



May 7, 2010

Mr. Arthur N. Marin
Executive Director, NESCAUM
89 South Street, Suite 602
Boston, MA 02111

RE: Proposed Northeast/Mid-Atlantic Low Carbon Fuel Standard
Comments on Economic Analysis, Draft Data and Assumptions, Part I

Dear Mr. Marin:

Fulcrum BioEnergy, Inc. strongly supports the Northeast and Mid-Atlantic State's efforts to develop a framework for a regional low carbon fuel standard (LCFS), which will significantly reduce carbon emissions and our reliance on fossil energy sources.

Fulcrum is a privately held company with a mission to create a clean, low-cost and sustainable source of domestic transportation fuel. Unlike existing ethanol production methods from corn and other feedstocks, our approach relies on an abundant and renewable feedstock: municipal solid waste. Using a proven thermochemical process to convert municipal solid waste into ethanol, Fulcrum is leading the next generation of ethanol production.

We offer the following comments on the Draft Data and Assumptions dated 4/15/10 grouped into categories requested by NESCAUM:

-Production Costs

Fulcrum is planning a series of 20 and 30 million gallon per year ethanol production facilities. We estimate the up-front capital costs will be similar to other cellulosic ethanol technologies and our operating costs will be less than \$1/gallon. Our low operating cost is achievable through zero feedstock costs, minimal imported energy costs, and a reasonable plant scale.

-Estimates of Technology Deployment

The draft data includes an assumed 10% blend limit for ethanol in gasoline. During congressional testimony, EPA and USDA have indicated that an increased blend limit (e.g. 15%) is expected to be approved.

-The draft data indicates that some states including Massachusetts have moratoriums on waste to energy projects. It should be clarified that MassDEP recently issued an opinion that a waste to ethanol project would not be subject to the moratorium.

-The final rulemaking for RFS2 includes two aspects that bolster the waste to fuels industry. First, EPA clarified that MSW with adequate separation is an acceptable feedstock, and it meets the definition of renewable biomass. Second, EPA identified that the GHG reduction of cellulosic ethanol derived from such MSW exceeds the 60% GHG reduction threshold relative to gasoline. Fulcrum's own lifecycle GHG analysis shows greater than a 75% reduction.

-Costs of Related Infrastructure

-One of the strengths of the waste to fuels model is its compatibility with the existing waste and fuel infrastructure. Ethanol is widely used throughout the 11 states engaged in the LCFS. The existing solid waste infrastructure is in place to collect, process and transport waste to a waste to fuels facility.

We welcome the opportunity to meet with NESCAUM to discuss our projects and to review our lifecycle GHG analysis.

Thank you for your time and attention to this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ted M. Kniesche', with a stylized flourish at the end.

Ted M. Kniesche
VP Business Development
FULCRUM BIOENERGY, INC.