

Q2 2020 Clean Transportation Program Advisory Council Meeting

July 29, 2020



Together, Building
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Agenda

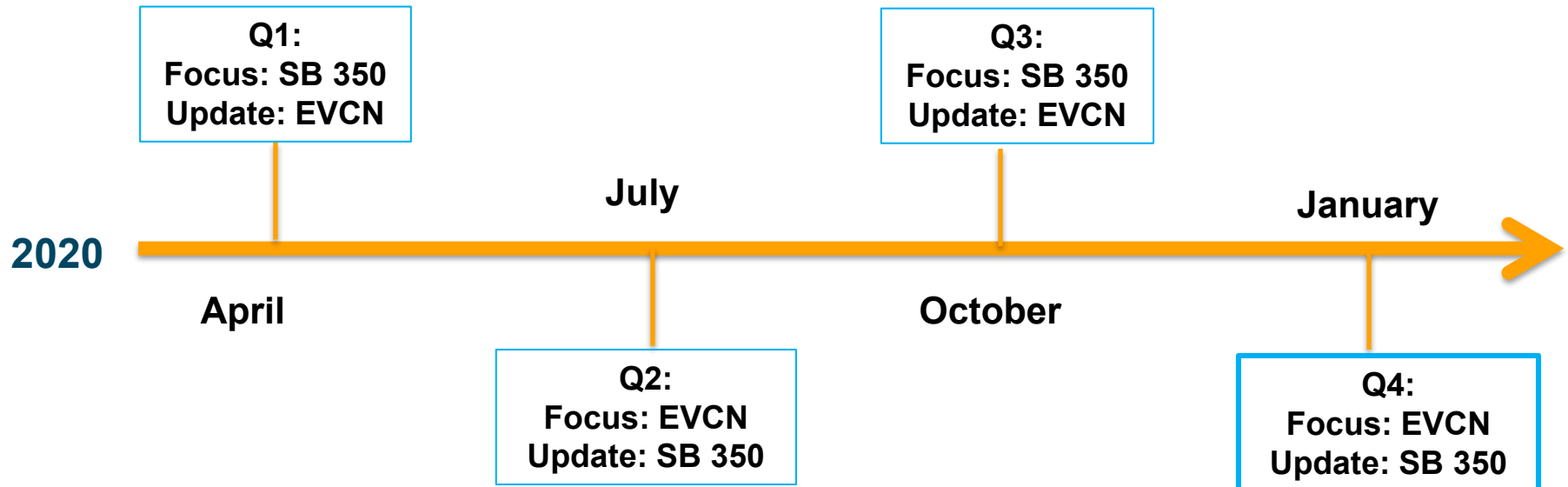
Safety/ Introductions	9:00 – 9:05
Program Portfolio Update	9:05 – 9:20
EV Savings Calculator	9:20 – 9:45
PAC Discussion	9:45 – 10:05
PSPS EV Resiliency Update	10:05 – 10:15
Questions	10:15 – 10:30



Clean Transportation Program Advisory Council

Overview

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



Program Portfolio Update



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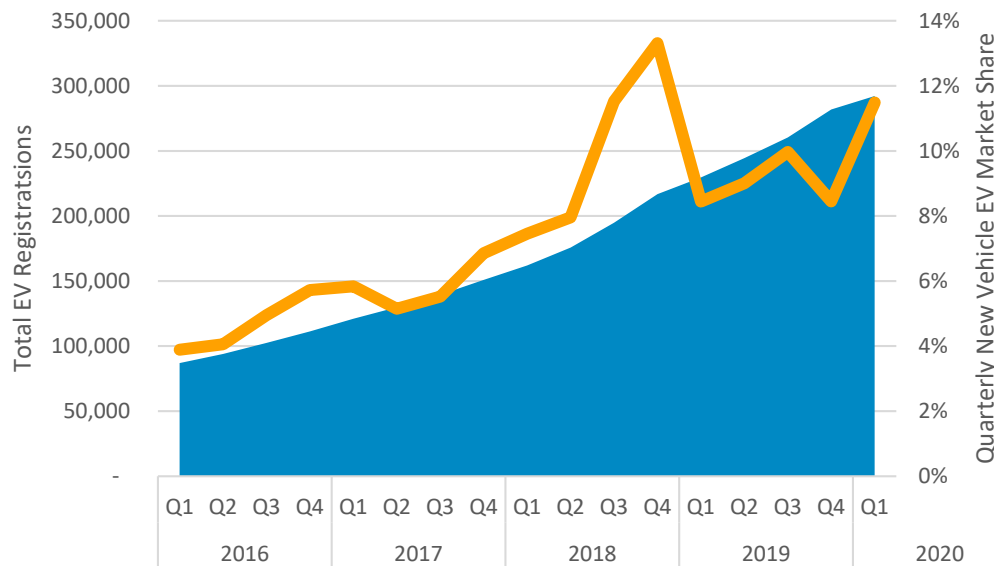


