



November 12, 2015

The Honorable Edmund G. Brown, Governor
California State Capitol
Sacramento, CA 95814

**Re: Draft Investment Plan for Cap-and-Trade Auction Proceeds for
Fiscal Years 2016-17 through 2018-19**

Dear Governor Brown:

I am writing on behalf of the Bioenergy Association of California (BAC) to thank you for your extraordinary leadership on climate change, including the state's Cap and Trade program. BAC strongly supports the goals of the Second Investment Plan, especially the increased focus on Short-Lived Climate Pollutants and the emphasis on both disadvantaged and rural communities. We offer the recommendations below to maximize the benefits of Cap and Trade investments in bioenergy, including renewable energy and fuels production, reduction of Short-Lived Climate Pollutants and air pollution, landfill diversion, and wildfire reduction.

The Bioenergy Association of California (BAC) represents more than 60 private companies, public agencies, local governments and others working to convert organic waste to energy. BAC's public sector members include wastewater and solid waste agencies, air pollution and environmental protection agencies, and more. BAC's private sector members include energy and waste management companies, technology providers, investors, construction and design firms, waste haulers, and others that are converting organic waste to energy. BAC members work in the solid waste, wastewater, dairy, forestry and agricultural sectors to convert organic waste to renewable electricity, low carbon fuels, combined heat and power, and pipeline biogas.

BAC recommends the following additions and clarifications to the Draft Investment Plan:

1. Include a Specific Allocation for Biogas and Near Zero-Emission Natural Gas Trucks in the Low Carbon Transportation Fund.

BAC strongly supports the inclusion of advanced biofuels and incentives for in-State

production of low carbon intensity fuels in the Draft Investment Plan.¹ Biogas produced from diverted organic waste provides the lowest carbon transportation of any kind and, when used in Class 7 and 8 trucks, can provide the greatest pollution reductions of any investment in the transportation sector. Heavy duty vehicles that run on biogas can reduce greenhouse gas emissions by more than 100 percent (since the fuel is carbon negative). They can reduce NOx emissions by more than 90 percent below the current standard for heavy duty vehicles. By reducing toxic air contaminants and NOx emissions, biogas used in heavy duty vehicles can also provide immediate air quality benefits in disadvantaged communities that suffer from diesel pollution from heavy duty vehicles. No other fuel can provide as significant and immediate benefits as biogas used in heavy duty vehicles.

Given the greenhouse gas reductions and other benefits, BAC urges the State to allocate at least one-quarter to one-third of the Low Carbon Transportation fund to biogas production and deployment in heavy duty natural gas trucks. The Draft Investment Plan mentions biofuels in Figures 7 and 10, but does not include biofuels in the other Figures and Tables. The Investment Plan should explicitly allocate funding to biogas development and deployment, including funding for the near-zero emission natural gas trucks that run on biogas, as a part of the Low Carbon Transportation fund.

2. Include a Specific Allocation for Pipeline Biogas Production and Distribution.

In the Draft Strategy to Reduce Short-Lived Climate Pollutants, the Air Resources Board acknowledges that pipeline access is a costly barrier to in-state biogas development and recommends additional incentives to offset the costs of pipeline biogas so that it can be put to its highest and best use. The California Public Utilities Commission has adopted an incentive program to help pay the costs of pipeline interconnection, but did not allocate funding to help pay the costs of biogas cleanup to meet pipeline injection standards. As a result, no new pipeline biogas projects have been developed since California adopted pipeline biogas standards intended to “promote” and “facilitate” pipeline biogas.²

BAC urges the State, therefore, to allocate \$30 to \$40 million in cap-and-trade funding to help pay the costs of biogas cleanup for pipeline injection. This will help to incentivize methane capture from dairies and biogas production from diverted organic waste, wastewater treatment facilities and other sources.

3. Include Specific Allocation for Forest Biomass to Energy Facilities in High Wildfire Hazard Zones.

BAC strongly supports the inclusion of funding for “new, clean biomass facilities and

¹ *Cap-and-Trade Auction Proceeds Second Investment Plan Draft* (“Second Investment Plan Draft”) Figures 7 and 12.

² AB 1900 (Gatto, 2012).

biomass conversion technologies for renewable energy generation.”³ Converting forest fuel to energy reduces black carbon from wildfire and greenhouse gas emissions from fossil fuels use. Both the Draft Strategy to Reduce SLCP’s and the Governor’s Emergency Order on forests and wildfire underscore the importance of forest fuel removal in high wildfire hazard zones and the benefits of converting that fuel to energy. Increasing forest biomass facilities in high wildfire hazard zones will also protect rural communities and provide jobs and economic benefits in those communities, both goals of the Draft Investment Plan.

For all these reasons, BAC supports the allocation of funding to new, clean biomass facilities that convert forest fuel from high wildfire hazard zones to renewable power, low carbon fuels, and combined heat and power.

4. Funding for Organic Waste Diversion Should be Technology Neutral and Focused on the Highest and Best Use of the Waste.

BAC strongly supports the inclusion of funding for organic waste diversion, but urges the State to make the allocation technology neutral and focused on the highest and best use of diverted organic waste, rather than limiting it to a single technology. The solid waste sector offers an enormous opportunity to immediately reduce methane and other greenhouse gas emissions, produce organic soil amendments and other beneficial products. Much of the organic waste that is currently landfilled, however, is not suitable for anaerobic digestion and funding intended to convert organic waste to energy should not be limited to the waste that can be converted through anaerobic digestion. Instead, funding for organic waste diversion should focus on achieving the maximum greenhouse gas reductions and other benefits.

BAC urges the State to allocate funding for organic waste to energy by any eligible conversion technology rather than limiting funding to anaerobic digestion. Similarly, funding for the byproducts of bioenergy production should not be limited to anaerobic digestion.⁴ Gasification of organic waste, which is the preferred conversion technology for cellulosic waste such as forest and wood waste, also produces highly beneficial byproducts such as biochar that should be included in the Investment Plan.

5. Funding for Livestock Waste to Energy Projects Should be Technology Neutral and Support Sustainable Industry Growth.

BAC strongly supports the inclusion of funding for livestock waste to energy projects. As with diverted organic waste, though, funding for livestock waste to energy projects should not be limited to a single technology. While anaerobic digestion may be the most common technology used in the dairy waste sector, it is not the only technology used to convert livestock waste to energy. Funding should be based on maximizing

³ Second Investment Plan Draft, Figure 14, page 39.

⁴ See, for example, the limitation to anaerobic digestion in Figure 16 under the headings “Organic Waste” and “Waste-to-Fuel”

greenhouse gas reductions and other performance criteria, rather than a single technology.

BAC also urges the State to allocate significant funding to livestock waste to energy projects and to do so in a manner that will produce sustained and sustainable growth in the sector. Helping to build a sustainable livestock waste to energy industry will require ramping up the funding over a period of years and incentivizing a variety of project types, sizes, technologies and biogas end uses, including use as a transportation fuel and for pipeline biogas.

BAC appreciates the opportunity to comment on the Draft Investment Plan and strongly supports inclusion of funding for bioenergy development and distribution to provide significant climate and other benefits. BAC urges the State to make the clarifications and changes above, however, to ensure that investments maximize greenhouse gas reductions and other benefits.

Sincerely,

A handwritten signature in cursive script that reads "Julia A. Levin".

Julia A. Levin
Executive Director