



E2
California Fuel Purchase Proposal
December 14, 2011 (Revised)

Executive Summary

This paper presents a plan for a set of California public agencies to pool their long-term transportation fuel purchasing power into a program that will provide: (1) potential economic advantages to the agencies; (2) will stimulate local farming and manufacturing operations and the jobs created by them; and (3) will grow access to cleaner fuels in California helping California to diversify off of petroleum fuels for transportation.

Introduction

A recent report by E2 (see "Advanced Biofuels Report"¹) documents over 240 companies that are technically capable of sustainably producing transportation fuels derived from non-food agriculture and forest sources. While these companies are technically capable of producing fuel, they lack adequate financing for building the production facilities. Investors and debt institutions hesitate to invest in processes that have yet to operate at scale. Once a few facilities have been built and proven, standard bank project financing becomes available.

This document proposes an innovative contract mechanism recently used in the State of Hawaii to stimulate investment, financing and construction of local biofuel facilities as well as the aligned farming operations to provide the biomass feedstock. The program stimulates investor and debt institution confidence while posing minimal or no financial risk to participating public entities.

Public agencies will be interested in participating either because they have a policy to reduce carbon emissions and/or the potential direct economic benefits of having a long term contract. All agencies are currently subject to increasing prices resulting from growing worldwide demand for petroleum fuels. By entering into a long-term (up to 20 year) contracts for fuel purchases, agencies will lock in a portion of the transportation costs. We expect some contracts could be below current market prices as it is to a company's advantage to secure long term contracts in order to finance their early facilities. In cases where a long-term

¹ <http://www.e2.org/jsp/controller?docName=AdvancedBiofuelMarketReport>



contract is above current market prices, we propose a financing structure to refund the difference so the agency is not taking any short-term risk.

Why is this important for California state policy?

The California Air Resources Board has established a Low Carbon Fuel Standard (LCFS)² as part of the regulations needed to meet the objectives of the California Global Warming Solutions Act of 2006. The LCFS requires major fuel distributors to reduce the “carbon intensity” of the transportation fuel they sell by 10% by 2020. The LCFS creates a market opportunity for lower carbon intensity fuels.

By stimulating both use and production of low carbon fuels in California the LCFS will stimulate job creation as well as generation of economic activity that comes from local energy production. Dollars normally exported from the State for fuel purchase will be maintained in the California economy and the State will realize greater energy and economic independence.

It has been done before: Hawaiian example

Over the last two years, biofuel activities in the state of Hawaii have been transformed through a similar program that is being administered by Hawaiian Electric Company, Inc. as part of the State’s Renewable Energy Program.

Background:

Hawaii is fully dependent (95%) on imported petroleum for its energy supplies. As a result the Hawaiian economy is continually buffeted by remote events that impact the price of oil. Hawaii bleeds \$6-7 billion annually from its economy (the GDP of Hawaii is \$60 billion³) to pay for oil. The State implemented the Hawaii Clean Energy Act in 2009⁴ to promote the local development of clean energy. This act requires Hawaii to convert 70% of its energy requirement to “clean” energy by 2030. The initial steps in deployment start in 2015. These requirements stimulated Hawaiian Electric Company, Inc. (HECO) to issue an RFP in March 2010 to purchase biofuels produced in Hawaii.

How did it work?

HECO released a competitive bid RFP in March 2010. The RFP called for production of up to 200 million gallons of fuel annually, but HECO was under no obligation to

² <http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

³ http://hawaii.gov/dbedt/info/economic/data_reports/qser/outlook-economy

⁴ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=HI06R&re=1&ee=1



purchase the full amount. Bids were due 75 days later in June 2010⁵. Any type and any amount of biofuel could be bid at any price for any term contract. The goal was to replace as much of their petroleum use as possible. The unique aspect of the bid was that the fuel could be delivered as much as 5 years after the bid had been accepted and approved. This time lag was important as with an approved contract that far in advance of delivery it would allow prospective producers to organize the conceptual plans and supply chain as part of the bid but be able to put the actual contracts and financing in place based on a firm contract. This was a powerful tool as it provides a mechanism to reduce the risk to investors and debt institutions and provides ample time after receiving the contract to organize the supply chain, gain permits and build the facility. The financial risk to HECO was minimal as they do not release any funds until they take delivery of the fuel. Outside consultants helped to evaluate the bids and provided accredited 3rd party processes and evaluation procedures.

What was the response? Ten bids were received and then narrowed in a screening process down to five bids that were in August 2010 invited to enter into contract negotiations. As of October 2011) four contracts had been awarded for a total of 27 million gallons of annual fuel purchase with the potential to increase that amount as negotiations continue with bidders. It is estimated these contracts will stimulate over \$500 million dollars of capital construction and several hundred new jobs in the State of Hawaii.

