

# Program Advisory Council Meeting

## Q3 2022



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# Agenda

<b>Safety / Introductions</b>	10 Minutes
<b>EV Market Update</b>	5 Minutes
<b>Schools and Parks Programs Updates</b>	10 Minutes
<b>EV Fast Charge Program Updates</b>	10 Minutes
<b>EV Fleet Program Updates</b>	10 Minutes
<b>Additional Program Updates (VGI and Empower EV)</b>	10 Minutes
<b>Questions</b>	20 Minutes

- Fall is the time when kids return to school, the weather begins to change, and driving conditions can vary day to day.
- Be sure to:
  - Refresh your memory on school bus laws as they are now back on the road following summer break
  - Assess your vehicles condition and preparedness for the new season
  - Exercise extra caution as conditions, weather require

## BACK-TO-SCHOOL SAFETY

- ▶ Respect crossing guards.
- ▶ Share the road with school buses, pedestrians, and bikers.
- ▶ Know the school-bus laws: Stop when they stop to collect or drop off children, no matter where you are on the road. Opposing traffic must also stop.



## FALL CAR CARE

- ▶ Replace your wiper blades. Autumn driving hazards include rain and falling leaves that may obscure vision.
- ▶ Clean and replace any dimmed or burnt out lights.
- ▶ Test your defrost and heater to make sure they are in working order.
- ▶ Check and top off your coolant levels. This is best to do during the cold months.
- ▶ Check all fluid levels. While you're there, make sure everything else is topped off.
- ▶ Have your battery checked before the cold months arrive.



## FALL DRIVING TIPS

Follow these seasonal tips to avoid accidents, this fall.

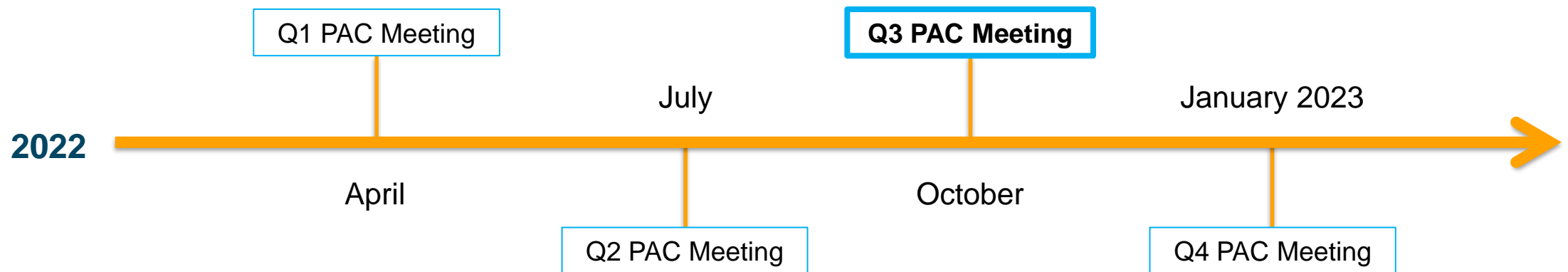
- ▶ Be cautious when braking on leaves. If they are wet from rain or dew, they become very slippery.
- ▶ Adjust your drive time according to daylight savings. Avoid driving in the dark, as more fatal accidents occur then.
- ▶ Use sunglasses in the morning and evening to avoid sun glare, which is most common in autumn.



# Clean Transportation Program Advisory Council

## Overview

- PG&E has expanded our efforts on transportation electrification, with a number of filings, pilots and programs in progress
- CPUC has directed PG&E to consult a Program Advisory Council 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



