

Summary of Biofuels Forum

The Biofuels Forum was conducted on March 28, 2007. Prior to the Forum, a background paper was prepared by the California Biomass Collaborative which served as a starting point for discussions. This Board sponsored, one-day Forum titled “Producing biofuels from waste: research and commercialization strategies for upgrading waste to fuels and chemicals” was conducted to support implementation of Executive Order S-06-06. In addition, the Forum supported the implementation of the Bioenergy Action Plan which was prepared by the Bioenergy Interagency Working Group. The goal of the Forum was to assess the technical and economic feasibility of producing biofuels from the organic portion of solid waste, with an emphasis on identifying key research, testing, and pilot project opportunities. The Forum also provided information that the Board and others can use to refine and implement the statewide strategy for the successful implementation of the Executive Order.

The following table summarizes common issues raised by the stakeholders at the Biofuels Forum.

Table 1. Biofuels Forum – Stakeholder Input of Common Issues

Category	Issues
Policy	<ul style="list-style-type: none"> • Diversion credits and definitions <ul style="list-style-type: none"> ◦ AB 939 diversion credits and definitions pertaining to conversion technologies need to be modernized • Need for lifecycle thinking, lifecycle accounting, or systems approach to waste management policy and decision making (also referred to as ‘cross media benefits/costs)
Economics	<ul style="list-style-type: none"> • Need for risk mitigation (bridge the “valley of death”) • Municipal solid waste anaerobic digester system costs are high and difficult to compete with landfill disposal costs. Diversion credit for green waste ADC causes feedstock constraints and there is a general lack of funding or mechanisms to offset risk, develop needed performance data, and conduct required tests
Regulatory & Permitting	<ul style="list-style-type: none"> • Related to AB 939 diversion credits, technology definitions, and/or waste permit tiers • Need for one-stop shop, ombudsman, research/demonstration waiver • Inconsistencies and/or contradictory goals across regulatory agencies (air/water/solid waste) • Permits are difficult to obtain because the permitting process is outdated and does not take into account new technologies. In addition, processes that take multiple feedstocks present a problem to permitting. • A major barrier that was a common theme across all breakout groups was the lack of coordination amongst regulatory agencies and the lack of consideration of the benefits of alternative energy and biofuels • Multiple feedstocks present a problem with respect to cross-media regulations. In addition, contradictory laws and regulations and existing and out-of-date definitions limits feedstock availability for fuel production
Research	<ul style="list-style-type: none"> • Need for technology demonstration at scale with competent and objective evaluation
Education	<ul style="list-style-type: none"> • Need for regulatory agencies to be familiar with technology status and capabilities • Proponents need to know permitting process and how to help the regulators by obtaining reliable and independent performance information

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| <ul style="list-style-type: none">• All stakeholders and the general public need to understand benefits and impacts and tradeoffs inherent to waste management options• There was a general lack of public understanding of biomass, biodiesel, and biofuels, including benefits |
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Stakeholders at the Forum reinforced the need to clarify and consolidate permitting processes and responsibilities both within the CIWMB's jurisdiction and across agencies and to establish clear performance standards while avoiding confusing and inconsistent regulatory technology definitions and prescriptions. Stakeholders also reinforced the need to continue a sustained research program through laboratory, pilot, and full scale demonstration with clear objectives as to type and quality of data needed for CIWMB assessment of technologies and communication of CIWMB actions to the public.

The following key recommendations were expressed by stakeholders at the Biofuels Forum.

ADC Policy

Diversion credits should be provided for biofuel production, not ADC. There should also be a phase-out of landfilling of biodegradable organics much like what has occurred in the European Union.

Economics

There is a need to provide risk mitigation insurance and other incentives. In addition, stakeholders recommended funding for technology demonstrations and loan guarantees.

Legislation

Legislation should be passed to update legislative definitions pertaining to new technologies. Cross-media issues need to be coordinated to address legislative, regulatory and permitting constraints. There was a recommendation for a one-stop permitting scheme as well

Research

Stakeholders recommended additional lifecycle assessment of all waste management options. In addition, stakeholders believe a stable funding source can be developed by increasing landfill tip fees or instituting a separate fee for green waste. The increased revenue can be dedicated to additional research activities.

Education

There is a need for more stakeholder and general public education on biofuels production technologies. Any educational efforts should be coordinated with other agencies;