

North Dakota

Energy Efficiency Jobs in America

Oct 2020

4,784*

Dec 2019

5,581

Clean energy workers are a huge and important part of America's workforce. We know from our country's last economic crisis that clean energy can lead the way to recovery.

Hundreds of thousands of workers are ready to return to work to build a better, cleaner, more equitable economy for tomorrow. With innovative policies we could get these workers back on the job today. Congress can start by spurring investments in energy efficiency (EE) and help the economy recover and grow for years to come.

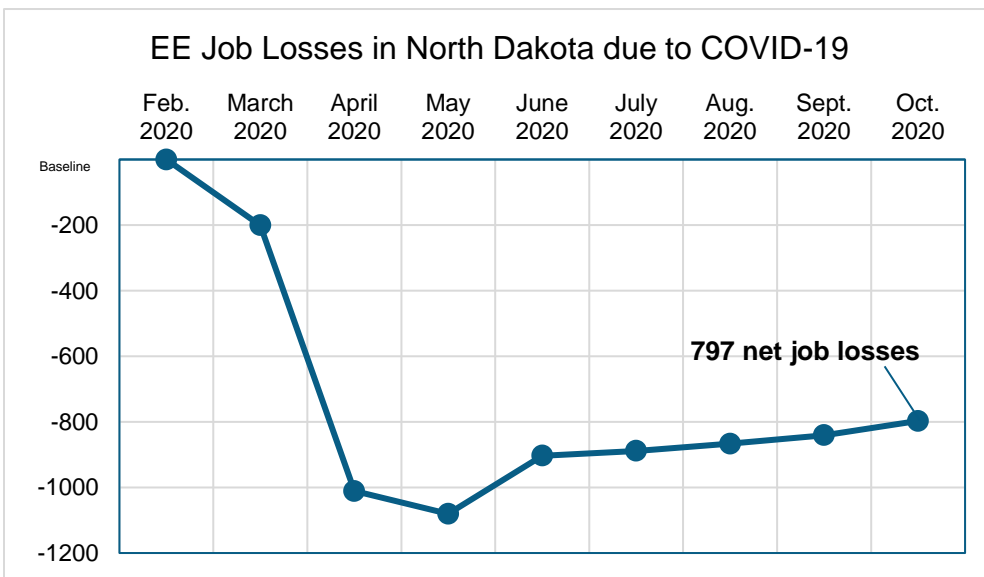
COVID-19 Impacts on the EE Job Sector

The 2020 pandemic shocked our nation's labor market with massive job losses. North Dakota's energy efficiency industry lost as many as 797 jobs since its onset, a 14.3% decrease compared to total jobs in December 2019—wiping out the last 2 years of gains.

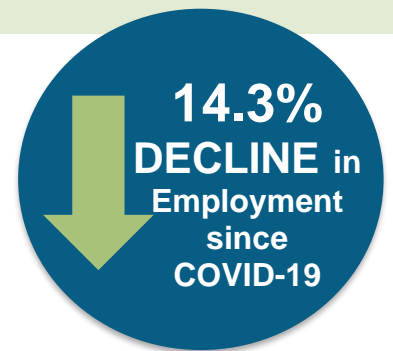
This disruption continues to ripple throughout the supply chain, slowing or halting the manufacture of efficiency equipment and components including insulation; windows; heating, ventilation, and air conditioning (HVAC) equipment; and other building systems technologies.

The energy efficiency workforce has the skills and expertise to meet this moment. Historically the North Dakota EE workforce grew steadily, gaining 17.2% since 2016.**

As the U.S. advances our economic recovery, policy solutions must create conditions to return to work laid-off/furloughed EE workers and to create a pathway for new workers to join this vital sector.



*Source: [Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis, March 2020-October 2020](#).
**first available sector-specific data



Presented by:



What are EE Jobs?

Jobs that deliver goods and services that lower energy use by improving technologies, appliances, buildings, and energy systems.