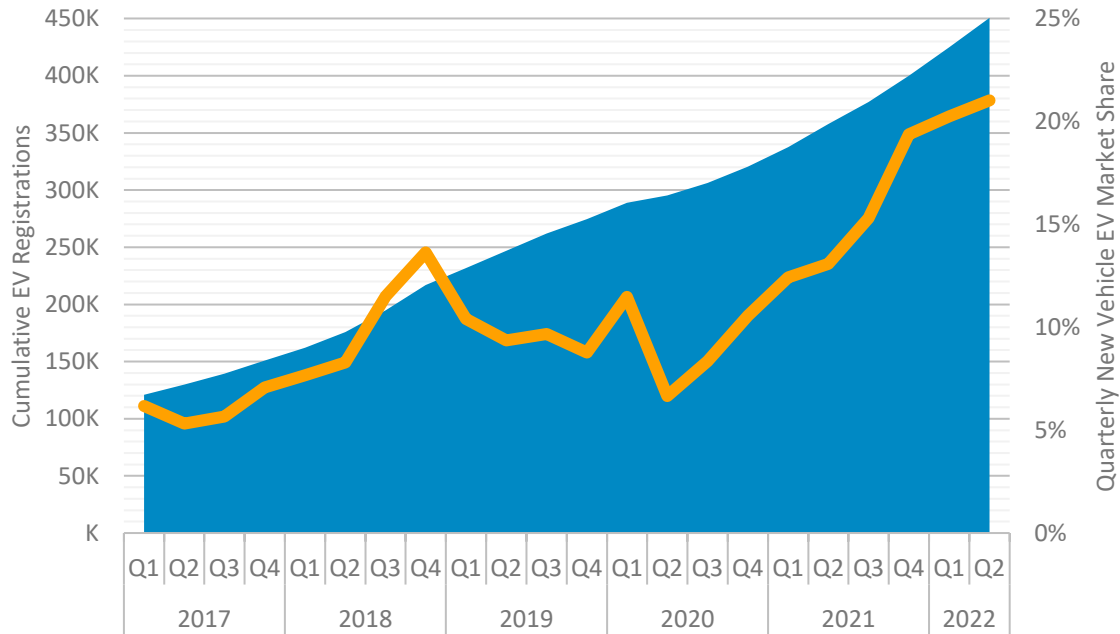


# EV Market Update

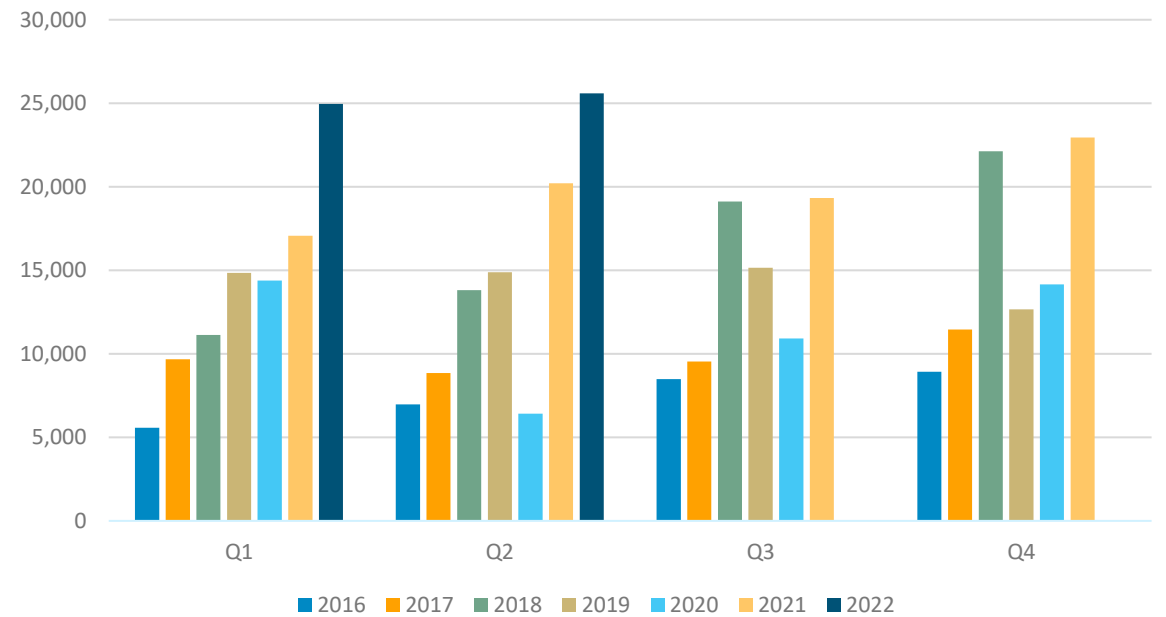
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**EVs registered** in PG&E service territory, through June of 2022

### Cumulative New EV Registrations PG&E Service Territory



### New EV Registrations by Quarter



# SB 350

## Standard Review Projects



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# EV Charge Schools & Parks Update



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- In support of AB 1082, EV Charge Schools will install **L2 charging infrastructure for passenger vehicles** at school facilities and educational institutions in support of CA's electrification goals.