Q2 2020 EV Market Update

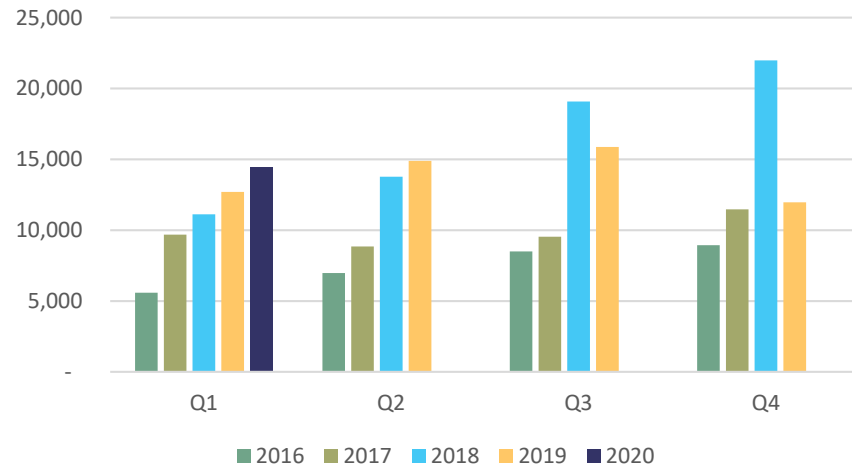
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EVs registered in PG&E service territory, through May of 2020

Cumulative New EV Registrations PG&E Service Territory



New EV Registrations by Quarter



Source: EPRI, Based on external registration data through May 2020



Programs Status Update

- Through June 2020, PG&E has installed:
 - Over 60% of target EVCN ports (2,716 ports out of 4,500 port target)
 - First 5 projects under the Fleet program
- PG&E was on track to install target of 4,500 ports by December 2020 program-end, before COVID19-related halt to installation March through May
 - Timeline extension granted by Energy Division through end of 2021
- Shelter-in-place construction halt was loosened at the end of May, enabling construction progress for EVCN projects in June
 - COVID-related safety protocols in place
 - Selecting projects for near-term work to maximize safety and minimize construction impact to customers during pandemic, e.g. near-term focus on outdoor workplaces



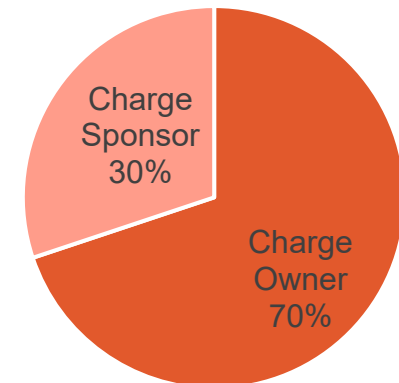
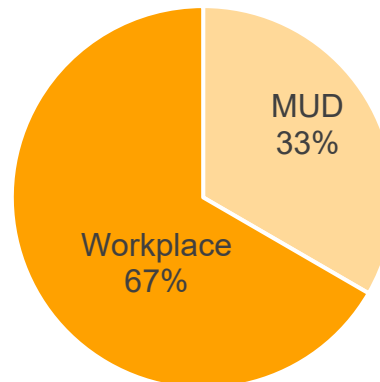
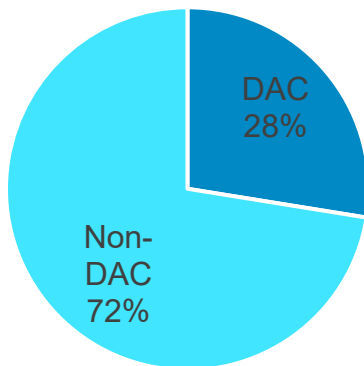
EVCN Progress Update

Status as of 6/30/2020

	Ports	Sites
Submitted	15,838	817
Viable	4,898	198
Final Design	4,688	194
Construction substantial complete	2,716	134
Activated	2,350	123