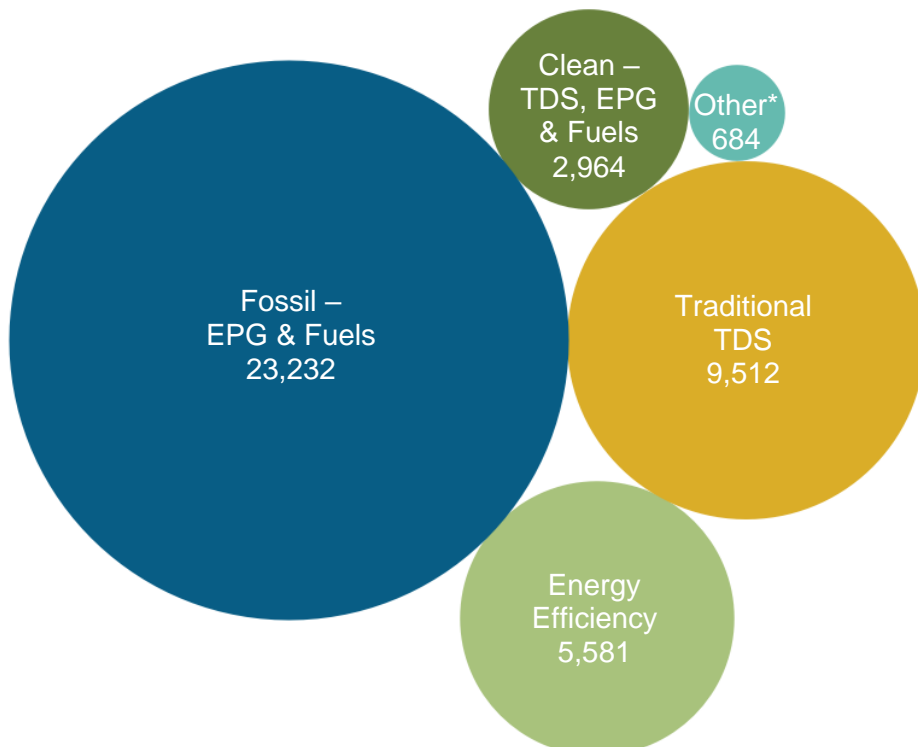
What type of work are EE workers doing?

- 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 energy data using software to maximize 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

All EE jobs counted in this report enhance energy efficiency. The above descriptions provide illustrative examples of what some EE workers do, and should not be considered an exhaustive list of all efficiency work.

How does EE compare in North Dakota?

Energy efficiency is the third largest energy sector in North Dakota.

