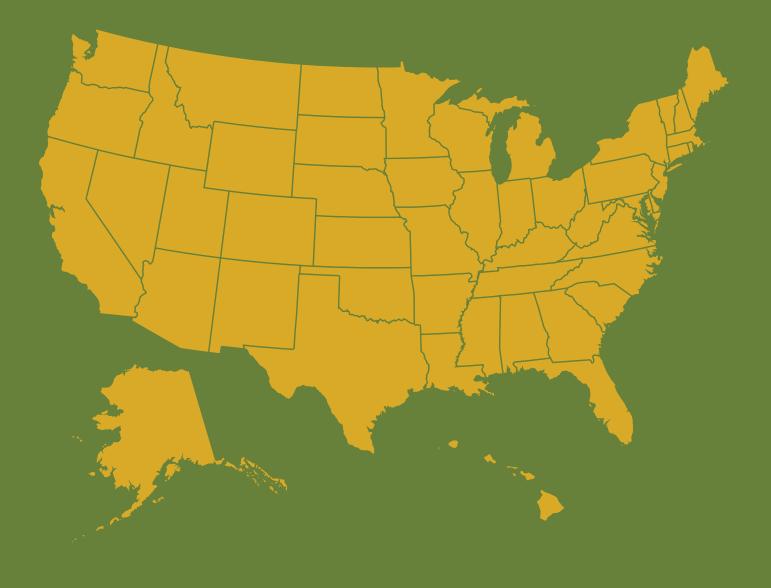
# Energy Efficiency Jobs in America

2.16 MILLION AMERICANS WORK IN ENERGY EFFICIENCY





**DECEMBER 2022** 

#FacesOfEE

# **Energy Efficiency Jobs in America**

2022



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Introduction and Overview Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware **District of Columbia** Florida Georgia Hawaii Idaho Illinois Indiana lowa Kansas Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi

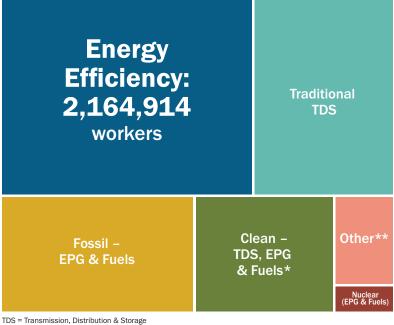
Missouri Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island South Carolina South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming

# A STRONGER U.S. ENERGY EFFICIENCY WORKFORCE

The Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) bring historic investments in energy efficiency to all sectors of the U.S. economy. Added to ongoing federal investments in energy efficiency (EE), they confirm efficiency's vital role in the economy and underscore its necessity as a prerequisite to address climate change in our built environment.

To achieve the goals of these federal investments, the EE workforce—already the largest workforce within the clean energy industry—will need to grow significantly. America must prioritize EE workforce development and training in every state. Positioning it squarely at center stage will enable more-diverse new hires, improving gender and racial/ethnic balances to better match area populations.

In construction—the largest portion of EE jobs—work often involves skills training and certifications to assure quality building performance. Efficiency workers are in demand; professionals who earn key credentials are highly compensated. Careers focused on creating better buildings and energy efficient infrastructure are helping everyday Americans in myriad ways.



EPG = Electric Power Generation

\*Also includes jobs in energy storage and grid modernization that enable renewable electricity \*\*Includes other subsectors such as corn ethanol, woody biomass, large hydropower

#### Reducing energy use in buildings can avert "up to one-third of coal- or gas-fired power generation." —LBNL

Lawrence Berkeley National Laboratory. How Managing Building Energy Demand Can Aid the Clean Energy Transition

## HISTORIC FEDERAL INVESTMENT WITH IRA AND IIJA SETS THE STAGE FOR JOB CREATION AND CARBON SAVINGS



## **UNLOCKING POSSIBILITY**

The passage of the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) unlocks billions in federal funding for efficiency investments in buildings. Investments include rebates and tax credits for upgrades such as insulation and better appliances, and installing highly efficient "two-way air conditioners"—heat pumps—that heat and cool.

Thousands of workers will be needed to design, manufacture, and install insulation, controls, replacement appliances, upgraded HVAC, and more. Efficiency improvements especially benefit lowincome consumers who are historically burdened with energy costs.

"The Inflation Reduction Act could cut the social costs of climate change by up to \$1.9 trillion by 2050," noted a White House spokesperson upon passage of the IRA.

<u>CNBC</u>

Avoided carbon emissions from energy savings also help to mitigate the worst impacts of climate change. And community resilience to severe weather and power outages increases as a result.

For workers, consumers, and the environment, this historical federal investment in buildings is a WIN-WIN-WIN!



responsible for 76%\*\* of all electricity used in the U.S.

\*U.S. Energy Information Administration \*\*Department of Energy: An Assessment of Energy Technologies and Research Opportunities

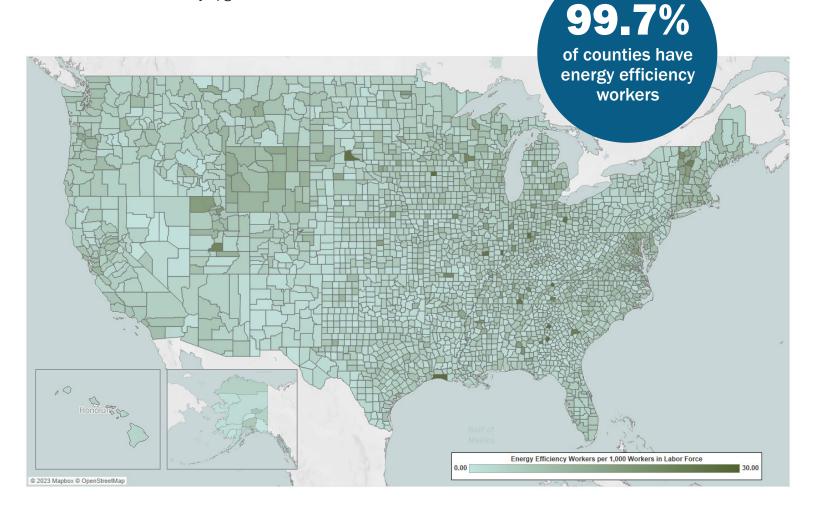
Although most **EXISTING buildings** will still be used in 2050,

80% are already 20+ years old.

U.S. Energy Information Administration and U.S. Census Bureau QuickFacts

# **ENERGY EFFICIENCY HELPS ALL LOCAL ECONOMIES**

Whether a building is old or new, opportunities to improve efficiency are always available. Design, construction, operation, and maintenance are all vital to increasing energy efficiency, and most of that work must be done by local workers, thereby creating longterm local jobs. "Mining" inefficient older buildings for big energy savings as also generates customer savings, which frees up more money to circulate in the local economy. Improved insulation, better HVAC and appliances, and new digital controls are a few of the most common key upgrades. Energy efficiency jobs are in nearly every county across the United States. These good-paying jobs can be found in rural economies, suburban developments, and in the heart of our largest cities. Investing in this industry benefits ALL local economies and communities. Wherever there are buildings, there is potential to reduce energy expenses, while creating local jobs that cannot be outsourced.



BEYOND THE BIG CITIES

# 286,208

Americans living in rural areas work in energy efficiency

# 280,388

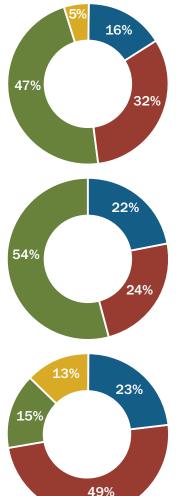
U.S. energy efficiency jobs are in counties with fewer than 100,000 residents

# 925,074

Energy efficiency jobs are outside America's top 50 metro areas

# **ENERGY EFFICIENCY WORKERS—WHERE DO THEY WORK?**

Energy efficiency professionals work in factories, offices, design studios, and data centers. They do much more than reduce energy use. They improve operations of existing buildings and design and build a better future. Squeezing out energy waste drives job creation. Most U.S. energy efficiency jobs are related to construction in the building sector.



#### **ACROSS POSITIONS**

- Production & Manufacturing
- Installation & Repairs
- Administration, Sales, & ManagementOther

I advocate for EE & sustainable practices within the museum field. Angela Moore,

Angela Moore, Missouri Historical Society, University City, MO

I push our construction

mindful of energy usage.

Carson Smith, Turner Construction Company,

Atlanta, GA

site teams to be



#### ACROSS INDUSTRIES

Manufacturing & Trade
Professional Services & Other\*

Construction

\*Professional services include finance/accounting, architecture, engineering, R&D, etc.; "other" includes maintenance, and business and nonprofit organizations

#### **ACROSS TECHNOLOGIES**

- ENERGY STAR Appliances
   & Efficient Lighting
- HVAC\*
- Building Materials & Insulation
   Other\*\*

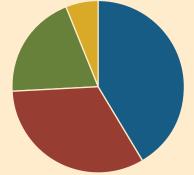
\*Heating, Ventilation, Air Conditioning of higher-than-standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services We develop and manufacture HVAC ducting products that reduce leakage. Doug Gudenbur, DMI Companies, Finleyville, PA



**#FacesOfEE** 

## SMALL BUSINESSES FUEL SUCCESS ACROSS AMERICA

There are **381,527** energy efficiency establishments in the U.S.



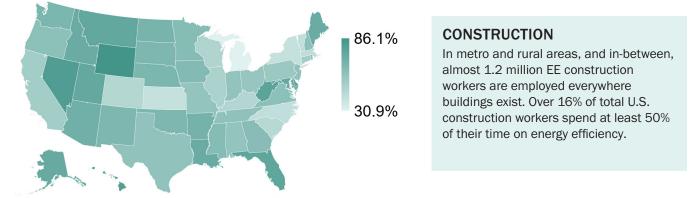
1-4 Employees: 42% 5-19 Employees: 33% 20-99 Employees: 20% 100+ Employees: 6%

# WORKFORCE NEEDS BY STATE: MAXIMIZING SUCCESS

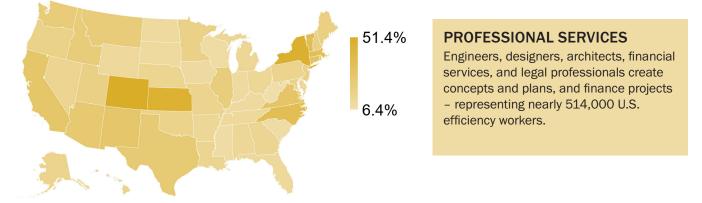
To achieve the goals of the massive investments provided by IIJA and IRA, the EE workforce will need to grow significantly. How can decisionmakers best match EE workforce training with job paths, to better serve employers and potential employees?

Factoring in the distribution of current EE jobs is a good place to start. These maps provide key information to use for that strategy. While most EE jobs are in construction, many opportunities exist in manufacturing and professional services. It helps to see how they vary by state.

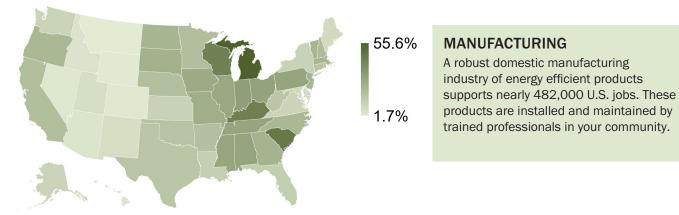
#### Percent of EE Workers Employed in Construction



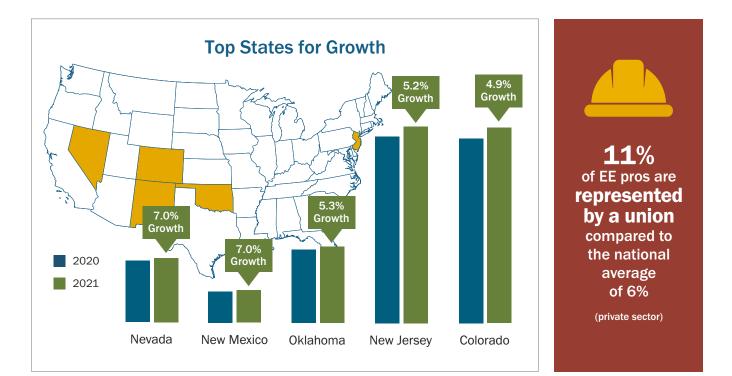
#### Percent of EE Workers Employed in Professional Services and Other



#### Percent of EE Workers Employed in Manufacturing and Trade



## **DETAILS PAINT A FULLER PICTURE**





Energy Efficiency Jobs In America 2022

## **NO BETTER TIME TO BUILD WORKFORCE DIVERSITY**

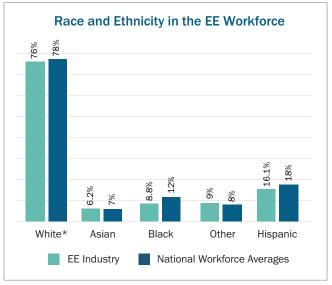
Demographic data is crucial for measuring progress in the EE sector. With historic investments in clean energy workforce development through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, this year marks a new opportunity to increase diversity as we grow the industry.

Boosting diversity in hiring practices is key to expanding a future workforce of skilled professionals, and to ensuring that all U.S. residents are better represented in the efficiency sector. As we deploy new workforce development funding, we must also ensure that energy efficiency projects are implemented in diverse communities.

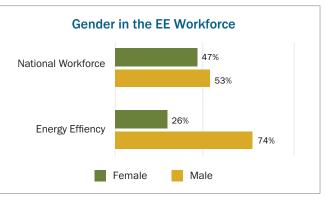
Prioritizing people of color and women for training and support will increase access to EE jobs. Ultimately, this will help to enable the longterm success of the EE industry and efforts to decarbonize our economy.

"Let's come together on energy, health, environmental and economic goals, as we tear down walls, and build bridges to economic prosperity."

-Leticia Colon de Mejias, on Efficiency For All workforce development initiatives

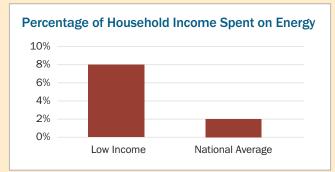


\*Includes non-Hispanic and Hispanic whites.



Note: Due to this report's reliance on federal agency data, non-binary gender data is missing. Greater representation of people of all gender identities and expressions in energy efficiency will create a stronger industry.

## **ENERGY EFFICIENCY HELPS TO ADDRESS ENERGY BURDENS**



Low-Income Households, Communities of Color Face High "Energy Burden" Entering Recession. <u>American Council for an Energy-Efficient Economy (ACEEE)</u> Low-income households and households of color consistently spend a large portion of their income on energy bills (and are therefore saddled with a larger "energy burden"). Weatherization upgrades, including thermal efficiency measures like insulation, can reduce these burdens by 25%. Too few households historically receive such upgrades. More attention and increased resources can help.

# THE ENERGY EFFICIENCY WORKFORCE: REAL PEOPLE, ADDING ENORMOUS VALUE



Yvette Maskrey Honeywell Smart Energy Honolulu, Hl

"Energy efficiency is a significant factor in working towards global resiliency."



Martins Pecholcs Accella Polyurethane Systems Cottonwood Heights, UT

"Saving energy is one of the most important objectives we all face. I manage regional sales of spray foam to save energy and reduce utility bills.".



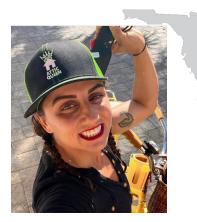
**Brandon Walker** Positive & Productive Innovations Belleville, IL

"I'm the sustainability coordinator, and we help families and businesses establish the best sustainability and EE solutions available."



**Patrick Addler** ThermAir Systems Phoenix, AZ

"We work with owners, engineers, and contractors to design and build commercial buildings. My team finds methods to reduce overall building electric loads."



**Jessica Azarelo** Attic Queen, LLC Tampa, FL

"There is no better feeling than a customer reaching out after a job is complete to say how much better they feel, how much more comfortable they are in their home or how much money they've saved."



**Renee Clair** Johnson Controls Williams Bay, WI

"I work on promoting EE through leadership programs and on regulatory advocacy for our product teams."

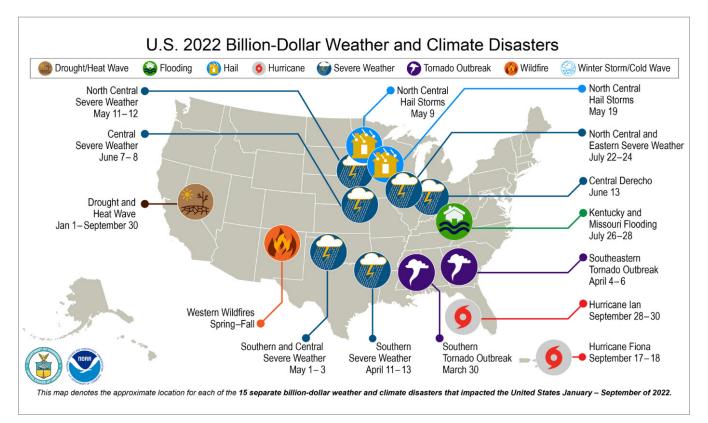
## **RESILIENCE MATTERS: EFFICIENT BUILDINGS CAN HELP**

Storm damage, heat waves, and extreme weather impact more lives each year. During severe events people rely on buildings in order to survive—so it matters how well they stand up. Many buildings were not designed for the harsh conditions now becoming commonplace. Damage can result in uninhabitable homes, and cause sustained power outages. Repair costs are high.

However, help is available: Constructing new buildings using stronger energy codes is one solution. Another is fixing older buildings. Both approaches reduce damage and increase safety and comfort. Well-constructed homes enable occupants to remain safe during extended power outages. Updated heating and cooling systems, and better insulation to help prevent energy loss, maximize resilience.

Almost 80% of existing U.S. homes were built before 2000.\* Retrofitting them for efficiency will also make them more resilient in the face of severe weather. Construction codes put in place to reduce risk of disaster also complement efficiency codes. For example, windows required to meet "wind codes" are also more highly efficient windows. Addressing multiple resilience factors provides building owners and communities with maximum benefits.\*\*

Efficient, resilient buildings can save lives and reduce the severity of property loss. Smart leaders support commitments to follow up-to-date international building codes, and to enforce compliance of those provisions.



Sources: Axios; map: National Oceanic and Atmospheric Administration

Statistics as of 10/11/22; United States suffered 15 events with losses exceeding \$1 billion each, resulting in the deaths of 342 people; for comparison, in 1980–2021 the annual average was 7.7 events and for 2017–21 it is 17.8 events (CPI-adjusted).

\*Energy Information Administration

\*\*Energy Efficiency: A Critical Component to Preparedness for Extreme Weather

# **POLICY LEADERSHIP**

Energy efficiency saves money, reduces emissions, improves air quality and public health, and makes us more energy independent—while also tackling climate change and creating jobs. The Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA) included historic investments aimed at advancing energy efficiency across the country. The effective implementation of the energy efficiency provisions in IRA and IIJA, and the continued funding for government-led energy efficiency activities, are both crucial to realizing the benefits of this critical energy source.



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

#### Maintain robust funding for proven federal energy efficiency programs, including:

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

#### **Use Historic Investments Wisely**

Ensure effective implementation of key incentives and rebates included in the IRA and the IIJA for building owners, households, and public buildings to make smart property upgrades that create jobs and improve building performance, such as:

#### Inflation Reduction Act

- Commercial and residential building tax credits (179D Energy Efficient Commercial Building Deduction; 25C Energy Efficient Home Improvement Credit; 45L New Energy Efficient Home Tax Credit)
- Residential rebate programs to drive efficiency and electrification deployment and job creation for local contractors—the Home Energy Saving Performance-Based, Whole-House Retrofit (HOMES) program, and the High-Efficiency Electric Home Rebate (HEEHR) Program
- State-Based Home Energy Efficiency Contractor Training Grants to expand the EE and electrification workforce
- Greenhouse Gas Reduction Fund (GHGRF) competitive grants to mobilize financing for clean energy and climate projects that reduce emissions (may include efficiency)
- Green and Resilient Retrofit program to support energy and water efficiency, and climate resilience of HUDassisted multifamily properties
- Funding for the General Services Administration to invest in low-carbon, high performance green buildings

#### Infrastructure Investment and Jobs Act

- Energy Auditor Training grant program for states to train individuals to conduct energy audits or conduct surveys of commercial and residential buildings
- Energy Efficiency Revolving Loan Fund Capitalization Grant Program for states to establish revolving loan funds in support of loans and grants for EE audits, upgrades, and retrofits to increase building efficiency

#### Support other policy initiatives to further advance energy efficiency nationwide, including:

- Programs focused on resilience, energy efficiency, and air quality in public buildings
- Tax credits and rebates for U.S. manufacturing of energy efficient appliances and technologies
- Stronger building and appliance efficiency standards, with training and enforcement
- ENERGY STAR, which helps people make smart energy choices
- Energy audits, technical assistance, and financing options for large manufacturers
- Directing FEMA (Federal Emergency Management Agency) to ensure that rebuilding complies with updated international building codes and advances energy efficiency

#### Advance and prioritize diversity, equity, and inclusion in federal energy efficiency programs:

- Strengthen workforce development and apprenticeship programs for the EE sector
- Create a workforce grant program to help organizations and small businesses hire and train new EE employees with a focus on equity, diversity, and inclusion
- Increase grants and financing to deploy more efficiency projects in underserved communities that often carry greater energy burdens while developing career opportunities for local workers

#### State and local leaders can keep energy efficiency jobs growing.

#### Leaders can:

- Adopt high efficiency and indoor air quality standards for new construction and existing buildings, leveraging IRA funds to support assistance for the latest (net zero) building energy code adoption for state and local governments
- Adopt energy benchmarking and reporting requirements for existing buildings
- Incorporate broader use of performance contracting in public buildings
- Advance commercial property assessed clean energy (PACE) programs
- Modernize regulations to ensure transparent and comprehensive cost-effectiveness evaluations; align utility incentives with investments in efficiency
- Invest in advanced infrastructure to enable interval data analytics of energy use, and to boost resilience

# **ABOUT THE REPORT**

The 2021 job numbers come from the national 2022 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. The 2022 USEER also relies on a unique supplemental survey of 33,000 business representatives across the U.S. 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. See appendix C of the USEER for complete methodology details.

For questions regarding this report, visit the 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.



#### ABOUT E2

E2 is a national, nonpartisan group of business leaders, investors and other professionals from every sector of the economy who advocate for smart policies that are good for the environment and good for the economy. E2 members have founded or funded more than 2,500 companies, created more than 600,000 jobs and control more than \$100 billion in private and venture capital equity. Visit 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, Maine, New Hampshire, California, Vermont, Iowa, Rhode Island, Florida, Connecticut, Pennsylvania, and Missouri, among others.

# Alabama Energy Efficiency Jobs in America

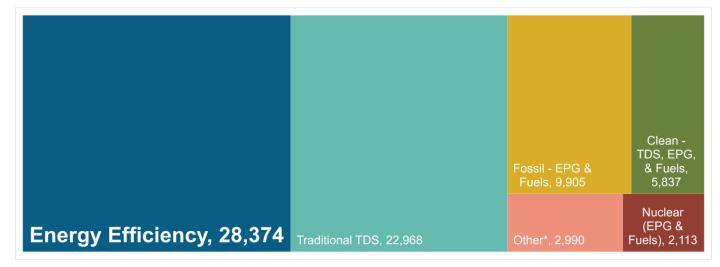


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Alabama's energy sectors compare?

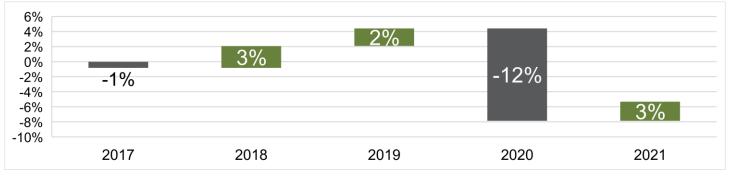
Energy Efficiency is the largest energy sector in Alabama



TDS = Transmission, Distribution & Storage EPG = Electric Power Generation

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

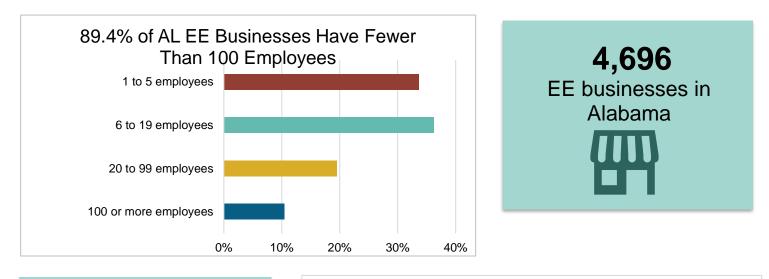
#### How is the EE industry growing in Alabama?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

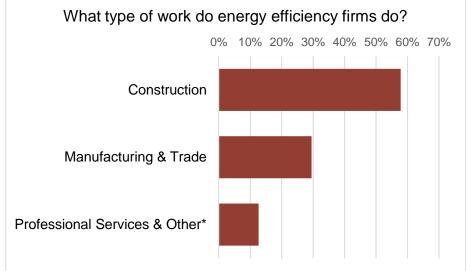


### What does EE look like in Alabama?

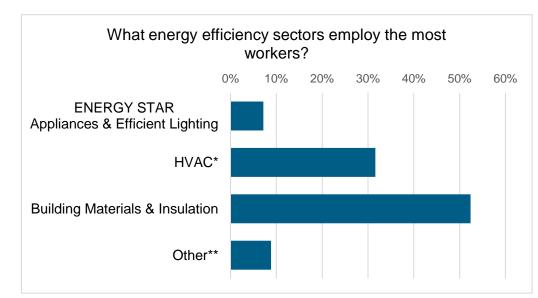


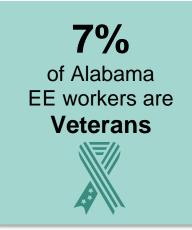
EE construction workers comprise **17%** of Alabama's construction workforce





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





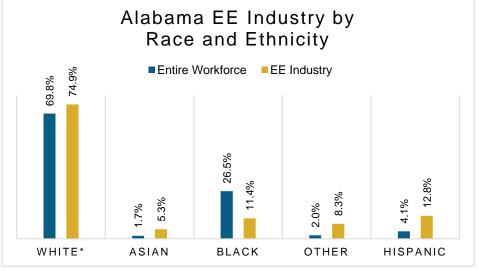
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services



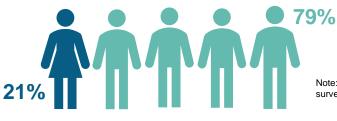
## How is EE doing on diversity in Alabama?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



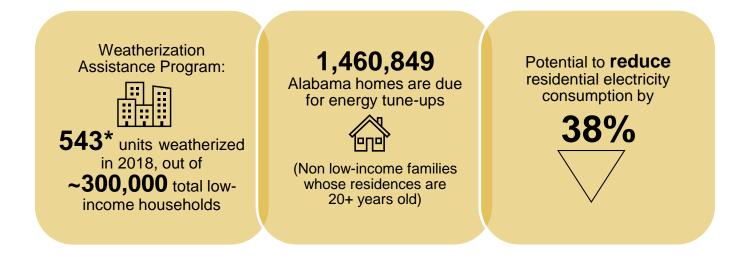
\*Includes non-Hispanic and Hispanic whites.



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.

Alabama's EE Potential

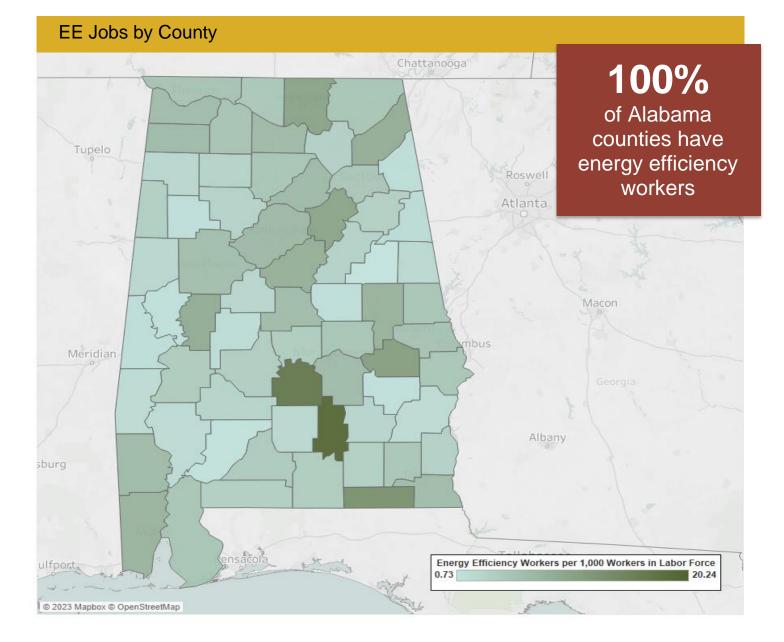
### Decades of work ready for Alabama's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) <u>Platform</u>



## Energy Efficiency Jobs are Everywhere



Metropolitan Areas						
Area	Jobs	Area	Jobs			
Anniston-Oxford	513	Gadsden	486			
Auburn-Opelika	644	Huntsville	2,992			
Birmingham-Hoover	8,558	Mobile	3,077			
Columbus	207	Montgomery	2,488			
Decatur	804	Tuscaloosa	1,125			
Dothan	949	Rural	5,638			
Florence-Muscle Shoals	892					



		Jobs by Cou	inty		
County	Jobs	County	Jobs	County	Jobs
Autauga County	104	Dallas County	98	Marion County	62
Baldwin County	904	DeKalb County	420	Marshall County	300
Barbour County	35	Elmore County	224	Mobile County	2,842
Bibb County	27	Escambia County	103	Monroe County	15
Blount County	130	Etowah County	339	Montgomery County	1,838
Bullock County	<10	Fayette County	13	Morgan County	756
Butler County	34	Franklin County	160	Perry County	<10
Calhoun County	340	Geneva County	147	Pickens County	19
Chambers County	94	Greene County	<10	Pike County	90
Cherokee County	18	Hale County	48	Randolph County	25
Chilton County	126	Henry County	29	Russell County	149
Choctaw County	15	Houston County	693	St. Clair County	422
Clarke County	35	Jackson County	171	Shelby County	1,555
Clay County	<10	Jefferson County	5,361	Sumter County	<10
Cleburne County	10	Lamar County	28	Talladega County	212
Coffee County	130	Lauderdale County	351	Tallapoosa County	223
Colbert County	338	Lawrence County	58	Tuscaloosa County	1,236
Conecuh County	28	Lee County	743	Walker County	123
Coosa County	<10	Limestone County	281	Washington County	50
Covington County	107	Lowndes County	100	Wilcox County	16
Crenshaw County	124	Macon County	105	Winston County	58
Cullman County	338	Madison County	4,665	N/A	1,012
Dale County	188	Marengo County	67		





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

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 <u>www.e2.org.</u>

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 <u>www.bwresearch.com</u>.

Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

For questions on E4TheFuture analyses please email: policy@e4thefuture.org.

# Alaska **Energy Efficiency Jobs in America**

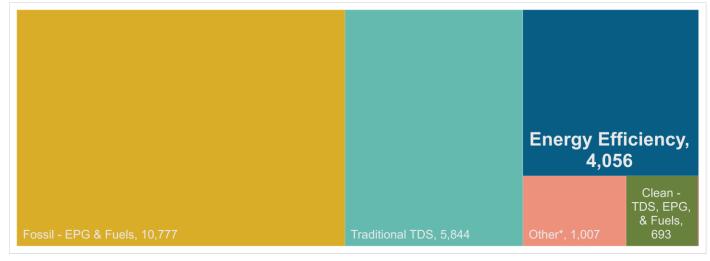


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Alaska's energy sectors compare?

Energy Efficiency is the third largest energy sector in Alaska

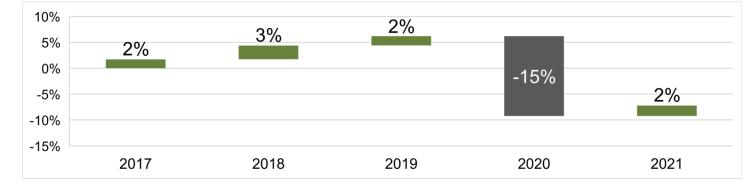


TDS = Transmission, Distribution & Storage EPG = Electric Power Generation

Nuclear (EPG & Fuels), < 12

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

#### How is the EE industry growing in Alaska?

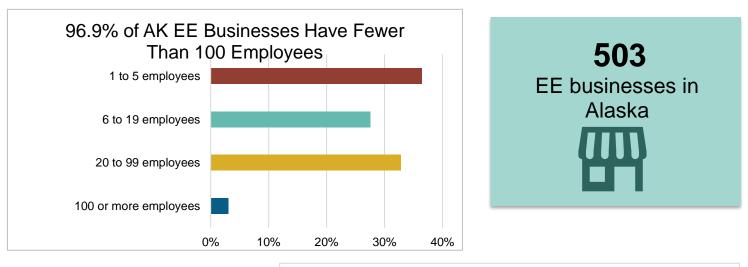


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

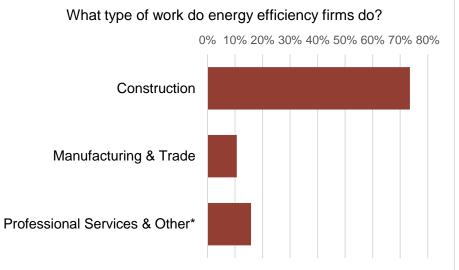


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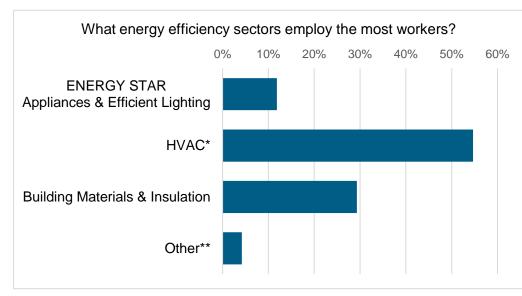
## What does EE look like in Alaska?



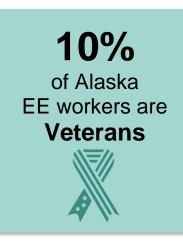
EE construction workers comprise **21%** of Alaska's construction workforce



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



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

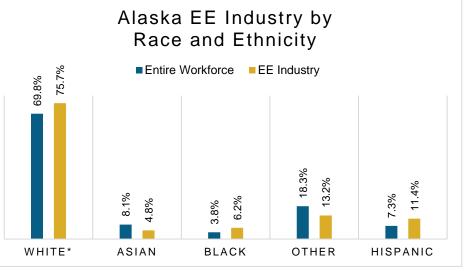




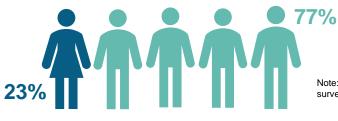
## How is EE doing on diversity in Alaska?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



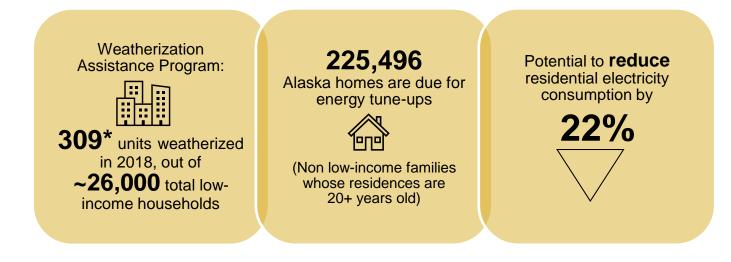
\*Includes non-Hispanic and Hispanic whites.



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.

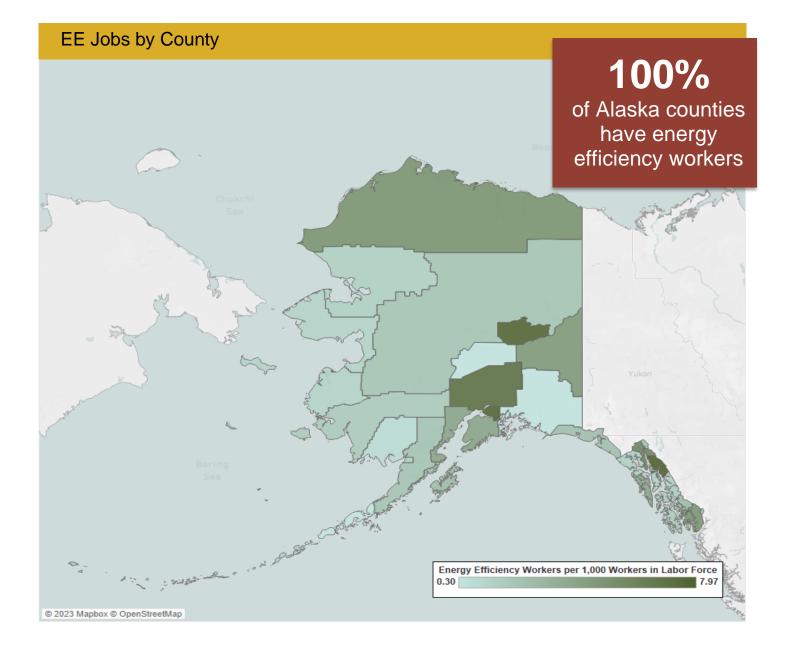
### Alaska's EE Potential

#### Decades of work ready for Alaska's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## Energy Efficiency Jobs are Everywhere



Metropolitan Areas						
	Area	Jobs				
	Anchorage	2,321				
	Fairbanks	505				
	Rural	1,229				



		Jobs by County			
County	Jobs	County	Jobs	County	Jobs
Aleutians East Borough County	<10	Juneau Borough County	283	Petersburg Borough County	<10
Aleutians West Census Area County	10	Kenai Peninsula Borough County	185	Prince of Wales-Hyder Census Area County	<10
Anchorage Borough County	2,204	Ketchikan Gateway Borough County	76	Sitka Borough County	35
Bethel Census Area County	26	Kodiak Island Borough County	30	Skagway Municipality County	<10
Bristol Bay Borough County	<10	Kusilvak Census Area County	<10	Southeast Fairbanks Census Area County	27
Denali Borough County	<10	Lake and Peninsula Borough County	<10	Valdez-Cordova Census Area County	27
Dillingham Census Area County	<10	Matanuska-Susitna Borough County	403	Wrangell City and Borough County	<10
Fairbanks North Star Borough County	542	Nome Census Area County	10	Yakutat Borough County	<10
Haines Borough County	13	North Slope Borough County	99	Yukon-Koyukuk Census Area County	10
Hoonah-Angoon Census Area County	<10	Northwest Arctic Borough County	<10	N/A	19





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Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

For questions on E4TheFuture analyses please email: policy@e4thefuture.org

# Arizona Energy Efficiency Jobs in America

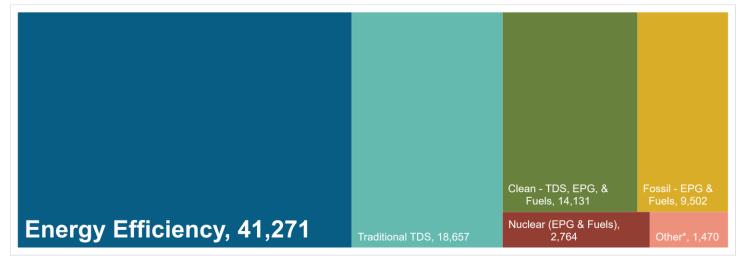


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Arizona's energy sectors compare?

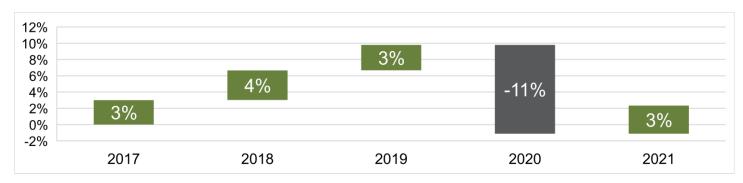
Energy Efficiency is the largest energy sector in Arizona



TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others

### How is the EE industry growing in Arizona?

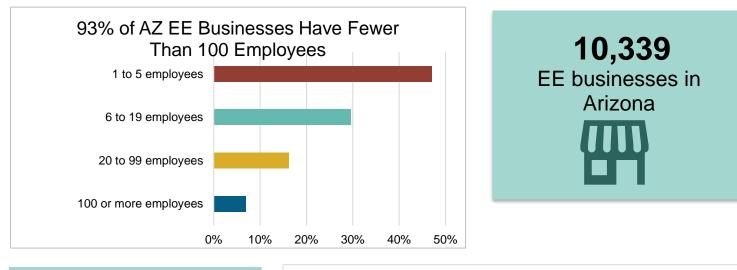


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



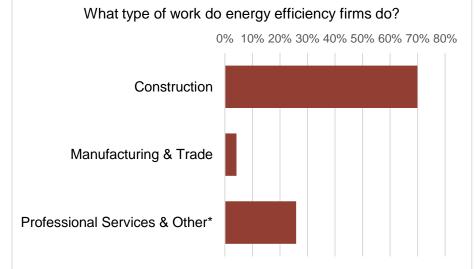
Presented by:

### What does EE look like in Arizona?

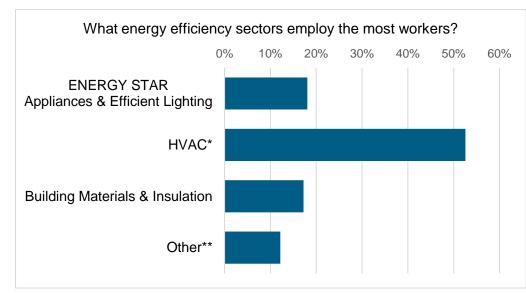


EE construction workers comprise **16%** of Arizona's construction workforce

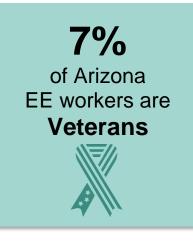




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



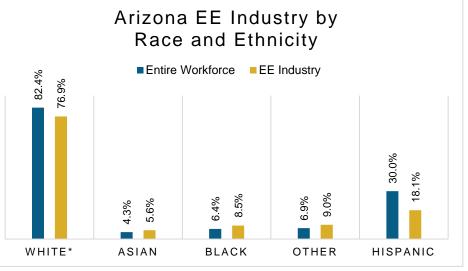
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services



## How is EE doing on diversity in Arizona?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



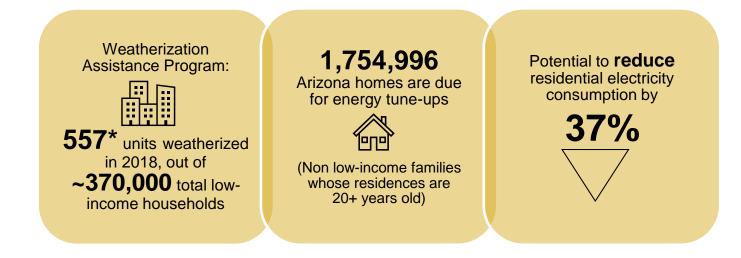
25% 75%

\*Includes non-Hispanic and Hispanic whites.

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.

### Arizona's EE Potential

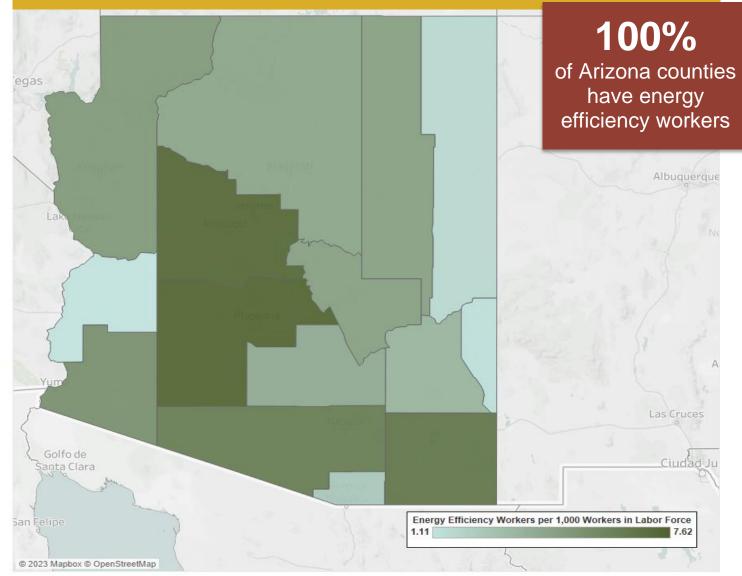
#### Decades of work ready for Arizona's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## Energy Efficiency Jobs are Everywhere

#### EE Jobs by County



Metropolitan Areas						
Area	Jobs					
Flagstaff	909					
Lake Havasu City-Kingman	933					
Phoenix-Mesa-Scottsdale	30,741					
Prescott	1,229					
Tucson	5,431					
Yuma	552					
Rural	1,475					



Jobs by County						
County	Jobs	County	Jobs			
Apache County	55	Mohave County	526			
Cochise County	437	Navajo County	245			
Coconino County	532	Pima County	4,764			
Gila County	128	Pinal County	535			
Graham County	69	Santa Cruz County	67			
Greenlee County	14	Yavapai County	958			
La Paz County	13	Yuma County	689			
Maricopa County	31,966	N/A	272			



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# Arkansas Energy Efficiency Jobs in America

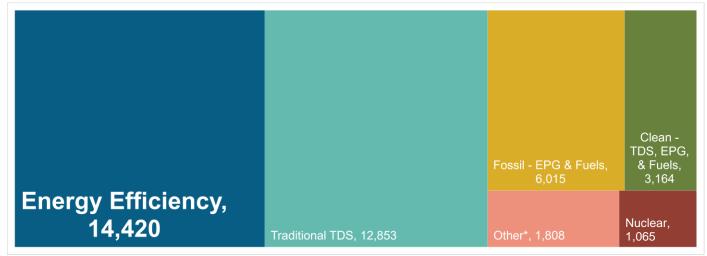


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Arkansas's energy sectors compare?

Energy Efficiency is the largest energy sector in Arkansas

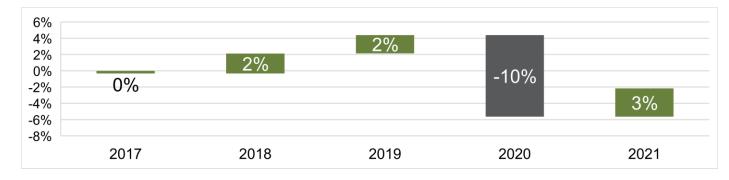


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear = includes EPG & Fuels \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

#### How is the EE industry growing in Arkansas?

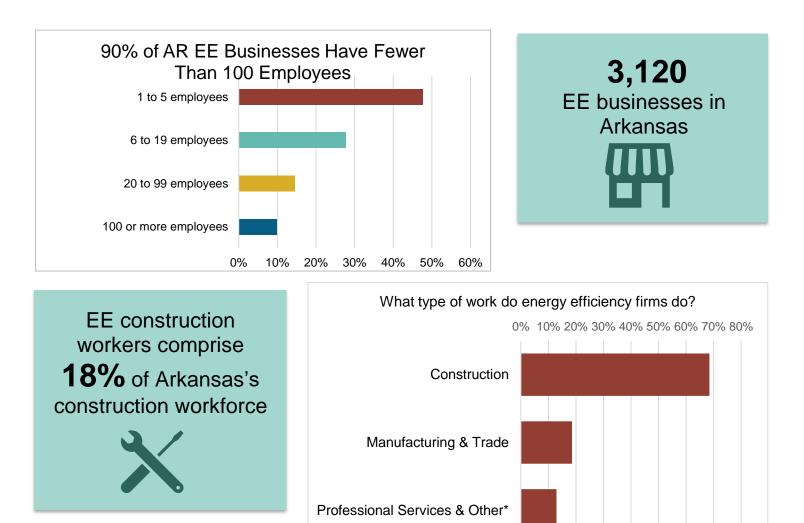


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

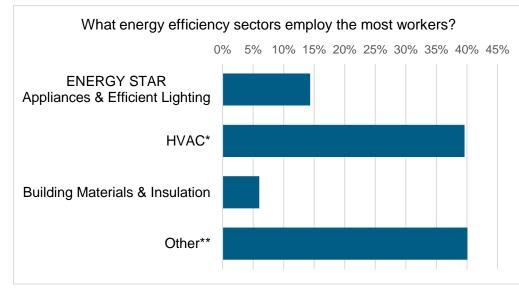


Presented by:

## What does EE look like in Arkansas?



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



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8%

of Arkansas

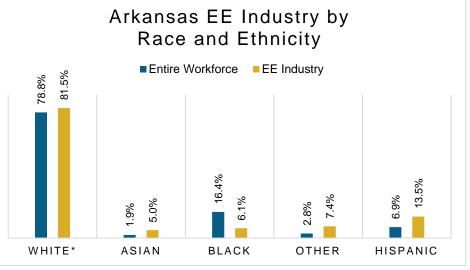
EE workers are

Veterans

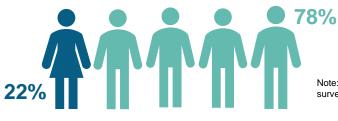
## How is EE doing on diversity in Arkansas?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Arkansas communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



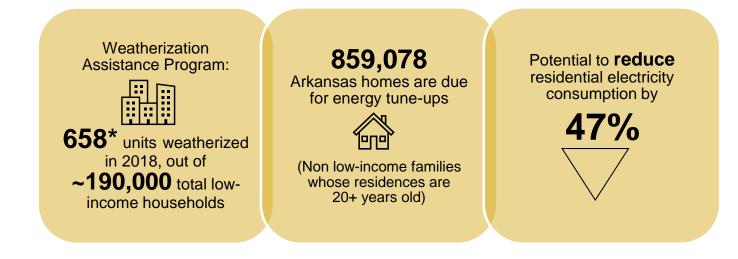
\*Includes non-Hispanic and Hispanic whites.



