

DOCKETED

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Utilities & Me: MDHD EV Infrastructure Installation and Funding

July 10, 2024
1pm PT

Agenda

Topic	Speaker
Welcome!	Lauren Fleming , EnergIIZE
PG&E EV Infrastructure Support	Dean Kunesh , PG&E
SDG&E EV Infrastructure Support	Christopher Roberts , SDG&E
EnergIIZE Overview & Available Funding	Lauren Fleming & Aidan Anthony , EnergIIZE
Question Panel and Q&A	All Presenters

Zoom Logistics

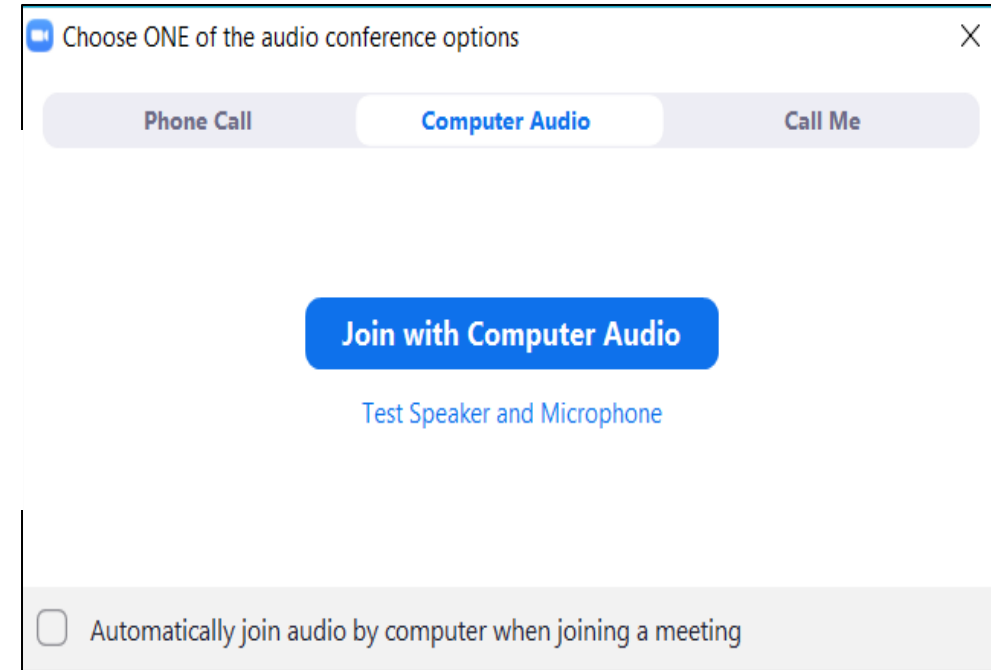
Webinar URL: https://calstart-org.zoom.us/webinar/register/WN_5G7Bn_8VS6Ggd8P88DIV7Q

Webinar ID: 867 4228 2594

Mobile: US: +1 719 359 4580 or +1 253 215 8782

This webinar is being recorded and slides will be available after the webinar.

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



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

All participants will be unable to share their video.

If you have questions, you can use the Q&A function.



EV Fleet Program



Public

What is the EV Fleet Program?

EV Fleet is a ratepayer-sponsored program that is designed to accelerate EV adoption for medium duty, heavy duty (MDHD EVs) and off-road vehicles

GOAL:

Support the deployment of
>6,500 MDHD EVs



BUDGET:

\$236 million



TIMEFRAME:

Enrolling sites through
2026 or until funding is
fully subscribed



What vehicles are eligible?



Medium duty Class 2–6

(>6,000 lbs GVWR)

School buses, cargo vans,
box trucks, cutaways,
work trucks, etc.



Heavy duty Class 7–8

Heavy duty trucks,
transit buses,
drayage, etc.



Off road

Class 1 forklifts, tractors,
construction equipment,
TRUs, ground support
equipment, cargo
handling equipment, etc.

What benefits does EV Fleet provide?

PG&E simplifies fleet electrification by offering:



Installation of electrical infrastructure up to the customer's meter **at no cost**

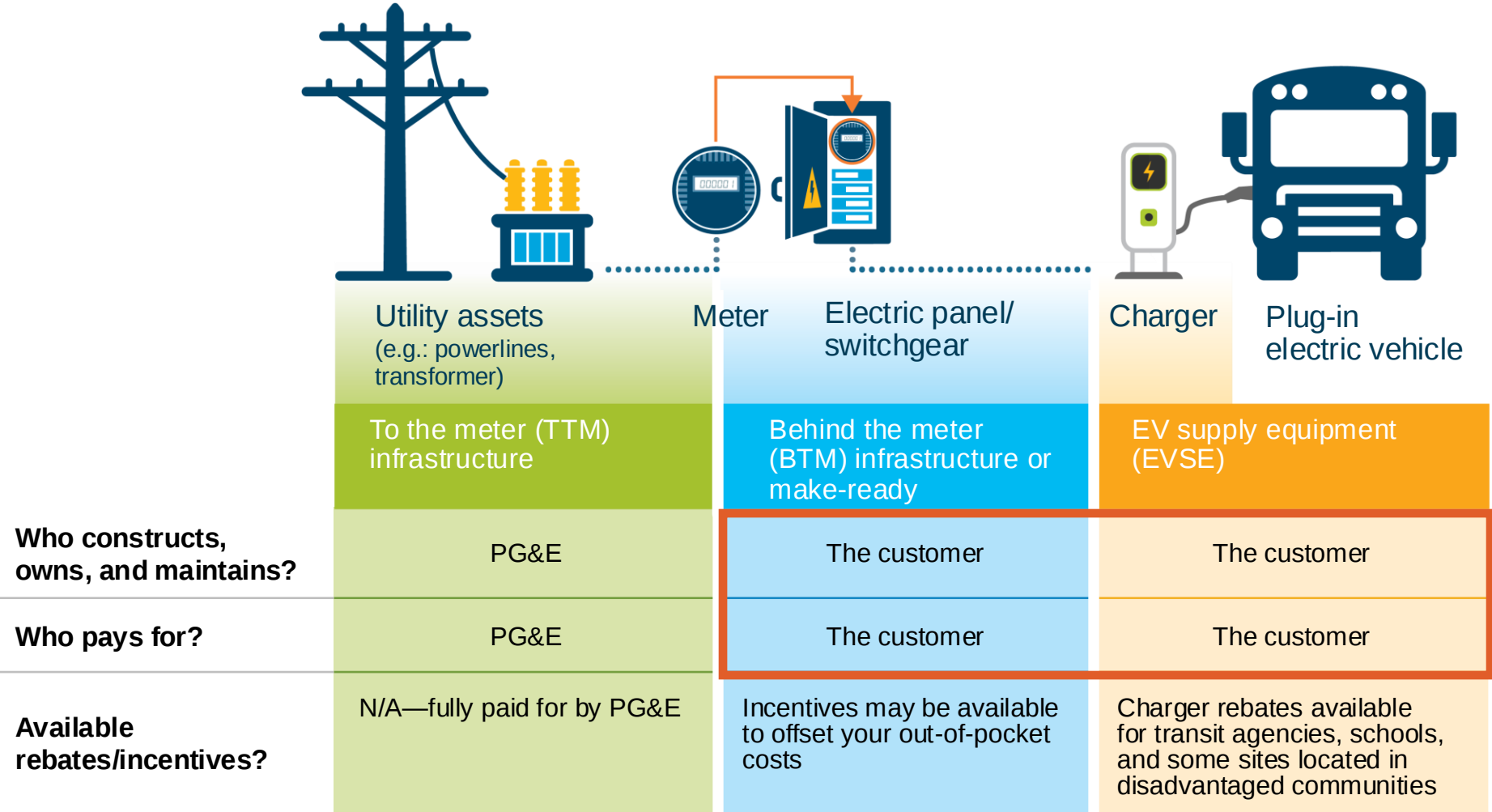


Incentives and rebates to offset out-of-pocket costs for construction and chargers

