

# Program Advisory Council Meeting

## Q3 2025

October 30, 2025



Together, Building  
a Better California

# Agenda

Introduction   Agenda   Safety	1 minute
Meeting Timeline   Market Update	3 minutes
EV Good News!	6 minutes
EV Fleet Update	15 minutes
EV Fast Charge Update	5 minutes
EV Charge Schools Update	10 minutes
EV Charge Parks Update	6 minutes
EV Advisory Services (EVAS)	8 minutes
LCFS 2026 Implementation Plan Update	10 minutes
VGI Pilots	5 minutes
Microgrid Pilot	10 minutes
Conclusion	1 minute



## Halloween Safety Tips



Don't keep candles burning in Jack-o'-lanterns or luminaries. Consider using battery operated 'flame impostors'.

Try opting for an alternate pumpkin activity by not carving and rather painting or decorating them with stickers.

Look for flame-resistant costumes, wigs, and accessories, and make sure your costume is the proper length and fit.

If applying face paint, be careful around the eyes and test for any skin allergies before using it.

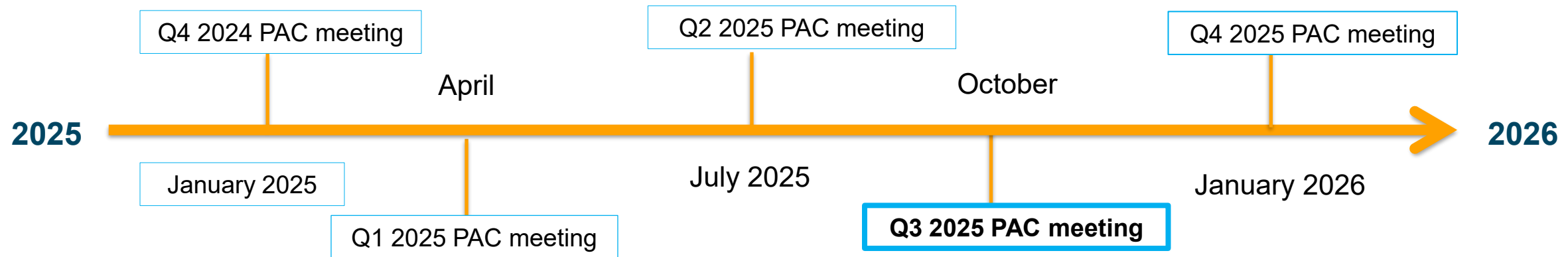
Avoid using contact lenses that alter the look or color of your eyes as they can be hazardous to your eye health.

Use a flashlight, LED light, or apply reflective tape to your costume to see and be seen by others especially cars.

If you wear a mask, test for full visibility out of the eye holes and proper breathability.

## Overview

- PG&E has expanded our efforts on transportation electrification (TE) with several filings, pilots and programs in progress
- CPUC has directed PG&E to consult a Program Advisory Council (PAC) in the development of key TE pilots and programs to gain feedback from industry stakeholders
- This platform will serve to gather insight and feedback on PG&E's proposals and ongoing programs



