



Air Resources Regulatory Experts

March 8, 2013



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

Re: Allocation of Cap and Trade Proceeds for the Diversion of Organic Waste to Bioenergy and Composting to operate a Carbon Negative Heavy-Duty Collection Fleet

Dear Chairman Nichols:

CleanFleets.net serves over 50 companies involved in the collection and processing of organic materials from municipal solid waste. Our clients operate a fleet of thousands of heavy-duty collection vehicles, and are transitioning from diesel to lower carbon compressed natural gas (CNG) fuel, with plans to make our own carbon negative CNG fuel someday soon with the organic waste we collect. CRRC submits these comments on the Draft Concept Paper for the Cap-and-Trade Auction Proceeds Investment Plan. 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. We urge the Air Resources Board to invest cap and trade proceeds in the diversion of organic waste to bioenergy and composting, which is critical to provide many of the greenhouse gas reductions called for in the AB 32 Scoping Plan and to alleviate environmental justice impacts.

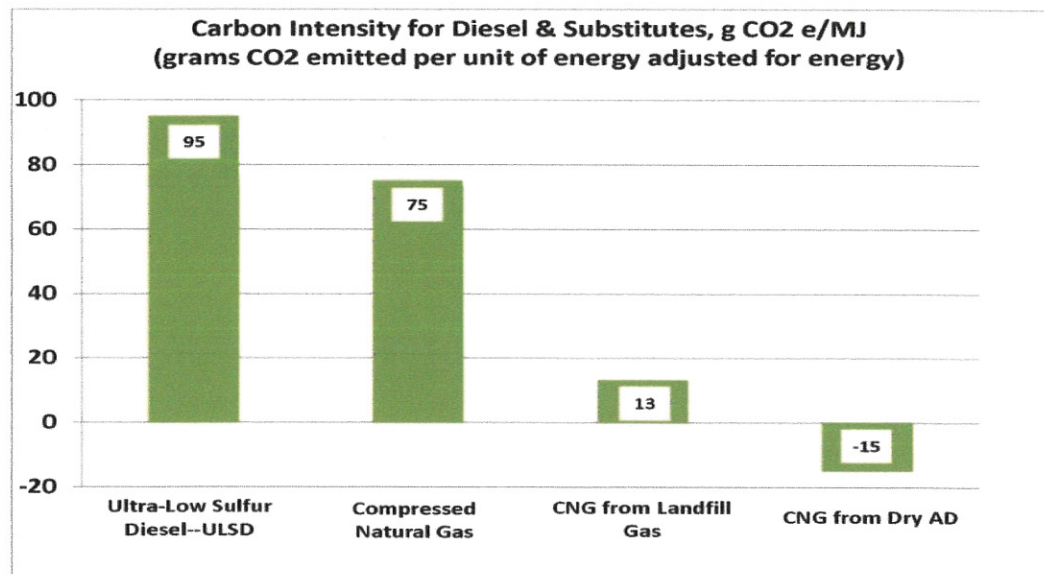
Our members, in partnership with local government, has been instrumental in our state's efforts to attain the recycling mandate of 50% waste diversion from landfills, required by the California Integrated Waste Management Act of 1989 (AB 939), and will remain critical to the attainment of future sustainable goals of 75% recycling and the implementation of AB 32. The Clean Fleet Coalitions fully supports the AB 939 statutory hierarchy of reducing, recycling, composting, transformation, and safe landfilling. CRRC has been supportive and engaged throughout the AB 32 Scoping Plan development and implementation process. 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, and where quality organic compost is produced and returned to sustainable agriculture.

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 carbon negative fuels. Biomethane development is important to reduce environmental

justice impacts by replacing diesel and other fossil fuels with significantly cleaner, lower carbon fuels. Given the many benefits of biomethane, we urge the Air Board to invest cap and trade proceeds in anaerobic digestion. Specifically, we recommend investments in the following:

- **Reauthorization of AB 118** to fund the California Energy Commission grant process to encourage the production and use of carbon negative fuels from organic waste, and the funding of heavy-duty fleet transition from diesel to CNG.
- **Biomethane Investment: Food Waste to Anaerobic Digestion Technology Incentive Payment** where the facility operator would receive a per ton incentive payment to operate an anaerobic digestion facility to accept food waste and green waste that can produce a carbon negative fuel to be used in the heavy-duty fleet that collects the organic waste.

Operating a Carbon Negative Fleet: There are over 15,000 refuse and recycling collection vehicles in California, with over 2,000 collection vehicles running on CNG, or about 13% of the fleet. The South Coast Air Quality Management District (SCAQMD) projects that there will be 4,500 CNG vehicles by 2020. The refuse and recycling collection fleet is rapidly transitioning to CNG that 50% of the fleet will be on CNG within the decade. The Low Carbon Fuel Standard calls for a 10% reduction of the fuel 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.

Renewable CNG Derived From Anaerobic Digestion Is Carbon Negative

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. The statewide commercialization of AD facilities in this manner could yield 23.5 million diesel equivalent gallons per year, based upon feedstock consisting of a blend of 2.5 million tons per year of food waste with 1.7 million tons of green waste, or enough fuel for 1,800 CNG-fueled refuse and recycling vehicles. With over 6 million tons of food waste disposed of in 2008, the amount of renewable CNG could double to nearly 50 million diesel equivalent gallons per year, or enough for 3,500 vehicles. The organics collection industry could operate a carbon negative fleet with the deployment of AD technology where the CNG vehicle that collects the organic waste runs on the CNG generated from the organic waste it collects.

Given the many benefits of biomethane in the production of carbon negative CNG, we urge the Air Board to invest cap and trade proceeds in anaerobic digestion and compost facility development. Specifically, CRRC has recommended investments in the following:

- ***Reauthorization of AB 118***
- ***Biomethane Investment: Food Waste to Anaerobic Digestion Technology Incentive Payment***

Should you have any questions, please contact me at (916) 520-6040 Ext 104.

Sincerely,



Sean Edgar
Director

cc: Cliff Rechtschaffen, Senior Advisor to Governor Brown
Ana Matosantos, Director, Department of Finance
Matt Rodriguez, Secretary, California Environmental Protection Agency
Karen Ross, Secretary, Department Food and Agriculture