

Virginia

Energy Efficiency Jobs in America

June 2021*

71,735

Dec 2020

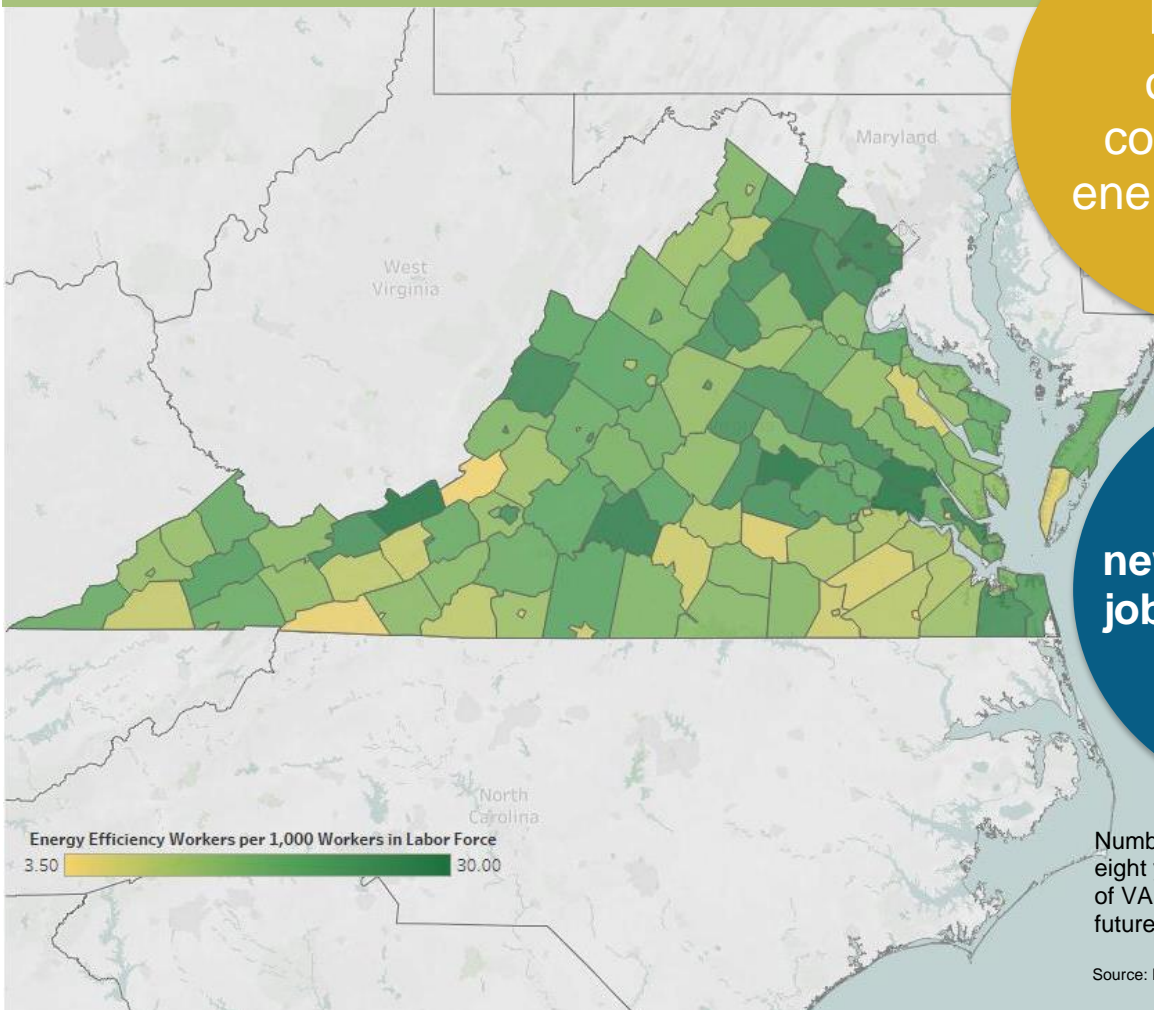
71,505

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

~27,300
new EE construction
jobs to retrofit Virginia
homes by 2030



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

Source: E4TheFuture/BW Research retrofit analysis, July 2021

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

Presented by:



