DOCKETED	
Docket Number:	21-TRAN-03
Project Title:	Zero Emission Vehicle Infrastructure Barriers and Opportunities
TN #:	243080
Document Title:	CHBC Comments
Description:	N/A
Filer:	System
Organization:	California Hydrogen Business Council (CHBC)
Submitter Role:	Public
Submission Date:	5/13/2022 4:47:29 PM
Docketed Date:	5/13/2022

Comment Received From: Sara Fitzsimon
Submitted On: 5/13/2022
Docket Number: 21-TRAN-03

CHBC Comments on 21-TRAN-03

CHBC Comments Attached

Additional submitted attachment is included below.

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California Energy Commission
Docket No. 21-TRAN-03
715 P Street
Sacramento, CA 95814

May 13, 2022

RE: 21-TRAN-03 Draft Zero-Emission Vehicle Infrastructure Plan

The California Hydrogen Business Council (CHBC)[1] appreciates the opportunity to respond to the workshop and publication on the Draft Zero-Emission Vehicle Infrastructure Plan ("ZEV Plan"). The CHBC finds the ZEV Plan falls short of meeting California's ZEV, decarbonization, and air quality goals due to the lack of investment in the hydrogen fueling network. Fuel cell electric vehicles (FCEVs) are crucial to California's ZEV fleet and widespread adoption will not happen without sufficient hydrogen fueling infrastructure.

FCEVs are an important technology that offer benefits battery electric vehicles (BEVs) cannot serve. FCEVs through the light, medium, and heavy-duty space are long-range, lightweight, easily recyclable, and require quick public refueling--similar to the refueling experience of today's gas and diesel-powered vehicles.[2] Therefore, FCEVs offer solutions to passenger and fleet drivers whose lifestyle and duty cycles are not served by the charging experience of battery electric vehicles (BEV) or the weight of a BEV.[3]

As a tool for reaching the state's zero-emission, air quality, and decarbonization goals, FCEVs offer great promise. First, although hydrogen is only required to be 40 percent renewable to receive funds through the Low Carbon Fuel Standard (LCFS)[4], stations that are funded through the LCFS program

[1] The CHBC is comprised of over 135 companies and agencies involved in the business of hydrogen. Our mission is to advance the commercialization of hydrogen in the energy sector, including transportation, goods movement, and stationary power systems to reduce emissions and help the state meet its decarbonization goals**. The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies.** CHBC Members are listed here: https://www.californiahydrogen.org/aboutus/chbc-members/

[2] https://afdc.energy.gov/vehicles/fuel_cell.html#:~:text=Unlike%20conventional%20internal%20combustion%20engine,a%20tank%20on%20the%20vehicle..

[3] https://www.energy.gov/sites/default/files/2014/03/f9/thomas_fcev_vs_battery_evs.pdf.

[4] https://ww2.arb.ca.gov/resources/documents/lcfs-zev-infrastructure-crediting.

dispense, on average, 90 percent renewable hydrogen fuel content.[5] The electric grid, which powers the charging system of BEVs, was only 33 percent renewable on average in 2020. This is not to say improvements on renewable content cannot be met for both FCEV and BEV but mounting funding for one type of technology that is not accessible for all Californians and is behind in renewability as compared to FCEVs is not the solution to meeting the state's goals. Both technologies serve a purpose in improving air quality and reducing carbon output, so both technologies need to be funded in relation to that purpose.

Unfortunately, the ZEV Plan prioritizes BEVs inexplicably over FCEVs notwithstanding the role FCEVs will play in meeting California's climate goals. In the ZEV Plan, light-duty hydrogen fueling infrastructure stations are capped at 200, as compared to 250,000 public BEV chargers, not accounting for future charger deployment past 2025. Further, the ZEV Plan lacks a heavy-duty specific hydrogen fueling station goal, even though FCEVs will be critical in servicing the duty cycles of the heavy-duty sector. The CHBC recommends the CEC increase the public hydrogen fueling station goal to match the 1,000 station target identified in the California Air Resources Board's AB 8 Hydrogen Self-Sufficiency Report[6] Without enough stations available for public refueling, light-duty passenger drivers will not feel confident purchasing FCEVs. Finally, the CHBC recommends the CEC create a 200 heavy-duty hydrogen refueling station target, as outlined in the California Fuel Cell Partnership's report on deploying a heavy-duty hydrogen fueling network.[7] Waiting for consumers to buy and lease FCEVs is not a reasonable option for the state to meet it's ZEV and climate targets because without the fueling infrastructure, drivers will not only be unfamiliar with the technology but unable to fill up if they were to purchase.

The CHBC looks forward to the expansion of the hydrogen fueling network goals and encourages the CEC to continue engagement with stakeholders like the CHBC and its members.

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[5] https://ww2.arb.ca.gov/sites/default/files/2021-09/2021_AB-8_FINAL.pdf.

[6] https://ww2.arb.ca.gov/resources/documents/self-sufficiency-report#:~:text=Assembly%20Bill%208%20asks%20CARB,without%20further%20State%20financial%20support.

[7] https://cafcp.org/blog/california-fuel-cell-partnership-envisions-70000-heavy-duty-fuel-cell-electric-trucks-supported.

Respectfully Submitted,

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