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CLIMATE CHANGE AND BIOFUELS

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EXECUTIVE SUMMARY

Sugarcane ethanol is not the villain that it is often made out to be and neither is the sugarcane industry. In Brazil, the sugarcane industry has set out to convince the Brazilian government to adopt a carbon cap and trade system domestically, independently of international negotiations. It is in their interest to reinsert the positive environmental externalities accrued from sugarcane ethanol use and production into the market system. It makes economic and environmental sense and it might spur a value-added product. The next best thing after organic sugar is carbon neutral sugarcane ethanol.

On March 11th, 2009 the Brazil Institute held a private luncheon for the policy and non-governmental community in the United States. Marcos Jank, president of the Brazilian Sugarcane Industry Association (UNICA) was the guest speaker. Discussions revolved around why the Brazilian sugarcane industry is advocating a domestic carbon cap and trade system, what progress has been made, how does one tie in the carbon cap and trade market advocated by the sugarcane industry with controlling deforestation in the Brazilian Amazon and what are the next steps to move forward on the implementation of the Brazilian carbon market.

Marcos Jank,
President of UNICA

ETHANOL INDUSTRY'S GREEN PROTOCOL

On his third visit to the Woodrow Wilson International Center for Scholars, Marcos Jank, president of the Brazilian Sugarcane Industry Association (UNICA) spoke to the policy and non-governmental community in the United States on UNICA's efforts to convince Brazil's government to launch a domestic carbon trade market. Jank spoke at a private luncheon hosted by the Brazil Institute, represented by its Director Paulo Sotero, and the Environmental Change and Security Program, represented by its Director Geoff Dabelko.

The current debate on renewable energy and climate change often portrays ethanol as an environmental villain. Even the critics that take the time to discern corn ethanol from sugarcane ethanol see many downsides to ethanol. In the case of sugarcane ethanol the most common criticism is the direct or indirect destruction of the Brazilian Amazon by sugarcane. They would be surprised to find though, that sugarcane has a limited presence in the Brazilian Amazon region and rather than pushing the cattle frontier north, sugarcane plantations salvage the land left by cattle growers in search of better pastures.

"BUSINESSES THAT BUY AGRICULTURAL PRODUCTS ALL AROUND THE WORLD, WITH THE PRICE SPIKES IN COMMODITIES, ARE NOW WILLING TO BUY MORE DIVERSE PRODUCTS TO CREATE AND STRENGTHEN A LONG TERM RELATIONSHIP WITH THEIR SUPPLIERS IN THEIR VALUE CHAIN."

The Brazilian Sugarcane Industry Association (UNICA) is aware of the often unwarranted criticism and of the possible economic benefits derived from a more environmentally conscious product. For this reason it has voluntarily adhered to the Green Protocol for businesses in the state of São Paulo. The Green Protocol is a social environmental responsibilities agreement that establishes guidelines for areas of permanent preservation (APP), water, agrochemicals and social issues such as labor.

In accordance with the voluntary Green Protocol, UNICA will eliminate the burning of sugarcane in 2014. The tradeoff of eliminating burning is the loss of jobs due to mechanization for 180,000 persons cutting sugarcane in the state of São Paulo. To curb the detrimental social effects of making production methods more environmentally sound, UNICA implemented a plan to qualify the sugarcane cutters to work with machines involved in sugarcane ethanol production. Expectations are that UNICA will to qualify 5,000 workers a year.

In addition to adhering to the Green Protocol, UNICA participates in all big discussions on the sustainability of biofuels. The association sits on the steering board of the Roundtable on Sustainable Biofuels and of the Better Sugarcane Initiative and is a member of the Global Bioenergy Partnership. UNICA also meets frequently with environmental

NGOs to coordinate and discuss the environmental sustainability of sugarcane ethanol.

