

March 15, 2023

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: GHC Comments on CARB's Public Workshop - Potential Future Changes to the LCFS Program

Introduction

GHC is a California educational 501(c)(3) non-profit organization. GHC was formed in 2019 to recognize the game-changing potential of "green hydrogen" to accelerate multi-sector decarbonization and combat climate change. GHC's mission is to facilitate policies and practices that advance green hydrogen production and use across all sectors of the economy to accelerate a carbon-free energy future and a just energy transition. Our sponsors include renewable energy users and developers, utilities, and other supporters of a reliable, affordable green hydrogen fuel economy for all.

GHC applauds the California Air Resources Board (CARB) for its workshop on potential future changes to the Low Carbon Fuel Standard (LCFS) program on February 22, 2023. The GHC believes the proposed changes will help enable the at-scale production, transport, and storage of green hydrogen to help accelerate the decarbonization of California's transportation sector.

GHC's specific comments on CARB's workshop are below.

Comments

1. Support For Book and Claim

The GHC is supportive of the book-and-claim (B&C) mechanism since it addresses one of the main challenges of producing low-carbon hydrogen – high costs associated with deploying the necessary infrastructure and technologies – by allowing producers to earn credits for each unit of low-carbon hydrogen produced, which can then be sold to other entities that need to comply with California's LCFS. These credits provide a financial incentive for low-carbon hydrogen production and reduce the overall cost of producing and delivering low-carbon hydrogen to the transportation sector, which is integral to generating momentum for the hydrogen market.

Moreover, the B&C mechanism is an effective way to promote the development of renewable and low-carbon hydrogen production pathways, which are critical to reducing greenhouse gas emissions and achieving California's climate goals. By providing a flexible and technology-neutral mechanism for producers to earn credits, B&C encourages

competition, innovation, and the development of a diverse range of low-carbon hydrogen production pathways.

Overall, the B&C mechanism is a critical tool for supporting the development of low-carbon hydrogen in California. By incentivizing low-carbon hydrogen production, promoting innovation and the development of diverse production pathways, and ensuring a reliable and sustainable supply of low-carbon hydrogen, B&C helps to accelerate the transition to a more sustainable energy future. The Green Hydrogen Coalition's support for B&C reflects its commitment to promoting the adoption of low-carbon hydrogen and achieving California's climate goals.

2. Program Eligibility

The GHC applauds CARB's decision to limit the B&C eligibility to non-fossil fuel-derived hydrogen. We believe the benefits of this approach are two-fold. First, the GHC is confident the exclusion of fossil-fuel derived hydrogen aligns with and supports the state's goals of reducing emissions and being on target to reach Senate Bill (SB) 100 goals. Secondly, we maintain that this will support the development of a renewable hydrogen hub and will help California's bid through the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES)¹ to the Department of Energy's Clean Regional Hydrogen Hubs program.²

At this time, the GHC believes that CARB does not need to adopt a specific definition for low-carbon hydrogen; rather, we believe CARB should remain focused on the carbon intensity (CI) score for eligibility. By focusing on CI, CARB can allow for greater flexibility in the development of low-carbon hydrogen production pathways and support innovation in the industry. Therefore, we believe a CI framework for LCFS is currently sufficient. If, however, CARB is interested in establishing a definition, the GHC has done extensive work to find consensus on defining different forms of hydrogen and would welcome the opportunity to provide feedback to CARB and discuss lessons learned.

3. Support for Medium- and Heavy-Duty Hydrogen Refueling Infrastructure Pathways.

The GHC would like to express its support for the Medium- and Heavy-Duty Hydrogen Refueling Infrastructure (MHD HRI) Pathway. The existing light-duty HRI has been successful and the GHC looks forward to seeing this replicated in the medium- and heavy-duty space, where hydrogen can provide a value-add by offering a decarbonization pathway for these hard-to-abate applications. Greater detail on our views on the MHD HRI can be found in our joint letter from 2022.³ We express our support and applaud CARB for helping to generate the momentum to jump-start the hydrogen ecosystem in California.

¹ <https://archesh2.org/>

² <https://www.energy.gov/oced/regional-clean-hydrogen-hubs>

³ See our 2022 [Joint Letter to Dr. Cheryl Laskowski](#).

Conclusion

GHC thanks CARB for its thoughtful leadership in framing potential future LCFS program changes and for this opportunity to comment on the process.

Respectfully submitted,

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