

PG&E Transportation Electrification Overview

September 20, 2018



Together, Building
a Better California



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

~70%
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

>360,000 solar customers

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



>165,000 electric vehicles

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



>800 GWh of efficiency savings¹

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



**>1,830 behind-the-meter battery
customer sites**

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



¹ Energy Efficiency savings for 2016, <https://cedars.sound-data.com/filings/dashboard/PGE/2017> PG&E ranked #2 in 2015 (benchmark data for 2016 not yet available),



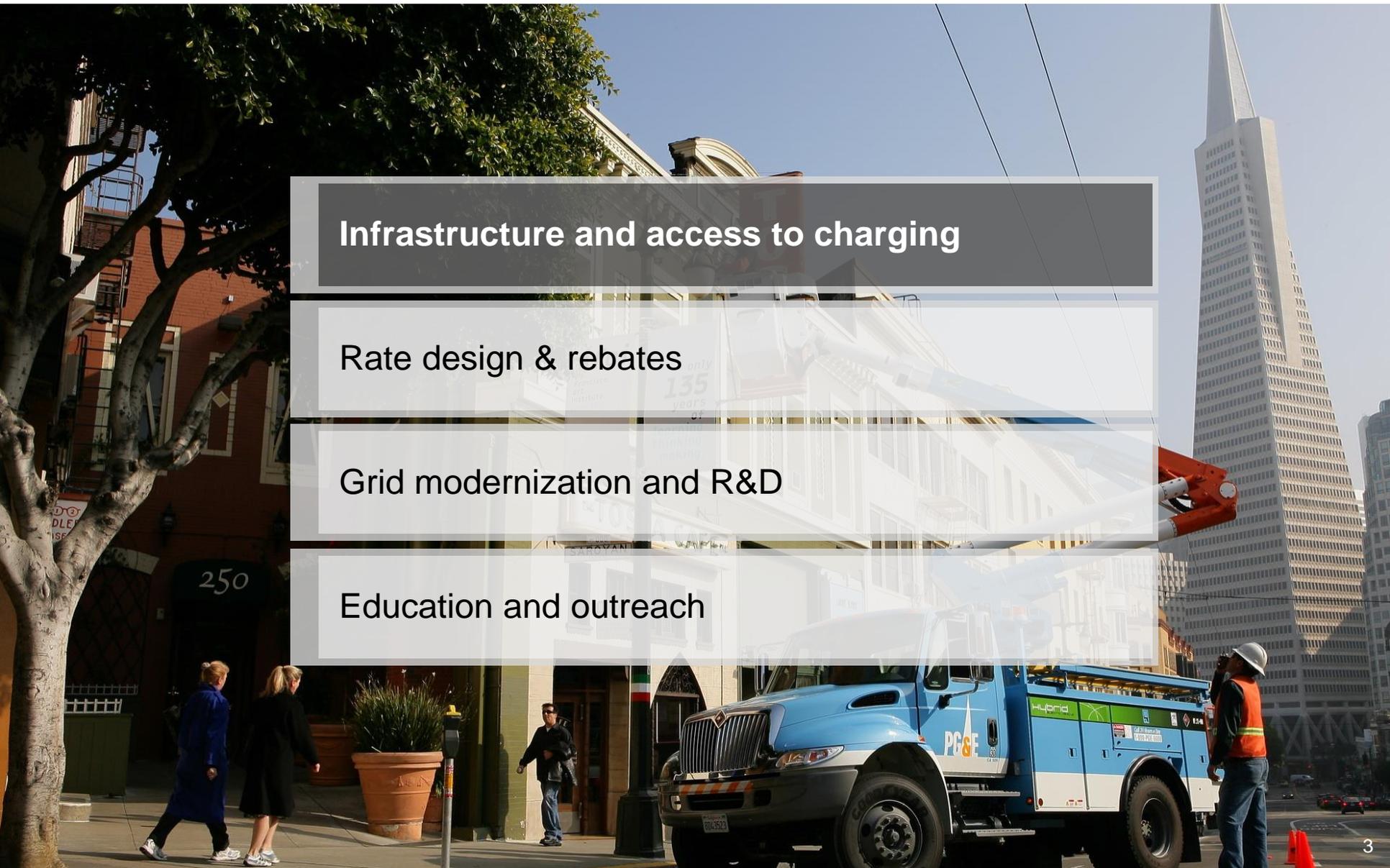
Support for EV growth by addressing market barriers and leveraging PG&E's core competencies

Infrastructure and access to charging

Rate design & rebates

Grid modernization and R&D

Education and outreach





\$380M of investments in EV infrastructure

EV Charge Network

- 7,500 Level 2 chargers (10-20 chargers per site)
- Installations began in January 2018
- \$130 million; 3 years
- Targeting Workplaces, multi-unit dwellings
- Turnkey installation from utility covers most costs; rebate/participation payment for site hosts

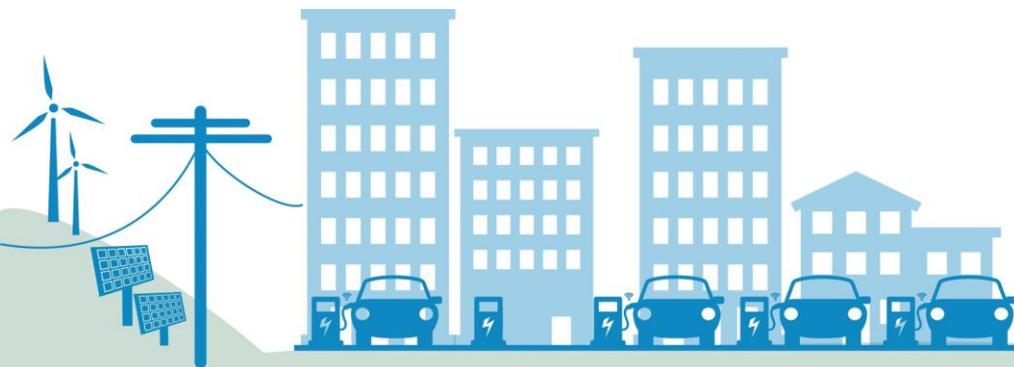
Fast Charge

- 50+ plazas for DC Fast Charging; utility provides make-ready infrastructure
- Final CPUC approval received 05/31/18
- \$22 million; 5 years
- Corridor and urban sites
- Plan for variety of power requirements (50 – 350 kW)

FleetReady

- Infrastructure for non-light-duty fleets (e.g. delivery vans, transit buses, forklifts, truck refrigeration units) - addressing the primary source of air pollution
- Final CPUC approval received 05/31/18
- \$236 million; 5 years
- Program sized to meet forecast adoption – 6,500 vehicles at 700 sites

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





Project 1: MD/HD Fleet Customer Demonstration

Goal: demonstrate lower total cost of ownership for customer fleet electrification with utility assistance

Description: Deploy make-ready infrastructure and charging management tools to minimize operating costs



Project 2: Idle Reduction Customer Demonstration

Goal: demonstrate economic viability for technology deployment with utility assistance

Description: Deploy make-ready infrastructure and charging management tools to minimize operating costs



Project 3: School Bus Over-generation pilot

Goal: test rate and incentive structures to target EV charging during periods of over-generation

Description: Leverage unique duty cycle of school bus fleet to charge vehicle mid-day for grid benefit

Thank you!

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