

Addressing Underperforming Ratepayer-Funded Programs

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SUMMARY: Electricity rates in California have more than [doubled](#) over the past decade, significantly outpacing inflation. Rising costs, driven by wildfire mitigation efforts and [legacy rooftop solar subsidies](#), are further exacerbated by underperforming programs funded through customers' utility bills. Over the past four years, ratepayers have contributed more than \$1.3 billion to programs that have not produced sufficient environmental or social benefits to justify their costs.¹ To protect ratepayers, reforms are needed to reduce utility costs and lower bills.

BACKGROUND

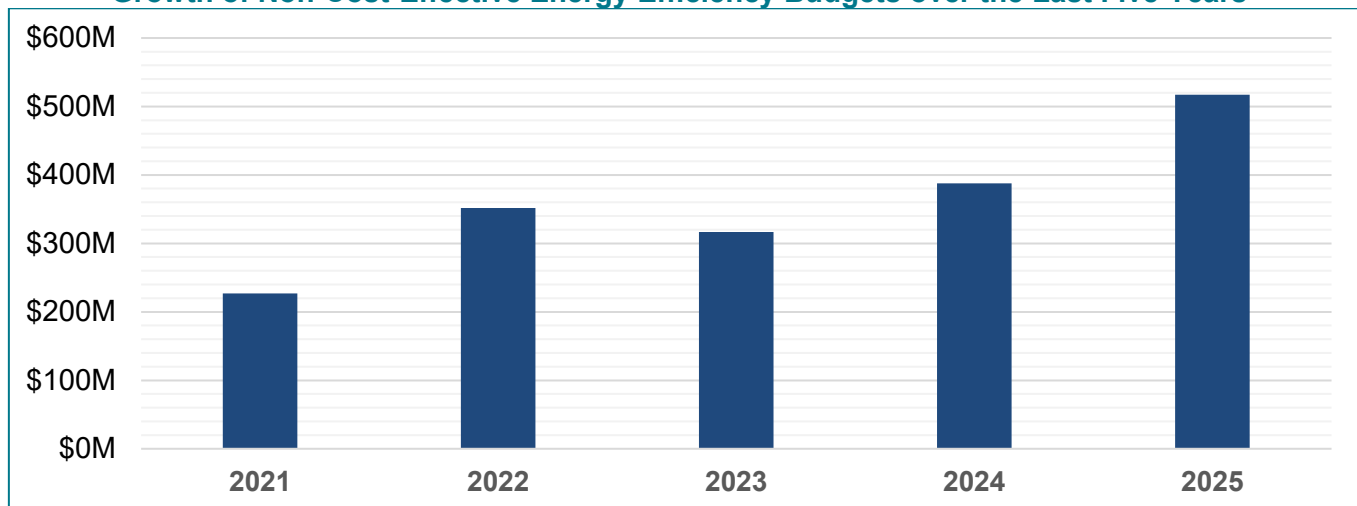
California's four largest utilities² have been authorized to collect more than \$5.9 billion over four years from electric ratepayers to fund energy efficiency and demand response programs.³

However, many of these programs no longer deliver the intended benefits, even as their authorized budgets continue to grow. Historically, energy efficiency initiatives helped lower overall costs for customers by reducing energy consumption. Energy efficiency continues to be a key cornerstone to achieving the state's clean climate and energy policy goals. However, as California has strengthened building codes to mandate higher efficiency standards, the effectiveness of many existing programs has diminished.⁴

As a result, long-standing programs have become less cost-effective, delivering fewer climate and energy benefits for every ratepayer dollar spent. Today, more than 63% of these programs fail to meet cost-effectiveness criteria, meaning they impose additional costs on ratepayers without corresponding benefits.⁵

Despite these challenges, program budgets have not been adjusted accordingly and continue to expand. This places an excessive financial burden on ratepayers – especially middle- and lower-income households – who already spend a disproportionate share of their income on utility bills.⁶

Growth of Non-Cost-Effective Energy Efficiency Budgets over the Last Five Years⁷



IDENTIFYING AREAS FOR REFORM

Often, demand-side programs – such as demand response and energy efficiency – operate in silos, addressing greenhouse gas reduction, reliability, and affordability separately rather than through an integrated approach.

