

Virginia

Energy Efficiency Jobs in America

79,241
Total Jobs

What are EE jobs?

Jobs that reduce energy use by improving efficiency in appliances, buildings, data systems, financing, new technologies, and more.

What do EE workers do?

- **Manufacture and install** high-efficiency systems, controls, windows, insulation, and ENERGY STAR-certified appliances and products in existing and new homes, as well as commercial, and industrial buildings.
- **Design and construct** high-performance buildings such as those earning nationally recognized sustainability and environmental performance ratings.
- **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 data** using software to maximize energy 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.

How does EE compare to other energy sectors in Virginia?

Energy efficiency is the largest energy sector in Virginia.



TDS = Transmission, Distribution, & Storage

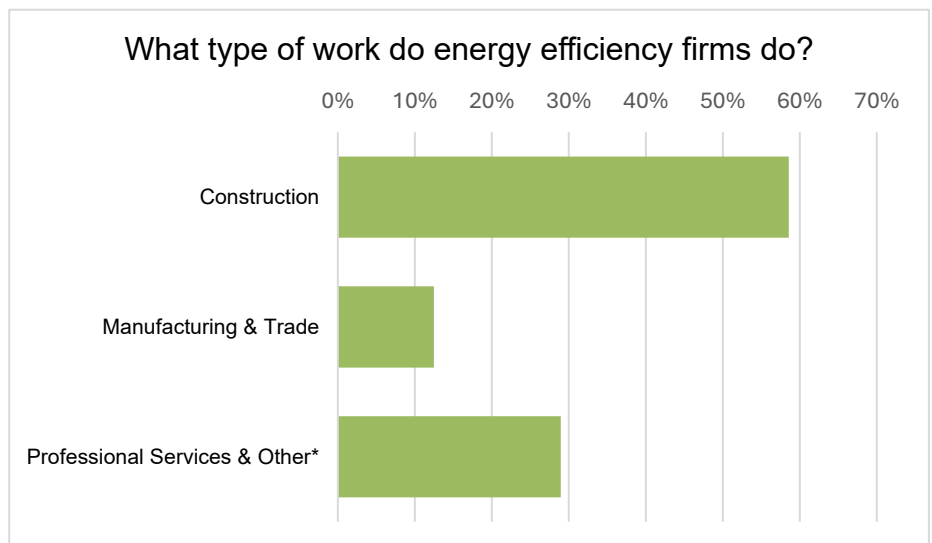
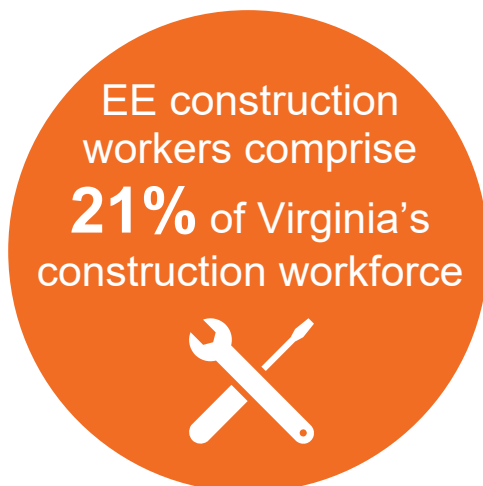
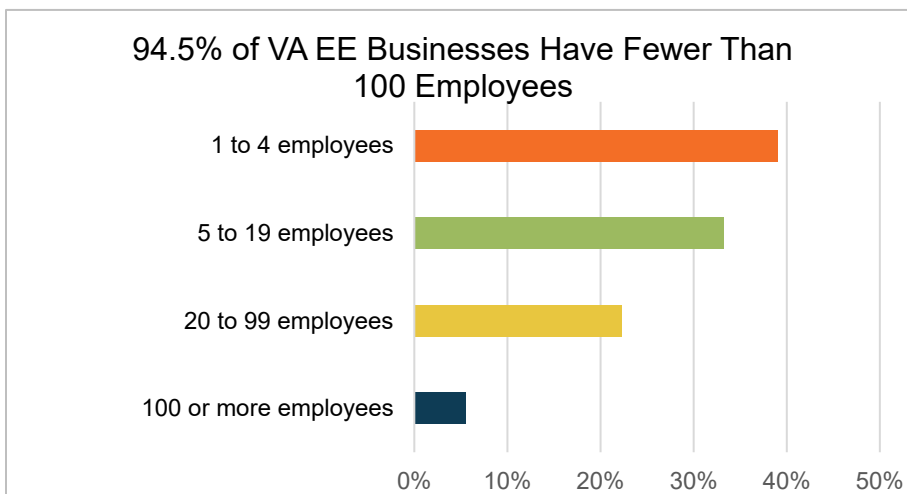
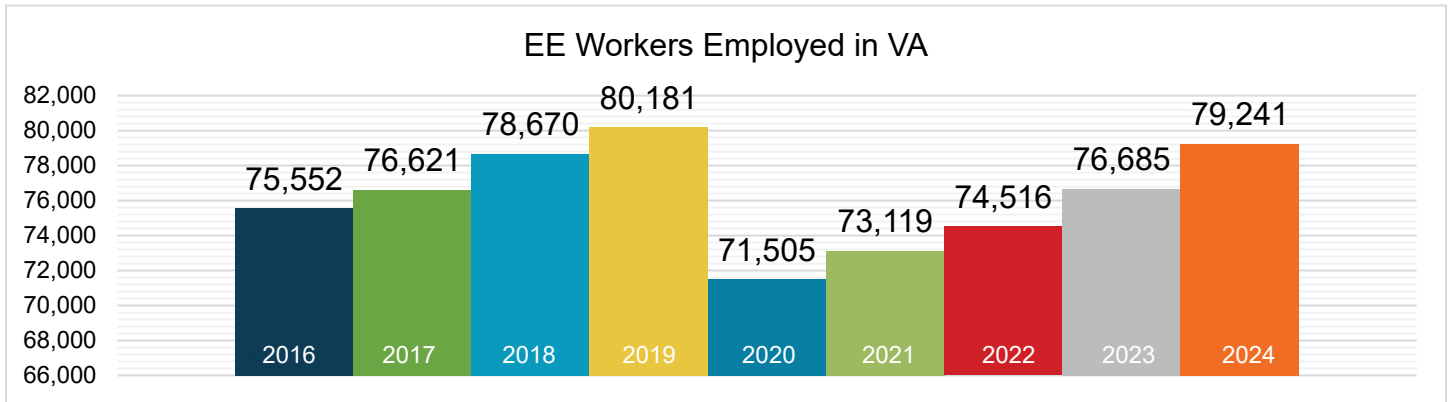
EPG = Electric Power Generation

