434	170	186
18	672	69	238	120	22	171	26
19	2,376	70	901	121	79	172	402
20	768	71	303	122	241	173	<5
21	417	72	169	123	307	174	<5
22	684	73	243	124	190	175	2,026
23	151	74	310	125	173	176	123
24	299	75	295	126	324	177	136
25	607	76	862	127	32	178	63
26	815	77	50	128	310	179	165
27	859	78	398	129	49	180	<5
28	267	79	564	130	204	181	57
29	892	80	53	131	782	182	1,699
30	25	81	129	132	420	183	135
31	918	82	495	133	606	184	201
32	359	83	551	134	210	185	78
33	158	84	198	135	120	186	58
34	270	85	254	136	332	187	1,223
35	489	86	381	137	266	188	77
36	196	87	863	138	246	189	26
37	1,745	88	169	139	229	190	57
38	58	89	411	140	774	191	<5
39	557	90	13	141	81	192	20
40	635	91	534	142	493	193	295
41	353	92	315	143	984	194	234
42	<5	93	468	144	64	195	<5
43	621	94	51	145	19	196	7
44	356	95	<5	146	165	197	<5
45	38	96	<5	147	101	198	46
46	130	97	<5	148	1,034	199	<5
47	1,046	98	264	149	1,003	200	<5
48	50	99	111	150	19	201	25
49	537	100	145	151	524	202	<5
50	109	101	538	152	360	203	<5
51	199	102	83	153	306		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



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# Rhode Island

## Energy Efficiency Jobs in America

Oct 2020

10,555\*

Dec 2019

13,028

*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.*

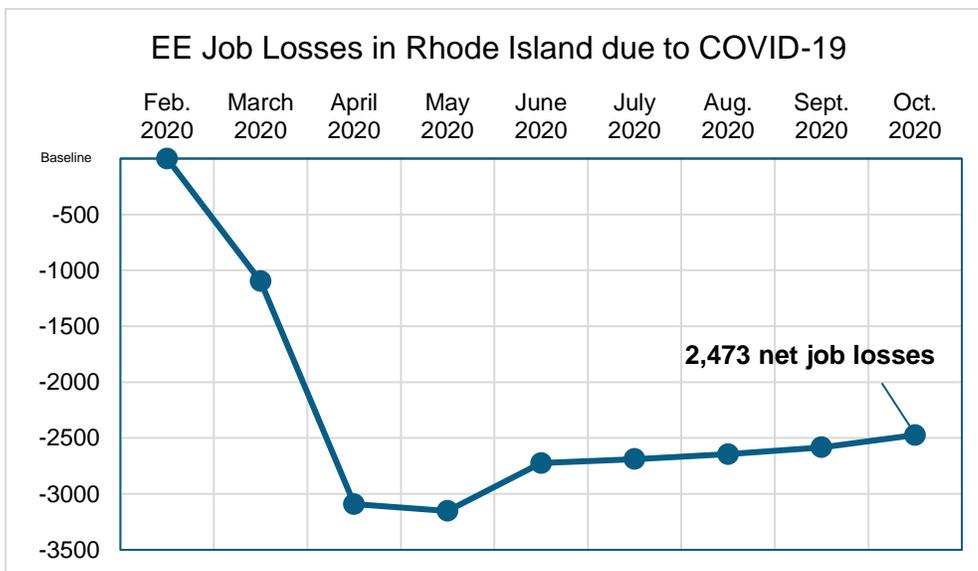
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Rhode Island's energy efficiency industry lost as many as 2,473 jobs since its onset, a 19.0% 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 Rhode Island EE workforce grew steadily, gaining 22.8% 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.



Presented by:



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

\*\*first available sector-specific data

# What are EE Jobs?

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

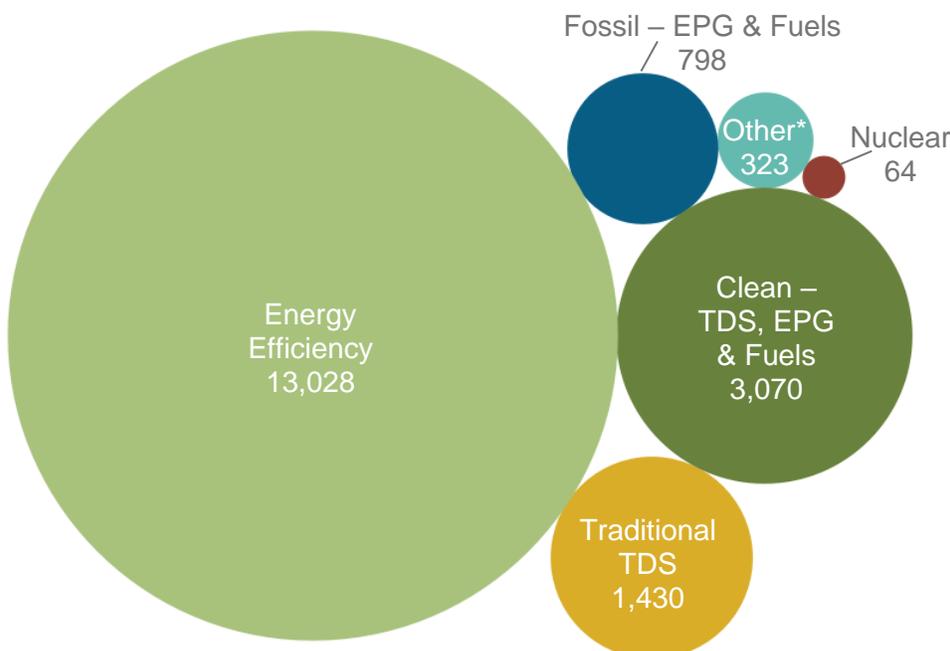
## What type of work are EE workers doing?

- 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 Rhode Island?

Energy efficiency is the largest energy sector in Rhode Island.

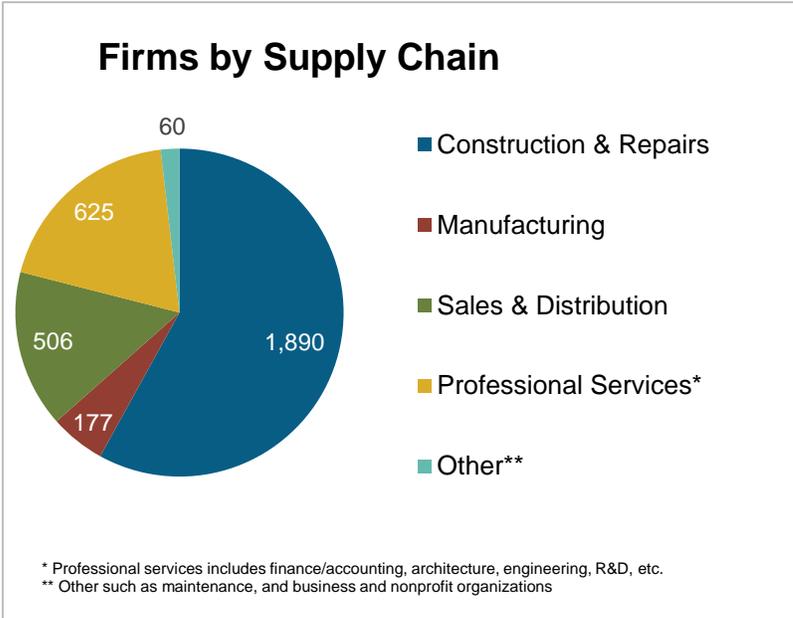
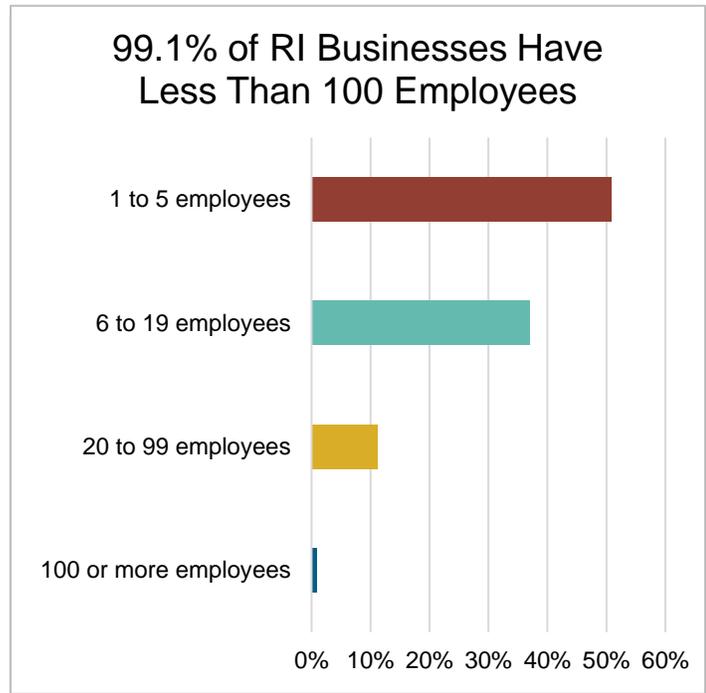


Energy efficiency in Rhode Island has seen consistent, reliable job growth – 22.8 percent since 2016.

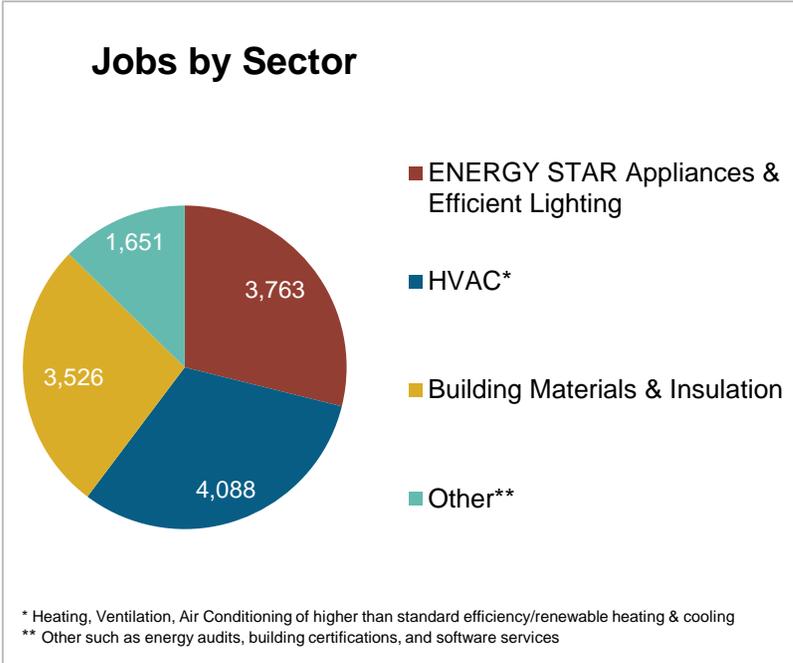
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Rhode Island?

EE Sector =  
**3,257**  
 Businesses in RI (Dec. 2019)  
 ↑ **60** over 2018




**7.4%**  
 of Rhode Island  
 residents employed  
 in EE are **Veterans**

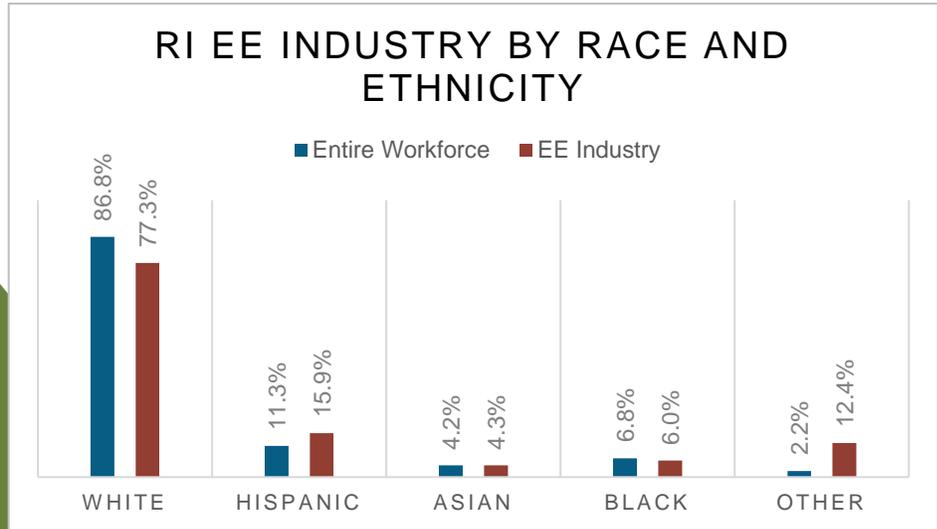



**Energy Efficiency  
 Construction Workers  
 Make Up 36% of RI  
 Construction Workers**

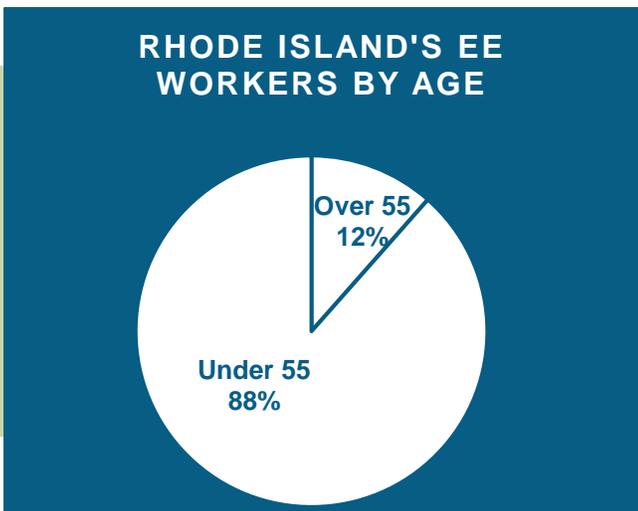
# How is EE Doing regarding Diversity in Rhode Island?

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 Rhode Island 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 Rhode Island efficiency workforce is in the “55+” category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

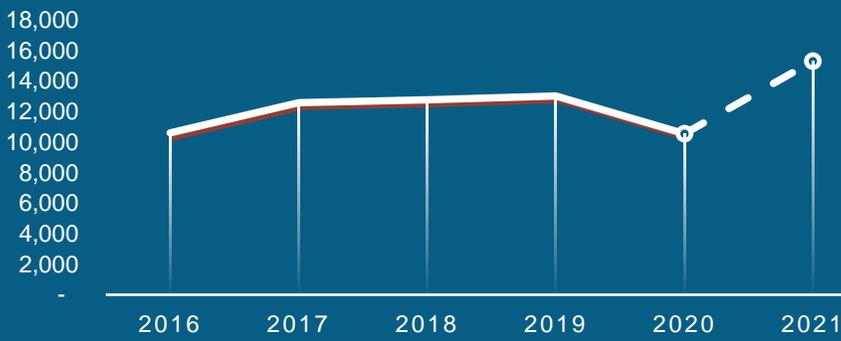
# Why invest in EE?

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.

## RHODE ISLAND PROJECTED STIMULUS JOB IMPACTS



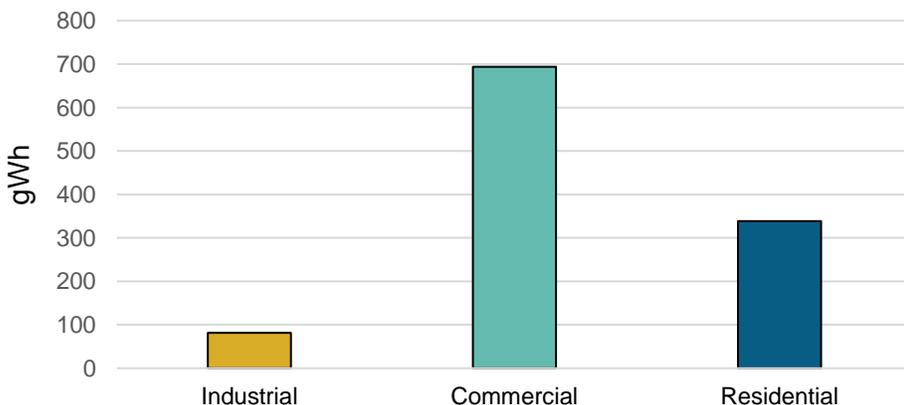
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,763 full-time direct, indirect, and induced RI jobs** that will last for at least five years: Over **23,817 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$346 million in GDP** each year for the next five years – resulting in **\$1.7 billion in economic activity**, more than 3.6 times the investment.

## How much energy efficiency is untapped in your state?

### Rhode Island Energy Efficiency Potential by Sector



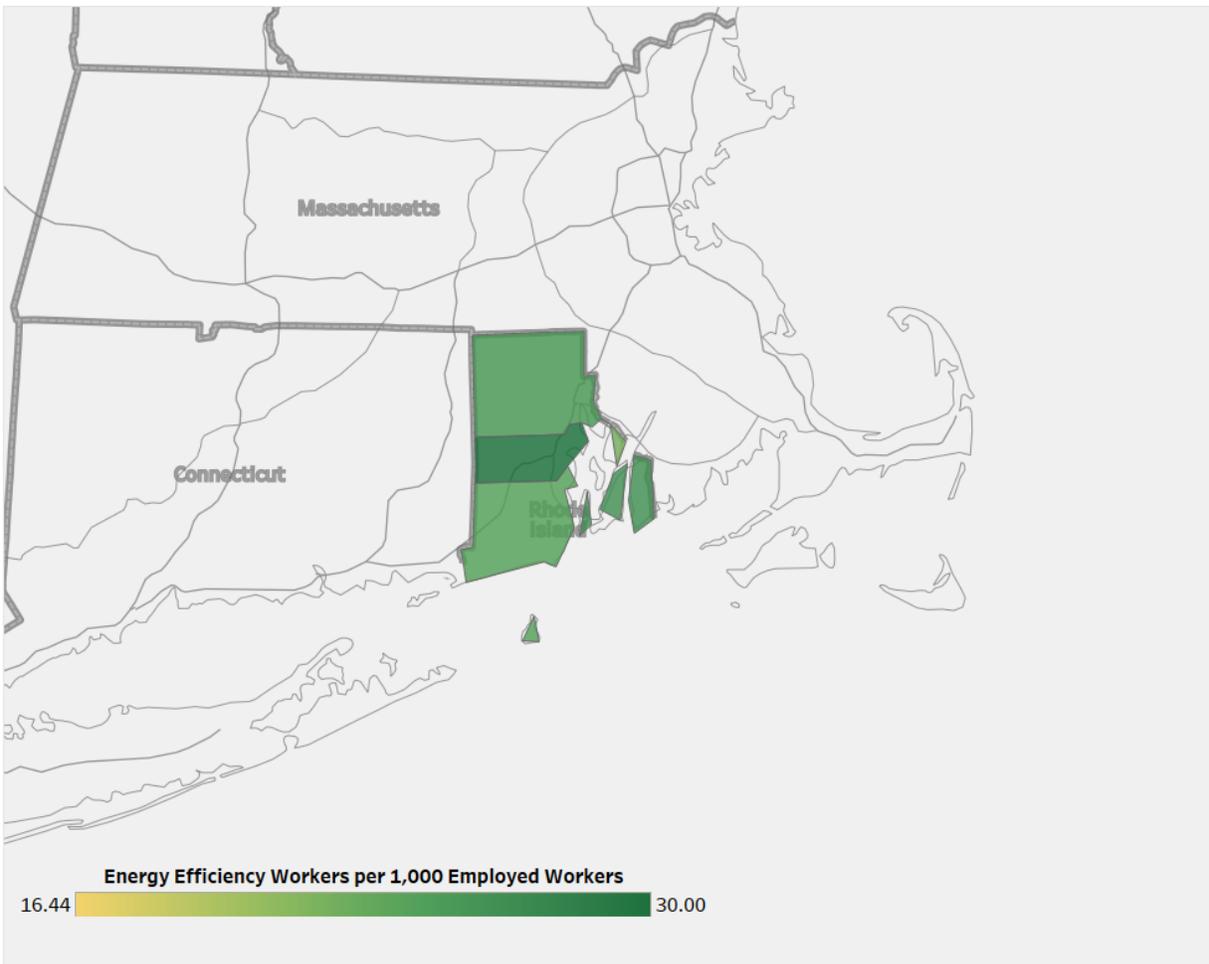
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **165,766 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	7,144	Rhode Island	13,028
2	5,884		

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,493	11	242	21	1,022	31	<5
2	762	12	774	22	412	32	124
3	659	13	87	23	145	33	<5
4	102	14	554	24	<5	34	553
5	<5	15	<5	25	<5	35	929
6	<5	16	68	26	195	36	<5
7	841	17	1,045	27	<5	37	46
8	<5	18	<5	28	<5	38	325
9	280	19	<5	29	1,257		
10	632	20	268	30	214		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,480	20	667	39	39	58	<5
2	488	21	197	40	320	59	<5
3	<5	22	<5	41	<5	60	<5
4	446	23	<5	42	<5	61	<5
5	<5	24	490	43	<5	62	<5
6	720	25	641	44	728	63	399
7	<5	26	<5	45	362	64	151
8	<5	27	<5	46	<5	65	<5
9	431	28	80	47	105	66	142
10	268	29	97	48	162	67	151
11	<5	30	<5	49	267	68	271
12	<5	31	585	50	<5	69	241
13	<5	32	<5	51	<5	70	344
14	<5	33	562	52	<5	71	99
15	194	34	<5	53	<5	72	271
16	<5	35	<5	54	<5	73	400
17	<5	36	517	55	<5	74	86
18	<5	37	<5	56	68	75	<5
19	410	38	149	57	<5	76	<5



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# South Carolina

## 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.*

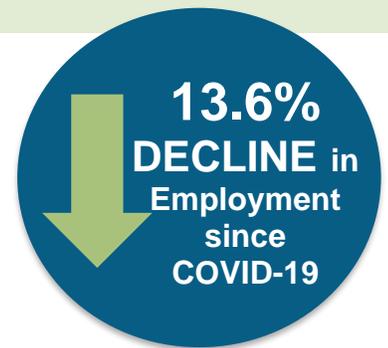
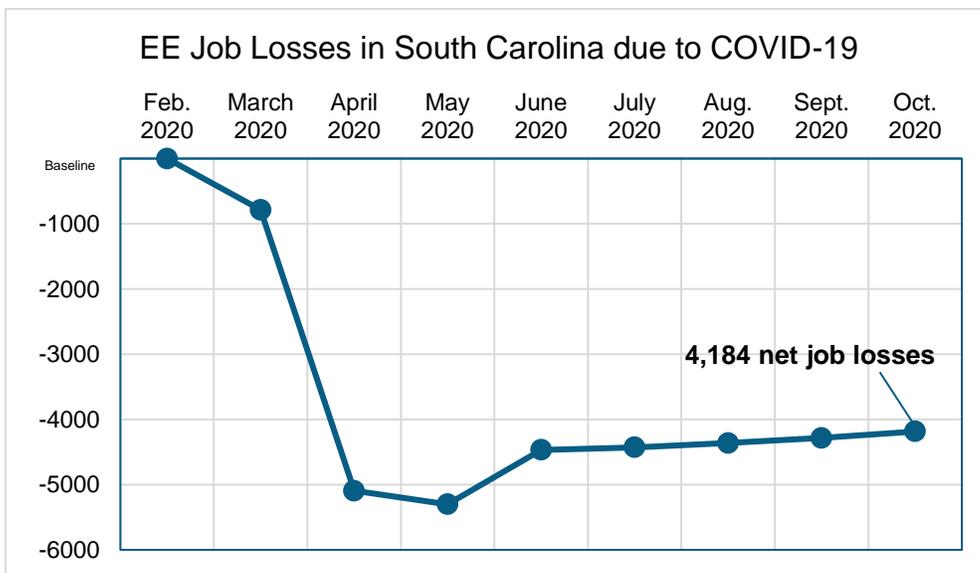
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. South Carolina’s energy efficiency industry lost as many as 4,184 jobs since its onset, a 13.6% 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 South Carolina EE workforce grew steadily, gaining 3.5% 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.



Presented by:



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

# What are EE Jobs?

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

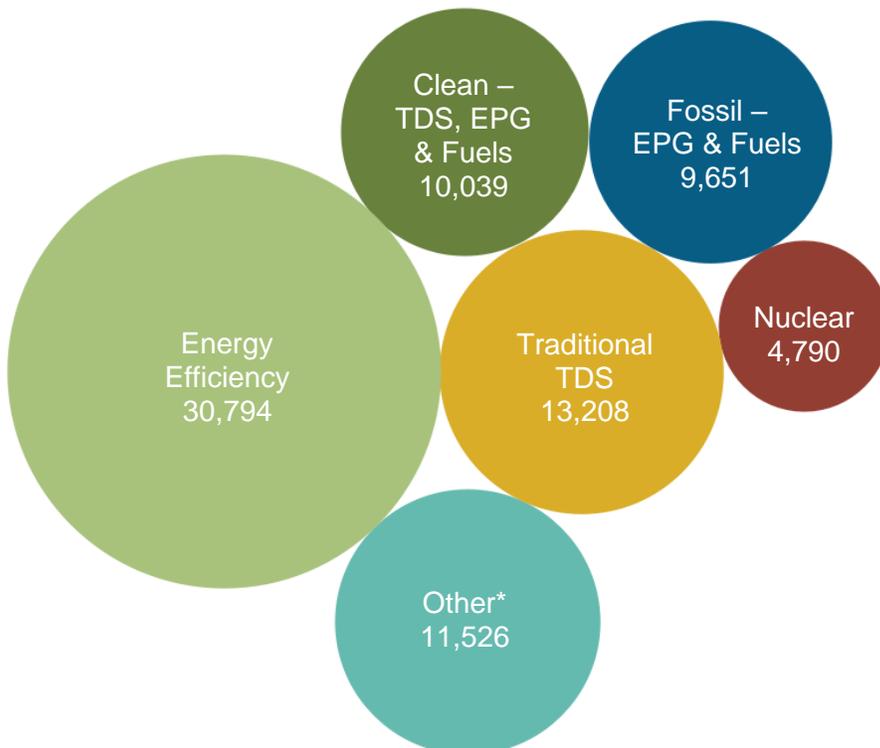
## What type of work are EE workers doing?

- 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 South Carolina?

Energy efficiency is the largest energy sector in South Carolina.

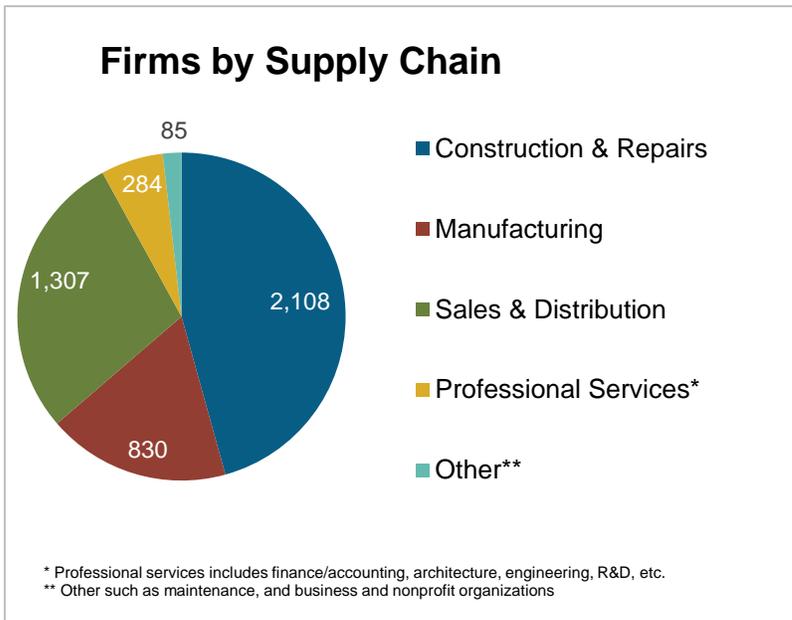
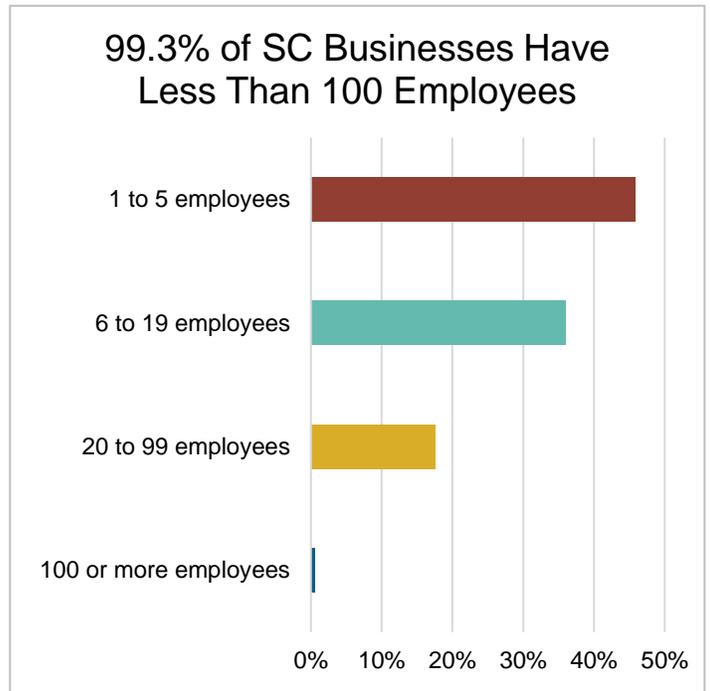


Energy efficiency in South Carolina has seen consistent, reliable job growth – 3.5 percent since 2016.

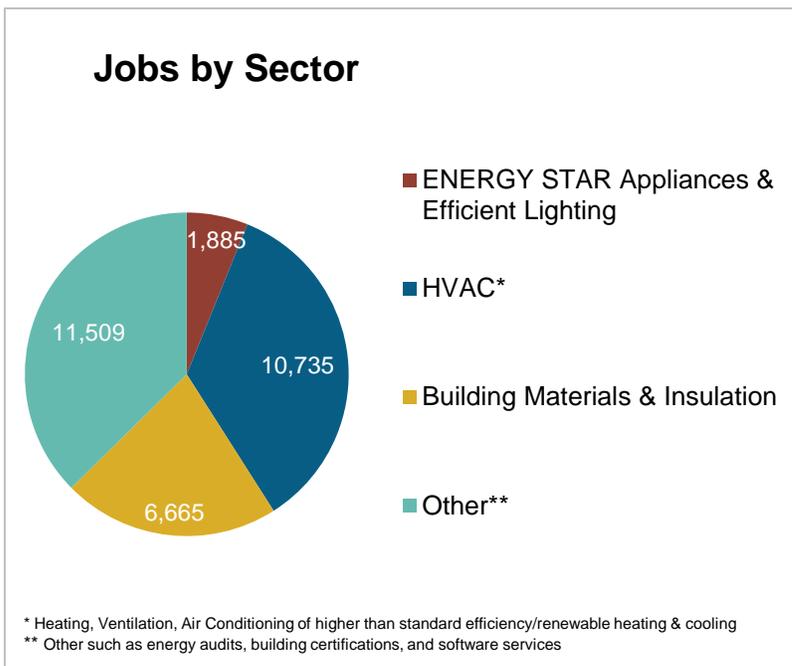
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in South Carolina?

