

**DOCKETED**

<b>Docket Number:</b>	22-EVI-03
<b>Project Title:</b>	National Electric Vehicle Infrastructure Deployment Plan Development, 2022-26 for CEC and Caltrans
<b>TN #:</b>	250939
<b>Document Title:</b>	DTNA Comments on MHD Considerations
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Daimler Truck North America
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/5/2023 8:16:38 AM
<b>Docketed Date:</b>	7/5/2023

*Comment Received From: Daimler Truck North America  
Submitted On: 7/5/2023  
Docket Number: 22-EVI-03*

## **DTNA Comments on MHD Considerations**

Please find attached comments submitted by Daimler Truck North America.

*Additional submitted attachment is included below.*

# DAIMLER TRUCK

## North America

July 5<sup>th</sup>, 2023

Jimmy O'Dea  
California Department of Transportation

Jim McKinney  
California Energy Commission

### **Re: Joint Workshop on Development of the 2023 Update to California's Deployment Plan for the National Electric Vehicle Infrastructure Formula Program Docket No. 22-EVI-03**

Daimler Truck North America (DTNA) submits the following comments in response to the Joint Workshop held by Caltrans and CEC June 29, 2023.

DTNA is the largest producer of medium- and heavy-duty vehicles in North America. DTNA is fully committed to supporting the emerging zero-emission vehicle (ZEV) market; we expect these technologies to play a significant role in the future of commercial transportation, and know they are a vital contributor to lowering NOx and GHG emissions. DTNA is investing heavily in the development of electric vehicles. We currently offer battery electric school buses, walk-in van chassis (Class 5/6), as well as heavy-duty (Class 8) trucks for sale, and we are preparing for the market introduction of an all-electric medium-duty (Class 6/7) truck. DTNA – in partnership with Portland General Electric (PGE) – is proud to have built the first-of-its-kind public charging island for commercial ZEVs in Portland, Oregon. In addition, DTNA launched a joint venture focused on public charging & refueling ([Greenlane](#)) to help in the acceleration of infrastructure that meets the needs of medium- and heavy-duty vehicles. Finally, DTNA has an expert eConsulting team dedicated to supporting fleets with all aspects of the ZEV transition, including site design and interfacing with utilities. Therefore, DTNA is uniquely positioned to speak to considerations for public charging for commercial vehicles.

### **Electrifying the Commercial Fleet Must be a Priority**

Commercial vehicles serve as the backbone of the U.S. economy, moving 72.5% of the nation's freight, delivering children to and from school, and facilitating the installation, upkeep and repair of critical services. It is not uncommon for medium- and heavy-duty commercial vehicles to travel more than 10 times the distance of a light-duty passenger car in a given year. Because of the exceptionally high usage, replacing one internal combustion powered commercial vehicle, particularly long haul trucks, can have the same carbon reduction as electrifying 20 passenger cars. In addition to the environmental impacts, CARB has adopted regulatory requirements for both OEMs and fleets, requiring the sale and acquisition of commercial ZEVs beginning January 1, 2024 in California. To achieve the greatest environmental impact, and enable fleet and OEM compliance with CARB regulations, electrifying medium- and heavy-duty vehicles and building resilient charging infrastructure must be a priority.

# DAIMLER TRUCK

## North America

Infrastructure plans that primarily focus on the needs of light-duty vehicles will not support the requirements of medium- and heavy-duty vehicles and will slow the electrification of the commercial fleet.



Left: Example of MHD vehicle attempting to utilize existing EV infrastructure catering only to light-duty passenger vehicles. Right: Successful implementation of dual purpose pull-through charging infrastructure able to accommodate all vehicle classes at Portland's Electric Island.

### **Public Charging Infrastructure Catering to Commercial Vehicles Must be Available**

Fleets are expected to utilize a spectrum of charging solutions that include both behind-the-fence depot charging and en-route public charging. While depot fueling is a common practice today, this paradigm may shift if fleets are not able to install behind-the-fence charging equipment due to cost or infrastructure constraints. Ensuring commercial vehicles have public access to charging stations will extend ranges from depots and allow ZEVs to serve broader parts of the community. Commercial ZEVs are available today in a variety of chassis configurations, but fleet adoption continues to be stalled by a lack of available charging infrastructure.

As discussed in the Joint Workshop, there are only 4 publicly accessible truck charging stations across the West Coast today. CTC estimated in the Clean Freight Corridor Efficiency Assessment that 84 public truck charging stations are needed in California by 2025 under the Accelerated Battery Electric Adoption scenario, which DTNA believes to be the most accurate ZEV adoption scenario based on current market conditions. DTNA strongly recommends California leverage the NEVI Formula program to help accelerate the near-term installation of charging infrastructure for commercial vehicles. The eligible corridor groups already identified include numerous critical freight corridors where commercial ZEVs are likely to be deployed in the near-term, if the infrastructure is in place to support it.

# DAIMLER TRUCK

## North America

### Recommendations for Accommodating Commercial Vehicles in NEVI Plans

To accelerate the adoption of electric medium- and heavy-duty vehicles, DTNA recommends a minimum of 15% of NEVI funding should be set aside for stations that include at least one dual-purpose pull-through charging lane with charging speeds >150 kW. Long pull-through parking lanes are common practice at truck stops today. Using a similar site design for at least one charging location will ensure that all vehicle classes including truck-trailer combinations can be accommodated. Higher charging speeds are necessary to support larger batteries in commercial vehicles. Additional weighting or consideration should be given to site proposals that address the following:

- **Proximity to freight corridors and major distribution hubs.** Sites serving areas with high freight traffic volumes should receive priority funding.
- **Future-proofing measures for speeds up to 1.5 MW.** DTNA recommends the pull-through site be planned for future charging rates.
- **Wide ingress and egress.** For safety and ease of use, DTNA recommends that points of entry and exit are designed with medium- and heavy-duty vehicle maneuverability in mind.
- **Cable lengths and charger locations.** Serving the commercial fleet will require longer cable lengths and strategic charger placement to reach charging ports on a wide variety of chassis configurations.

### Conclusion

California's ZEV refueling infrastructure is not on track to meet the demands of the medium- and heavy-duty market. DTNA strongly urges CEC and CTC to consider a set-aside fund for sites that can serve both commercial ZEVs and light-duty passenger vehicles to jump start commercial ZEV infrastructure deployment. Light-duty vehicles can utilize sites designed for medium- and heavy-duty vehicles, but the opposite is not possible. DTNA has vehicle movement data available to highlight critical freight corridors, and would be happy to further discuss dual-purpose site-design with CEC and CTC.

Sincerely,



Sean T. Waters  
Vice President, Compliance and Regulatory Affairs