

November 13, 2015

Shelby Livingston Chief, Climate Investments Branch Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Comments on Cap-and-Trade Auction Proceeds Second Investment Plan

Dear Ms. Livingston:

AECA appreciates the opportunity to comment on the "Cap-and-Trade Auction Proceeds Second Investment Plan" (Investment Plan).

AECA represents the collective energy interests of the state's leading agricultural trade associations, agricultural water agencies and over 40,000 growers. Formed in 1990, AECA has been at the forefront of developing renewable and clean energy opportunities for the agricultural community in California.

AECA recognizes the importance and urgency of reducing greenhouse gases (GHGs) in California and elsewhere as a strategy to slow climate change. Efficient and effective investments of Cap-and-Trade auction proceeds via the Greenhouse Gas Reduction Fund (GGRF) are an essential part of the strategy to reduce these emissions while maintaining a sustainable business climate in California. AECA provided comments on the Draft Concept Paper in September and incorporates those by reference here.

Prioritizing Projects That Target and Reduce SLCP

According to the Investment Plan, although carbon dioxide is the dominant greenhouse gas, "other short-lived climate pollutants may be responsible for as much as 40 percent of global warming experienced to date." Prioritizing investments in projects and programs that target short lived climate pollutants (SLCPs) will provide climate benefits faster while helping the state realize AB 32 and SB 605 requirements. The California Air Resources Board (CARB) is in the process of finalizing its SLCP strategy and it is critical that the Investment Plan recognize and provide necessary funding for those strategies identified in the SLCP process.

Significant Targeted Funding for Dairy Manure Digesters

Dairy manure digesters are already an integral component of the Investment Plan's Natural Resources and Waste Diversion sector goals. Expanded development of dairy manure digesters will help the state achieve three identified core waste diversion and utilization goals, as follows:

- Reduce methane emissions by 40% by 2030
- Significantly cut methane emissions from dairies
- Utilize organic waste to help meet the state's renewable electricity and bioenergy targets

The Investment Plan should prioritize and recommend substantial long-term funding to build dairy digesters in California. There is a direct relationship between the amount of GGRF investment and the number of dairy digesters that can be built to capture and destroy methane. The Investment Plan should specifically align its goals for reducing dairy methane emissions to meet AB 32 and SB 605 goals with the appropriate amount of GGRF investment to achieve that goal.

Dairy manure digesters are a proven technology that provides substantial methane reduction. Dairy manure digesters are also one of the most cost-effective methods to reduce GHGs and provide a tremendous return for each dollar of GGRF investment. Moreover, dairy digesters provide substantial other benefits to the state. As a result, dairy manure digesters should receive an initial \$500 million investment commitment as specified in the draft SLCP Plan.

- Dairy digesters provide unparalleled return on investment. Dairy digesters return one ton of CO2e GHG reduction over the life of the project for each \$4 to \$8 of GGRF investment. When the SLCP benefits of methane reduction are also included, the return on investment can be below \$2 per ton over the expected 20 year life of a typical dairy digester project.
- Dairy digesters capture and destroy methane, a SLCP, so additional GGRF investment in this technology will produce climate benefits faster while helping the state achieve a core strategy of the Administration's overall climate policies.
- Dairy digesters provide substantial benefits to disadvantaged communities (DACs) and these benefits will increase as digesters are transitioned from waste-to-electricity to waste-to-fuel technologies. Transitioning to waste-to-fuel will maximize digester front-end benefits of capturing and destroying methane with significant back-end benefits of reducing NOx and Diesel PM (black carbon) by replacing diesel fuel with cleaner burning renewable compressed natural gas or RCNG. Dairy waste-to-fuel projects provide a tremendous opportunity to dramatically improve air quality for DACs throughout the San Joaquin Valley.
- Dairy digesters represent an important opportunity to integrate systems across sectors and geographies. Funding such integrated strategies will enable the second Investment Plan to obtain the deep reductions needed to achieve the state's long-term climate goals. Investment in dairy digesters not only addresses Natural Resources and Waste Diversion goals, but dairy waste-to-energy and waste-to-fuel technologies also address Investment Plan goals in the clean energy and transportation sectors. These additional benefits include renewable electricity and

bioenergy targets as well as reducing the carbon intensity of transportation fuels and furthering CARB's heavy duty and sustainable freight strategies.

• Dairy digesters also provide tremendous benefits to rural communities as a result of their predominant location in the San Joaquin Valley. Additional digester development will bring substantial economic (jobs), air quality and health benefits to rural communities.

Biomass Facilities

AECA is concerned about the numerous biomass facilities that have closed in the past year and further closures will leave very few options for growers to dispose of their woody waste material. In the past, farmers would open pile burn the material in field but, for air quality reasons, this is no longer an option. Additionally, as the state is increasing diversion of organics away from landfills, sending agricultural woody waste to a landfill is not a realistic option.

The state's biomass plants are currently the most economic and environmentally prudent option to for agricultural waste and it is crucial they continue to operate. For these reasons, CARB should work closely with the California Public Utilities Commission to prioritize funding to ensure the continued operation of biomass facilities.

Conclusion

As CARB develops this important second GGRF Investment Plan, it is critical that return on investment and projects that provide SLCP reductions be prioritized. GGRF investment in dairy digesters should be expanded and an initial five-year funding commitment of \$100 million per year, \$500 million total, should become a specific recommendation of the Investment Plan.

Respectfully submitted,

muchael Boccadro

Michael Boccadoro Executive Director