Ensuring that ratepayer-funded programs are cost-effective, well-coordinated, and aligned with California's long-term climate and energy goals is critical. The California Public Utilities Commission (CPUC) should carefully balance these priorities to ensure that decarbonization and reliability goals are achieved without placing excessive financial burden on ratepayers. To facilitate the level of electrification required to meet state climate targets, electricity rates must remain below reasonable thresholds and ratepayer-funded programs must yield measurable, quantifiable benefits.

1) Maximizing Climate Impact by Addressing Misaligned Incentives

An increasing amount of energy efficiency funding is directed toward building electrification, replacing traditional natural gas appliances such as water and space heaters. While the CPUC has approved a limited ban on natural gas incentives (with an exemption for technologies with no viable electric alternatives),⁸ ratepayer funds continue to support the installation of natural gas appliances through programs such as the Energy Savings Assistance Program, contradicting the state's clean energy goals. Encouraging the installation of new gas appliances will delay electrification and result in increased ratepayer costs by prolonging the need to maintain gas system infrastructure.

Ensuring that newly installed electric appliances are designed to integrate with complementary programs can maximize decarbonization benefits and support grid reliability. For instance, requiring heat pump water heaters to be demand response-enabled upon installation would allow them to provide both economic and emergency reliability advantages.⁹ To fully support California's climate and affordability objectives, ratepayer funding should be prioritized for cost-effective electrification measures that deliver tangible benefits to both customers and the grid.

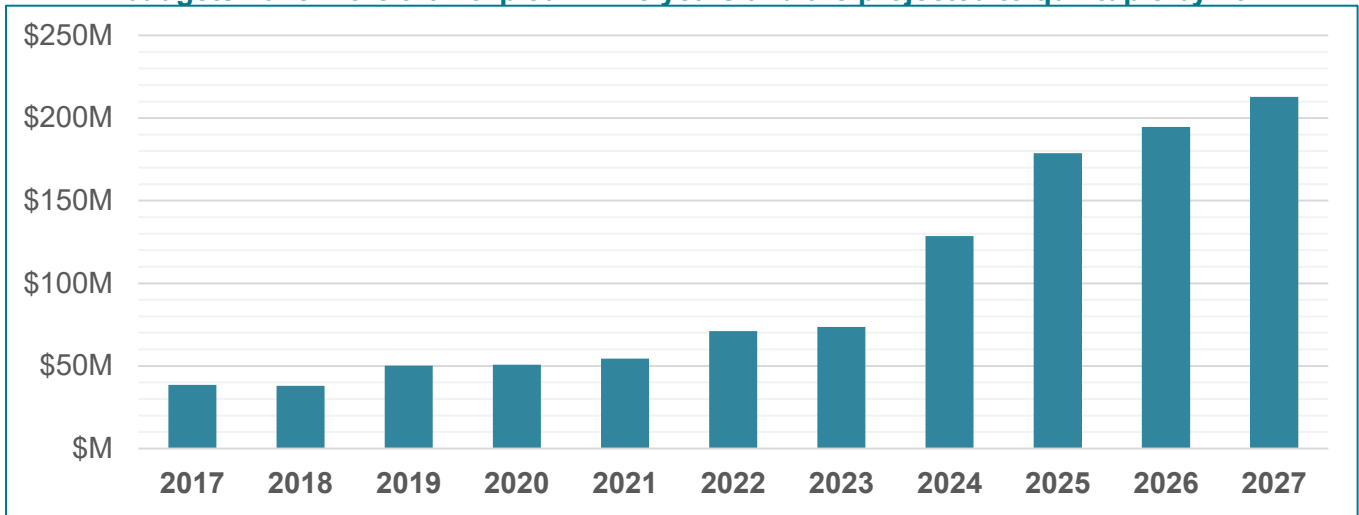
2) Applying Alternative Funding Sources for Regional Energy Networks (RENs)

Regional Energy Networks (RENs), established as local government-led programs, were designed to complement utility-administered energy efficiency initiatives, which collectively receive \$3.6 billion in funding.¹⁰ Despite receiving approval for \$664 million in energy efficiency funding, RENs do not primarily focus on achieving the state's energy goals and have not effectively delivered on the primary objectives of reducing energy consumption, lowering demand, and decreasing greenhouse gas emissions.

