



NARUC Electric Vehicles State Working Group

MAY MEETING

MAY 26, 2020

AGENDA (Eastern Time)

3:00 PM	Welcome and Introductions (5 minutes) <ul style="list-style-type: none">• Agenda review• Roll call, by state
3:05 PM	Presentation and Q&A: National Consumer Law Center (25 minutes) <ul style="list-style-type: none">• Jenifer Bosco, Staff Attorney, will present on the rate impacts of EV programs on low-income communities, economic impacts from COVID-19, and steps to ensure that electric transportation is available to underserved communities
3:30 PM	Presentation and Q&A: Pacific Gas & Electric (25 minutes) <ul style="list-style-type: none">• Sam Piell, Senior Program Manager, will present on PG&E's EV Fast Charge program and how PG&E is ensuring EV charging and electric transportation are available to underserved communities and customers who live in multi-unit dwellings
3:55 PM	Closed Door Discussion (30 minutes) <ul style="list-style-type: none">• Working group members will discuss their own views and the actions their states have taken to date.
4:25 PM	Next Steps and Announcements (5 minutes)
4:30 PM	Adjourn

Roll Call – Read from Webinar

Working Group Members

States:

- ▶ Arizona
- ▶ California
- ▶ Colorado
- ▶ Connecticut
- ▶ D.C.
- ▶ Florida
- ▶ Georgia
- ▶ Hawaii
- ▶ Illinois
- ▶ Maryland

- ▶ Massachusetts
- ▶ Michigan
- ▶ Minnesota
- ▶ Missouri
- ▶ Nevada
- ▶ New Jersey
- ▶ New York
- ▶ North Carolina
- ▶ Ohio
- ▶ Oregon
- ▶ Puerto Rico

- ▶ South Dakota
- ▶ Texas
- ▶ Vermont
- ▶ Washington
- ▶ Wisconsin

National/Federal Partners:

- ▶ NARUC
- ▶ U.S. DOE
- ▶ U.S. EPA

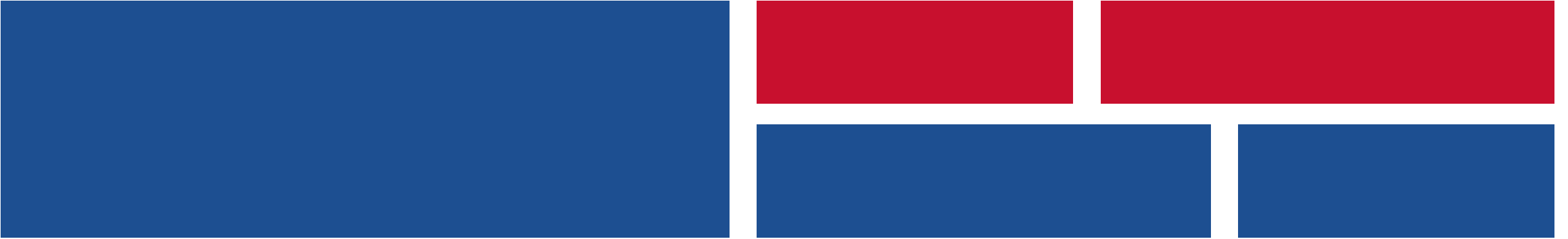
Ensuring Equity in EV Programs

Preparation Questions

- ▶ Does your state have any programs that enable charging for customers who live in multi-unit dwellings?
- ▶ Does your state have any programs that encourage or require EV charging to be located in underserved communities?
- ▶ Are there efforts in your state to electrify public transit, school buses, or pre-owned vehicles that might be more accessible to low-income communities?

Pre-Read Materials

- ▶ Lawrence Berkeley National Lab, [The Future of Transportation Electrification: Utility, Industry and Consumer Perspectives](#), p. 73-102
- ▶ The Greenlining Institute, [Electric Vehicles for All: An Equity Toolkit](#)



NARUC EV Working Group Transportation Electrification Access and Equity

Jenifer Bosco, Staff Attorney (jbosco@nclc.org)
National Consumer Law Center
May 26, 2020



The National Consumer Law Center

- Since 1969, the nonprofit National Consumer Law Center (NCLC) has used its expertise in consumer law and energy policy to work for consumer justice and economic security for low-income and other disadvantaged people in the United States through policy analysis and advocacy, publications, litigation, and training.
- <https://www.nclc.org/>

NCLC transportation electrification principles

- Advance solutions that will --
 1. Increase transportation access and security for economically disadvantaged consumers
 2. Equitably allocate costs and benefits for economically disadvantaged consumers
 3. Reduce air pollution to achieve public health benefits
 4. Reduce emissions (state climate goals)

