

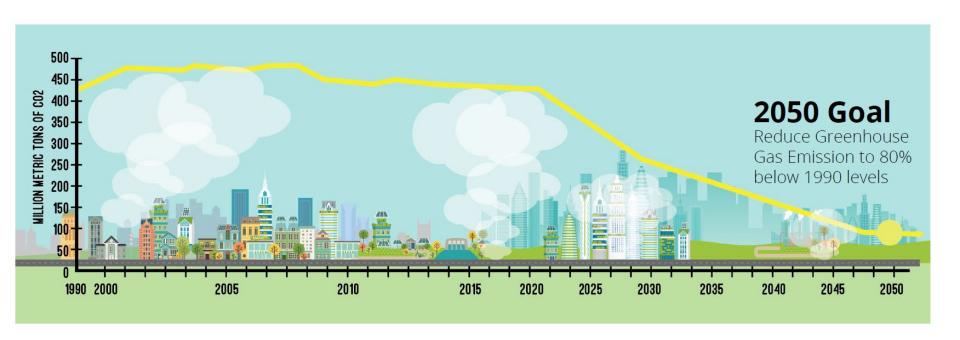
# **Southern California Edison Charge Ready Transport**

February 25, 2019



### SCE is Leading the Way in Transforming the Energy Sector

- Governor Brown's Executive Order B-48-18 increases the state target for Zero-Emission Vehicles to 5 Million by 2030
- In line with the state's efforts, SCE filed a wide-ranging plan with the California Public Utilities Commission (CPUC) for expanding electric transportation within its service area.

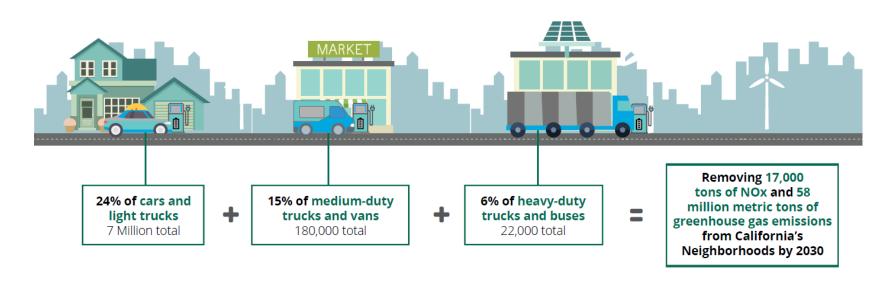


## The Transportation Electrification Pathway to 2030

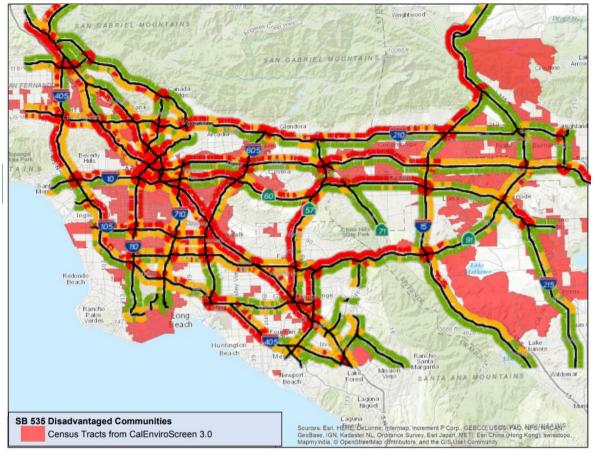
- SCE's vision to reduce greenhouse gases and air pollution to meet California goals
- Our approach is to leverage our role as an electric infrastructure provider to enable a clean future in CA

#### THE TRANSPORTATION ELECTRIFICATION PATHWAY TO 2030

SCE's vision to reduce greenhouse gases and air pollution to meet California goals.