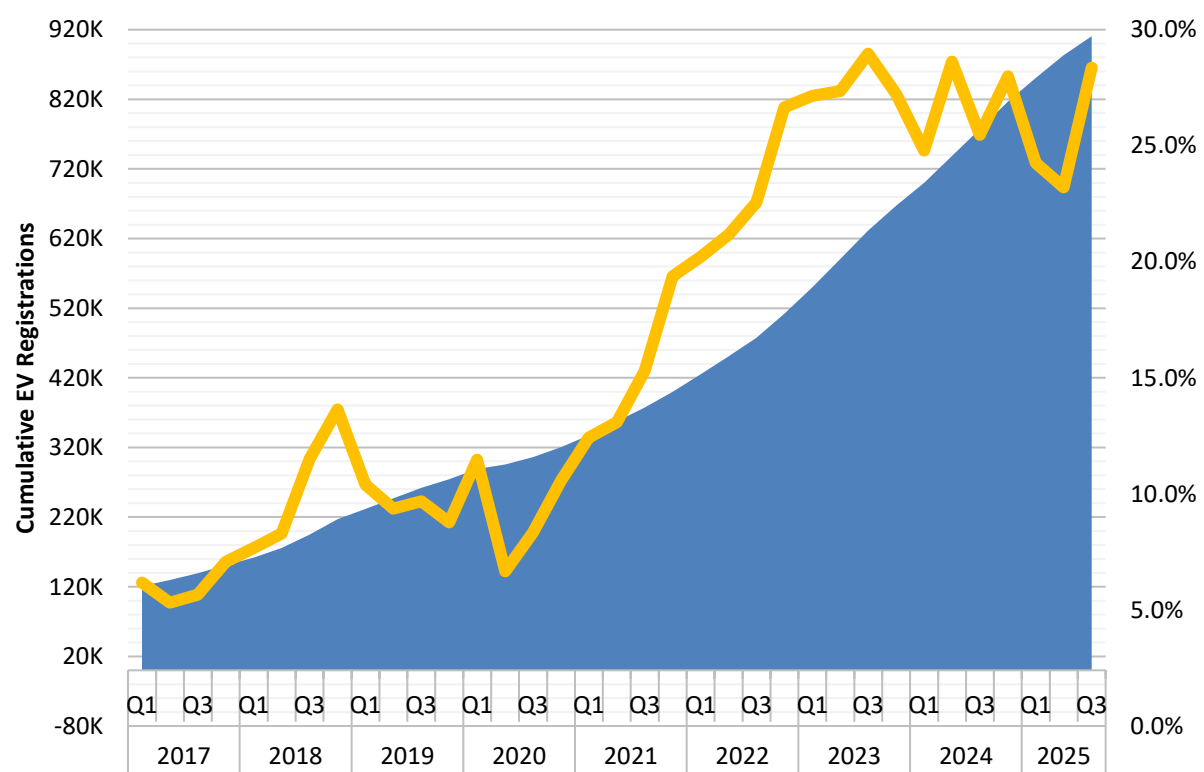


# EV Market Update

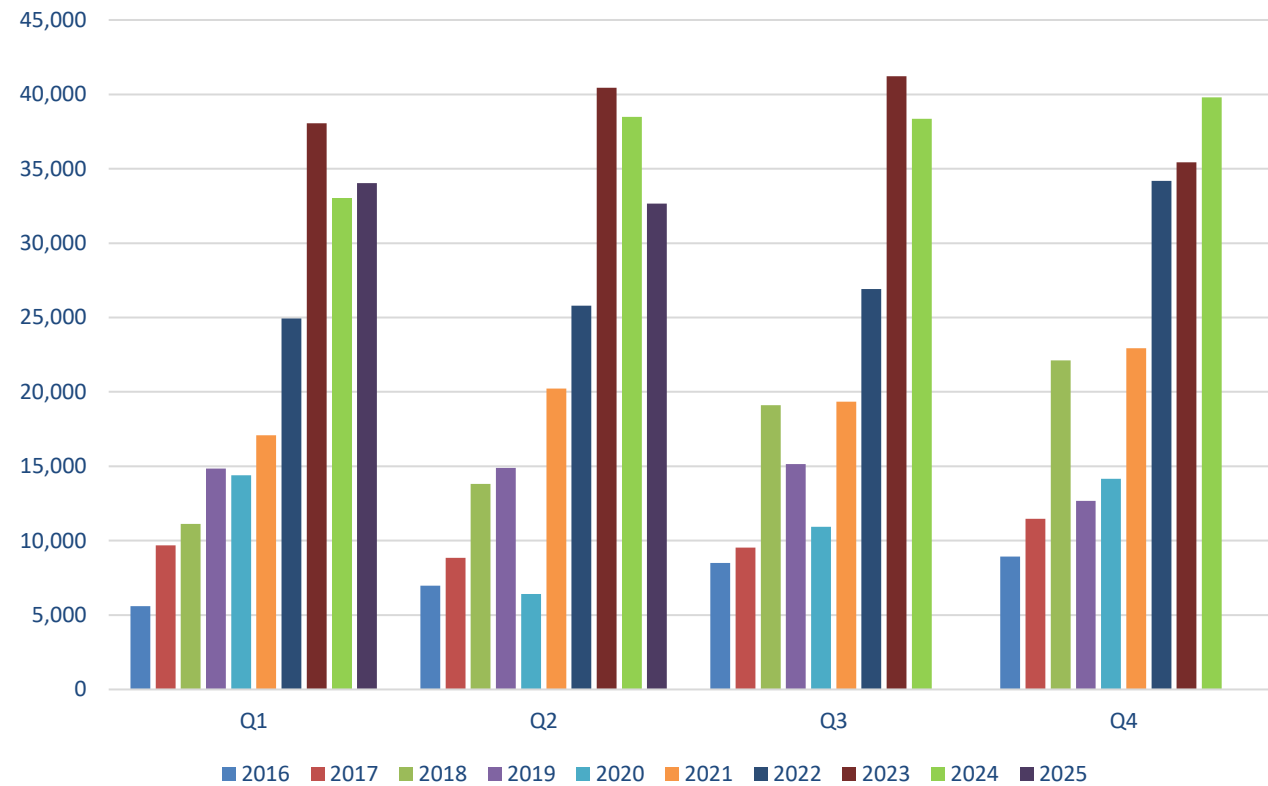
897,031

EVs registered in PG&E service territory through August 2025

Cumulative New EV Registrations PG&E Service Territory



New EV Registrations by Quarter



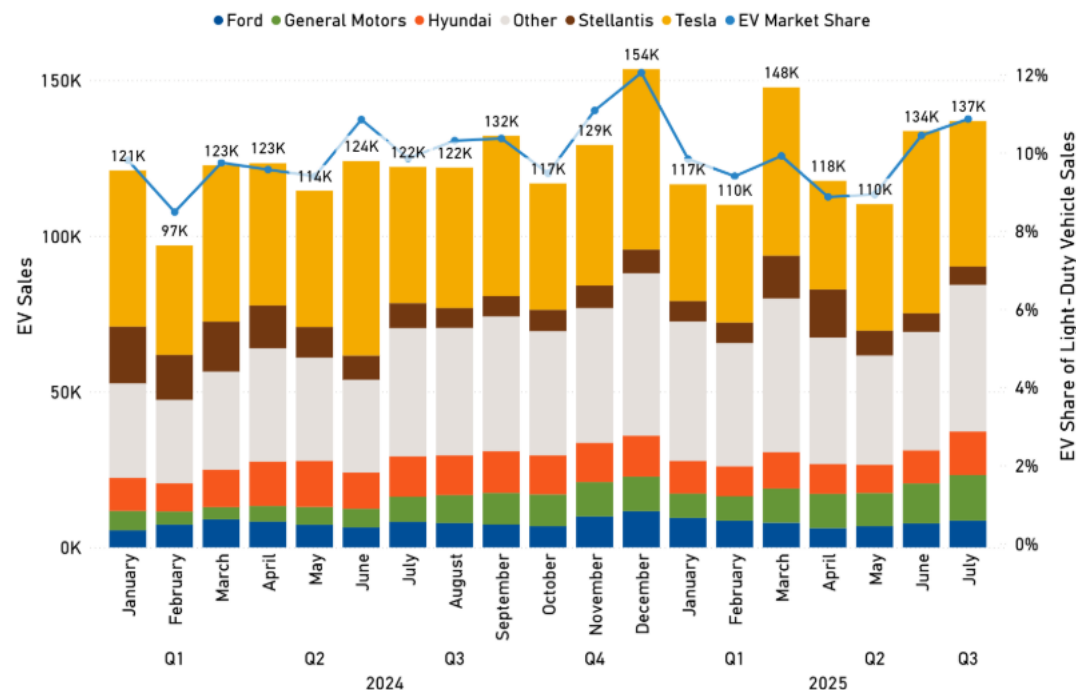
Source: EPRI, Based on external registration data through August 2025



# EV Good News!

## EV Market Share Reaches 10.9% in July 2025

U.S. New Light-Duty BEV and PHEV Sales and Share of Light-Duty Sales



**Colorado** and **California** lead the nation, with **EVs** accounting for **28%** of **new vehicle sales** in each state.

EV market share in PG&E service territory has continued to increase in 2025, despite federal incentive rollbacks. In July 2025, **EVs** accounted for **30%** of **new vehicle sales** in **PG&E service territory**.

# SB 350 Standard Review Projects



Together, Building  
a Better California

# EV Fleet Updates



Together, Building  
a Better California



# EV Fleet Program Update

## Status as of 9/30/2025

	Sites	MDHD EVs Committed
Applications	798	-
Viable Contracts <sup>1</sup>	375 <sup>2</sup>	7,134
Construction Complete	155	3,709
Activated	132	2,662

<sup>1</sup>Viable contracts are all contracts signed to date excluding cancelled and withdrawn.

<sup>2</sup> Does not reflect approximately 30 contracts that have expressed intent to cancel their project.

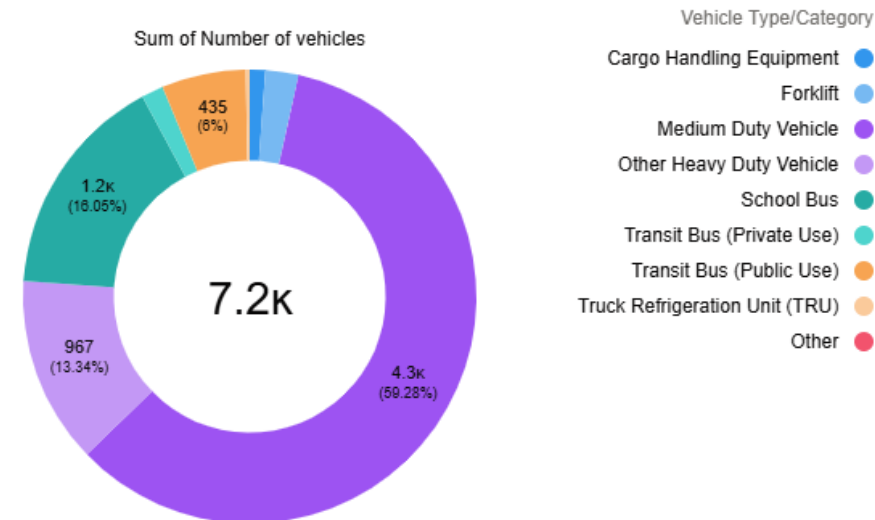
## Program Budget Overview

Spend-to-Date	Remaining Funds
\$83.1M	\$153.2M

## Lessons Learned/Best Practices

- Program has strong momentum with 141 applications currently being assessed for program eligibility, 28 of which applied for the waitlist.
- Transit participation has lagged compared to other market segments, leading to a surplus of dedicated transit agency budget. The program is continuing to conduct targeted outreach to transit agencies to support electrification, and plans to request a goal modification from the CPUC.

