



October 26, 2023

Matthew Botill
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on the Potential Amendments to the Cap-and-Trade Regulation Workshop

Dear Mr. Botill:

On behalf of Amp Americas (“Amp”), we appreciate the opportunity to provide feedback on the October 5, 2023, Potential Amendments to the Cap-and-Trade Regulation Workshop. Amp strongly supports California’s climate goals and the Cap-and-Trade Program as an important element of the State’s overarching climate change framework. We especially support the California Air Resources Board’s (“CARB”) efforts to focus on fuel switching, including the use of biomethane, as a strategy to decarbonize hard to electrify sectors, in line with the 2022 Scoping Plan. We hope you will pursue opportunities through the Cap-and-Trade Program and upcoming amendments to help achieve these objectives.

ABOUT AMP AMERICAS

Founded in 2011, Amp develops and operates renewable natural gas (“RNG”) facilities that convert dairy waste into carbon-negative renewable energy. Over our history, Amp’s projects have prevented over 1.5 million metric tons of carbon equivalent emissions. In 2022 alone, our projects abated approximately 480,000 metric tons of carbon equivalent emissions and we plan to rapidly expand our impact over the next several years.

As a pioneer in the dairy RNG industry, Amp registered the first 5 dairy RNG-to-CNG pathways in California’s Low Carbon Fuel Standard (“LCFS”), and was the RNG supplier for the first 11 dairy RNG-to-hydrogen pathways. Our experience developing, operating, and reporting on these and other assets gives us a unique perspective on the impact CARB policy has on development of projects to reduce greenhouse gas emissions. Our projects and resulting methane and carbon dioxide (“CO₂”) reductions have been made possible by CARB’s leadership in decarbonizing transportation, and we encourage CARB to continue to support the policy decisions that have made it so successful and build from them to reach new sectors, like cement.

BIOGENIC PROCESS EMISSIONS EXEMPTION

We encourage CARB to include biogenic CO₂ emissions exemptions for process emissions, which will create equal treatment of process and combustion emissions, while creating more opportunities for fuel switching in hard to electrify sectors. Specifically, doing so will support the Scoping Plan’s goals to increase renewable hydrogen production by incentivizing current instate hydrogen production to switch



from fossil fuel to renewable sources, which is also consistent with federal policy under the Inflation Reduction Act (“IRA”).

Amp also supports the inclusion of biogas and biomethane as a biomass-derived fuels under 95852.2(a). The use of either as a fuel is additional to the status quo of venting or flaring biogenic CO₂ from waste sources. As stated in the workshop, biofuel use in California was largely static in the initial 2010 rule making, and still is in the industrial sector. As such, to incentivize fuel switching, biogas and biomethane should continue to remain eligible for exemption and the full lifecycle analysis of biofuels should be considered.

BIOMETHANE IN CAP-AND-TRADE

In the workshop CARB asked four key questions regarding biomethane in Cap-and-Trade Regulation which are discussed below:

Enabling Biomethane through the Cap-and-Trade Program

In order to support decarbonization of the industrial sector, fuel switching to biomethane or other renewable fuels (including in the cement sector, pursuant to SB 596) has been identified by CARB as a key solution. To get there, we suggest that CARB begin from the LCFS pathways process, and utilize existing lifecycle accounting pathways and tools to account for site-specific emissions factors for various biomethane and other fuel pathways. Consistent accounting with the LCFS will minimize the implementation burden for new programs, provide equal market access to biomass among sectors, and thereby support the transition of biomethane from the transportation sector to hard-to-electrify sectors using a consistent set of rules and procedures.

Cement plants, power plants, or other industrial facilities transitioning to biomethane should be able to reduce their greenhouse gas intensity based on the avoided emissions associated with the fuels they use, just like the transportation sector can today under the LCFS. This will incentivize the development of methane-mitigating projects and may be necessary to balance any remaining emissions associated with cement production and industrial operations to achieve net zero greenhouse gas goals.

Importantly, as CARB develops other solutions to decarbonize the economy through fuel switching, including through Cap-and-Trade amendments, it should avoid hindering access to biomethane in the transportation sector and LCFS. CARB should approach Cap-and-Trade amendments and fuel switching in industry as additive to the LCFS and fuel switching in transportation, in order to develop as many avenues as possible for switching to clean energy throughout the economy and allow for maximum methane avoidance and decarbonization.