The Future of Transportation Electrification report

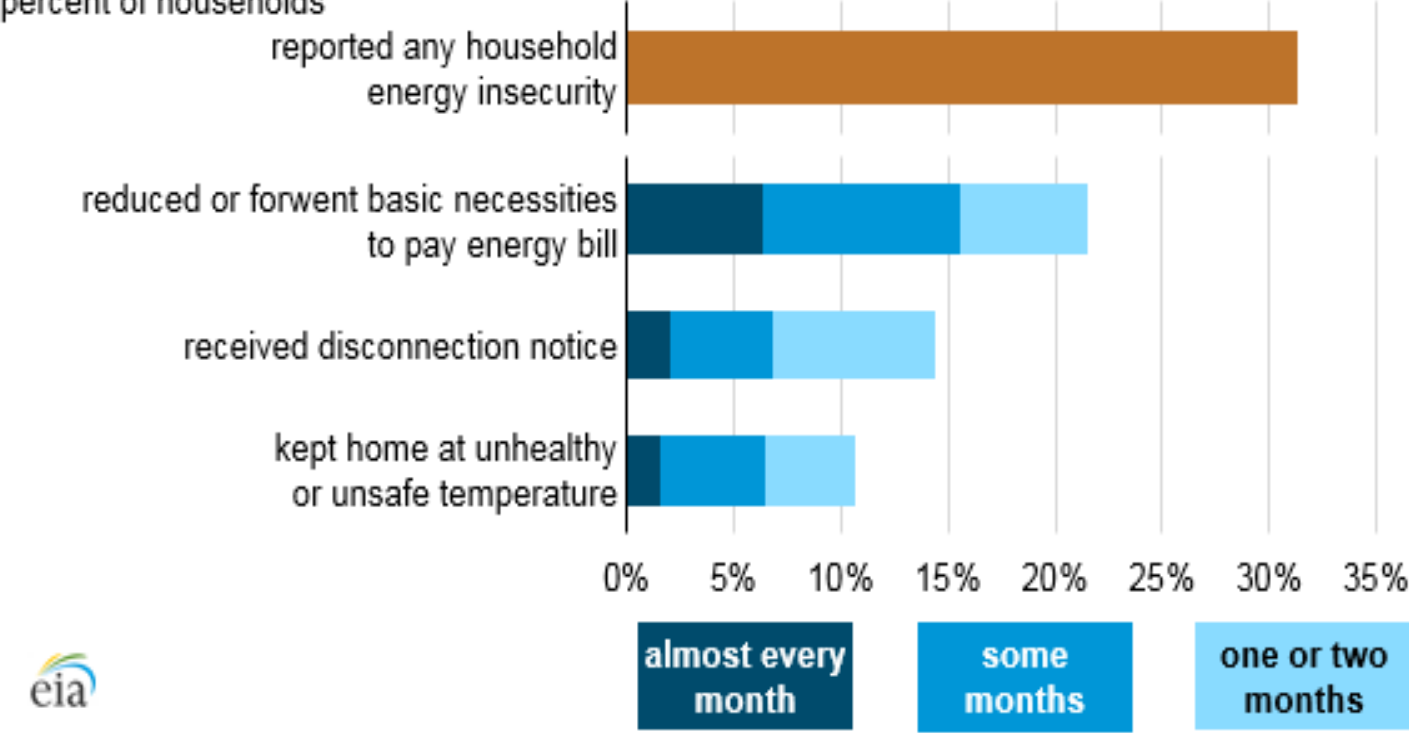
- ***The Future of Transportation Electrification: Utility, Industry and Consumer Perspectives***, by Philip B. Jones, Jonathan Levy, Jenifer Bosco, John Howat, and John W. Van Alst, Ed. Lisa C. Schwartz, FEUR Report No. 10 (2018) (available at <https://emp.lbl.gov/projects/feur>)
- The report approaches the issues from three perspectives: utilities, the EV charging industry and consumers.

Energy Affordability Challenges Before COVID-19

One in three U.S. households faces a challenge in meeting energy needs

Source: U.S. EIA, Residential Energy Consumption Survey 2015 (Sept. 19, 2018)

Households that experienced energy insecure situations, 2015
percent of households



Source: U.S. EIA, Residential Energy Consumption Survey 2015 (Sept. 19, 2018)

What are the potential benefits and risks of transportation electrification for low-income consumers?

- Residential customer benefits – what we hope to see, especially for under-resourced consumers
 - Lower electric rates
 - Lower transportation costs
 - More transportation options
- Residential customer risks –
 - Short-term (or longer?) rate increases to fund utility infrastructure investment
 - Will benefits be equitably shared?

Who will use EVs and how? Car Ownership and Low-Income Consumers

- Average vehicle age is 11.6 years
- Lower income consumers are more likely to lack access to a vehicle, a trend more pronounced for people of color
- Those low-income drivers who own tend to own older vehicles
- For some low-income consumers, non-ownership alternatives such as **public transit, electric school buses** or subsidized **car share** programs may be an equitable way to share in benefits of transportation electrification

Benefits and risks, continued

- Societal benefits
 - Public health and environmental benefits
 - Lower transportation costs overall
 - Efficient use of DERs with managed charging
- Societal risks
 - Will low-income drivers be the last ones driving gasoline-fueled cars?
 - Will additional electricity be produced with renewable energy or with fossil fuels?
 - Would less expensive transportation lead to higher VMTs and less investment in public transit?

What roles should utilities and other stakeholders play?

- EV infrastructure investments must be pursued in a way that will lessen the impact on ratepayers and shield struggling low-income ratepayers from unaffordable rate increases, while providing sufficient infrastructure to support broad adoption of EVs
- Limit utility investments to those not addressed by the market or where other resources are not available, which may include make-ready, multi-family
- Very small rate increases so far but advocates continue to be mindful of bill impacts
- Use rate design, discount rates, bill payment assistance to protect low-income consumers
- Private investment, state and federal funding, Transportation and Climate Initiative as other possible options

What types of utility infrastructure will be needed/who will pay/cost recovery?

