

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

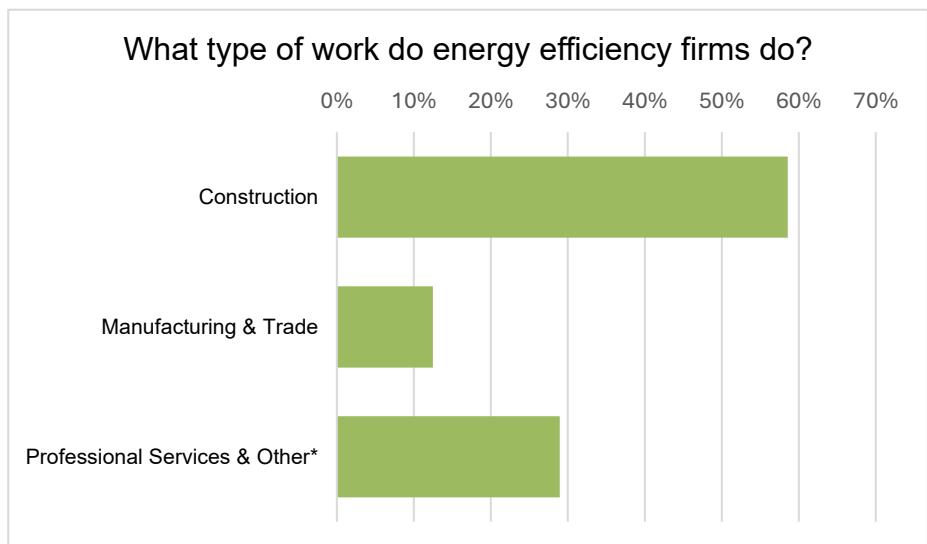
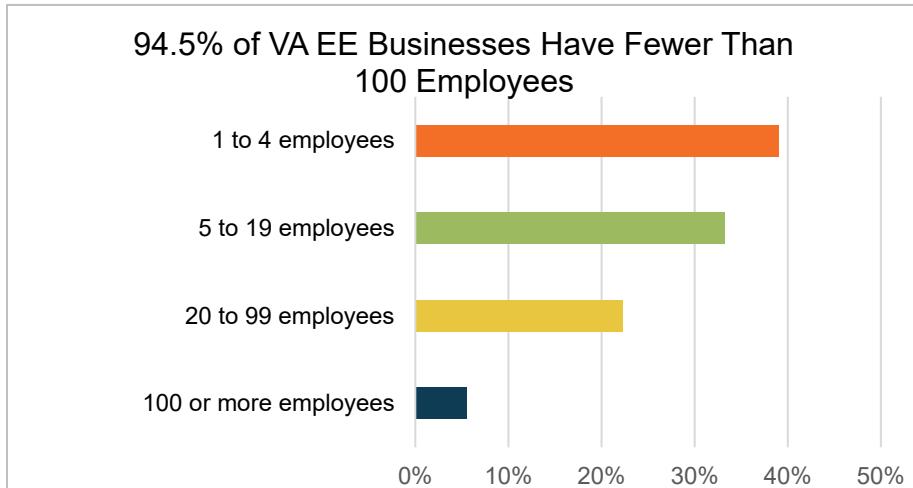
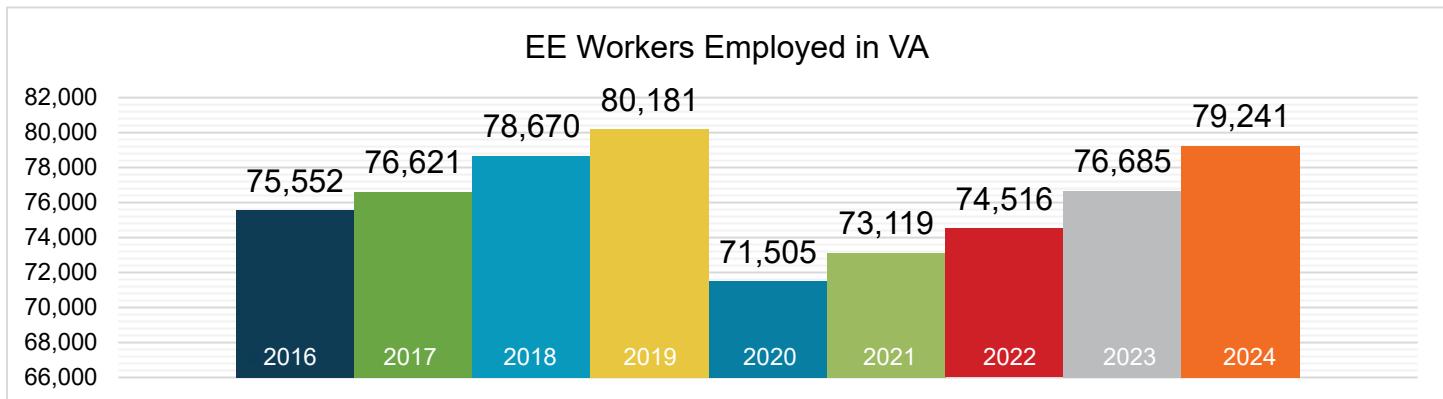
EPG = Electric Power Generation

