

Advanced Clean Tech News FOR THE COMMERCIAL TRANSPORT SECTOR

Funding Availability for Zero-Emission Vehicles

Today's webinar will start at:

10 a.m. PT / 1 p.m. ET

In Coordination With























Advanced Clean Tech News FOR THE COMMERCIAL TRANSPORT SECTOR

WEBINAR

Before we get started

Q&A

Submit your questions to the host using the Q&A box in the upper right-hand corner.

Survey

A 30-second survey will pop-up at the end. We appreciate your feedback!

Presentations

A recording of today's webinar will be posted on the ACT News website, and you will be emailed a link by early next week.

Technical Issues

Contact Stephane Babcock at Stephane.Babcock@gladstein.org or 424-363-0341 for assistance.



















ACTIVE Advanced Clean Tech News FOR THE COMMERCIAL TRANSPORT SECTOR

Funding Availability for Zero-Emission Vehicles





Brianna Lawrence Vice President, Programs Gladstein Neandross and **Associates**

















Overview

- Regulatory and Technology Reminders
- What can I get funding for?
- What funding is out there?
- Should I apply?
- What does it take to apply?
- What does the timeline look like?
- Q&A



ZEV Drayage Fleet Overview

Transition all Class 7 and & 8 trucks operating at California intermodal seaports and railyards to full ZE by 2035

How?

Extend current Drayage Truck Rule/Registry mechanism to prohibit non-ZE truck access

Starting 1/1/24, all new trucks registered in the Drayage Truck Registry must be ZE

Drayage Fleet Details



Must be registered in the Drayage Truck Registry (DTR).



- All current drayage trucks must achieve MY 2010 engine standards by December 31, 2022
- They will not be DTR compliant unless they visit a California seaport or railyard at least once in 2024 (and annually thereafter)



Starting January 1, 2024:

- Only zero-emission trucks can be added to the Registry Beginning January 1, 2035, all drayage trucks must be ZEV

Current MY 2010+ engine trucks in DTR must:



- Report odometer annually, once engine model year is 13 years old
- Retire when either (whichever first):
- Mileage reaches 800,000 miles
 - 18 years old
- Remain active: visit a CA seaport or railyard at least 1x/yr in 2023+

Examples of Class 8 EV Tractors











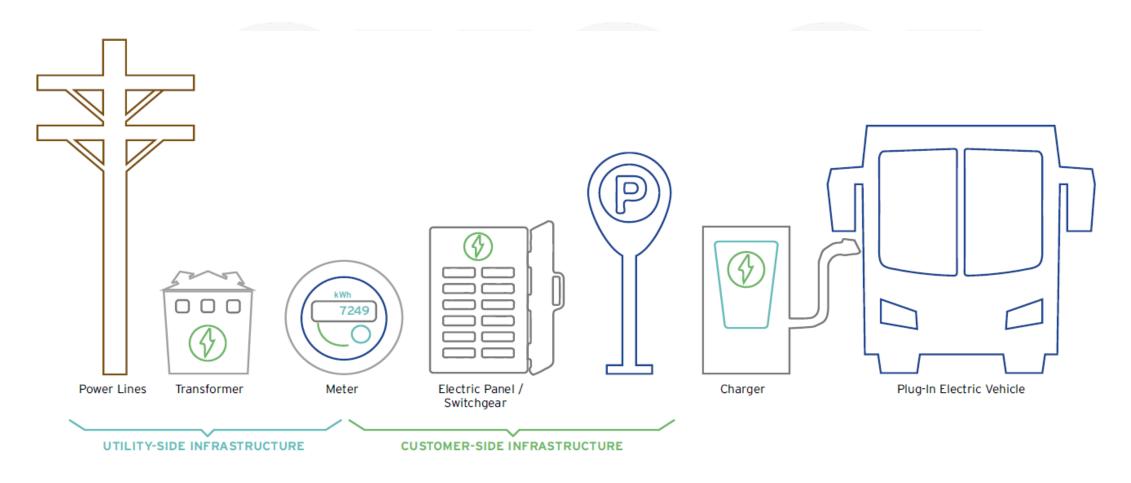


Freightliner eCascadia 438 kWh 190" WB Curb Weight: 21,800 lbs (est)

Volvo VNRe 565 kWh 200" WB (est) Curb Weight: 24,500 lbs (est) 400 kWh 190" WB (est) Curb Weight: 22,500 lbs (est) Kenworth T680E 396 kWh 190" WB Curb Weight: 22,500 lbs (est) 563 kWh 167" WB Curb Weight: 28,000 lbs (est) 653 kWh 200" WB Curb Weight: 26,000 lbs (est)

| | ÷ 2.0 kWh per mile | | x 75% usable SOC | | x 80% EOL Capacity | / |
|-----------------------------|--------------------------------|-----|------------------|-----|--------------------|-----|
| Max Ro (m | ange niles) 219 | 283 | 200 | 198 | 282 | 327 |
| Ty _l Range (N | pical lew) 164 | 212 | 150 | 149 | 211 | 245 |
| Ty Range (| pical EOL) <mark>131</mark> | 170 | 120 | 119 | 169 | 196 |