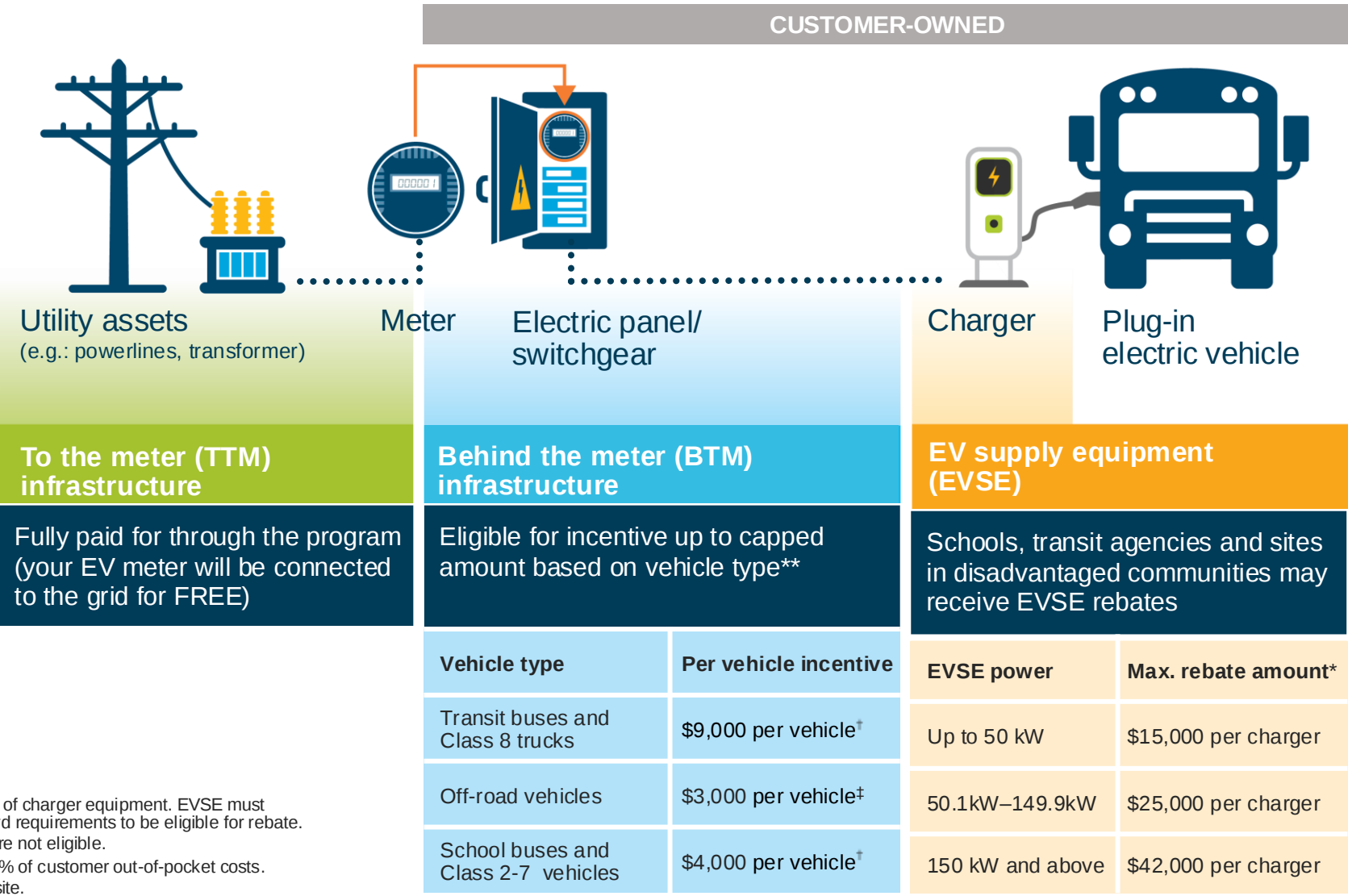


Comprehensive support throughout the completion of the EV charging project

EV charging project breakdown



Available incentives and rebates



*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.

**Incentive not to exceed 80% of customer out-of-pocket costs.

[†]Limited to 25 vehicles per site.

[‡]Limited to 50 vehicles per site.

Eligibility requirements

1

Be a PG&E electric customer

This includes Direct Access and retail customers, as well as customers receiving power from a Community Choice Aggregator.



3

Acquire at least 2 eligible EVs

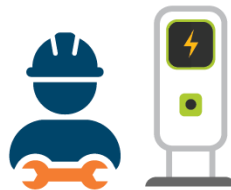
Customers must plan to put into operation a minimum of two medium duty, heavy duty or off-road electric vehicles over the next 5 years.



2

Own or lease the property

Applicants must have authority to install charging infrastructure on their site.



4

Agree to all requirements

Customers must make a 10-year commitment to operate and maintain equipment, a 5-year commitment to provide EV usage data and agree to all terms and conditions.

