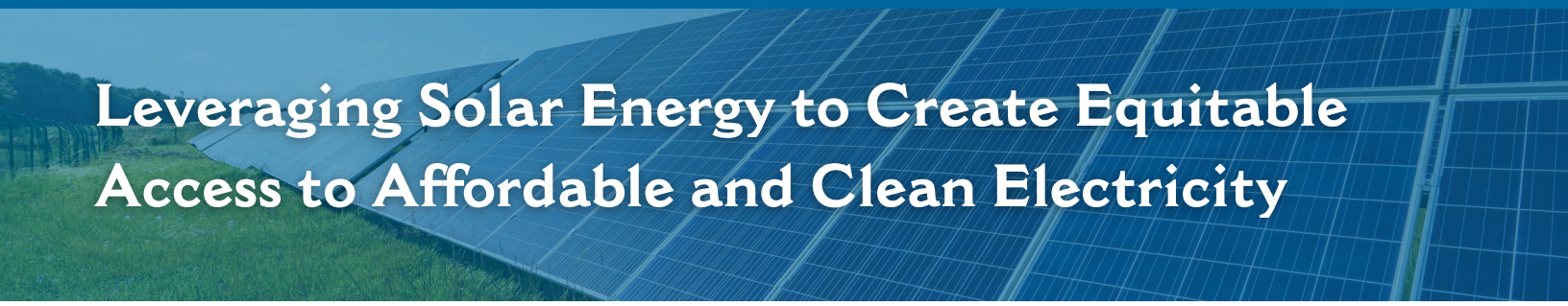
RACHEL CARSON COUNCIL

Fact Sheet



Leveraging Solar Energy to Create Equitable Access to Affordable and Clean Electricity

BACKGROUND

"Electricity prices have been on the rise, and it only keeps getting worse…" This is the narrative that consumers have been told for years. Yet, while nominal retail electricity prices have risen 30%, inflation-adjusted prices have **actually declined 8%** since 2010.[1] So, why do consumers still feel the pinch in our pockets?

The benefits of a declining inflation-adjusted retail electricity price have mostly been distributed to commercial and industrial sectors, effectively passing on the cost to the residential sector, which is the only sector to experience an inflation-adjusted price increase (of 3% since 2019).[1] As a result, utility debt is on the rise – roughly **1 in 6 households are behind on their bills** and face frequent risk of having their utility service terminated due to late or non-payment.[2]

Furthermore, low-income, Black, Hispanic, and Indigenous communities are disproportionately impacted by rising electricity prices. Many of these communities have also long lived with wide-ranging detrimental effects of environmental injustice, such as air pollution, water contamination, and industrial facilities siting near their communities.[3]

In spite of the existing strain on American consumers, energy prices will likely continue to rise in the future. This is due, in part, to:[1]

- Growing demand for electricity (largely from data centers),
- Fluctuating global natural gas prices
- Aging grid infrastructure (which necessitates grid modernization)
- Severe weather and climate change damaging grid infrastructure

KEY FACTS

1

Energy Burden

Defined as the percentage of gross household income spent on energy costs. A greater than 6% energy burden is considered high.[4] Low-income households experience 300% higher energy burden than non-low-income households.[4] Indigenous communities experience 28% higher energy burden than average.[5]

2

Solar Adoption

Black and Hispanic neighborhoods have respectively 74% and 42% less rooftop solar than majority white neighborhoods.[6]

LEVERAGING SOLAR ENERGY TO ALLEVIATE ELECTRICITY AFFORDABILITY ISSUES

In this landscape, the declining cost of solar energy provides an unprecedented opportunity to **leverage solar technology to lower energy bills** for disadvantaged communities (and reduce greenhouse gas emissions concurrently).[7] Community solar, in particular, presents promising benefits to low-income households. It is a solar project, within a geographic area, shared by multiple energy users of a community.

The systems are typically utility- or third party-owned while the energy user pays a fee for the clean energy. This arrangement expands solar energy access to low-income households that often face various barriers to installing rooftop solar (e.g. high upfront cost, low home ownership rates, suboptimal roof conditions, and limited access to credit).[8]

However, since the signing of the One Big Beautiful Bill Act (OBBBA) in 2025, the federal clean energy investment incentives of the Inflation Reduction Act have been repealed. This has wiped away nearly three-quarters of the clean energy capacity that would have been added to the grid,[9] significantly stalling clean energy growth and access. Instead, the OBBBA is forcing the U.S. power system to increase generation from older and more expensive power plants, **ultimately raising electricity prices further.**[10]

KEY FACTS

- On average, the levelized cost of energy (LCOE) from new utility-scale solar is **26% cheaper than new natural gas baseload power.**[11]
- On average, community solar subscribers saved money over the lifetime of their subscriptions through mid-2024.[12,13]

ENDNOTES

1. World Resources Institute, "What's Driving U.S. Electricity Prices?" accessed May 20, 2026, https://www.wri.org/insights/whats-driving-us-electricity-prices
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3. Adam Kent, "EPA Announces $7 Billion Solar for All Awards," Natural Resources Defense Council, April 22, 2024, https://www.nrdc.org/bio/adam-kent/epa-announces-7-billion-solar-all-awards.
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6. Sunter et al., "Disparities in rooftop photovoltaics deployment in the United States by race and ethnicity," Nature Sustainability 2 (2019): 71–76, https://www.nature.com/articles/s41893-018-0204-z
7. National Consumer Law Center, "New Report Details How Community Solar Programs Can Reduce Energy Costs for Low-Income People and Address Climate Change," accessed May 20, 2026, https://www.nclc.org/new-report-details-how-community-solar-programs-can-reduce-energy-costs-for-low-income-people-and-address-climate-change/
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11. Lazard, Levelized Cost of Energy+, Version 18.0 (New York: Lazard, June 2025), https://www.lazard.com/media/eijnqja3/lazards-lcoeplus-june-2025.pdf.
12. The median capacity-weighted NPV of community solar subscriptions is about +$0.27 per watt (W-AC) through mid-2024.
13. U.S. Department of Energy, "Community Solar Market Trends," accessed May 20, 2026, https://www.energy.gov/communitysolar/community-solar-market-trends

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Uniting science, wonder, and action for a sustainable, just and peaceful future.

The Rachel Carson Council (RCC), founded in 1965, is the national environmental organization envisioned by Rachel Carson to carry on her work after her death. We promote Carson's ecological ethic that combines scientific concern for the environment and human health with a sense of wonder and reverence for all forms of life in order to build a more sustainable, just, and peaceful future. The Rachel Carson Council is a nonpartisan 501(c)(3) nonprofit organization.