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

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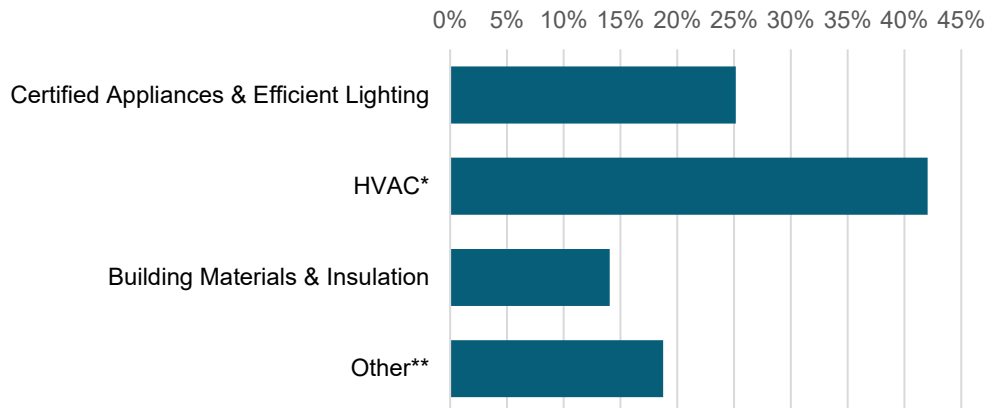


What does EE look like in Virginia?



*Professional services include finance, accounting, architecture, engineering, research and development, and more. The "other" category includes roles in maintenance, business operations, and nonprofit organizations.

What energy efficiency sectors employ the most workers?