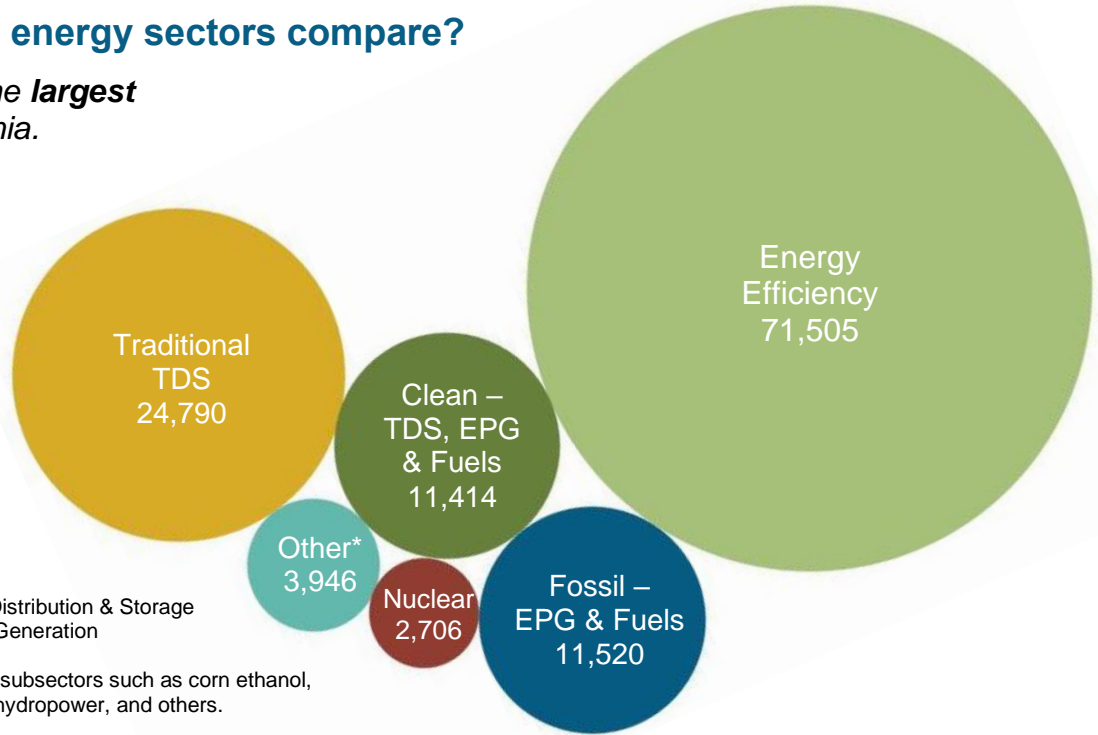
Key EE Statistics for Virginia

What are energy efficiency (EE) jobs?