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### Arkansas's EE Potential

#### Decades of work ready for Arkansas's growing energy efficiency workforce.

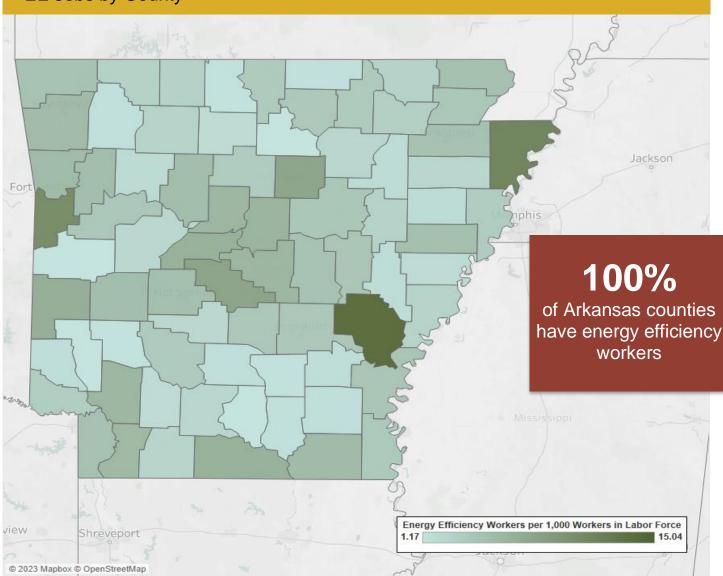


\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



## Energy Efficiency Jobs are Everywhere

EE Jobs by County



Metropolitan Areas						
Area	Jobs	Area	Jobs			
Fayetteville-Springdale- Rogers	2,448	Texarkana	200			
Fort Smith	1,389	Rural	4,209			
Hot Springs	565					
Jonesboro	699					
Little Rock-North Little Rock-Conway	4,108					
Memphis	477					
Pine Bluff	324					



County	Jobs	County	Jobs	County	Jobs
Arkansas County	323	Greene County	143	Pike County	<10
Ashley County	71	Hempstead County	101	Poinsett County	29
Baxter County	131	Hot Spring County	42	Polk County	87
Benton County	1,349	Howard County	16	Pope County	281
Boone County	93	Independence County	90	Prairie County	14
Bradley County	12	Izard County	24	Pulaski County	3,222
Calhoun County	<10	Jackson County	22	Randolph County	37
Carroll County	77	Jefferson County	227	St. Francis County	74
Chicot County	23	Johnson County	39	Saline County	453
Clark County	67	Lafayette County	13	Scott County	<10
Clay County	32	Lawrence County	28	Searcy County	<10
Cleburne County	110	Lee County	<10	Sebastian County	1,481
Cleveland County	<10	Lincoln County	10	Sevier County	18
Columbia County	46	Little River County	23	Sharp County	31
Conway County	90	Logan County	46	Stone County	<10
Craighead County	548	Lonoke County	153	Union County	236
Crawford County	225	Madison County	11	Van Buren County	31
Crittenden County	122	Marion County	11	Washington County	1,368
Cross County	19	Miller County	129	White County	233
Dallas County	<10	Mississippi County	415	Woodruff County	12
Desha County	42	Monroe County	<10	Yell County	33
Drew County	21	Montgomery County	15	N/A	592
Faulkner County	565	Nevada County	<10		
Franklin County	55	Newton County	<10		
Fulton County	<10	Ouachita County	45		
Garland County	401	Perry County	14		
Grant County	38	Phillips County	28		



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# California Energy Efficiency Jobs in America

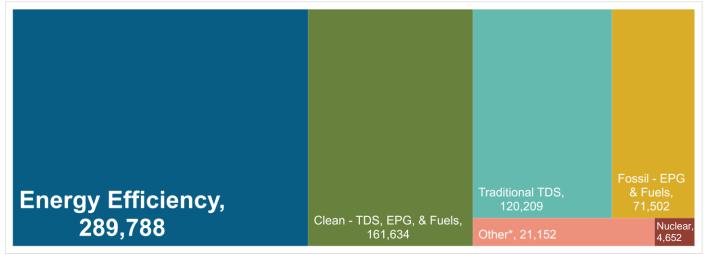


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do California's energy sectors compare?

Energy Efficiency is the largest energy sector in California

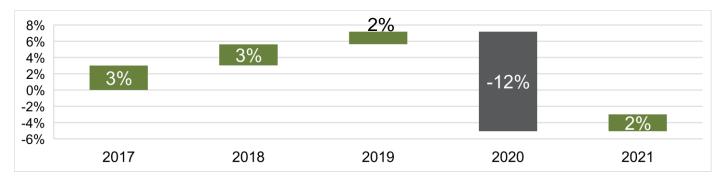


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear = Includes EPG & Fuels \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

#### How is the EE industry growing in California?

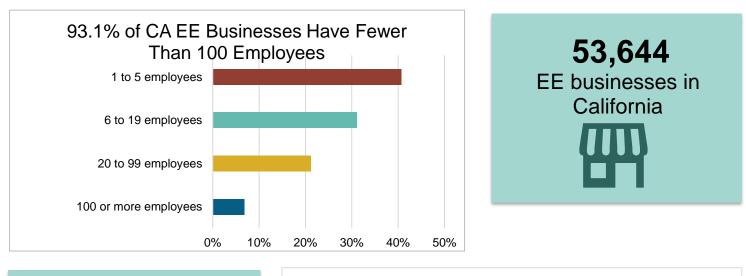


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



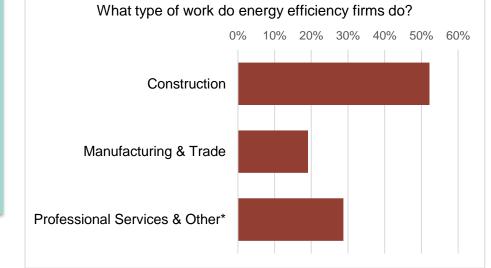
Presented by:

### What does EE look like in California?

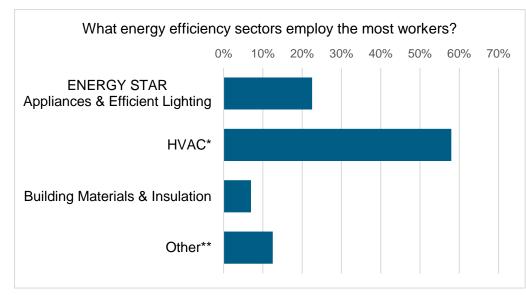


EE construction workers comprise **17%** of California's construction workforce

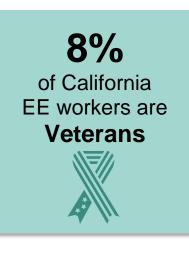




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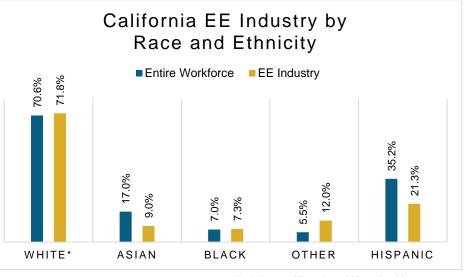




## How is EE doing on diversity in California?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



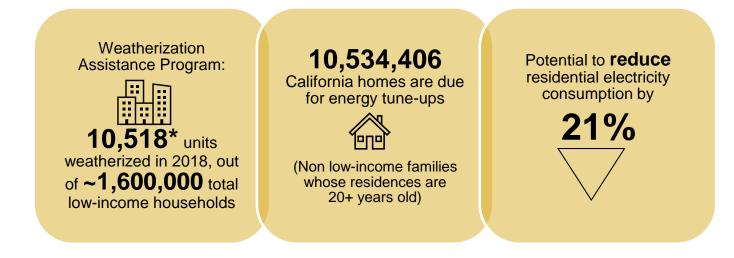
\*Includes non-Hispanic and Hispanic whites.



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.

### California's EE Potential

#### Decades of work ready for California's growing energy efficiency workforce.



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		Metropolitan Areas	S		
Area	Jobs	Area	Jobs	Area	Jobs
Bakersfield	4,415	Napa	1,325	San Luis Obispo-Paso Robles	5,316
Chico	1,829	Oxnard-Thousand Oaks- Ventura	5,573	Santa Barbara-Santa Maria- Goleta	4,785
El Centro	667	Redding	1,552	Santa Cruz-Watsonville	2,398
Fresno	5,620	Riverside-San Bernardino- Ontario	21,679	Santa Rosa-Petaluma	5,893
Hanford-Corcoran	370	Sacramento-Arden-Arcade- Roseville	17,671	Stockton	3,408
Los Angeles-Long Beach- Santa Ana	86,005	Salinas	2,574	Vallejo-Fairfield	1,746
Madera	623	San Diego-Carlsbad-San Marcos	31,691	Visalia-Porterville	1,742
Merced	762	San Francisco-Oakland- Fremont	54,479	Yuba City	718
Modesto	2,647	San Jose-Sunnyvale-Santa Clara	18,026	Rural	6,274



		Jobs by County			
County	Jobs	County	Jobs	County	Jobs
Alameda County	15,719	Marin County	2,375	San Mateo County	8,174
Alpine County	<10	Mariposa County	43	Santa Barbara County	3,082
Amador County	107	Mendocino County	315	Santa Clara County	26,62
Butte County	965	Merced County	535	Santa Cruz County	1,304
Calaveras County	161	Modoc County	19	Shasta County	883
Colusa County	31	Mono County	84	Sierra County	<10
Contra Costa County	8,028	Monterey County	1,639	Siskiyou County	115
Del Norte County	61	Napa County	1,032	Solano County	1,928
El Dorado County	1,018	Nevada County	662	Sonoma County	3,677
Fresno County	4,657	Orange County	34,415	Stanislaus County	2,410
Glenn County	55	Placer County	3,413	Sutter County	309
Humboldt County	548	Plumas County	85	Tehama County	113
Imperial County	411	Riverside County	13,038	Trinity County	12
Inyo County	54	Sacramento County	10,839	Tulare County	1,490
Kern County	3,811	San Benito County	279	Tuolumne County	185
Kings County	237	San Bernardino County	8,861	Ventura County	5,25
Lake County	139	San Diego County	29,178	Yolo County	1,167
Lassen County	49	San Francisco County	17,137	Yuba County	155
Los Angeles County	60,911	San Joaquin County	2,810	N/A	6,68
Madera County	493	San Luis Obispo County	1,988		





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# Colorado Energy Efficiency Jobs in America

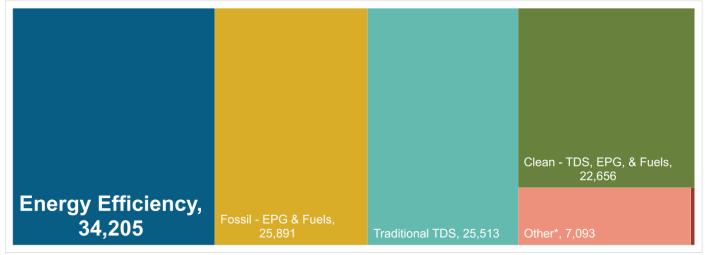


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#### How do Colorado's energy sectors compare?

Energy Efficiency is the largest energy sector in Colorado



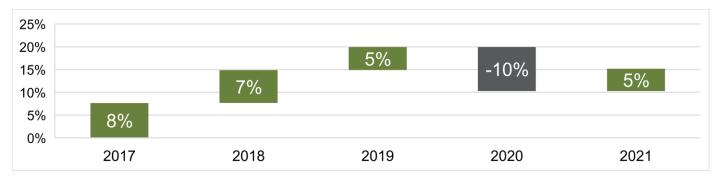
TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear (EPG & Fuels), 153

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

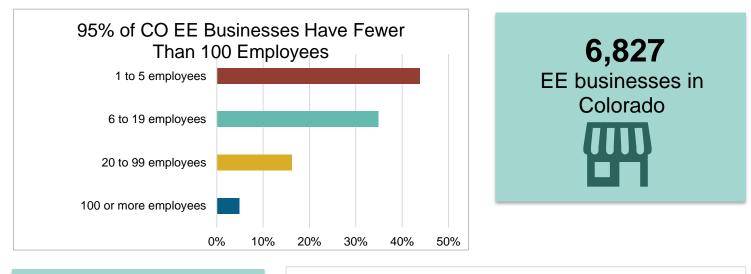
#### How is the EE industry growing in Colorado?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

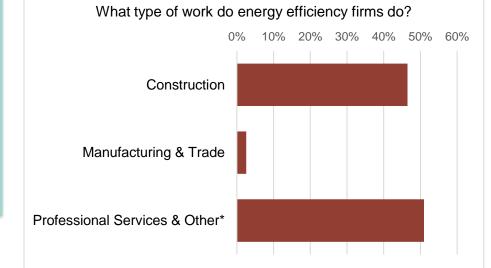


### What does EE look like in Colorado?

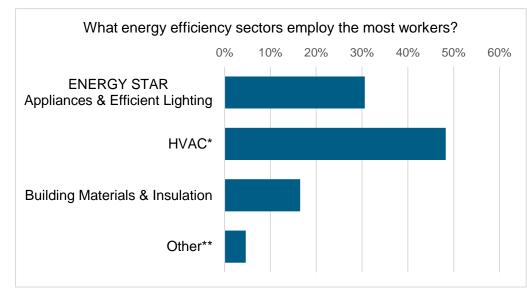


EE construction workers comprise **9%** of Colorado's construction workforce

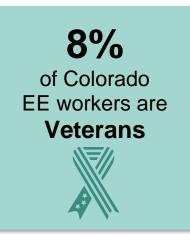




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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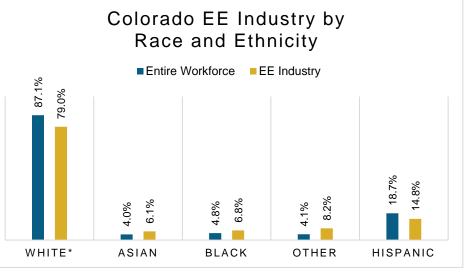




## How is EE doing on diversity in Colorado?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



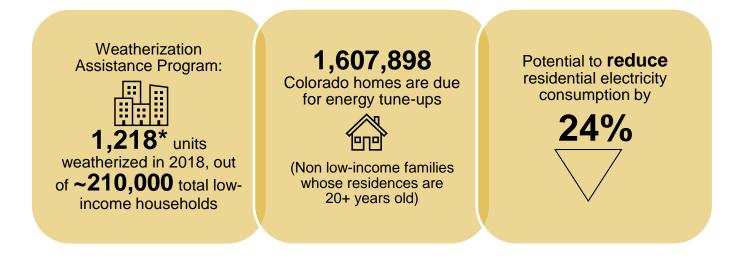
29% 71%

\*Includes non-Hispanic and Hispanic whites.

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.

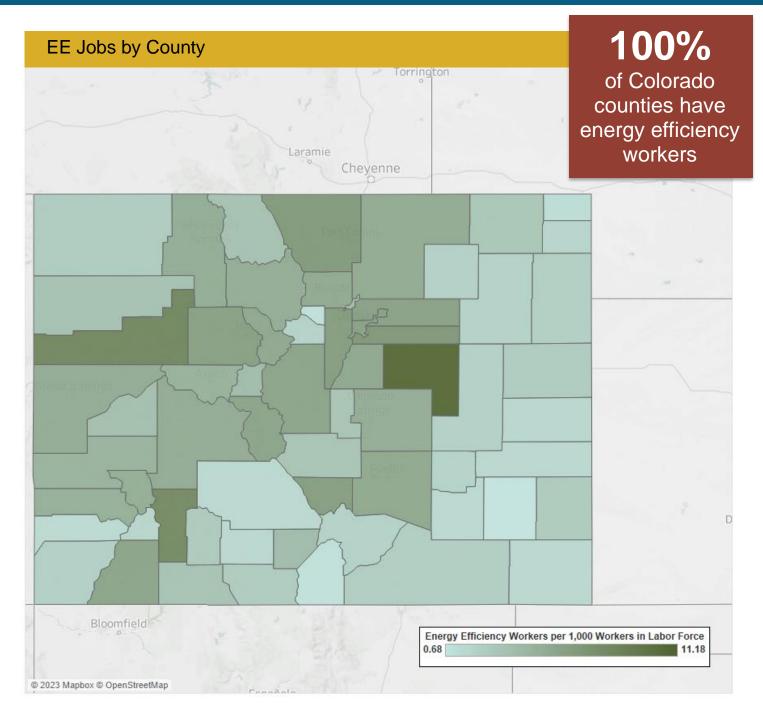
#### Colorado's EE Potential

#### Decades of work ready for Colorado's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform





Metropolitan Areas						
Area	Jobs	Area	Jobs			
Boulder	3,680	Rural	4,694			
Colorado Springs	2,831					
Denver-Aurora	18,349					
Fort Collins-Loveland	2,147					
Grand Junction	780					
Greeley	1,197					
Pueblo	527					



County	Jobs	County	Jobs	County	Jobs
Adams County	3,035	Fremont County	97	Morgan County	56
Alamosa County	69	Garfield County	468	Otero County	19
Arapahoe County	4,856	Gilpin County	<10	Ouray County	25
Archuleta County	33	Grand County	84	Park County	37
Baca County	<10	Gunnison County	103	Phillips County	<10
Bent County	<10	Hinsdale County	<10	Pitkin County	167
Boulder County	2,211	Huerfano County	<10	Prowers County	26
Broomfield County	329	Jackson County	<10	Pueblo County	740
Chaffee County	115	Jefferson County	3,342	Rio Blanco County	22
Cheyenne County	<10	Kiowa County	<10	Rio Grande County	15
Clear Creek County	14	Kit Carson County	16	Routt County	168
Conejos County	<10	Lake County	20	Saguache County	<10
Costilla County	<10	La Plata County	333	San Juan County	<10
Crowley County	<10	Larimer County	2,434	San Miguel County	62
Custer County	15	Las Animas County	25	Sedgwick County	<10
Delta County	65	Lincoln County	10	Summit County	239
Denver County	6,973	Logan County	50	Teller County	54
Dolores County	<10	Mesa County	713	Washington County	<10
Douglas County	1,674	Mineral County	<10	Weld County	1,25
Eagle County	434	Moffat County	25	Yuma County	20
Elbert County	101	Montezuma County	46	N/A	152
El Paso County	3,218	Montrose County	158		





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## Connecticut Energy Efficiency Jobs in America



Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Connecticut's energy sectors compare?

Energy Efficiency is the largest energy sector in Connecticut

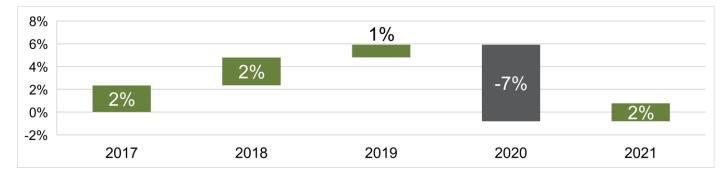


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear = includes EPG & Euels

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

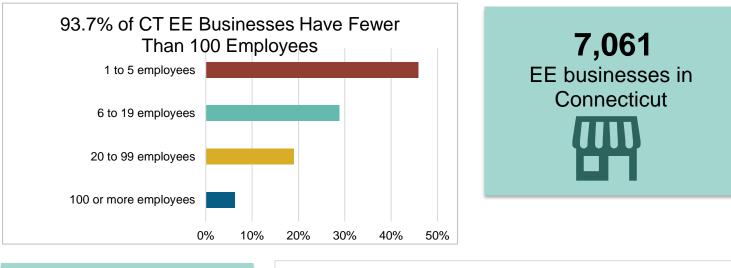
#### How is the EE industry growing in Connecticut?



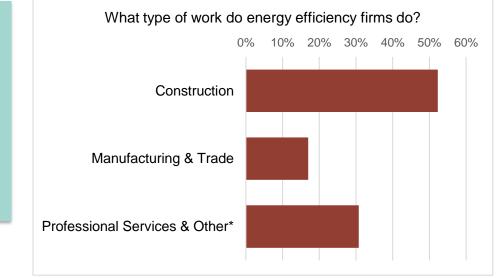
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



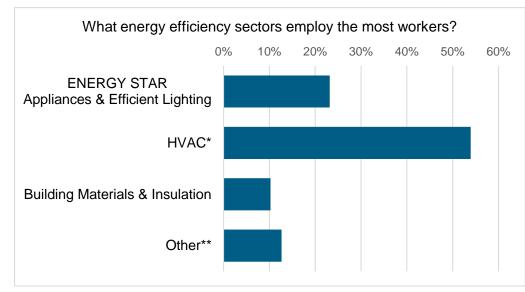
### What does EE look like in Connecticut?



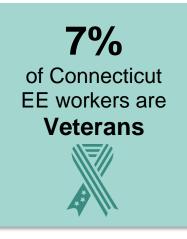
EE construction workers comprise **30%** of Connecticut's construction workforce



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



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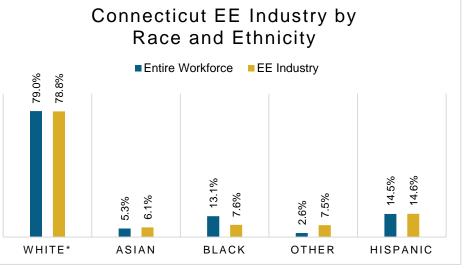




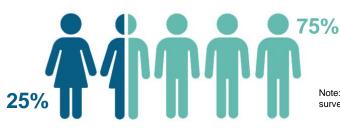
## How is EE doing on diversity in Connecticut?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



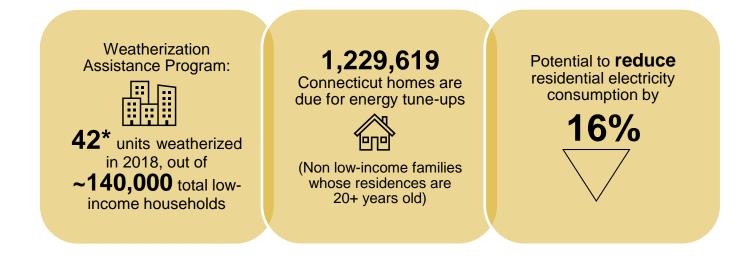
\*Includes non-Hispanic and Hispanic whites.



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.

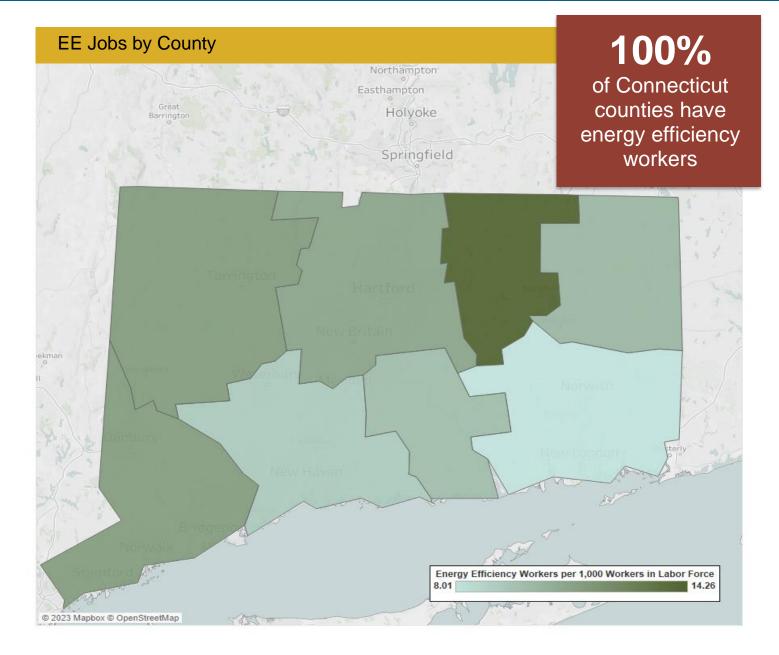
#### Connecticut's EE Potential

#### Decades of work ready for Connecticut's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform





Metropolitan Areas					
Area	Jobs				
Bridgeport-Stamford- Norwalk	11,389				
Hartford-West Hartford- East Hartford	11,684				
New Haven-Milford	6,718				
Norwich-New London	1,895				
Rural	2,419				



Jobs by County	
County	Jobs
Fairfield County	9,439
Hartford County	11,054
Litchfield County	1,432
Middlesex County	1,365
New Haven County	6,873
New London County	1,873
Tolland County	664
Windham County	414
N/A	992





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## Delaware Energy Efficiency Jobs in America

# **10,733** Total Jobs

Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Delaware's energy sectors compare?

Energy Efficiency is the largest energy sector in Delaware

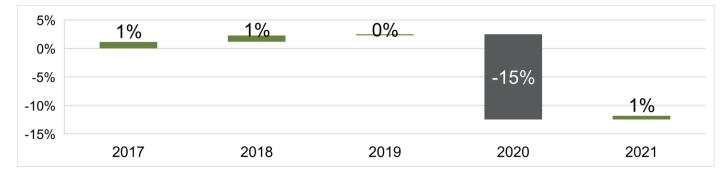


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 16

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

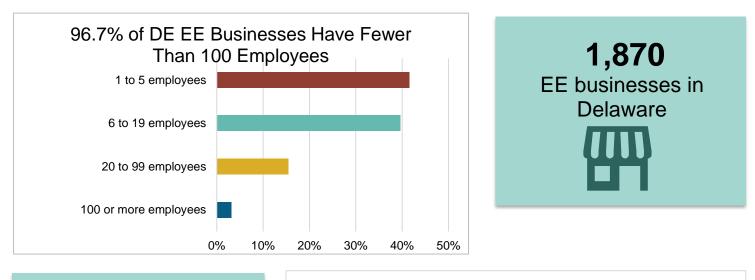
#### How is the EE industry growing in Delaware?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

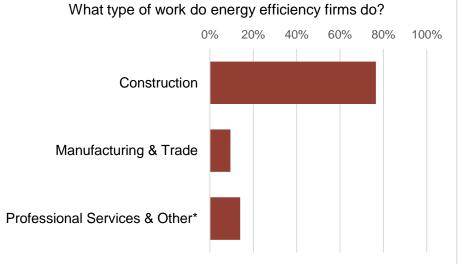


## What does EE look like in Delaware?

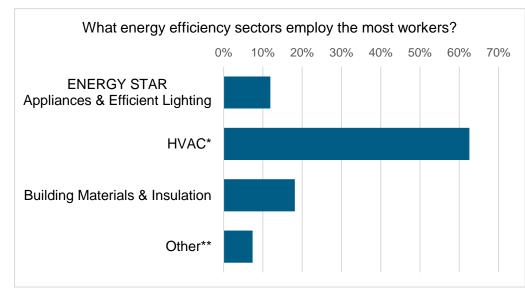


EE construction workers comprise **36%** of Delaware's construction workforce

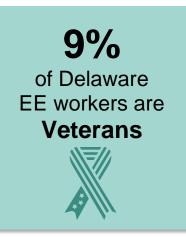




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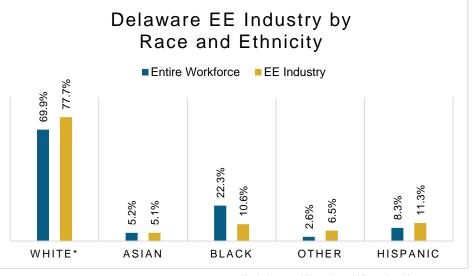




## How is EE doing on diversity in Delaware?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



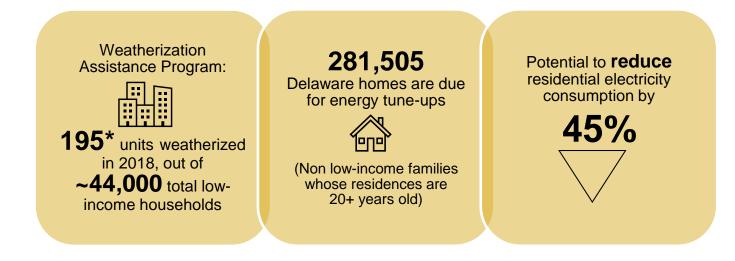
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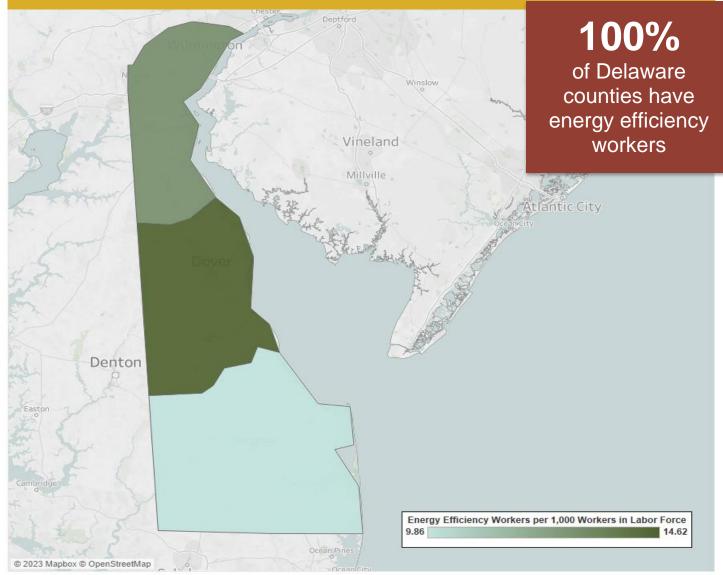
#### Delaware's EE Potential

#### Decades of work ready for Delaware's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform

#### EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Dover	1,212				
Philadelphia-Camden- Wilmington	6,907				
Rural	2,615				



Jobs by County					
County	Jobs				
Kent County	1,182				
New Castle County	7,533				
Sussex County	1,707				
N/A	311				





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## District of Columbia Energy Efficiency Jobs in America



Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do District of Columbia's energy sectors compare?

Energy Efficiency is the largest energy sector in District of Columbia

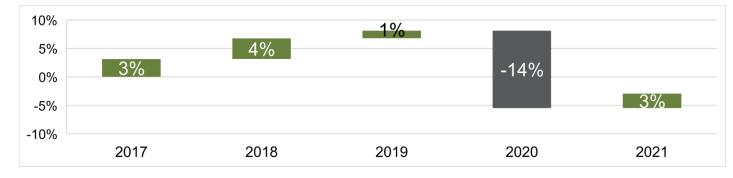


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 143

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

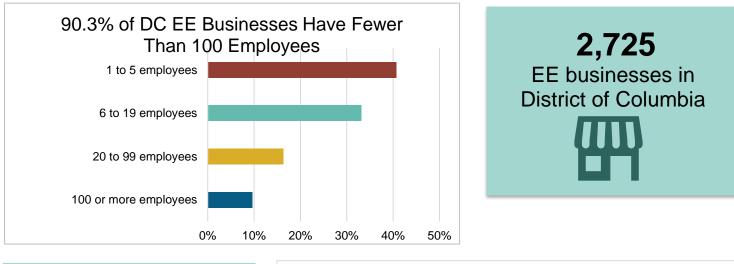
#### How is the EE industry growing in District of Columbia?



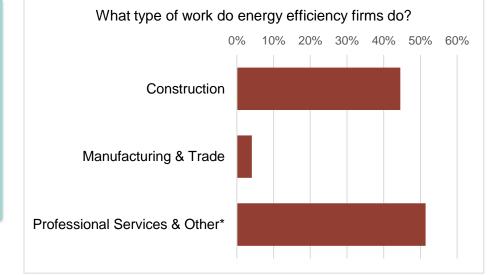
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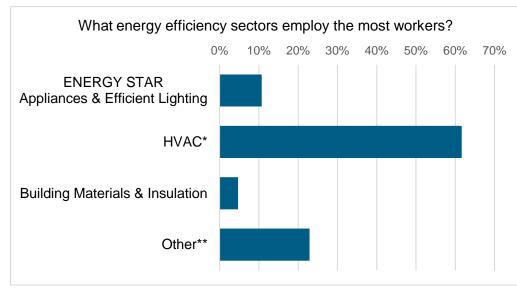
### What does EE look like in District of Columbia?



EE construction workers comprise **33%** of District of Columbia's construction workforce



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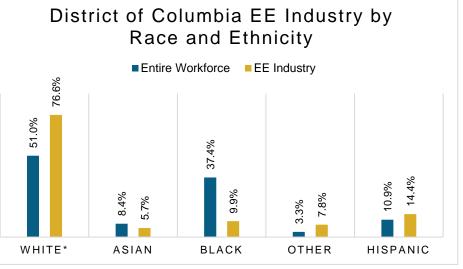
6% of District of Columbia EE workers are Veterans



### How is EE doing on diversity in District of Columbia?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



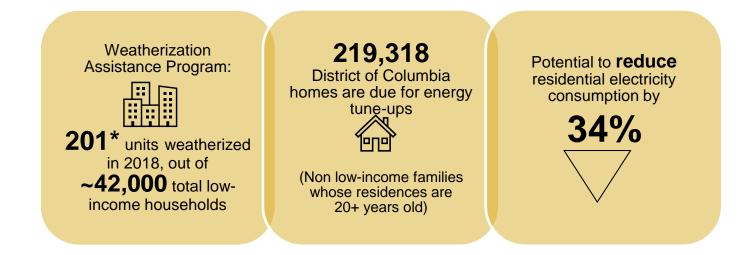
28% 72%

\*Includes non-Hispanic and Hispanic whites.

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.

#### District of Columbia's EE Potential

#### Decades of work ready for District of Columbia's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform



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# **Florida** Energy Efficiency Jobs in America

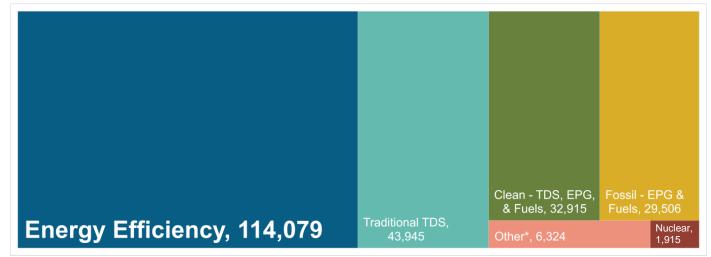


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Florida's energy sectors compare?

Energy Efficiency is the largest energy sector in Florida

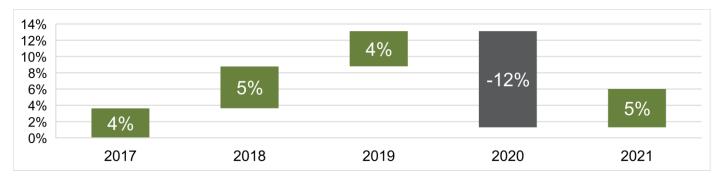


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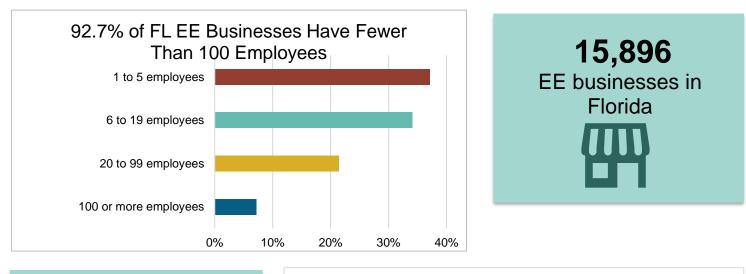
#### How is the EE industry growing in Florida?



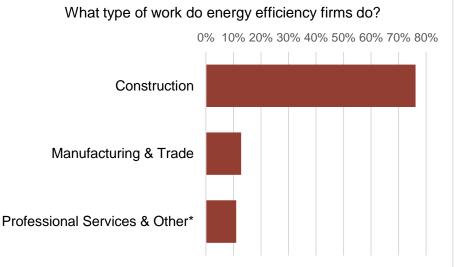
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



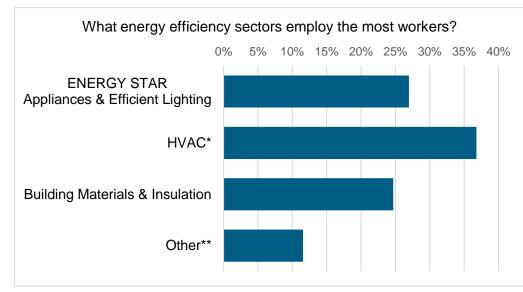
### What does EE look like in Florida?



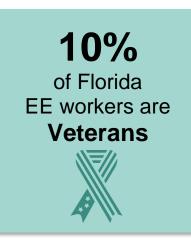
EE construction workers comprise **15%** of Florida's construction workforce



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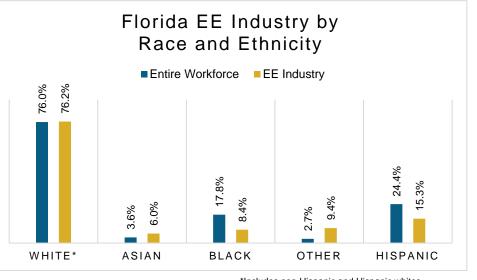




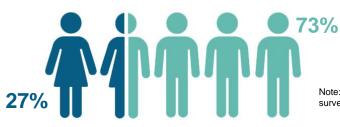
## How is EE doing on diversity in Florida?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



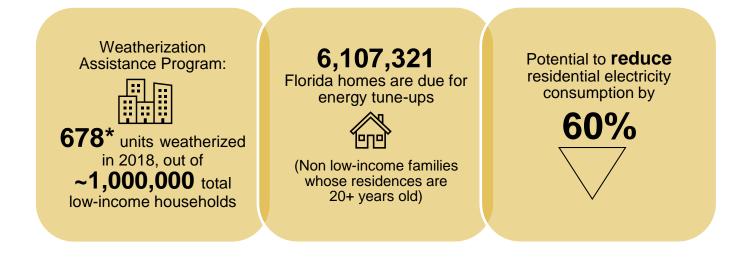
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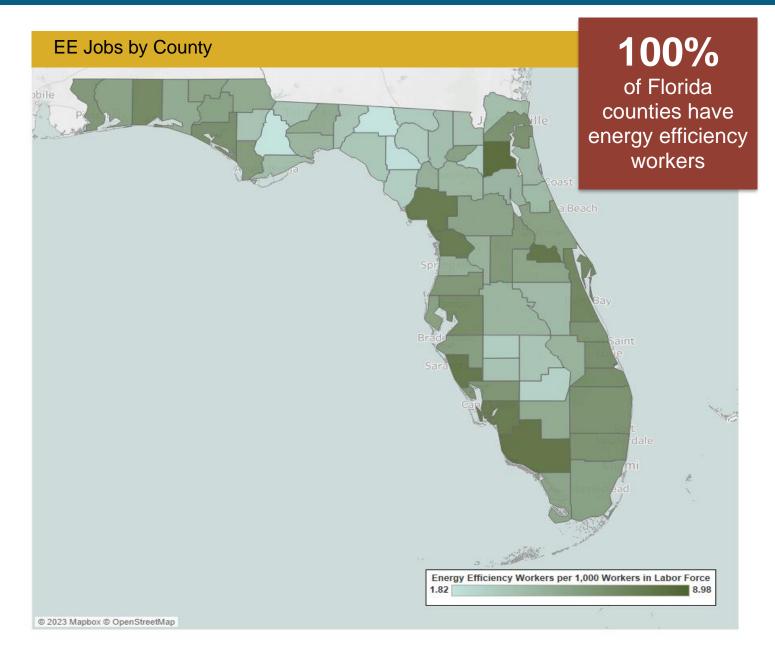
#### Florida's EE Potential

#### Decades of work ready for Florida's growing energy efficiency workforce.



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Area	Jobs	Area	Jobs	Area	Jobs
Cape Coral-Fort Myers	4,689	Orlando-Kissimmee, FL MSA	11,445	Tallahassee, FL MSA	2,266
Deltona-Daytona Beach- Ormond Beach	2,326	Palm Bay-Melbourne- Titusville, FL MSA	2,956	Tampa-St. Petersburg- Clearwater, FL	15,125
Fort Walton Beach-Crestview- Destin	1,167	Palm Coast, FL MSA	328	Rural	4,521
Gainesville	1,504	Panama City-Lynn Haven, FL MSA	962		
Jacksonville	7,798	Pensacola-Ferry Pass-Brent, FL MSA	2,282		
Lakeland	1,904	Port St. Lucie, FL MSA	2,689		
Miami-Fort Lauderdale- Pompano Beach	41,428	Punta Gorda, FL MSA	885		
Naples-Marco Island	2,501	Sarasota-Bradenton-Venice, FL MSA	4,884		
Ocala	1,491	Sebastian-Vero Beach, FL MSA	928		



County	leks	Jobs by County	1	Country	lebe
County	Jobs	County	Jobs	County	Jobs
Alachua County	1,199	Hendry County	121	Osceola County	907
Baker County	59	Hernando County	462	Palm Beach County	8,435
Bay County	1,073	Highlands County	204	Pasco County	1,655
Bradford County	38	Hillsborough County	10,465	Pinellas County	5,185
Brevard County	3,360	Holmes County	38	Polk County	2,305
Broward County	11,026	Indian River County	700	Putnam County	145
Calhoun County	23	Jackson County	142	St. Johns County	761
Charlotte County	658	Jefferson County	21	St. Lucie County	1,122
Citrus County	538	Lafayette County	<10	Santa Rosa County	470
Clay County	915	Lake County	1,328	Sarasota County	2,924
Collier County	2,570	Lee County	4,499	Seminole County	3,446
Columbia County	198	Leon County	1,615	Sumter County	358
DeSoto County	72	Levy County	143	Suwannee County	72
Dixie County	16	Liberty County	<10	Taylor County	46
Duval County	7,277	Madison County	18	Union County	37
Escambia County	1,786	Manatee County	1,545	Volusia County	2,056
Flagler County	229	Marion County	1,260	Wakulla County	57
Franklin County	30	Martin County	1,008	Walton County	342
Gadsden County	147	Miami-Dade County	13,775	Washington County	68
Gilchrist County	36	Monroe County	481	N/A	2,978
Glades County	11	Nassau County	201		
Gulf County	52	Okaloosa County	1,281		
Hamilton County	20	Okeechobee County	105		
Hardee County	40	Orange County	9,915		



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## Georgia Energy Efficiency Jobs in America

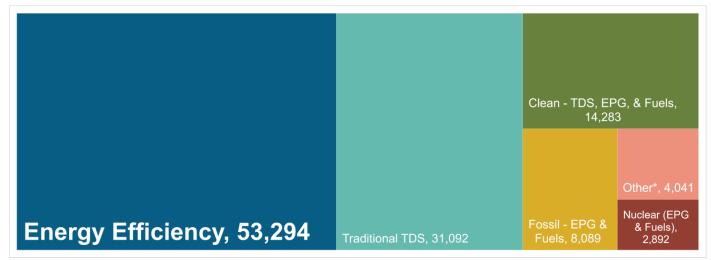


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Georgia's energy sectors compare?

Energy Efficiency is the largest energy sector in Georgia

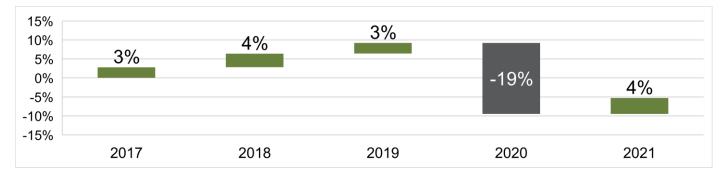


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

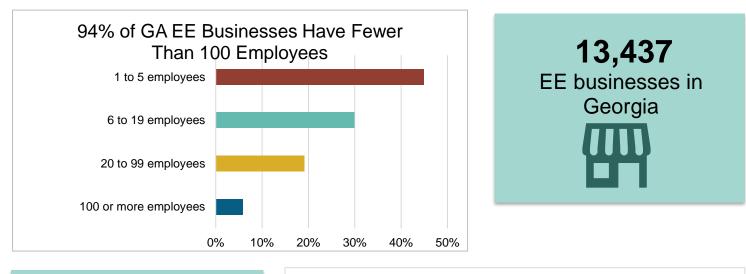
#### How is the EE industry growing in Georgia?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

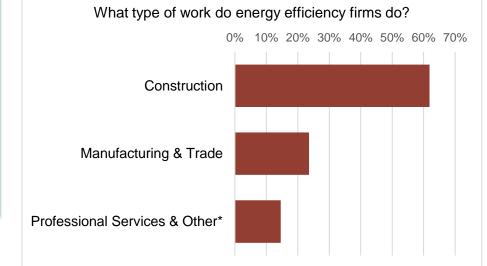


## What does EE look like in Georgia?

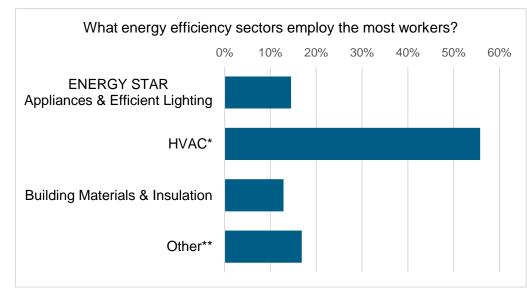


EE construction workers comprise **16%** of Georgia's construction workforce

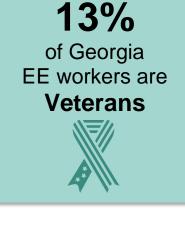




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

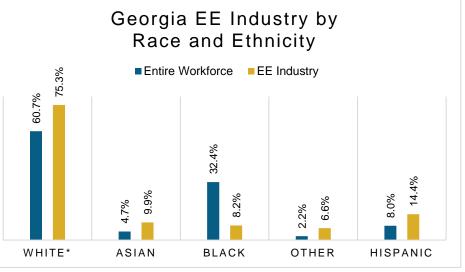




## How is EE doing on diversity in Georgia?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Georgia communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



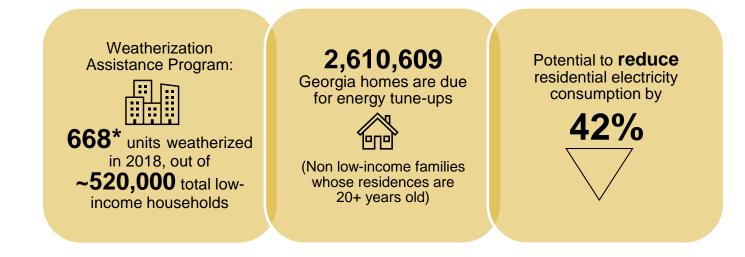
\*Includes non-Hispanic and Hispanic whites.



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.

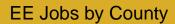
### Georgia's EE Potential

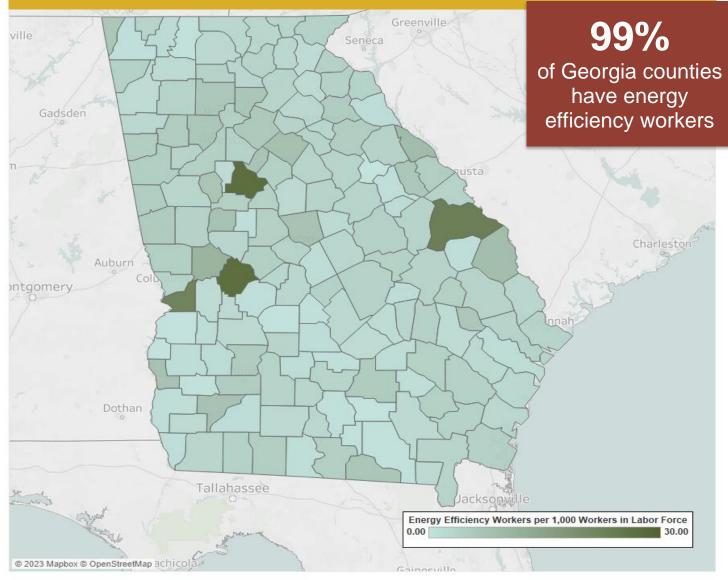
#### Decades of work ready for Georgia's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform







	Metropolitan Areas						
	Area	Jobs	Area	Jobs			
Alk	bany	737	Gainesville	899			
Ath	nens-Clark County	944	Hinesville-Fort Stewart	134			
	anta-Sandy Springs- rietta	34,738	Macon	1,492			
Au	gusta-Richmond County	1,697	Rome	419			
Bru	unswick	674	Savannah	1,864			
Ch	attanooga	516	Valdosta	718			
Co	lumbus	936	Warner Robins	450			
Da	Iton	566	Rural	6,511			



		Jo	obs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Appling County	67	Dade County	54	Jefferson County	38	Richmond County	818
Atkinson County	<10	Dawson County	63	Jenkins County	<10	Rockdale County	538
Bacon County	11	Decatur County	65	Johnson County	13	Schley County	<10
Baker County	<10	DeKalb County	2,573	Jones County	67	Screven County	57
Baldwin County	83	Dodge County	28	Lamar County	10	Seminole County	<10
Banks County	23	Dooly County	<10	Lanier County	<10	Spalding County	231
Barrow County	180	Dougherty County	537	Laurens County	159	Stephens County	78
Bartow County	348	Douglas County	381	Lee County	85	Stewart County	<10
Ben Hill County	13	Early County	13	Liberty County	69	Sumter County	57
Berrien County	<10	Echols County	<10	Lincoln County	27	Talbot County	19
Bibb County	629	Effingham County	76	Long County	<10	Taliaferro County	<10
Bleckley County	24	Elbert County	19	Lowndes County	498	Tattnall County	27
Brantley County	22	Emanuel County	56	Lumpkin County	69	Taylor County	106
Brooks County	10	Evans County	66	McDuffie County	100	Telfair County	10
Bryan County	85	Fannin County	44	McIntosh County	10	Terrell County	<10
Bulloch County	215	Fayette County	738	Macon County	<10	Thomas County	217
Burke County	562	Floyd County	177	Madison County	44	Tift County	156
Butts County	78	Forsyth County	1,191	Marion County	<10	Toombs County	107
Calhoun County	<10	Franklin County	70	Meriwether County	40	Towns County	24
Camden County	133	Fulton County	9,266	Miller County	<10	Treutlen County	<10
Candler County	36	Gilmer County	42	Mitchell County	21	Troup County	478
Carroll County	461	Glascock County	<10	Monroe County	77	Turner County	<10
Catoosa County	119	Glynn County	252	Montgomery County	10	Twiggs County	<10
Charlton County	16	Gordon County	120	Morgan County	65	Union County	52
Chatham County	1,227	Grady County	59	Murray County	14	Upson County	48
Chattahoochee County	107	Greene County	50	Muscogee County	678	Walker County	39
Chattooga County	44	Gwinnett County	4,900	Newton County	247	Walton County	447
Cherokee County	949	Habersham County	57	Oconee County	114	Ware County	90
Clarke County	454	Hall County	734	Oglethorpe County	22	Warren County	<10
Clay County	12	Hancock County	11	Paulding County	326	Washington County	57
Clayton County	487	Haralson County	81	Peach County	65	Wayne County	78
Clinch County	<10	Harris County	56	Pickens County	71	Webster County	<10
Cobb County	5,352	Hart County	62	Pierce County	45	Wheeler County	<10
Coffee County	218	Heard County	24	Pike County	51	White County	61
Colquitt County	81	Henry County	8,685	Polk County	70	Whitfield County	210
Columbia County	410	Houston County	421	Pulaski County	<10	Wilcox County	<10
Cook County	28	Irwin County	16	Putnam County	48	Wilkes County	23
Coweta County	329	Jackson County	266	Quitman County	<10	Wilkinson County	24
Crawford County	14	Jasper County	14	Rabun County	52	Worth County	24
Crisp County	64	Jeff Davis County	16	Randolph County	<10	N/A	1,697







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## Hawaii Energy Efficiency Jobs in America

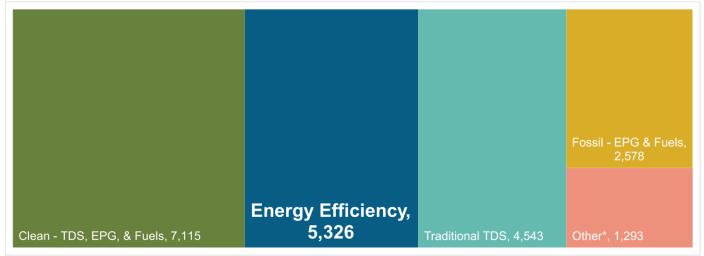


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Hawaii's energy sectors compare?

