

West Virginia

Energy Efficiency Jobs in America

June 2021*

6,315

Dec 2020

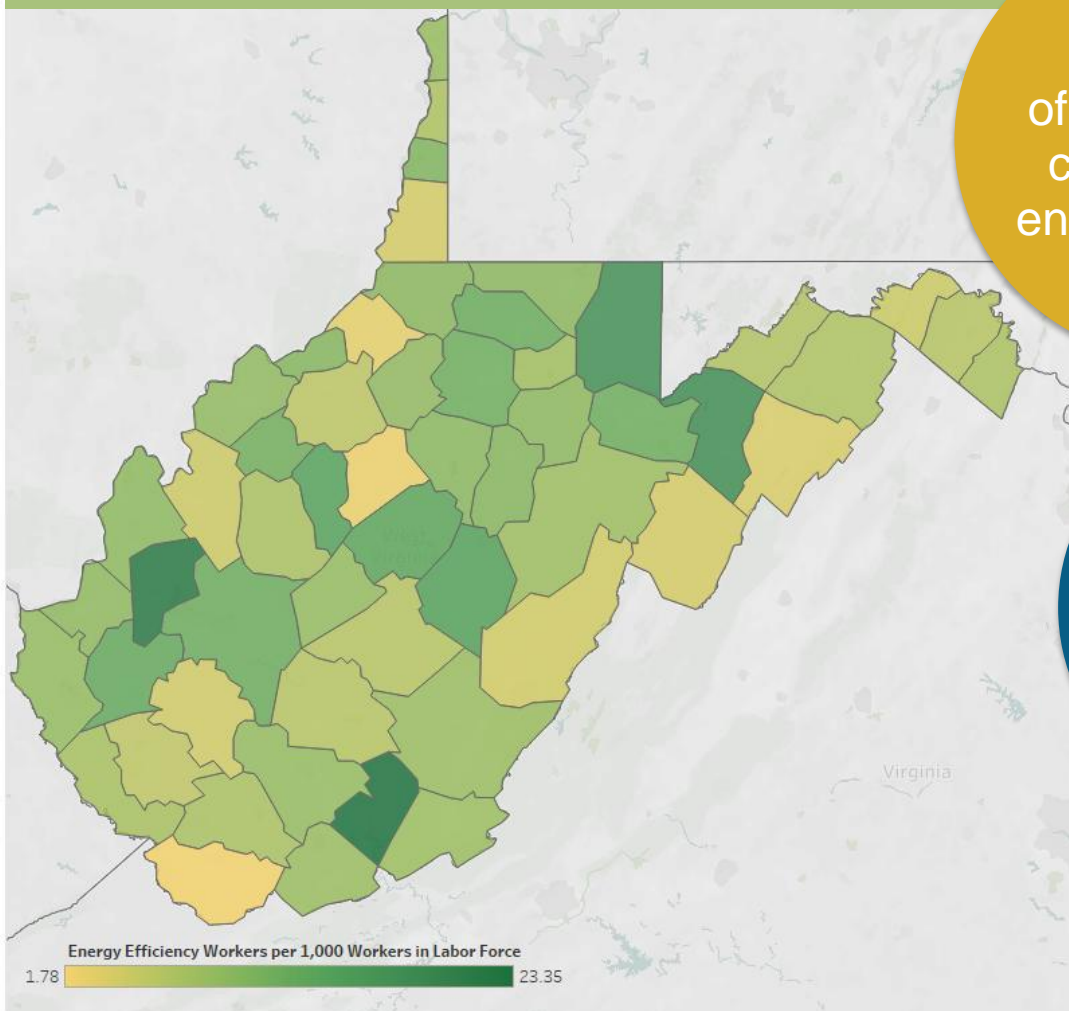
6,309

Energy efficiency (EE) workers are a crucial part of America's workforce. EE jobs are everywhere – in rural, urban, and suburban communities. In West Virginia, there are EE jobs in every county.

Investments in EE are the best possible energy investment. Energy efficiency measures are a highly cost-effective way to improve the reliability of the electric grid, reduce emissions, and make other renewable energy resources, such as solar and wind, more valuable. Efficiency also saves households money while creating high-quality, local jobs that cannot be outsourced.

Energy Efficiency Jobs are Everywhere

EE Jobs by County



100%

of West Virginia counties have energy efficiency workers

~7,600

new EE construction jobs to retrofit West Virginia homes by 2030



Number of full-time workers required for eight years 2022-2030 to improve 80% of WV residences for a clean energy future.

