



Fact Sheet: The Biden-Harris Clean Energy Revolution

Since the Inflation Reduction Act was passed in 2022, America has witnessed a clean energy revolution. In less than two years, the Biden-Harris clean energy plan has sparked a clean energy manufacturing renaissance and created over [334,000 new, good-paying jobs all across the country](#). As we approach the two-year anniversary of this game changing legislation, a full-blown clean energy revolution is already underway, dramatically expanding cheaper, cleaner energy choices for the American people and drastically bringing down costs so they are within reach for the first time.

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ENERGY INNOVATION

Technological breakthroughs have led to exponential growth in clean energy capacity and innovation. With record construction of solar and wind in 2023, a new era of falling fossil generation is imminent. [Renewables generated a record 30% of global electricity in 2023](#), and a [report from the Federal Energy Regulatory Commission](#) found that solar and wind accounted for 86.79% and 12.4% of new U.S. generating capacity, respectively, in the first quarter of 2024. In the same period, natural gas represented just 0.65% of new capacity. Twelve states generate enough renewable energy to cover [more than 50%](#) of their annual electricity needs. In March 2024, [56% of electricity](#) consumed in six New England states came from wind and solar and in August 2024, [California hit 100 days of 100% demand](#) met by renewables.

Solar dominates this next generation energy industry, accounting for nearly [9% of U.S. total electric generation capacity](#). In 2023, solar represented [53% of new electricity generation capacity](#). Not only is solar powering more and more homes, but it is also providing new standards of reliability and resilience. In Houston, home solar-battery owners were [able to keep themselves powered through Hurricane Beryl](#) and its aftermath. Meanwhile, the utility company CenterPoint Energy took days to restore power across the city.

Wind power has also seen dramatic growth. U.S. offshore wind capacity is projected to expand from 41 MW to [almost 1,000 MW](#) in 2024 – enough to power around 500,000 U.S. homes.

Finally, electric vehicles (EVs) have become more affordable, accessible, and popular than ever with American drivers. Fundamental to this growth is building the charging infrastructure necessary for widespread adoption. In 2024, the U.S. increased the number of public fast-charging stations by 7.6%, totaling [one EV-charging station for every 15 gas stations](#). That's not all: the number of [public EV chargers is set to surpass gas stations](#) in just eight years. The private sector has also jumped at the opportunity: [Walmart is rolling out its coast-to-coast network of fast chargers](#). With 90% of the U.S. population living within 10 miles of a Walmart, this network is poised to expand access to charging stations rapidly.

[Increasing use of clean energy in the U.S. yields billions of dollars of benefits](#). A new study published in Cell Reports Sustainability finds emission reductions provided \$249 billion in climate and health benefits.

OTHER HEADLINES

- **Good Day Sunshine: Solar Hits Record Global Power Supply on Summer Solstice.**
Thanks to the [remarkable recent growth in solar power](#), the world was expected to get roughly a fifth of its total electricity from the sun during the solstice, according to a new report on clean-energy capacity.

- **Researchers unveil breakthrough solar energy structure** that is significantly cheaper than traditional solar panels: 'The holy grail.' The implications of these findings could mean solar cells that are equally or more efficient (meaning they can harvest more solar energy over the same time period, using the same amount of physical space), cheaper and less energy-intensive to make, and involve fewer non-renewable resources (like silicon) — all while theoretically being just as durable.

CHEAPER, CLEANER ENERGY CHOICES

Americans have more affordable energy choices than ever. Electric vehicles continue getting [more and more affordable](#) thanks to the [clean vehicle tax credit](#), which offers up to \$7,500 toward a new electric, hydrogen, or plug-in hybrid vehicle, and up to \$4,000 for a used one. These instant rebates are available right at the dealership. Not only is electric vehicle ownership getting cheaper, but EV drivers are also [saving everyone billions of dollars](#) on their monthly electricity bills. On aggregate, EV drivers provided more than \$3 billion in net revenue to the grid between 2011 and 2021.