EE Sector =  
**4,613**  
 Businesses in SC  
 (Dec. 2019)  
 ↑ **120** over 2018




**8.6%**  
 of South Carolina  
 residents employed  
 in EE are **Veterans**

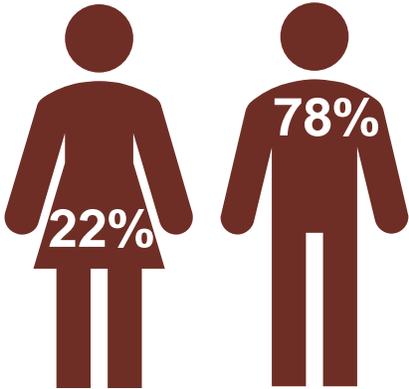
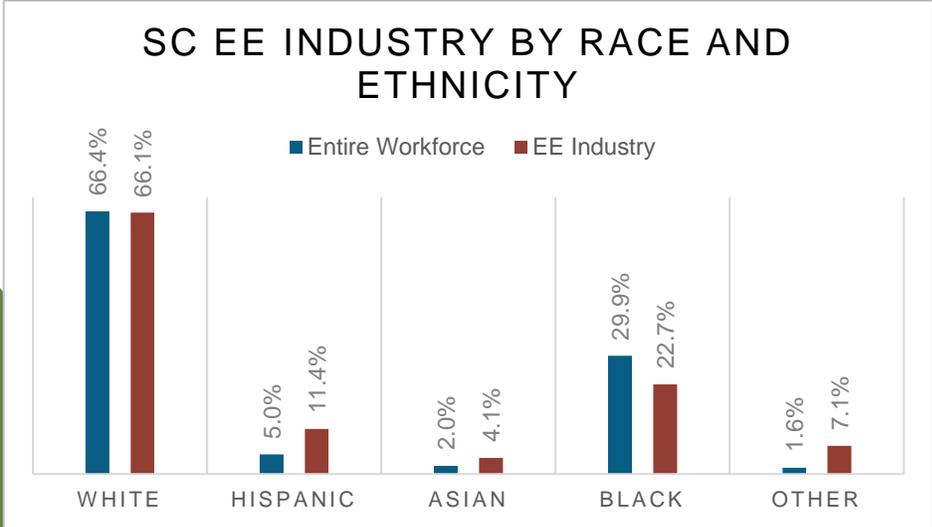



**Energy Efficiency  
 Construction Workers  
 Make Up 13% of SC  
 Construction Workers**

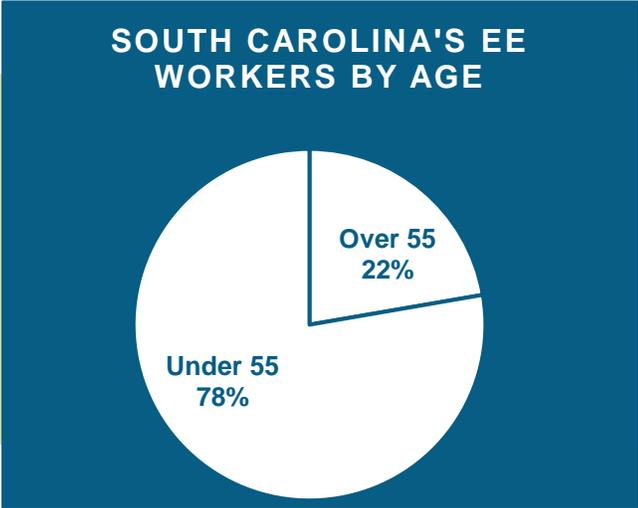
# How is EE Doing regarding Diversity in South Carolina?

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 South Carolina 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.



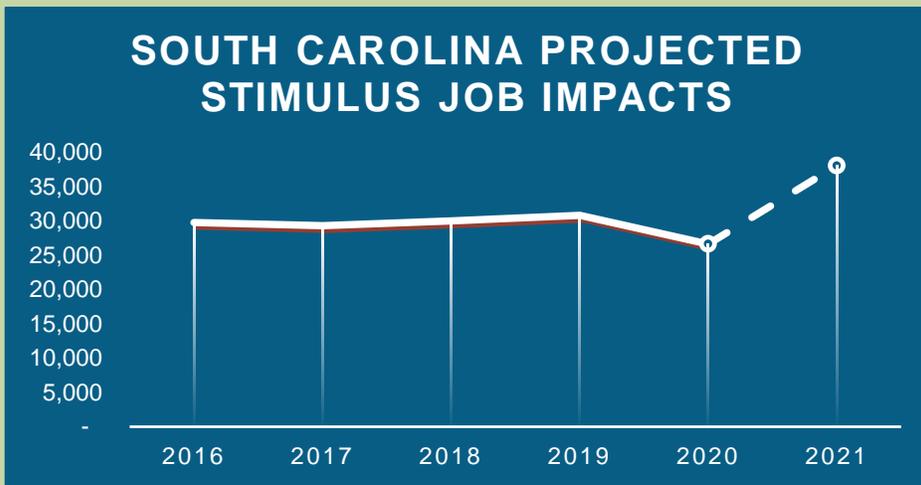
South Carolina's percentage of "55+" workers is the second highest for any state's EE workforce. 22% of the energy efficiency workers are likely to retire within the next ten years, providing career growth opportunities for both current and future professionals.

# 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.

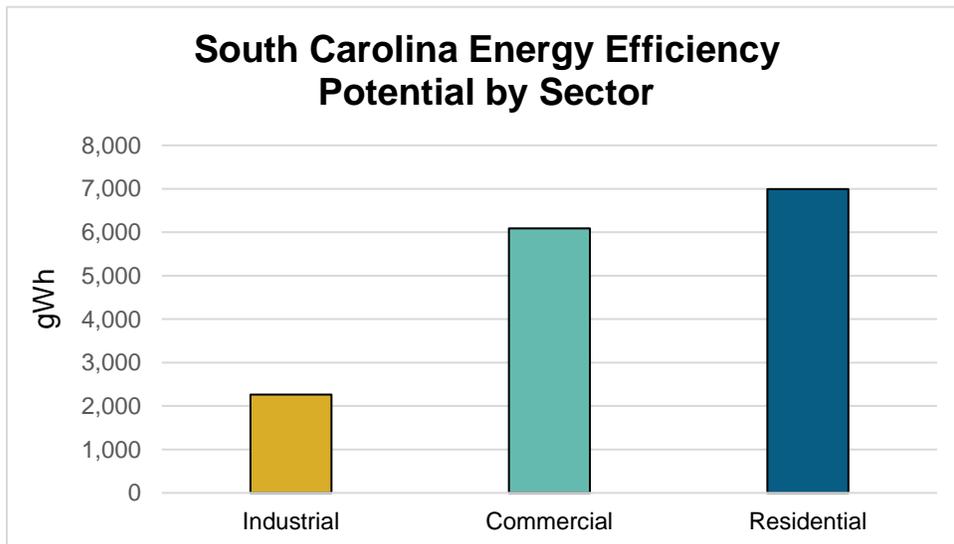


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **11,432 full-time direct, indirect, and induced SC jobs** that will last for at least five years: Over **57,159 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$680 million in GDP** each year for the next five years – resulting in **\$3.4 billion in economic activity**, more than 3.7 times the investment.

## How much energy efficiency is untapped in your state?



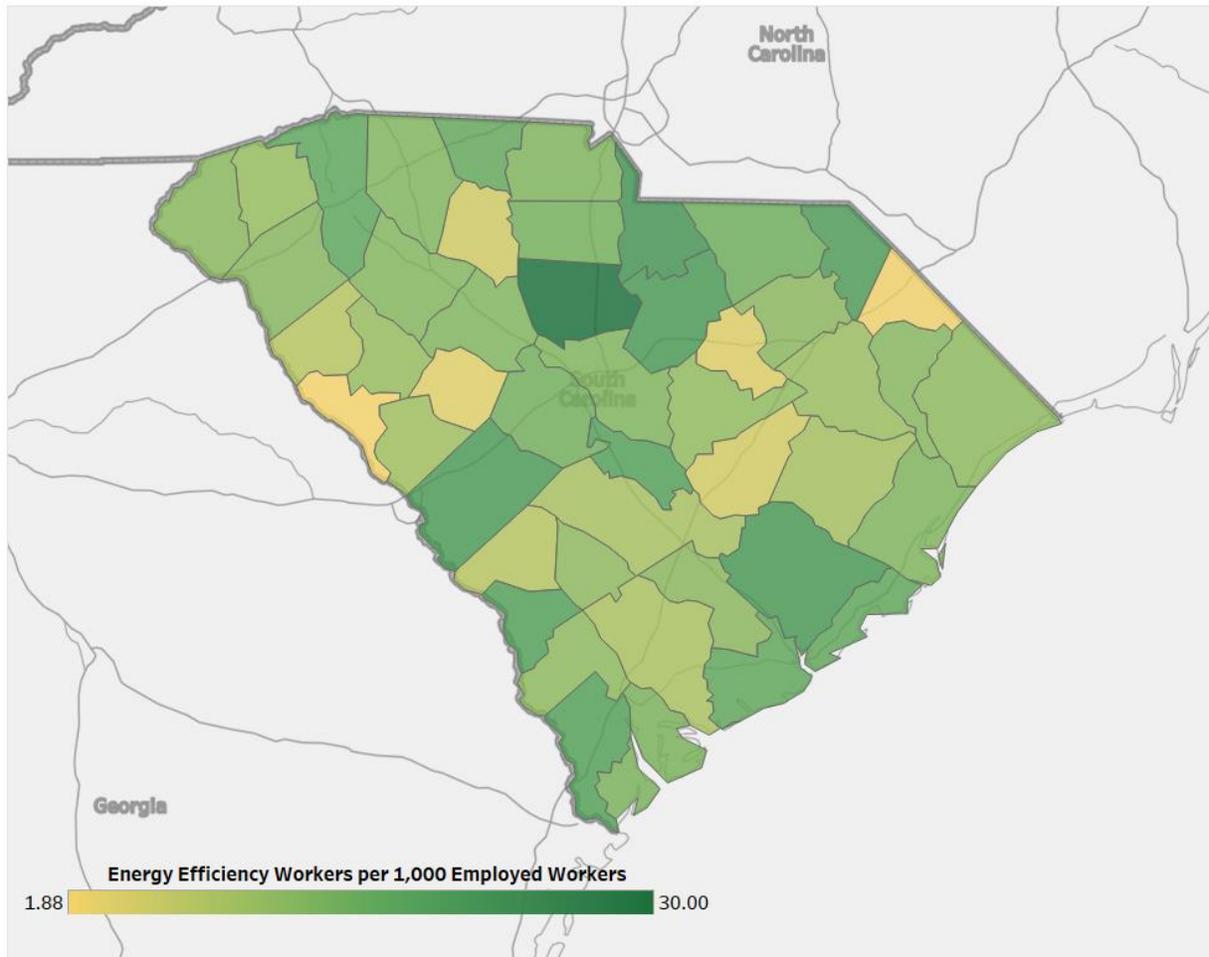
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,148,015 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	6,937	Anderson	947
2	4,610	Augusta-Richmond County	752
3	4,036	Charleston-North Charleston	5,664
4	5,072	Charlotte-Gastonia-Concord	1,810
5	3,118	Columbia	4,994
6	2,904	Florence	1,132
7	4,116	Greenville-Mauldin-Easley	5,346
		Myrtle Beach-Conway-North Myrtle Beach	2,281
		Spartanburg	1,645
		Sumter	522
		Rural	5,701

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	461	13	242	25	30	37	1,723
2	855	14	506	26	215	38	850
3	1,011	15	1,142	27	572	39	699
4	459	16	292	28	1,398	40	225
5	1,419	17	250	29	923	41	1,226
6	2,156	18	1,086	30	154	42	756
7	486	19	2,078	31	152	43	858
8	255	20	529	32	400	44	<5
9	292	21	253	33	914	45	632
10	321	22	76	34	1,383	46	414
11	1,093	23	564	35	427		
12	192	24	689	36	137		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	325	32	<5	63	<5	94	220
2	25	33	<5	64	152	95	<5
3	488	34	95	65	<5	96	10
4	225	35	<5	66	364	97	166
5	92	36	154	67	<5	98	399
6	924	37	<5	68	626	99	1,115
7	40	38	<5	69	1,130	100	65
8	79	39	472	70	203	101	156
9	<5	40	225	71	176	102	8
10	247	41	266	72	1,679	103	314
11	463	42	125	73	<5	104	332
12	67	43	51	74	273	105	<5
13	59	44	290	75	<5	106	345
14	314	45	<5	76	252	107	<5
15	741	46	<5	77	<5	108	48
16	301	47	<5	78	<5	109	543
17	1,004	48	<5	79	<5	110	597
18	301	49	<5	80	<5	111	684
19	<5	50	470	81	448	112	<5
20	517	51	400	82	61	113	<5
21	727	52	85	83	159	114	317
22	793	53	166	84	48	115	267
23	314	54	135	85	<5	116	60
24	95	55	358	86	42	117	<5
25	<5	56	654	87	<5	118	654
26	828	57	111	88	108	119	<5
27	<5	58	356	89	83	120	725
28	<5	59	685	90	357	121	351
29	1,016	60	99	91	134	122	41
30	28	61	119	92	508	123	<5
31	1,129	62	<5	93	71	124	42



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# South Dakota

## 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.*

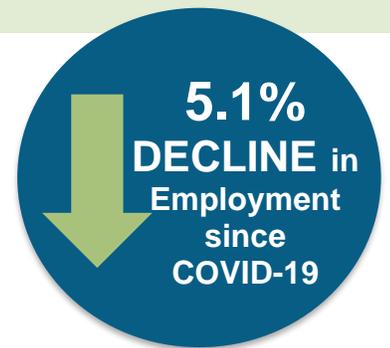
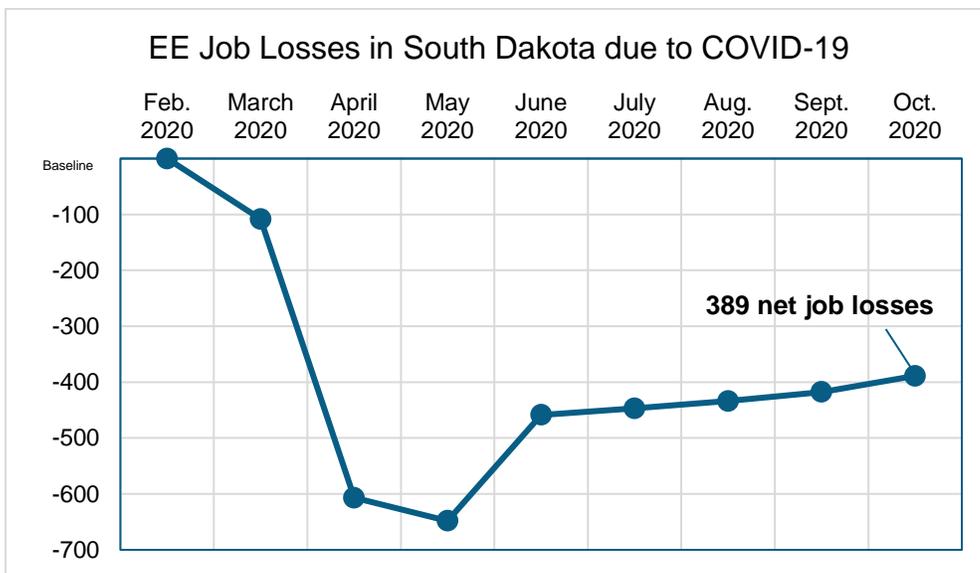
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. South Dakota's energy efficiency industry lost as many as 389 jobs since its onset, a 5.1% decrease compared to total jobs in December 2019—wiping out the last 2 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 South Dakota EE workforce grew steadily, gaining 5.9% 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.



Presented by:



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

# What are EE Jobs?

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

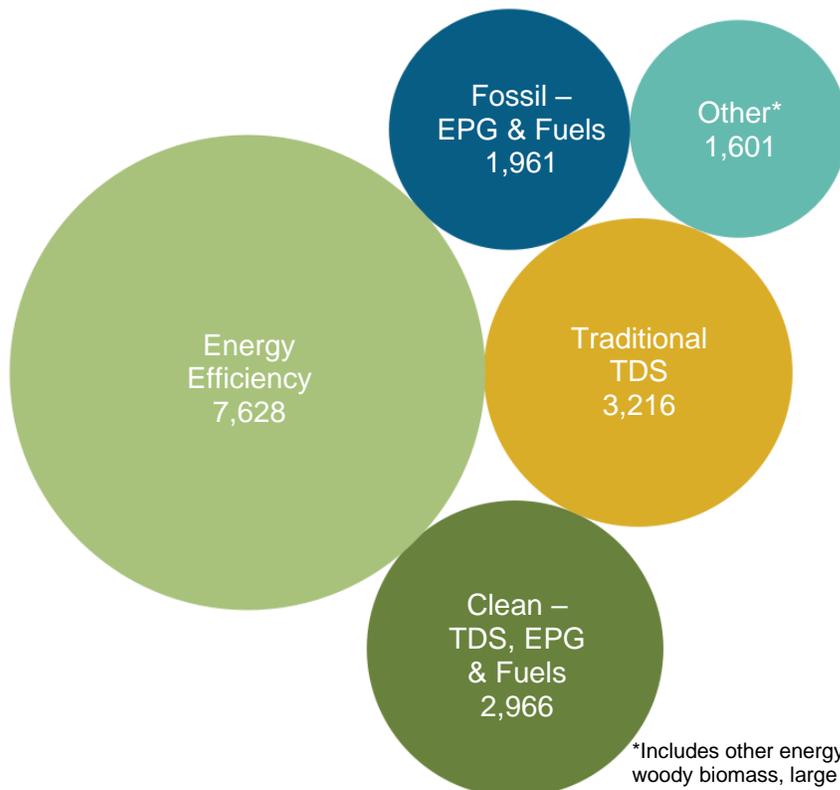
## What type of work are EE workers doing?

- 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 South Dakota?

Energy efficiency is the largest energy sector in South Dakota.

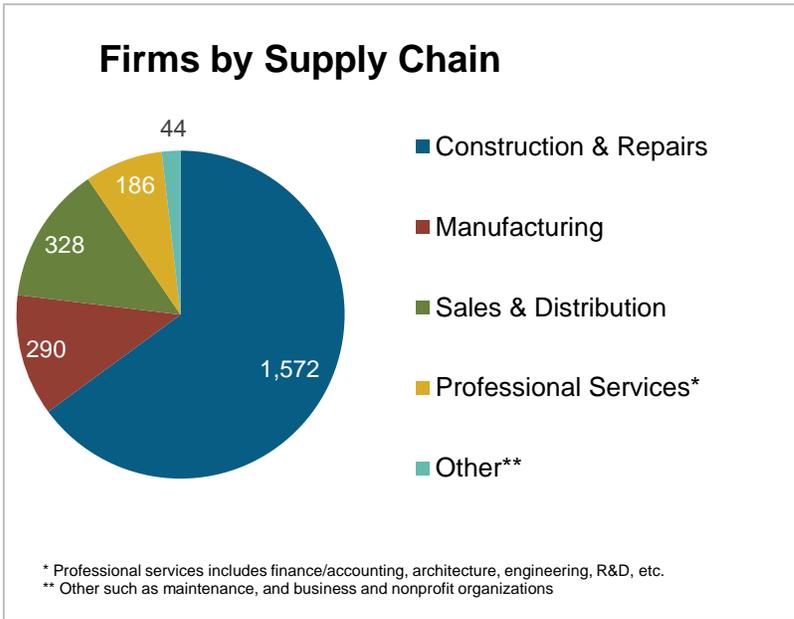
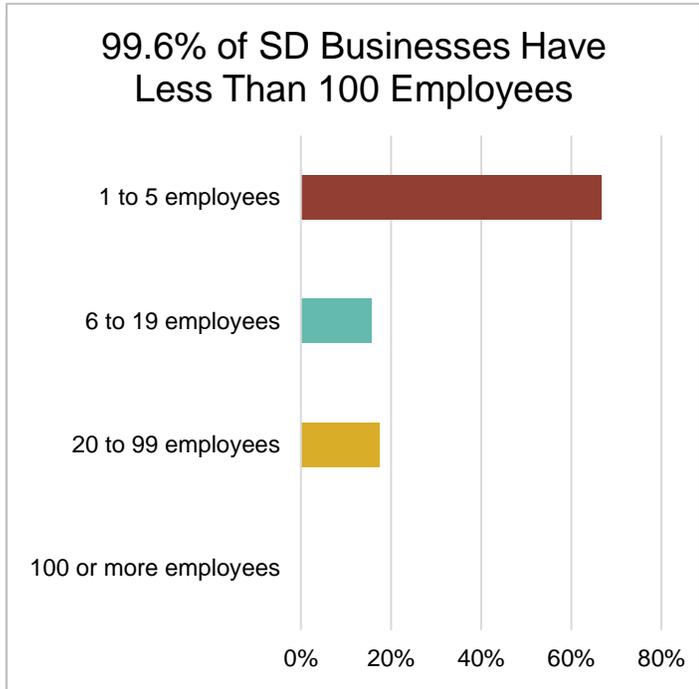


Energy efficiency in South Dakota has seen consistent, reliable job growth – 5.9 percent since 2016.

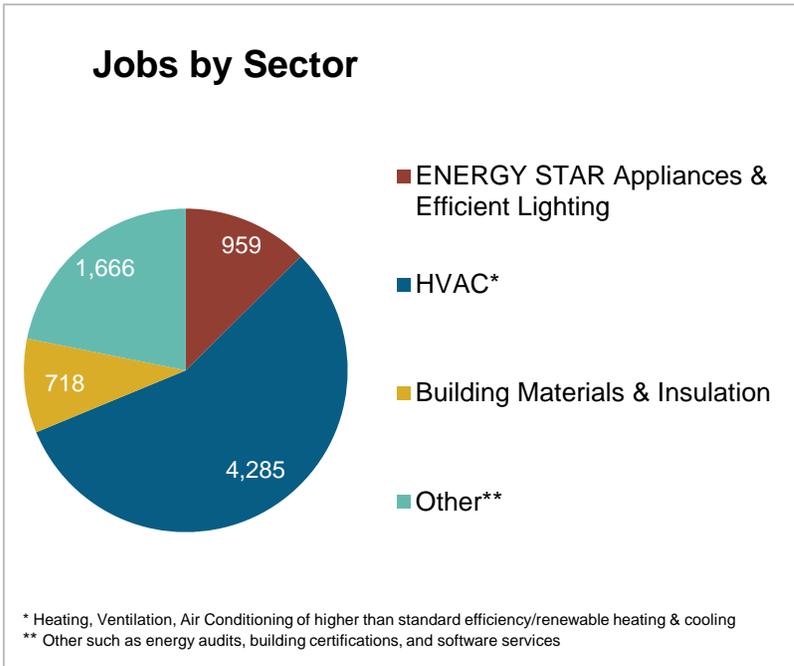
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in South Dakota?

EE Sector =  
**2,422**  
 Businesses in SD  
 (Dec. 2019)  
 ↑ **40** over 2018



**9.5%**  
 of South Dakota  
 residents employed  
 in EE are **Veterans**



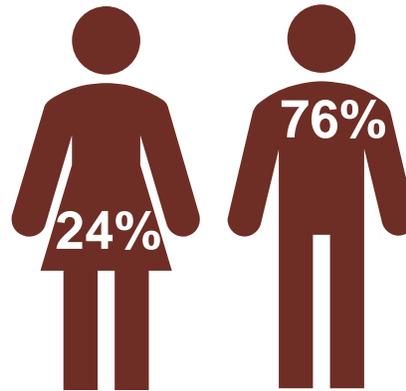
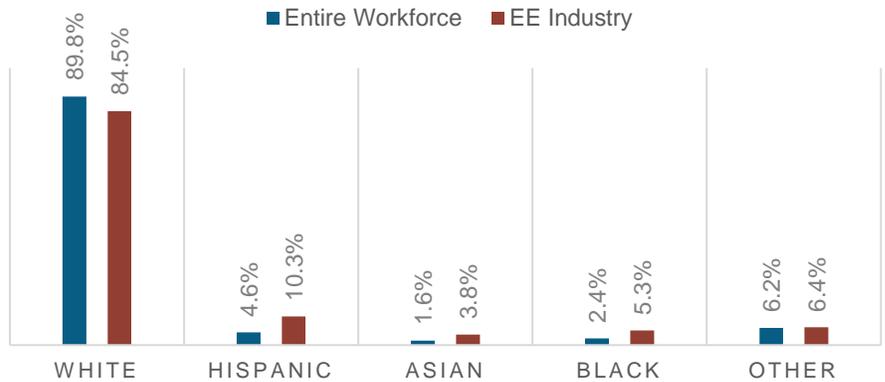
**Energy Efficiency  
 Construction Workers  
 Make Up 19% of SD  
 Construction Workers**

# How is EE Doing regarding Diversity in South Dakota?

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 South Dakota communities are represented in the EE sector.

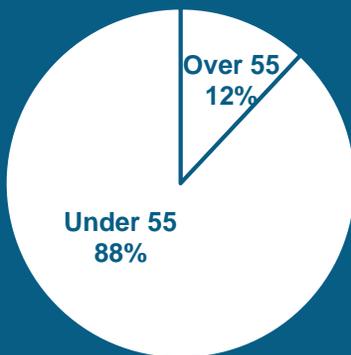
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## SD EE INDUSTRY BY RACE AND ETHNICITY



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.

## SOUTH DAKOTA'S EE WORKERS BY AGE



A significant portion of the South Dakota efficiency workforce is in the "55+" category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

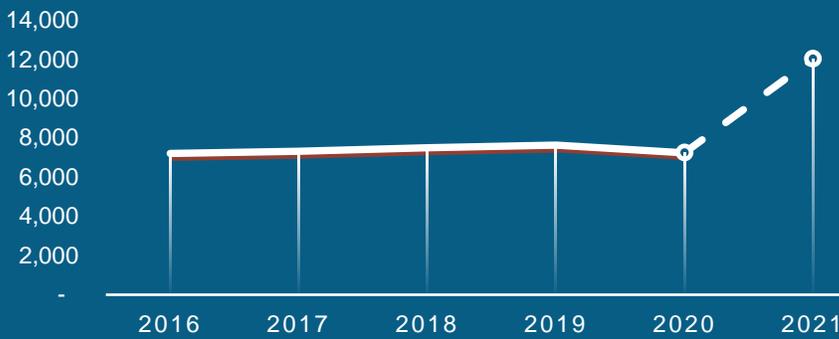
# Why invest in EE?

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.

## SOUTH DAKOTA PROJECTED STIMULUS JOB IMPACTS



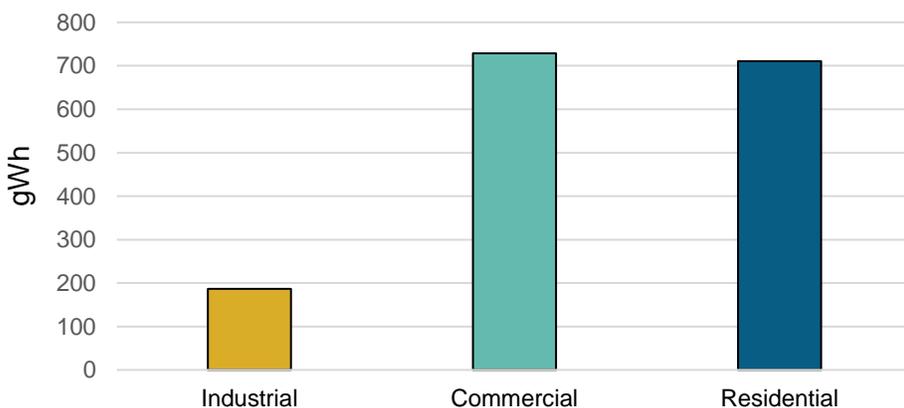
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,793 full-time direct, indirect, and induced SD jobs** that will last for at least five years: Over **23,963 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$305 million in GDP** each year for the next five years – resulting in **\$1.5 billion in economic activity**, more than 3.3 times the investment.