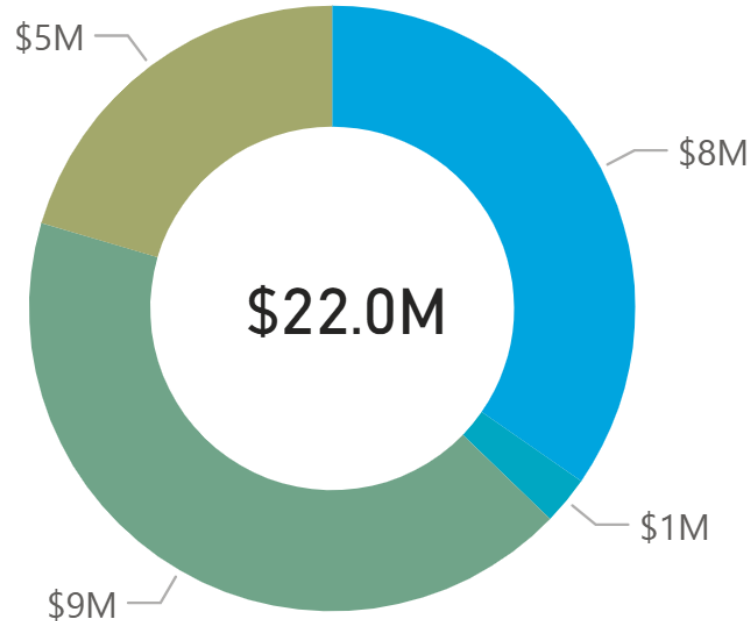
## Viable Contracts: Vehicle Type



## Program Highlights

- Program has exceeded its vehicle target (6,500 vehicles), on track to meet updated site goal of 375 sites
- 167 of the 375 signed contracts **(45%) are in DACs**
- Signed 30 contracts in Q3, supporting 336 vehicles
- Program is seeing a **diverse mix of vehicle types**; medium duty vehicles are dominant due to various applications, availability, operational compatibility; school buses, heavy duty vehicles, and transit buses are also successfully enrolling in the program

# EV Fleet Transit Update



## Stage

- Available Transit Funds
- Cancellation Pending
- Committed
- Fully Invoiced

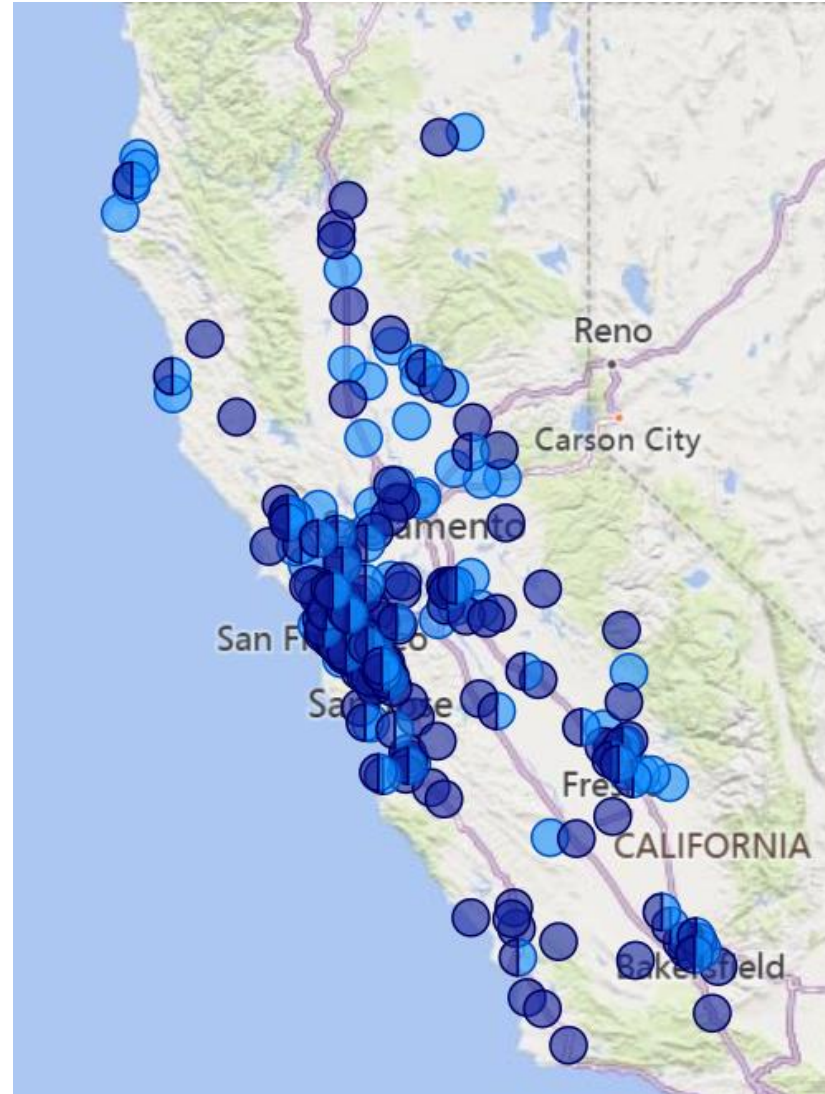
- **Transit enrollment** has lagged despite several strategies to accommodate transit projects, including:
  - Targeted outreach to ensure awareness
  - Exceptions to project cost threshold
  - Exceptions to construction timelines
- **Strategies under consideration:**
  - **Goal modification** - EV Fleet plans to submit an Advice Letter requesting a goal modification to reduce the dedicated transit budget from 15% to 8% of the infrastructure budget (\$22M to \$12M).
  - **Increased BTM incentives**
- **Continued transit prioritization** - EV Fleet will continue to reserve \$22M through the program application deadline of June 30, 2026, and will prioritize transit projects. Any budget that is not reserved by transit agencies will then be reallocated to projects on the waitlist.
- Please email additional feedback to [sarah.knight@pge.com](mailto:sarah.knight@pge.com)

# EV Fleet Construction and Activation

Activated sites and sites in construction by zip code

**Status**

- Activated Site
- Contract Signed



# EV Fast Charge



Together, Building  
a Better California

# EV Fast Charge Program Update

## Status as of 9/30/2025

	Sites	Ports
Applications	272	1,225
Contracted Sites <sup>1</sup>	39 <sup>2</sup>	204
Constructed	33	164
Activated	33	172

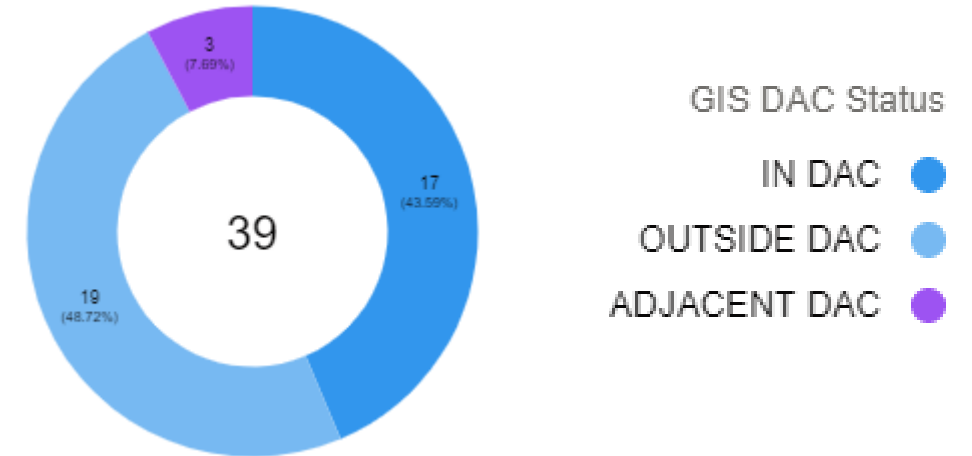
<sup>1</sup>Contracted sites counts excludes cancelled projects.

