

DOCKETED	
Docket Number:	22-OII-02
Project Title:	Gas Decarbonization
TN #:	270992
Document Title:	Teresa Cheng Comments - Industrious Labs Comment on CEC Draft Staff Report on Clean and Renewable Hydrogen
Description:	N/A
Filer:	System
Organization:	Teresa Cheng
Submitter Role:	Public
Submission Date:	6/25/2026 9:58:36 AM
Docketed Date:	6/25/2026

*Comment Received From: Teresa Cheng
Submitted On: 6/25/2026
Docket Number: 22-OII-02*

Industrious Labs Comment on CEC Draft Staff Report on Clean and Renewable Hydrogen

Additional submitted attachment is included below.



June 24, 2026

Submitted Electronically

California Energy Commission
Docket Number 22-OII-02
715 P Street
Sacramento, CA 95814-5512

Re: Comments on the California Energy Commission's Draft Staff Report on Clean and Renewable Hydrogen for the Electricity and Transportation Sectors

Dear Commissioners and Staff,

Industrious Labs submits these comments in response to the California Energy Commission's Draft Staff Report on Clean and Renewable Hydrogen for the Electricity and Transportation Sectors. We commend CEC staff for a rigorous assessment of hydrogen's potential role in California's electricity and transportation sectors. Our comments address a gap in the report's scope defined by Senate Bill 1075 (Skinner, Chapter 363, Statutes of 2022) and recommend that CEC address it through its Clean Hydrogen Program and future analytical work.

I. The Report's Sector Scope Leaves Agricultural Uses Unanalyzed

The staff report was developed under the analytical framework established by SB 1075, which directed CEC to assess hydrogen's role in the electricity and transportation sectors. The result is that electrolytic hydrogen production for ammonia as an input to nitrogenous fertilizer, one of the most commercially mature near-term applications for in-state electrolytic hydrogen, falls outside of the report's direct scope. The CEC's report acknowledges that hydrogen is "the key input to ammonia production through the Haber-Bosch process" and that agriculture is a significant demand sector, but it does not analyze this further. CEC should assess California's potential to produce green ammonia domestically at a meaningful scale.

This assessment is essential because California applies approximately 688,000 tons of nitrogenous fertilizer annually, sourced overwhelmingly from imports, primarily from the Middle East and Europe, and arriving primarily through the Port of Stockton.ⁱ The JR Simplot plant in Lathrop, one of the last domestic production facilities serving California, closed in 2023.ⁱⁱ When global fertilizer supply chains are disrupted, as occurred when natural gas price spikes following Russia's invasion of Ukraine in 2022 drove ammonia prices to record highs, and again when strikes on Iran in spring 2026 effectively closed the Strait of Hormuz to fertilizer shipping, California farmers have no structural protection and no alternative supply.

II. CEC Should Assess the Potential for In-State Distributed Green Ammonia Production

The report notes that California curtailed 3.4 million MWh of solar and wind in 2024, a 29 percent increase over the prior year. The Central Valley, the heart of California's agricultural economy, sits within CAISO's highest-curtailment zones. The report identifies co-location with dedicated renewable generation as the most viable approach to hydrogen production, with access to low-cost curtailed energy improving plant economics. Green ammonia facilities in these zones fit this model naturally. Local farmers can provide a reliable, regional market for the product, and the Central Valley's chronic renewable oversupply means the electricity needed to produce it is among the cheapest in the state.

CEC's analytical mandate for this report under SB 1075 is appropriately scoped to electricity and transportation, but the Commission also has independent authority to assess and invest in clean hydrogen production pathways that serve California's broader energy and economic goals. We recommend that the CEC further assess the potential for in-state green ammonia production as a hydrogen end-use pathway. A dedicated scenario modeling the Central Valley's capacity to support distributed modular electrolytic hydrogen production for green ammonia synthesis, drawing on CDFA fertilizer consumption data, CAISO curtailment data, and available solar interconnection capacity, could directly inform California's agricultural resilience policy and inform other future agency analyses.

III. Conclusion

The staff report provides a strong analytical foundation for hydrogen's role in California's electricity and transportation sectors. However, while the role of hydrogen in those sectors is being scoped out, other states are moving forward to deploy green hydrogen for distributed fertilizer manufacturing right now. Iowa and Minnesota already host operational facilities.ⁱⁱⁱ As such, hydrogen for fertilizer not only presents significant climate, jobs, and economic opportunity for farmers and the Central Valley, but it is also the closest to commercial deployment.

We encourage CEC to assess distributed, modular electrolytic hydrogen production for in-state green ammonia as a near-term, commercially viable end use. California has the solar resources, curtailed energy, agricultural demand, and mature commercial technology to build a domestic green fertilizer supply chain, and a state assessment evaluating that potential would be valuable in supporting affordability and resilience for California farmers, consumers, and our climate.

We appreciate the opportunity to comment and welcome further engagement.

Sincerely,

Teresa Cheng
California Director
Industrious Labs

ⁱ California Department of Food and Agriculture, Fertilizer Tonnage Report, https://www.cdfa.ca.gov/is/ffldrs/Fertilizer_Tonnage.html. Figure excludes non-farm nitrogen materials.

ⁱⁱ Capital Press, "Simplot to Close California Fertilizer Plant" (Sept. 22, 2023), <https://capitalpress.com/2023/09/22/simplot-to-close-california-fertilizer-plant>.

ⁱⁱⁱ See Landus and TalusAg, "Landus and TalusAg Deliver First Local Green Ammonia Production in North America" (Feb. 5, 2025), <https://finance.yahoo.com/news/landus-talusag-deliver-first-local-130000925.html> (Iowa); Canary Media, "Minnesota Now Has a Wind-Powered Green Ammonia Plant" (June 2026), <https://www.canarymedia.com/articles/wind/wind-project-farmers-fertilizer-prices>.