

North Dakota Clean Energy & Transportation Jobs Are Growing

North Dakota's clean energy and clean vehicle jobs grew nearly 4 percent in 2022 and the industry is poised for continued growth thanks to federal climate investments passed last year.

QUICK FACTS

8,867

Clean energy jobs

+7.9%

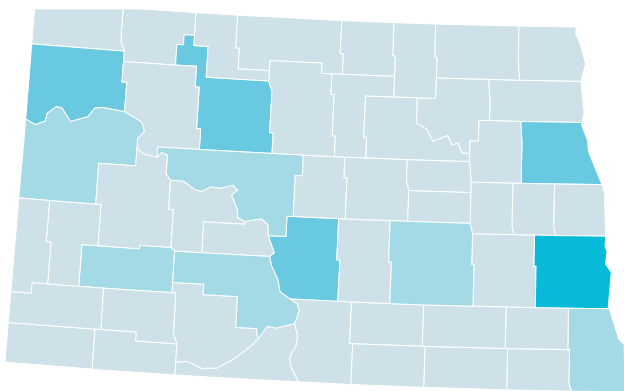
Growth of jobs in the clean transportation sector, the state's fastest-growing sector in 2022

+3.4%

Growth in clean energy jobs in 2022

Clean energy companies employed nearly 9,000 North Dakotans at the end of 2022, a nearly 4 percent increase from 2021. Clean energy is a significant part of North Dakota's economy. In fact, more than 5 times as many North Dakotans worked in clean energy than the number of lawyers, web developers, and real estate agents combined. In 2022, clean energy jobs grew faster than the overall economy, and this growth is expected to continue as federal clean energy and vehicle incentives lead to new clean energy projects, a resurgence of domestic manufacturing, and lower upfront costs for homeowners to make energy efficiency improvements.

Clean Energy Jobs* in North Dakota



Jobs by County

■ 5,000+ ■ 2,000-4,999 ■ 500-1,999 ■ 100-499 ■ <100

*Visualization based on 2021 data

The biggest sector in North Dakota's clean energy industry is energy efficiency, comprising over 57 percent of the state's clean energy workforce. The 5,110 energy efficiency workers in North Dakota manufacture ENERGY STAR-rated appliances, install efficient lighting, ventilation, and air conditioning (HVAC) systems, and install advanced building materials in homes and commercial buildings.

As more automakers and their suppliers continued to shift to electric vehicles, the clean transportation sector saw an increase in employment of nearly 8 percent in North Dakota for a total of 851 workers. Electric vehicle-related jobs accounted for most of the sector's growth.

Renewable energy jobs in solar (14% growth) continue to see gains throughout the state while smaller, emerging subsectors like battery storage technologies (5% growth) and grid modernization (12% growth) are also continuing to expand.

Clean energy jobs are found in every corner of the state. While big cities like Fargo (2,598) and Bismarck (1,604) are some of the largest hubs for clean energy jobs, more than one in three – or nearly 4,000 – jobs are in rural areas.

65.7%

Small businesses drive North Dakota's clean energy sector – in 2022, 65.7 percent of the state's clean energy businesses employed fewer than 20 individuals

10.5%

More than 10 percent of North Dakota's clean energy workers were veterans in 2022



POLICIES MATTER

While recent federal policies, including investments and tax credits for energy efficiency upgrades, EV and solar purchases and new clean energy projects create strong tailwinds, there is still more to do. To meet the nation’s climate goals of reducing climate emissions by 50 percent by 2030, improve equity in the clean energy economy and grow clean energy jobs, lawmakers and policymakers should:

- **Defend against attempts to roll back federal clean energy and vehicle investments:** Just one year after the passage of the Inflation Reduction Act, companies are investing over \$86 billion in large scale clean energy projects that will lead to the creation of over 74,000 jobs, thanks to the federal investments and incentives in the new law. Of the 210 projects announced, almost a quarter are in Midwestern states. Attempts to rollback provisions of the federal clean energy incentives threaten future clean energy job growth and economic opportunity.
- **Develop and fund federal and state workforce development programs.** One of the largest barriers to clean energy job growth is the challenge to fill open positions. Workforce training will be critical to the continued growth of the industry, as over 92 percent of employers in North Dakota report at least some difficulty hiring workers, leading the Midwest.
- **Expand transmission to increase access for clean energy projects.** Federal and state governments must work with the Midwest regional transmission organizations to build more transmission. Without more transmission, many wind and solar projects will not be built.
- **Advance state-level clean energy policies.** It will be important for North Dakota to adopt state policies that support renewable energy, energy efficiency and electric vehicles to leverage federal investment and help create thousands of new jobs.

JOBS BY SECTOR



2022 SUBSECTOR DETAILS



Energy Efficiency

- 514 Energy STAR & Efficient Lighting
- 729 Traditional HVAC
- 3,302 High Efficiency HVAC & Renewable H&C
- 310 Advanced Materials
- 254 Other



Grid & Storage

- 327 Clean Storage
- 89 Smart Grid
- 60 Micro Grid
- 62 Other Grid Modernization



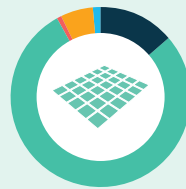
Clean Fuels

- 64 Other Ethanol/Non-Woody Biomass
- 102 Other Biofuels



Clean Transportation

- 385 Hybrid Electric Vehicles
- 178 Plug-In Hybrid Vehicles
- 243 Electric Vehicles
- 45 Hydrogen and Fuel-Cell Vehicles



Renewable Energy Generation

- 305 Solar
- 1,723 Wind
- 19 Geothermal
- 125 Bioenergy/CHP
- 30 Low-Impact Hydroelectric

Unless otherwise stated, the data and analyses presented in this report by Evergreen Climate Innovations and Environmental Entrepreneurs (E2) are based on data collected for the 2023 U.S. Energy Employment Report (2023 USEER), produced by the United States Department of Energy (DOE) and collected and analyzed by BW Research Partnership (BWRP).