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# Ethanol Imports and the Caribbean Basin Initiative

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## Summary

Fuel ethanol consumption has grown significantly in the past several years. Most of the U.S. market is supplied by domestic refiners producing ethanol from American corn. However, imports do play a role, albeit small, in the U.S. market. One reason for the relatively small role is a 54-cent-per-gallon tariff on imported ethanol. This tariff offsets an economic incentive of 51 cents per gallon for the use of ethanol in gasoline. However, to promote development and stability in the Caribbean region and Central America, the Caribbean Basin Initiative (CBI) allows the imports of most products, including ethanol, duty-free. While many of these products are produced in CBI countries, ethanol entering the United States under the CBI is generally produced elsewhere, and reprocessed in CBI countries for export to the United States. The U.S.-Central America Free Trade Agreement (CAFTA) would maintain this duty-free treatment, and set specific caps for imports from Costa Rica and El Salvador. Duty-free treatment of CBI ethanol has raised concerns, especially as the market for ethanol has the potential for dramatic expansion if an omnibus energy bill or similar legislation were enacted. In a related development, due to increased ethanol demand in California, as well as high gasoline prices, direct imports from Brazil to the United States increased dramatically in 2004. This report will be updated as events warrant.

## Introduction

In the United States, fuel ethanol is largely domestically produced. A value-added product of agricultural commodities, mainly corn, it is used as a gasoline additive and as an alternative to gasoline. To promote its use, ethanol-blended gasoline is granted a significant tax incentive. However, this incentive does not recognize point of origin, and there is a tariff on most imported fuel ethanol to offset the exemption. But a limited amount of ethanol may be imported under the Caribbean Basin Initiative (CBI) duty-free, even if most of the steps in the production process were completed in other countries. This duty-free import of ethanol has raised concerns, especially as U.S. demand for ethanol has been growing, and has the potential to dramatically increase under certain policy scenarios. Further, duty-free imports from these countries, especially Costa Rica and El Salvador, have played a role in the development of the U.S.-Central America Free Trade Agreement.

#### Fuel Ethanol

Ethanol is an alcohol fuel produced from the fermentation of simple sugars.<sup>1</sup> Most ethanol in the United States is produced from corn. In other countries, sugar or other plants are common feedstocks. In the United States, the increased demand for corn leads to higher income for U.S. corn farmers. Ethanol is usually blended in gasoline (a mixture called "gasohol") to increase octane, improve combustion, and extend gasoline stocks. Currently, about 1% to 2% of total U.S. gasoline demand is actually met by ethanol, and roughly 30% of U.S. gasoline contains some ethanol.

U.S. ethanol is generally produced and consumed in the Midwest, close to where the corn feedstock is produced. The main steps to ethanol production are as follows:

- The feedstock (e.g., corn) is processed to separate fermentable sugars.
- Yeast is added to ferment the sugars.
- The resulting alcohol is distilled.
- Finally, the distilled alcohol is dehydrated to remove any remaining water.

This final step — dehydration — is at the heart of the issue over ethanol imports from the CBI, as will be discussed below.

#### Ethanol Imports

According to the United States International Trade Commission, roughly one half of all fuel ethanol imports to the United States came through CBI countries between 1999 and 2003 (see **Figure 1**).<sup>2</sup> In 2004, imports from Brazil to the United States grew dramatically, and as of October 2004, direct imports from Brazil accounted for more than half of U.S. fuel ethanol imports for the year. In total, imports currently play a relatively small role in the U.S. ethanol market. Total ethanol consumption in 2003 was approximately 2.8 billion gallons, while imports totaled 115 million gallons, or about 4%. Imports from the CBI totaled approximately 2%.

One reason for the limited amount imported — even though, in some cases, production costs for ethanol in foreign countries are significantly lower than in the United States — is a most-favored-nation tariff of 54 cents per gallon.<sup>3</sup> In many cases, this tariff negates lower production costs in other countries. For example, by some estimates

<sup>&</sup>lt;sup>1</sup> For more information on ethanol, see CRS Report RL30369, *Fuel Ethanol: Background and Public Policy Issues*.

<sup>&</sup>lt;sup>2</sup> It should be noted that between 1999 and 2003, Saudi Arabia was the largest exporter to the United States of ethanol. However, this ethanol is synthetic (produced from fossil fuels) and does not qualify for the tax incentives for ethanol-blended fuel. Therefore, ethanol from Saudi Arabia is used as an industrial feedstock, and is subject to different tariff treatment than fuel ethanol.

<sup>&</sup>lt;sup>3</sup> Technically, the tariff is 14.27 cents per liter, which is equal to 54 cents per gallon.

Brazilian production costs are 40% to 50% lower than in the United States.<sup>4</sup> With U.S. wholesale ethanol prices ranging from \$0.60 to \$1.40 per gallon from June 2003 to August 2004, the tariff presents a significant barrier to imports.<sup>5</sup>



Figure 1. Annual Ethanol Imports to the United States

**Source:** U.S. International Trade Commission, *Interactive Tariff and Trade DataWeb*, at [http://dataweb. usitc.gov], accessed January 5, 2004. 2004 data through October 2004.