Energy Efficiency is the second largest energy sector in Hawaii

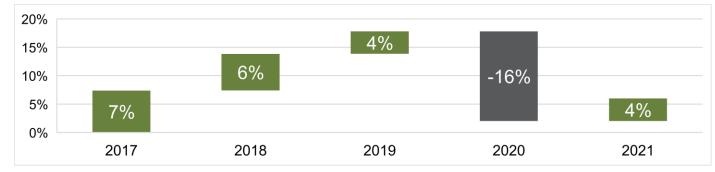


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), < 15

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

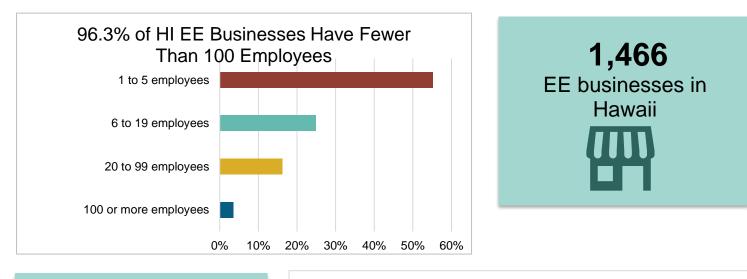
### How is the EE industry growing in Hawaii?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

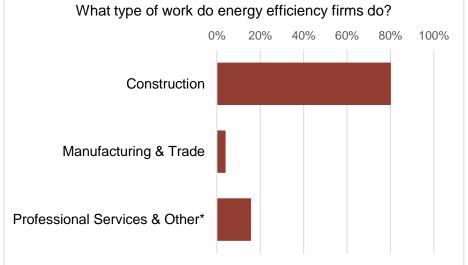


### What does EE look like in Hawaii?

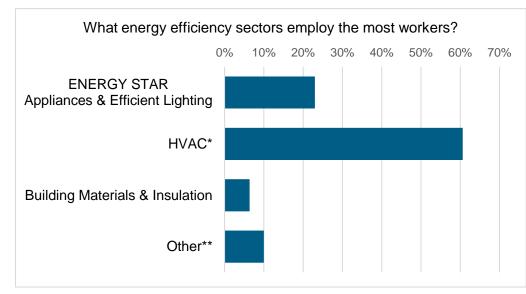


EE construction workers comprise **12%** of Hawaii's construction workforce

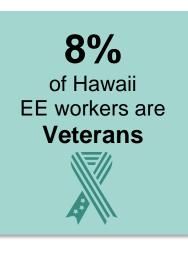




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

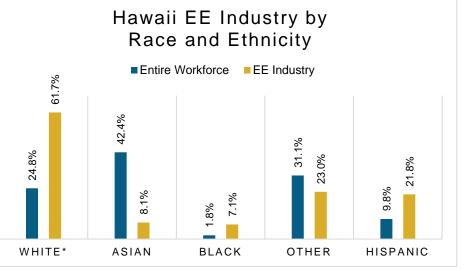




## How is EE doing on diversity in Hawaii?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



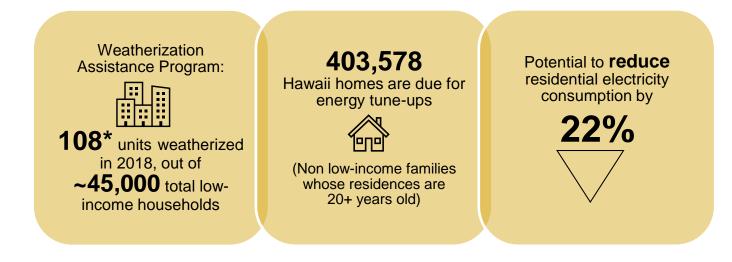
\*Includes non-Hispanic and Hispanic whites.



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.

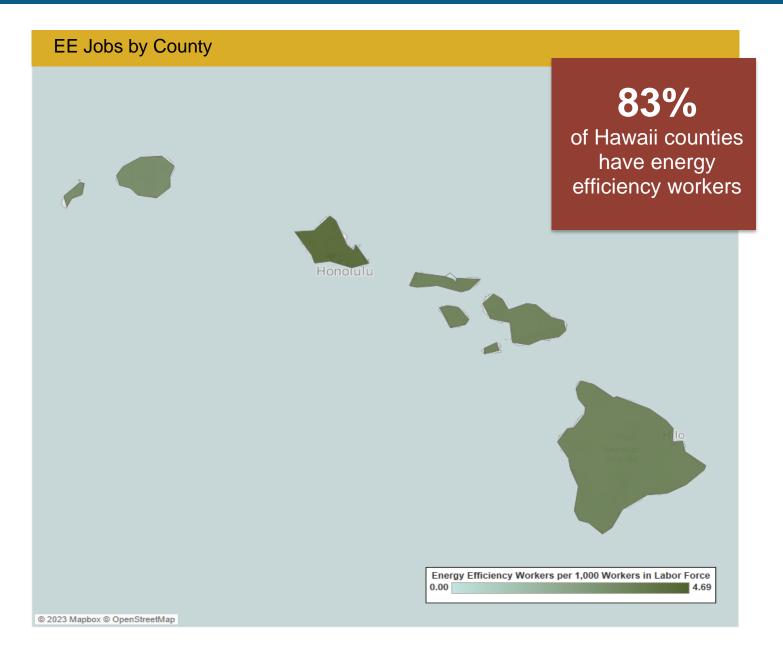
## Hawaii's EE Potential

#### Decades of work ready for Hawaii's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform





Metropolitan Areas					
	Area	Jobs			
	Honolulu	3,988			
	Rural	1,338			



Jobs by County	
County	Jobs
Hawaii County	529
Honolulu County	4,061
Kalawao County	<10
Kauai County	197
Maui County	537
N/A	<10



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# Idaho **Energy Efficiency Jobs in America**

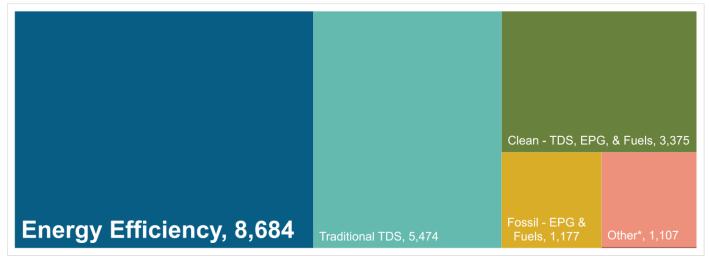


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Idaho's energy sectors compare?

Energy Efficiency is the largest energy sector in Idaho



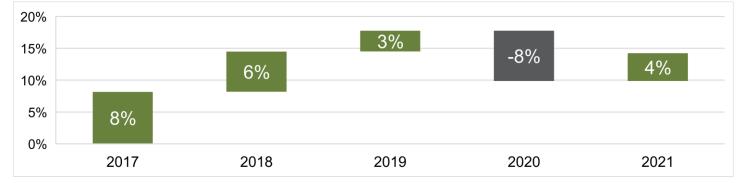
TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear (EPG & Fuels), < 15

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

#### How is the EE industry growing in Idaho?

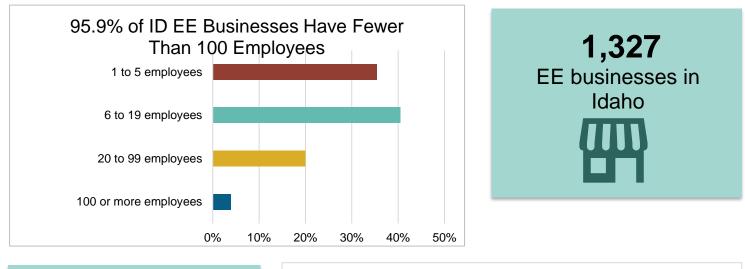


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



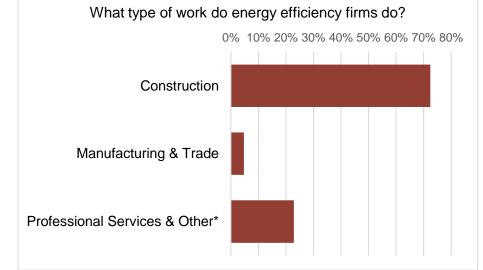
Presented by:

## What does EE look like in Idaho?

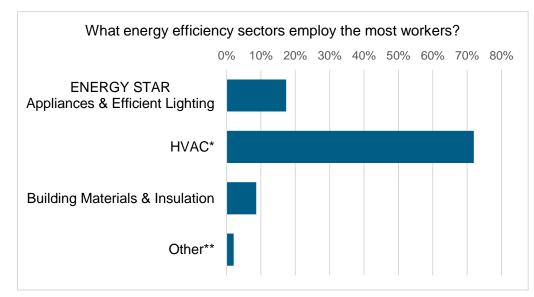


EE construction workers comprise **11%** of Idaho's construction workforce

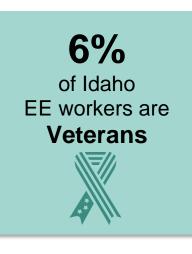




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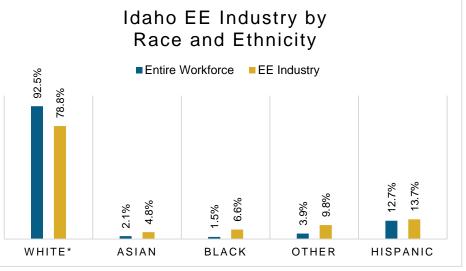
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# How is EE doing on diversity in Idaho?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Idaho communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



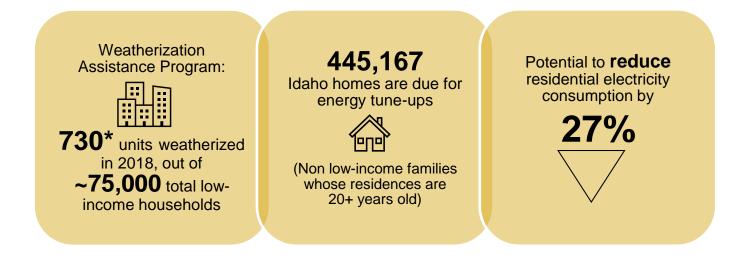
28% 72%

\*Includes non-Hispanic and Hispanic whites.

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### Idaho's EE Potential

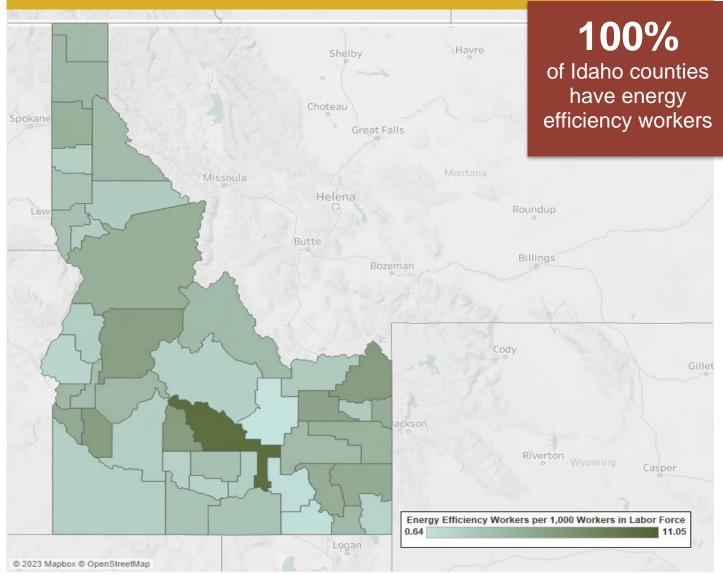
#### Decades of work ready for Idaho's growing energy efficiency workforce.



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## EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Boise City-Nampa	3,554				
Coeur d'Alene	864				
Idaho Falls	787				
Lewiston	258				
Logan	54				
Pocatello	489				
Rural	2,678				



County	Jobs	County	Jobs	County	Jobs	
Ada County	3,689	Cassia County	88	Lewis County	<10	
Adams County	<10	Clark County	<10	Lincoln County	13	
Bannock County	389	Clearwater County	15	Madison County	96	
Bear Lake County	<10	Custer County	<10	Minidoka County	42	
Benewah County	16	Elmore County	37	Nez Perce County	155	
Bingham County	134	Franklin County	36	Oneida County	<10	
Blaine County	304	Fremont + Yellowstone Park County	52	Owyhee County	15	
Boise County	16	Gem County	35	Payette County	61	
Bonner County	142	Gooding County	30	Power County	<10	
Bonneville County	588	Idaho County	49	Shoshone County	42	
Boundary County	35	Jefferson County	102	Teton County	51	
Butte County	12	Jerome County	44	Twin Falls County	289	
Camas County	<10	Kootenai County	714	Valley County	73	
Canyon County	945	Latah County	98	Washington County	11	
Caribou County	42	Lemhi County	24	N/A	154	





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# **Illinois** Energy Efficiency Jobs in America

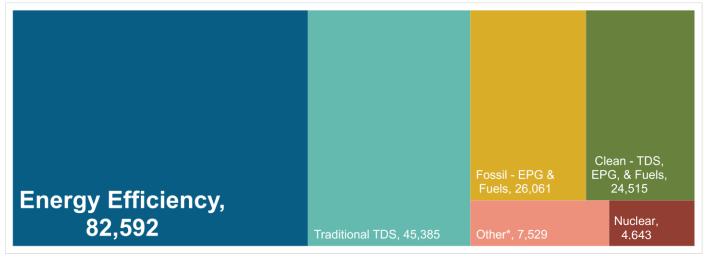


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Illinois's energy sectors compare?

Energy Efficiency is the largest energy sector in Illinois

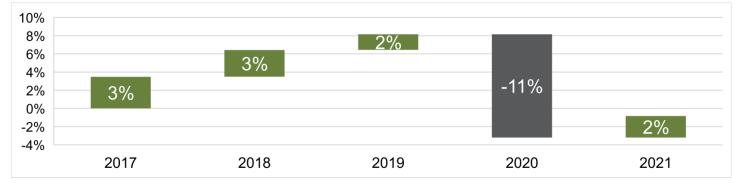


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear = Includes EPG & Fuels \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

#### How is the EE industry growing in Illinois?

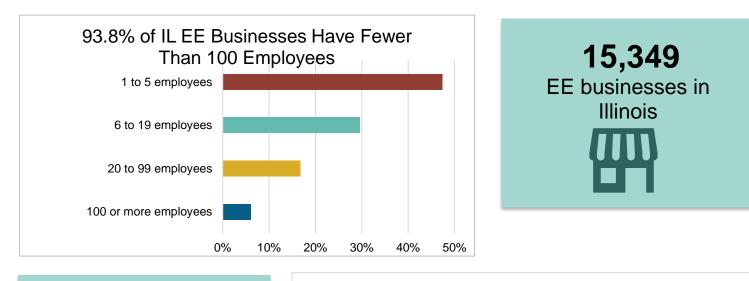


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



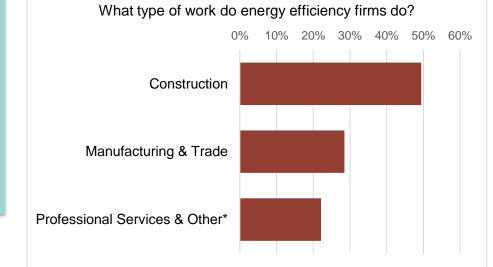
Presented by:

## What does EE look like in Illinois?

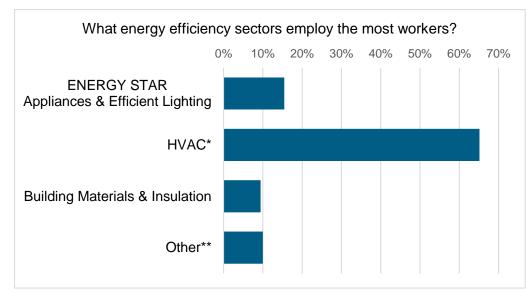


EE construction workers comprise **18%** of Illinois's construction workforce

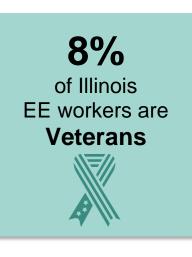




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

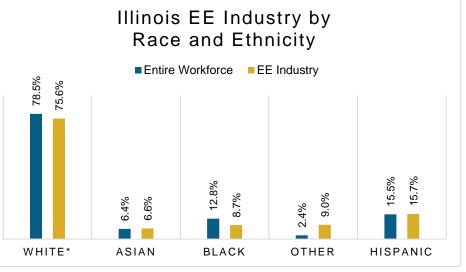




# How is EE doing on diversity in Illinois?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



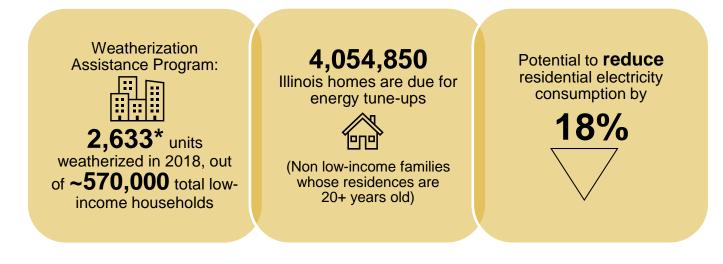
\*Includes non-Hispanic and Hispanic whites.



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.

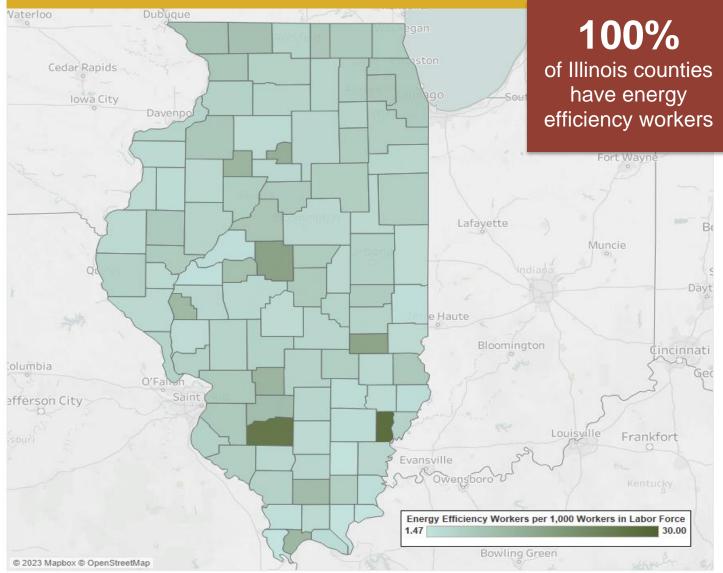
## Illinois's EE Potential

#### Decades of work ready for Illinois's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

#### EE Jobs by County



Metropolitan Areas				
Area	Jobs	Area	Jobs	
Bloomington-Normal	839	Kankakee-Bradley	552	
Cape Girardeau-Jackson	38	Peoria	2,362	
Champaign-Urbana	1,287	Rockford	2,080	
Chicago-Naperville-Joliet	58,208	Springfield	1,658	
Danville	458	St. Louis	4,353	
Davenport-Moline-Rock Island	1,199	Rural	8,921	
Decatur	635			



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adams County	364	Ford County	47	Livingston County	165	Randolph County	128
Alexander County	<10	Franklin County	86	Logan County	259	Richland County	46
Bond County	109	Fulton County	79	McDonough County	133	Rock Island County	702
Boone County	222	Gallatin County	<10	McHenry County	1,498	St. Clair County	1,283
Brown County	36	Greene County	17	McLean County	711	Saline County	97
Bureau County	85	Grundy County	304	Macon County	646	Sangamon County	1,138
Calhoun County	<10	Hamilton County	<10	Macoupin County	107	Schuyler County	22
Carroll County	70	Hancock County	34	Madison County	1,539	Scott County	21
Cass County	25	Hardin County	<10	Marion County	122	Shelby County	46
Champaign County	959	Henderson County	<10	Marshall County	26	Stark County	39
Christian County	65	Henry County	193	Mason County	17	Stephenson County	343
Clark County	34	Iroquois County	91	Massac County	19	Tazewell County	814
Clay County	30	Jackson County	241	Menard County	35	Union County	23
Clinton County	236	Jasper County	19	Mercer County	25	Vermilion County	172
Coles County	223	Jefferson County	142	Monroe County	105	Wabash County	39
Cook County	38,805	Jersey County	65	Montgomery County	94	Warren County	39
Crawford County	96	Jo Daviess County	142	Morgan County	127	Washington County	379
Cumberland County	97	Johnson County	16	Moultrie County	58	Wayne County	27
DeKalb County	337	Kane County	2,713	Ogle County	188	White County	37
De Witt County	73	Kankakee County	373	Peoria County	1,324	Whiteside County	243
Douglas County	111	Kendall County	318	Perry County	34	Will County	3,204
DuPage County	9,292	Knox County	127	Piatt County	32	Williamson County	620
Edgar County	40	Lake County	4,238	Pike County	35	Winnebago County	1,300
Edwards County	303	La Salle County	390	Pope County	<10	Woodford County	163
Effingham County	310	Lawrence County	20	Pulaski County	30	N/A	2,483
Fayette County	52	Lee County	133	Putnam County	51		



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

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 <u>www.e2.org.</u>

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Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

For questions on E4TheFuture analyses please email: policy@e4thefuture.org.



# Indiana **Energy Efficiency Jobs in America**

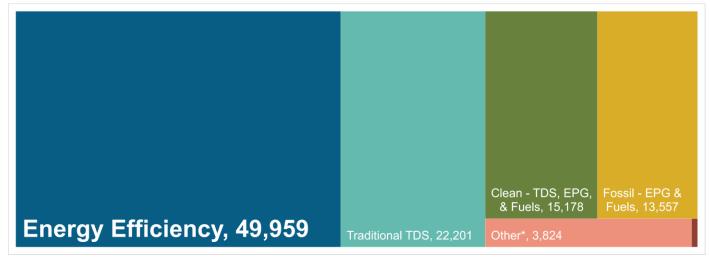


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Indiana's energy sectors compare?

Energy Efficiency is the largest energy sector in Indiana



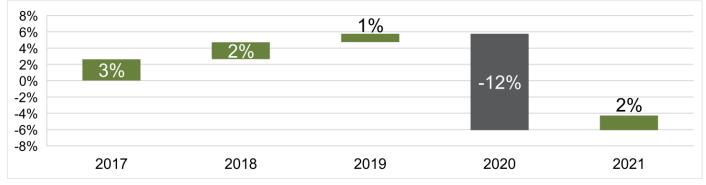
TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear (EPG & Fuels), 110

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

#### How is the EE industry growing in Indiana?

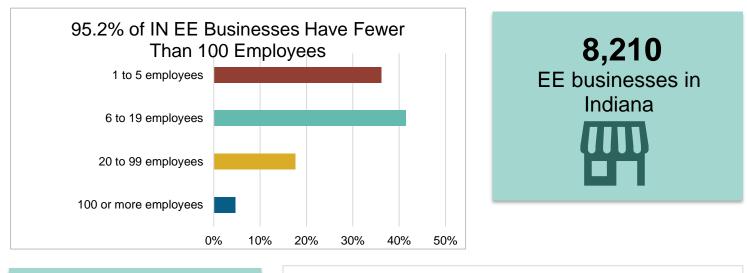


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



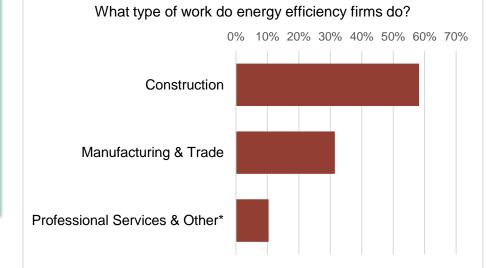
Presented by:

## What does EE look like in Indiana?

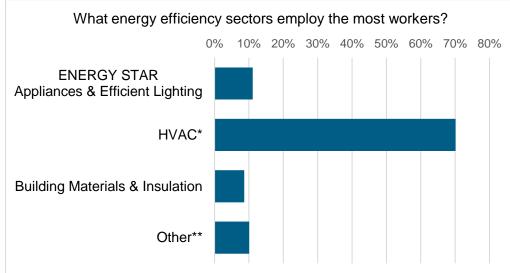


EE construction workers comprise **19%** of Indiana's construction workforce





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



EE workers are Veterans

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



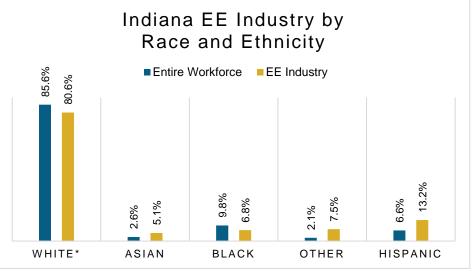
8%

of Indiana

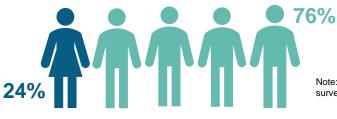
# How is EE doing on diversity in Indiana?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Indiana communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



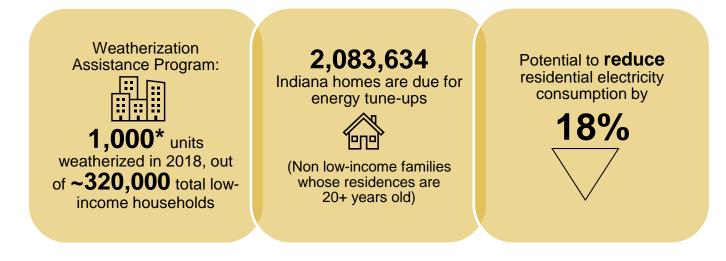
\*Includes non-Hispanic and Hispanic whites.



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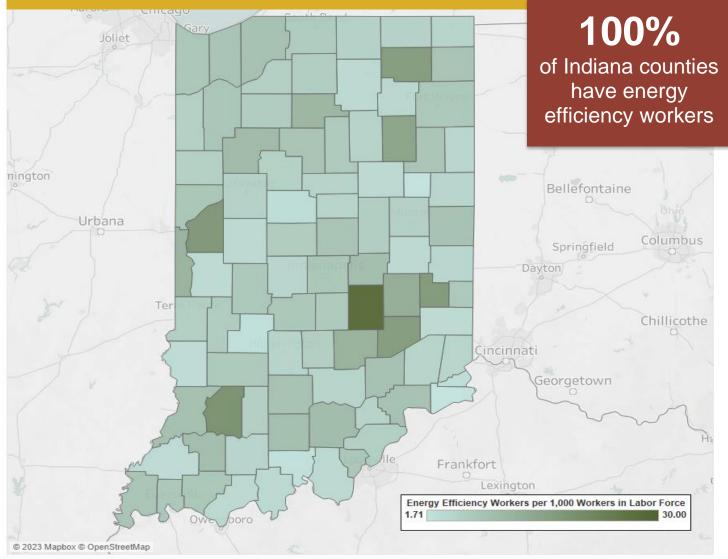
## Indiana's EE Potential

#### Decades of work ready for Indiana's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## EE Jobs by County



Metropolitan Areas					
Area	Jobs	Area	Jobs		
Anderson	645	Kokomo	707		
Bloomington	1,212	Lafayette	1,140		
Chicago-Naperville-Joliet	6,366	Louisville/Jefferson County	2,281		
Cincinnati-Middletown	515	Michigan City-La Porte	671		
Columbus	669	Muncie	553		
Elkhart-Goshen	1,426	South Bend-Mishawaka	2,231		
Evansville	2,365	Terre Haute	1,097		
Fort Wayne	4,736	Rural	8,937		
Indianapolis-Carmel	14,408				



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adams County	131	Fulton County	152	Marion County	10,334	Shelby County	1,142
Allen County	3,179	Gibson County	162	Marshall County	267	Spencer County	63
Bartholomew County	1,338	Grant County	230	Martin County	109	Starke County	53
Benton County	27	Greene County	97	Miami County	130	Steuben County	177
Blackford County	12	Hamilton County	2,872	Monroe County	700	Sullivan County	44
Boone County	567	Hancock County	558	Montgomery County	130	Switzerland County	<10
Brown County	40	Harrison County	86	Morgan County	270	Tippecanoe County	1,05
Carroll County	69	Hendricks County	823	Newton County	41	Tipton County	55
Cass County	266	Henry County	110	Noble County	624	Union County	21
Clark County	743	Howard County	375	Ohio County	<10	Vanderburgh County	1,74
Clay County	108	Huntington County	460	Orange County	148	Vermillion County	116
Clinton County	73	Jackson County	241	Owen County	31	Vigo County	594
Crawford County	<10	Jasper County	202	Parke County	28	Wabash County	131
Daviess County	511	Jay County	71	Perry County	53	Warren County	33
Dearborn County	140	Jefferson County	242	Pike County	55	Warrick County	298
Decatur County	511	Jennings County	152	Porter County	1,101	Washington County	134
DeKalb County	406	Johnson County	954	Posey County	161	Wayne County	283
Delaware County	540	Knox County	342	Pulaski County	74	Wells County	187
Dubois County	288	Kosciusko County	320	Putnam County	186	White County	207
Elkhart County	1,710	Lagrange County	179	Randolph County	138	Whitley County	126
Fayette County	218	Lake County	3,152	Ripley County	112	N/A	1,81
Floyd County	524	La Porte County	785	Rush County	139		
Fountain County	195	Lawrence County	256	St. Joseph County	1,744		
Franklin County	39	Madison County	533	Scott County	89		



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# **IOWA** Energy Efficiency Jobs in America

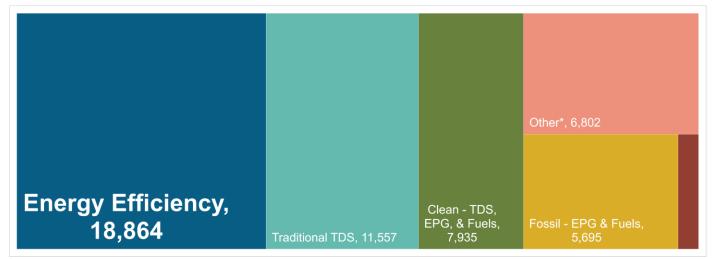


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do lowa's energy sectors compare?

Energy Efficiency is the largest energy sector in Iowa

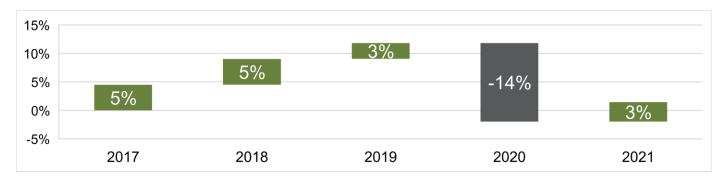


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 755

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

#### How is the EE industry growing in lowa?

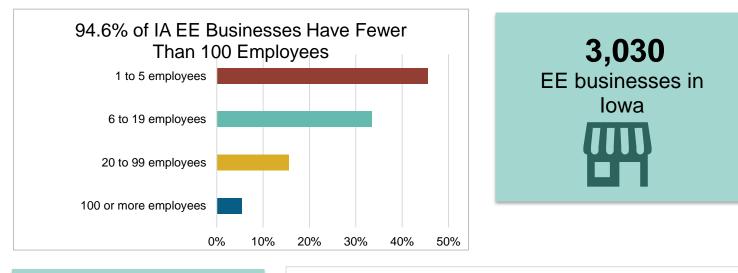


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



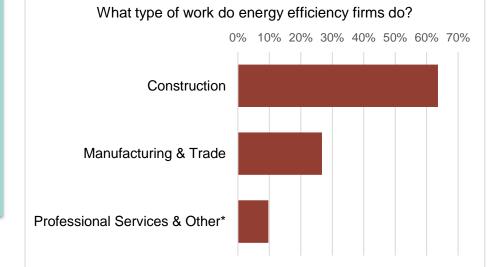
Presented by:

## What does EE look like in lowa?

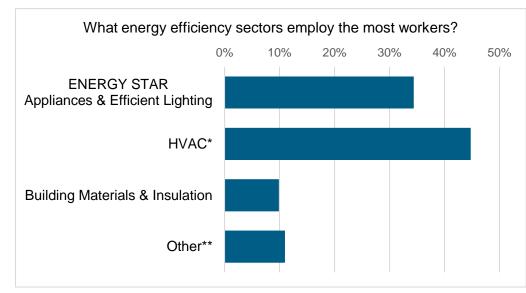


EE construction workers comprise **15%** of Iowa's construction workforce





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



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



**9%** 

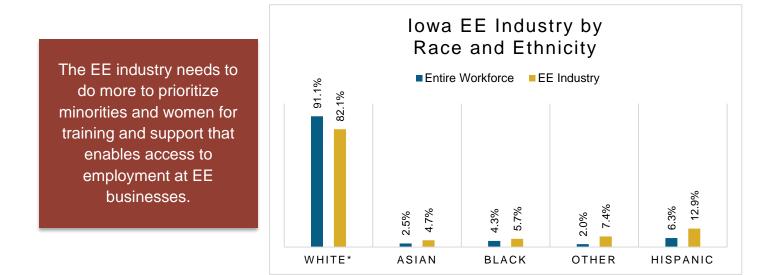
of Iowa

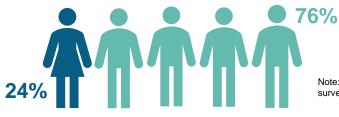
EE workers are

Veterans

# How is EE doing on diversity in Iowa?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all lowa communities are represented in the EE sector.



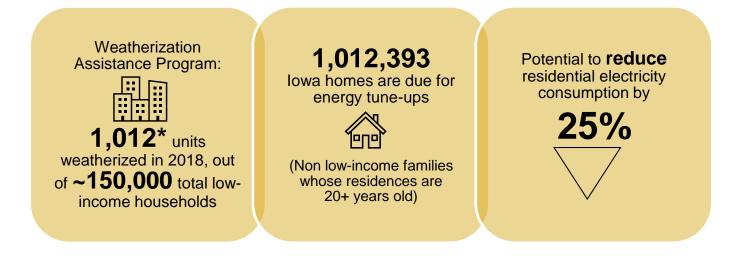


\*Includes non-Hispanic and Hispanic whites.

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.

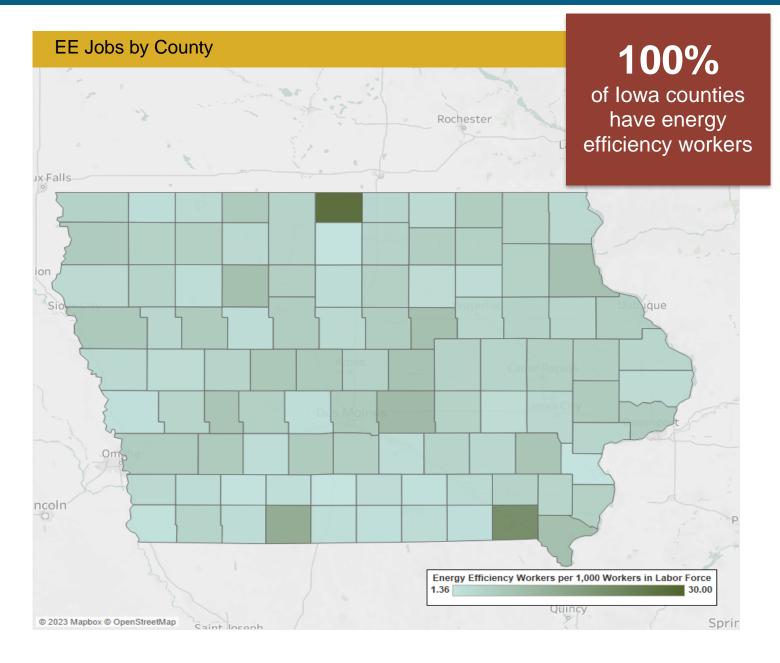
Iowa's EE Potential

#### Decades of work ready for lowa's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform





	Metropolitan Areas					
Area	Jobs	Area	Jobs			
Ames	564	Sioux City	541			
Cedar Rapids	1,611	Waterloo-Cedar Falls	866			
Davenport-Moline-R Island	Rock 908	Rural	8,360			
Des Moines-West D Moines	es 3,926					
Dubuque	517					
Iowa City	913					
Omaha-Council Blu	ffs 657					



		1	bs by Co				
County	Jobs	County	Jobs	County	Jobs	County	Job
Adair County	18	Davis County	12	Jefferson County	79	Pocahontas County	63
Adams County	<10	Decatur County	14	Johnson County	622	Polk County	4,62
Allamakee County	42	Delaware County	69	Jones County	79	Pottawattamie County	545
Appanoose County	31	Des Moines County	242	Keokuk County	20	Poweshiek County	117
Audubon County	32	Dickinson County	93	Kossuth County	72	Ringgold County	21
Benton County	64	Dubuque County	761	Lee County	285	Sac County	46
Black Hawk County	690	Emmet County	55	Linn County	1,619	Scott County	1,23
Boone County	138	Fayette County	83	Louisa County	12	Shelby County	57
Bremer County	67	Floyd County	78	Lucas County	26	Sioux County	33
Buchanan County	77	Franklin County	49	Lyon County	54	Story County	45
Buena Vista County	65	Fremont County	10	Madison County	63	Tama County	61
Butler County	28	Greene County	56	Mahaska County	85	Taylor County	13
Calhoun County	18	Grundy County	89	Marion County	129	Union County	34
Carroll County	120	Guthrie County	41	Marshall County	298	Van Buren County	87
Cass County	88	Hamilton County	48	Mills County	25	Wapello County	12
Cedar County	78	Hancock County	21	Mitchell County	32	Warren County	16
Cerro Gordo County	261	Hardin County	92	Monona County	22	Washington County	15
Cherokee County	51	Harrison County	21	Monroe County	17	Wayne County	10
Chickasaw County	63	Henry County	89	Montgomery County	26	Webster County	24
Clarke County	13	Howard County	61	Muscatine County	221	Winnebago County	28
Clay County	107	Humboldt County	49	O'Brien County	78	Winneshiek County	12
Clayton County	128	Ida County	34	Osceola County	15	Woodbury County	80
Clinton County	148	Iowa County	63	Page County	61	Worth County	22
Crawford County	47	Jackson County	59	Palo Alto County	31	Wright County	39
Dallas County	313	Jasper County	243	Plymouth County	97	N/A	<1



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# Kansas Energy Efficiency Jobs in America

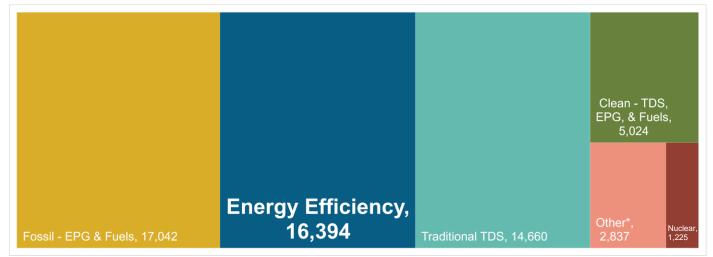


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Kansas's energy sectors compare?

Energy Efficiency is the second largest energy sector in Kansas

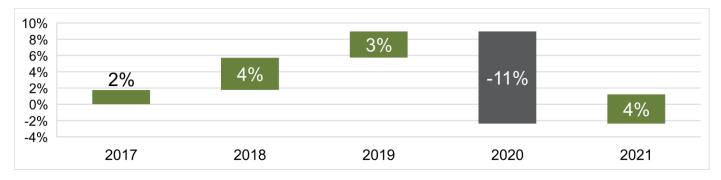


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear = includes EPG & Fuels

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

### How is the EE industry growing in Kansas?

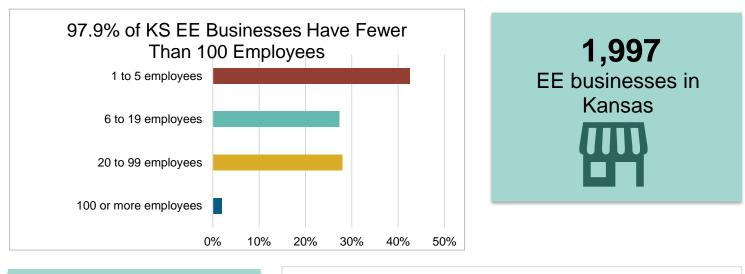


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



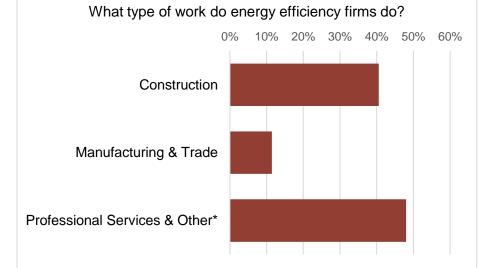
Presented by:

## What does EE look like in Kansas?

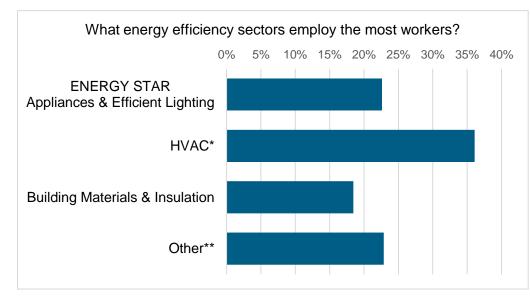


EE construction workers comprise **10%** of Kansas's construction workforce

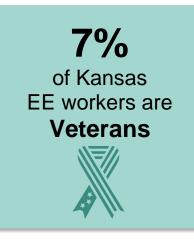




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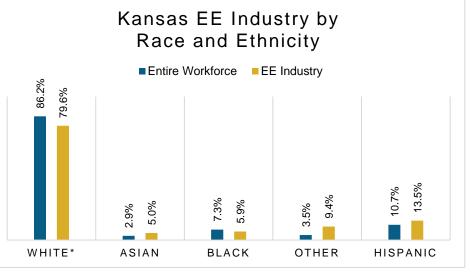




# How is EE doing on diversity in Kansas?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



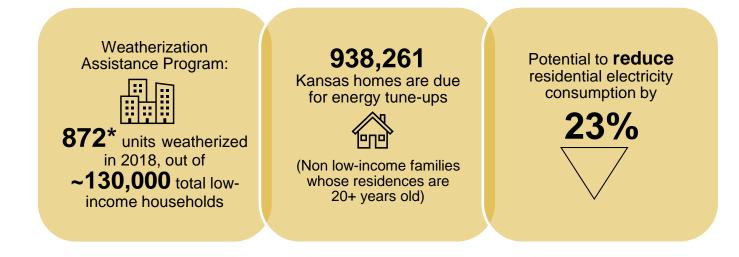
24% 76%

\*Includes non-Hispanic and Hispanic whites.

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.

### Kansas's EE Potential

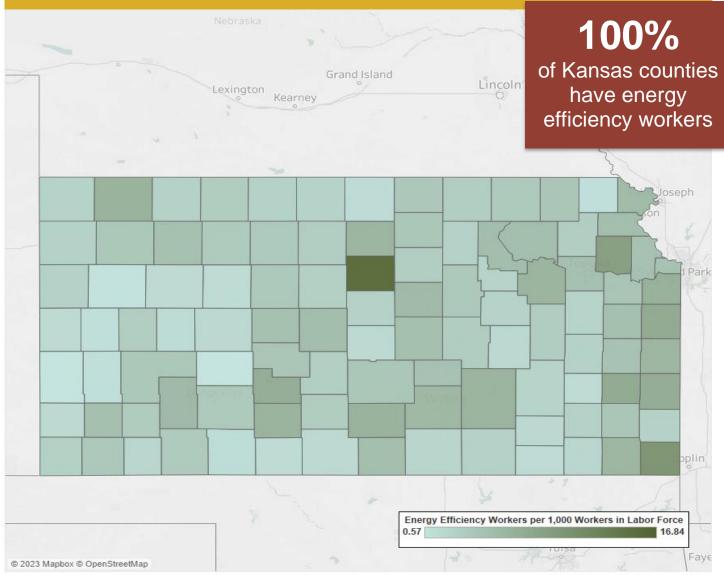
#### Decades of work ready for Kansas's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



### EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Kansas City	5,665				
Lawrence	581				
Manhattan	540				
St. Joseph	37				
Topeka	1,160				
Wichita	3,303				
Rural	5,109				



County	Jobs	County	bs by Co Jobs	County	Jobs	County	Jobs
Allen County	95	Finney County	179	Logan County	<10	Rooks County	14
Anderson County	24	Ford County	147	Lyon County	114	Rush County	11
Atchison County	61	Franklin County	147	McPherson County	175	Russell County	17
,	-				27		367
Barber County	<10	Geary County	69	Marion County		Saline County	
Barton County	132	Gove County	<10	Marshall County	38	Scott County	16
Bourbon County	90	Graham County	<10	Meade County	13	Sedgwick County	3,323
Brown County	13	Grant County	27	Miami County	143	Seward County	51
Butler County	273	Gray County	41	Mitchell County	43	Shawnee County	1,029
Chase County	<10	Greeley County	<10	Montgomery County	66	Sheridan County	12
Chautauqua County	<10	Greenwood County	<10	Morris County	10	Sherman County	14
Cherokee County	127	Hamilton County	<10	Morton County	<10	Smith County	<10
Cheyenne County	<10	Harper County	28	Nemaha County	52	Stafford County	<10
Clark County	<10	Harvey County	144	Neosho County	61	Stanton County	<10
Clay County	18	Haskell County	13	Ness County	<10	Stevens County	19
Cloud County	30	Hodgeman County	<10	Norton County	17	Sumner County	32
Coffey County	21	Jackson County	30	Osage County	17	Thomas County	37
Comanche County	<10	Jefferson County	80	Osborne County	10	Trego County	<10
Cowley County	82	Jewell County	<10	Ottawa County	<10	Wabaunsee County	18
Crawford County	108	Johnson County	5,353	Pawnee County	25	Wallace County	<10
Decatur County	<10	Kearny County	<10	Phillips County	14	Washington County	15
Dickinson County	53	Kingman County	35	Pottawatomie County	107	Wichita County	<10
Doniphan County	28	Kiowa County	16	Pratt County	34	Wilson County	21
Douglas County	468	Labette County	112	Rawlins County	14	Woodson County	<10
Edwards County	14	Lane County	<10	Reno County	239	Wyandotte County	885
Elk County	<10	Leavenworth County	217	Republic County	17	N/A	353
Ellis County	130	Lincoln County	32	Rice County	16		
Ellsworth County	13	Linn County	29	Riley County	342		



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# Kentucky Energy Efficiency Jobs in America

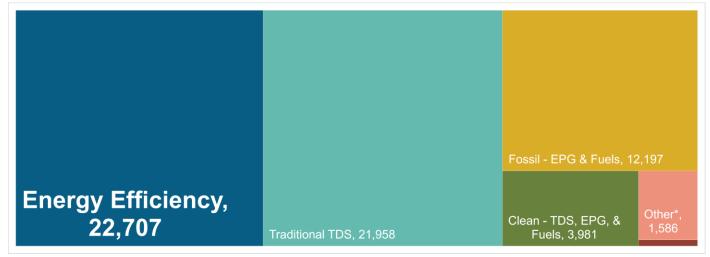


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Kentucky's energy sectors compare?

Energy Efficiency is the largest energy sector in Kentucky

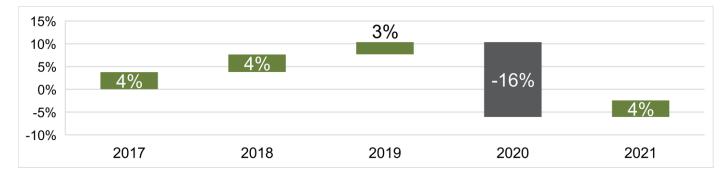


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 142

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

#### How is the EE industry growing in Kentucky?

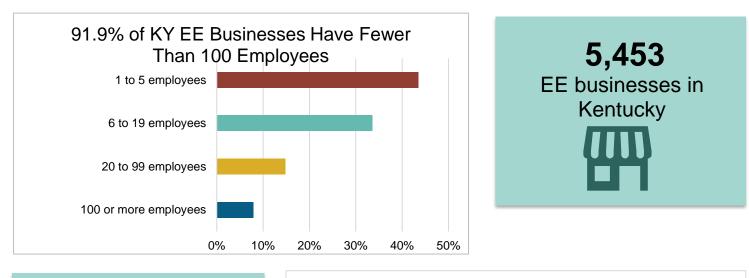


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



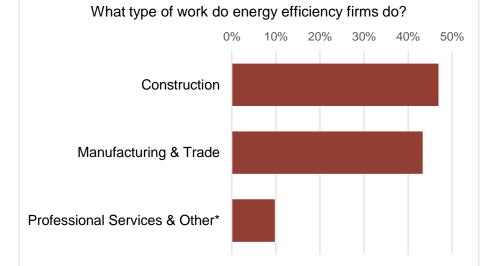
Presented by:

## What does EE look like in Kentucky?

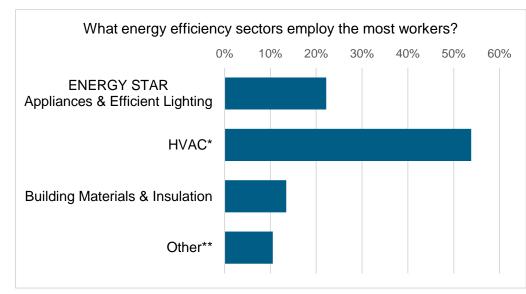


EE construction workers comprise **13%** of Kentucky's construction workforce

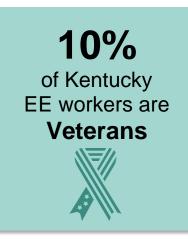




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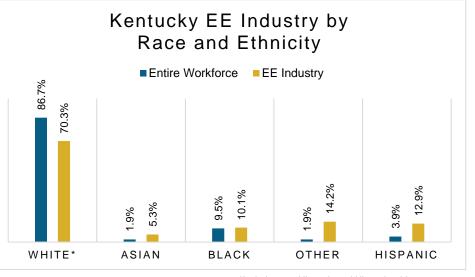
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services



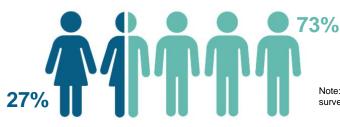
# How is EE doing on diversity in Kentucky?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



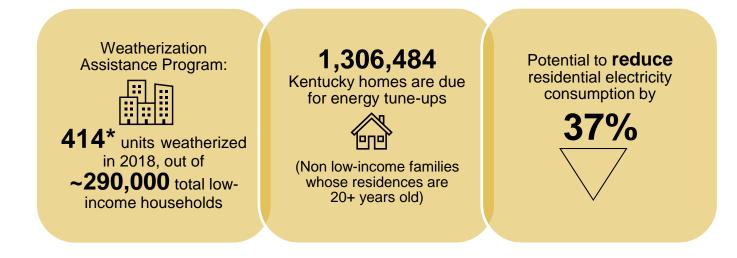
\*Includes non-Hispanic and Hispanic whites.



