To: California Air Resource Board
From: Peter Weisberg, Program Manager, The Climate Trust
Date: October 30, 2015
Subject: Comments on the Draft Short-Lived Climate Pollutant Reduction Strategy (September 2015)

Background

The Climate Trust was founded in 1997 as a nonprofit organization to assist new fossil-fueled power plants comply with the Oregon Carbon Dioxide Standard—the nation's first legislation to curb emissions of carbon dioxide. Since that time, The Climate Trust has committed $31.7 million to greenhouse gas offset projects, including investing in thirteen different biogas projects throughout the United States. The Climate Trust is currently building a new carbon fund that will invest early-stage capital into livestock digesters in return for ownership of the resulting carbon credits.

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."

Carbon offsets, in addition to energy and nutrient sales, are a key source of revenue for dairy digester projects. Carbon offsets sales are projected to represent between 15% to 40% of the revenue dairy digester generate, with the potential to grow significantly as carbon prices increase over time. Eliminating dairy digesters from California's carbon market will eliminate this revenue stream[1], making already financially marginal projects less viable. If livestock digesters do not qualify to generate California Carbon Offsets, The Climate Trust's will not be able to provide carbon financing to digester projects throughout California and the rest of the United States.

New regulation requiring best manure management practices does not necessitate eliminating the eligibility of livestock digesters to generate offset credits.

To have environmental integrity, offsets must come from uncapped sectors of the economy. To qualify as additional, the emission reductions credited as offsets from dairy digester projects must be in addition to any methane reductions required by law. The Climate Trust believes, however, that "manure management best practices for new dairies and expansions at existing dairies" could be implemented in a manner that still allow dairy digesters to be eligible to generate offset credits.

Based on the language in the draft plan, regulation will only address manure management for new dairies and expansions at existing dairies. The methane emissions at existing dairies (not going through

---

[1] Voluntary buyers for offset credits do exist, but it is difficult to predict the scale and price at which they will purchase credits and therefore very difficult to finance a project based on potential voluntary market sales. California's cap-and-trade system is currently the only market that offers this "bankability."

an expansion) therefore will not be regulated. The Climate Trust believes these existing dairies offer the greatest opportunity for the installation of new anaerobic digesters, and therefore recommends these existing dairies remain eligible to generate California Carbon Offsets.

To the extent possible, ARB should define what constitutes the "expansion of an existing dairy." Does, for example, consolidation of existing dairies represent an expansion even if other dairies decrease herd size or close (and transfer an existing permit to the consolidated dairy)? Without clear guidance regarding what constitutes an expansion, the questionable eligibility of projects could reduce private investment in the sector needed to reduce methane emissions.

Even for new and expanding dairies, provided this new regulation does not require the complete elimination of methane emissions, digesters will likely reduce methane emissions above and beyond what is required by new manure management best practices. To incentivize deeper methane reductions, these additional methane emissions avoided by digesters should still be eligible for continued offset crediting. This can be accomplished, in practice, by revising the Livestock Protocol baseline to match the manure management best practices established by this new regulation. This will allow methane reductions that are in addition to these manure management best practices to continue to be eligible to generate offsets, providing an incentivize for verified methane reductions above and beyond those required by the new regulation and contributing to the effort to meet SLCP reduction goals.

To account for the possibility that offsets could continue to be generated after new regulation establishing best manure management practices is in place, The Climate Trust recommends the first sentence of footnote 102 be revised to read,

> *Requiring best management practices for manure management at new and expanding dairies may require adjusting the baseline of the Livestock Protocol to ensure all emission reductions credited as offsets are in addition to any methane reductions required by this new legislation.*

Eliminating livestock digester offsets may increase methane emissions outside of California.

The Air Resource Board should consider the potential leakage associated with ending the eligibility of livestock digester projects to generate California Carbon Offsets. Livestock digesters throughout the United States are eligible to generate California Carbon Offsets. If livestock digesters are no longer eligible, then new projects will lose 20% to 40% of their potential revenues. This could significantly reduce the number of livestock digesters built outside of California, inadvertently increasing methane emissions in areas that do not have new regulation requiring manure management best practices.

Offsets pay directly for verified reductions in methane emissions.

If livestock digester projects are no longer eligible to generate California Carbon Offsets, in order to meet the Air Resources Board's goals for reducing methane emissions from the dairy sector, some mechanism will be needed to replace the revenue associated with offset sales. The Air Resource Board should consider the implications of replacing offset funding, which directly pays for verified reductions in methane emissions, with other types of support. As a mechanism to reduce methane, the grant funding dispersed upfront by the current CDFA Dairy Digester Research and Development Program faces the risk that funding will be dispersed to projects that do not achieve the methane reductions anticipated. Offsets, on the other hand, only pay for verified methane reductions. If the Air Resource Board does eliminate the eligibility of dairy digesters to generate California Carbon Offsets, some replacement mechanism that builds upon the quantification and verification infrastructure established by the offset market to pay projects for verified reductions in methane emissions should be considered.

The Livestock Protocol currently uses a Global Warming Potential for methane 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 (25). This would triple the financial incentive offered by carbon markets to dairy digesters to verifiably reduce methane emissions.

Continue to emphasize that existing projects will be allowed to finish their crediting period.

The Climate Trust greatly appreciates the Air Resource Board's clarity in footnote 102 and in the offset guidance document that, in the event that regulation changes the eligibility of livestock digesters, registered projects will be allowed to finish their existing crediting period. When discussing this issue, please continue to emphasize this point. The Climate Trust and its potential investors have been greatly comforted by this clarity.