

January 14, 2009

Remarks by Vice Chair James D. Boyd
California Energy Commission
CALSTART: 2030 Vision for Transportation Fuels

**“Report Card II: Meeting California’s Energy and Alternative
Fuel Production Goals”**

It’s my great pleasure to be with you today to talk about a subject near and dear to my heart---alternative transportation fuels. I’ve been asked to report on the State of California’s progress in meeting our energy and alternative fuel production goals.

I’m here today in my capacity as the lead Energy Commissioner on transportation fuels policy for California, but as the Vice-Chair of the California Energy Commission and the Associate Member of the 2009 Integrated Energy Policy Report Committee. I also chair the Bioenergy Interagency Working Group for the Administration.

I am especially pleased to share the podium today with my dear friend Mary Nichols. Air quality improvement and energy diversity have been mutually compatible state policy goals in California for many years.

With the signing of Assembly Bill 32, climate change has now become the most important policy driver of all. Global climate change has presented us the most important economic and environmental challenge of the century. To quote Thomas Friedman: “We are entering the energy-climate era.”

Achieving our state’s energy and alternative fuel goals, while addressing climate change, will require a combination of government mandates, market-based investments, and substantial public and private sector investment.

It’s especially fitting that Mary and I speak to you today about our shared vision for climate change and transportation fuels. The State Alternative Transportation Fuels, which the Energy Commission and the Air Resources Board approved in October 2007. This Joint State Plan established aggressive alternative fuels goals, to be

measured on a gasoline gallon equivalent basis, for the years 2012, 2017 and 2022.

The Plan also lays out a three-part strategy (the infamous “three-legged stool) for reaching our joint vision for the year 2050.

- Significantly increasing the use of alternative transportation fuels, moving toward “zero carbon” fuels;
- Substantially improving vehicle fuel economy about today’s modest CAFÉ standards;
- Reducing Vehicle Miles Travelled through land use changes, greater reliance on public transit, innovative pricing strategies, and through other means.

Our Governor has made his views on petroleum reduction clear, when issuing his Executive Order on Bioenergy on April 25, 2006. He stated: “It is critical that we do everything we can to reduce our dependence on petroleum based fuels.”

In the final days of the 2007 legislative session, the Governor signed a landmark bill, Assembly Bill 118, authored by then Assembly Speaker Fabian Nunez, which established the Alternative and Renewable Fuel and Vehicle Program. Cal Start and its members deserve a great deal of credit for the successful passage of this legislation.

AB 118 appropriated over \$200 million per year for 7 ½ years, to the ARB for air quality improvement and to the Energy Commission alternative fuels and vehicle programs. Working together, our two agencies are moving forward with the “rules of the game” for these needed state incentives.

With the signing of this important funding legislation, we are now well positioned to move forward aggressively to advance our energy, petroleum reduction, climate change, and air quality goals for the transportation sector.

The Energy Commission Staff has recently released a Draft Investment Plan, and draft Regulations, required by the legislation, have been filed with the Office of Administrative Law. We have convened an Advisory Committee, which has been meeting regularly, providing strategic input on AB 118 funding opportunities and priorities. We hope to begin soliciting applications for the first \$75 million in late spring or early summer 2009.

How is California doing in achieving its energy and alternative fuels goals: not very well. Despite our best efforts, California as a state continues to be over 95 percent dependent on petroleum fuels, consuming over sixteen billion gallons of gasoline and over 4 billion gallons of diesel fuels each year.

California remains the third largest gasoline consumer in the world, second only to the U. S. as a whole and China. In California, the transportation sector is the single largest source of greenhouse gases, approaching 40 percent of the statewide total emissions.

In response to the Governor's direction, we are embarking on a series of joint efforts with the ARB to reduce our petroleum dependence and address climate change:

- A continuing examination of the costs and benefits of alternative fuels and vehicle technologies, using the same "well to wheels" or "full fuel cycle" approach that was used in the Alternative Fuels Plan. This ongoing analysis demonstrates that alternative fuels can achieve lower carbon intensity for California's transportation fuel pool.
- Support for Research, Development and Demonstration (RD&D) programs.
- Through the Energy Commission's PIER program, we are directing state RD&D funding to advanced transportation technologies. One notable example is the creation of a Plug-In Hybrid Center at the University of California at Davis to support the commercial development of this promising vehicle

technology.

- Administering the state incentive funding provided by AB 118 to spur the commercial development of advanced fuels and technologies.
- Forming strategic alliances with the federal government, other state agencies, local air districts, and our private sector partners to support alternative fuels, fueling infrastructure and advanced technology.

New opportunities present themselves today for clean technology with the selection of Steven Chu from California as the U. S. Energy Secretary and the announcement of our new President's economic stimulus package.

The short answer is: There is no silver bullet. No single fuel or vehicle technology has all of the desirable attributes which consumers want and need. There are often price and performance tradeoffs. Government should not "pick winners" because of the risk of "picking the wrong fuel or technology."

The success of most alternative fuels in both the light- and heavy-duty markets continue to be driven by three factors: the convenience of fueling infrastructure, vehicle performance, and relative price to the consumer (when compared to vehicles which operate on gasoline and diesel fuels).

The future of biofuels is a bright one, especially when waste streams can be effectively used to produce these fuels domestically. There is significant private sector investment by oil companies and private venture capitalists in new fuel formulations, in response to California's Low Carbon Fuel Standard and the Governor's Bioenergy Action Plan. Also, there is considerable national attention being placed on renewable transportation fuels through national RD&D priorities and the national Renewable Fuel Standard. With the new Administration in Washington, D. C., we expect greater focus on clean transportation technologies and alternative and renewable fuels.

At the same time, we are mindful of the debate surrounding “food versus fuel” competition. By using our waste streams, such as field wastes, orchard pruning, dairy manure, food processing wastes, forest debris, and urban green wastes as a source of fuel production, this issue can be avoided.

In addition, we feel it is important to address land conversion effects on agriculture, including the indirect impacts on water consumption and fertilizer use, and carbon releases from soil disturbance, in measuring the environmental impacts of emerging biofuels produced from energy crops. The importance of a “full fuel cycle” analysis cannot be overstated.

Finally, in signing his Executive Order on Bioenergy in April 2006, our Governor challenged state agencies to promote the sustainable development of our state’s biomass resources. To quote Governor Schwarzenegger: “Turning waste products into energy is good for the economy, local job creation and our environment.”

In California, blending ethanol by up to ten percent by volume is allowed by state fuel specifications. Blending biodiesel and renewable diesels, in the form of B-5, B-10 and B-20 blends, into diesel fuel is an option. Substantial amounts of private risk capital are being directed toward building biofuels production facilities in California. Fuel blends are important “supply enhancers” as we continue to face limits on our state’s refining capacity.

In conclusion, California should continue to lead by example to influence the national agenda on alternatives to petroleum. Meeting our energy and alternative fuels goals in California will enhance supply security, improve fuel diversity, improve air quality, and reduce greenhouse gases. Finally, let me ask: Do we as Californians have the courage and staying power in these challenging times?