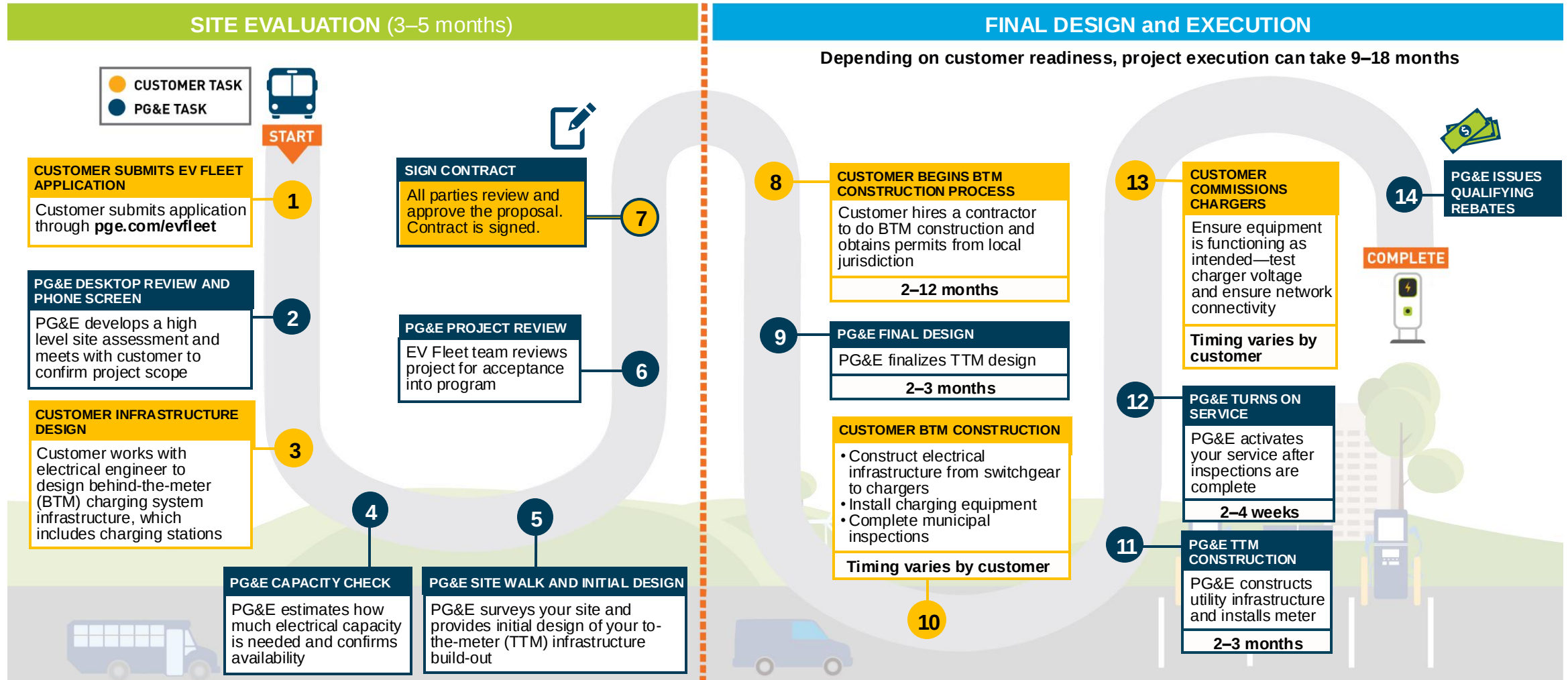


Ready to apply



1	Vehicle deployment plan	Quantity, make and model of EVs that you plan to deploy over the next 5 years
2	EV charger deployment plan	Quantity, make, model, power level and datasheet for each EV charger that you plan to deploy  Approved Product List (hosted by Southern California Edison)
3	Map of EV charger location	Map screenshot indicating the location where you plan to install your EV chargers
4	Secured funding for out-of-pocket costs	Grants or approved budget to cover cost of BTM infrastructure, vehicles and chargers
5	Leadership approval	Must have internal readiness to sign a contract to commit to the EV Fleet Program
6	Proof of vehicle procurement	Paid vehicle invoice, approved vehicle grant or a letter from board/owner/city council/etc
7	Permission from property owner	Property owner must be willing to sign an easement with PG&E for infrastructure installation

EV Fleet electrification process



Grid capacity for EV projects



Does PG&E have enough grid capacity to serve my EV chargers?

Good news! Only about 15% of EV Fleet projects face capacity challenges, and we have different strategies for providing power for these sites.

Interested in learning more about capacity at your site?



Check out PG&E's Integration Capacity Analysis (ICA) maps

Frequently asked questions



EVs are expensive—are there grants that can help me pay for them?

Yes, check out our list of available grants at fleets.pge.com/grants 



How do I plan for the future when I'm not sure how many EVs I'll get?

It's good to plan for the number of vehicles and chargers that you are fairly certain you'll need over the next 5 years. You can only apply to the program once per site, so future upgrades to your electrical service will be at your own expense. The program also allows you to futureproof your site by installing a larger switchgear. **Talk to your Onboarding Specialist to learn more.**



How can I address concerns around power reliability?

Events that lead to power outages are **usually known in advance**, which means you can make sure all of your vehicles are fully charged before they happen. Additionally, backup battery storage systems can be useful for emergency situations.



Can I install solar panels on my EV meter?

Yes, as long as all of your chargers are smart chargers so that you can meet data reporting requirements. Generally off-road vehicles like forklifts and TRUs do not use smart chargers, so these projects cannot install solar.

Business EV rate structure

1

Customers choose subscription level, based on charging needs

High Use EV Rate:

\$95.56 / 50kW block over 100kW*

Low Use EV Rate:

\$12.41 / 10kW 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

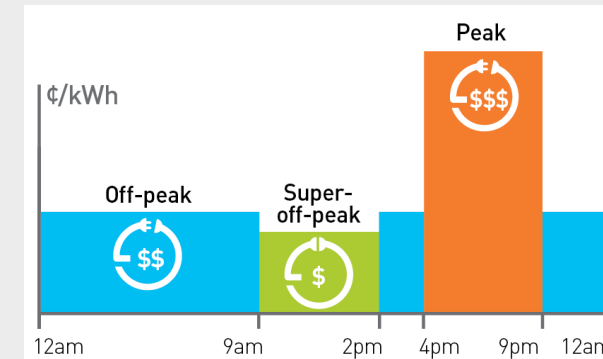
 If site charging power exceeds subscription, several customer communications are triggered, and overage fees may apply.

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

3

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

Energy Charge:



~\$1.91
per e-gallon

Depends on vehicle type, season, and time of day for charging



Compare e-gallon rate savings to gas/diesel



Visit the **Business EV Rate website** for more information

* 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 50kW block is \$85.98. Please refer to the [Business EV Tariff](#) for exact values.



EV Fleet Savings Calculator

PG&E

INFORMATION ▾

- Planning
- Grants
- Vehicles

CALCULATORS ▾

- Fuel Savings
- Total Costs
- BEV Rate
- Rate Comparison
- LCFS

Feedback

Electrify Your Fleet: Drive Change

Learn how you can start saving money and the planet.

Calculate Fuel Savings

Total Cost of Ownership

Build a plan with PG&E

- 1
Check Your Eligibility
- 2
Review Available Funding
- 3
Calculate Fuel Savings
- 4
Collaborate with PG&E

Together, let's drive savings, sustainability, and change. We've compiled the resources you need to understand the entire process and make an informed decision.

Build A Plan

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

\$299,000

Savings Per Mile

\$0.64



Annual LCFS Credits

\$143,000

Revenue Per Mile

\$0.31



Annual GHG Emissions Saved

866 Tons

VEHICLES

3x Tesla Semi



Miles per vehicle
Days Operating
Charging:

300
Weekdays
9pm - 5am

6x Kenworth K370e



Miles per vehicle
Days Operating
Charging:

100
Weekdays
9pm - 5am, 2pm - 4pm

1x Ford E-transit



Miles per vehicle
Days Operating
Charging:

100
Weekdays
9pm - 5am

3x Rivian R1t



Miles per vehicle
Days Operating
Charging:

60
Weekdays
9pm - 5am

FINANCIAL

ELECTRICITY

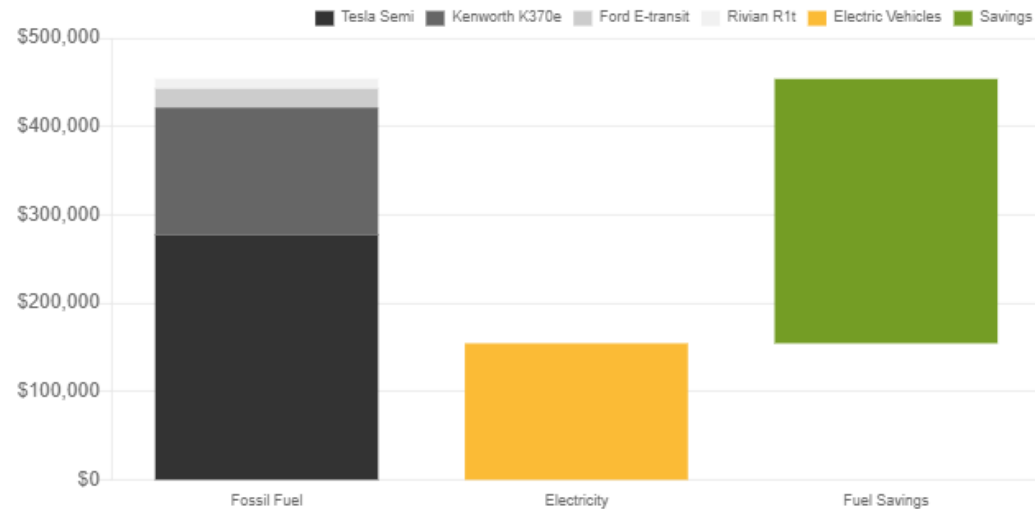
VEHICLES

CHARGERS

EMISSIONS

Based on your selections, using electricity instead of fossil fuel saves **\$299,000** per year.

