

Virginia

Energy Efficiency Jobs in America

76,685
Total Jobs

What are EE jobs?

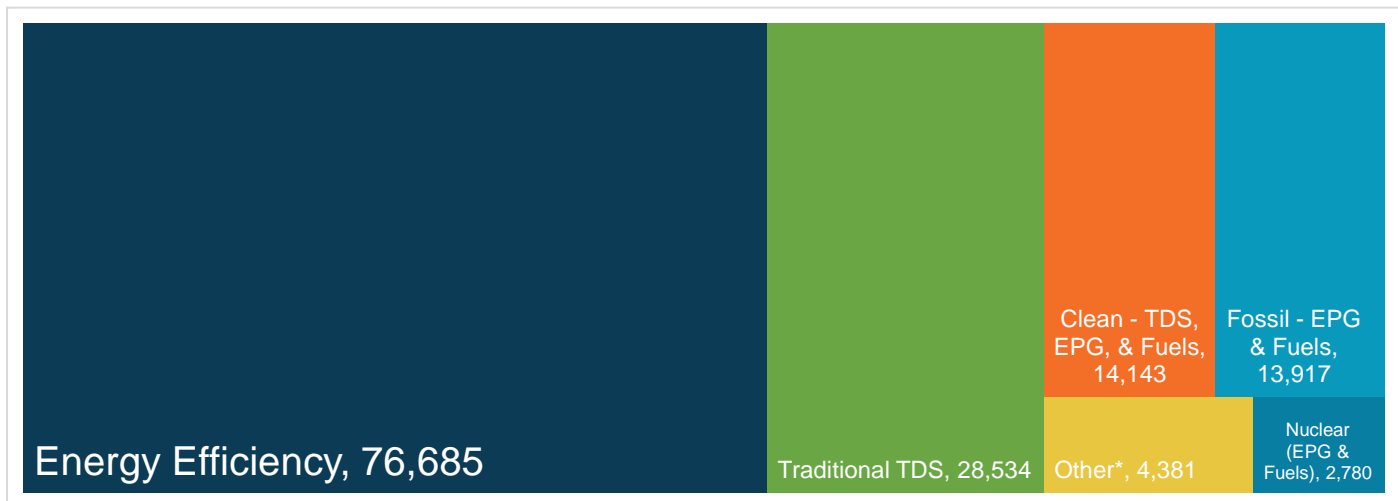
Jobs that deliver goods and services that lower energy use by improving energy efficiency with a focus on appliances, buildings, data systems, financing, new technologies, and more.

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, 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 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.

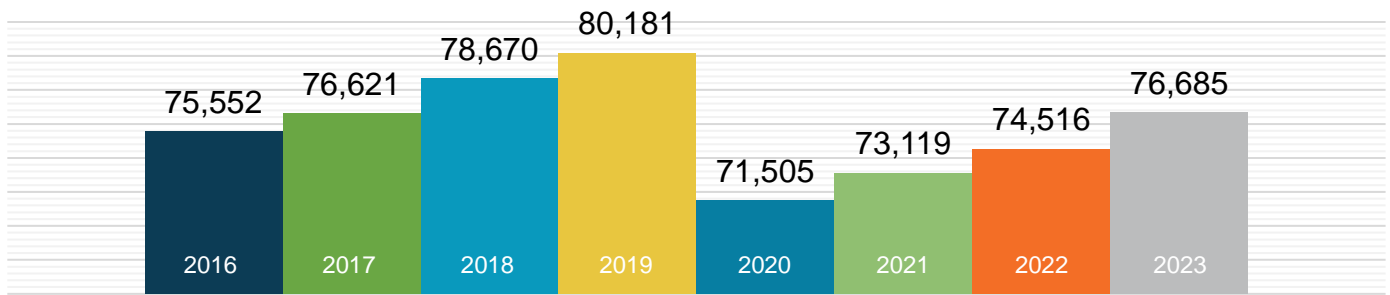
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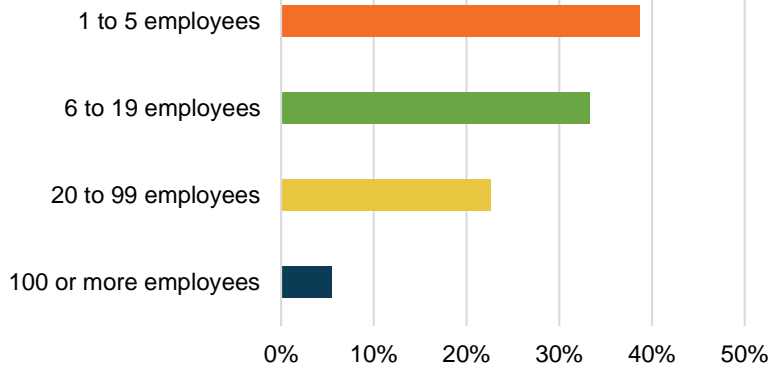
E4 THE FUTURE

