

CALAC
Conference
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California's Clean Off-Road Equipment Voucher Incentive Program

Clean Off-Road
Equipment Voucher
Incentive Program



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CALSTART





CALSTART: A Non-Profit Organization Accelerating Deployment of Clean Transportation Technology through:

- **Tech Demonstrations**
- **Assessment and Validation**
- **Fleet Assistance**
- **Strategic Roadmapping**
- **Data Collection**
- **Collaborative Industry Partnerships**

Mission & Background:

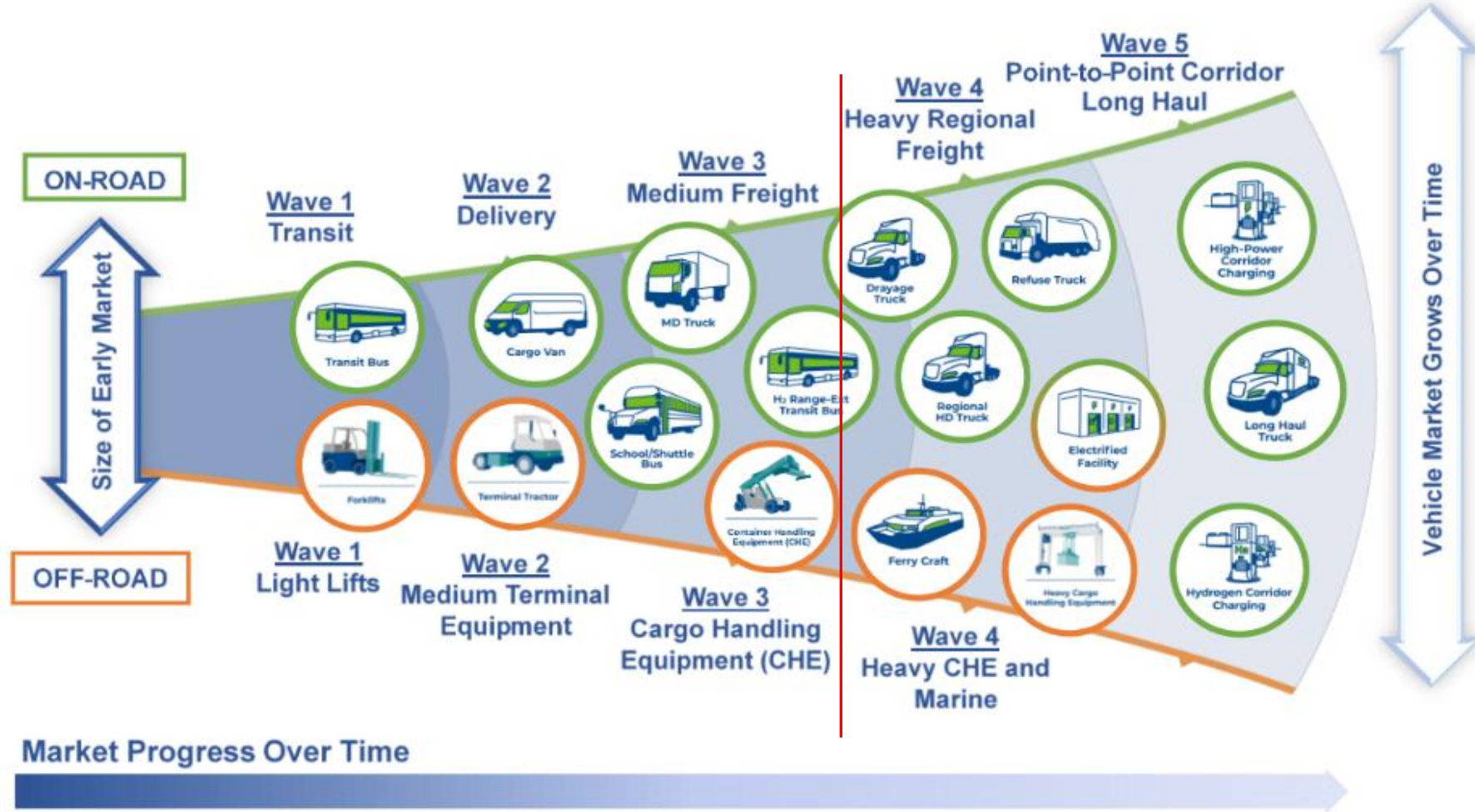
- **Support and expand clean transportation tech industry**
- **Drive faster commercialization**
- **Tech and fuel neutral but focusing on move toward zero-emission**
- **Operating since 1992**