ANNUAL FUEL COSTS



EV Fleet Savings Calculator

Annual Fuel Savings \$299,000	Savings Per Mile \$0.64	Annual LCFS Credits \$143,000	Revenue Per Mile \$0.31	Annual GHG Emissions Saved 866 Tons
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VEHICLES

3x Tesla Semi



Miles per vehicle 300
Days Operating Weekdays
Charging: 9pm - 5am

6x Kenworth K370e



Miles per vehicle 100
Days Operating Weekdays
Charging: 9pm - 5am, 2pm - 4pm

1x Ford E-transit



Miles per vehicle 100
Days Operating Weekdays
Charging: 9pm - 5am

3x Rivian R1t



Miles per vehicle 60
Days Operating Weekdays
Charging: 9pm - 5am

FINANCIAL

ELECTRICITY

VEHICLES

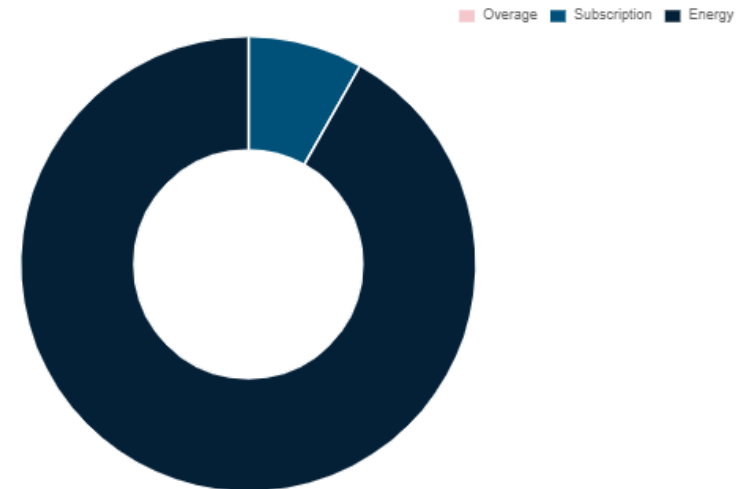
CHARGERS

EMISSIONS

To maximize BEV rate inputs, we have set your rate to **Business High Use EV**, with a subscription level of **11 blocks**. Check out the [Business EV Rate Calculator](#) to explore your options.

The total monthly cost would be **\$12,874**, which includes the cost to recharge to full and the subscription charges.

BEV COST COMPONENTS



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

LCFS Calculator

The Low Carbon Fuel Standard is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

— Low Carbon Fuel Standard Homepage

The Low Carbon Fuel Standard (LCFS) is administered by the [California Air Resources Board \(CARB\)](#). Participation requires registration, which entities can do so [here](#). The LCFS program is set to continue through at least 2030.

The calculation below is based on the methodology provided by CARB, which assumes a decreasing carbon intensity of fossil fuels. This tool makes no assumptions about a similar decreasing carbon intensity of the California Grid, therefore it is recommended to use the results of 2021 for a typical year.

The calculation below also assumes a flat LCFS credit price of \$150. This value is not guaranteed going forward and can change at any time. See the latest LCFS credit prices [here](#). A single LCFS credit represents 1 metric ton of carbon, and credit prices are often referred to as \$ ___ /MT (dollars per metric ton).

LOW CARBON FUEL STANDARD

ENERGY DISPLACED PER YEAR

730,000

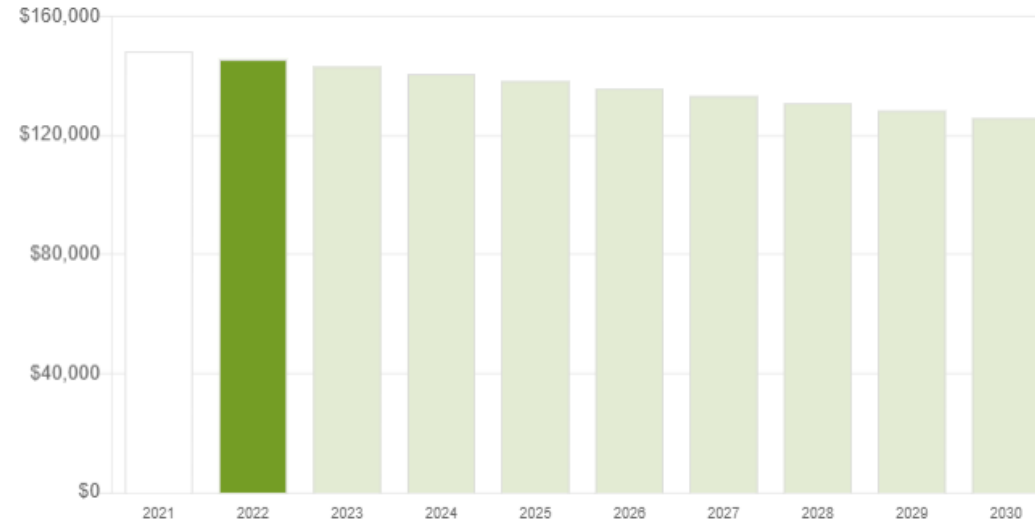
10,000 10,000,000
730,000 kWh; equivalent of 19,543 gallons of diesel

ELECTRICITY SOURCE

California Grid

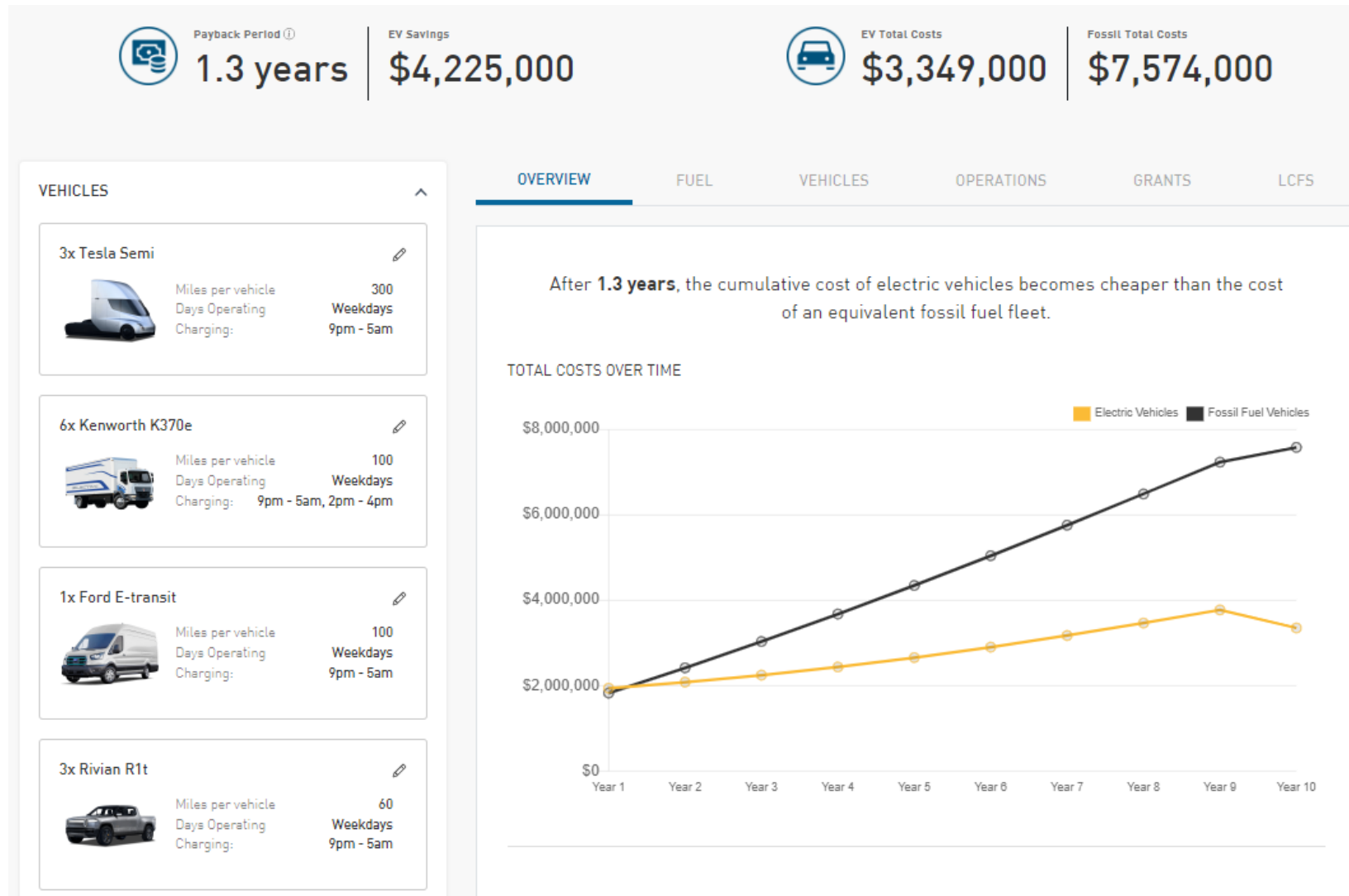
Carbon neutral generation creates more LCFS credits. Carbon neutrality can be achieved with clean on-site generation or Renewable Energy Credits (RECs).