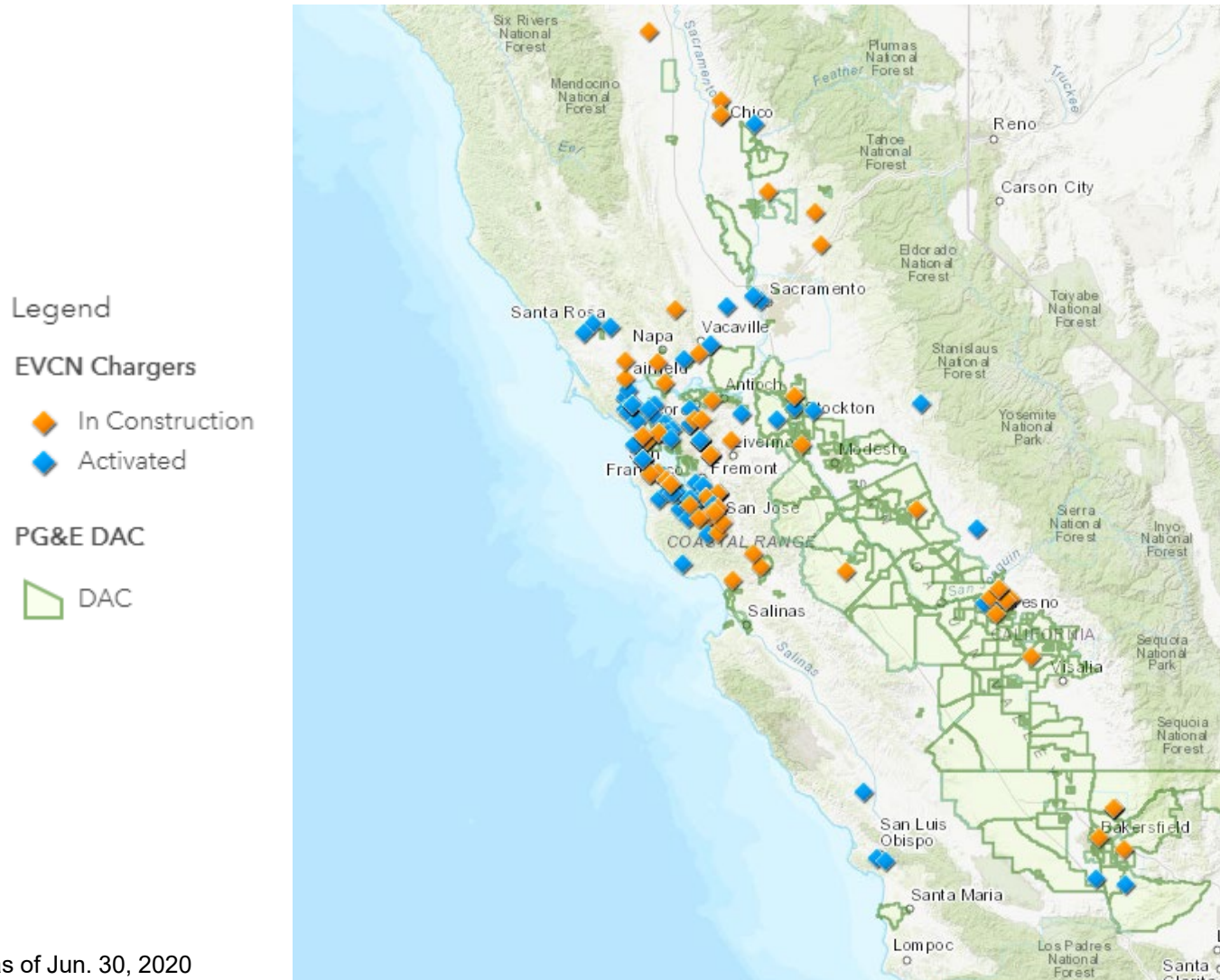
- **Customer acquisition** complete: application portal closed Q2 2019
- **Site eligibility** complete: all customer agreements in place
- **Final design** nearly complete across all Viable ports, to be complete in July 2020
- **Construction** prior to COVID-19 at steady capacity; program is re-ramping construction pace as construction has re-started*

Installed port portfolio



EVCN Construction and Activation Map

- Activated sites and sites in construction updated on [public map](#)
- Sites are summarized by zip code to maintain site host anonymity