Source: E4TheFuture/BW Research retrofit analysis, July 2021

*Source: E4TheFuture/BW Research job analysis, July 2021

Presented by:



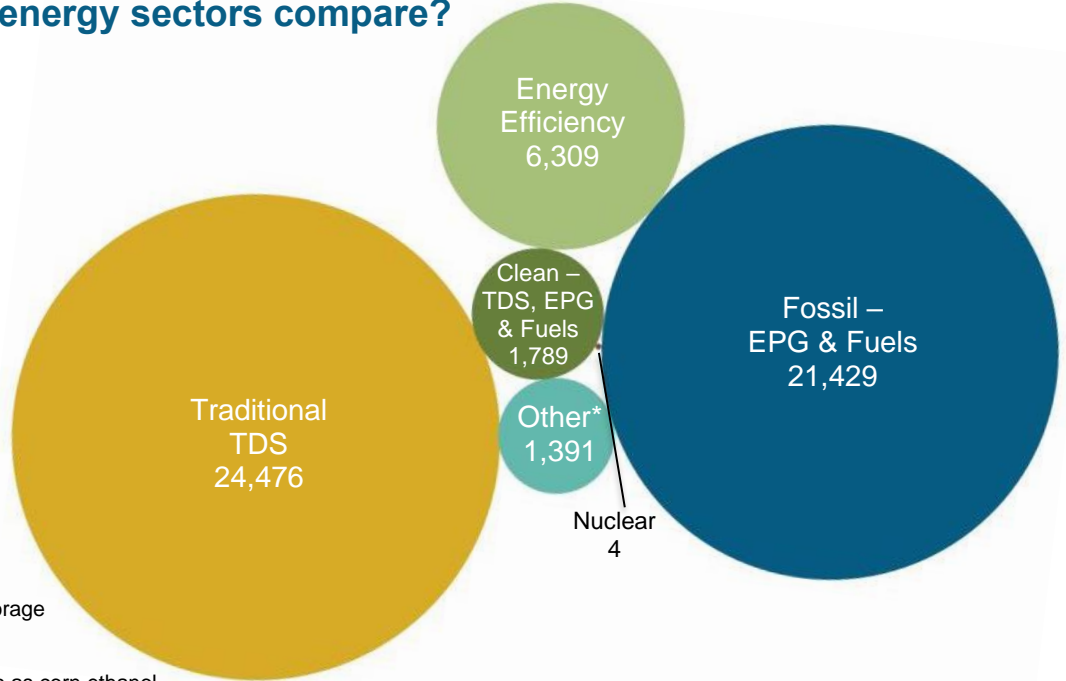
Key EE Statistics for West Virginia

What are energy efficiency (EE) jobs?

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

How do West Virginia's energy sectors compare?

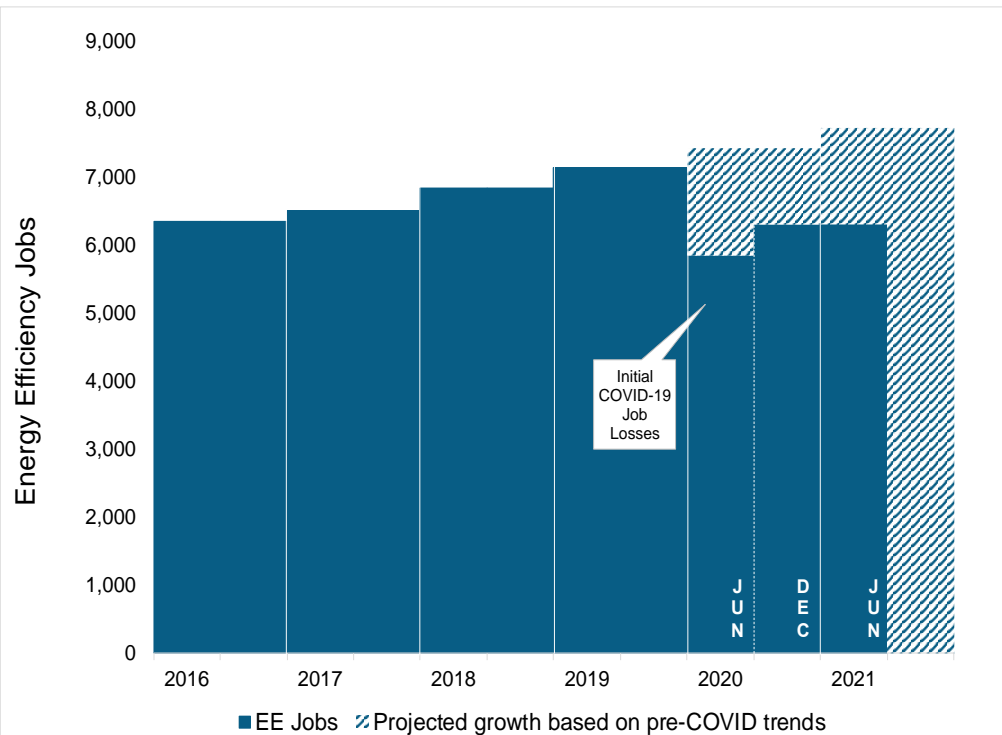
Energy Efficiency is the third largest energy sector in West Virginia.



