

Reprint **Island Tides**

Visit www.islandtides.com for more interesting articles on other BC, national & international topics

Reprint from Volume 18 Number 16

August 24, 2006

Supermarkets and service stations competing for grain

Lester R. Brown

Cars, not people, will claim most of the increase in world grain consumption this year. The US Department of Agriculture projects that world grain use will grow by 20 million tons in 2006. Of this, 14 million tons will be used to produce fuel for cars in the United States, leaving only 6 million tons to satisfy the world's growing food needs.

In agricultural terms, the world appetite for automotive fuel is insatiable. The grain required to fill a 25-gallon SUV gas tank with ethanol will feed one person for a year. The grain to fill the tank every two weeks over a year will feed 26 people.

Investors are jumping on the highly profitable biofuel-bandwagon so fast that hardly a day goes by without another ethanol distillery or biodiesel refinery being announced somewhere in the world. The amount of corn used in US ethanol distilleries has tripled in five years, jumping from 18 million tons in 2001 to an estimated 55 million tons from the 2006 crop.

In some US corn belt states, ethanol distilleries are taking over the corn supply. In Iowa, a staggering 55 ethanol plants are operating or have been proposed. Iowa State University economist Bob Wisner observes that if all these plants are built, they would use virtually all the corn grown in Iowa. In South Dakota, a top-ten corn-growing state, ethanol distilleries are already claiming over half of the corn harvest.

With so many distilleries being built, livestock and poultry producers fear there may not be enough corn to produce meat, milk, and eggs. And since the United States supplies 70% of world corn exports, corn-importing countries are worried about their supply.

Since almost everything we eat can be converted into fuel for automobiles, including wheat, corn, rice, soybeans, and sugarcane, the line between the food and energy economies is disappearing. As the price of oil climbs, it becomes increasingly profitable to convert farm commodities into automotive fuel, either ethanol or biodiesel. In effect, the price of oil becomes the support price for food commodities. Whenever the food value of a commodity drops below its fuel value, the market will convert it into fuel.

Crop-based fuel production is now concentrated in Brazil, the United States, and Western Europe. The United States and Brazil

each produced over 4 billion gallons (16 billion litres) of ethanol in 2005. While Brazil uses sugarcane as the feedstock, US distillers use grain—mostly corn. The 55 million tons of US corn going into ethanol this year represent nearly one sixth of the country's grain harvest but will supply only 3% of its automotive fuel.

Brazil, the world's largest sugar producer and exporter, is now converting half of its sugar harvest into ethanol. With just 10% of the world's sugar harvest going into ethanol, the price of sugar has doubled. Cheap sugar may now be history.

In Europe the emphasis is on producing biodiesel. Last year the European Union (EU) produced 1.6 billion gallons of biofuels. Of this, 858 million gallons were biodiesel, produced from vegetable oil, mostly in Germany and France, and 718 million gallons were ethanol, most of it distilled from grain in France, Spain, and Germany. Margarine manufacturers, struggling to compete with subsidized biodiesel refineries, have asked the European Parliament for help.

In Asia, China and India are both building ethanol distilleries. In 2005, China converted some 2 million tons of grain—mostly corn, but also some wheat and rice—into ethanol. In India, ethanol is produced largely from sugarcane. Thailand is concentrating on ethanol from cassava, while Malaysia and Indonesia are investing heavily in additional palm oil plantations and in new biodiesel refineries. Within the last year or so, Malaysia has approved 32 biodiesel refineries, but recently has suspended further licensing while it assesses the adequacy of palm oil supplies.

The profitability of crop-based fuel production has created an investment juggernaut. With a US ethanol subsidy of 51¢ per gallon in effect until 2010, and with oil priced at \$70 per barrel, distilling fuel alcohol from corn promises huge profits for years.

In May 2005, the 100th US ethanol distillery came on line. Seven of these distilleries are being expanded. Another 34 or so are under construction and scores more are in the planning stages. The soaring demand for crop-based fuel is coming when world grain stocks are at the lowest level in 34 years and when there are 76 million more people to feed each year.

The US investment in biofuel production in response to runaway oil prices is spiraling out of control, threatening to

© Island Tides Publishing Ltd. This article may be reproduced with the following attribution, in its entirety, and notification to Island Tides Publishing Ltd.

'This article was published (August 24, 2006) in 'Island Tides', an independent, regional newspaper distributing across the Southern Strait of Georgia from Tsawwassen to Victoria to Nanaimo.'

Island Tides, Box 55, Pender Island, BC, Canada.

Phone: 250-629-3660. Fax: 250-629-3838.

Email: islandtides@islandtides.com.

Website: <http://www.islandtides.com>

draw grain away from the production of beef, pork, poultry, milk, and eggs. Simply put, the stage is being set for a head-on collision between the world's 800 million affluent automobile owners and global food consumers. Given the insatiable appetite of cars for fuel, higher grain prices appear inevitable. The only question is when food prices will rise and by how much. Indeed, in recent months, wheat and corn prices have risen by one fifth.

For the 2 billion poorest people in the world, many of whom spend half or more of their income on food, rising grain prices can quickly become life threatening. The broader risk is that rising food prices could spread hunger and generate political instability in low-income countries that import grain, such as Indonesia, Egypt, Nigeria, and Mexico. This instability could in turn disrupt global economic progress. If ethanol distillery demand for grain continues its explosive growth, driving grain prices to dangerous highs, the US government may have to intervene in the unfolding global conflict over food between affluent motorists and low-income consumers.

There are alternatives to using food-based fuels. For example, the equivalent of the 3% gain in automotive fuel supplies from ethanol could be achieved several times over—and at a fraction of the cost—simply by raising auto fuel efficiency standards by 20%.

Investing in public transport could reduce overall car dependence.

There are other fuel options as well. While there are no alternatives to food for people, there is an alternative source of fuel for cars, one that involves shifting to highly efficient gas-electric hybrid plug-ins. This would enable motorists to do short-distance driving, such as the daily commute, with electricity.

If wind-rich countries such as the United States, China, and those in Europe invest heavily in wind farms to feed cheap electricity into the grid, cars could run primarily on wind energy, and at the gasoline equivalent of less than \$1 a gallon.

Lester R. Brown is president of Earth Policy Institute and author of 'Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble' which outlines a plan, a budget, and a timetable for rescuing our twenty-first century civilization. The plan includes eradicating poverty, stabilizing population, protecting and restoring soils, forests, rangelands, and fisheries, and conserving the earth's biological diversity. The above article is © 2006 Earth Policy Institute and printed with permission. For more information: www.earth-policy.org.