EV Fleet Progress Update

Status as of 6/30/2020

	Sites	EVs
Applications	111	1909
Viable	44	826
Final Design	31	342
Construction substantial complete	5	82
Activated	3	74

- **Customer acquisition** included webinars and marketing campaign to educate customers on benefits of fleet electrification
- **Site eligibility** assessments and contracting continued through shelter-in-place, but program anticipates pipeline development delays to continue through 2020 due to COVID19-related customer budget constraints
- **Final designs** were completed despite shelter in place, as the program developed a remote review process versus in person site walks
- **Construction** site work was paused starting in March and PG&E developed guidelines for resuming site presence safely; construction activity resumed in July.

EV Savings Calculator



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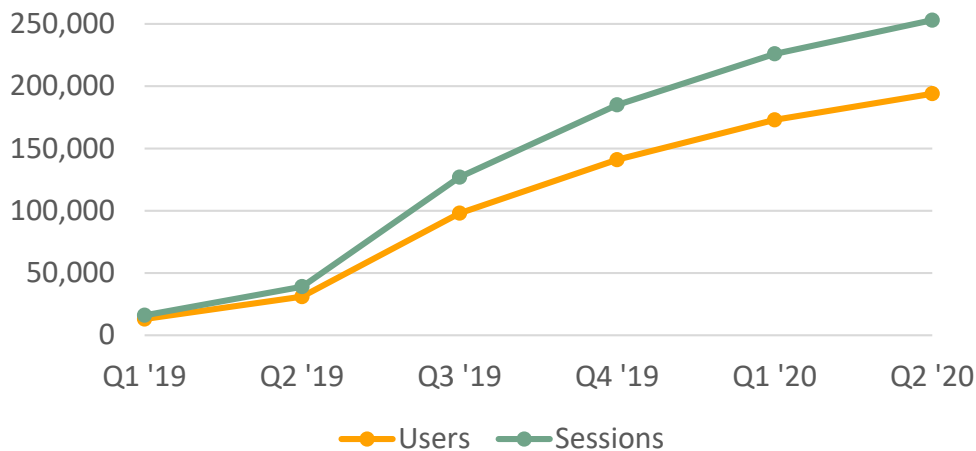


EV Savings Calculator

ev.pge.com

PG&E tool	ITD unique users	ITD total sessions
EV Savings Calculator	194,000	253,000

Quarterly Metrics



>8,200 total hours of engagement ITD

Refine Match Score

ROUNDTrip COMMUTE
35 Miles

BUDGET AFTER INCENTIVES
\$25,000

MINIMUM SEATS
2 seats

HOME CHARGING AVAILABILITY
Level 2

Filter

FUEL
All-Electric
Plug-in Hybrid

TYPE
Sedan Hatchback
Coupe Crossover
Minivan SUV
Wagon Truck

Sort By: Match Score

<p>Nissan LEAF PLUS</p> <p>Electric Range: 226 miles MSRP: \$36,550</p> <p>AFTER INCENTIVES: \$23,250 MATCH SCORE: 100</p>	<p>Hyundai Kona Electric</p> <p>Electric Range: 258 miles MSRP: \$37,495</p> <p>AFTER INCENTIVES: \$26,695 MATCH SCORE: 97</p>	<p>Nissan LEAF</p> <p>Electric Range: 150 miles MSRP: \$29,990</p> <p>AFTER INCENTIVES: \$15,690 MATCH SCORE: 97</p>
<p>Kia Niro EV</p> <p>Electric Range: 239 miles MSRP: \$38,500</p> <p>AFTER INCENTIVES: \$27,700 MATCH SCORE: 95</p>	<p>Hyundai Ioniq Electric</p> <p>Electric Range: 124 miles MSRP: \$30,315</p> <p>AFTER INCENTIVES: \$19,515 MATCH SCORE: 94</p>	<p>Volkswagen e-Golf</p> <p>Electric Range: 125 miles MSRP: \$31,895</p> <p>AFTER INCENTIVES: \$21,095 MATCH SCORE: 94</p>
<p>Ford Focus Electric</p> <p>AFTER INCENTIVES: \$19,515 MATCH SCORE: 94</p>	<p>Kia Soul EV</p> <p>AFTER INCENTIVES: \$19,515 MATCH SCORE: 94</p>	<p>Chevrolet Bolt EV</p> <p>AFTER INCENTIVES: \$19,515 MATCH SCORE: 94</p>

Vehicles displayed may not reflect actual availability. PG&E does not endorse or recommend any specific vehicle or car manufacturer.