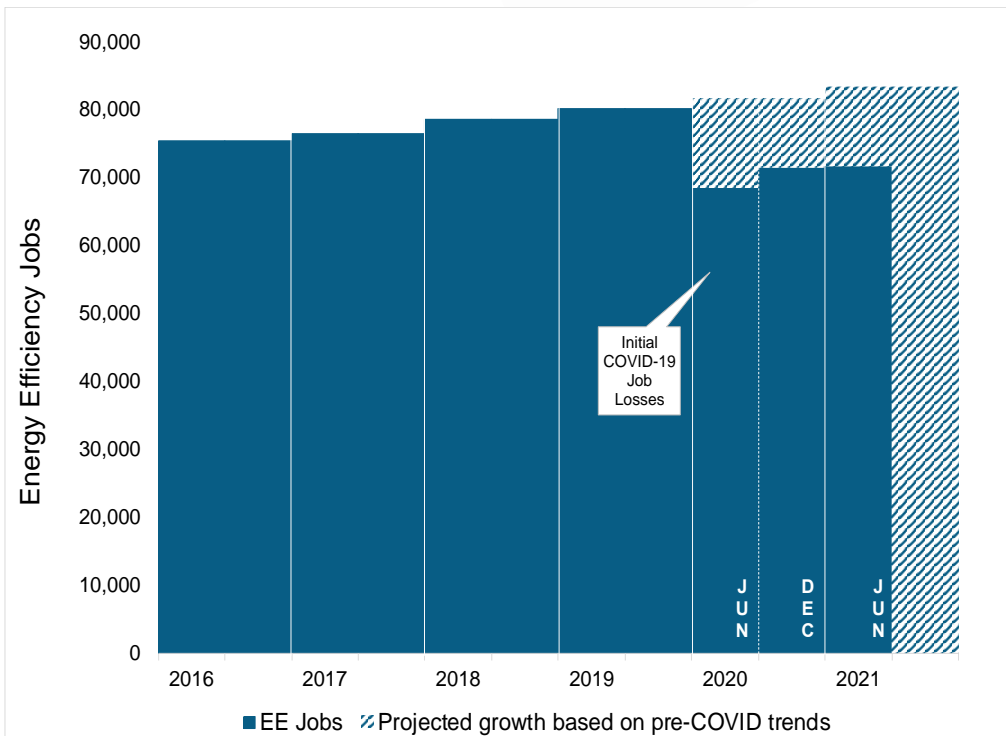
Jobs that deliver goods and services that lower energy use by improving technologies, appliances, buildings, and energy systems.

How do Virginia's energy sectors compare?

Energy Efficiency is the **largest** energy sector in Virginia.



How is the EE industry recovering?



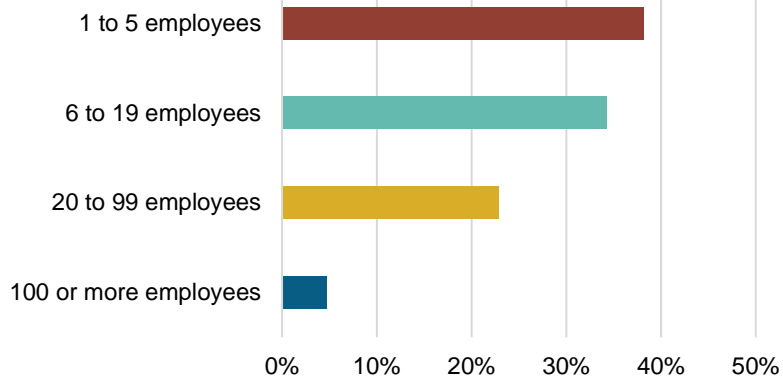
Recovery from COVID-19 has fallen short of Dec. 2019 levels and is significantly below pre-pandemic projections.



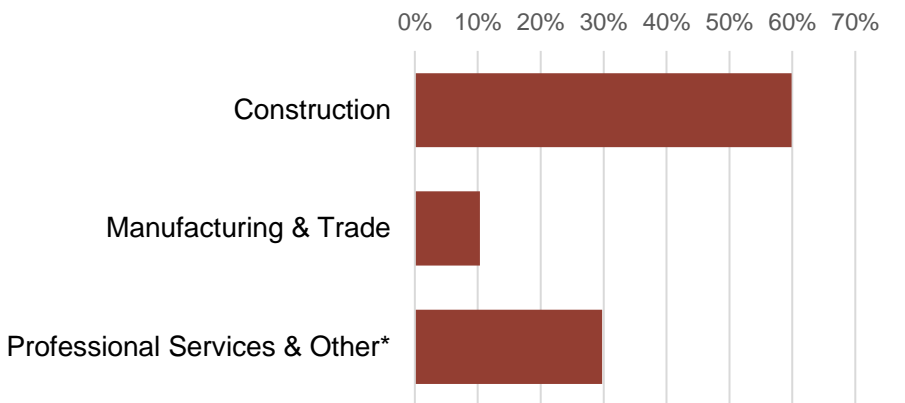
Source: E4TheFuture/BW Research job analysis, July 2021

What does EE look like in Virginia?