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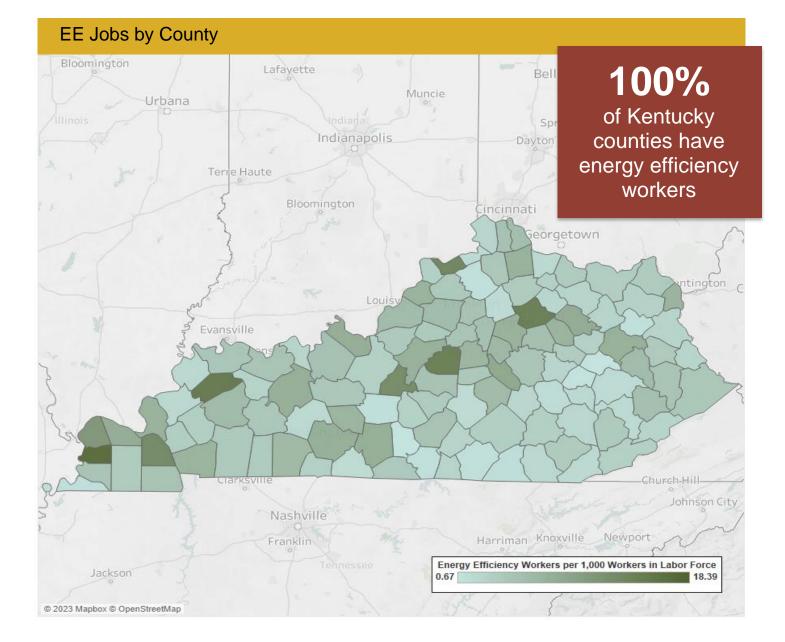
## Kentucky's EE Potential

#### Decades of work ready for Kentucky's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform





Metropolitan Areas					
Area	Jobs	Area	Jobs		
Bowling Green	790	Louisville/Jefferson County	6,734		
Cincinnati-Middletown	2,119	Owensboro	600		
Clarksville	358	Rural	7,644		
Elizabethtown	643				
Evansville	334				
Huntington-Ashland	398				
Lexington-Fayette	3,088				



		1	bs by Co				
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adair County	50	Elliott County	<10	Laurel County	194	Owen County	<10
Allen County	19	Estill County	12	Lawrence County	24	Owsley County	<10
Anderson County	52	Fayette County	3,025	Lee County	<10	Pendleton County	36
Ballard County	61	Fleming County	18	Leslie County	14	Perry County	47
Barren County	263	Floyd County	113	Letcher County	25	Pike County	196
Bath County	35	Franklin County	347	Lewis County	15	Powell County	25
Bell County	37	Fulton County	<10	Lincoln County	53	Pulaski County	196
Boone County	580	Gallatin County	<10	Livingston County	48	Robertson County	<10
Bourbon County	210	Garrard County	47	Logan County	125	Rockcastle County	20
Boyd County	368	Grant County	49	Lyon County	22	Rowan County	59
Boyle County	136	Graves County	95	McCracken County	688	Russell County	35
Bracken County	<10	Grayson County	75	McCreary County	<10	Scott County	112
Breathitt County	10	Green County	12	McLean County	10	Shelby County	209
Breckinridge County	42	Greenup County	60	Madison County	355	Simpson County	63
Bullitt County	263	Hancock County	24	Magoffin County	24	Spencer County	19
Butler County	13	Hardin County	326	Marion County	96	Taylor County	96
Caldwell County	38	Harlan County	43	Marshall County	308	Todd County	21
Calloway County	166	Harrison County	43	Martin County	11	Trigg County	47
Campbell County	366	Hart County	14	Mason County	64	Trimble County	<10
Carlisle County	37	Henderson County	184	Meade County	80	Union County	23
Carroll County	224	Henry County	25	Menifee County	<10	Warren County	1,097
Carter County	39	Hickman County	<10	Mercer County	96	Washington County	101
Casey County	16	Hopkins County	218	Metcalfe County	<10	Wayne County	14
Christian County	280	Jackson County	<10	Monroe County	30	Webster County	89
Clark County	157	Jefferson County	6,063	Montgomery County	172	Whitley County	63
Clay County	19	Jessamine County	249	Morgan County	45	Wolfe County	<10
Clinton County	19	Johnson County	45	Muhlenberg County	77	Woodford County	108
Crittenden County	<10	Kenton County	815	Nelson County	281	N/A	645
Cumberland County	<10	Knott County	26	Nicholas County	<10		
Daviess County	475	Knox County	64	Ohio County	122		
Edmonson County	24	Larue County	69	Oldham County	250		



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# Louisiana Energy Efficiency Jobs in America

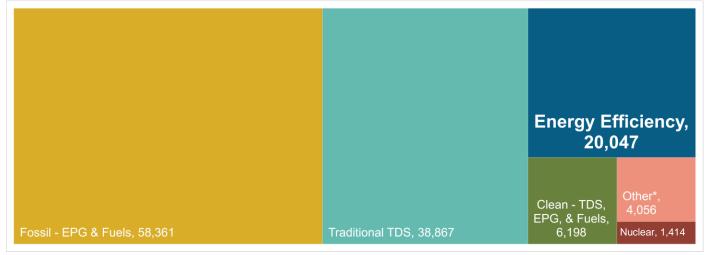


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Louisiana's energy sectors compare?

Energy Efficiency is the third largest energy sector in Louisiana

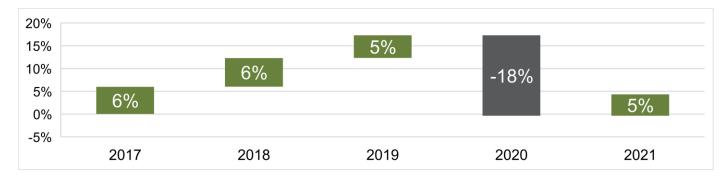


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

#### How is the EE industry growing in Louisiana?

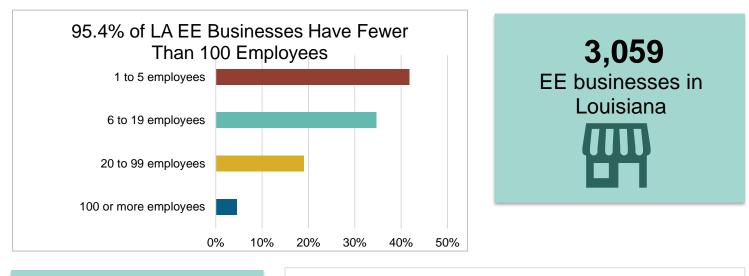


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



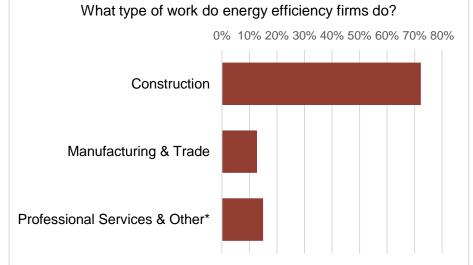
Presented by:

## What does EE look like in Louisiana?

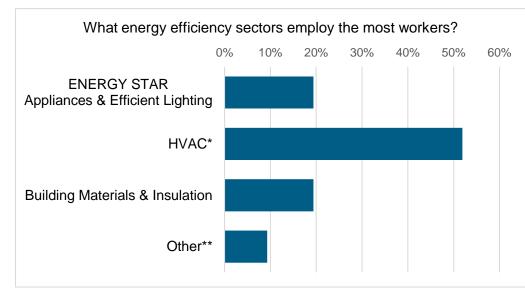


EE construction workers comprise **11%** of Louisiana's construction workforce

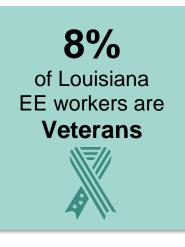




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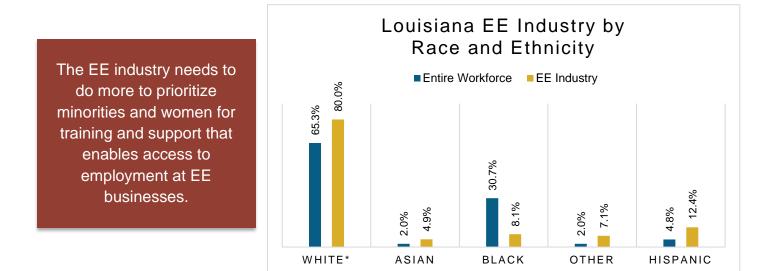


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## How is EE doing on diversity in Louisiana?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Louisiana communities are represented in the EE sector.



23% **77%** 

\*Includes non-Hispanic and Hispanic whites.

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.

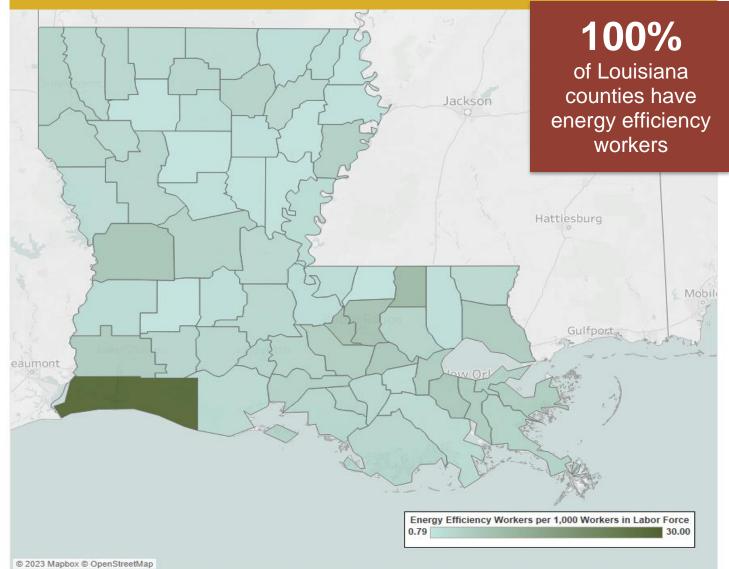
## Louisiana's EE Potential

## Decades of work ready for Louisiana's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

### EE Jobs by County



Metropolitan Areas						
Area	Jobs	Area	Jobs			
Alexandria	576	Shreveport-Bossier City	1,740			
Baton Rouge	3,583	Rural	3,119			
Houma-Bayou Cane- Thibodaux	858					
Lafayette	1,620					
Lake Charles	883					
Monroe	671					
New Orleans-Metairie- Kenner	6,997					



County	Jobs	County	Jobs	County	Job
Acadia County	114	Iberia County	225	St. Charles County	329
Allen County	12	Iberville County	172	St. Helena County	34
Ascension County	672	Jackson County	17	St. James County	42
Assumption County	29	Jefferson County	2,269	St. John the Baptist County	148
Avoyelles County	67	Jefferson Davis County	67	St. Landry County	182
Beauregard County	44	Lafayette County	1,140	St. Martin County	102
Bienville County	<10	Lafourche County	212	St. Mary County	164
Bossier County	315	La Salle County	13	St. Tammany County	1,16
Caddo County	957	Lincoln County	147	Tangipahoa County	186
Calcasieu County	1,118	Livingston County	267	Tensas County	<10
Caldwell County	<10	Madison County	10	Terrebonne County	382
Cameron County	451	Morehouse County	29	Union County	32
Catahoula County	<10	Natchitoches County	106	Vermilion County	87
Claiborne County	19	Orleans County	1,819	Vernon County	194
Concordia County	28	Ouachita County	655	Washington County	67
De Soto County	56	Plaquemines County	106	Webster County	82
East Baton Rouge County	4,333	Pointe Coupee County	24	West Baton Rouge County	211
East Carroll County	<10	Rapides County	517	West Carroll County	10
East Feliciana County	12	Red River County	17	West Feliciana County	22
Evangeline County	33	Richland County	45	Winn County	<10
Franklin County	12	Sabine County	31	N/A	267
Grant County	14	St. Bernard County	129		





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# Maine Energy Efficiency Jobs in America

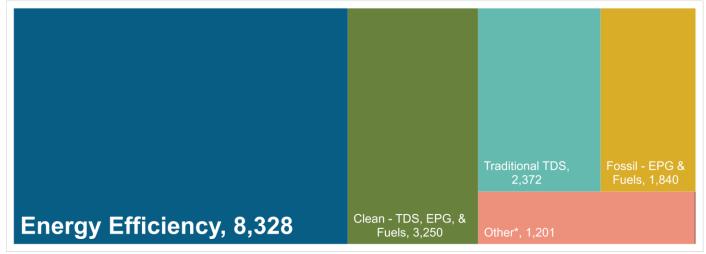


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Maine's energy sectors compare?

Energy Efficiency is the largest energy sector in Maine

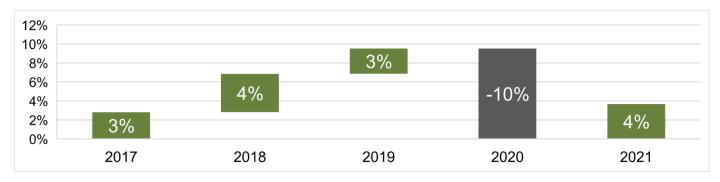


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), < 15

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#### How is the EE industry growing in Maine?

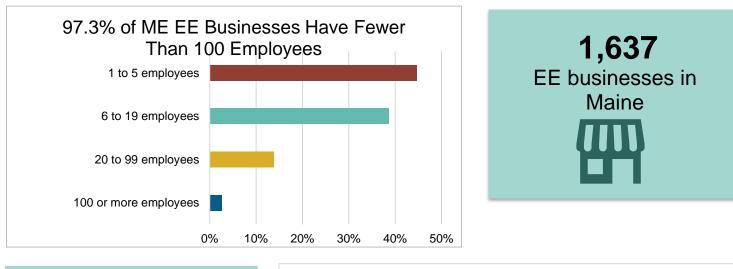


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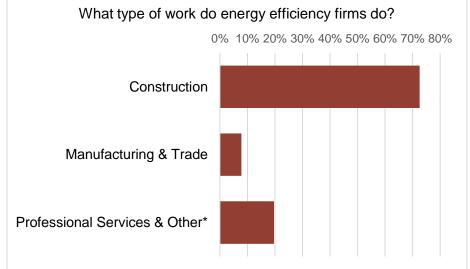
Presented by:

## What does EE look like in Maine?

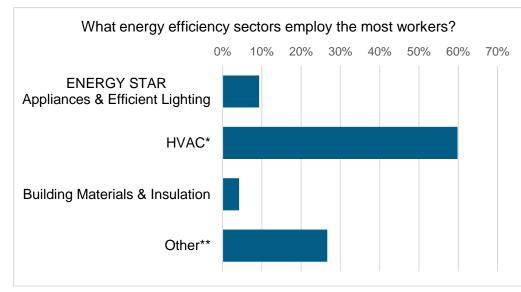


EE construction workers comprise **19%** of Maine's construction workforce

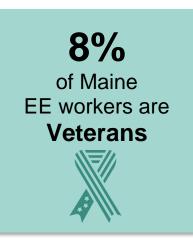




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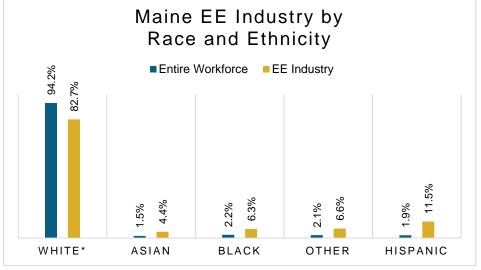




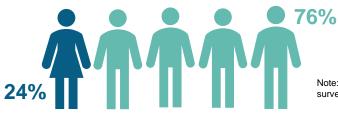
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The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



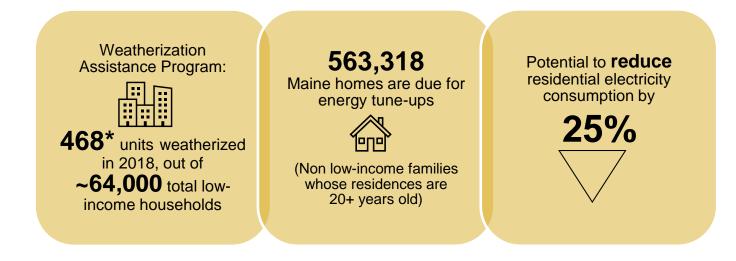
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## Maine's EE Potential

#### Decades of work ready for Maine's growing energy efficiency workforce.

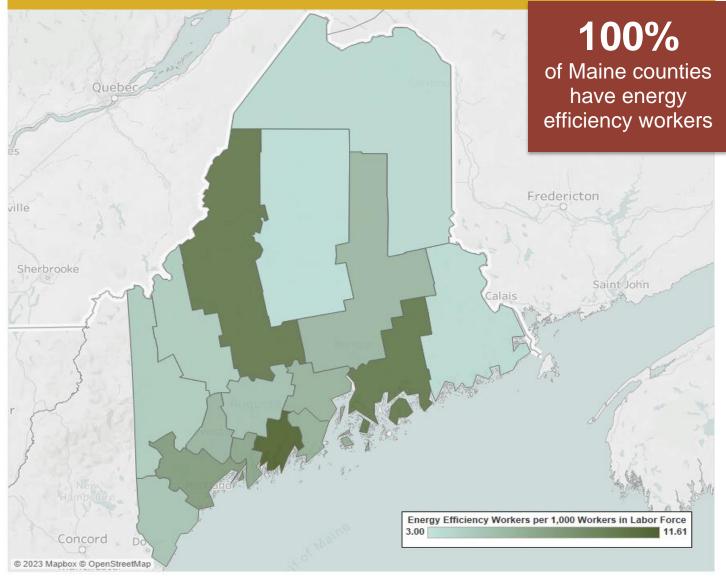


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## Energy Efficiency Jobs are Everywhere

### EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Bangor	821				
Lewiston-Auburn	503				
Portland-South Portland- Biddeford	3,659				
Rural	3,345				



	Jobs by County						
County	Jobs	County	Jobs				
Androscoggin Cou	inty 593	Penobscot County	854				
Aroostook County	191	Piscataquis County	40				
Cumberland Count	ty 2,955	Sagadahoc County	239				
Franklin County	95	Somerset County	329				
Hancock County	501	Waldo County	149				
Kennebec County	668	Washington County	73				
Knox County	229	York County	830				
Lincoln County	274	N/A	150				
Oxford County	158						





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# Maryland Energy Efficiency Jobs in America



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#### How do Maryland's energy sectors compare?

Energy Efficiency is the largest energy sector in Maryland

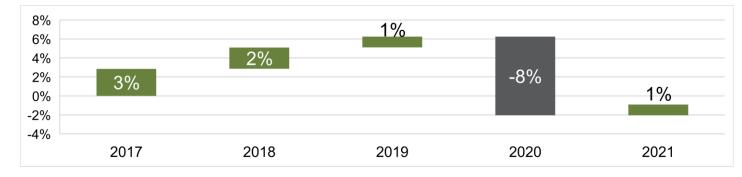


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#### How is the EE industry growing in Maryland?

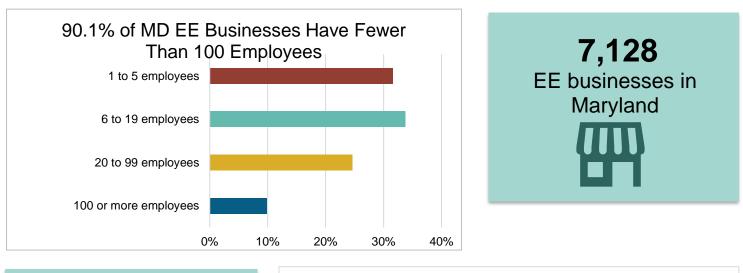


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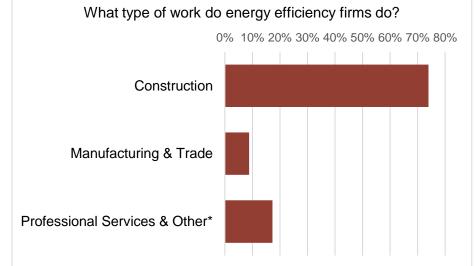
Presented by:

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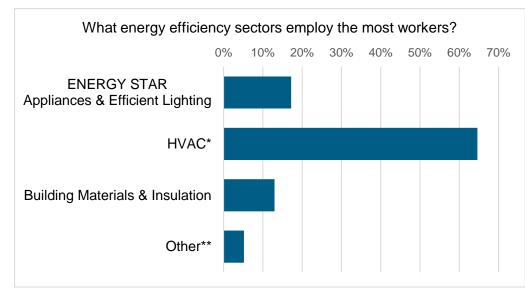


EE construction workers comprise **30%** of Maryland's construction workforce

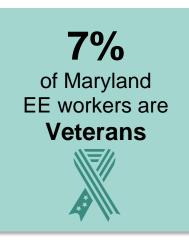




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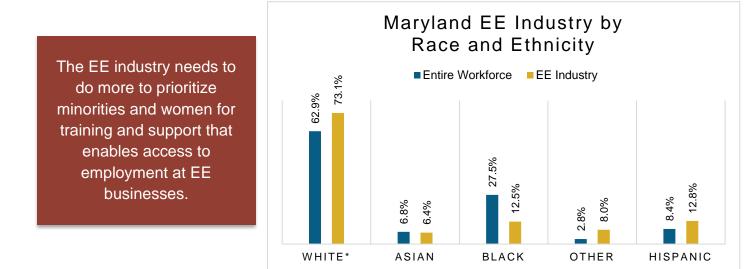
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services

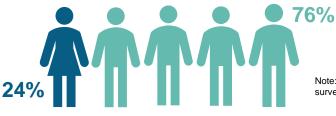


#### 2022 - Energy Efficiency Jobs in America Maryland

## How is EE doing on diversity in Maryland?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Maryland communities are represented in the EE sector.



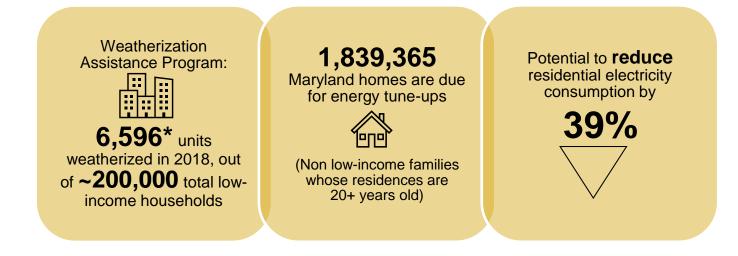


\*Includes non-Hispanic and Hispanic whites.

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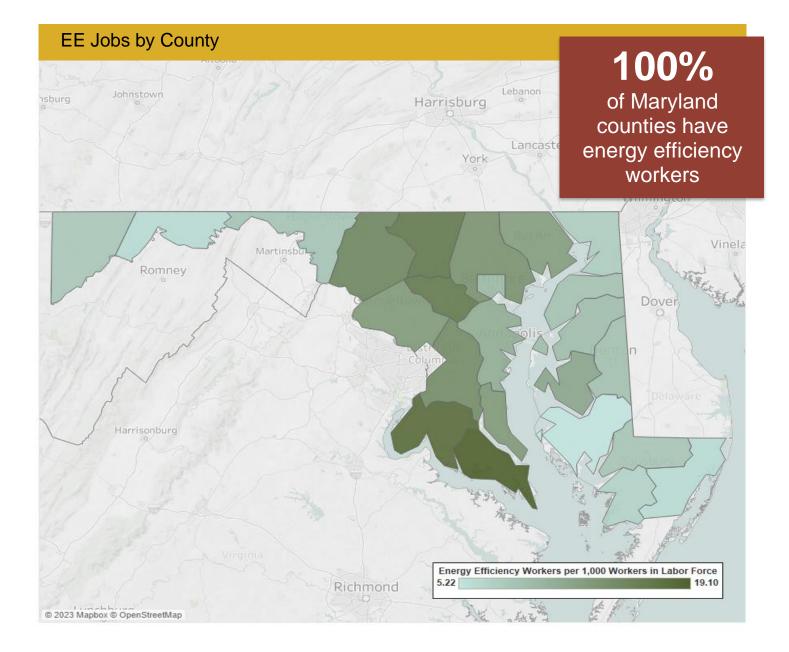
### Maryland's EE Potential

#### Decades of work ready for Maryland's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## Energy Efficiency Jobs are Everywhere



Metropolitan Areas					
Area	Jobs				
Baltimore-Towson	30,030				
Cumberland	592				
Hagerstown-Martinsburg	1,378				
Philadelphia-Camden- Wilmington	2,073				
Salisbury	1,134				
Washington-Arlington- Alexandria	27,071				
Rural	3,889				



Jobs by County					
County	Jobs	County	Jobs		
Allegany County	343	Kent County	131		
Anne Arundel County	5,987	Montgomery County	11,706		
Baltimore County	10,037	Prince George's County	8,898		
Calvert County	574	Queen Anne's County	285		
Caroline County	176	St. Mary's County	1,779		
Carroll County	1,879	Somerset County	94		
Cecil County	530	Talbot County	401		
Charles County	1,448	Washington County	1,060		
Dorchester County	128	Wicomico County	745		
Frederick County	3,098	Worcester County	347		
Garrett County	193	Baltimore City County	6,508		
Harford County	2,353	N/A	2,105		
Howard County	5,363				



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## Massachusetts Energy Efficiency Jobs in America

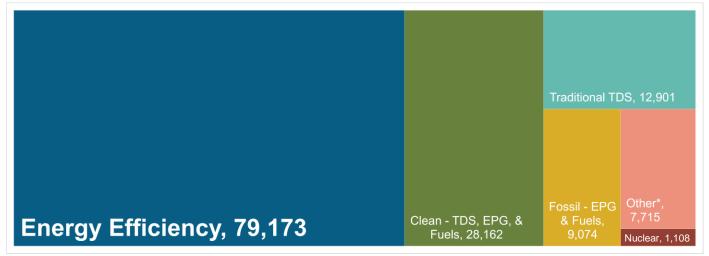


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Massachusetts's energy sectors compare?

Energy Efficiency is the largest energy sector in Massachusetts

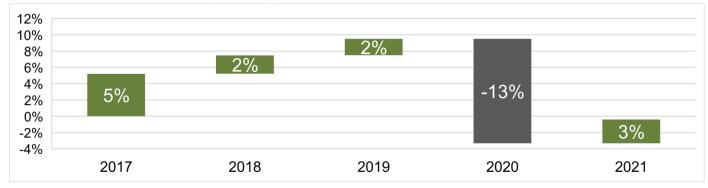


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear = includes EPG & Euels

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

#### How is the EE industry growing in Massachusetts?

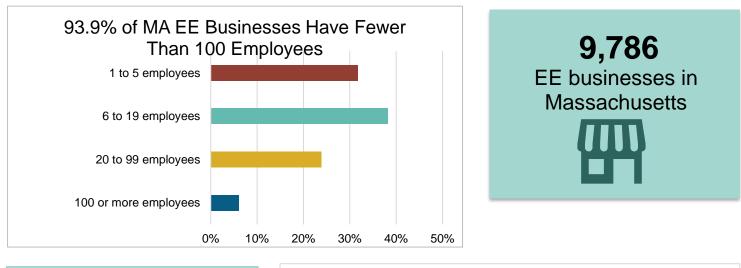


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

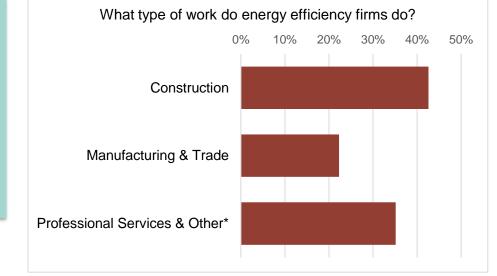


Presented by:

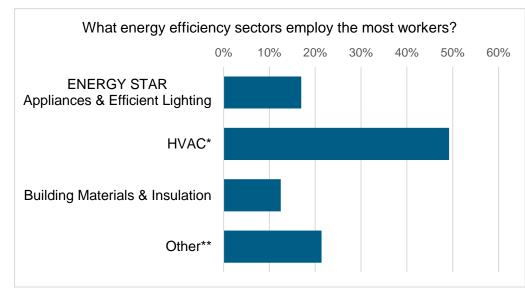
## What does EE look like in Massachusetts?



EE construction workers comprise **20%** of Massachusetts's construction workforce



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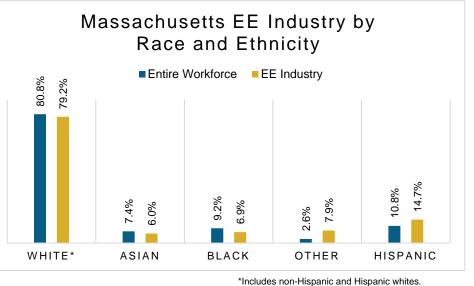
7% of Massachusetts EE workers are Veterans



## How is EE doing on diversity in Massachusetts?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



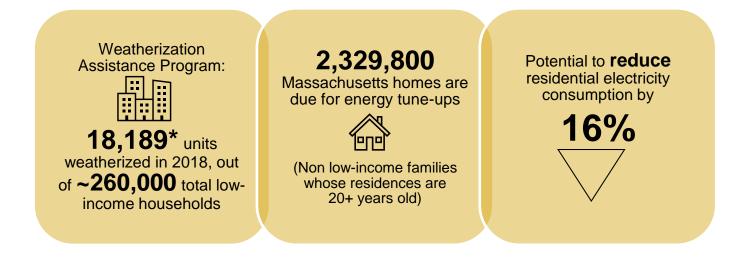
includes non-hispanic and hispanic whites



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### Massachusetts's EE Potential

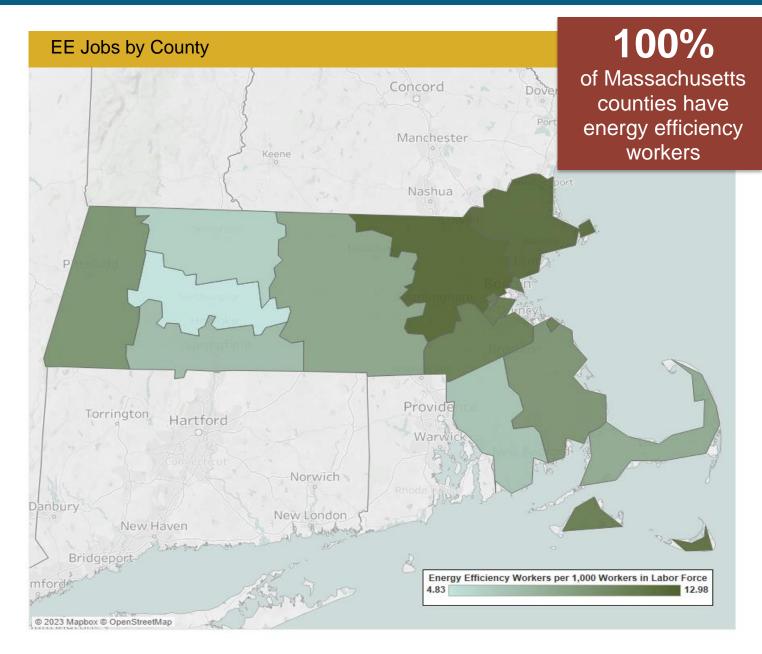
#### Decades of work ready for Massachusetts's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



## Energy Efficiency Jobs are Everywhere



Metropolitan Areas					
Area	Jobs				
Barnstable Town	3,276				
Boston-Cambridge-Quincy	56,606				
Pittsfield	1,368				
Providence-New Bedford- Fall River	4,789				
Springfield	6,212				
Worcester	6,430				
Rural	492				



Jobs by County						
County	Jobs	County	Jobs			
Barnstable County	1,813	Middlesex County	24,167			
Berkshire County	1,216	Nantucket County	234			
Bristol County	3,272	Norfolk County	7,981			
Dukes County	245	Plymouth County	4,032			
Essex County	8,234	Suffolk County	16,425			
Franklin County	334	Worcester County	5,925			
Hampden County	3,173	N/A	1,474			
Hampshire County	649					



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# Michigan Energy Efficiency Jobs in America

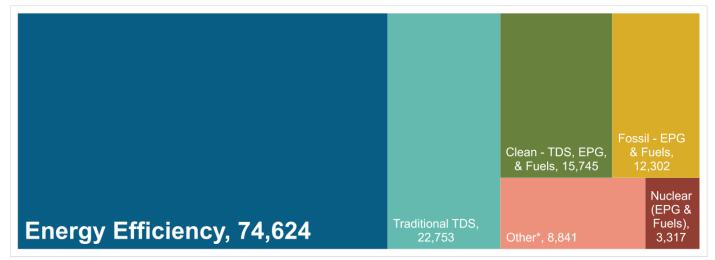


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Michigan's energy sectors compare?

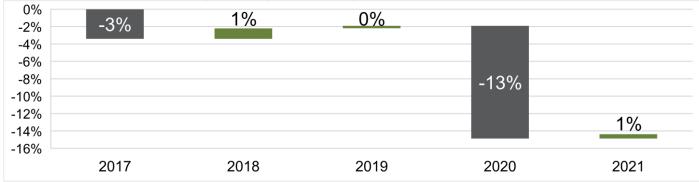
Energy Efficiency is the largest energy sector in Michigan



TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

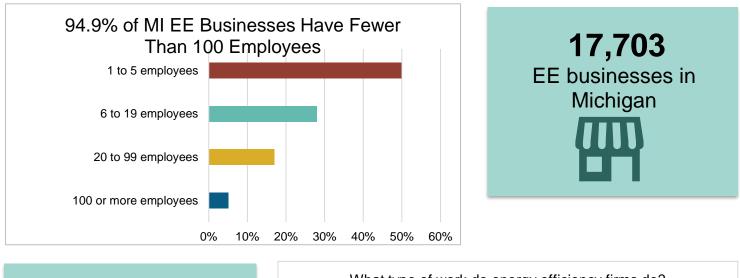
#### How is the EE industry growing in Michigan?



The EE industry has made a gradual recovery from the COVID-19 pandemic, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

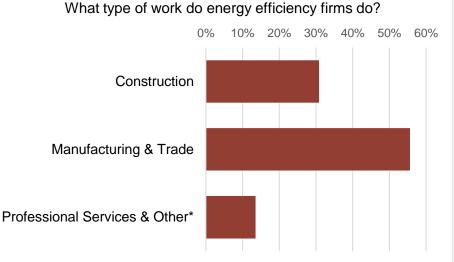


## What does EE look like in Michigan?

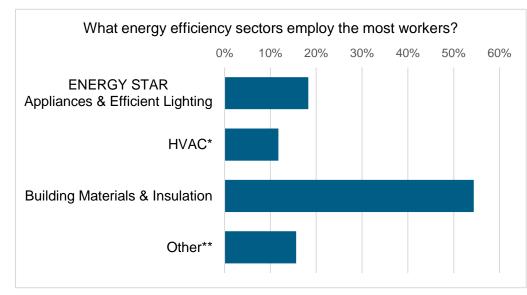


EE construction workers comprise **13%** of Michigan's construction workforce

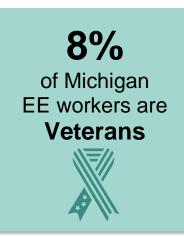




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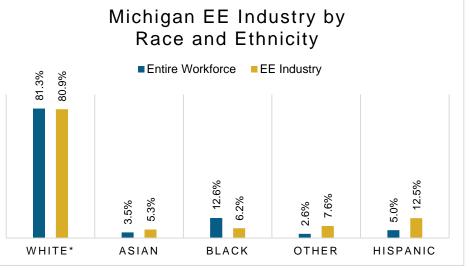




## How is EE doing on diversity in Michigan?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Michigan communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



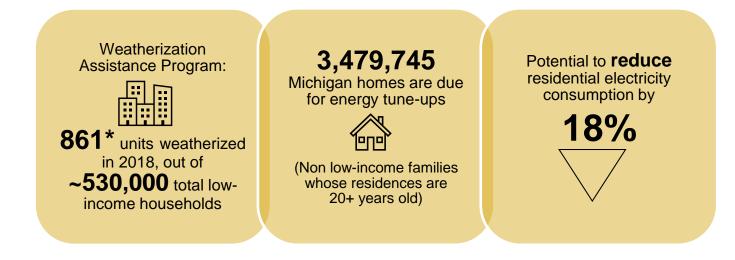
22% **78%** 

\*Includes non-Hispanic and Hispanic whites.

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### Michigan's EE Potential

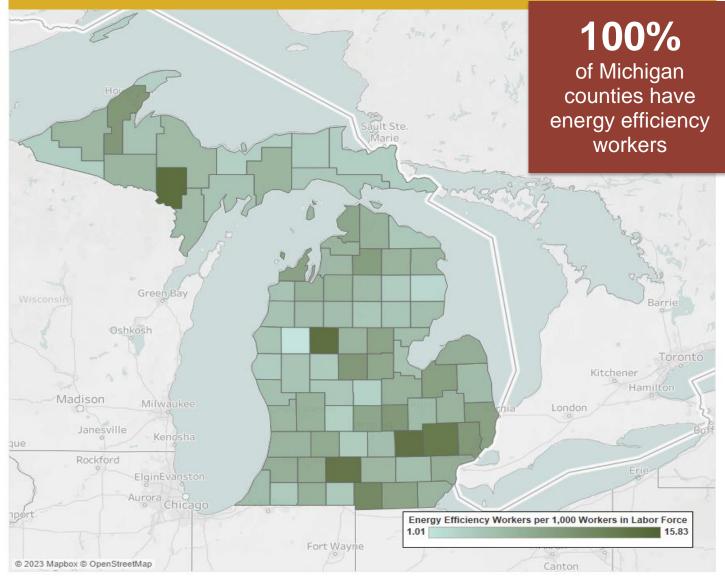
#### Decades of work ready for Michigan's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## Energy Efficiency Jobs are Everywhere

## EE Jobs by County



Metropolitan Areas					
Area	Jobs	Area	Jobs		
Ann Arbor	2,889	Kalamazoo-Portage	2,408		
Battle Creek	876	Lansing-East Lansing	3,179		
Bay City	575	Monroe	809		
Detroit-Warren-Livonia	32,761	Muskegon-Norton Shores	996		
Flint	2,270	Niles-Benton Harbor	1,611		
Grand Rapids-Wyoming	6,317	Saginaw-Saginaw Township North	1,493		
Holland-Grand Haven	2,167	South Bend-Mishawaka	309		
Jackson	979	Rural	14,986		



		J	obs by C	ounty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Alcona County	<10	Dickinson County	440	Lake County	<10	Oceana County	56
Alger County	18	Eaton County	355	Lapeer County	305	Ogemaw County	63
Allegan County	574	Emmet County	340	Leelanau County	137	Ontonagon County	18
Alpena County	156	Genesee County	1,590	Lenawee County	462	Osceola County	238
Antrim County	74	Gladwin County	76	Livingston County	1,917	Oscoda County	12
Arenac County	46	Gogebic County	36	Luce County	13	Otsego County	216
Baraga County	30	Grand Traverse County	773	Mackinac County	52	Ottawa County	1,662
Barry County	211	Gratiot County	83	Macomb County	7,009	Presque Isle County	26
Bay County	365	Hillsdale County	287	Manistee County	62	Roscommon County	56
Benzie County	52	Houghton County	216	Marquette County	341	Saginaw County	1,164
Berrien County	720	Huron County	179	Mason County	105	St. Clair County	791
Branch County	116	Ingham County	1,714	Mecosta County	92	St. Joseph County	318
Calhoun County	1,579	Ionia County	139	Menominee County	91	Sanilac County	118
Cass County	77	losco County	90	Midland County	629	Schoolcraft County	36
Charlevoix County	161	Iron County	48	Missaukee County	44	Shiawassee County	326
Cheboygan County	110	Isabella County	477	Monroe County	546	Tuscola County	222
Chippewa County	94	Jackson County	776	Montcalm County	134	Van Buren County	333
Clare County	91	Kalamazoo County	1,920	Montmorency County	29	Washtenaw County	2,367
Clinton County	324	Kalkaska County	66	Muskegon County	691	Wayne County	11,013
Crawford County	52	Kent County	6,009	Newaygo County	125	Wexford County	170
Delta County	139	Keweenaw County	<10	Oakland County	20,597	N/A	1,414



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## Minnesota Energy Efficiency Jobs in America

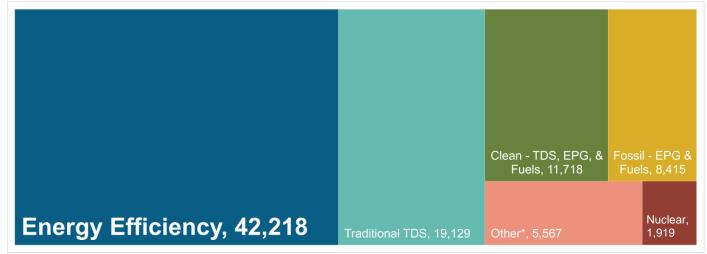


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Minnesota's energy sectors compare?

Energy Efficiency is the largest energy sector in Minnesota

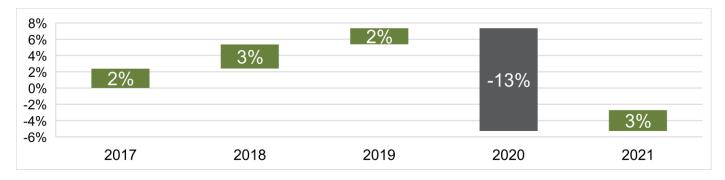


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EPG = Electric Power Generation

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

#### How is the EE industry growing in Minnesota?

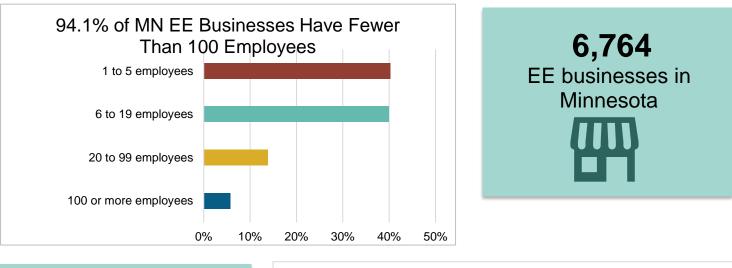


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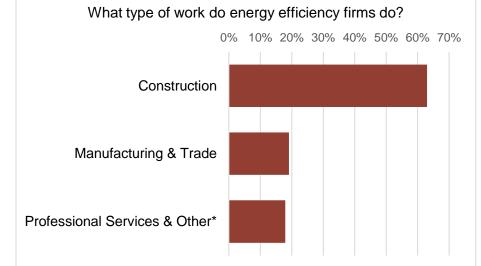
Presented by:

## What does EE look like in Minnesota?

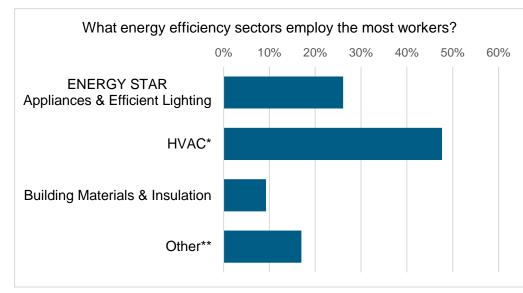


EE construction workers comprise **21%** of Minnesota's construction workforce

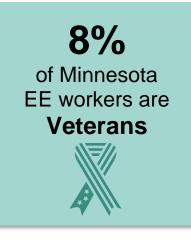




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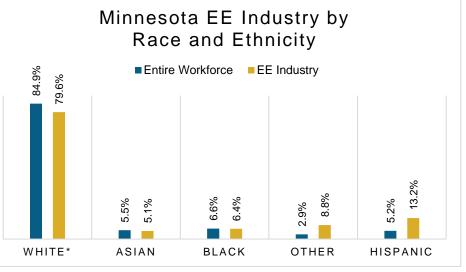




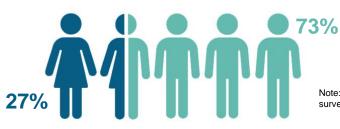
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The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



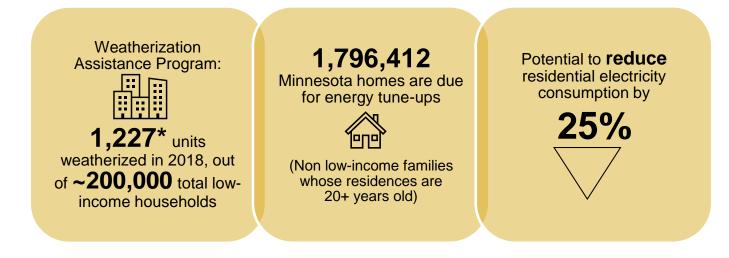
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### Minnesota's EE Potential

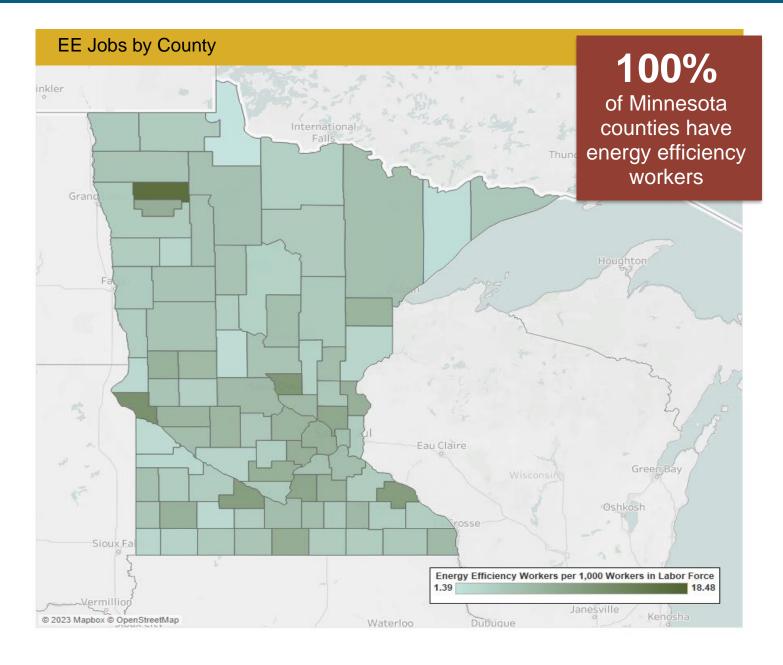
#### Decades of work ready for Minnesota's growing energy efficiency workforce.



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## Energy Efficiency Jobs are Everywhere



Metropolitan Areas						
Area	Jobs	Area	Jobs			
Duluth	1,348	St. Cloud	2,227			
Fargo	375	Rural	10,169			
Grand Forks	197					
La Crosse	193					
Mankato-North Mankato	655					
Minneapolis-St. Paul- Bloomington	25,787					
Rochester	1,267					



4

		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Aitkin County	46	Fillmore County	69	Marshall County	30	Rock County	24
Anoka County	2,658	Freeborn County	116	Martin County	99	Roseau County	80
Becker County	186	Goodhue County	201	Meeker County	82	St. Louis County	1,229
Beltrami County	263	Grant County	34	Mille Lacs County	75	Scott County	762
Benton County	450	Hennepin County	15,624	Morrison County	131	Sherburne County	407
Big Stone County	46	Houston County	75	Mower County	157	Sibley County	67
Blue Earth County	516	Hubbard County	81	Murray County	52	Stearns County	1,257
Brown County	304	Isanti County	127	Nicollet County	149	Steele County	199
Carlton County	223	Itasca County	160	Nobles County	77	Stevens County	69
Carver County	747	Jackson County	50	Norman County	16	Swift County	60
Cass County	93	Kanabec County	58	Olmsted County	937	Todd County	36
Chippewa County	74	Kandiyohi County	360	Otter Tail County	286	Traverse County	<10
Chisago County	293	Kittson County	15	Pennington County	382	Wabasha County	159
Clay County	197	Koochiching County	40	Pine County	55	Wadena County	50
Clearwater County	33	Lac qui Parle County	13	Pipestone County	52	Waseca County	80
Cook County	30	Lake County	17	Polk County	113	Washington County	878
Cottonwood County	38	Lake of the Woods County	<10	Pope County	39	Watonwan County	41
Crow Wing County	427	Le Sueur County	177	Ramsey County	4,159	Wilkin County	16
Dakota County	2,629	Lincoln County	21	Red Lake County	19	Winona County	214
Dodge County	91	Lyon County	133	Redwood County	59	Wright County	759
Douglas County	301	McLeod County	143	Renville County	40	Yellow Medicine County	24
Faribault County	87	Mahnomen County	12	Rice County	430	N/A	1,10



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# Mississippi Energy Efficiency Jobs in America

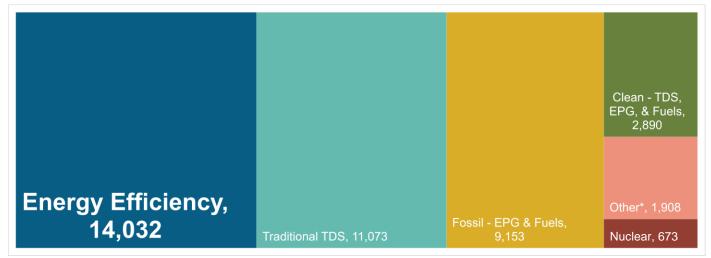


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Mississippi's energy sectors compare?

Energy Efficiency is the largest energy sector in Mississippi

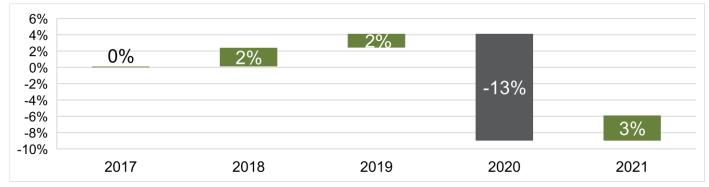


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\*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

#### How is the EE industry growing in Mississippi?

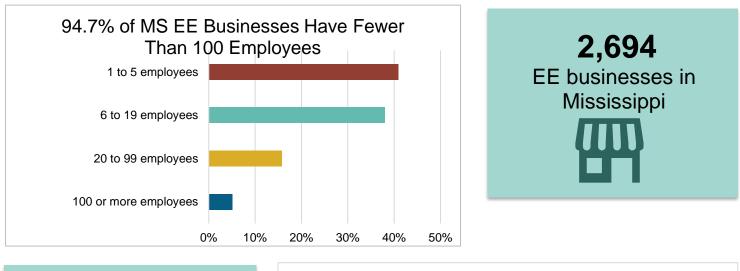


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



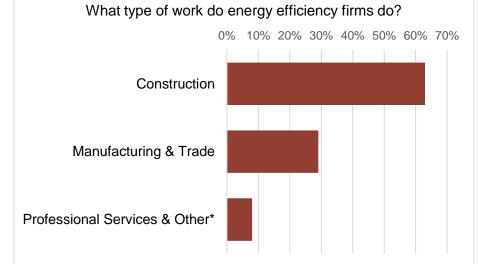
Presented by:

## What does EE look like in Mississippi?

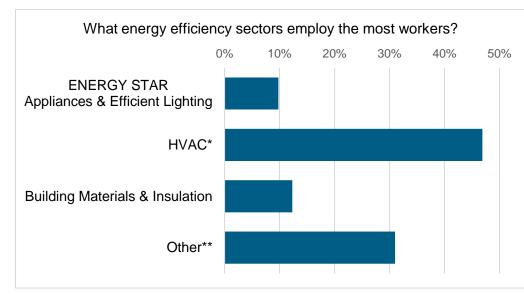


EE construction workers comprise **19%** of Mississippi's construction workforce

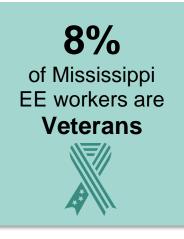




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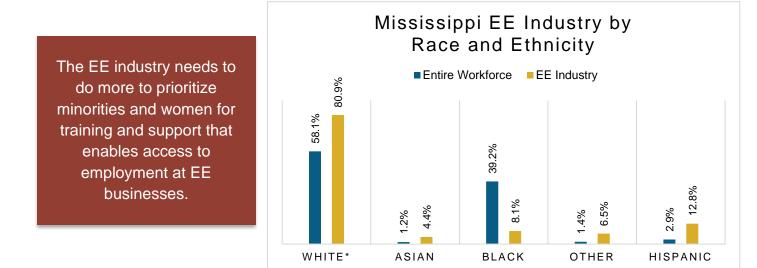
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services

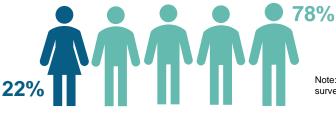




## How is EE doing on diversity in Mississippi?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Mississippi communities are represented in the EE sector.