EV Savings Calculator – Enhancements



[Download a PDF](#)

AFTER INCENTIVES
\$26,900

MSRP
\$38,200

ESTIMATED INCENTIVES
\$11,300

[9 available incentives >](#)

TYPE
Hatchback

SEATS
5

ELECTRIC RANGE
226 miles

BATTERY SIZE [?]
62 kWh

30 MIN FAST CHARGING [?]
~ 81 miles

TIME TO CHARGE - LEVEL 2
~ 9 hr 25 min

[View Nissan LEAF PLUS>](#)

AFTER INCENTIVES
\$34,190

MSRP
\$37,990

ESTIMATED INCENTIVES
\$3,800

[9 available incentives >](#)

TYPE
Sedan

SEATS
5

ELECTRIC RANGE
250 miles

BATTERY SIZE [?]
55 kWh

30 MIN FAST CHARGING [?]
~ 104 miles

TIME TO CHARGE - LEVEL 2
~ 7 hr 15 min

[View Tesla Model 3 Standard Range Plus>](#)

[Compare Two Cars](#)



EV Savings Calculator – Enhancements

PURCHASE METHOD ?

Cash

MILES DRIVEN PER YEAR

9,000 Miles

YEARS OF OWNERSHIP/LEASE

5 years

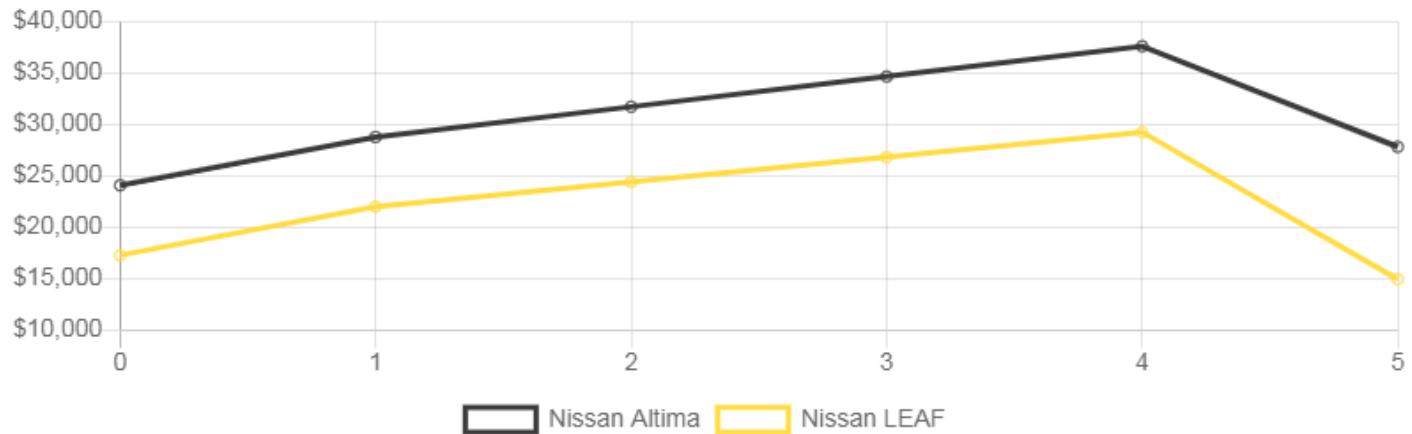
GASOLINE PRICE (\$/GAL)

\$2.95

INCLUDE VEHICLE RESALE



Compare the cumulative lifetime cost of the Nissan LEAF to a Nissan Altima



[Additional TCO Features](#)