What does EE look like in Virginia?

EE Workers Employed in VA



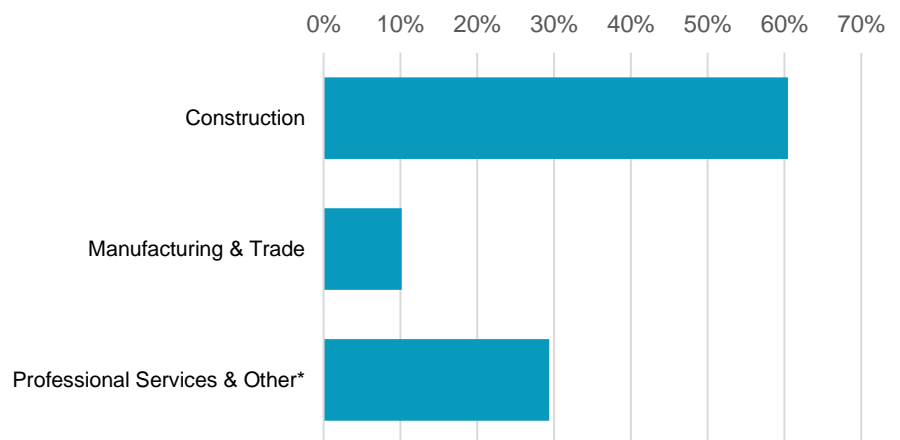
94.5% of VA EE Businesses Have Fewer Than 100 Employees



EE construction workers comprise **22%** of Virginia's construction workforce

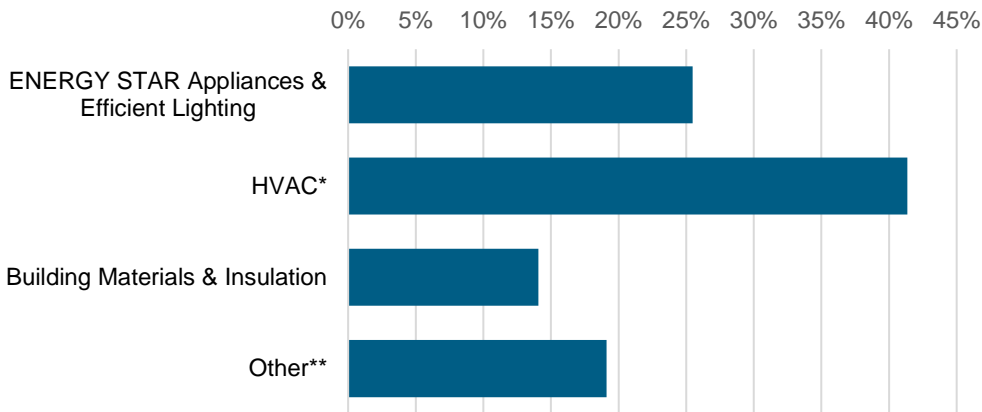


What type of work do energy efficiency firms do?



