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California Hydrogen Business Council Comments on the Draft Staff Report on 2020-2023 Investment Plan Update for the CTP

Additional submitted attachment is included below.
California Hydrogen Business Council Comments on the Draft Staff Report on 2020-2023 Investment Plan Update for the Clean Transportation Program
March 30, 2020

I. Introduction

The California Hydrogen Business Council (CHBC)\(^1\) appreciates the opportunity to submit comments on the draft staff report on the 2020-2023 Investment Plan Update for the Clean Transportation Program (Draft Report). A summary of our comments is as follows:

- We appreciate the Draft Report’s plans for continuing to provide $20 million for hydrogen related transportation investment in California in Chapters 3 and 4 and the acknowledgment of renewable hydrogen in plans to further fund alternative transportation fuels in Chapter 5.

- However, this is only a good start for what we believe is needed, and we urge you to heed the recommendations in ARB’s December 2019 assessment report pursuant to SB 498 that calls for expanded support for programs that advance fuel cell electric vehicle (FCEV) deployment, hydrogen infrastructure and production.

II. Comments

A. We appreciate the 2020-23 plan’s inclusion of $20M in funding on an annual basis for hydrogen refueling infrastructure.\(^2\) We believe this continued investment, as allowed by AB 8, is imperative to help meet the hydrogen fueling capacity that the report correctly states will be needed in California to support the anticipated number of FCEVs in the years to come.\(^3\)

B. It should be considered that manufacturer survey projections for FCEVs on California roads by 2025 are highly conservative\(^4\) and may not reflect actual market conditions. We therefore appreciate the report stating that “vehicle projections from the auto

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\(^1\) The CHBC is comprised of over 100 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 dependence on oil. 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/

\(^2\) Draft Report, p. 33

\(^3\) Draft Report, p. 48

\(^4\) Ibid. The survey projections of 48,000 FCEVs on California’s roads by 2025 are based on conservative estimates, and it is our understanding that OEMs are in discussions with CARB staff to develop better understanding of market conditions, which ought to be taken into consideration by other agencies.
manufacturer survey will require another 10,000 kilograms of daily capacity by 2025 at minimum.⁵ We urge these projections be revisited regularly, as market data evolves.

C. We strongly urge the Energy Commission to heed the recommendations of ARB in their recent SB 498 report.

In the recent Draft Assessment of CARB’s Zero-Emissions Vehicle Programs Per SB 498 (SB 498 Report), CARB identified the need for expanded effort to support hydrogen fueling infrastructure and production, beyond what is called for in the draft 2021-23 Clean Transportation Program Investment plan. The report finds:

“The network of 64 open and funded hydrogen stations in California provides coverage to only 41 percent of the State’s population within a 15-minute drive;¹⁶² 21 percent of the covered population lives within a disadvantaged community. Hydrogen fueling networks of 200 and 1,000 stations (reflecting the goals of Executive Order B-48-18 and the California Fuel Cell Partnership’s Revolution,¹⁶⁵ respectively) could provide coverage to 68 percent and 94 percent of the state’s population. Additionally, California faces challenges due to the limited availability of hydrogen production, storage, and distribution resources to support the hydrogen fueling station network. While AB ⁸ addresses the challenge of establishing the fueling network, there are no State programs that address these upstream challenges as thoroughly... Infrastructure supporting the growing heavy-duty ZEV market is also needed.⁶

The SB 498 Report makes several recommendations to address these issues. Some may require legislative support. But others could potentially be implemented into the Energy Commission’s Clean Transportation Program planning now. For example:

- **Plan to continue funding for ZEV infrastructure, including hydrogen fueling stations, past the AB 8 2023 sunset date.**⁷ While the Draft Report may only cover 2020-23, it could signal that funding is needed past that time.
- **Identify investment priorities for ZEV infrastructure to serve high-mileage fleets and build the business case for ZEV infrastructure.**⁸ FCEVs are particularly well suited to high mileage fleets, given their long ranges and fast refueling times, so we believe they should be especially prioritized in such programs.
- **Build on efforts to invest in hydrogen fuel production, with an emphasis on low carbon and renewable hydrogen.**⁹ As the SB 498 Report states, “the Energy

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⁵ Draft Report, p. 49 emphasis added
⁷ Ibid, p. vii
⁸ Ibid, p. ix
⁹ Ibid, p. 86
Commission has begun to provide grant funds for renewable hydrogen production facilities, but these investments are likely not sufficient to achieve the scale required to meet both cost and emission goals simultaneously and are primarily able to address capital costs.”\textsuperscript{10} The Draft Report’s statement that only $10 million over the next year is allocated to zero and near zero carbon fuel production supply, with no certainty that any of this will go to renewable hydrogen production, is not aligned with CARB’s recommendation, and we find it grossly inadequate. The greatest barrier to cost-competitive renewable hydrogen supply is volume, and as with any emerging energy technology, incentives are needed to help stimulate market development in the beginning. Lumping together biofuels, which have received far more funding for far longer, with renewable hydrogen, and forcing them to compete with each other for a small amount of funding will not help California achieve the stable, low carbon fuel supply for fuel cell electric vehicles across classes that will be needed.

III. Conclusion

We appreciate your consideration of these comments and look forward to collaborating with you further to accelerate economical hydrogen transportation to further California’s climate, clean air, and clean energy goals.

Respectfully,

Emanuel Wagner
Deputy Director
California Hydrogen Business Council

\textsuperscript{10} Ibid, p. 87