# Colorado Energy Efficiency Jobs in America



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

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

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

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

This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies. The energy efficiency workforce has the skills and expertise to meet this moment. Historically the Colorado EE workforce grew steadily, gaining 21.3% since 2016.\*\*

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





Presented by:



\*Source: <u>Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis, March 2020-October 2020</u>. \*\*first available sector-specific data

## What are EE Jobs?

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

#### What type of work are EE workers doing?

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

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

#### How does EE compare in Colorado?

Energy efficiency is the largest energy sector in Colorado.



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



## What do the EE businesses look like in Colorado?



# **Firms by Supply Chain**



\* Professional services includes finance/accounting, architecture, engineering, R&D, etc. \*\* Other such as 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



6.9% of Colorado residents employed in EE are Veterans

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



#### How is EE Doing regarding Diversity in Colorado?

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





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



## Why invest in EE?

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

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

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



Source: Build Back Better, Faster,

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

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

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



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

Source: State and Local Planning for Energy (SLOPE) Platform.



# Where are EE Jobs?

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





## State Senate

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

# **State House of Representatives**

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







E4TheFuture is dedicated to bringing clean, efficient energy home for every American and promotes energy solutions to advance climate protection and economic fairness. Visit <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 2020 U.S. Energy and Employment Report, March 2020, by NASEO and EFI (see Appendix A, pages 201-206 for methodology details). This methodology -- adopted by the U.S. Dept. of Energy for its 2017 U.S. Energy and Employment Report, approved by the Office of Management and Budget and grounded on data collected by the U.S. Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.