



# AEMETIS

April 11, 2022

California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE:** *CARB Workshop on Methane, Dairies and Livestock, and Renewable Natural Gas in California*, held March 29, 2022, and Petition for the reconsideration of the denial of the petition for rulemaking to exclude all fuels derived from biomethane from dairy and swine manure from the Low Carbon Fuel Standard Program (Dated March 25, 2022).

Dear Board Members,

This letter is intended to address both the *CARB Workshop on Methane, Dairies and Livestock, and Renewable Natural Gas in California*, held March 29, 2022, and the petition mentioned above.

Aemetis, Inc. is one of California's leading renewable fuels companies, is a renewable natural gas and renewable fuels company focused on below zero carbon intensity products. Aemetis has also been the largest in-state producer of renewable ethanol since 2011. As such, Aemetis has made significant contributions to California's Low Carbon Fuel Standard (LCFS) program as both a producer of LCFS credits as well as reducing harmful climate pollutants by significantly decreasing or eliminating the use of carbon-based transportation fuels.

In 2019, the company formed a subsidiary, Aemetis Biogas LLC, to develop and operate dairy methane digesters for the production of below zero carbon intensity (CI) Renewable Natural Gas (RNG) for use as transportation fuel. When fully built out, the planned 60+ dairies in the estimated \$380 million Aemetis biogas project are expected to capture more than 1.6 million MMBtu of dairy methane and reduce greenhouse gas emissions equivalent to an estimated 5 million metric tonnes of CO<sub>2</sub> each year, equal to removing the CO<sub>2</sub> emissions from more than 1 million cars per year. This sum is also equal to 40 percent of the credit generated across all fuel types in the LCFS during 2020. Subsequently, Aemetis has formed similar subsidiaries to produce Renewable Diesel (RD) and Sustainable Aviation Fuel (SAF), as well as Carbon Capture and Sequestration (CCS).

By aggressively responding to GHG reduction goals and policies set forth by the State Assembly, multiple Governors, CARB, CEC and other state and local agencies, Aemetis and other private sector companies are doing exactly what the State of California envisioned when enacting said

policies – investing billions of dollars of capital to bring about the acceleration of transportation de-carbonization. Making drastic changes to the LCFS at this critical juncture would do irreparable harm to the state’s policy goals, and likely make attainment impossible. While debate is a part of any process, recent claims by participants in the Workshop and Petition for Reconsideration do not accurately reflect scientific evidence. Repeating false narratives over and over does not make them true, and it is critical that a discussion of dairy renewable natural gas policies be based on peer-reviewed scientific evidence, not opinion, false correlations, or incorrect information.

For instance, in the Petition for Reconsideration, the parties state on page 11, “*Aemetis Advanced Fuels Keyes (“Aemetis”) develops dairy biogas cluster projects located in the San Joaquin Valley, and its Aemetis Central Dairy Digester Project<sup>45</sup> provides a case study showing the power of CARB’s perverse incentive to expand factory farm herd sizes.*” The petition then goes on to note (pages 11-12), “*Of the dairies currently identified by Aemetis as part of this cluster project and in various stages of installing anaerobic lagoon digesters, the following seven dairies have recently expanded their herd or are in the process of expanding...*” (the list of dairies).

This claim, however, is false. Of the seven dairies cited in the petition, six of the dairies submitted applications for expansion either prior to Aemetis Biogas LLC being formed as a business, or prior to an any agreement between Aemetis and the dairy to build a digester. Several the applications predated Aemetis Biogas LLC by 2-3 years. In other words, dairies in our cluster were not even considering digesters when they applied for expansion – meaning that their decision to expand was based on factors that had nothing to do with dairy biogas production. Only one dairy in the cluster cited applied for expansion after signing an agreement with Aemetis, and this came after a change of ownership. Therefore, the assertion that signing an agreement with Aemetis is correlated with expansion efforts is false.

In our considerable experience, dairies make decisions regarding their herd for reasons that are related to milk production or scalability – not biogas. No matter how many times dairy biogas opponents claim otherwise, the amount of money paid to dairies by biogas producers is a fraction of overall dairy revenues. For the dairy operators working with Aemetis Biogas, most have noted that the payments are less than what they pay for animal feed on a quarterly basis. As the dairy owners who participated in the Workshop repeatedly pointed out, the milk market (not the RNG market) drive expansion decisions. The herd expansion application process is independent from biogas digesters; it is a very difficult, lengthy, and expensive process for the dairy owner and requires years of review by the Air District and Water Board that consider issues unrelated to biogas production. A well-established regulatory process is in place to safeguard air and water, with ample public comment/hearings as a main feature.

Aemetis pays dairy owners for the use of their land and manure, that is not disputed. The often-repeated fallacy that claims dairy owners are “getting rich” by installing digesters is an unfortunately misplaced and misinformed distraction from our collective need to de-fossilize every aspect of our lives. Californians and global citizens cannot move fast enough to reduce every Greenhouse Gas, most importantly, methane. Reducing methane while reducing noxious fumes and lowering the costs on farmers to produce agricultural commodities our society demands,

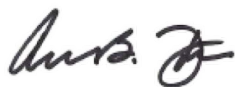
should be in everyone's interest. While we believe it is fair to compensate dairy owners for the use of their land and manure, the overall cost of installing a digester, permitting, pipeline installation, and gas cleanup equipment are all paid by the developer. Each dairy digester and related infrastructure cost millions of dollars. As such, the majority of revenues generated by the digester are used to pay off developer debt associated with the project, which averages 5 years.

To the negative comments about adverse impacts on disadvantaged communities or people of color, many of the Aemetis Biogas digesters operate in disadvantaged communities. Not only do community members support the projects, but many have thanked us for reducing air pollution and odors by building digesters. Local elected officials have been extremely supportive of our projects through letters to permitting and grant agencies. To date, we have had little or no response during public comment periods associated with our CEQA or other permits. The public health benefits of reducing methane and other dangerous air pollutants are well established, and we have no evidence that residents of impacted communities disapprove of our activities.

We have Labor Agreements in place which have generated many jobs that directly benefit local building trade laborers, a number of whom are also minorities and live in these communities. We established a scholarship program that awards monetary support to local high school graduates pursuing STEM careers – students who live in disadvantaged communities. We work directly with a local job training organization (Volt Institute) who is working with local citizens to develop job skills directly related to jobs in our industry. Through deliberate action, hiring, consultation and outreach, and significant investment, Aemetis Biogas continues to demonstrate a purposeful and respectful approach to the communities that host our dairy digester projects. It is also worth pointing out that two thirds of the Aemetis Biogas development team, including senior management, are women or minorities and live in the very communities served by our projects.

Finally, we believe that the voluminous detailed work conducted by CARB staff regarding dairy RNG LCFS pathways is scientifically based, accurate, and should continue forward to help California achieve its aggressive GHG reduction objectives. The facts are clear that dairy digesters and dairy based RNG provide significant environmental benefits, most notably the reduction of methane gas, CO<sub>2</sub>, and other air contaminants. To suggest otherwise defies logic, and the thousands of CARB staff hours that been dedicated to ensuring that the scientific evidence aligns with carbon reduction policies advanced by California citizens, elected officials, health and environmental professionals, and academia. . We strongly urge the CARB Board to focus on facts and data, not opinions, false claims, and correlations, as you consider the future of dairy based RNG in the LCFS.

Sincerely,



Andrew B. Foster  
President  
Aemetis, Inc.

[andy.foster@aemetis.com](mailto:andy.foster@aemetis.com)