\*Includes non-Hispanic and Hispanic whites.

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 Potential

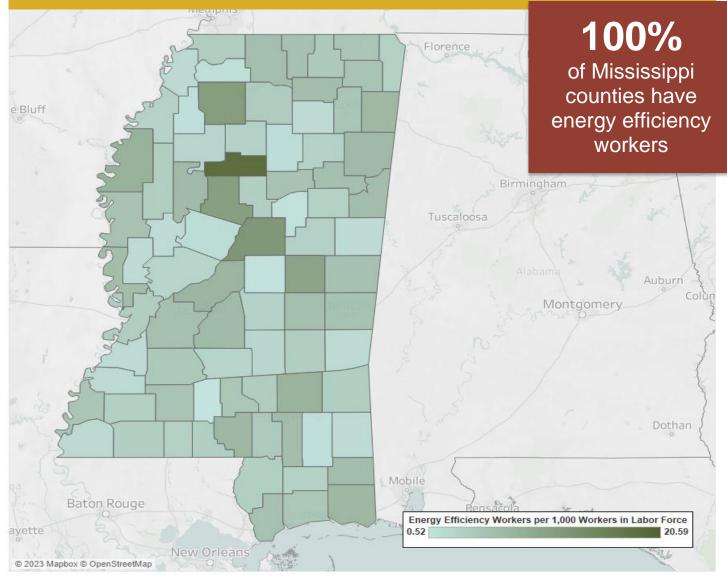
#### Decades of work ready for Mississippi's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform

## Energy Efficiency Jobs are Everywhere

### EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Gulfport-Biloxi	1,713				
Hattiesburg	811				
Jackson	3,275				
Memphis	1,239				
Pascagoula	779				
Rural	6,216				



Jobs by County								
County	Jobs	County	Jobs	County	Jobs	County	Jobs	
Adams County	115	Grenada County	405	Lincoln County	154	Simpson County	43	
Alcorn County	149	Hancock County	180	Lowndes County	345	Smith County	13	
Amite County	16	Harrison County	946	Madison County	923	Stone County	35	
Attala County	124	Hinds County	1,434	Marion County	131	Sunflower County	70	
Benton County	13	Holmes County	10	Marshall County	141	Tallahatchie County	14	
Bolivar County	182	Humphreys County	<10	Monroe County	156	Tate County	16	
Calhoun County	10	Issaquena County	<10	Montgomery County	20	Tippah County	67	
Carroll County	27	Itawamba County	93	Neshoba County	269	Tishomingo County	51	
Chickasaw County	37	Jackson County	788	Newton County	69	Tunica County	27	
Choctaw County	<10	Jasper County	34	Noxubee County	<10	Union County	165	
Claiborne County	12	Jefferson County	<10	Oktibbeha County	154	Walthall County	20	
Clarke County	12	Jefferson Davis County	16	Panola County	257	Warren County	161	
Clay County	84	Jones County	467	Pearl River County	87	Washington County	184	
Coahoma County	44	Kemper County	22	Perry County	<10	Wayne County	38	
Copiah County	64	Lafayette County	224	Pike County	111	Webster County	25	
Covington County	52	Lamar County	193	Pontotoc County	52	Wilkinson County	<10	
DeSoto County	606	Lauderdale County	382	Prentiss County	91	Winston County	37	
Forrest County	541	Lawrence County	<10	Quitman County	<10	Yalobusha County	19	
Franklin County	12	Leake County	<10	Rankin County	956	Yazoo County	37	
George County	68	Lee County	628	Scott County	95	N/A	725	
Greene County	<10	Leflore County	213	Sharkey County	<10			



E2 [bw] RESEARCH E4TheFuture is dedicated to bringing clean, efficient energy home for every American and promotes energy solutions to advance climate protection and economic fairness. Visit <u>www.E4TheFuture.org.</u>

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Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

# Missouri Energy Efficiency Jobs in America

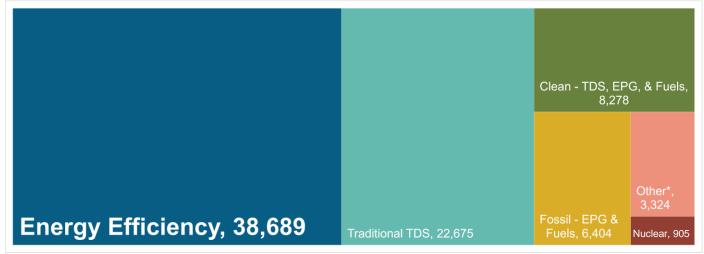


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Missouri's energy sectors compare?

Energy Efficiency is the largest energy sector in Missouri

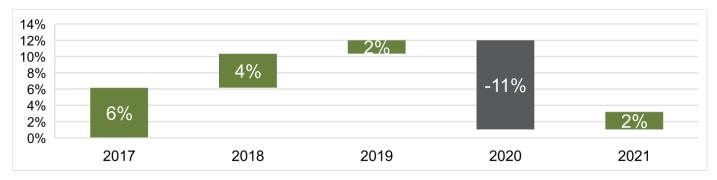


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

### How is the EE industry growing in Missouri?

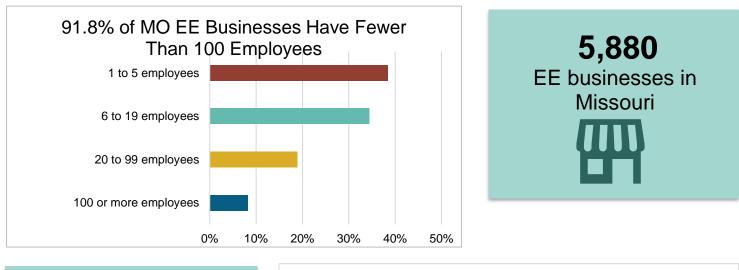


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



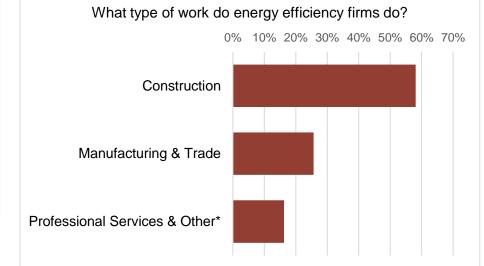
Presented by:

## What does EE look like in Missouri?

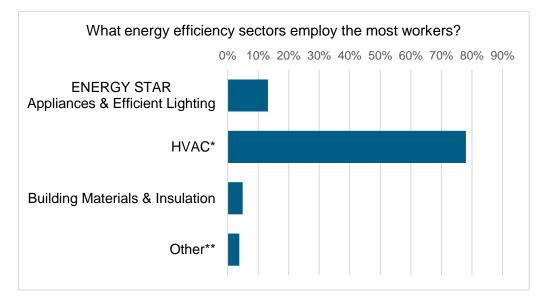


EE construction workers comprise **17%** of Missouri's construction workforce

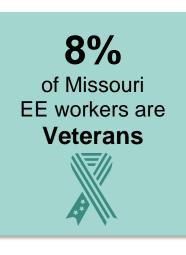




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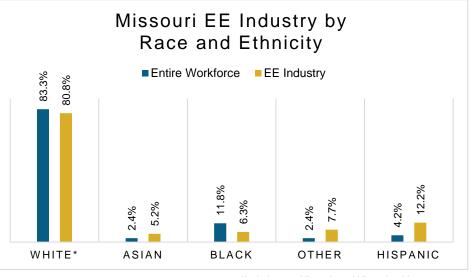




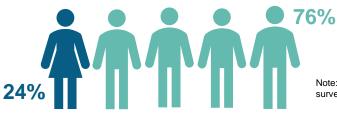
## How is EE doing on diversity in Missouri?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



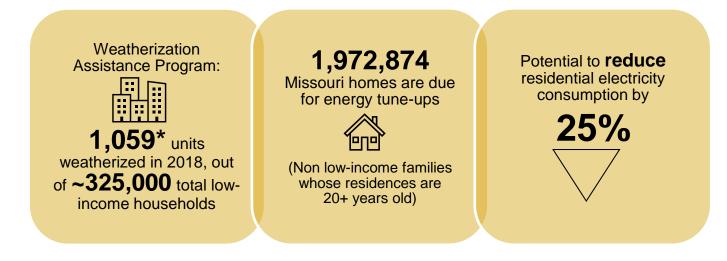
\*Includes non-Hispanic and Hispanic whites.



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.

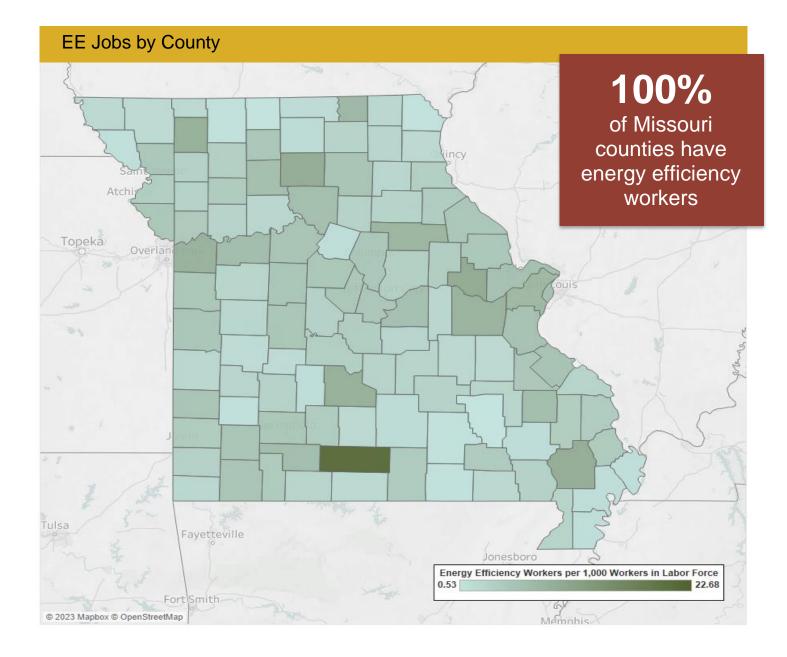
## Missouri's EE Potential

#### Decades of work ready for Missouri's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## Energy Efficiency Jobs are Everywhere



Metropolitan Areas							
Area	Jobs	Area	Jobs				
Cape Girardeau-Jackson	672	St. Joseph	568				
Columbia	1,115	St. Louis	14,496				
Fayetteville-Springdale- Rogers	140	Rural	8,505				
Jefferson City	929						
Joplin	982						
Kansas City	8,201						
Springfield	3,079						



County	Jobs	County	Jobs	County County	Jobs	County	Jobs
Adair County	66	Dallas County	<10	Livingston County	95	Randolph County	73
Andrew County	34	Daviess County	15	McDonald County	33	Ray County	30
	-	-	-				
Atchison County	<10	DeKalb County	22	Macon County	64	Reynolds County	<10
Audrain County	150	Dent County	28	Madison County	55	Ripley County	16
Barry County	169	Douglas County	113	Maries County	<10	St. Charles County	2,173
Barton County	43	Dunklin County	60	Marion County	114	St. Clair County	<10
Bates County	45	Franklin County	743	Mercer County	<10	Ste. Genevieve County	81
Benton County	48	Gasconade County	32	Miller County	77	St. Francois County	258
Bollinger County	18	Gentry County	42	Mississippi County	10	St. Louis County	10,136
Boone County	1,088	Greene County	2,043	Moniteau County	51	Saline County	111
Buchanan County	410	Grundy County	35	Monroe County	13	Schuyler County	10
Butler County	147	Harrison County	<10	Montgomery County	29	Scotland County	<10
Caldwell County	20	Henry County	49	Morgan County	40	Scott County	165
Callaway County	128	Hickory County	<10	New Madrid County	25	Shannon County	<10
Camden County	167	Holt County	<10	Newton County	157	Shelby County	11
Cape Girardeau County	394	Howard County	<10	Nodaway County	37	Stoddard County	220
Carroll County	14	Howell County	153	Oregon County	<10	Stone County	80
Carter County	16	Iron County	23	Osage County	58	Sullivan County	<10
Cass County	352	Jackson County	7,071	Ozark County	<10	Taney County	192
Cedar County	21	Jasper County	577	Pemiscot County	15	Texas County	24
Chariton County	28	Jefferson County	653	Perry County	61	Vernon County	37
Christian County	296	Johnson County	101	Pettis County	229	Warren County	170
Clark County	<10	Knox County	<10	Phelps County	124	Washington County	27
Clay County	1,114	Laclede County	284	Pike County	61	Wayne County	<10
Clinton County	32	Lafayette County	135	Platte County	546	Webster County	88
Cole County	598	Lawrence County	109	Polk County	69	Worth County	<10
Cooper County	57	Lewis County	13	Pulaski County	93	Wright County	22
Crawford County	38	Lincoln County	144	Putnam County	<10	St. Louis City County	3,052
Dade County	<10	Linn County	88	Ralls County	35	N/A	1,470



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# Montana Energy Efficiency Jobs in America



Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Montana's energy sectors compare?

Energy Efficiency is the second largest energy sector in Montana

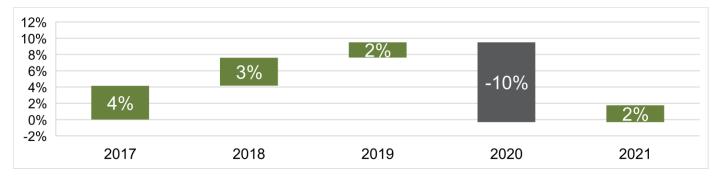


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), < 15

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

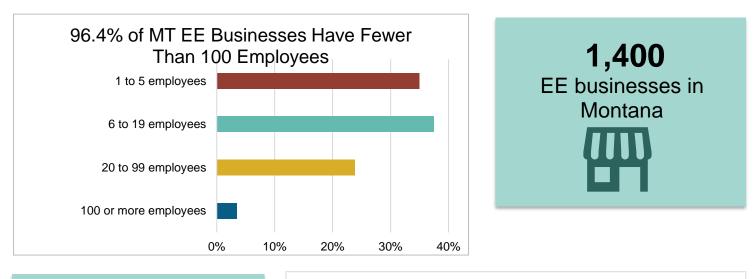
### How is the EE industry growing in Montana?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

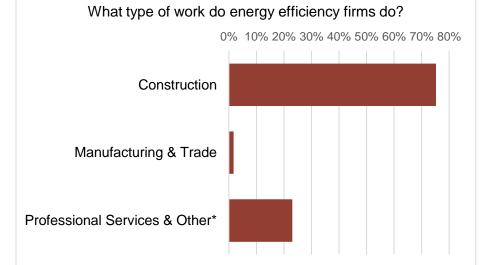


# What does EE look like in Montana?

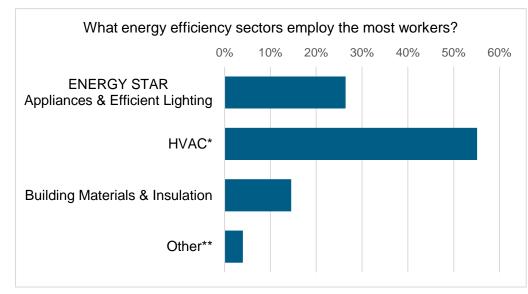


EE construction workers comprise **18%** of Montana's construction workforce

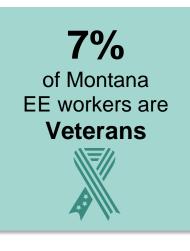




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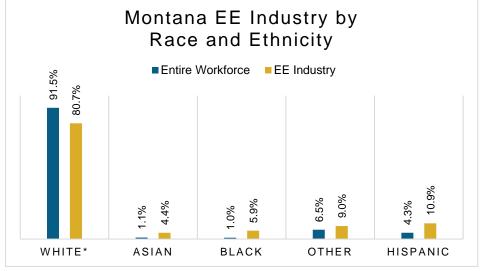




# How is EE doing on diversity in Montana?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Montana communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



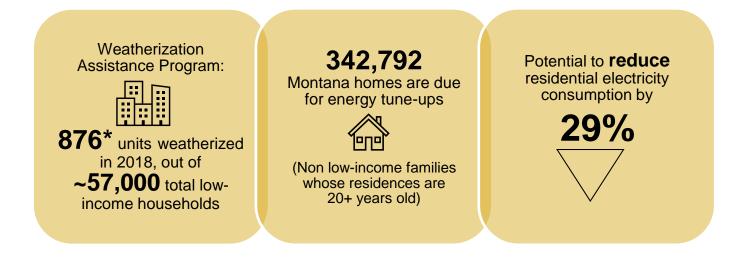
24% 76%

\*Includes non-Hispanic and Hispanic whites.

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.

## Montana's EE Potential

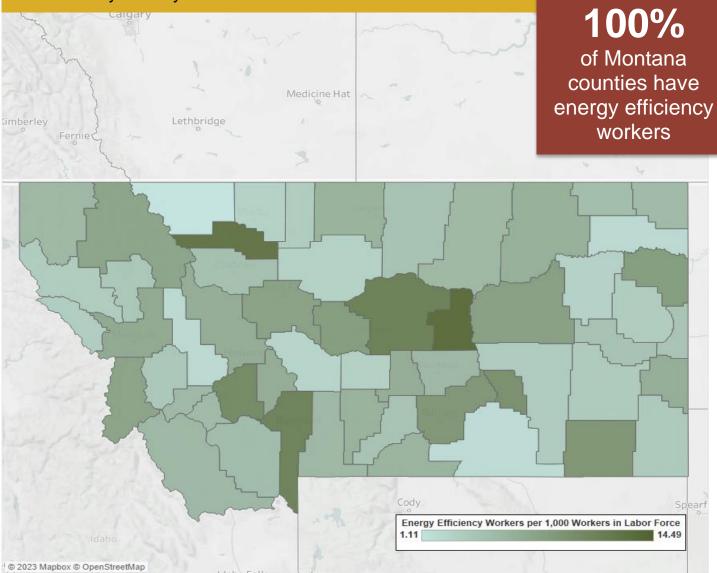
#### Decades of work ready for Montana's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

# Energy Efficiency Jobs are Everywhere

## EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Billings	1,699				
Great Falls	486				
Missoula	963				
Rural	4,988				



County	laha	Jobs by County	laha	County	
County	Jobs	County	Jobs	County	J
Beaverhead County	48	Granite County	<10	Powell County	
Big Horn County	16	Hill County	89	Prairie County	<
Blaine County	12	Jefferson County	57	Ravalli County	2
Broadwater County	20	Judith Basin County	<10	Richland County	
Carbon County	40	Lake County	87	Roosevelt County	
Carter County	<10	Lewis and Clark County	558	Rosebud County	
Cascade County	616	Liberty County	<10	Sanders County	
Chouteau County	<10	Lincoln County	72	Sheridan County	
Custer County	43	McCone County	<10	Silver Bow County	1
Daniels County	<10	Madison County	51	Stillwater County	
Dawson County	27	Meagher County	<10	Sweet Grass County	
Deer Lodge County	39	Mineral County	<10	Teton County	
Fallon County	19	Missoula County	980	Toole County	
Fergus County	113	Musselshell County	15	Treasure County	•
Flathead County	796	Park County	92	Valley County	
Gallatin County	1,644	Petroleum County	<10	Wheatland County	
Garfield County	<10	Phillips County	15	Wibaux County	•
Glacier County	10	Pondera County	44	Yellowstone County	1
Golden Valley County	<10	Powder River County	11	N/A	1



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For questions on E4TheFuture analyses please email: policy@e4thefuture.org.

# Nebraska Energy Efficiency Jobs in America

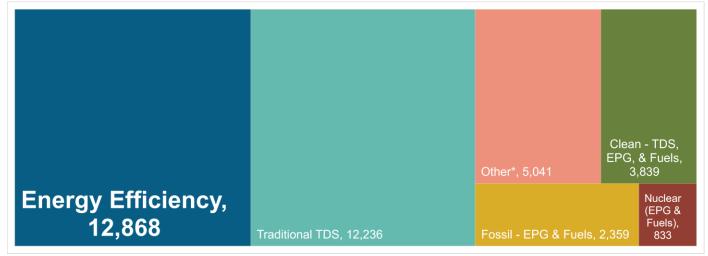


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do Nebraska's energy sectors compare?

Energy Efficiency is the largest energy sector in Nebraska

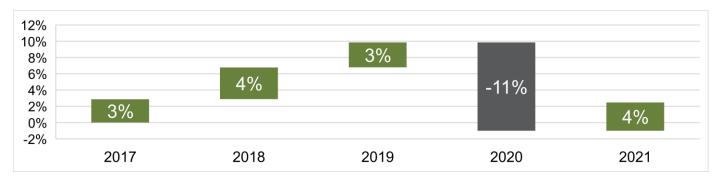


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EPG = Electric Power Generation

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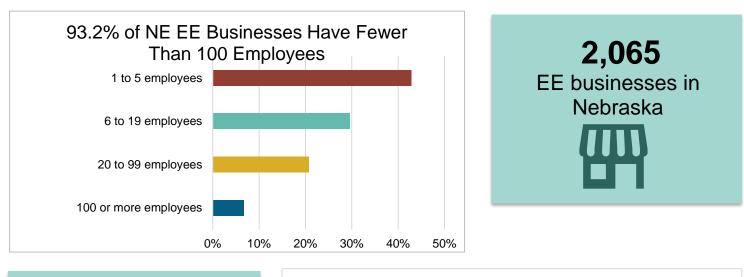
## How is the EE industry growing in Nebraska?



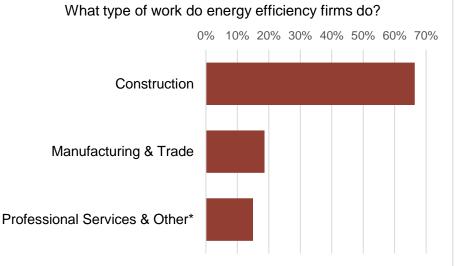
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



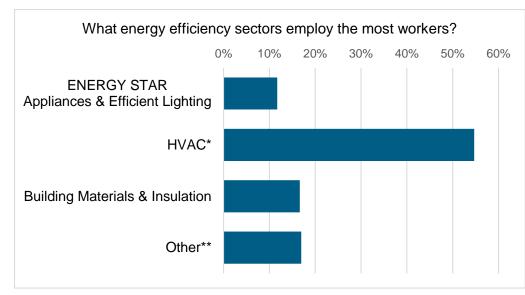
# What does EE look like in Nebraska?



EE construction workers comprise **15%** of Nebraska's construction workforce



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



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8%

of Nebraska

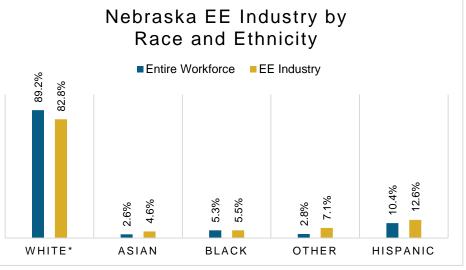
EE workers are

Veterans

# How is EE doing on diversity in Nebraska?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



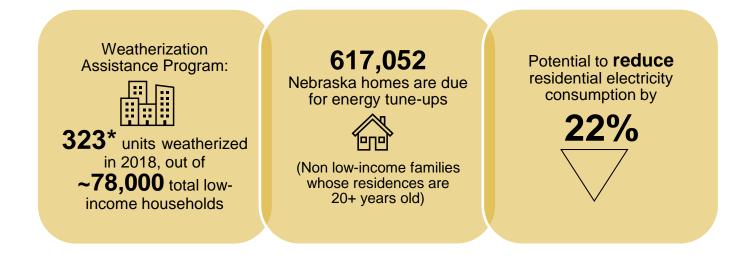
24% 76%

\*Includes non-Hispanic and Hispanic whites.

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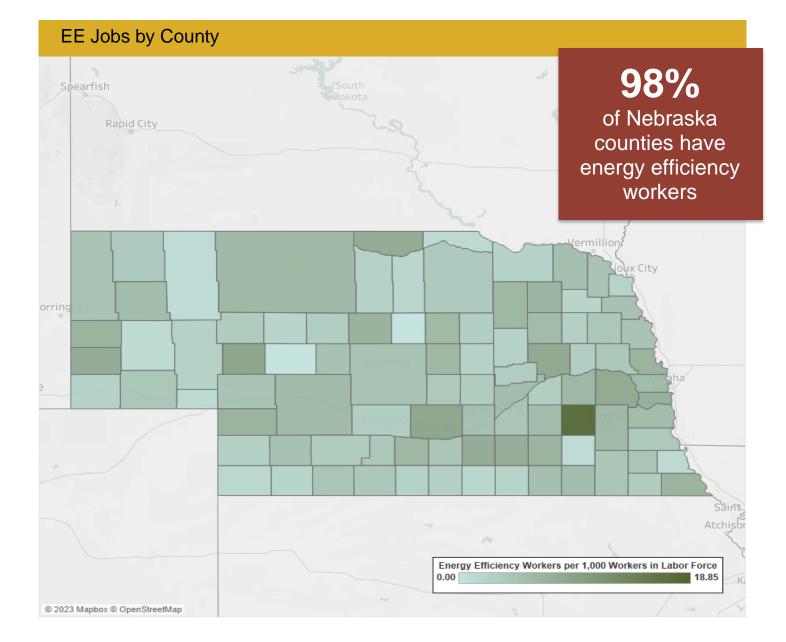
## Nebraska's EE Potential

### Decades of work ready for Nebraska's growing energy efficiency workforce.



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# Energy Efficiency Jobs are Everywhere



Metropolitan Areas					
Area	Jobs				
Lincoln	2,192				
Omaha-Council Bluffs	5,111				
Sioux City	98				
Rural	5,468				



Jobs by County							
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adams County	275	Deuel County	<10	Johnson County	14	Red Willow County	50
Antelope County	32	Dixon County	20	Kearney County	20	Richardson County	37
Arthur County	<10	Dodge County	172	Keith County	35	Rock County	<10
Banner County	<10	Douglas County	4,358	Keya Paha County	<10	Saline County	18
Blaine County	<10	Dundy County	<10	Kimball County	<10	Sarpy County	1,204
Boone County	14	Fillmore County	36	Knox County	16	Saunders County	109
Box Butte County	45	Franklin County	<10	Lancaster County	2,283	Scotts Bluff County	244
Boyd County	<10	Frontier County	<10	Lincoln County	191	Seward County	216
Brown County	<10	Furnas County	17	Logan County	<10	Sheridan County	<10
Buffalo County	528	Gage County	85	Loup County	<10	Sherman County	<10
Burt County	19	Garden County	<10	McPherson County	<10	Sioux County	<10
Butler County	38	Garfield County	11	Madison County	281	Stanton County	<10
Cass County	76	Gosper County	<10	Merrick County	29	Thayer County	26
Cedar County	32	Grant County	<10	Morrill County	<10	Thomas County	<10
Chase County	12	Greeley County	<10	Nance County	<10	Thurston County	36
Cherry County	32	Hall County	395	Nemaha County	10	Valley County	26
Cheyenne County	37	Hamilton County	36	Nuckolls County	<10	Washington County	123
Clay County	35	Harlan County	<10	Otoe County	55	Wayne County	20
Colfax County	34	Hayes County	<10	Pawnee County	<10	Webster County	<10
Cuming County	37	Hitchcock County	<10	Perkins County	18	Wheeler County	<10
Custer County	50	Holt County	35	Phelps County	61	York County	95
Dakota County	67	Hooker County	<10	Pierce County	30	N/A	420
Dawes County	27	Howard County	12	Platte County	370		
Dawson County	85	Jefferson County	41	Polk County	11		



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# Nevada Energy Efficiency Jobs in America

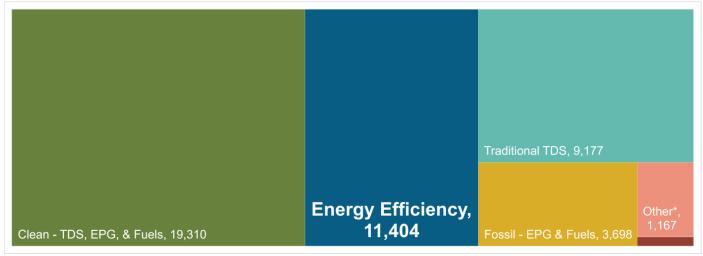


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Nevada's energy sectors compare?

Energy Efficiency is the second largest energy sector in Nevada

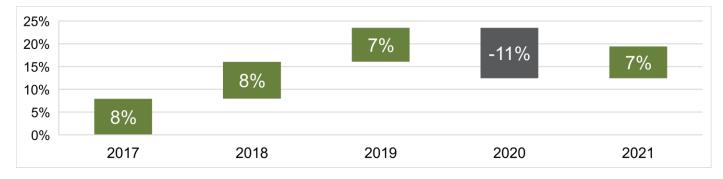


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 142

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

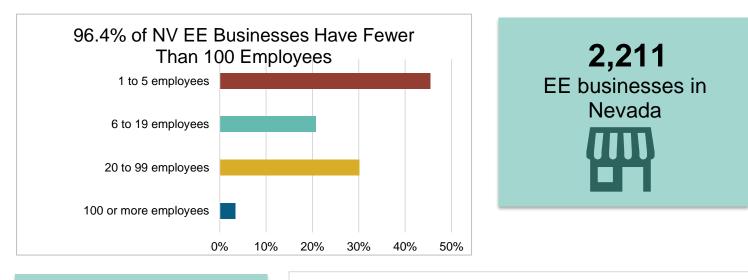
## How is the EE industry growing in Nevada?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

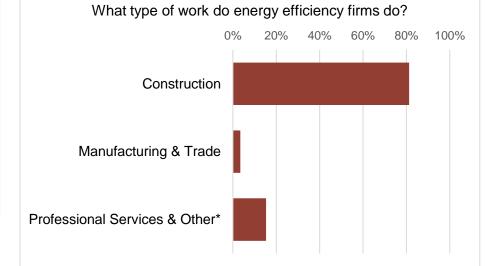


## What does EE look like in Nevada?

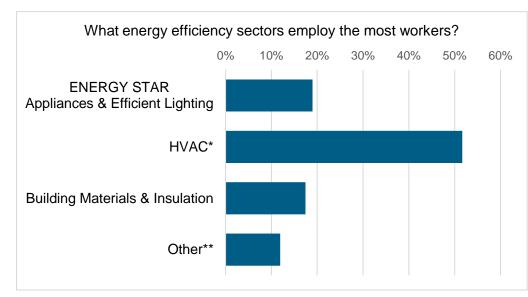


EE construction workers comprise **10%** of Nevada's construction workforce

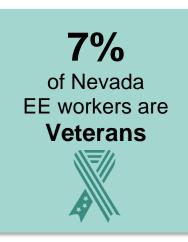




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

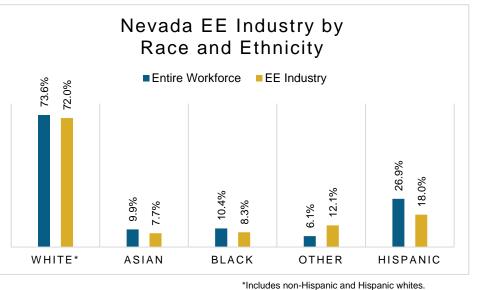




# How is EE doing on diversity in Nevada?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.

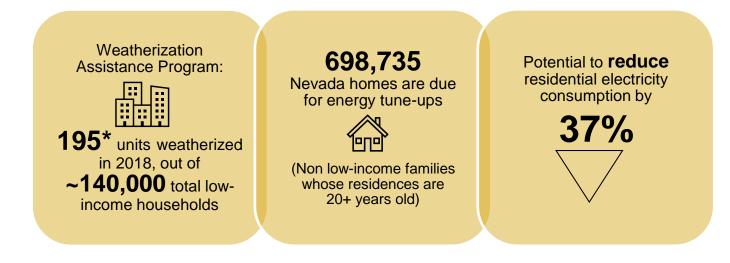




Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

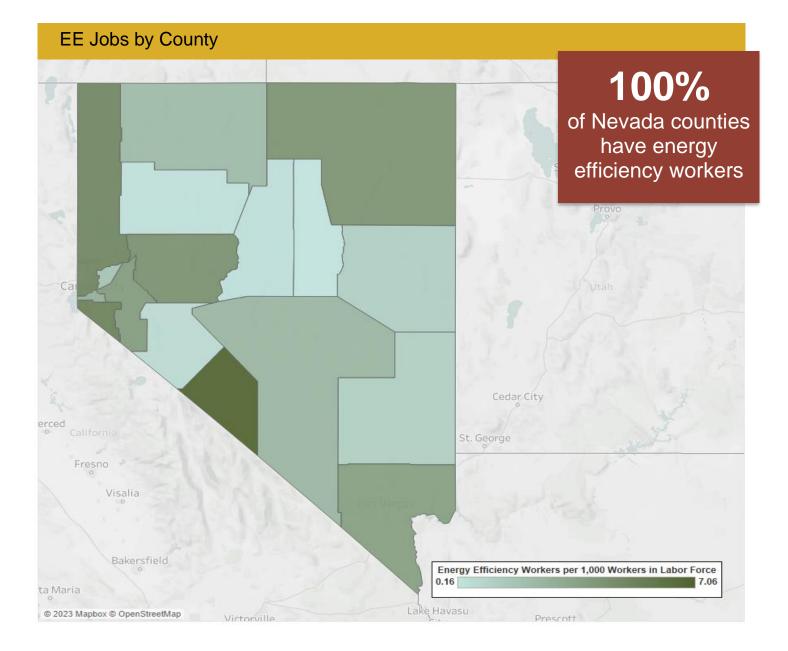
## Nevada's EE Potential

#### Decades of work ready for Nevada's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform

# Energy Efficiency Jobs are Everywhere



Metropolitan Areas					
Area	Jobs				
Carson City	218				
Las Vegas-Paradise	6,773				
Reno-Sparks	3,941				
Rural	472				



Jobs by County					
County	Jobs	County	Jobs		
Churchill County	80	Lyon County	114		
Clark County	7,988	Mineral County	<10		
Douglas County	214	Nye County	71		
Elko County	200	Pershing County	<10		
Esmeralda County	<10	Storey County	73		
Eureka County	<10	Washoe County	2,386		
Humboldt County	36	White Pine County	11		
Lander County	<10	Carson City County	175		
Lincoln County	<10	N/A	40		



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# New Hampshire Energy Efficiency Jobs in America

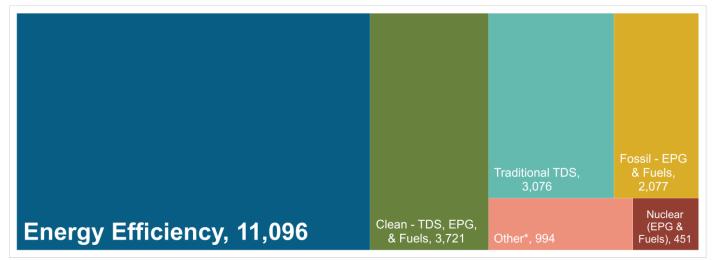


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do New Hampshire's energy sectors compare?

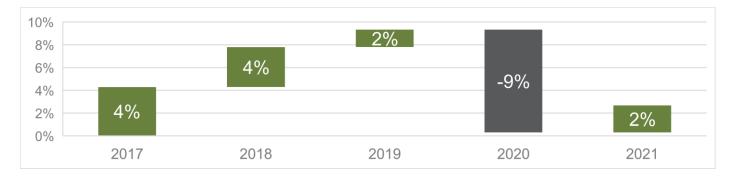
Energy Efficiency is the largest energy sector in New Hampshire



TDS = Transmission, Distribution & Storage EPG = Electric Power Generation

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

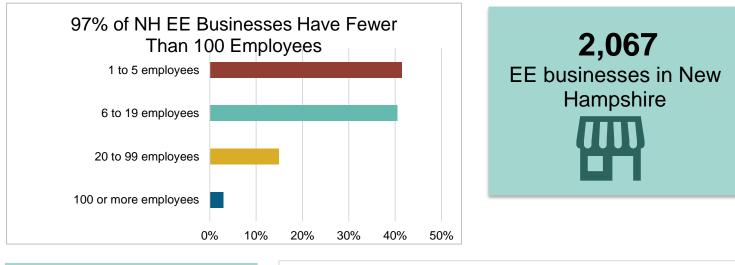
### How is the EE industry growing in New Hampshire?



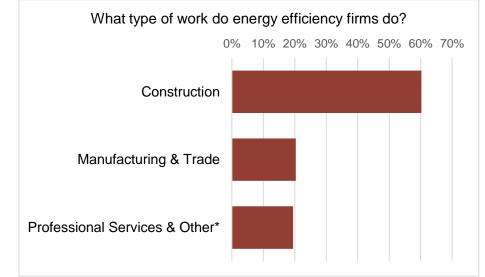
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



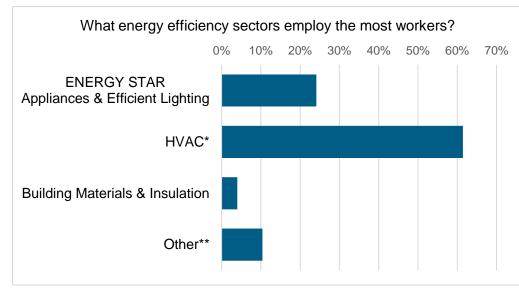
# What does EE look like in New Hampshire?



EE construction workers comprise **23%** of New Hampshire's construction workforce



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



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

8%

of New Hampshire

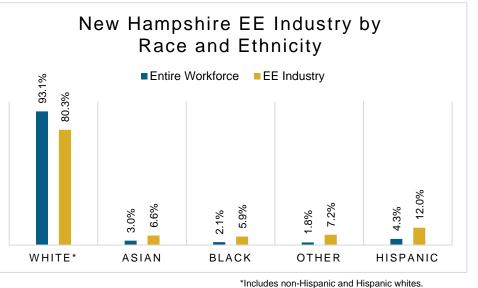
EE workers are

Veterans

## How is EE doing on diversity in New Hampshire?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



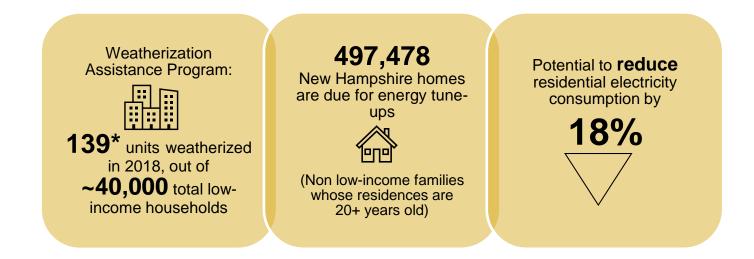
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Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

## New Hampshire's EE Potential

#### Decades of work ready for New Hampshire's growing energy efficiency workforce.

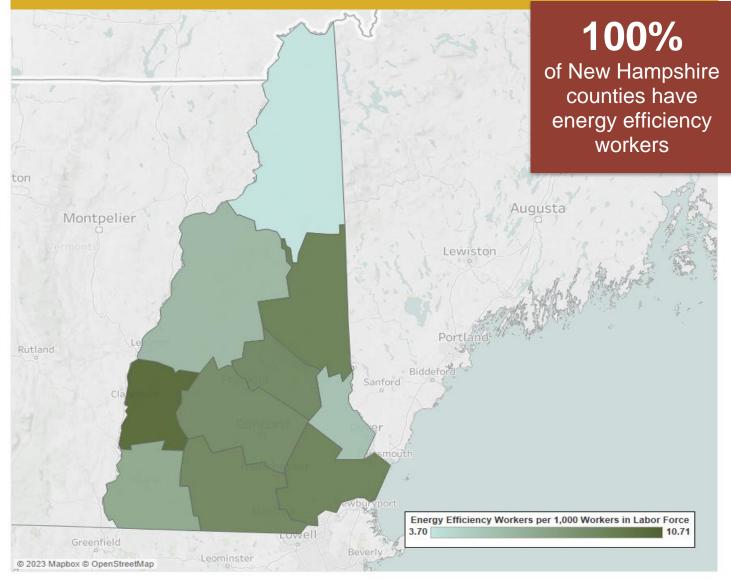


\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



# Energy Efficiency Jobs are Everywhere

## EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Boston-Cambridge-Quincy	5,685				
Manchester-Nashua	2,362				
Rural	3,049				



Jobs by County					
County	Jobs				
Belknap County	465				
Carroll County	382				
Cheshire County	451				
Coos County	89				
Grafton County	659				
Hillsborough County	3,637				
Merrimack County	1,324				
Rockingham County	2,826				
Strafford County	545				
Sullivan County	293				
N/A	425				



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# New Jersey Energy Efficiency Jobs in America



Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do New Jersey's energy sectors compare?

Energy Efficiency is the largest energy sector in New Jersey

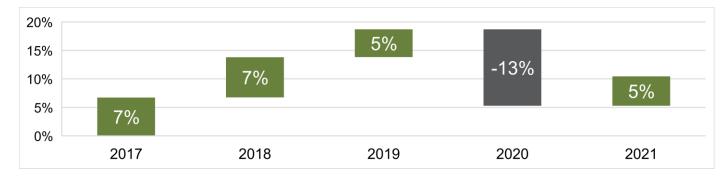


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

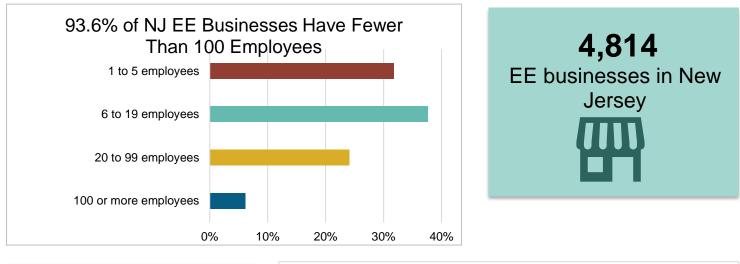
## How is the EE industry growing in New Jersey?



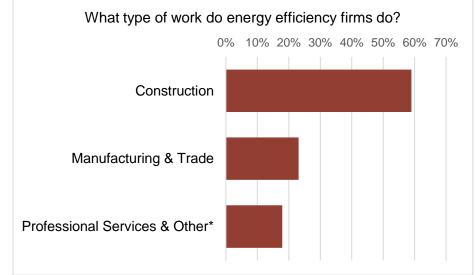
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



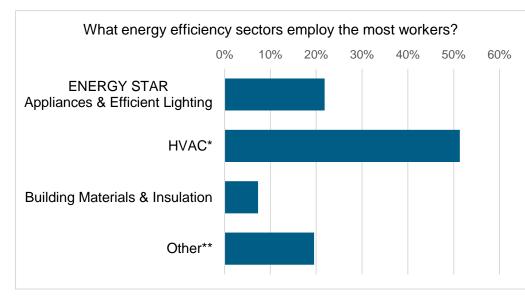
# What does EE look like in New Jersey?



EE construction workers comprise **13%** of New Jersey's construction workforce



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



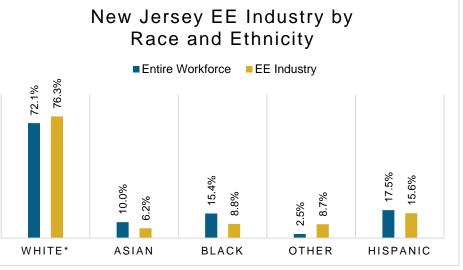
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services 7% of New Jersey EE workers are Veterans



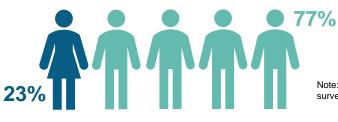
# How is EE doing on diversity in New Jersey?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



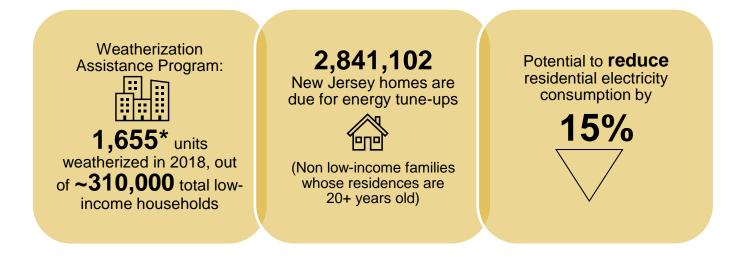
\*Includes non-Hispanic and Hispanic whites.



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.

## New Jersey's EE Potential

#### Decades of work ready for New Jersey's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



# Energy Efficiency Jobs are Everywhere

EE Jobs by County Scranton 100% Wilkes-Barre of New Jersey counties have energy efficiency workers 1. Albert & States of the Allentown ork Reading banon Lancaster Philade Wilming Bel Air tic City Dover Energy Efficiency Workers per 1,000 Workers in Labor Force 2.55 6.19 Denton © 2023 Mapbox © OpenStreetMap

Metropolitan Areas					
Area	Jobs				
Allentown-Bethlehem- Easton	426				
Atlantic City	689				
New York-Northern New Jersey-Long Island	26,339				
Ocean City	410				
Philadelphia-Camden- Wilmington	4,902				
Trenton-Ewing	1,508				
Vineland-Millville-Bridgeton	310				



Jobs by County					
County	Jobs	County	Jobs		
Atlantic County	793	Middlesex County	3,530		
Bergen County	4,267	Monmouth County	2,689		
Burlington County	1,627	Morris County	3,712		
Camden County	1,847	Ocean County	1,473		
Cape May County	273	Passaic County	1,329		
Cumberland County	351	Salem County	124		
Essex County	2,733	Somerset County	1,474		
Gloucester County	782	Sussex County	384		
Hudson County	1,386	Union County	1,988		
Hunterdon County	532	Warren County	201		
Mercer County	1,815	N/A	1,274		



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# New Mexico Energy Efficiency Jobs in America

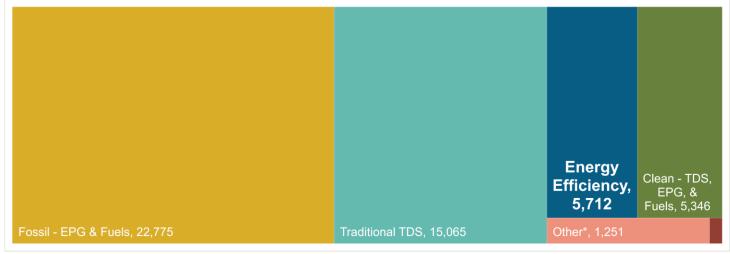


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do New Mexico's energy sectors compare?

Energy Efficiency is the third largest energy sector in New Mexico

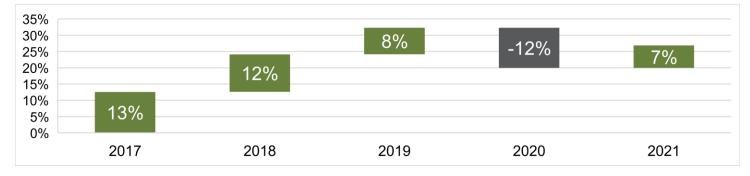


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 97

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

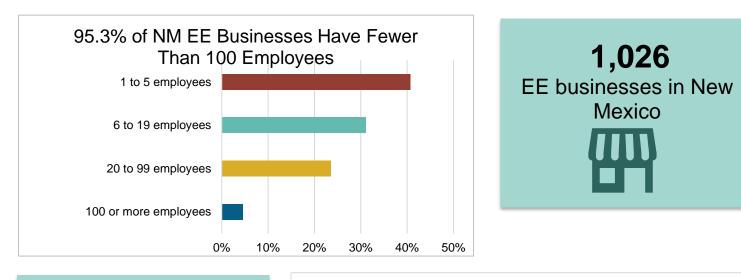
### How is the EE industry growing in New Mexico?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

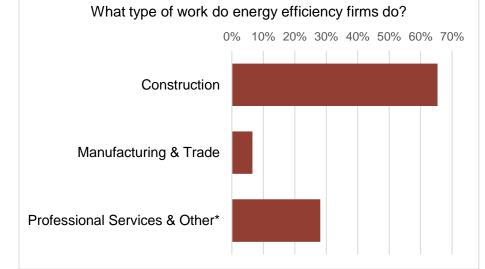


## What does EE look like in New Mexico?

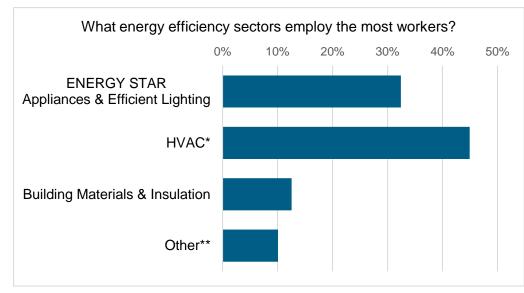


EE construction workers comprise **8%** of New Mexico's construction workforce





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



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



8%

of New Mexico

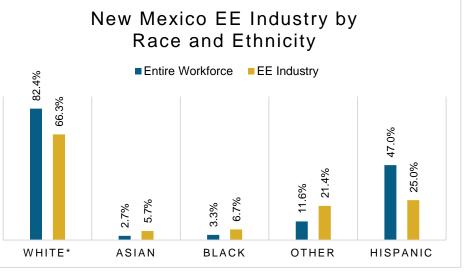
EE workers are

Veterans

# How is EE doing on diversity in New Mexico?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



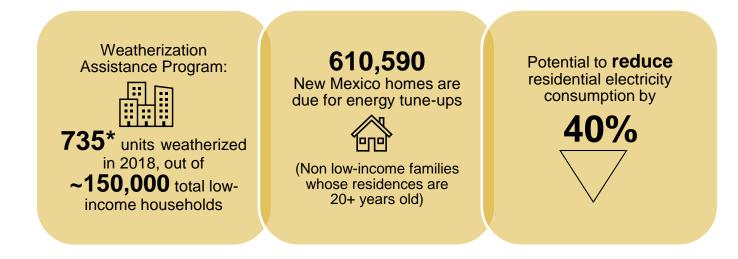
26% 74%

\*Includes non-Hispanic and Hispanic whites.

