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A Brief Synopsis of the Biodiesel Industry

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Introduction

This brief paper outlines current policies designed to promote the use of biodiesel as well as the potential demand for biodiesel and market outlets for biodiesel. The increasing price of soybean oil has reduced the profitability of biodiesel. Also, variations in the price of petroleum have also affected the biodiesel market. However, outlets for biodiesel remain.

Sales to schools and other types of fleets show the most promise, as well as the increased interest in low sulfur diesel fuel. A biodiesel producer will need to have customers lined up and contracts signed in order to insure a market for its product.

Government Policy

The primary government policy that promotes biodiesel production is the Biodiesel Blenders Tax Credit. This policy ,which is part of the 2005 Energy Bill, creates a $1.00 a gallon tax credit for biodiesel produced from animal fats or vegetable oil. The tax credit is 50 cents a gallon is the biodiesel is produced from recycled cooking oil (Schumacher, p.3). For example B20 (20 percent biodiesel) produced from soybean oil would receive a 20 cents a gallon tax credit, and a B20 produced from recycled cooking oil would receive a 10 cents a gallon tax credit. The greater the amount of biodiesel used the greater the tax credit. The tax credit is necessary to offset the higher cost of biodiesel production.

Until July of 2006, the Commodity Credit Corporation (CCC) used to make payments to biodiesel producers but this program was phased out (Schumacher, p.3). The federal government also requires that 75 percent of federal vehicle purchases be alternative fuel vehicles (Schumacher, p.3). However, this policy has not been particularly successful in expanding the demand for alternative fuels, many of these vehicles can use petroleum based fuels.

The 2005 Energy Policy Act created a Renewable Fuel Standard (RFS). The RFS require that 2.78 percent of the fuel sold to consumers be generated from renewable sources (Schumacher, p.4). This requirement will be met by the increased production of biodiesel and ethanol.

The 2005 Energy Policy Act also created incentives for infrastructure improvements. The Act created a tax credit equal to 30 percent of the cost of an alternative refueling property. The tax credit is capped at $30,000 for a business and $1,000 for an individual. Biodiesel blends equal to or greater than B20 qualify for this credit. The credit is scheduled to be eliminated on December 31, 2009 (Schumacher, p.4).

Another policy that can be used by a biodiesel firm is the USDA Value-Added Producer Grant Program. This program is available to farmers and cooperatives for planning activities and working capital. A match from the producers or cooperative is necessary in order to obtain the grant (Schumacher, p.5).

Growth of the Market

The market for biodiesel is projected to grow over time. The Energy Information Administration (EIA), projects that biodiesel and related products will be more than 7 percent of the entire market by 2030 (EIA, p.1). The amount of biodiesel used is estimated to by 400 million gallons (EIA, p.1). It is also estimated that the number of diesel vehicles on the road will increase over time (AEO, p.3).

One policy that is designed to increase the demand for biodiesel is cost sharing grants to school districts for the purpose of retrofitting buses to run on high biodiesel blends (Schumacher, p.4). Generally, little if any, additional work needs to be done on buses to run biodiesel blends of up to 20 percent. Several school districts in the state run on B20.

Another policy that will increase the demand for biodiesel is the reduction in the level of sulfur in diesel fuel. The standard was lowered in 2006 from 500 parts per million to 15 parts per million (Radich, p.5). Biodiesel as an additive can add to the lubricity of fuel without any additional sulfur. The demand for biodiesel resulting from the reduced sulfur content in diesel fuel could increase the demand up to 470 million galls per year in 2010 and 630 million gallons per year in 2020 (Radich, p.7). However, these are upper estimates and may not be achieved.

Despite these positive trends, there is excess capacity in biodiesel production. Current capacity of existing biodiesel facilities is likely to be in excess of 80 million gallons per year (Radich, p.5). High feedstock prices, including vegetable oil prices, animal fat prices, and restaurant grease prices have also hindered the profitability of biodiesel plants. Currently, no additional biodiesel facilities are necessary to meet demand; although that may change as biodiesel is used as an additive to meet the new regulations regarding sulfur. Currently, without the subsidies, biodiesel production is not cost competitive with petroleum diesel production.

In order to be successful a biodiesel producer will need a good marketing plan. This includes contractual arrangements with buyers and distributors of diesel fuel. Selling biodiesel on the spot market is not likely to be successful.

Conclusion

Despite several government programs designed to promote the use of biodiesel, there is overcapacity in the industry. Current conditions are not conducive to the construction of additional biodiesel facilities. One of the major drawbacks to additional biodiesel production is the high price of feedstock, whether it is virgin vegetable oil, animal fats or recycled grease.

However, in the long run there may be a potential for one or two additional biodiesel facilities in the state. The demand for low sulfur diesel will increase the demand for biodiesel as a fuel additive to enhance the lubricity of diesel fuel. Also, some fleets

especially school bus fleets, may continue to increase the demand for biodiesel as they switch from conventional diesel fuels.

Sources

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