<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>21-TRAN-04</th>
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<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles (Energiize Commercial Vehicles)</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>242740</td>
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<tr>
<td><strong>Document Title:</strong></td>
<td>CEC Presentation for Incentives Program Advisory Group (IPAG) led by California Air Resources Board</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>Spencer Kelley</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
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<tr>
<td><strong>Submission Date:</strong></td>
<td>4/21/2022 1:32:06 PM</td>
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<td><strong>Docketed Date:</strong></td>
<td>4/21/2022</td>
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### Context Setting: ZEV Goals

<table>
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<tr>
<th>Category</th>
<th>Description</th>
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</table>
| **Light Duty Vehicles**           | - 2025: 1.5M ZEVs  
- 2030: 5M ZEVs  
- 2035: 100% of New Sales are ZEVs (E.O. N-79-20)                                                                                     |
| **Charging and Refueling Infrastructure** | - 2025: 250,000 Chargers (inc. 10,000 DC Fast Chargers)  
- 2025: 200 Hydrogen Refueling Stations                                                                                             |
| **Medium- and Heavy-Duty Vehicles** | - 2029: 100% of New Transit Bus Purchases are ZEVs  
- 2035: 100% of All Off-Road Vehicles and Equipment are ZEVs (E.O. N-79-20)  
- 2035: 100% of All Drayage Trucks are ZEVs (E.O. N-79-20)  
- 2045: 100% of All Trucks and Buses are ZEVs (E.O. N-79-20)                                                                 |
Clean Transportation Program Origins in Statute

- Established by Assembly Bill 118 (Nunez, 2007)
- Provides up to $100 million per year
- Extended to January 1, 2024 by Assembly Bill 8 (Perea, 2013)
Clean Transportation Program Funding
By Category 2009–2021

- **Electric** $451M
- **Other Types** $46.3M
- **Workforce** $33.3M
- **Ethanol** $33.5M
- **Hydrogen** $218M
- **Natural Gas/Propane** $131M
- **Biomethane** $67.9M
- **Biodiesel/Renewable Diesel** $67.9M

$1 Billion invested in 600+ projects & programs
General Funds from ZEV Package to be Administered by the CEC

$250 million - for zero-emission drayage trucks
$25 million - for drayage truck and infrastructure pilot

$90 million - for transit buses
$50 million - for school buses

$250 million - for ZEV manufacturing grants
$500 million - for ZEV infrastructure

The budget prioritizes diesel emission reduction by earmarking funding to replace

↓ 1,125 Drayage Trucks
↓ 1,000 School Buses
↓ 1,000 Transit Buses

with zero-emission alternatives and refueling infrastructure

$785 million appropriated in Budget Act of 2021;
$380 million anticipated in FY 2022-23 and 2023-24

And to accelerate charging and hydrogen refueling stations and promote ZEV-related manufacturing
2021-2023 Zero-Emission Investments Funding Prioritizes

- **$314M**
  - Light-Duty Electric Vehicle Charging Infrastructure and eMobility

- **$690M**
  - Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure
    (battery-electric and hydrogen fuel cell)

- **$77M**
  - Hydrogen Refueling Infrastructure

**Total Clean Transportation Program (CTP) funding:**

- **$238M**

**Total General Funding (administered through CTP):**

- **$1.127B**

- **$25M**
  - Zero and Near Zero Carbon Fuel Production and Supply

- **$243.8M**
  - ZEV Manufacturing

- **$15M**
  - Workforce Development

**Total Funding:**

- **$1.365B**
<table>
<thead>
<tr>
<th>Grant Funding Opportunity Title</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Grant for MD/HD Zero-Emission Refueling Infrastructure Incentive Projects</td>
<td>$50 million (authority up to $276 million)</td>
</tr>
<tr>
<td>Zero-Emission Transit Fleet Infrastructure Deployment</td>
<td>$36.2 million</td>
</tr>
<tr>
<td>Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure</td>
<td>$7.6 million</td>
</tr>
<tr>
<td>BESTFIT Innovative Charging Solutions (MD/HD projects)</td>
<td>$8.4 million</td>
</tr>
<tr>
<td>Hydrogen Fuel Cell Demonstrations in Rail and Marine Applications at Ports (H2RAM) (Joint project with ERDD)</td>
<td>$4 million</td>
</tr>
<tr>
<td>Zero-Emission Drayage Truck and Infrastructure Pilot Project (Joint solicitation with the CA Air Resources Board (CARB))</td>
<td>$44.3 million (Joint solicitation with the CA Air Resources Board (CARB))</td>
</tr>
<tr>
<td></td>
<td>$108.2 M total with CARB funds</td>
</tr>
</tbody>
</table>
EnergIIZE
Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles

EnergIIZE Commercial Vehicles provides financial incentives to increase the adoption of commercial zero emission medium- and heavy-duty (MD/HD) vehicles to promote healthy communities.