A DOMESTIC CARBON MARKET

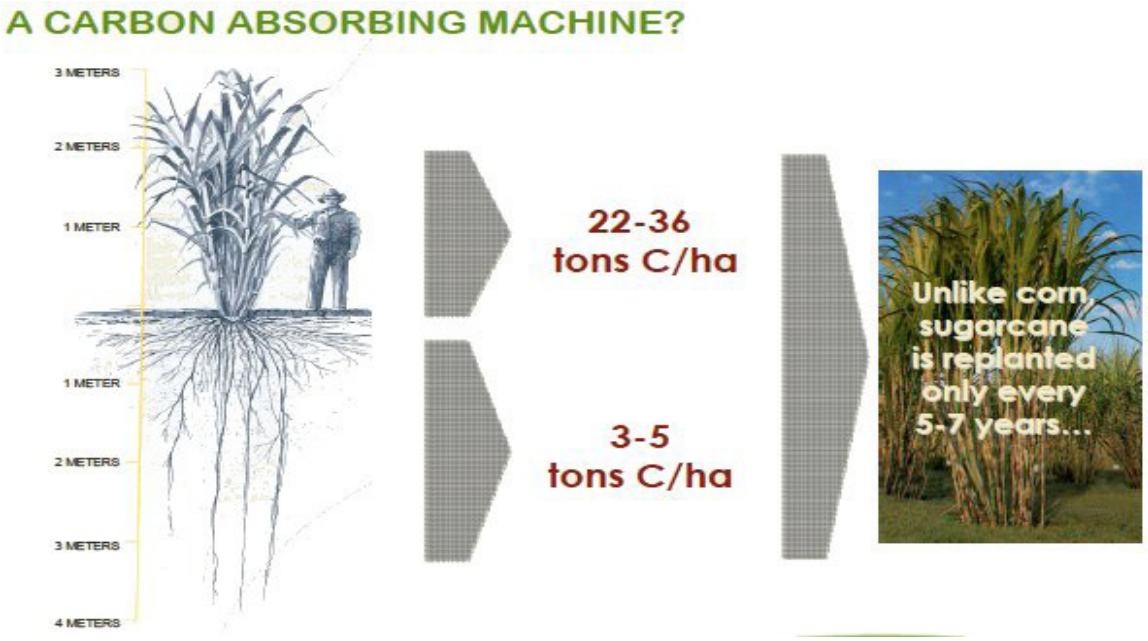
In 2008, UNICA moved decisively on climate change. Ethanol should be part of the discussions on Climate Change, specifically on flexible mechanisms such as carbon emissions trading. It was not part of the discussion in Kyoto because the only country that produced ethanol in significant quantities was Brazil. Because it was not part of the discussion, there are no carbon credits for ethanol. Brazil does receive credits from bioelectricity, which is ethanol and other biofuels converted into electricity to power a small battery. Those bioelectricity credits represent twenty percent of the credits Brazil receives today.

UNICA is in the beginning stages of coordinating with four other industries--charcoal, steel, renewable energy and fly ash cement--in order to convince the Brazilian government to introduce a domestic cap and trade system. Its advocates believe that while international negotiations on cap and trade will be long drawn, a window of opportunity has opened up in Brazil to introduce a domestic system. The Brazilian government recently announced a national plan on climate change, but currently it is only focused on controlling and reducing deforestation. There also seems to be internal dissension in policy between the foreign policy position of the Ministry of External Affairs, which does not support an international cap and trade system, and the position of the Ministry of Environment, favorable to carbon market. The climate change plan and this internal fissure might be the opportunity that these industries are looking for to convince the Brazilian government to introduce a cap and trade system domestically.

UNICA has not given up on an international cap and trade regime. The implementation and success of a domestic cap and trade regime would be just the first step towards a similar system at the international level. UNICA was present in the Conference of the Parties in Bali and in Potsdam and will be in Copenhagen pushing the private sector perspective in these discussions. If Brazil does implement a domestic cap and trade system, UNICA hopes that Brazil can then connect its system to that of the carbon emissions market in the US and in Europe. The implementation and success of the Brazilian emissions market is not directly related to Kyoto, which means it can move forward even if Kyoto does not.

THE CABON MARKET BENEFITS ALL

UNICA believes that the private sector is the starting point for any public policy toward the environment and climate change. That is how the moratorium on trading soy from freshly deforested areas of the Amazon came to be, with the support from



companies such as Cargill. UNICA is also working to convince the government that a sugarcane ban in the Amazon is required. Amazonian governors do not support this, but industry does.

The economic benefits for Brazil's sugarcane industry of a domestic cap and trade system are numerous. Directly, it would allow the industry to trade one more sugarcane byproduct – its ability to capture carbon. Indirectly it solves a public relations problem caused by unwarranted criticism of the effects of sugarcane plantations on the Amazon region. It creates a value-added product that will potentially be in high demand.

Participants in the luncheon argued for the creation of a voluntary carbon market, based on their experience with companies that buy agricultural products. Current spikes in commodity prices encourage businesses that purchase agricultural products all around the world to buy more diverse products in order to create and strengthen long-term relationships with suppliers in their value chain. They see this as a supply chain management tool. Buying carbon from producers allows coke to become carbon neutral within its own value chain; the same applies to Mars, Kraft and Cargill. Every company carries a bundle of values – it is either GM or not GM, organic or not organic, and, in this case, carbon neutral or non-carbon neutral ethanol. It is, thus, not an unprecedented idea.

In creating value for products and trading it, the public sector trails the private. The yellow in yellow corn in the US wasn't defined until 1996 and private companies had been trading yellow corn a few years prior to that. Carbon is just a way to accommodate new values.

DEFORESTATION AND CARBON MARKET

Reduction of Emissions from Deforestation and Degradation (REDD) is becoming reality. Controlling deforestation is not currently included in the Kyoto protocol as a source of carbon credits and, until recently, quantifying the reduction in emissions as a result of limiting deforestation was a challenge. With the advances in Remote Sensing Technology, however, this challenge is close to being overcome.