<sup>2</sup> Does not reflect 2 contracts that were cancelled.

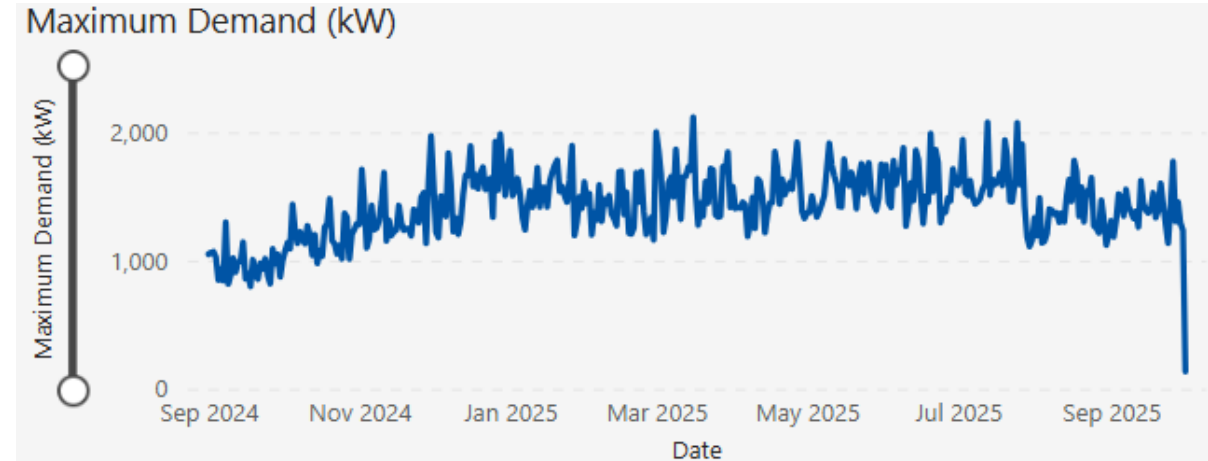
## Program Budget Overview

Spend-to-Date	Remaining Funds
\$20.8M	\$1.6M

## DAC Targets: Signed Contracts



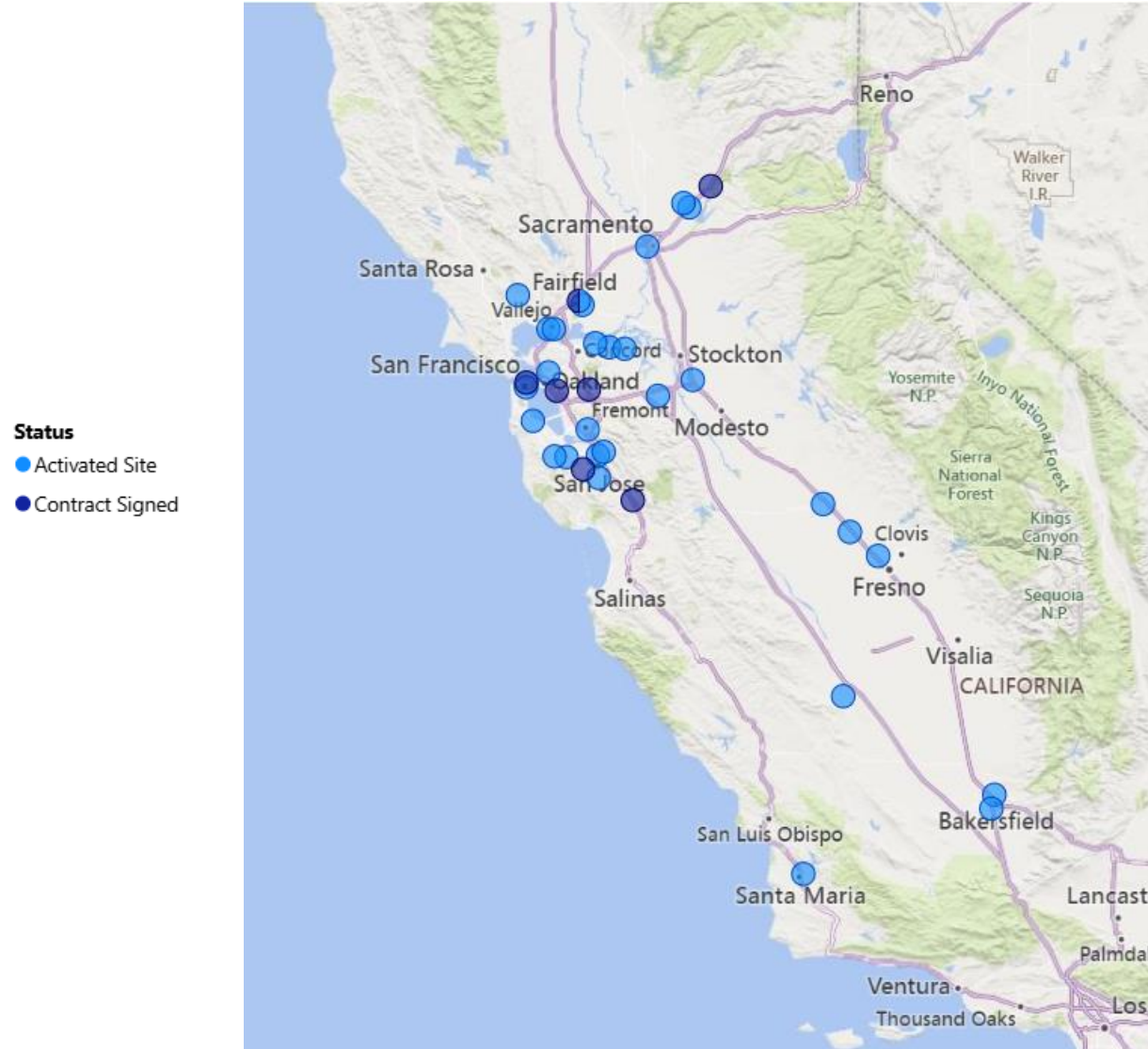
## Portfolio-wide Utilization Trends



Source: SRP Evaluation Dashboard

# Fast Charge Sites Contracted and Activated

Activated sites and sites contracted by zip code



# AB1082 & AB1083 Standard Review Projects



Together, Building  
a Better California

# EV Charge Schools & Parks Update



Together, Building  
a Better California



## Status as of 9/30/2025

	Sites	Ports
Applications	78	468
Contracted Sites	15	90
Constructed	15	90
Activated	13	78