*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

9%
 of Virginia
 EE workers are
Veterans

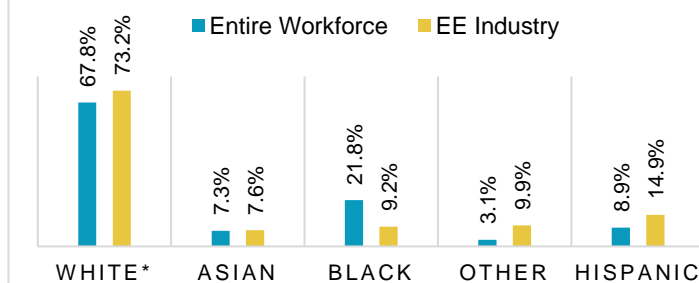


How is EE doing on diversity in Virginia?

Demographic data is critical to measure progress in expanding the diversity of the EE industry. A more inclusive industry that reflects the communities it serves is a stronger one that better meets the needs of all U.S. residents. Promoting diversity in hiring is key to maintaining a future workforce of qualified 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 Virginia businesses.

Virginia EE Industry by Race and Ethnicity



*Includes non-Hispanic and Hispanic whites.

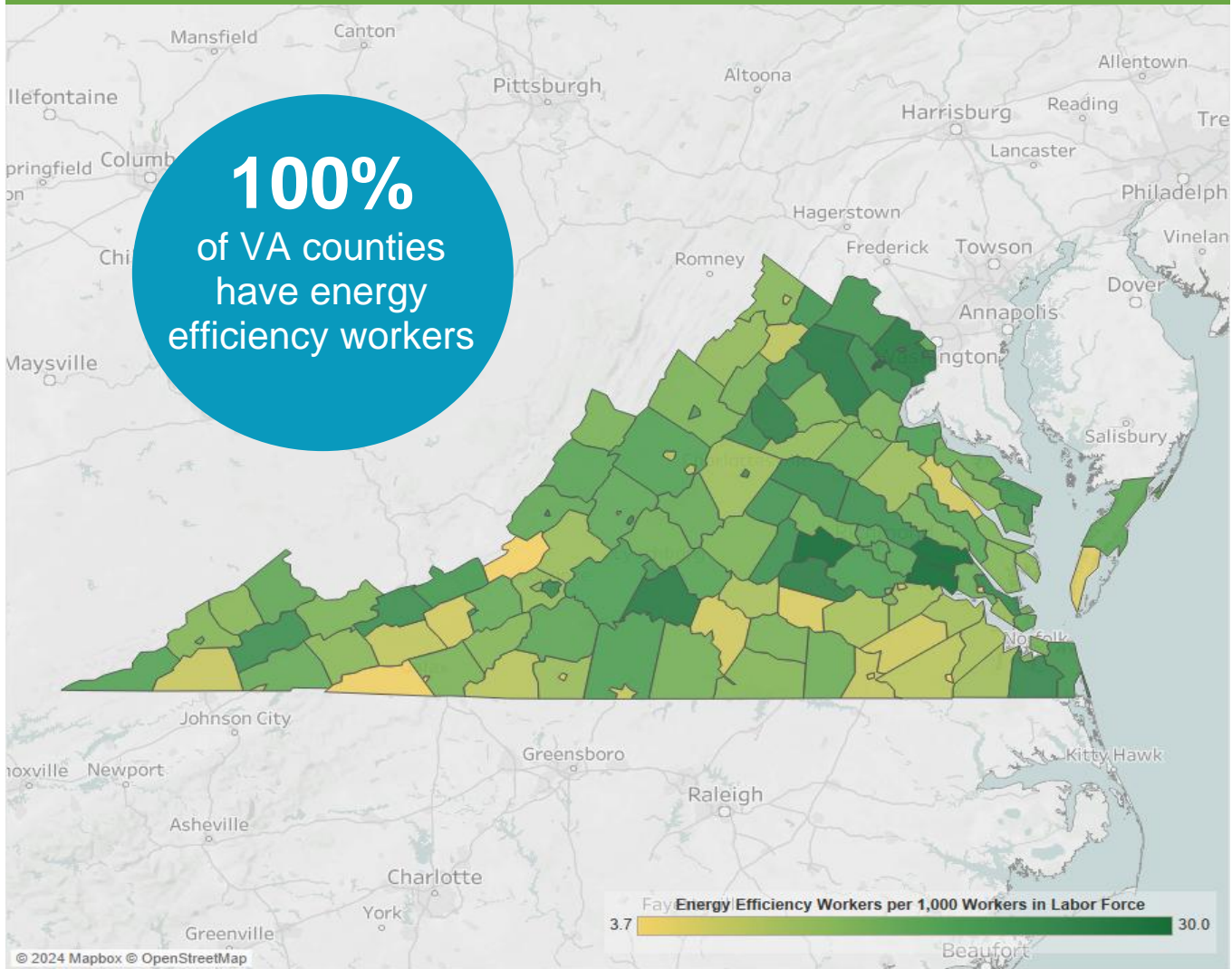
Gender in the Virginia EE Workforce



Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary 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/330956>.

Congressional				Metropolitan Areas			
District	Jobs	District	Jobs	Area	Jobs	Area	Jobs
1	4,910	7	4,748	Blacksburg-Christiansburg-Radford	1,138	Richmond	12,106
2	6,271	8	11,866	Charlottesville	1,855	Roanoke	2,697
3	6,743	9	4,549	Danville	432	Virginia Beach-Norfolk-Newport News	12,829
4	6,310	10	9,162	Harrisonburg	1,124	Virginia-Arlington-Alexandria	34,337
5	6,470	11	9,752	Kingsport-Bristol-Bristol	458	Winchester	730
6	5,903			Lynchburg	2,079	Rural	6,899

State Senate										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	3,041		11	994		21	1,322		31	5,874
2	1,027		12	956		22	1,619		32	3,182
3	1,075		13	4,404		23	450		33	<10
4	2,980		14	1,385		24	2,447		34	3,126
5	3,359		15	2,454		25	2,379		35	1,335
6	748		16	12		26	1,036		36	628
7	2,965		17	2,057		27	2,399		37	387