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## New Mexico's EE Potential

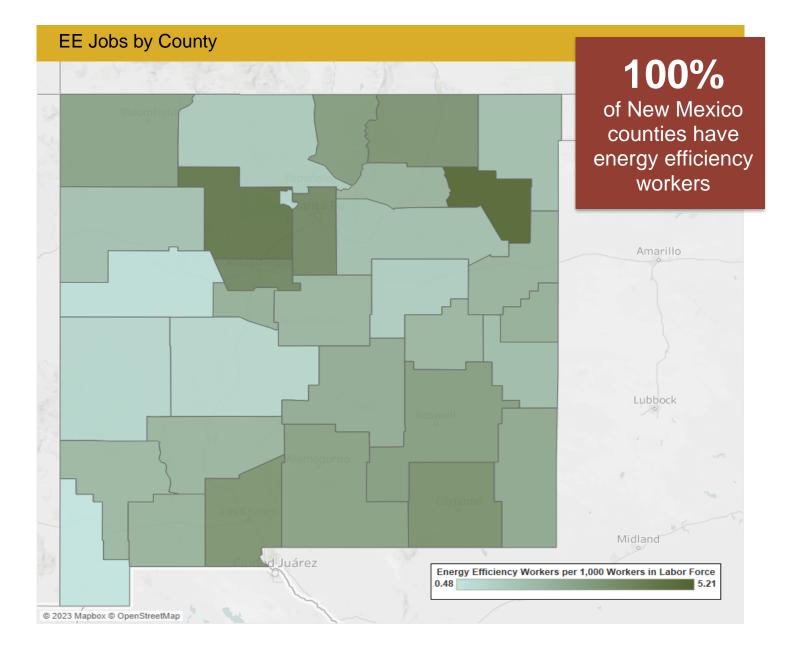
### Decades of work ready for New Mexico's growing energy efficiency workforce.



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# Energy Efficiency Jobs are Everywhere



Metropolitan Areas					
Area	Jobs				
Albuquerque	3,191				
Farmington	308				
Las Cruces	279				
Santa Fe	754				
Rural	1,181				



County	Jobs	County	Jobs	County	Jobs
Bernalillo County	2,657	Hidalgo County	<10	San Juan County	261
Catron County	<10	Lea County	165	San Miguel County	28
Chaves County	136	Lincoln County	37	Santa Fe County	465
Cibola County	10	Los Alamos County	43	Sierra County	16
Colfax County	29	Luna County	39	Socorro County	10
Curry County	88	McKinley County	71	Taos County	68
De Baca County	<10	Mora County	<10	Torrance County	14
Dona Ana County	523	Otero County	106	Union County	<10
Eddy County	215	Quay County	12	Valencia County	82
Grant County	40	Rio Arriba County	29	N/A	239
Guadalupe County	<10	Roosevelt County	22		
Harding County	<10	Sandoval County	290		



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# New York Energy Efficiency Jobs in America

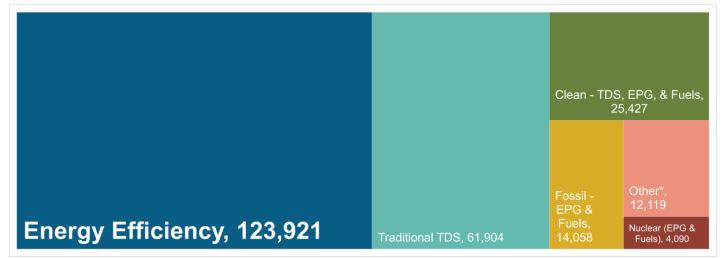


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do New York's energy sectors compare?

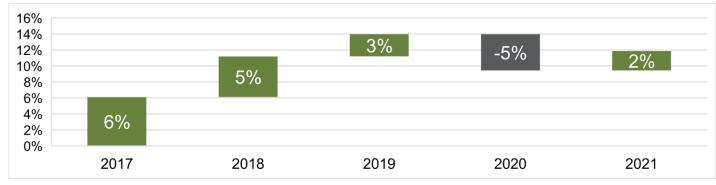
Energy Efficiency is the largest energy sector in New York



TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

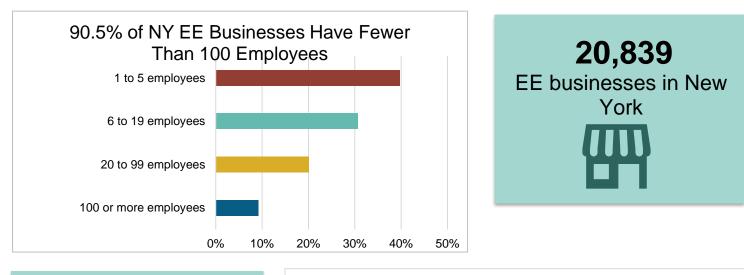
## How is the EE industry growing in New York?



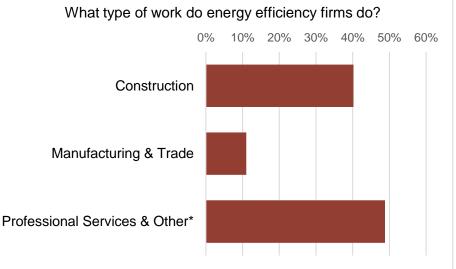
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



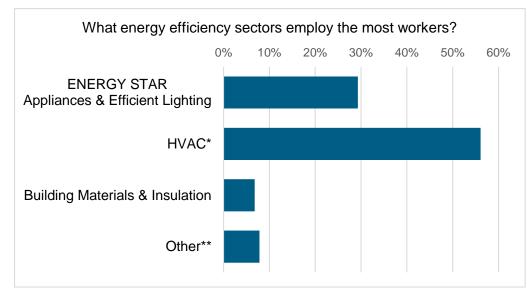
## What does EE look like in New York?



EE construction workers comprise **13%** of New York's construction workforce



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



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

7%

of New York

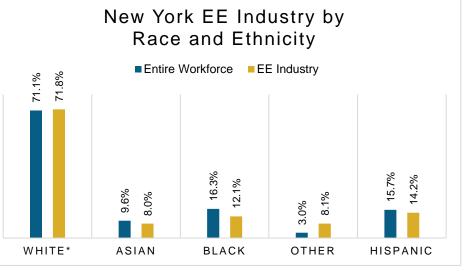
EE workers are

Veterans

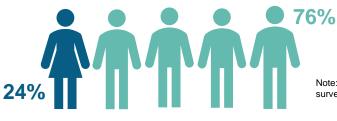
# How is EE doing on diversity in New York?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



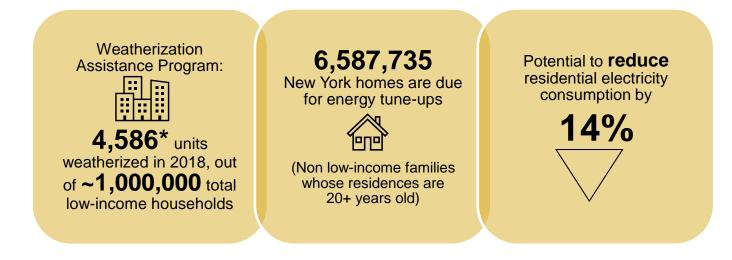
\*Includes non-Hispanic and Hispanic whites.



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.

## New York's EE Potential

#### Decades of work ready for New York's growing energy efficiency workforce.

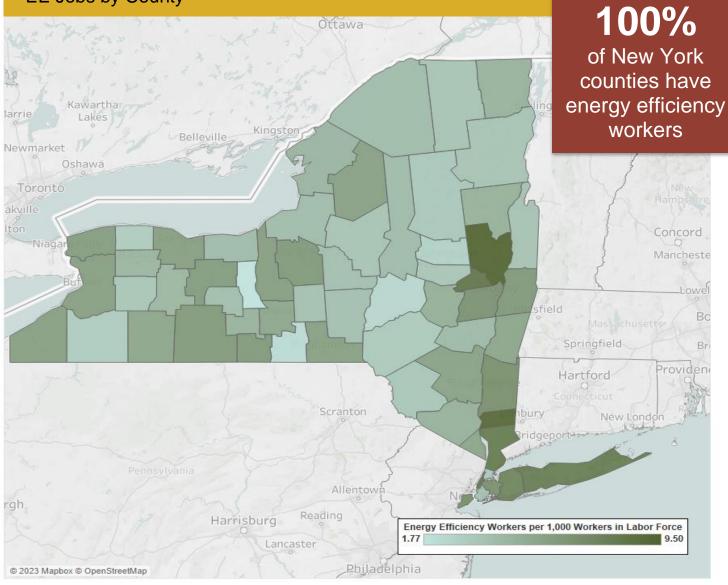


\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) <u>Platform</u>



# Energy Efficiency Jobs are Everywhere

### EE Jobs by County



	Metropolitan Areas							
	Area	Jobs	Area	Jobs				
	Albany-Schenectady-Troy	6,027	New York-Northern New Jersey-Long Island	81,513				
	Binghamton	1,280	Poughkeepsie-Newburgh- Middletown	4,459				
	Buffalo-Niagara Falls	6,881	Rochester	6,568				
	Elmira	457	Syracuse	4,088				
	Glens Falls	1,449	Utica-Rome	1,453				
	Ithaca	904	Rural	7,569				
	Kingston	1,273						



4

Jobs by County									
County	Jobs	County	Jobs	County	Jobs				
Albany County	3,022	Herkimer County	134	Richmond County	1,844				
Allegany County	138	Jefferson County	380	Rockland County	1,476				
Bronx County	2,095	Kings County	6,442	St. Lawrence County	287				
Broome County	951	Lewis County	76	Saratoga County	1,73				
Cattaraugus County	176	Livingston County	181	Schenectady County	960				
Cayuga County	302	Madison County	166	Schoharie County	83				
Chautauqua County	557	Monroe County	4,474	Schuyler County	49				
Chemung County	428	Montgomery County	136	Seneca County	38				
Chenango County	133	Nassau County	9,442	Steuben County	451				
Clinton County	311	New York County	39,225	Suffolk County	10,64				
Columbia County	237	Niagara County	839	Sullivan County	212				
Cortland County	134	Oneida County	752	Tioga County	60				
Delaware County	97	Onondaga County	3,002	Tompkins County	506				
Dutchess County	1,493	Ontario County	649	Ulster County	674				
Erie County	5,395	Orange County	1,467	Warren County	372				
Essex County	106	Orleans County	76	Washington County	114				
Franklin County	130	Oswego County	272	Wayne County	242				
Fulton County	93	Otsego County	117	Westchester County	6,79				
Genesee County	216	Putnam County	504	Wyoming County	98				
Greene County	126	Queens County	9,612	Yates County	56				
Hamilton County	13	Rensselaer County	709	N/A	2,420				



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Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

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# North Carolina Energy Efficiency Jobs in America

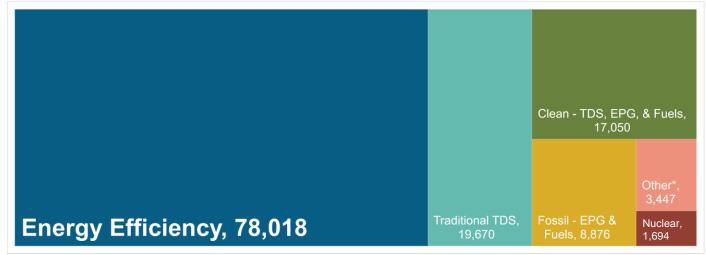


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do North Carolina's energy sectors compare?

Energy Efficiency is the largest energy sector in North Carolina

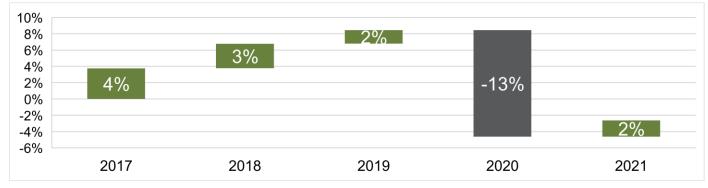


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

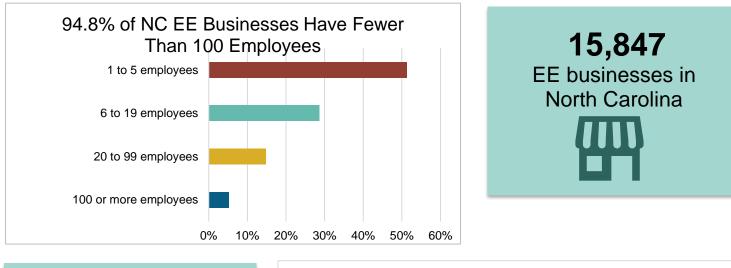
### How is the EE industry growing in North Carolina?



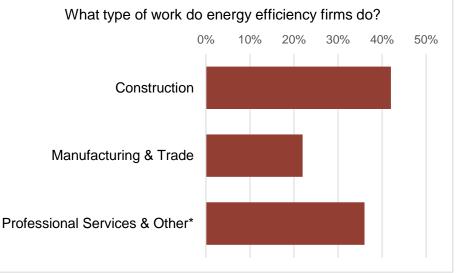
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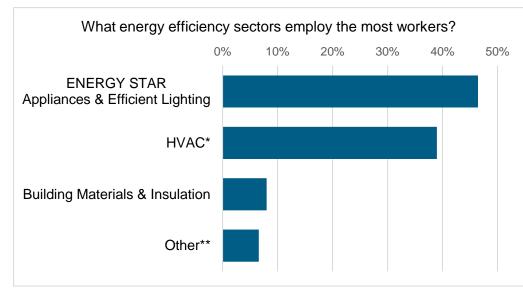
## What does EE look like in North Carolina?



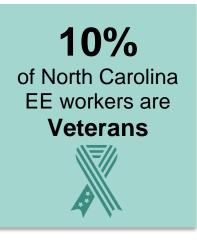
EE construction workers comprise **14%** of North Carolina's construction workforce



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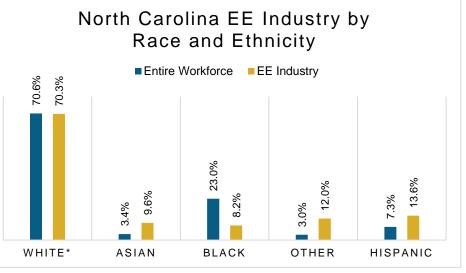




# How is EE doing on diversity in North Carolina?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



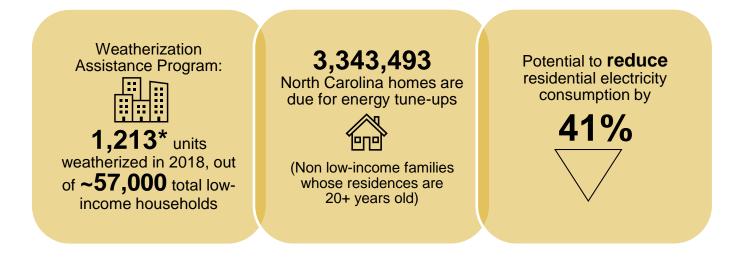
\*Includes non-Hispanic and Hispanic whites.



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## North Carolina's EE Potential

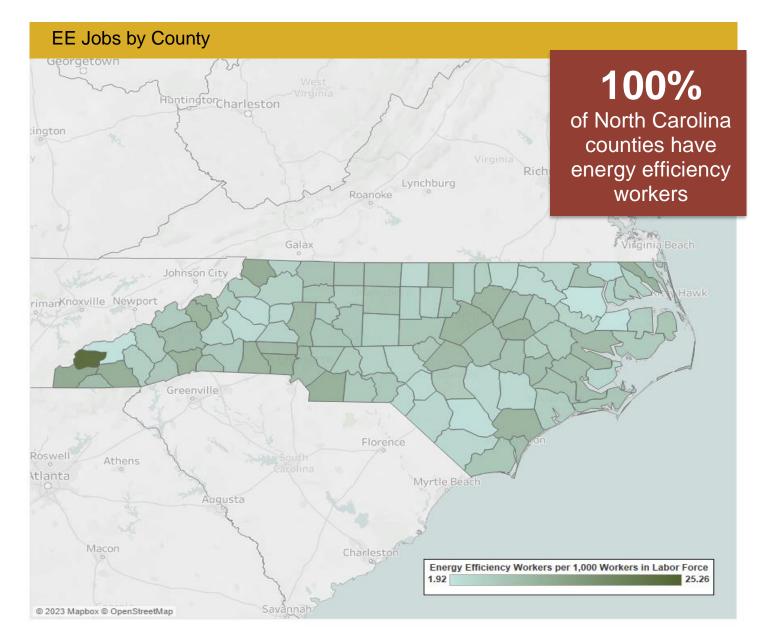
### Decades of work ready for North Carolina's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



# Energy Efficiency Jobs are Everywhere



	metropo	olitan Areas	
Area	Jobs	Area	Jobs
Asheville	4,872	Hickory-Lenoir- Morganton	2,363
Burlington	1,036	Jacksonville	819
Charlotte-Gastonia- Concord	15,486	Raleigh-Cary	11,142
Durham	4,796	Rocky Mount	968
Fayetteville	1,955	Virginia Beach-Norfolk- Newport News	558
Goldsboro	575	Wilmington	3,644
Greensboro-High Point	5,544	Winston-Salem	3,133
Greenville	1,204	Rural	19,921



		Jo	bs by C	ounty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Alamance County	704	Currituck County	113	Lee County	385	Rockingham County	378
Alexander County	88	Dare County	361	Lenoir County	550	Rowan County	782
Alleghany County	39	Davidson County	701	Lincoln County	542	Rutherford County	267
Anson County	96	Davie County	176	McDowell County	149	Sampson County	150
Ashe County	183	Duplin County	152	Macon County	289	Scotland County	104
Avery County	96	Durham County	3,269	Madison County	55	Stanly County	261
Beaufort County	316	Edgecombe County	220	Martin County	59	Stokes County	113
Bertie County	20	Forsyth County	2,468	Mecklenburg County	14,423	Surry County	457
Bladen County	77	Franklin County	274	Mitchell County	94	Swain County	54
Brunswick County	582	Gaston County	1,723	Montgomery County	104	Transylvania County	142
Buncombe County	2,617	Gates County	<10	Moore County	362	Tyrrell County	13
Burke County	219	Graham County	94	Nash County	665	Union County	1,614
Cabarrus County	1,229	Granville County	225	New Hanover County	2,251	Vance County	167
Caldwell County	183	Greene County	56	Northampton County	48	Wake County	13,40
Camden County	24	Guilford County	4,499	Onslow County	661	Warren County	24
Carteret County	387	Halifax County	117	Orange County	811	Washington County	13
Caswell County	23	Harnett County	543	Pamlico County	34	Watauga County	313
Catawba County	937	Haywood County	220	Pasquotank County	170	Wayne County	685
Chatham County	264	Henderson County	959	Pender County	304	Wilkes County	227
Cherokee County	208	Hertford County	142	Perquimans County	29	Wilson County	793
Chowan County	49	Hoke County	68	Person County	177	Yadkin County	156
Clay County	40	Hyde County	26	Pitt County	1,056	Yancey County	101
Cleveland County	770	Iredell County	1,657	Polk County	93	N/A	2,492
Columbus County	139	Jackson County	177	Randolph County	525		
Craven County	725	Johnston County	988	Richmond County	207		
Cumberland County	1,641	Jones County	27	Robeson County	348		



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# North Dakota Energy Efficiency Jobs in America



Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do North Dakota's energy sectors compare?

Energy Efficiency is the third largest energy sector in North Dakota

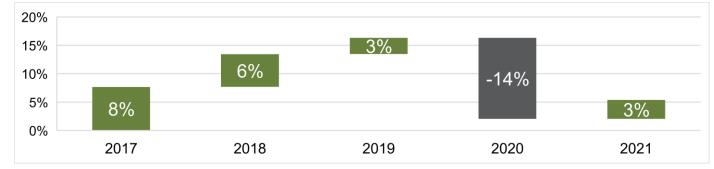


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), < 15

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

## How is the EE industry growing in North Dakota?

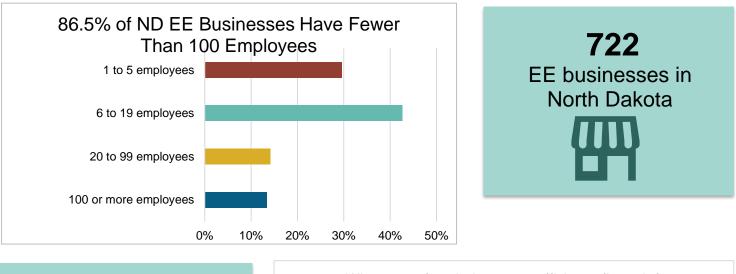


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

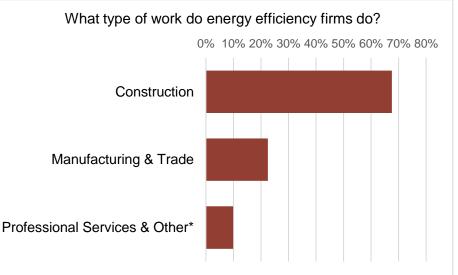


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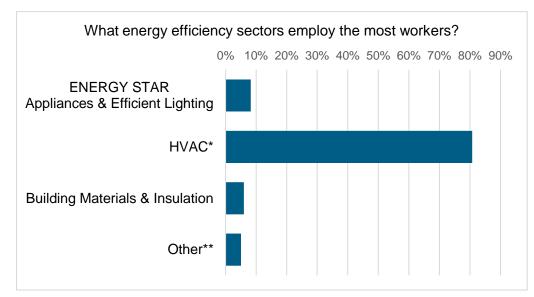
## What does EE look like in North Dakota?



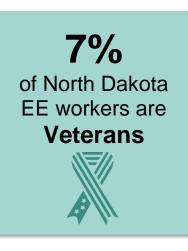
EE construction workers comprise **14%** of North Dakota's construction workforce



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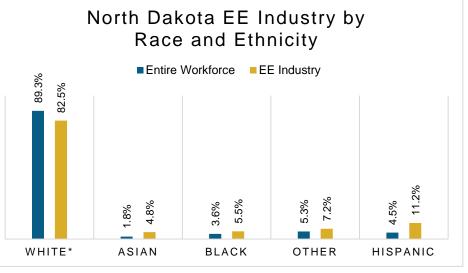




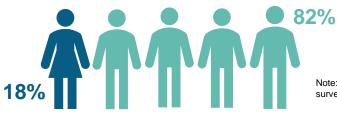
## How is EE doing on diversity in North Dakota?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



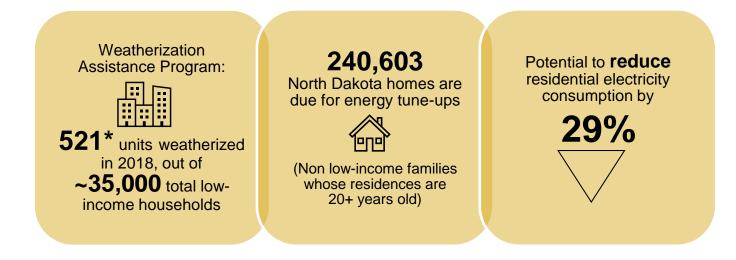
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## North Dakota's EE Potential

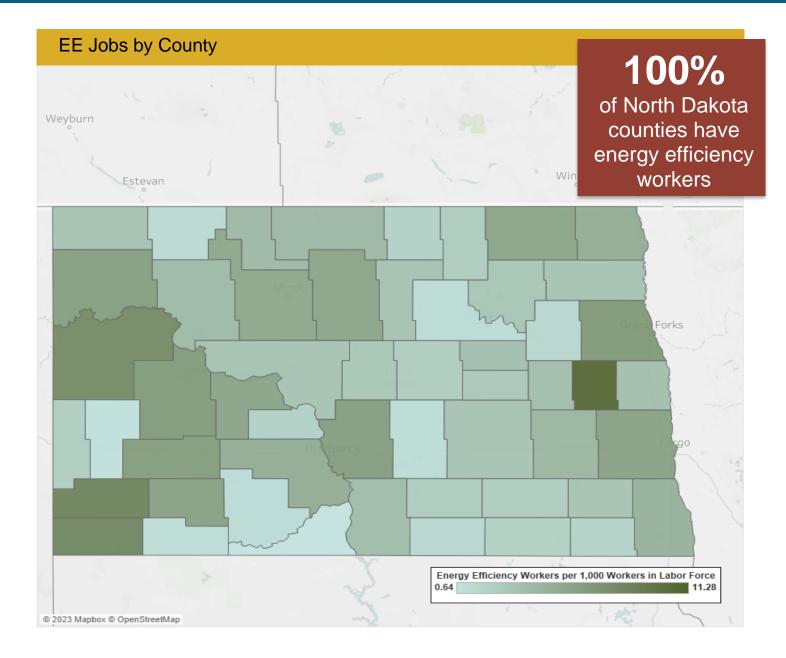
#### Decades of work ready for North Dakota's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform



# Energy Efficiency Jobs are Everywhere



Metropolitan Areas						
Area	Jobs					
Bismarck	714					
Fargo	1,204					
Grand Forks	360					
Rural	2,665					



		Jobs by Count	З <b>У</b>		
County	Jobs	County	Jobs	County	Job
Adams County	<10	Grant County	<10	Ransom County	14
Barnes County	43	Griggs County	<10	Renville County	<1
Benson County	<10	Hettinger County	10	Richland County	78
Billings County	<10	Kidder County	<10	Rolette County	21
Bottineau County	23	LaMoure County	<10	Sargent County	13
Bowman County	24	Logan County	<10	Sheridan County	<1
Burke County	<10	McHenry County	16	Sioux County	<1
Burleigh County	781	McIntosh County	<10	Slope County	<1
Cass County	1,566	McKenzie County	167	Stark County	25
Cavalier County	16	McLean County	24	Steele County	13
Dickey County	<10	Mercer County	53	Stutsman County	74
Divide County	<10	Morton County	132	Towner County	<1
Dunn County	30	Mountrail County	44	Traill County	25
Eddy County	<10	Nelson County	<10	Walsh County	34
Emmons County	<10	Oliver County	<10	Ward County	37
Foster County	10	Pembina County	35	Wells County	<1
Golden Valley County	<10	Pierce County	12	Williams County	32
Grand Forks County	558	Ramsey County	37	N/A	54





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# Ohio Energy Efficiency Jobs in America

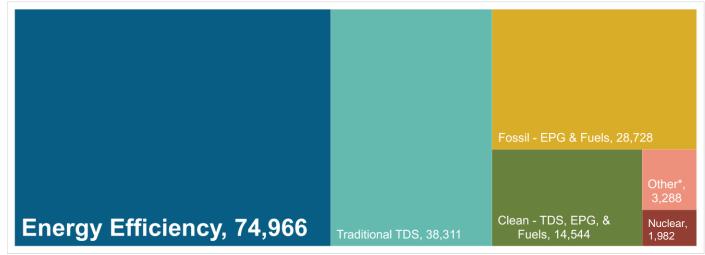


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Ohio's energy sectors compare?

Energy Efficiency is the largest energy sector in Ohio

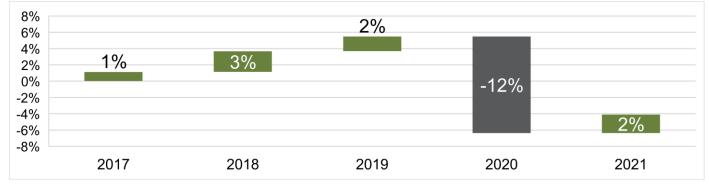


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear = includes EPG & Euels

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

### How is the EE industry growing in Ohio?

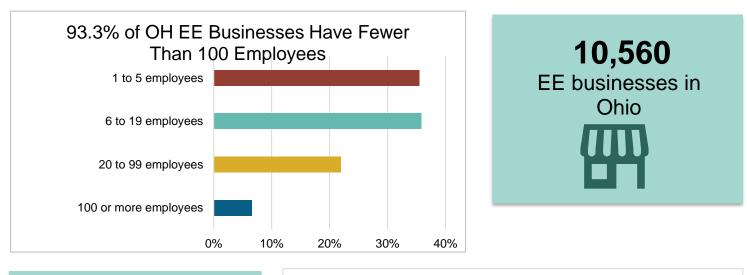


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

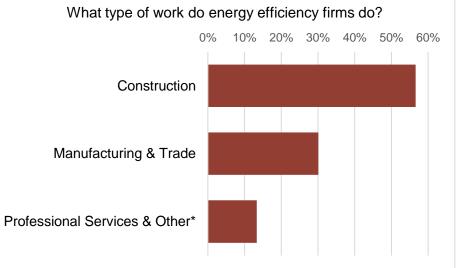


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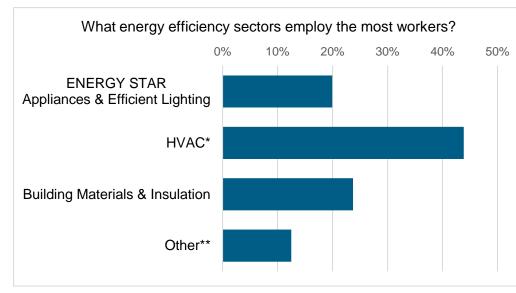
## What does EE look like in Ohio?



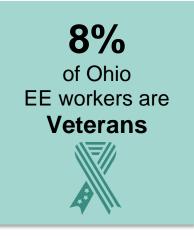
EE construction workers comprise **19%** of Ohio's construction workforce



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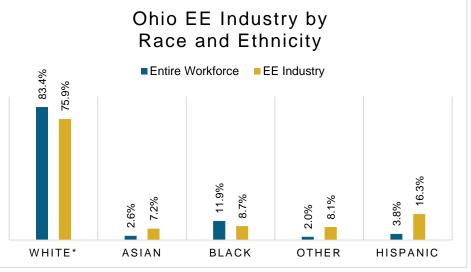




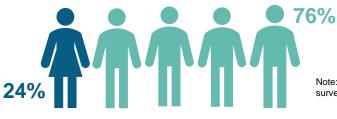
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Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



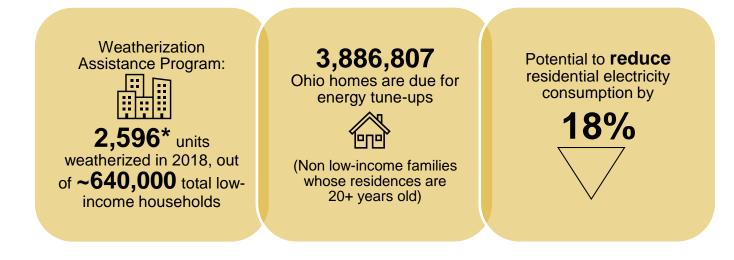
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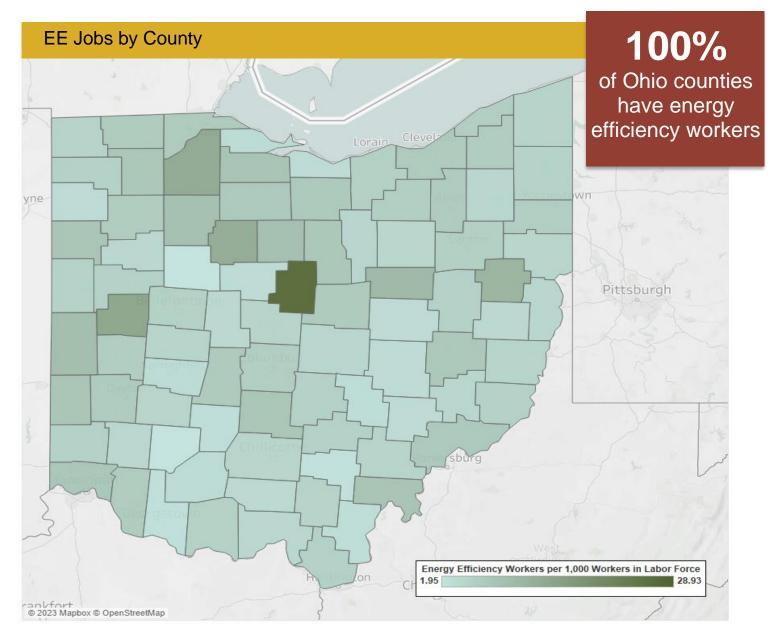
## Ohio's EE Potential

### Decades of work ready for Ohio's growing energy efficiency workforce.



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# Energy Efficiency Jobs are Everywhere



	Metropo	olitan Areas	
Area	Jobs	Area	Jobs
Akron	5,074	Parkersburg-Marietta- Vienna	434
Canton-Massillon	2,450	Sandusky	441
Cincinnati-Middletown	10,527	Springfield	644
Cleveland-Elyria-Mentor	14,751	Toledo	7,256
Columbus	11,426	Weirton-Steubenville	239
Dayton	5,054	Wheeling	303
Huntington-Ashland	195	Youngstown-Warren- Boardman	2,839
Lima	647	Rural	11,744
Mansfield	941		



		Jo	bs by Co	ounty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adams County	77	Fayette County	70	Lorain County	1,246	Richland County	819
Allen County	470	Franklin County	10,307	Lucas County	2,950	Ross County	303
Ashland County	197	Fulton County	266	Madison County	315	Sandusky County	459
Ashtabula County	337	Gallia County	72	Mahoning County	1,263	Scioto County	223
Athens County	219	Geauga County	522	Marion County	176	Seneca County	301
Auglaize County	261	Greene County	786	Medina County	838	Shelby County	846
Belmont County	226	Guernsey County	235	Meigs County	63	Stark County	2,072
Brown County	47	Hamilton County	8,600	Mercer County	232	Summit County	3,792
Butler County	1,817	Hancock County	883	Miami County	580	Trumbull County	721
Carroll County	144	Hardin County	33	Monroe County	34	Tuscarawas County	445
Champaign County	108	Harrison County	32	Montgomery County	3,625	Union County	308
Clark County	347	Henry County	176	Morgan County	22	Van Wert County	200
Clermont County	880	Highland County	80	Morrow County	298	Vinton County	12
Clinton County	71	Hocking County	86	Muskingum County	265	Warren County	967
Columbiana County	287	Holmes County	487	Noble County	29	Washington County	401
Coshocton County	73	Huron County	341	Ottawa County	115	Wayne County	472
Crawford County	250	Jackson County	111	Paulding County	37	Williams County	188
Cuyahoga County	10,474	Jefferson County	207	Perry County	44	Wood County	2,049
Darke County	390	Knox County	303	Pickaway County	260	Wyandot County	288
Defiance County	184	Lake County	1,280	Pike County	90	N/A	1,904
Delaware County	1,019	Lawrence County	167	Portage County	545		
Erie County	302	Licking County	788	Preble County	207		
Fairfield County	532	Logan County	237	Putnam County	180		





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# Oklahoma Energy Efficiency Jobs in America

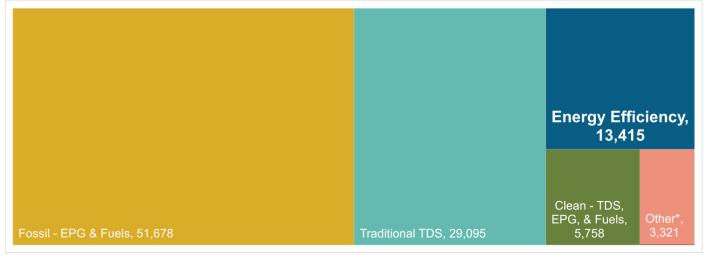


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Oklahoma's energy sectors compare?

Energy Efficiency is the third largest energy sector in Oklahoma

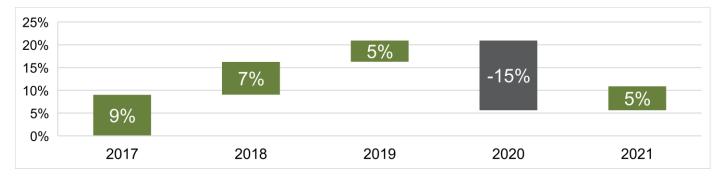


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 33

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

### How is the EE industry growing in Oklahoma?

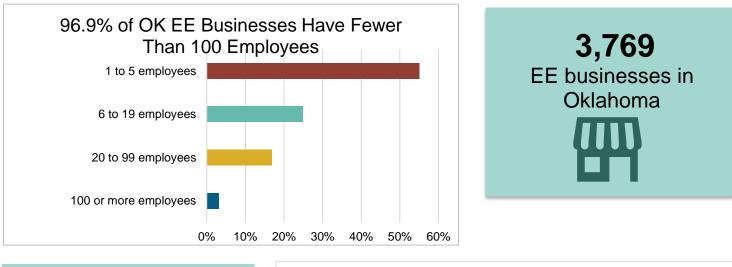


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



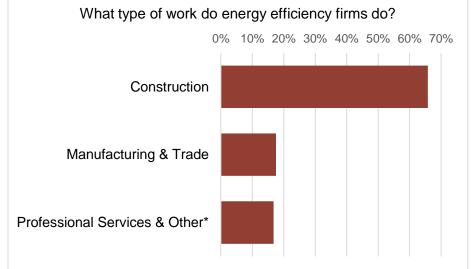
Presented by:

## What does EE look like in Oklahoma?

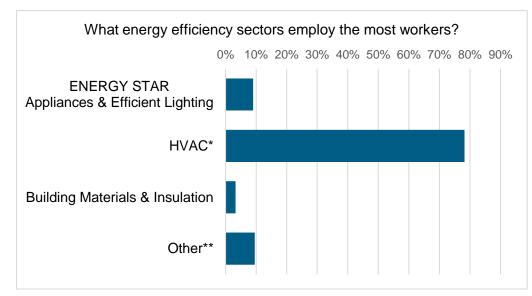


EE construction workers comprise **11%** of Oklahoma's construction workforce

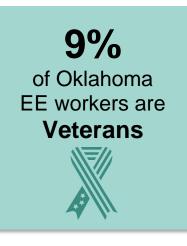




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

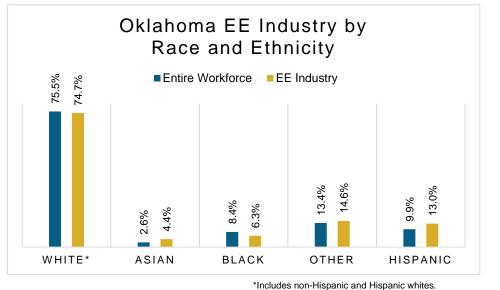




## How is EE doing on diversity in Oklahoma?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Oklahoma communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.

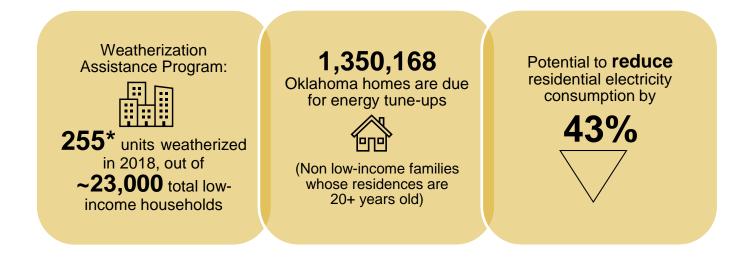


81%

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 Potential

#### Decades of work ready for Oklahoma's growing energy efficiency workforce.

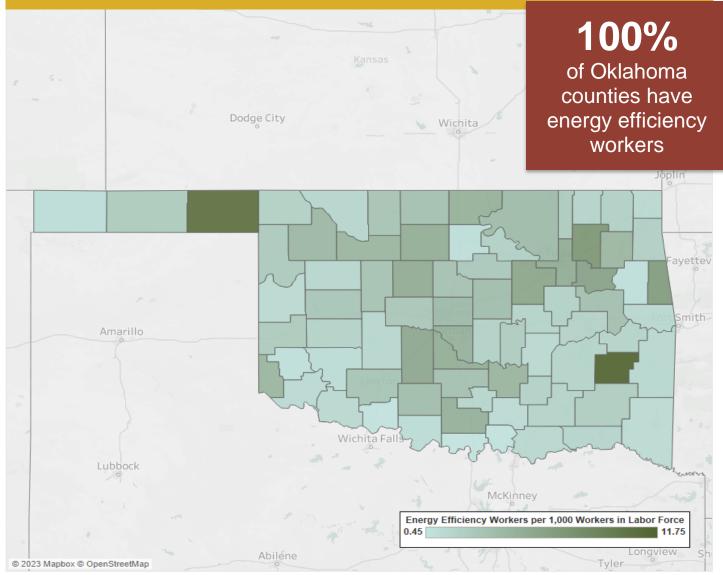


\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform



# Energy Efficiency Jobs are Everywhere

## EE Jobs by County



Metropolitan Areas						
Area	Jobs					
Fort Smith	551					
Lawton	230					
Oklahoma City	4,964					
Tulsa	3,730					
Rural	3,940					



Jobs by County									
County	Jobs	County	Jobs	County	Jobs	County	Jobs		
Adair County	62	Delaware County	46	Lincoln County	53	Pittsburg County	56		
Alfalfa County	<10	Dewey County	<10	Logan County	57	Pontotoc County	178		
Atoka County	12	Ellis County	<10	Love County	<10	Pottawatomie County	93		
Beaver County	27	Garfield County	244	McClain County	108	Pushmataha County	12		
Beckham County	50	Garvin County	71	McCurtain County	33	Roger Mills County	<10		
Blaine County	20	Grady County	139	McIntosh County	17	Rogers County	385		
Bryan County	63	Grant County	10	Major County	20	Seminole County	34		
Caddo County	23	Greer County	<10	Marshall County	<10	Sequoyah County	29		
Canadian County	212	Harmon County	<10	Mayes County	117	Stephens County	116		
Carter County	232	Harper County	<10	Murray County	19	Texas County	51		
Cherokee County	28	Haskell County	12	Muskogee County	214	Tillman County	<10		
Choctaw County	16	Hughes County	<10	Noble County	<10	Tulsa County	3,81		
Cimarron County	<10	Jackson County	25	Nowata County	<10	Wagoner County	117		
Cleveland County	845	Jefferson County	<10	Okfuskee County	<10	Washington County	98		
Coal County	<10	Johnston County	<10	Oklahoma County	3,980	Washita County	<10		
Comanche County	263	Kay County	176	Okmulgee County	39	Woods County	11		
Cotton County	<10	Kingfisher County	72	Osage County	55	Woodward County	70		
Craig County	22	Kiowa County	<10	Ottawa County	36	N/A	255		
Creek County	233	Latimer County	57	Pawnee County	14				
Custer County	75	Le Flore County	37	Payne County	159				



[bw]

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# Oregon Energy Efficiency Jobs in America

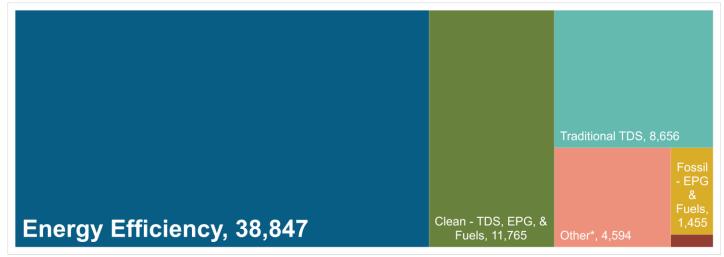


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Oregon's energy sectors compare?

Energy Efficiency is the largest energy sector in Oregon

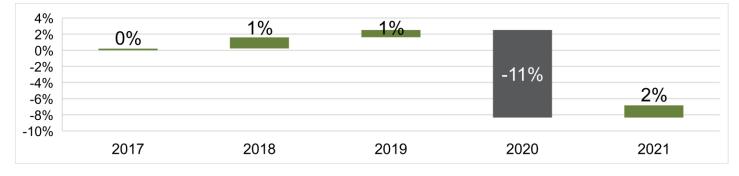


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 211

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

### How is the EE industry growing in Oregon?

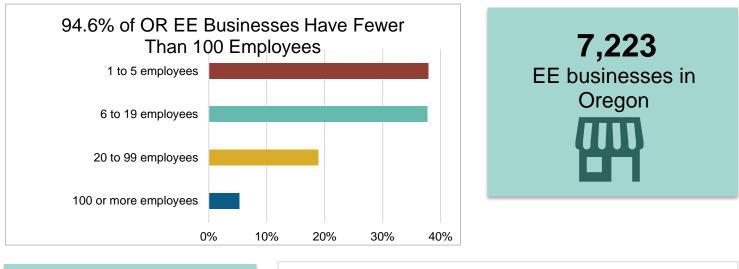


Prior to 2020, the EE sector was growing gradually, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



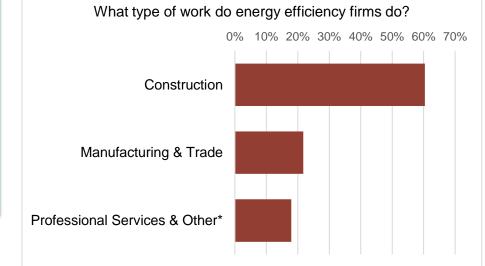
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## What does EE look like in Oregon?

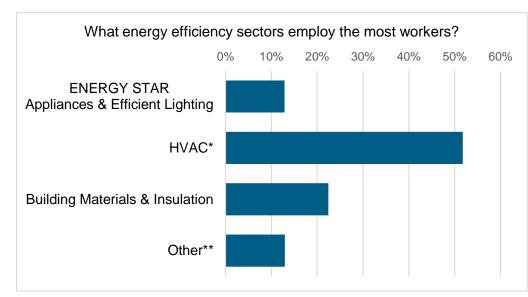


EE construction workers comprise **21%** of Oregon's construction workforce

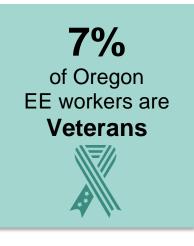




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

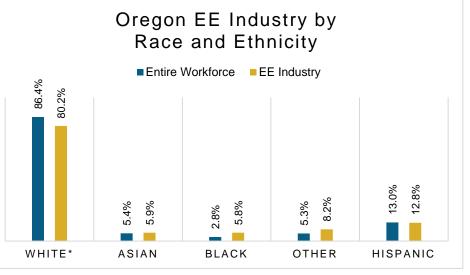




# How is EE doing on diversity in Oregon?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



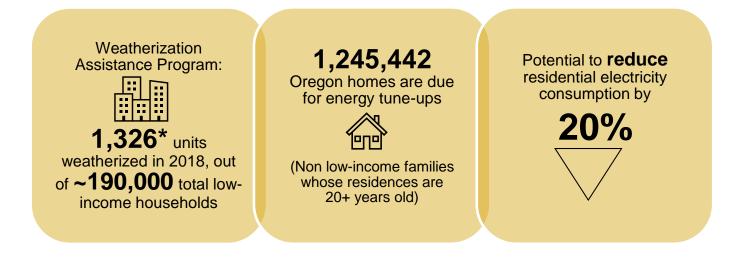
\*Includes non-Hispanic and Hispanic whites.



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.

## Oregon's EE Potential

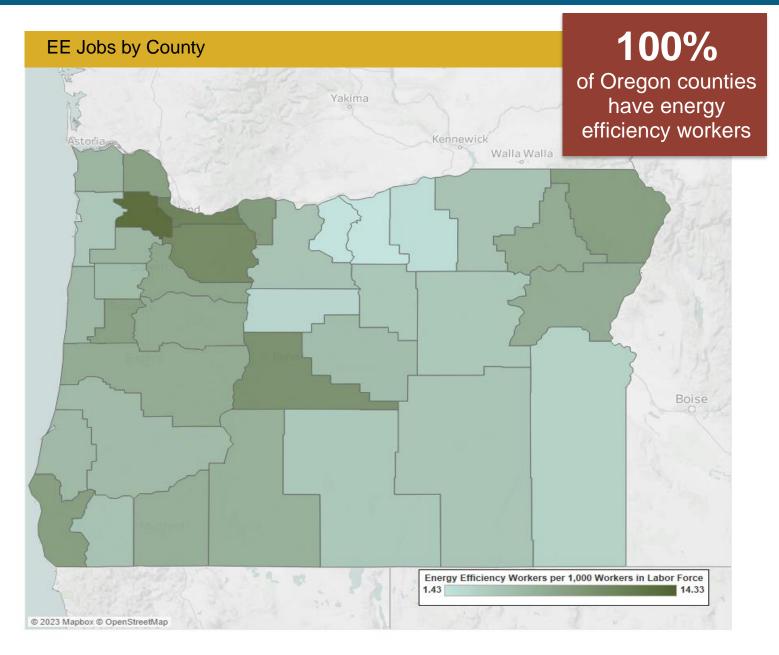
#### Decades of work ready for Oregon's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform



# Energy Efficiency Jobs are Everywhere



Metropolitan /	Areas
Area	Jobs
Bend	1,894
Corvallis	677
Eugene-Springfield	3,573
Medford	2,395
Portland-Vancouver- Beaverton	20,083
Salem	2,788
Rural	7,437



		Jobs by Count	У		
County	Jobs	County	Jobs	County	Jobs
Baker County	86	Hood River County	254	Polk County	251
Benton County	665	Jackson County	1,302	Sherman County	<10
Clackamas County	3,831	Jefferson County	42	Tillamook County	89
Clatsop County	247	Josephine County	305	Umatilla County	329
Columbia County	218	Klamath County	337	Union County	158
Coos County	270	Lake County	24	Wallowa County	52
Crook County	87	Lane County	2,341	Wasco County	120
Curry County	121	Lincoln County	221	Washington County	8,69
Deschutes County	1,867	Linn County	762	Wheeler County	<10
Douglas County	465	Malheur County	90	Yamhill County	500
Gilliam County	<10	Marion County	2,686	N/A	556
Grant County	24	Morrow County	29		
Harney County	27	Multnomah County	11,784		





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# Pennsylvania Energy Efficiency Jobs in America

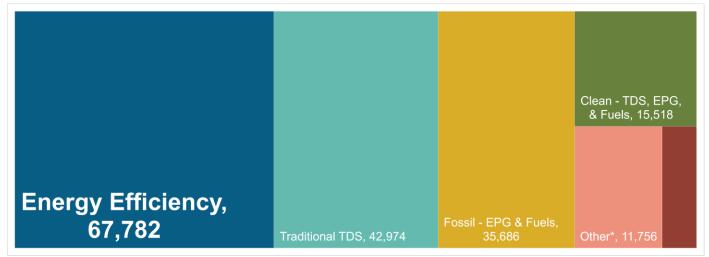


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do Pennsylvania's energy sectors compare?

