DOCKETED	
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Project Title:	Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (EnergIIZE Commercial Vehicles)
TN #:	242340
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EnergIIZE Utilities and Me Workshop Slides and Recording

EnergIIZE Utilities and Me Workshop PowerPoint slides below from March 15, 2022 presentation.

A recording of the Workshop is viewable at the link below.
https://www.youtube.com/watch?v=ouRqcXWS7O0

Additional submitted attachment is included below.

Energize Commercial Vehicles

March 15, 2022

EnergIIZE COMMERCIAL VEHICLES

Utilities and Me

Infrastructure Readiness Center (IRC) Webinar highlighting how fleets can get on one accord with their local utility

EnergIIZE Commercial Vehicles

Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles

Accelerating fueling infrastructure deployment for zero-emission trucks, buses and equipment

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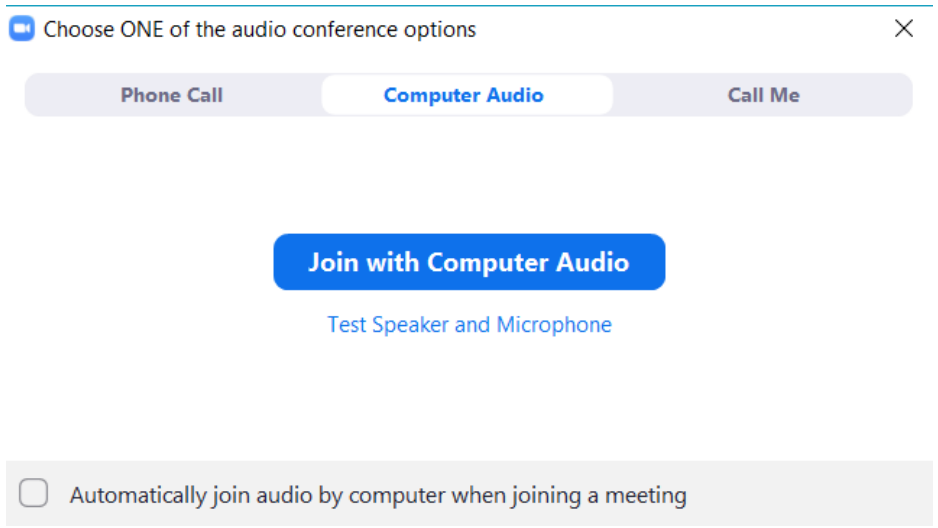
Zoom Logistics

All participants will be unable to share their video.

All participants (web and dial-in) are automatically in listen-only mode.

If you have questions, you can use the chat function. You may send messages to the whole meeting or individual participants.

If you dial-in from a phone, use the meeting ID and passcode from invite



Meeting ID: 882 1704 4786

Passcode: 121986

Mobile:
+16699006833,88217044786# US (San Jose)
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+1 669 900 6833 US (San Jose)
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(Invite information above is for illustrative purposes only.)

Agenda

1. Make-Ready Overview

2. Investor-Owned Utility (IOU) Make-Ready Presentations
   - San Diego Gas & Electric
   - Pacific Gas & Electric
   - Southern California Edison

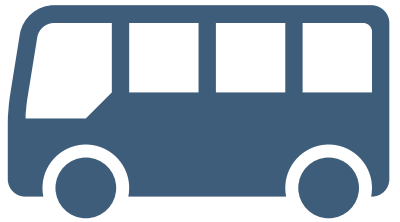
3. Utility Panel Questions

4. Q&A

Make-Ready Overview

Site Preparation

Make-Ready Utility Programs look to provide much of the equipment necessary for adequate energy supply to your site. This may include any equipment requested for a site which needs new service.



Collaboration

By participating in make-ready programs, you create partnerships with your local utility and may aid with any current and future projects to come!

Make-Ready and EnergIIZE

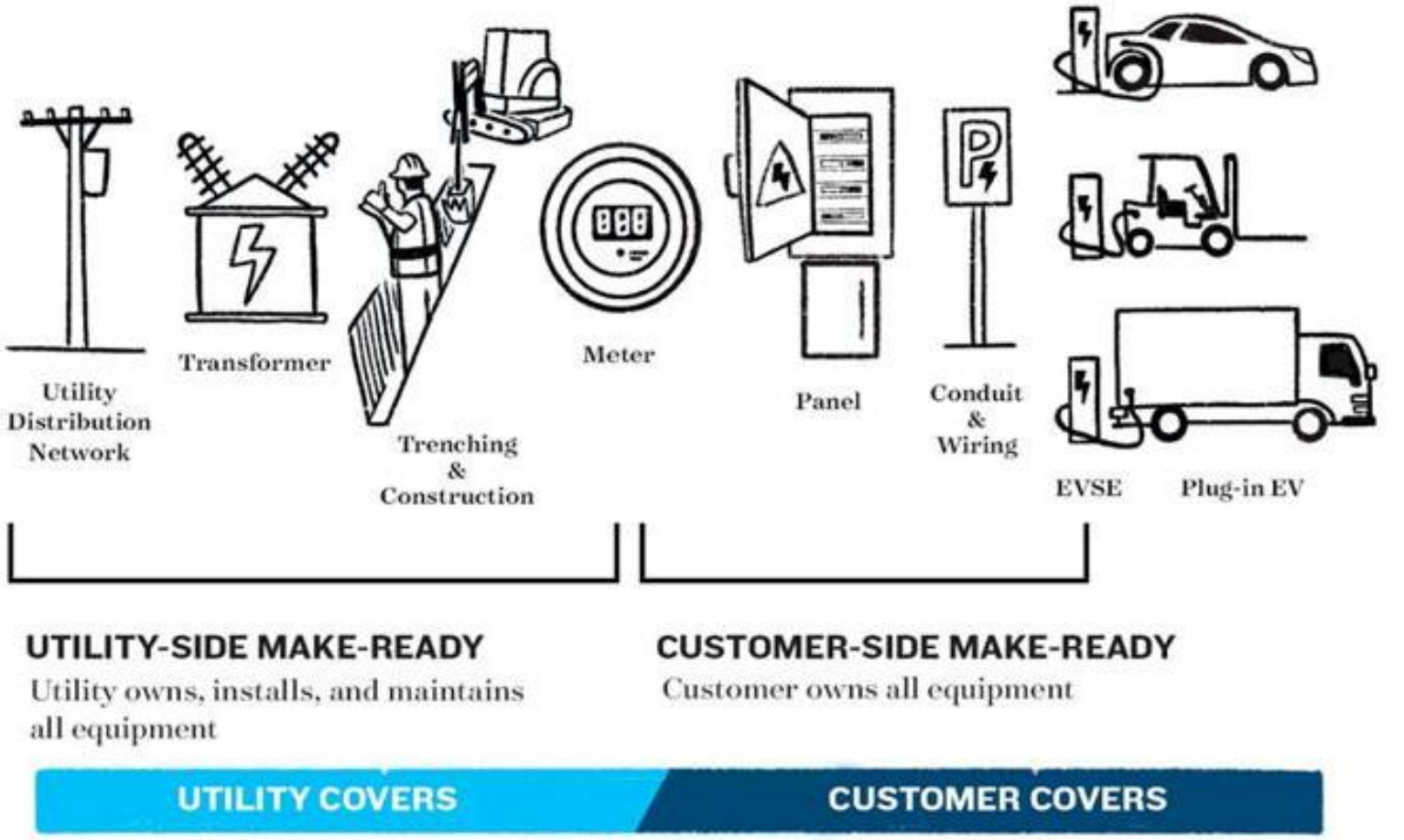


Image:
Jessica Russo, Natural Resources Defense Council (NRDC)

- EnergIIZE and Make-Ready Incentives can be stacked.
- This is intended to aid in the construction and installation of most components necessary for your infrastructure project.
- EnergIIZE incentives apply to Equipment on the customer-side of the meter as shown in the figure.

EnergIIZE COMMERCIAL VEHICLES

Utility Spotlight

SDGE

A Sempra Energy utility®

Power Your Drive *for* Fleets

Charging Infrastructure Support for Medium- & Heavy-Duty Electric Vehicles

SDG&E helps install make-ready charging infrastructure for medium- and heavy-duty fleets

Program Overview

$107 million
budget over 5 years

3,000+ new EVs
on- and off-road Class 2-8

300+ customer sites
commercial and private fleets

Program Requirements

Demonstrate commitment to procure a minimum of 2 electric fleet vehicles

Demonstrate long-term electrification growth plan and schedule of load increase

Provide data related to charger usage for a minimum of **5 years**

Own or lease the property where chargers are installed, and **operate and maintain vehicles and chargers for minimum of 10 years**

Program eligibility includes a diverse mix of on-road and off-road, medium- and heavy-duty vehicle types

ELIGIBLE VEHICLE TYPES

MEDIUM DUTY

Delivery & shuttle (Class 2-6)
>6,000 LBs

HEAVY DUTY

Transit (Class 7-8)

School bus (Class 6-7)

Goods movement (Class 7-8)

Other (Class 7-8)

