North Carolina

Energy Efficiency Jobs in America



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 STARcertified 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 North Carolina?

Energy efficiency is the largest energy sector in North Carolina.



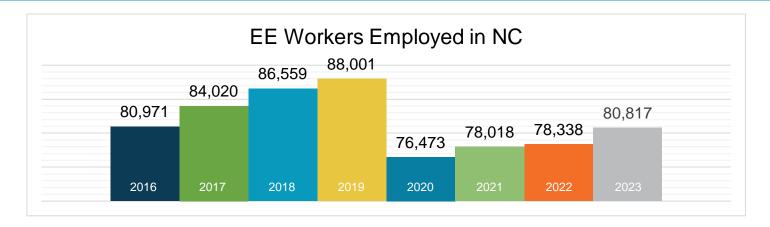
TDS = Transmission, Distribution & Storage EPG = Electric Power Generation Nuclear (EPG & Fuels) = 1,806

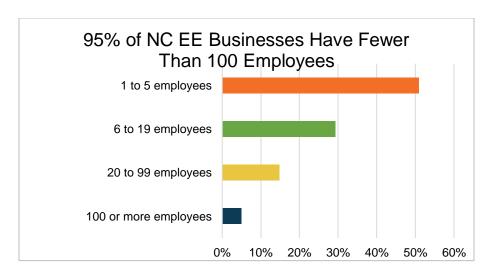
*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.





What does EE look like in North Carolina?

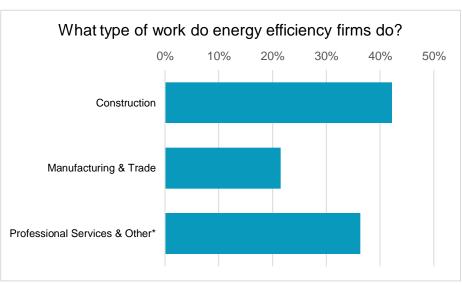




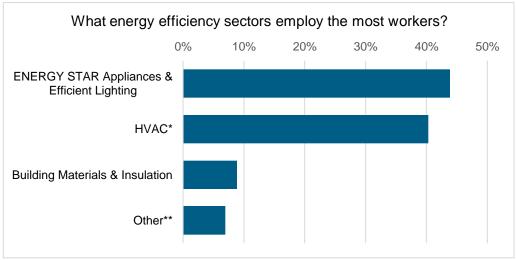


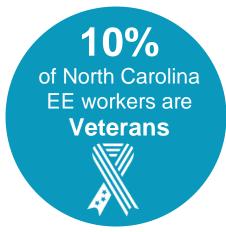
EE construction workers comprise

13% of North
Carolina's construction workforce



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

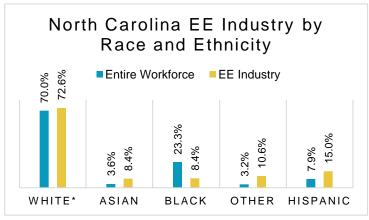




How is EE doing on diversity in North Carolina?

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 North Carolina 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 North Carolina businesses.



*Includes non-Hispanic and Hispanic whites.

Gender in the North Carolina EE Workforce



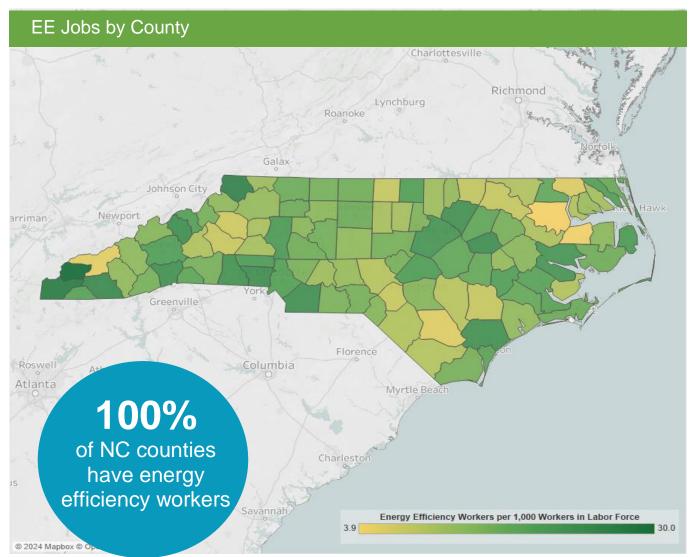
Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.



