



DOCKET

09-ALT-1

DATE FEB 23 2010

RECD. FEB 23 2010

February 24, 2010

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 09-ALT-1
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Docket Number 09-ALT-1 / Advisory Committee Meeting;
Comments on AB118 FY10-11 Investment Plan

Lotus applauds the Energy Commission on its aggressive plan to invest in the technologies necessary to achieve California's climate change objectives over the next decade and beyond. Lotus believes that a diversified portfolio of energy sources to support future transportation needs is the most prudent course but notes that methanol, a low carbon alternative fuel, is conspicuous by its absence from the FY10-11 plan.

Methanol is extremely attractive as a low carbon transportation fuel compared to other candidates because of its high energy density, clean and high efficiency combustion, and its ability to be produced sustainably. Methanol has been used successfully as a fuel in California in the past, and is included in California's State Plan to Increase the Use of Non-Petroleum Transportation Fuels created as a result of AB 1007 (CEC-600-2007-004-rev).

Renewable and sustainable methanol can be produced from renewable electricity (e.g. wind, solar, etc.), renewable hydrogen from electrolysis of water, and atmospheric carbon dioxide. When this renewable fuel is used in all phases of production, distribution, and consumption, the full cycle or "Well-to-Wheels" carbon emissions can effectively net out to zero. In the nearer term, methanol can be produced economically from natural gas, bio- and waste feedstocks while still offering important reductions in greenhouse gases. This transitional plan could allow earlier implementation and earlier phase out of legacy products requiring petroleum based fuels.

Out of its concern for the environment and the sustainability of personal transportation, Lotus has studied the issue of energy vectors for the future and concluded that low carbon-number alcohol fuels, like methanol and ethanol, offer great promise for sustainability, minimal impact on the environment, energy density, minimal change to existing infrastructure, convenience, and cost.

Lotus believes that the Energy Commission can send a strong message by including research on advanced uses of methanol fuel as a transportation fuel in its FY10-11 investment plan. Further, a comprehensive study of the renewable methanol production pathway from atmospheric CO₂ would enable the inclusion of methanol in the Air Resources Board's Low Carbon Fuel Standard.

Lotus welcomes the opportunity to comment on this important program and stands by to assist in clarifying any of the points raised.

Sincerely,

Stephen R. Brueckner
Chief Technology Officer
Lotus Engineering, Inc.