



Tuesday, March 28, 2006

RE: CA Energy Commission- Bioenergy Response

Dear Energy Commissioners

The Oil industry for at least 1000 years was run on renewable fuels, then “rock oil” replaced “whale oil” and our society invented traffic...Now we are on the crest of a new wave of change, one to be welcomed and not feared. California is the undisputed leader in environmental protection and innovation. We now have a great opportunity to create a massive wave of change that will sweep war, and bloodshed from our lives. We will perfect the usage of biologically based renewable fuels.

The great societal good that bio-energy produces in preventing climate change and foreign wars should be recognized by our government. Most importantly the complete removal of foreign oil imports is of the utmost importance for national security.

Therefore all laws passed from this point forward must encourage the usage of biologics, over petroleum. The current oil companies constitute an illegal monopoly that prevents choice for our own citizens. We must level the playing field and let help the biodiesel industry flourish.

The tax breaks and incentives are in the billions for petroleum production. Yet the biodiesel industry is wanting? Where are our tax breaks, incentives, and grants?

The current legislation is so biased as to demand that every individual retail user of our fuel must be registered on a list, and sign a wavier, this, and other laws create undue, and anti-competitive behavior.

Biodiesel plants must file numerous forms (not required of oil companies) to be operated, or built. These must be waived or fast-tracked to allow for immediate production.

A California Bio-Fuel Standard must be written and assessed immediately to assure quality and accountability. Bosch, and Daimler Chrysler, as well as other stakeholders also agree there is necessity.

The following must be done with haste. For we have much to do and not much time to do it in. I also suggest that you have the CA Attorney General keep a close watch on anti-competitive and illegal behavior by my competition.

I thank everyone involved in this endeavor for their time and expertise.

I have enclosed some notes in the following document.

Fear not! We can replace 5% of the diesel you requested with non-petroleum biodiesel. In fact with our new refinery we could do closer to 10%. This is a fairly small refinery- there are many other facilities that sit idle. Given time we could replace everything, trust us we have been at this a long time.

So do you want another 350,000,000 barrels of diesel at \$1.80 a gallon wholesale?

Then let us begin, it will be an honorable work.

Yours respectfully with hand extended,
Matthew Hunter Kramer

Air Quality. Biofuels are naturally low in sulfur, aromatics, and other toxic Compounds that impact human health. For example, biodiesel and biodiesel Blends not only significantly reduce particulate emissions, but the toxics that ride on soot particles. Although NOx emissions from biodiesel fuels may slightly Increase relative to petroleum diesel, lower associated toxic emissions are a Significant advantage.

Page 25 of report

The situation with biofuels differs significantly from that of biopower. Although the state is a large user of biofuels, California has only 35 million gallons per year of in-state ethanol production capacity versus the 15 billion gallons per year of annual gasoline demand. The state should take the necessary actions to ensure in-state market demand for biofuels and to stimulate a local biofuels industry to supply a significant fraction of that demand.

Page 34

In the longer term, California could support the creation of integrated biorefineries, that is, facilities that would produce power, fuels, and valued added chemicals and products concurrently. Biorefineries represent a potentially attractive long-term option for large-scale, high-value, high-efficiency use of biomass. Development of biorefineries could be coordinated with efforts to repower aging biopower facilities and to co-locate ethanol plans with existing biomass power plants.

Page 38

Recommended Tier 1 Actions for 2006

1. The **Governor's Office** should consider issuing an Executive Order establishing statewide goals for bioenergy production and utilization. This Executive Order should:

a. Establish a broad-based RFS for California's transportation sector, targeting consumption of 2 billion gallons of biofuels by 2020 with a minimum of 40 percent produced in California.

10% renewable diesel use with 40% produced in CA currently 2.6 billion gallons consumed meaning the need for 260 million gallons of renewable diesel and 104 million gallons refined in state- current consumption 5 million gallons , and refinery capacity of 6 million gallons.

5% 2007

10%2008

40%2010

80%2015
100%2020

you don't have another 40yrs of petrol lucky if we get 20yrs

b. Target the development of 1,500 MW of new biopower capacity by 2020 so that biopower can continue to provide a 20 percent share of in-state renewable electric power as part of the state's accelerated RPS.

c. Direct the **Bioenergy Interagency Working Group to develop an integrated and coordinated plan to create a favorable regulatory environment that enhances opportunities for sustainable bioenergy development, yet maintains the required oversight of the existing utility, transportation fuel, and waste management industries, especially with regards to environmental protection. This plan should:**

1) Eliminate conflicting regulations, to the greatest extent possible.

No zoning specified for bio-refinery that makes biodiesel. Lower temperatures and safer ingredients should be considered.

2) Consider the net environmental benefits of bioenergy production and use, including the reduction of greenhouse gas emissions.

