



TRUCK ELECTRIFICATION STATE OF PLAY

What's happening and what we can learn from
light-duty vehicle infrastructure

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Atlas Public Policy



ATLAS
PUBLIC POLICY



A DC-based policy tech firm established in 2015

Atlas Public Policy equips businesses and policymakers to make **strategic, informed decisions that serve the public interest**. Atlas builds analytical tools and dashboards using powerful, accessible technology, and offers expert advisory services to tackle the pressing issues of the day.

Transportation

Buildings

Climate

Disinformation

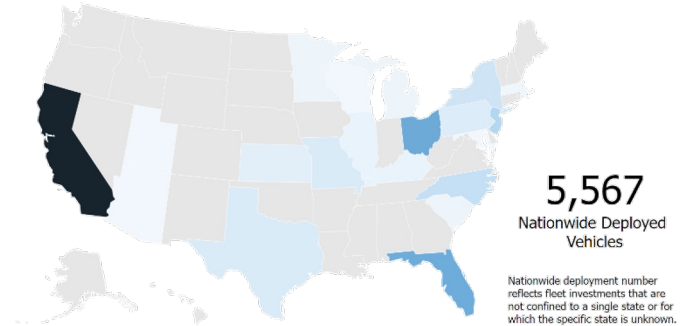
Water

WE HAVE TOOLS AND RESOURCES FOR YOU

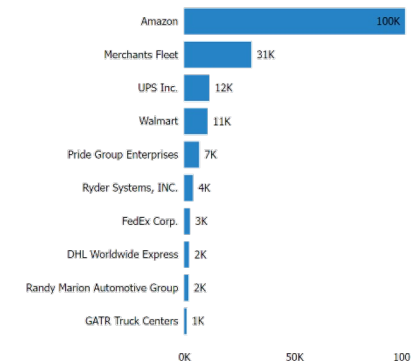
- Atlas's Tools and Resources
 - Public agencies get **free** access to [EV Hub](#)
 - [Electric Freight](#) and [MDHD Charging Investment](#) Dashboards track current and near-future state of freight and MDHD vehicle electrification
- **Free** Direct Support for States
 - Cost comparison analysis of electric and conventional vehicles under Connecticut's ACC II ZEV and ACT regulations
 - Air pollution and greenhouse gas health impact analysis for Oregon's Clean Vehicle Rebate Program