^{*}Heating, ventilation, air conditioning of higher than standard efficiency/renewable heating & cooling

^{**}Other such as energy audits, building certifications, and software services

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/330956.

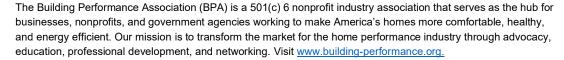
Congressional						Metropolitan Areas						
District	Jobs		District	Jobs	Area	Jobs		Area	Jobs			
1	5,173		8	6,278	Asheville	3,960		Hickory-Lenoir-Morganton	1,472			
2	5,953		9	4,137	Burlington	726		Jacksonville	682			
3	5,228		10	4,124	Charlotte-Concord- Gastonia 22,682		Raleigh	15,273				
4	7,076		11	7,927	Durham-Chapel Hill	4,642		Rocky Mount	925			
5	3,938		12	7,682	Fayetteville	1,789		Virginia Beach-Norfolk-Newport News	124			
6	4,335		13	5,777	Goldsboro	708		Wilmington	2,630			
7	6,318		14	6,869	Greensboro-High Point	5,599		Winston-Salem	3,743			
					Greenville	1,090		Rural	14,772			

State Senate										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	2,234		14	4,281		27	2,039		40	<10
2	1,662		15	2,592		28	<10		41	492
3	918		16	1,789		29	1,263		42	2,218
4	1,520		17	334		30	1,311		43	1,609
5	1,780		18	344		31	2,453		44	1,040
6	940		19	1,515		32	<10		45	1,289
7	155		20	2,093		33	195		46	1,420
8	2,904		21	181		34	1,838		47	1,633
9	1,881		22	2,018		35	1,769		48	2,513
10	2,414		23	1,062		36	3,142		49	1,730
11	792		24	1,331		37	7,830		50	1,570
12	2,098		25	1,874		38	182			
13	891		26	3,007		39	656			

State House of Representatives										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	827		31	110		61	449		91	21
2	1,142		32	178		62	89		92	1,928
3	1,011		33	1,050		63	406		93	595
4	1,071		34	3,021		64	<10		94	124
5	239		35	709		65	314		95	<10
6	1,171		36	767		66	30		96	<10
7	1,174		37	30		67	530		97	159
8	659		38	<10		68	395		98	513
9	531		39	<10		69	378		99	649
10	485		40	417		70	688		100	515
11	2,748		41	18		71	1,757		101	<10
12	<10		42	730		72	217		102	128
13	984		43	831		73	1,564		103	<10
14	631		44	<10		74	211		104	<10
15	93		45	21		75	217		105	<10
16	523		46	752		76	1,385		106	<10
17	905		47	116		77	460		107	<10
18	1,856		48	624		78	379		108	1,220
19	575		49	<10		79	356		109	<10
20	<10		50	974		80	165		110	1,067
21	231		51	671		81	<10		111	77
22	1,895		52	715		82	2,406		112	403
23	237		53	103		83	<10		113	1,556
24	<10		54	413		84	1,493		114	2,764
25	171		55	1,642		85	1,288		115	423
26	1,107		56	97		86	696		116	210
27	342		57	2,047		87	74		117	<10
28	217		58	993		88	5,373		118	567
29	2,345		59	735		89	918		119	591
30	1,748		60	1,243		90	520		120	523









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