## Program Budget Overview

Spend-to-Date	Remaining Funds
\$5.4M	\$390K

## Lessons Learned/Best Practices

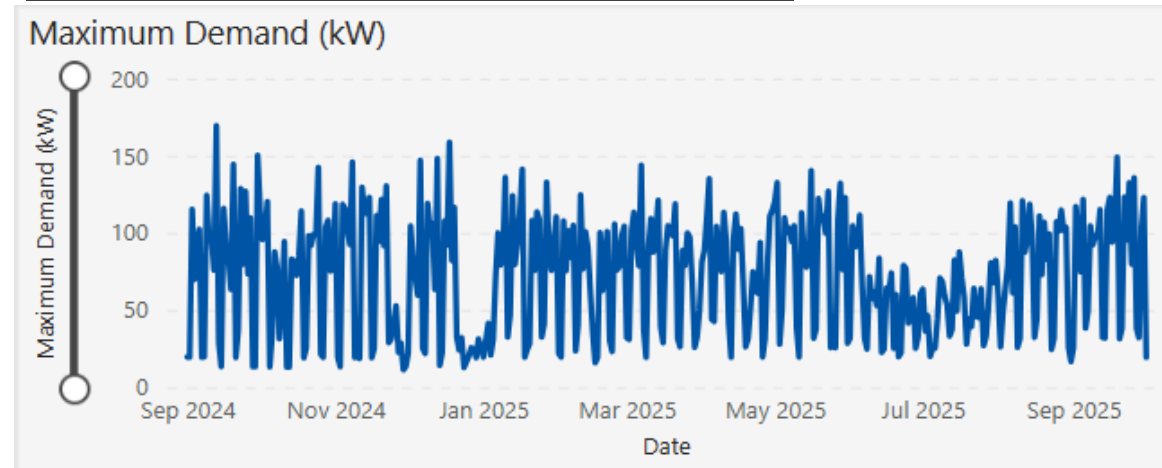
- Asking educators to learn and teach students about the EV Curriculum, on top of their other responsibilities, proved to be challenging without additional support.
- Survey feedback from schools stated additional funding would be extremely helpful and allow for expansion of sites.

## Program Updates

- Final site completed in September
- EV Curriculum available online to every K-12 school in PG&E territory

<https://www.energizeschools.org/evcurriculumportal.html>

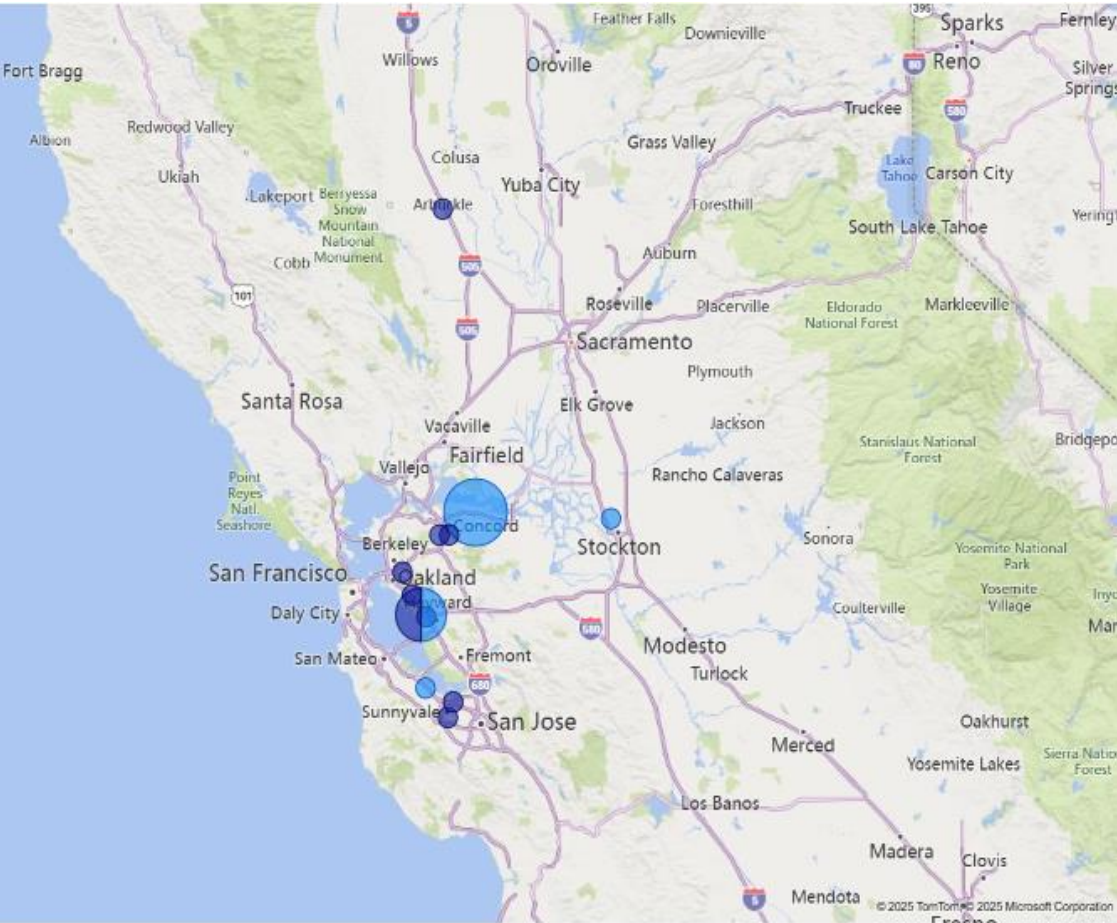
## Portfolio wide utilization



Source: SRP Evaluation Dashboard

Sites with signed contracts\*

**DAC Status**  
 ● IN DAC  
 ● OUTSIDE DAC



\* 3 DAC sites within same zip code

	In DAC	Outside DAC	Total
Contracts	6	9	15
Ports	36	54	90
DAC Percentage	40%	60%	100%

- Schools provided an overall recommendation score of 9.1 out of 10
- Schools rated program safety a 9.5 out 10
- A few survey responses, demonstrating impact of the program:
  - “This program has been very valuable to our district and staff use of the charging stations is growing at a rapid rate.”
  - “This is a great program that gives districts the opportunity to install EV chargers even when their budget may not have that included.”
  - “We hope to increase our EV charging station count in the near future with additional sites.”



Photos of EV Curriculum presented during a high school workshop at Levi's Stadium



# EV Charge Parks Program Update

## Status as of 9/30/2025

		Sites	Ports
Applications		131	0
Contracted Sites		6	54
Constructed		0	0
Activated		0	0