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

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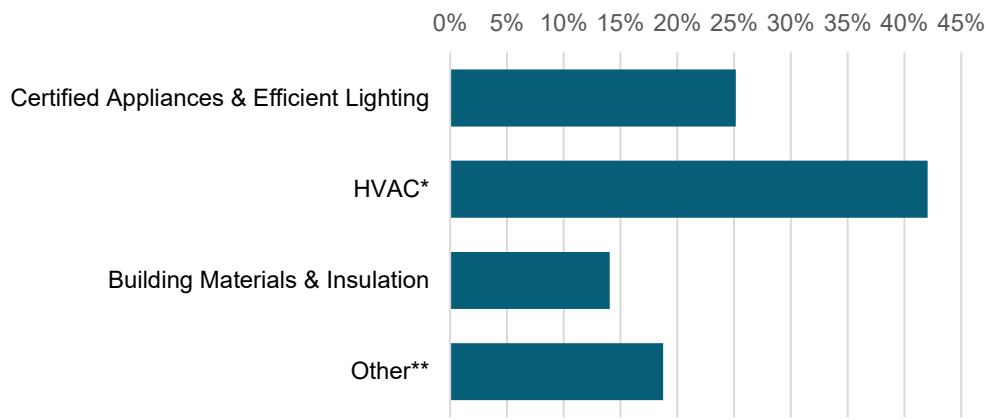


What does EE look like in Virginia?



*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

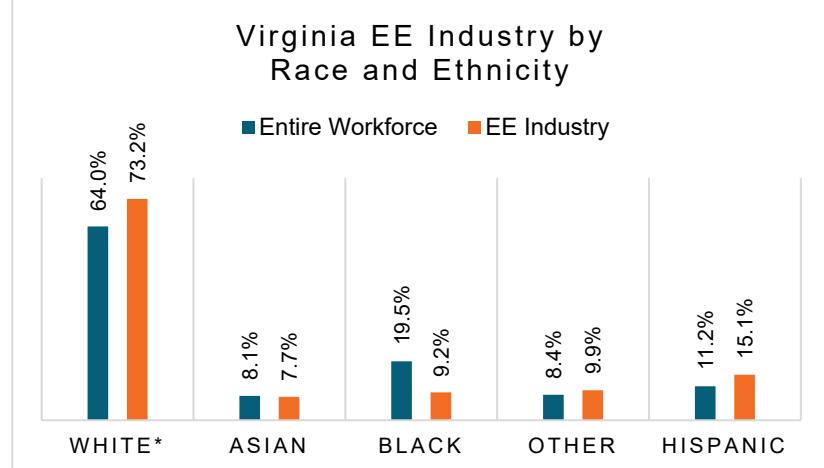
9%
of Virginia
EE workers are
veterans



How representative is the EE workforce in Virginia?

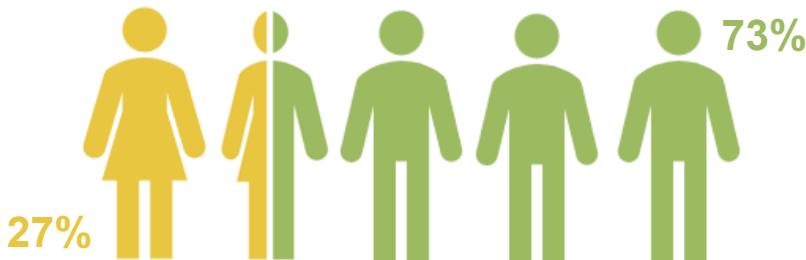
Demographic data is critical to measure progress towards a more representative EE workforce. Tracking this data helps show how well Virginia's EE workforce reflects the communities it serves and where gaps remain.