8	1,193		18	619		28	1,561		38	1,149
9	4,775		19	3,730		29	1,017		39	<10
10	3,765		20	574		30	3,564		40	1,089

State House of Delegates										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	502		26	36		51	<10		76	687
2	993		27	2,520		52	22		77	121
3	636		28	784		53	<10		78	499
4	577		29	762		54	808		79	1,550
5	588		30	382		55	1,618		80	65
6	440		31	1,032		56	1,415		81	1,187
7	983		32	1,256		57	1,565		82	<10
8	1,082		33	183		58	277		83	1,163
9	1,046		34	3,895		59	492		84	<10
10	2,201		35	2,295		60	412		85	<10
11	1,507		36	1,621		61	702		86	<10
12	90		37	538		62	1,303		87	<10
13	1,758		38	1,592		63	274		88	10
14	627		39	1,550		64	1,019		89	148
15	976		40	377		65	66		90	<10
16	200		41	164		66	66		91	946
17	104		42	200		67	891		92	274
18	1,280		43	443		68	2,160		93	735
19	792		44	182		69	1,724		94	1,308
20	1,140		45	2,187		70	<10		95	<10
21	3,914		46	<10		71	296		96	171
22	1,111		47	1,806		72	585		97	499
23	167		48	568		73	<10		98	447
24	383		49	<10		74	677		99	634
25	1,739		50	78		75	247		100	268





The Building Performance Association (BPA) is a 501(c) 6 nonprofit industry association that serves as the hub for businesses, nonprofits, and government agencies working to make America's homes more comfortable, healthy, and energy efficient. Our mission is to transform the market for the home performance industry through advocacy, education, professional development, and networking. [Visit www.building-performance.org](http://www.building-performance.org).



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.



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, August 2024, 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