Electric Freight Dashboard

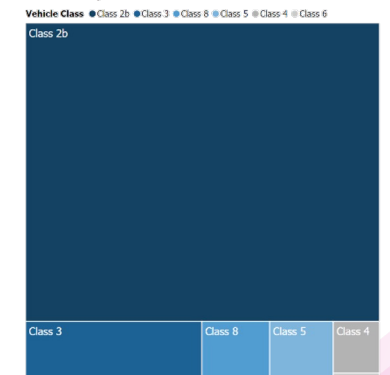
Deployed Vehicles by State



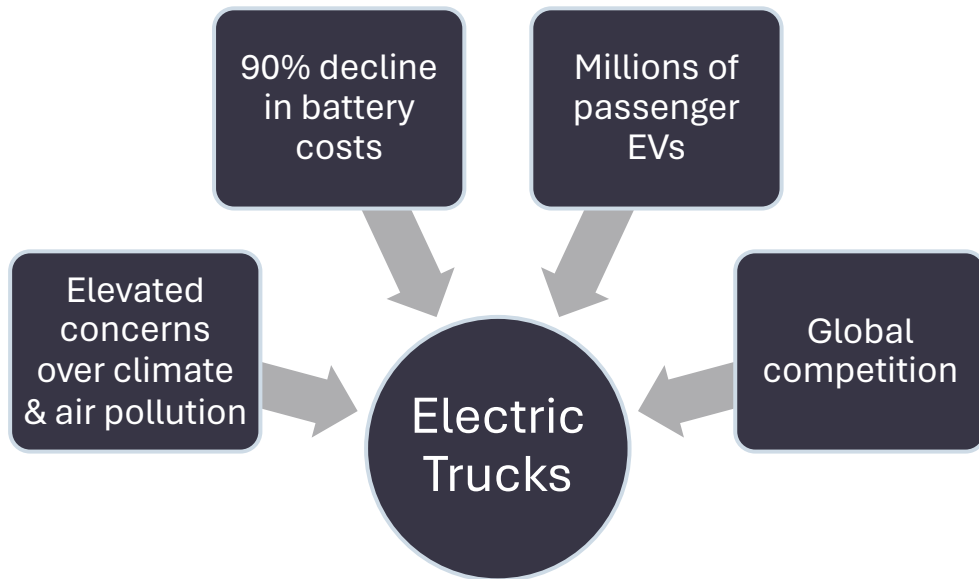
Top Fleets by Electric Vehicle Count



Vehicles by Vehicle Class



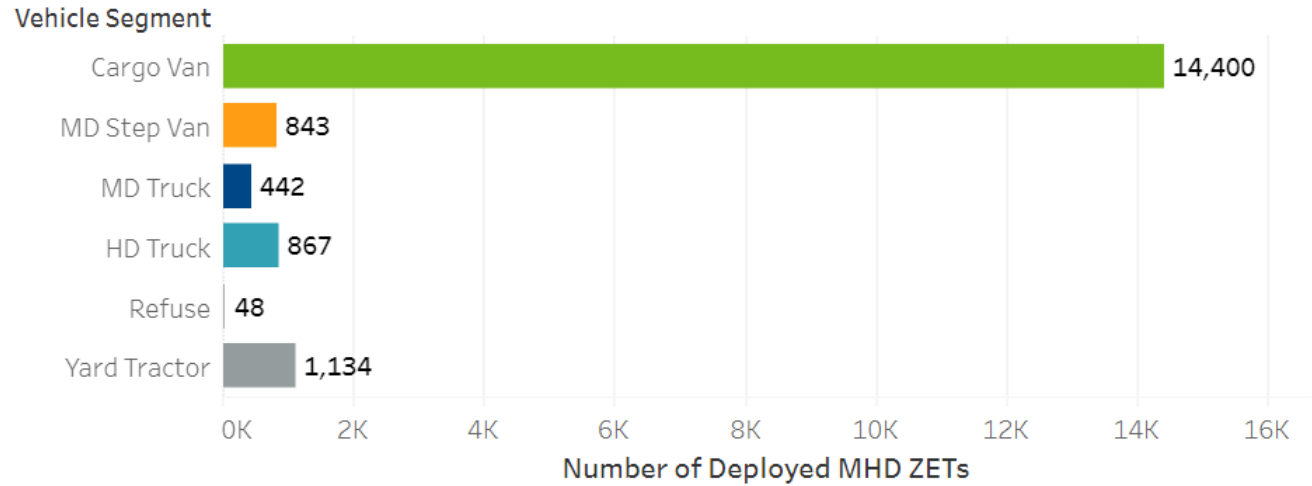
HOW DID WE GET HERE?



ELECTRIC TRUCK DEPLOYMENT

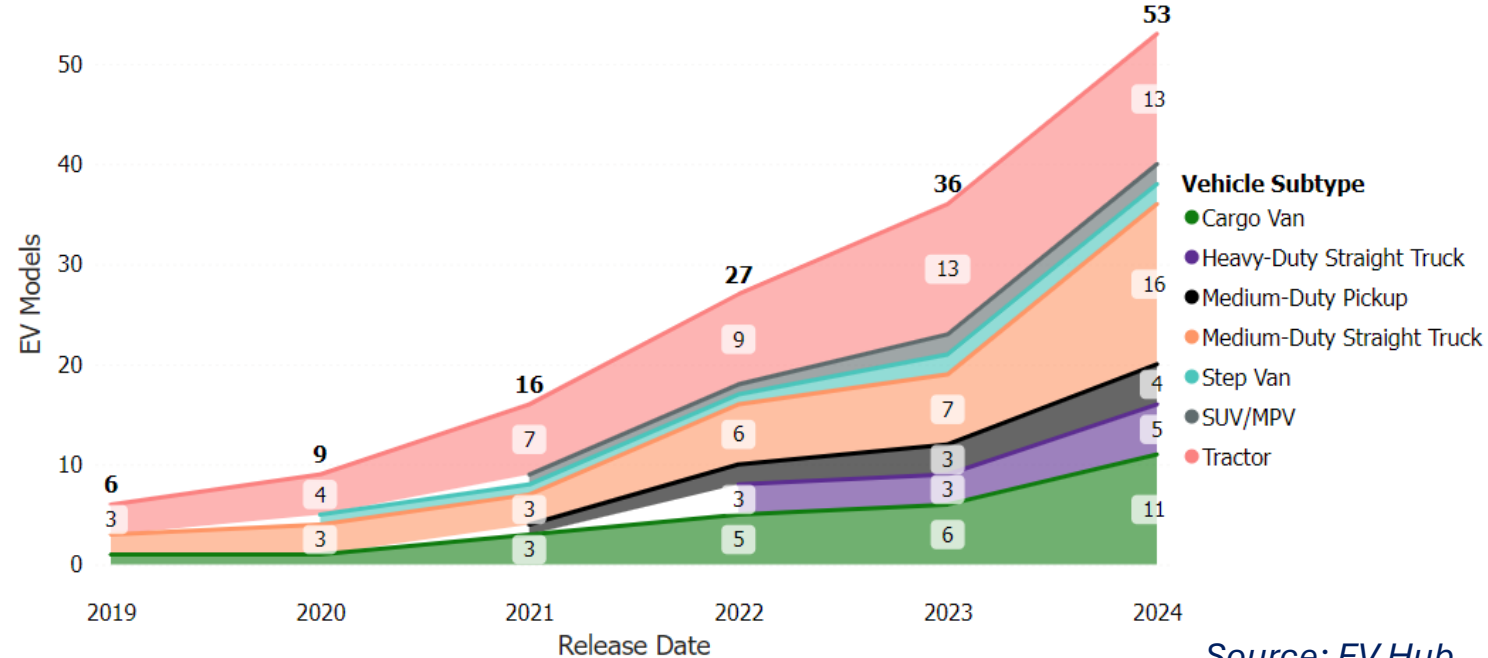
- 15 MDHD electric models currently available 38 on the way
- Average battery size: 205 kWh
- Average electric range: 194 miles
- ~18,000 MDHD electric trucks deployed