The Biden-Harris Clean Energy Revolution is also lowering Americans' monthly energy bills. In 2023, more than [3.4 million Americans benefited from \\$8.4 billion in tax credits](#) to lower the costs of clean energy and energy efficiency upgrades. [Solar is now 33% cheaper than gas power](#) and installing solar can help Americans save as much as [95% of utility costs](#). Widespread home solar adoption has increased thanks to the [\\$7 billion Solar for All](#) grant competition, which provides grants to ensure low-income and disadvantaged households can access solar power. The average residential solar setup can generate between [350 kWh to 850 kWh per month](#), and the average American household uses around 893 kWh of electricity per month. [As record heat waves and gas prices increase the average U.S. power bill](#), clean energy provides a more reliable and affordable alternative for American families weathering extreme temperatures.

RECHARGED JOBS & COMMUNITIES

The Clean Energy Revolution has catalyzed a veritable job boom, soaring past 334,565 good-paying jobs in the past two years. Clean energy jobs have [grown](#) by more than 10% in the past two years, faster than both the overall energy industry and overall U.S. employment. The clean energy sector added jobs 53% faster than the rest of the U.S. economy, and [nine million](#) new clean energy and climate-related jobs are projected over the next decade. The newly announced jobs are spread [across the clean energy economy](#), including:

- ◆ 133,284 new battery jobs.
- ◆ 46,613 new clean technology jobs.
- ◆ 51,283 new EV jobs.
- ◆ 15,407 new grid and transmission jobs.
- ◆ 12,970 new hydrogen jobs.
- ◆ 62,131 new solar jobs.
- ◆ 12,877 new wind jobs.

The clean energy jobs boom has also been a win for unions and high standards for worker health, safety, and stability. [A labor win at Georgia school bus factory shows a worker-led EV transition is possible](#). Where federal dollars and green jobs are flowing, unions see an opportunity to organize the right-to-work South. Blue Bird also received an [\\$80 million grant from the clean energy plan](#) to convert an old RV manufacturing facility to construct electric school buses, adding 400 union jobs.

The nation's fastest-growing union of construction workers is [standing behind new state laws](#) designed to help drive more clean energy investments—and jobs—into Michigan. Justin Carpenter, director of policy for the Michigan Energy Innovation Business Council, which represents nearly 200 advanced energy companies across the state, said, "Detroit used to be the arsenal of democracy, and as we go forward into a cleaner future, it can be the arsenal of decarbonization. We can live and build our manufacturing right here."

The Biden-Harris Clean Energy Revolution is also creating new opportunities for young people to take on vital roles with the American Climate Corps. This program will [employ 20,000 young people](#) and bolster local initiatives to expand access to renewable energy and protect natural lands. The Climate Corps [swore in its first class](#) of 9,000 members in June 2024 and will grow to employ [50,000 per year by 2031](#).

The massive influx of manufacturing investment is also reshaping the domestic and global economy. [Clean energy is driving a new era of manufacturing](#) across the Midwest, where states have received \$30 billion in capital investments since the passage of the clean energy plan in 2022. Globally, after it appeared to top out at around \$200 billion last summer, private [investment in manufacturing construction](#) has continued to increase. It

reached a seasonally adjusted \$225 billion in new spending in January — a jump of more than 180 percent from its usual level, around \$80 billion annually over the last decade.

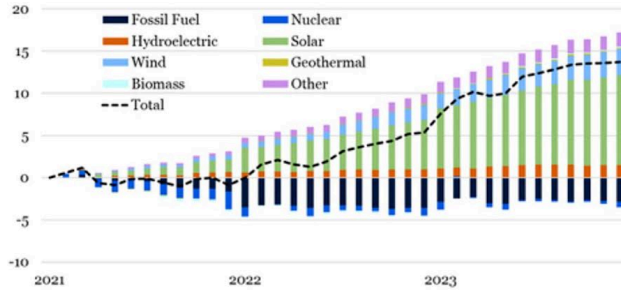
Since the passage of the clean energy plan, Energy Communities have seen a [\\$2.4 billion](#) increase in monthly investment announcements. [Energy Communities](#) are areas with a recent coal mine or power plant closure, high fossil fuel employment, and a recent high unemployment rate, or areas with brownfield sites. Comparatively, non-energy communities have seen a [\\$1 billion increase](#) in monthly announced investment.