- Community and stakeholder input should provide guidance
- Infrastructure to support public uses like electrification of public transit, school buses
- Multi-family housing
 - Many cars lack an off-street parking space
 - Low-income households, younger households, and people of color are more likely to rent than are other demographic groups
 - Regulators have recognized this need in multi-family housing and allowed for utility investment (e.g., California, Florida, Massachusetts)
 - Equity principles support funding through sources other than utility investment where possible, and when utility investment is needed, mitigating rate impacts on low-income consumers

Some Rate Design Options and Cost Recovery Options

- EV-only tariffs
 - Time-varying rates
- Amortizing investment costs over long periods of time
- Applying “used and useful” cost recovery principles
- Establish or enhance low-income discounts and arrearage management programs to mitigate any short-term financial harms from new investment

Time varying rates (TVRs) and low-income consumers

- Consider needs of disadvantaged consumers
 - Some low-income consumers conserve energy so well and use so little electricity that it is difficult to shift load
 - May lack appliances such as central air conditioning, dishwashers, clothes dryers
 - May use medical equipment
 - More likely to work irregular schedules
- Possibilities include EV-only TVRs (instead of whole house), one year “hold harmless” trial period, shadow billing, opt-in TOU rate
- AMI costs paid by EV participants

Policy and regulatory issues

- Utility consumer protections
 - Stronger consumer protections to prevent disconnection will be needed as beneficial electrification moves forward
- Address underserved markets
 - Community mobility needs assessments can help identify the most beneficial types of programs for an underserved community, such as installation of chargers in multi-family housing, enhanced purchase and lease incentives, public transit, school buses, ride sharing, car sharing, scrap & replace, electric bike or scooter sharing, addressing digital divide issues

But you can't plug in your EV without electricity ...

- COVID-19 crisis has highlighted utility affordability issues
- Orders or voluntary guidance were issued in most states to prevent disconnection of electricity, gas and/or water service for nonpayment during crisis
- Public Health Rationale for Disconnection Moratorium Orders:
 - Uninterrupted access to electricity, heat, and hot water are now necessary for individual and public health
 - Must maintain electric and other utility service, including telecommunications, to comply with directives to maintain social distancing, wash hands, stay at home while sick, work from home, participate in on-line education, consult with health care providers remotely, monitor the condition of vulnerable family and friends
 - Financial hardships due to health consequences, diminished income, or both
 - Disproportionate harm to people of color, low-wage workers

Status of Moratorium Orders and Post-Moratorium Protections

- Updated lists of state moratorium orders and post-moratorium information available at:
 - Energy and Policy Inst., energyandpolicy.org
 - NARUC State Tracker, naruc.org
 - NASUCA State Tracker, nasuca.org

State Orders, examples

- California
 - Request filed with CPUC on 3/12/2020
 - Request referenced open dockets on disconnections (R.18-07-005) and disaster relief (R.18-03-011)
 - Order issued 3/17, retroactive to 3/4
 - Applies to energy, water, sewer, and communications companies under CPUC jurisdiction
 - Extends through at least April 16, 2021
 - Requirements for payment plans for energy customers are found in previous disaster docket order, D.19-07-015

State Orders, examples

- Massachusetts
 - Disconnection moratorium issued on 3/24 to cover regulated electricity, gas and regulated water service
 - Lasts for duration of state of emergency or other notice from DPU
 - Current proceeding at DPU 20-58 re: credit and collection policies, payment plans, AMPs, duration of protections, self-certification
 - Post-moratorium working group established

State Orders, examples

- Illinois Credit and Collections Policies, Post Emergency
 - ICC initiated proceeding as part of shut off moratorium order calling for more flexible C&C plans to be filed by all regulated electric, gas and water utilities “for the Commission’s consideration and review.”
 - Commission: “Temporary revised and more flexible credit and collections procedures are needed to ensure that customers remain connected to essential utility services when the emergency status ends.”

Post-Moratorium Advocacy – NCLC Recommendations

NCLC general recommendations include:

- Reconnect any customers disconnected prior to shelter-in-place order
- Eliminate any customer deposit requirements
- Eliminate down payment requirements on payment plans or deferred payment arrangements (DPAs)
- Allow flexible, reasonable DPAs that are based on the customer's ability to pay (18-24 months for low-income customers)
- Eliminate any requirement that disconnected customers pay the full arrearage in order to reconnect, thereby permitting reconnection upon issuance of an affordable DPA
- Eliminate minimum balance requirements for prepaid utility service customers
- Stop late fees and negative credit reporting
- Require utilities to collect and report critical data on residential disconnections and arrearages, by zip code

NCLC Resources

- ***The Future of Transportation Electrification: Utility, Industry and Consumer Perspectives***, LBNL FEUR Report No. 10 (2018), <https://emp.lbl.gov/projects/feur>
- ***Principles for Fair and Equitable Investment in Electric Vehicles and Transportation Electrification*** (Oct. 2018), https://www.nclc.org/images/pdf/electric_vehicles/nclc-ev-principles-oct18.pdf
- **NCLC comments re: Transportation & Climate Initiative of the Northeast and Mid-Atlantic States**, February 28, 2020
- **Making Electric Vehicles Work for Utility Consumers: A Policy Handbook for Consumer Advocates**, November 2019 by Synapse Energy Economics, Inc. with foreword by Jenifer Bosco (NCLC) and fellow advisory group members.
- COVID-19 Advocacy Resources: <https://www.nclc.org/special-projects/covid-19-consumer-protections.html>
- ***Coronavirus Crisis: How States Can Help Consumer Maintain Essential Utility Service***: https://www.nclc.org/images/pdf/special_projects/covid-19/IB_What_States_Can_Do_Coronavirus_Uilities.pdf
- Major consumer protections announced in response to COVID-19: <https://library.nclc.org/major-consumer-protections-announced-response-covid-19>
- ***The Need for Utility Reporting of Key Credit and Collections Data Now and After the Covid-19 Crisis***: <http://bit.ly/brief-covid-19-data>
- Bill assistance and arrearage management program design template <https://bit.ly/RPT-covid-19-program-design>
- Electric utility residential arrearage scenarios by state [bit.ly: https://bit.ly/covid-state-electric-arrears](https://bit.ly/covid-state-electric-arrears)



National
Consumer Law
Center

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Audience Questions

Does the working group have any questions for the Jenifer?