Energy Efficiency is the largest energy sector in Pennsylvania



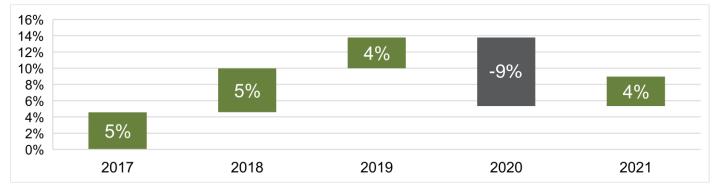
TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear (EPG & Fuels), 4,640

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

#### How is the EE industry growing in Pennsylvania?

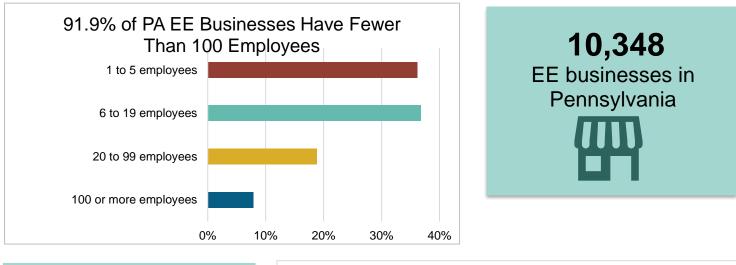


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

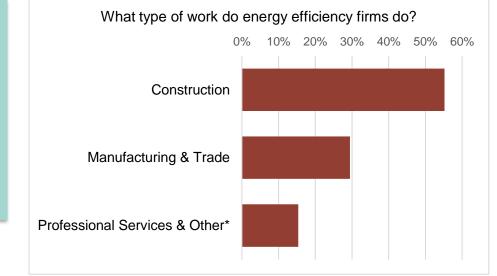


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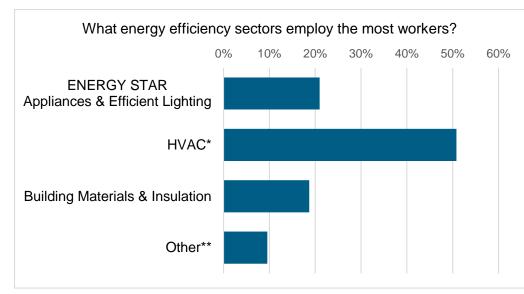
## What does EE look like in Pennsylvania?



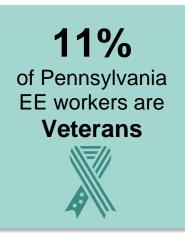
EE construction workers comprise **15%** of Pennsylvania's construction workforce



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



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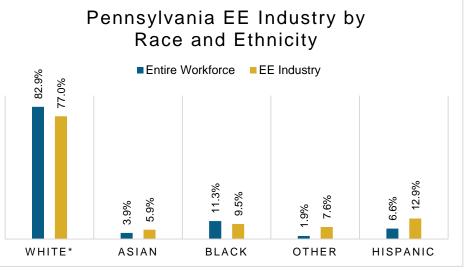




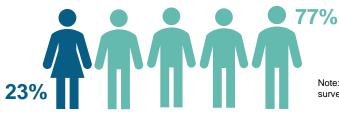
## How is EE doing on diversity in Pennsylvania?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



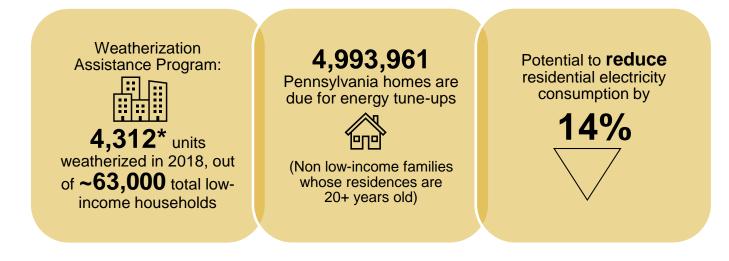
\*Includes non-Hispanic and Hispanic whites.



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### Pennsylvania's EE Potential

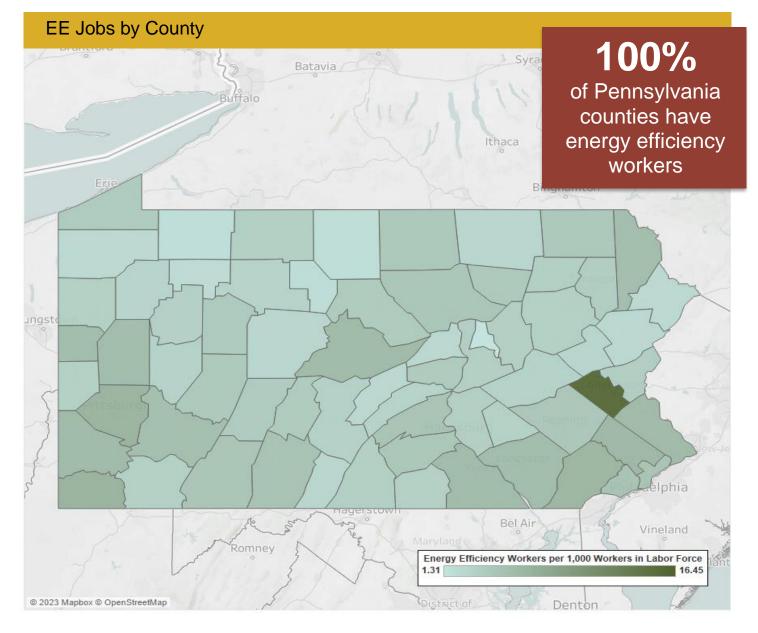
#### Decades of work ready for Pennsylvania's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



# Energy Efficiency Jobs are Everywhere



	Metropolitan Areas						
A	rea	Jobs	Area	Jobs			
Allentown-Be	thlehem-Easton	3,277	Pittsburgh	12,813			
Altoona		624	Reading	2,739			
Erie		1,266	ScrantonWilkes-Barre	2,733			
Harrisburg-Ca	arlisle	2,839	State College	670			
Johnstown		454	Williamsport	605			
Lancaster		2,817	York-Hanover	1,825			
Lebanon		567	Youngstown-Warren- Boardman	401			
New York-Nor Jersey-Long I		4,040	Rural	8,208			
Philadelphia- Wilmington	Camden-	21,905					



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Adams County	253	Clinton County	106	Lackawanna County	788	Pike County	66
Allegheny County	9,374	Columbia County	187	Lancaster County	3,093	Potter County	21
Armstrong County	110	Crawford County	157	Lawrence County	342	Schuylkill County	345
Beaver County	382	Cumberland County	1,357	Lebanon County	381	Snyder County	138
Bedford County	178	Dauphin County	1,453	Lehigh County	6,530	Somerset County	241
Berks County	1,641	Delaware County	2,360	Luzerne County	1,099	Sullivan County	13
Blair County	517	Elk County	92	Lycoming County	492	Susquehanna County	85
Bradford County	130	Erie County	1,038	McKean County	112	Tioga County	122
Bucks County	3,507	Fayette County	289	Mercer County	334	Union County	96
Butler County	1,072	Forest County	<10	Mifflin County	89	Venango County	108
Cambria County	414	Franklin County	469	Monroe County	316	Warren County	55
Cameron County	<10	Fulton County	30	Montgomery County	6,748	Washington County	1,11
Carbon County	95	Greene County	168	Montour County	43	Wayne County	184
Centre County	721	Huntingdon County	90	Northampton County	965	Westmoreland County	1,54
Chester County	3,471	Indiana County	247	Northumberland County	214	Wyoming County	74
Clarion County	91	Jefferson County	133	Perry County	85	York County	2,29
Clearfield County	174	Juniata County	43	Philadelphia County	7,135	N/A	2,15





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# Rhode Island Energy Efficiency Jobs in America

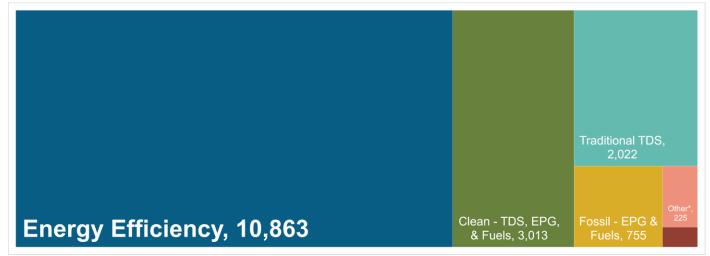


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do Rhode Island's energy sectors compare?

Energy Efficiency is the largest energy sector in Rhode Island

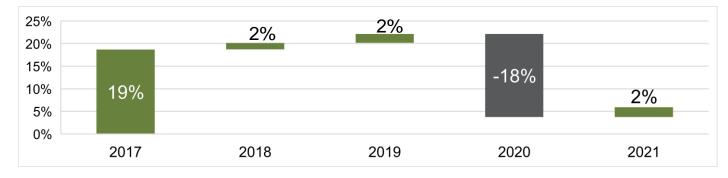


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 73

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

#### How is the EE industry growing in Rhode Island?

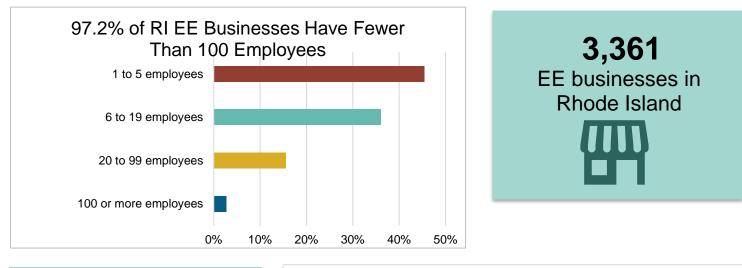


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

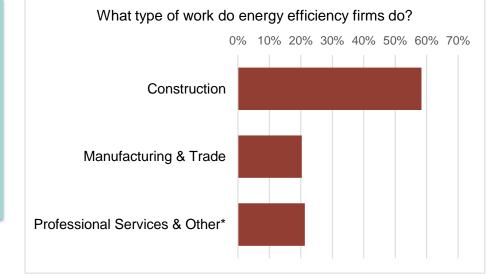


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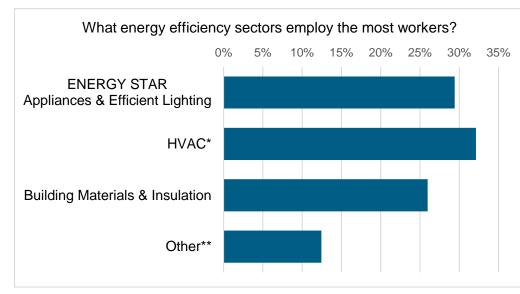
# What does EE look like in Rhode Island?



EE construction workers comprise **31%** of Rhode Island's construction workforce



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



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

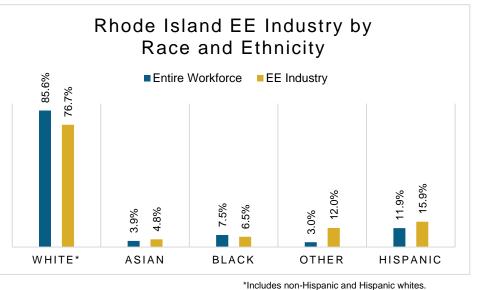
**7%** of Rhode Island EE workers are **Veterans** 

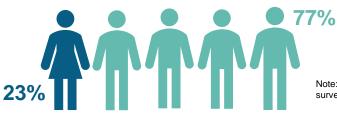


## How is EE doing on diversity in Rhode Island?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.

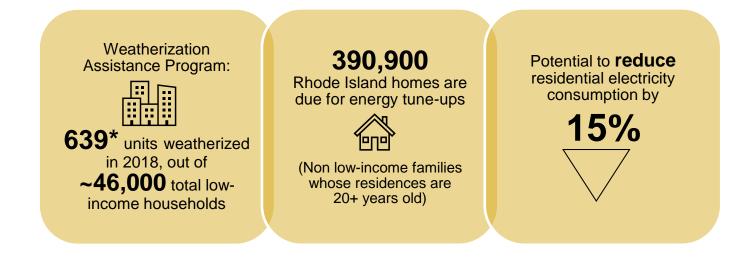




Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

## Rhode Island's EE Potential

#### Decades of work ready for Rhode Island's growing energy efficiency workforce.

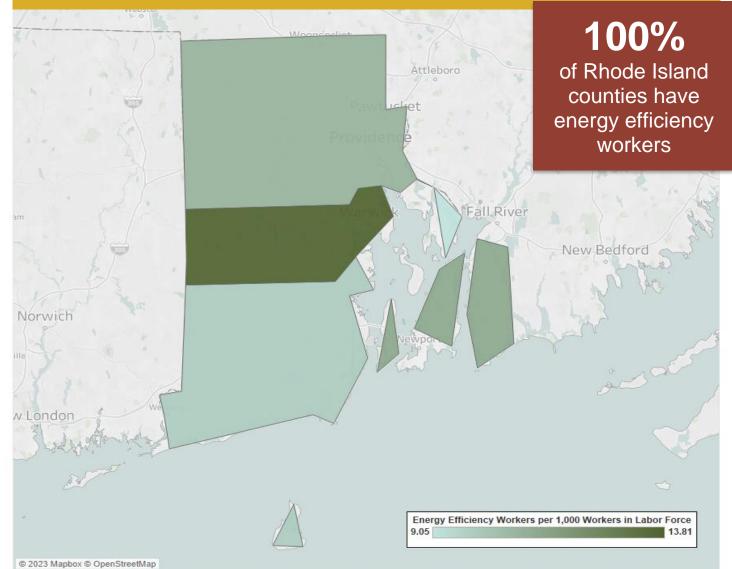


\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform



# Energy Efficiency Jobs are Everywhere

## EE Jobs by County



Metropolitan Areas		
	Area	Jobs
	Rhode Island	10,863



Jobs by County			
	County	Jobs	
	Bristol County	265	
	Kent County	2,065	
	Newport County	968	
	Providence County	6,141	
	Washington County	1,153	
	N/A	271	



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

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For questions on E4TheFuture analyses please email: policy@e4thefuture.org.

# South Carolina Energy Efficiency Jobs in America

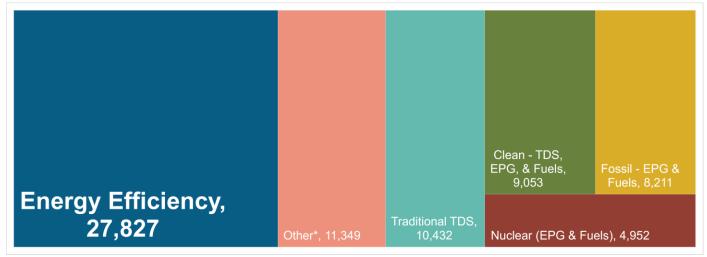


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

### How do South Carolina's energy sectors compare?

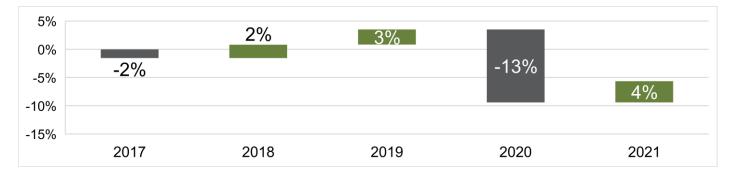
Energy Efficiency is the largest energy sector in South Carolina



TDS = Transmission, Distribution & Storage EPG = Electric Power Generation

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

### How is the EE industry growing in South Carolina?

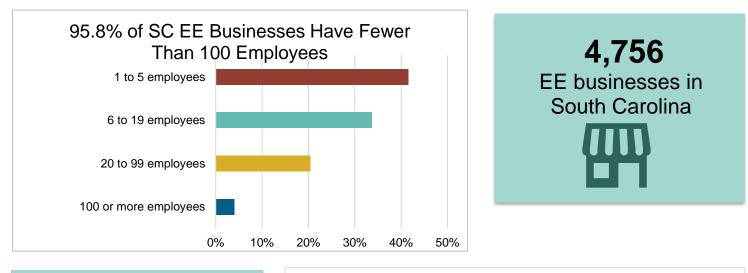


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

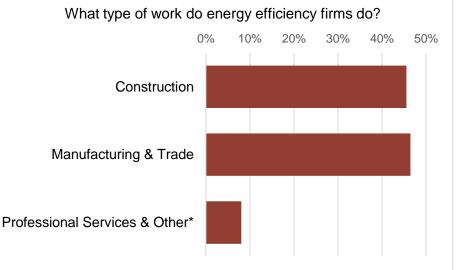


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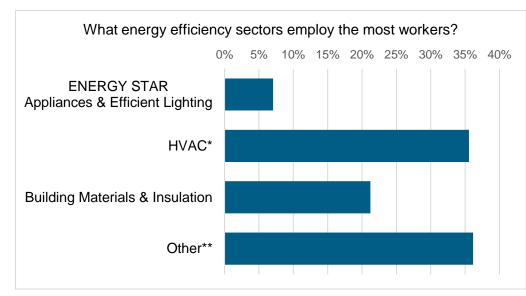
## What does EE look like in South Carolina?



EE construction workers comprise **12%** of South Carolina's construction workforce



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



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

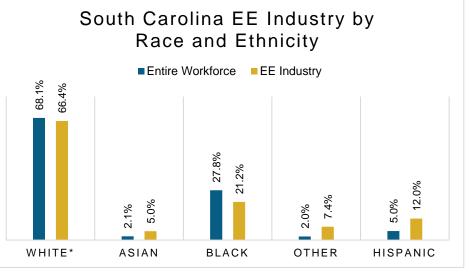
8% of South Carolina EE workers are Veterans



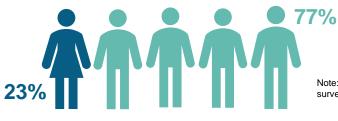
## How is EE doing on diversity in South Carolina?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



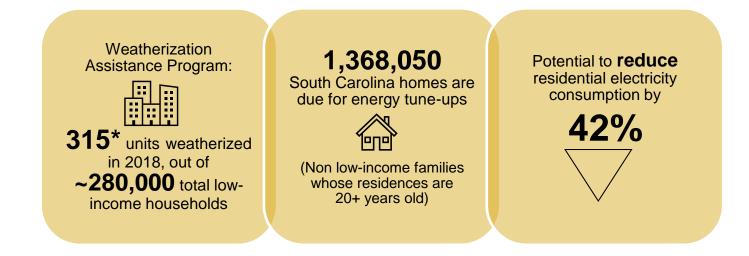
\*Includes non-Hispanic and Hispanic whites.



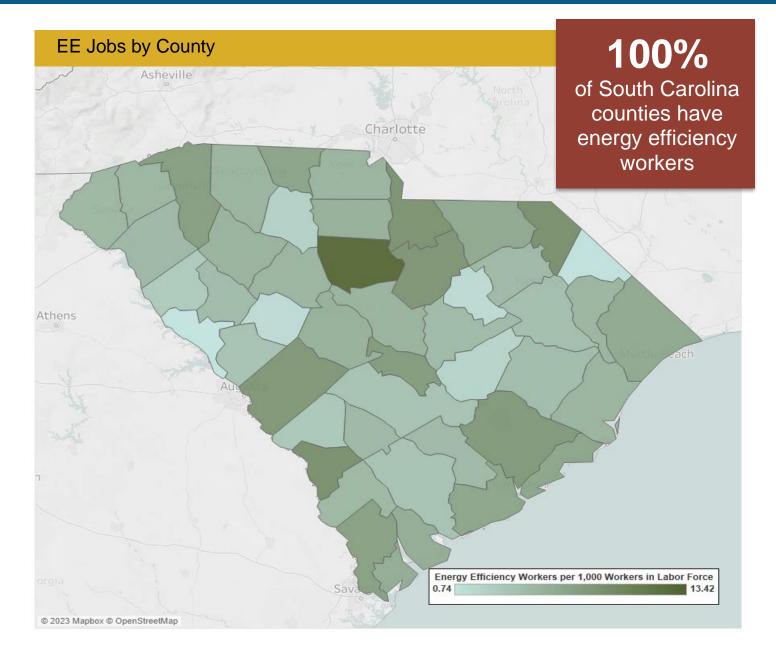
Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

## South Carolina's EE Potential

#### Decades of work ready for South Carolina's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



Metropolitan Areas					
Area	Jobs	Area	Jobs		
Anderson	837	Greenville-Mauldin- Easley	5,209		
Augusta-Richmond County	691	Myrtle Beach-Conway- North Myrtle Beach	2,018		
Charleston-North Charleston	5,002	Spartanburg	1,453		
Charlotte-Gastonia- Concord	1,660	Sumter	461		
Columbia	4,411	Rural	5,086		
Florence	1,000				



County	Jobs	County	Jobs	County	Jobs
Abbeville County	36	Dillon County	18	McCormick County	<10
Aiken County	1,061	Dorchester County	383	Marion County	76
Allendale County	44	Edgefield County	50	Marlboro County	116
Anderson County	731	Fairfield County	151	Newberry County	169
Bamberg County	37	Florence County	601	Oconee County	261
Barnwell County	36	Georgetown County	293	Orangeburg County	235
Beaufort County	889	Greenville County	4,537	Pickens County	346
Berkeley County	993	Greenwood County	271	Richland County	2,555
Calhoun County	75	Hampton County	48	Saluda County	16
Charleston County	3,793	Horry County	1,919	Spartanburg County	1,679
Cherokee County	299	Jasper County	157	Sumter County	367
Chester County	121	Kershaw County	316	Union County	40
Chesterfield County	202	Lancaster County	497	Williamsburg County	77
Clarendon County	31	Laurens County	241	York County	1,169
Colleton County	84	Lee County	13	N/A	1,057
Darlington County	214	Lexington County	1,522		



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# South Dakota Energy Efficiency Jobs in America

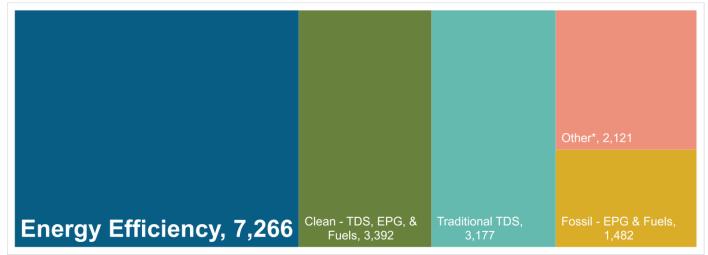


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do South Dakota's energy sectors compare?

Energy Efficiency is the largest energy sector in South Dakota



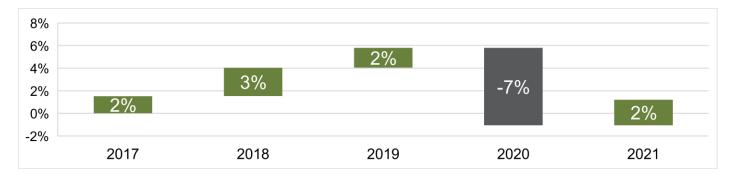
TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

Nuclear (EPG & Fuels), >12

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

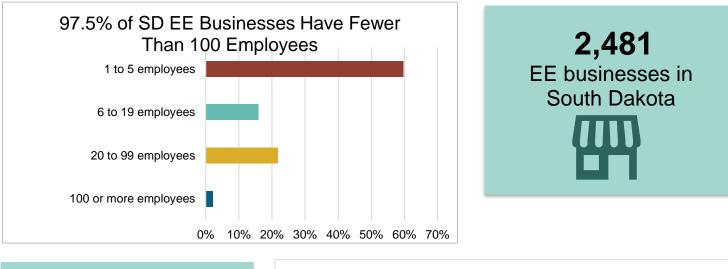
#### How is the EE industry growing in South Dakota?



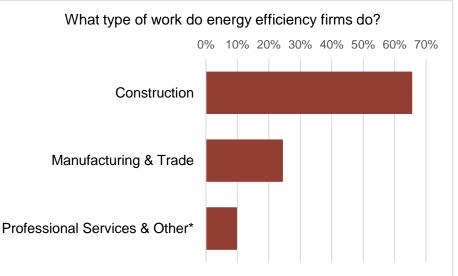
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



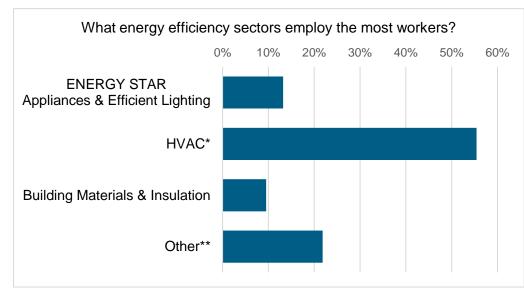
# What does EE look like in South Dakota?



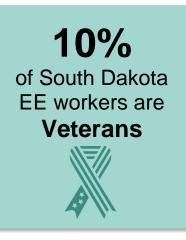
EE construction workers comprise **19%** of South Dakota's construction workforce



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



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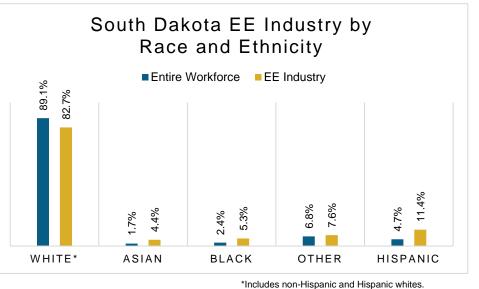




# How is EE doing on diversity in South Dakota?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.

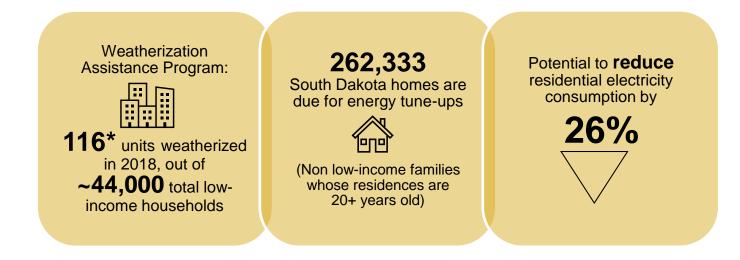




Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

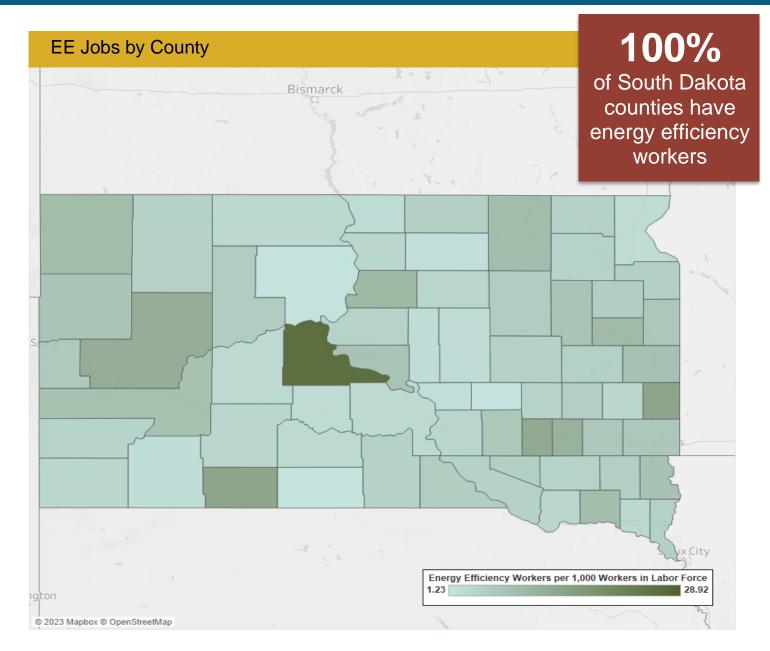
### South Dakota's EE Potential

#### Decades of work ready for South Dakota's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform





Metropolitan Areas					
	Area	Jobs			
	Rapid City	1,183			
	Sioux City	128			
	Sioux Falls	2,819			
	Rural	3,137			



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Aurora County	14	Day County	21	Jackson County	<10	Pennington County	1,155
Beadle County	98	Deuel County	24	Jerauld County	<10	Perkins County	13
Bennett County	26	Dewey County	<10	Jones County	<10	Potter County	20
Bon Homme County	17	Douglas County	14	Kingsbury County	24	Roberts County	24
Brookings County	309	Edmunds County	<10	Lake County	45	Sanborn County	<10
Brown County	423	Fall River County	24	Lawrence County	190	Spink County	26
Brule County	19	Faulk County	<10	Lincoln County	514	Stanley County	80
Buffalo County	<10	Grant County	48	Lyman County	10	Sully County	<10
Butte County	47	Gregory County	22	McCook County	22	Todd County	<10
Campbell County	<10	Haakon County	<10	McPherson County	<10	Tripp County	27
Charles Mix County	42	Hamlin County	54	Marshall County	19	Turner County	30
Clark County	20	Hand County	<10	Meade County	230	Union County	114
Clay County	38	Hanson County	17	Mellette County	<10	Walworth County	19
Codington County	216	Harding County	10	Miner County	<10	Yankton County	269
Corson County	<10	Hughes County	194	Minnehaha County	2,047	Ziebach County	<10
Custer County	33	Hutchinson County	28	Moody County	79	N/A	61
Davison County	368	Hyde County	<10	Oglala Lakota County	22		



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# Tennessee Energy Efficiency Jobs in America

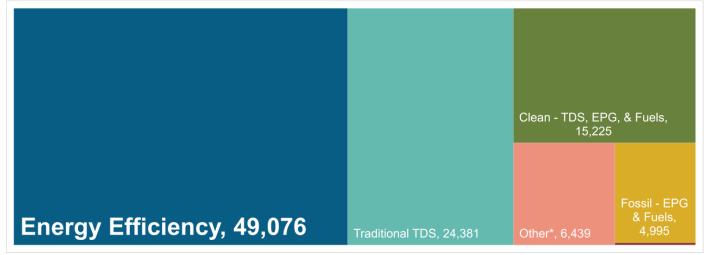


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Tennessee's energy sectors compare?

Energy Efficiency is the largest energy sector in Tennessee

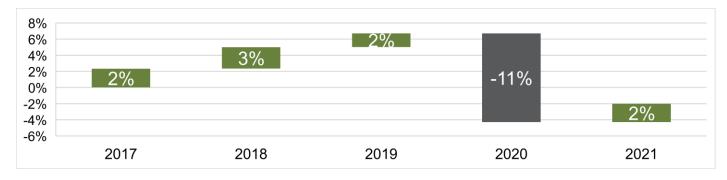


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 121

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

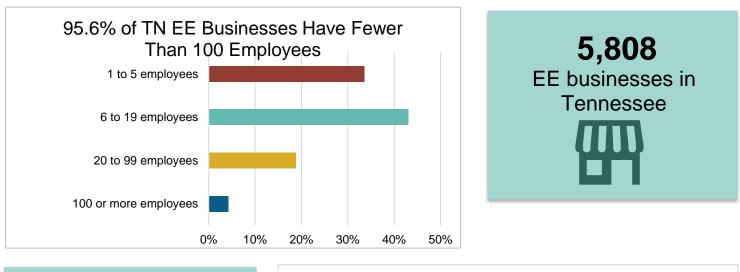
#### How is the EE industry growing in Tennessee?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

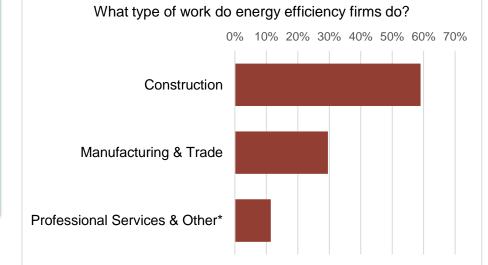


## What does EE look like in Tennessee?

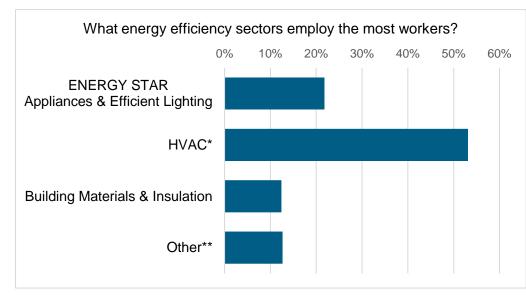


EE construction workers comprise **21%** of Tennessee's construction workforce

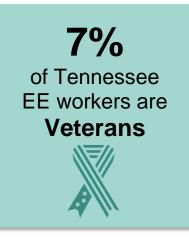




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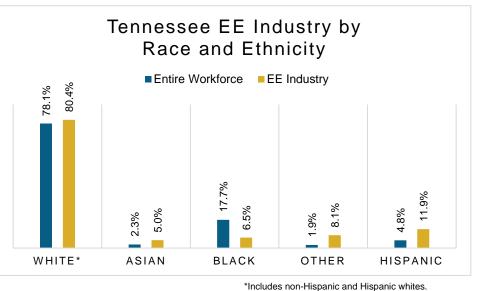




## How is EE doing on diversity in Tennessee?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



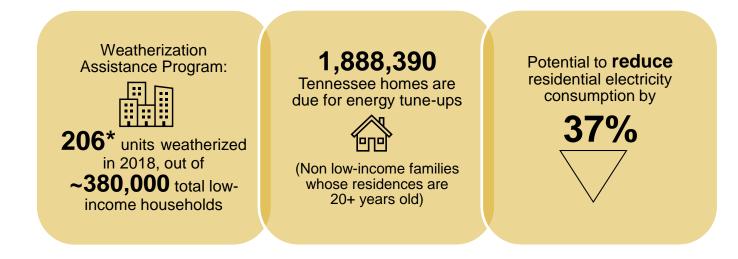
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### Tennessee's EE Potential

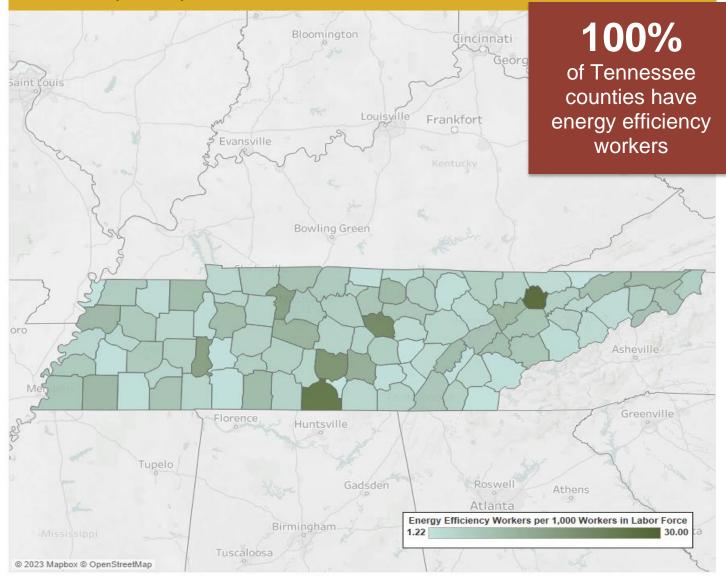
#### Decades of work ready for Tennessee's growing energy efficiency workforce.



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### EE Jobs by County



	Metropolitan Areas					
Area	Jobs	Area	Jobs			
Chattanooga	3,429	Knoxville	6,565			
Clarksville	871	Memphis	7,981			
Cleveland	1,516	Morristown	868			
Jackson	1,033	Nashville-Davidson- Murfreesboro-Franklin	14,785			
Johnson City	1,308	Rural	9,236			
Kingsport-Bristol-Bristol	1,483					



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Anderson County	1,065	Fentress County	27	Lauderdale County	55	Roane County	374
Bedford County	711	Franklin County	103	Lawrence County	252	Robertson County	425
Benton County	28	Gibson County	223	Lewis County	40	Rutherford County	1,492
Bledsoe County	17	Giles County	110	Lincoln County	546	Scott County	72
Blount County	865	Grainger County	55	Loudon County	351	Sequatchie County	16
Bradley County	501	Greene County	166	McMinn County	138	Sevier County	327
Campbell County	96	Grundy County	11	McNairy County	100	Shelby County	7,957
Cannon County	24	Hamblen County	269	Macon County	24	Smith County	87
Carroll County	63	Hamilton County	3,255	Madison County	874	Stewart County	24
Carter County	189	Hancock County	<10	Marion County	82	Sullivan County	1,416
Cheatham County	331	Hardeman County	33	Marshall County	94	Sumner County	888
Chester County	35	Hardin County	75	Maury County	473	Tipton County	186
Claiborne County	63	Hawkins County	248	Meigs County	11	Trousdale County	21
Clay County	11	Haywood County	22	Monroe County	77	Unicoi County	90
Cocke County	57	Henderson County	98	Montgomery County	790	Union County	179
Coffee County	729	Henry County	239	Moore County	<10	Van Buren County	<10
Crockett County	33	Hickman County	49	Morgan County	25	Warren County	166
Cumberland County	173	Houston County	14	Obion County	162	Washington County	773
Davidson County	7,890	Humphreys County	123	Overton County	72	Wayne County	18
Decatur County	117	Jackson County	34	Perry County	<10	Weakley County	70
DeKalb County	289	Jefferson County	145	Pickett County	12	White County	58
Dickson County	198	Johnson County	56	Polk County	11	Williamson County	3,833
Dyer County	375	Knox County	4,293	Putnam County	616	Wilson County	778
Fayette County	189	Lake County	<10	Rhea County	258	N/A	1,042



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# Texas Energy Efficiency Jobs in America

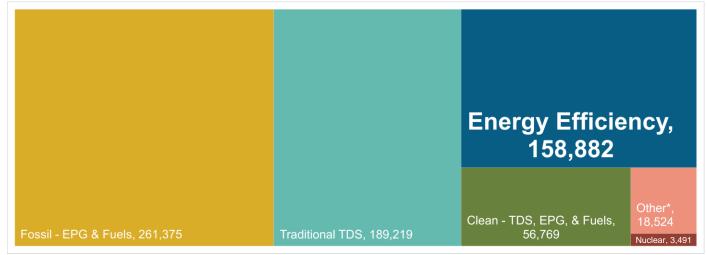


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Texas's energy sectors compare?

Energy Efficiency is the third largest energy sector in Texas

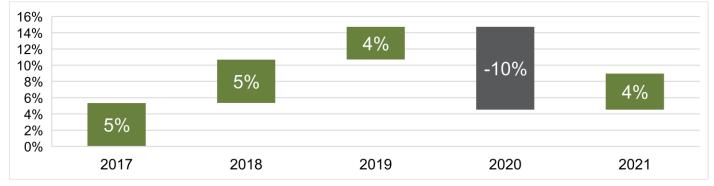


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EPG = Electric Power Generation Nuclear = includes EPG & Euels

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

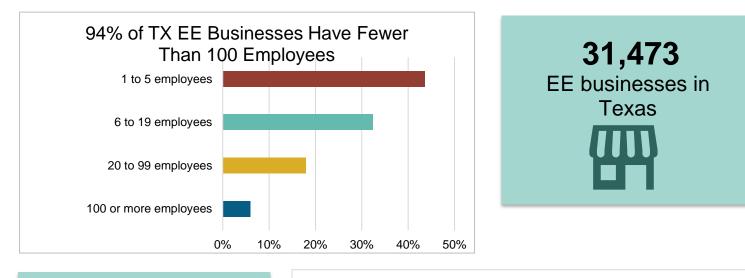
#### How is the EE industry growing in Texas?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

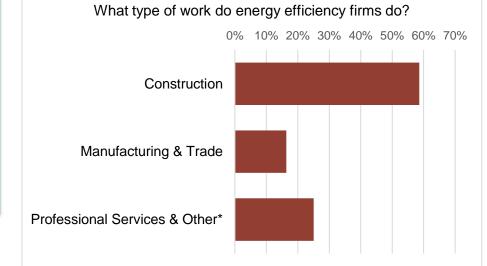


## What does EE look like in Texas?

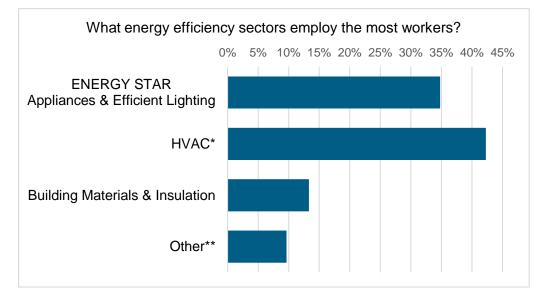


EE construction workers comprise **12%** of Texas's construction workforce

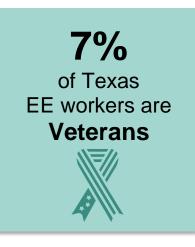




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



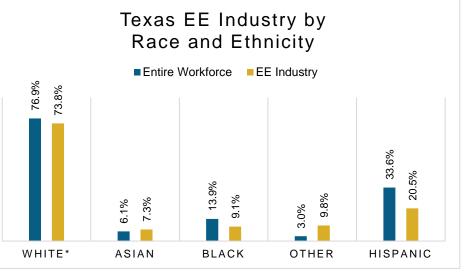
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services



## How is EE doing on diversity in Texas?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified professionals and ensuring all Texas communities are represented in the EE sector.

The EE industry needs to do more to prioritize minorities and women for training and support that enables access to employment at EE businesses.



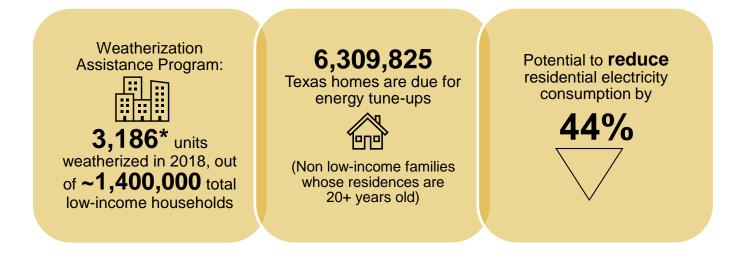
27% 73%

\*Includes non-Hispanic and Hispanic whites.

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.

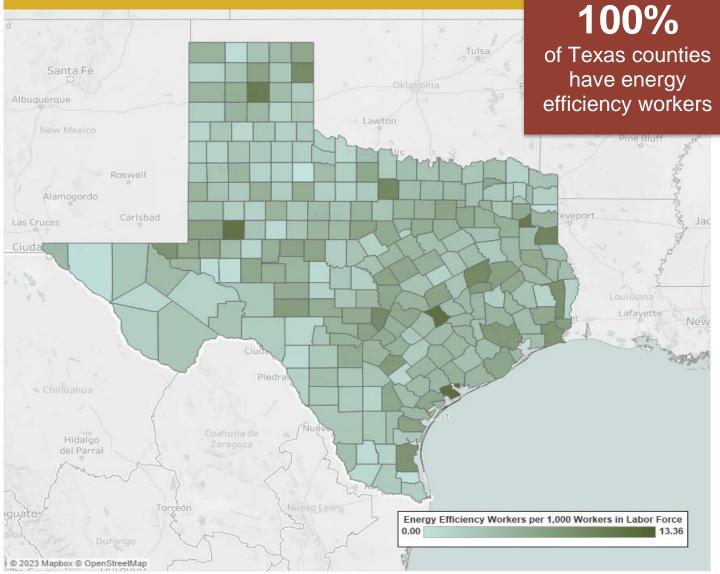
## Texas's EE Potential

#### Decades of work ready for Texas's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## EE Jobs by County



Metropolitan Areas						
Area	Jobs	Area	Jobs	Area	Jobs	
Abilene	991	Houston-Sugar Land-Baytown	42,502	San Antonio	13,931	
Amarillo	1,837	Killeen-Temple-Fort Hood	1,594	Sherman-Denison	596	
Austin-Round Rock	16,624	Laredo	953	Texarkana	594	
Beaumont-Port Arthur	2,268	Longview	1,417	Tyler	1,776	
Brownsville-Harlingen	1,119	Lubbock	1,895	Victoria	851	
College Station-Bryan	1,125	McAllen-Edinburg-Mission	2,260	Waco	1,280	
Corpus Christi	2,796	Midland	1,381	Wichita Falls	918	
Dallas-Fort Worth-Arlington	39,063	Odessa	1,147	Rural	15,782	
El Paso	3,552	San Angelo	630			



	T -	İ.	bs by Co				
County	Jobs	County	Jobs	County	Jobs	County	Job
Anderson County	118	Concho County	<10	Hale County	78	La Salle County	18
Andrews County	113	Cooke County	111	Hall County	<10	Lavaca County	63
Angelina County	321	Coryell County	209	Hamilton County	29	Lee County	173
Aransas County	61	Cottle County	<10	Hansford County	17	Leon County	94
Archer County	24	Crane County	<10	Hardeman County	<10	Liberty County	16
Armstrong County	<10	Crockett County	<10	Hardin County	169	Limestone County	45
Atascosa County	97	Crosby County	<10	Harris County	39,284	Lipscomb County	17
Austin County	131	Culberson County	<10	Harrison County	239	Live Oak County	49
Bailey County	11	Dallam County	50	Hartley County	10	Llano County	53
Bandera County	43	Dallas County	25,529	Haskell County	10	Loving County	<1
Bastrop County	178	Dawson County	20	Hays County	877	Lubbock County	1,5
Baylor County	<10	Deaf Smith County	42	Hemphill County	32	Lynn County	<1
Bee County	71	Delta County	12	Henderson County	150	McCulloch County	15
Bell County	902	Denton County	2,591	Hidalgo County	1,538	McLennan County	1,3
Bexar County	9,657	DeWitt County	76	Hill County	88	McMullen County	<1
Blanco County	76	Dickens County	<10	Hockley County	65	Madison County	71
Borden County	<10	Dimmit County	33	Hood County	180	Marion County	<1
Bosque County	39	Donley County	<10	Hopkins County	86	Martin County	54
Bowie County	300	Duval County	24	Houston County	112	Mason County	<1
Brazoria County	1,648	Eastland County	87	Howard County	93	Matagorda County	11
Brazos County	1,077	Ector County	1,016	Hudspeth County	<10	Maverick County	73
Brewster County	28	Edwards County	<10	Hunt County	233	Medina County	12
Briscoe County	<10	Ellis County	666	Hutchinson County	120	Menard County	<1
Brooks County	10	El Paso County	2,974	Irion County	<10	Midland County	93
Brown County	109	Erath County	225	Jack County	53	Milam County	80
Burleson County	39	Falls County	12	Jackson County	67	Mills County	10
Burnet County	219	Fannin County	55	Jasper County	176	Mitchell County	<1
Caldwell County	55	Fayette County	83	Jeff Davis County	<10	Montague County	39
	352					Montgomery	
Calhoun County		Fisher County	<10	Jefferson County	2,078	County	2,2
Callahan County	26	Floyd County	<10	Jim Hogg County	<10	Moore County	90
Cameron County	762	Foard County	<10	Jim Wells County	118	Morris County	29
Camp County	26	Fort Bend County	2,054	Johnson County	682	Motley County	<1
Carson County	37	Franklin County	20	Jones County	28	Nacogdoches County	29
Cass County	35	Freestone County	40	Karnes County	18	Navarro County	12
Castro County	18	Frio County	42	Kaufman County	520	Newton County	<1
Chambers County	158	Gaines County	57	Kendall County	281	Nolan County	43
Cherokee County	142	Galveston County	1,168	Kenedy County	<10	Nueces County	2,2
Childress County	16	Garza County	19	Kent County	<10	Ochiltree County	4
Clay County	<10	Gillespie County	159	Kerr County	210	Oldham County	10
Cochran County	<10	Glasscock County	<10	Kimble County	17	Orange County	35
Coke County	11	Goliad County	12	King County	<10	Palo Pinto County	57
Coleman County	11	Gonzales County	40	Kinney County	<10	Panola County	16
Collin County	4,486	Gray County	68	Kleberg County	68	Parker County	42
Collingsworth County	<10	Grayson County	417	Knox County	10	Parmer County	20
Colorado County	78	Gregg County	1,754	Lamar County	192	Pecos County	3
Comal County	878	Grimes County	73	Lamb County	15	Polk County	8
Comanche County	19	Guadalupe County	509	Lampasas County	73	Potter County	92



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Presidio County	10	San Saba County	<10	Terry County	24	Webb County	637
Rains County	24	Schleicher County	10	Throckmorton County	<10	Wharton County	128
Randall County	382	Scurry County	65	Titus County	64	Wheeler County	<10
Reagan County	24	Shackelford County	<10	Tom Green County	497	Wichita County	424
Real County	<10	Shelby County	69	Travis County	11,683	Wilbarger County	16
Red River County	10	Sherman County	<10	Trinity County	31	Willacy County	<10
Reeves County	65	Smith County	1,244	Tyler County	13	Williamson County	2,273
Refugio County	29	Somervell County	18	Upshur County	100	Wilson County	147
Roberts County	<10	Starr County	39	Upton County	<10	Winkler County	47
Robertson County	36	Stephens County	38	Uvalde County	64	Wise County	182
Rockwall County	426	Sterling County	<10	Val Verde County	98	Wood County	73
Runnels County	42	Stonewall County	<10	Van Zandt County	141	Yoakum County	35
Rusk County	118	Sutton County	20	Victoria County	361	Young County	40
Sabine County	22	Swisher County	<10	Walker County	122	Zapata County	23
San Augustine County	19	Tarrant County	10,827	Waller County	171	Zavala County	21
San Jacinto County	22	Taylor County	688	Ward County	53	N/A	3,588
San Patricio County	220	Terrell County	<10	Washington County	150		





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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 <u>www.bwresearch.com</u>.

Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

# Utah Energy Efficiency Jobs in America

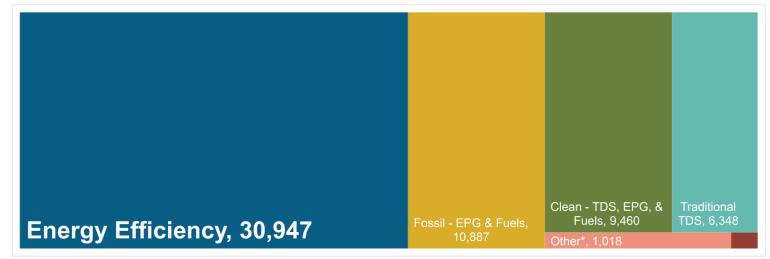


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Utah's energy sectors compare?