## Program Summary

**Offering:** Make-ready infrastructure for L2 charging infrastructure for passenger vehicles at schools.

**Amount:** Rebates up to \$11,500 (L2 single)/up to \$15,500 (L2 dual) for schools program or utility sponsored

**Model:** Utility owned make-ready + customer or PG&E owned EVSE

**Budget:** \$5.76M from 2021 - 2023

**Scope:** up to 22 schools, range of 88-132 L2 ports

**Equity:** 40% of school project sites



PG&E pays for and owns "make-ready" infrastructure



## Status as of 9/30/22

	Sites	Ports*
Applications	66	396
Contracted Sites	13	78
Pre-Construction	3	18
Constructed	1	6
Activated	1	6

## Program Updates

- Broke ground on first site in June 2022 and that site was activated in Q3 2022
- EV Curriculum complete
  - Virtual curriculum training for schools in the program held in October 2022
  - Recorded training + curriculum to be made available to every K-12 school in PG&E territory

## Program Budget Overview

Spend-to-Date	Remaining Funds
\$1.43M	\$4.33M

## Lessons Learned/Best Practices

- **EV Curriculum**
  - Needed several participants to agree to one training time collectively
- **Dynamic marketplace**
  - Long equipment lead times due to supply chain challenges

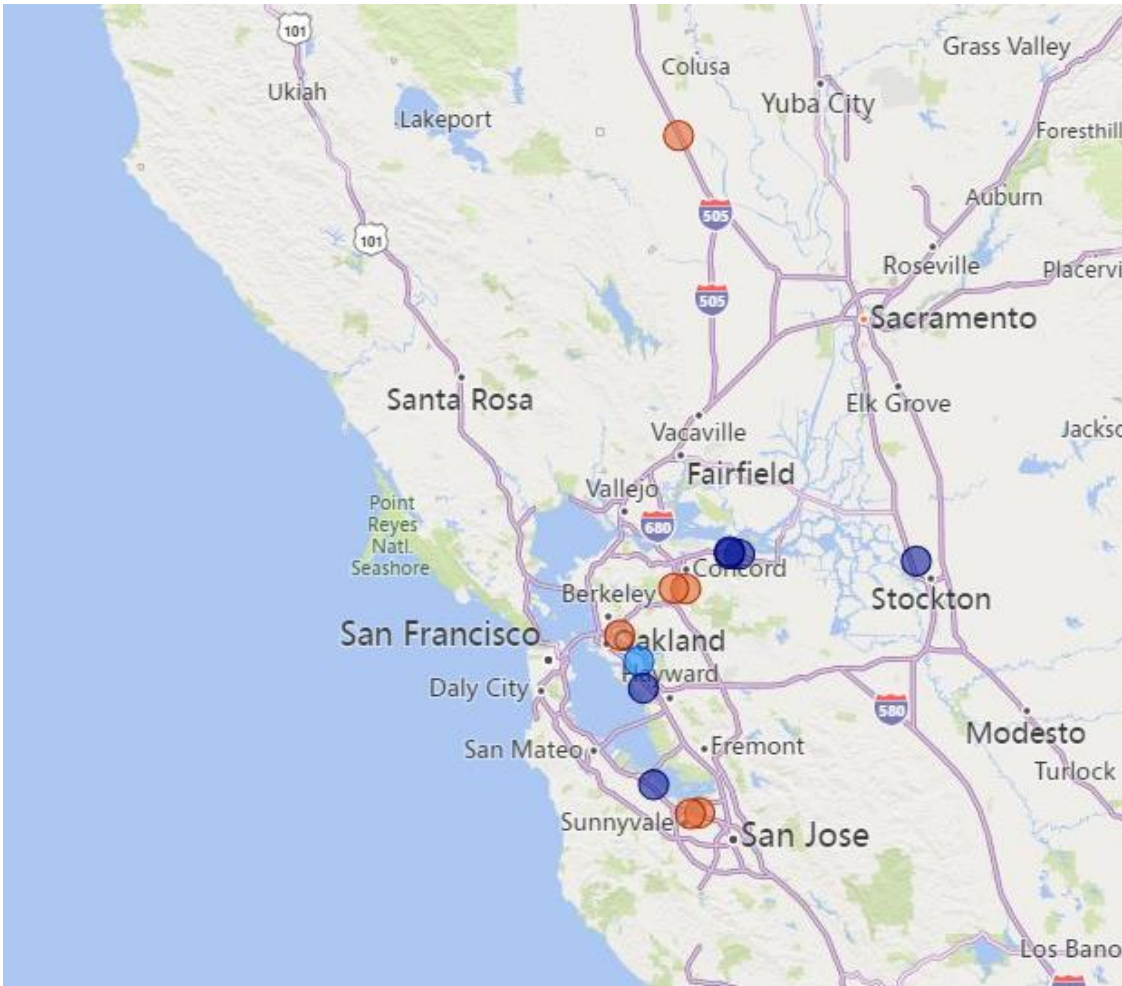


\*Targeting 6 ports per site

## Sites with signed contracts\*

**DAC Status**

- ADJACENT DAC
- IN DAC
- OUTSIDE DAC



	DACs	DAC Adjacent	Non DACs	Total
<b>Contracts</b>	6	1	6	<b>13</b>
<b>Ports</b>	36	6	36	<b>78</b>