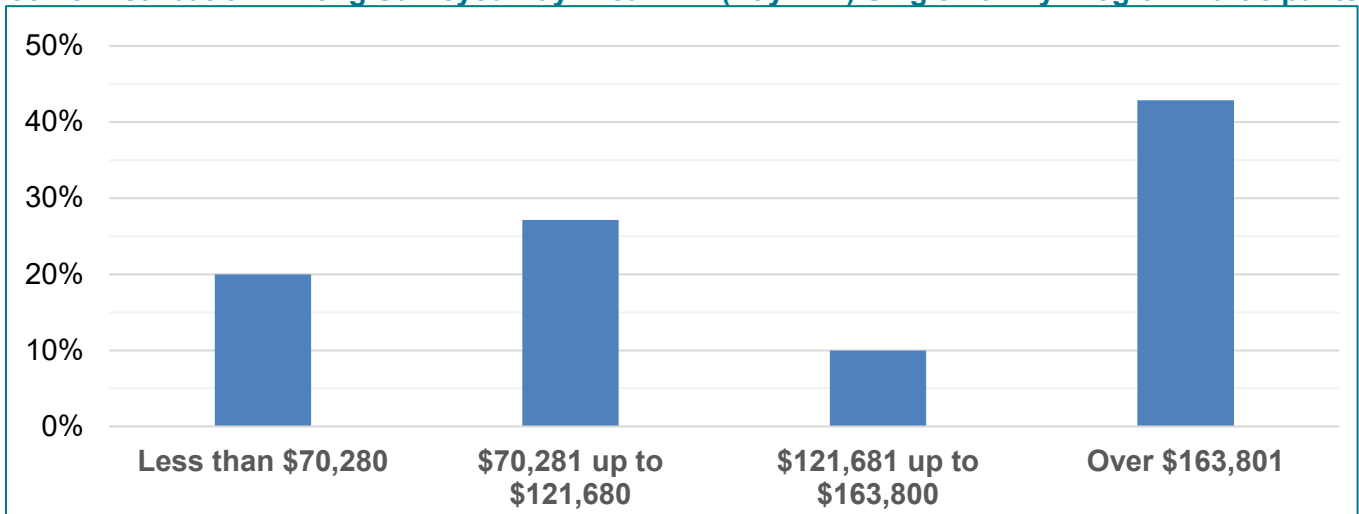
Approximately 98% of REN budgets are not cost-effective, meaning program benefits to the climate, the grid, and ratepayers are lower than the cost to administer and implement the programs.¹¹ This means that for every ratepayer dollar spent on REN programs, ratepayers receive only 27 cents in benefits.¹² While these initiatives may provide benefits for a select group of participants, the increasing burden of high energy bills necessitates a reconsideration of how such programs are funded, ensuring they do not rely on ratepayer contributions.

Furthermore, while RENs were initially established to serve “hard to reach customers,” they are not required to focus on lower-income households. As a result, higher-income homeowners have disproportionately benefited from fully subsidized upgrades, with the costs spread across all ratepayers.

REN budgets have more than tripled in five years and are projected to quintuple by 2027.¹³



Income Distribution Among Surveyed Bay Area REN (BayREN) Single-Family Program Participants¹⁴



3) Reforming Ratepayer Contributions to State Programs

The California Schools Healthy Air, Plumbing, and Efficiency Program (CALSHAPE) has provided grants for school infrastructure improvements, which serve an important purpose. However, its funding has come from the volumetric charges on Californians’ energy bills rather than general tax revenues and does not provide direct grid benefits to ratepayers. This funding mechanism disproportionately impacts low-income customers, as the volumetric charge is the same for all ratepayers across income brackets. Unlike the progressive income tax system typically used to fund state programs, this structure shifts costs onto those least able to afford them.