## How much energy efficiency is untapped in your state?

### South Dakota Energy Efficiency Potential by Sector



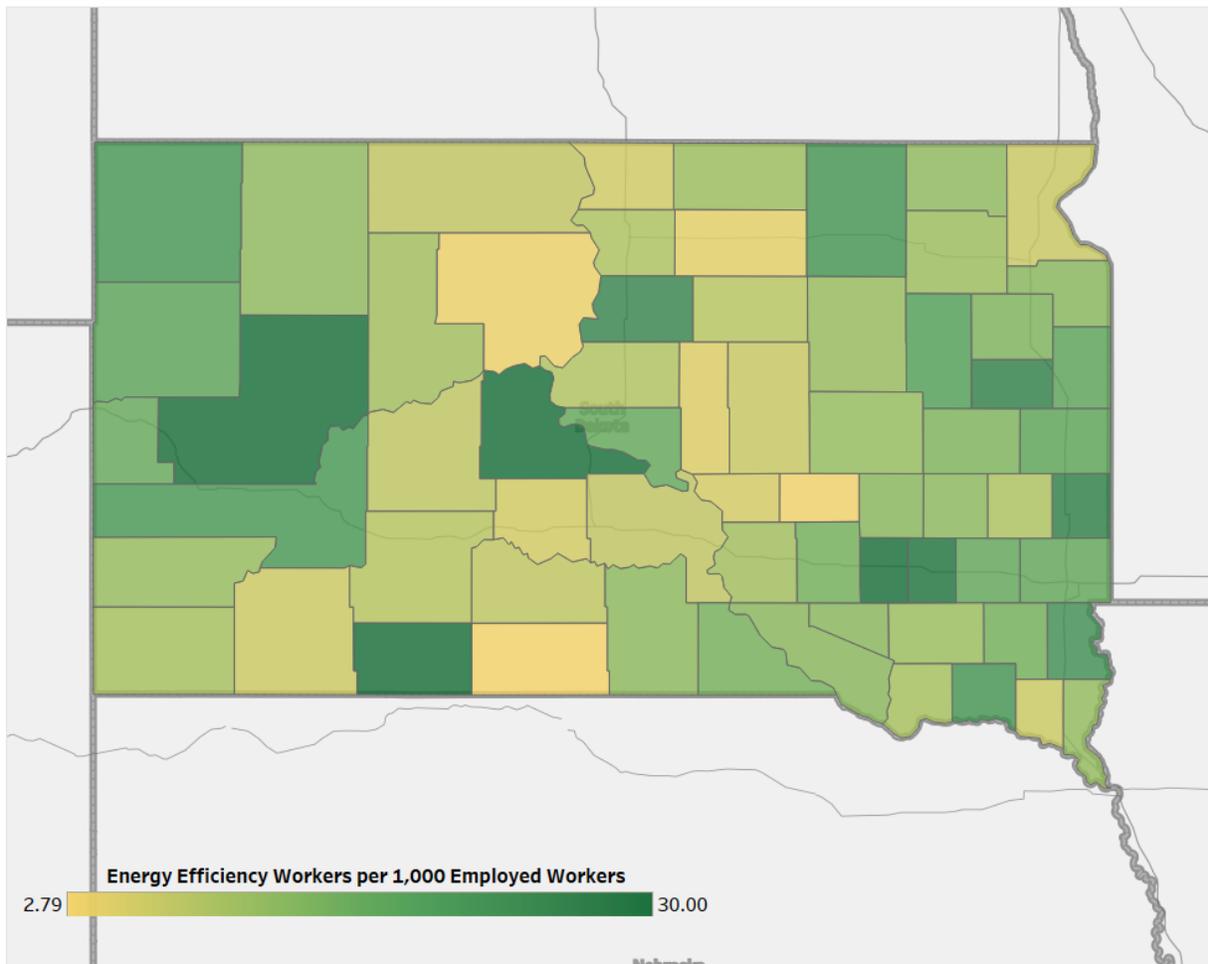
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **129,795 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	7,628	Rapid City	1,244
		Sioux City	134
		Sioux Falls	2,961
		Rural	3,289

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	553	10	243	19	348	28	243
2	190	11	<5	20	42	29	1,079
3	<5	12	194	21	148	30	220
4	537	13	<5	22	197	31	99
5	<5	14	<5	23	174	32	<5
6	514	15	<5	24	285	33	<5
7	<5	16	150	25	14	34	<5
8	153	17	142	26	88	35	<5
9	1,896	18	37	27	82		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	551	19	347	37	<5	55	<5
2	189	20	42	38	<5	56	<5
3	<5	21	148	39	<5	57	<5
4	536	22	167	40	<5	58	<5
5	<5	23	174	41	<5	59	<5
6	513	24	284	42	<5	60	<5
7	<5	25	14	43	<5	61	<5
8	152	26	<5	44	<5	62	<5
9	1,896	27	82	45	<5	63	<5
10	242	28	<5	46	<5	64	<5
11	<5	29	1,183	47	<5	65	<5
12	194	30	220	48	<5	66	<5
13	<5	31	228	49	<5	67	<5
14	<5	32	<5	50	<5	68	<5
15	<5	33	<5	51	<5	69	<5
16	150	34	<5	52	<5	70	<5
17	141	35	<5	53	<5		
18	174	36	<5	54	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Tennessee

## Energy Efficiency Jobs in America

Oct 2020

48,887\*

Dec 2019

53,916

*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

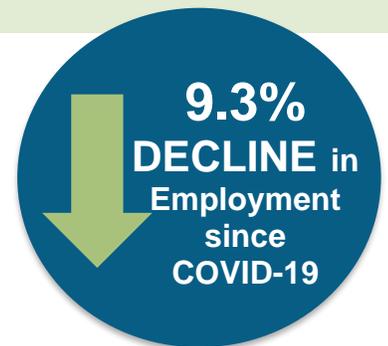
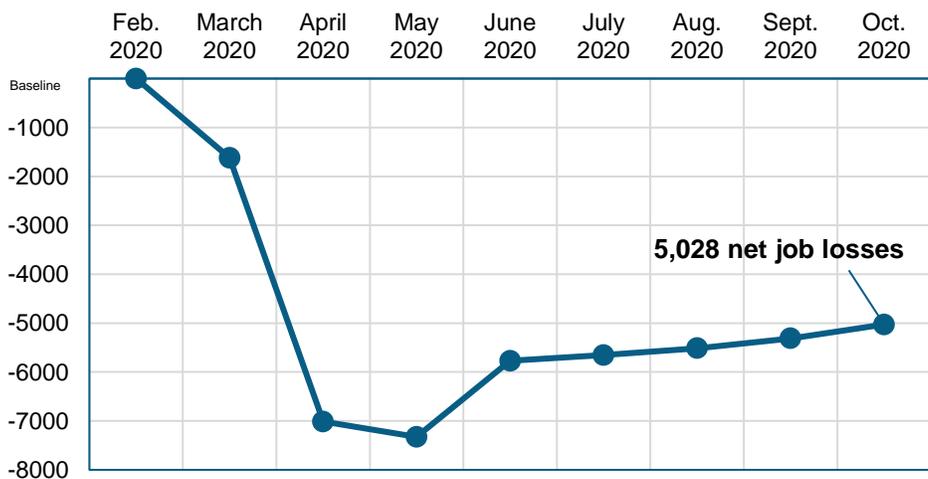
The 2020 pandemic shocked our nation's labor market with massive job losses. Tennessee's energy efficiency industry lost as many as 5,028 jobs since its onset, a 9.3% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Tennessee EE workforce grew steadily, gaining 6.9% 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.

#### EE Job Losses in Tennessee due to COVID-19



Presented by:



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

\*\*first available sector-specific data

# What are EE Jobs?

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

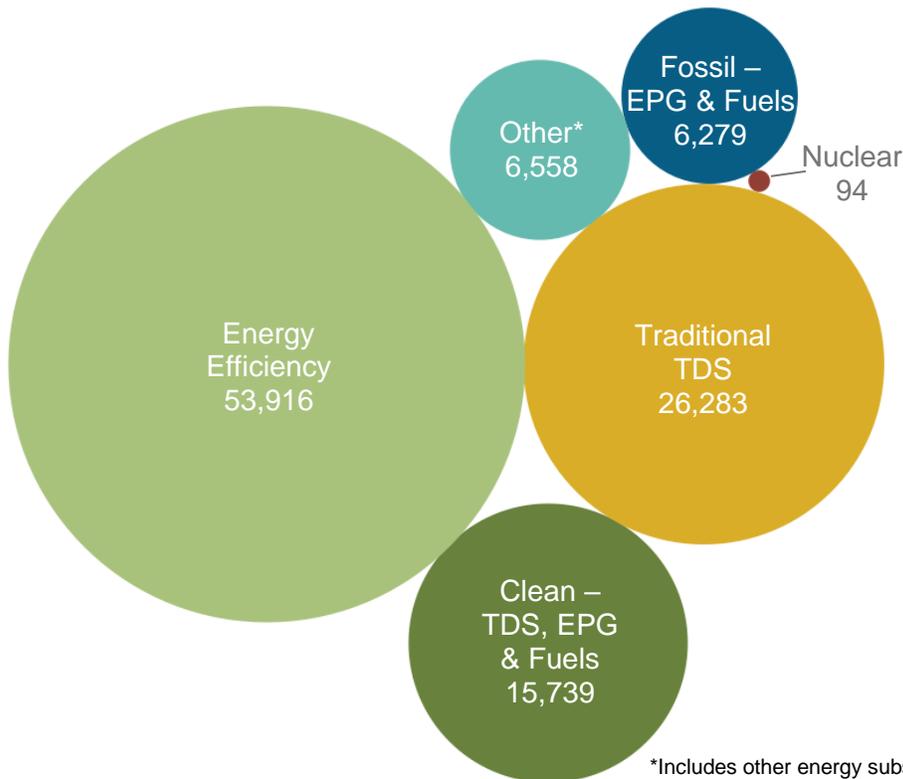
## What type of work are EE workers doing?

- 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
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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 Tennessee?

Energy efficiency is the largest energy sector in Tennessee.

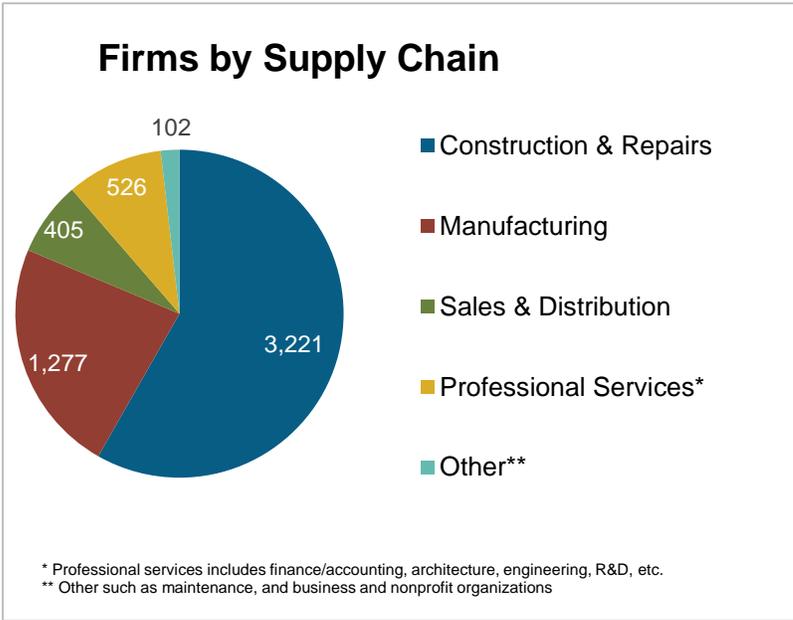
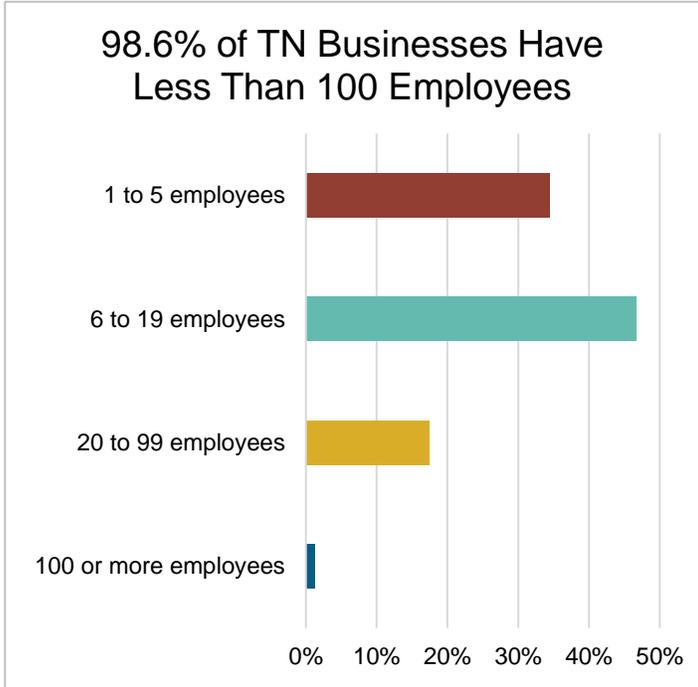


Energy efficiency in Tennessee has seen consistent, reliable job growth – 6.9 percent since 2016.

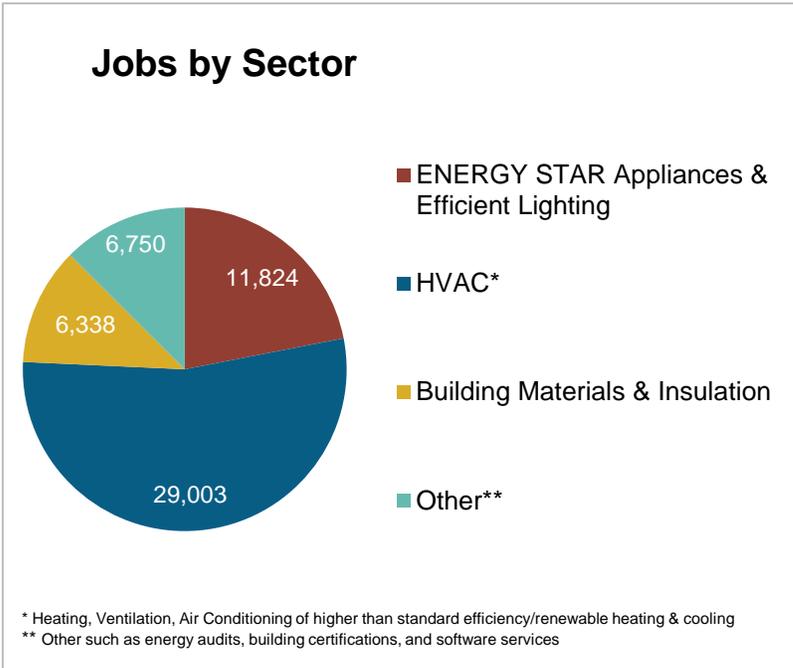
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Tennessee?

EE Sector =  
**5,530**  
 Businesses in TN  
 (Dec. 2019)  
 ↑ **90** over 2018




**6.7%**  
 of Tennessee  
 residents employed  
 in EE are **Veterans**

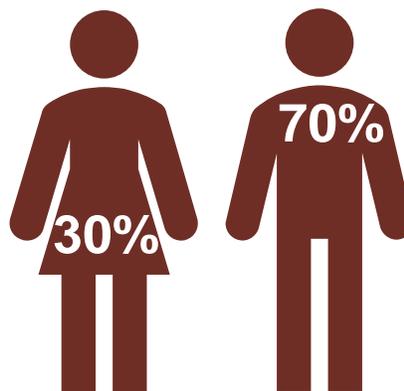
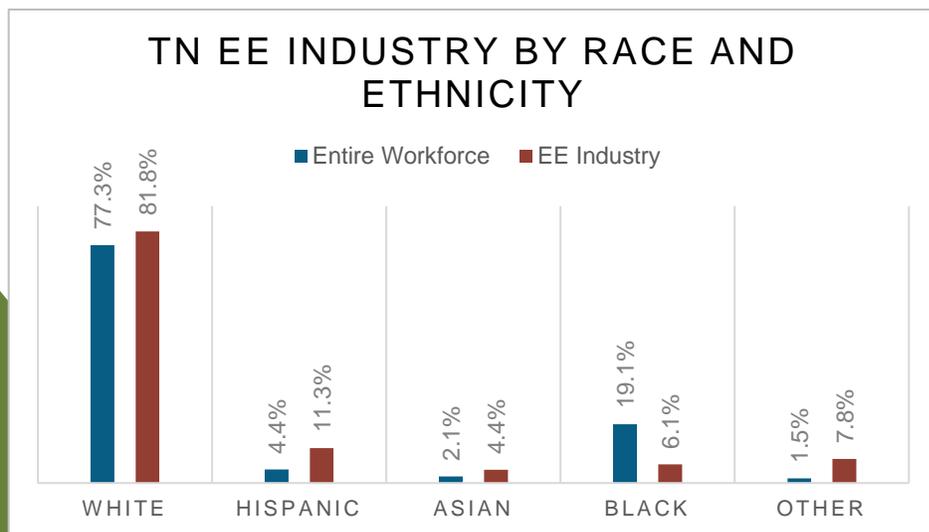



**Energy Efficiency  
 Construction Workers  
 Make Up 23% of TN  
 Construction Workers**

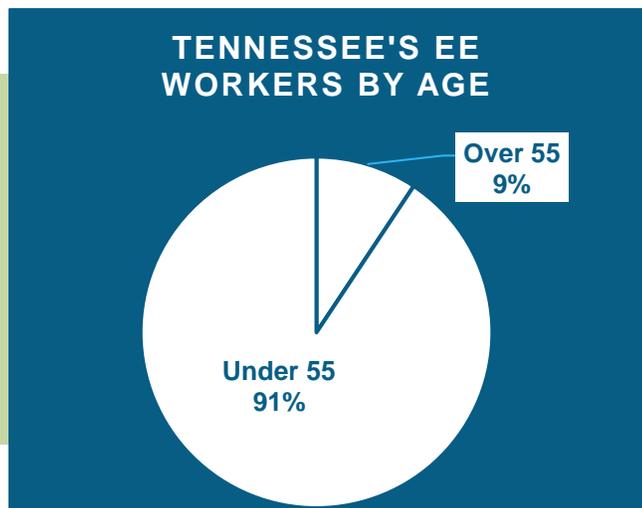
# How is EE Doing regarding Diversity in Tennessee?

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 Tennessee 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.



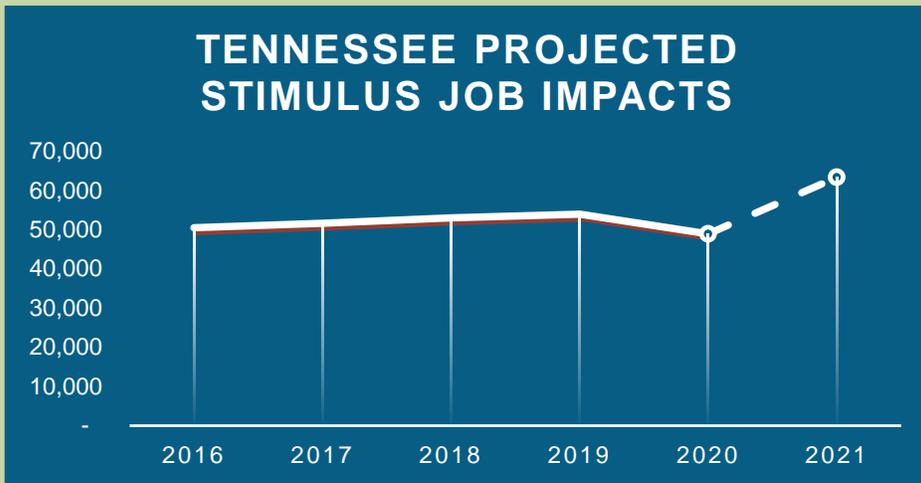
A significant portion of the Tennessee efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

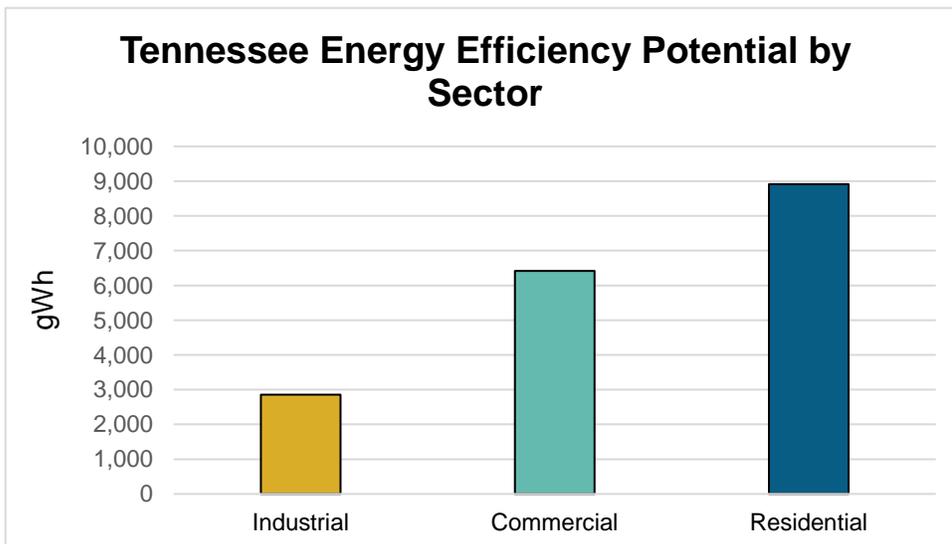


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **14,427 full-time direct, indirect, and induced TN jobs** that will last for at least five years: Over **72,136 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$941 million in GDP** each year for the next five years – resulting in **\$4.7 billion in economic activity**, more than 3.9 times the investment.

## How much energy efficiency is untapped in your state?



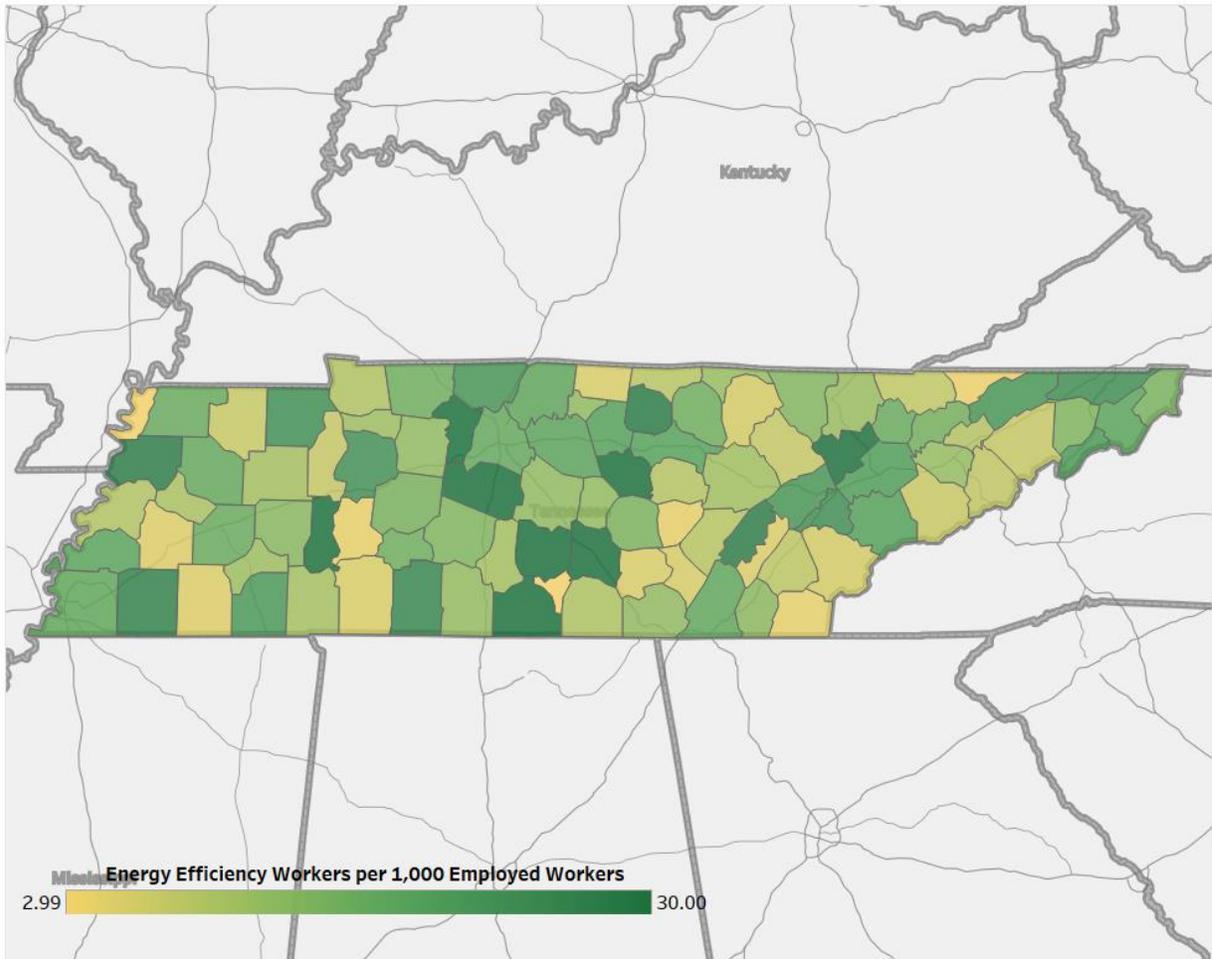
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,245,368 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,492	Chattanooga	3,763
2	7,315	Clarksville	960
3	6,376	Cleveland	1,672
4	5,288	Jackson	1,140
5	9,857	Johnson City	1,443
6	4,580	Kingsport-Bristol-Bristol	1,636
7	3,669	Knoxville	7,228
8	7,741	Memphis	8,719
9	3,598	Morristown	953
		Nashville-Davidson-Murfreesboro-Franklin	16,218
		Rural	10,183

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,147	10	2,957	19	5,725	28	631
2	1,518	11	534	20	2,837	29	3,380
3	1,700	12	999	21	<5	30	2,304
4	1,326	13	2,233	22	1,141	31	1,453
5	3,007	14	1,675	23	1,428	32	246
6	2,527	15	1,642	24	2,024	33	354
7	485	16	877	25	895		
8	389	17	1,129	26	1,902		
9	1,711	18	2,017	27	723		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,210	26	2,246	51	3,647	76	501
2	402	27	269	52	1,135	77	327
3	774	28	823	53	1,343	78	112
4	489	29	9	54	<5	79	283
5	555	30	122	55	597	80	153
6	160	31	411	56	77	81	357
7	<5	32	630	57	<5	82	181
8	1,369	33	207	58	82	83	3,159
9	131	34	1,685	59	<5	84	1,224
10	636	35	175	60	<5	85	149
11	445	36	238	61	1,170	86	1,323
12	527	37	507	62	157	87	256
13	2,117	38	426	63	205	88	1,051
14	1,667	39	993	64	588	89	<5
15	640	40	2,460	65	33	90	<5
16	246	41	728	66	357	91	28
17	70	42	9	67	883	92	10
18	160	43	148	68	38	93	<5
19	114	44	25	69	469	94	292
20	59	45	403	70	490	95	354
21	364	46	51	71	284	96	138
22	1,752	47	189	72	359	97	306
23	307	48	9	73	1,160	98	<5
24	<5	49	47	74	87	99	<5
25	1,087	50	2,014	75	446		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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# Texas

## 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.*

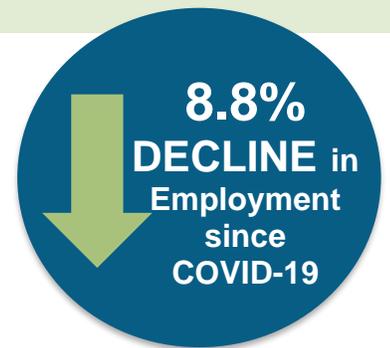
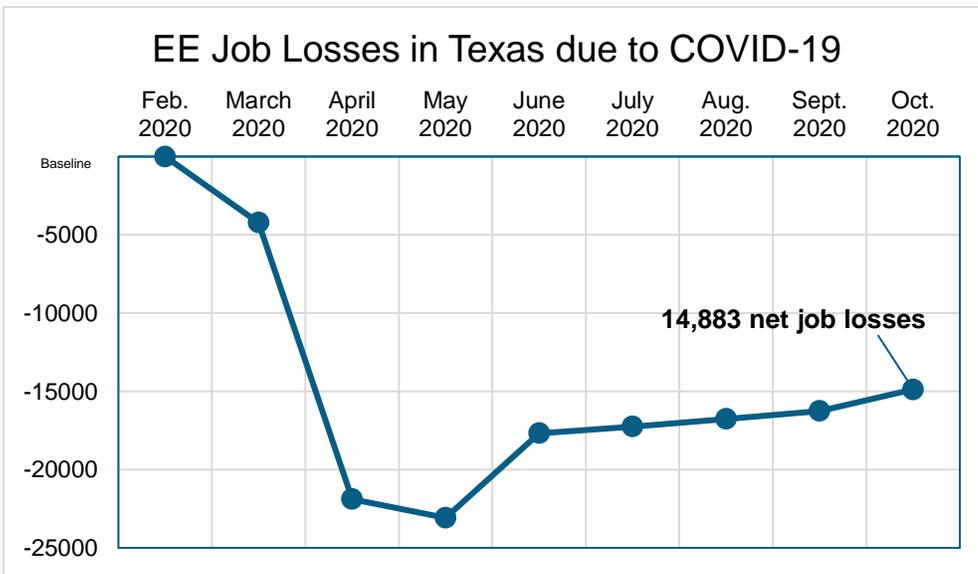
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Texas’s energy efficiency industry lost as many as 14,883 jobs since its onset, a 8.8% decrease compared to total jobs in December 2019—wiping out the last 2 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 Texas EE workforce grew steadily, gaining 15.5% 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.



Presented by:



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

# What are EE Jobs?

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

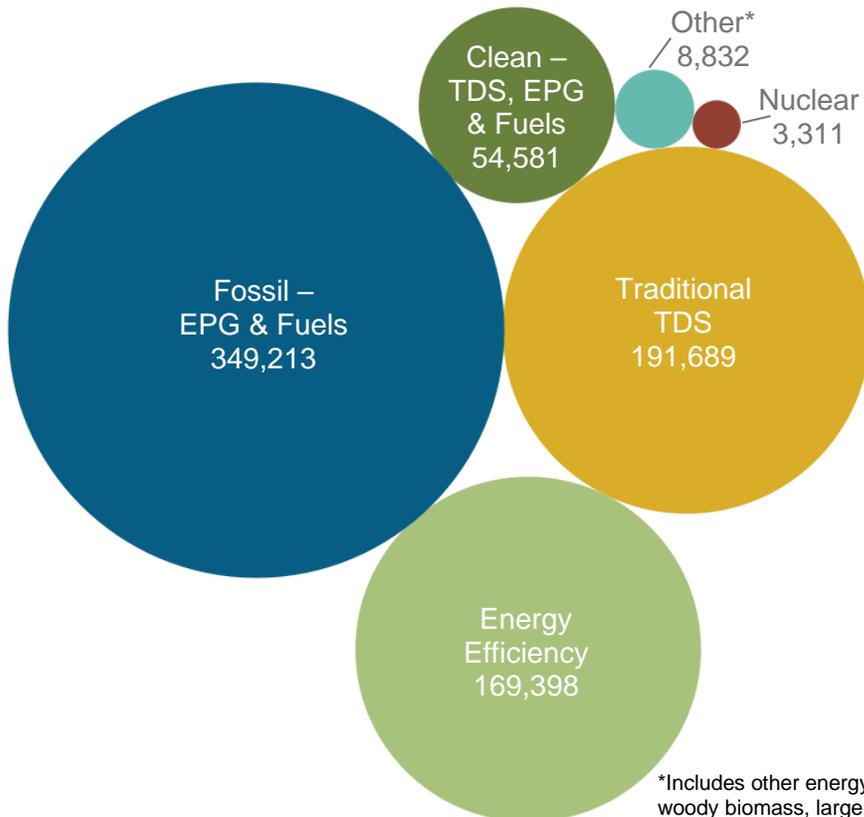
## What type of work are EE workers doing?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings
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- Upgrade and repair heating, air conditioning and ventilation (HVAC) and water heating equipment
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## How does EE compare in Texas?

Energy efficiency is the third largest energy sector in Texas.

