Minnesota Clean Energy & Transportation Jobs Are Growing

Minnesota’s energy efficiency and clean energy jobs grew 3.4% in 2022 and the industry is poised for continued growth thanks to state policy and federal climate investments passed over the last year.

Clean energy companies employed nearly 60,000 Minnesotans at the end of 2022, a 3.4 percent increase from 2021. In 2022, clean energy jobs grew 50 percent faster than the state’s overall economy. This growth is expected to continue as historic state and federal clean energy policies and incentives lead to new projects and lower upfront costs for businesses and homeowners to make energy efficiency improvements. Alongside tremendous opportunity for growth is the need for renewed focus on workforce training programs as historically low unemployment levels mean fierce competition for skilled workers across the state.

Clean Energy Jobs* in Minnesota

- **59,708** Clean energy jobs
- **+10.6%** 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

The biggest sector in Minnesota’s clean energy industry is energy efficiency, comprising over 72 percent of the state’s clean energy workforce. The 43,133 energy efficiency workers in Minnesota manufacture ENERGY STAR-rated appliances, install efficient lighting, heating, ventilation, and air conditioning (HVAC) systems, and install advanced building materials in commercial buildings and homes.

As more auto manufacturers and their suppliers continued to shift to electric vehicles, the clean transportation sector saw an increase in employment of nearly 11 percent in Minnesota — the fastest growing sector in the state. The sector added over 400 new jobs for a total of 4,226 workers. Electric vehicle-related jobs accounted for most of the sector’s growth.

Renewable energy jobs in solar (5% growth) and wind (4% growth) continue to see gains throughout the state while smaller, emerging subsectors like battery storage technologies (5% growth) and grid modernization (13% growth) also continued to grow.

Clean energy jobs are found in every corner of the state. While the Twin Cities (38,362), St. Cloud (6,290), and Duluth (1,867) are some of the largest hubs for clean energy jobs, more than one in three — or more than 21,000 — jobs are in Greater Minnesota.

**Small businesses** drive Minnesota’s clean energy sector — in 2022, 71.7 percent of the state’s clean energy businesses employed fewer than 20 individuals.**

**More than 11 percent of Minnesota’s clean energy workers were veterans** in 2022.

Learn even more about clean energy jobs in Minnesota at [www.cleanjobsmidwest.com](http://www.cleanjobsmidwest.com)
While recent federal policies create strong tailwinds, there is still more to do to meet the nation’s climate goals of reducing emissions by 50 percent by 2030, improve equity in the clean energy economy and grow clean energy jobs. The state of Minnesota has committed itself to 100 percent clean energy by 2040 and net-zero economy-wide by 2050. To accomplish these goals, 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 at least $86 billion in large scale clean energy projects nationwide thanks to the federal climate investments in the new law. Attempts to rollback provisions of the federal clean energy incentives threaten future clean energy job growth and economic opportunity.

- **Develop and fund workforce training programs**: One of the largest barriers to clean energy job growth is the challenge to fill open positions. Workforce development and training will be critical to the continued growth of the industry; programs and coordination across private, public, and academia are critical to address this problem, with a specific focus on funding and expanding programs to deliver the clean energy jobs of the future.

- **Expand transmission to increase access for clean energy projects**: Federal and state governments must work with Midwest regional transmission organizations to build and expand the electricity grid. Curtailment of wind projects is already taking place in Minnesota — reducing relied upon revenue due to the lack of transmission capacity.

- **Advance and implement state-level clean energy policies**: Minnesota can cement its place as a leader in the clean energy transition with continued strong policy and implementation. This includes supporting the efficient buildout of transmission, easing the permitting process, solving the interconnection issues faced by renewable energy projects, attracting clean technology manufacturers and furthering a pragmatic approach to safe and responsible extraction of minerals key to the clean energy transition.

### JOBS BY SECTOR

<table>
<thead>
<tr>
<th>Sector</th>
<th>Count</th>
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<tbody>
<tr>
<td>Energy Efficiency</td>
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<tr>
<td>Renewable Energy</td>
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<td>Clean Transportation</td>
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<td>Grid &amp; Storage</td>
<td>2,923</td>
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<tr>
<td>Clean Fuels</td>
<td>712</td>
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</tbody>
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### 2022 SUBSECTOR DETAILS

**Energy Efficiency**
- Energy STAR & Efficient Lighting: 11,097
- Traditional HVAC: 8,686
- High Efficiency HVAC & Renewable H&C: 11,929
- Advanced Materials: 4,150
- Other: 7,270

**Renewable Energy Generation**
- Solar: 5,120
- Wind: 2,739
- Geothermal: 140
- Bioenergy/CHP: 495
- Low-Impact Hydroelectric: 200

**Clean Transportation**
- Hybrid Electric Vehicles: 1,914
- Plug-In Hybrid Vehicles: 880
- Electric Vehicles: 1,210
- Hydrogen and Fuel Cell Vehicles: 222

**Grid & Storage**
- Clean Storage: 1,985
- Smart Grid: 261
- Micro Grid: 336
- Other Grid Modernization: 342

**Clean Fuels**
- Other Ethanol/Non-Woody Biomass: 354
- Other Biofuels: 359

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).