Cumulative U.S. ZET Deployments by Vehicle Segment (2017-June 2023)



Source: CALSTART Zeroing In on ZETs

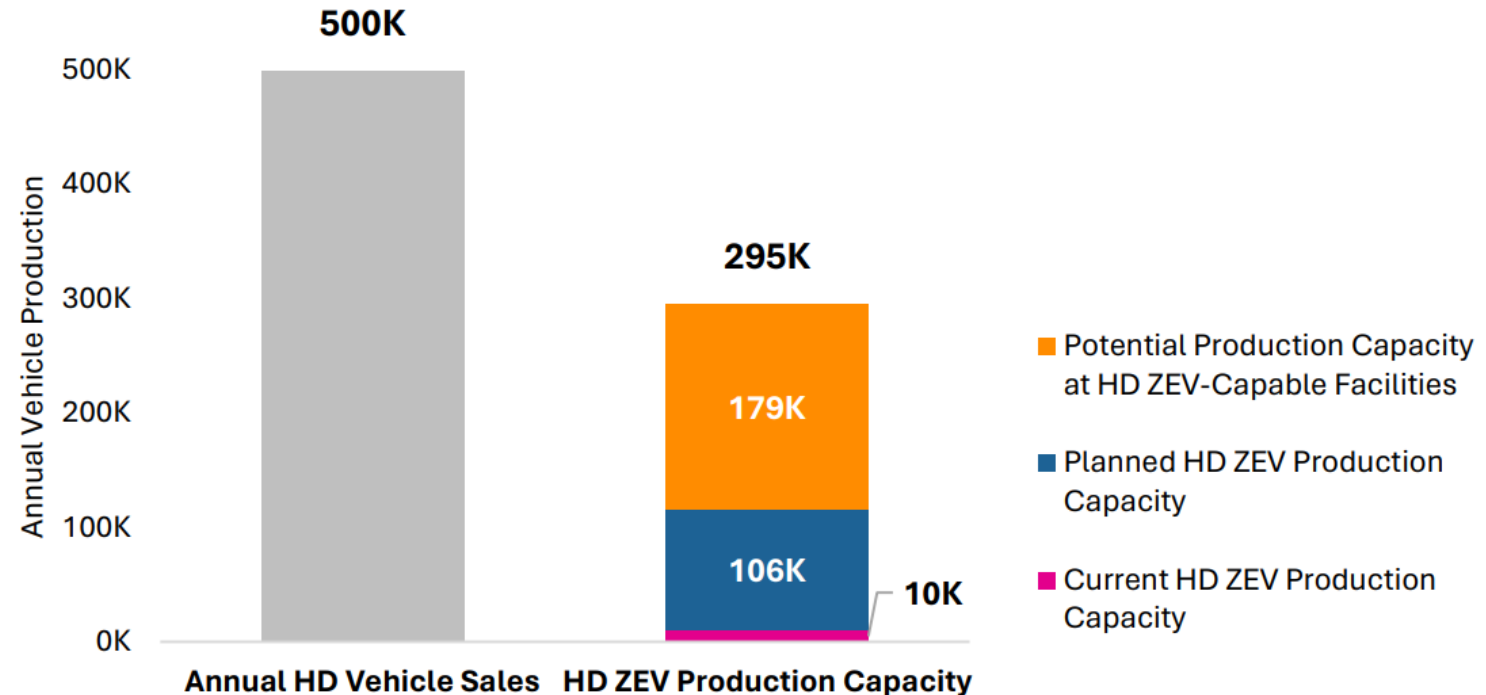
Cumulative Sold and Upcoming EV Models by Year and Vehicle Subtype



