North Carolina Energy Efficiency Jobs in America



What are EE Jobs?

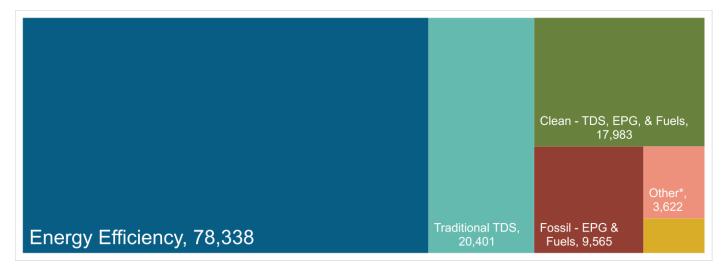
Jobs that deliver goods and services that lower energy use by improving energy efficiency – with a focus on appliances, buildings, data systems, financing, new technologies, and more.

What do EE workers do?

- Manufacture and install high efficiency systems, controls, windows, insulation and ENERGY STAR-certified appliances and products in existing and new homes, commercial & industrial buildings.
- **Design and construct** high performance buildings such as those earning LEED certification.
- 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?

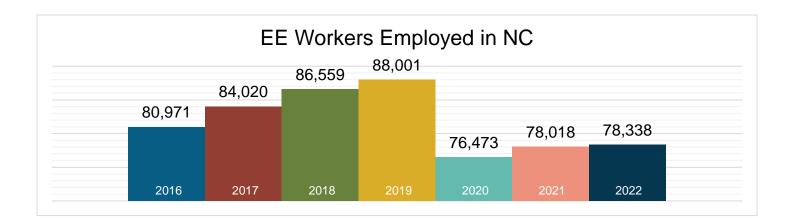
Energy Efficiency is the largest energy sector in North Carolina.

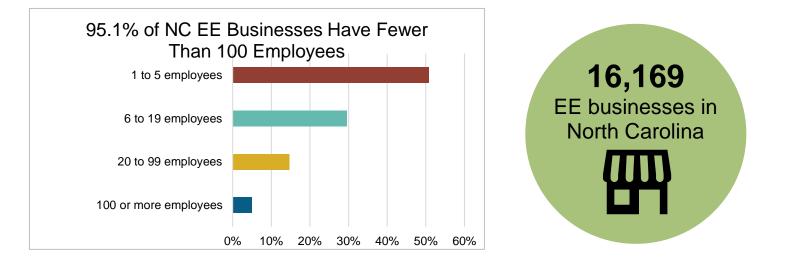


TDS = Transmission, Distribution & Storage EPG = Electric Power Generation Nuclear (EPG & Fuels) = 1,736 *Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

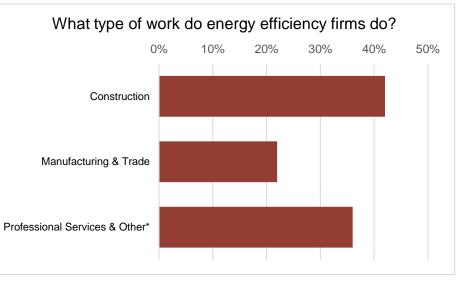


What does EE look like in North Carolina?



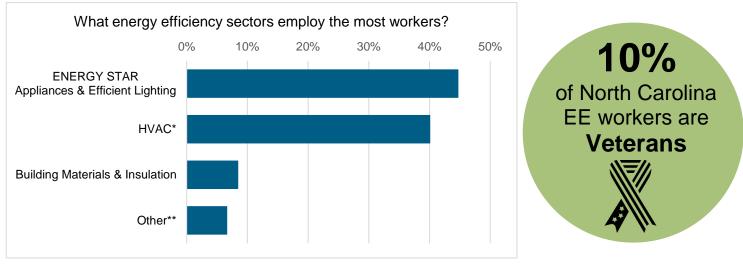






*Professional services include finance/accounting, architecture, engineering, R&D, etc. and other includes maintenance, and business and nonprofit organizations.

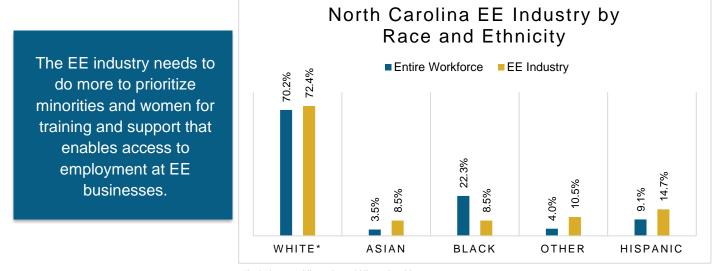




*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling **Other such as energy audits, building certifications, and software services

How is EE doing on diversity in 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.



*Includes non-Hispanic and Hispanic whites.