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



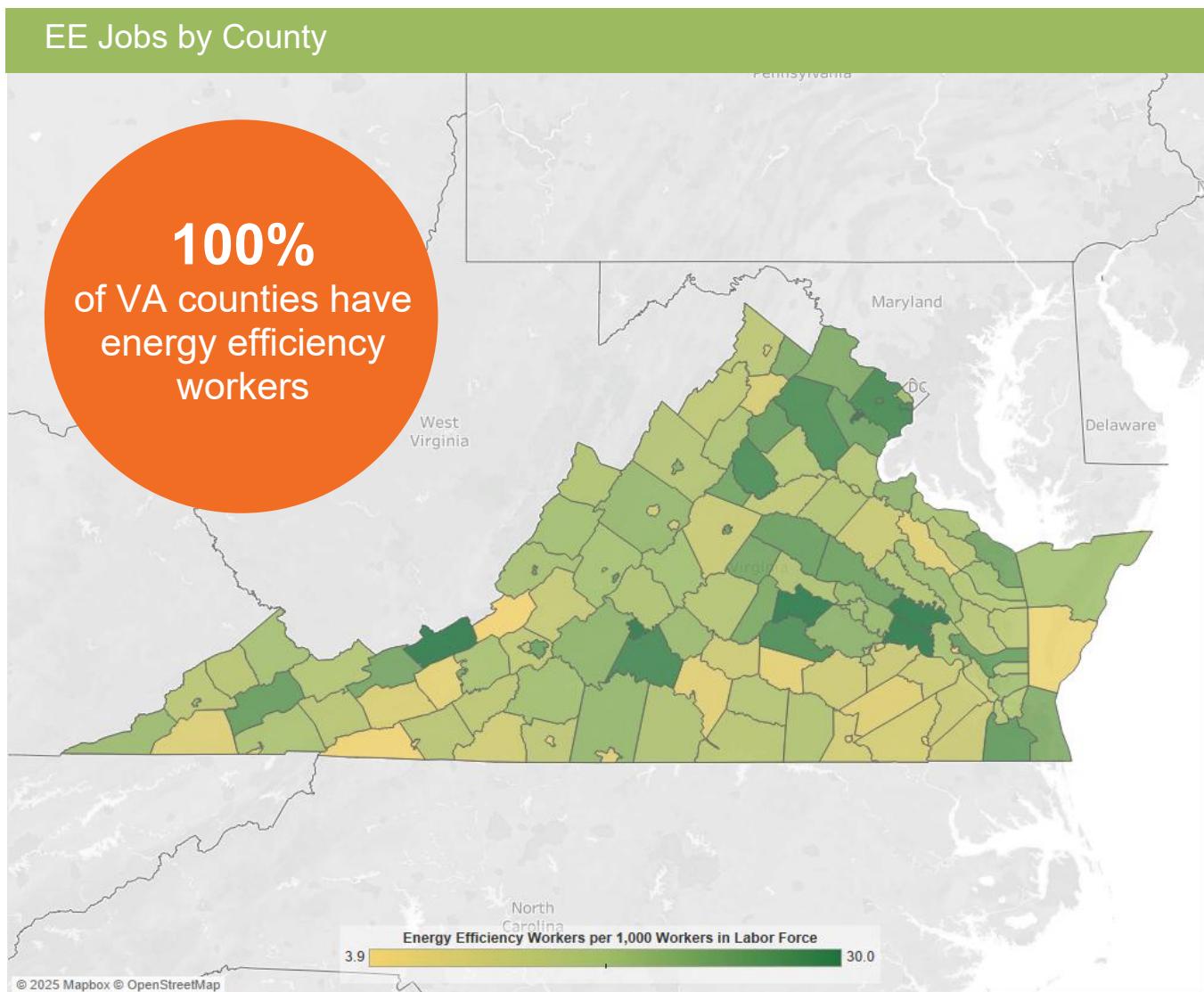
*Includes non-Hispanic and Hispanic whites.

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



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

