



January 7, 2022

Dr. Cheryl Laskowski  
Branch Chief, Transportation  
California Air Resources Board

RE: LCFS Rulemaking Input- Expanding book-and-claim Eligibility for Hydrogen and other Hydrogen-Related Regulatory Recommendations

(Comment submitted electronically via Comment Submittal Form at [https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=lcfs-wkshp-dec21-ws&comm\\_period=1](https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=lcfs-wkshp-dec21-ws&comm_period=1) )

Dear Dr. Laskowski,

Yosemite Clean Energy LLC (YCE) is developing biomass to carbon-negative green hydrogen and carbon negative renewable natural gas projects. We first publicly announced these projects in Q4 2021. We are using an advanced indirect gasification technology that uses biomass waste. YCE has developed a (patent pending) process to convert woody biomass into clean syngas that is then upgraded into a hybrid platform that produces both green hydrogen and renewable natural gas.

We are aware from the CARB LCFS Rulemaking workshop that CARB is currently considering how best to expand and improve the LCFS program to meet California's SB 32 and Executive Order N-79-20 and B-55-18 goals. Collectively these policies require a 40% reduction of transportation emissions by 2030, mandate that California achieve carbon neutrality by 2045 or sooner across sectors, and require a transition to Zero Emission Vehicle sales with a phase-out of internal combustion engine cars and trucks in California.

To advance initiatives, policies and regulation that will provide investment signals for producers like Yosemite Clean Energy to develop and market carbon negative fuels and meet zero emission mandates, our company is suggesting the following rulemaking items for consideration .

First, the most effective incentive under the LCFS program to support the production of biofuels from forest and agricultural biomass waste streams is for CARB to approve LCFS pathways

under the CA-GREET model that recognize the GHG benefit of biomass utilization and the associated “avoided emissions”. There is extensive scientific evidence for avoided emissions and this evidence meets the LCFS standard of scientific defensibility. This should be a central objective of the rulemaking as it would greatly increase forest and agricultural biomass utilization, reduce wildfire risk, and similarly reduce criteria and GHG pollutant emissions. We recommended that CARB approve both specific modeling for custom Tier 2 pathways, and establish Tier 1 calculators to address this issue that is truly vital to the future of California’s forests and inhabitants.

Second, we ask CARB to support Electric Low Carbon Fuels Credits (ELCFS) by developing LCFS provisions in this rulemaking to enable YCE and other market participants to provide electricity generation for charging infrastructure and receive LCFS credits from Hydrogen Fuel Cell electricity generation transmitted via microgrids. Yosemite Clean Energy in late 2019 supported our partner (Nevada County Biomass Task Force) with a response to a CPUC Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill 1339- Proceeding R.19-09-009. In our submission, we recommended that CPUC consider Hydrogen Fuel Cell power generation for microgrids, which may help resolve power transmission and distribution issues for electric charging stations across California. Microgrids would provide the additional benefit of improving the reliability of electric power in rural areas, many of which are currently without power due to winter storms and may remain without power throughout January.

Third, we would like CARB to allow green hydrogen to be used in dairy bio-methane upgrading as a method to produce renewable natural gas under LCFS. In this case, green hydrogen would be used to improve methane production at bio-digester facilities and would be used under an approved pathway for LCFS credit generation.

We appreciate the opportunity to provide our thoughts and requests for CARB’s consideration. We hope that the current Rulemaking process goes well and advances the various low-carbon fuels technologies to further access and benefit from the LCFS market.

Sincerely,

A handwritten signature in cursive script that reads "Thomas Hobby".

Thomas Hobby. – MBA, MA, MSc, P.Ag  
President & Managing Member