### Sustainability Impacts in Disadvantaged Communities - Greater Los Angeles Area & Orange County



Communities are considered DACs if they are in the worst quartile of environmental & economic burden, as evaluated by the California EPA using CES 3.0. Freight corridors are consistent with those identified by the Southern California Association of Governments in its 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy. A map of freight corridors, warehouses, and rail lines is available in the RTP/SCS Goods Movement appendix, available at <a href="http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS">http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS</a> GoodsMovement.pdf.

### SCE Charge Ready Transport



## **Business TE Programs**



#### **Decision Summary**

- Approved total program budget of \$356.4M
- Achieve minimum 870 sites with 8,490 electric vehicles procured or converted
- Charging station rebates available for transit/school buses and sites in DACs
- Launching first half of 2019

#### **Budget Allocation**

- Minimum 15% infrastructure budget should serve transit agencies
- Maximum 10% infrastructure budget should serve forklifts
- Minimum 25% of infrastructure budget should serve ports and warehouses
- Minimum 40% infrastructure budget should serve sites in DACs

### Charge Ready Transport Program Overview

SCE will deploy makeready infrastructure up to the interconnection point with charging equipment.

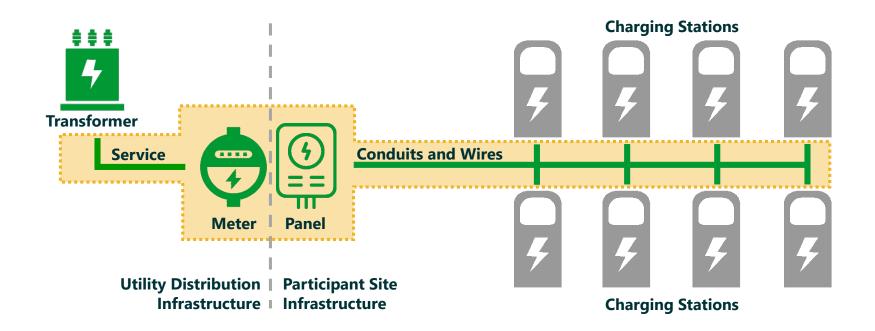
Participants can select from a list of approved charging equipment.

Customer ownership option on customer side infrastructure is available.

Charging equipment rebate available to transit agencies, school bus operators, and sites located in disadvantaged communities.

## **Defining Make-Ready Infrastructure**

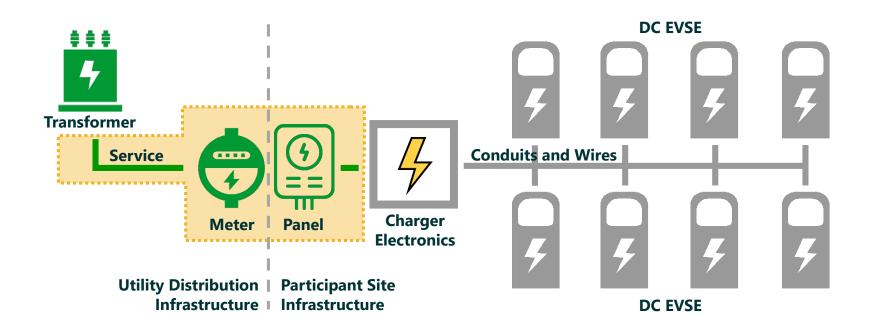
Standalone charging station model



Program covers costs associated with service drop, meter, panel, and circuit dedicated to EV charging. Make-ready ends at interconnection point with customer charging equipment providing AC service.

## **Defining Make-Ready Infrastructure**

Centralized charger electronics with modular DC power distribution



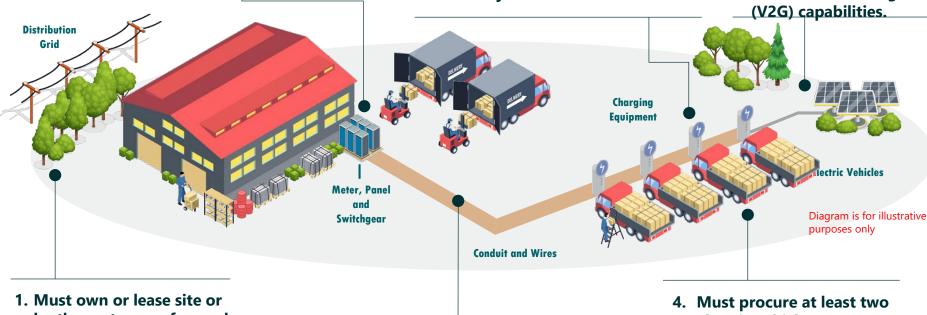
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## **Customer Eligibility and Obligation**



