



California Hydrogen Business Council Comments
South Coast AQMD Stationary and Mobile Source Control Measures
Draft 2022 Air Quality Management Plan
July 5, 2022

I. INTRODUCTION

The California Hydrogen Business Council (CHBC), a trade association representing over 135 member organizations, working to commercialize hydrogen and supporting hydrogen technologies across the economy, appreciates the opportunity to submit comments to the Draft 2022 Air Quality Management Plan. Summarily, our comments address how fuel cell systems and fuel cell electric vehicles (FCEVs) should be the preferred resources for electric generation and air pollutant reduction in the stationary and mobile source categories.

These comments will address the following control measures:

- L-CMB-03: NOx Reductions from permitted Non-Emergency Internal Combustion Engines
- L-CMB-04: Emission Reductions from Emergency Standby Engines
- MOB-05: Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles
- MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles
- MOB-15: Zero Emission Infrastructure for Mobile Sources

II. COMMENTS

A. L-CMB-03: NOx Reductions from permitted Non-Emergency Internal Combustion Engines

The CHBC respectfully recommends the inclusion of fuel cells as a part of the proposed method of control to transition older and higher-emitting engines in the RECLAIM program. Fuel cell systems that run on hydrogen are zero-emission and have been successfully commercially deployed for the last twenty years. CHBC members, Plug Power¹ and Bloom Energy², for example, have been providing power for material handling and data centers, respectively, in lieu of internal combustion engines.

B. L-CMB-04: Emission Reductions from Emergency Standby Engines

¹ Plug Power. Available at: <https://www.ir.plugpower.com/press-releases/news-details/2022/Plug-Supplies-Walmart-with-Green-Hydrogen-to-Fuel-Retailers-Fleet-of-Material-Handling-Lift-Trucks/default.aspx>.

² Bloom Energy. Available at: <https://www.bloomenergy.com/technology/>.



The CHBC supports the inclusion of zero and near-zero emission fuel cell systems in the proposed method of control as a replacement for emergency standby engines and an immediate reduction in NOx and VOCs. We agree that fuel cell systems have been successful as backup power resources for small-scale uses like powering stoplights during power outages. However, we would like to note that fuel cell systems have the ability to support utility backup power beyond multi-MW capacities and have done so commercially.³ We encourage the addition of fuel cell systems as part of the scalable power sources that would replace diesel-fueled emergency standby engines.

C. MOB-05: Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles

The CHBC supports the continuation of the Clean Cars 4 All program, which assists eligible low and moderate-income residents living in disadvantaged communities (DAC) with purchasing a like-new or new clean vehicle. Clean Cars 4 All includes FCEVs as a part of its program. Providing residents in DACs access to FCEVs will have an immediate impact on the air quality of that community and serve as an education tool for others in the community to become familiar with the growing technology.

In response to the proposed methods of control, the CHBC is supportive of retiring up to 2,000 light-and medium-duty vehicles per year through the Replace Your Ride Program, as well as including a \$2,000 voucher for hydrogen fueling, to reflect the \$2,000 voucher proposed for the installation of charging equipment.

D. MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles

Although fuel cell trucks are considered a viable option upon the successful deployment of the proposed Trade Up Program for On-Road Heavy-Duty Vehicles, the CHBC proposes the inclusion of fuel cell trucks in the pilot from the start. Fuel cell trucks are currently being piloted at the Port of Oakland through CHBC member, Hyundai⁴, and are being offered in a bundled lease program by CHBC member, Nikola⁵, that includes hydrogen fueling and maintenance. The fuel cell truck market is ready for deployment and the CHBC encourages the addition of fuel cells in the rollout of the Trade Up Program.

E. MOB-15: Zero Emission Infrastructure for Mobile Sources

The Strategies in the Proposed South Coast AQMD Workplan for Zero Emissions Fueling/Charging Infrastructure is correct in stating the need to understand the FCEV

³ H2 View, George Heynes, "New 78.96 MW hydrogen fuel cell power plant opens in South Korea," November 3, 2021. Available at: [New 78.96MW hydrogen fuel cell power plant opens in South Korea \(h2-view.com\)](https://www.h2-view.com/news/new-78-96mw-hydrogen-fuel-cell-power-plant-opens-in-south-korea)

⁴ Hyundai. "Hyundai Motor Details Plans to Expand into Market with Hydrogen-powered XCIENT Fuel Cells at ACT Expo," May 9, 2022. Available at: <https://www.hyundai.com/worldwide/en/company/newsroom/hyundai-motor-details-plans-to-expand-into-u.s.-market-with-hydrogen-powered-xcient-fuel-cells-at-act-expo-0000016825>.

⁵ Nikola. Available at: <https://nikolamotor.com/two-fcev>.



fueling demand, funding needs, stakeholder collaboration, public education, and statewide alignment across state entities. The CHBC supports incorporating FCEV manufacturers, hydrogen fuel producers, hydrogen fuel distributors, and hydrogen fueling station developers in the zero-emission infrastructure section of the Workplan. There are currently over 50 publicly accessible hydrogen fueling stations and the state has the funds to meet the 200-station⁶ target. However, as of 2020, there were over 6.5 million drivers in the greater Los Angeles region alone, meaning the South Coast Air Quality Management District (SCAQMD) will need far more than 200 hydrogen fueling stations shared throughout the state to meet the air quality targets set out in this Draft plan. The CHBC encourages this draft plan to advocate for the state to set higher hydrogen fueling station targets so the SCAQMD will receive sufficient funding and coordination from the state in deploying a sustainable zero-emission infrastructure network for the region.

III. CONCLUSION

The CHBC supports the Draft 2022 Air Quality Management Plan and respectfully requests consideration of the aforementioned recommendations. We look forward to collaborating further. Thank you for the opportunity to comment.

Respectfully Submitted,

Sara Fitzsimon, J.D.

A handwritten signature in black ink, appearing to read 'Sara Fitzsimon', with a long horizontal line extending to the right.

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⁶ "Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investments. January 26, 2018. Available at: <https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html>.