ESTIMATED LCFS REVENUES



Note: Values shown for illustrative purposes. Please refer to the [EV Fleet Savings Calculator](#) at [Fleets.pge.com](#) for exact values.

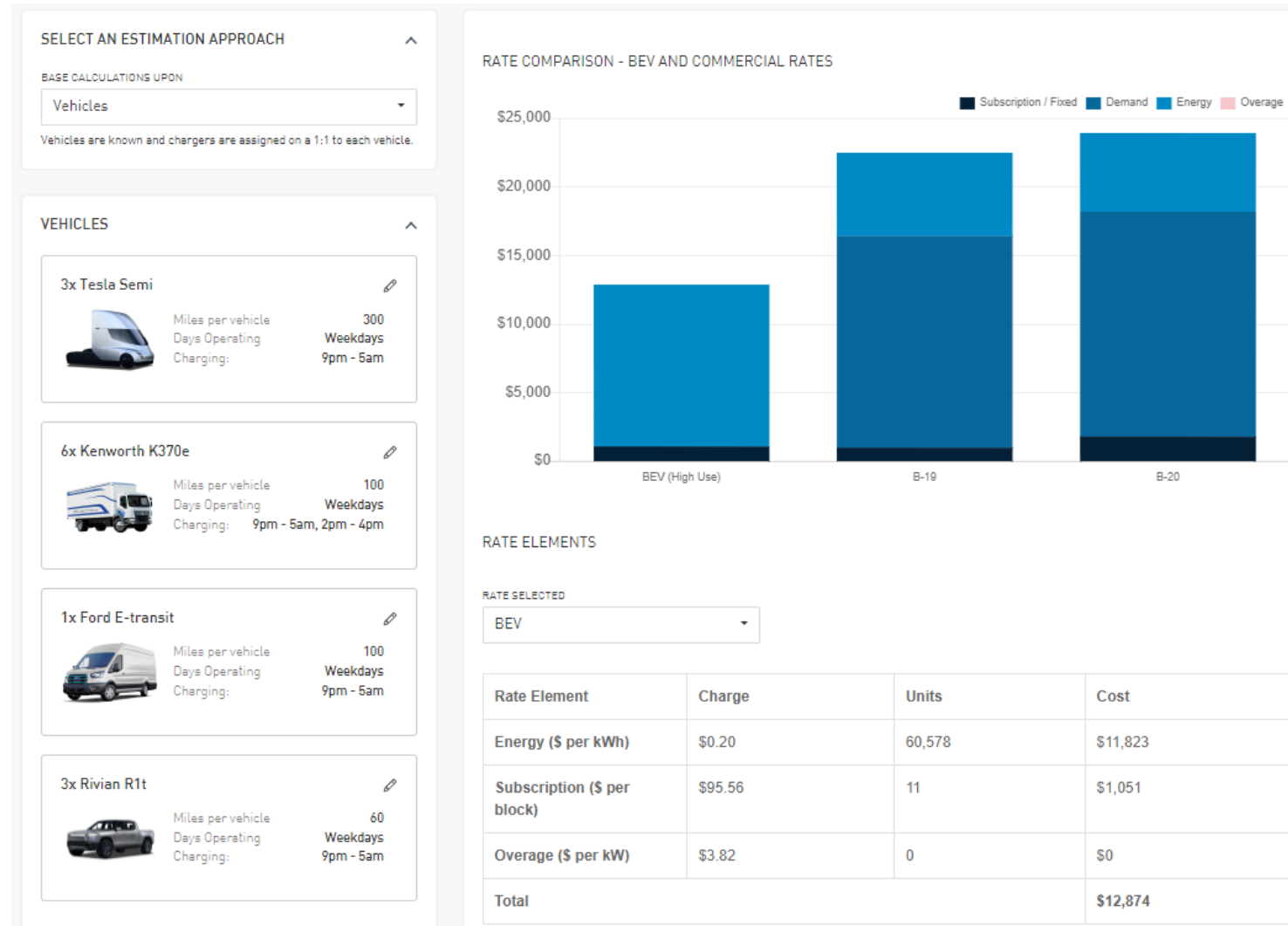
EV Fleet Savings Calculator



Note: Values shown for illustrative purposes. Please refer to the [EV Fleet Savings Calculator](https://fleets.pge.com) at [Fleets.pge.com](https://fleets.pge.com) 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.



Thank you!

Dean Kunesh

Dean.Kunesh@pge.com



- EV Fleet Website
- PG&E Integration Capacity Analysis (ICA) Map
- EV Fleet Application
- Approved List of Chargers
- Request to add Chargers to APL
- Requesting Letter of Support
- 3rd Party Authorization Form
- EV Permit Streamlining Map
- EV Fleet Terms and Conditions
- EV Fleet Easement
- PG&E Service Territory Map
- PSPS Map and Outage History
- PG&E Power Mix
- Generating Revenue with Low Carbon Fuel Standard (LCFS)