OFF-ROAD

Truck stop electrification

Transport refrigeration units

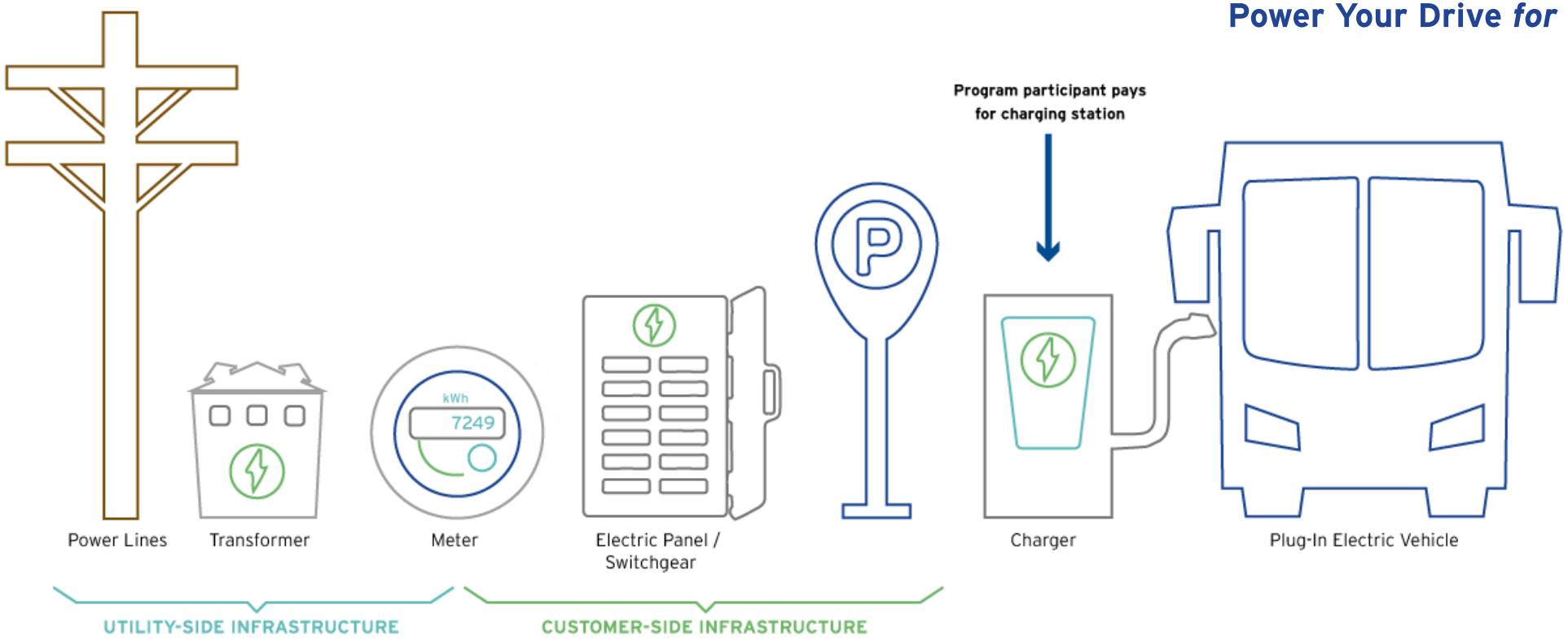
Yard trucks

Airport ground support equipment

Forklifts (Class 2 or higher)
>6,000 LBs

Program offers two options for installation & ownership

Power Your Drive *for* Fleets



Option 1:
SDG&E-Owned Infrastructure

SDG&E pays for, constructs, owns and maintains all infrastructure up to the charging station

Customer owns & pays for charging stations; charger rebates may apply

Option 2:
Customer-Owned Infrastructure

SDG&E pays for, constructs, owns and maintains infrastructure to the meter

Customer pays for, constructs, owns and maintains infrastructure behind the meter for a rebate of up to 80% of the costs; owns & pays for charging stations; charger rebates may apply

SDGE A Sempra Energy utility®

Power Your Drive *for* Fleets
ELECTRIFICATION TIMELINE

START

1 Submit Interest:

Fleets can start by submitting an **interest form**. An SDG&E® representative will work with you to ensure your site is eligible and help you apply for the program.

1-2 months »

2 Preliminary Design & Engineering

SDG&E® will conduct a physical inspection of your project location, create and finalize your infrastructure design package, and obtain permits.

6-9 months »

3 Construct Infrastructure:

SDG&E® will construct your make-ready EV charging infrastructure. Fleets have two options to construct and pay for charging infrastructure.

3-4 months »

4 Activate Site:

Customer must commission EV charging stations before SDG&E® will inspect and energize equipment.

1 month »

5 Closeout & Maintenance:

SDG&E® will conduct a post-event job walk and is responsible for ongoing maintenance of SDG&E®-owned infrastructure. Customer is responsible for ongoing maintenance of customer-owned infrastructure and equipment.

COMPLETE

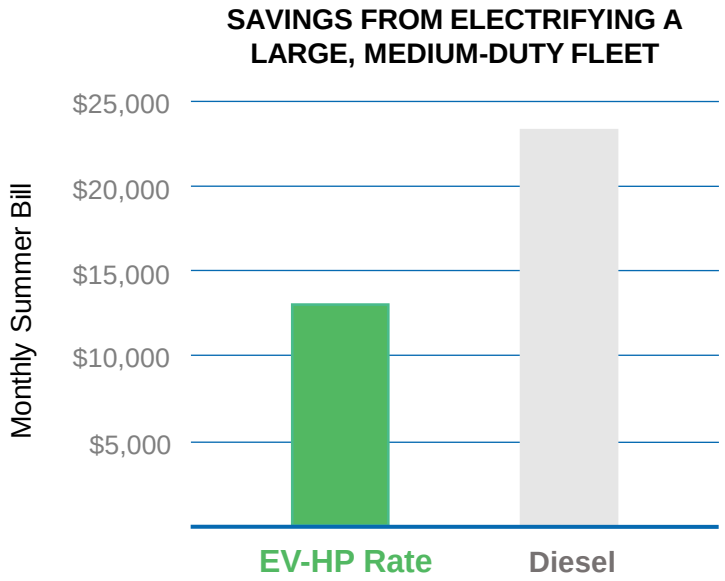
Total Electrification Timeline: 11-16 months

SDG&E provides additional incentives with fleet-friendly rates & program charger rebates

Benefits of EV-HP Rate

- Eliminates Demand Charges
- Lower, Fixed Rates
- Simpler Billing Through a Monthly Subscription Plan

Eligible EV-HP customers have an opportunity to **save up to 50% on electricity costs** compared to the cost of fueling with diesel.



Who is eligible for the charger rebate?

- School buses
- Transit buses
- Sites in disadvantaged communities

Maximum rebate amounts per charger power level

EVSE power	Max. rebate amount*
Up to 19.2kW	$3,000 per charger
19.3kW up to 50kW	$15,000 per charger
50.1kW up to 150kW	$45,000 per charger
150.1kW and above	$75,000 per charger

**Eligible sites will receive a rebate for each qualified charger for the lesser of 50% of the cost of the charger or the maximum amount based on power output as detailed above, not to exceed 50% of the cost of the charger.*

Questions?

RESOURCES:

Want to learn more about the program, visit **sdge.com/evfleets**

Ready to talk to a customer solutions specialist, visit **sdge.com/mdhd-interest-form**

Lianna Rios
EV Customer Solutions Manager
LHRios@sdge.com
858-636-5733

EV Fleet Program

EV Fleet Program overview

PG&E will help you install EV make-ready infrastructure for medium- and heavy-duty fleets