EnergIIZE helps commercial fleets keep pace with industry demands as they transition to zero-emission vehicles, and helps advance zero-emission infrastructure technology.

Funded by the California Energy Commission’s (CEC) Clean Transportation Program.
EV Fast-Track
Applicants in this funding lane are ready to go and may already have prior experience applying for commercial MD/HD EV funding

EV Jump Start
Applicants in this funding lane will need to meet specific eligibility criteria and will be allotted more time to submit required documents

EV Public Charging Station
Applicants in this funding lane intend to develop publicly available charging stations for commercial MHD EVs

Hydrogen
Applicants in this funding lane intend to develop a hydrogen infrastructure project for commercial MHD vehicles

www.energiize.org
Proposed MD/HD ZEV Infrastructure Concepts

<table>
<thead>
<tr>
<th>Summary of Proposed Concepts</th>
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<tbody>
<tr>
<td>Hydrogen Refueling</td>
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<tr>
<td>School District Vehicle Grid Integration</td>
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<tr>
<td>Truck Parking EV Charging and Hydrogen Refueling</td>
</tr>
<tr>
<td>Warehouse and Regional Trucking</td>
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<tr>
<td>Innovative EV Charging and Hydrogen Refueling Technologies</td>
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<tr>
<td>Mobility-as-a-Service Models</td>
</tr>
<tr>
<td>Rural Small Transit Fleet Infrastructure Deployment</td>
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<tr>
<td>Large Scale Ultra-Fast Charging Stations</td>
</tr>
<tr>
<td>MD/HD Blueprint Planning Documents</td>
</tr>
<tr>
<td>Infrastructure Concepts to Complement CARB Demonstration and Pilot Project Concepts</td>
</tr>
<tr>
<td>MD/HD Loan Pilot</td>
</tr>
</tbody>
</table>

https://www.energy.ca.gov/event/workshop/2019-10/staff-workshop-medium-and-heavy-duty-zero-emission-vehicles-and
Comments to Docket 19-TRAN-02

Electronic Commenting System
Visit the comment page for this docket at:

Comment by E-mail
E-mail: docket@energy.ca.gov
Subject Line: “19-TRAN-02 MD/HD Allocation”
ZEV Dashboard

ELECTRIC VEHICLE CHARGERS
Total Public and Shared Private Electric Vehicle Chargers

79,023

<table>
<thead>
<tr>
<th>Type</th>
<th>Public</th>
<th>Shared Private</th>
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<tbody>
<tr>
<td></td>
<td>45.043%</td>
<td>54.957%</td>
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<tr>
<td>Number</td>
<td>35,594</td>
<td>43,429</td>
</tr>
</tbody>
</table>

DC Fast Chargers by County

Level 1 and Level 2 Chargers by County

https://www.energy.ca.gov/data-reports/energy-insights/zero-emission-vehicle-and-charger-statistics
Empower Innovation strives to accelerate your clean tech journey with easy access to funding opportunities from the CEC and other funding providers, curated resources and events, and connections to people and organizations.

**FIND A PARTNER**
Announce your interest in this funding opportunity and message other interested parties to find potential partners.

**RESOURCES & TOOLS**
Browse the collection of resources for clean tech innovators including Resource Libraries, Funding Sources, Tools, and Databases.

To search for funding opportunities, please go to this link:
https://www.empowerinnovation.net/en/custom/funding/directory

Please direct questions for the Empower Innovation platform to:
https://www.empowerinnovation.net/en/contact_us
Thank you

Clean Transportation Program Funding 101: https://www.energy.ca.gov/event/workshop/2021-12/workshop-clean-transportation-program-funding-101

Contact Information:
Elizabeth John
Elizabeth.John@energy.ca.gov