EV Savings Calculator – Enhancements

START LOCATION

Oakland, CA, USA

END LOCATION

South Lake Tahoe, CA 96150, US

Map Route

HIGH POWER STATIONS ONLY

Public stations

Installed by business or government



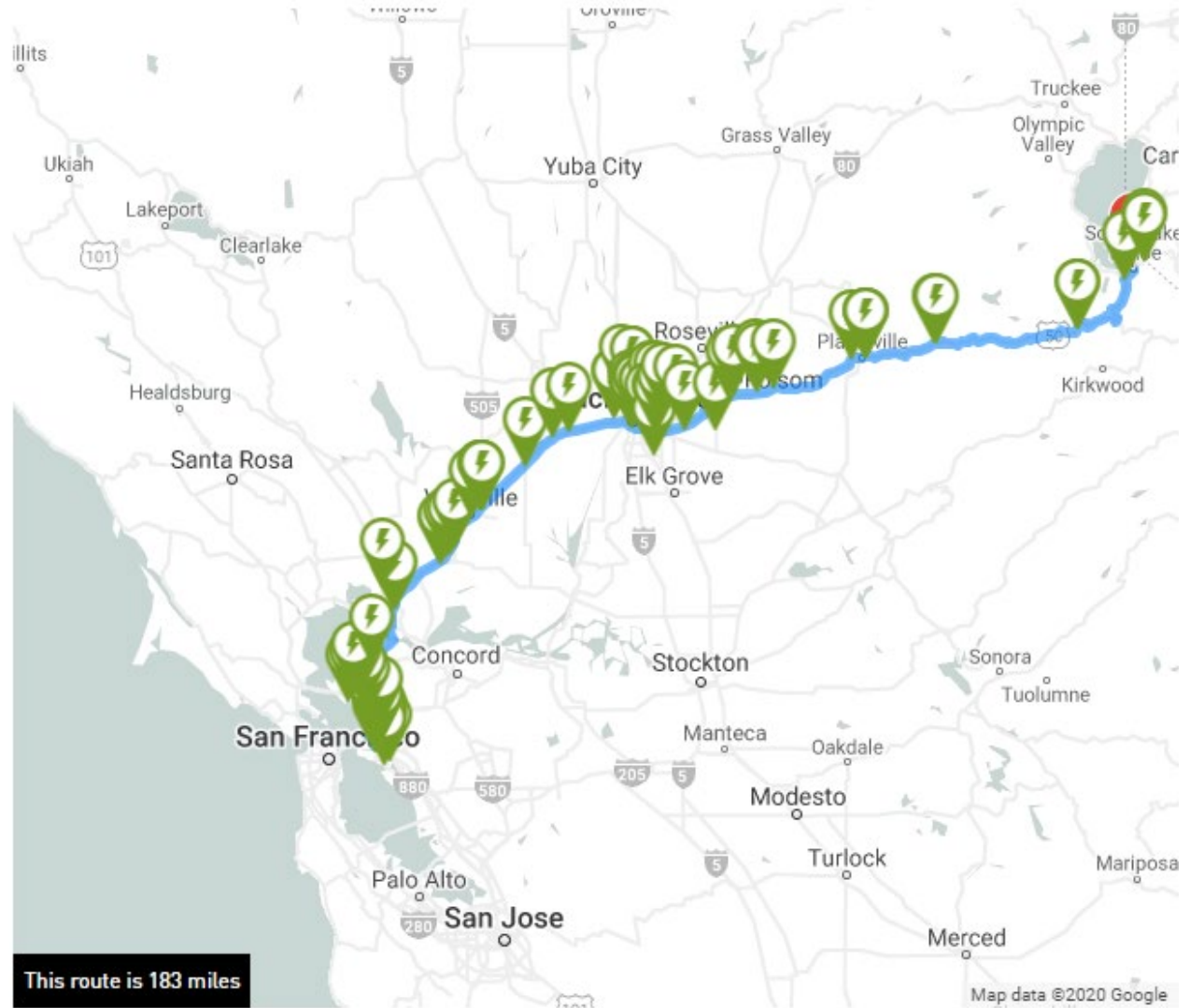
High Power Stations

DC fast charge or superchargers



Other Types of Stations

Private stations



[Map a Route](#)



EV Savings Calculator – Enhancements

ADDRESS

San Francisco, CA, USA

VEHICLE

Tesla Model 3 Long Range A | ▾

View travel radius

HIGH POWER STATIONS ONLY

Public stations

Installed by business or government



High Power Stations

DC fast charge or superchargers



[Vehicle Range Radius](#)