$236 million
budget over 5 years
FROM 2020–2024

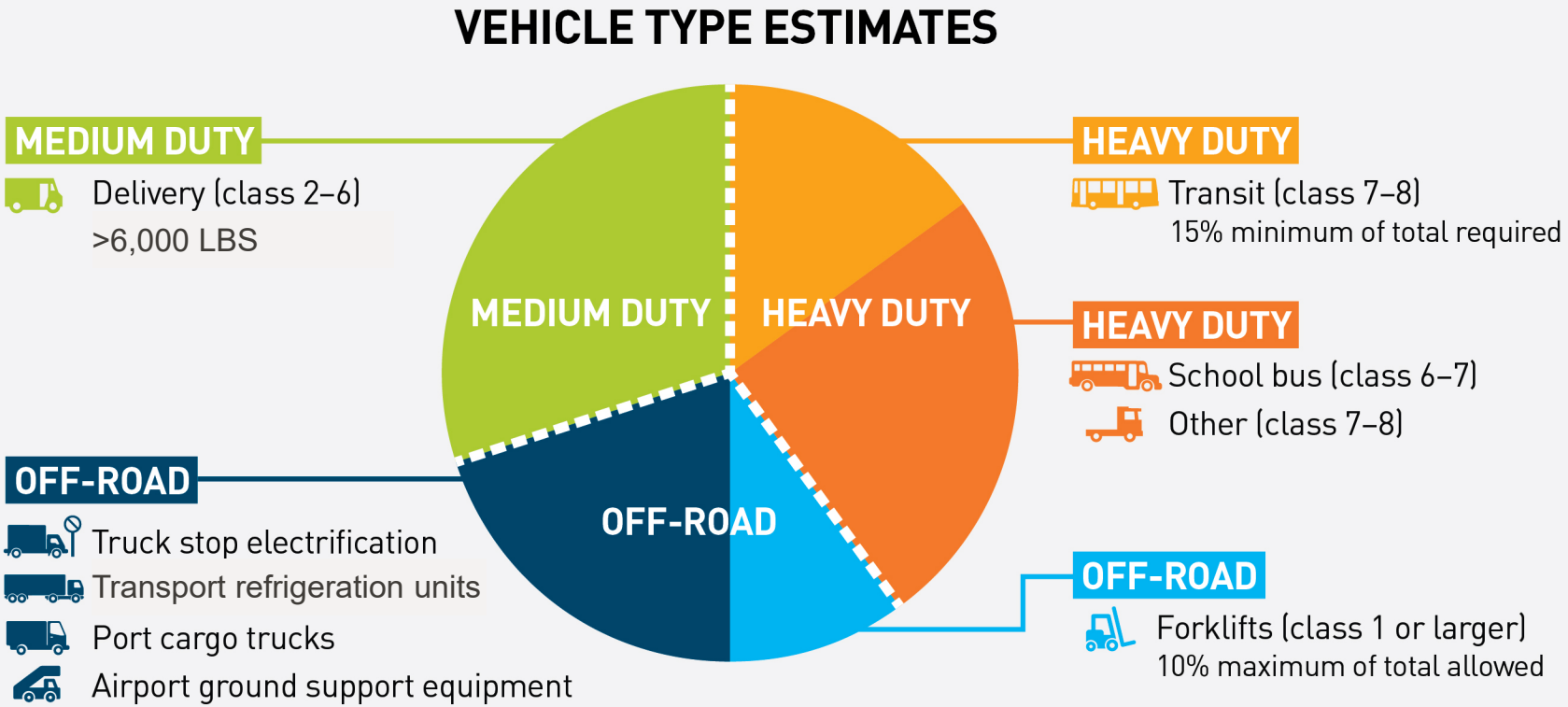
700+ sites
SUPPORTING
6,500 new EVs

Support conversion of commercial and public fleets to electric

EXAMPLES:
Delivery vehicles, school buses, transit buses, and more...

EV Fleet vehicle sector mix

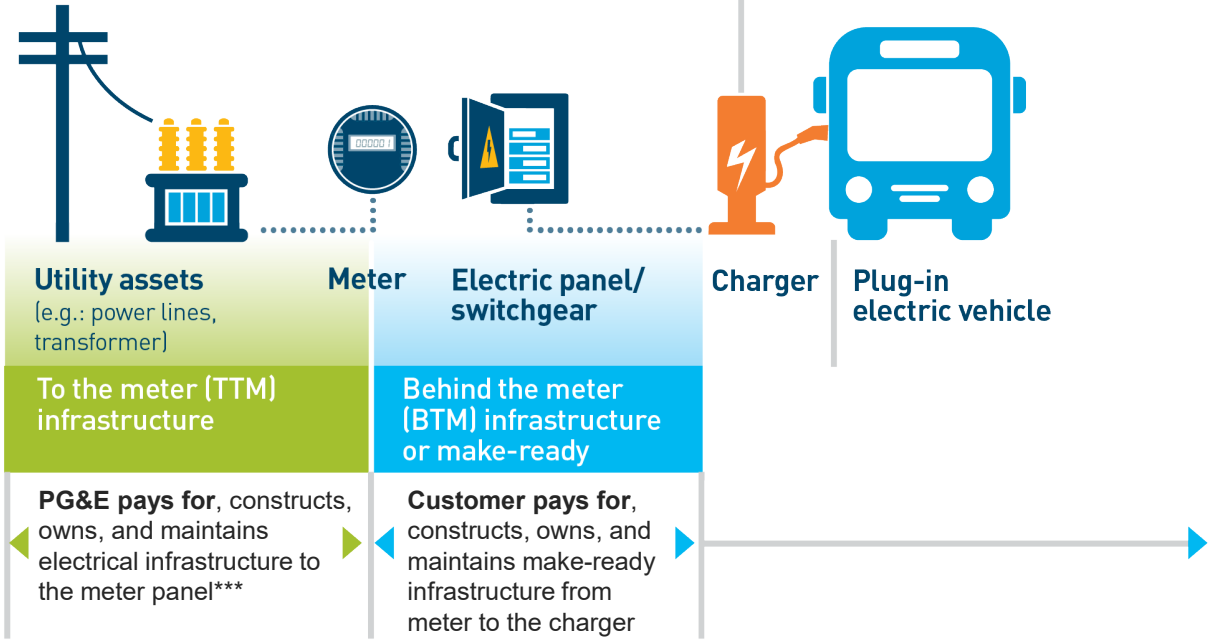
EV Fleet will target a diverse mix of medium- and heavy-duty vehicle types*



*Actual representation of vehicle types subject to vary based on program implementation, project costs, and market readiness

EV Fleet ownership—customer-owned

PG&E pays for infrastructure cost up to the customer meter*



Charging equipment rebates for schools, transit agencies and disadvantaged communities

EVSE power	Max. rebate amount**
Up to 50 kW	$15,000 per charger
50.1kW – 149.9kW	$25,000 per charger
150 kW and above	$42,000 per charger

Customer-owned infrastructure

Eligible for incentive up to capped amount based on vehicle sector

Vehicle type	Per vehicle incentive cap
Transit buses and Class 8 trucks	$9,000 per vehicle†
Transportation refrigeration units, truck stop electrification, ground support equipment and forklifts	$3,000 per vehicle‡
School buses, local delivery trucks, and other vehicles	$4,000 per vehicle†

* Some exceptions may apply to customers who hold Primary Service with PG&E.
** Rebate not to exceed 50% of charger equipment.
EVSE must meet minimum and standard requirements to be eligible for rebate.
Fortune 1000 companies are not eligible.
*** Customer-owned eligibility at PG&E discretion based on project scope and associated costs.
† Limited to 25 vehicles per site.
‡ Limited to 50 vehicles per site.

How to prepare

What we need from you

Demonstrate commitment to procurement of a minimum of 2 electric fleet vehicles

Demonstrate long-term electrification growth plan and schedule of load increase

Provide data related to charger usage for a minimum of **5 years**

Own or lease the property where chargers are installed, and operate and maintain vehicles and chargers for minimum of **10 years**

Application readiness

Ready to apply

1. Has a **paid vehicle invoice, approved vehicle grant**, or provides a **letter from their board/owner, city council**
2. Has a **vehicle and electrification plan**
3. **Knows location** for charger placement (Map)
4. **Knows charger company, model and size** (KW) (Datasheet)
5. **Secured funding** for out of pocket cost.
   ie: Grants or Approved Budget
6. Has **leadership approval** for EV Fleet program participation

EV Fleet electrification process

PRELIMINARY DESIGN (3–5 months)

CUSTOMER TASK
PG&E TASK

START

1 SUBMIT EV FLEET APPLICATION
Consult with your fleet OEM and/or electrical contractor to prepare and complete a PG&E EV Fleet program application **pge.com/evfleetapp**

2 CUSTOMER INFRASTRUCTURE DESIGN
Electrical contractor designs your charging system infrastructure behind-the-meter (BTM), which includes charging stations

3 PG&E INITIAL DESIGN
PG&E works with you and your electrical contractor on an optimal design

3 PG&E estimates how much electric capacity you'll need (referred to as a capacity check)

4 PG&E surveys your site and provides initial design of your to-the-meter (TTM) infrastructure build-out

5 PG&E ESTIMATE
PG&E calculates the time, effort and cost of your build-out (referred to as rough order of magnitude, or ROM)

6 SIGN CONTRACT
All parties review and approve the proposal. Contract is signed

FINAL DESIGN and EXECUTION (6–8 months)

7 CUSTOMER BEGINS BTM CONSTRUCTION PROCESS
Submit/obtain permit from local jurisdiction

8 PG&E FINAL DESIGN
PG&E finalizes TTM design

CUSTOMER BTM CONSTRUCTION

9 Construct electrical infrastructure behind the utility meter

10 Install EVSE/charging equipment

11 Complete municipal inspection(s)

12 PG&E TTM CONSTRUCTION
PG&E constructs utility infrastructure, installs meter and makes any necessary transformer upgrades

13 PG&E TURNS ON SERVICE
PG&E activates your service once inspections are complete

14 CUSTOMER COMMISSIONS EVSE EQUIPMENT
Ensure equipment is functioning as intended:
- Test EVSE for voltage
- Ensure connectivity to equipment manufacturer network

15 PG&E ISSUES QUALIFYING REBATES

COMPLETE

Business EV rate structure

1

Customers choose subscription level, based on charging needs

High Use EV Rate:

$95.56 / 50 kW block over 100kW*

Low Use EV Rate:

$12.41 / 10 kW block up to 100kW

Customers that want to **manage charging loads** can opt for a lower subscription level.

2

Subscription remains consistent month-to-month

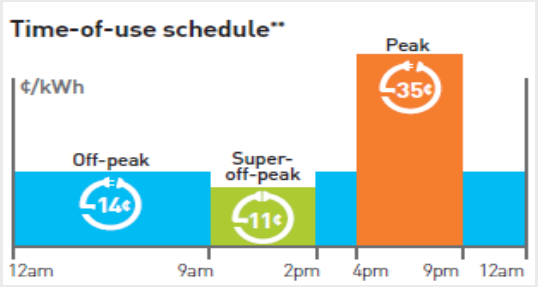
If site charging power exceeds subscription, several customer communications are triggered, and overage fees may apply.

Customers **can change subscription level** to suit their charging needs.