Goals:

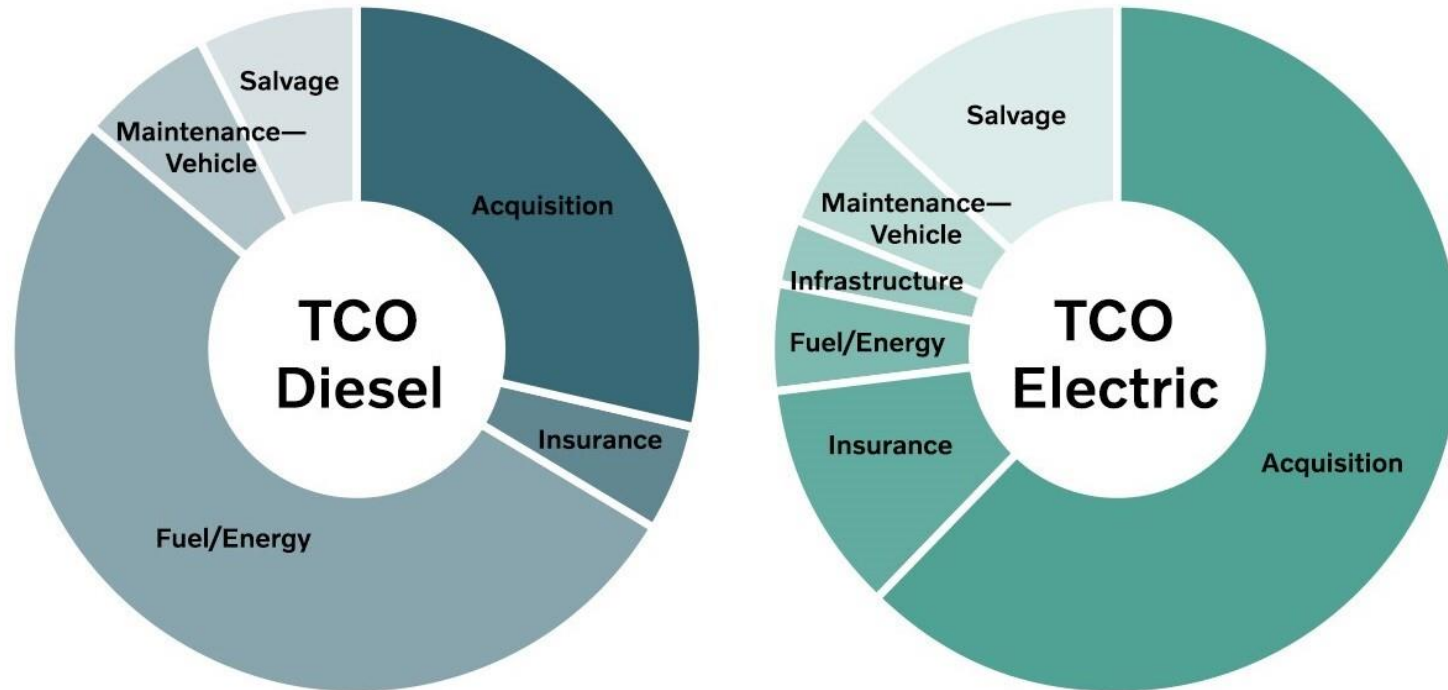
- **Promote clean air technology solutions**
- **Grow & develop high-quality jobs in the U.S.**
- **Battle climate change**
- **Reduce dependence on petroleum**

