



October 30, 2015

The Honorable Mary Nichols, Chair  
The Honorable Richard Corey, Executive Officer  
California Air Resources Board  
Sacramento, CA 95814

Re: Comments on the Draft Short-Lived Climate Pollutant Reduction Strategy (September 2015)

Dear Chair Nichols and Mr. Corey:

On behalf of Harvest Power California, LLC ("**Harvest Power**"), I write to express strong support for the *Short-Lived Climate Pollutant Reduction Strategy ("SLCP")* Draft. The Strategy Draft provides an excellent summary of the science and the urgency of reducing SLCPs and offers several appropriate strategies on reducing SLCPs. While supporting what has been proposed, we also identify several gaps where additional commitments should be made.

Our comments are based on the experience and expertise of the family of companies under Harvest Power, Inc., which include some of the largest anaerobic digestion facilities in North America, as well as some of the largest food scrap and yard debris composting facilities. Our affiliated companies are successfully operating three digesters with a combined annual generating capacity of 65,000 megawatt-hours. We manage more than two million tons of organic material annually, including pre- and post-consumer wastes, through a network of 30 anaerobic digester and compost operating sites in North America. We are also very familiar with California's requirements for organic composting facilities. Our current operations in California include two large compost facilities in addition to several anaerobic digester projects and new composting facilities now under development. Harvest Power, Inc.'s leadership in the industry has given us a deep understanding of the complexities of creating, sustaining and utilizing feedstocks derived from pre- and post-consumer organic wastes; developing, permitting and financing bioenergy facilities; and building, operating and maintaining those facilities.

Harvest Power is a member of the Bioenergy Association of California ("**BAC**"), and generally supports BAC's comments. We provide our additional comments to address specific concerns, as well as to provide additional context based on our extensive experience with the diversion and recycling of organic feedstocks, both for composting and for use in bioenergy facilities that to generate reliable power.

**1. The goal of effectively eliminating landfill disposal of organics by 2025 must be met; regulatory changes and sufficient funding for infrastructure and R&D will be required.**

Notably, the very first broad policy recommendation in the Strategy Draft is "Put Organic Waste to Beneficial Use" (p. 11). This top priority is both appropriate and necessary, since, as the Strategy Draft observes, "California's organic waste streams are responsible for half of the State's methane emissions and represent a valuable energy and nutrient resource." (p. 11) The Strategy Draft also

correctly identifies that the first step towards beneficial use of organic wastes is to keep them from being disposed in the first place:

The State has already established its intent to phase out the disposal of organics from landfills. Existing law sets a goal of diverting 75 percent of solid waste from landfills by 2020 and provides other measures and requirements to support diverting organics from landfills. California will build on that intent and progress, with market and institutional support, and effectively eliminate the disposal of organics in landfills by 2025, by diverting at least 75 percent of organic materials from landfills by 2020, and 90 percent by 2025 (an 80 percent reduction over current disposal levels). (p. 49)

However, diversion of organics from landfill disposal requires more than a government declaration of “Just Say No.” Sufficient infrastructure—billions of dollars’ worth<sup>1</sup>--must be built. Private sector developers and investors are prepared to invest and build a significant portion of that infrastructure. Their willingness to commit to such large scale investment will depend on whether there are supplies of organic material, at assured prices and volumes. Without such assurances, project finance capital will typically not be available. For example, at six (6) million tons of food waste, assuming 65,000 tons per year of processing capacity and 3MW sized output per facility, the State requires approximately 100 anaerobic digestion facilities (\$2.7B of infrastructure at \$30M per facility). In addition, similar composting capacity is required to handle the digestate and additional green materials to create a product for healthy soils.

Therefore a strong law – not just an aspiration, but a requirement—that organic wastes may not be disposed in landfills as of 2025 is necessary to assure would-be project lenders and developers, “If you build the infrastructure, the material will come.” An actual ban on landfilling organics is the correct measure for the investment in anaerobic digestion and composting facilities to beneficially use the organic materials. CalRecycle should be designated to lead efforts to design an appropriate phase-in of AB 1826 (Chesbro, Chapter 727, Statutes of 2014) and enforcement mechanisms.

While a strong organics waste ban is a necessary condition, it remains to be seen whether it will be sufficient. Further measures may be required to assure adequacy of supply. For example, communities that adopt measures such as flow control or franchising agreements are able to aggregate a sufficient quantity of material such that they can provide long-term volume commitments at predictable prices. Some California communities have already started down this path; others should be mandated to follow suit.

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<sup>1</sup> The Strategy Paper predicts “Building infrastructure to better manage organic waste streams could lead to billions of dollars of investment and thousands of jobs in the State,” (p. 11) citing two sources that estimate costs only for the dairy industry to address manure. The equipment required to process organic wastes diverted from the Municipal Solid Waste stream (principally, food scraps and fats, oils and grease) is typically more elaborate and expensive than that required for manure processing. Both the infrastructure investment and job-creation benefits will therefore be even greater than suggested by the Strategy Paper.

