



BRAZILIAN SUGARCANE INDUSTRY ASSOCIATION  
ETHANOL • SUGAR • ENERGY BRAZIL

November 17, 2011

VIA ELECTRONIC MAIL

Michelle Buffington  
Air Pollution Specialist  
Advisory Panel Co-Chair  
Headquarters Building  
1001 I Street  
Sacramento, CA 95814

**Reference: *Comments on Low Carbon Fuel Standard 2011 Program Review Report – Working Draft Version 1.***

Dear Ms. Buffington:

The Brazilian Sugarcane Industry Association (UNICA) welcomes the opportunity to provide specific comments on the Low Carbon Fuel Standard 2011 Program Review Report – Working Draft Version 1 (The Report), which the staff of the California Air Resources Board (CARB) published on October 26, 2011.

The Brazilian Sugarcane Industry Association (UNICA) is the largest organization representing sugar, ethanol, and bioelectricity producers in Brazil. UNICA's members are responsible for more than 50% of all ethanol produced in Brazil and 60% of overall sugar production. UNICA's priorities include serving as a source for credible scientific data about the competitiveness and sustainability of sugarcane biofuels. The association works to encourage the continuous advancement of sustainability throughout the sugarcane industry and to promote ethanol as a clean, low carbon, reliable alternative to fossil fuels. In fact, gasoline is now the alternative fuel in Brazil, with more ethanol consumption than gasoline. In terms of sustainability, sugarcane ethanol production uses about 1.5% of Brazil's arable land and reduces greenhouse gases (GHG) by 90%, on average, compared to conventional gasoline. Moreover, thanks to our innovative use of ethanol in transportation and biomass for power cogeneration, sugarcane is now the number one source of renewable energy in Brazil, representing 18% of the country's total energy needs. And this industry is expanding existing production of renewable, bioplastics and, with the help of innovative companies here in the United States and elsewhere, are beginning to offer bio-based hydrocarbons that can replace carbon-intensive fossil fuels.

Given our extensive experience with and knowledge of sugarcane biofuels production, and given our direct and significant interest in the successful implementation of California's Low Carbon Fuel Standard (LCFS) program, we request that CARB considers

the comments of this letter as it continues to improve the development of the program. Our comments are outlined below.

## **I - Advisability for Harmonization**

UNICA commends CARB for creating a program that strives to significantly reduce greenhouse gas (GHG) emissions in the State of California, and for working with the Environmental Protection Agency (EPA) to harmonize LCFS and the Renewable Fuel Standard (RFS2) program. The LCFS is in its initial stages of implementation and we feel that any effort of harmonization of the program has to be done carefully, and may only be appropriate when current programs have been in fully effect and their progress can be carefully evaluated.

In regards to harmonization of lifecycle assessment UNICA would like to reiterate that lifecycle analysis, by definition, involves a considerable number of variables with complex relationships, and the addition of indirect land use changes only exacerbates these complexities. It has been the recommendation of various stakeholder groups (e.g. Global Bioenergy Partnership, Roundtable on Sustainable Biofuels, etc.) to simplify the analyses by eliminating some aspects that are clearly of smaller impact on the model's output.<sup>1</sup> Brazilian and international experts differ in opinion with GREET-CA on how to calculate GHG emissions, reaching a consensus on these approaches would facilitate analyses and comparisons going forward. It is also imperative that models continues to take into considerations the advances in agricultural practices in question and use the most up-to-date data values available.

## **II – Advances in Lifecycle Assessment**

UNICA was please to see that staff has included reference to the improvement in the representation of yields in recent converted lands as previously suggested by UNICA on the September 12, 2011<sup>2</sup> comments submitted to CARB. As the GTAP model has presented strong sensitivity in the results due to this parameter, and the GTAP group has made important improvements to estimate such parameter using a terrestrial ecosystem model, we appreciate seeing this improvement be properly addressed in the report and in future lifecycle estimates done by CARB using GTAP.

In regards to our recommendation to include reference in the outline of possible future improvements in the land supply nesting structure, in the direction recommended by the CARB LCFS Expert Workgroup, we are also pleased to see this cited on the report.

UNICA continues to monitor the updates and improvements to the LUC modeling, and we request that ARB staff refer to, and carefully consider, our suggestions on other aspects of developments of LUC analysis submitted on October 5<sup>th</sup>, 2011.<sup>3</sup> We continue

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<sup>1</sup> See *Sustainable biofuels: Prospects and Challenges*, The Royal Society, January 2008, Policy Document 01/08. Available at <http://royalsociety.org/document.asp?id=7366>

<sup>2</sup> See: <http://sugarcane.org/resource-library/unica-materials/LCFS%20-%20UNICA%20Comments%20to%20August%202011%20documents.pdf>

<sup>3</sup> See: <http://sugarcane.org/resource-library/unica-materials/UNICA%20comments%20to%20CARB%2020111005.pdf>

to be at your disposal to cooperate with you and your contracted researchers in any way you may find helpful.

In regards to changing the current pathway approval process from a regulatory to a certification process, UNICA would like to request staff to elaborate on the details of this proposed change and how such certification process would work. We encourage staff to ensure that any language modification proposed to the Board, specifically as it relates to Brazilian sugarcane pathways, takes into consideration the reality of sugarcane cultivation in Brazil, and does not translate into barriers by imposing certain documentation that do not exist in Brazilian systems.

### **III– Technology Assessment, Supply and Availability**

UNICA was pleased to see that CARB added a session on Brazilian sugarcane ethanol to this chapter as previously suggested by UNICA. Given the importance of Brazilian sugarcane ethanol for the successful implementation of the LCFS and fact that more than 40 Brazilian mills have registered to supply the Californian market, we are ready to collaborate with staff and provide information about the latest technology and developments in the Brazilian sugarcane industry.

### **IV – LCFS Credit Market**

We agree with the Advisory Panel and ARB staff that the credit market is a necessary component of the LCFS regulation and it needs to be transparent and competitive in order to properly function and succeed. We support the staff on their efforts in building a strong and enforceable credit market.

### **Conclusion**

I hope these comments will contribute to improving the development of the LCFS in California, and I look forward to seeing the final draft report. I would also like to congratulate you, the staff, and the Advisory Panel members for the work you have put into this throughout this year and we remain at your disposal to collaborate with you and answer any questions you may have.

Sincerely,

A handwritten signature in cursive script that reads "Leticia Phillips". The signature is written in black ink on a white background.

Leticia Phillips  
Representative – North America