Over 300 Members

THE BEACHHEAD MODEL: TARGET THE EASIEST SECTORS TO ELECTRIFY



DIESEL VS. ELECTRIC - TOTAL COST OF OWNERSHIP EXAMPLE



Source: Volvo Trucks 2022 – Class 8 truck example

MARKET ACCELERATION: CALSTART INCENTIVE PROGRAMS

- **Hybrid & Zero-Emission Truck & Bus Voucher Incentive Program (HVIP)** – Calif Air Resources Board (CARB)
 - 9,000+ on-road vehicles, 1,580 participating fleets
 - \$600 million+ funded through 2021, \$197 million more in 2022
 - www.californiahvip.org
- **Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (ENERGIIZE)** – Calif Energy Commission
 - Funds infrastructure (BEV and fuel cell) for commercial fleets
 - \$50 million authorized in 2021
 - www.energiize.org
- **Clean Off-Road Equipment Voucher Incentive Program (CORE)** – CARB
 - www.californiacore.org

CALSTART partners seek to bring the point-of-sale voucher incentive model to other states and federally

CORE OVERVIEW

- **Point-of-Sale Voucher Incentive Program** to purchase or lease zero-emission off-road equipment
- **Offset Costs** of zero-emission technology (incremental cost) with point-of-sale discount
- **Additional Funding** for charging and fuel stations, equipment deployed in disadvantaged communities (DAC) and operated by a small business



CORE GUIDING PRINCIPLES

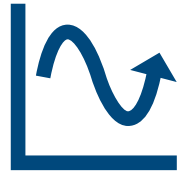


Maintain simplicity and a fleet-friendly process

Accelerate market transformation for the cleanest advanced technologies

Support CARB'S Long-Term Heavy-Duty Investment Strategy

Drive purchase decisions



Support CARB strategies and regulatory efforts

Avoid market disruptions caused by unpredictable funding availability

Graduate established technologies



Support more equitable investments

Include support for smaller economically disadvantaged fleets

EQUIPMENT USER PARTICIPATION

Any off-road equipment user in California is eligible

Equipment must be domiciled and operated in California for at least 3 years

Equipment users must submit activity reports for 3 years

The size of the fleet does not affect voucher amounts, and equipment users have no limit on the number of vouchers for which they can apply



HOW THE PROCESS WORKS FOR END-USERS

1. Select equipment that suits your needs from the CORE catalog

2. Contact an approved dealer – they are trained to submit the CORE voucher request

3. Provide the dealer with equipment domicile location and other required information

4. Receive your approved funding status of your voucher request

5. Purchase your CORE-discounted equipment



MANUFACTURER STEPS TO PARTICIPATE

1. Review the CORE Implementation Manual



2. Compile documents outlined in Attachment A



3. Send complete application packet to
CORE@arb.ca.gov



4. Advise dealers to enroll



New
Categories

NINE EQUIPMENT FUNDING CATEGORIES

1

- Terminal tractors (on- and off-road)

2

- Transport refrigeration units

3

- Large forklifts and container- handling equipment (rubber-tired gantry [RTG] cranes, straddle carriers, reach stackers, side picks, and top picks)

4

- Airport ground-support equipment (airport cargo loaders, wide-body aircraft tugs, and aircraft GPUs)

5

- Railcar movers and switchers

6

- Mobile Power Units and mobile shore-power cable management systems

7

- Construction equipment (excavators, dozers, skid-steers, loaders, backhoes, mining equipment and other construction equipment types)

8

- Agriculture equipment (agricultural harvesting equipment and agricultural tractors)

9

- Commercial harbor craft (fishing and excursion vessels, ferries, tug, tow, crew and supply boats, barges, dredges, and other vessel types)

ELIGIBLE EQUIPMENT AND VOUCHER AMOUNTS



Large Forklifts

Up to \$500,000



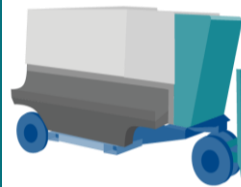
Container-Handling Equipment (CHE)