3

Energy usage is billed based on time-of-use pricing

Energy Charge:

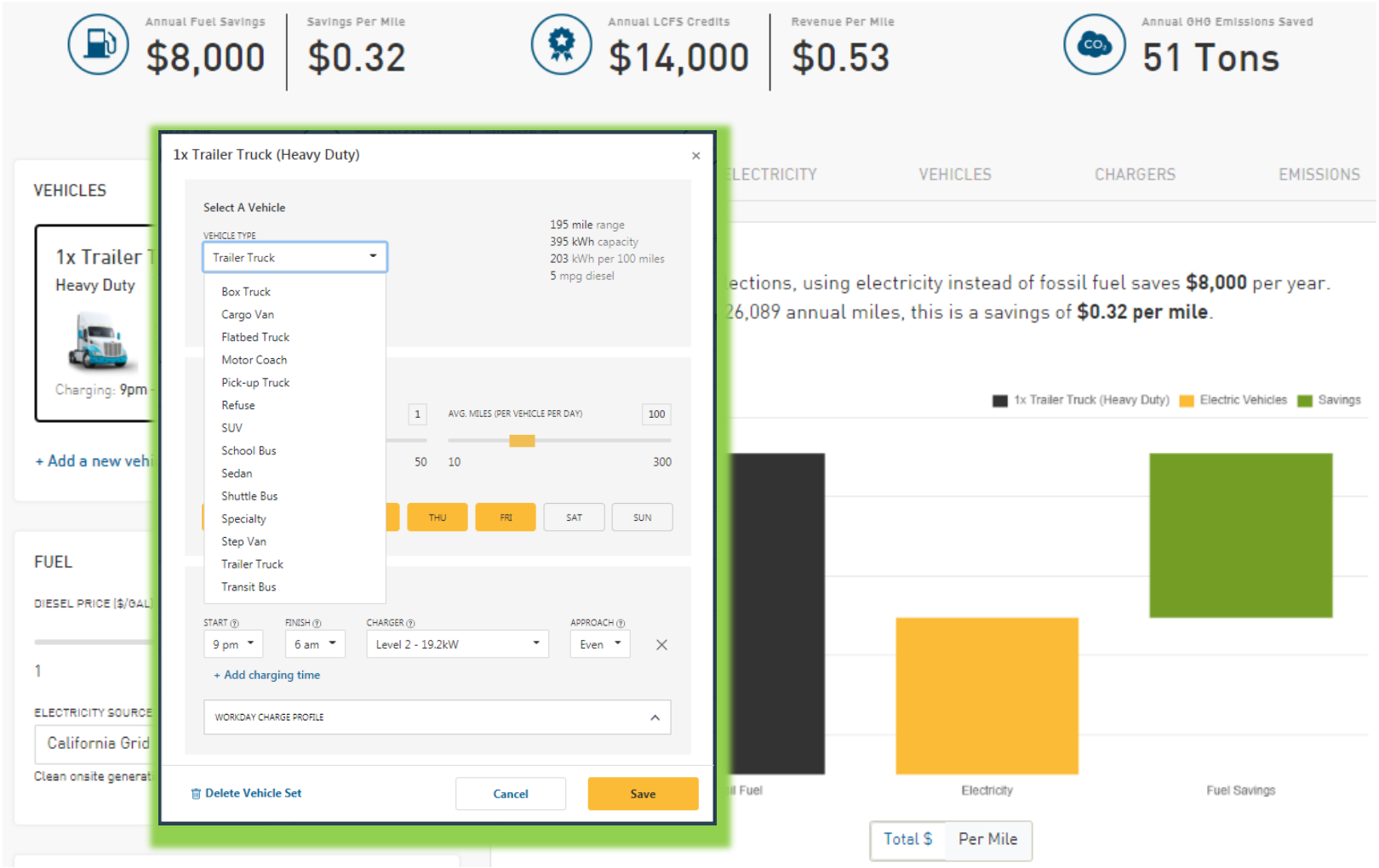


Charging is cheapest mid-day, when PG&E has higher levels of renewable energy generation.

* Values for Business High Use EV Rate Secondary (BEV2-S) voltage. For Business High Use EV Rate Primary (BEV2-P) voltage, the price of each 50 kW block is $85.98.

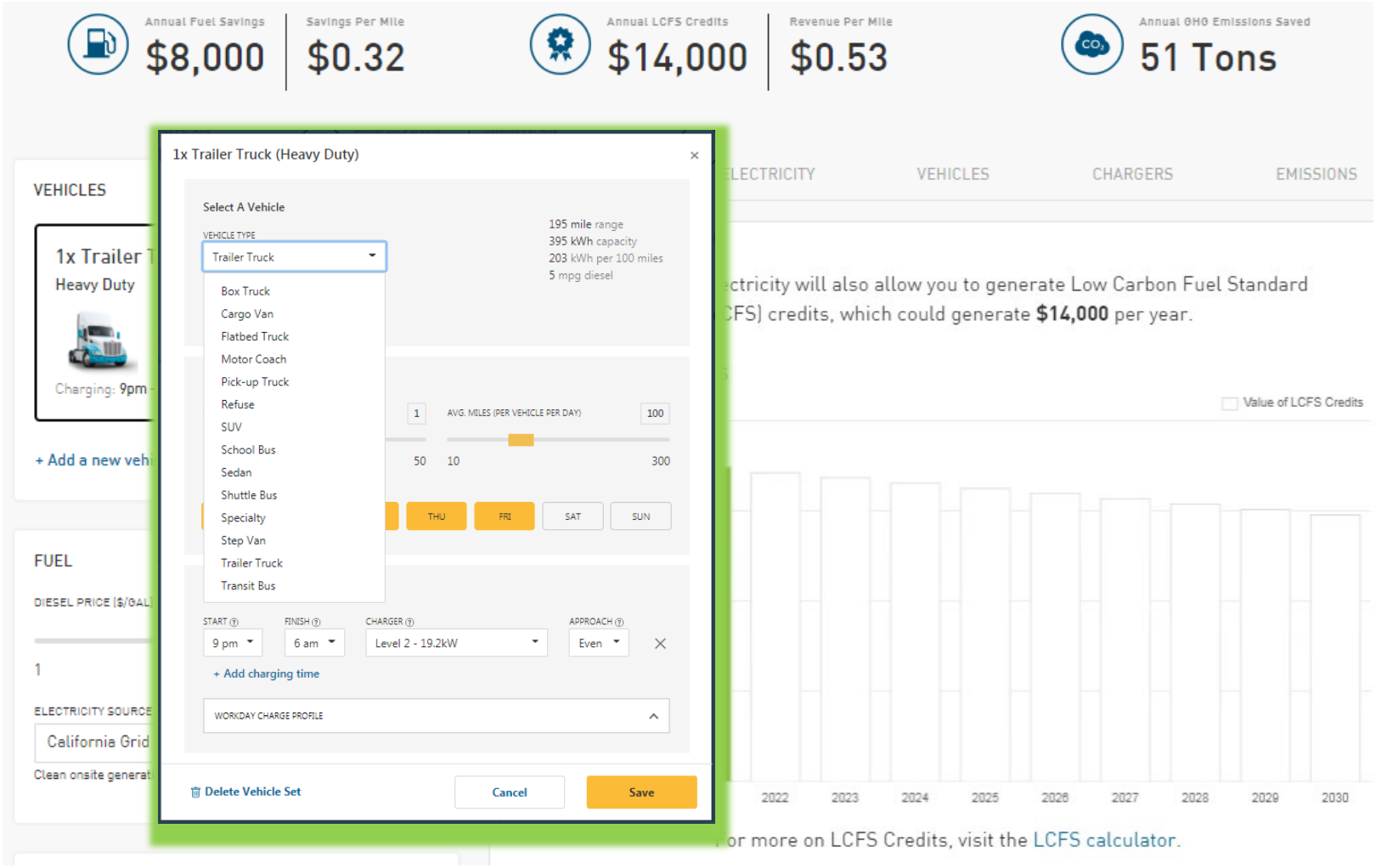
**Business High Use EV Rate (BEV2) values shown for illustrative purposes. Business Low Use EV Rate (BEV1) values will vary slightly from the values shown above. The kWh values of the TOU periods above are rounded for clarity. Please refer to the Business EV Tariff for exact values.

EV Fleet Savings Calculator



Note: Values shown for illustrative purposes. Please refer to the EV Fleet Savings Calculator at **Fleets.pge.com** for exact values.