95.2% of VA EE Businesses Have Less Than 100 Employees

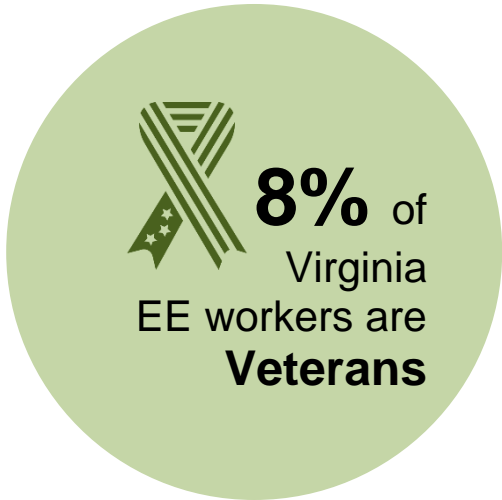
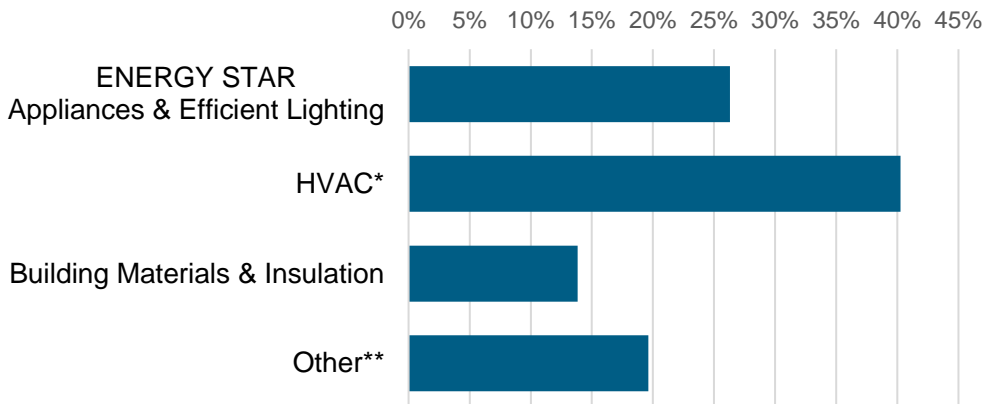


What type of work do energy efficiency firms do?



*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?

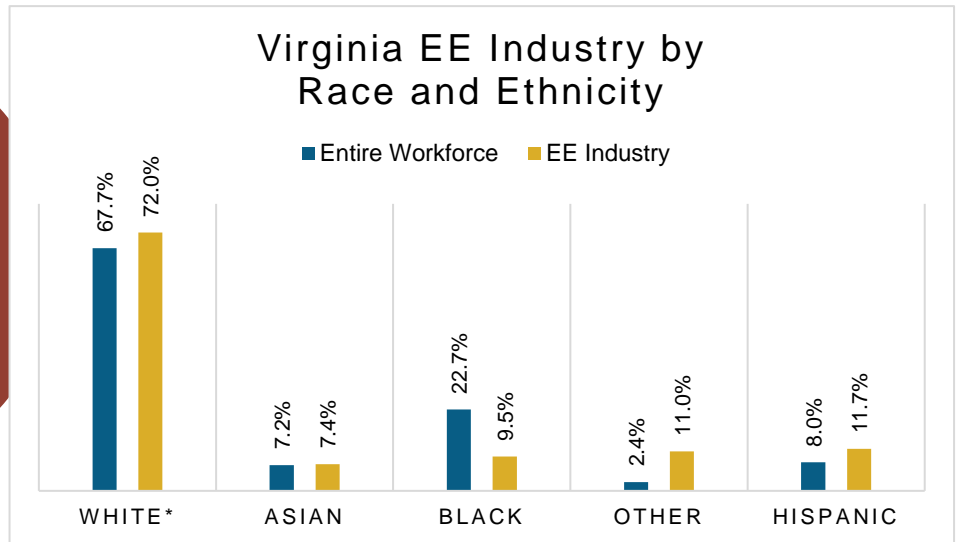


*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling
**Other such as energy audits, building certifications, and software services

