October 18, 2007

James Boyd, Vice Chair; Presiding Member, Transportation Committee, CEC
Jeffrey Byron, Commissioner; Associate Member, Transportation Committee, CEC
Michael Scheible, Deputy Executive Officer, CARB

California Energy Commission
Docket Office
Attn: Docket 06-AFP-1
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

Re: Comments on 2007 State Alternative Fuels Plan Committee Draft Report

Dear Commissioners Boyd and Byron and Deputy Executive Officer Scheible:

We appreciate the opportunity to comment on the State Alternative Fuels Plan and acknowledge the extensive work that the Energy Commission and the Air Resources Board staff have put into developing this report. We offer the following comments in addition to our joint letter from the broader coalition of environmental and public health organizations tracking this plan over the last eighteen months. We hope our comments and suggestions will be of assistance.

1) Environmental Standards

We reiterate our concern (also included in the October 10, 2007 Environmental Coalition Joint Comment Letter) that the state plan does not make clear what environmental standards are guiding the state's promotion of alternative fuels. The final plan should clearly articulate its AB 1007 obligation to promote the use of alternative fuels while ensuring "no net material increase in air pollution, water pollution, or any other substances that are know to damage human health." The statutory language also requires that the plan "optimize the environmental and public health benefits of alternative fuels, including, but not limited to, reductions in criteria air pollutants, greenhouse gases, and water pollutants." The draft report includes various articulations of environmental standards throughout, including language in the Abstract which states that the plan should not cause a "*significant* degradation of public health and environmental quality." (emphasis added). We request that the correct standard be used throughout the final report and that, in particular, the standard be set forth in the Legislative Requirements section in the Executive Summary (p. 3).

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We believe it is critical that the final Plan send a clear and unequivocal message to industry and investors that increasing the use of alternative fuels must not come at the expense of the environment.

2) Sustainability Principles

We appreciate that the report recognizes the need to produce alternative fuels in a sustainable fashion. However, the plan must more clearly articulate a definition of sustainability and the mechanisms by which the State will achieve its sustainability goals. We recommend that the Plan outline a process and a timeline by which the State will move forward on developing rigorous sustainability standards. We also strongly recommend that the Energy Commission develop mandatory sustainability criteria that will inform decisions concerning state funding of research, deployment, and infrastructure projects.

Friends of the Earth, in collaboration with the Institute for Agriculture and Trade Policy, have developed a set of sustainability principles to guide the development of an emerging bioenergy economy; we include these principles as Appendix A to this letter. While these principles are still in draft form, we hope that they will serve as a more concrete illustration of the type of principles that should guide sustainable fuels production.

In a review of sustainability principles currently operational or in development, three broad categories can be identified (Transnational Institute, 2007):

1. Greenhouse gas balance;
2. Direct and indirect environmental impacts including: deforestation; loss of habitat, biodiversity and high nature values; erosion; the introduction of chemicals to air, soil, or water; and consumption of water resources; and
3. Direct and indirect social and economic impacts, including access to, and production of, food.

We note that these categories fall within AB 1007's environmental protection requirements.

3). Criteria for Government Investment in Alternative Fuels

The final Plan should apply sustainability principles as criteria for incentives and other forms of government support. With limited resources, the state must prioritize the distribution of state funds to support alternative fuels, and biofuels in particular, with the greatest environmental and GHG benefits. The brief mention of sustainability in this draft report does not provide sufficient cues to industry that state funds will be selectively applied to fuels that meet rigorous environmental and performance standards.

4) Multi-Media Impacts

The multimedia impacts and conclusions reported at p. 26 of the report are insufficient in scope and detail. The multimedia assessment does not represent the full range of environmental impacts associated with alternative fuel use.

This limited assessment highlights the difficulty of analyzing a full range of multimedia impacts without clear criterion. As stated above, the state's final plan should include a process and a timeline by which the state will move forward in developing rigorous environmental standards and criteria. We appreciate and agree with the report's acknowledgement that quantification of the full range of impacts is possible through additional analysis (p.27). The final plan should therefore also outline a process for the development and implementation of these quantification tools.

Given the unique challenge of quantifying the full range of possible alternative fuel impacts, we also recommend that the final report provide a discussion of gaps in the current Full Fuel Cycle Analysis and strategies for improving the analysis as state alternative fuel planning moves forward. One acknowledged gap is the carbon quantification of both land use and land use change as distinct parameters affecting carbon emissions. A complete analysis will require the input of a broad and diverse group of stakeholders across disciplines and representing multiple areas of expertise. The Energy Commission is uniquely positioned to guide this effort in moving forward.

