



04-23-09

California board adopts low-carbon fuel standard

Biofuels industry advocates suggest findings based on 'shaky science'

By Sara Wyant

© Copyright Agri-Pulse Communications, Inc.

In a ruling that many predict will be replicated in other parts of the country and adopted by federal regulators, California became the first state on Thursday to mandate carbon-based reductions in transportation fuels. The California Air Resources Board (ARB) approved a phased-in reduction starting in 2011, with a goal of shrinking carbon impacts 10% by 2020.

ARB Board Chairwoman Mary Nichols hailed the low-carbon fuel standard as a major step in moving the nation away from oil dependence and toward alternative fuels that generate lower greenhouse gas emissions. However, businesses and oil industry critics warned that the air board was moving too broadly and quickly and that its action would lead to higher costs for consumers.

The air board looked at the entire carbon "intensity" of fuels, rather than the impact of emissions from use alone. The board's staff studied the amount of greenhouse gases released during the production and use of each fuel. But with biofuels, the staff also examined changes in land use, both here and abroad, triggered by biofuel production.

Many environmentalists say developing countries are turning forests into farmland to feed the growing biofuels market. When you add in what they project as "indirect" land-use changes, some kinds of ethanol score worse than gasoline in the air board's rankings –especially many corn-based ethanol plants made in the Midwest.

Ethanol advocates challenged the report's findings, disputing that their corn-based production had a significant impact on greenhouse-gas increases elsewhere. But they also suggested that petroleum and other fuels were not given the same treatment.

"We are not convinced that expansion of ethanol production in the United States has caused or will cause indirect land use change," testified Geoff Cooper, Vice President for Research for the Renewable Fuels Association. "Tremendous increases in grain output per unit of land, coupled with growing supplies of animal feed co-products like distillers grains, have essentially eliminated the need to expand the global cropland base in response to increased U.S. biofuels demand."

Growth Energy co-chairman Gen. Wesley Clark testified that greenhouse-gas emissions related to the U.S. military in the Middle East should be considered as part of oil's calculation.

"There are indirect effects for many fuels, but the only indirect effects that have been looked at are the indirect effects in land use for biofuels," Clark said. "So if we're going to look at indirect effects, and I think we should, you have to take a broader look and roll in more."

In a letter to Clark on April 22, CARB Chairman Nichols promised to work with ethanol producers to update formulas related to the indirect effects of fuels as warranted by future research.

"I wanted to let you know that ARB firmly believes that corn ethanol will play an important role in helping California achieve the goals of the LCFS," wrote Nichols. "The federal RFS already requires significant volumes of corn ethanol to be blended into gasoline and the quantity of corn ethanol in California is expected to reach nearly 2 billion gallons in 2010. We expect the current generation of corn ethanol fuels to play a significant role well into the next decade. The LCFS as currently proposed will drive investment toward even cleaner low-carbon corn ethanol, increasing its market share over time. Our staff estimates that quantities of clean corn ethanol will more than triple in California by 2020."

A review by ARB staff found that not all feed stocks and production processes for ethanol are the same. Looking at eleven separate production pathways, they found that seven that produce significantly less greenhouse gases than baseline gasoline, thereby assuring that they will play a role in reaching the standard, she pointed out.

The board also agreed to take three additional steps, outlined by Nichols in her letter:

1. Because of the critical importance to the industry and the climate, the Board will commit to an ongoing investigation including input from outside experts to evaluate the land use and other indirect effect of all transportation fuels. For biofuels, this will include a consideration of agricultural yield improvements, coproduct credits, land emission factors, food price elasticity, and other relevant factors. The results of this investigation and recommended changes to the rule will be presented to the Board on or before December, 2011.
2. As part of the federal Renewable Fuels Standard, the USEPA has been working on evaluating life-cycle emissions for biofuels including land use emissions and has a rule pending at OMB. Additionally, the European Commission is committed to addressing this issue by December, 2010. ARB will work with these other agencies to harmonize where possible the data, modeling and values used for life-cycle analysis and land use change.
3. We are expanding upon an approach within the rule which allows suppliers of alternative fuels, including biofuels, to provide data and information to certify their feedstocks and fuel production processes. The LCFS as written allows for all fuel producers to certify their specific pathway including a demonstration of innovative agricultural practices that can reduce their life cycle emissions including their impact on land use change. The Board will also commit to establishing criteria and a list of specific biofuel feedstocks that are expected to have no or inherently

negligible land use effects on carbon intensity by December 2009.

"We're disappointed with the Board's vote," said Growth Energy's Clark. "This was a poor decision, based on shaky science, not only for California, but for the nation. It is unfair to selectively single out the indirect effects of one fuel pathway while ignoring the significant indirect effects of all other fuels, including petroleum. Today's decision puts another road block in moving away from dependence on fossil fuels and stifles development of the emerging cellulosic industry."

#30

© Copyright Agri-Pulse Communications, Inc. All rights reserved. Reproduction or distribution in any form is prohibited without consent from Editor Sara Wyant, Agri-Pulse Communications, Inc. 5N985 Rt. #31, St. Charles, IL. 60175. Phone: (630) 443-3257. Fax: (630) 443-3258.