Source: EV Hub

PRODUCTION CAPACITY TO MEET A GROWING MARKET

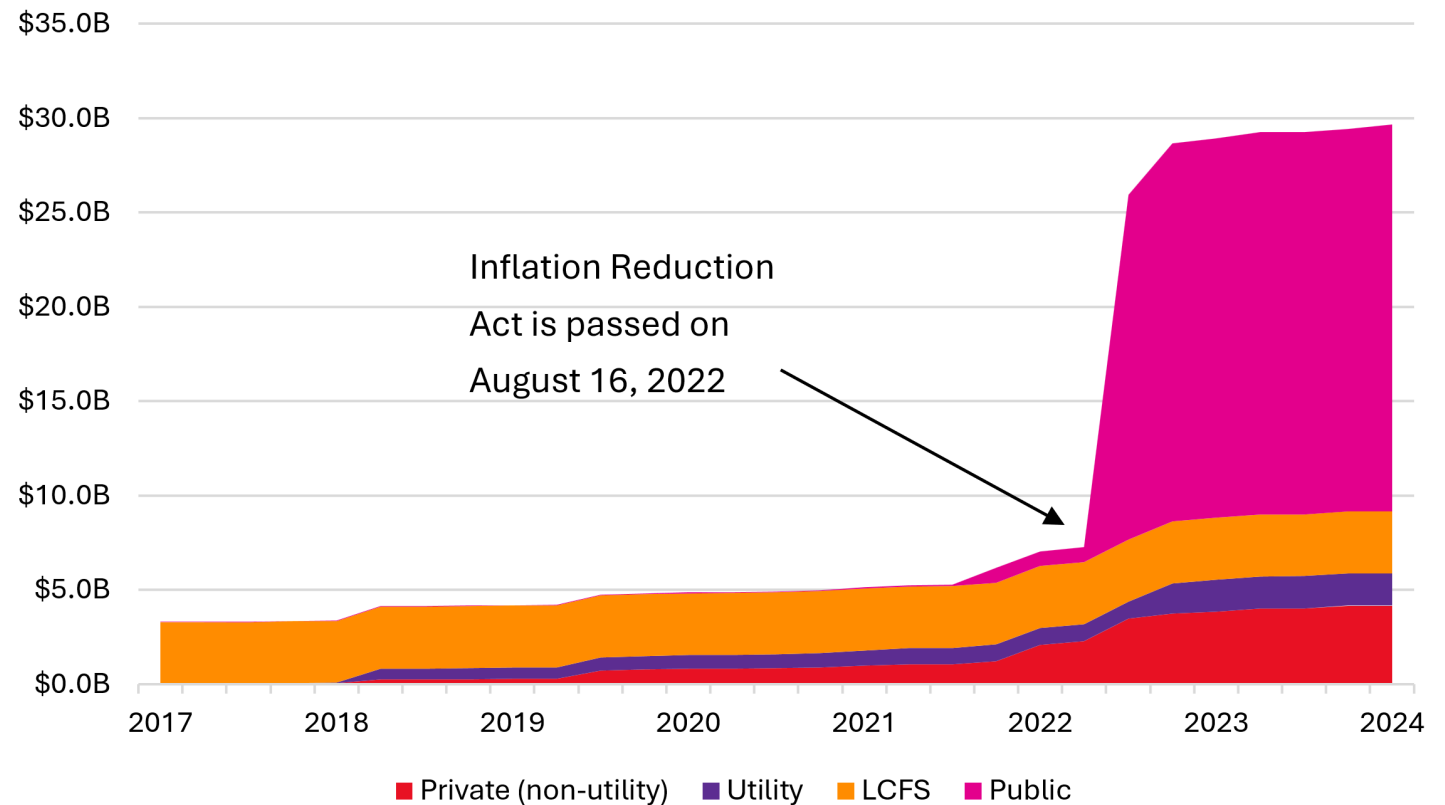
- 37 of 43 heavy-duty vehicle manufacturing facilities are ZEV-capable
- \$6.5B announced investment in new production
- Converting all production at ZEV-capable facilities could reach 59% of annual heavy-duty sales