- 1 contract signed in Q3 2022
- Good geographic dispersion
- Trending to achieve 40% DAC target
- Hard to reach communities are in program

\* 3 DAC sites are within same zip code



# EV Charge Parks Program Update

## Status as of 9/30/22

	Sites	Ports*
Applications	0	0
Contracted Sites	0	0
Pre-Construction	0	0
Constructed	0	0
Activated	0	0

## Lessons Learned/ Best Practices

- Establish more than one internal champion
- Diversify customer base

## Program Update

- Working on streamlined master agreement
- Preliminary site assessment list (34 State Parks) still under review with Parks
- State Parks requested to remove Fleet charging from scope of work, adjusting budget accordingly

## Program Budget Overview

Spend-to-Date	Remaining Funds
\$431K	\$5.11M

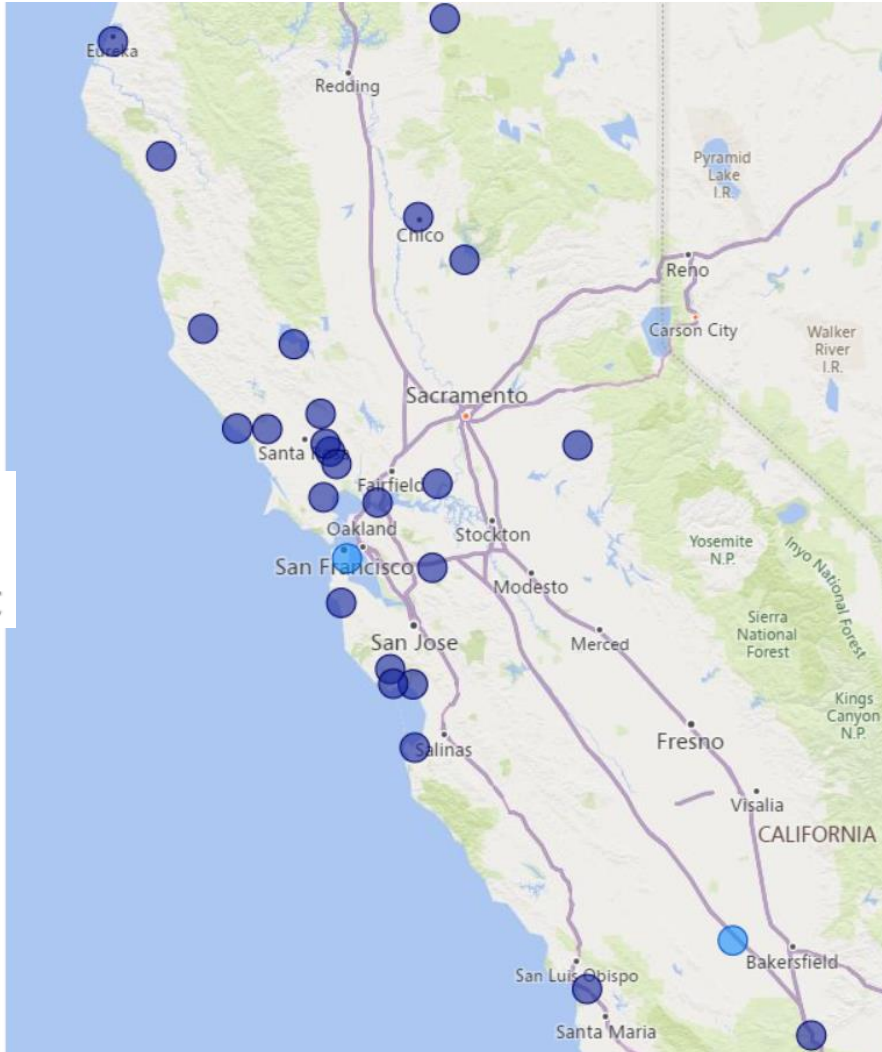






# EV Charge Parks Site Update

Sites identified by PG&E



## Program Scope

	Scope	Time	Budget	Sites	DAC	Rebates
<b>Parks Program</b>	15 parks/beaches 40 L2 ports 3 DCFC	2 years	\$5.54M	State parks/beaches (fleet and public)	25% of sites	PG&E Sponsorship

