



CALIFORNIA FARM BUREAU FEDERATION

GOVERNMENTAL AFFAIRS DIVISION  
1127-11TH STREET, SUITE 626, SACRAMENTO, CA 95814 · PHONE (916) 446-4647



**Agricultural Council**  
of California

January 17, 2017

Mary D. Nichols, Chair  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95814

Submitted Electronically:

<https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=2016slcp>

**Re: Revised Proposed Short-Lived Climate Pollutant Reduction Strategy**

Dear Chair Nichols:

The Agricultural Council of California (Ag Council) and the California Farm Bureau Federation (Farm Bureau) appreciate the opportunity to submit comments based on the California Air Resources Board's (ARB) Revised Proposed Short-Lived Climate Pollutant Reduction Strategy (Revised Strategy).

Both Ag Council and Farm Bureau strive to protect and improve the ability of farmers and ranchers engaged in production agriculture, to provide a reliable supply of food and fiber through responsible stewardship of California's resources. California's natural and working lands can and do provide significant environmental and public health benefits and support state and local economies. As an essential part of California's farming heritage, our members understand the importance of protecting the land, water and air for their families, their communities and future generations. While we recognize that ARB has prioritized the reduction of short-lived climate pollutants (SLCPs), there still remain many data gaps in our efforts to understand and evaluate potential mitigation measures.

After reviewing the Revised Strategy and supportive documents we are encouraged to see that the requirements in Senate Bill (SB) 1383 by Senator Lara, have been incorporated. Evaluating the best-available scientific, technological and economic information is vital to ensuring that the Revised Strategy is cost-effective and realistically feasible. We still remain concerned about the proposed targets, but we will work toward voluntary wide-scale adoption of SLCP reduction strategies in California.

**Reducing Anthropogenic Black Carbon Emissions**

The agricultural sector has proven over time that incentive funding is an effective way to obtain ecosystem improvements without putting the agricultural community at a competitive

disadvantage. Other states and countries do not have the same level of environmental protection requirements that California does and the risk of leakage is a main concern. Agriculture can continue to accomplish reductions in black carbon emissions, if sufficient incentives are available that allow voluntary changes in practices and technologies.

### *Biomass*

The Revised Strategy points to the successful progress the agricultural sector has made in the phase down of burning woody biomass. With approximately a 70 percent reduction in black carbon emissions between 2000 and 2013, agriculture has made great efforts to address the challenge of handling this material. However, we are deeply concerned over the continued closures of biomass facilities in the state. With the limited options available for the disposal of woody biomass by-products, these facilities are critical to agriculture as an effective and efficient resource. Unless they remain open and operational, there is no other feasible infrastructure available in the short term to effectively manage the material. Ag Council and Farm Bureau look forward to participating in spring summits, mentioned in the Revised Strategy, that will highlight this issue and explore possible cost-effective solutions.

### **Reducing Manure Methane Emissions**

We agree that manure from dairies and livestock operations could be put to valuable use as a source of renewable energy or fuel, soil amendments, and other products. Building market certainty and value in these areas will help secure financing to accelerate and scale project development. However, it is important to note that no one strategy will work for all dairies. California's dairy industry is considerably diverse, with farm scales, management systems, land types, business structures, and regulatory requirements varying significantly from region to region. State investment should be designed to benefit dairy operators with "shovel-ready" projects across many contexts, helping all dairies prepare for the challenges ahead.

SB 1383 clearly sets the reduction target at reducing "manure management" related emissions by 40 percent, and not emissions from the entire dairy and livestock sector. Ag Council and Farm Bureau would suggest that the inclusion of the SB 1383 directive to ARB read as such, "*Senate Bill 1383 directs ARB to develop a strategy to reduce dairy and livestock sector manure methane emissions by up to 40 percent from 2013 level by 2030.*" This target is still overly ambitious but is a big improvement over the previous emission target of 75 percent in the April 2016 Draft Strategy. Going forward it is important that staff understand the limitations, especially for reductions from enteric fermentation. We ask that ARB focus on helping the dairy and livestock industry meet the goal voluntarily. The Economic Assessment in Appendix F shows that the cost-effectiveness of achieving reductions works best when we have incentives prior to regulations. We have a tremendous opportunity to make sure markets are fully enabled and dairies have access to the capital, credits and incentives they need to develop successful methane reduction projects.

### *Barriers to Adoption*

As the Revised Strategy points out, stubborn barriers remain for projects that are attempting to significantly cut methane emissions from dairy and livestock operations. A number of issues will need to be addressed by ARB, and other agencies must help facilitate wide-scale adoption of proven practices and open a pathway for development in California.