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

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

How is the EE industry recovering?



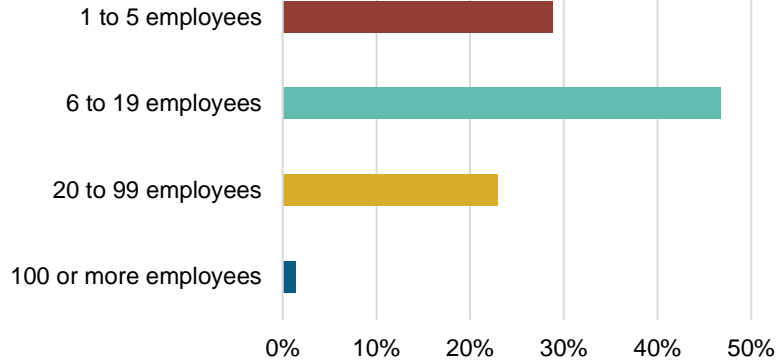
Recovery from COVID-19 has fallen short of Dec. 2019 levels and is significantly below pre-pandemic projections.



Source: E4TheFuture/BW Research job analysis, July 2021

What does EE look like in West Virginia?

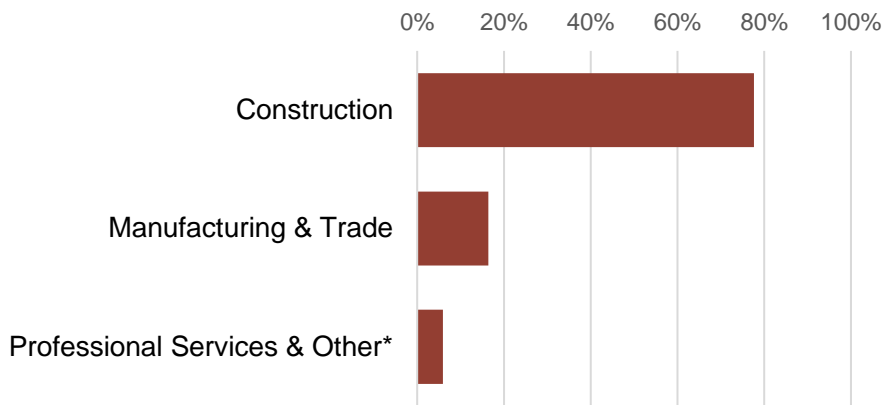
98.5% of WV EE Businesses Have Less Than 100 Employees



707
EE businesses in West Virginia

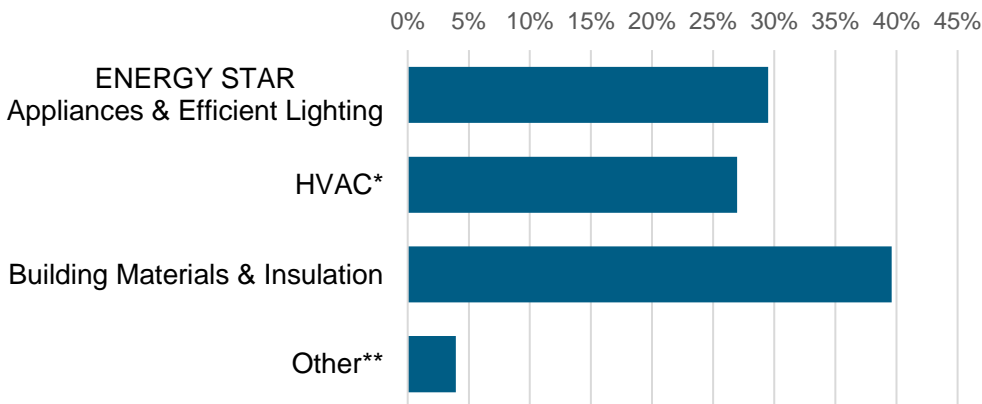
EE construction workers comprise **16%** of West Virginia construction workers

What type of work do energy efficiency firms do?