EV Savings Calculator – Enhancements

ZIP CODE

93650

Search Qualified Dealers

BRANDS

All Brands

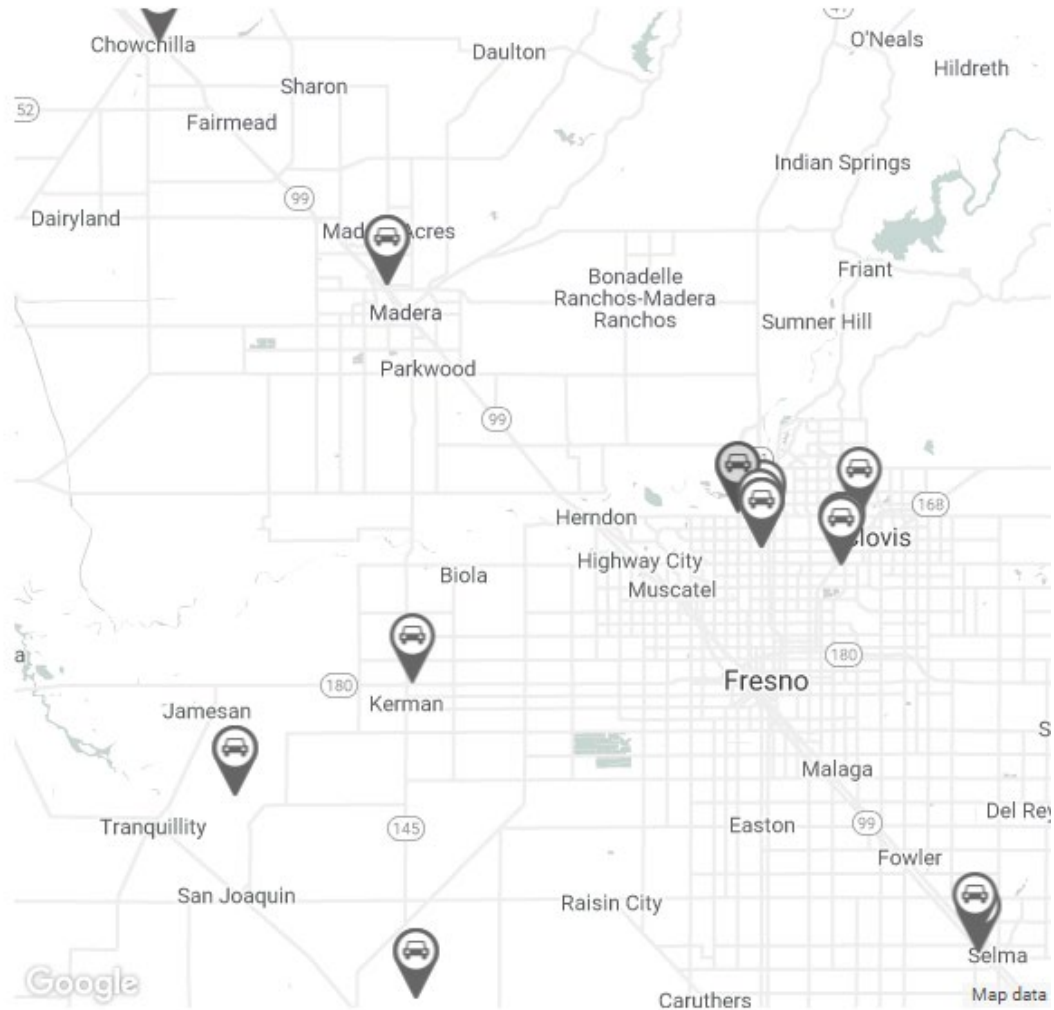
All Brands

- Audi
- BMW
- Chevrolet
- Fiat
- Ford
- Honda
- Mitsubishi
- Nissan
- Subaru
- Toyota

7171 N PALM AVE
FRESNO, CA, 93650

CONTACT

WEBSITE



[Find a Dealer](#)



EV Savings Calculator – Enhancements

Net Promoter Score

Net Promoter Score®, or NPS®, measures customer experience and predicts business growth. This proven metric transformed the business world and now provides the core measurement for customer experience management programs the world round.

Added in June – 65 responses to-date, **NPS = +45**



Would you recommend this tool?