Up to \$500,000



Airport Cargo Loader

Up to \$100,000



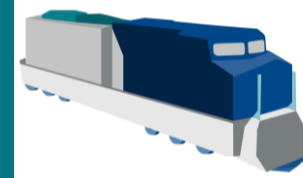
Mobile & Ground Power Units

Up to \$300,000



Railcar Movers

Up to \$500,000



Switcher Locomotive

Up to \$500,000



Construction

Up to \$500,000



RTG Cranes

Up to \$500,000



Shore-Power Cable Systems

Up to \$500,000



On- & Off-Road Terminal Tractor

Up to \$120,000



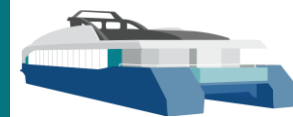
Transport Refrigerator Units (TRU)

Up to \$65,000



Wide-Body Aircraft Tugs

Up to \$500,000



Harbor Craft

Up to \$500,000



Agriculture

Up to \$500,000

CORE PROJECT BY THE NUMBERS



CORE FY20-22

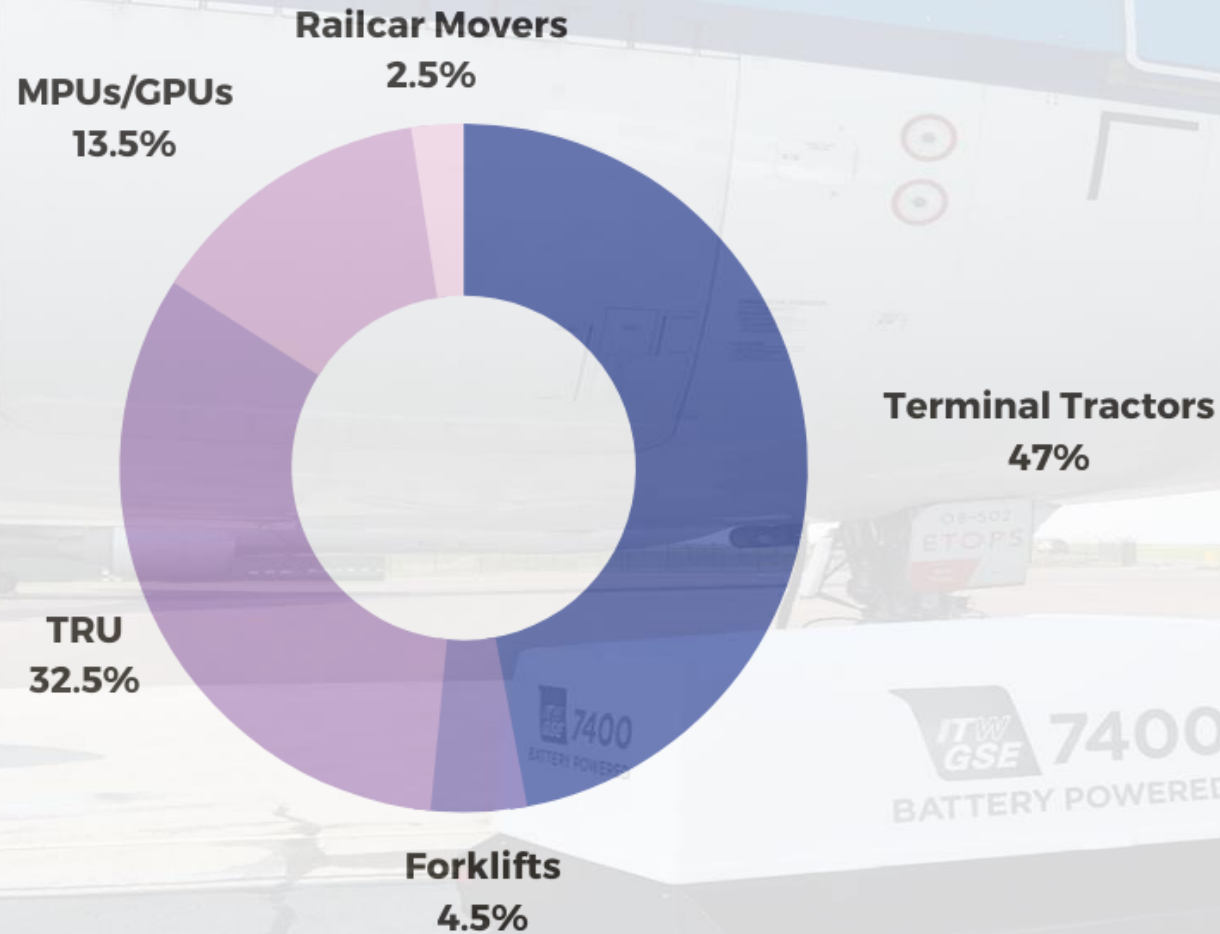
- Number of OEMs: 13
- Number of Dealers: 31
- Equipment Types: 51
- Total Vouchers Funded: 459