Infrastructure Components

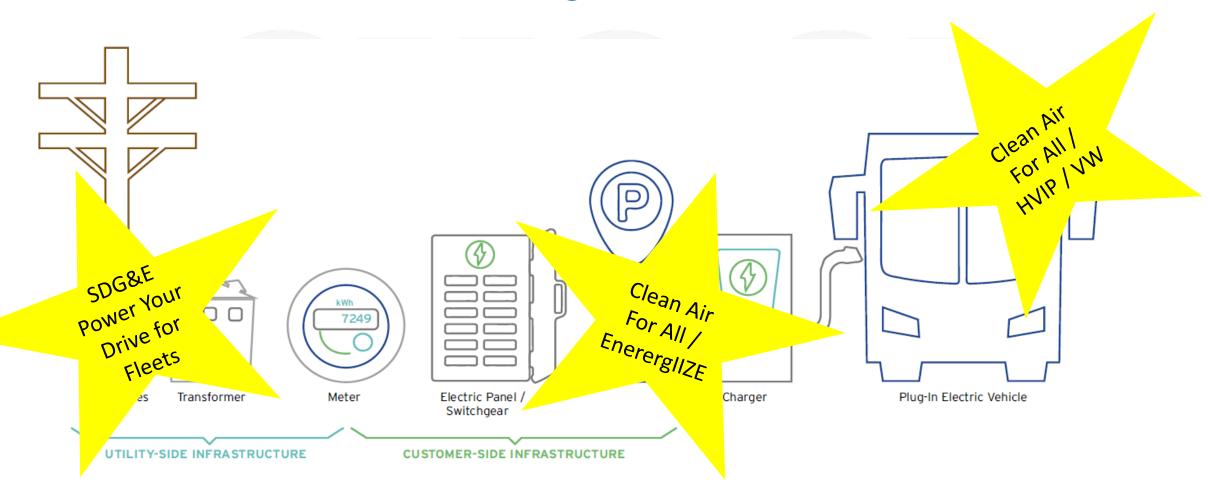


Source: SDG&E Power Your Drive for Fleets Charging Guidebook

Key Recommendations

- Understanding your daily use of the trucks (average and peak mileage, dwell time and location, max cargo weight, etc) is critical to evaluating how EVs will fit in your fleet.
- If possible, demonstrate an EV in your fleet so that you understand its practical fit in your operations.
- Maximizing utilization of chargers usually minimizes total costs.
- Charging speeds are limited by the slowest link (grid supply, charger, vehicle, battery). Ensure you **know what performance to expect** from your vehicle and infrastructure combination.
- Not all vehicles charge at the same voltage, even if they meet the same charging standard (e.g. CCS-1). Your chargers must match or exceed your vehicle requirements.
- Utility supply can have long timelines. Get started as soon as possible.

What can get funded?



What's out there?*

| | What's it for? | Local/Stat e | Program | Status | Maximums |
|--|--------------------------------|-----------------------|---|---|--|
| | Infrastructure | Local | SDG&E Power Your Drive For Fleets | Open; first-come, first- served | 100% up to the charger; potential charger rebate |
| | Infrastructure AND Vehicles | Local | SDAPCD Clean Air For All | Building a contingency list | Up to 50% of vehicle and infrastructure costs |
| | Vehicles | Local | SDAPCD Voucher Incentive Project | Under development; may not return in 2023 | Varies by age/usage of existing vehicle |
| | Vehicles | Local | SDAPCD Zero Emission Port Truck Pilot Project | Open; first-come, first- served | Up to 90% of costs or \$250,000 |
| | Infrastructure | State | EnergIIZE – Fast Track | Under development | Up to 50% of costs or \$500,000 |
| | Infrastructure | State | EnergIIZE – Jump Start | Under development | Up to 75% of costs or \$750,000 |
| | Infrastructure AND Vehicles | State | Innovative Small e-Fleet Program | Under development | Up to \$300,000 per ZEV |
| | Vehicles | State | Hybrid and Zero Emission Truck Voucher Incentive Project (HVIP) | Open; first-come, first- served | \$150,000 base for drayage per ZEV |
| | Vehicles *Does not include | State de federal i | California VW Program for Class 8 Trucks programs that require a publ | Open; first-come, first- served ic agency sponsor | \$200,000 per ZEV |

And in every case, you should use this tax credit...

- Qualified Commercial Clean Vehicle
 - December 31, 2021- December 31, 2032
 - % of base vehicle cost OR incremental cost
 - \$7,500 cap for vehicles < 14,000 lbs.
 - \$40,000 cap for vehicles > 14,000 lbs.