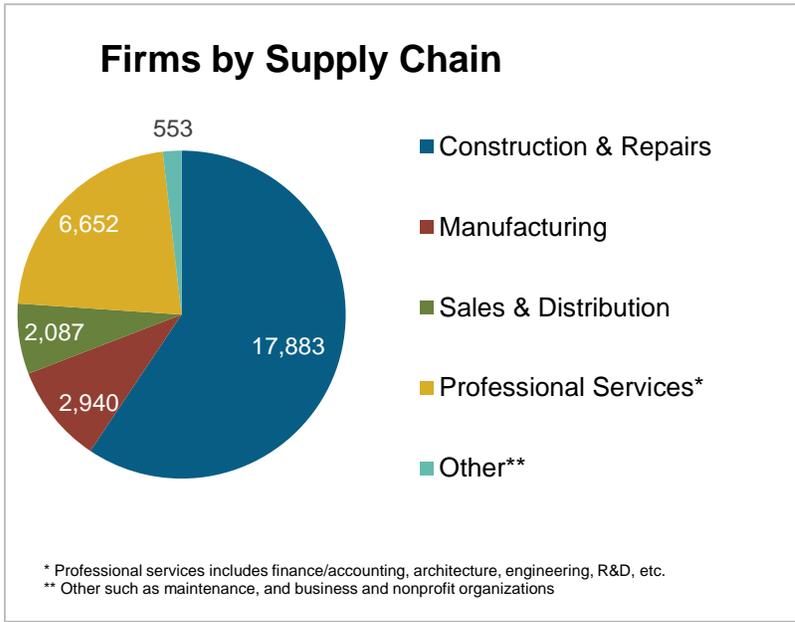
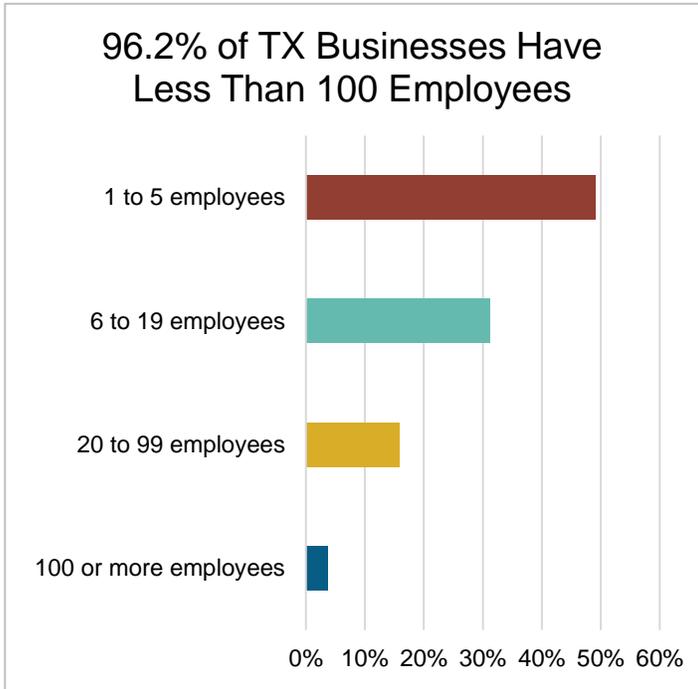


Fossil fuel jobs are historically key to Texas's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 15.5% from 2016-2019, adding 22,676 jobs.

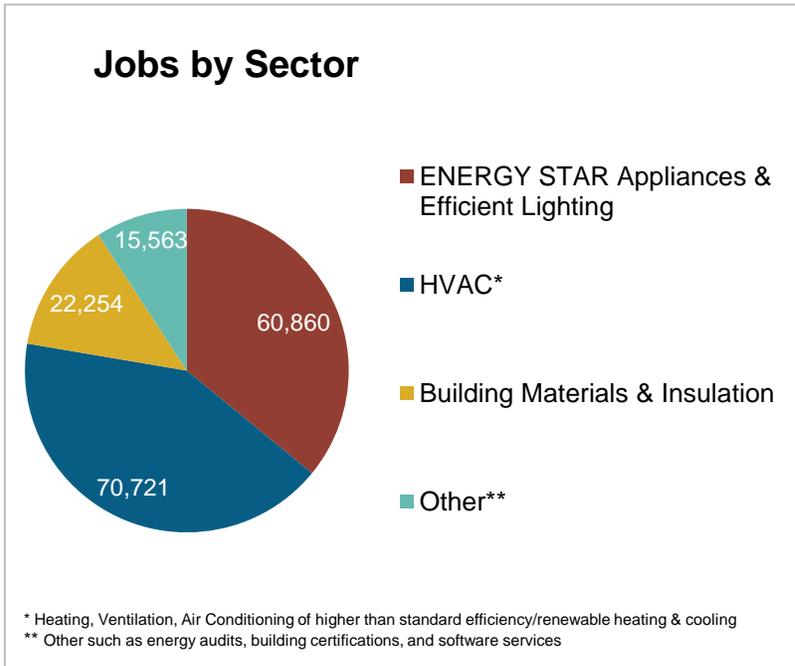
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# What do the EE businesses look like in Texas?

EE Sector =  
**30,115**  
 Businesses in TX  
 (Dec. 2019)  
 ↑ **1,170** over 2018




**7.1%**  
 of Texas  
 residents employed  
 in EE are **Veterans**

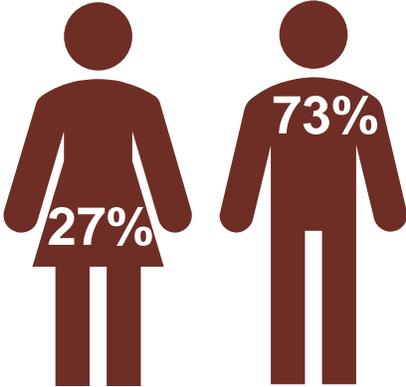
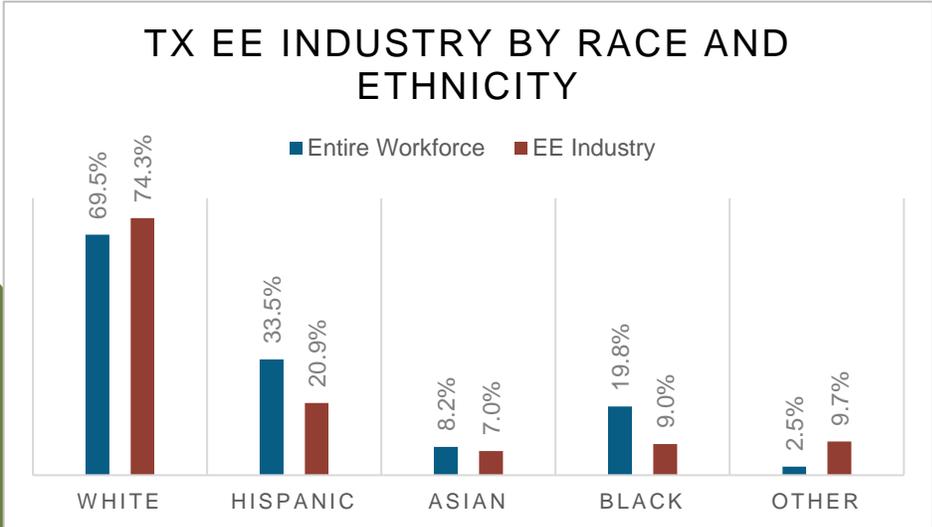



**Energy Efficiency  
 Construction Workers  
 Make Up 12% of TX  
 Construction Workers**

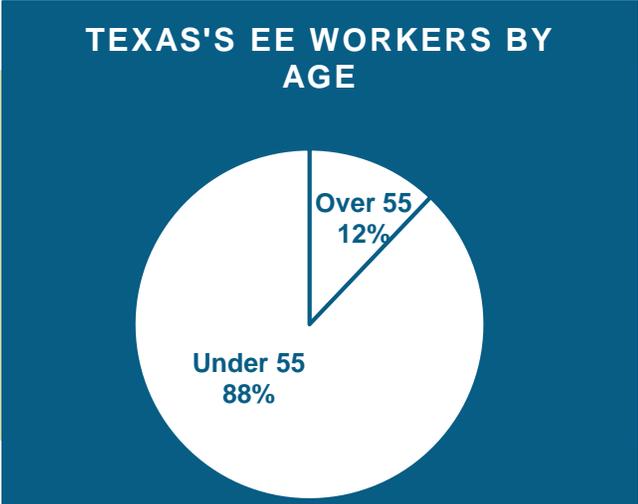
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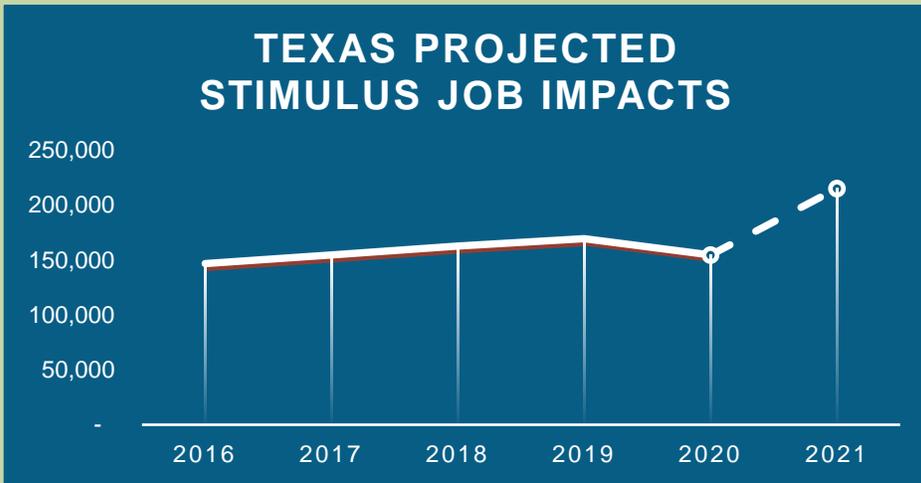
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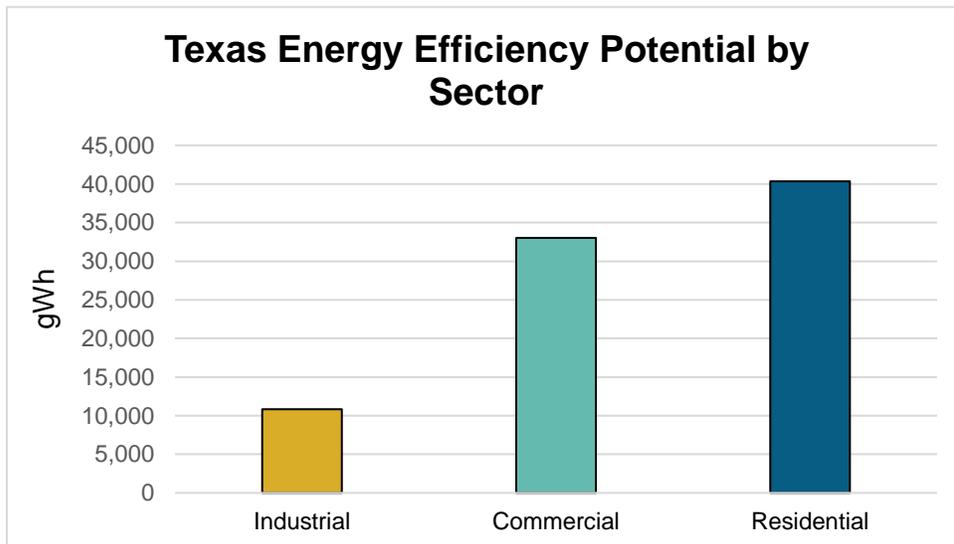


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **60,547 full-time direct, indirect, and induced TX jobs** that will last for at least five years: Over **302,733 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$4.0 billion in GDP** each year for the next five years — resulting in **\$19.9 billion in economic activity**, more than 4.9 times the investment.

## How much energy efficiency is untapped in your state?



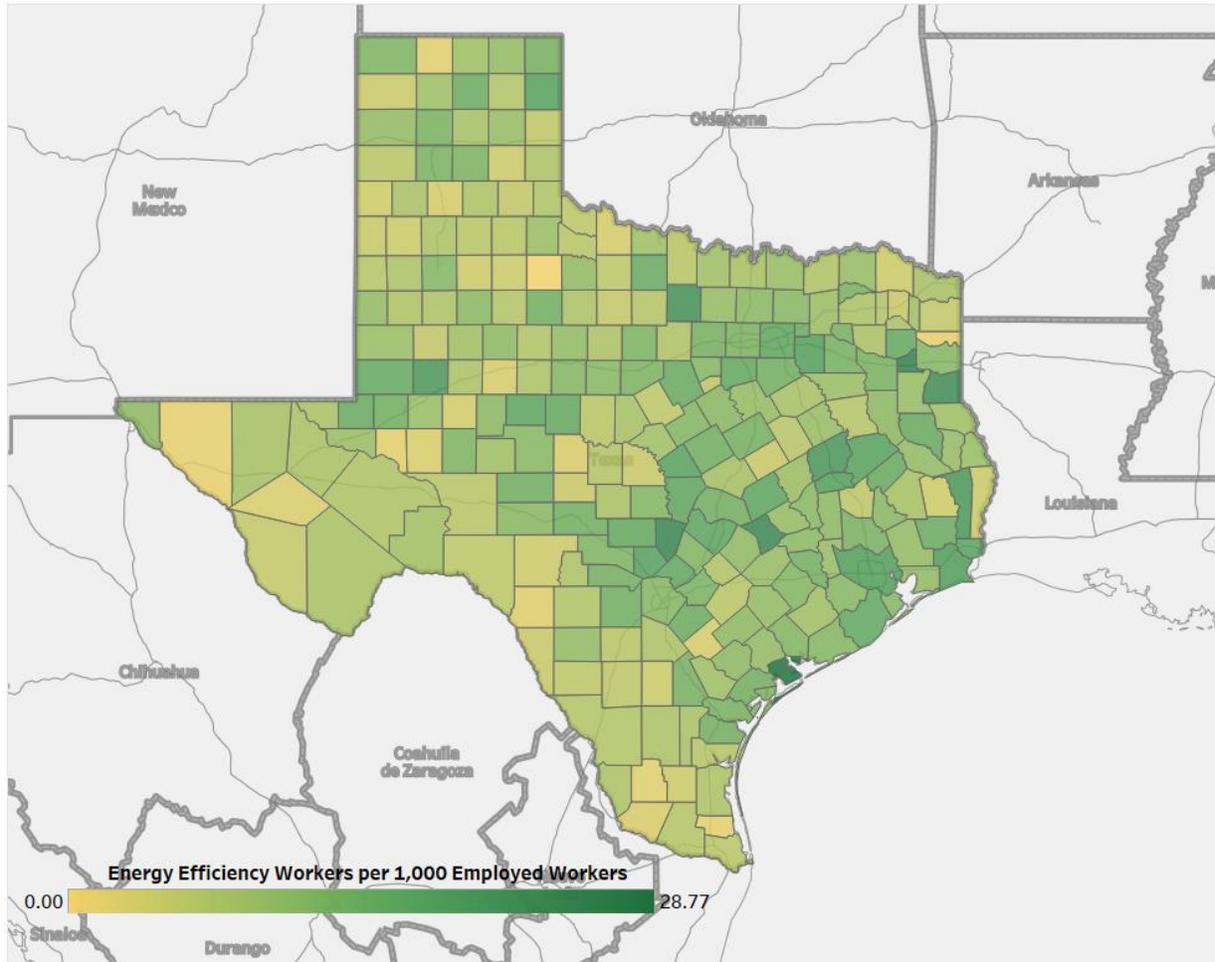
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **6,155,048 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,526	Abilene	1,066
2	16,457	Amarillo	1,954
3	5,968	Austin-Round Rock	17,660
4	3,979	Beaumont-Port Arthur	2,441
5	4,515	Brownsville-Harlingen	1,200
6	5,484	College Station-Bryan	1,188
7	8,188	Corpus Christi	2,770
8	4,440	Dallas-Fort Worth-Arlington	41,892
9	2,844	El Paso	3,822
10	9,380	Houston-Sugar Land-Baytown	45,576
11	6,961	Killeen-Temple-Fort Hood	1,715
12	6,516	Laredo	1,003
13	5,379	Longview	1,524
14	4,462	Lubbock	2,030
15	4,810	McAllen-Edinburg-Mission	2,432
16	3,793	Midland	1,486
17	3,835	Odessa	1,234
18	4,892	San Angelo	678
19	3,344	San Antonio	14,306
20	5,817	Sherman-Denison	641
21	11,129	Texarkana	640
22	2,993	Tyler	1,911
23	2,054	Victoria	916
24	8,637	Waco	1,378
25	2,609	Wichita Falls	987
26	1,553	Rural	16,949
27	4,596		
28	2,053		
29	1,218		
30	4,970		
31	2,430		
32	2,594		
33	129		
34	1,498		
35	1,474		
36	2,873		

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	5,759	9	7,312	17	5,089	25	7,347
2	5,494	10	5,009	18	4,159	26	1,645
3	4,926	11	3,498	19	6,403	27	1,627
4	7,151	12	3,553	20	3,944	28	5,078
5	6,937	13	6,829	21	3,057	29	3,873
6	10,575	14	11,023	22	4,142	30	3,635
7	9,091	15	2,839	23	2,285	31	6,306
8	7,440	16	8,149	24	5,224		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,254	39	31	77	1,409	115	<5
2	1,188	40	248	78	186	116	2,596
3	3,106	41	<5	79	105	117	619
4	849	42	1,011	80	330	118	931
5	1,170	43	187	81	1,487	119	709
6	1,345	44	1,511	82	1,627	120	2,071
7	1,190	45	781	83	1,846	121	3,644
8	1,031	46	3,223	84	415	122	225
9	836	47	4,299	85	362	123	<5
10	861	48	2,856	86	1,395	124	136
11	791	49	2,967	87	1,196	125	<5
12	1,494	50	473	88	852	126	3,426
13	1,099	51	181	89	133	127	1,099
14	296	52	252	90	3,618	128	1,510
15	1,280	53	1,507	91	1,450	129	1,066
16	333	54	817	92	1,739	130	143
17	1,603	55	699	93	834	131	2,238
18	769	56	675	94	1,189	132	928
19	987	57	732	95	179	133	5,219
20	2,400	58	1,586	96	74	134	8,623
21	1,528	59	817	97	378	135	1,935
22	508	60	1,446	98	<5	136	<5
23	1,741	61	1,656	99	103	137	138
24	550	62	816	100	4,711	138	698
25	1,029	63	1,549	101	284	139	1,170
26	2,674	64	909	102	3,019	140	1,619
27	492	65	1,491	103	2,880	141	294
28	348	66	1,077	104	46	142	776
29	280	67	1,714	105	641	143	642
30	1,215	68	1,336	106	83	144	471
31	1,149	69	955	107	635	145	406
32	2,009	70	421	108	2,689	146	<5
33	2,735	71	420	109	557	147	462
34	455	72	1,041	110	53	148	<5
35	1,579	73	1,262	111	179	149	<5
36	950	74	711	112	208	150	498
37	752	75	710	113	<5		
38	<5	76	1,322	114	648		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Utah

## Energy Efficiency Jobs in America

Oct 2020

30,512\*

Dec 2019

32,483

*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.*

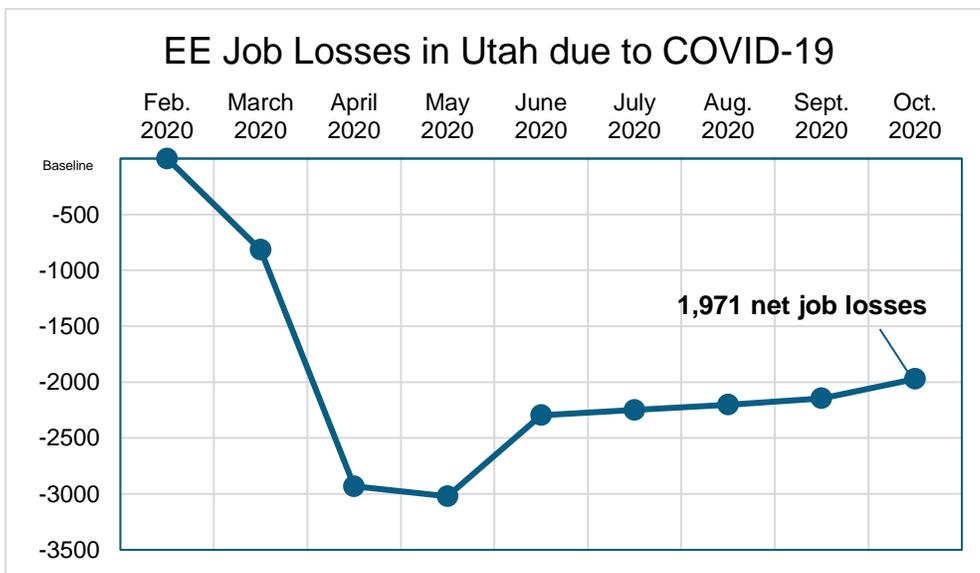
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. Utah's energy efficiency industry lost as many as 1,971 jobs since its onset, a 6.1% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

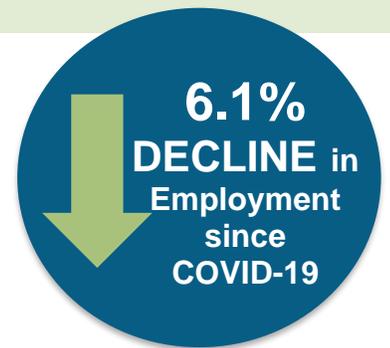
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Utah EE workforce grew steadily, gaining 4.5% 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.

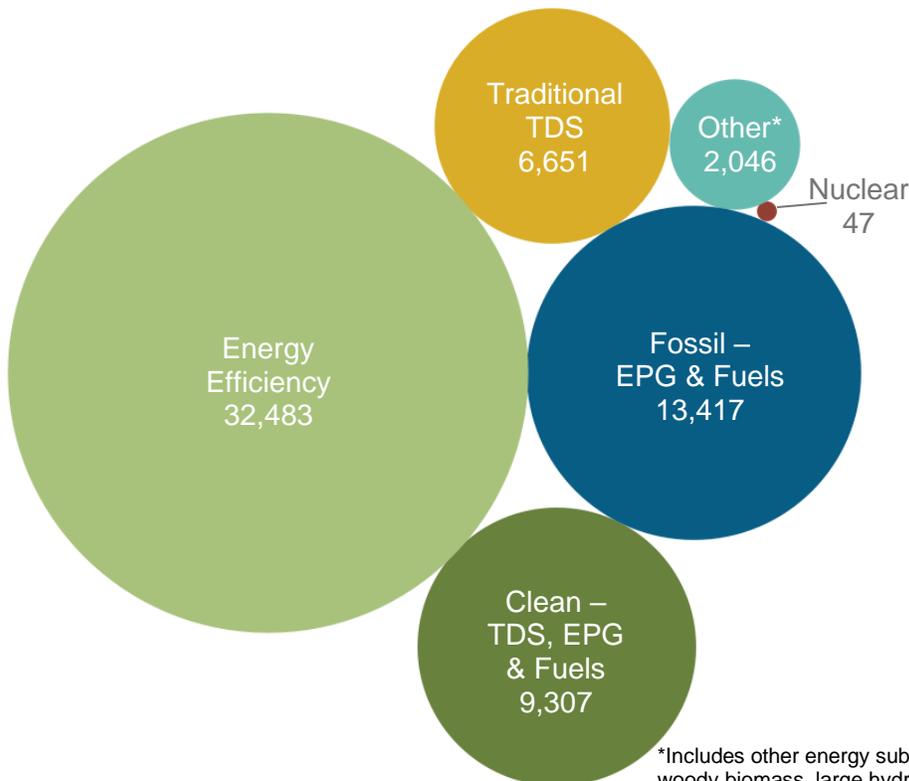
## What type of work are EE workers doing?

- 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 Utah?

Energy efficiency is the largest energy sector in Utah.

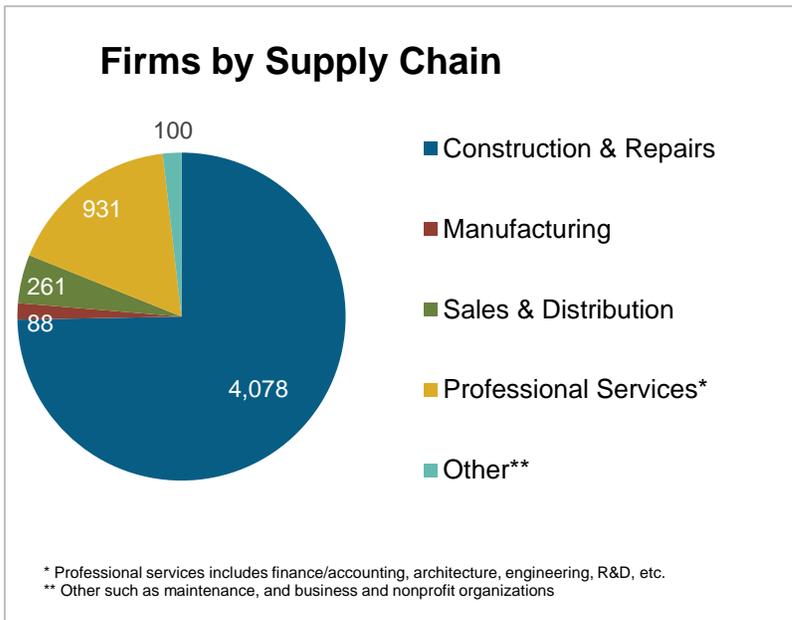
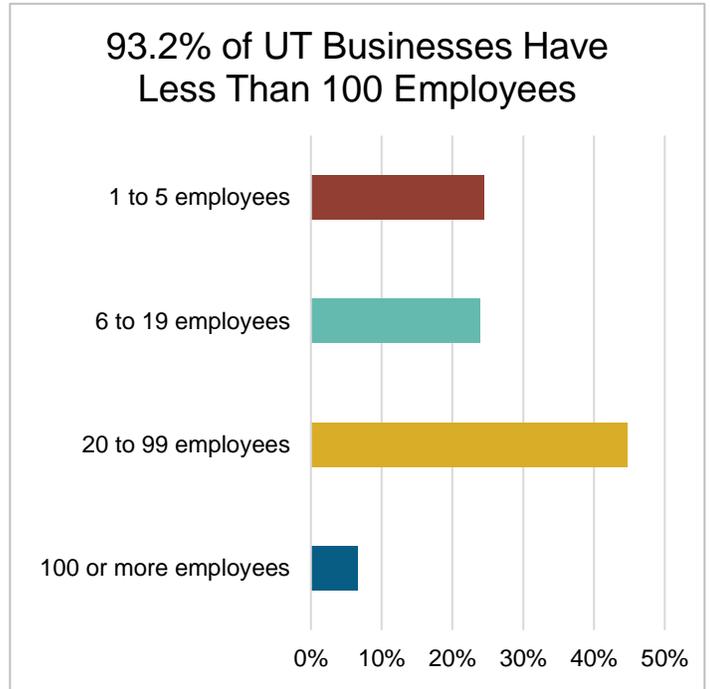


Energy efficiency in Utah has seen consistent, reliable job growth – 4.5 percent since 2016.

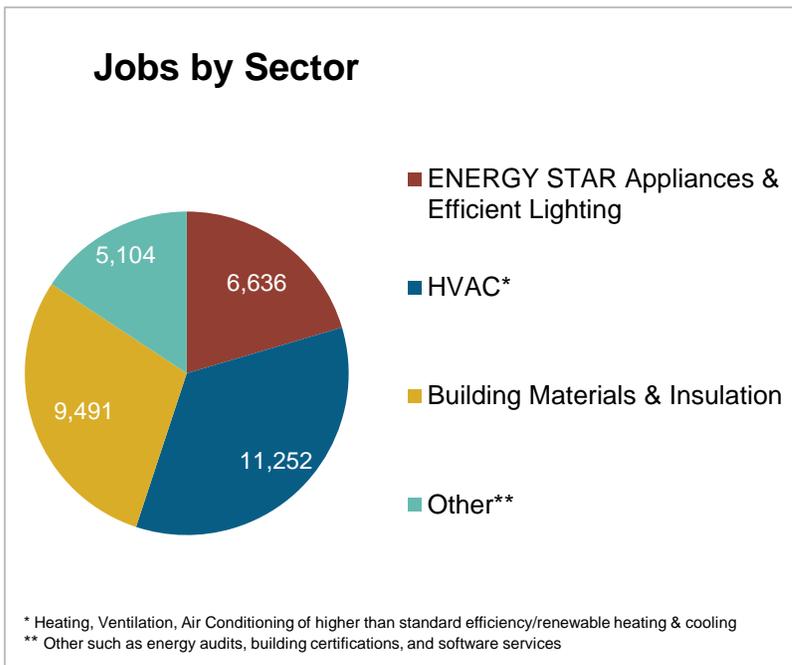
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Utah?

EE Sector =  
**5,459**  
 Businesses in UT  
 (Dec. 2019)  
 ↑ **115** over 2018



**7.3%**  
 of Utah  
 residents employed  
 in EE are **Veterans**

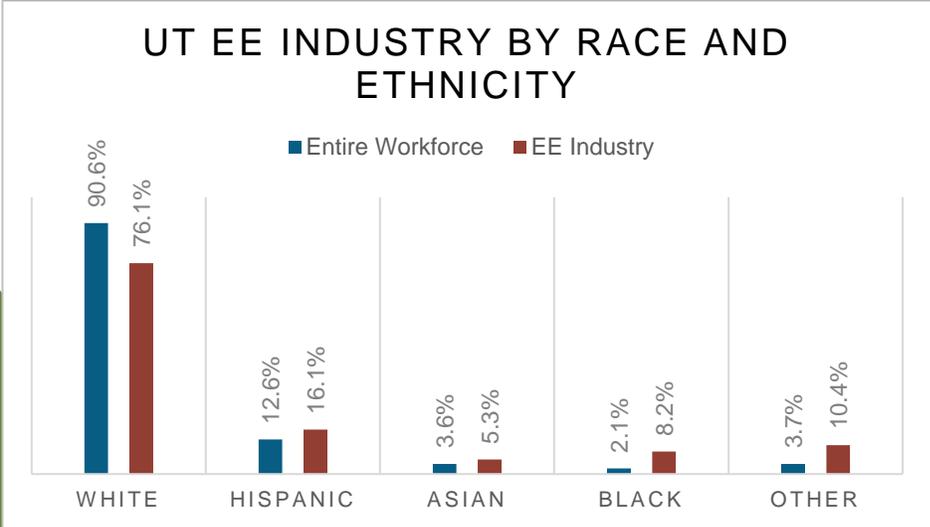


**Energy Efficiency  
 Construction Workers  
 Make Up 21% of UT  
 Construction Workers**

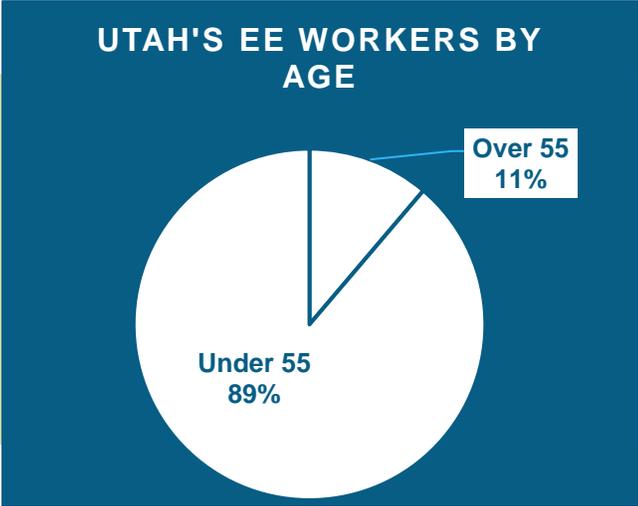
# How is EE Doing regarding Diversity in Utah?