Proposed California program

Purpose: The purpose of the California Fuels Program is to provide an environmental and potentially an economic benefit to the participating public agencies through both long-term visibility in the price of fuel and potentially lower prices overall. It also serves a public purpose of stimulating a California based biofuels industry and enhancing the LCFS policy through the in-state production of very low carbon fuels.

Goal: The program should target up to 10 contracts that in aggregate represent up to 100 million gallons/year of fuel purchased by Public Agencies for their transportation fleets. All fuel consumed – gasoline/ethanol blends and diesel would be placed up for bid. This process should be aimed at both ethanol and biodiesel and also “drop-in fuels” such as renewable gasoline, renewable diesel and renewable marine fuels.

⁵ http://www.heco.com/vcmcontent/StaticFiles/pdf/QandA_C_052410.pdf



Participants: Potentially all State agencies, public institutions (schools, universities), County and City fleets could participate. It may also be possible to include other entities (military bases, California National Guard, etc) but not at the expense of making the contract harder to negotiate.

Proposed structure: Either a single state agency (possibly DGS) or a limited purpose non-profit would solicit bids and negotiate a contract for a compatible set of buyers. The contracting arrangement needs to be sufficiently straight forward so it does not discourage participation.

Key elements:

- Competitive process to include a preliminary assessment of bona fide responses based on assessment by a State group or limited purpose non-profit put together to make this assessment. The State may need to hire an outside firm or consultants to help vet the bids.
- Payment for fuel is guaranteed, at a negotiated price per year but payment is made only upon actual delivery of fuel
- Preference could be given where proposals include local biomass and facilities for a significant portion of the total contract volume.
- Up to a 5 year lag between contract approval and fuel delivery (for reasons stated above)
- A Carbon Intensity that is less than one quarter the intensity of standard gasoline or diesel (i.e. less than 24 grams per megajoule)
- Bid size restricted only by the amount of fuel the agencies purchase and no minimum bid. This will encourage small business development where scale allows this (e.g. biodiesel producers).
- State may want to consider an initial RFI (request for information) prior to issuing the RFP. This will add a couple of months to the process but would allow the collection of information that would help shape the RFP as well as provide a signal to the industry that this process is being initiated.
- Announce RFP and establish a period of 75-90 days to submit a bid. Schedule a Workshop to answer questions soon after RFP is issued.
- Close bidding and allow 60-90 days for evaluation of bids. Select all credible bids for further contract negotiations but do not require a standard contract. It is advisable for the State to spend some time upfront on a contract template that would be issued with the RFP.
- Encourage long-term contracts (up to 20 years) in order to make the contract valuable for the bidder in securing debt financing.

Optional Program Enhancements



Compensation for above market prices: Some proposals may come in above current market price for comparable fuels. It is worth considering providing state funding to compensate the public agencies for the price risk. The AB 118⁶ funds, administered by the California Energy Commission could be a source of funds if approved by the agency. The structure would provide a way to refund to the participating public agencies, the price difference between the average prices for petroleum fuel in a time period as compared to the contract price. The funds could be limited to the first few years of delivery with a total cap to limit financial exposure. Correspondingly, if the cost is below market, the benefit should flow back to AB 118 funds.

The public benefit of assisting the LCFS program could justify the use of funds. For example, a contract for 10 million gallons per year came in at an average of 50 cents above market, the cost would be \$5 million. The economic of creating a new facility and increasing the low carbon fuel supply would justify the investment in public funds.

LCFS Credits: When an entity delivers fuel with a carbon intensity below gasoline/diesel, they can accumulate a credit as determined by the LCFS. The contracting entity would be expected to hold those credits and presumably use their value to help provide a competitive price for fuel.

LCFS Flexible Compliance: The California Air Resources Board is defining a flexible compliance mechanism to deal with the cases of one or more regulated parties failing to meet the LCFS standard in any given year. The Air Board could consider a non-compliance fee based on a multiple of the value of LCFS credits and paid to enable the state to enter into additional fuel contracts. In this way, the environmental integrity of the program is maintained since the state purchase program is achieving carbon reduction benefits above those required by the regulated parties. Paying a premium into the program is an appropriate way to encourage the regulated parties to meet their obligations since in principle the penalty for non-compliance is larger than the cost to comply.

For further information contact:

Mary Solecki
E2

⁶ <http://www.energy.ca.gov/2010-ALT-1/index.html>



ENVIRONMENTAL
ENTREPRENEURS

mary@e2.org

www.e2.org

Northern California
111 Sutter Street, 20th Floor
San Francisco, CA 94104
TEL 415 875-6100 FAX 415 875-6161

NEW YORK & NEW ENGLAND
40 West 20 Street
New York, NY 10011
TEL 212 727-2700 FAX 212 727-1773

Southern California
1314 Second Street
Santa Monica, CA 90401
TEL 310 434-2300 FAX 310 434-2399