

## **Economics of the Environment: The impact of Bio-fuels**

The increase in average global temperature has been a major concern of many for some time now, and has been receiving a great deal of attention from the world's Governments, scientists, environmental lobbyists among others. For many years we have been warned of the potential changes in weather pattern due to the release of gases such as chlorofluorocarbons (CFC), methane, nitrous oxide and carbon dioxide (commonly known as greenhouse gasses) into the atmosphere. These gasses trap heat in the surface-air by restricting the ability of infra-red radiation to bounce off the earth and dissipate into space. There are numerous negative effects from global warming, including potential skin cancer and eye cataract that affect our person as well as increased earth quakes, severe weather, droughts and floods which may have a direct or indirect impact on us.

### **THE USE OF FOSSIL FUEL**

A major cause of greenhouse gas is what many have described as our over-dependence on the use of fossil fuel as a source of energy. Our dependence on fossil fuel is easily demonstrated in the ever increasing price of oil and gas products. Last year oil futures reached US\$100 per barrel which at the time was a record high for the commodity. It is easy then to see why stakeholders were becoming concerned about the continued use of fossil fuel as an energy source. Two main concerns that are engaging special attention are how to reduce the dependence on a fossil fuel and how to reduce the negative impact of energy sources on global warming. Consequently, the use of bio-fuel has been herald as the answer to both these issues.

### **THE USE OF BIO FUEL**

Bio-fuel is a renewable source of fuel that is made from biomass such as cellulous, corn or plant oils, trees and animal waste. While we find comic relief in movies that show massive containers of bio-fuel occupying the back seat of cars when there is a need to drive from one American state to the next, or kids emitting the odor of materials used in making the bio-fuel having taken a ride in a bio-diesel school bus, these are actual downsides to switching fuel types for common use.

It takes a lot more bio-fuel to generate energy levels created by fossil fuel and while bio-fuel is renewable there are serious questions as to whether it can satisfy our levels of energy consumption and whether the use of certain materials in the manufacture of bio-fuel may actually be contributing to the problems of global warming through deforestation and pollution via the use of fertilizers in growing fast crops.

### **IMPACT ON PRICES**

The use of bio-fuel has not had the stabilizing impact on oil prices as some may have expected, as last week, oil futures climbed above US\$125 per barrel. There has also been a considerable increase in global prices for such foods as corn, wheat and soy bean as some traditional food farms are now providing crops to be used in the production of bio-fuels.

The scarcity created by the change in use of these farms and crops and the resulting higher food prices have sparked protests in countries like Mexico, Haiti, and Indonesia and prompted the

others like the Dominican Republic to expand subsidies on some basic food staples. Trinidad and Tobago has certainly not been spared from these global changes and several calls have been made by the public for the Government to help alleviate the impact. There has also been some form of protest to increasing prices with the looting of food supply trucks, and although this is not the first instance in this country, it is undoubtedly targeted.

## SUGGESTED SOLUTIONS

The Trinidad and Tobago Government has taken the approach of encouraging a return to agricultural farming. The Government has shown support for the floundering industry through the provision of funding and access to additional credit lines to farmers as well as dedicating lands to the creation of mega farms to be operated with the help of Cuban experts. Tucker Valley has been identified as a location for one such farm to be established over 200 acres at an estimated cost of \$50 million. At the same time, cheaper food produce in other countries have been identified but the import execution, for the most part, is being left to private sector enterprise.

There is also suggestion of diet change; substituting certain foods and planting kitchen gardens as ways in which individuals can help themselves ease the inflationary effects. Whereas these suggestions would provide relief to some, they are limitations to their application with regard to human health factors, availability and ease of food type substitutes, and availability of space for planting a kitchen garden, particularly to those individuals who rent apartments.

Beside this, some officials have urged the population to live within its means and although this is always very sound advice, the means value for many continue to diminish and satisfying even the basic needs is proving to be more difficult for those in the lower income bracket.

Notwithstanding the shortcomings, the application of all these measures would provide some relief to food supplies and inflationary pressures.

The problem of harmonizing economics and the environment will continue for some time to come. The technology surrounding the adoption of alternative energy sources such as solar, wind and bio-fuel has a great deal of development yet to undergo so as to become more efficient and user friendly in order to be more widely accepted. One thing for certain, developing bio-fuel as an alternative to fossil fuel is causing some discomfort worldwide even though the level of bio-fuel consumption is not now nor will be in the near future, remotely close to that of fossil fuel. Meanwhile, inputs for both sources continue to rise.

The United Nations World Food Programme Executive Director has described the conditions responsible for the increase in prices: escalating demand for agricultural products as an alternative fuel source, the growing food needs of developing countries like China and India, higher transportation costs, drought and floods, as a “perfect storm”.

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