Clean Transportation Programs

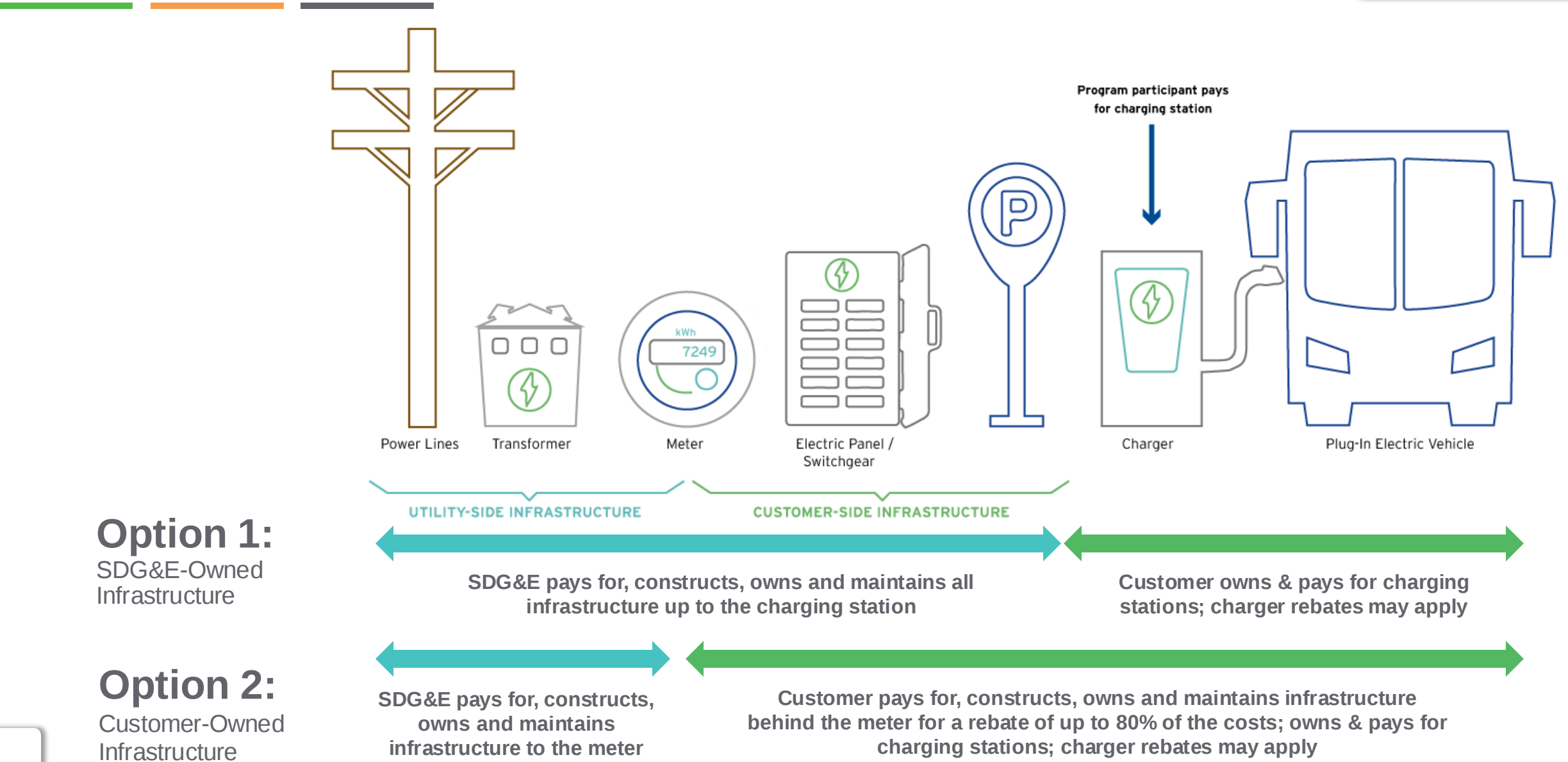
Christopher Roberts
Sr. Customer Solutions Advisor



**IT'S EASY TO
LOVELECTRIC**

Power Your Drive *for* Fleets

Installation & Ownership Options



Power Your Drive *for* Fleets

Fleet-Friendly Pricing & Charger Rebates



Who is eligible for the charger rebate?

- School buses
- Transit buses
- Sites located in areas of opportunity

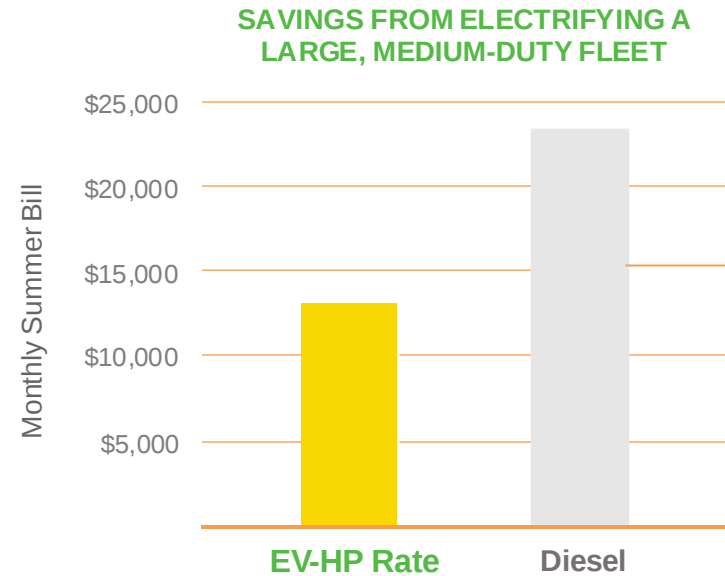
Maximum rebate amounts per charger power level

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.*

Benefits of the 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.

Complimentary Support

Transportation Electrification Advisory Services (TEAS)

SDG&E is dedicated to helping fleets transition to EVs

Small businesses, educational institutions, tribal communities, transit agencies, and municipalities may receive dedicated help electrifying medium and heavy-duty fleets.



GET STARTED TODAY

Begin the journey to electrification by filling out the TEAS interest form. This quick step allows SDG&E to better understand your needs and schedule personalized consultation.



TAILORED RESOURCES

Whether you're looking for specific solutions, education on electrification, or have unique challenges, SDG&E is ready to provide assistance precisely for you.



TRUSTED ENERGY ADVISORS

SDG&E has TEAS advisors standing by to support every aspect of your electrification journey, as well as tools and other electric vehicle experts to work through any roadblocks.



TEAS.SDGE.COM

- ❖ Fill out the TEAS interest form
- ❖ Get quick resources for starting your electrification journey
- ❖ Learn how to overcome common electrification roadblocks

LOVELECTRIC

Fleet Electrification Planning

Transportation Electrification Advisory Services (TEAS)



Designed to meet the unique needs of each fleet

An SDG&E TEAS advisor collaborates closely to develop personalized strategies, helping fleets navigate the complexities of vehicle selection and charging infrastructure.



EV SELECTION AND CHARGING INFRASTRUCTURE

Fleets explore a variety of electric vehicle options that could meet their needs as well as customized options on the types and quantities of charging equipment needed.



CAPACITY ANALYSIS & SITE PLANNING

Fleets also explore the current infrastructure potential to support new technologies, as well as gain insights into the site layout and load requirements.



LOAD MANAGEMENT AND RATE OPTIMIZATION

Fleets dive into strategies to manage energy loads efficiently to minimize charging costs, as well as work with an advisor to understand available energy pricing plans.

Additional Support

- ❖ Where to start with transitioning
- ❖ External Funding Information
- ❖ Advanced Clean Fleets (ACF)

LOVELECTRIC

Pre-Energization Support

Transportation Electrification Advisory Services (TEAS)



Get comprehensive support to assist with a smooth start

SDG&E TEAS advisors provide pre-energization support that focuses on preparing for an EV project and gathering details required to begin the electrification transition.



UNDERSTANDING NEEDS & MAKING CONNECTIONS

SDG&E TEAS advisors facilitates connections to other SDG&E teams needed to support a request-for-service application, simplifying the process of integrating new systems.



PROVIDER SELECTION SUPPORT

Fleets receive guidance from an SDG&E TEAS advisor on essential electrification considerations before connecting with an electric vehicle service provider (EVSP).



CAPACITY & INFRASTRUCTURE UPGRADES

SDG&E TEAS advisors also help understand current capacity available for a project, as well as support fleets through the process of upgrading service to meet long-term needs.

TEAS.SDGE.COM

- ❖ Fill out the TEAS interest form
- ❖ Get quick resources for starting your electrification journey
- ❖ Learn how to overcome common electrification roadblocks

LOVELECTRIC

Post-Energization Support

Transportation Electrification Advisory Services (TEAS)



Support does not end with activation of an EV site

SDG&E is committed to enhancing fleet operations over time, encouraging effective energy consumption, and providing support for adapting to new technologies.