Source: Manufacturing Capacity for Heavy-Duty Zero-Emission Vehicles in the United States

CHARGER AVAILABILITY AND INVESTMENTS

- At least 1,210 announced MDHD [DCFC ports](#) across more than 40 locations
- Estimated \$30Bn in [funding for MDHD charging](#)



Source: Estimated \$30 Billion Committed to Medium- and Heavy-Duty Charging Infrastructure in the United States

Phase 2: Connect Corridors

FEDERAL ROLE 2027-2030

Planning

United States goal is all new truck and bus sales are zero emission by 2040

National Zero-Emission Freight Corridor Strategy

- Whole-of-government strategy to marshal public investment
- Build a phased, nationwide zero-emission freight network by 2040

Regulations

EPA's 'Phase 3' Heavy-Duty Greenhouse Gas Standards

EPA Light- and Medium-Duty Greenhouse Gas Standards

Funding

MDHD is eligible for National Electric Vehicle Infrastructure (NEVI) program and Charging & Fueling Infrastructure (CFI) grants

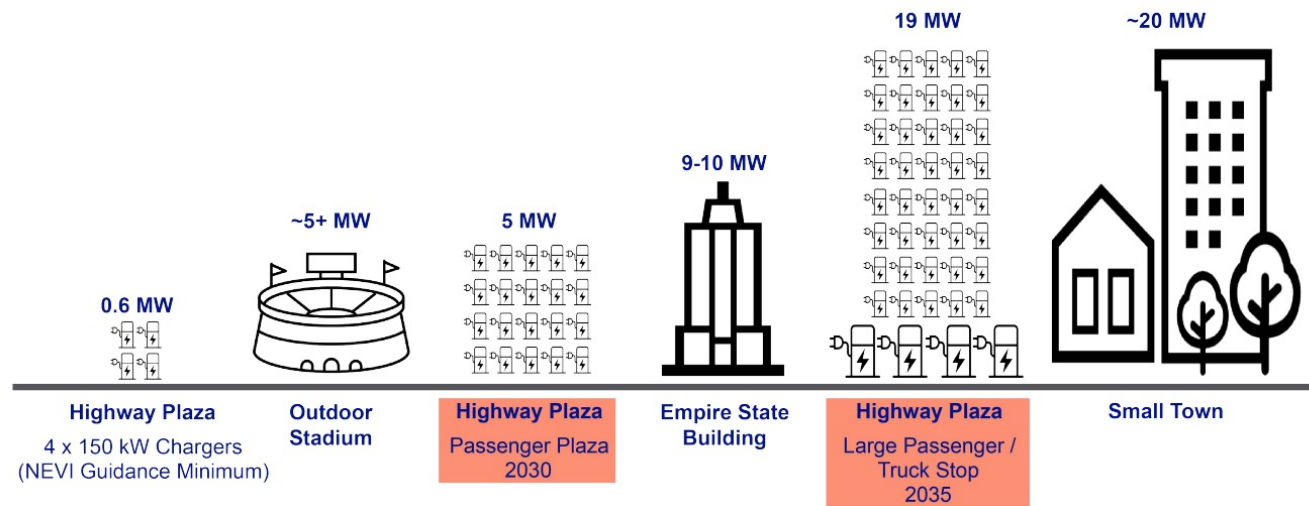
Federal tax credit for infrastructure (30C) up to \$100k per EV supply equipment

Federal tax credit (45W) for commercial vehicles up to \$40k

- Capped at \$7,500 if under 14k pounds

STATE & UTILITY ACTION IS ESSENTIAL

Figure 21. Comparative Peak Loads for Illustrative Sites and Other Major Users³⁵



Source: Electric Highways Study (nationalgrid.com)

- Providing analysis on need for proactive action
 - [2022 National Grid study](#) estimated charging needs for 71 sites in NY & Mass through 2045
- Public Utility Commission support essential for utility engagement
 - Authorized over [\\$1.8B](#) in MDHD investment as of May 2024
- Managing NEVI and receiving CFI grants
 - December 2023 [Atlas analysis](#) found 60% of NEVI sites were MDHD ready
 - 40% of funding for [first CFI awards](#) went to MDHD

LOOKING AHEAD & LESSONS LEARNED FROM LIGHT-DUTY

- Regulatory reform for utilities needed
 - *Lesson from Light-Duty:* utility engagement necessary
- Pairing infrastructure priorities with technology
 - *Lesson from Light-Duty:* range must meet consumer expectations
- Putting equity first by supporting disadvantaged communities and small fleets
 - *Lesson from Light-Duty:* important to funnel public resources where they're most needed





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