NOT LIKELY

0

1

2

3

4

5

6

7

8

9

10

VERY LIKELY

Submit



EV Savings Calculator – KPIs

2019 Marketing:

- 2019 marketing drove 50% of unique users at \$/acq. of \$1.41 (72% less than benchmarks)
- 2019 marketing spend divided by total 2019 sessions = **\$0.54 per session**
- 7% of all calculator visitors selected the clean fuel rebate link with ~2,300 completions equaling ~\$1,800,000

2020 YTD (7/10/20):

- 1,270 clean fuel rebate application completions
- 2,200 clicked “change rate” button
- 150 clicked individual Dealer Website (since feature launch 5/1/2020)

Program Advisory Council Discussion



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In parallel to deployment of make-ready infrastructure for EVCN, EV Fleet, EV Fast Charge, and Schools & Parks programs,

PG&E is seeking Program Advisory Council feedback in two areas:

- Port utilization data
- Tracking the number of ports statewide

Port utilization data

- What are industry stakeholders' / EVSPs' perspectives on consistency in gathering and reporting utilization data?
- Is this a valuable goal? If so, achievable? Have there been any efforts toward this to-date?
- Have there been any new reporting methodology and/or capabilities that EVSPs have received interest in? Or are rolling out?



Tracking the number of ports statewide

- What are industry stakeholders' perspectives on feasibility and methodology to count ports holistically statewide?

PSPS / EV Resiliency Update



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PSPS OIR Final Decision TE Resiliency Requirements

EV Charging Infrastructure Resiliency

- By 2021 wildfire season, implement Mobile Charging Pilot(s) to investigate the feasibility of **mobile and deployable EV Level 3 fast charging**
- By 8/4/2020, in coordination with EV charge network providers, design a **backup generation plan to reinforce key existing charging**

EV Charger Availability Communications

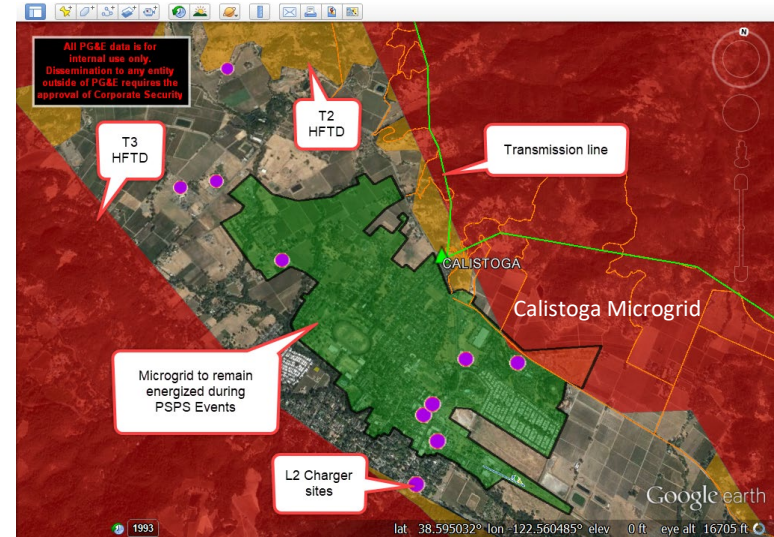
- Coordinate with EV network information providers to **communicate Level 3 and public Level 2 charger availability** in proximity to areas potentially impacted by PSPS events



Customer Impact Analysis Drives Communications Plan

Approximately **11,000 customers** who received Clean Fuel Rebates live in Tier 2/Tier 3 elevated/extreme fire threat areas¹

# of Charger Sites in	Level 2	DCFC
Tier 2 HFTD	91	7
Tier 3 HFTD	31	5
Energized Microgrid	5	1
Total # of sites in PG&E territory	3,060	789



2020 Communications Plan



PG&E Website

Messaging to EV customers to prepare for an event and links to charging maps, EVSP sites



PG&E Social Media

Crafting messaging to provide prior to events for EV customers



Customer Collaboration

Working with stakeholders (e.g. OEMs, EVSPs) to provide messaging to their customers

¹ Based on 114,316 unique accounts who have received a Clean Fuel Rebate. Data source: PG&E CFR database, April 2020



Further Research, Outreach Needed Beyond Initial Filing

8/4 Filing Backup Generation Plan

Insights, guidance based on initial outreach w/in 60 days of Decision

- Overview of expected PSPS impact to EV customers and insights from initial EVSP outreach
- Existing resources PG&E is deploying for resiliency (e.g. microgrids)
- Early insights from research on EV backup generation options, challenges
- “How-to” guide for entities that want to install backup immediately
- Propose further research, outreach

Q1 2021 Research Results & Next Steps

Summary of additional research undertaken since initial phase, next steps

- Cost-effectiveness of backup generation options
- Safety and operational implications
- Potential customer benefits
- Insights from EVSPs
- Research results leveraged to inform and potentially test technologies and processes throughout 2021 WF season

Questions



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