PG&E Clean Energy Transportation Programs

*Ensuring equity in utility EV programs
Prepared for NARUC's EV State Working Group*

Sam Piell
Program Manager, EV Fast Charge
Samantha.Piell@pge.com

May 2020

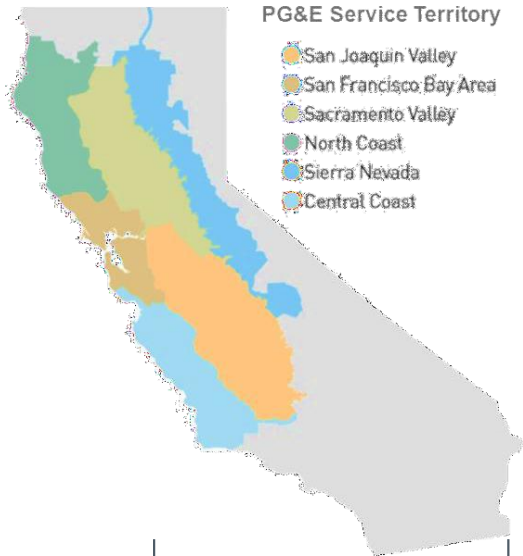


Together, Building
a Better California



PG&E Company overview

PG&E is focused on providing safe, reliable, affordable and clean energy to nearly 16 million Californians.



20,000+
employees

5.3 million
electric
customers

~80%
GHG-free energy

70,000
square mile
service area

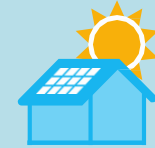
4.4 million
gas distribution
customers

7,700
MW of owned
electric generation
capacity

PG&E customers lead the nation in clean technology adoption

450,000 solar customers

PG&E ranked #1 with
20% of all U.S. rooftop solar



270,000 electric vehicles

PG&E ranked #1 with
20% of all U.S. electric vehicles



>800 GWh of efficiency savings

PG&E ranked #2 among U.S. utilities



**7,500 behind-the-meter battery
customer sites**

CA ranked #1 for behind-the-meter storage
deployments with 50% of all U.S. deployments



Source: Solar and storage statistics from PG&E internal customer database, EV adoption from Veloz CA Sales Dashboard, Energy Efficiency from <https://cedars.sound-data.com/filings/dashboard/PGE/2017>



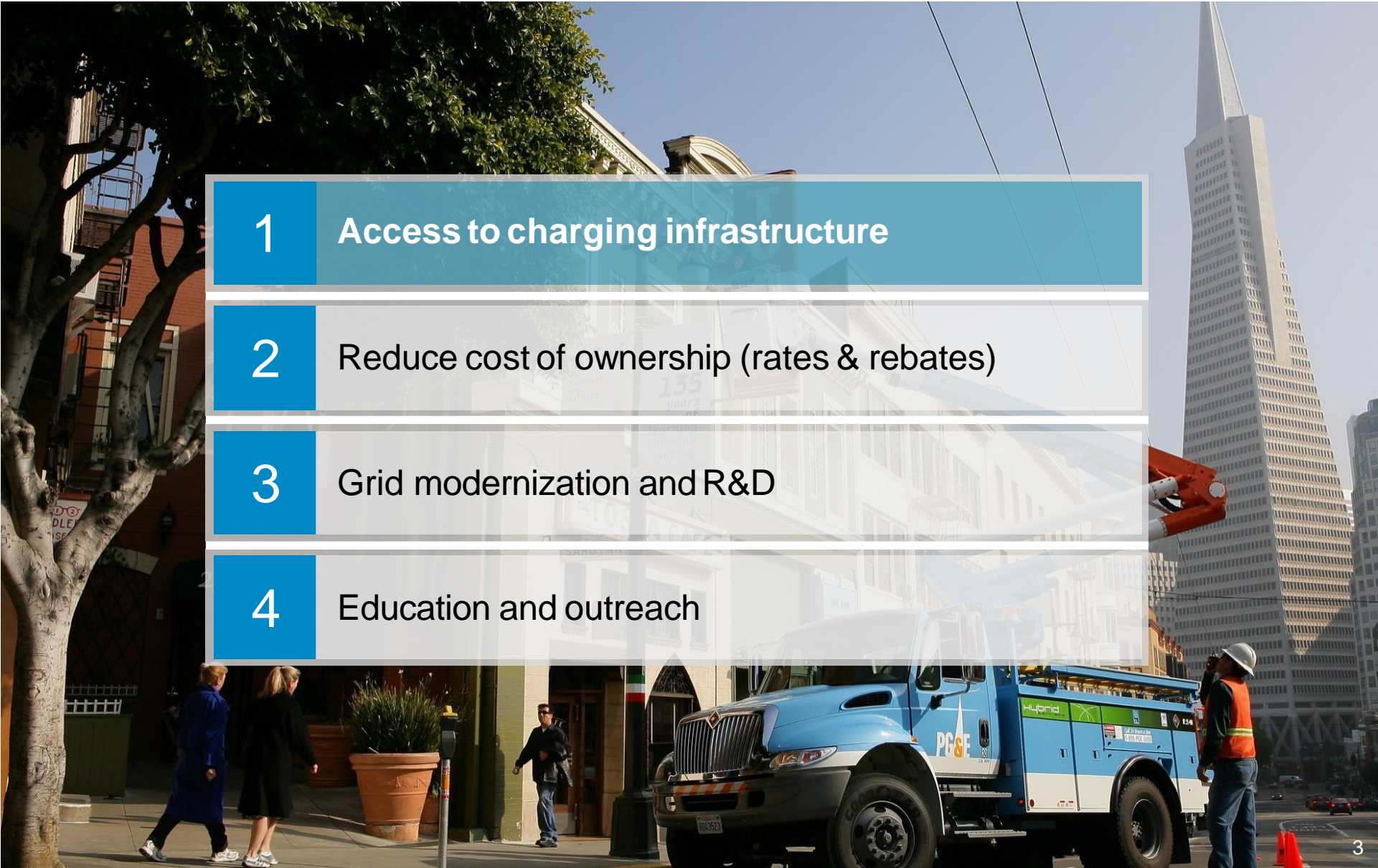
Support for EV growth by targeting key enablers and leveraging PG&E's core competencies

