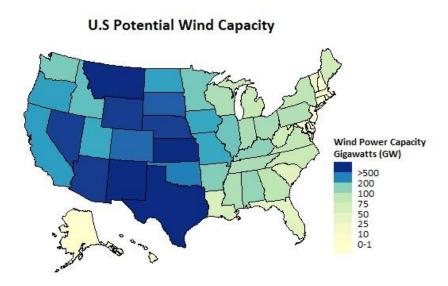


Investments in Wind Energy Will Help to Create A Fairer and More Resilient Economy

Investing in the next generation of wind energy is imperative to support the transition to cleaner energy and independence from fossil fuels in the United States. Expanding wind energy production will make the U.S. resilient against climate change, increase access to cheaper and cleaner energy and yield significant economic benefits across the country.

- Wind power is the largest source of renewable electricity in the U.S. and continues to grow rapidly because it is very low cost.
- Increasing the amount of electric power generated through wind will reduce carbon emissions and avert significant economic costs from climate change damage.
- Well-paying jobs in the wind energy industry are projected to grow by almost 70% over the next decade.
- Wind energy will create jobs throughout the country allowing different geographic regions to benefit from the wind energy boom.

On Earth Day, wind energy's demonstrated effectiveness and unrealized potential highlight how investments in the planet also benefit the economy. It is important for Congress and the Biden administration to continue to invest in wind energy to promote economic opportunities across the country.



Source: AWS Truepower, NREL Note: Wind power capacity potential reflects the amount of wind power that is technologically possible to have installed in a given region.

Wind energy will play a growing role in tackling climate change, securing energy independence and creating economic opportunities across the country

Over the past two decades, global wind energy production has grown rapidly and U.S. wind power capacity has grown by 15% per year. It is now the largest source of renewable electricity in the United States. Wind energy has lowered energy costs and created thousands of good jobs in communities across the country. Investing in the next generation of wind energy projects will bring cheaper, cleaner energy to even more families. New offshore wind developments will provide economic opportunities in the Great Lakes, Great Plains and Gulf regions, as well as on the coasts.

Transitioning to clean, renewable energy is essential to <u>mitigate</u> the impact of climate change and secure the U.S. electric grid. According to the Government Accountability Office the cost of climate damage and disruption to the electric grid is likely to cost <u>billions of dollars</u>, even before factoring in the potential loss of human life. The U.S. should build on <u>investments</u> from the bipartisan Infrastructure and Investment and Jobs Act to advance wind energy installations and transmission infrastructure. Strengthening the wind energy industry to ensure it can compete in a <u>rapidly growing</u> global market will help address climate change and reduce U.S. energy vulnerabilities, which have been underscored by Russia's invasion of Ukraine.

Wind energy already accounts for the largest share of electricity generation among renewables and helps make the U.S. economy more resilient to climate change

Wind energy already generates the <u>largest share</u> of electricity among renewable sources in the U.S. Further investments in wind power will lower household electricity costs without contributing to climate change. The wind energy industry is growing fast, spurring the creation of high-quality jobs: the Bureau of Labor Statistics (BLS) <u>projects</u> wind turbine service technicians will be one of the fastest growing occupations between 2020 and 2030.

The U.S. already generates 9.2% of electricity from wind, the largest share among renewables and a key part of the solution to combating climate change. The U.S. Department of Energy projects a sevenfold increase from the 2013 levels of electric power that America can generate from wind by 2050 would reduce carbon dioxide emissions by 23%. These reductions are expected to prevent climate change damages estimated to cost between \$85 billion and \$1.23 trillion, according to the U.S. Interagency Working Group's Social Cost of Carbon.

Employment in the wind energy industry continues to grow, as the coal and natural gas industries have lost jobs

Wind energy creates well-paying, high-quality jobs in clean-energy production, transmission and manufacturing. The median pay for wind turbine service technicians is <u>comparable</u> to the median pay for <u>plumbers, pipefitters and steamfitters</u> and electricians and does not require a college degree. Wind energy jobs already exist across the U.S., and new wind projects across the <u>Great Lakes</u> and Gulf Coast expand job opportunities across the country.

While employment in fossil-fuel based electric power generation sector, such as coal and natural gas, has declined, employment in the wind power sector <u>grew</u> by almost 2 percent. And the surging job growth is expected to continue: between 2020 and 2030, BLS <u>projects</u> the number of

wind turbine service technicians in the United States will grow by almost 70%. By some estimates, the wind energy industry could sustain approximately <u>600,000 jobs</u> by 2050—an increase of almost six-fold from today's levels. Notably, this growth is expected in addition to job creation from other parts of the renewable energy boom.

Investment in wind energy will create high-quality jobs across the country

The next generation of wind energy promises to expand job creation to even more states, including on the coasts and especially further inland. Currently, most wind power in the United States comes from the Great Plains. In 16 states, wind energy already provides more than 10% of electricity, and in Iowa, Kansas, Oklahoma, South Dakota and North Dakota, it provides 30% or more of the states' electricity. Further opportunities in these regions abound, including new wind projects like Western Spirit in New Mexico, that will create jobs and economic investments across the country. With new technology, the U.S. is positioned to expand its wind energy production into the states with the greatest potential to generate significant wind power, including Texas, Kansas and New Mexico.

In addition to creating jobs specific to wind energy, the growing domestic wind industry promotes domestic manufacturing, job creation and shared prosperity across the U.S. For example, workers in Alabama and West Virginia are supplying 10,000 tons of domestic steel to a Texas shipyard to build the first vessel for offshore wind-turbine installation. Once completed, this turbine vessel will further support the nascent offshore wind sector in the Great Lakes.

Wider adoption of wind energy reduces fossil fuel dependence and makes clean energy more widely available, while enabling U.S. industry growth

Wind power is cost-effective and a more stable alternative to fossil fuels. Greater adoption of wind energy decreases reliance on expensive fossil fuels and secures the U.S. power grid. Even before Russia's invasion of Ukraine, the global market for wind electricity was projected to increase significantly in 2022, growing to more than \$104 billion and up from \$90 billion the year before. Since Russia's unprovoked attack on Ukraine began, renewable energy stocks have posted notable gains as investors recognize the impact of wind energy on a more rapid transition to renewables.

Congress and the Biden administration can ensure cost-effective energy is available to more Americans by making additional investments in the wind industry. Land-based utility-scale wind is already one of the lowest-priced energy sources available, costing between one to two cents per kilowatt-hour after the production tax credit. Since the electricity from wind farms is often purchased in long-term contracts at a fixed price over an extended period, such as 20 years, and is fuel free, wind energy is insulated from fossil fuel price volatility inherent in legacy sources of energy. Wind power is a means to achieve U.S. energy independence, since it is typically sourced domestically, making both prices and supply less volatile to global disruptions that plague fossil fuels. Finally, as other advanced economies, like Germany, expedite the transition to renewables, heightened demand for U.S. exports of small and medium wind turbines from a strong U.S. wind industry can create manufacturing jobs in the United States.

Conclusion

Congress and the Biden administration should build on IIJA's <u>investments</u> in wind energy to reduce energy costs for families, create jobs and strengthen U.S. energy independence. Wind energy is already an engine of economic growth and is poised to deliver vast economic and environmental benefits to U.S. workers and families across the country. Wind energy can lower energy costs for Americans and create hundreds of thousands of well-paying jobs in the United States, steering the U.S. economy towards a more sustainable and resilient future.