We do not believe, however, that the private sector can finance this build-out on its own. While the potential **public** benefits of organic waste diversion as outlined the Draft Strategy are enormous, they will not be realized just as a happy by-product of the private sector pursuing profits. Costs and risks are still high relative to potential returns. Public sector investment will therefore be needed. This can take various forms:

- (a) Grants are especially helpful in the development stages of projects to supplement high risk (high cost) capital. Ultimately, though, grants don't ensure the long-term viability of a particular project if all the other fundamentals (such as feedstock security) are in place. Nor do grants to a few selected commercial (as opposed to demonstration) projects do much to ensure that the industry as a whole scales.
- (b) Low interest or forgivable loans would allow the cash flows to come back to the equity holders rather than high interest debt options that sweep the funds from the projects. If projects meet certain milestones then the debt could be forgivable as it forces people to perform.
- (c) Property tax, sales tax and corporate tax exemptions would continue to be helpful.

## **2. Harvest strongly supports the strategies for speeding both electricity and gas pipeline interconnect, and urges additional steps.**

Beneficial reuse of organics materials to produce energy will ultimately be frustrated if the current system of high cost and high unpredictability prevails for both electricity and gas pipeline grid interconnects.

We agree with the Strategy Paper's basic finding: "Interconnecting distributed sources of renewable energy onto the electricity grid, or biogas into pipelines, remains an unnecessarily long and costly process in many cases." (p. 12).

We agree with the Strategy Paper's observation that the Low Carbon Fuel Standard (LCFS) could offer major support for biogas development (pp.12-13), though not just at dairies. One of the most compelling LCFS-eligible applications of biomethane is to fuel CNG-ready vehicles, especially where the biomethane was produced at or near the fueling site from a food waste or waste water treatment anaerobic digester. The State could offer incentives to municipalities who adopt such closed loop systems. The LCFS program could be improved by allowing speedier approval of new pathways and by extending the program beyond 5 years.

We observe that the cost of pipeline interconnection is typically much high for biogas producers in California than elsewhere. Although the CPUC partially addressed this question in a Decision<sup>2</sup> earlier this year, the CPUC could either relax some of its costly interconnection requirements or otherwise provide support by allowing greater cost allocation to the utility.

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<sup>2</sup> The California Public Utilities Commission Decision ("D.") 15-06-029, Regarding the Costs of Compliance with D.14-01-034 and Adoption of Biomethane Promotion Policies and Program.



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Finally, certain regulatory changes and incentives will be needed; both to ensure a steady flow of feedstock and to enable a rapid build-out of the required infrastructure. There are number of funding sources already in place. For example, Cap and Trade, AB118 and tax incentives, that can be directed toward rapid deployment of facilities and operations statewide. In addition, legislative initiatives are in process that can also support these initiatives. Overall, the following are examples of how to direct these programs and funds in the short term. Additional incentives may be needed to increase the number of facilities in future years. In order to secure a long-term viable market for the 100 new anaerobic digestion and associated composting facilities, additional incentives may be required. The following is an initial list of implementable programs.

- Allocate funds to municipalities and haulers for collection equipment (trucks, bins, etc.) if they source bioCNG rather than CNG from non-bio sources.
- Subsidize tip fees based on inbound organics if an auditable trail of the materials was available similar to doing the LCFS audits to ensure compliance.
- Provide and increase funds to assist in the clean-up and interconnection costs for pipeline injection of biomethane.
- Enforce AB1826 goals for commercial organics recycling.
- Maintain tax incentives for the purchase of equipment to operate anaerobic digestion and composting facilities.
- Continue to encourage regulatory agencies and municipalities to coordinate efforts related to siting, permitting, and operating facilities.

### **3. The Strategy Must Recommend Ways to Increase Coordination Across Agencies.**

We appreciate and applaud the Board for identifying strategies that stretch beyond its own scope and authority to suggest actions that must be led by other agencies. We urge the Board to go a step further, and to identify explicitly the lead agencies for each measure in the SLCP Strategy and to identify clearly when measures will require inter-agency coordination. Many of the most promising measures with the greatest co-benefits will require inter-agency coordination, but the Draft Strategy does not identify which agencies must participate in different actions, help to remove critical barriers, coordinate funding or provide other inter-agency coordination. Including this clear guidance in the SLCP Strategy will not only meet the requirement of SB 605 to increase inter-agency coordination, but will make implementation of the Strategy more effective.

Harvest appreciates the opportunity to comment on the Draft Strategy and looks forward to working with you to ensure that the SLCP Strategy is as effective and beneficial as possible.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Ligocki".

Kathleen Ligocki  
CEO