

# TOWARDS AN ENERGY REVOLUTION?

**Fidel Castro Ruz**

*[On the eve of May Day, 2007, Fidel Castro Ruz, commander in Chief, Cuba, made his reflections on the coming bio-fuel revolution vis-à-vis the role of USA in monopolizing bio-fuel resources, Excerpts :]*

At the time of Christopher Columbus, barely 500 years ago, some of the important cities did not exist or they had populations that did not exceed several tens of thousands. Nobody used one single kilowatt to light their home. Possibly, the population of the world then was not more than 500 million. In 1830, world population reached the first billion mark, one hundred and thirty years later it multiplied by three, and forty-six years later the total number of inhabitants on the planet had grown to 6.5 billion; the immense majority of these were poor, having to share their food with domestic animals and from now on with biofuels.

Humanity did not then have all the advances in computers and means of communication that the people have today, even though the first atomic bombs had already been detonated over two large human communities, in a brutal act of terrorism against a defenseless civilian population, for reasons that were strictly political.

Today, the world has tens of thousands of nuclear bombs that are fifty times as powerful, with carriers that are several times faster than the speed of sound and having absolute precision; sophisticated species could destroy itself with them. At the end of World War II, fought by the peoples against fascism, a new power emerged that took over the world and imposed the absolutist and cruel order under which people live today.

Before Bush's trip to Brazil, the leader of the empire decided that corn and other foodstuffs would be suitable raw material for the production of biofuels. For his part, Lula stated that Brazil could supply as much biofuel as necessary from sugar cane; he saw in this formula a possibility for the future of the Third World, and the only problem left to solve would be to improve the living conditions of the sugarcane workers. He was well aware -and he said it— that the United States should in turn lift the custom tariffs and the subsidies affecting ethanol exports to that country.

Bush replied that custom tariffs and subsidies to the growers were untouchable in a country such as the United States, which is the first world producer of ethanol from corn.

The large American transnationals, which produce this biofuel investing tens of billion dollars at an accelerated pace, had demanded from the imperial leader the distribution in the American market of no less than thirty-five billions (35,000,000,000) of gallons of this fuel every year. The combination of protective tariffs and real subsidies would raise that figure to almost one hundred billion dollars each year.

Insatiable in its demand, the empire had flung into the world the slogan of producing biofuels in order to liberate the United States, the 'world's supreme energy consumer, from all external dependency on hydrocarbons.

History shows that sugar as a single crop was closely associated with the enslaving of Africans, forcibly uprooted from their natural communities, and brought to Cuba, Haiti

and other Caribbean islands. In Brazil, the exact same thing happened in the growing of sugar cane.

Today, in that country, almost 80% of sugar cane is cut by hand. Sources and studies made by Brazilian researchers affirm that a sugarcane cutter, a piece-work laborer, must produce no less than twelve tons in order to meet basic needs. This worker needs to perform 36,630 flexing movements with his legs, make small trips 800 times carrying 15 kilos of cane in his arms and walk 8,800 meters in his chores. He loses an average of 8 liters of water every day. Only by burning cane can this productivity per man be achieved. Cane cut by hand or by machines is usually burned to protect people from nasty bites and especially to increase productivity. Even though the established norm for a working day is from 8 in the morning until 5 in the afternoon, this type of piece-work cane cutting tends to go on for a 12 hour working day. The temperature will at times rise to 45 degrees centigrade by noon.

The great agricultural yields of the United States were achieved by rotating the *gramineae* (corn, wheat, oats, millet and other similar grains) with the legumes (soy, alfalfa, beans, etc.). These contribute nitrogen and organic material to the soil. The corn crop yield in the United States in 2005, according to FAO (Food and Agriculture Organization of the United Nations) data was 9.3 tons per hectare.

In Brazil they only obtain 3 tons of this same grain in the same area. The total production registered by this sister nation that year was thirty-four million six hundred thousand tons, consumed internally as food. It cannot contribute corn to the world market.

The prices for this grain, the staple diet in numerous countries of the region, have almost doubled. What will happen when hundreds of millions of tons of corn are redirected towards the production of biofuel? [It is better] not to mention the amounts of wheat, millet, oats, barley, sorghum and other cereals that industrialized countries will use as a source of fuel for its engines.

Add to this that it is very difficult for Brazil to rotate corn and legumes. Of the Brazilian states traditionally producing corn, eight are responsible for ninety percent of production: Parana, Minas Gerais, Sao Paulo, Goias, Mato Grosso, Rio Grande do Sul, Santa Catarina y Mato Grosso do Sul. On the other hand, 60% of sugar cane production, a grain that cannot be rotated with other crops, takes place in four states: Sao Paulo, Parana, Pernambuco and Alagoas.

The engines of tractors, harvesters and the heavy machinery required to mechanize the harvest would use growing amounts of hydrocarbons. The increase of mechanization would not help in the prevention of global warming, something which has been proven by experts who have measured annual temperatures for the last 150 years.

Brazil does produce an excellent food that is especially rich in protein: soy, fifty million one hundred and fifteen thousand (50,115,000) tons. It consumes almost 23 million tons and exports twenty-seven million three hundred thousand (27,300,000). Is it perhaps that a large part of this soy will be converted to biofuel?

As it is, the producers of beef cattle are beginning to complain that grazing land is being transformed into sugarcane fields.

The former Agriculture Minister of Brazil, Roberto Rodrigues, an important advocate for the current government position, —and today a co-president of the Inter American Ethanol Commission created in 2006 following an agreement with the state of Florida and the Inter American Development Bank (IDB) to promote the use of biofuel on the American continent— declared that the program to mechanize the sugarcane harvest does not create more jobs, but on the contrary it would produce a surplus of nonqualified manpower.

The poorest workers from various states are the ones who gravitate towards cane cutting out of necessity. Sometimes, they must spend many months away from their families. That is what happened in Cuba until the triumph of the Revolution, when the cutting and hauling of sugarcane was done by hand, and mechanized cultivation or transportation hardly existed. With the demise of the brutal system forced on Cuban society the cane-cutters, massively taught to read and write, abandoned their wanderings in a few years and it became necessary to replace them with hundreds of thousands of voluntary workers.

Add to this the latest report by the United Nations about climate change, affirming what would happen in South America with the water from the glaciers and the Amazon water basin as the temperature of the atmosphere continue to rise.

Nothing could prevent American and European capital from funding the production of biofuels. They could even send the funds as gifts to Brazil and Latin America. The United States, Europe and the other industrialized countries would save more than one hundred and forty billion dollars each year, without having to worry about the consequences for the climate and the hunger which would affect the countries of the Third World in the first place. They would always be left with enough money for biofuels and to acquire the little food available on the world market at any price.

It is imperative to immediately have an energy revolution that consists not only in replacing all the incandescent light bulbs, but also in massively recycling all domestic, commercial, industrial, transport and socially used electric appliances that require two and three times more energy with their previous technologies.

It hurts to think that 10 billion tons of fossil fuel is consumed every year. This means that each year people waste what it took nature a million years to create. National industries are faced with enormous challenges, including the reduction of unemployment.

Another risk of a different nature facing the world is an economic recession in the United States. In the past few days, the dollar has broken records at losing value. On the other hand, every country has most of its reserves in convertible currencies precisely in this paper currency and in American bonds. □□□