



Iowa's Clean Energy Leadership is Paying Off

Holly Fritz and Delainey Thorud • Nov. 2, 2022

Despite a tough couple of years, the renewable energy industry is resiliently powering through to provide affordable, reliable electricity for customers across the Midwest. Among the vast open fields of America's Heartland, Iowa remains a clean energy leader. The Hawkeye State clean energy economy is growing, and has already earned [\\$23 billion](#) for the state's economy.

Wind Power in Iowa

With over [12,000 Megawatts \(MW\)](#), wind energy is Iowa's biggest power producer. Iowa gets over [55 percent](#) of its in-state electricity production from wind power, the highest in the country. State and local taxes produce up to [\\$58.4 million](#) for the state every year, and an additional [\\$69.6 million](#) in annual land lease payments are being paid to rural landowners.

Renewables offer much more than economic benefits - clean power generation reduces emissions and uses virtually no water. Wind, solar and energy storage projects have saved the state over [34 million](#) metric tons of CO2 emissions -- the equivalent of taking almost 7.5 million cars off the road.

Solar Power in Iowa

Iowa's solar sector has grown over the last year. Even though it ranks [33rd in the nation](#) for installed solar energy, capacity reached nearly 517 MW at the end of 2021, with 159 MW being added in 2021 alone. That's enough to power over 64,000 homes. But this is just a glimpse of what's to come. Over the next five years, Iowa's solar capacity is slated to increase by 1,304 MW. Solar prices have dropped 53 percent in the last decade, making it one of the cheapest electricity sources. The solar industry has already invested over \$727 million in Iowa, with \$187 million invested in 2021 alone. The solar industry in Iowa grew by nearly [15 percent](#) in 2021 and now employs [1,030 people](#) through its [66 solar companies](#), including 10 manufacturers, 31 installers and developers and 25 other related companies.

[Solar development has grown in the last two years.](#) The 128 MW Wapello Solar Project came online in 2021 and has the capacity to power over 16,600 homes, and the 31.8 MW Arbor Hill Solar Project that was completed in 2022 and has the capacity to power more than 4,125 homes.

Clean Energy Growth in Iowa

Between wind, solar, and battery storage projects, Iowa has the ability to power more than 4 million homes with clean energy. But growth in the clean energy sector in Iowa doesn't stop there. Iowa is poised to become an even greater powerhouse in the Midwest. The electric grid in Iowa is operated by the Midcontinent Independent System Operator (MISO). MISO has [received applications](#) for 29 wind projects, 19 solar projects and 12 battery storage projects in Iowa that would contribute another nearly 10 GW of new clean energy to MISO's capacity.

Clean Energy Jobs in Iowa

Iowans benefit from the great jobs offered by the renewable energy sector. New, family-supporting jobs are emerging across the state. At the same time, local businesses benefit from the economic ripple effect that comes from renewable energy development. According to [Clean Jobs Midwest](#), more than 32,000 Iowans were employed in a clean energy job in 2021, a 5 percent increase from 2020. These jobs grew 2 times faster than the state's overall employment in 2021 and 46 percent of jobs that were lost during the COVID-19 economic downturn were regained. Renewable energy is the second largest clean energy employer in Iowa, with 5,682 workers.

As an early adopter of wind energy, Iowa has also invested in [educational programs](#) to build a workforce to support this growing industry. Iowa Lakes Community College offers a Wind Energy and Turbine Technology program through its Sustainable Energy Resources Technology building.

In addition to promoting wind workforce training for students, the state has worked on modernizing the current U.S. wind technician workforce and creating more accessible career opportunities for veterans through veterans-focused jobs programs. In 2020, veterans made up [over 10%](#) of Iowa's clean energy workforce.

"Iowa is one of the nation's leaders in developing and utilizing sustainable energy resources, like wind energy, to create good-paying jobs for folks in our state. The backbone of this industry is the workforce that powers it," [said Iowa Senator Joni Ernst](#).

[MISO also proposed](#) a transmission build-out that could create nearly 36,000 jobs in Iowa.

Iowa Leads the Clean Energy Transition

Iowa has always been a leader in the clean energy transition and ranks [#1 in the country](#) not only for its in-state electricity production from wind power, but also for percent of electricity produced by clean power. Almost 60 percent of electricity produced in Iowa comes from wind, solar, and energy storage power plants. The next closest state is South Dakota, with just over 54 percent of electricity coming from wind, solar, and energy storage power plants.

As the United States energy sector transitions to a clean energy economy, states continue to implement strategies to incorporate more renewables and set carbon-reduction goals. Iowa embraced this new energy future, which encouraged more growth for the state's economy. In fact, Iowa was one of the first states to adopt a renewable energy law. Despite the small requirement that major utilities acquire 105 megawatts of renewable energy sources, Iowa's leadership in the energy sector has translated to significant and meaningful benefits for Iowans across the state- and that's just smart!