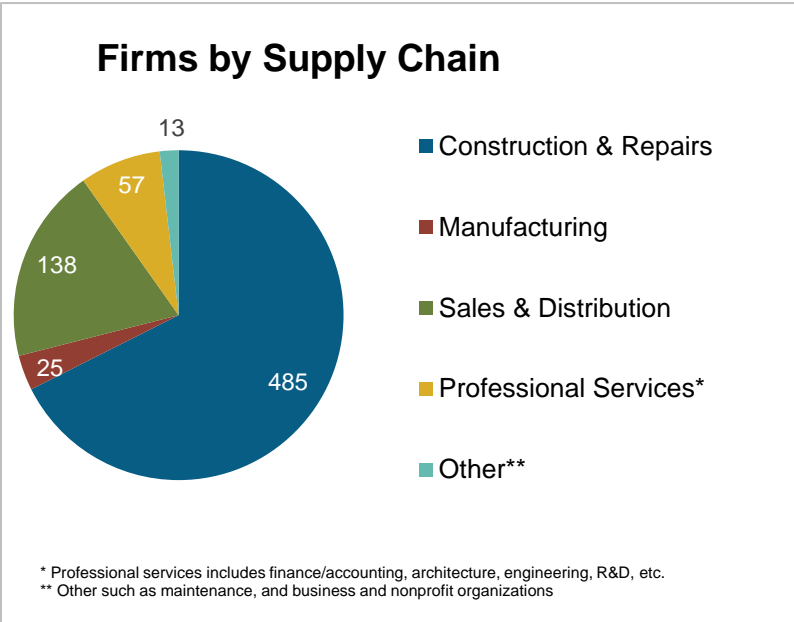
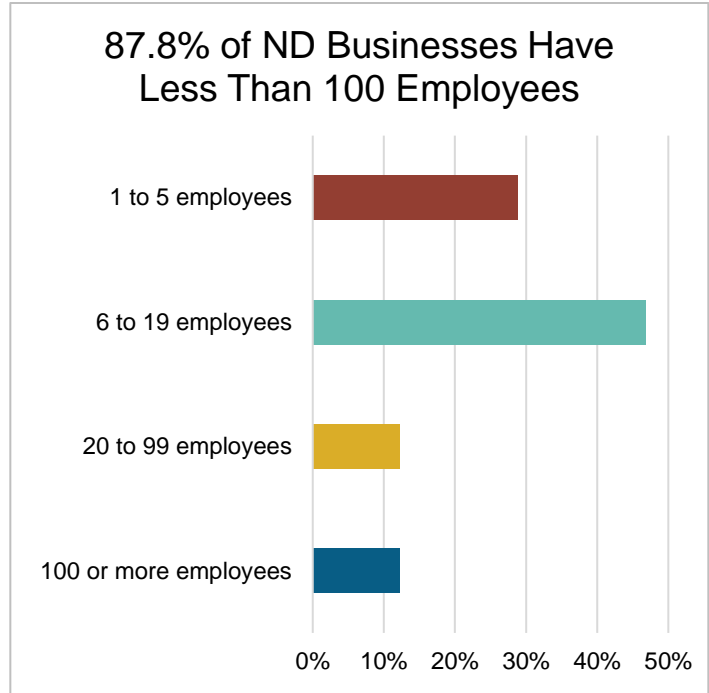



Fossil fuel jobs are historically key to North Dakota's energy economy, but the current job total doesn't tell the full story. The number of fossil fuel jobs has faced consistent downward pressure for decades and continues to fall. By contrast, before COVID-19, energy efficiency has grown by 17.2% from 2016-2019, adding 818 jobs.

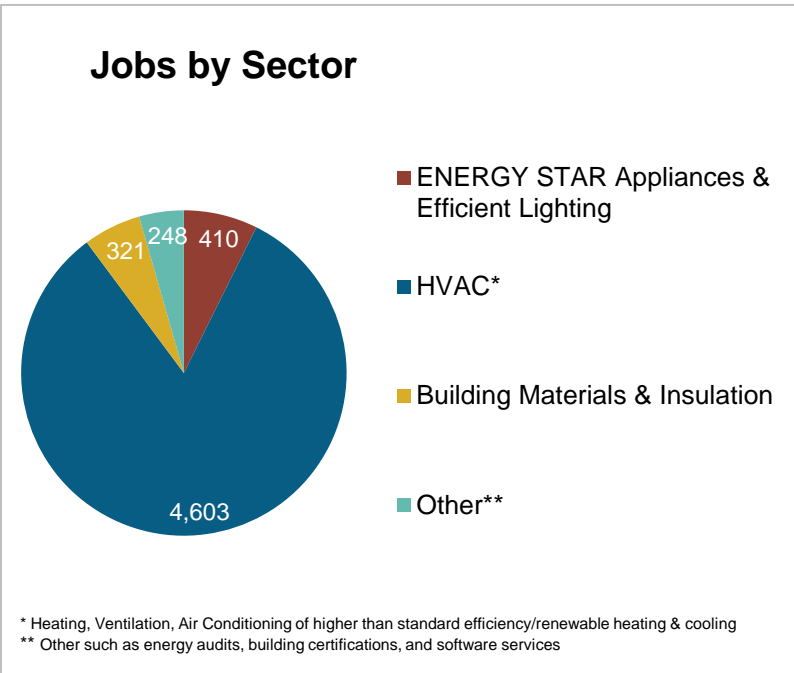
*Includes other energy subsectors such as corn ethanol, woody biomass, large hydropower, and others.

What do the EE businesses look like in North Dakota?