1 Access to charging infrastructure

2 Reduce cost of ownership (rates & rebates)

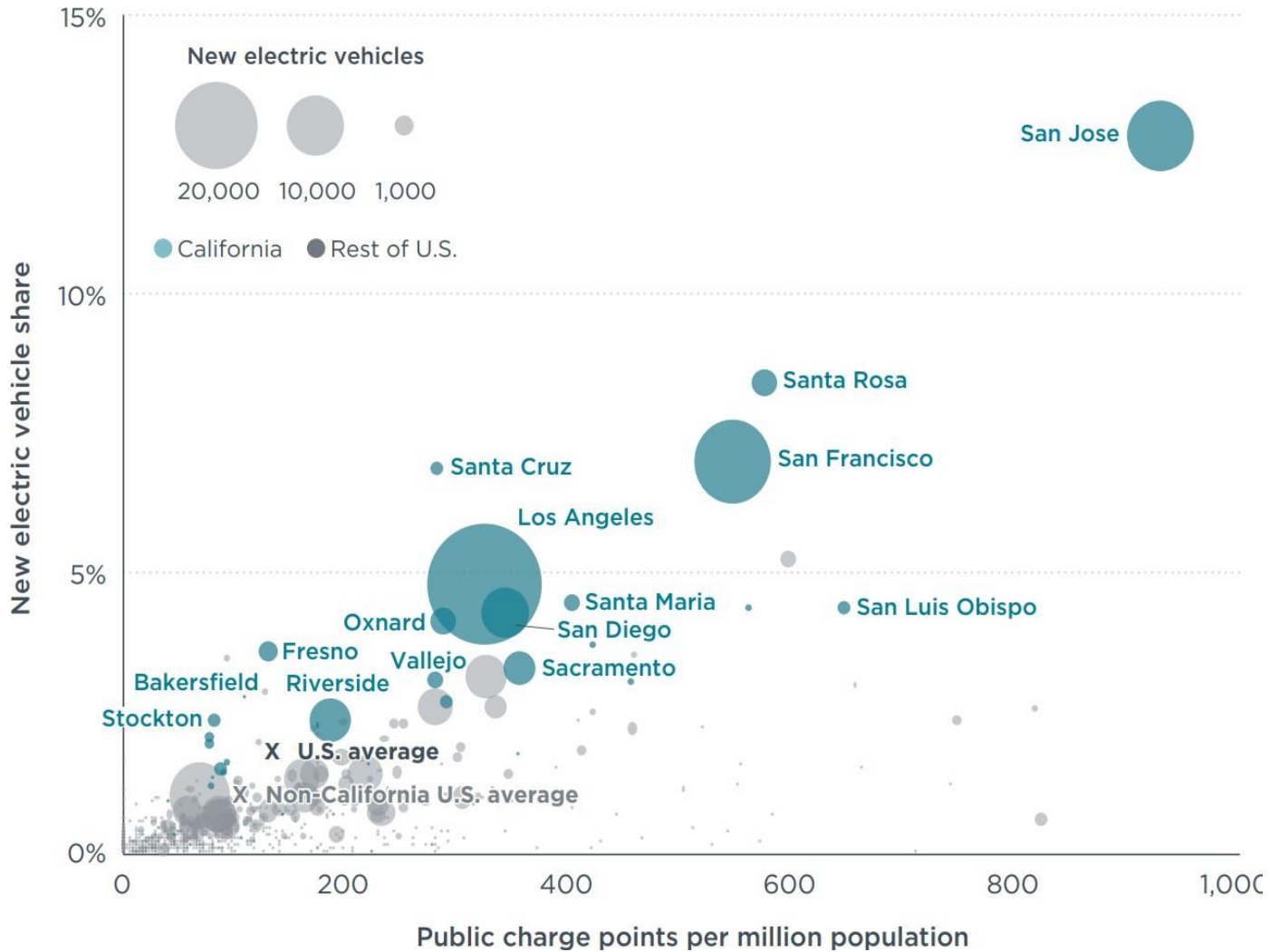
3 Grid modernization and R&D

4 Education and outreach





Access to charging infrastructure is closely correlated to EV adoption



Source: International Council on Clean Transportation (2018), *California's continued electric vehicle market development*.
<https://www.theicct.org/sites/default/files/publications/CA-cityEV-Briefing-20180507.pdf>