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 Utah 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 Utah 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.

## UTAH PROJECTED STIMULUS JOB IMPACTS



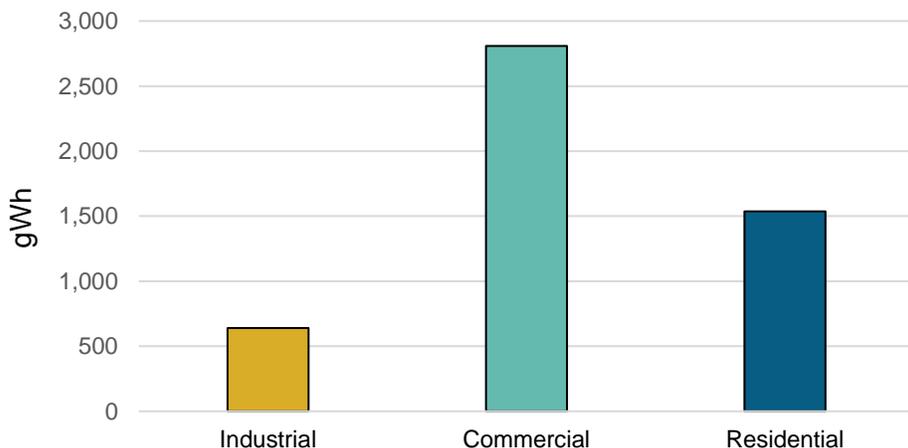
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **9,005 full-time direct, indirect, and induced UT jobs** that will last for at least five years: Over **45,025 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$571 million in GDP** each year for the next five years – resulting in **\$2.9 billion in economic activity**, more than 4.3 times the investment.

## How much energy efficiency is untapped in your state?

### Utah Energy Efficiency Potential by Sector



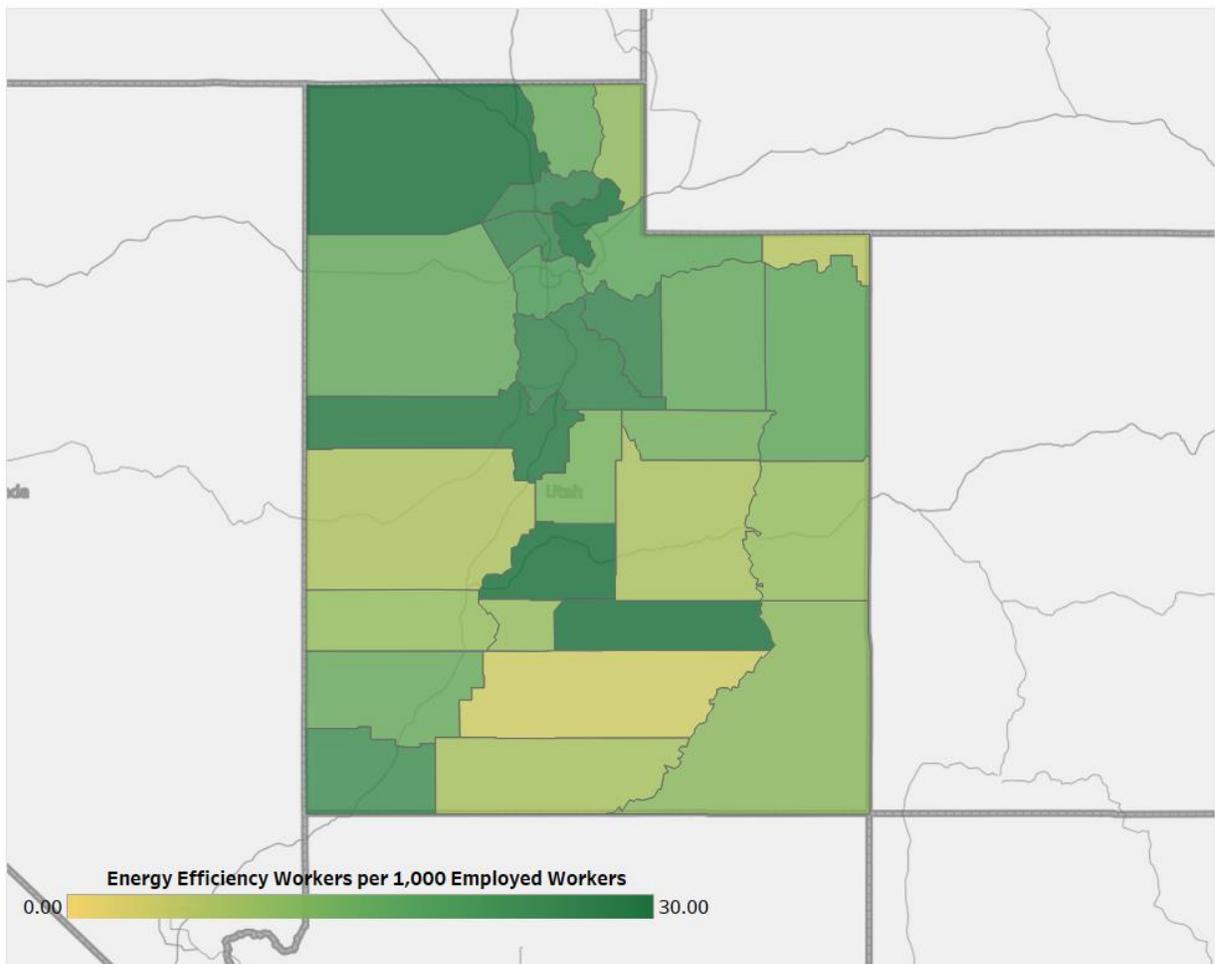
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **571,424 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,351	Logan	786
2	10,114	Ogden-Clearfield	3,820
3	14,737	Provo-Orem	9,269
4	2,281	Salt Lake City	14,232
		St. George	1,350
		Rural	3,026

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,488	9	348	17	939	25	369
2	3,781	10	538	18	1,625	26	1,359
3	2,547	11	5,066	19	865	27	460
4	580	12	221	20	40	28	1,955
5	81	13	224	21	617	29	86
6	1,539	14	2,393	22	410		
7	1,621	15	<5	23	709		
8	823	16	50	24	748		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	399	20	288	39	<5	58	223
2	5,462	21	215	40	<5	59	860
3	575	22	743	41	251	60	<5
4	49	23	687	42	243	61	437
5	69	24	2,266	43	<5	62	1,159
6	2,070	25	1,627	44	554	63	343
7	467	26	761	45	164	64	<5
8	1,029	27	1,259	46	<5	65	200
9	274	28	380	47	<5	66	<5
10	40	29	316	48	546	67	21
11	574	30	137	49	<5	68	193
12	82	31	24	50	<5	69	242
13	<5	32	1,308	51	<5	70	244
14	<5	33	371	52	<5	71	590
15	216	34	867	53	1,046	72	17
16	31	35	<5	54	449	73	192
17	66	36	1,101	55	12	74	61
18	659	37	<5	56	<5	75	19
19	<5	38	<5	57	<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](http://www.E4TheFuture.org)



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BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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# Vermont

## Energy Efficiency Jobs in America

Oct 2020

9,733\*

Dec 2019

11,032

*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

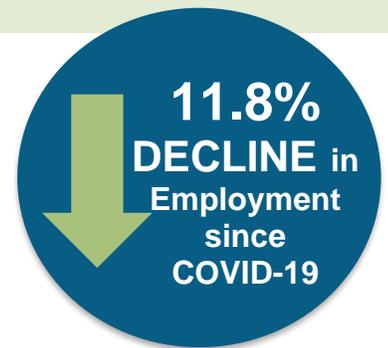
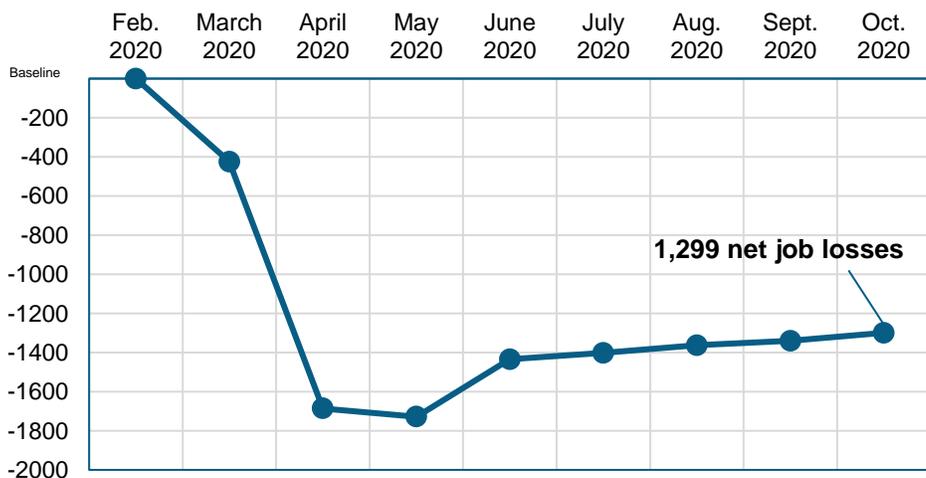
The 2020 pandemic shocked our nation's labor market with massive job losses. Vermont's energy efficiency industry lost as many as 1,299 jobs since its onset, a 11.8% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Vermont EE workforce grew steadily, gaining 1.0% 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.

#### EE Job Losses in Vermont due to COVID-19



Presented by:

E4 THE FUTURE



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

# What are EE Jobs?

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

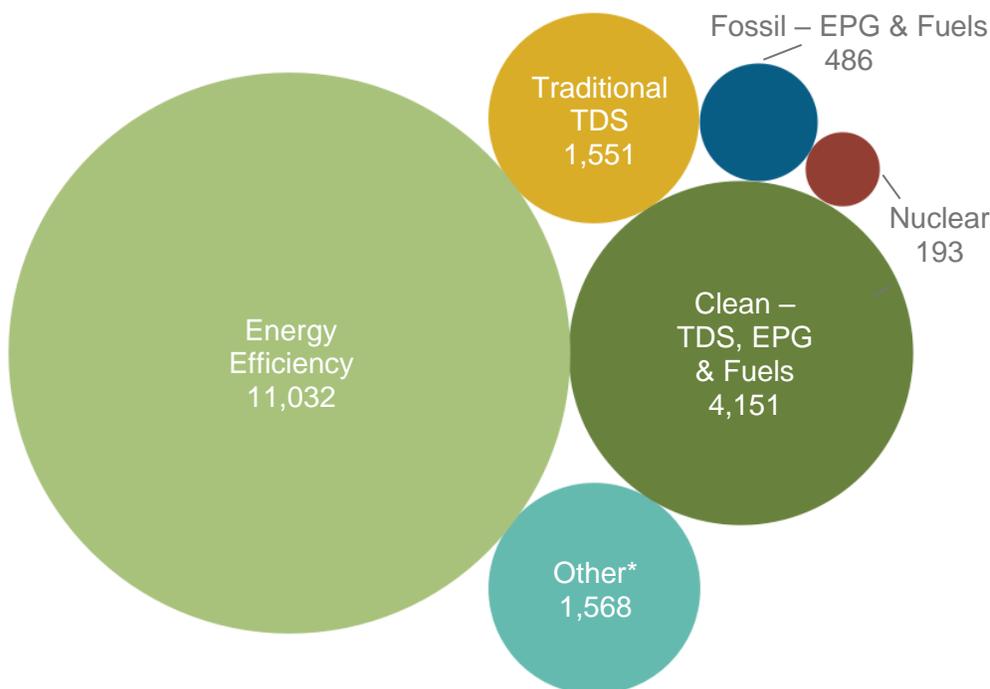
## What type of work are EE workers doing?

- 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
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- 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 Vermont?

Energy efficiency is the largest energy sector in Vermont.

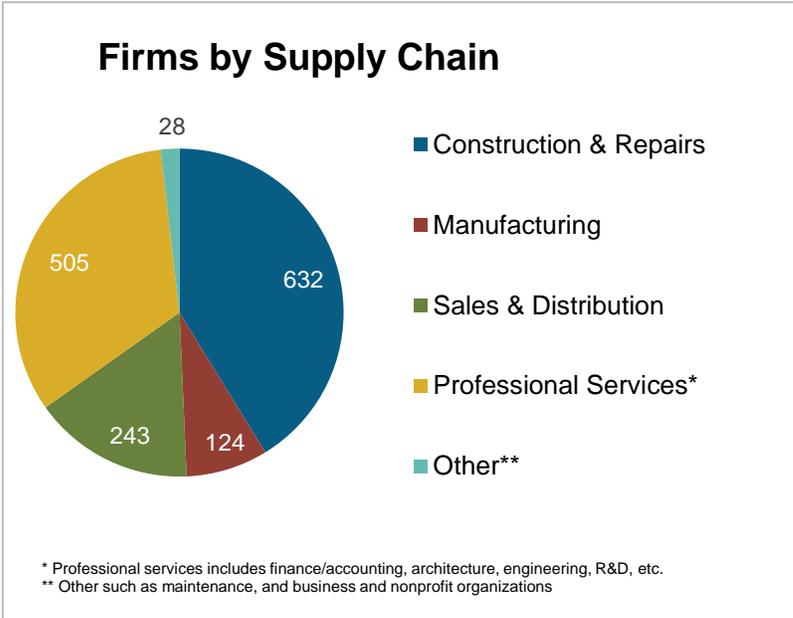
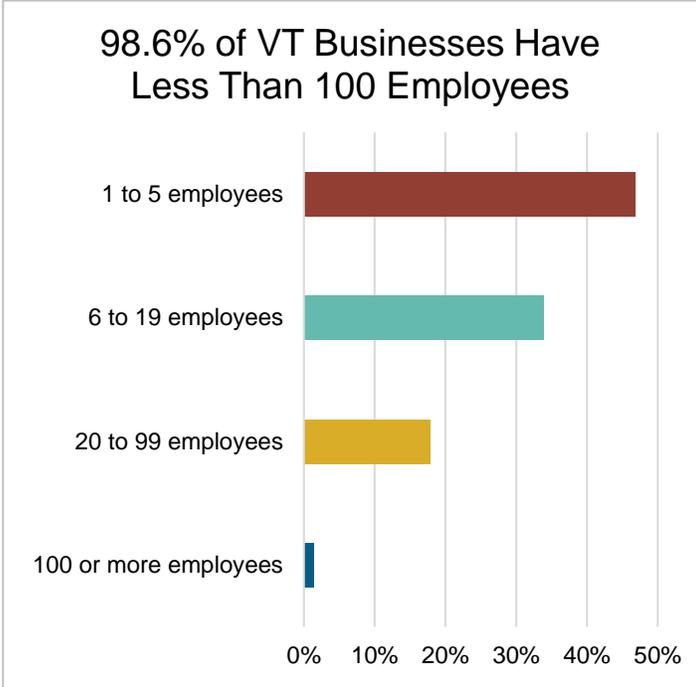


Energy efficiency in Vermont has seen consistent, reliable job growth – 1.0 percent since 2016.

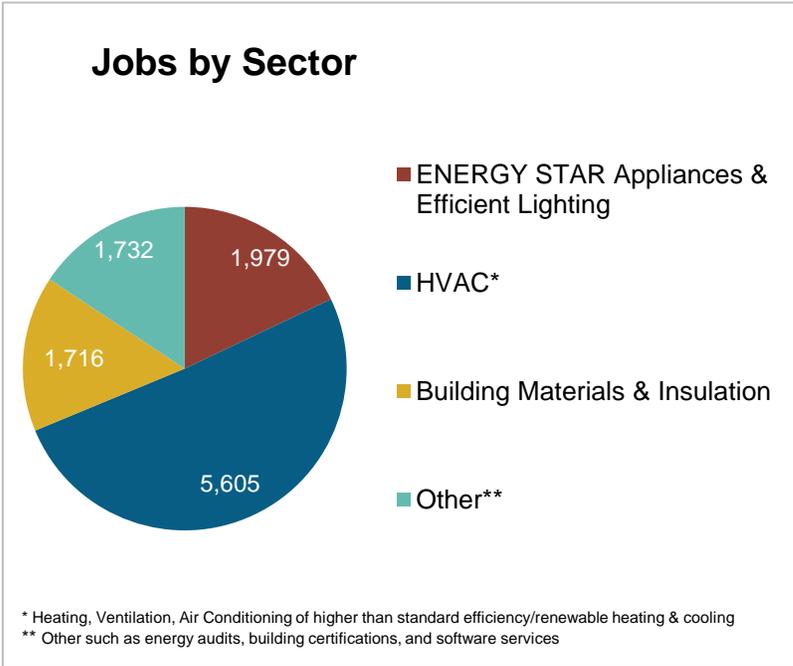
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Vermont?

EE Sector =  
**1,532**  
Businesses in VT  
(Dec. 2019)




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

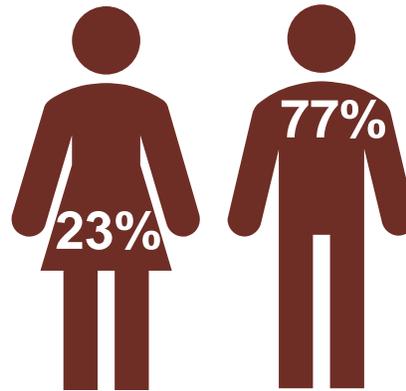
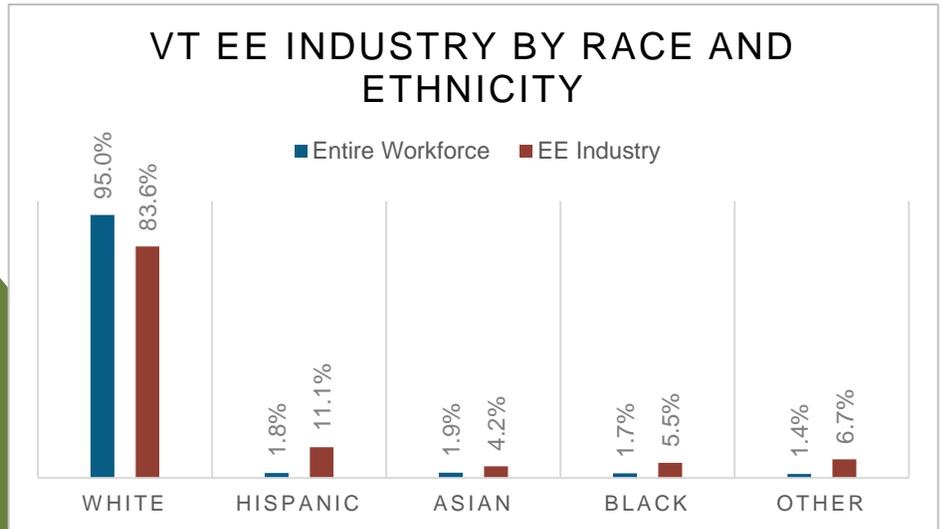



**Energy Efficiency  
Construction Workers  
Make Up 28% of VT  
Construction Workers**

# How is EE Doing regarding Diversity in Vermont?

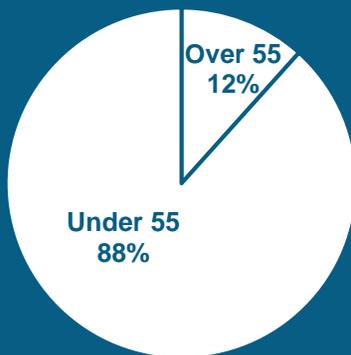
Demographic data is crucial for benchmarks and to measure progress in the energy efficiency industry. In striving for more diversity in EE jobs, we can create a stronger and more inclusive industry. Promoting diversity in hiring is key to maintaining a future workforce of talented professionals and ensuring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

## VERMONT'S EE WORKERS BY AGE



A significant portion of the Vermont efficiency workforce is in the "55+" category. 12% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

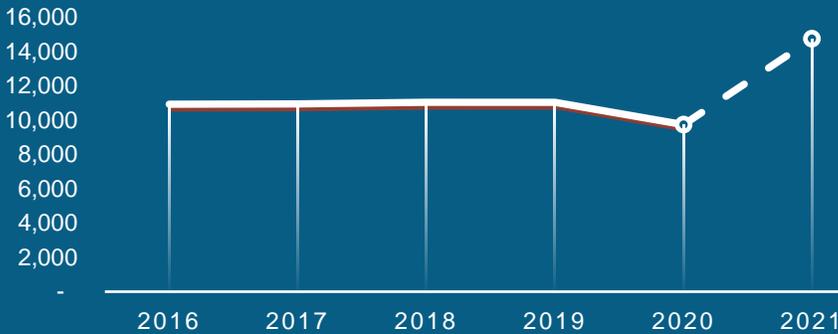
# Why invest in EE?

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.

## VERMONT PROJECTED STIMULUS JOB IMPACTS



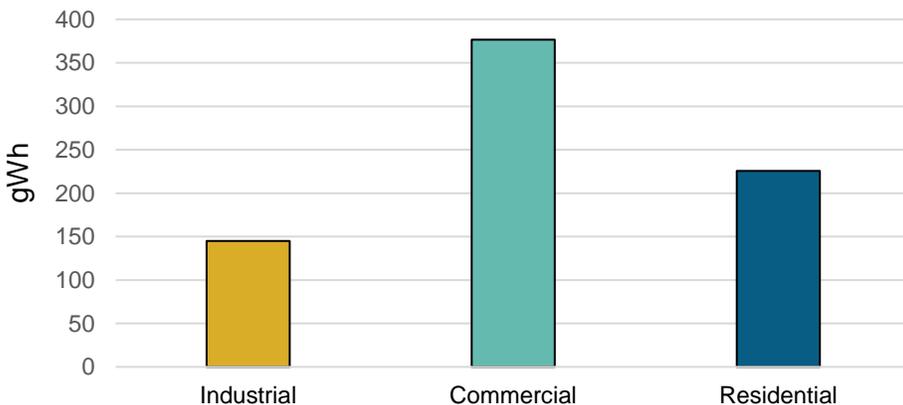
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,990 full-time direct, indirect, and induced VT jobs** that will last for at least five years: Over **24,951 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$300 million in GDP** each year for the next five years – resulting in **\$1.5 billion in economic activity**, more than 3.5 times the investment.

## How much energy efficiency is untapped in your state?

### Vermont Energy Efficiency Potential by Sector



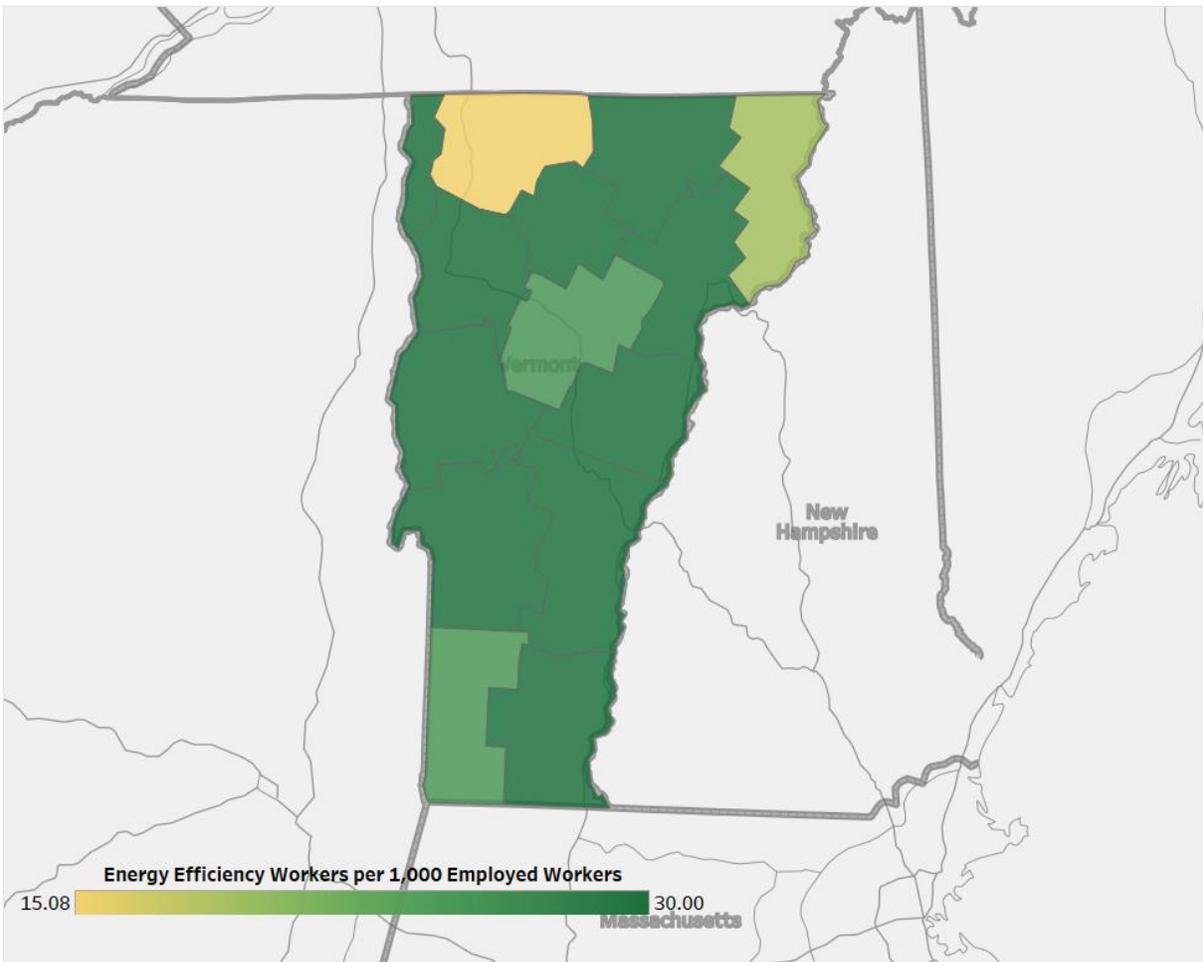
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **113,409 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	11,032	Burlington-South Burlington	3,677
		Rural	7,355

## Energy Efficiency Jobs by County



## State Senate

District	Jobs		District	Jobs		District	Jobs		District	Jobs
ADD	787		CHI	2,439		ORA	340		WSR	854
BEN	667		E-O	555		RUT	980			
CAL	847		FRA	543		WAS	1,012			
CGI	903		LAM	346		WDM	759			

## State House of Representatives

District	Jobs		District	Jobs		District	Jobs		District	Jobs
A-1	159		C71	516		LM2	261		W-1	326
A-2	102		C81	287		LMW	13		W-3	313
A-3	160		C83	22		O-1	185		W-5	60
A-4	253		C91	<5		O-2	88		W-6	34
A-R	111		CA1	195		O-C	83		WA1	346
B-1	213		CA2	64		O-L	20		WA5	53
B-3	127		CA4	122		OLC	36		WA6	7
B-4	110		CAW	111		OR1	419		WA7	735
B-R	174		E-C	52		OR2	16		WAC	205
C-1	124		ECO	89		OWA	144		WBW	68
C10	168		F-1	263		R-1	110		WIB	55
C-2	488		F-2	40		R-2	58		Y-1	244
C-3	104		F-4	160		R-3	19		Y-2	165
C41	77		F-5	32		R-4	436		Y31	24
C51	101		F-6	75		R-6	56		Y41	28
C61	64		F-7	12		R-B	63		YO2	91
C62	621		GIC	104		R-W	204		Y-R	121
C67	381		LM1	120		RW2	142			



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



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# Virginia

## 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.*

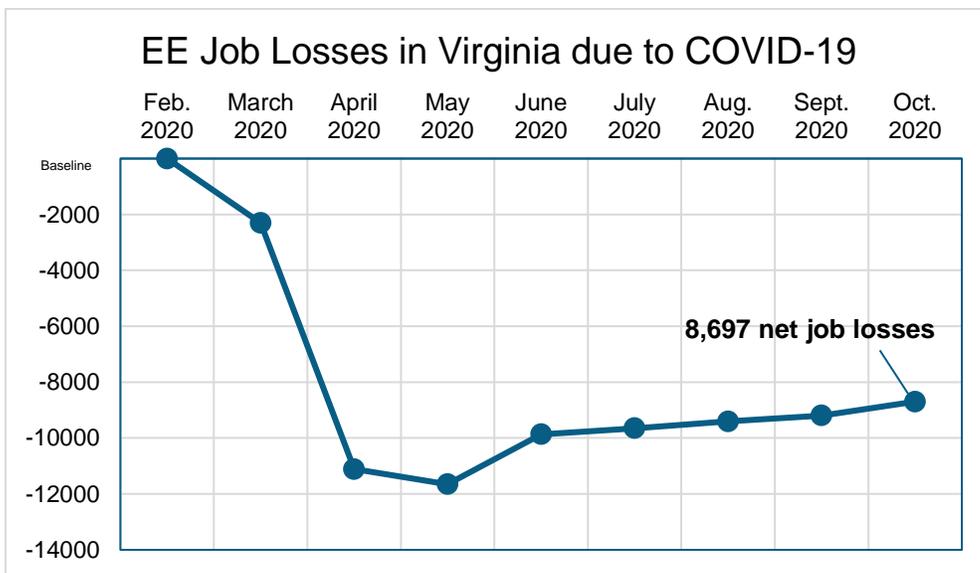
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Virginia’s energy efficiency industry lost as many as 8,697 jobs since its onset, a 10.8% 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 Virginia EE workforce grew steadily, gaining 6.1% 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.



Presented by:



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

# What are EE Jobs?

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

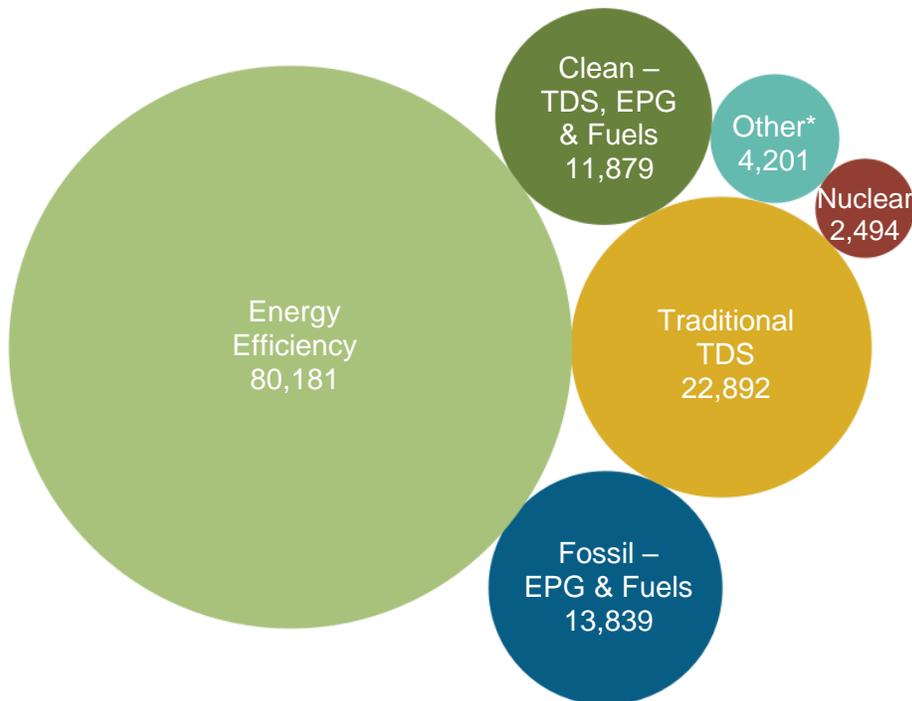
## What type of work are EE workers doing?