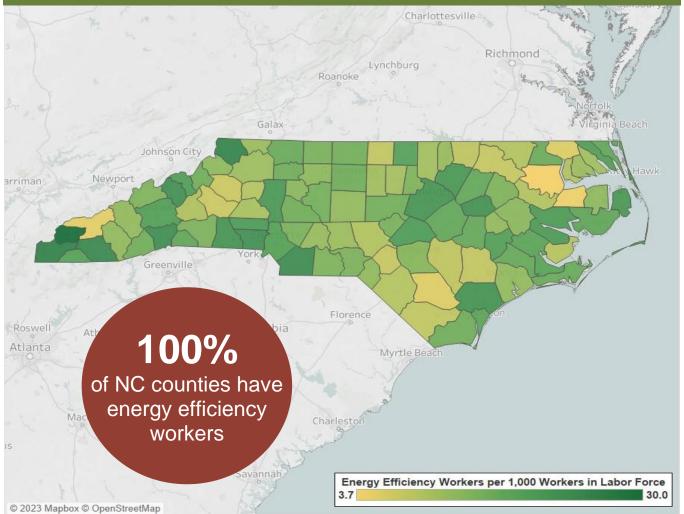
Note: The U.S. Bureau of Labor Statistics (BLS) only includes two genders in their survey. Non-binary gender data is missing from this document due to this limitation.



3

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 the 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/policy/2023ounty-level-data-faq

Congressional						Metropolitan Areas					
District	Jobs		District	Jobs		Area	Jobs		Area	Jobs	
1	9,027		9	11,152]	Asheville	3,853		Hickory-Lenoir- Morganton	1,430	
2	9,130		10	7,327		Burlington	706		Jacksonville	663	
3	5,495		11	3,980	1	Charlotte- Concord-Gastonia	22,035		Raleigh	14,740	
4	7,733		12	444	1	Durham-Chapel Hill	4,520		Rocky Mount	890	
5	8,565		13	1,197]	Fayetteville	1,715		Virginia Beach-Norfolk- Newport News	121	
6	4,655					Goldsboro	688		Wilmington	2,558	
7	4,288					Greensboro-High Point	5,439		Winston-Salem	3,628	
8	5,344					Greenville	1,059		Rural	14,294	



State Senate									
District	Jobs	District	Jobs	District	Jobs				
1	2,168	18	333	35	1,716				
2	1,613	19	1,469	36	3,047				
3	887	20	2,030	37	7,597				
4	1,475	21	175	38	176				
5	1,727	22	1,958	39	636				
6	912	23	1,027	40	<10				
7	151	24	1,292	41	478				
8	2,812	25	1,814	42	2,150				
9	1,824	26	2,918	43	1,557				
10	2,340	27	1,978	44	1,009				
11	769	28	<10	45	1,245				
12	2,033	29	1,225	46	1,378				
13	865	30	1,272	47	1,585				
14	4,148	31	2,369	48	2,436				
15	2,515	32	<10	49	1,678				
16	1,734	33	189	50	1,523				
17	323	34	1,783						

State House of Representatives										
District	Jobs		District	Jobs		District	Jobs		District	Jobs
1	805		39	<10		77	447		115	411
2	1,111		40	406		78	369		116	204
3	983		41	18		79	346		117	<10
4	1,042		42	710		80	160		118	551
5	229		43	807		81	<10		119	575
6	1,139		44	<10		82	2,339		120	509
7	1,143		45	20		83	<10			
8	641		46	731		84	1,453			
9	517		47	113		85	1,254			
10	472		48	602		86	672			
11	2,673		49	<10		87	72			
12	<10		50	948		88	5,228			
13	957		51	652		89	891			
14	614		52	671		90	506			
15	90		53	101		91	21			
16	509		54	402		92	1,876			
17	876		55	1,589		93	579			
18	1,805		56	95		94	121			
19	558		57	1,992		95	<10			
20	<10		58	965		96	<10			
21	225		59	716		97	155			
22	1,844		60	1,208		98	499			
23	230		61	437		99	621			
24	<10		62	87		100	501			
25	167		63	395		101	<10			
26	1,075		64	<10		102	124			
27	332		65	306		103	<10			
28	211		66	29		104	<10			
29	2,281		67	515		105	<10			
30	1,613		68	385		106	<10			
31	107		69	367		107	<10			
32	173		70	670		108	1,182			
33	997		71	1,709		109	<10			
34	2,933		72	212		110	1,038			
35	690		73	1,522		111	75			
36	745		74	205		112	393			
37	29		75	200		113	1,512			
38	<10		76	1,337		114	2,689			





E4TheFuture is dedicated to bringing clean, efficient energy home for every American and promotes energy solutions to advance climate protection and economic fairness. Visit <u>www.E4TheFuture.org.</u>

E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy. Visit <u>www.e2.org.</u>

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 <u>www.bwresearch.com</u>.

Data Source: Except for county data on page 4, all data are from the U.S. Energy and Employment Report, June 2023, 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 E4TheFuture analyses please email: policy@e4thefuture.org



6