

Evaluating California's Landmark Utility Transportation Electrification Programs

California is home to the largest utility-led investment in transportation electrification ever evaluated – an initiative aimed at transforming how vehicles are powered across the state. This unprecedented effort includes 14 programs administered by four electric utilities: Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), Pacific Gas and Electric (PG&E) and Liberty Utilities.

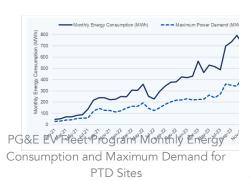
Authorized in 2018 by the California Public Utilities Commission (CPUC), the programs aim to accelerate electric vehicle (EV) adoption and build the infrastructure necessary for a clean, equitable transportation future throughout California. The projects, collectively worth over \$750 million, include:

- Large-scale programs to electrify commercial medium- and heavy-duty vehicle fleets, including drayage trucks, delivery vehicles, and transit and school buses
- Installation of public DC fast charging stations
- Pilots to install EV charging at schools and parks
- A vehicle-to-grid (V2G) pilot demonstration

To understand the real-world impact of these programs, Energetics and Cadmus Group are leading a comprehensive, third-party evaluation. This multi-year effort focuses on analyzing data and outcomes to assess effectiveness, identify challenges and uncover lessons learned – particularly in the context of fleet electrification.

In November 2024, the evaluation team published its third report, highlighting both measurable progress and broader market insights. Among the key findings: by the end of 2023, the utility programs had collectively displaced more than 3 million gallons of petroleum – a major milestone in reducing transportation emissions.

Sample findings from the program analysis





In addition to quantitative outcomes, the report also provides guidance for future transportation electrification efforts by surfacing critical lessons on:

- Barriers to electrification
- Strategies to shorten project timelines
- Approaches to managing long-term operating costs
- Methods for increasing program participation, especially in under-resourced communities

While the programs have already achieved significant progress, the evaluation underscores that further work is needed to reach deployment targets, fully realize the long-term benefits of electrified transportation systems, and ultimately, help the state achieve its clean energy and climate goals.

Energetics is proud to contribute to this work alongside Cadmus, the National Renewable Energy Laboratory (NREL), University of California, Davis, ZMA and Davenergy Solutions. The insights and lessons learned from this effort will support similar initiatives across the United States, helping to inform policy, utility program design and future investments in transportation electrification.



The full set of evaluation reports, including the latest publication, is available on the <u>California Public Utilities</u> <u>Commission website</u>, along with supporting presentations and information about the CPUC's authorization of the transportation electrification programs. Explore the full <u>third evaluation report</u>.