### Additional Program Components

- Awareness raising: Signage and PR efforts for parks/beaches
- Exploring opportunities to deploy chargers in Tribal Communities

- PG&E analysis identified 34 potentially eligible State Parks and Beaches sites for EV Charge Parks Program
- Some dots represent more than 1 Park due to overlapping zip codes

# EV Fast Charge



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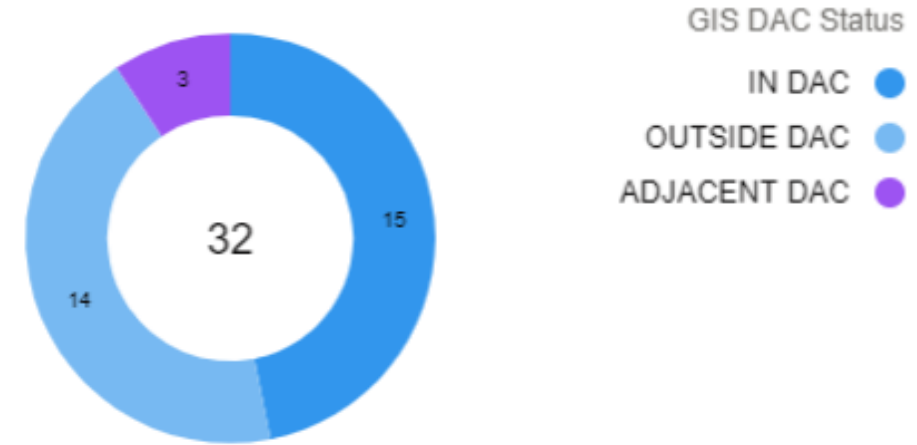


# EV Fast Charge Program Update

## Status as of 9/30/2022

	Sites	Ports
Applications	256	1156
Contracted Sites	32	170
Final Design	20	102
Constructed	9	39
Activated	6	24

