



June 15, 2007

Winston Hickox, Chair  
Market Advisory Committee  
California Air Resources Board  
c/o California Environmental Protection Agency  
1001 I Street  
P.O. Box 2815  
Sacramento, CA 95812

**Re: Comments on Market Advisory Committee's "Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California"**

Dear Chairman Hickox:

On behalf of Covanta Energy Corporation ("Covanta"), I am pleased to offer the following comments on the greenhouse gas ("GHG") "cap-and-trade" program proposed by the Market Advisory Committee ("MAC") of the California Air Resources Board ("CARB") in the above-referenced June 1, 2007 draft report.

Covanta is a world premier operator of over 30 Waste-to-Energy ("WTE") facilities, including the Stanislaus County Resource Recovery Facility in Crows Landing, California -- a member of the prestigious U.S. Environmental Protection Agency ("EPA") "Performance Track" program. Our modern WTE facilities turn 15 million tons of waste into nearly 8 million megawatt hours of clean renewable electricity each year and create 10 billion pounds of steam that are sold to a variety of industries. Using U.S. nationwide averages, WTE produces 520 kWh of electricity per ton of waste, while reducing GHG emissions by up to one ton of CO<sub>2</sub> per ton of waste (as determined using EPA methodologies). Our Stanislaus facility is classified as an "eligible renewable energy resource" under the California Renewables Portfolio Standard ("RPS") (Public Utilities Code sec. 399.12).

Covanta's renewable energy portfolio also includes wood-burning (biomass), landfill gas-to-energy (biogas) and small hydroelectric power projects, including four biomass and four biogas projects in California. Like Stanislaus, our biomass and biogas projects are RPS-eligible; in addition, they are classified as "in-state renewable electricity generation facilit[ies]" (Public Resources Code sec. 25751). Covanta's 82 MW portfolio of WTE, biomass, and biogas renewable energy sources in California is helping the State to achieve its goal of having at least 20% of retail electric sales come from renewable energy by December 31, 2010.

As a leader in the renewable energy industry, a Climate Action Leader with the California Climate Action Registry, and a member of the Global Roundtable on Climate Change, Covanta is concerned that the MAC's draft GHG cap-and-trade program may inadvertently capture renewable energy facilities under the cap, while at the same time, excluding landfill disposal facilities and potentially allowing the latter to create program "offsets." Such a decision could result in the perverse outcome of *increasing* the size and/or number of GHG-emitting landfills in

California and *discouraging* investment in renewable energy facilities that would divert waste from landfills and use it to generate clean energy that displaces fossil GHG and landfill methane emissions. Such an outcome would be contrary to the goals of AB 32, ignore sound carbon life-cycle analysis, and contrary to the determined policies of the EPA, the European Union and its member states, and the United Nations Framework Convention on Climate Change.

In developing and implementing a plan under AB 32, CARB has been tasked to consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment and health. As a compliant renewable energy source according to the CEC, Covanta is a GHG pollution-preventer. Covanta meets the standards set forth to achieve this recognition: our facilities reduce other air pollutants, do not use fossil or imported fuels to generate electricity, and provide clean, sustainable energy to California.

A GHG emission source under AB 32 is any source whose emissions are at a "level of significance" as determined by CARB and whose participation in the program will enable the Board to "effectively reduce" GHG emissions. By that definition, Covanta's WTE and other renewable energy facilities should not be counted as GHG emission sources. Based strictly on stack emissions alone, Covanta is not a significant producer of GHG and in fact, is a net reducer by means of offsetting methane emissions and fossil fuel combustion. Instead of being included in the cap-and-trade program, Covanta's facilities should be classified as a source of offset credits to account for the net reduction of GHG achieved by our WTE, biomass, and landfill gas generation processes.

According to Appendix C of the MAC report, waste combustion (mainly WTE) in California generates minimal quantities of GHG (100,000 tons); this is less than 0.02% of the total state GHG emissions of 494,300,000 tons, and 0.09% of the total GHG emissions from the electricity sector. Clearly, GHG emissions from waste combustion are insignificant – while the benefits are anything but insignificant. WTE is a renewable energy source, reduces reliance on fossil fuels, provides environmentally safe waste-disposal, and provides substantial local benefits. WTE, together with other renewable energy generation including biomass and biogas, thus should not be placed under any "cap." Covanta's facilities are "effective reducers" of GHG and should be recognized as such in CARB's implementation of AB 32.

It is important to recognize that if waste is not processed at WTE facilities, it will be directed to landfills, where it will decay and produce hazardous methane – a GHG that is 21 times more potent than the minimal quantities of CO<sub>2</sub> produced in the WTE process. Even if waste is buried in ultra-modern landfills with methane control technology, methane will still escape and be emitted to the atmosphere.<sup>1</sup> Although biogas facilities can generate electricity using captured landfill methane, the fact remains that landfill gas capture produces only 20 kWh of electricity per ton of waste as compared to the 520 kWh of electricity per ton of waste produced by WTE. Clearly, the energy value of waste placed in landfills is not fully realized. Landfilling waste is the equivalent of burying renewable fuel – and to replace those megawatts, more of California's

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<sup>1</sup> With respect to landfill emissions, the MAC Report at p. 25 states that "[m]ethane emissions vary daily across the entire surface area of a landfill and currently no technologies exist to make an accurate estimate of total emissions through the soil."

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energy needs will need to be supplied by fossil generation. That is not what the Legislature intended when it enacted AB 32 and is inconsistent with the State's target of at least 20% of retail electric sales from renewable energy by December 31, 2010..

In conclusion, Covanta urges the MAC to exclude from its consideration of a cap-and-trade program those energy facilities that are classified as "eligible renewable energy resource[s]" under the RPS (Public Utilities Code sec. 399.12) and/or classified as "in-state renewable electricity generation facilit[ies]" (Public Resources Code sec. 25751). Further, we strongly urge the MAC to recommend that renewable sources in California be positioned to offer GHG credits to other GHG polluters who are not able to stay below their cap. Offering credits from renewable sources, including WTE facilities, is consistent with the Kyoto protocol, will enable consistency with and linkage to the international markets, and will contribute to addressing the global GHG problem.

Covanta appreciates this opportunity to provide comments on the MAC's draft cap-and-trade program recommendations. If you have any questions with respect to the information included in this letter, please feel free to contact to me at (925) 284-2006.

Sincerely yours,



Jeffrey L. Hahn, PE, BCEE, QEP  
Director, Environmental

cc: Stanislaus County Legislative Delegation  
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Honorable Doreen D'Adamo  
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