

## April 24, 2013

Mary Nichols, Chairman California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Re: Comments on the Cap-and-Trade Auction Proceeds Fiscal Years 2013-2014 through 2015-2016 Strong Support for Waste Diversion Investment and Carbon Negative Fuel Investment

Dear Chairman Nichols:

The California Compost Coalition (CCC) is a statewide organization representing operators of permitted facilities which are involved in the processing and composting of green and food waste materials throughout California. On behalf of these companies, we respectfully submit the following comments on the Draft AB 32 Cap-and-Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 Through 2015-16 in strong support of investment that will enhance the diversion of organic waste to bioenergy and composting, and enable the development of carbon negative heavy-duty collection fleets.

CCC appreciates the opportunity to submit comments; we are grateful for the Administration's leadership on climate change issues and look forward to working together to help achieve the goals of AB 32. CCC strongly supports the Air Resources Board efforts to invest cap and trade proceeds into Natural Resources and Waste Diversion programs, particularly the diversion of organic waste to composting and bioenergy, including anaerobic digestion that produces a carbon negative fuel. Anaerobic digestion and composting are at the nexus of the AB 32 Scoping Plan adopted measures where organic wastes are diverted from landfilling to generate renewable energy and carbon negative fuel, resulting in quality compost that is returned to sustainable agriculture.

The compost industry, in partnership with local government, has been instrumental in our state's efforts to attain the recycling mandate of 50% waste diversion from landfills, required by the California Integrated Waste Management Act of 1989 (AB 939), and will remain critical

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## Members

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Website: www.californiacompostcoalition.org to the attainment of future sustainability goals of 75% recycling and the implementation of AB 32. Our members fully support the AB 939 statutory hierarchy of reducing, recycling, composting, transformation, and safe landfilling. We have been supportive and engaged throughout the AB 32 Scoping Plan development and implementation process.

Biomethane from anaerobic digesters provides renewable electricity, carbon negative fuels, combined heat and power, and renewable natural gas. It significantly reduces methane emissions from landfills and converts those emissions into clean energy and fuel. Biomethane development is important to reduce environmental justice impacts by replacing diesel and other fossil fuels with significantly cleaner, low-carbon fuels. Given the many benefits of biomethane and compost use, we urge the Air Board to invest cap and trade proceeds in anaerobic digestion and compost facility development.

At the nexus of AB 32: Anaerobic digestion and composting are at the nexus of the AB 32 Scoping Plan adopted measures where commercial organic wastes are diverted from landfilling to generate renewable energy and negative carbon fuel, resulting in quality compost that is returned to sustainable agriculture. The investment of cap-and-trade auction proceeds into organic waste diversion efforts will deliver co-benefits in many areas:

- <u>Renewable Energy:</u> The increased use of renewable energy, from 20% in 2010 to 33% by 2020, is mandated to achieve 21.3 million metric tons of CO<sub>2</sub> equivalent reductions by 2020. Anaerobic digestion (AD) facilities create biomethane where typically one-third of the biomethane is converted to renewable energy to power the AD facility, with the remainder of biomethane converted to a carbon negative compressed natural gas (CNG) fuel.
- Low Carbon Fuel Standard: The Low Carbon Fuel Standard calls for a 10% reduction of fuel carbon intensity by 2020, where renewable CNG from an anaerobic digestion facility (using dry fermentation of food waste with green waste) has been determined by the California Air Resources Board to be minus 15 g CO2e/MJ, or carbon negative, as shown in the figure below. CalRecycle, in the recently adopted Program EIR for AD facilities, has projected the need to develop 70 AD facilities processing 50,000 tons per year, or 210 AD facilities of 20,000 tons per year to meet the AB 32 Scoping Plan requirements.
- <u>Mandated Commercial Recycling:</u> Five million metric tons of CO<sub>2</sub> equivalent reductions are required by 2020, resulting from diverting about 1.5 million tons of waste from landfilling. Commercial food waste diversion will be phased in with the development of both food and green waste composting and AD facilities, to assist jurisdictions in complying with the mandated commercial recycling regulations that became effective on July 1, 2012. CalRecycle has adopted Strategic Directive No. 6 which targets 50% of the food waste to be diverted by 2020.
- <u>Anaerobic Digestion (AD)</u>: AD projects are expected to provide two million metric tons of CO<sub>2</sub> equivalent reductions by 2020; where, as previously stated, up to 210 AD Facilities at 20,000 tons per year will be needed by 2020. Anaerobic digestion represents a triple bottom line strategy for the AB 32 Scoping Plan adopted measures where

commercial organic wastes are diverted from landfilling to generate renewable energy and carbon negative fuel, avoiding landfill methane emissions, and producing quality compost for sustainable agriculture.

Compost Use: The use of compost is expected to reduce 2 million metric tons of CO2 • equivalent emissions by 2020. With air and water regulations pushing compost in-vessel, state-of-the-art food waste compost facilities are employing a covered aerated static pile (CASP) system- which is considered best available control technology (BACT) by air districts - where compost is covered and air is forced through the cover for aeration, cleansing the emissions with a biofilter prior to being released, significantly reducing volatile organic compounds (VOC) emissions (by over 80%), and minimizing odors. AD facilities produce a solid digestate after biomethane is recovered, which is typically 70% of the incoming food waste and green waste. This digestate can be used as a compost feedstock that is processed into a soil amendment for use in sustainable agriculture. Case studies have shown that compost use by farmers can reduce water use by up to 30% and significantly reduce the use of fertilizer. The decreased pumping of water and reduced fertilizer usage (minimizing nitrogen releases to both air and water) are key practices for farmers to reduce greenhouse gases and promote sustainable agriculture. The use of compost reduces the use of pesticides and petroleum-based fertilizers which can decrease the environmental impacts of agricultural production in disadvantaged communities.

Given the many benefits of organic waste landfill diversion, we continue to urge the Air Board to invest cap and trade proceeds in anaerobic digestion and compost facility development.

Should you have any questions, please contact me at (916) 739-1200.

Sincerely,

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