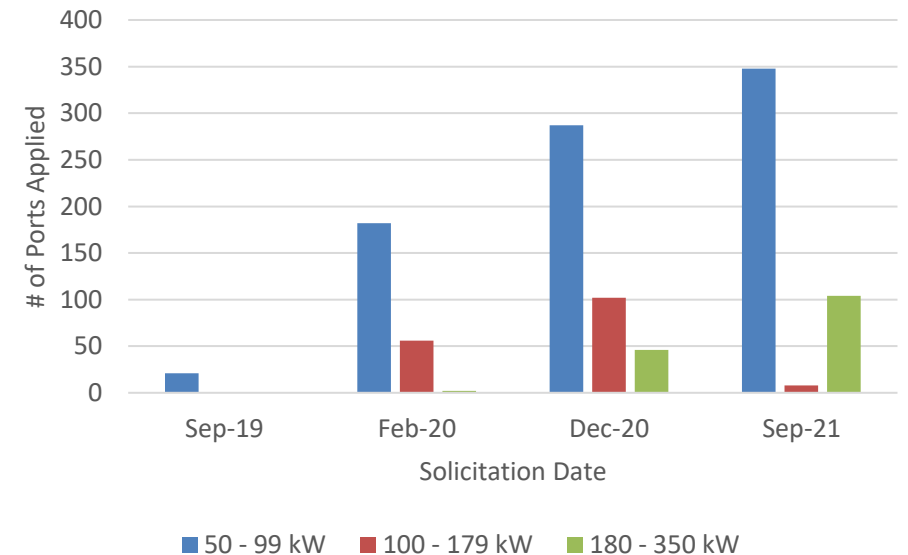
## DAC Targets: Signed Contracts



## Program Budget Overview

Spend-to-Date	Remaining Funds
\$7.9M	\$14.5M

## kW per Port Trend – All Applications Received



### Lessons Learned:

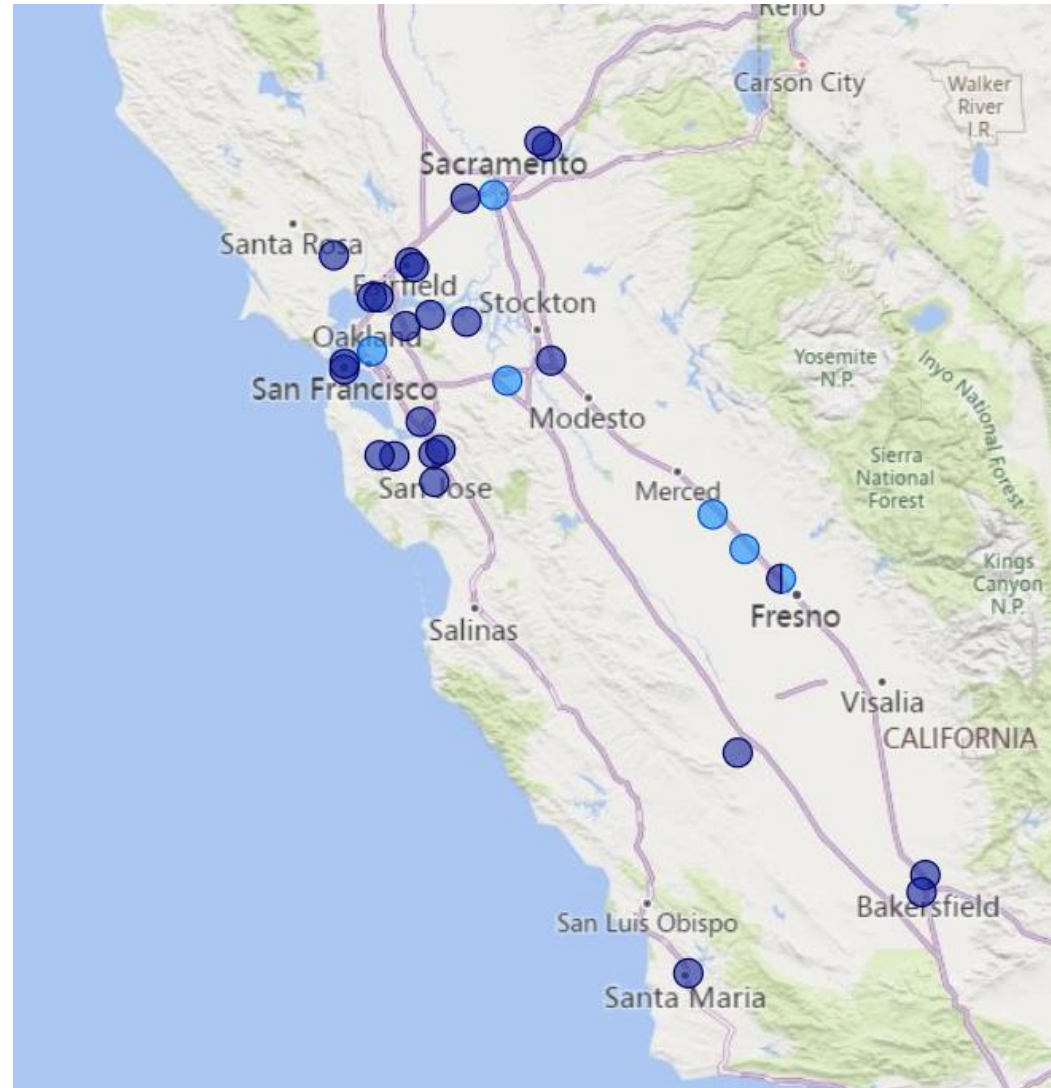
- Program is seeing more customers opting for 3<sup>rd</sup> party EVSE ownership.
- Customers have seen delays in activations due to lack of EVSE code readiness for credit card chip readers.