We agree with the many challenges laid out in the Revised Strategy and offer additional observations:

- Achieving the state's ambitious methane reduction goals, set forth in SB 1383 will be very difficult without substantial investment. Funding is needed to develop new infrastructure to handle organic waste, research to quantify methane reduction potential of non-digester practices and technologies, and incentives to support methane-reducing practices that aren't currently technologically and/or economically feasible. Currently, available options for reducing such emissions are extremely limited and costly. More work is needed to identify and deploy a comprehensive set of practices for reducing emissions and evaluating and quantifying their effectiveness. Extensive money from the greenhouse gas reduction fund (GGRF) and other incentive funding will need to be provided to enhance the economics of projects and encourage greater adoption. We appreciate that the Revised Strategy recognizes that far more financial support is needed.
- Energy contracts, power purchase agreements (PPAs) and other off-take agreements for energy and transportation fuels remain elusive and obstacles remain. Additional steps will need to be taken to ensure long-term contracts are available for the energy procured by these projects to enable project financing.
- Interconnection barriers continue to limit project development for both electric energy and biomethane injection projects. ARB and the California Public Utilities Commission (CPUC) will need to ensure Investor-Owned Utilities are prepared to work with, not against, project developers to efficiently and cost effectively interconnect and facilitate project development. A project that gets hung up at this stage for 8-18 months is not an appropriate amount time. Especially as projects become more common and utilities can rely on standardized models to expedite interconnection.

The Revised Strategy recognizes many of the challenges that stand in the way and we believe the process laid out by SB 1383 is crucial. We stand ready to work with ARB and other agencies to address the technical, market, and regulatory hurdles in forth coming workshops and working groups. Our hope is that the workgroup process is initiated soon as there is a huge amount of work to accomplish.

#### *Continued Research on Emission Reduction Potential*

California agriculture needs increasing public investment in research, education, technical assistance, and financial incentives. New programs, such as the State Water Efficiency and Enhancement Program and the Dairy Digester Research and Development Program, expand the ability of producers to deal with complex issues like climate change.

There is potential for alternative methane reduction projects, but further emission research is needed to quantify reductions. It will be necessary to build and study several projects to evaluate and quantify their ability to compete for wider adoption. Projects of significant interest at this time include:

- Enhancing separation of manure solids out of the flush stream on dairies where recycled water flush is the primary means of removing manure from barns; and
- Converting manure collection to mechanical means (vacuum or scrape) and with handling and storage designed to encourage rapid drying (solar drying or composting).

The Revised Strategy suggests that one alternative could be the conversion of some contemporary dairies with freestall barns and in-barn feeding of animals to pasture dairies. While we support maintaining current pasture dairies, which are generally located in rainy, cooler areas with poor soils, incentivizing wide-scale conversions of dairies in the Central Valley would not be acceptable. It would force lower milk production, and higher water use per gallon of milk produced. In addition, less milk per acre of land used would occur.

**Conclusion**

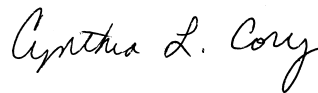
In closing, we recognize the potential of reducing black carbon and methane emissions with incentives while continually evaluating cost-effectiveness and feasibility. We are encouraged to see the Revised Strategy put an emphasis on addressing barriers and research gaps. This work is important to prioritize at the outset. That way we can close the numerous information gaps and provide a complete and realistic understanding of the costs, benefits, impacts and feasibility of all recommended methane emission reduction strategies. Completing these steps first is essential for measuring accurate progress in meeting the state's goals, as well as coordination between state agencies to avoid regulatory duplication.

We appreciate your consideration and the opportunity to comment. Should you have any questions or need anything further from us, please contact either Rachael O'Brien at (916) 443-4887 / [Rachael@agcouncil.org](mailto:Rachael@agcouncil.org) or Cynthia Cory at (916) 446-4647 / [ccory@cfbf.com](mailto:ccory@cfbf.com).

Respectfully,



Emily Rooney  
President  
Agricultural Council of California



Cynthia L. Cory  
Director, Environmental Affairs  
California Farm Bureau Federation

CC: Members of the Air Resources Board  
Ryan McCarthy, Chair's Office  
Emily Wimberger, Chief Economist  
Dave Mehl, Manager, Energy Section  
Marcelle Surovik, Staff Air Pollution Specialist  
Glenn Gallagher, Staff Air Pollution Specialist