Mass Fleet Advisor Green Communities Summit

November 18, 2025

Technology developments and expanded supply chains drive electrification in increasing vehicle segments.

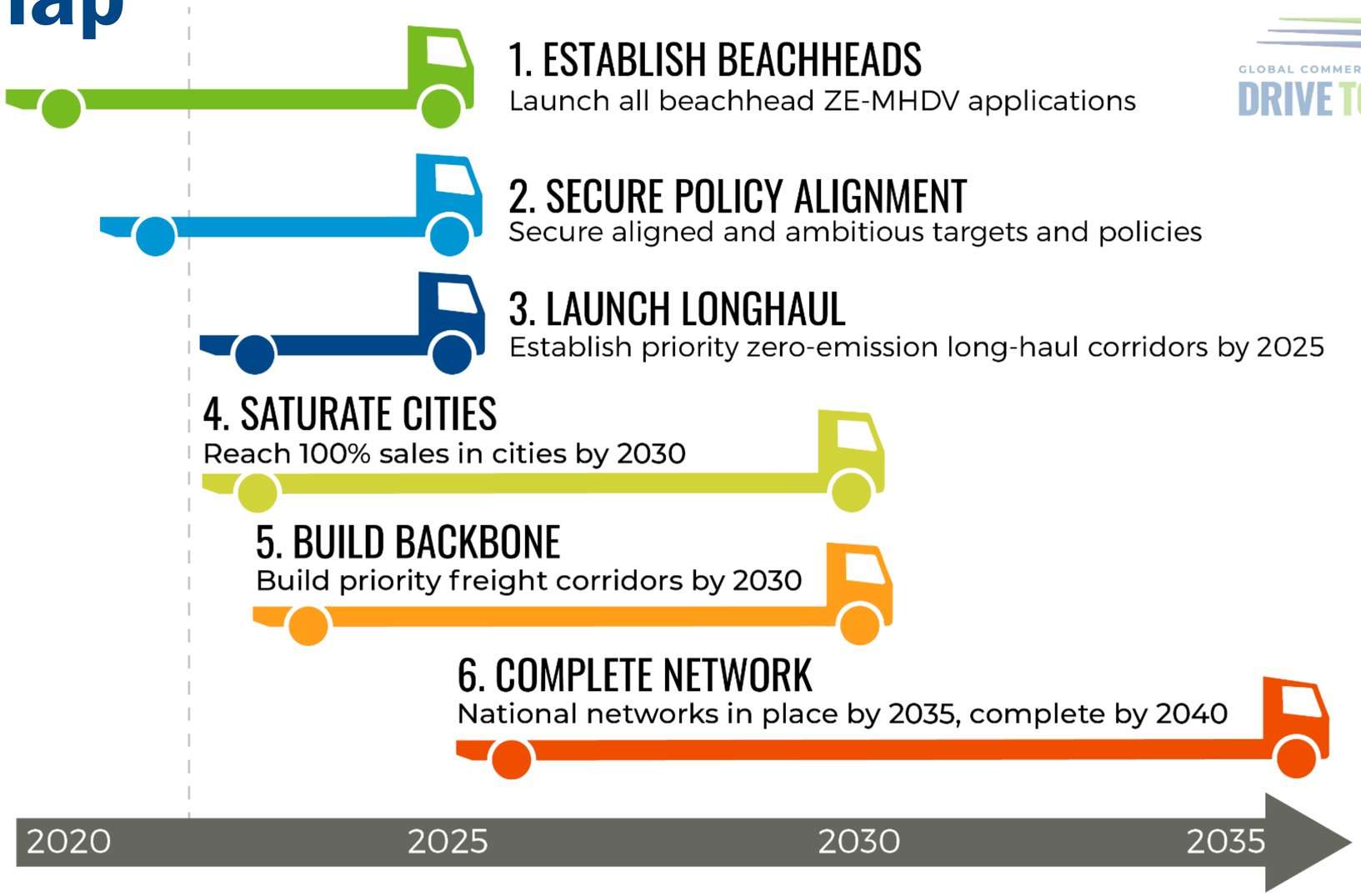
Similar drivetrain and component sizing can scale to early near applications

Expanded supply chain capabilities and price reductions enable additional applications

Steadily increasing volumes and infrastructure strengthen business case and performance confidence