# Fast Charge Sites Contracted and Activated

Activated sites and sites contracted by zip code

**Status**

- Activated Site
- Contract Signed



# EV Fleet



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# EV Fleet Program Update

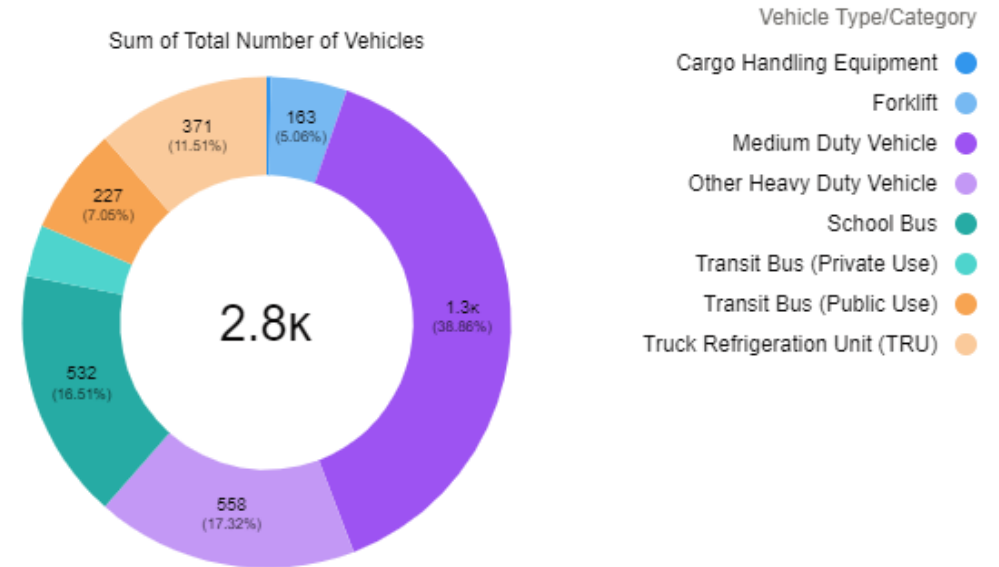
## Status as of 9/30/2022

	Sites	EVs
Applications	301	-
Viable Contracts <sup>1</sup>	130	2,642
Final Design	84	1,500
Construction Complete	41	499
Activated	36	428

## Program Highlights

- Continue to see very high pace of applications
- 57 of the 130 signed contracts **(44%) are in DACs**
- Program is seeing a **good mix of vehicle types**
- Program budget = \$236.3M; **Spend-to-date = \$33.3M**
- Joint T3 AL with SCE has been further suspended until May 1<sup>st</sup>, 2023
- Would like to expand School and Transit Bus EVSE Rebates to include public shuttle bus charging

## Viable Contracts: Vehicle Type



### Lesson Learned:

- Local ordinances may inhibit a customer's ability to participate in the program
  - San Jose pole restrictions
  - San Francisco EV charger zoning
- Supply chain challenges are compounding – 40 weeks for some transformers and 70 weeks for switchgears