EV Fleet Savings Calculator



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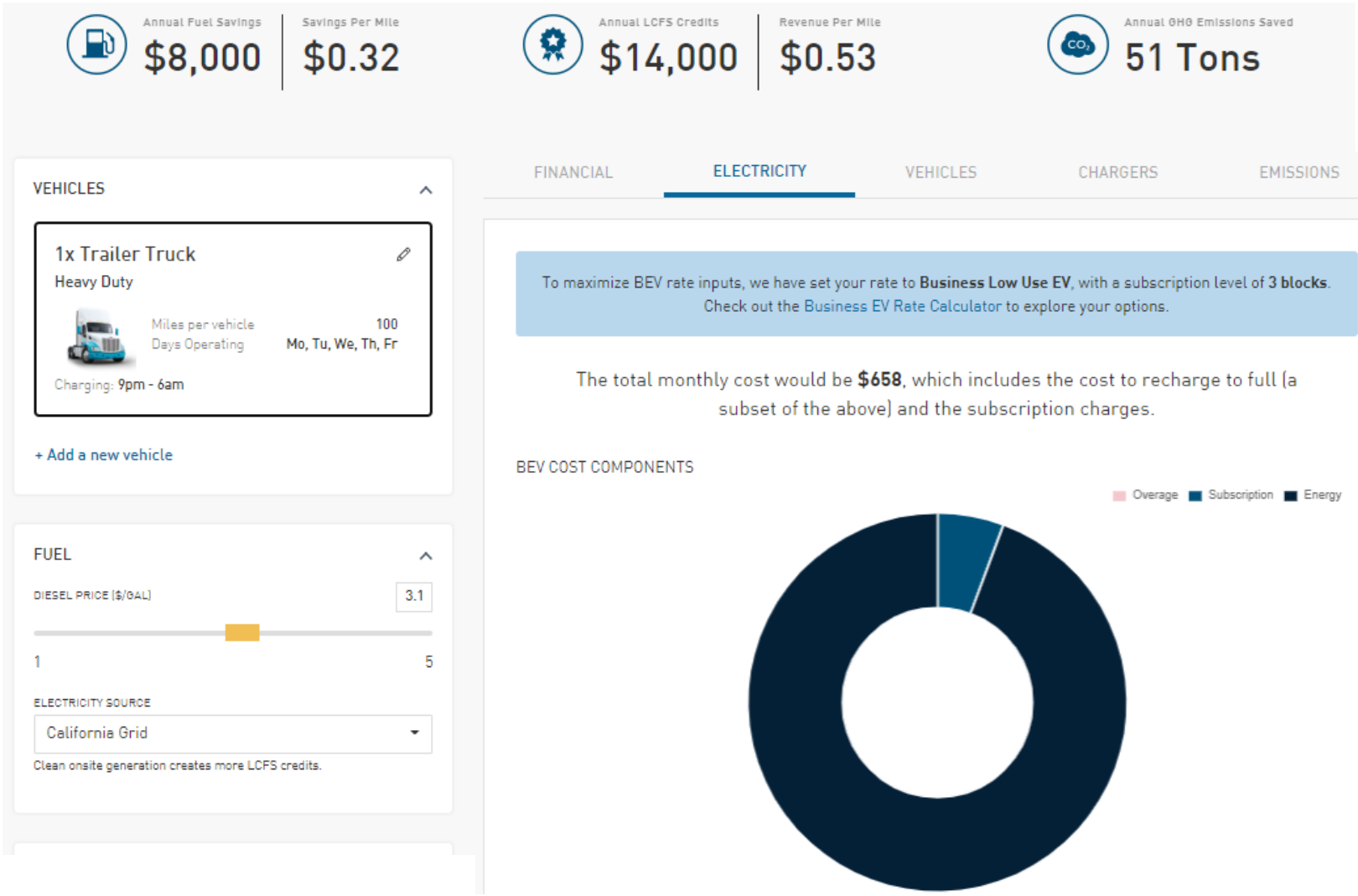
EV Fleet Savings Calculator



Note: Values shown for illustrative purposes. Please refer to the EV Fleet Savings Calculator at **Fleets.pge.com** for exact values.

EV Fleet Savings Calculator

Annual Fuel Savings	Savings Per Mile	Annual LCFS Credits	Revenue Per Mile	Annual GHG Emissions Saved
$8,000	$0.32	$14,000	$0.53	51 Tons

VEHICLES

1x Trailer Truck
Heavy Duty

Miles per vehicle 100
Days Operating Mo, Tu, We, Th, Fr

Charging: 9pm - 6am

+ Add a new vehicle

FUEL

DIESEL PRICE ($/GAL) 3.1

1 5

ELECTRICITY SOURCE

California Grid

Clean onsite generation creates more LCFS credits.

FINANCIAL | ELECTRICITY | VEHICLES | CHARGERS | EMISSIONS

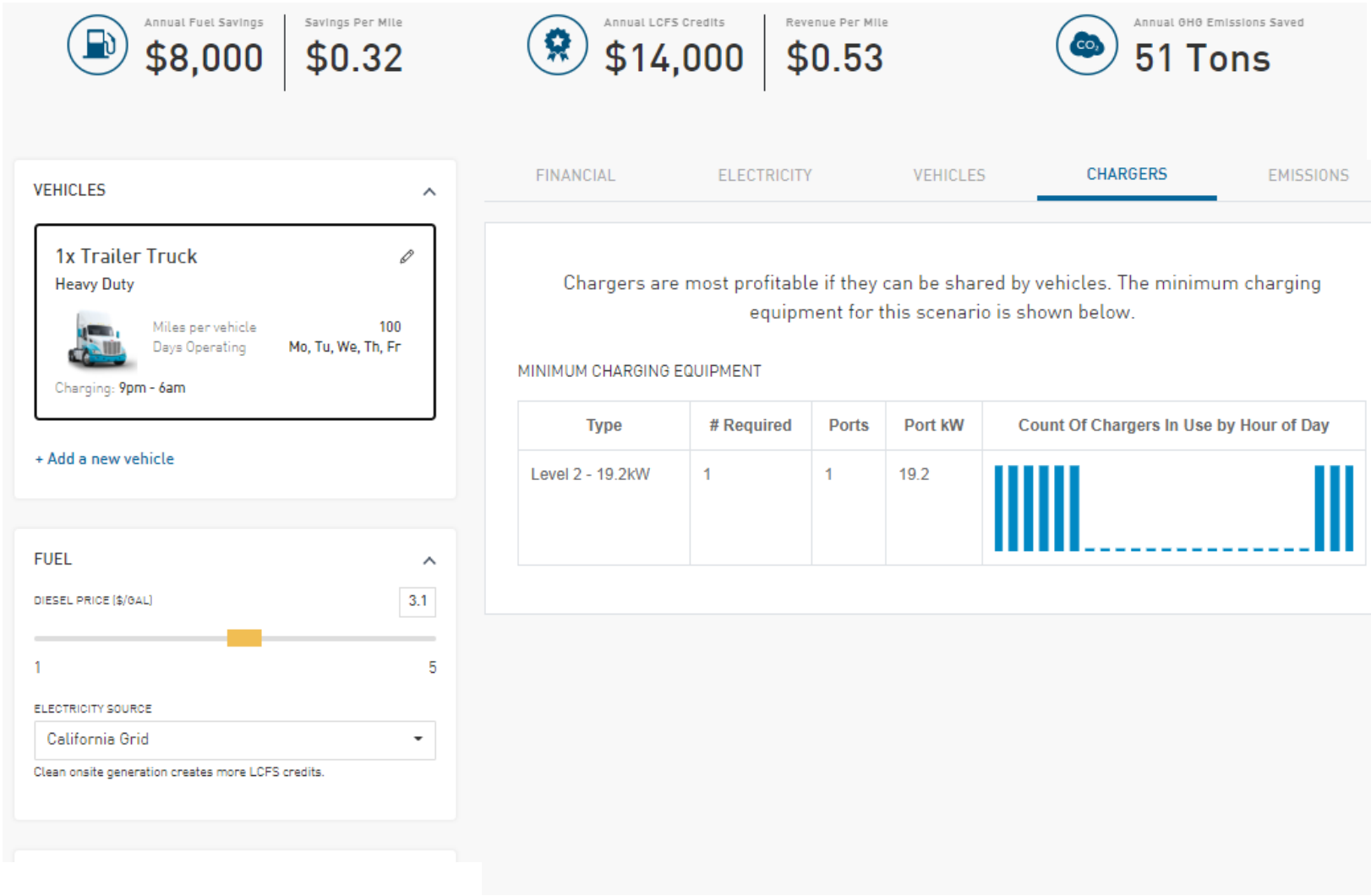
The selected vehicles and their corresponding details is shown below.

VECHILE SET CHARACTERISTICS

	1x Trailer Truck (Heavy Duty)
Representative Image	Trailer Truck Heavy Duty
Vehicle Range	195 miles
Vehicle Battery Capacity	395 kWh
Equivalent Fossil Fuel MPG	5 mpg (diesel)
Workdays	Mon, Tue, Wed, Thu, Fri
Typical Workday	100 miles
Charging Windows	9pm to 6am Level 2 - 19.2kW Approach: Even

Note: Values shown for illustrative purposes. Please refer to the EV Fleet Savings Calculator at **Fleets.pge.com** for exact values.