Source: CALSTART

2040 Roadmap



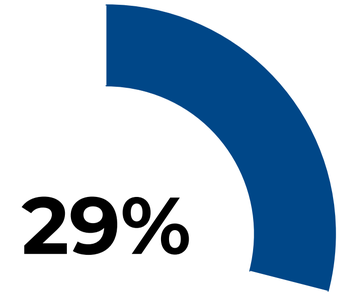
GLOBAL COMMERCIAL VEHICLE DRIVE TO ZERO™

Source: CALSTART

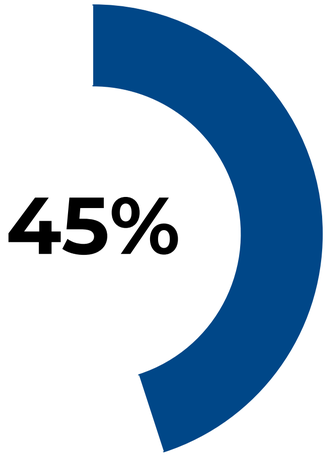
Medium- and heavy-duty vehicles (M/HDVs) disproportionately pollute our communities.

M/HDVs account for <10% of vehicles on the road.

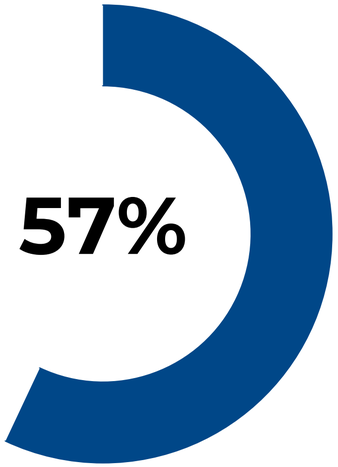
M/HDVs account for nearly one-third of on-road vehicle GHG emissions.



M/HDVs account for 45% of on-road NOx emissions.



M/HDVs account for 57% of on-road, direct PM2.5 emissions.



Source: UCS

Vehicle Segmentation

Cargo Van

Class 2b/3 Cargo Van
- Used in last-mile delivery operations
- Average 11,000 miles/year

MD Step Van

Class 3-8 Step Van
- Walk-in last-mile delivery operations
- Used in last-mile delivery operations

MD Truck

Class 3-6 Rural/Intercity
- Cargo, freight, delivery
- Combination of urban and highway traffic

Class 3-6 Work Site Support
- Utility, construction (significant idle time and PTO use)
- Heavy equipment or heavy machinery operations

HD Truck

Class 7-8 Over the Road (OTR) or Long-Haul Trucks
- Average 75,000 miles/year
- Higher average speed due to highway driving

Class 7-8 Urban/Regional Haul
- Average 35,000 miles/year
- Day cab
- Operates delivery or drayage operations

Class 7-8 Work Site Support
- Used in utility and construction
- Significant idle time and power take-off (PTO) use