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

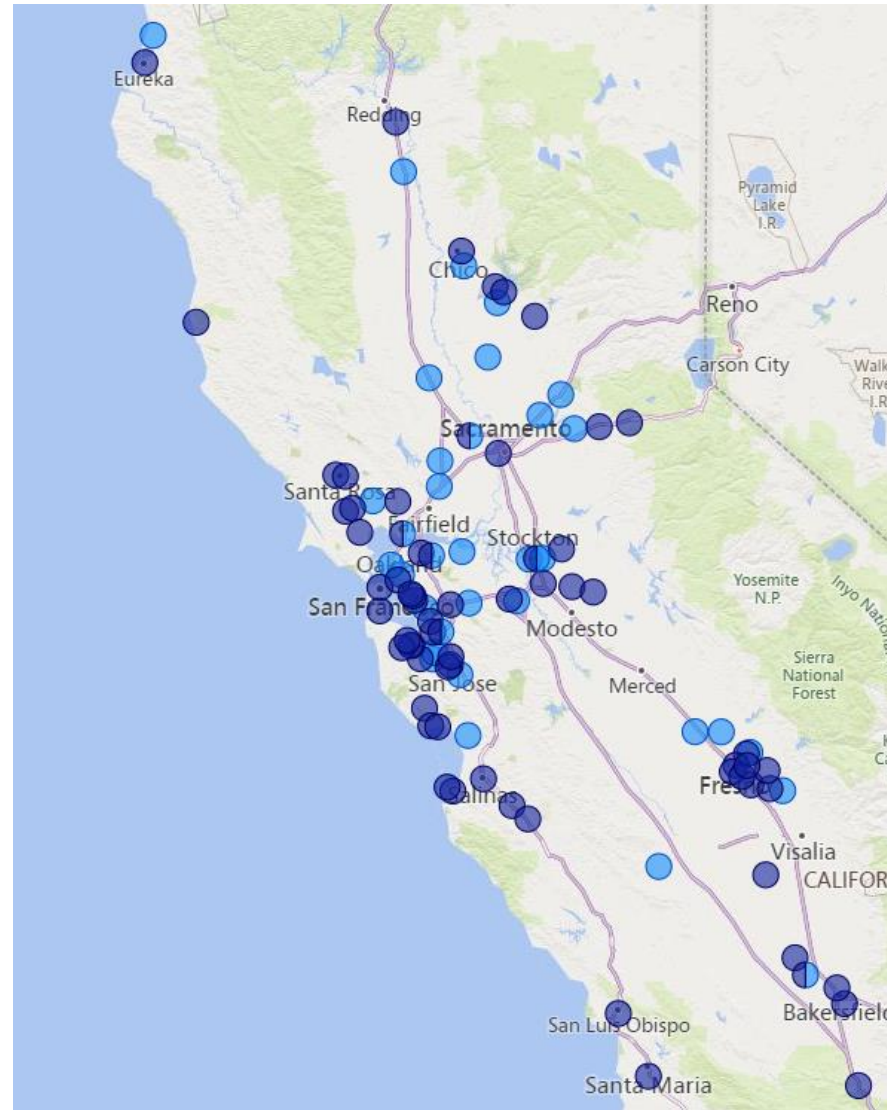
# Fleet Construction and Activation

Activated sites and sites in construction by zip code

**Status**

● Activated

● In Construction



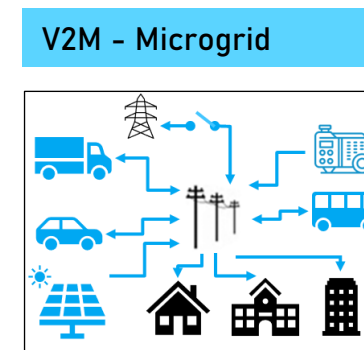
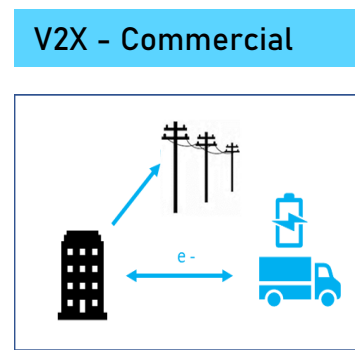
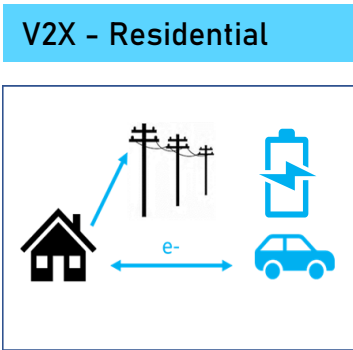
# Additional Program Updates



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# VGI Programs

Objective: PG&E's VGI pilots will help determine cost-effective V2X solutions and pathways to scale deployment. Timeline: 2022 Q4 – 2025 Q3



	V2X – Residential	V2X – Commercial	V2M – Microgrid
<b>Objectives</b>	<p>Enable residential customers to adopt LD EVs and split-phase bidirectional DC EVSEs, evaluate use of V2X technology for grid services and determine pathways to scale:</p> <p>Year 1</p> <ul style="list-style-type: none"> <li>- V2H Backup power</li> </ul> <p>Year 2</p> <ul style="list-style-type: none"> <li>- V2G Customer bill management</li> <li>- V2G Real-time energy</li> <li>- V2G Renewable energy integration</li> </ul>	<p>Enable commercial customers to adopt LD/MD/HD EVs and 3-phase bidirectional DC EVSEs, evaluate use of V2X technology for grid services and determine pathways to scale:</p> <p>Year 1</p> <ul style="list-style-type: none"> <li>- V2B Backup power</li> </ul> <p>Year 2</p> <ul style="list-style-type: none"> <li>- V2G Customer bill management</li> <li>- V2G Real-time energy</li> <li>- V2G Distribution upgrade deferral</li> </ul>	<p>Enable BTM-sited vehicles to charge/discharge in a PSPS-formed microgrid to support community resiliency.</p>
<b>No. of Pilot Participants</b>	1,000	200	Hundreds
<b>Total Budget</b>	\$7.5 million	\$2.7 million	\$1.5 million



## V2X Pilot Program Updates

- **Pre-Enrollment begins November 14**
  - Customers will be able to pre-enroll in Pilot 1, Residential and Pilot 2, Commercial
  - Customers who have the required EV and charger will be able to reserve an incentive
  - All will be able to learn more about the pilots and indicate interest in participation
- **Full-Enrollment expected to begin Q1 or early Q2, 2023 pending vehicle/charger availability**
- **VGI Dynamic Rate Advice Letter Pending Approval**



# Empower EV

Financial support to help LMI residential customers receive EV charging equipment and upgrade residential service panels

## Program Overview

- Audience: LMI Residential
- Incentive: \$500 for Lvl 2 charger, \$2,000 for SP upgrades
- Timeline: 2023 - 2024
- Status: Begin developing

**\$4.13 M** Program budget

**2,000** Customers served

**Q1' 23** Target launch date

## Eligibility

- Residential Customers
- Current or potential EV owners
- 400% or below FPL
- Home-owners or renters

## Program Updates

- CPUC issued Non-standard Disposition on Empower EV's Supplemental Advice Letter 9/26
- Empower EV's implementation plan is consistent with Decision 19-09-006
- PG&E will work with GRID Alternatives, 3<sup>rd</sup> Party Implementer and contracted electrician to collect and report program metrics

# Questions



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