A key motivation for the establishment of the tariff was to offset a tax incentive for ethanol-blended gasoline ("gasohol").<sup>6</sup> This incentive is currently valued at 51 cents per gallon of pure ethanol used in blending. Unless imports enter the U.S. duty-free, the tariff effectively negates the incentive for those imports.

#### Ethanol and the CBI

As Congress noted in the Customs and Trade Act of 1990, the Caribbean Basin Initiative was established in 1983 to promote "a stable political and economic climate in the Caribbean region."<sup>7</sup> As part of the initiative, duty-free status is granted to a large array of products from beneficiary countries, including fuel ethanol under certain conditions. If produced from at least 50% local feedstocks (e.g., ethanol produced from sugar cane

<sup>&</sup>lt;sup>4</sup> "NCGA's Adams Addresses World Energy Crisis at ACE Meeting," *NCGA News*, August 16, 2004; Kevin Diaz, "Cargill Takes Heat Over Ethanol Import Plan," *Star Tribune*, July 2, 2004.

<sup>&</sup>lt;sup>5</sup> Chemical Week Associates, "Octane Week Price Report," *Octane Week*, various issues, June 2003 to August 2004.

<sup>&</sup>lt;sup>6</sup> U.S. General Accounting Office, *Fuel Ethanol: Imports from Caribbean Basin Initiative Countries*, April 1989. For more information on the excise tax exemption, see CRS Report 98-435, *Alcohol Fuels Tax Incentives*.

<sup>&</sup>lt;sup>7</sup> P.L. 101-382, §202; 19 U.S.C. 2701 note: congressional findings.

grown in the CBI beneficiary countries), ethanol may be imported duty-free.<sup>8</sup> If the local feedstock content is lower, limitations apply on quantity of duty-free ethanol. Nevertheless, up to 7% of the U.S. market may be supplied duty-free by CBI ethanol containing no local feedstock.<sup>9</sup> In this case, hydrous ("wet") ethanol produced in other countries, historically Brazil or European countries, can be shipped to a dehydration plant in a CBI country for reprocessing.<sup>10</sup> After the ethanol is dehydrated, it is imported duty-free into the United States. Currently, imports of dehydrated ethanol under the CBI are far below the 7% cap (approximately 3% in 2003). For 2003, the cap was about 150 million gallons, while about 60 million gallons were imported under the CBI in that year.

Dehydration plants are currently operating in Jamaica, Costa Rica, and El Salvador.<sup>11</sup> Jamaica and Costa Rica were the two largest exporters of fuel ethanol to the United States from 1999 to 2003. (In 2004, direct imports from Brazil will likely exceed imports from all other countries combined.)<sup>12</sup> In spring and summer of 2004, it was reported that a major U.S. ethanol producer and a major petroleum company had announced possible plans to construct new dehydration plants in El Salvador and Panama.<sup>13</sup> The plants could produce 60 million gallons per year and between 50 and 100 million gallons per year, respectively. It is expected that in both cases, the hydrous ethanol would be produced in Brazil. If the plants were constructed and operated at full capacity, and all of the ethanol were exported to the United States, it would lead to a tripling or more of U.S. imports of CBI ethanol. However, this proposal has been met with criticism from corn growers, other U.S. ethanol producers, and some Members of Congress. Critics argue that expansion of duty-free imports from the CBI would undermine the domestic U.S. ethanol industry.<sup>14</sup>

Duty-free ethanol imports have also played a role in discussions over the U.S.-Central America Free Trade Agreement (CAFTA).<sup>15</sup> Under this agreement signed by the Bush Administration and the participating countries (and awaiting consideration by Congress), specific allocations (of the 7% duty-free cap for CBI ethanol) would be set aside for Costa Rica and El Salvador. Costa Rica would be granted a maximum allocation of 31 million gallons per year (roughly double current imports from Costa Rica). El Salvador would be granted an initial allocation of approximately 6.6 million gallons per year, increasing by roughly 1.3 million gallons in each subsequent year.

<sup>11</sup> Petrojam, Ltd., Petrojam Ethanol Limited - Alcohol Sources.

<sup>12</sup> U.S. International Trade Commission, *Interactive Tariff and Trade DataWeb*, at [http://dataweb.usitc.gov]. Accessed January 4, 2005.

<sup>13</sup> The two companies are Cargill and ChevronTexaco. Rachel Gantz, "Reaction to Bill to Close CBI 'Loophole' Met With Some Concern," *Renewable Fuel News*, August 2, 2004.

<sup>14</sup> Rachel Gantz, "NCGA Troubled by Report Cargill May Import Ethanol to U.S.," *Renewable Fuel News*, May 17, 2004.

