



February 7, 2025

California Energy Commission
Docket Unit, MS-4
Docket No. 24-TRAN-03
2024 DRAFT ZIP
715 P Steet
Sacramento, CA 95814

RE: Comments on 2024 Draft Zero-Emission Vehicle Infrastructure Plan

Please accept these comments from the California Hydrogen Business Council (“CHBC”) to the California Energy Commission (“Commission”) on the 2024 Draft Zero-Emission Vehicle Infrastructure Plan (“ZEV Plan”), which is presented as the deployment plan to complement the Clean Transportation Program Investment Plan. These comments focus on three primary areas: 1) eligibility of hydrogen infrastructure for funding alongside electric charging infrastructure investments, 2) data discrepancies, and 3) the inappropriate grouping of medium-duty investments with heavy-duty investments for hydrogen refueling infrastructure.

Discrepancy between Draft ZEV Plan and the Clean Transportation Program Commission Report

The ZEV Plan is inconsistent with the 2024-2025 Investment Plan Update for Clean Transportation Program (“CTPIP”) Commission Report (Docket 24-ALT-01), February 4, 2025. Consistent with the CTPIP Update presented on November 26, 2024, the plan calls for the following:

Table ES-2: Clean Transportation Program Base Fund Allocations for Fiscal Year 2024–2025 (in Millions)

Category	Eligible Fuel Types	Funding Source	2024–2025
Light-Duty Charging Infrastructure	Electric	Clean Transportation Program (Base)	\$40.0
Medium- and Heavy-Duty ZEV Infrastructure	Electric, Hydrogen	Base	\$38.2
Hydrogen Refueling*	Hydrogen	Base	\$15.0
Workforce Training and Development	Electric, Hydrogen	Base	\$2.0
		Total Base	\$95.2

* Open to light-, medium-, and heavy-duty vehicle infrastructure projects, including mixed-use hydrogen stations. AB 126 requires the CEC to spend at least 15 percent of Clean Transportation Program base funds per year on hydrogen infrastructure through 2030.

Source: California Energy Commission

On Slide 8 of the 2024 Draft ZEV Plan Workshop Presentation, an outdated table is presented that lists a category for “Medium- and Heavy-Duty Charging Infrastructure” with only “Electric” as an eligible fuel type for \$38.2 million. Again, Table ES-2 from the CTPIP confirms that both electric and hydrogen are eligible fuel types in the MDHD ZEV Infrastructure category, consistent as well with the November 26, 2024 Clean Transportation Program Lead Commissioner Report. This inaccuracy is also presented in Slide 13 of the workshop presentation. Appendix A of the ZEV plan inconsistently lists \$40.2 million for MDHD, and states that this category only applies to EV.

Table 9: Clean Transportation Program Base Allocations

Category	FY 24/25	FY 25/26	FY 26/27	FY 27/28	Total
LD EV	\$37.0	\$37.0	\$37.0	\$37.0	\$148.0
MDHD EV	\$40.2	\$40.2	\$40.2	\$40.2	\$160.8
Hydrogen	\$15.0	\$15.0	\$15.0	\$15.0	\$60.0
Total	\$92.2	\$92.2	\$92.2	\$92.2	\$368.8

Source: CEC Staff analysis

We request that the ZEV Infrastructure Plan follow the direction of the Commission set in the Clean Transportation Program Investment Plan (Table ES-2) and ensure that both electric and hydrogen are eligible in the MDHD category.

Hydrogen Infrastructure Funding should match Electric Charging Funding

The Draft recommends continuing with hydrogen infrastructure funding at \$15 million a year in Slide 13, compared to \$37 million a year for light-duty (LD) battery charging and \$40.2 million a year for medium- and heavy-duty (MDHD) battery charging. This imbalance only minimally meets the mandate of AB 126 that the Commission allocate 15 percent of the Clean Transportation Program annual funds to hydrogen fueling stations.

AB 126 should be considered an investment floor, not a ceiling. The Commission should equally allocate funding to electric and hydrogen infrastructure by allowing both eligibility in each category. This level playing field allows competition and the market to decide where to allocate funds, not the Commission.

In addition, the amount allocated to hydrogen will not allow the achievement of the 200-station goal set by the Executive Order B-48-18, nor does it represent the infrastructure necessary to provide cost share and support for the California ARCHES hydrogen hub. The ARCHES hub plans workforce development and deployment of 1,000 hydrogen fueled buses and 5,000 hydrogen fueled trucks, in large part in disadvantaged communities that are also disproportionately impacted by diesel produced air pollution. The Commission should therefore allocate more funding to support these market trends and other committed deployments of hydrogen buses and trucks.

Discrepancy between Medium- and Heavy-Duty Forecasting

There is strong deviation between station forecasting presented in the CARB Scoping Plan, ARCHES H2 HUB, CTC SB 671 compared to CEC AATE3 MD & HD,¹ with one to two orders of magnitudes difference. The sustained discrepancy in forecasting can significantly impact investment decisions by the private sector, as the CEC is the primary agency overseeing the administration of hydrogen infrastructure funding. The Commission should revisit the demand forecast and align projections with other state agencies, ultimately consolidating and aligning a single station forecast scenario for the State of California.

¹ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=254100> - Tables 6, 8, 10 and 12

Medium-duty and heavy-duty hydrogen investments should be separate

For hydrogen infrastructure, LD and MD vehicles share infrastructure, not MD and HD.² MD vehicles include work trucks, vans, and utility vehicles, which refuel at public fueling stations, or behind that fence at a, say, UPS depot. These vehicles have differently-sized nozzles and different inputs for MD vehicles than for HD vehicles, as well as significant differences in capacity requirements (tank sizes).

Unfortunately and inconsistent with industry standards, the presentation slides 16 and 32 continue to group MD with HD hydrogen infrastructure. The Commission should create categories for dedicated HD infrastructure to support hydrogen infrastructure that can refuel trucks and buses, each application where vehicles compete successfully with electric trucks on issues including range, weight, and vehicle cost.

The CHBC urges the Commission to make these revisions before the final Plan is adopted.

Sincerely,



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² The United States Council for Automotive Research (USCAR), a company consisting of Ford, General Motors and Stellantis, released a whitepaper on the topic of using light-duty fueling protocols for medium-duty refueling. <https://uscar.org/download/53/hydrogen-fuel-cell/13748/2023-uscar-medium-duty-h2-infrastructure-white-paper.pdf>