



The California Public Utilities Commission

Without Improving Its Oversight, the Benefits of Energy Efficiency Programs May Not Be Worth Their Cost to Ratepayers

Background

The CPUC is responsible for regulating public utilities, including the Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company. Energy savings from utilities' energy efficiency programs (efficiency programs) help the State meet its goals to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030. The CPUC supervises the administration of efficiency programs by utilities, sets annual goals for electricity and natural gas savings for each utility's portfolio of efficiency programs (program portfolios), and has established a cost-effectiveness measure that compares program benefits to costs.

Key Recommendations

- The Legislature should consider amending state law to require the CPUC to eliminate funding for chronically underperforming efficiency programs.
- The CPUC should monitor the energy-savings performance of utility program portfolios, proactively identify efficiency programs that are underperforming and eliminate them, track and ensure that utilities implement recommendations to improve efficiency programs, and adjust its TRC calculation to account for participant non-energy benefits.

Percentage of Electric Energy-Savings Goals Achieved by Year and Utility

	2016	2017	2018	2019	2020	2021	2022
PG&E	107%	101%	89%	75%	82%	80%	60%
SCE	107	80	81	65	56	44	45
SDG&E	111	89	150	83	92	68	49

Source: CPUC data.

Note: For each utility's program portfolio, we divided the energy savings by the energy-savings goals. Percentages represent the proportion of the goal each utility achieved.

■ = Utility met or exceeded its energy-savings goal, 100% or greater

Indicates that the utility did not meet its energy-savings goal

■ = 81%–99%, ■ = 51%–80% ■ = 34%–50%, ■ = 0%–33%

Key Findings

- The program portfolios for the four utilities regularly fell short of achieving energy-savings goals and were not always cost-effective.
 - » None of the utilities' program portfolios met their annual goals in at least five of the seven years from 2016 through 2022, and none have met electric energy-savings goals since 2019.
 - » From 2012 through 2022, utilities' program portfolios rarely achieved the CPUC's current cost-effectiveness requirement, indicating that program portfolios' costs outweigh their benefits.
 - » We also reviewed 20 efficiency programs and found that they generally did not achieve expected energy savings and were not cost-effective.
- Although the CPUC is well-positioned to identify and correct deficient program portfolios and efficiency programs, it does not currently monitor whether utilities' program portfolios achieve annual energy-savings goals or are cost-effective.
 - » Instead, it tasked utilities with using this information for future program portfolio planning and does not address underperforming efficiency programs.
 - » This lack of CPUC oversight may result in the State missing opportunities for significant energy savings and greenhouse gas reductions, undermining its progress toward these goals.
- Although the CPUC uses ratepayer dollars to fund independent studies on the effectiveness of efficiency programs, it does not ensure that utilities act on the recommendations or track their implementation to improve those programs, limiting the studies' potential value.
- The CPUC's currently flawed method for measuring cost-effectiveness has likely discouraged utilities' adoption of alternative approaches to achieve energy-savings goals.
 - » Despite best practices recommending that cost-effectiveness measurements should include both participant benefits and costs, the CPUC only accounts for participant costs without accounting for participant benefits.
 - For example, replacing a gas water heater with an electric powered water heater is a fuel substitution method that reduces greenhouse gas emissions.
 - Efficiency programs that use fuel substitution methods often struggle to be cost-effective, in part because they have participant benefits that the CPUC does not account for. Likely as a result, utilities do not use this method widely, and from 2020 through 2022, annual expenditures on fuel substitution programs accounted for just 4 percent or less of utilities' program portfolios.