Some highlights of community revitalization happening all across the country include:

- [The Inflation Reduction Act could change the future of one Native American reservation](#). The clean energy plan includes [more than \\$720 million for Tribal nations](#) and native communities, as well as makes expanded clean energy tax credits available to tribes for the first time.
- [Toyota opened a 'megasite' for EV batteries in a struggling N.C. community, Fueled by Biden's IRA](#). The auto giant has invested more than \$1 billion outside Greensboro, where local officials hope their formerly dying region will become a boom town with over 5,000 new jobs and as many as 100,000 new residents.
- The Bipartisan Infrastructure Law [provides](#) new federal funding for school energy upgrades and incentives to install solar energy.
 - ◆ In March 2021, [savings](#) from installing nearly 1,500 solar panels at a high school in Batesville, rural Arkansas, resulted in all teachers receiving up to \$15,000 raises. The school district saved more than \$600,000 in utility costs through solar installation.
 - ◆ Tucson Unified School District in Arizona, the state's third-largest school district, expects to [save](#) \$43 million over 20 years from its solar panel installation.
 - ◆ [Pennsylvania schools will soon get to benefit from this grant program](#) and install solar panels on their buildings, increasing their efficiency and reducing electricity costs.
- Since the clean energy plan passed, companies have announced 117 [new clean projects](#) in rural communities, bringing \$53 billion in investment and 52,128 jobs to rural communities across 31 states.

Job gains in electric power generation have been driven by power generation from clean sources, including **solar** (+10,600), **wind** (+3,100), and **hydropower** (+1,500).

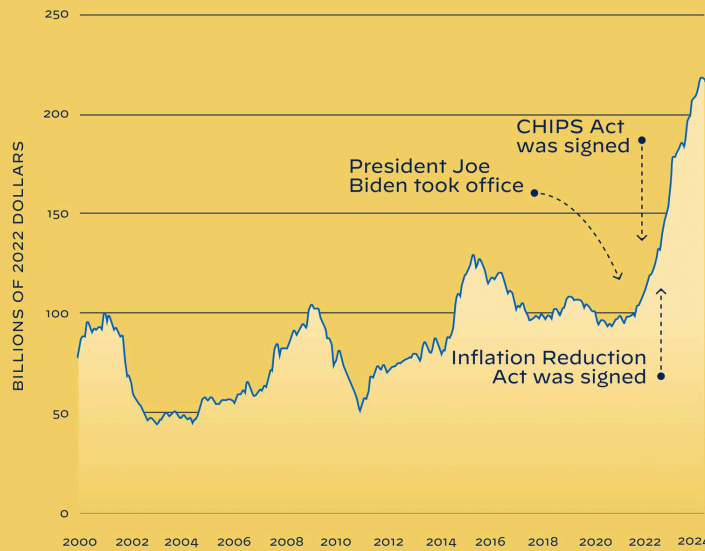
Change in employment in electric power generation since January 2021
Thousands of jobs



Sources: QCEW, CEA calculations
As of June 5, 2024 at 10:00 am.



PRESIDENT BIDEN IS PRESIDING OVER A PRIVATE MANUFACTURING INVESTMENTS BOOM



Source: Census; BEA; BLS; CEA calculations. Note: Deflated using the PPI Final Demand Construction for Private Capital Investment (post-2009), the Census implicit price deflator for Private Industrial construction (pre-2003), and an interpolation of BEA's implicit price deflator for private fixed investment in manufacturing structures (2003-2008).
As of August 1, 2024 at 10:00 am.