



**BioEnergy Producers Association**  
*Clean Technology for Renewable Energy*

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**CAW Misrepresents Renewable Energy Bill (AB 222)**

Californians Against Waste (CAW) was formed in 1977 to pursue resource conservation through the promotion of waste reduction and recycling.

Although it has done a great deal of good in this field, CAW has opposed legislation to enable the beneficial use of the 40 million tons of post-recycled municipal waste that are being placed in California's landfills each year. They dismiss the simultaneous destruction and recovery of energy from post-recycled municipal wastes as being beyond the traditional hierarchy of source reduction, recycling, and composting.

AB 222 (Adams & Ma), which passed the Assembly by a vote of 54-13 after 11-0 bipartisan approval in the Utilities & Commerce Committee, will make available to local governments a wide range of clean 21<sup>st</sup> century technologies for the production of renewable energy. In opposing this bill—CAW has taken the liberty of misrepresenting its objectives and impact.

The following myths are taken directly from statements to be found on their website, [www.cawrecycles.org](http://www.cawrecycles.org):

*CAW Myth #1: The bill changes the law to allow waste materials processed at biorefineries to count as recycling under AB 939.*

**FACT:** Thermal conversion technologies qualified as waste diversion before AB 222 ever was introduced. All references to landfill diversion or so-called "diversion credits" have been removed from AB 222, because the entire concept under which a local jurisdiction is required to calculate and report its landfill waste diversion was revised under SB 1016, passed by the legislature in 2008. What AB 222 does is this: It requires that, to the maximum extent feasible, all recyclable materials must first be removed from the waste stream—before the post-recycled residual (destined for a landfill) is used for the production of liquid and/or electric energy, or other biobased products. This ironclad provision protects the current recycling infrastructure in perpetuity from any threat of competition from biorefineries.

*CAW Myth #2: The bill would create a mandate for biorefineries, and thereby undermine California's waste reduction and recycling efforts.*

**FACT:** AB 222 creates no new mandates. Since biorefineries that utilize urban waste feedstocks will only be allowed to process the post-recycled portion of the stream, which would otherwise be destined for landfills, they will not undermine existing recycling efforts. On the contrary, independent studies conducted by the California Integrated Waste Management Board have concluded that the pre-processing of incoming residual wastes by a biorefinery will actually result in a 7-13% net increase in the recovery of glass, metal, and plastics.

*CAW Myth #3: Biorefineries “destroy” resources rather than “recycle” them.*

**FACT:** Biorefineries represent the ultimate in recycling. What they recycle is carbon, the building block for a wide range of products, including advanced biofuels and green power. The materials targeted for conversion are residual and organic wastes, which are lost to society once placed in landfills. By converting into marketable products materials that will otherwise rest for eternity in landfills or decompose into methane gas—biorefineries create rather than destroy resources. And by producing products that displace the need for fossil fuels, biorefineries help to preserve scarce resources as well. By processing post-recycled wastes before they are placed in a landfill, biorefineries recover five times as much energy as landfill biogas projects.

Moreover, there has never been regulatory oversight--any systematic governmental or industry tracking--of the use or reuse of the recovered materials, which are shipped from California to Asia, India and elsewhere for “recycling.” Evidence indicates that a meaningful percentage of these materials are not being recycled, but instead are being combusted for local power generation or district heating, or being used as fuel for cement kilns. There ever been a life-cycle study of the global environmental impacts of these practices.

*CAW Myth #4: The bill would eliminate existing environmental protections in statute that prohibit a solid waste conversion facility from emitting air and water pollution.*

**FACT:** Section 25741 of the bill clearly states that biorefineries, as defined, must meet or exceed all standards set by the State Air Resources Board, local air pollution control districts, or local air quality management districts regarding air contaminants or emissions (including greenhouse gases); and meet or exceed standards set by the State Water Resources Control Board or regional water quality control boards regarding discharges to surface or ground waters of the state. What AB 222 does eliminate is a scientifically inaccurate definition of “gasification,” consistent with the unanimous recommendations of the California Bioenergy Action Plan and independent studies conducted by the California Integrated Waste Management Board, the University of California, and the Energy Commission’s California Biomass Collaborative.

*CAW Myth #5: The bill would undercut planned greenhouse gas reductions from the state’s renewable energy efforts.*

**FACT:** Thermal conversion technologies that dispose of organic wastes are the only pathway for advanced biofuels production that absolutely can meet or surpass the goals for greenhouse gas reductions mandated by California’s new Low Carbon Fuels Standard. Studies conducted by the Air Resources Board in connection with these regulations have indicated that ethanol, when produced from organic wastes could reduce CO<sub>2</sub> emissions from automobiles by 86% or more, as compared to an energy-equivalent amount of gasoline.

The California Air Resources Board has identified abatement of landfill methane emissions as a primary greenhouse gas reduction strategy for the waste management sector. The EPA reports that landfills accounted for 23% of total U.S. anthropogenic methane emissions in 2007, making them the second largest source of such emissions in the country. Biorefinery development presents an unprecedented opportunity for the upstream diversion of these materials to green power and fuel production.

Biorefineries would also reduce greenhouse gas emissions by displacing fossil fuels. California Air Resources Board's Economic and Technology Advancement Advisory Committee (ETAAC) has reported that by conservative estimates, conversion technologies have the potential to reduce annual GHG emissions by approximately five million metric tons of CO<sub>2</sub> equivalent in California, just from the displacement of fossil fuels based on our current energy mix. Coupled with the reductions in the landfilling of waste and the transportation of this waste to remote disposal facilities, the greenhouse gas benefits resulting from the commercialization of new bio-industries become geometric in effect.

*CAW Myth #6: The bill would...harm the development of solar and wind energy.*

California's plan for energy independence relies upon the parallel development and commercialization of diverse industries, including biomass, wind, solar, and wave technologies. Currently, only 13.5% of California's electricity is generated from renewable resources, with only 2.2% coming from biomass. There is a tremendous need to expand development of a diverse array of renewable energy sources simply to meet the goal of 33% renewable electricity mandated by California's Renewable Portfolio Standard.

*CAW Myth #6: "Californians continue to dispose of more than 40 million tons of waste, much of it recyclable or compostable."*

At what environmental and economic cost? Recycling is not only a physical process, it is a function of what is economically feasible. It is generally agreed that the vast majority of all materials that can be economically recycled are already being removed from the waste stream.

In 1989, the year AB 939 was passed, California placed 40 million tons of municipal waste in landfills. Were it not for the recessionary impact on waste generation, the state would be disposing of the same amount of material today. The progress in recycling has been almost totally offset by California's growing population. Just from the 35.5 million tons of municipal waste that were placed in landfills in 2008, thermal conversion technologies could produce 1.6 billion gallons of ethanol and 1250 MW of power.

The traditional recycling industry was hard hit by the 2008 recession. The Asian markets for recyclables collapsed, and it is uncertain whether the export markets for these materials will ever return to their former levels.

In summary, it is folly to believe that we can reach zero waste in this state through source reduction, traditional means of recycling and composting alone.

California's population is expected to grow by some 10 million people over the next 25 years. Unless more flexible legislative and regulatory policies are put in place, enabling the use of its waste resources for energy production, the state will landfill **more than one billion tons of municipal solid waste** (that's **one billion**) during that time--and a major opportunity to advance energy independence, reduce GHG emissions and advance the production of Low Carbon Fuels will have been lost.

Please join us in helping to move this important legislation forward.