<sup>15</sup> For more information on CAFTA, see CRS Report RL31870, *The U.S.-Central America Free Trade Agreement (CAFTA): Challenges for Sub-Regional Integration.* 

<sup>&</sup>lt;sup>8</sup> P.L. 99-514 §423; 19 U.S.C. 2703 note: ethyl alcohol and mixtures thereof for fuel use.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> U.S. House of Representatives, Committee on Ways and Means, *Hearing on Fuel Ethanol Imports from Caribbean Basin Initiative Countries*, April 25, 1989.

However, El Salvador's allocation may not exceed 10% of the total CBI allocation (or 0.7% of the U.S. market). While the agreement was signed on May 28, 2004, neither the agreement nor implementing legislation has been submitted to Congress.

#### Growing U.S. Ethanol Market

The U.S. ethanol market has grown dramatically over the past several years. Between 1990 and 2003, U.S. ethanol consumption increased from about 900 million gallons per year to 2.8 billion gallons per year. Much of this growth has resulted from Clean Air Act requirements that gasoline in areas with the worst ozone pollution contain an oxygenate, such as ethanol. Further, there is growing concern that methyl tertiary butyl ether (MTBE) — ethanol's chief competitor in the oxygenate market — is contaminating groundwater.<sup>16</sup> Therefore, several states have acted to ban or limit the use of MTBE. This has led to even faster growth in the ethanol market.

Partially because of the concerns over MTBE, there has been a move to amend the Clean Air Act to eliminate the oxygenate requirement. To replace the requirement, a renewable fuels standard (RFS) has been proposed. An RFS would require that gasoline sold in the United States contain a renewable fuel, such as ethanol. The conference report on the energy bill in the 108<sup>th</sup> Congress (H.R. 6, H.Rept. 108-375) would have established an RFS requiring the use of 5 billion gallons of renewable fuel by 2015.<sup>17</sup> As most of this requirement would likely be met by ethanol, the RFS could lead to nearly a doubling of the U.S. ethanol market. While domestic producers anticipate greater demand for their product, they are also concerned that duty-free ethanol imports through the CBI could dramatically increase, to their detriment.

#### **Congressional Action**

Some Members of Congress have expressed concern over duty-free imports of dehydrated ethanol that originates in Brazil or other countries. Because of this concern, bills were introduced in the 108<sup>th</sup> Congress to amend the CBI provisions on ethanol. S. 2762 (Grassley) would have lowered the cap on allowable duty-free imports of dehydrated ethanol. Instead of the existing cap of 7% of the U.S. market (about 200 million gallons in 2004), S. 2762 would have established a cap of 90 million gallons; current CBI imports are approximately 60 million gallons. Amending the cap would have affected the ethanol provisions of CAFTA, which has been signed by the President, but not submitted to Congress. S. 2762 was introduced on July 22, 2004, and was referred to the Senate Finance Committee.

S. 2769 (Daschle) would have prohibited the use of imported ethanol to meet a future renewable fuels standard. As no RFS has yet been established, the bill would have no effect currently. However, if an RFS were enacted, no imported ethanol could be counted toward the RFS quota. Currently, about 4% of U.S. demand is met by imported fuel

<sup>&</sup>lt;sup>16</sup> For more information on MTBE, see CRS Report 98-290, *MTBE in Gasoline: Clean Air and Drinking Water Issues*.

<sup>&</sup>lt;sup>17</sup> The H.R. 6 conference report was approved by the House on November 18, 2003; a cloture motion failed in the Senate on November 21, 2003. As of this writing, it is unclear what further action will be taken on H.R. 6.

ethanol, and much of this ethanol is not covered by CBI (or other trade agreements, such as NAFTA) and is thus subject to the 54-cent-per-gallon tariff. S. 2769 was introduced on July 22, 2004, and was referred to the Senate Environment and Public Works Committee.

Other bills from the 108<sup>th</sup> Congress that would have affected likely ethanol imports were those to establish an RFS. Most notably, H.R. 6 would have required the use of 5 billion gallons of renewable fuel annually by 2012. It is likely that most of this requirement would be met with ethanol, and it is expected that at least some of that ethanol could come from CBI countries.<sup>18</sup> However, this bill stalled in the Senate. It is likely that any omnibus energy bill introduced in the 109<sup>th</sup> Congress will contain an RFS in some form.

#### Conclusion

With growing demand for ethanol, there is increased interest in foreign imports. Because ethanol from CBI countries is granted duty-free status, there is the possibility that imports of dehydrated ethanol will grow because of this avenue provided in the law. While CBI countries have not yet reached their quota for ethanol refined in other countries and dehydrated in the Caribbean, there is the possibility that CBI imports could increase significantly over the next few years. Low-cost ethanol imports could potentially have an advantage over domestically produced ethanol, which could undermine the competitive position of the U.S. ethanol industry and American corn growers. However, the U.S. ethanol industry has grown significantly in the past several years, while the CBI's share of the U.S. market has stayed relatively stable.

<sup>&</sup>lt;sup>18</sup> In the absence of S. 2769, which would make this impossible.