April 24, 2013

The Honorable Mary Nichols, Chair
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

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

Dear Chairman Nichols:

The Bioenergy Association of California appreciates the opportunity to comment on the Draft Cap-and-Trade Auction Proceeds Investment Plan released on April 16. The Draft Investment Plan improves upon the Draft Concept Plan released in February in several important respects, particularly the additions of waste diversion, forest management, wastewater biogas, and agricultural management. The Bioenergy Association of California strongly supports these additions and urges the Air Resources Board to increase the proportion of funding for the Natural Resources and Waste Diversion category overall. We also urge the Air Resources Board to include funding focused specifically on the development of low carbon transportation fuels.

The Bioenergy Association of California (BAC) is an association of bioenergy developers, waste producers and managers, wastewater treatment and solid waste agencies, environmental and public health agencies, environmental groups and others working together to promote sustainable bioenergy development. BAC represents all sectors of the bioenergy industry, including forestry, dairy, agriculture, urban organic waste, wastewater treatment, landfills and other organic waste and biogas producers.

As noted in BAC's March 8 comments, bioenergy plays a critical role in reducing greenhouse gas emissions, addressing environmental justice issues and providing other public health, safety and economic benefits. Bioenergy is a renewable resource that reduces greenhouse gas emissions through the avoided use of fossil fuels in transportation or energy production, by producing the lowest carbon transportation fuels available, and avoiding uncontrolled or flaring of methane emissions. In addition, other beneficial uses of biomass contribute to

the goal, outlined under the category of Natural Resources and Waste Diversion, including maintaining carbon sequestration in California's forests, reducing organic waste and producing beneficial byproducts such as organic fertilizers and soil amendments.

More specifically, bioenergy also helps to address environmental justice impacts by reducing fossil fuel combustion in power plants and motor vehicles that may be located in, or pass through, disadvantaged communities. Many dairies, landfills, and wastewater plants are located in or adjoin the most disadvantaged communities in California, as identified in Appendix C of the Draft Plan. Some landfills and wastewater treatment facilities may not directly be located in disadvantaged communities but still serve them through management of their waste. Many of the state's dairies – especially those in the southern San Joaquin Valley – directly adjoin and/or are upwind from disadvantaged communities, contributing odors, particulate matter and other impacts.

For all these reasons and the many co-benefits of bioenergy described in BAC's March 8 comment letter, BAC strongly supports the addition of Natural Resources and Waste Diversion to the Draft Investment Plan. In particular, we support the following investment recommendations described in Appendix B of the Draft Investment Plan:

1) Wastewater-to-Energy (B-9)

BAC supports the inclusion of investments in wastewater-to-energy projects, both to develop biogas cleanup technologies and to help install on-site facilities for direct power production from biogas and conversion of biogas to transportation fuel. ARB staff have recently calculated that transportation fuels from wastewater biogas may be the lowest carbon fuels available, as low as negative 63 grams CO2 equivalent / MJ.[1] Investments in these areas, including investments in pollution control technologies to meet new air quality standards, will help to ensure that wastewater biogas is used to produce these ultra-low carbon fuels and clean, renewable electricity instead of flaring (wasting) this valuable gas supply. Such investments should also be allocated for full scale implementation of proven technology and not just for pilot testing and demonstration projects.

2) Forest Management (B-12)

BAC supports the inclusion of investments in the forestry sector, especially investments in fuel reduction treatments and biomass energy production. The Draft Investment Plan correctly notes that reducing wildfire risks protects public health and safety. Protecting forest ecosystems provides many other co-benefits as well, including improved water quality and supply, wildlife habitat, air quality protection, recreation values and more.

[1] Presentation at BioCycle – need full citation and check grams.

3) Agricultural Management (B-14)

BAC supports the inclusion of Agricultural management, especially the competitive grants for bioenergy production and funding for agricultural practices and fertilizing materials that reduce greenhouse gas emissions, improve water quality and provide other co-benefits. Bioenergy from dairy waste can achieve as much as 6 million metric tons of CO2 equivalent emission reductions in California, and is currently only one of four areas where the Air Board has adopted a carbon offset protocol. In addition, bioenergy from other agricultural waste can produce biochar, an organic soil amendment that sequesters carbon and increases productivity. Furthermore the land application of biosolids should be promoted as an efficient recycling practice that avoids fossil fuel intense commercial fertilizer (0.22 gallons per pound of inorganic nitrogen) and sequesters carbon in the soil.

4) Waste Diversion (B-15)

BAC supports the inclusion of Waste Diversion in the Draft Investment Plan. This is a significant opportunity to reduce emissions, support CalRecycle's 75% diversion goal, and increase biogas production for transportation fuels and electricity generation. In the area of organic waste diversion, we urge the Air Board to require that incentives for organic waste diversion prioritize bioenergy production before being used to produce compost and other products, to maximize the emissions reductions and other co-benefits of this valuable resource. Wastewater agencies should be recognized as significant partners in this effort as many have existing digester capacity to accept hauled in organic wastes, such as grease and food waste to produce additional bioenergy and divert this waste from landfills. We also urge the Air Board to provide incentives for local agencies to switch from green waste to other forms of Alternative Daily Cover, using the green waste to generate energy instead.

Need to Add Low Carbon Fuels to Investment Plan

Finally, we urge the Air Resources Board to include specific investments in the production of low carbon fuels within the Sustainable Communities and Clean Transportation category. Although a number of the investments described above may produce transportation fuels, none of them is specifically targeted to do so and could be used to generate electricity or other end products instead. The recommended investment in low-carbon freight and zero-emission vehicles (B-6) focuses on equipment and fueling infrastructure, and does not include low-carbon fuels at all.

Investments in low carbon fuels are more important than ever now that the oil companies are withdrawing their support for biofuels development.[2]
The AB 32 Scoping Plan attributes 15 million metric tons of emissions reductions to low carbon fuels and 31.7 million metric tons of reductions to the Pavley

[2] See, eg, *San Francisco Chronicle,* "Oil Companies break promises on biofuels," , April 22, 2013, page D1.

standards for light duty vehicle emissions. Together, these two strategies account for more than a quarter of total emission reductions in the AB 32 Scoping Plan and will require significant investments in the development of low carbon fuels.

Including a specific focus on production of low carbon fuels would help spur the transition to those fuels, providing enormous greenhouse gas reductions, benefits to environmental justice communities and other co-benefits from reduced diesel and other pollution. Since the transportation sector is the biggest source of greenhouse gas emissions in California, and biofuels are very low carbon or carbon negative, targeting some investment in the development of those fuels would be an important addition to the Draft Investment Plan.

Thank you for the opportunity to comment on the Draft Investment Plan and the many helpful additions to earlier versions.

Sincerely,

Julia A. Levin
Executive Director