EV Fleet Savings Calculator



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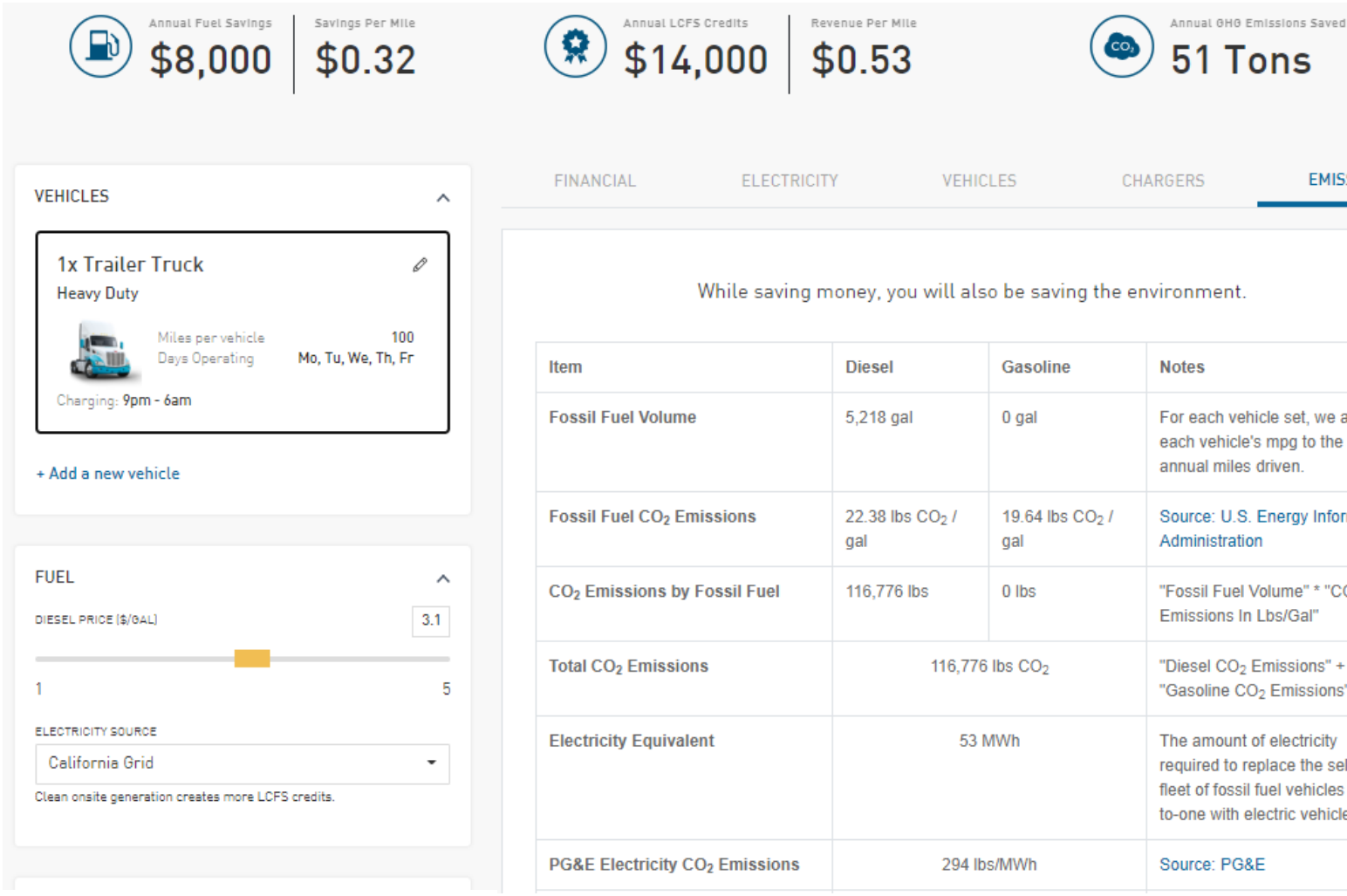
EV Fleet Savings Calculator



Item	Diesel	Gasoline	Notes
Fossil Fuel Volume	5,218 gal	0 gal	For each vehicle set, we applied each vehicle's mpg to the annual miles driven.
Fossil Fuel CO_2 Emissions	22.38 lbs CO_2 / gal	19.64 lbs CO_2 / gal	Source: U.S. Energy Information Administration
CO_2 Emissions by Fossil Fuel	116,776 lbs	0 lbs	"Fossil Fuel Volume" * "CO_2 Emissions In Lbs/Gal"
Total CO_2 Emissions	116,776 lbs CO_2		"Diesel CO_2 Emissions" + "Gasoline CO_2 Emissions"
Electricity Equivalent	53 MWh		The amount of electricity required to replace the selected fleet of fossil fuel vehicles one-to-one with electric vehicles.
PG&E Electricity CO_2 Emissions	294 lbs/MWh		Source: PG&E

Note: Values shown for illustrative purposes. Please refer to the EV Fleet Savings Calculator at **Fleets.pge.com** for exact values.

Thank you!

Tim O’Neill
tko2@pge.com

Helpful resources

CTRL + Click to open link

- EV Fleet Website
- EV Fleet Savings Calculator
- EV Fleet Fact Sheet
- EV Fleet Interest Form
- EV Fleet Application
- EV Fleet List of Approved Charging Vendors
- EV Fleet Terms and Conditions
- EV Fleet Customer Information Sharing Agreement
- EV Fleet Non-Disclosure Agreement
- EV Fleet Additional Funding Filtering Tool
- PG&E Service Territory Map
- Guidance Document: Customer Owned EV Supply Infrastructure

Charge Ready Transport

March 15, 2022

Energy for What's Ahead®

SOUTHERN CALIFORNIA EDISON®

About Southern California Edison

Who We Are

- One of the nation's largest electric utilities
- Headquartered in Rosemead, California
- More than 130 years of history

Who We Serve

- 50,000 square miles of SCE service area across Central, Coastal and Southern California
- 15 million residents in service territory
- 5 million customer accounts

Clean Energy

- 43% percent of the electricity that SCE delivers to customers comes from carbon-free resources, including solar and wind. (2020)
- Charge Ready Programs help SCE customers, including light-, medium-, and heavy-duty vehicle fleet managers, business leaders, government agencies, and multi-family housing communities, seeking to install EV charging equipment.