Certified Appliances = ENERGY STAR-certified appliances

*Heating, ventilation, air conditioning of higher than standard efficiency/renewable heating and cooling

**Other includes energy audits, building certifications, and software services

9%
of Virginia
EE workers are
veterans

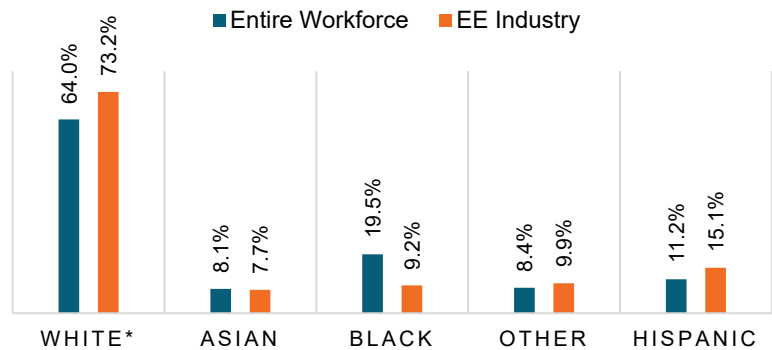


How representative is the EE workforce in Virginia?

Demographic data is critical to measure progress towards a more representative EE workforce. Tracking this data helps show how well Virginia's EE workforce reflects the communities it serves and where gaps remain.

Expanded training programs in Virginia can help ensure energy efficiency careers are accessible to all.

Virginia EE Industry by Race and Ethnicity



*Includes non-Hispanic and Hispanic whites.