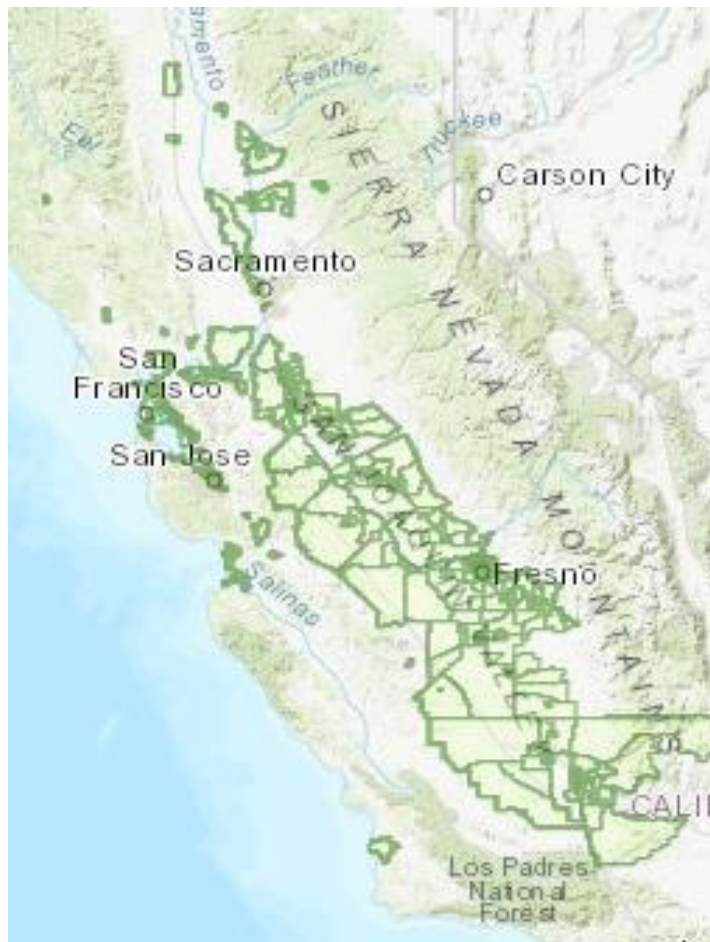
What is a DAC?

*Disadvantaged communities refers to the areas throughout California which most suffer from **a combination of economic, health, and environmental burdens**. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease. One way that the state identifies these areas is by collecting and analyzing information from communities all over the state. **CalEnviroScreen**, an analytical tool created by the California Environmental Protection Agency (CalEPA), combines different types of **census tract-specific** information into a score to determine which communities are the most burdened or "disadvantaged."*

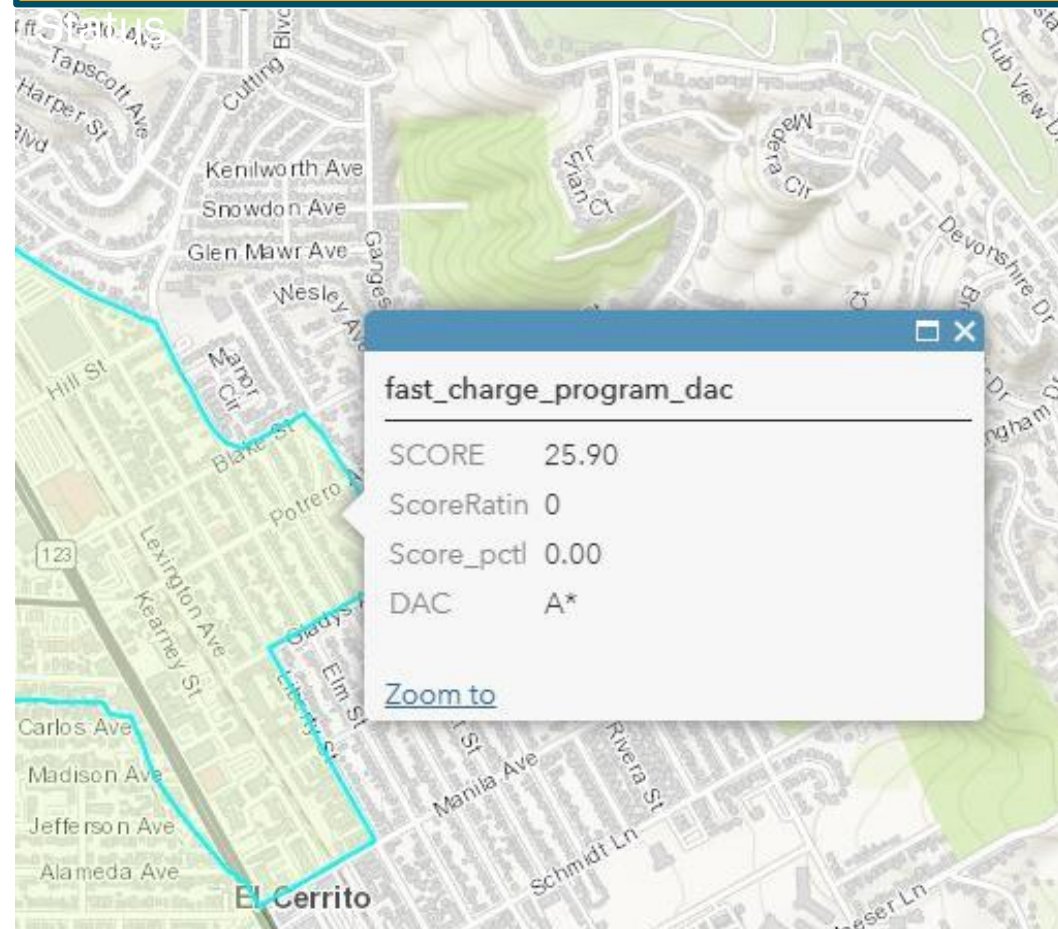
Source: <https://www.cpuc.ca.gov/discom/>