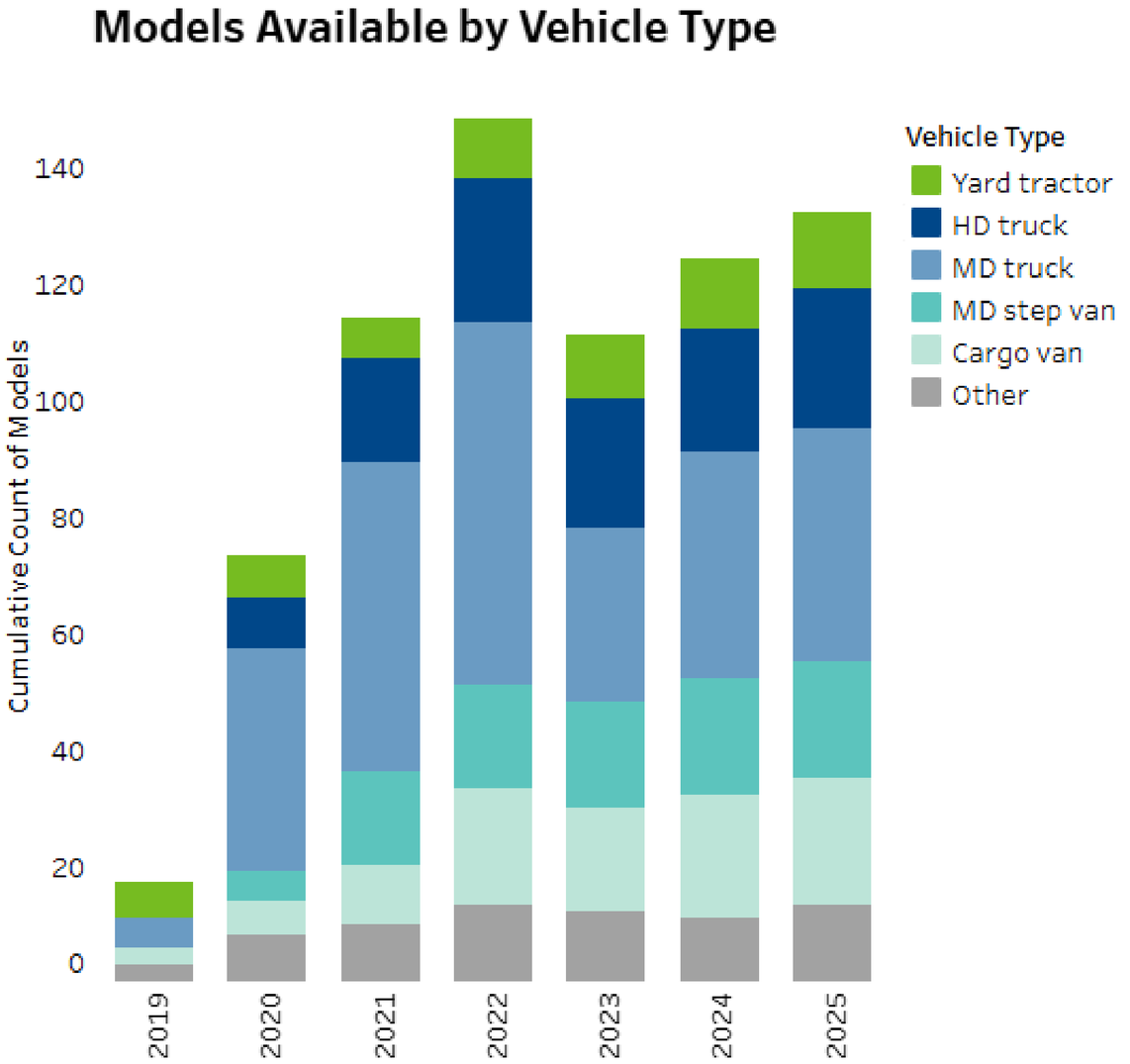
Refuse Truck

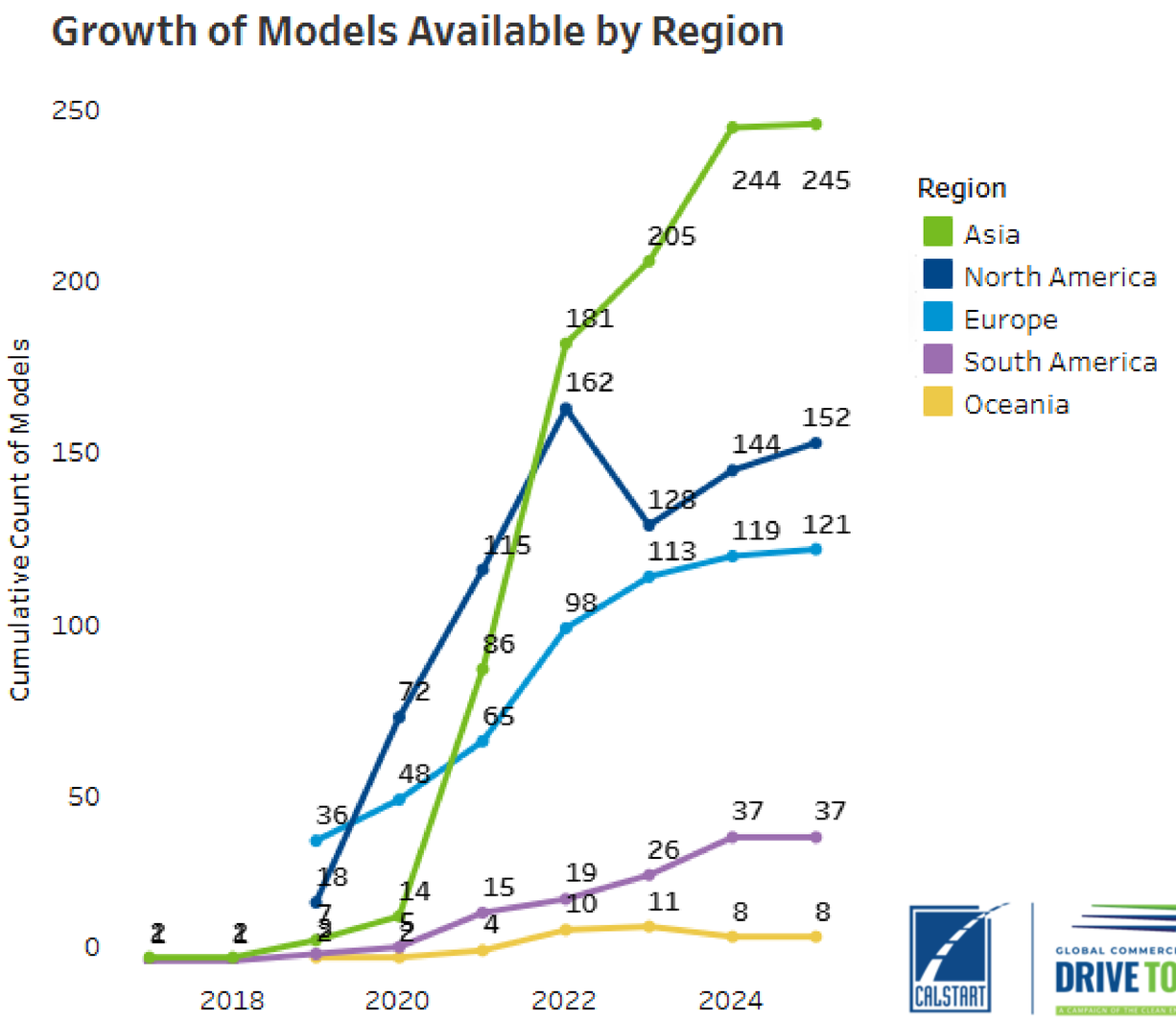
Class 3-8 Refuse Truck
- Waste and recycling collection and transport
- Average 25,000 miles/year
- High frequency stopping

Yard Tractor

Class 7-8 Yard Tractor
- Moves semi-trailers within a cargo yard or warehouse
- Can qualify for either on-or off-road use