LOAD MANAGEMENT

Implement and maintain plans to efficiently manage energy loads and minimize the cost to charge a fleet's vehicles based upon usage data.



RATE OPTIMIZATION

SDG&E TEAS advisors also provide guidance on electric vehicle (EV) rates based upon usage patterns, and can help fleets better understand how to optimize.



LEVERAGING LOW CARBON FUEL STANDARD (LCFS)

Fleets can also take advantage of Low Carbon Fuel Standard (LCFS) opportunities to benefit operations and a company's bottom-line.

Emerging Tech

- ❖ Stay at the front of EV innovation
- ❖ Learn about V2X capabilities
- ❖ Get support for Automated Load Management options

LOVELECTRIC

Want to learn more about the program?

sdge.com/fleets & sdge.com/teas

Ready to talk to a customer solutions specialist?

ctprograms@sdge.com

Thank you for your time today.



Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles

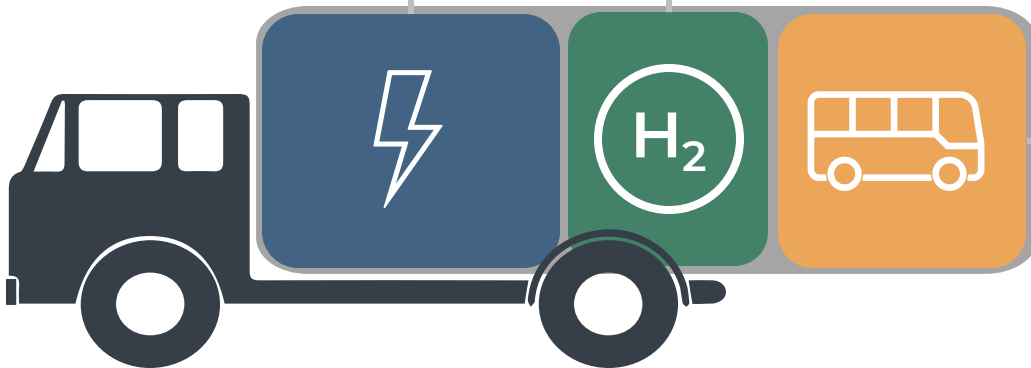
Overview of EnergIIZE

Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles

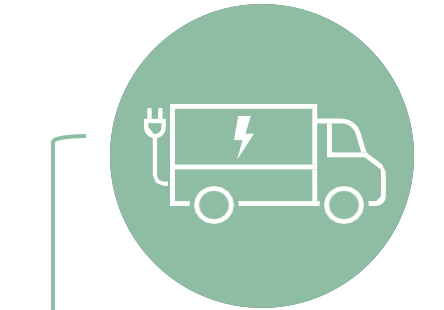
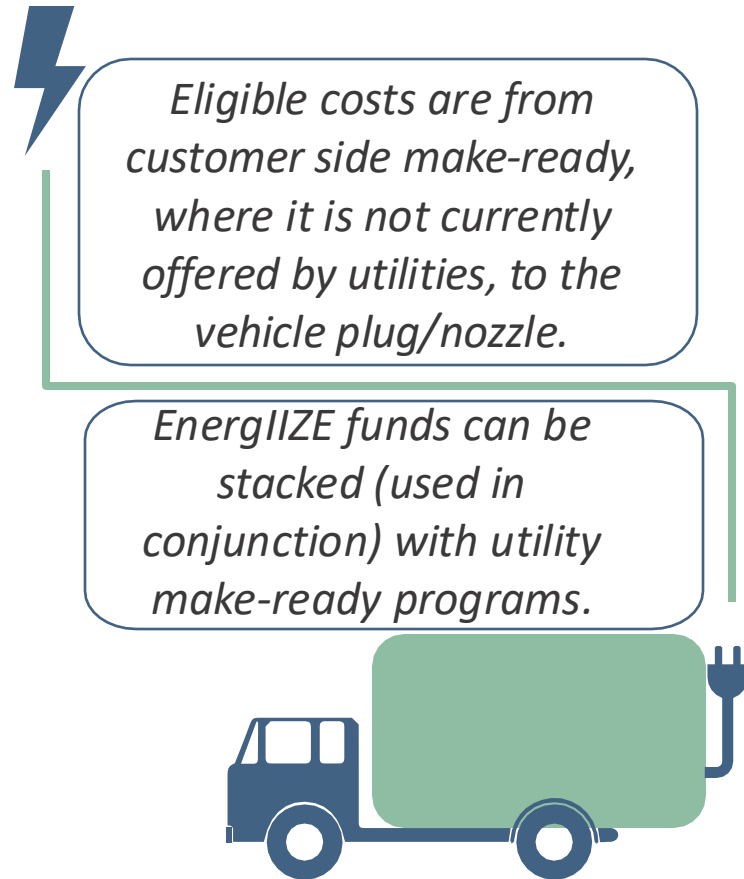
Provides incentives for zero-emission vehicle (ZEV) infrastructure equipment for medium-duty and heavy-duty (MDHD) battery-electric and hydrogen fuel cell vehicles operated and domiciled in California.

Funding is released in distinct lanes, each representing a key area of the commercial ZEV landscape. Vehicles must be Class 2b-8, off-road applications are considered on a case-by-case basis.

Funded by the California Energy Commission's (CEC) Clean Transportation Program.



EnerglIZE Eligible Costs



**EV
Infrastructure**



Make Ready

- Eligible EVSE listed on [Approved Product List](#)
 - Level 2 Chargers
 - Direct Current Fast-Charging (DCFC)
 - V2G and Wireless Charging
- Networking
- Software
- Maintenance
- Warranty
- Switchgear
- Electrical Panel Upgrades
- Meters
- Stub-outs

EnerglIZE Standard Funding Lanes

Closed



EV Fast Track

Applicants are ready to go and may already have prior experience applying for commercial MDHD EV funding.

Closed



Hydrogen

Applicants intend to develop a hydrogen infrastructure project for commercial MDHD fuel cell vehicles.

Open 7/16/24



EV Jump Start

Applicants will need to meet specific eligibility criteria and will be allotted more time to submit required documents.