Gender in the Virginia EE Workforce

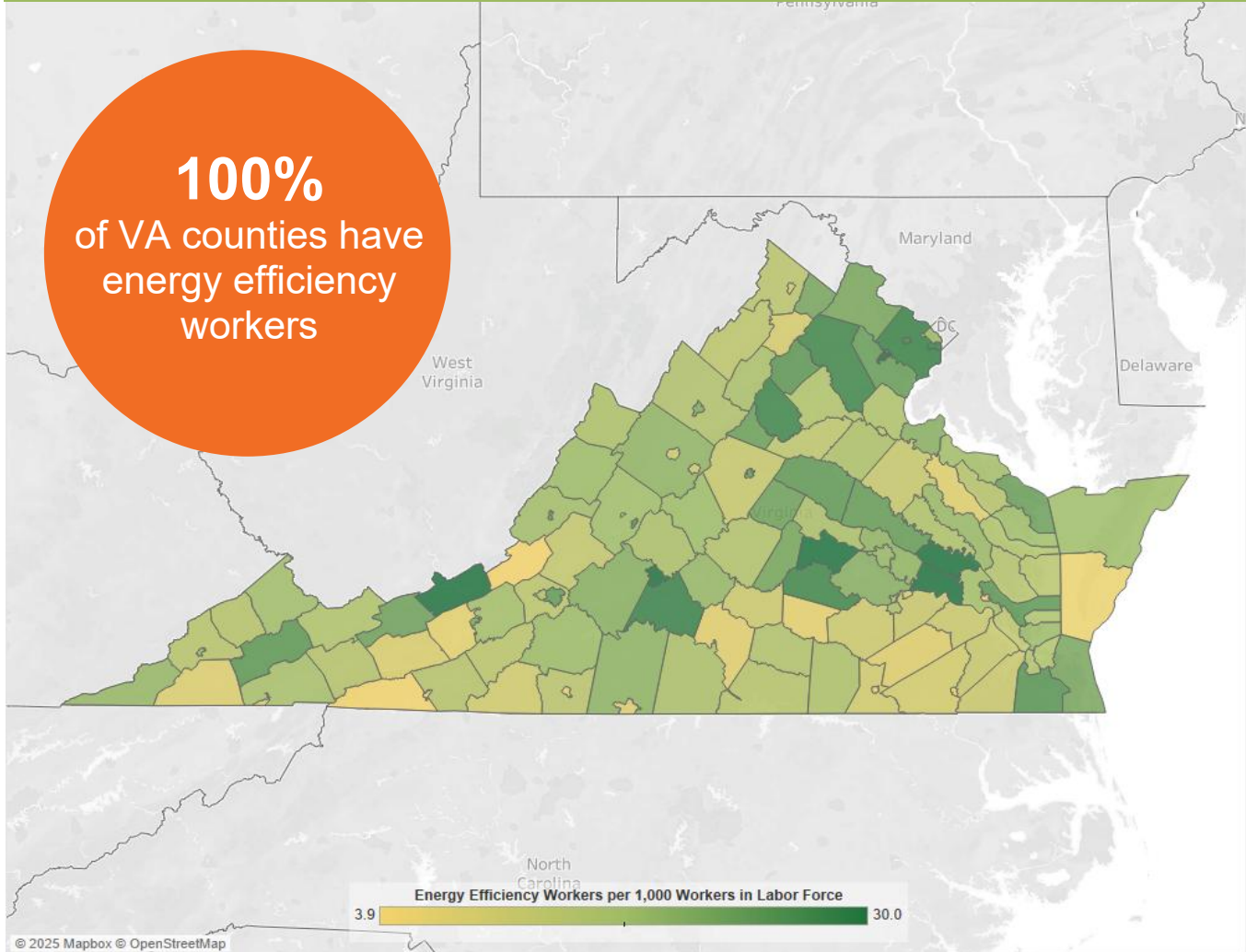


Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Nonbinary gender data is missing from this document due to this limitation.



Energy efficiency jobs are everywhere

EE Jobs by County



The energy efficiency job concentration displayed above is capped at thirty jobs per thousand in order to maintain observable differences between the majority of counties within the state. This is done to eliminate the influence outliers have on overall color gradient. For a full list of energy efficiency jobs by county, please visit the Department of Energy's (DOE) United States Energy and Employment Report (USEER) County-Level data site at <https://www.energy.gov/media/348937>.

Congressional				Metropolitan Areas			
District	Jobs		District	Jobs		Area	Jobs
1	6,758		7	4,555		Blacksburg-Christiansburg-Radford	1,165
2	6,624		8	12,433		Charlottesville	1,892
3	6,069		9	3,769		Danville	441
4	7,094		10	7,604		Harrisonburg	1,147
5	6,665		11	11,781		Kingsport-Bristol-Bristol	467
6	5,888					Lynchburg	2,872
						Richmond	12,443
						Roanoke	2,752
						Virginia Beach-Norfolk-Newport News	13,101
						Virginia-Arlington-Alexandria	35,146
						Winchester	746
						Rural	7,069



State Senate

District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	1,172		11	1,900		21	1,989		31	1,869
2	1,737		12	1,841		22	1,543		32	2,736
3	940		13	1,207		23	1,372		33	2,512
4	2,599		14	2,245		24	1,666		34	3,375
5	1,362		15	2,766		25	944		35	3,003
6	1,089		16	2,518		26	1,675		36	3,904
7	758		17	917		27	1,311		37	3,113
8	2,428		18	1,805		28	1,328		38	2,943
9	943		19	1,943		29	1,287		39	3,396
10	1,635		20	2,394		30	2,120		40	2,956

State House of Delegates

District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	1,140		26	1,432		51	561		76	1,152
2	1,176		27	802		52	1,899		77	1,638
3	1,298		28	865		53	182		78	1,439
4	1,687		29	913		54	1,224		79	632
5	1,052		30	593		55	495		80	593
6	1,228		31	371		56	472		81	693
7	1,029		32	616		57	1,309		82	346
8	1,518		33	412		58	881		83	258
9	1,699		34	847		59	647		84	435
10	1,167		35	663		60	1,102		85	428
11	966		36	437		61	648		86	779
12	1,660		37	349		62	427		87	480
13	1,156		38	1,365		63	537		88	665
14	1,323		39	382		64	566		89	433
15	999		40	978		65	462		90	724
16	1,467		41	525		66	205		91	1,115
17	1,187		42	606		67	549		92	1,127
18	1,743		43	457		68	325		93	866
19	1,262		44	554		69	525		94	738
20	1,085		45	333		70	836		95	585
21	805		46	335		71	427		96	958
22	509		47	263		72	621		97	508
23	268		48	326		73	822		98	566
24	741		49	409		74	293		99	890
25	447		50	369		75	662		100	705





The Building Performance Association (BPA) is a nonprofit industry association that serves as the hub for businesses, nonprofits, and government agencies working to make America's homes more energy-efficient, comfortable, healthy, and safe. Visit www.building-performance.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 August 2025 U.S. Energy and Employment Report, by the U.S. Department of Energy (see Appendix B 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 BPA analyses, please email: communications@building-performance.org.

