# **Program Advisory Council Meeting** Q2 2022





Safety / Introductions	10 Minutes
PG&E Net Zero Goals	15 Minutes
Schools and Parks Programs Updates	10 Minutes
EV Fast Charge Program Updates	10 Minutes
EV Fleet Program Update	10 Minutes
EVC 2 Update	10 Minutes
Questions	15 Minutes

Extreme heat can vary depending on your location.

Safety

Heat illness results when the body is unable to cool itself down fast enough via sweating and the body's temperature rises too fast.

**Damage** can result to the brain and other **vital organs**.

Elderly people, children, outdoor work environments, people with disabilities.



# **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





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

Cumulative New EV Registrations PG&E Service Territory 25% 400K 20% %01 %00 Quarterly New Vehicle EV Market Share 350K Cumulative EV Registrations 300K 250K 120K 120K 120K 50K 0% К Q1 Q2 Q3 Q4 Q1 2017 2018 2020 2022 2019 2021



New EV Registrations by Quarter

## **PG&E Net Zero Goals**





## **Committed to Climate Action in California**

PG&E has set public-facing, longer-term climate goals with an emphasis on decarbonization, "beyond net zero" energy, and the triple bottom line.



**Need for climate action:** From extreme weather to rising tides, California—like the rest of the planet—is experiencing the significant and increasing effects of a changing climate.

**Clean energy future for all:** We're committed to bringing about a clean energy future in partnership with our customers and others.



C Triple bottom line: We approach this work through the framework of serving People, the Planet, and California's Prosperity.





### **California's 2045 Carbon Neutrality Goal**

Executive Order B-55-18 established a statewide goal to achieve economy-wide carbon neutrality by 2045 and to maintain net negative emissions thereafter.



### **PG&E's Climate Goals**

### **Our Commitment: Helping to Heal the Planet**

### Leading an equitable and viable transition that leaves no one behind



#### Notes:

Scope 1: Direct emissions from PG&E's operations.

Scope 2: Indirect emissions from facility electricity use and electric line losses.

Scope 3: Emissions resulting from value chain activities not owned or controlled by PG&E but that can be indirectly impacted by PG&E actions.

"Scope 4": An emerging term for categorizing emission reductions enabled by a company. PG&E can make a significant contribution by enabling these emission reductions in our service area.



### **PG&E's 2030 Climate Goals**

Scope 1 and 2	Reduce emissions by 50% from 2015 levels
Scope 3	Reduce emissions by 25% from 2015 levels
"Scope 4"	Various goals to enable customer emission reductions
Continue to Green the Power Sector towards Delivering Decarbonized Electricity 24 x 7 x 365	<ul> <li>Deliver 70% Renewables Portfolio Standard (RPS) clean electricity.</li> <li>Facilitate the use of Diablo Canyon Power Plant transmission infrastructure to support new carbon-free generation.</li> <li>Manage energy demand as a reliable, cost-effective alternative to traditional power generation solutions.</li> </ul>
Accelerate Electrification of the Transportation Sector	<ul> <li>Be the global model in the industry by fueling at least 3 million EVs in our service area—leading to a cumulative reduction of 58 MMT of carbon emissions:</li> <li>Proactively prepare the grid for 12,000 GWh of EV-related electric load and enable rapid, safe EV energization and interconnection.</li> <li>Enable 2 million EVs to participate in vehicle-grid integration applications, allowing EVs to be a cornerstone of reliability and resilience.</li> <li>Repurpose at least 500 MWh of second-life batteries for grid-connected energy storage.</li> </ul>
Enable Building Electrification in an Orderly Transition and Shape the Future Natural Gas Delivery System	<ul> <li>Achieve 48 MMT of lifecycle carbon emission reductions through comprehensive energy efficiency and decarbonization strategies, with an increasing focus on building electrification:</li> <li>Align customer building electrification programs with the timing, scope, and goals of PG&amp;E's targeted gas system transition.</li> <li>Aim for 50% of the topics in PG&amp;E's Workforce Education and Training programs to focus on building knowledge and skills for electrification—with a continued commitment that 60% of the participants will be from disadvantaged communities.</li> <li>Take a proactive, policy leadership position in developing and advocating for federal, state, and local electrification codes and standards for buildings and appliances.</li> <li>Execute zonal electrification and create a repeatable model on how to best perform it:</li> <li>Evaluate our gas capital projects for electrification and pursue electrification for projects deemed feasible and cost-effective.</li> <li>Commit to a new program that seeks to zonally electrify three to five communities, with a focus on decarbonizing vulnerable communities.</li> </ul>
"Green" the Gas Supply for Hard-to-Electrify Customers	<ul> <li>Reduce cumulative carbon emissions 2.5 MMT by proactively converting industrial and large commercial customers unable to electrify from dirtier burning fuels to natural gas, prioritizing sites in or adjacent to disadvantaged communities.</li> <li>Deliver 15% Renewable Natural Gas (RNG) in PG&amp;E's core gas throughput.</li> <li>Maximize readiness for hydrogen blending by operationalizing a hydrogen pilot project by 2024—helping inform a safe level of hydrogen we can blend into the existing system by 2030.</li> <li>Pledge \$25M toward sustainable uses for woody biomass: R&amp;D collaboration on converting wood waste to RNG &amp; biomass carbon removal and other byproducts.</li> </ul>

Note: "MMT" refers to million metric tons and "carbon emissions" refers to carbon dioxide equivalent (CO2-e) emissions.