Rapid Growth in Model Availability; Global Competition

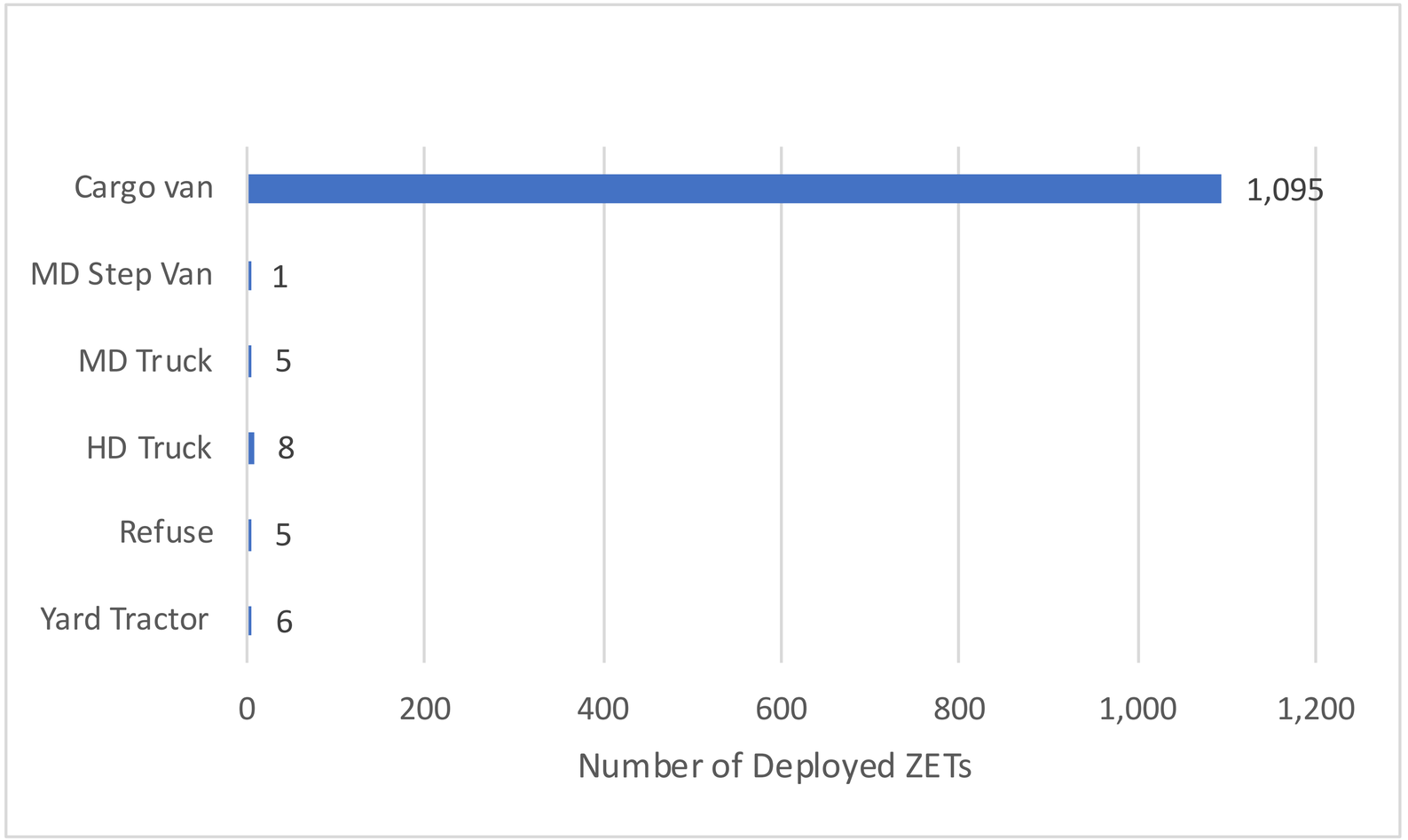




Source: https://https://globaldrivetozero.org/tools/zeti-data-explorer/

Tool: Technology Inventory, Medium/Heavy Duty

ZET Deployments by Segment in MA



Source: CALSTART Zeroing in on Zero-Emission Trucks Market Update January 2026

ZET Deployments by State

Rank	State	Number of ZETs
1	California	10,579
2	Texas	5,201
3	Florida	5,099
4	New York	3,637
5	New Jersey	2,547
6	Pennsylvania	2,533
7	Georgia	2,132
8	North Carolina	2,007
…	…	…
18	**Massachusetts**	**1,120**

Source: CALSTART Zeroing in on Zero-Emission Trucks Market Update January 2026

What is Mass Fleet Advisor?

- Mass Fleet Advisor provides free technical assistance for medium- and heavy-duty fleets interested in exploring their fleet electrification options through personalized Fleet Electrification Reports

- The Mass Fleet Advisor Program is designed and funded by the Massachusetts Clean Energy Center

- CALSTART serves as Lead Consultant, manages the program, and prepares each fleet's report

- For nonprofit fleets, PowerOptions works with CALSTART to serve as the Fleet Relationship Manager

- The program has expanded to include up to 200 fleets, as our original 65 spots are filled

Sign up to participate at massfleetadvisor.org

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What's Provided by the Program?

Personalized Fleet Electrification Report provided to each fleet includes:

- One-to-One electric vehicle replacement options
- Total Cost of Ownership Calculations
- Infrastructure upgrades and Electric Vehicle Supply Equipment (EVSE) recommendations
- Customized charging plan
- Recommendations for short- and long-term electrification of your vehicles
- Information about available financial incentives

MASS FLEET ADVISOR

YOUR FLEET ELECTRIFICATION ASSISTANT.

Who is Eligible?

- Any private (non-government) or non-profit fleet operating or with a depot in Massachusetts is eligible for this free, no obligation support
- Municipalities served by a MLP are now eligible!
- Your fleet must have at least three vehicles, one of which is medium or heavy duty
- Fleets are not required to purchase any electric vehicles




Sign up to participate at massfleetadvisor.org

How Do I Sign Up?