EE Sector =
718
 Businesses in ND
 (Dec. 2019)
 ↑ **20** over 2018

6.3%
 of North Dakota
 residents employed
 in EE are **Veterans**



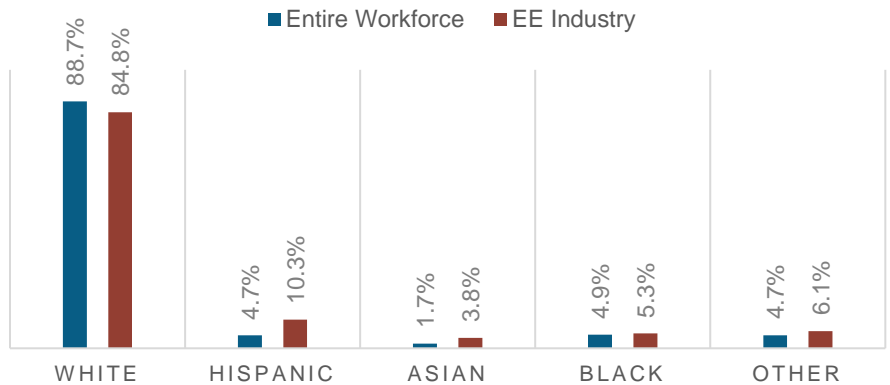

**Energy Efficiency
 Construction Workers
 Make Up 12% of ND
 Construction Workers**

How is EE Doing regarding Diversity in North Dakota?

Demographic data is crucial for benchmarks and to measure progress in the energy efficiency industry. In striving for more diversity in EE jobs, we can create a stronger and more inclusive industry. Promoting diversity in hiring is key to maintaining a future workforce of talented professionals and ensuring all North Dakota communities are represented in the EE sector.

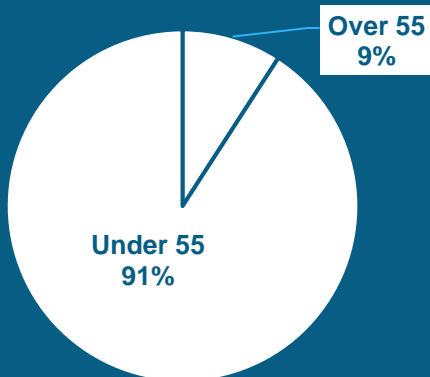
The EE industry needs to do more to prioritize minorities and women for training and support that will enable them to obtain and/or retain employment at EE businesses.

ND EE INDUSTRY BY RACE AND ETHNICITY



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.

NORTH DAKOTA'S EE WORKERS BY AGE



A significant portion of the North Dakota efficiency workforce is in the “55+” category. 9% are likely to retire within the next ten years, providing career opportunities for current and future professionals.

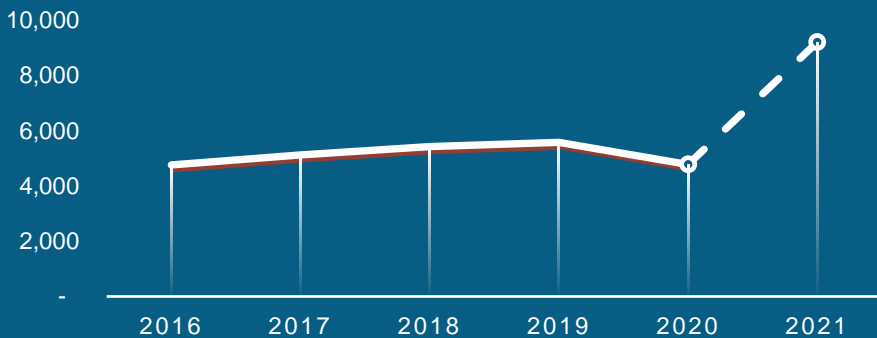
Why invest in EE?

Economic benefits of a federal energy efficiency stimulus package include high-quality jobs for U.S. residents, worker income, boosts to local, state, and federal tax revenues, contributions to Gross Domestic Product (GDP), and energy cost savings.

All these benefits ultimately translate to greater cash flow and stronger local economies. Energy efficiency jobs are proven to be sustainable wage positions that are accessible to all localities nationwide — regardless of geography or politics — providing new jobs that cannot be outsourced.