- 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 Virginia?

Energy efficiency is the largest energy sector in Virginia.

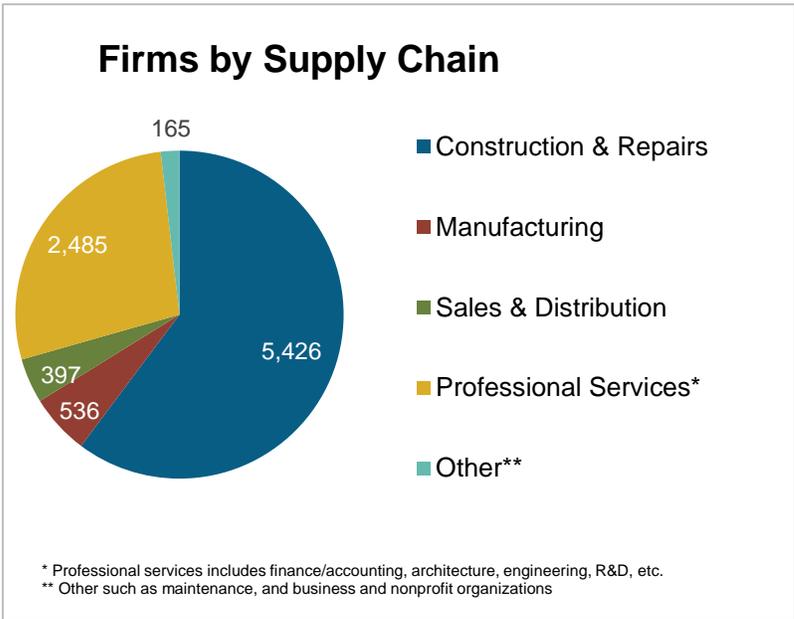
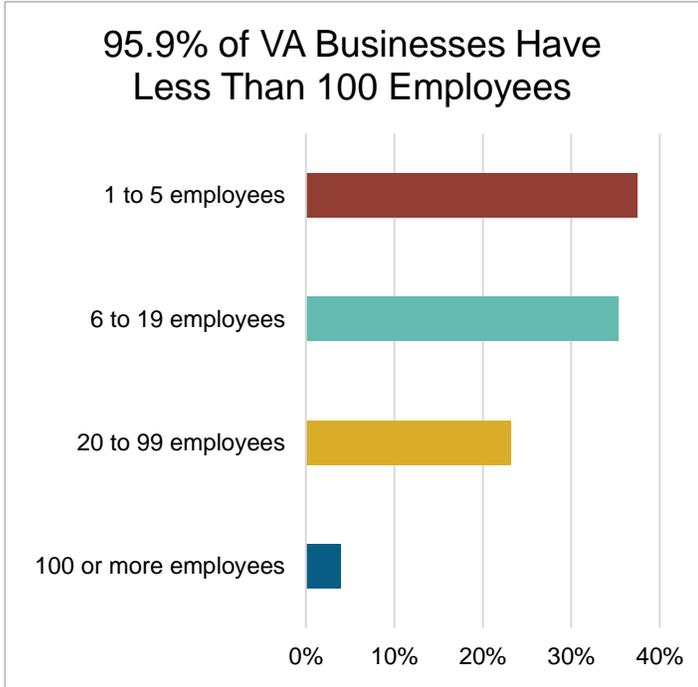


Energy efficiency in Virginia has seen consistent, reliable job growth – 6.1 percent since 2016.

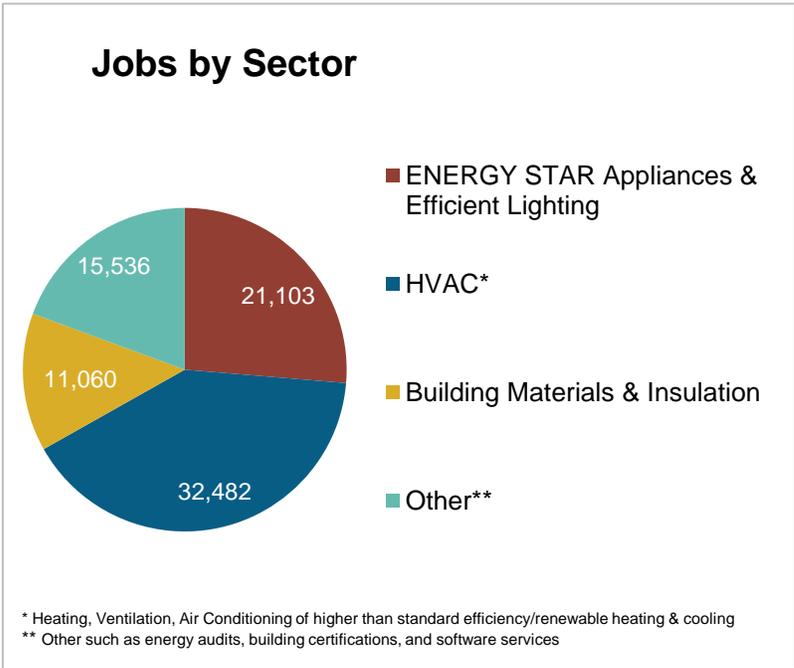
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Virginia?

EE Sector =  
**9,009**  
 Businesses in VA  
 (Dec. 2019)  
 ↑ **170** over 2018



**7.7%**  
 of Virginia  
 residents employed  
 in EE are **Veterans**

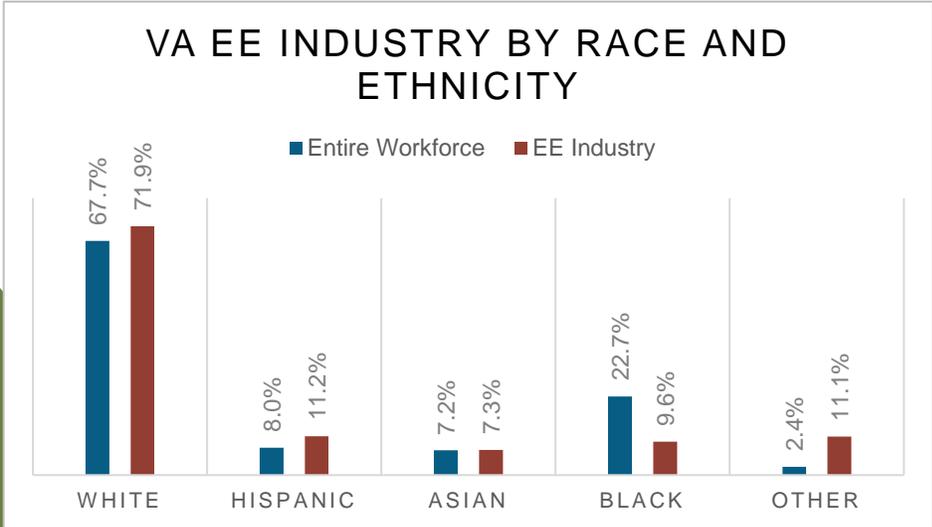


**Energy Efficiency  
 Construction Workers  
 Make Up 23% of VA  
 Construction Workers**

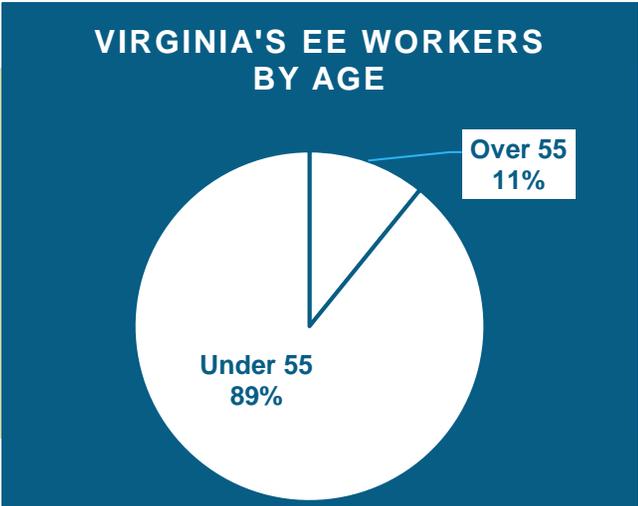
# How is EE Doing regarding Diversity in Virginia?

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 Virginia 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.



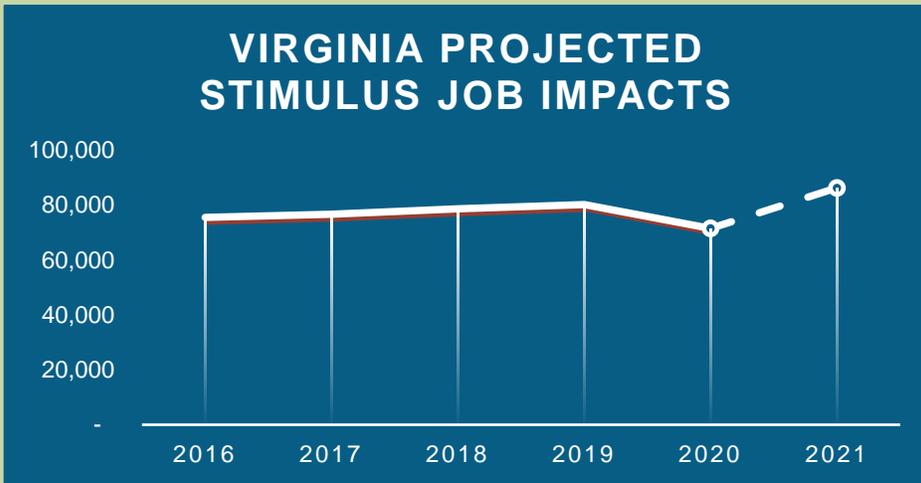
A significant portion of the Virginia efficiency workforce is in the “55+” category. 11% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

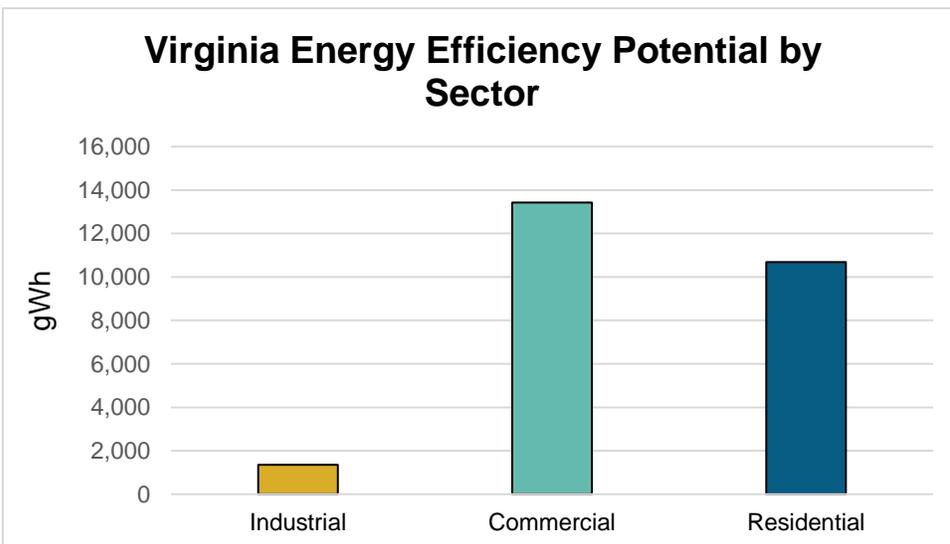


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **14,794 full-time direct, indirect, and induced VA jobs** that will last for at least five years: Over **73,970 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.0 billion in GDP** each year for the next five years — resulting in **\$5.2 billion in economic activity**, more than 3.8 times the investment.

## How much energy efficiency is untapped in your state?



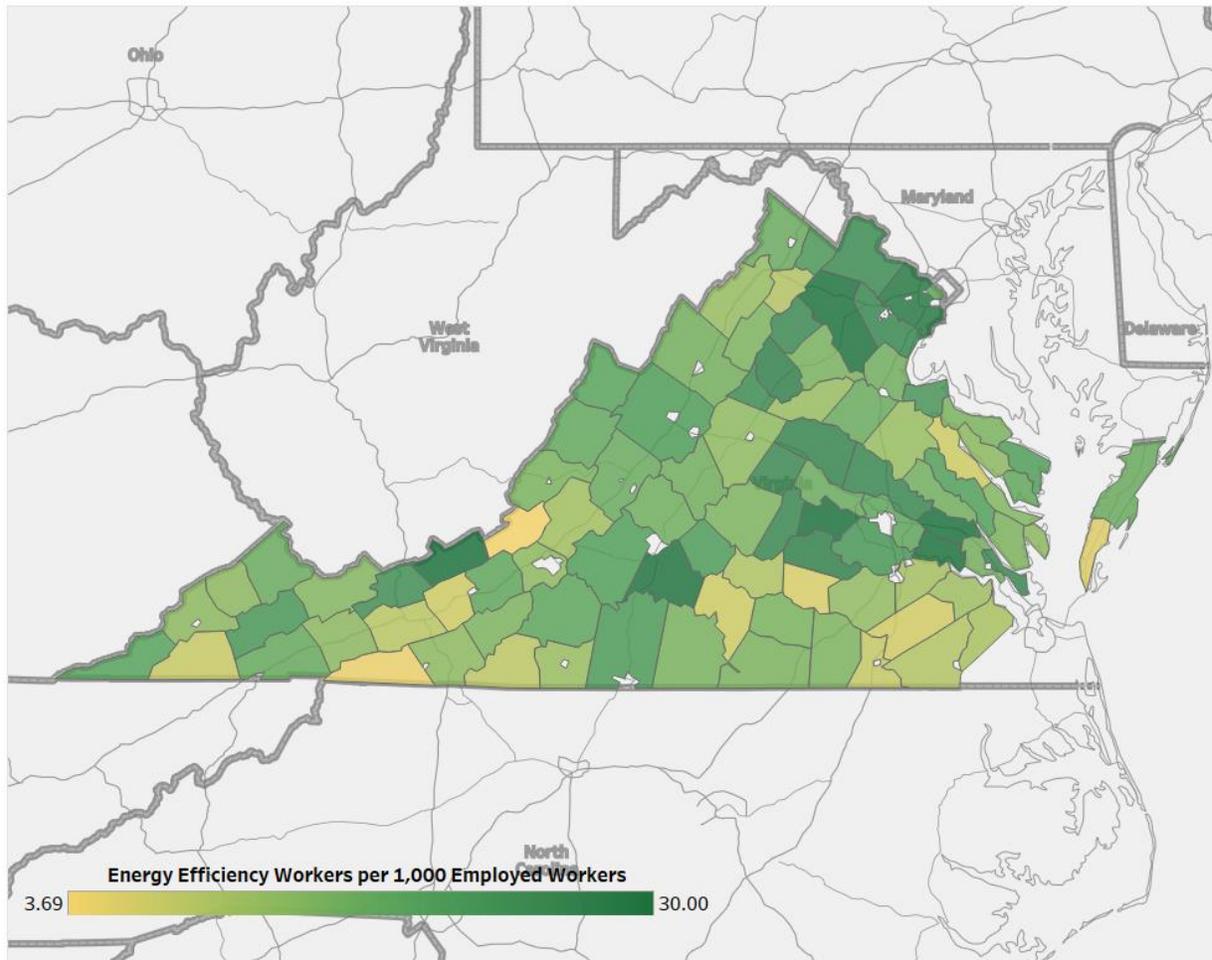
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,891,397 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,671	Blacksburg-Christiansburg-Radford	1,149
2	7,798	Charlottesville	3,338
3	7,573	Danville	729
4	6,065	Harrisonburg	1,154
5	10,427	Kingsport-Bristol-Bristol	860
6	6,253	Lynchburg	2,286
7	5,516	Richmond	13,460
8	10,306	Roanoke	3,151
9	4,259	Virginia Beach-Norfolk-Newport News	14,671
10	11,887	Virginia-Arlington-Alexandria	30,293
11	1,426	Winchester	1,110
		Rural	7,980

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	3,185	11	1,041	21	1,385	31	6,153
2	1,074	12	999	22	1,694	32	3,333
3	1,126	13	4,597	23	471	33	<5
4	3,115	14	1,450	24	2,563	34	3,275
5	3,518	15	2,570	25	2,466	35	1,398
6	784	16	12	26	1,085	36	658
7	3,079	17	2,147	27	2,509	37	406
8	1,249	18	649	28	1,635	38	1,177
9	4,991	19	3,904	29	1,065	39	<5
10	3,944	20	601	30	3,732	40	1,140

## State House of Delegates

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	500	26	37	51	<5	76	720
2	1,041	27	2,643	52	23	77	127
3	667	28	822	53	<5	78	523
4	605	29	799	54	841	79	1,625
5	617	30	401	55	1,697	80	68
6	456	31	1,083	56	1,482	81	1,245
7	1,027	32	1,317	57	1,615	82	<5
8	1,134	33	192	58	291	83	1,220
9	1,097	34	4,084	59	516	84	<5
10	2,304	35	2,406	60	432	85	<5
11	1,577	36	1,700	61	736	86	<5
12	94	37	564	62	1,366	87	<5
13	1,844	38	1,658	63	287	88	11
14	658	39	1,626	64	1,069	89	155
15	1,024	40	395	65	69	90	<5
16	210	41	172	66	69	91	990
17	109	42	210	67	919	92	273
18	1,336	43	464	68	2,255	93	771
19	831	44	191	69	1,808	94	1,370
20	1,190	45	2,293	70	<5	95	<5
21	4,100	46	<5	71	310	96	179
22	1,160	47	1,891	72	614	97	524
23	173	48	595	73	<5	98	469
24	401	49	<5	74	706	99	665
25	1,823	50	82	75	259	100	281



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# Washington

## 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.*

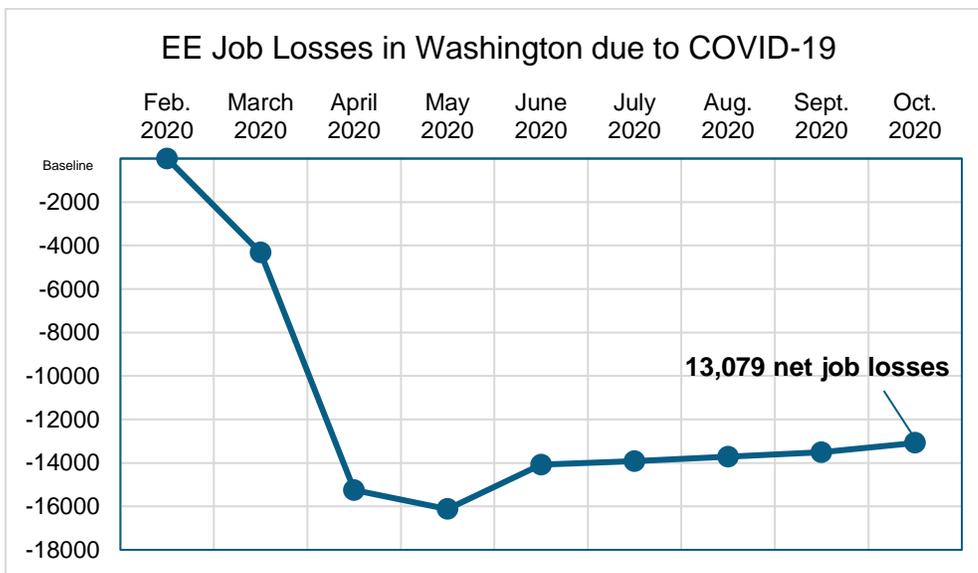
### COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation’s labor market with massive job losses. Washington’s energy efficiency industry lost as many as 13,079 jobs since its onset, a 20.1% 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 Washington EE workforce grew steadily, gaining 4.9% 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.



Presented by:



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

# What are EE Jobs?

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

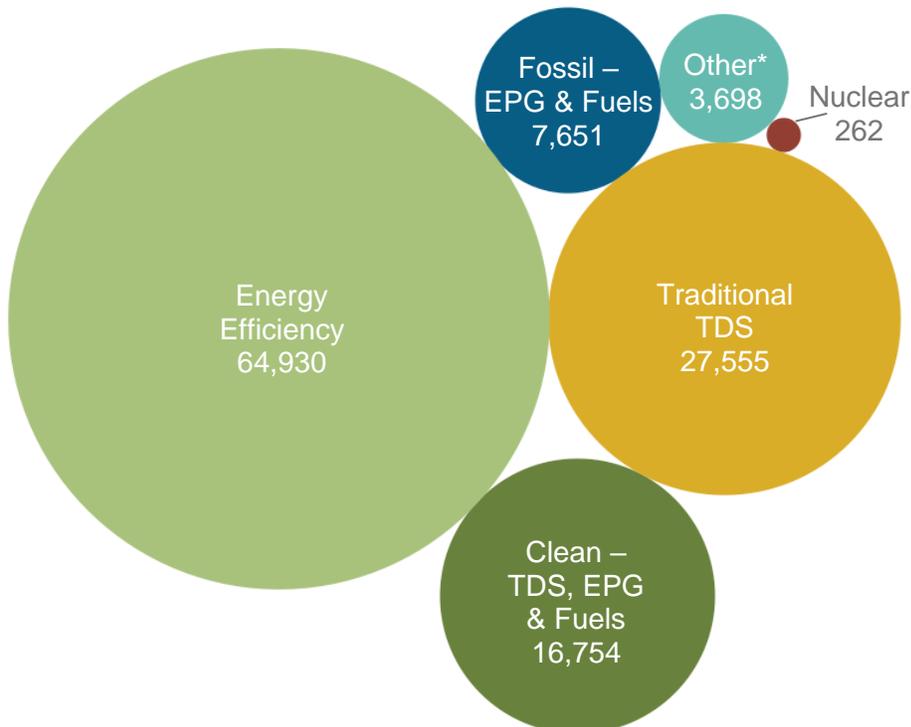
## What type of work are EE workers doing?

- 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 Washington?

Energy efficiency is the largest energy sector in Washington.

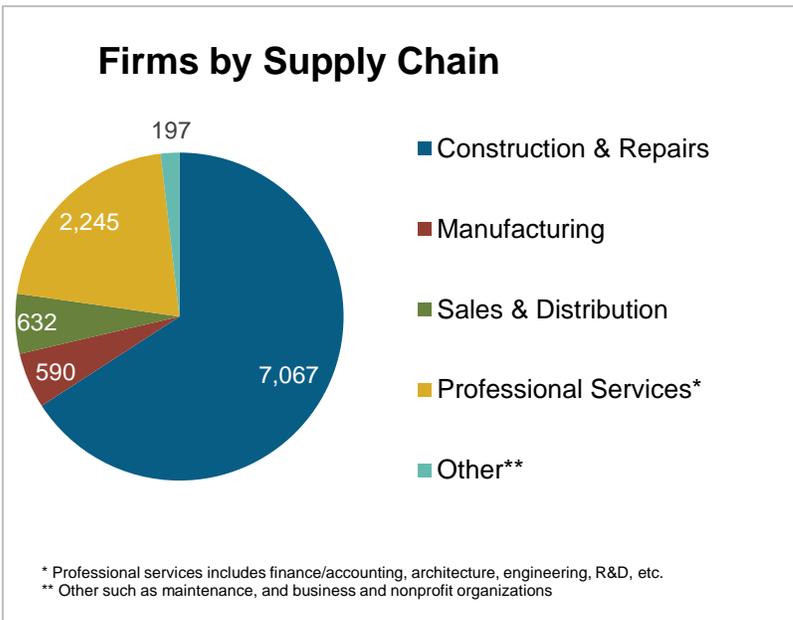
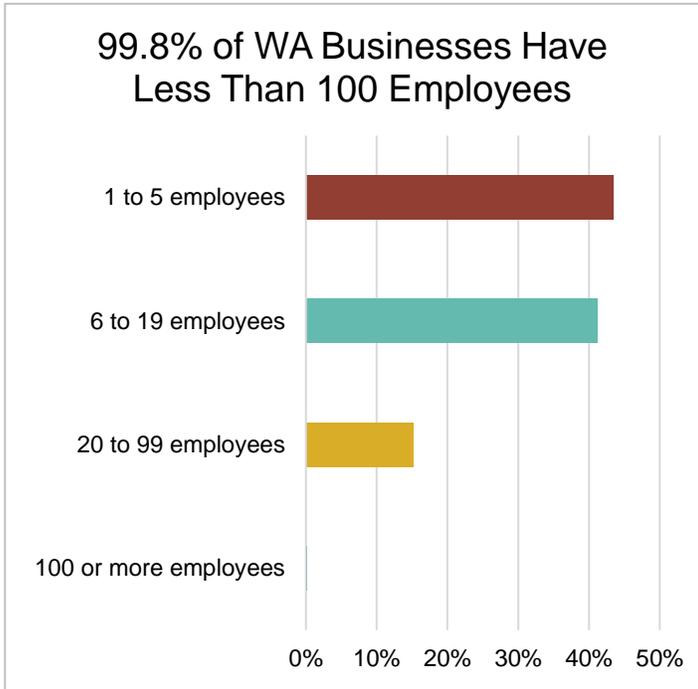


Energy efficiency in Washington has seen consistent, reliable job growth – 4.9 percent since 2016.

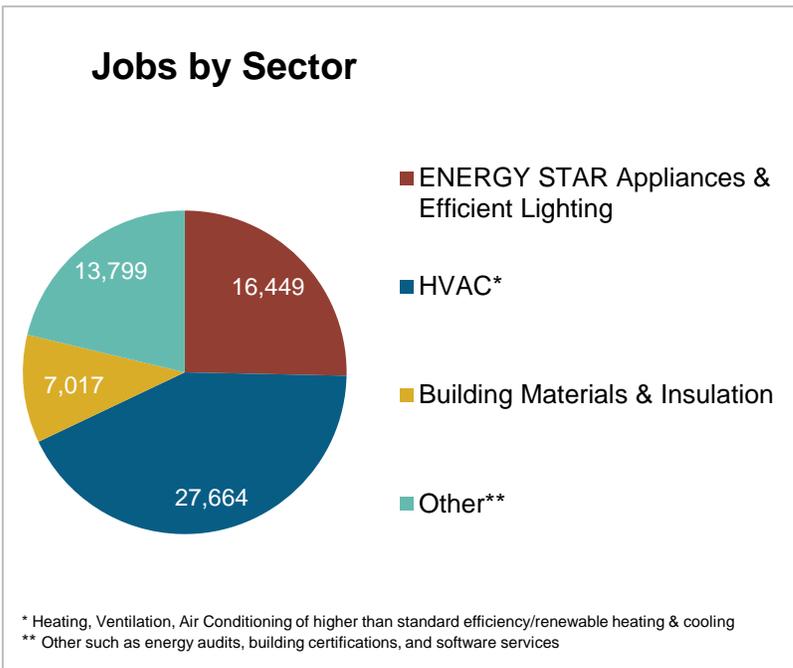
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Washington?

EE Sector =  
**10,732**  
 Businesses in WA  
 (Dec. 2019)  
 ↑ **170** over 2018



**7.3%**  
 of Washington  
 residents employed  
 in EE are **Veterans**



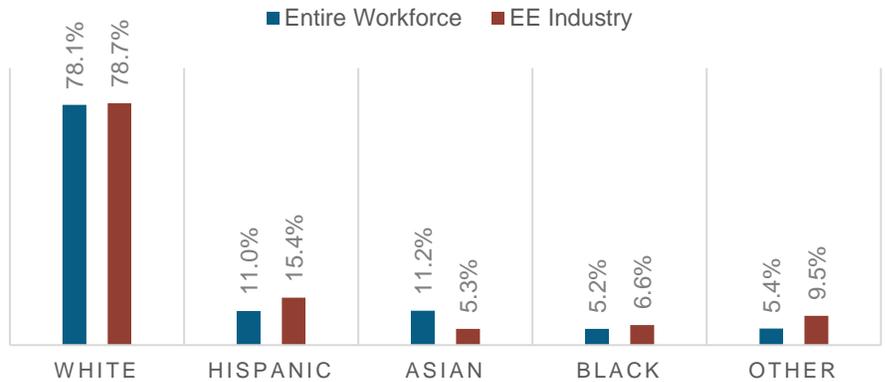
**Energy Efficiency  
 Construction Workers  
 Make Up 20% of WA  
 Construction Workers**

# How is EE Doing regarding Diversity in Washington?

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 Washington communities are represented in the EE sector.

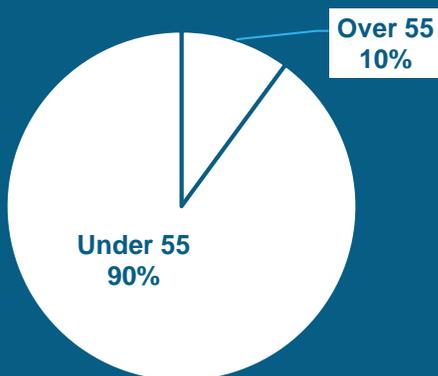
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## WA EE INDUSTRY BY RACE AND ETHNICITY



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.