RECOMMENDATIONS FOR REDUCING CUSTOMERS' UTILITY BILLS

To mitigate rising utility costs while maintaining support for necessary energy programs, the following measures should be implemented:

- **Enhance program oversight** to ensure integration and optimization of program spending to reduce redundancies and apply consistent performance standards across all program administrators.¹⁵
- **Cease approval of ratepayer funding for programs that fail to deliver measurable benefits to ratepayers** – currently, there are approximately 243 energy efficiency programs funded by ratepayers that are not cost-effective.¹⁶
- **Cap energy efficiency program funding to 2020 levels** to prevent unnecessary budget growth and reduce overall costs to ratepayers.
- **Set new requirements for leveraging outside funding to limit ratepayer costs.** Specifically, require program administrators to seek and utilize California Energy Commission programs funded by the California General Fund or other funding sources prior to seeking additional ratepayer funds.
- **Support, strengthen, and expand cost-effectiveness requirements** to prevent ineffective spending and ensure ratepayer funds achieve measurable benefits. Some industry groups have proposed weakening these requirements, leading to an increasing number of exemptions. Without a robust cost-benefit comparison, ratepayers cannot be certain that their dollars are being spent wisely and achieving climate benefits.

ADVANCING CLIMATE AND AFFORDABILITY GOALS

High electric rates not only impact affordability but also discourage adoption of clean energy technologies and impede electrification and decarbonization goals. Research from UC Davis indicates that **for every \$0.10/kWh increase in electric rates, demand for electric vehicle usage drops by 15%.**¹⁷

Cost savings in demand-side programs can lower revenue requirements, and in turn, lower customer rates. To address the affordability crisis facing ratepayers and advance the state's climate and energy goals, it is critical to reevaluate funding sources for programs deemed non-cost-effective if they do not provide real benefits to ratepayers.

The Public Advocates Office represents utility customer interests before the California Public Utilities Commission and other forums. We develop recommendations that advance the state's energy and climate goals in the most affordable ways for ratepayers.

For more detailed information, please contact Mary Flannelly at mary.flannelly@cpuc.ca.gov or visit our website at www.publicadvocates.cpuc.ca.gov.

¹ The EE budgets refer to program years 2021 to 2024 for programs with TRC below 1 reported on CEDARS. Unless otherwise noted, the EE budgets exclude Codes and Standards, EM&V, and administrative costs for all portfolio administrators. For San Diego REN, the budgets include administrative costs while excluding Codes and Standards and EM&V pursuant to Decision 24-08-003. For the two Rural RENs, the budgets include Codes and Standards, EM&V, and administrative costs pursuant to Decision 24-09-031.

² These include PG&E, SCE, SDG&E, and SoCalGas.

³ Demand response programs provide customers incentives in exchange for customers lowering their energy usage during specific times or events. D.23-12-005 authorized budgets totaling \$5.19 billion for 2024-2027. Decision 23-06-055, Table 9, authorizes PG&E, SCE, SDG&E, and SoCalGas to collect \$4.2 billion from program years 2024 through 2027 in rates on behalf of all EE program administrators. Meanwhile, Decision 24-08-003 authorizes SDREN a revenue requirement of \$124 million while Decision 21-11-013 authorizes Inland REN a revenue requirement of \$35 million. In total, the four IOUs would collect \$4.4 billion in rates (based on the original \$84 million Rural REN budget as authorized in D.23-06-055).

⁴ For example, NRDC reported: “The California Energy Commission (CEC) approved a new building energy code that ensures the vast majority of new homes in the Golden State will be built without fossil fuel connections by 2026. Additionally, the new code includes provisions to strongly encourage the replacement of gas rooftop HVAC (heating ventilation air conditioning) units for existing commercial buildings with two-way heat pumps.” Accessed at: <https://www.nrdc.org/bio/merrian-borgeson/california-climate-energy-policy-2024-update>.