Exclusion from air-quality permits, and CARB regulations due to the vital greenhouse gas lowering potential of renewable, and petroleum displacement potential

3) Explore "cross-pollutant" or "inter-pollutant" netting, such as offsetting NO_x with emission reductions of volatile organic compounds and non-methane organic compounds.

CARB EXEMPTION

4) Streamline the permitting of biopower and biofuels conversion facilities.

Incentives the use of existing "mothballed or inoperative oil processing facilities. Especially in "brown fields" and "superfund sites" The equipment and facilities to process and move biofuels closely mimics petroleum refining and storage sites. The ability to use existing tanks, pumps, and equipment is the fastest and most efficient use of existing resources. It also lessens the potential greenhouse gas emissions of building a new plant, verses rehabilitating existing structures.

d. Request that the CPUC:

1) Work diligently to preserve the operational status of existing biopower facilities, given the uncertainty in the market after July 2006.

2) Initiate a proceeding to develop mechanisms that reward biopower for the range of benefits it provides in meeting RPS requirements

and other power system needs. This could include biopower's contribution to the resource adequacy requirements for electric utilities and the ability to strategically-locate biopower facilities to relieve existing and expected future electric transmission congestion. A goal should be to provide biopower with long-term power purchase agreements.

e. Direct the **California Energy Commission** to:

1) In conjunction with the California Biomass Collaborative and the U.S. Department of Energy, fund a selected number of demonstration and pilot projects that are designed to prove the commercial readiness biofuels production technologies that use lignocellulosic feedstocks, including those derived from agricultural, forestry, and municipal wastes, and to leverage available federal funds.

Don't exclusively focus on one technology-look at biodiesel, and renewable power production as well. We have over 300 compounds to replace, don't be too focused on transport fuels.

2) Assist the Department of Corrections and Forestry and Fire Protection in the installation of biomass combined heat and power units at six facilities statewide, where an identified fuel supply is Sustainable for 10 years.

Onsite biodiesel plant recycling community grease.

3) In consultation with other state agencies, formulate a plan to disseminate information about the broad-based benefits of bioenergy to the public and to policy makers. This plan could include selected, high-visibility demonstration projects, highlight the "grown here" aspect of bioenergy, and sponsor public awareness programs (e.g., of flexible fuel vehicle options and resource management benefits).

Use state DMV records that list type of fuel used on registered owners allow bioenergy information be give to a fuel group

f. Direct the Air Resources Board to develop regulations that maximize the flexibility of using biofuels, while concurrently preserving or enhancing the environmental benefits of their use. The effort should build upon the *Rulemaking to Update the Predictive Model and Specifications for Reformulated Gasoline* proceeding that has recently been initiated, and could include:

1) Proposing minimum annual statewide ethanol consumption levels to encourage in-state production opportunities until details of the proposed state RFS are developed.

2) Conducting a comprehensive and peer-reviewed study of the costs, emissions impacts and fuel supply consequences of low-level ethanol blends (i.e. E6 to E10), and incorporate the study findings into the rulemaking process.

3) Addressing the emissions performance, fuel supply consequences and cost issues surrounding greater use of E85 in California.

4) Establishing necessary fuel specifications for transportation biofuels used in blends and as neat fuels, including low-ethanol blends with gasoline, E85, E-diesel, FT diesel, B5, B20, B100, and biomethane.

g. Direct the **California Integrated Waste Management Board** to:

1) Revise the existing statutory definition for “transformation” and recommend a new definition for “conversion technology” that facilitates development of environmentally acceptable waste management alternatives. In particular, review definitions of gasification, fermentation, pyrolysis, and manufacturing.

2) Work to enact amendments to existing law to provide diversion credits to local jurisdictions for solid waste processed by eligible conversion technologies meeting environmental standards.

Incentives for the collection of all waste greases from a personal/home basis. The recycling program would use existing waste fleets to collect all household bacon grease, fry oil and associated liquid hydrocarbons. The waste would be delivered to rendering facilities, or directly to bio-refinery locations.

Look at opening up the restrictions on rendering-for example the 2 million dollar bond required to collect waste grease. This could create new jobs, and increase available feedstock supply for biofuel and bioenergy plants.

h. Direct the **California Department of Food and Agriculture** and the **California Department of Forestry** to work to:

1) Develop a plan to determine how to gain better access to available agricultural and forest biomass resources, including regulatory and technology development needs.

2) Continue research to identify the highest value use for forest fuel and harvest residues as a potential source of energy, fuel, chemicals, and other forest products, in coordination with the Energy Commission.

3) Coordinate activities with the State Water Resources Control Board to ensure that criteria for watershed protection and water quality are met.

1. Direct state agencies to purchase biofuels, bio-based products, and biopower, including combined heat and power where possible, with specific targets for 2010 and 2020. Also, encourage local governments and public institutions to follow the state's lead.

Standards for biodiesel use in School buses-as it directly affect the health of small children who are more susceptible to air pollution and carcinogens in diesel fuel.