Sign up at massfleetadvisor.org or by emailing massfleetadvisor@calstart.org

Total time needed from fleet is 3 to 5 hours

1. Pre-participation Virtual Call: *15 to 30 minutes*

2. Sign Participation Agreement

3. Receive and complete Fleet Intake Form

- Vehicle make/model, operational schedule, average annual mileage for your existing fleet

4. Every fleet now receives a free site assessment for charging equipment exploration

5. Additional options for deeper analysis:

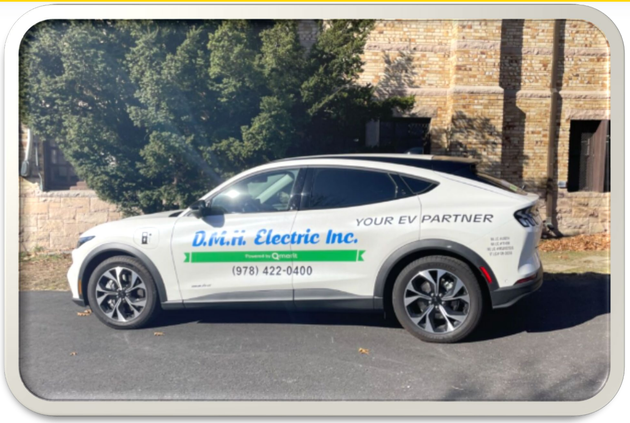
- Install dataloggers for 4 weeks or share existing GPS data
- Solar Analysis

Personalized Report: Example Table of Contents

Contents

Site Assessments

- Each participating fleet receives an on-site assessment of existing parking locations for EVSE infrastructure analysis
- Mass Fleet Advisor's team includes two certified electrician teams, DMH Electric and Better Together Brain Trust (BT2)
- Process
- Results



Site Assessments

24
EVSE Stations

48
Charging Ports

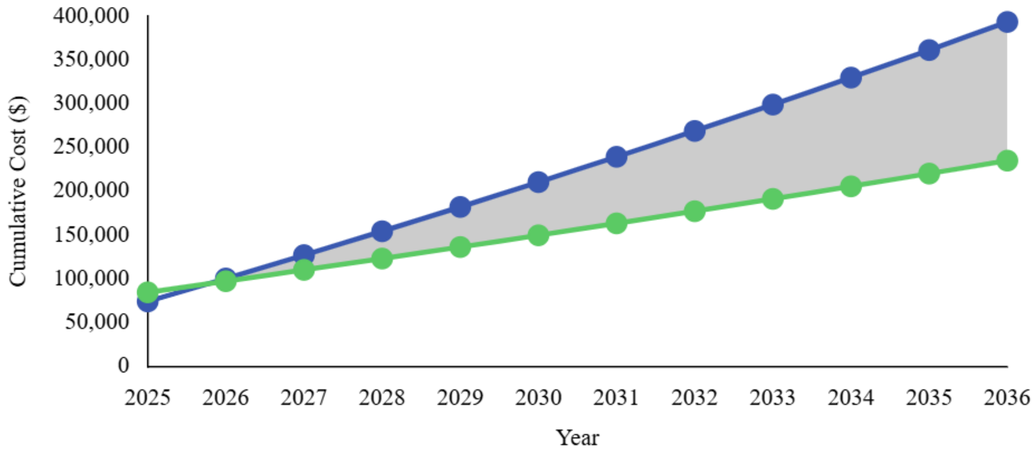
New	AC Charger	Transformer	Switchgear	Handhole	DC Charger	Electrical Panel	
Existing	Utility Pole	Electrical Panel	Charger				
Raceways & Trenching	DC Branch CCC Exterior	L2 Branch CCC Exterior	Concrete Encased Duct Bank	DC Service CCC Exterior	L2 Service Feeder	Asphalt excavation	