Updates to U.S. energy infrastructure are investments in the collective economic future of Americans; the creation of a more resilient energy system is vital to economic growth and security.

NORTH DAKOTA PROJECTED STIMULUS JOB IMPACTS



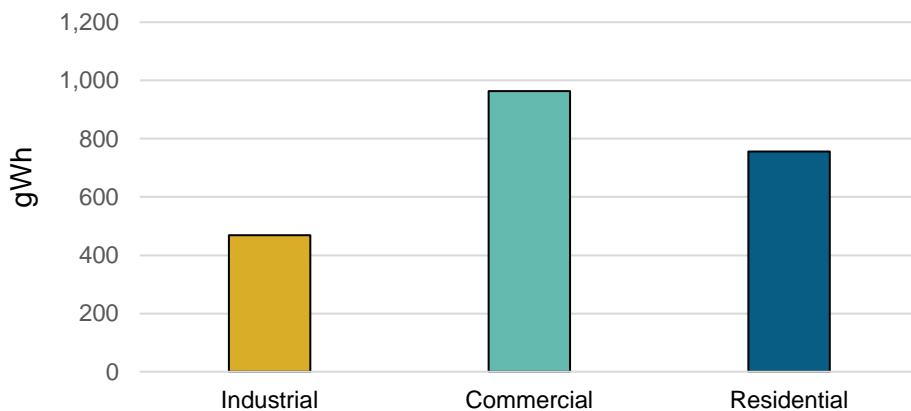
Source: [Build Back Better, Faster](#).

Modeling finds that federal investment would create **4,428 full-time direct, indirect, and induced ND jobs** that will last for at least five years: Over **22,139 job-years** total.

A stimulus of this level and the jobs it would create would also generate more than **\$316 million in GDP** each year for the next five years – resulting in **\$1.6 billion in economic activity**, more than 3.3 times the investment.

How much energy efficiency is untapped in your state?

North Dakota Energy Efficiency Potential by Sector



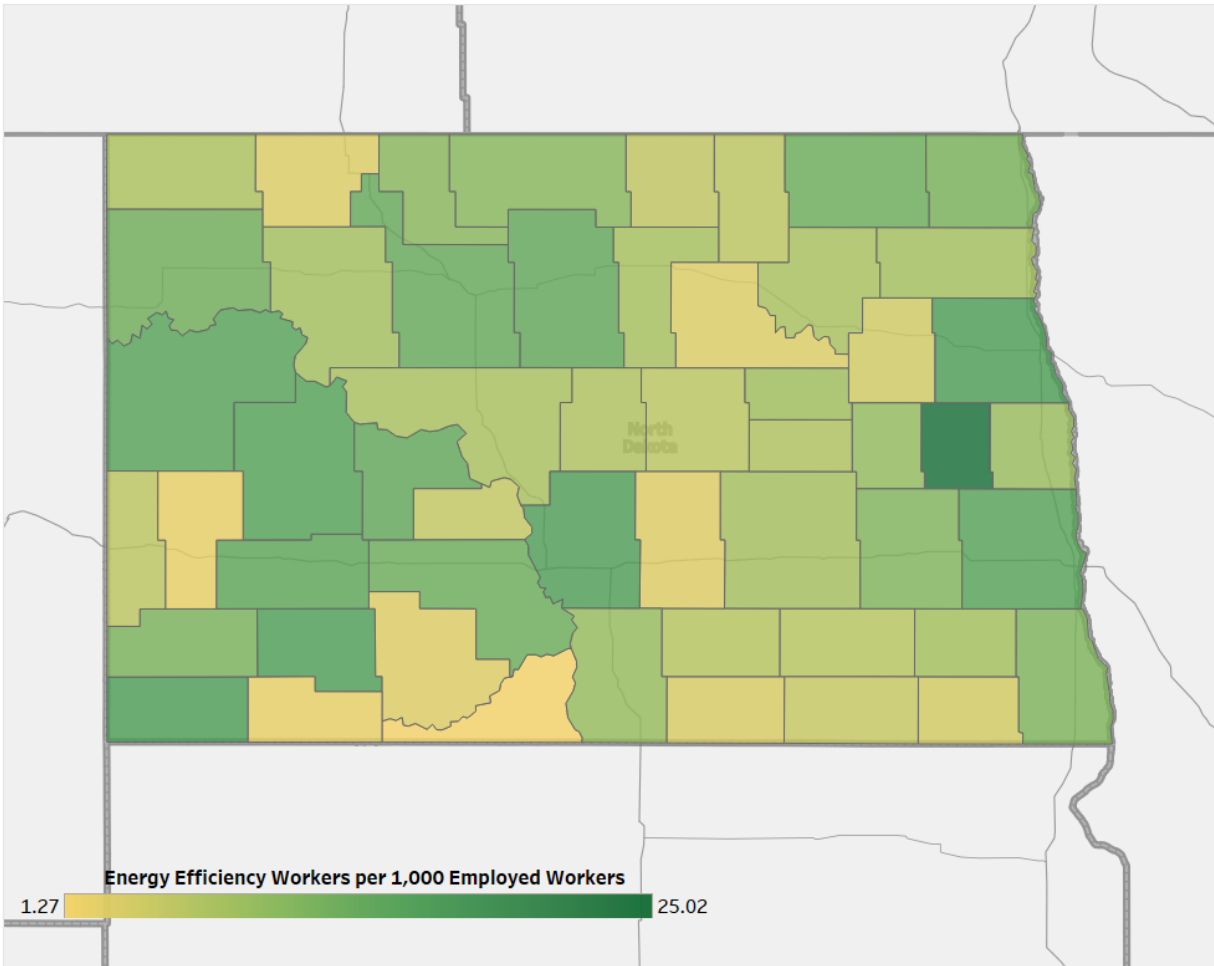
Source: [State and Local Planning for Energy \(SLOPE\) Platform](#).