## WASHINGTON'S EE WORKERS BY AGE



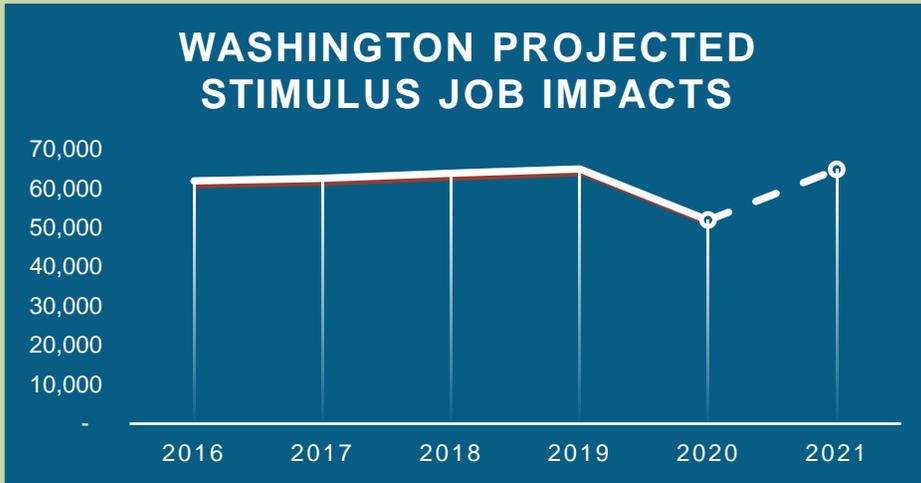
A significant portion of the Washington efficiency workforce is in the “55+” category. 10% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

# 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.

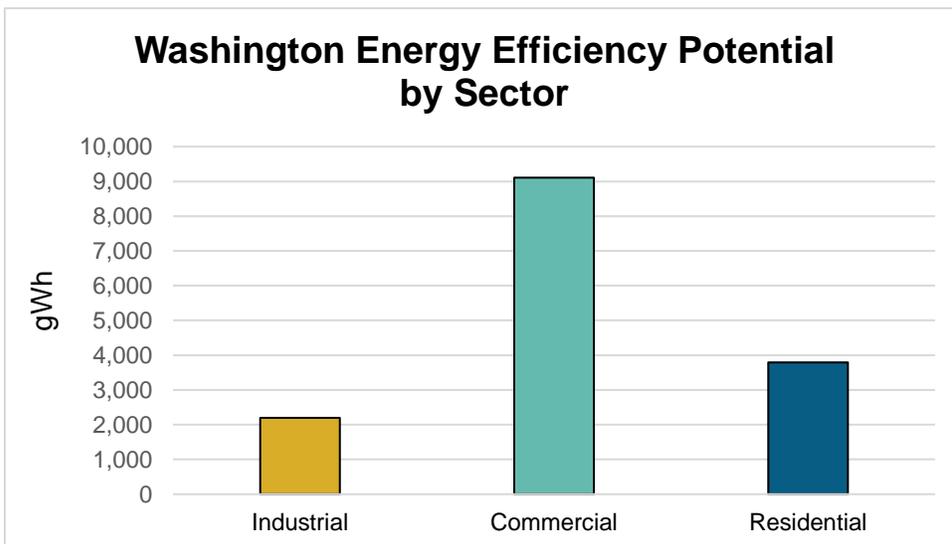


Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **12,950 full-time direct, indirect, and induced WA jobs** that will last for at least five years: Over **64,748 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$993 million in GDP** each year for the next five years – resulting in **\$5.0 billion in economic activity**, more than 4.3 times the investment.

## How much energy efficiency is untapped in your state?



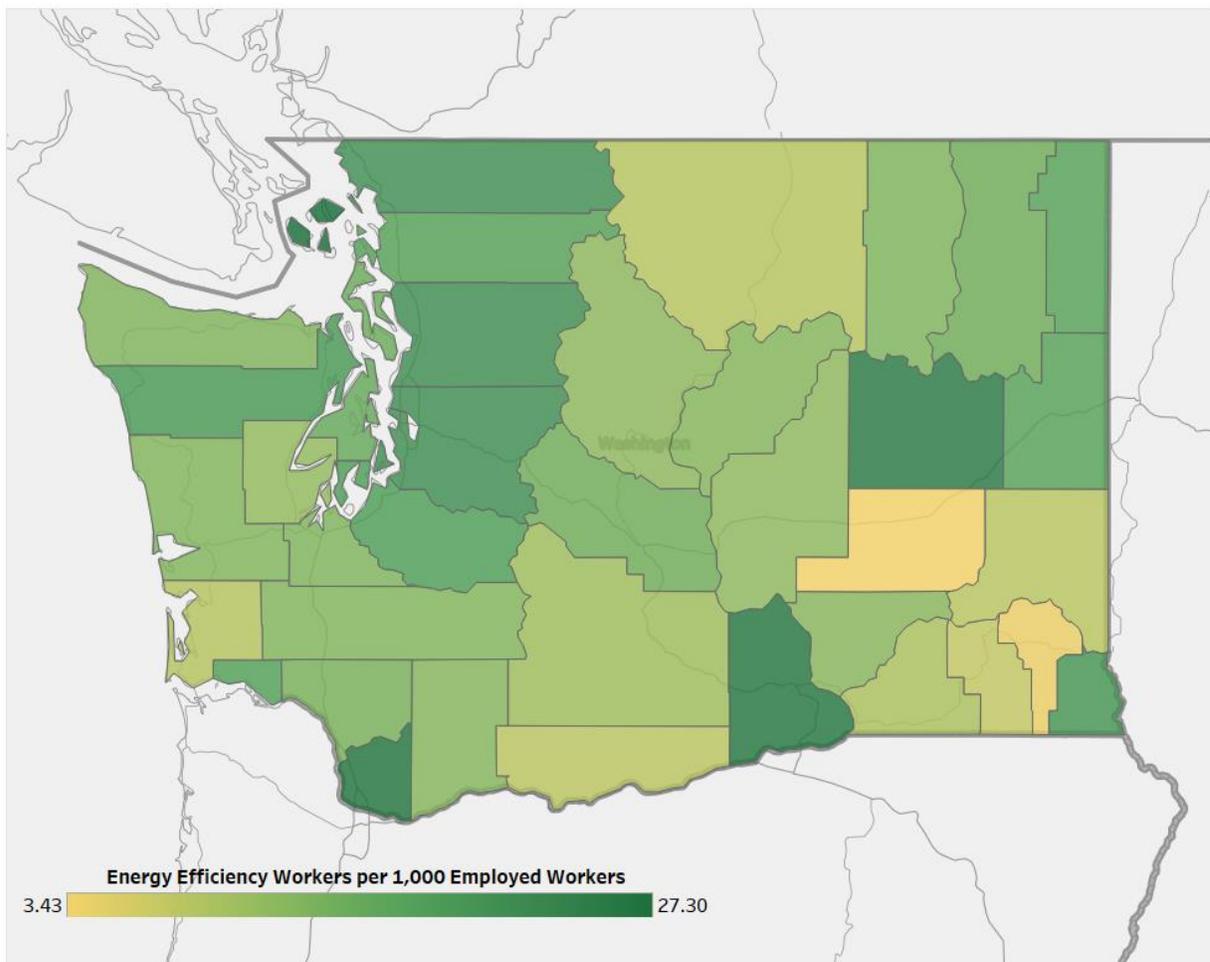
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **1,292,992 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	11,929	Bellingham	2,600
2	5,327	Bremerton-Silverdale	2,181
3	6,063	Kennewick-Richland-Pasco	1,647
4	4,567	Lewiston	138
5	5,695	Longview	725
6	7,036	Mount Vernon-Anacortes	1,016
7	12,151	Olympia	2,238
8	6,308	Portland-Vancouver-Beaverton	4,371
9	3,135	Seattle-Tacoma-Bellevue	36,307
10	2,720	Spokane	4,772
		Wenatchee	960
		Yakima	1,537
		Rural	6,438

## Energy Efficiency Jobs by County



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,971	14	1,594	27	1,630	40	2,314
2	1,590	15	114	28	837	41	3,468
3	3,056	16	186	29	378	42	711
4	1,106	17	2,305	30	1,443	43	1,239
5	2,404	18	694	31	100	44	<5
6	455	19	1,503	32	691	45	1,496
7	826	20	1,330	33	378	46	281
8	1,368	21	1,441	34	747	47	<5
9	1,099	22	560	35	483	48	<5
10	2,698	23	1,939	36	4,965	49	598
11	4,026	24	1,001	37	2,097		
12	1,160	25	1,294	38	1,338		
13	1,012	26	962	39	1,044		

## State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	2,970	14	1,616	27	1,631	40	2,299
2	1,590	15	114	28	837	41	3,470
3	3,068	16	187	29	<5	42	713
4	1,110	17	2,343	30	1,442	43	1,254
5	2,406	18	697	31	99	44	<5
6	457	19	1,508	32	690	45	1,497
7	830	20	1,341	33	390	46	282
8	1,373	21	1,441	34	752	47	<5
9	1,103	22	562	35	485	48	<5
10	2,735	23	1,946	36	5,042	49	600
11	4,125	24	1,004	37	2,105		
12	1,164	25	1,293	38	1,338		
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# West Virginia

## 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.*

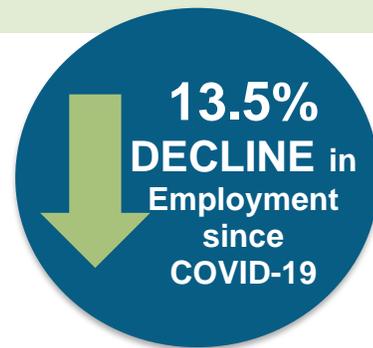
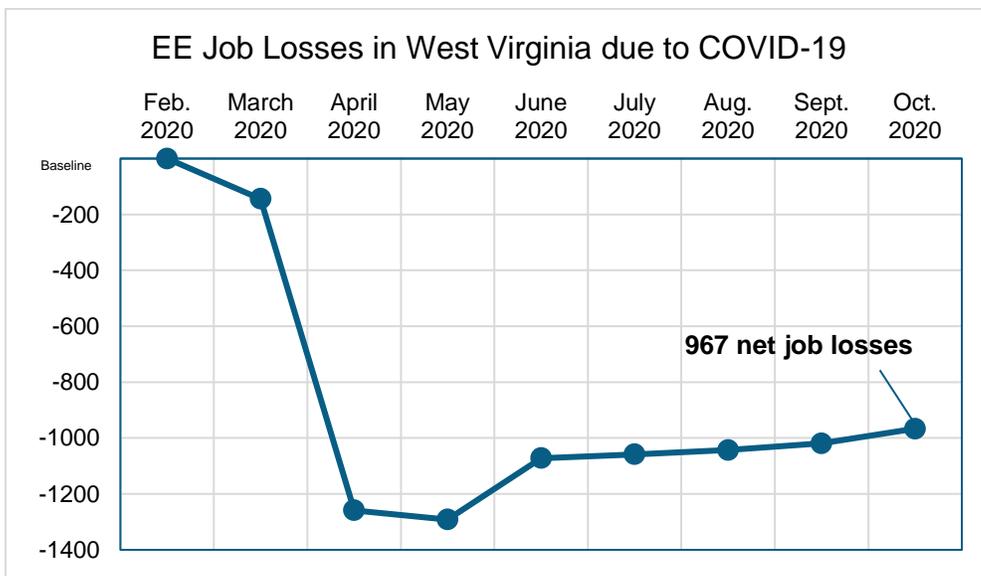
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This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building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

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the West Virginia EE workforce grew steadily, gaining 12.5% 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.



Presented by:



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

# What are EE Jobs?

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

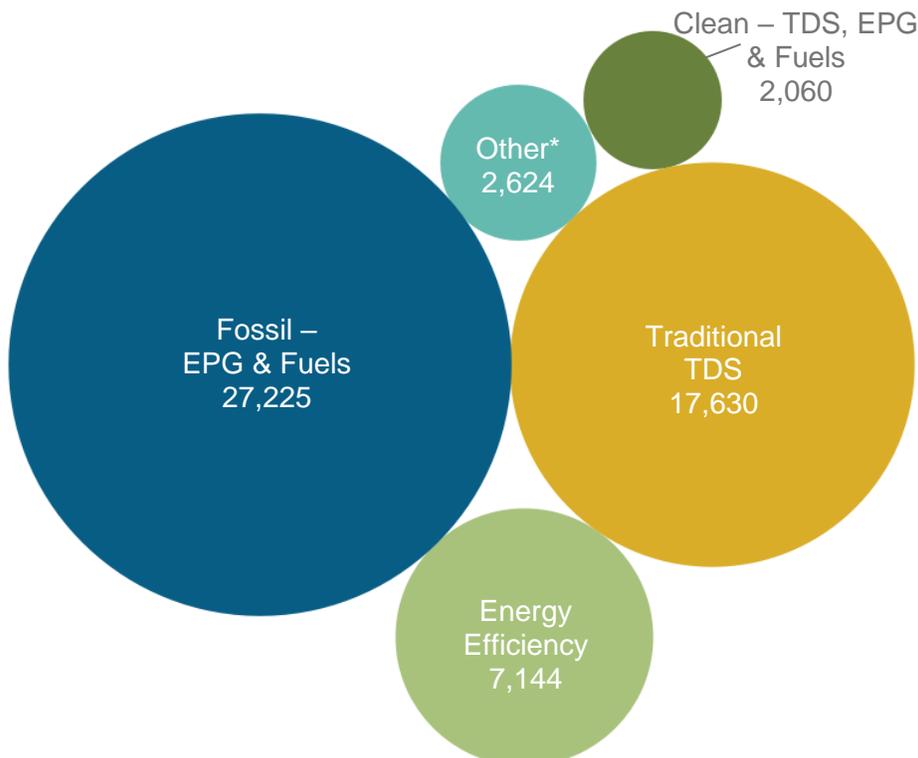
## What type of work are EE workers doing?

- 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
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## How does EE compare in West Virginia?

Energy efficiency is the third largest energy sector in West Virginia.

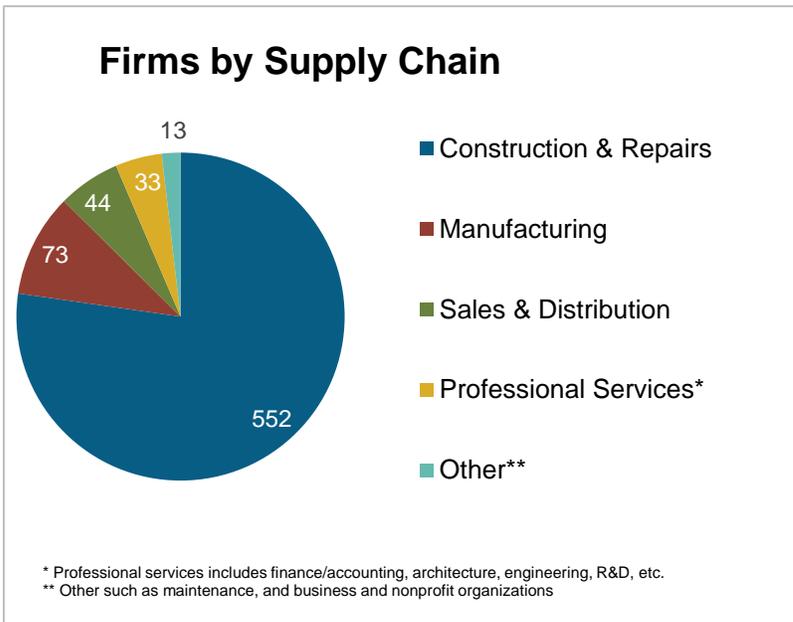
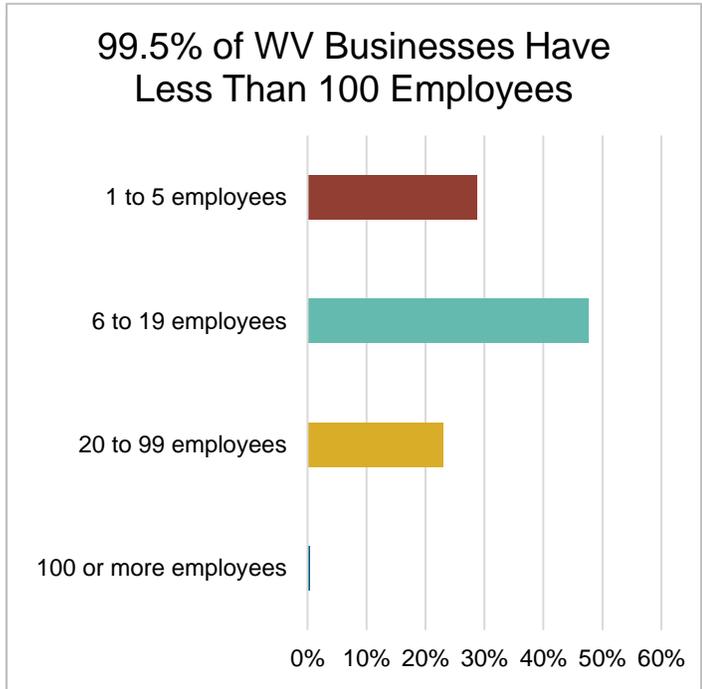


Fossil fuel jobs are historically key to West Virginia's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 12.5% from 2016-2019, adding 792 jobs.

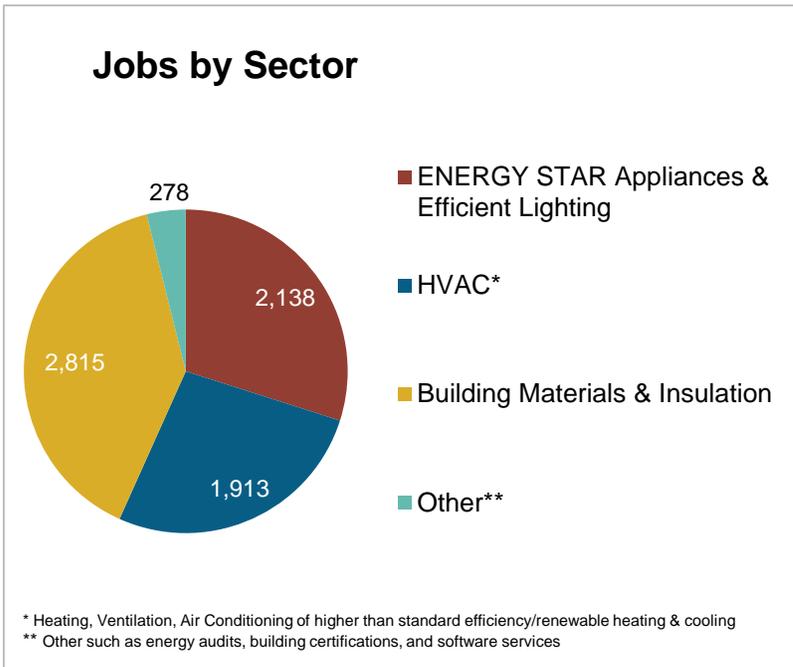
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in West Virginia?

EE Sector =  
**714**  
Businesses in WV  
(Dec. 2019)  
↑ **30** over 2018




**17.4%**  
of West Virginia  
residents employed  
in EE are **Veterans**

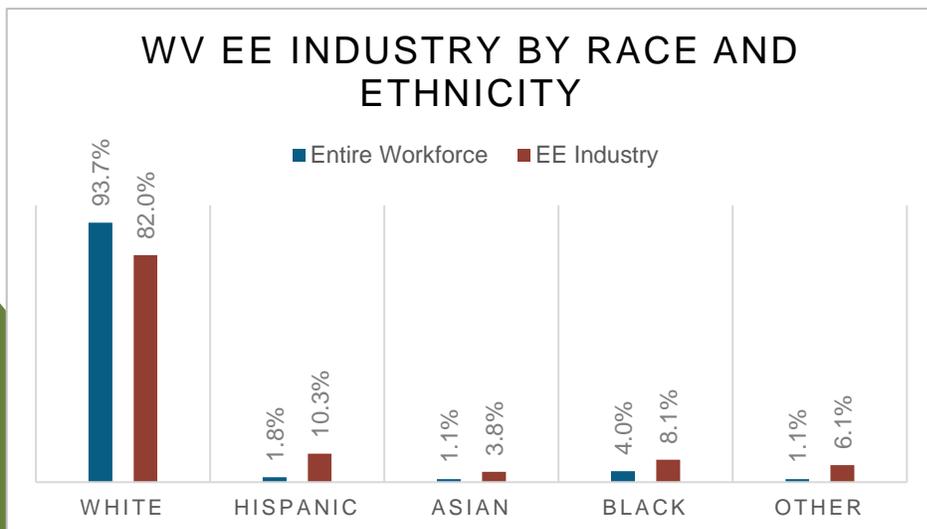



**Energy Efficiency  
Construction Workers  
Make Up 14% of WV  
Construction Workers**

# How is EE Doing regarding Diversity in West Virginia?

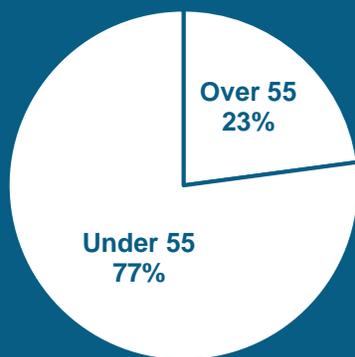
Demographic data is crucial for benchmarks and to measure progress in the energy efficiency industry. In striving for more diversity in EE jobs, we can create a stronger and more inclusive industry. Promoting diversity in hiring is key to maintaining a future workforce of talented professionals and ensuring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

## WEST VIRGINIA'S EE WORKERS BY AGE



West Virginia's percentage of "55+" workers is the highest for any state's EE workforce. 23% of the energy efficiency workers are likely to retire within the next ten years, providing career growth opportunities for both 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.

## WEST VIRGINIA PROJECTED STIMULUS JOB IMPACTS



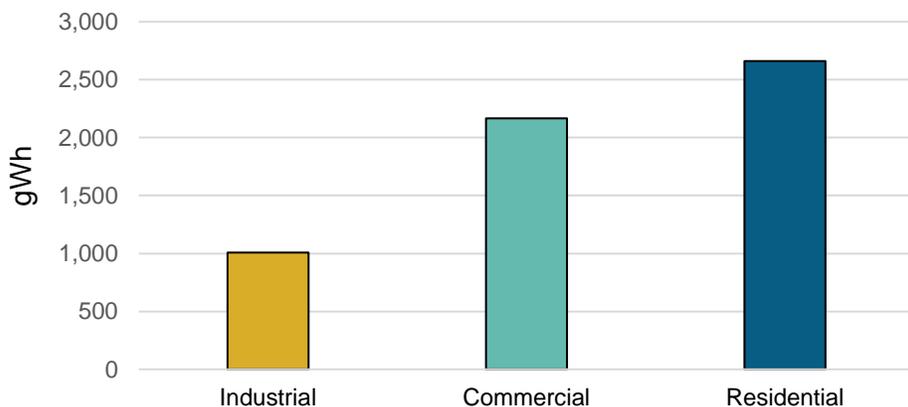
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **6,817 full-time direct, indirect, and induced WV jobs** that will last for at least five years: Over **34,084 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$396 million in GDP** each year for the next five years — resulting in **\$2.0 billion in economic activity**, more than 3 times the investment.

## How much energy efficiency is untapped in your state?

### West Virginia Energy Efficiency Potential by Sector



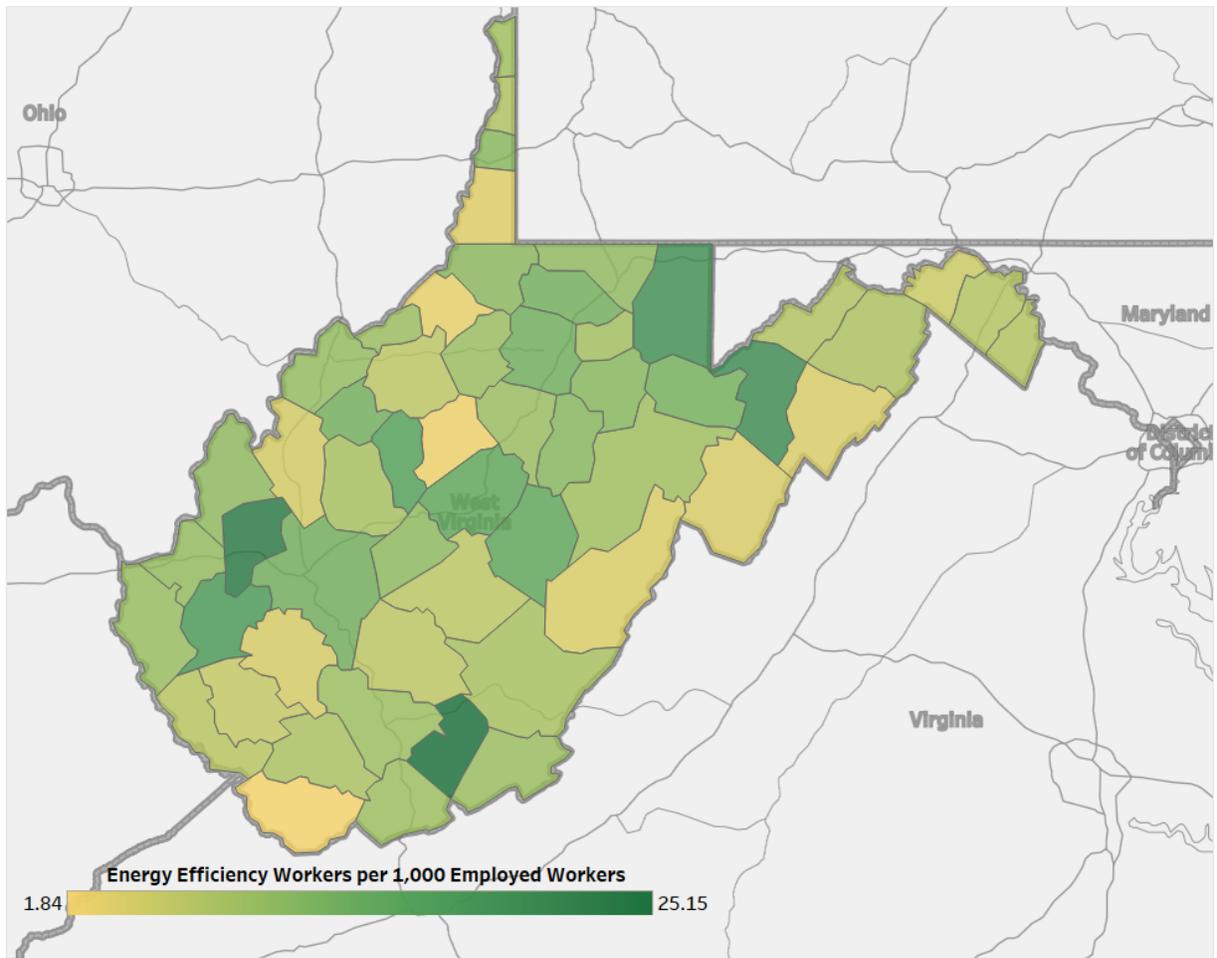
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **448,593 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	2,790	Charleston	1,026
2	2,467	Cumberland	56
3	1,887	Hagerstown-Martinsburg	320
		Huntington-Ashland	386
		Morgantown	437
		Parkersburg-Marietta-Vienna	341
		Washington-Arlington-Alexandria	1,972
		Weirton-Steubenville	132
		Wheeling	269
		Winchester	77
		Rural	2,130

## Energy Efficiency Jobs by County



## State Upper House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	502	11	451	21	<5	31	<5
2	985	12	517	22	<5	32	<5
3	512	13	34	23	<5	33	<5
4	537	14	291	24	<5	34	<5
5	442	15	445	25	<5		
6	321	16	299	26	<5		
7	163	17	34	27	<5		
8	851	18	<5	28	<5		
9	424	19	<5	29	<5		
10	338	20	<5	30	<5		

## State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	150	28	336	55	63	82	<5
2	277	29	37	56	31	83	<5
3	24	30	<5	57	76	84	<5
4	112	31	42	58	130	85	<5
5	36	32	215	59	164	86	<5
6	70	33	49	60	119	87	<5
7	45	34	67	61	28	88	<5
8	164	35	748	62	<5	89	<5
9	280	36	147	63	73	90	<5
10	<5	37	<5	64	<5	91	<5
11	173	38	<5	65	110	92	<5
12	15	39	12	66	14	93	<5
13	133	40	<5	67	<5	94	<5
14	182	41	24	68	<5	95	<5
15	59	42	138	69	<5	96	<5
16	347	43	175	70	<5	97	<5
17	64	44	138	71	<5	98	<5
18	<5	45	<5	72	<5	99	<5
19	74	46	83	73	<5	100	<5
20	92	47	194	74	<5		
21	25	48	495	75	<5		
22	54	49	193	76	<5		
23	21	50	11	77	<5		
24	32	51	323	78	<5		
25	133	52	86	79	<5		
26	101	53	14	80	<5		
27	27	54	113	81	<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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Wisconsin

## Energy Efficiency Jobs in America

Oct 2020

56,899\*

Dec 2019

63,569

*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

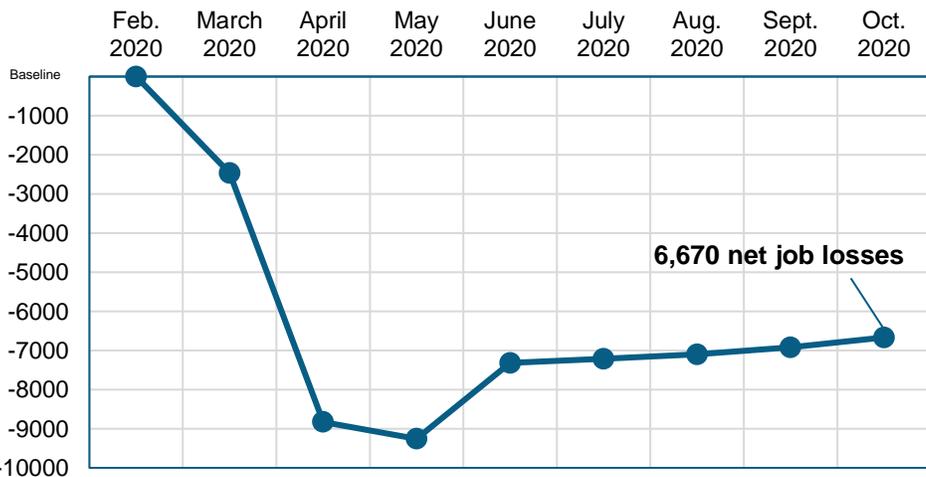
The 2020 pandemic shocked our nation's labor market with massive job losses. Wisconsin's energy efficiency industry lost as many as 6,670 jobs since its onset, a 10.5% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Wisconsin EE workforce grew steadily, gaining 2.1% 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.

#### EE Job Losses in Wisconsin due to COVID-19



\*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.