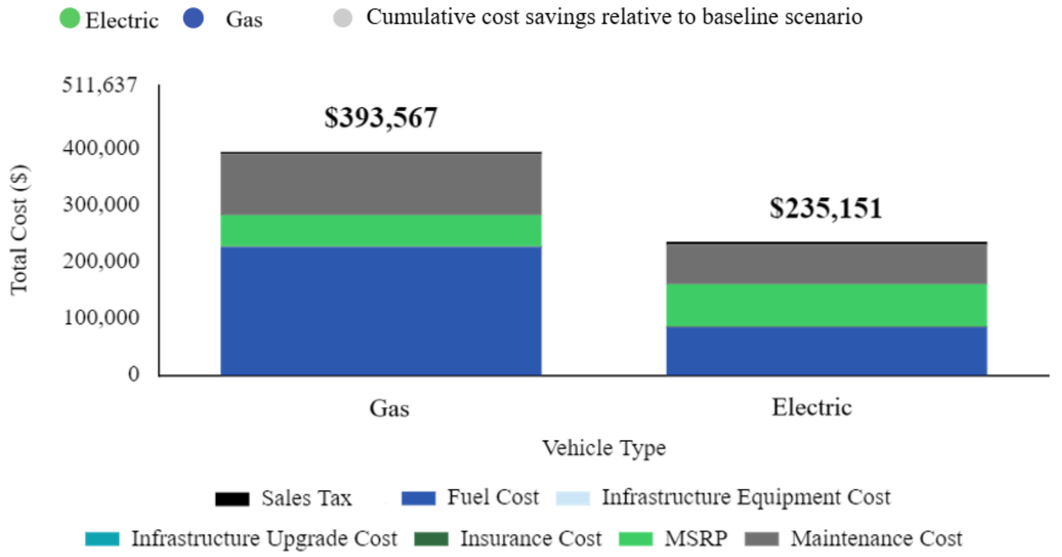
Vehicle Analysis

Delivery vans (class 2b/3) are excellent targets for electrification:

- Total cost of ownership is lower for the electric vehicle
- Low purchase price of the EV model, for example, Ford E-Transit, when compared to the traditional gas/diesel model

Vehicle Group	Van						
Electric Vehicle	GreenPower	Cenntro	Ford	Rivian		Mercedes-Benz	BrightDrop
	EV Star Cargo	Logistar 260	E-Transit	Delivery 700	Delivery 500	eSprinter	Zevo 400/600
Availability	Coming 2025	Now	Now	Now	Now	Now	Now
Class/Size	Class 4	Class 2a	Class 2b	Class 2b	Class 2b	Class 2b	Class 3
Range	150 miles	168 miles	143-159 miles	153 miles	161 miles	206 miles	250 miles
Payload	6,300 lbs.	2,822 lbs.	2,799-3,249 lbs.	2,513 lbs.	2,734 lbs.	2,600 lbs.	3,580 lbs./3,180 lbs.
Cargo Volume	N/A	264 ft³	311.9-536.4 ft³	900 ft³	700 ft³	488 ft³	412 ft³/615 ft³
Energy Capacity	118 kWh	43.5 kWh	89 kWh	N/A	N/A	113 kWh	173 kWh
Level 2 Charging Time	8 hours	8 hours	8 Hours	N/A	N/A	12 hours	10 hours
Website	EV Star	Logistar 260	E-Transit	Delivery 700	Rivian	eSprinter	Zevo
Vehicle Photo							



