



## **What's at stake in the United States?**

**By Joel Velasco**

A year ago, UNICA's board made the seminal decision to expand the reach of the trade association with a permanent presence outside of Brazil. Whereas previously UNICA was limited in its international reach by private meetings and formal presentations at conferences around the world, today UNICA is present with offices in Washington and Brussels and soon in Asia. While UNICA mission has not changed, its strategy and tactics are being adapted to a constantly changing world. What's at stake in the United States for UNICA's members?

The United States remains the world largest auto market, representing about one third of the world automotive sales and over 40% of the world's gasoline consumption. There are over 140 million passenger vehicles (not including another 100 million trucks and other vehicles) in the United States. In gasoline alone, the United States consumes close to 150 billion gallons (565 billion liters) every year, making it the largest potential market for ethanol, either as a gasoline extender or replacement. Even with reduced sales of new cars -- Americans will buy about 14 million new vehicles this year, the weakest sales volumes in 15 years -- gasoline demand will abate (down 3% during the peak summer driving season) but not dramatically to reduce the U.S. market's potential for ethanol producers.

Recognizing that the United States is heavily dependent on fossil fuels (70% of it imported) for its transportation fuel needs and recognizing the rising burden on consumers of increasing gas prices, the U.S. Congress approved legislation last year that set the stage for a major shift away from gasoline. Perhaps no other recent change, with the likely exception of the move to flex-fuel vehicles in Brazil, has the potential to change the market for ethanol dramatically for the sugarcane ethanol industry in the years to come.

The new U.S. energy law establishes a renewable fuel standard (RFS) that mandates a minimum volume of biofuels that must be consumed annually in the United States. For 2008, the law requires that 9 billion gallons (34 billion liters) of renewable fuel would be added to motor fuel supply. By 2022, the requirement is for 36 billion gallons (136 billion liters) of biofuels. The law also divides the mandate in two broad categories, conventional and advanced biofuels. Advanced biofuels are those that reduce greenhouse gases (GHG) by at least 50% on a lifecycle basis. Conventional biofuels, namely corn ethanol, are mostly exempt from the GHG requirement. Brazilian sugarcane ethanol is considered an advanced biofuel under the RFS, subject to confirmation by the EPA regulatory process underway.

Another significant change in the United States has been the sharp increases of gas prices and its impacts on policy makers. When gasoline surpassed US\$ 4.00 per gallon, consumer sentiment changed dramatically. As opinion polls suggest, gas prices is now the top consumer concern, ahead of the war in Iraq and often tied with concerns about the economy generally. Over 75% of those polled say high gasoline prices are causing financial hardship. In short, while driving habits and vehicle choice are changing, consumer (read: voters) focus remains on reducing prices at the pump. Politicians are struggling to respond since the United States, unlike most countries, has not levied high taxes on gasoline (about 10%, compared to about



40% in Brazil).

How do these two events – biofuels mandate and energy crisis – affect Brazil's ethanol industry? What's at stake in the United States?

First, the United States will continue demanding ethanol, likely at least until supply reaches about 14 billion gallons (53 billion liters) (i.e. so called "blend wall").<sup>[1]</sup> With gasoline refining margins very tight<sup>[2]</sup> (e.g., Valero, the largest U.S. refiner, gasoline-refining margins down 77% from a year ago), it is not surprising that ethanol demand is quickly increasing. Not only is there a federal requirement to consume biofuels but also, because of the sharp increase in oil prices, gasoline distributors are economically incentivized (even before the US\$ 0.51 per gallon tax credit) to blend lower priced ethanol with gasoline at up to 10% blends. (The U.S. Environmental Protection Agency confirmed in early August that it would not reduce the mandate though there will continue to be political pressure to reduce food-based ethanol production.)

Second, U.S. production of ethanol may be reaching a plateau. According to the best industry estimates, total ethanol production capacity today is 10 billion gallons (38 billion liters). If all the mills that are currently planned and under construction were to be added at full capacity, the total would reach 13.5 billion gallons (50 billion liters). However, continued high price of corn has significantly reduced margins for corn ethanol production, leading many to speculate that actual production will not be close to the total capacity. Given that 10% of gasoline demand is roughly about 15 billion gallons (57 billion liters) It may be reasonable to project that there will be a shortfall of about 1.5 billion gallons (5.5 billion liters) of ethanol in the U.S. before imports are considered. Of course, that presumes that gasoline consumption does not abate significantly and corn ethanol mills continue to operate at full capacity. The latter is perhaps more likely than the former. Many studies suggest that corn ethanol producers margins are near zero at corn prices over \$5 a bushel. As the president of the Renewable Fuels Association, the main lobby of the corn ethanol industry in the United States, often says, "you can't produce \$2 per bushel corn on \$4.50 per gallon diesel." In other words, corn prices are directly linked to high oil prices, and the expensive feedstock (i.e., corn) may be pricing corn ethanol out of the market.

In conclusion, UNICA's decision to move on the international front by establishing permanent offices in major capitals was the first such move by a major trade association in Brazil and, I believe, one that will be looked upon as one of the critical junctures of the sugarcane industry and the biofuels industry in years to come. For now, what a difference a year makes. Our challenge today is to comprehend these changing currents and capitalize on Brazil's agribusiness potential to expand the reach of its biofuels industry, not just for the industry's sake but for the sake of reducing the world's dependency on dwindling fossil fuels.

#### **NOTES:**

<sup>[1]</sup>Blend wall is the limit of ethanol that can be blended into the gasoline supply. Under current U.S. regulations, gasoline may contain up to 10% ethanol, thus the term E-10. Additional growth in ethanol demand would be constrained by the blend wall unless deployment of E-85 ethanol or other higher blends were permitted by



U.S. federal and state regulators.

[2] Difference between the cost of crude oil and the value of the resulting product.

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