⁵ This is based on EE budgets for program year 2025, excluding EM&V, Codes and Standards, administrative costs (those which are separate line items), regardless of program status. These budgets include those of SDREN, Central California Rural REN, and Rural REN North which are under Commission’s review. Data from CEDARS, accessed on March 3, 2025.

⁶ See analysis from the Bank of America Institute Report, “Will rising utility bills increase the heat on consumers?”, pages 4-5. Accessed at: <https://institute.bankofamerica.com/content/dam/economic-insights/utilities-update.pdf>.

⁷ These budget figures for program years 2021 through 2025, regardless of program status, exclude administrative costs (those which are separate line items), Codes and Standards, and EM&V. These figures include the program years 2024 and 2025 budgets for SDREN, Central California Rural REN, and Rural REN North which are under Commission’s review. Data from CEDARS, accessed on March 3, 2025.

⁸ D.23-04-035.

⁹ Specifically, as heat pumps would increase electric load, they could be fitted with direct load-control technologies to reduce demand during peak periods. For an overview, see: <https://www.iea.org/reports/the-future-of-heat-pumps/executive-summary>.

¹⁰ In D.23-06-055, the Commission approved the following EE budgets to be collected in rates: \$3.6 billion for the four large IOUs, \$78 million for Marin Clean Energy, and \$471 million for BayREN, 3C-REN, and SoCalREN. Alongside the updated budgets of \$69 million for the bifurcated Rural RENs and the approved budget of \$124 million for San Diego REN, the Commission has approved a total of \$(471 + 69 + 124) million = \$664 million for the RENs. These budget figures cover the costs of all segments, including EM&V, Codes and Standards, and administrative costs.

¹¹ The percentage of REN budgets being non-cost-effective refers to the budgets for program years 2024 through 2027, excluding EM&V, Codes and Standards, and administrative costs. The budgets are based on the data available on CEDARS, accessed on March 3, 2025, and include the budgets of Rural REN North, Central California Rural REN, and San Diego REN which are currently under Commission’s review. Without including the budgets of Rural REN North, Central California Rural REN and San Diego REN, over 99 percent of REN budgets are not cost-effective.

¹² 0.27 is the average cost-effective score for the following RENs: BayREN, Inland REN, SoCalREN, and Tri-County REN. For Rural REN North, Central California Rural REN, and San Diego REN, their cost and benefit figures are available on CEDARS and are under review as of March 3, 2025. Including these three RENs will lead to an average cost-effective score of 0.26 for all the abovementioned RENs. These cost-effectiveness scores exclude costs and benefits associated with EM&V, Codes and Standards, and administrative costs (those which are separate line items).

¹³ The budget figures cover all program costs, including administrative costs, EM&V, and Codes and Standards, for the following RENs: BayREN, Inland REN, SoCalREN, Tri-County REN, Rural REN North (under review), Central California Rural REN (under review), and San Diego REN (under review). CEDARS data, accessed on March 3, 2025.

¹⁴ Among those surveyed participants who chose to share their income level. DNV, *EM&V GROUP A Regional Energy Networks, Program Year 2022*, May 8, 2024, at 40-41. Available at: https://pda.energydataweb.com/api/view/3969/CPUC%20Group%20A%20REN%20Evaluation%20Report_DNV_FINAL_PD_A.pdf.

¹⁵ The CPUC’s upcoming energy efficiency rulemaking could serve as one potential forum for addressing these issues.

¹⁶ Regardless of programs status. Data available on the CPUC’s CEDARS website, accessed on March 3, 2025.

¹⁷ See presentation of David Rapson, “Electric Vehicles: Demand and Usage”, CPUC En Banc, February 24, 2021. Accessed at: [rates-en-banc_panel-1_updated.pdf](https://www.cpuc.ca.gov/~/media/CPUC/Files/2021/02/24/20210224_EnBanc_Presentation_David_Rapson_Electric_Vehicles_Demand_and_Usage.pdf) (Slide 37).