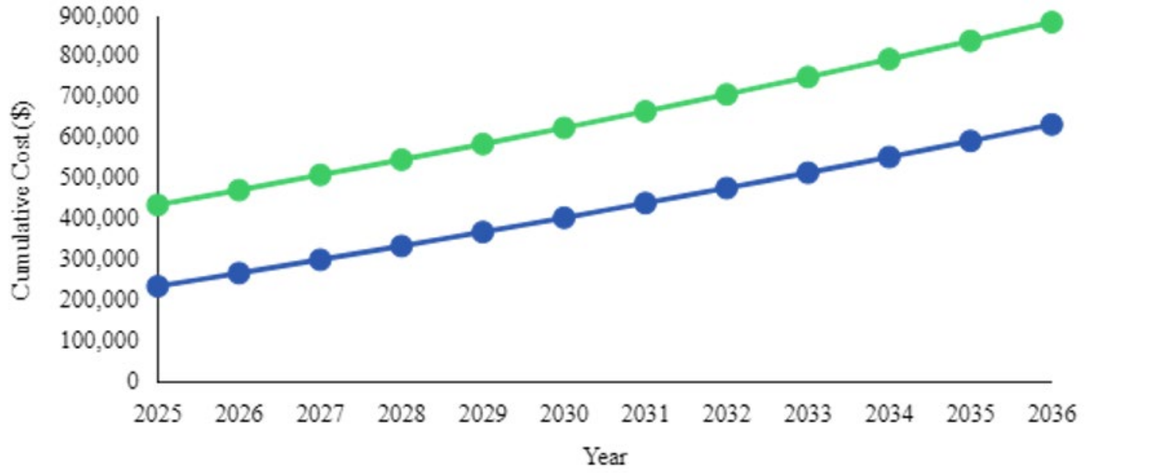


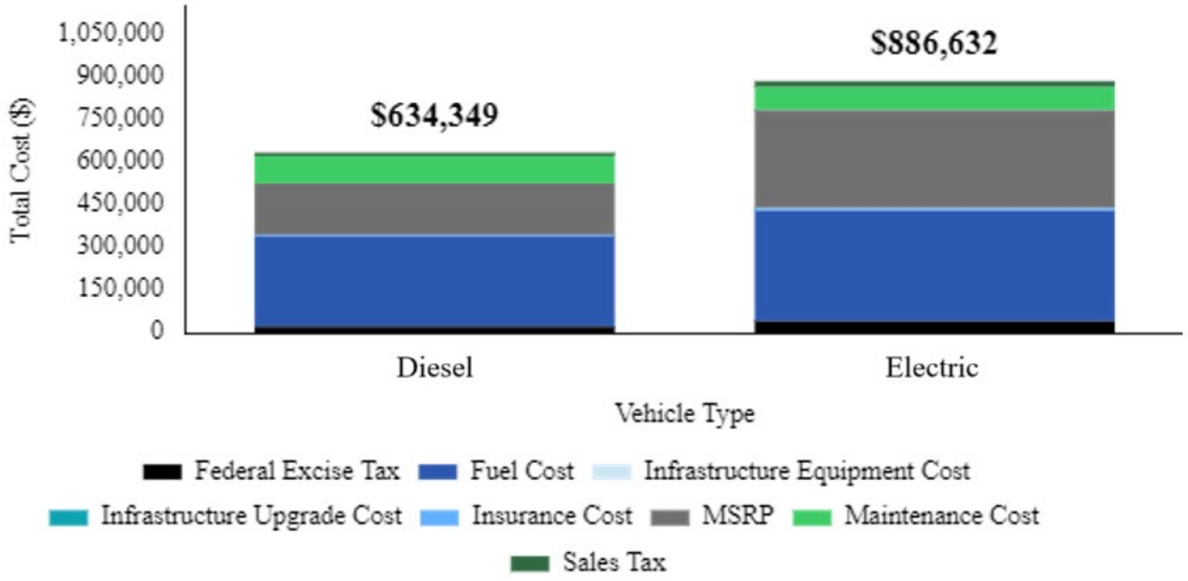
Vehicle Analysis

Class 8 Vehicle Analysis Results

- Heavy duty trucks, such as the Class 8 modeled here, do not achieve cost parity during an expected 12- year life
- High capital procurement cost leads to higher lifetime cost
- Additional point of sale purchase incentives and reduced capital cost from OEM can bring vehicles into cost parity

Vehicle Group	Class 8 Trucks					
Electric Vehicle	BYD 8TT	Freightliner eCascadia	Tesla Semi	XOS HDXT	Nikola TRE BEV	Volvo VNR Electric
Availability	Now	Now	Coming Soon	Now	Now	Now
Class/Size	Class 8	Class 8	Class 8	Class 8	Class 8	Class 8
Range	200 miles	230 miles	500 miles	230 miles	350 miles	275 miles
Payload	78,765 lbs.	60,000 lbs.	44,000 lbs.	56,000 lbs.	40,000 lbs.	66,000 lbs.
Energy Capacity	422 kWh	438 kWh	1000 kWh	N/A	753 kWh	565 kWh
Level 3 Charging Time (350 kW power)	1.5 hours	1.5 hours	1 hour (Using Tesla Semi Charger)	N/A	2.5 hours	2 hours
Website	8TT	eCascadia	Semi	HDXT	TRE BEV	VNR Electric
Vehicle Photo						





Thank you for your time.

Jennifer Kritzler, CALSTART, *jkritzler@calstart.org*

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