

Comments Re: 2016 Short Lived Climate Pollutants

October 29, 2015

To whom it may concern,

Thank you for the opportunity to submit comments related to CARB's proposed 2015 Short-Lived Climate Pollutants (SLCP) Reduction Strategy. As a consultant focused on helping dairies with methane digesters monetize the environmental benefits their projects create, this strategy is particularly relevant to our clients, many of whom operate offset projects listed with CARB's Cap and Trade Program.

The draft Short-Lived Climate Pollutant Reduction Strategy recommends developing a "regulation by 2018 that would establish requirements for manure management best practices for new dairies and expansions at existing dairies." Footnote 102 notes that "Requiring emission reductions from the sector would mean that offsets under the Cap-and-Trade program would no longer be issued for new projects once the regulation takes effect. Any new projects developed after a regulation is in effect would still be eligible for incentives under other programs, including the bioenergy feed-in-tariff (pursuant to Senate Bill 1122) and the Low Carbon Fuel Standard."

Footnote 103 states, "Enabling pipeline injection of biomethane and minimizing associated costs will help get dairy biogas into the transportation sector and allow for the generation of Low Carbon Fuel Standard Credits (LCFS), which could provide an especially valuable revenue stream. ARB will immediately begin to work with manure-to-methane-to-transportation fuel pathway applicants to enhance LCFS credits from such projects, by including manure methane destruction in the carbon intensity calculations. Initial estimates suggest that this would reduce the carbon intensity of a dairy digester pathway from about 30 gCO₂e/MJ currently to at least -100 gCO₂e/MJ." These sections of the SCLP Reduction Strategy raise several issues that deserve consideration:

1) We appreciate CARB's interest in the bioenergy feed-in-tariff and in including manure methane destruction in the carbon intensity calculations of related LCFS pathways. The relative simplicity of a feed-in-tariff or LCFS credits (once a pathway is approved) in relation to the complexities of monitoring, verifying and registering offsets may lead to greater adoption of digesters in CA. That said there are limitations to the effectiveness of these policies, and therefore we are concerned that eliminating the ability for projects to create offsets would lead to reduced digester adoption not more. Given that LCFS credits can only be created when the biogas is used for transportation the substantial economic and infrastructure barriers would need to be eliminated for the LCFS market to lead to greater digester adoption. In addition, the bioenergy feed-in-tariff rate would need to be set high enough to provide clear financial incentive, and to allow for substantial additional biogas electricity capacity. If the feed-in-tariff limits the size of projects or the total MW capacity from biogas it would

inhibit the ability of this policy to effectively lead to increased digester adoption.

2) While discussing eliminating manure digester offsets in the SLCP strategy CARB is simultaneously asking for comments on how to streamline the offset program as part of 2016 C&T regulation amendments. These mixed messages cause confusion. Eliminating the ability for new digester projects to create offset would create further confusion in the manure digester industry. Consistent support for adoption of digester technology would support the industry. Such support can include strengthening the currently available incentives rather than eliminate some of them. Here are two examples of how CARB could do this:

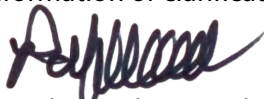
a) In comparison to LCFS credit prices offset and allowance prices are low. The reasons for this are largely due to CARB policy given the market for offsets and allowances is regulated by CARB. Changing policy so that prices increase to be on par with LCFS prices will provide more incentive for digester adoption with offset financing.

b) The CARB Compliance Livestock Protocol currently uses a Global Warming Potential for methane of 21 based on a 100 year time horizon. ARB, in the SLCP report, writes, "The use of GWPs with a time horizon of 20 years better captures the importance of the SLCPs and gives a better perspective on the speed at which SLCP emission controls will impact the atmosphere relative to CO2 emission controls." This importance of SLCP reduction could be translated into a financial incentive if the Livestock Protocol were to use a 20-year Global Warming Potential for methane (72) instead of the 100-year (21 or 25 depending on which IPCC assessment report is referenced). This would triple the financial incentive offered by carbon offsets to dairy digesters leading to additional digester adoption.

3) If ARB does propose policy that would eliminate the ability of new digester projects to sell offsets ARB should define what constitutes the "expansion of an existing dairy." Without clear guidance regarding what constitutes an expansion, the questionable eligibility of projects could reduce investment in the sector needed to reduce methane emissions. This could also adversely impact existing projects that rely on offset revenue. Eliminating eligibility of offsets from some digester projects sends a signal to the carbon market that would likely cause buyers to be wary of acquiring offsets from existing projects. This would decrease demand for offsets from those projects leading to lower revenue from the sale of offsets.

4) If ARB does propose policy that would eliminate the ability of new digester projects to sell offsets ARB should continue to allow new digester projects in states outside CA to create and sell offsets. Since projects outside CA would not be subject to ARB's manure management regulations and would not benefit from the other incentives (e.g. feed-in-tariff, CDFA grants and LCFS credits) losing the option to sell offsets into CA would have adverse impacts. If new projects outside CA that would rely on offset revenue are not allowed to create offsets the projects would not be built and the associated methane would continue to be released to the atmosphere.

Thank you for your consideration of these suggestions. Please let me know if any additional information or clarification would be helpful.



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