Thank you to CARB staffers for the incredible work with the LCFS Program. On behalf of SGH2 Energy Global LLC, we appreciate the opportunity to participate in this Public workshop on Potential Future Changes to the LCFS Program.

As per our CEO, Dr. Robert T. Do, comments during the workshop, we would like to reiterate our comments on the potential changes to the new LCFS program:

1. Application for Hydrogen Pathway via Tier 2 or Tier 1:

SGH2 Energy is in the process of developing and building a renewable Clean Hydrogen facility in Lancaster, CA, in order to supply both Shell’s and Iwatani’s HRS in SoCal with 11,000 Kg per day of H2 on a 24/7 basis x 350 days per year. The Clean Hydrogen will be produced by the thermal conversion/gasification of 120 tons per day of biogenic waste feedstocks ( rejected recycled waste paper ) supplied by waste recyclers in SoCal. The Clean Hydrogen will have an estimated CI of -188 gCO2eq/MJ, and SGH2 will apply for Tier 2 alternate pathways to produce clean, renewable Hydrogen during Q1 2022.

A: We wanted to know whether we should apply under the newly announced Tier 1 Pathway for Hydrogen or to apply for a new Tier 2 Alternate Pathway.

2. GWP ( Greenhouse Warming Potential ) of Methane:

The UN IPCC and the COP 26 and over 100 countries, including the US, have voted for a Methane Cap noting that Methane has a GWP 85 X CO2 over a twenty-year period. This is relevant because CH4 has a tremendous near-term impact GHGs and that action in reducing CH4 in the next 20 years ( 2030 - 2040 ) would be most significant in reducing GHGs and keeping temperature rise to below 1.5 C.

CARB also stated that it has a target to address pre-2030 and post 2030 impact on GHGs to address the critical timeframe required to reduce CH4/CO2 to meet the States mandate.

Yet, currently, CARB uses a GWP for Methane of only 25 X CO2, which is based on its impact over a 100 year period in all of its calculations on the impact of Methane. We believe that CARB should align its Methane reduction goals with that of the UN, the COP26, and the US Federal mandate by calculating CH4 GWP of 85 X CO2 over a 20 year period rather than 100 years.

Additionally, most facilities producing clean H2 or RNG or any fuel gas which reduces CH4 have a lifespan of 20 years. Therefore, their impact in reducing CH4 should also be calculated over 20 years and not 100 years.

3. Landfill Gas Emissions of CH4:

Currently , CARB arbitrarily considered that ALL landfills in the US are properly capped and that 75% of all Landfill gases of CH4 and CO2 are therefore trapped and flared. This, in turn, leads CARB to consider that only 25% of CH4 leaked from landfills.

Both the US NASA, NOAA, and other agencies, including the EPA, have reported that landfill gases are rarely properly capped. Massive amounts of CH4 are continuously leaking from all landfills at alarming amounts, significantly exceeding the 25% considered by CARB.

Therefore, CARB should consider reducing the amount of CH4 considered to be capped from 75% to a more conservative percentage to more accurately reflect actual data of between 35% to 50%.

Sincerely,

Xenia Seliverstov

Corporate Affairs Manager

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