Avoid Restricting Access to Biogas in the Program

California imports nearly all of its natural gas,¹ and any biomethane injected into the pipeline system serves to displace fossil natural gas that otherwise would be imported into the State. The North American natural gas system does not mirror the fractured and isolated electricity markets in the

¹ According to the California Energy Commission, “California continues to depend upon out-of-state imports for nearly 90 percent of its natural gas supply...” <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>



western U.S. Instead, the gas system is deeply interconnected, and long ago moved away from point-to-point service, instead creating trading hubs and flexible receipt and delivery points to give customers a variety of options in the market.

Fossil natural gas operates on a system very similar to book-and-claim, in which buyers of fossil gas do not buy the molecules injected by their supplier, but rather instantaneously take receipt of a pre-agreed amount corresponding to the amount their supplier injected on the other end of the system. These systems already work well for natural gas supplies across the continent, in the federal Renewable Fuel Standard, and in existing LCFS programs such as California, Oregon, and Washington, and they should continue to be leveraged to cost effectively and efficiently support decarbonizing California gas end uses. In any event, RNG should not be treated differently than fossil natural gas, and it certainly should not face higher barriers to market than does fossil natural gas.

We oppose restrictions to book-and-claim accounting of RNG under the LCFS. We also oppose restricting access to CNG markets for book-and-claim biomethane, which is arbitrary, given the planned phaseout of CNG vehicles in most applications through the forthcoming Advanced Clean Fleets regulation. Instead of limiting book-and-claim eligibility, we strongly encourage CARB to allow book-and-claim eligibility for additional pathways that align with State goals, including for hydrogen production and ongoing use in stationary sources through the Cap-and-Trade program.

Enabling biomethane from North Americas to be allowed in Cap-and-Trade will assist CARB with its decarbonization goals to decarbonize the hard to electrify sectors. While CARB appears reluctant to expand the LCFS to the industrial sector (which would directly enable the transition of RNG from transportation to industrial uses in the State), allowing biomethane as fuel switching decarbonization tool would serve as an important step and enabler in shifting RNG to stationary sources in the industrial sector. We recommend changes to 95852.1. and 95852.1.1 to expressly allow delivery of North American biomethane to qualify as a biomass-derived fuel.

Enable All Biomethane to Displace Fossil Fuel

Specifically, as CARB re-evaluates the Cap-and-Trade Program, it should remove restrictions related to utilizing biomethane in the industrial sector and develop incentives supporting the transition to biomethane or other renewable fuels at cement, power plant, and other industrial sector operations. Currently, the Program treats biomass-derived fuels from outside of California differently than fossil fuels. This is different than treatment under the LCFS and discourages the use of biomethane in the industrial sector or outside of transportation.

We encourage CARB to make minor amendments to enable biomethane projects from anywhere in North America to support California's greenhouse gas goals through the Cap-and-Trade Program, in line with rules under the LCFS and operation of the natural gas market today. We also encourage the program to include accounting for avoided methane emissions in biomethane pathways to support the State's wide array of greenhouse gas reduction goals.

Requirements to Align with Existing Programs

CARB is a widely recognized leader on decarbonization policy and must not set policy precedents that will hinder implementation of effective methane abatement programs in other jurisdictions. States including Washington, Oregon, and New York, either already have Cap-and-Trade inspired programs or



are pursuing legislative efforts to create similar programs, and it is important that CARB consider the impacts its rulemakings will have on the development of clean energy throughout the country, and work to develop a consistent set of rules that will allow clean energy to grow at scale to address global climate change.

To date, CARB has largely got it right by enabling book-and-claim accounting of biomethane to support the clean energy transition in California. Other programs, such as limitations under the Renewable Portfolio Standard, specifically limit opportunities for biomethane, and have accordingly failed to spur development of this important clean energy resource. We strongly encourage CARB to continue aligning its Cap-and-Trade and LCFS market rules related to biomethane, and indeed – further align them to include lifecycle accounting for biomethane pathways in the Cap-and-Trade program while continuing to allow book-and-claim accounting of biomethane to decarbonize hard-to-abate sectors and gas end uses in California.

CONCLUSION

Thank you again for the opportunity to comment on the Potential Amendments to the Cap-and-Trade Regulation Workshop. We support CARB in its efforts to maintain a strong Cap-and-Trade program to achieve the State's greenhouse gas goals, including decarbonizing industry and directing biomethane toward stationary sources. We look forward to continuing to work with you through this process and other related efforts to achieve these outcomes.

Sincerely,

Cassandra Farrant

Cassandra Farrant
Head of Environmental Credit Compliance
Amp Americas