Energy Efficiency is the largest energy sector in Utah

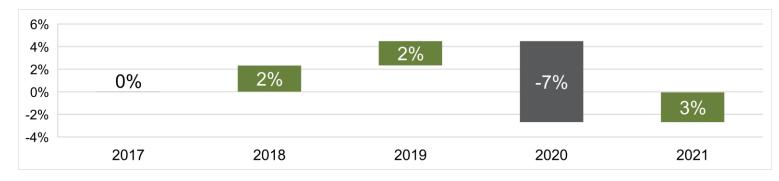


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 146

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

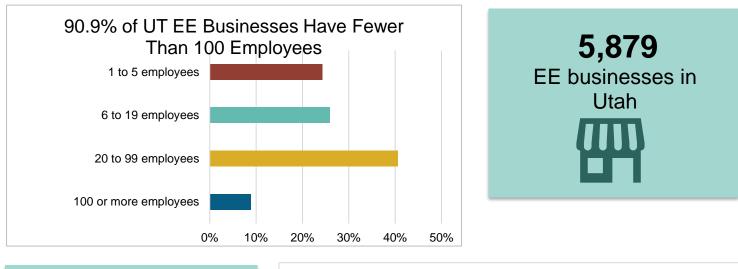
#### How is the EE industry growing in Utah?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

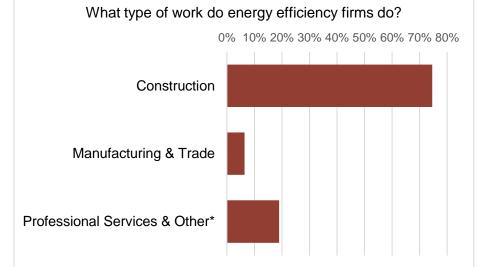


## What does EE look like in Utah?

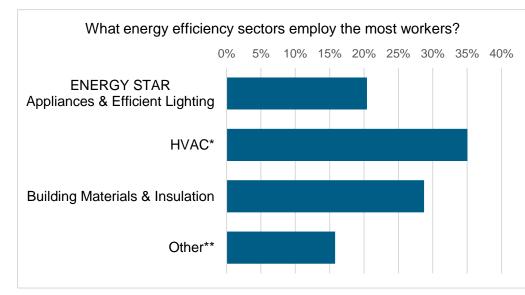


EE construction workers comprise **19%** of Utah's construction workforce

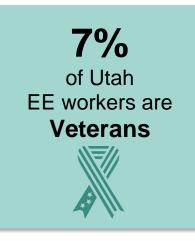




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



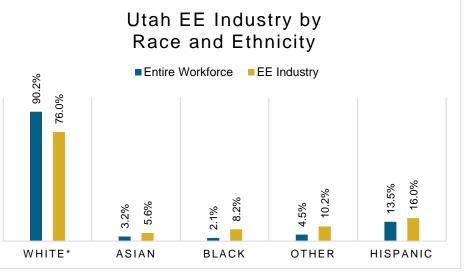
\*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling \*\*Other such as energy audits, building certifications, and software services



## How is EE doing on diversity in Utah?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



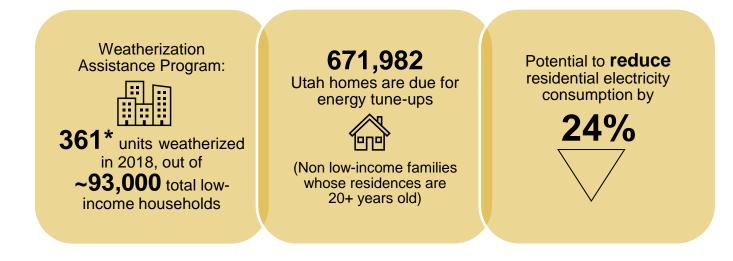
26% 74%

\*Includes non-Hispanic and Hispanic whites.

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.

### Utah's EE Potential

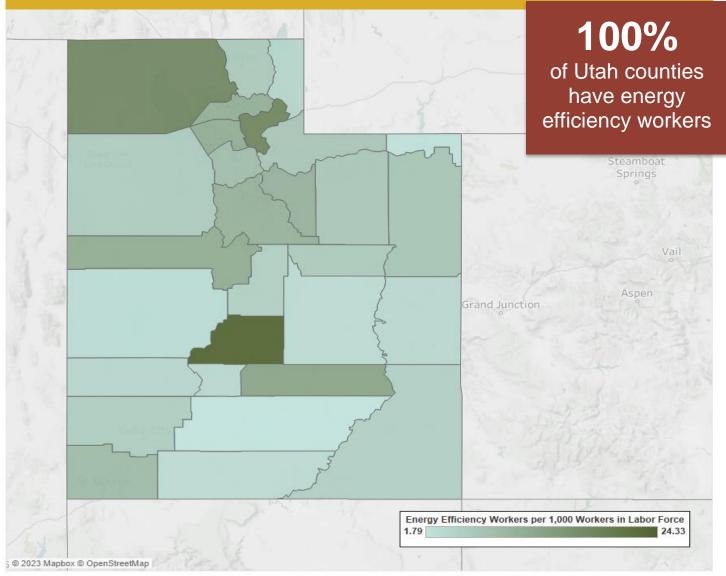
#### Decades of work ready for Utah's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



### EE Jobs by County



Metropolitan Areas					
Area	Jobs				
Logan	756				
Ogden-Clearfield	3,639				
Provo-Orem	8,820				
Salt Lake City	13,569				
St. George	1,284				
Rural	2,879				



		Jobs by Count	y		
County	Jobs	County	Jobs	County	Jobs
Beaver County	25	Iron County	264	Sevier County	477
Box Elder County	852	Juab County	103	Summit County	413
Cache County	824	Kane County	29	Tooele County	236
Carbon County	110	Millard County	33	Uintah County	202
Daggett County	<10	Morgan County	100	Utah County	6,040
Davis County	3,189	Piute County	<10	Wasatch County	253
Duchesne County	116	Rich County	11	Washington County	1,449
Emery County	25	Salt Lake County	13,318	Wayne County	34
Garfield County	11	San Juan County	48	Weber County	2,612
Grand County	62	Sanpete County	102	N/A	<10





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# Vermont Energy Efficiency Jobs in America

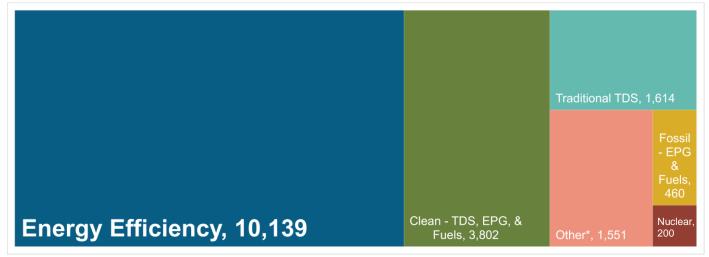


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Vermont's energy sectors compare?

Energy Efficiency is the largest energy sector in Vermont

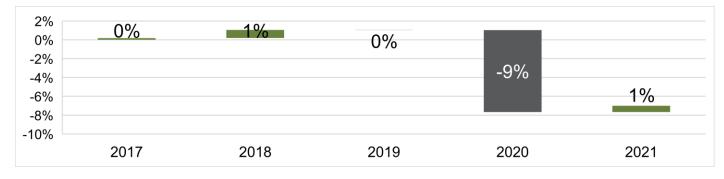


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear = includes EPG & Euels

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

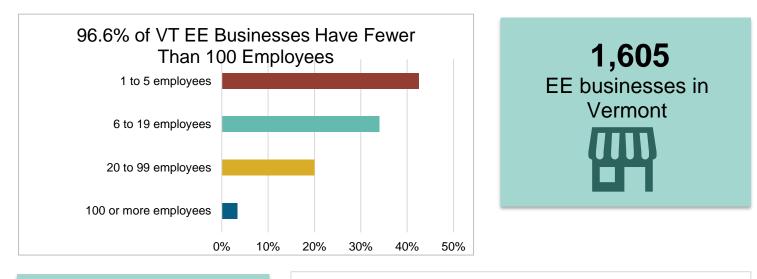
#### How is the EE industry growing in Vermont?



Prior to 2020, the EE sector was growing gradually each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

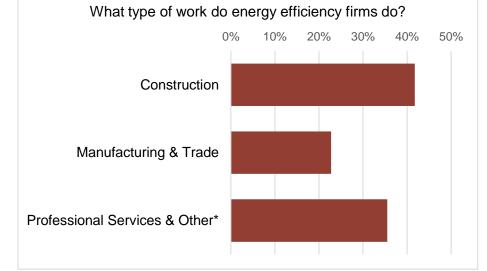


## What does EE look like in Vermont?

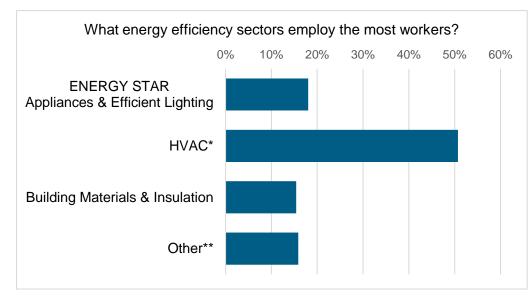


EE construction workers comprise **28%** of Vermont's construction workforce

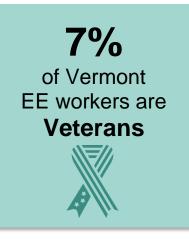




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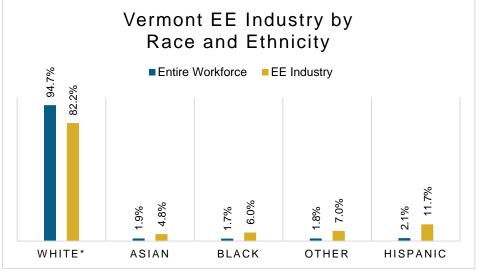




## How is EE doing on diversity in Vermont?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



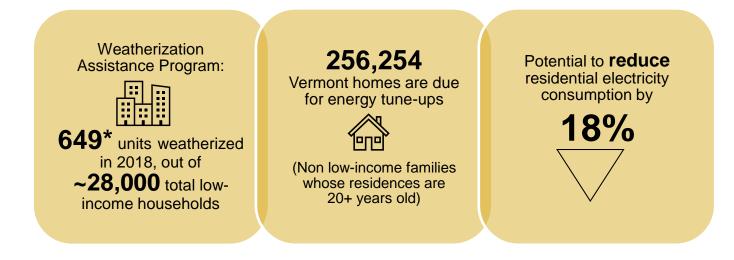
24% 76%

\*Includes non-Hispanic and Hispanic whites.

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.

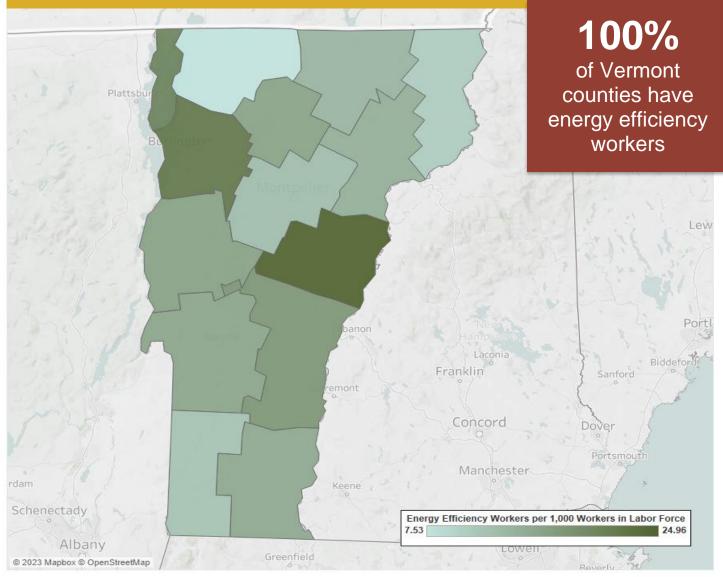
## Vermont's EE Potential

#### Decades of work ready for Vermont's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform

## EE Jobs by County



Metropolitan Areas					
	Area	Jobs			
	Burlington-South Burlington	3,368			
	Rural	6,771			



4

Jobs by County									
County	Jobs	County	Jobs						
Addison County	478	Orange County	364						
Bennington County	396	Orleans County	299						
Caledonia County	304	Rutland County	787						
Chittenden County	4,464	Washington County	811						
Essex County	20	Windham County	579						
Franklin County	249	Windsor County	817						
Grand Isle County	49	N/A	154						
Lamoille County	368								



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# Virginia Energy Efficiency Jobs in America

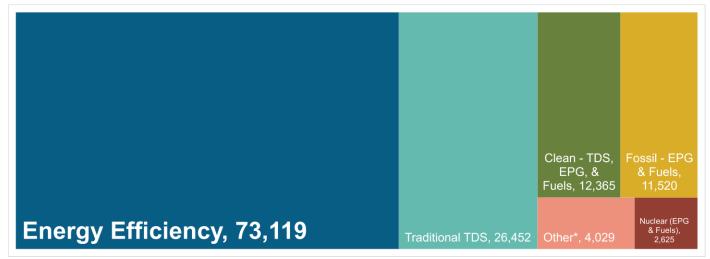


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Virginia's energy sectors compare?

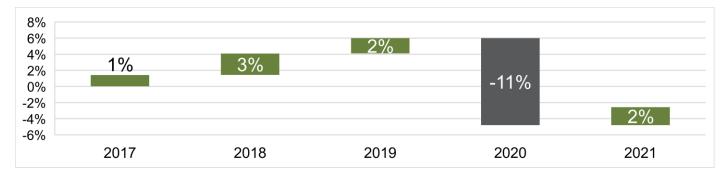
Energy Efficiency is the largest energy sector in Virginia



TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation \*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

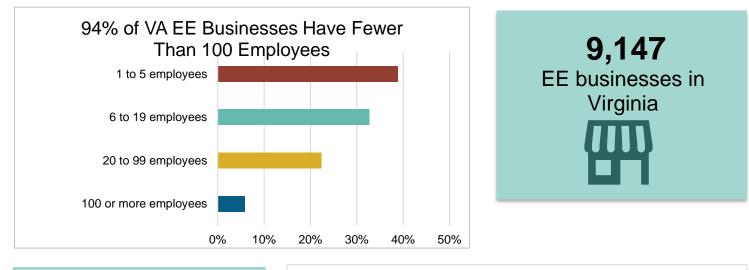
## How is the EE industry growing in Virginia?



Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

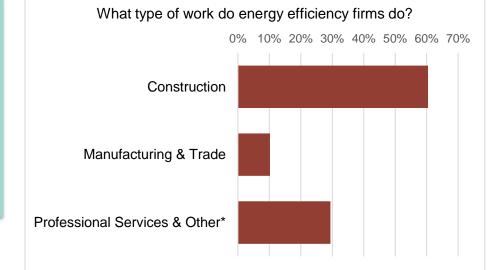


## What does EE look like in Virginia?

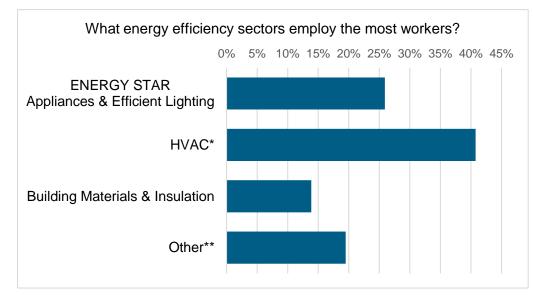


EE construction workers comprise **21%** of Virginia's construction workforce

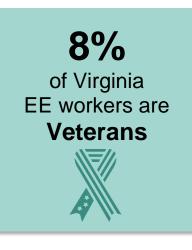




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

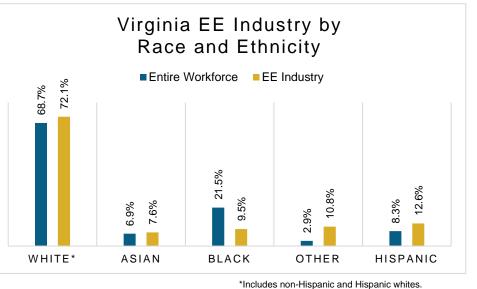




# How is EE doing on diversity in Virginia?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



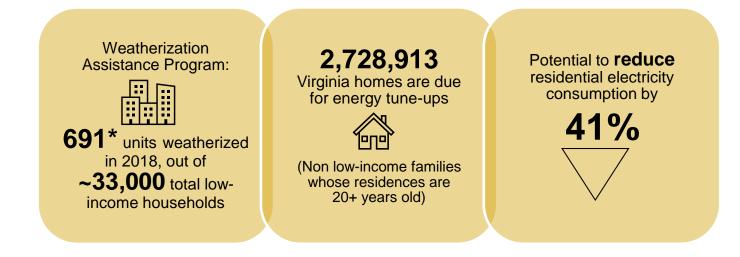
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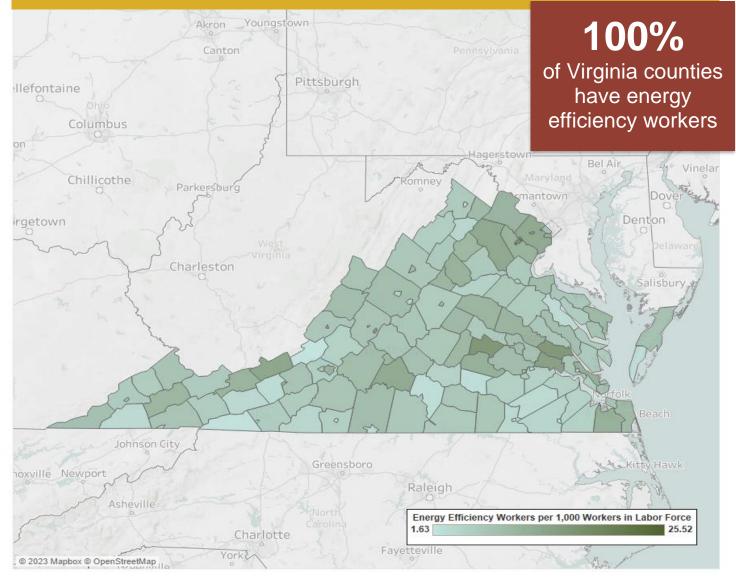
## Virginia's EE Potential

#### Decades of work ready for Virginia's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform

#### EE Jobs by County



Metropolitan Areas								
Area	Jobs	Area	Jobs					
Blacksburg-Christiansburg- Radford	1,037	Richmond	12,166					
Charlottesville	3,012	Roanoke	2,850					
Danville	657	Virginia Beach-Norfolk- Newport News	13,268					
Harrisonburg	1,042	Washington-Arlington- Alexandria	28,038					
Kingsport-Bristol-Bristol	776	Winchester	1,001					
Lynchburg	2,063	Rural	7,207					



		Jo	bs by Co	unty			
County	Jobs	County	Jobs	County	Jobs	County	Jobs
Accomack County	210	Giles County	146	Pittsylvania County	233	Danville City County	165
Albemarle County	691	Gloucester County	129	Powhatan County	259	Emporia City County	20
Alleghany County	51	Goochland County	269	Prince Edward County	84	Fairfax City County	588
Amelia County	60	Grayson County	13	Prince George County	152	Falls Church City County	171
Amherst County	117	Greene County	84	Prince William County	3,089	Franklin City County	15
Appomattox County	61	Greensville County	31	Pulaski County	95	Fredericksburg City County	269
Arlington County	2,985	Halifax County	170	Rappahannock County	33	Galax City County	28
Augusta County	527	Hanover County	1,272	Richmond County	35	Hampton City County	843
Bath County	38	Henrico County	3,208	Roanoke County	454	Harrisonburg City County	595
Bedford County	342	Henry County	175	Rockbridge County	96	Hopewell City County	52
Bland County	42	Highland County	<10	Rockingham County	479	Lexington City County	30
Botetourt County	118	Isle of Wight County	103	Russell County	135	Lynchburg City County	99
Brunswick County	48	James City County	450	Scott County	36	Manassas City County	814
Buchanan County	97	King and Queen County	19	Shenandoah County	159	Manassas Park City County	232
Buckingham County	43	King George County	242	Smyth County	147	Martinsville City County	52
Campbell County	472	King William County	59	Southampton County	31	Newport News City County	1,19
Caroline County	71	Lancaster County	76	Spotsylvania County	547	Norfolk City County	2,03
Carroll County	76	Lee County	72	Stafford County	649	Norton City County	47
Charles City County	52	Loudoun County	3,978	Surry County	22	Petersburg City County	164
Charlotte County	18	Louisa County	225	Sussex County	22	Poquoson City County	27
Chesterfield County	2,708	Lunenburg County	33	Tazewell County	189	Portsmouth City County	593
Clarke County	79	Madison County	76	Warren County	111	Radford City County	12 <sup>-</sup>
Craig County	<10	Mathews County	20	Washington County	310	Richmond City County	2,81
Culpeper County	225	Mecklenburg County	154	Westmoreland County	49	Roanoke City County	1,46
Cumberland County	29	Middlesex County	46	Wise County	141	Salem City County	27
Dickenson County	42	Montgomery County	677	Wythe County	93	Staunton City County	10
Dinwiddie County	100	Nelson County	58	York County	505	Suffolk City County	37
Essex County	24	New Kent County	178	Alexandria City County	2,064	Virginia Beach City County	3,4
Fairfax County	16,311	Northampton County	23	Bristol City County	92	Waynesboro City County	8
Fauquier County	600	Northumberland County	49	Buena Vista City County	58	Williamsburg City County	49
Floyd County	47	Nottoway County	32	Charlottesville City County	793	Winchester City County	20
Fluvanna County	98	Orange County	113	Chesapeake City County	2,406	N/A	2,00
Franklin County	255	Page County	78	Colonial Heights City County	122		
Frederick County	494	Patrick County	36	Covington City County	78		







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# Washington Energy Efficiency Jobs in America

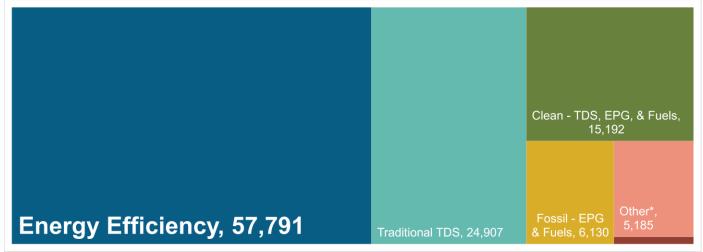


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Washington's energy sectors compare?

Energy Efficiency is the largest energy sector in Washington

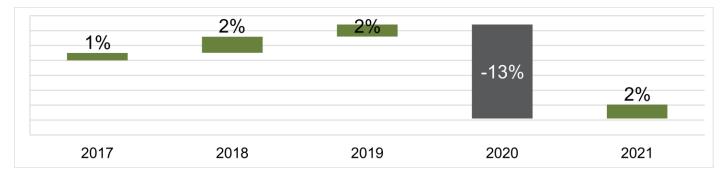


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 392

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

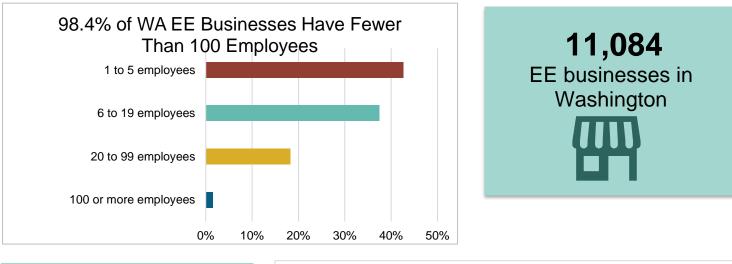
#### How is the EE industry growing in Washington?



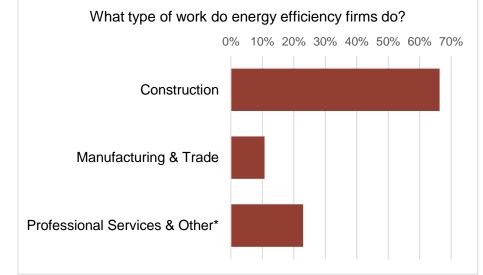
Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



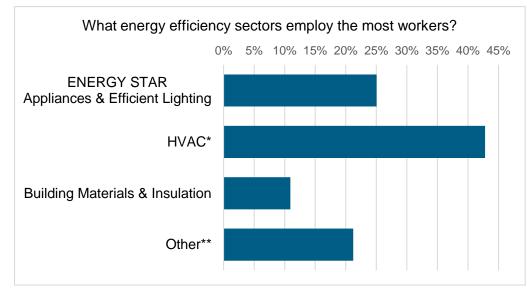
### What does EE look like in Washington?



EE construction workers comprise **18%** of Washington's construction workforce



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



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

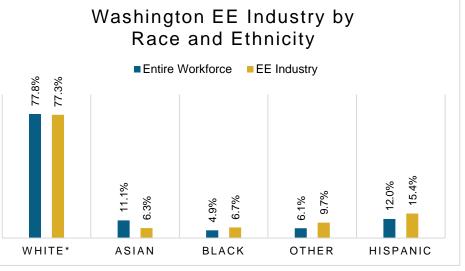
8% of Washington EE workers are Veterans



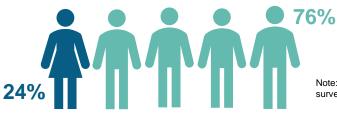
## How is EE doing on diversity in Washington?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



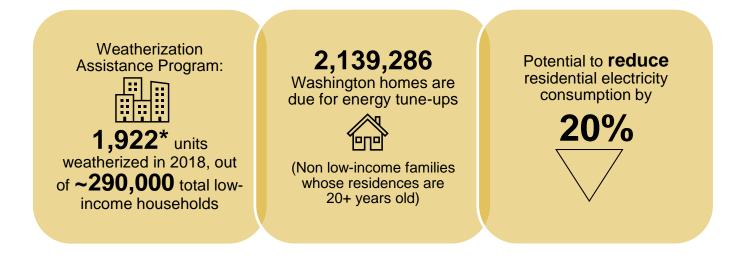
\*Includes non-Hispanic and Hispanic whites.



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.

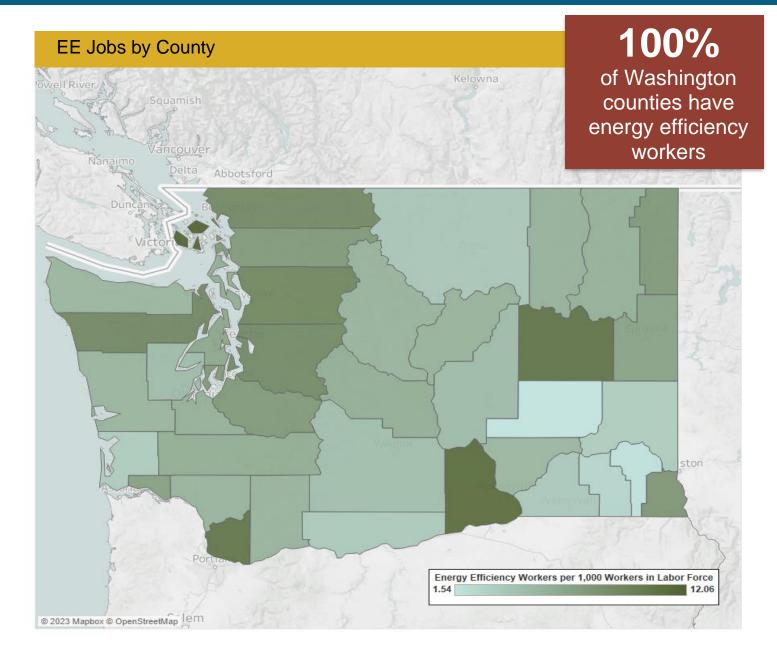
#### Washington's EE Potential

#### Decades of work ready for Washington's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (<u>SLOPE</u>) Platform





Metropolitan Areas						
Area	Jobs	Area	Jobs			
Bellingham	2,270	Portland-Vancouver- Beaverton	4,061			
Bremerton-Silverdale	1,904	Seattle-Tacoma-Bellevue	32,325			
Kennewick-Richland-Pasco	1,475	Spokane	4,187			
Lewiston	121	Wenatchee	838			
Longview	633	Yakima	1,342			
Mount Vernon-Anacortes	894	Rural	5,665			
Olympia	2,075					



		Jobs by County	/		
County	Jobs	County	Jobs	County	Jobs
Adams County	31	Island County	222	Skagit County	816
Asotin County	110	Jefferson County	165	Skamania County	24
Benton County	2,187	King County	26,428	Snohomish County	5,36
Chelan County	495	Kitsap County	1,223	Spokane County	3,40
Clallam County	266	Kittitas County	200	Stevens County	138
Clark County	3,794	Klickitat County	58	Thurston County	1,47
Columbia County	<10	Lewis County	336	Wahkiakum County	11
Cowlitz County	469	Lincoln County	60	Walla Walla County	230
Douglas County	147	Mason County	143	Whatcom County	1,67
Ferry County	20	Okanogan County	135	Whitman County	139
Franklin County	413	Pacific County	48	Yakima County	1,12
Garfield County	<10	Pend Oreille County	48	N/A	392
Grant County	441	Pierce County	5,124		
Grays Harbor County	263	San Juan County	159		





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# West Virginia Energy Efficiency Jobs in America

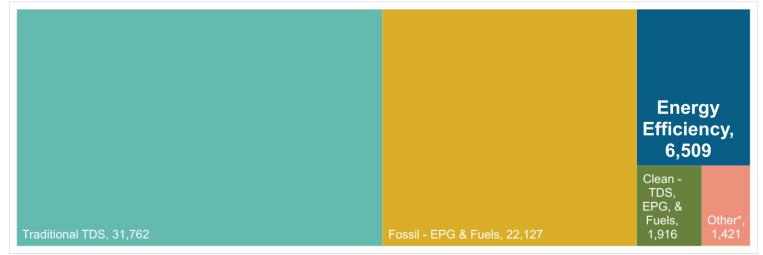


Energy efficiency (EE) workers are crucial to America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities.

Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do West Virginia's energy sectors compare?

Energy Efficiency is the third largest energy sector in West Virginia

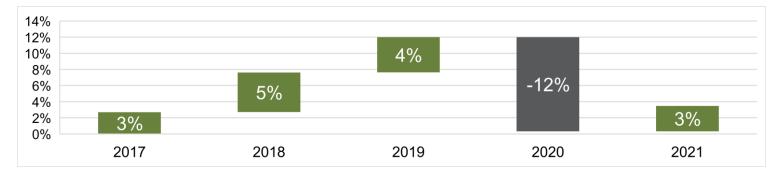


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), < 15

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

#### How is the EE industry growing in West Virginia?

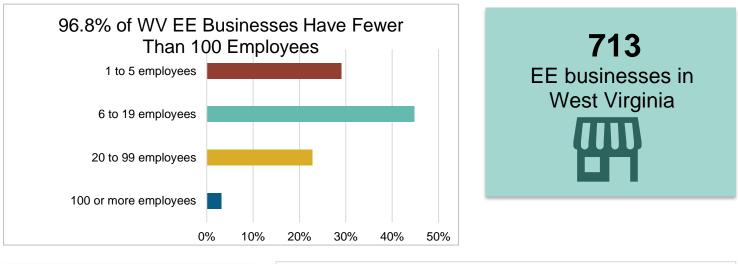


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.

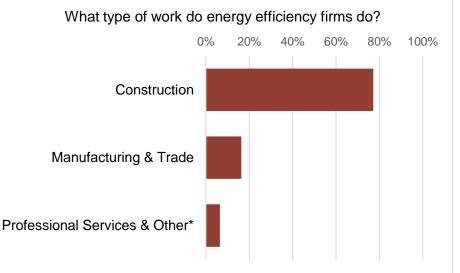


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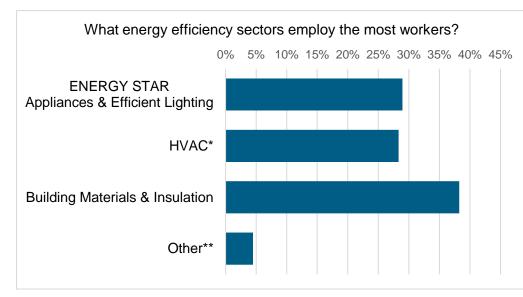
## What does EE look like in West Virginia?



EE construction workers comprise **16%** of West Virginia's construction workforce



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



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

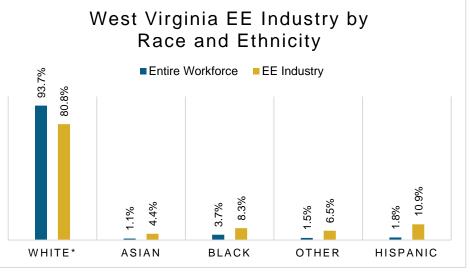
16% of West Virginia EE workers are Veterans



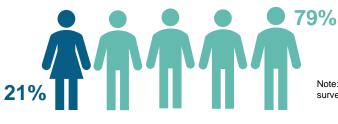
## How is EE doing on diversity in West Virginia?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



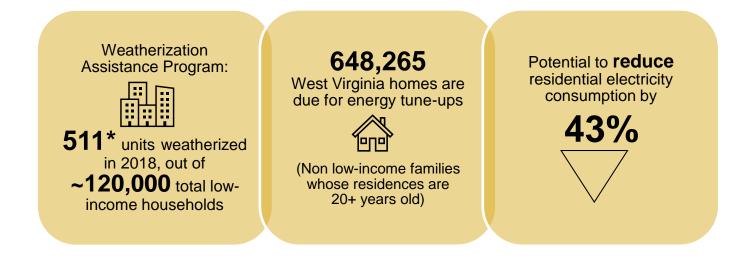
\*Includes non-Hispanic and Hispanic whites.



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 Potential

#### Decades of work ready for West Virginia's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SI OPE) Platforn



## EE Jobs by County 100% of West Virginia Pittsburgh counties have energy efficiency workers bus Hagerstown othe Parke Hunting Richr Lynchburg Energy Efficiency Workers per 1,000 Workers in Labor Force Roand 0.92 11.56 © 2023 Mapbox © OpenStreetMap

	Metropolitan Areas					
	Area	Jobs	Area	Jobs		
Char	leston	838	Washington-Arlington- Alexandria	2,249		
Cum	berland	46	Weirton-Steubenville	108		
Hage	erstown-Martinsburg	264	Wheeling	219		
Hunt	ington-Ashland	315	Winchester	63		
Morg	jantown	357	Rural	1,740		
Park Vien	ersburg-Marietta- na	312				



	Jobs by County								
County	Jobs	County	Jobs	County	Jobs	County	Jobs		
Barbour County	35	Hancock County	76	Mineral County	51	Ritchie County	18		
Berkeley County	222	Hardy County	21	Mingo County	32	Roane County	21		
Boone County	19	Harrison County	427	Monongalia County	511	Summers County	53		
Braxton County	50	Jackson County	40	Monroe County	16	Taylor County	24		
Brooke County	51	Jefferson County	103	Morgan County	14	Tucker County	29		
Cabell County	452	Kanawha County	1,102	Nicholas County	43	Tyler County	<10		
Calhoun County	16	Lewis County	51	Ohio County	273	Upshur County	72		
Clay County	12	Lincoln County	30	Pendleton County	<10	Wayne County	72		
Doddridge County	14	Logan County	53	Pleasants County	23	Webster County	25		
Fayette County	63	McDowell County	<10	Pocahontas County	11	Wetzel County	41		
Gilmer County	<10	Marion County	196	Preston County	127	Wirt County	<10		
Grant County	61	Marshall County	44	Putnam County	434	Wood County	308		
Greenbrier County	97	Mason County	50	Raleigh County	260	Wyoming County	29		
Hampshire County	26	Mercer County	150	Randolph County	88	N/A	446		





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# Wisconsin Energy Efficiency Jobs in America

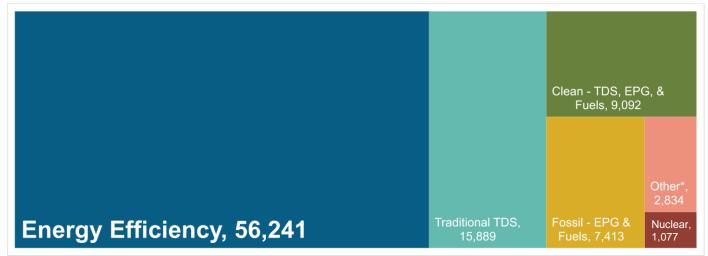


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Investing in EE is a highly cost-effective way to improve the reliability of the electric grid, reduce harmful emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency measures also lower household energy bills while creating high-quality, local jobs that cannot be outsourced.

#### How do Wisconsin's energy sectors compare?

Energy Efficiency is the largest energy sector in Wisconsin

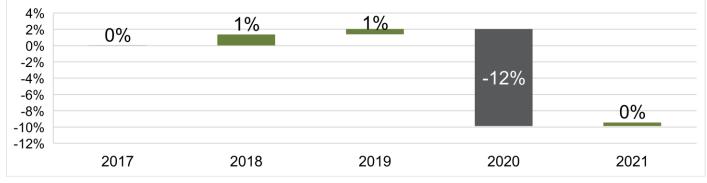


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation

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

#### How is the EE industry growing in Wisconsin?

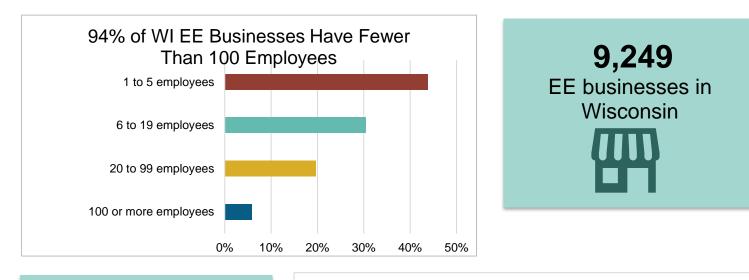


Prior to 2020, the EE sector was growing gradually each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



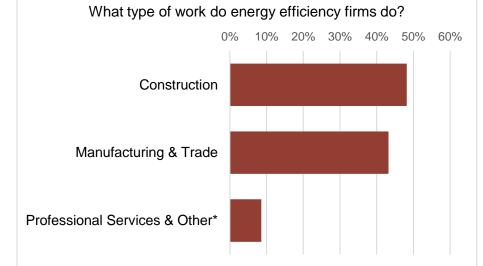
Presented by:

#### What does EE look like in Wisconsin?

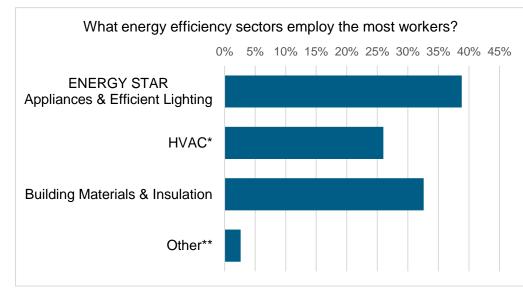


EE construction workers comprise **22%** of Wisconsin's construction workforce

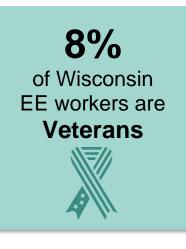




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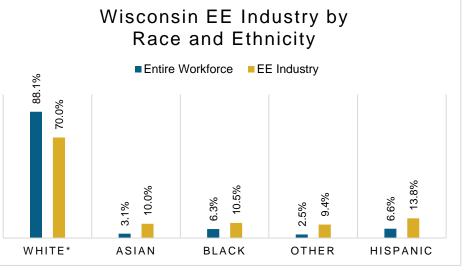




## How is EE doing on diversity in Wisconsin?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



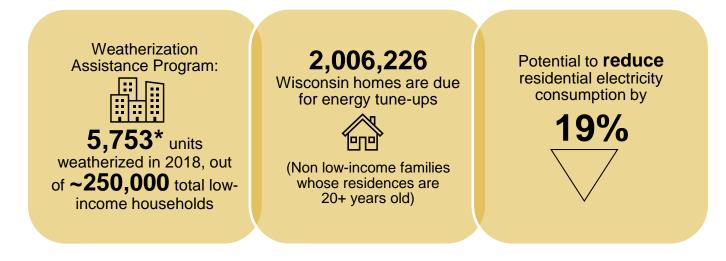
\*Includes non-Hispanic and Hispanic whites.



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#### Wisconsin's EE Potential

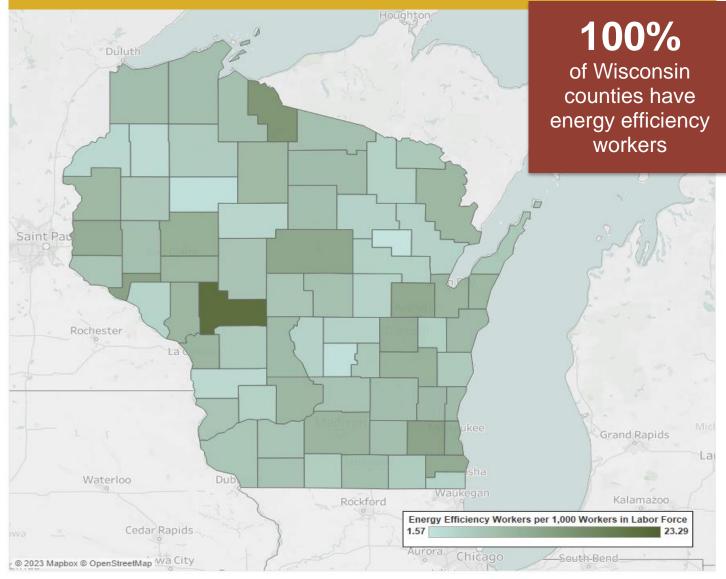
#### Decades of work ready for Wisconsin's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SLOPE) Platform



#### EE Jobs by County



Metropolitan Areas						
Area	Jobs	Area	Jobs			
Appleton	2,157	Madison	6,343			
Chicago-Naperville-Joliet	3,291	Milwaukee-Waukesha- West Allis	14,552			
Duluth	264	Minneapolis-St. Paul- Bloomington	2,390			
Eau Claire	1,401	Oshkosh-Neenah	2,467			
Fond du Lac	838	Racine	1,473			
Green Bay	2,642	Sheboygan	892			
Janesville	1,107	Wausau	1,148			
La Crosse	1,030	Rural	14,246			



Jobs by County								
County	Jobs	County	Jobs	County	Jobs	County	Jobs	
Adams County	41	Fond du Lac County	988	Marquette County	18	Sawyer County	88	
Ashland County	128	Forest County	31	Menominee County	<10	Shawano County	128	
Barron County	281	Grant County	250	Milwaukee County	10,547	Sheboygan County	777	
Bayfield County	60	Green County	177	Monroe County	258	Taylor County	67	
Brown County	3,104	Green Lake County	78	Oconto County	87	Trempealeau County	249	
Buffalo County	35	Iowa County	155	Oneida County	301	Vernon County	65	
Burnett County	38	Iron County	53	Outagamie County	2,655	Vilas County	144	
Calumet County	171	Jackson County	328	Ozaukee County	725	Walworth County	530	
Chippewa County	585	Jefferson County	574	Pepin County	58	Washburn County	38	
Clark County	173	Juneau County	170	Pierce County	136	Washington County	1,098	
Columbia County	345	Kenosha County	663	Polk County	308	Waukesha County	6,498	
Crawford County	93	Kewaunee County	129	Portage County	498	Waupaca County	163	
Dane County	7,050	La Crosse County	1,378	Price County	99	Waushara County	51	
Dodge County	582	Lafayette County	70	Racine County	1,756	Winnebago County	2,097	
Door County	203	Langlade County	72	Richland County	57	Wood County	543	
Douglas County	272	Lincoln County	175	Rock County	1,112	N/A	875	
Dunn County	266	Manitowoc County	624	Rusk County	22			
Eau Claire County	1,120	Marathon County	1,827	St. Croix County	835			
Florence County	11	Marinette County	347	Sauk County	707			





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## Wyoning Energy Efficiency Jobs in America

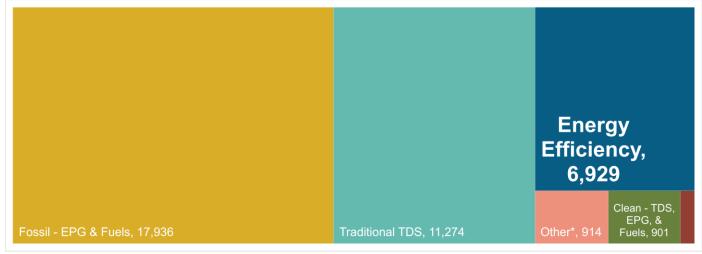


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#### How do Wyoming's energy sectors compare?

Energy Efficiency is the third largest energy sector in Wyoming

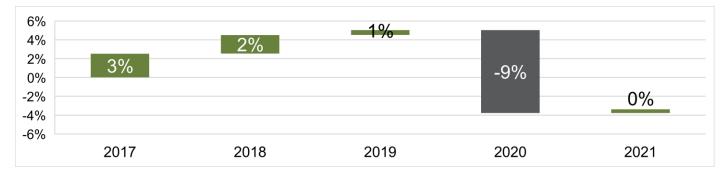


TDS = Transmission, Distribution & Storage

EPG = Electric Power Generation Nuclear (EPG & Fuels), 178

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

#### How is the EE industry growing in Wyoming?

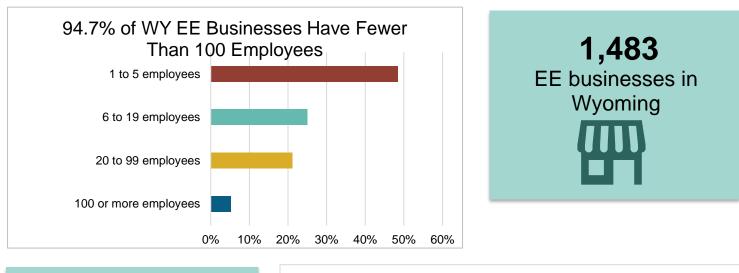


Prior to 2020, the EE sector was growing steadily each year, but suffered heavy job losses in the COVID-19 pandemic. The EE industry has made a strong recovery, but job gains have been slower than in the U.S. workforce overall. As we invest in EE, a focus on workforce development is vital to ensure a strong efficiency industry for years to come.



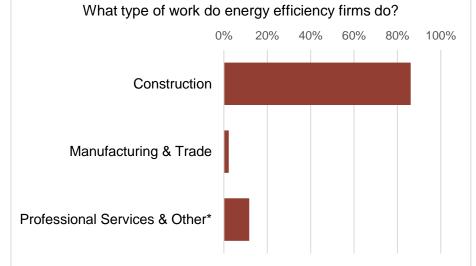
Presented by:

### What does EE look like in Wyoming?

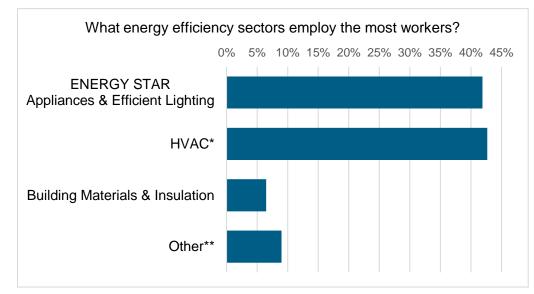


EE construction workers comprise **29%** of Wyoming's construction workforce

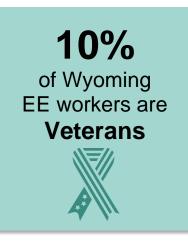




\*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.



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

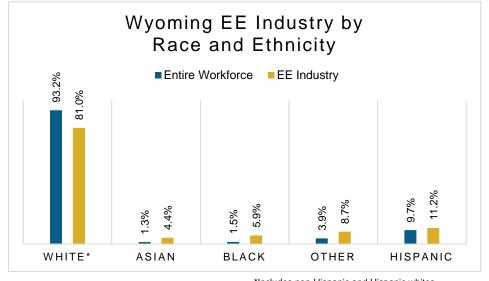




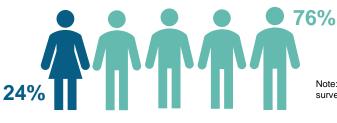
## How is EE doing on diversity in Wyoming?

Demographic data is critical to measure progress in the EE industry. In striving for more diversity in EE jobs, we can create a stronger industry that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 enables access to employment at EE businesses.



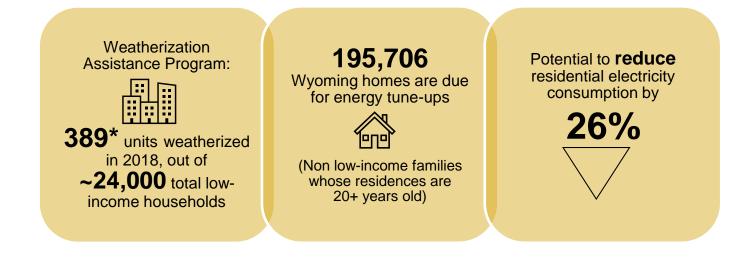
\*Includes non-Hispanic and Hispanic whites.



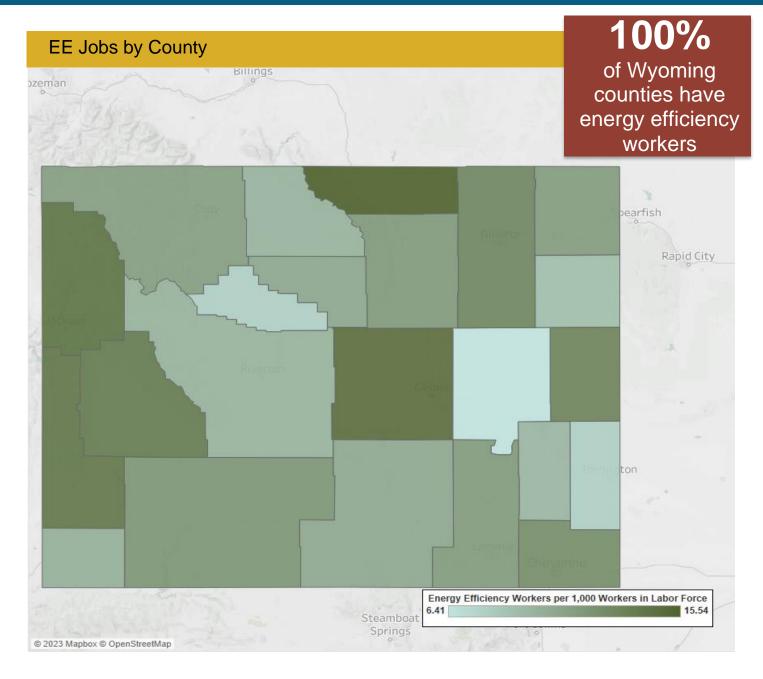
Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.

### Wyoming's EE Potential

#### Decades of work ready for Wyoming's growing energy efficiency workforce.



\*National Association for State community Services Programs (NASCSP) <u>Weatherization Assistance Program Annual Funding Survey</u> Source: E4TheFuture/BW Research retrofit analysis, July 2021, <u>U.S. Census Bureau QuickFacts</u> and <u>State and Local Planning for Energy</u> (SI OPE) Platforn



Metropolitan Areas					
Area	Jobs				
Casper	1,228				
Cheyenne	1,177				
Rural	4,524				



Jobs by County							
County	Jobs	County	Jobs	County	Jobs		
Albany County	316	Hot Springs County	32	Sheridan County	442		
Big Horn County	84	Johnson County	81	Sublette County	106		
Campbell County	635	Laramie County	1,165	Sweetwater County	481		
Carbon County	150	Lincoln County	210	Teton County	716		
Converse County	79	Natrona County	1,131	Uinta County	162		
Crook County	64	Niobrara County	13	Washakie County	77		
Fremont County	308	Park County	348	Weston County	44		
Goshen County	65	Platte County	70	N/A	148		





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

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 <u>www.e2.org.</u>

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 <u>www.bwresearch.com</u>.

Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, June 2022, by the U.S. Department of Energy (see Appendix C 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 Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.