Other key points for EV credits:

- No Buy America provisions for commercial
- No cap on credits

One of Many Examples of Maximizing Incentives

(Assumes fleet is in a DAC and has 10 or fewer vehicles)

SDG&E Power Your
Drive For Fleets
(100% of costs up to charger + charger rebate)

Jumpstart (75% of costs of charger, software, and installation)

Federal Tax Credit (\$40,000 towards the ZEV)

SDAPCD CAFA or Pilot Program (up to \$410,000 towards the ZEVs)

Another Example of Maximizing Incentives

(Assumes fleet is in a DAC and has > 10 vehicles)

SDG&E Power Your
Drive For Fleets
(100% of costs up to charger + charger rebate)

Jumpstart (75% of costs of charger, software, and installation)

Federal Tax Credit (\$40,000 towards the ZEV)

SDAPCD CAFA or Pilot Program (up to \$410,000 towards the ZEVs)

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Third Example of Maximizing Incentives

(Assumes fleet is not in a DAC and has > 10 vehicles)

SDG&E Power Your
Drive For Fleets
(100% of costs up to charger + charger rebate)

EnergIIZE Fast Track (50% of costs of charger and software, and installation)

Federal Tax Credit (\$40,000 towards the ZEV)

SDAPCD CAFA or Pilot Program (up to \$410,000 towards the ZEVs)

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Last Example of Maximizing Incentives

(Assumes fleet is not in a DAC and has 10 or fewer vehicles)

SDG&E Power Your
Drive For Fleets
(100% of costs up to charger + charger rebate)

EnergIIZE Fast Track (50% of costs of charger and software, and installation)

Federal Tax Credit (\$40,000 towards the ZEV)

SDAPCD CAFA or Pilot Program (up to \$410,000 towards the ZEVs)

Making a decision to apply

Before proceeding, be sure to check...

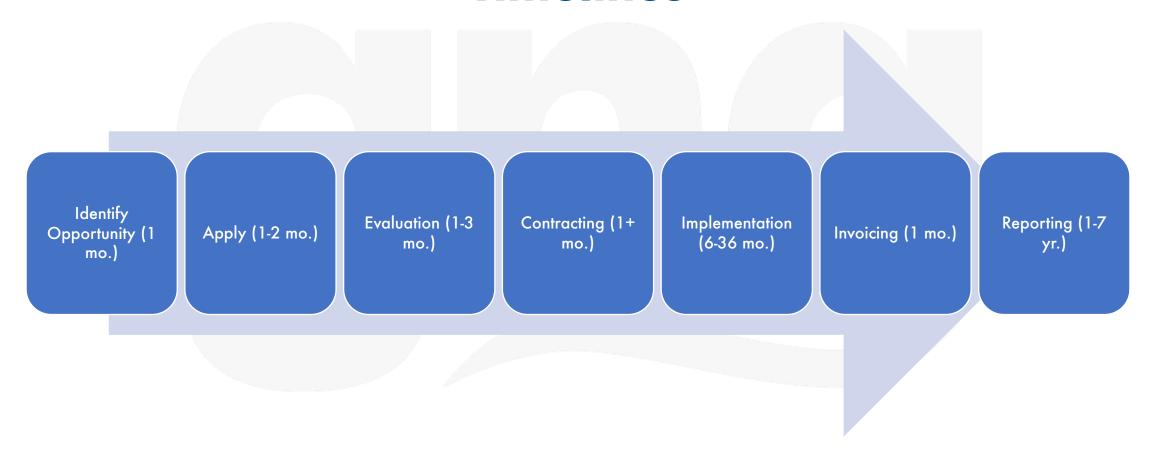
- Am I an eligible applicant (based on entity type, size, etc.)
- Do I have enough time ahead of the due date to prepare an application?
- Is my project located in a priority area?
- Can I get enough funding for the vehicle or equipment to make the project financially feasible?
- Is scrappage required, and if so, do I have an eligible truck to scrap?
- Can I complete the project in the amount of time provided?



Examples of Application Requirements

| Vehicles | Infrastructure | | |
|------------------------------------|---------------------------------------|--|--|
| New Vehicle Quote | Project Schedule | | |
| Compliance Certificate | Bids from Contractor(s) and Vendor(s) | | |
| Titles (existing vehicle) | Site Plan | | |
| Registration (existing vehicle) | Proof of Utility Coordination | | |
| Insurance (existing vehicle) | Proof of EV order or purchase | | |
| Photographs (existing vehicle) | Permitting Plan | | |
| Mileage Records (existing vehicle) | Deed or Lease | | |
| Applicant Information | Applicant Information | | |

Timelines





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Questions and Answers

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AVAILABLE TO FLEETS SERVING THE PORT OF SAN DIEGO

Available now through June 2023! Following a short discovery call to learn more about your operations and interests, GNA's team of funding, regulatory, and technical experts will work with you through a series of FREE calls to address your questions and provide guidance regarding zero emissions vehicles.







WEBINAR

Thank You!

What did you think of the webinar? Please fill out our 30 second survey.

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