- 6. Provide proof of purchase (EVSE and vehicles)
- 7. Must maintain and operate charging stations for at least 10 years from installation.
- 8. Must provide charging data for at least five years after EVSE is installed.

10.Participants can combine on-site load management technologies to EV charging including solar, energy storage, and/or vehicle-to-grid (V2G) capabilities.



- 1. Must own or lease site or be the customer of record associated with meter.
- 2. Site must include an appropriate location to deploy charging equipment in a cost-effective manner.

3. Provide signed grant of easement by site owner

- 4. Must procure at least two electric vehicles (EV) or convert at least two diesel vehicles to electric.
- 5. Submit vehicle acquisition plan

#### SCE Electric Vehicle Rates



#### New Rates to Accelerate EV Adoption

#### **New Features**

- Targeting availability March 2019
- No demand charges years 1-5
- Demand charges phased in years 6-10
- Existing EV accounts will have Demand Neutralization grandfathered in perpetuity



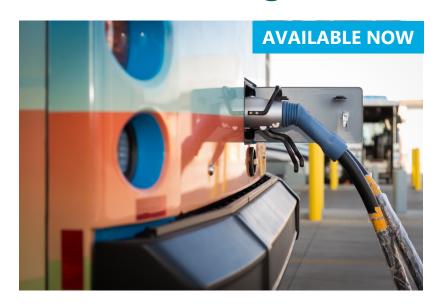
#### **Metering:**

 EV rates available for separately-metered charging installation

#### **Encouraging off-peak charging:**

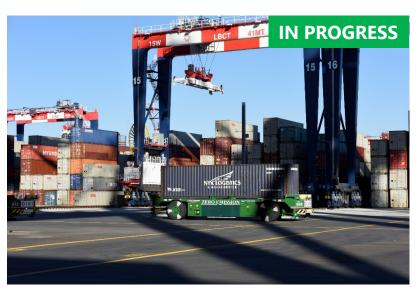
 Higher energy rates on-peak (4-9 PM)

#### **Business TE Programs**





- No-cost infrastructure to serve electric bus charging
- Available to all government transit agency customers
- **One-time rebate** to offset the costs of charging equipment
- Launched on June 4, 2018



#### **Port of Long Beach Projects**

- Convert nine out of 24 rubber tire gantry cranes from diesel to electric power
- Deploy infrastructure to serve up to 20 yard tractor charging stations
- Complete by end of 2019

#### **Business TE Programs**





- No-cost infrastructure to serve level
  1 or level 2 EV charging
- Available to all business customers and multi-unit dwelling site owners
- One-time rebate to offset the costs of charging stations
- CPUC authorized \$22 Million in "Bridge Funding" accepting new applications in Q2/19



#### **Charge Ready DC Fast Charge**

- No-cost infrastructure to serve DCFC or level 3 EV charging
- Available to all business customers
- One-time rebate to offset the costs of DCFC stations
- Launched on June 29, 2018

### **Additional Programs and Services**



## **Transportation Electrification Advisory Services**

- Perform rate analyses to find optimum rate tier
- Perform fleet assessment service to calculate GHG reductions and potential LCFS credits
- Support customer-led projects outside of programs

## **Self Generation Services**

- Review plans for solar and battery storage projects
- Conduct analysis of feasibility and customer savings
- Provide a third-party check on vendor claims

## **Online Energy Management Tool**

- Displays usage data daybehind
- Online graphs and data summaries provide highlevel insights
- Detailed data available for download and offline analysis