CLEAN ENERGY & MANUFACTURING INVESTMENTS: A GENERATIONAL ECONOMIC & ENERGY BOOM



The Center for Climate and Energy Solutions (C2ES)'s mission is to secure a safe and stable climate by accelerating the global transition to net-zero greenhouse gas emissions and a thriving, just, and resilient economy. Core to our work is engaging our Business Environmental Leadership Council, comprised of over 40 mostly Fortune 500 companies across different industry sectors, which together represent about **13 percent of the U.S. GDP by revenue** and who **employ nearly 5 million workers**. These companies demonstrate leadership by managing their own greenhouse gas emissions, creating technologies and processes that reduce emissions, and working with policy makers to develop solutions that reduce emissions and that also work for business. **C2ES maintains its independent view and does not speak on behalf of them; nonetheless, member companies provide salient insights that help inform our policy recommendations.**



A BURGEONING CLEAN ENERGY BOOM

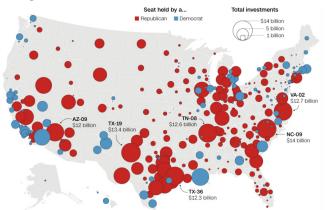
From Q3 in 2022 to Q4 in 2024, **\$289 billion** was invested in clean energy and manufacturing projects.

- There is an additional **\$524 billion** in announced, yetto-be-built projects. These are not hypothetical future investments, but real projects; repealing or modifying these credits jeopardizes these investments and the jobs and local tax revenue that come with them.
- More than **2,000 new facilities** are yet to come online.
- 77 percent of investments are in Republican congressional districts.

WHAT'S AT RISK?

- Removal of just the technology-neutral tax credits (i.e., 48E and 45Y) could **reduce clean energy deployment** 237 GW by 2040, enough to power 35.7 million homes, resulting in 97,000 net fewer energy jobs.
- On average, cuts to the technology neutral tax credits would lead to **annual power bills increasing \$142 per year for consumers by 2040**.¹
 - Some states (e.g., Texas) could experience increases as high as \$348 per year.
- Any cuts are a threat to grid reliability when the 5-year load growth forecast has increased by almost a factor of five, from 23 GW to 128 GW, with signs that this trend is likely to continue.²

Figure 1: Announced Investments by Congressional District



Data reflect investments from Q3 2022 to Q4 2024. Figures do not include an additional \$117 billion in announced investments for which the project locations are not certain.

Sources: Rhodium Group and MIT CEEPR's Clean Investment Monitor; Graphic: Renée Rigdon, CNN

¹ Aurora Energy Research, "Removal of Technology-Neutral Clean Energy Tax Credits Could Cost Upwards of \$336 Billion In Investment, Increase Electricity Bills 10% For Consumers," Jan. 6, 2025, https://auroraer.com/media/reform-to-clean-energy-tax-credits

² John D. Wilson, Zach Zimmerman, and Rob Gramlich, Strategic Industries Surging: Driving US Power Demand (Grid Strategies, 2024: Washington, DC), https://gridstrategiesllc.com/wp-content/uploads/National-Load-Growth-Report-2024.pdf

CLEAN ENERGY INVESTMENTS = ECONOMIC AND ENERGY SECURITY

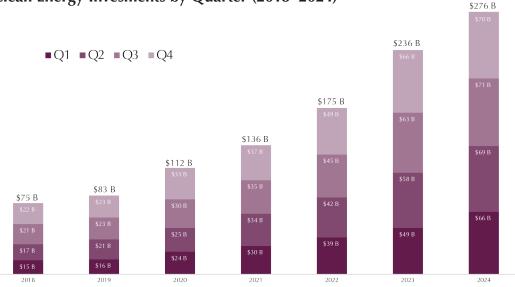


Figure 2: Clean Energy Invesments by Quarter (2018-2024)

Values are adjusted to 2023 dollars.

Source: Rhodium Group-MIT/CEEPR, Clean Investment Monitor 2024 Q3 Update, November 21, 2024, https://www.cleaninvestmentmonitor.org/reports/clean-investment-monitor-q3-2024-update.

Figure 3: A 4X Return on Investment for the American Taxpayer



Energy Jobs: Tax credits enable almost **2.3 million cumulative job-years** in the power sector (annual average job gains are estimated to be over 200,000).



Manufacturing jobs: Tax credits lead to **2.6 million cumulative job-years** in the manufacturing sector until 2035 (an average of 242,000 jobs per year).



Lower energy prices: With energy tax credits, overall energy system costs would decline by almost **11 percent in 2035**, compared to a scenario where those credits are repealed.

Source: ICF, Economy-wide Impacts of the Inflation Reduction Act Energy Provisions (American Clean Power, 2024: Washington, DC), https://cleanpower.org/ resources/economy-wide-benefits-of-energy-tax-credits.



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