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

What energy efficiency sectors employ the most workers?



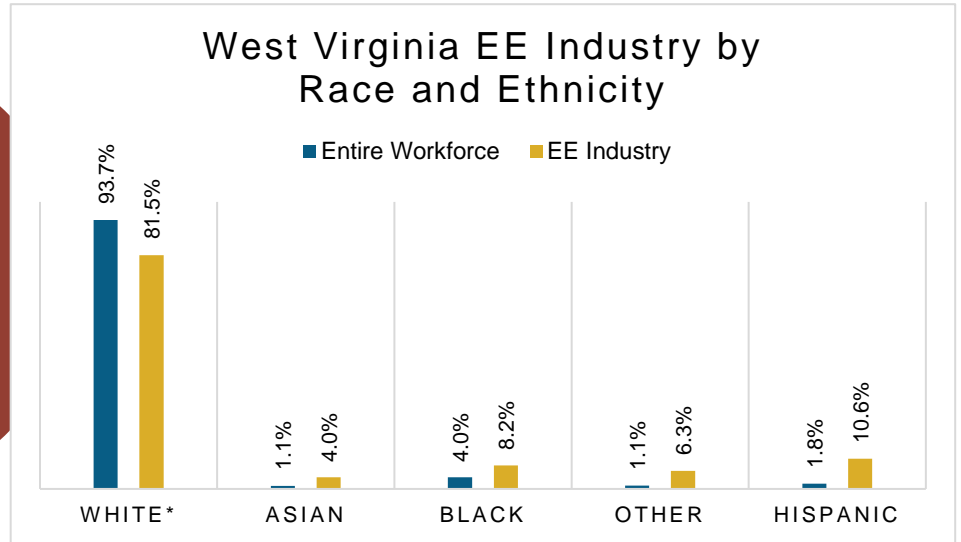
*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling
**Other such as energy audits, building certifications, and software services

17% of West Virginia EE workers are **Veterans**

How is EE doing on diversity in West Virginia?

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

The EE industry needs to do more to prioritize minorities and women for training and support that 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.

Weatherization Assistance Program:



511* units weatherized in 2018, out of **~120,000** total low-income households

648,265

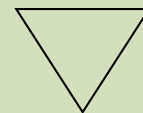
West Virginia homes are due for energy tune-ups



(Non low-income families whose residences are 20+ years old)

Potential to **reduce** residential electricity consumption by

43%



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

Energy Efficiency Jobs by Location

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	2,464	Charleston	906
2	2,179	Cumberland	49
3	1,667	Hagerstown-Martinsburg	282
		Huntington-Ashland	341
		Morgantown	386
		Parkersburg-Marietta-Vienna	301
		Washington-Arlington-Alexandria	1,742
		Weirton-Steubenville	116
		Wheeling	237
		Winchester	68
		Rural	1,881

State Upper House										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	443		11	398		21	<5		31	<5
2	870		12	457		22	<5		32	<5
3	452		13	30		23	<5		33	<5
4	474		14	257		24	<5		34	<5
5	390		15	393		25	<5			
6	284		16	264		26	<5			
7	144		17	30		27	<5			
8	751		18	<5		28	<5			
9	374		19	<5		29	<5			
10	298		20	<5		30	<5			

State Lower House

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	132	28	297	55	55	82	<5
2	245	29	32	56	28	83	<5
3	22	30	<5	57	68	84	<5
4	99	31	37	58	115	85	<5
5	31	32	190	59	145	86	<5
6	62	33	44	60	105	87	<5
7	40	34	59	61	25	88	<5
8	145	35	661	62	<5	89	<5
9	248	36	130	63	65	90	<5
10	<5	37	<5	64	<5	91	<5
11	152	38	<5	65	97	92	<5
12	14	39	11	66	13	93	<5
13	117	40	<5	67	<5	94	<5
14	161	41	21	68	<5	95	<5
15	52	42	122	69	<5	96	<5
16	306	43	154	70	<5	97	<5
17	56	44	122	71	<5	98	<5
18	<5	45	<5	72	<5	99	<5
19	66	46	73	73	<5	100	<5
20	81	47	171	74	<5		
21	22	48	437	75	<5		
22	48	49	171	76	<5		
23	18	50	9	77	<5		
24	29	51	286	78	<5		
25	117	52	76	79	<5		
26	89	53	13	80	<5		
27	24	54	100	81	<5		



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



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. Visit www.e2.org



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

Data Source: Unless otherwise stated, all data are from the U.S. Energy and Employment Report, July 2021, by the U.S. Department of Energy (see Appendix A 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.