## Program Budget Overview

Spend-to-Date	Remaining Funds
\$952K	\$4.6M

## Lessons Learned / Best Practices

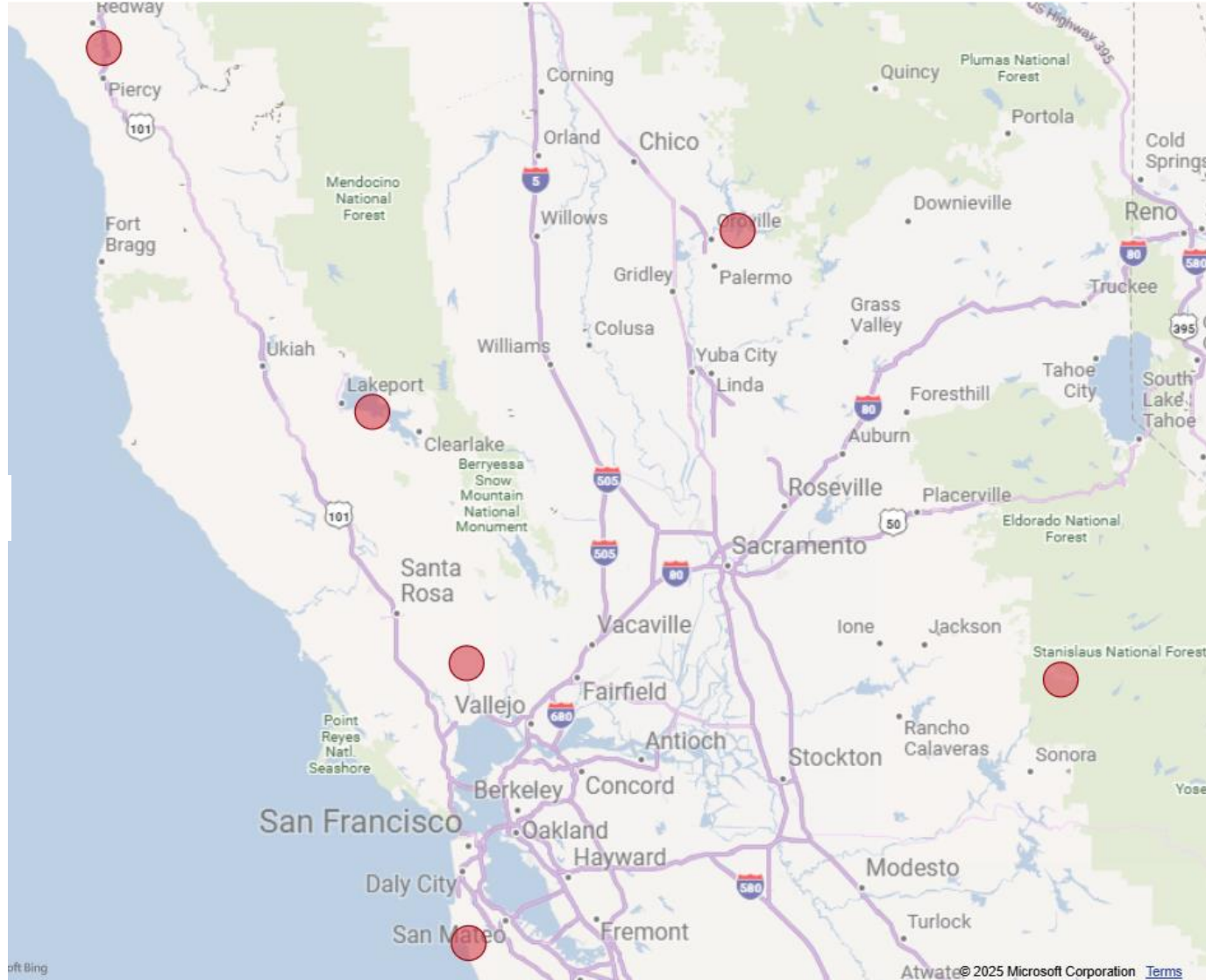
- Each Parks' district acts as its own AHJ, approving permits and performing CEQA reviews, which will lengthen permitting timelines.

## Program Update

- Tier 1 AL approved, allowing the installation of DCFC and EVSP ownership of the chargers.
- Program in process of contracting with an EVSP.
- Calaveras Big Trees site in permitting phase.
- Aligning with Parks Dept. on Right of Entry permit approach.



## State Parks in PG&E Service Territory



Public

# EV Advisory Services (EVAS)



Together, Building  
a Better California

# EV Advisory Services (EVAS)

## Status as of 9/30/2025

Program to-date	Total
Sites Served	335
Unique Customers	79

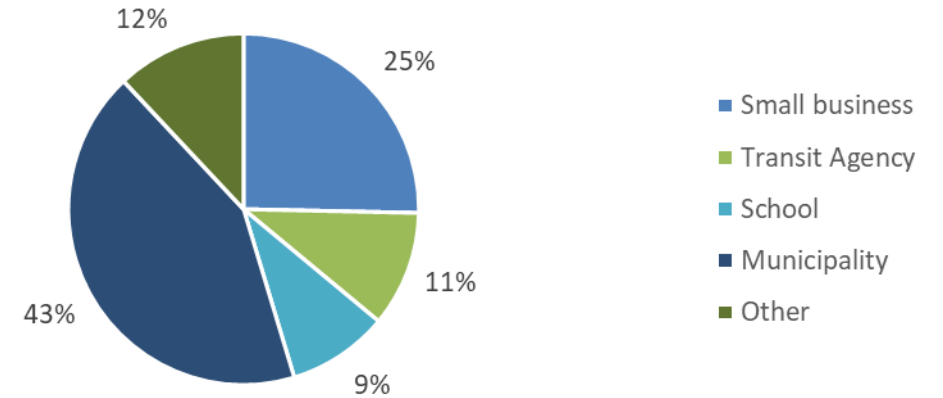
## Program Budget Overview

Spend-to-Date	Remaining Funds
\$2.34M	\$16.43M

## Program Updates

- Program has been renamed to EV Advisory Services (EVAS) to avoid confusion with EV Fleet
- Plan to request extension of program, either via Rule 16.6 extension request or Tier 3 AL
- Launched new Fleet Electrification Guidebook and Fleet Planning Tool
- Have begun delivering post-energization services to customers (load management and rate selection)

## Customers Served by Segment



## Lessons Learned and Key Findings

### Customers do not expect to go to their utility for advising, so outreach strategy is critically important

- Emphasize no cost and no obligation to participate
- Simplify sign up process, detailed applications make customer feel like they're making a big commitment
- Educate customers on when/how the program can help (not just for late-stage planning)

# Additional Program Updates



Together, Building  
a Better California









# LCFS 2026 Implementation Plan Update



Together, Building  
a Better California



# PG&E Current LCFS Portfolio Overview

2021 Implementation Plan	<b>Pre-Owned EV Rebate Program</b> Post-purchase rebate for pre-owned EVs. \$1,000 base rebate, \$4,000 for income-qualified customers		<b>\$86.6M</b> 2022-2026	Active (launched Feb 2023)
	<b>MFH + Small Business Direct Install Pilot</b> Install low-power chargers (Level 1 and Level 2) at multifamily and small businesses with capacity on panel		<b>\$25.2M</b> 2022-2027	Active (launched Jun 2023)
	<b>Residential Charging Solutions Pilot</b> Educational resources and financial support to install residential EV charging and avoid panel upgrades		<b>\$7.3M</b> 2023-2026	Active (launched Nov 2023)
2023 Implementation Plan	<b>Affordable Public Charging</b> Public EV charging credit to income-qualified customers via a prepaid debit card		<b>\$28.8M</b> 2025-2028	In Development
	<b>Residential Charging Solutions Expansion</b> Offer upfront cost reductions through contractors or after-the-fact rebates for panel upgrades and circuit extensions		<b>\$19.3M</b> 2025-2028	In Development
	<b>Resilient Fleet</b> Provide an online playbook on resilient charging solutions, targeted at critical customers looking to electrify their fleets		<b>\$2.5M</b> 2025-2028	In Development
	<b>Capacity Pilot</b> Fund grid capacity upgrades related to medium & heavy-duty electric vehicle charging in equity communities		<b>\$20.0M</b> 2025-2026	Active (started Sept 2025)

Public

# Program Ideation

## Key customer barriers/pain points:

- Continued high upfront costs for vehicles and charger installs and diminishing market support
- High PG&E rates erode ongoing savings
- Complexity of install process for commercial properties/need for support and expertise to navigate timelines, capacity challenges, cost overruns
- Lack of education around load management/managed charging to save money



## How we arrived at these ideas:

1. Sourced 65 brainstormed ideas across CET using pain points and experience from existing programs
2. Assess fit with strategic priorities:
  1. Affordability
    1. Offer opportunities for reduced charging costs
    2. Transition non-res portfolio from ratepayer funds to LCFS
    3. Produce downward pressure on rates for all customers by accelerating EV adoption
  2. Experience
    1. Create suites of solutions rather than several individual programs
    2. Support current suite of res programs and gather learnings for bigger changes in next plan



# Building a Comprehensive Portfolio

We want to assist customers at every step of their EV journey.