Open Oct. 2024



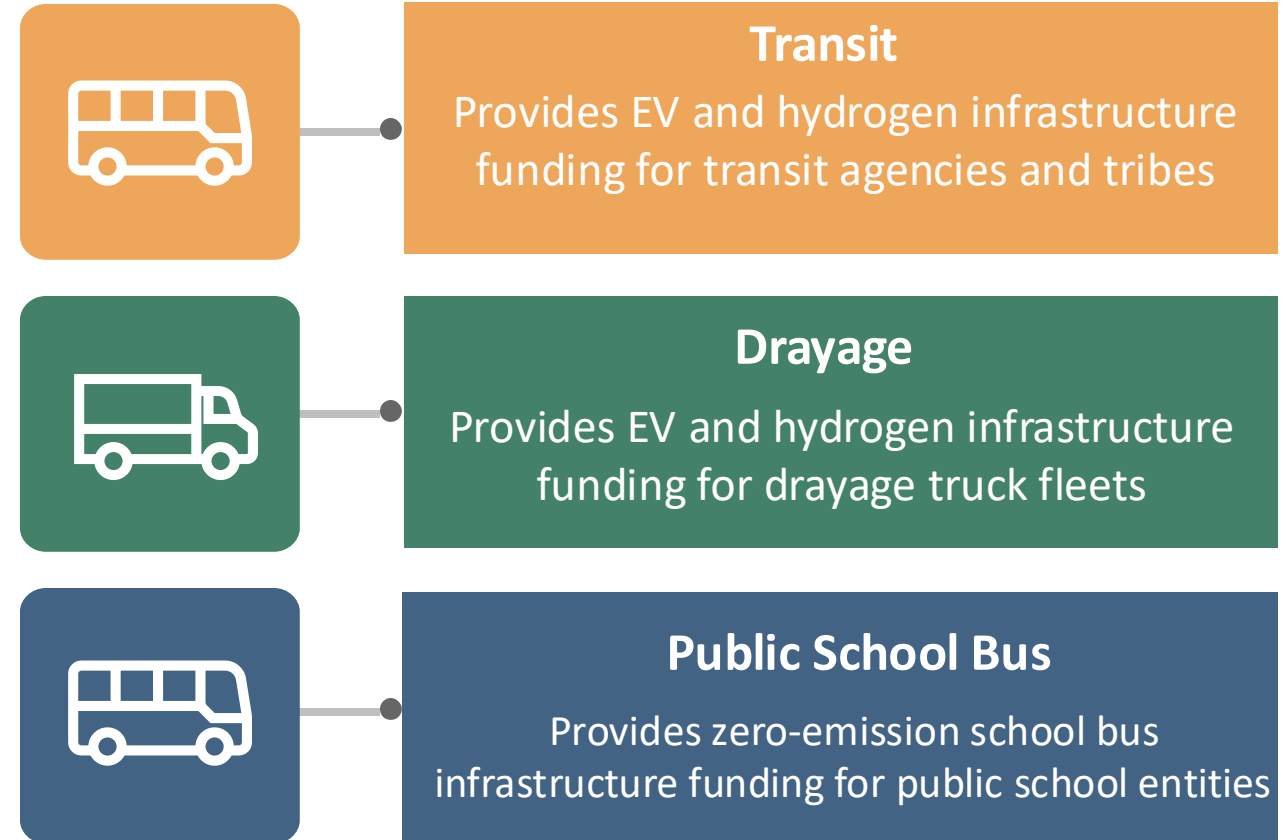
EV Public Charging

Applicants intend to develop publicly available or shared charging stations for commercial MDHD EVs.

EnergIIZE Set-Aside Funding Lanes

The Set-Aside lanes pair EnergIIZE infrastructure funding with vehicle funding through the [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project \(HVIP\)](#).

Transit and Drayage lanes open now!





Open July 16!

EV Jump Start

The project must meet one of the following criteria:

- Project site will be in a [Disadvantaged Community \(DAC\)](#) or [Low-Income Community \(LIC\)](#)
- Public Transit System serving a DAC or LIC
- Public School District serving economically disadvantaged students
- Tribe or tribal serving entity
- Small business as identified in the California State Legislative Code
- Certified Minority Business Enterprise
- Non-profit organization

The project may be for public, shared, or private commercial fleet use by MDHD EVs.



Open Now!

Transit

- Included in the CARB Innovative Clean Transit (ICT) program's list of compliant transit agencies
- California city or county government, transportation district/transit district, or public agency
- California Native American Tribe, California Tribal Organization, or Non-Governmental Organization Serving Tribal entities
- Must show proof of HVIP vehicle purchase or HVIP voucher request by Step 3 of the EnergiIZE process

Open Now!

Drayage

- Fleet that performs drayage operations, according to HVIP definition
- CaaS developers serving drayage fleets
- Must show proof of HVIP vehicle purchase or HVIP voucher request by Step 3 of the EnergiIZE process

Incentive Structure

Applicant Lane	EV Fast Track	EV Public Charging	Hydrogen	EV Jump Start
Application	First Come, First Serve	Competitive	Competitive	Competitive
Incentive Structure	50-75% of Total Eligible Adjusted Project Costs 	50-75% of Total Eligible Adjusted Project Costs 	50-75% of Total Eligible Adjusted Project Costs 	75% of Total Eligible Adjusted Project Costs 
Maximum Award	\$500k-750k	\$500k-750k	\$3M-4M	\$750k

Set-Aside Lanes Incentive Structure

Drayage

Lane Characteristics	EV	Hydrogen Fueling	Mixed Fuel
Maximum Incentive Offering	75 percent of Total Eligible Adjusted Project Costs Incurred*		
Maximum Award	\$750,000	\$2,800,000	\$1,400,000

If meeting equity criteria:

Lane Characteristics	EV	Hydrogen Fueling	Mixed Fuel
Maximum Incentive Offering If Meeting Equity Criteria**	90 percent of Total Eligible Adjusted Project Costs Incurred*		
Maximum Award If Meeting Equity Criteria**	\$1,000,000	\$3,920,000	\$1,960,000

If installing more nozzles:

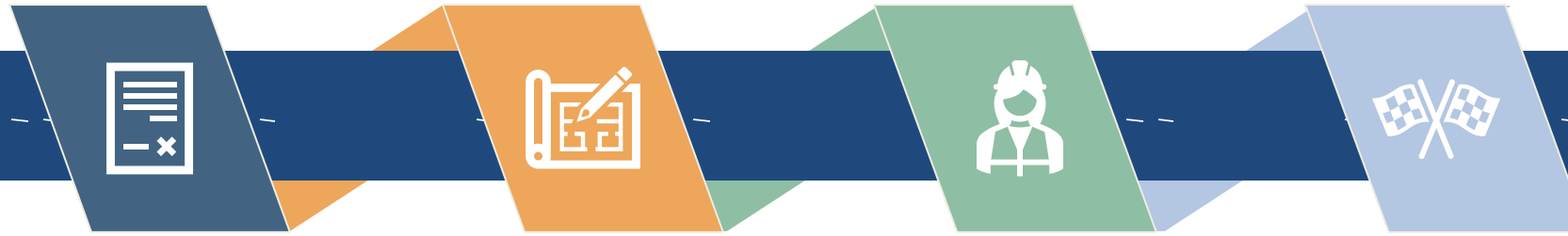
Lane Characteristics	EV	Hydrogen Fueling	Mixed Fuel
Maximum Incentive Offering If Installing More Nozzles	90 percent of Total Eligible Adjusted Project Costs Incurred*		
Maximum Award If Installing More Nozzles	\$1,000,000 if installing 10 or more nozzles	\$3,050,000 if installing 4 or more nozzles	\$1,650,000 if installing 10 or more nozzles (combined, not per fuel type)

Transit

	EV	Hydrogen Fueling	Mixed Fuel
Maximum Incentive Offering	75 percent of Adjusted Project Costs Incurred*		
Maximum Project Cap	\$500,000	\$2,000,000	\$1,000,000

	EV	Hydrogen Fueling	Mixed Fuel
Maximum Incentive Offering If Meeting Equity Criteria*	90 percent of Adjusted Project Costs Incurred*		
Maximum Project Cap If Meeting Equity Criteria**	\$750,000	\$2,800,000	\$1,400,000

EnergIIZE Project Steps



Step 1:
Submit
Application

Step 2:
Provide
supporting
documents

Step 3:
Permitting
and
construction
*Milestone
Payment*

Step 4:
Commission
project
Final Payment



Resources

- For interested applicants: <https://calstart3.my.site.com/apply/s/> (Application Portal)
- For vendors & installers:
Apply to be an approved Project Partner to apply and/or install infrastructure for fleets at <https://www.energiize.org/partners>
- Find more stackable funding opportunities at <https://fundingfindertool.org/>

Contact Us



infrastructure@calstart.org



877-ENR-GIZE
877-367-4493



www.EnergIIZE.org





SDGETM



Common Questions

When stacking EnergiZE and utility programs, who should I contact first?



SDG&E™



Common Questions

When stacking EnergiIZE and utility programs, how does reimbursement work?



SDG&E™



Common Questions

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



SDGGE™



Common Questions

What are common reasons for project delays?



SDGETM



Q&A

Please submit your questions using the Q&A function!