Combined, this would displace the annual electricity consumption of **164,441 homes**.

Where are EE Jobs?

Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	5,581	Bismarck	807
		Fargo	1,361
		Grand Forks	407
		Rural	3,007

Energy Efficiency Jobs by County



State Senate

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	379	13	342	25	124	37	<5
2	139	14	153	26	118	38	<5
3	448	15	96	27	<5	39	258
4	147	16	162	28	66	40	<5
5	9	17	351	29	24	41	<5
6	120	18	9	30	<5	42	9
7	598	19	89	31	248	43	<5
8	37	20	60	32	<5	44	<5
9	32	21	353	33	28	45	<5
10	110	22	114	34	<5	46	<5
11	374	23	26	35	<5	47	<5
12	102	24	146	36	310		

State House of Representatives

District	Jobs	District	Jobs	District	Jobs	District	Jobs
1	374	25	124	49	<5	73	<5
2	140	26	118	50	<5	74	<5
3	449	27	<5	51	<5	75	<5
4	147	28	66	52	<5	76	<5
5	9	29	24	53	<5	77	<5
6	120	30	<5	54	<5	78	<5
7	599	31	248	55	<5	79	<5
8	37	32	<5	56	<5	80	<5
9	32	33	28	57	<5	81	<5
10	110	34	<5	58	<5	82	<5
11	374	35	<5	59	<5	83	<5
12	102	36	310	60	<5	84	<5
13	342	37	<5	61	<5	85	<5
14	154	38	<5	62	<5	86	<5
15	97	39	259	63	<5	87	<5
16	162	40	<5	64	<5	88	<5
17	351	41	<5	65	<5	89	<5
18	9	42	9	66	<5	90	<5
19	89	43	<5	67	<5	91	<5
20	60	44	<5	68	<5	92	<5
21	354	45	<5	69	<5	93	<5
22	114	46	<5	70	<5	94	<5
23	26	47	<5	71	<5		
24	146	48	<5	72	<5		



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Data Source: Unless otherwise stated, all data are from the 2020 U.S. Energy and Employment Report, March 2020, by NASEO and EFI (see Appendix A, pages 201-206 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 U.S. Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.