## Residential

Upfront vehicle purchase	Upfront charger install	Ongoing cost to charge
Pre-owned EV Rebate	Charger incentive (RCS)	Public charging incentive (APC)
	Panel upgrade incentive (RCS)	EV Rates, CARE Rate
	MFH charger installation (MSDI)	Managed Charging incentive

## Non-Residential

Upfront vehicle purchase	Upfront charger install	Ongoing cost to charge
CCFR	Rule 29	BEV Rate
	Behind-the-meter incentive	
	Automated Load Management incentives	
Advisory Services*		

Resilient Fleets

LCFS-funded offering   New LCFS proposal   Non-LCFS-funded offering   In-development or proposed offering

RCS: Residential Charging Solutions. MSDI: Multifamily & Small Business Direct Install. APC: Affordable Public Charging. CARE: California Alternative Rates for Energy. CCFR: California Clean Fuel Reward (funded by other utility LCFS proceeds). BEV: Business EV. // LCFS-funded Capacity Pilot not shown.

# Additional Holdback Programs – In-Development

Res

## Residential Managed Charging

Problem: High rates erode savings over gasoline; uncoordinated charging can negatively impact the grid

- Scaled version of managed charging pilots allows us to test optimizing many more customers, better measure the value to PG&E of VGI, and engage market partners like OEMs.
- Program will provide a monthly credit or discount in exchange for PG&E optimizing their charging.

~\$30M  
2027-2028

Non-residential suite

## Non-Res Advisory Services Expansion\*

Problem: Customers often struggle to understand how to move an electrification project forward.

- Comprehensive support throughout each stage of the EV customer journey and is an entry point for other PG&E services (including Rule 29, rates, and the programs below).
- Uncertainty around TEF TA; no advisory services for customers without MDHD fleets.

~\$8M  
2027-2029

## Non-Res Behind-the-Meter Infrastructure Incentive

Problem: High costs for upfront charging install; BTM costs will remain steady even as vehicle prices drop

- Upfront incentives to drive toward cost parity for non-Res EV projects. UC Davis Truck Choice Model data shows that BTM incentives lead to 2-3x MDHD EV sales.
- EV Fleet sunsets in 2026; Rule 29 covers TTM but not BTM.

~\$22M  
2027-2028

## Medium/Heavy Duty Fleet Automated Load Management

Problem: Only 17% of EV Fleet customers use any load management, even though it reduces customer costs

- Develop education and incentives to support customers adopting automated load management
- ALM can reduce customer operating costs from decreasing upfront capacity needs and avoiding on-peak charging. It can also reduce impacts and costs to the grid.

~\$8M  
2027-2029

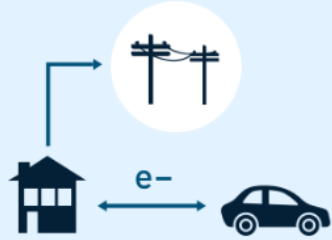
# VGI Pilots



Together, Building  
a Better California

# Vehicle to Everything (V2X) Pilots ([www.pge.com/vgi](http://www.pge.com/vgi))

## Pilot #1: Residential

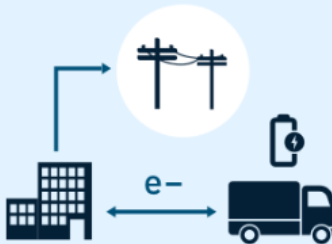


**Enrollment:** We have 4 customers enrolled. There are still 246 Early Bird Incentives available!

### Eligible Equipment:

- Ford 80 Amp Charge Station Pro and Sunrun Home Integration System paired with the Ford F-150 Lightning
- GM Energy PowerShift e1.19 and V2H Enablement Kit paired with the Chevrolet Silverado EV, Equinox, or Blazer, GMC Hummer EV or Sierra, or Cadillac OPTIQ, VISTIQ, ESCALADE IQ, or LYRIQ

## Pilot #2: Commercial

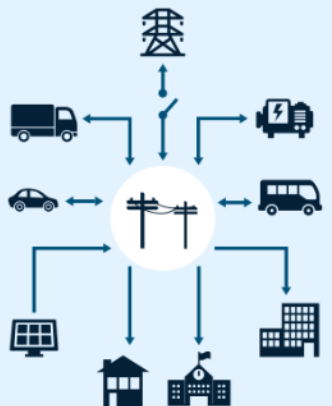


**Enrollment:** One customer with 74 chargers enrolled and able to export.

### Eligible Equipment:

- Tellus Power bidirectional chargers paired with BYD-RIDE School Buses
- Micro Bird and Blue Bird school buses paired with the Borg Warner RES-DCVC60-480 charger
- Nissan Leaf paired with Fermata Energy FE-20

## Pilot #3: Microgrids



### Phase 1 - Testing Cohort / Redwood Coast Airport Microgrid:

- Islanded test of Frequency Control Scheme for bidirectional chargers successfully completed
- Estimated completion of Phase 1 Q1 2026

### Phase 2 – Incentive Cohort

- Open enrollment began Q4 2024

### Eligible Equipment:

- Nissan Leaf paired with Fermata Energy FE-20

# Microgrid Pilot



Together, Building  
a Better California



## Pilot #3: Microgrid Pilot

### Phase 1 - Testing Cohort / Redwood Coast Airport Microgrid:

- **(Update)** *First ever* demonstration of automated frequency capabilities for electric vehicles and bi-directional chargers successfully integrated with a multi-customer microgrid
- Status: Four FE-20 chargers installed (one replacement pending), microgrid settings updated and ready for full energization
- Estimated completion of Phase 1 - Q1 2026

### Phase 2 – Incentive Cohort

- Original scope: open incentives to <200 eligible customers
- **(Update) Proposed scope change:** early offramp of Phase 2 replaced by Hybrid Support Model
- Regulatory proceedings: Supplemental Advice Letter submitted to Energy Division requesting approval for Phase 2 offramp - currently pending resolution



## Accomplishments – Frequency Droop Test

### How it works?

- 1) For normal operation, the EVs are charged and discharged under the control of the Fermata Energy cloud controller.
- 2) When the frequency seen by the chargers exceeds the upper or lower limit of the frequency deadband, the charge commands are generated by the FE-Link unit, overriding the FE cloud commands

