****September 19, 2022

Low Carbon Fuels Standard Program

California Air Resources Board

Sacramento, CA 95814

Subject: Comments on LCFS meeting on August 18, 2022

Dear LCFS Program Officer,

I greatly appreciate the opportunity to comment on the proposed changes to LCFS program. A number of new clean hydrogen production technologies are in development around the world. Electro-Active Technologies, Inc., is leading the development of a new and novel technology based on Microbial Electrolysis, a process which utilizes organic waste and electricity to generate hydrogen with reduced carbon intensity.

The current pathways approved for clean hydrogen production under the LCFS do not include those which integrate use of electricity with chemical energy derived from organic waste to generate hydrogen. Such a pathway offers a way to significantly reduce the carbon intensity of the fuel. We request the Air Resources Board to consider inclusion of such pathways and specifically suggest the following two point for inclusion:

* Book and claim accounting for all electricity used to make hydrogen. At a minimum the power used for microbial electrolysis should be eligible for book and claim.
* The proposed Tier1 hydrogen calculator should be expanded to include organic waste feedstocks.

Our approach has a number of benefits beyond production of clean hydrogen with low carbon intensity, while treating organic waste. These include reduction in release of Short-Lived Climate Pollutants such as methane. The organic wastes typically end up in landfills generating methane, which is not always captured. Our approach will minimize release of such SLCPs. These pollutants have been identified as the most important for reduction in the next two decades by recent IPCC report. In addition, our scalable and distributed waste to hydrogen production approach allows reduction in transportation and logistics costs of waste management and hydrogen storage and transportation.

We would also like to take this opportunity to request support from the Air Resources Board to facilitate the modification or adaptation of the CA-GREET model to enable calculation of GHG emissions and to help determine carbon intensity via such pathways. Our analysis indicates a carbon-negative lifecycle GHG emissions for this process and support from the Air Resources Board to demonstrate this via the CA-GREET model would be highly desirable.

I would like to second the points made by Julia Levin of the California Bioenergy Association, dated August 8, 2022, related to adoption of incentives for generation of biofuels such as hydrogen from organic waste.

Thank you or your consideration.

Sincerely,

Abhijeet P. Borole

President and Co-Founder,

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