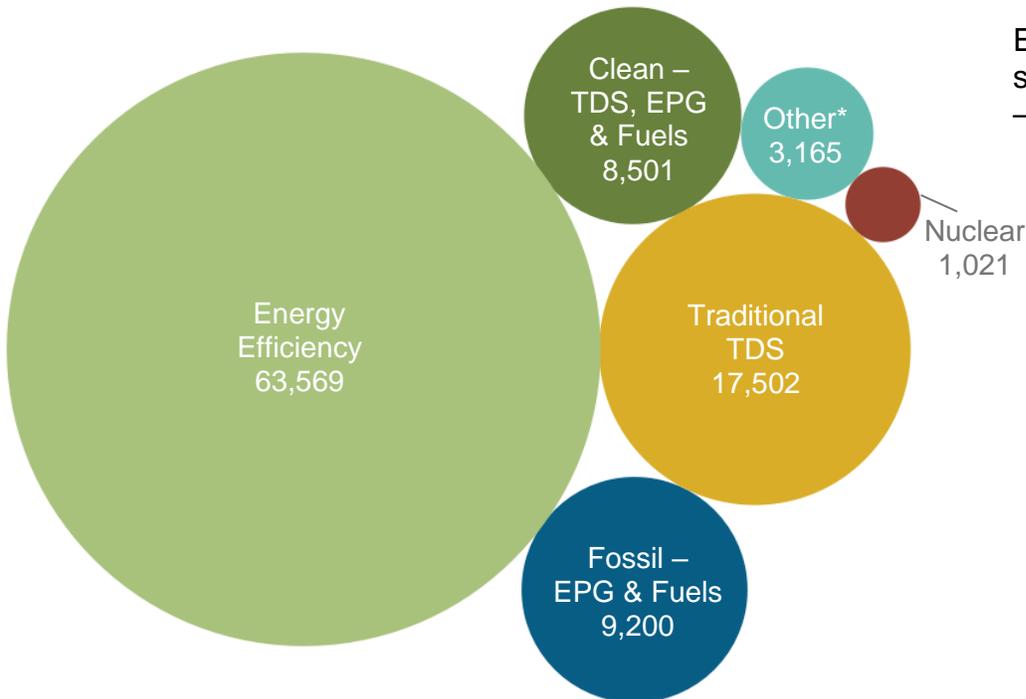
## What type of work are EE workers doing?

- 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 Wisconsin?

*Energy efficiency is the largest energy sector in Wisconsin.*

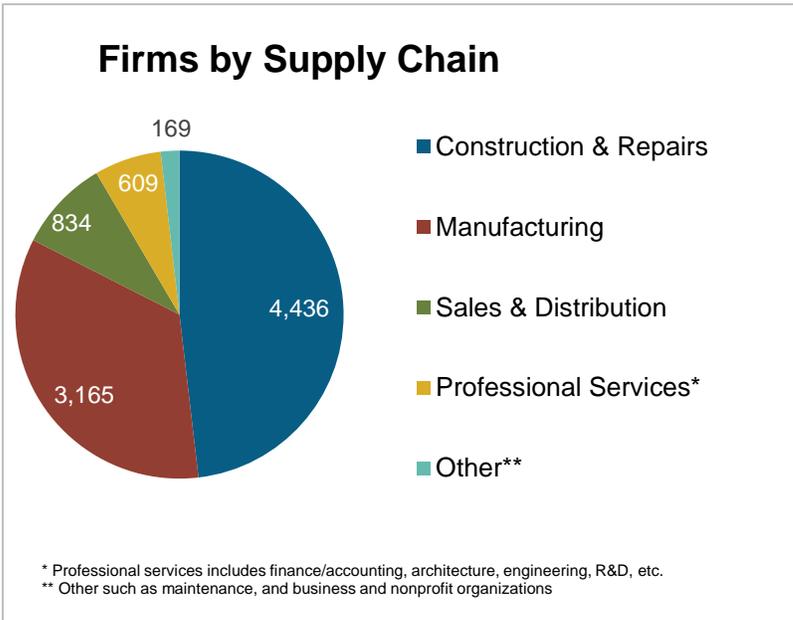
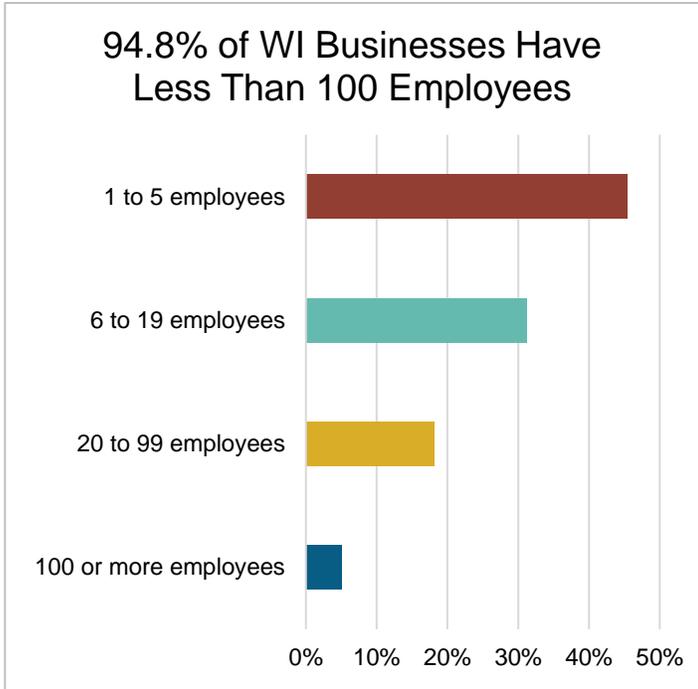


Energy efficiency in Wisconsin has seen consistent, reliable job growth – 2.1 percent since 2016.

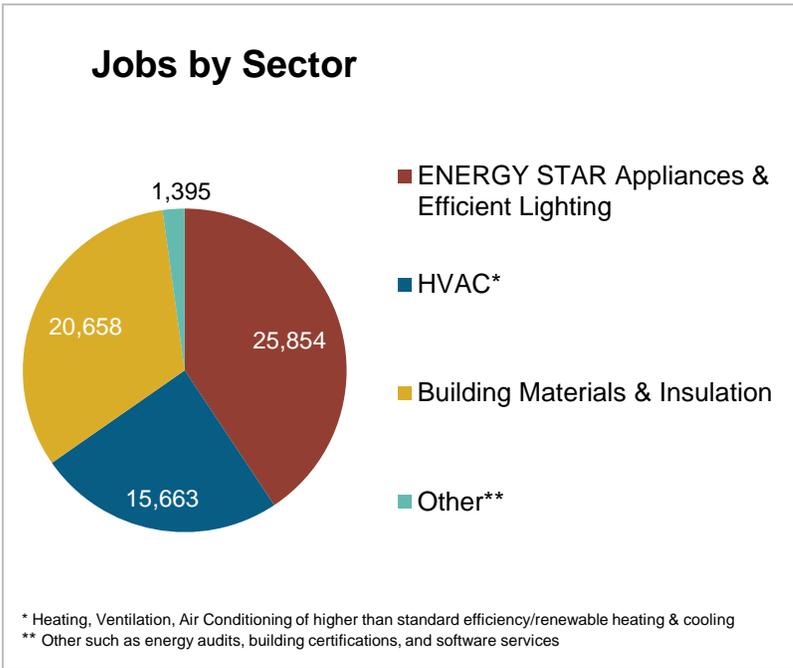
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Wisconsin?

EE Sector =  
**9,213**  
 Businesses in WI  
 (Dec. 2019)  
 ↑ **60** over 2018



**7.3%**  
 of Wisconsin  
 residents employed  
 in EE are **Veterans**



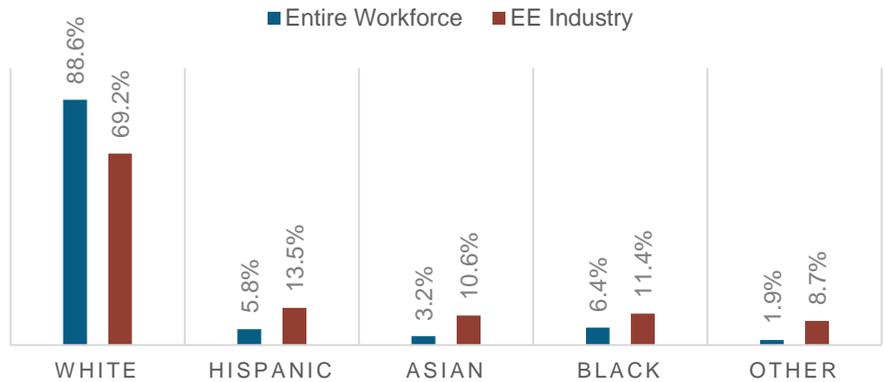
**Energy Efficiency  
 Construction Workers  
 Make Up 23% of WI  
 Construction Workers**

# How is EE Doing regarding Diversity in Wisconsin?

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 Wisconsin communities are represented in the EE sector.

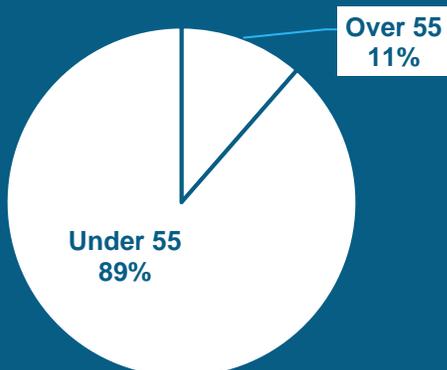
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## WI EE INDUSTRY BY RACE AND ETHNICITY



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.

## WISCONSIN'S EE WORKERS BY AGE



A significant portion of the Wisconsin 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.

## WISCONSIN PROJECTED STIMULUS JOB IMPACTS



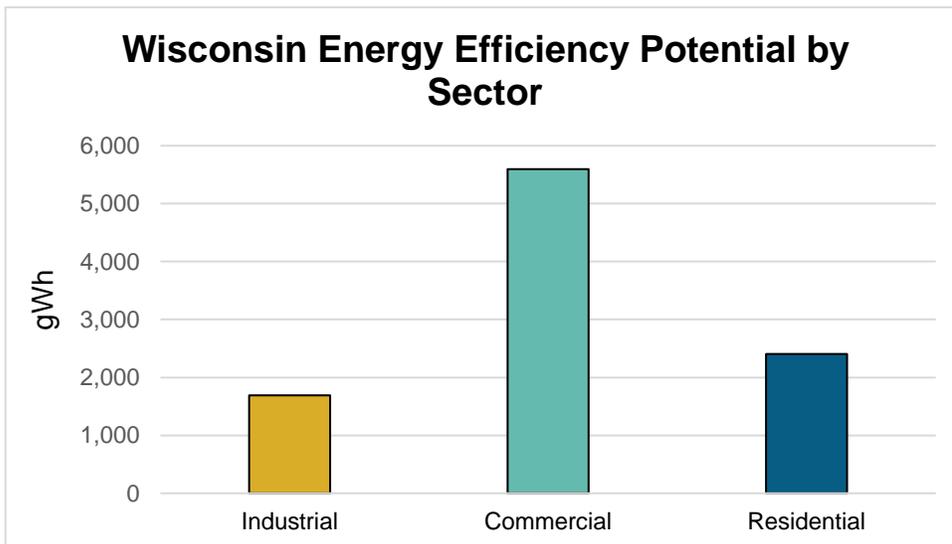
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **14,982 full-time direct, indirect, and induced WI jobs** that will last for at least five years: Over **74,912 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$1.0 billion in GDP** each year for the next five years — resulting in **\$5.0 billion in economic activity**, more than 4 times the investment.

## How much energy efficiency is untapped in your state?

### Wisconsin Energy Efficiency Potential by Sector



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

Combined, this would displace the annual electricity consumption of **1,198,272 homes**.

## Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,970	Appleton	2,482
2	9,266	Chicago-Naperville-Joliet	3,081
3	7,763	Duluth	304
4	7,657	Eau Claire	1,612
5	6,465	Fond du Lac	947
6	9,441	Green Bay	3,042
7	7,954	Janesville	1,275
8	6,052	La Crosse	1,118
		Madison	7,250
		Milwaukee-Waukesha-West Allis	16,708
		Minneapolis-St. Paul-Bloomington	2,590
		Oshkosh-Neenah	2,831
		Racine	1,670
		Sheboygan	1,027
		Wausau	1,321
		Rural	16,312



## State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	4,006	11	3,437	21	2,423	31	724
2	2,938	12	3,403	22	264	32	1,592
3	2,096	13	2,358	23	2,780	33	720
4	2,245	14	2,186	24	1,651		
5	4,257	15	735	25	1,968		
6	1,499	16	3,215	26	2,218		
7	913	17	2,198	27	380		
8	3,377	18	1,710	28	498		
9	1,285	19	2,300	29	654		
10	2,278	20	1,010	30	250		

## State Assembly

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	1,082	28	1,068	55	2,286	82	227
2	1,555	29	702	56	11	83	270
3	1,370	30	497	57	<5	84	<5
4	1,588	31	2,110	58	581	85	305
5	598	32	723	59	99	86	<5
6	750	33	617	60	326	87	347
7	1,196	34	1,472	61	1,332	88	147
8	882	35	1,330	62	1,074	89	102
9	<5	36	592	63	11	90	<5
10	1,285	37	1,696	64	264	91	<5
11	771	38	317	65	<5	92	464
12	179	39	360	66	<5	93	257
13	2,861	40	679	67	1,134	94	1,348
14	634	41	761	68	1,102	95	<5
15	745	42	778	69	536	96	242
16	1,495	43	324	70	1,295	97	621
17	<5	44	<5	71	349	98	21
18	<5	45	408	72	13	99	171
19	<5	46	664	73	642		
20	493	47	2,321	74	795		
21	416	48	217	75	525		
22	1,569	49	799	76	1,229		
23	1,144	50	690	77	323		
24	650	51	700	78	661		
25	179	52	775	79	86		
26	910	53	931	80	231		
27	204	54	<5	81	57		



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](http://www.E4TheFuture.org)



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit [www.e2.org](http://www.e2.org)



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit [www.bwresearch.com](http://www.bwresearch.com)

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.

# Wyoming

## Energy Efficiency Jobs in America

Oct 2020

6,893\*

Dec 2019

7,568

*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

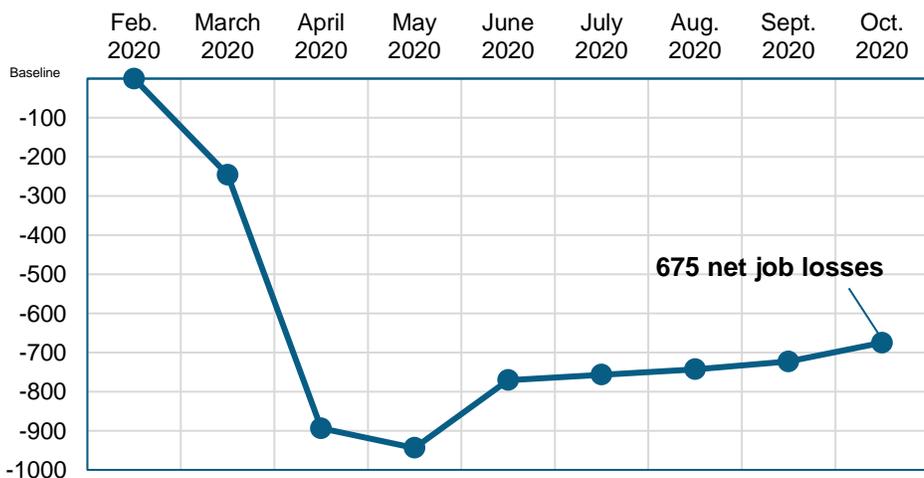
The 2020 pandemic shocked our nation's labor market with massive job losses. Wyoming's energy efficiency industry lost as many as 675 jobs since its onset, a 8.9% decrease compared to total jobs in December 2019—wiping out the last 3 years of gains.

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 Wyoming EE workforce grew steadily, gaining 5.1% 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.

EE Job Losses in Wyoming due to COVID-19



Presented by:



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

# What are EE Jobs?

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

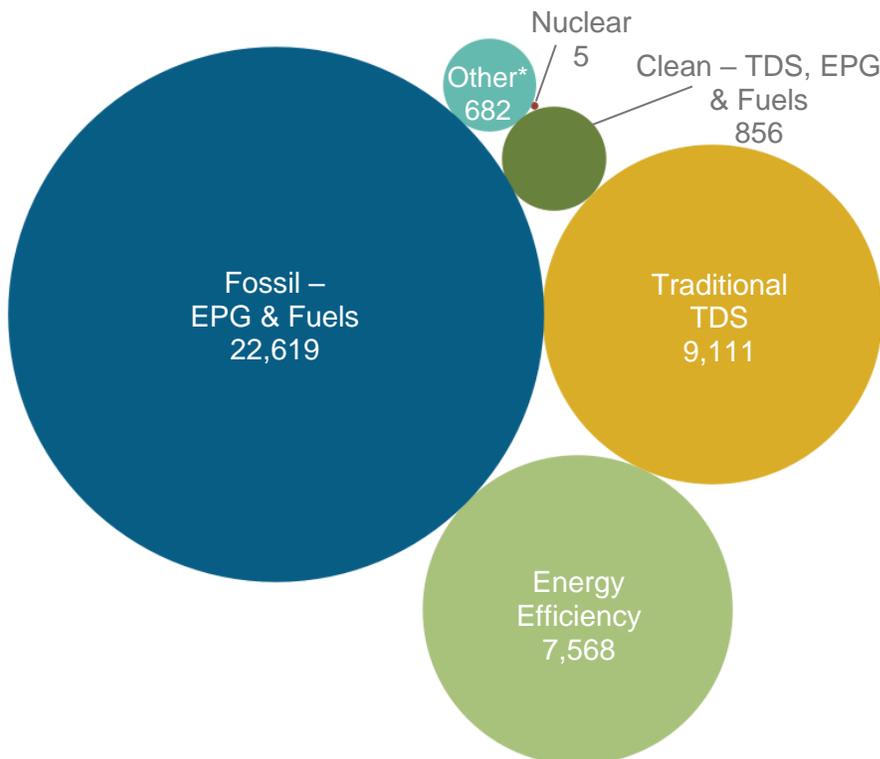
## What type of work are EE workers doing?

- 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 Wyoming?

Energy efficiency is the third largest energy sector in Wyoming.

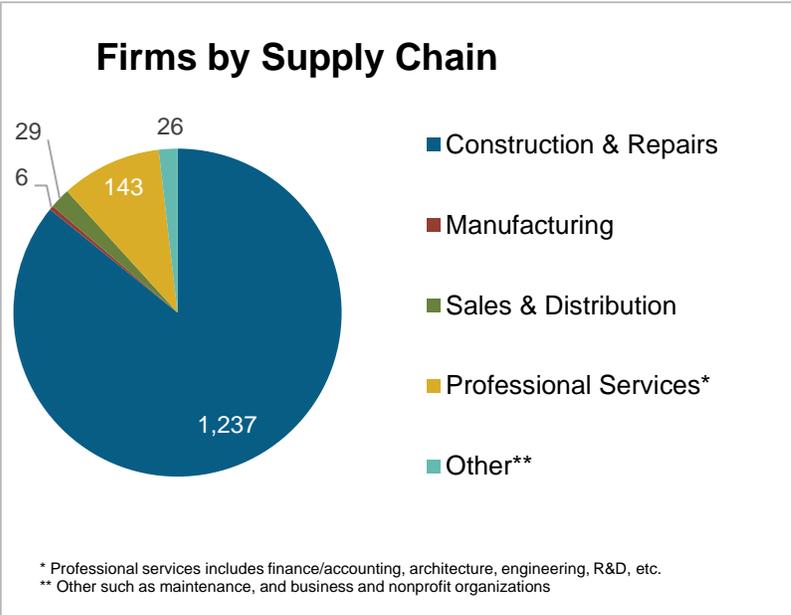
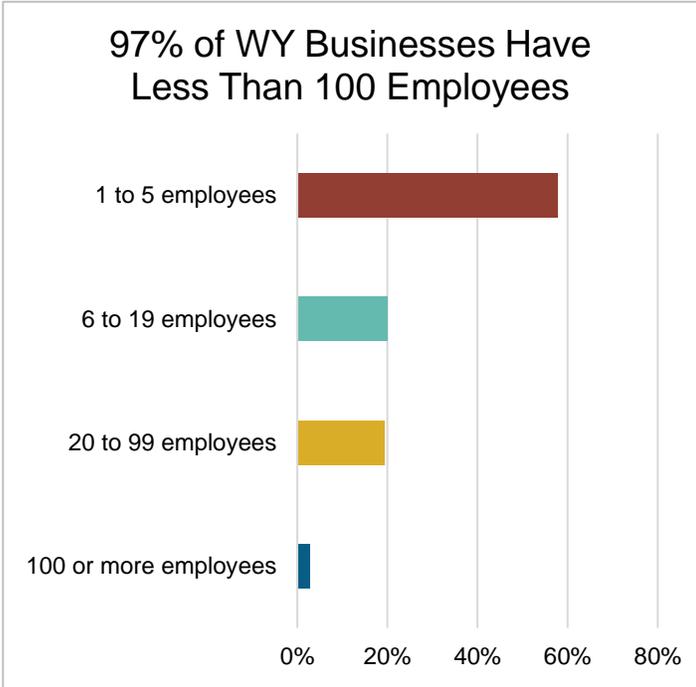


Fossil fuel jobs are historically key to Wyoming's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 5.1% from 2016-2019, adding 368 jobs.

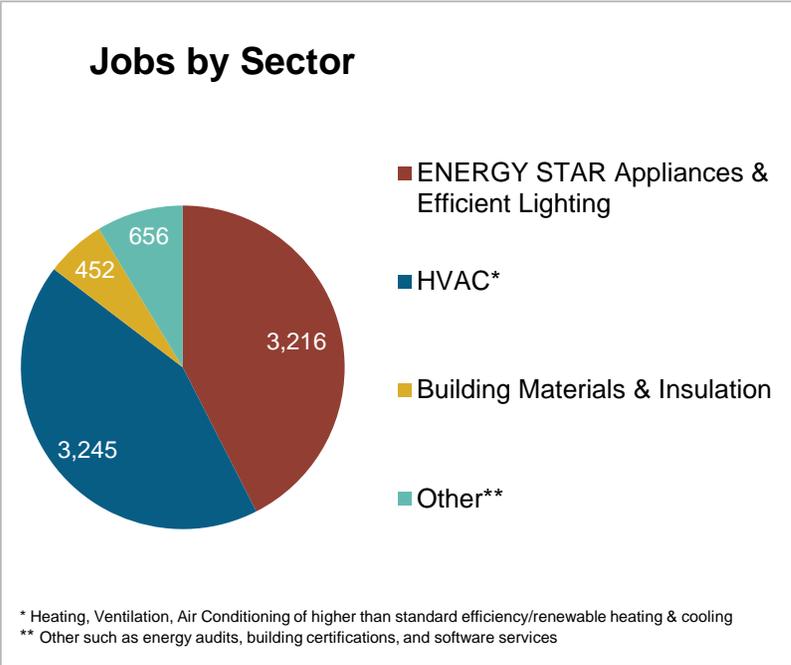
\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

# What do the EE businesses look like in Wyoming?

EE Sector =  
**1,442**  
 Businesses in WY  
 (Dec. 2019)  
 ↑ **10** over 2018




**10.2%**  
 of Wyoming  
 residents employed  
 in EE are **Veterans**



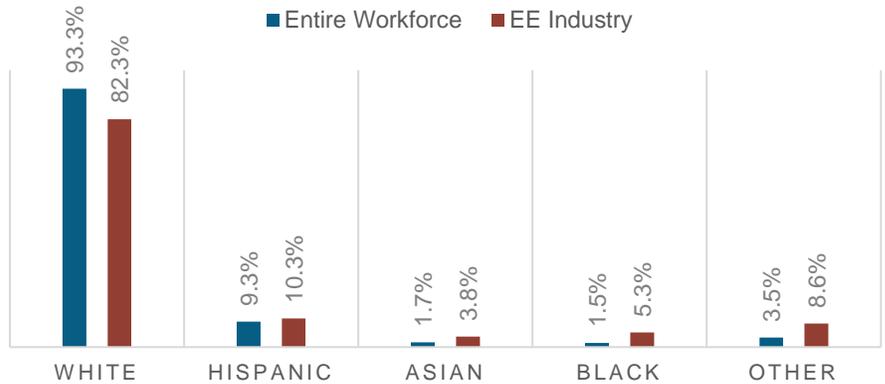

**Energy Efficiency  
 Construction Workers  
 Make Up 27% of WY  
 Construction Workers**

# How is EE Doing regarding Diversity in Wyoming?

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 Wyoming communities are represented in the EE sector.

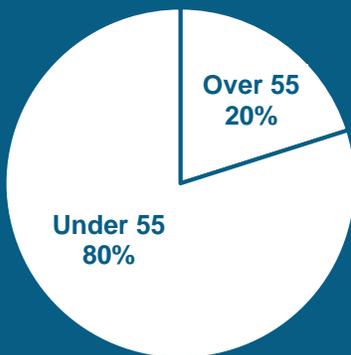
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

## WY EE INDUSTRY BY RACE AND ETHNICITY



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.

## WYOMING'S EE WORKERS BY AGE



Wyoming's percentage of "55+" workers is the fifth highest for any state's EE workforce. 20% of the energy efficiency workers are likely to retire within the next ten years, providing career growth opportunities for both 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.

## WYOMING PROJECTED STIMULUS JOB IMPACTS



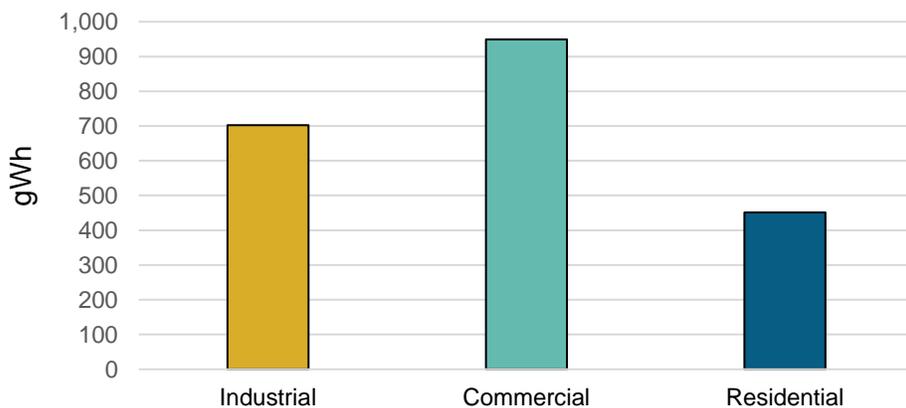
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,413 full-time direct, indirect, and induced WY jobs** that will last for at least five years: Over **22,067 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$273 million in GDP** each year for the next five years – resulting in **\$1.4 billion in economic activity**, more than 3 times the investment.

## How much energy efficiency is untapped in your state?

### Wyoming Energy Efficiency Potential by Sector



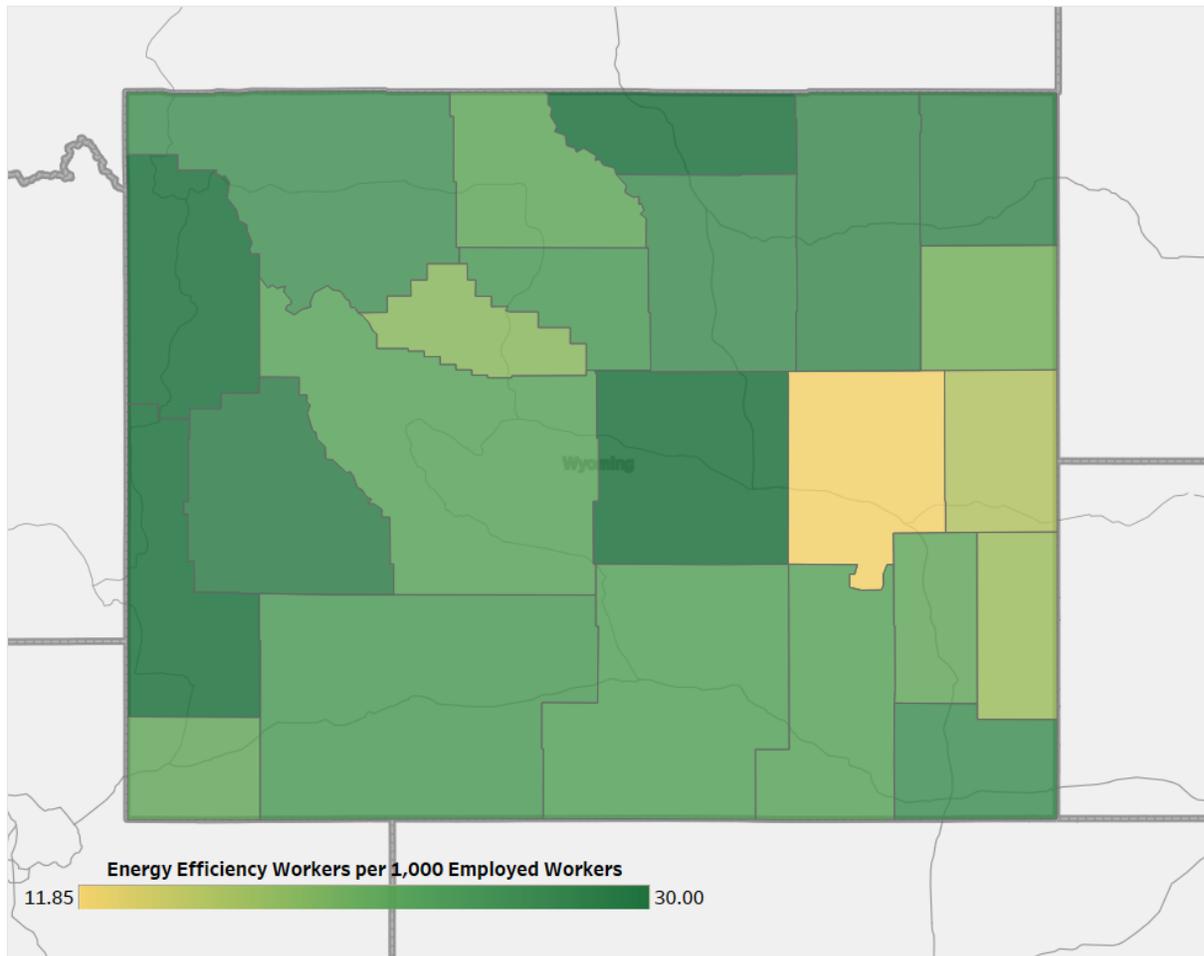
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **202,801 homes**.

# Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	7,568	Casper	1,370
		Cheyenne	1,207
		Rural	4,991

## Energy Efficiency Jobs by County



State Senate							
District	Jobs		District	Jobs		District	Jobs
1	614		11	906		21	510
2	238		12	88		22	98
3	116		13	<5		23	10
4	964		14	184		24	<5
5	<5		15	77		25	169
6	198		16	754		26	181
7	<5		17	34		27	927
8	<5		18	548		28	<5
9	368		19	85		29	42
10	8		20	387		30	61

State House of Representatives										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	79		16	635		31	<5		46	<5
2	233		17	452		32	16		47	85
3	522		18	44		33	172		48	<5
4	79		19	76		34	<5		49	<5
5	<5		20	144		35	908		50	16
6	34		21	116		36	<5		51	16
7	942		22	112		37	333		52	8
8	<5		23	33		38	10		53	177
9	<5		24	345		39	<5		54	<5
10	211		25	175		40	96		55	<5
11	<5		26	83		41	466		56	<5
12	<5		27	68		42	<5		57	<5
13	360		28	311		43	<5		58	42
14	8		29	<5		44	<5		59	<5
15	93		30	67		45	<5		60	<5



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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.