5). Report On The Impacts Of Biofuel Production

We are concerned that the report promotes biofuel consumption prominently in both the near and long term without identifying clear mechanisms and strategies to ensure that biofuel production meets AB 1007's environmental and public health standards. Given the multiple and significant gaps in current analyses related to increased biofuels production, and the time constraints imposed on the release of this report, the Energy Commission would be well served by producing a separate report, in collaboration with other agencies, assessing the full range of impacts of biofuel production in both the U.S. and abroad. Given that biofuels are still an emerging industry, the state has a unique opportunity to identify best management practices and policy tools to incentivize the production of biofuels with the greatest GHG and environmental benefit.

In the absence of this type of full analysis, either in a separate report or as part of the final Plan, we do not believe sufficient information is available to the state to advocate a substantial reliance on biofuels, which could well lead to greater environmental problems than they are intended to solve.

6). Role of State Agencies

The final Plan should also clarify the roles and responsibilities of relevant state agencies in carrying out future work related to the State Alternative Fuels Plan and additional life

cycle analyses of transportation fuels. Given the intersection of the State Alternative Fuel Planning Process with the Low Carbon Fuel Standard, the Energy Commission and the Air Resources Board must make more transparent their plan for distributing work between agencies and collaborating where applicable. Without full agency disclosure, it is difficult for the public to provide appropriate substantive input in areas of particular concern.

7). Alternative Fuel Planning Updates

Assembly Bill 118, which establishes the Alternative and Renewable Fuel and Vehicle Technology Program to be administered by the Energy Commission, was signed in to law in October 2007. Given this significant new source of funding for alternative fuel and vehicle technologies and the dynamic nature of emerging markets and industries, as well as increasing knowledge about the benefits and impacts of alternative fuels, we propose that the Energy Commission conduct periodic updates of the State Alternative Fuels Plan. This update would provide an opportunity and process, in which the public could participate, for updating information, reviewing progress, and assessing the efficacy of current funding priorities.

8). Lack of Specificity in Plan

The current report is significantly lacking in specificity in recommended actions. It also lacks timelines, next steps, delineation of responsibilities, and many other details that normally make up a true plan of action. Given time constraints, we recognize that this type of detail was likely not possible to achieve for this report. However, we believe that a more specific plan should be drafted and vetted through a public review process. We therefore recommend that the final plan identify a timeline and mechanism for creating a true plan of action and for updating the state alternative fuels plan on a regular basis in coming years.

9). Technical Comments

Given the short time provided to review data underlying the case examples, fuel use goals, and economic analyses, we are unable at this time to provide comments on the analytical information in the report. We do note, however, that capital costs attributed to plug-in hybrids appear high and the predicted contribution of electricity appears low. Since the calculations and conclusions following from the report's economic analyses and case examples are at the heart of the planning process, and presumably will be the basis for future state actions, we request that staff continue to take comment on these analyses beyond the Friday deadline.

10). Coalition Comments

We reiterate and support the comments made in the October 15, 2007 environmental coalition joint letter.

Sincerely,

Danielle Fugere
Kate Horner

Appendix A

Excerpts of Biomass Principles.

Biomass production must be linked to increased energy and resource conservation. Wasteful use of fossil fuels must not be replaced with wasteful use of bioenergy, biofuels and biomaterials. Instead, significant reductions in total consumption, together with increased conservation, must be the first priority - and must take place at the same time as any increase in biobased production.

Biomass production must be sustainable for the climate, environment and public health.

- **The full life cycle of biomass production (including processing for energy) must significantly reduce greenhouse gas emissions.** As part of achieving this objective, the use of fossil fuels in the production and processing of biomass crops should be minimized, prevented whenever possible, and eventually phased out. Selection, production and use of biomass crops should also result in reduced greenhouse gas emissions.
- **Biomass production must maintain and build soil structure and fertility and conserve water quantity and quality.** Agricultural practices that promote better soil and water quality should be utilized in biomass production. Perennial biomass crops that enhance and protect soil quality, promote water retention, and reduce nutrient and chemical run-off should be prioritized.
- **Biomass crop production must not encroach on forests and other intact ecosystems.** Forests and other habitats or ecosystems need to be protected from encroachment by biomass crops. Protected areas must not be declassified or appropriated for biomass crop production and conversion of native ecosystems must be prevented.
- **Biomass production should improve, not erode, biological diversity.** This will require both the protection of previously undeveloped habitats, the use of native species and crop diversification, as well as cultivation that does not deplete soil nutrients or reduce soil biodiversity. In addition, biomass production must not involve the use of genetically engineered crops and materials, or the release of genetically engineered organisms into the environment during processing.
- **Biomass crop production must minimize, and eliminate whenever possible, the use of dangerous agrochemicals.** Agrochemicals that are hazardous to the environment, workers, and local communities should be used only as a last resort. Chemicals used will be non-persistent and chemicals that are endocrine disrupting, carcinogenic or mutagenic in humans should be phased out.