Charge Ready Transport Program Overview

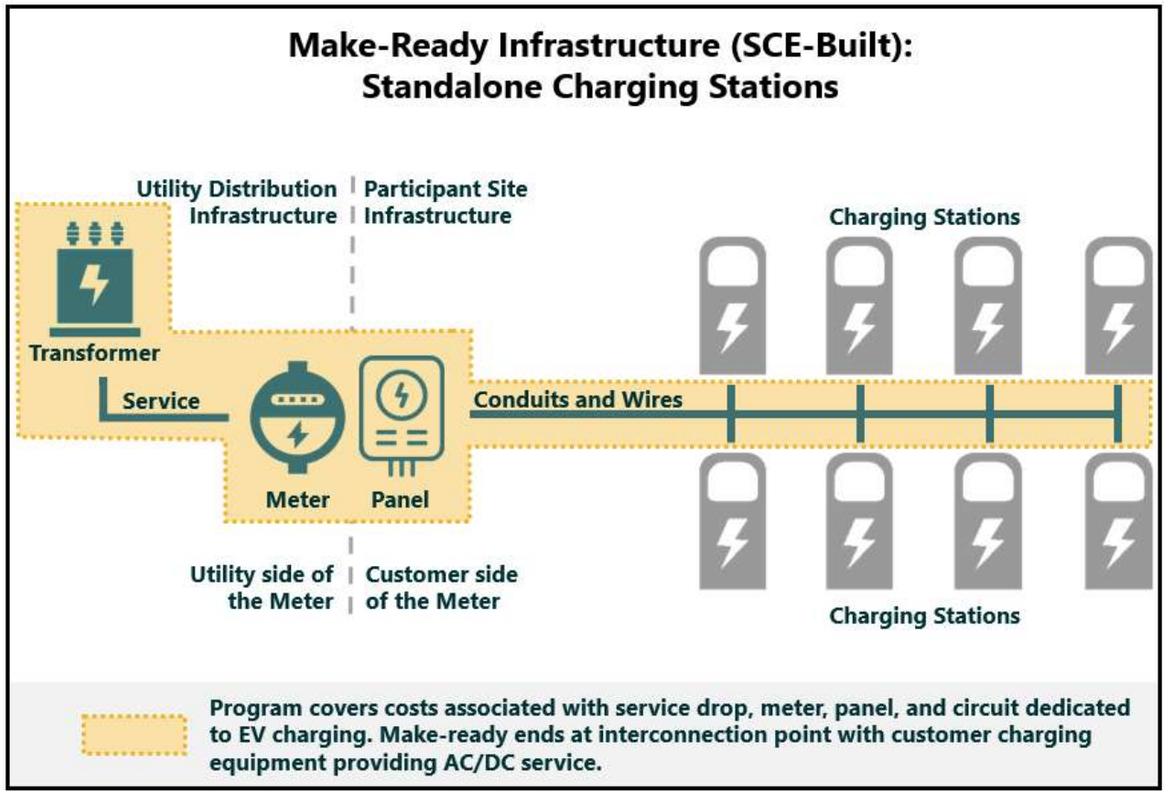
Energy for What's Ahead℠

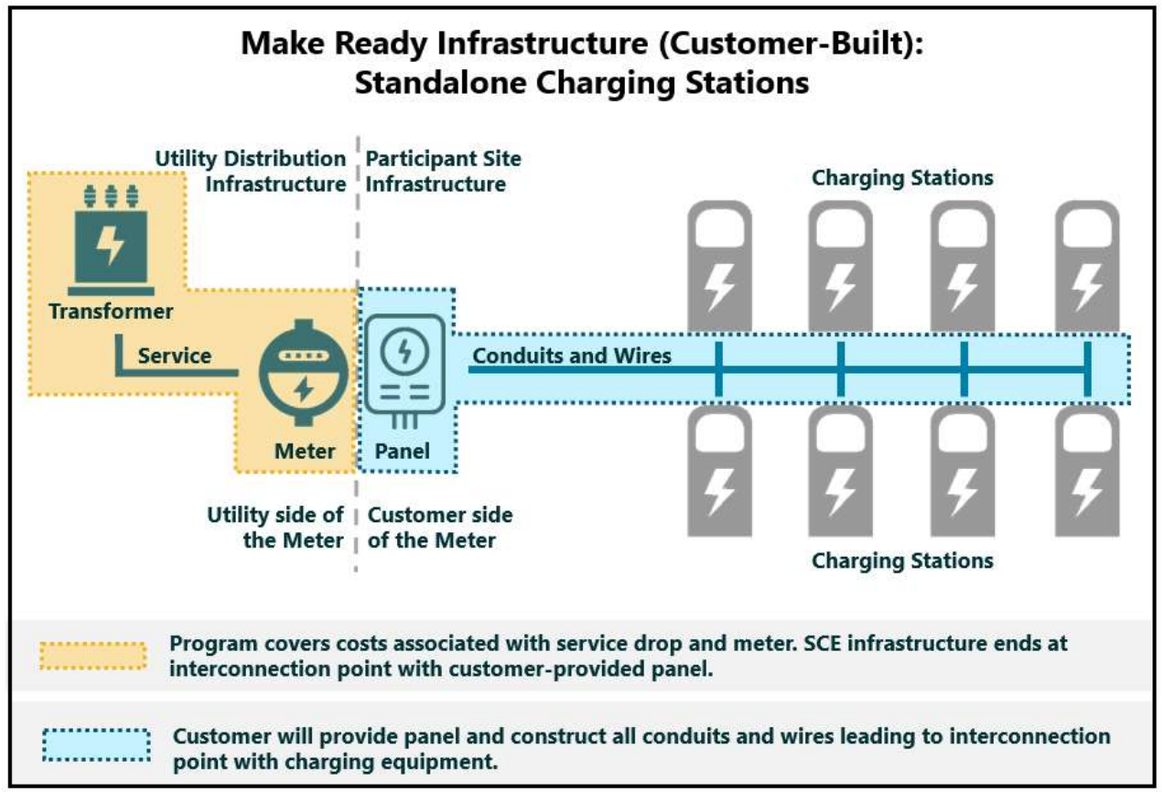
SOUTHERN CALIFORNIA EDISON®

SCE's Charge Ready Transport Program

- Launched in 2019, Charge Ready Transport is helping California achieve its GHG reduction goals by providing **infrastructure to support fleet electrification**
- Five-year program with an approved total program budget of **$356.4M**
- Program will **design and build make-ready electrical infrastructure** on both the utility-side and customer-side of the meter for qualifying SCE fleet customers procuring or converting at least 2 MDHD EVs
- **Charging Equipment Rebate** available for **transit/school buses** and for eligible Participants installing charging equipment at **sites located in disadvantaged communities** where the Participant is not a Fortune 1000 company
- Striving to provide support the electrification of **8,490 MDHD vehicles**

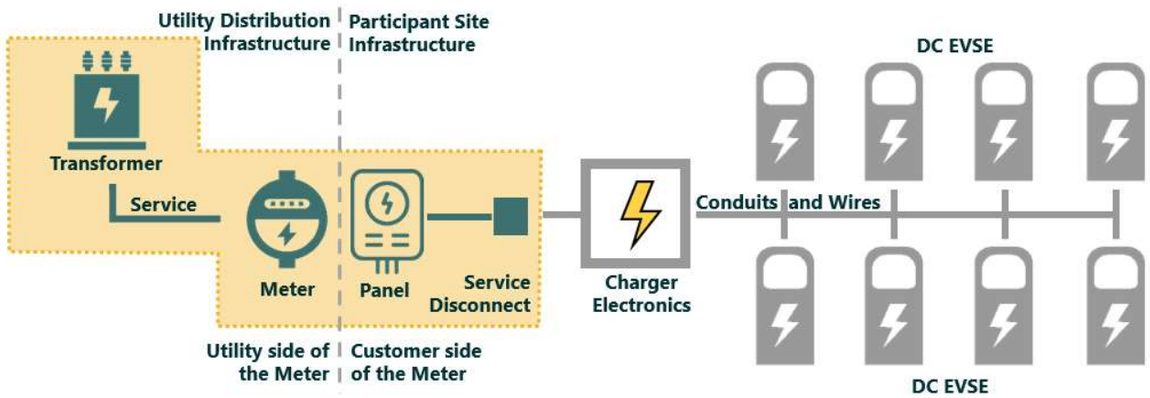
Make-Ready Infrastructure Defined





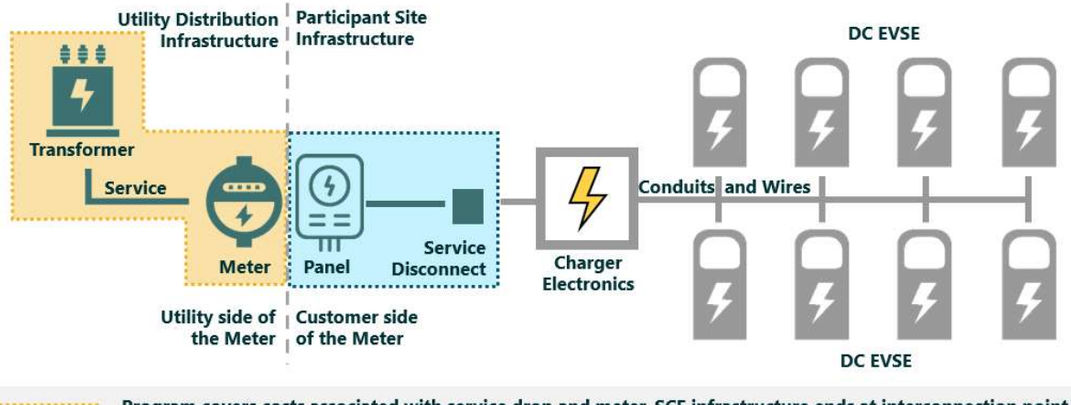
Make-Ready Infrastructure Defined

Make-Ready Infrastructure (SCE-Built):
Centralized charger electronics with remote DC dispensers



Program covers costs associated with service drop, meter, panel, and circuit dedicated to EV charging. Make-ready Infrastructure scope ends at interconnection point with power conversion (i.e. AC/DC interface) of customer's charging equipment. Customer is responsible for constructing all conduits and wires leading to interconnection point with dispensers as part of EVSE installation.

Make-Ready Infrastructure (Customer-Built):
Centralized charger electronics with remote DC dispensers



Program covers costs associated with service drop and meter. SCE infrastructure ends at interconnection point with customer-provided panel.

Customer will provide panel and construct all conduits and wires leading to interconnection point with power conversion (i.e. AC/DC interface). Make-ready Rebate scope covers Participant Infrastructure and ends at interconnection point with power conversion of customer's charging equipment. Customer is responsible for constructing all conduits and wires leading to interconnection point with dispensers as part of EVSE installation.

Charge Ready Transport supports a variety of medium and heavy-duty electric vehicles

On-road vehicles

Eligible Classes:

- Medium-Duty vehicles
- Heavy-Duty vehicles
- School Buses
- Transit Buses
- Truck Stop Infrastructure

Vehicles must have GVWR (max loaded weight) +6,000 lbs. and above (class 2-8)

Off-road vehicles

Eligible Classes:

- Yard trucks
- Forklifts
- Transportation Refrigeration Units (TRU)
- Airport ground support equipment (GSE)

No specific weight minimum








Eligible chargers are listed on SCE's Approved Product List

AC Level 2

- Up to 80 amp (19.2 kW).
- Standard J-1772 connector.

DC Standalone

- Up to 180 kW.
- CCS-1, CCS-2, CHAdeMO connectors.

DC Power Cabinet

- Modular cabinet with one or more dispensers.
- Up to 350kW.
- CCS-1, CCS-2, CHAdeMO

Off-road TRU & Forklift

- TRU: 4-pin and 6-pin, up to 32 amp, UL listed.
- Forklift: variety of chargers for different forklift models, UL listed.