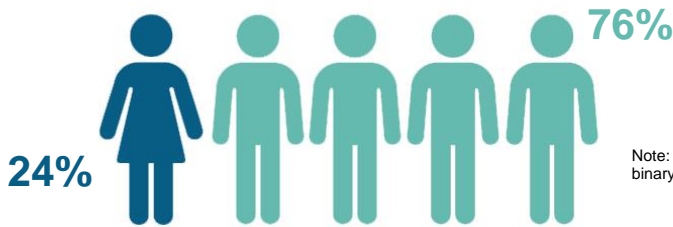
How is EE doing on diversity in Virginia?

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 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.

Virginia's EE Potential

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

Weatherization Assistance Program:



691* units weatherized in 2018, out of **~33,000** total low-income households

2,728,913

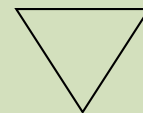
Virginia homes are due for energy tune-ups



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

Potential to **reduce** residential electricity consumption by

41%



*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	7,733	Blacksburg-Christiansburg-Radford	1,025
2	6,954	Charlottesville	2,977
3	6,753	Danville	650
4	5,408	Harrisonburg	1,029
5	9,298	Kingsport-Bristol-Bristol	767
6	5,576	Lynchburg	2,039
7	4,919	Richmond	12,004
8	9,193	Roanoke	2,810
9	3,798	Virginia Beach-Norfolk-Newport News	13,083
10	10,600	Washington-Arlington-Alexandria	27,017
11	1,272	Winchester	990
		Rural	7,116

State Senate									
District	Jobs	District	Jobs	District	Jobs	District	Jobs		
1	2,840	11	929	21	1,235	31	5,487		
2	958	12	891	22	1,511	32	2,973		
3	1,004	13	4,100	23	420	33	<5		
4	2,778	14	1,293	24	2,286	34	2,920		
5	3,138	15	2,292	25	2,199	35	1,247		
6	699	16	11	26	967	36	587		
7	2,746	17	1,915	27	2,237	37	362		
8	1,114	18	578	28	1,458	38	1,050		
9	4,451	19	3,482	29	950	39	<5		
10	3,517	20	536	30	3,329	40	1,017		

State House of Delegates

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	446	26	33	51	<5	76	642
2	928	27	2,357	52	21	77	113
3	595	28	733	53	<5	78	466
4	539	29	712	54	750	79	1,449
5	550	30	357	55	1,513	80	61
6	406	31	966	56	1,321	81	1,110
7	916	32	1,174	57	1,440	82	<5
8	1,012	33	171	58	259	83	1,088
9	978	34	3,642	59	460	84	<5
10	2,055	35	2,146	60	385	85	<5
11	1,406	36	1,516	61	656	86	<5
12	84	37	503	62	1,218	87	<5
13	1,644	38	1,479	63	256	88	10
14	587	39	1,450	64	953	89	138
15	913	40	352	65	61	90	<5
16	187	41	153	66	62	91	883
17	97	42	187	67	820	92	243
18	1,191	43	413	68	2,011	93	687
19	741	44	170	69	1,613	94	1,221
20	1,061	45	2,045	70	<5	95	<5
21	3,656	46	<5	71	276	96	160
22	1,035	47	1,689	72	548	97	467
23	154	48	531	73	<5	98	418
24	358	49	<5	74	630	99	593
25	1,626	50	73	75	231	100	251



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.