

California Energy Commission Dockets Office, MS-4 Re: Docket No. 08-ALT-1 1516 Ninth Street Sacramento, CA 95814-5512

James D. Boyd Vice Chair and Presiding Member Transportation Committee

Karen Douglas Commissioner and Associate Member Transportation Committee

Docket number 08-ALT-1, AB-118 Regulations

Dear Commissioners,

Propel would like to enter the following comments to Docket Number: 08-OIR-1 for the Development of Regulations for the Alternative and Renewable Fuel and Vehicle Technology Program regarding the <u>REGULATORY CONCEPTS ON SUSTAINABILITY GOALS for the Alternative and Renewable Fuel</u> and Vehicle Technology Program, published July 8, 2008.

Thank you for your consideration of these comments.

Sincerely, Jeffrey R. Stephens, Ph.D.

Director of Science and Technology Propel Fuels, Inc 1215 K Street, Suite 1717 Sacramento, CA 95814 DOCKET 08-ALT-1 DATE SEP 1 9 2008 RECD. SEP 1 8 2008

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Below are excerpts from the <u>REGULATORY CONCEPTS ON SUSTAINABILITY GOALS for the</u> <u>Alternative and Renewable Fuel and Vehicle Technology Program</u> published July 8, 2008. Comments from Propel, in red, follow the Goals statements.

California has one of the most stringent and comprehensive environmental review processes in the world, as exemplified by the California Environmental Quality Act (CEQA) and associated state and federal environmental statutes and regulatory programs. A cornerstone for many internationally recognized, certified sustainability programs is compliance to local environmental laws and regulations. The Energy Commission assumes that *sustainability goals will require environmental performance and production practices from applicants for the AB 118 funding program that exceed extant regulatory standards if the term "sustainability"* is to have any substantive meaning. Full legal and regulatory compliance with all applicable state and federal laws and regulatory standards are NOT sustainable, when, in fact they may be sustainable. This concept should only be applied if the extant regulatory standards are not sustainable and the ability to exceed those standards is both feasible and economically realistic.

Sustainability Goal No. 1: The Energy Commission's long-term goal for the Alternative and Renewable Fuel and Technology Program is to identify and support alternative fuels and technologies with the best potential for meaningful reductions in GHG emissions associated with California's transportation system in order to help the state meet the goals set forth in the California Global Warming Solutions Act of 2006 (AB 32). AB 32 requires capping California's GHG emissions at the 1990 level by 2020, which translates to about a 28 percent cut in emissions below projected 2020 levels.1 The Governor's long-term target, as articulated in Executive Order S-03-05, calls for reducing emissions to 80 percent below 1990 levels by 2050.

## Project Characteristics to Further Sustainability Goals

Characteristic 1: Projects that demonstrate a minimum 10 percent reduction in GHG emissions on a life-cycle basis from the petroleum baseline, including direct and indirect land-use change effects, will further sustainability goals.

The Roundtable on Sustainable Biofuels, in its recently released <u>Global principles and criteria for</u> <u>sustainable biofuels production</u>, <u>Version Zero</u>, states that "Unfortunately, there is to date no scientific consensus as to how to quantify the amount of land use change ..., attributable to biofuel production." Implementing LCAs that take land use changes into account before there is widespread agreement on how to quantify their effects and for potential methods for mitigation could cause unintended consequences with major impacts on the biofuels industry in California. The data sets used to develop both the impacts of direct and indirect land use change should be vetted by the wider scientific community and especially by the scientist instrumental in developing the models used. A small subset of scientist should not be allowed to develop these data sets without wider scientific input.

## However;

Characteristic 2: The Energy Commission recognizes that some technologies with strong potential for substantial, long-term reductions in life-cycle scale GHG reductions may require longer-term incubation for optimal results to be achieved, and that such technologies may have current GHG footprints above the 10 percent criteria. For example, an E85 fueling station in California might dispense ethanol made from Midwest corn in the near-term, but dispense ethanol from cellulosic feedstock when commercially



available. Such bridging technologies can further sustainability goals in the long term. This is an important feature that recognizes that the development of certain infrastructure is necessary for the advancement of the industry.

**Sustainability Goal No. 2:** The Energy Commission's goal in administering AB 118 is to recognize, support and encourage production of alternative fuels and vehicle technologies in manners that are more environmentally efficient and less environmentally damaging than current baseline practices for the production of petroleum fuels, production of basic agricultural commodities, and extraction of natural resources. The Energy Commission seeks to ensure that the amounts of land and natural resources used for alternative fuel production, and the resulting pollution loading from air, water, toxic, and solid waste streams, do not further and unacceptably degrade already damaged ecosystems, water basins and air basins. It is assumed that all projects subject to CEQA shall at a minimum assess and mitigate project impacts in accordance with state and federal law.

Characteristic 3: The Energy Commission can encourage alternative fuel and transportation projects to minimize environmental impacts and natural resource use by recognizing projects that maximize the use of waste stream materials as their feedstock.

A potential issue is how "waste stream" is defined. Many industries have by-products that would be considered by some as waste streams, yet have some market value. If a "waste stream" is or becomes a valuable commodity is it still "waste"? It would be helpful to have a definition of "waste stream".

Characteristic 4: Projects that use purpose-grown energy crops from California that submit a Sustainability Best Management Practices Plan<sup>4</sup> developed for the subject crop and processing procedure in conjunction with the California Biomass Collaborative and Bio-energy Working Group, will further sustainability goals.<sup>5</sup>

This characteristic appears to require any Sustainability BMP Plan to be developed exclusively with the Collaborative and the Bio-energy Working Group. This may limit the ability of a project to develop a BMP if these are the only groups that can aid in the plan development. More flexibility could be introduced if guidelines for Sustainability BMP Plan were published or referenced by the CEC so the project developers were not limited to working with only these two groups. In addition, qualified groups other than the Collaborative and the BWG should be allowed and encouraged to develop Sustainability BMP Plans.