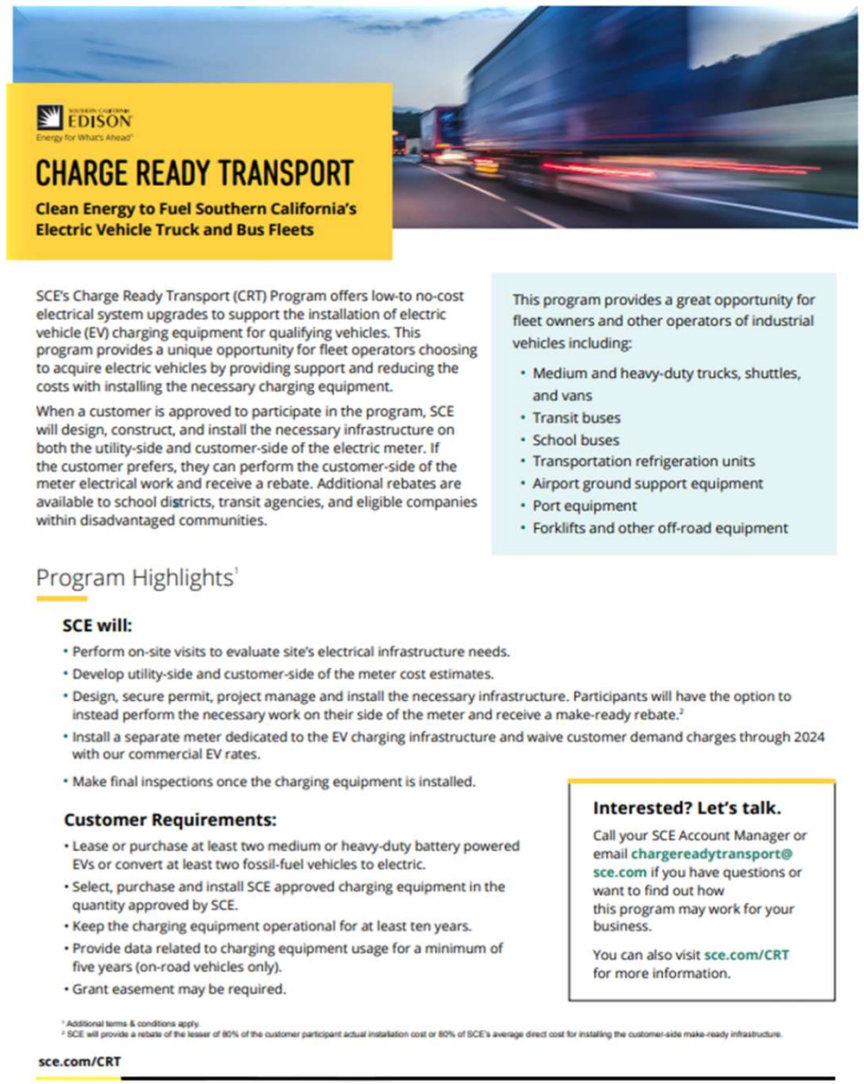
Approved product list available at http://www.sce.com/apl.
New models are added regularly. Check for the newest availability list.

Participating in Charge Ready Transport

Program Requirements

- Purchase or lease **at least two medium- or heavy-duty battery-powered EVs** or convert at least two fossil-fuel vehicles to battery electric.
- Own or lease the property where chargers are installed
  - Project site must be located in SCE's service territory
- Select, purchase, and install SCE-approved charging equipment
- Operate and maintain chargers for a minimum of 10 years
- Enroll in a time-of-use rate plan with separately metered EV charging
- Provide data related to charging equipment usage for a minimum of 5 years (on-road vehicles only)
- Provide a property easement for the SCE infrastructure
- Agree to Program terms and conditions

Visit www.sce.com/crt to learn more!



EDISON
Energy for What's Ahead℠

CHARGE READY TRANSPORT

Clean Energy to Fuel Southern California's Electric Vehicle Truck and Bus Fleets

SCE's Charge Ready Transport (CRT) Program offers low-to no-cost electrical system upgrades to support the installation of electric vehicle (EV) charging equipment for qualifying vehicles. This program provides a unique opportunity for fleet operators choosing to acquire electric vehicles by providing support and reducing the costs with installing the necessary charging equipment.

When a customer is approved to participate in the program, SCE will design, construct, and install the necessary infrastructure on both the utility-side and customer-side of the electric meter. If the customer prefers, they can perform the customer-side of the meter electrical work and receive a rebate. Additional rebates are available to school districts, transit agencies, and eligible companies within disadvantaged communities.

This program provides a great opportunity for fleet owners and other operators of industrial vehicles including:

- Medium and heavy-duty trucks, shuttles, and vans
- Transit buses
- School buses
- Transportation refrigeration units
- Airport ground support equipment
- Port equipment
- Forklifts and other off-road equipment

Program Highlights[1]

SCE will:

- Perform on-site visits to evaluate site's electrical infrastructure needs.
- Develop utility-side and customer-side of the meter cost estimates.
- Design, secure permit, project manage and install the necessary infrastructure. Participants will have the option to instead perform the necessary work on their side of the meter and receive a make-ready rebate.[2]
- Install a separate meter dedicated to the EV charging infrastructure and waive customer demand charges through 2024 with our commercial EV rates.
- Make final inspections once the charging equipment is installed.

Customer Requirements:

- Lease or purchase at least two medium or heavy-duty battery powered EVs or convert at least two fossil-fuel vehicles to electric.
- Select, purchase and install SCE approved charging equipment in the quantity approved by SCE.
- Keep the charging equipment operational for at least ten years.
- Provide data related to charging equipment usage for a minimum of five years (on-road vehicles only).
- Grant easement may be required.

Interested? Let's talk.

Call your SCE Account Manager or email chargereadytransport@sce.com if you have questions or want to find out how this program may work for your business.

You can also visit sce.com/CRT for more information.

[1] Additional terms & conditions apply.
[2] SCE will provide a rebate of the lesser of 80% of the customer participant actual installation cost or 80% of SCE's average direct cost for installing the customer-side make-ready infrastructure.

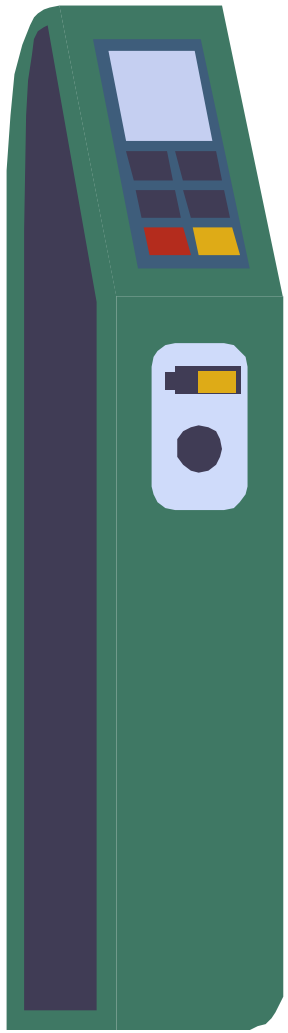
sce.com/CRT

Charge Ready Transport

More Information:

- www.sce.com/crt
- chargereadytransport@sce.com

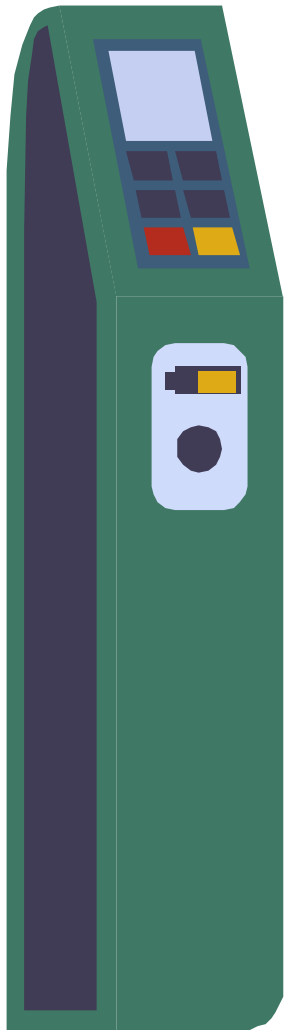
Utility Panel Questions



01

What can interested applicants do to be prepared before their first conversation with their utility?

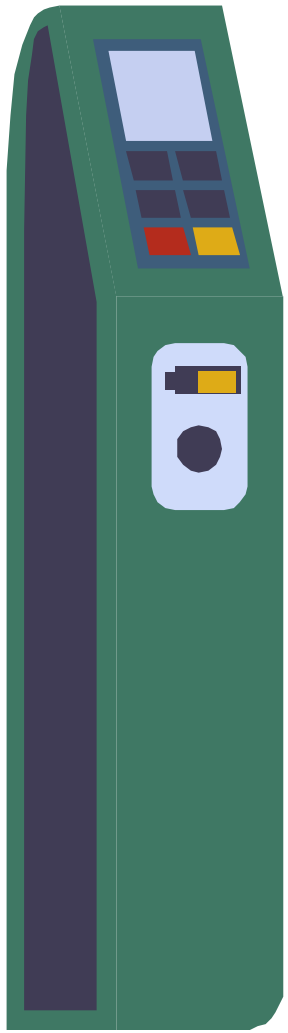
Utility Panel Questions



02

What are common causes of delays prospective applicants should be aware of?

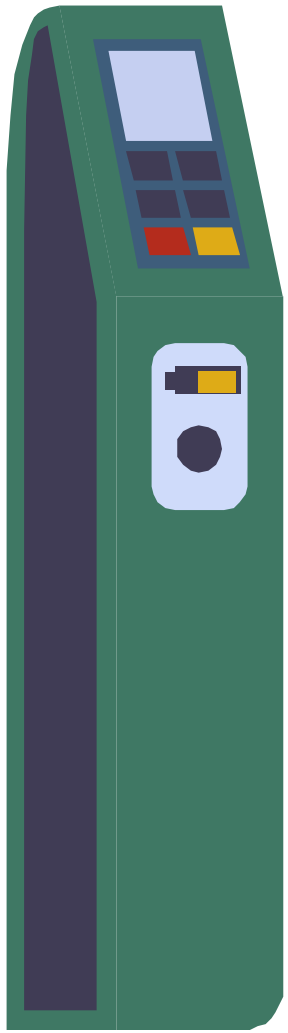
Utility Panel Questions



03

For a number of reasons people may opt not to participate in a make ready program. How can they coordinate with you to receive that make ready infrastructure?

Utility Panel Questions



04

What are the some of the most important contractual obligations participants need to keep in mind prior to signing their agreement?

EnergIIZE COMMERCIAL VEHICLES

Q&A

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