Important Tools: DAC Maps

View of entire serviceterritory



Zoomed in to find specific address and DAC



\$380M of investments in EV infrastructure

EV charge network

- \$130M over 3 years
- Utility-owned make-ready infrastructure for up to 7,500 level 2 chargers at workplaces and multi-unit dwellings (MUD)
- Rebate for charger or option for utility ownership at MUDs and in disadvantaged communities

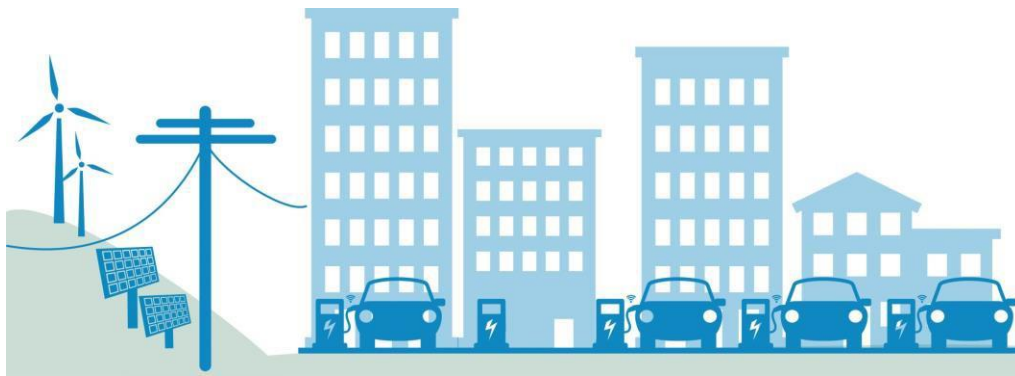
EV fleet

- \$236M over 5 years
- Make-ready infrastructure for 6,500 non-light-duty EVs (delivery trucks, transit buses, etc.) at 700 sites
- Customer can elect to own make-ready and receive reimbursement of up to 80% of construction cost

EV fast charge

- \$22M over 5 years
- Utility-owned make ready infrastructure for 50+ fast charging plazas
- Chargers from 50-350 kW with make ready 'future proofed' to minimum 150kW

All programs include additional incentives for and deployment targets in disadvantaged communities