Characteristic 5: The Energy Commission can further sustainability goals and promote the development of certification systems for sustainable alternative fuel production by recognizing projects that use a recognized sustainability reporting system.

Characteristic 6: The Energy Commission can encourage the development and production of sustainable biofuels appropriate to the climate and resource constraints of California by recognizing purpose-grown energy crops uniquely suited to meet California's climate, water and natural resource constraints.

Characteristic 7: The Energy Commission can encourage alternative fuel and transportation projects that minimize impacts to natural landscapes and ecosystems by recognizing projects with feedstocks originating on extant agricultural areas historically used for tilled, irrigated agriculture. Projects with feedstocks from lands used for conservation purposes, such as the Conservation Reserve Program, would not further AB 118 sustainability goals

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1) Limiting production to feedstocks "originating on extant agricultural areas historically used for tilled, irrigated agriculture" would appear to discourage production on non-irrigated land. Using non-irrigated agricultural land would likely further sustainability goals by conserving water resources. Removing the "tilled, irrigated" would provide more flexibility and potentially encourage the production of feedstocks suitable for non-irrigated land that is only marginally productive for other crops.

2) The intention of the CRP is to "encourage farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers." (NRCS website, http://www.nrcs.usda.gov/programs/CRP/) While the goal is to convert highly erodible crop land into land with high conservation value, farmers often place acreage, which is unprofitable because of low commodity prices, into the CRP in order to realize at least some revenue from the acreage. The Program becomes a form of price control. Consequently, many of those acres may not have high conservation value. Dedicated biofuels crops, especially those which have low agricultural input needs, low environmental impacts, and that can be grown sustainably may be wellsuited for cropping on some CRP land. A project that can show that specific land in the CRP could be used to produce a biofuels crop without causing erosion or environmental degradation and can be accomplished sustainably would appear to support both the intentions of the CRP as well as further the AB 118 sustainability goals.

3) In addition, other lands not historically used for agriculture may also be suitable for biofuels production and should not be eliminated from consideration, as long as the land is cropped sustainably. As an example, the Utah Department of Transportation has partnered with Utah State University in the Freeways to Fuel Initiative,

(http://www.udot.utah.gov/main/f?p=100:pg:9775588220793876046:::1:T,V:1376), to research the possibility of growing biodiesel crops alongside of the state highways. While these lands have not historically been farmed, they could potentially produce significant amounts of biofuels feedstock as well as further the AB 118 sustainability goals.

Since Characteristic 4 requires a Sustainability Best Management Practices Plan that would apply to all agricultural projects, regardless of the previous history of land use, and appears to support the intentions of land protection of Characteristic 7, we suggest elimination of Characteristic 7, as it appears to be too limiting.

Characteristic 8: The Energy Commission can further sustainability goals by recognizing projects that use renewable energy and / or cogeneration in production, processing, and distribution phases.

**Sustainability Goal No. 3:** The Energy Commission recognizes that some climates are uniquely suited to the production of promising biofuel feedstocks such as sugarcane and palm oil. However, many legitimate concerns over secondary environmental impacts to water supplies, ecosystems and wildlife from non-sustainable production have been identified. The Energy Commission's goal is to identify and promote practices and programs for certified, sustainable production of biofuels that can serve California markets with low GHG transportation fuels and provide economic benefits to under-privileged peoples and societies around the world.

Characteristic 9: The Energy Commission can further sustainability goals by recognizing projects that include a commitment to produce or procure fuels made with best-available sustainable production methods and practices. Such commitments might include a proposal for supply chain management of Best Available, Most Sustainable fuels.



The idea of "Best Available, Most Sustainable" is important, yet if the Best Available, Most Sustainable fuel is in limited supply, the supply pressure may push prices to the point that the fuel is not economically viable. Some leeway needs to be given as the industry, as a whole, moves toward sustainable practices. Giving preference to fuels produced from specific feedstocks poses not only supply issues, but also distribution issues. Fuel distribution terminals are already struggling with limited storage for most biofuels. Requiring segregation of a fuel shipment based on the sustainability of the feedstock it is produced from imposes significant challenges on the distribution network. The CEC may be able to further the sustainability goals by setting goals for the percentage of sustainably-produced fuel in the fuel mix. This would allow the distribution network to co-mingle fuels produced from different feedstocks while still supporting the sustainability goals.

Characteristic 10: The Energy Commission can further sustainability goals and promote the development of internationally-recognized certification systems for sustainable alternative fuel production by recognizing projects that use a recognized sustainability reporting system.

**Sustainability Goal No. 4:** The Energy Commission's goal is to minimize the risk of unintended consequences from domestic and global alternative fuel production, especially from fuels derived from purpose-grown energy crops. The Energy Commission recognizes and is concerned about possible primary and secondary impacts to essential food supplies for human consumption and feeds for animal production. Such impacts include induced, indirect land use changes resulting in higher than anticipated GHG emissions, reductions in commodities needed for human consumption and resulting higher commodity prices, and potential abuse of basic human and labor rights associated with alternative fuel production.

In furtherance of the goal to minimize the risk of unanticipated consequences while endeavoring to promote the widest possible range of alternative fuels, technologies and infrastructure, the Energy Commission shall use the concept of Adaptive Management to make changes in AB 118 program funding criteria as new information emerges. The Energy Commission shall also continue to fund and collaborate in models such as GREET in order to maximize the utility of their analytic power to identify and help resolve primary, secondary and unanticipated impacts from alternative fuels.