### Why this matters?

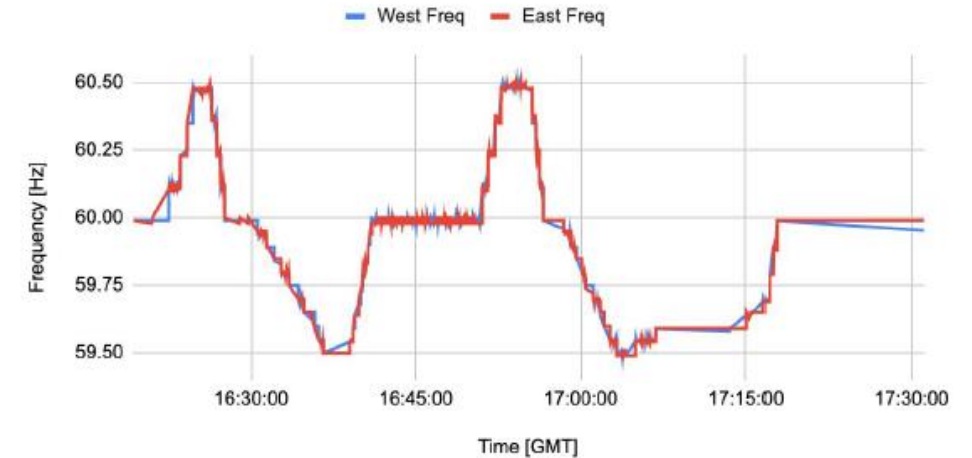
- Grid Stability During Islanding
- Coordinated Response from EVs
- Resilience During Outages
- Autonomous Operation
- Scalability Across Diverse Microgrids

### Frequency-droop test results

Both Test 1 and Test 2 (C1/C2) showed the chargers would go from STANDBY to CHARGING (for OF conditions) or DISCHARGING (for UF conditions) based solely on the measured value of the frequency, without command or other control required

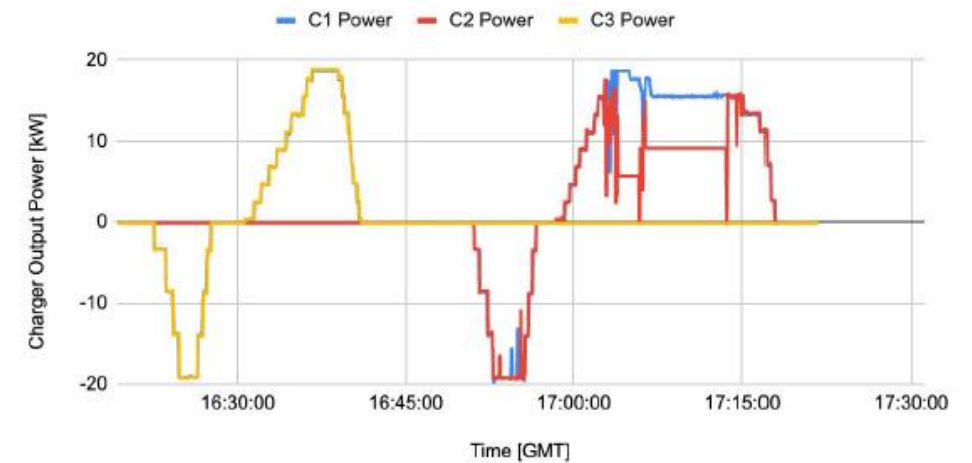
### Combined Test 1 and Test 2

June 9, 2025 (showing both RCAM West and RCAM East power meter readings)



### Combined Test 1 and Test 2

June 9, 2025 (showing output power of all three chargers)



## Challenges Facing Phase Implementation

### Limited Participant Pool

- Early-stage V2G market and misalignment of microgrid readiness and equipment limit participant involvement.

### Smaller than anticipated microgrid pervasiveness

- Only one multi-customer microgrid operational; community/multi-customer microgrid pervasiveness and timelines create scheduling uncertainty.

### Logistical Issues

- Federal funding delays, certification delays, firmware issues, and infrastructure problems slow project progress.

### Hardware and Testing Problems

- Chargers faced operational issues, firmware issues lead to test failures, and outages damaged chargers stopping data collection.

## Lessons Learned

- Convey Technology Maturity and ecosystem readiness in initial regulatory filings
- Milestone-Based planning over fixed timelines
- Strategic vendor engagement and redundancy
- Need for regulatory Off-Ramps and pilot exit criteria
- Technology specific implementation learnings





## Proposed Hybrid Support Model

### Scope Change Proposal

PG&E proposes ending Phase II open enrollment and implementing the Hybrid Support Model to reduce costs and align timelines with Community Microgrid operational readiness.

### Hybrid Support Model

Staff will provide technical consultancy funded by non-pilot resources, supporting Community Microgrids in collaboration with Microgrid Incentive Program (MIP) during technology maturation.

### Cost and Enrollment Management

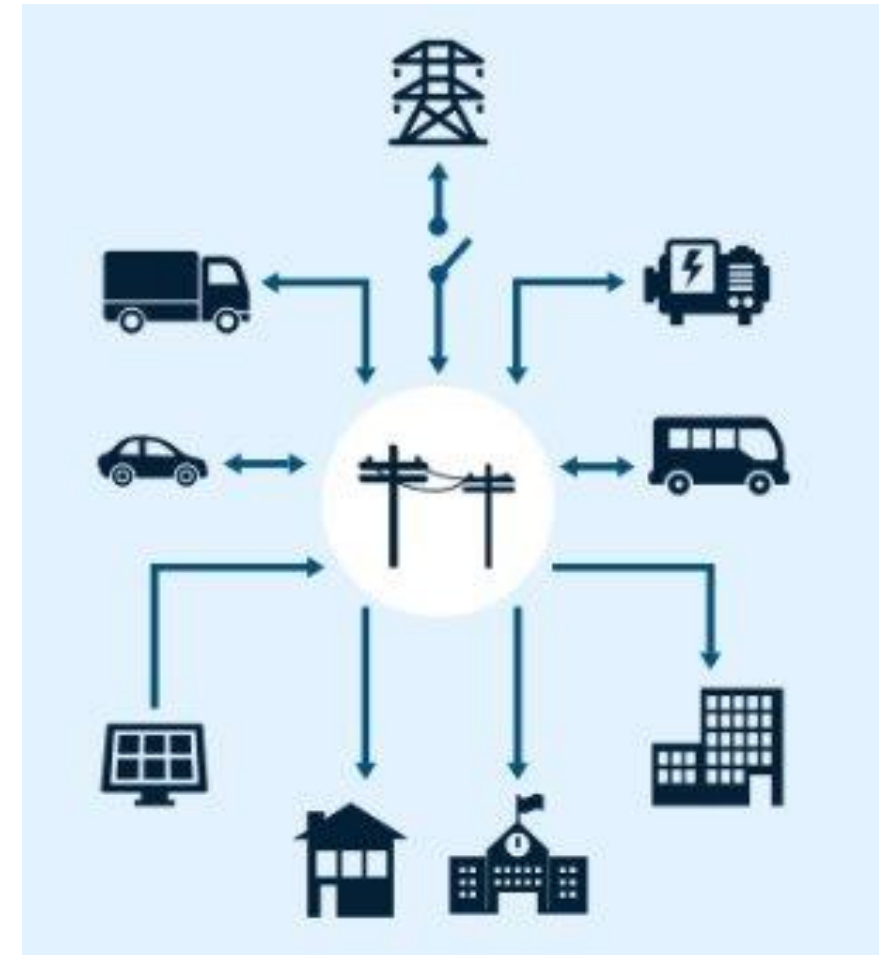
Closing open enrollment of Phase II and returning unused incentives helps avoid unnecessary operational costs and project delays.

### Key Objectives

Complete Phase I, support Community Microgrid and MIP activities for 2-4 years, and facilitate knowledge transfer and V2X readiness.

### Regulatory Pathway to Implementation

PG&E Submitted a Supplemental Advice Letter and a Data Response to Energy Division detailing the above proposal. Currently pending ED resolution.



# Conclusion



Together, Building  
a Better California