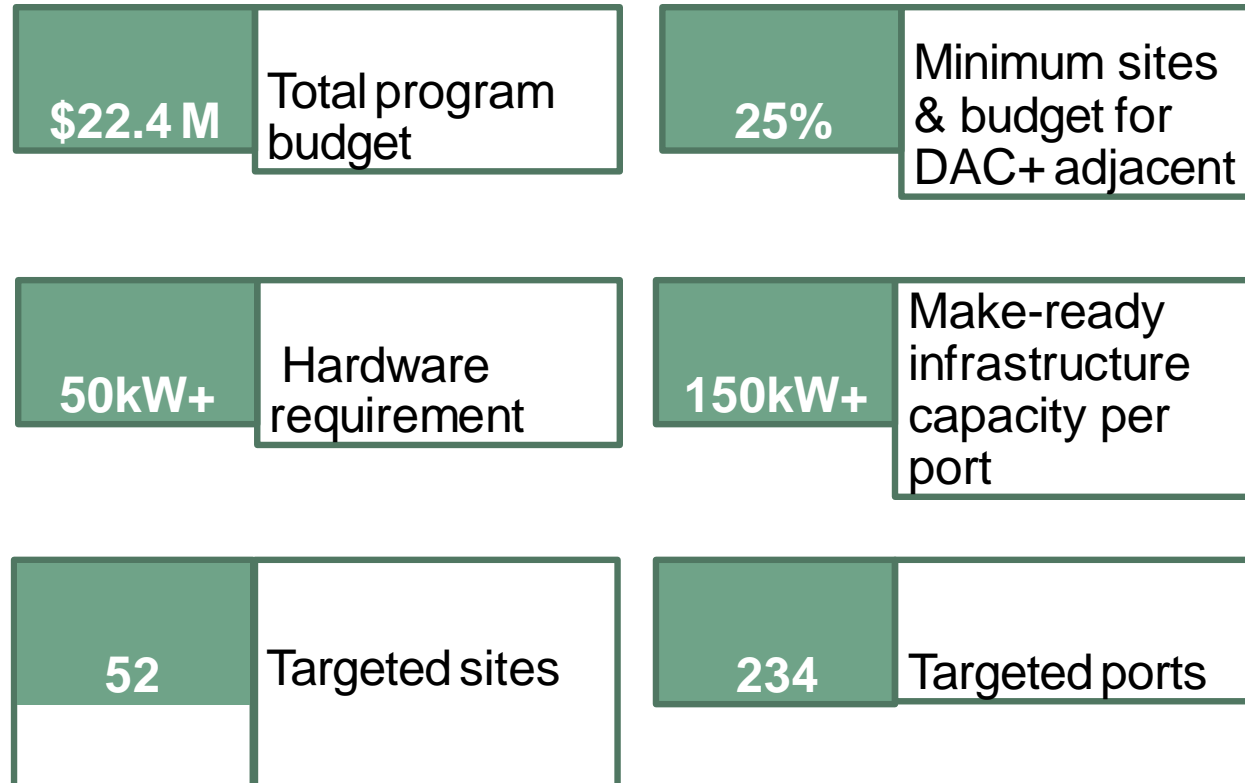


Fast Charge: Program Overview

Key Program Features

- Light-duty vehicles
- Publicly available chargers
- PG&E pays for and owns make-ready infrastructure
- EVSE owned by site-host, EVSP or 3rd Party
- Participation limited to top-ranking sites

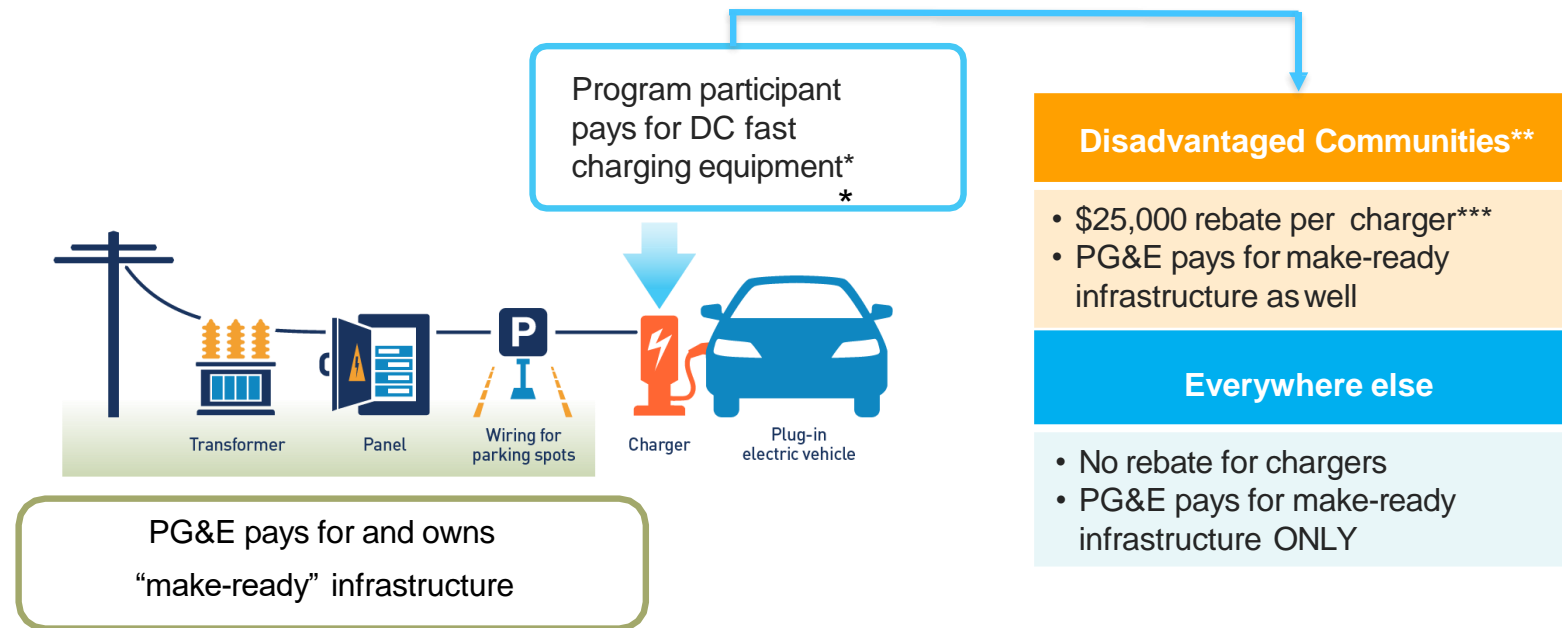
Fast Charge Highlights by the Numbers





Fast Charge: How it Works

PG&E pays for a significant portion of total costs



* DC fast charger can be owned by customer, charging equipment vendor, or other third-party. PG&E can not own chargers.

** Includes census tracts adjacent to disadvantaged communities

*** Rebate amount not to exceed full cost of charger equipment and installation costs

Audience Questions

Does the working group have any questions for the Sam?

Peer Discussion – Commissioners and Commission Staff Only

Facilitators

- ▶ Working Group Chair Maria Bocanegra and Illinois Commerce Commission Staff
- ▶ Working Group Vice-chair Jason Stanek and Maryland Public Service Commission Staff

Discussion Questions

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2. What requirements or programs should commissions pursue to ensure EV charging programs benefit underserved communities?
3. What steps should commissions pursue to ensure electric transportation is available to low-income consumers and other underserved groups?
4. How do you solve the challenge posed by multi-unit dwellings?

Announcements

May Meeting:

- ▶ Topic: *Public Charging: Siting, Demand Charges, and Permitting*
- ▶ **June 23, 3:00 – 4:30pm ET**
- ▶ Speakers and agenda to come

EVSWG Listserv: NARUC-EVSWG@lists.naruc.org

Presentations and recordings of past EVSWG events: www.naruc.org/cpi-1/energy-infrastructure-modernization/electric-vehicles/