There was general consensus that halting deforestation is the simplest way to cut emissions and that the world is close to successfully creating a carbon market solution to deforestation. The solution hinges on two important factors. First, Brazil must carry out what it has committed to do – reach its target and demonstrate using its world-renowned remote sensing technology that by 2017 it can reduce deforestation by 75 percent. Secondly, the US system has to allow those reductions into its market for compliance purposes.

Brazil will eventually adopt a cap and possibly under Obama, the United States will also adopt a cap. This creates an international dynamic that is very different from what is going on in clean development mechanisms (CDM) projects in China, for example. Because of CDM projects in China their emissions are going through the roof, but there is no net gain for the atmosphere. If Brazil has a cap and the United States has a cap, bilateral trade between the countries would continue to drive down emissions. Reducing overall emissions by 2020 involves larger atmospheric problems with solutions qualitatively different from the offset proposals that are out there. Thus, the environmental community supports allowing carbon credit for controlling deforestation.

Another problem is how to distribute the benefits accrued from the carbon market. A lot of the policy work on this has already been done. The most interesting is probably the stock-flow proposal. The government can sell the reduction of deforestation to the market, and the profits can be redistributed, according to carbon stocks, to all the carbon stock holders. So everyone has a way of benefiting--federal and municipal government, private companies and civil society. Carbon stocks as a criteria are something objective on which to hang the negotiation so it is not purely political. Thus, there are ways, through cap and trade, to reduce deforestation.

MOVING FORWARD

In order to achieve the goal of implementing a domestic carbon market in Brazil Marcos Jank argues that civil society has to get on board. The industry already supports this initiative and so does the non-governmental

"WE HAVE A MONOCULTURE OF PASTURES IN BRAZIL, NOT OF SUGARCANE. WE HAVE 170 MILLION HECTARES OF PASTURES AND 3 MILLION HECTARES OF SUGARCANE. HALF OF BRAZIL'S ARABLE LAND IS CATTLE AND EVERY HEAD OF CATTLE USES 2.5 ACRES. IF YOU MAKE CATTLE MORE EFFICIENT YOU CAN PRODUCE MORE SUGARCANE."

community. To leverage the differences in opinion between the Ministry of External Relations, against a carbon market, and the Ministry of Environment, in favor of it, civil society awareness and, subsequently, pressure is essential.

One option for a next step is to move the debate on a carbon market, such as the one in the private luncheon hosted at the Wilson Center, over to Brazil. UNICA often finds itself preaching to choir when speaking in the United States or in Europe, but if foreign organizations that support a carbon market solution participate in a conference in Brazil it might spark debate in Brazilian society, and hopefully catalyze the creation of a domestic carbon market.

Guests at the luncheon include:

-- Barbara Bramble, Senior Program Advisor, International Affairs, National Wildlife Federation;
-- Jay Caldwell, Center for American Progress;
-- Jason Clay, Senior Vice President World Wildlife Fund;
-- Clifford Duke, Director of Science Programs at the Ecological Society of Americas;
-- Dave Hamilton, Director of Global Warming & Energy Programs at the Sierra Club;
-- Jim Harkness, Institute for Agriculture and Trade Policy;
-- Tom Johnson, Latin American and Caribbean Unit of the World Bank;
-- Michael Levi, Senior Fellow at the Council of Foreign Relations;
-- Christine Parthemore, fellow at the Center for New American Security's, Program for Energy Security and Climate Change;
-- Kevin Ogorzalek, World Wildlife Fund and Management Committee for the Better Sugarcane Initiative;
-- Jacob Scherr, Director of the International Programs at the Natural Resources Defense Council;
-- Steve Schwartzman, Environmental Defense Fund;
-- Joel Velasco, Chief Representative - North America at UNICA.

BRAZIL INSTITUTE

Created in June 2006 as part of the Wilson Center's Latin American Program, the BRAZIL INSTITIUTE strives to foster informed dialogue on key issues important to Brazilians and to the Brazilian-U.S. relationship. We work to promote detailed analysis of Brazil's public policy and advance Washington's understanding of contemporary Brazilian developments, mindful of the long history that binds the two most populous democracies in the Americas.

The Institute honors this history and attempts to further bilateral cooperation by promoting informed dialogue between these two diverse and vibrant multiracial societies. Our activities include: convening policy forums to stimulate nonpartisan reflection and debate on critical issues related to Brazil; promoting, sponsoring, and disseminating research; participating in the broader effort to inform Americans about Brazil through lectures and interviews given by its director; appointing leading Brazilian and Brazilianist academics, journalists, and policy makers as Wilson Center Public Policy Scholars; and maintaining a comprehensive website devoted to news, analysis, research, and reference materials on Brazil.

Paulo Sotero, Director, Brazil Institute
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