CORE FY22-23

- Number of OEMs: 26
- Number of Dealers: 110
- Equipment Types: 127
- Total Vouchers Funded: 476

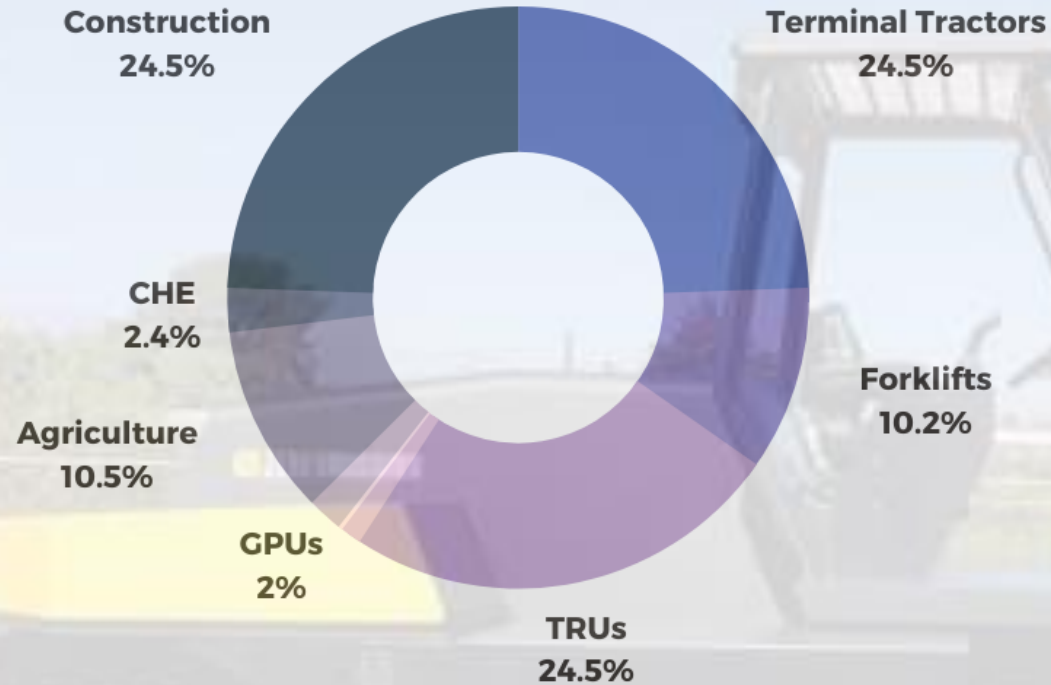
(and counting...)

CORE FY20-22 FUNDING RESULTS



- Total Funding: \$69 million
- \$44 million to deploy zero-emission off-road freight-enabling equipment
- \$30 million to fund the contingency list
- Total No. of Vouchers: 459
- Equipment Operated in DACs: 297 (63%)

CORE FY22-23 FUNDING RESULTS (To Date)



- Total Funding: \$125 million
- \$30 million set aside to fund ZE lawn and garden equipment (coming this month)
- Terminal tractors: \$25,000,000
- TRUs: \$25,000,000
- Large forklifts and CHE: \$10,470,213
- Airport ground support equipment: \$2,000,000
- Railcar movers and switchers: \$247,500
- MPUs and mobile shore power cable management systems: \$1,200,000
- Agriculture equipment: \$10,768,097
- Construction: equipment: \$25,000,000



**THANK
YOU**

QUESTIONS?

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