### **PG&E's Climate Strategy Report**





#### Learn more from our CEO



Pacific Gas and Electric Company Climate Goals

#### As California's largest energy utility, sustainability and climate action have long been part of PG&E's DNA.

We deliver some of the cleanest electricity in the world, with 93 percent from greenhousegas free sources in 2021.

We're also leading in key areas of clean energy adoption, incluiding rooftop solar installations, electric vehicle adoption and grid-level energy storage, such as our leading-edge battery installation at Moss Landing. In our gas business, we're a national leader in leak reduction, which has driven down our overall emissions.

#### PG&E's Climate Goals Fact Sheet

### Visit pge.com/climate

### Climate Strategy Report:

 Describes our Climate Goals, along with our actions and progress in addressing climate change

### Video Message from Our CEO

#### Climate Goals Fact Sheet

June 2022

PG&E is building upon its history

of climate leadership by rolling

out ambitious long-term carbon emission reduction goals.

that leaves no one behind.

We're committed to doing our part to

achieve net zero energy and beyond-

leading an equitable and viable transition

We're also committed to partnering with

organizations, and others to co-create plans

and deliver on these goals in a cost-effective

way, with minimal impact to customer bills.

customers, co-workers, community

# SB 350 Standard Review Projects



Together, Building a Better California

# **EV Charge Schools & Parks Update**



# **EV Charge Schools Pilot Program Overview**



 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



# EV Charge Schools Program Update



### Status as of 6/30/22

	Sites	Ports*
Applications	65	390
Contracted Sites	12	72
Pre-Construction	4	24
Constructed	0	0
Activated	0	0

### \_essons Learned/Best Practices

- Work is not done in silos
- Building trusted relationships is key to program success
  - Internal + external stakeholders
- Dynamic marketplace
  - Long equipment lead times due to supply chain challenges

### **Program Updates**

- Broke ground on first site in June '22
- EV Curriculum complete
  - Virtual training scheduled for schools in the program
  - Recorded training + curriculum to be made available to every K-12 school in PG&E territory
  - Curriculum deployment in Q3'22
- Filed SB 350 + evaluator reports end of Q2' 22

### **Program Budget Overview**

Spend-to-Date	Remaining Funds
\$919k	\$4.84M



# EV Charge Schools Contract + Site Update





	DACs	DAC Adjacent	Non DACs	Total
Contracts	5	1	6	12
Ports	30	6	36	72

- 3 additional contracts received since Q1'22 PAC update
- 2 additional sites in pipeline
- Good geographic dispersion
- Trending to achieve 40% DAC target
- Hard to reach communities are in program

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# **EV Charge Parks Program Update**

### Status as of 6/30/22

	Sites	Ports*
Applications	0	0
Contracted Sites	0	0
<b>Pre-Construction</b>	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
- Filed SB 350 + evaluator reports end of Q2' 22

### Program Budget Overview

Spend-to-Date	Remaining Funds
\$383K	\$5.16M



# **EV Charge Parks Site Update**

### Sites identified by PG&E



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

### **Program Scope**

# **EV Fast Charge**



# EV Fast Charge Program Update

#### Status as of 6/30/2022

	Sites	Ports
Applications	256	1156
Contracted Sites	27	142
Final Design	18	90
Constructed	8	32
Activated	6	24

### **Program Budget Overview**

Spend-to-Date	Remaining Funds
\$6.6M	\$15.8M

**Lesson Learned:** Contracting challenges with customers is a significant hurdle which affects most customer types.



### kW per Port Trend – All Applications Received



## **Fast Charge Construction and Activation**

Activated sites and sites in construction by zip code

Status

PG<mark>&</mark>E



## **EV Fleet**



### Status as of 6/30/2022

	Sites	EVs
Applications	267	-
Viable Contracts <sup>1</sup>	112	2,419
Final Design	80	1,496
Construction Complete	39	455
Activated	36	428

### **Program Highlights**

- Program interest is strong, applications have been up since Q3 2021.
- 45 of the 112 signed contracts (40%) are in DACs ٠
- Program is seeing a good mix of vehicle types
- Program budget = \$236.3M; Spend-to-date = \$30.2M
- Changed rebate structure for power cabinets rebates will be issued based on number of dispensers (not ports)

### Viable Contracts: Vehicle Type



Forklift

School Bus

#### Lesson Learned:

Attended ACT Expo in May –

- Utility infrastructure is critical component for fleet electrification
- New and renewed opportunities for partnerships across • the EV ecosystem
- Momentum is growing in MDHD EV space

# Fleet Construction and Activation

Activated sites and sites in construction by zip code

PG<mark>s</mark>e



StatusActivated

In Construction

# **EVC 2 Update**



# EV Charge 2 Proceeding Update

- PG&E has proposed a five-year, \$276M program extension to support installation of approximately 16,000 charging ports
- Emphasis is on multi-location support of multi-family housing (MFH) residents
- Program design is built on lessons learned from EVCN, including significant unmet need



1. To-the-meter (TTM) work associated with EVC 2 infrastructure deployment will be completed under Rule 29: EV Infrastructure Rule, as per AB 841.

. As required by D. 21-07-028.

## Questions