2. In addition to the above state-level actions, California should coordinate with other states and the federal government. To that end, California agencies should:

a. Support extension of the Federal PTC and advocate for equal tax treatment for biomass relative to other renewable energy resources in federal incentive programs.

b. Leverage federal research and development efforts and improve coordination to realize greater investment of federal research funds in the state.

c. Work with the Western Governors' Association and the National Biomass R&D Initiative to influence federal funding decisions.

3. To support the above actions, the following key legislative initiatives should be considered, with appropriate input from stakeholders, for 2006:

a. Establish stable funding for bioenergy programs based on the premise that many of the benefits represent public goods that accrue to all Californians, but those they are not adequately recognized in the market for bioenergy. Some of the funding mechanisms the state may want to explore are:

1) Excise taxes on non-renewable motor fuels with proceeds targeted towards bioenergy programs.

YES definitely, and the exclusion of certain taxes-such as the OIL Spill Tax, due to safer nature of the fuels

2) An increase in landfill tipping fees to encourage greater diversion of biomass resources for use in biomass conversion projects.

See comments under waste management board

3) Carbon taxes, consistent with broader state policy on greenhouse gas reductions.

This would help in incentivising fleet use of renewable fuels that lower greenhouse gas emissions

b. Establish financial incentives and mechanisms to encourage investment in biopower, biofuels, and bio-products, to reward bioenergy producers for the multiple benefits they provide, and to support innovation and investments in new and emerging technologies. Among the possible financial incentives the state could consider are to:

1) Expand and coordinate the use of existing state programs, such as the **Pollution Control Financing Authority, the California Power Authority, the Dairy Power Production Program, and the Energy Commission Supplemental Energy Payments** program.

2) Consider a range of possible tax credits for biopower and biofuels facilities and delivery infrastructure, including energy production, investment and income tax credits. These credits should be designed to maximize leverage of federal incentives.

3) Consider a range of possible tax exemptions, including biofuel excise tax exemptions and sales and property tax exemptions for fueling infrastructure and other investments.
Property Tax exemptions would incentivise

4) Create ways to reduce the cost of technology risk to private sector investors, such as supporting costly premium payments for insurance products (e.g. efficacy insurance).

5) Establish a system of carbon credits, consistent with broader state policy on greenhouse gas reductions.

TIER II recommendations-

3. The **California Integrated Waste Management Board** should:

a. Conduct a study to assess the resource potential for waste fats, oils, and grease for biodiesel production and aggressively pursue their collection in a manner that facilitates conversion to biodiesel.

Page 41 Strongly support, comments on tier I recommendations

5. The **California Department of Food and Agriculture** should:

a. Assess sugar/starch crop potential, cellulosic energy crop potential, and oil crop potential with respect to relative quantities, benefits, and impacts on water and land use. Include an assessment of crops that can be used for soil remediation and assess the impact of salinity on biomass conversion processes.

b. Conduct RD&D on cropping systems, harvesting, handling, storage, and distribution practices and technology, in coordination with a larger state

and federal level R&D effort.

Look at USDA research on algae and oil production, Crops Cupetta, and Indian oil producing plant Jathropa, use GM crops for oil production.

c. Identify and support development and deployment of bioenergy technologies to address animal disposal and animal health concerns.

6. The California Department of General Services should create rules requiring the evaluation and incorporation of renewable energy, where practical, into any new construction projects carried forward through Capital Outlay Budget Change Proposals, including biomass heating and small biomass combined heat and power systems.

(requirement of emergency diesel power generators on critical facilities, that can be run on straight grease or biodiesel if needs require it)

What tax incentives are non-renewable oil companies given?

-2.4 billion from federal government for drilling and exploration costs, which includes fuel, labor, they can expense 70% upfront, and 30% over the next 5 years

-They pay lower tax rates instead of 35% they have averaged 13% from 2001-2003

-Five year net operating loss carry back for oil and gas producers

-500 million loan program from federal government

- The percentage depletion allowance: \$28 million. Independent oil and gas companies can deduct 15 percent of their sales revenue for the lifetime of each well. This often allows them to write off non-existent "expenses" above actual development costs.
- The manufacturer's investment credit (MIC) for oil refineries: \$40 million. The oil industry has taken the MIC for investments which they were required by state and federal law to make, to re-tool for MTBE. Now they will make ethanol investments and other upgrades which are either required by regulation or necessitated by the market. The purpose of the MIC is to give incentives to mobile manufacturers to locate here, not to reward companies that must be in California and are following regulatory requirements.
- Intangible drilling allowances: \$10 million. This benefit permits oil and gas companies to write off development expenses in one year, rather than amortizing them over many years as companies do under normal accounting procedures. This allows them to shield revenue and defer the payment of taxes.
- Establish an oil severance tax in the 4-6 percent range on the price of oil at the wellhead. This would be consistent with other states and would generate around \$300 million per year, depending on the price of oil.
- CA is only state without a state oil severance tax