Comments to California Air Resources Board )”CARB”) LCFS Public Meeting, April 10, 2024

I am Ross Buckenham, with California Bioenergy LLC (“CalBio”), a developer and operator of CA dairy digesters. Thank you, CARB, for all the analysis and thank you for the opportunity to say a few words.

IPCC reports it is a scientific “fact” that the warming of our global system is due to human activity, and they also report that the methane level in our atmosphere has grown three times faster than carbon dioxide contributing 30% of global warming to-date.

This month we will celebrate Earth Day. Yes I say celebrate, despite:

* 2023 the highest average global temperature since pre-industrial times.
* We are experiencing more frequent extreme weather events
* We see rising sea levels and shrinking Ice caps and glaciers
* And acidifying oceans are impacting our coral reefs and other marine systems

We can celebrate Earth Day because despite the climate crisis we have proven solutions, one of which is that aggressively reducing methane emissions can transform its global warming effect into a global cooling effect. This is due to methane’s incredibly short life compared to carbon dioxide’s near perpetual life in the atmosphere.

Since agriculture is the largest source of global methane emissions, farmers present the largest opportunity to deliver this climate cooling effect.

It is not a solution to simply produce less food. For example global dairy production will increase 50% by 2030 to meet demand which grows unabated despite the marketing of supposed “non-dairy” alternatives.

CARB recognized this and pioneered and incentivized simple but effective technology, called digesters, to capture dairy methane and convert it into renewable fuel while also supporting affordable dairy production. As a result, CA dairy is well on its way to reducing its methane emissions by a whopping 40% by 2030 as documented in a recent UC Davis study and report.

Dairy methane capture contributes toward global cooling, it recycles a waste into an energy, it allows dairy farms to sustainably maintain their dairy cows which themselves are an important and major recycler,s transforming significant quantities of inedible agricultural waste into nutrient-rich, dairy.

Over 100 digesters are currently operational in the CA on approximately 400,000 milk cows. These digesters also reduce odors by removing over 350 tons per year of hydrogen sulfide emissions and in doing so reduces 670 tons of small damaging PM2.5 particles. Overall these 100 digesters are the equivalent to removing 8 million cars from the Central Valley roads. Another 100 need to be build. Hence the need for CARB to step down and steepen the compliance curves to match credit supply with deficits and critically to support dairy RNG pathways to electricity and hydrogen fuels via book and claim.

Dairy methane recycling into fuel,

* displaces fossil fuel consumption and reducing exhaust pipe emissions,
* improves local air and water pollution in surrounding communities,
* supports local clean economies through emission reductions,
* generates high-quality, organic fertilizer for sustainable agriculture,
* creates jobs,
* increases investment in disadvantaged communities,
* is one if not the most affordable way for the state to reduce ghg emissions.

The time for debate and half-measures has passed; the time for even more action is upon us. California’s family farms remain committed and “all in” on their important role of producing the majority of the nation’s dairy (and the much of world’s) economically and sustainably, creating a cleaner, more reliable and affordable food future for generations to come.

Thank you.

Ross Buckenham

CEO California Bioenergy LLC