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## **Ecuador**

Post: Quito

## **Ethanol Industry Emerging in Ecuador**

**Report Categories:** 

Biofuels

Approved By:

Regional Agricultural Attaché Kirsten Luxbacher

**Prepared By:** FAS Quito

## **Report Highlights:**

Ecuador is a promising market for the expansion of the demand for ethanol. It currently has an E5 blend mandate for gasoline that it is not meeting, and its domestic sugar industry is looking to expand into non-food uses. FAS Quito conservatively estimates the size of the Ecuadorian ethanol market at \$160 million.

## **Executive Summary:**

Latin American markets hold great potential for the increased demand for ethanol. Ecuador, with a sugar sector looking to diversify into non-food based uses of its products, is no exception. In 2017, the total production of ethanol reached over 80 million liters. Ethanol is available for sale at 41 percent of Ecuador's gas stations. An enabling policy environment is needed to increase usage in order to meet the current voluntary E5 blend mandate. FAS Quito conservatively estimates the size of the Ecuadorian ethanol market at \$160 million.

Background on Ethanol Production, Supply, and Demand in Ecuador: Ecuador's interest in ethanol production and usage as fuel dates back to 2001, when it issued Executive Degree 1215 which formally encourages the production of renewable fuels. In 2005 a new Law was passed offering tax incentives for the production of renewable fuel "additives" such as ethanol. In 2010, the Eco País E5 Pilot Program (E5=5 percent ethanol content in gasoline type Extra of 85 octanes) started in the cities of Guayaquil and Durán. By 2015, this Program covered 86 percent of demand for Extra fuel in the Guayas Province. Ecuadorian sugarcane and alcohol producers were able to produce 40 million liters of ethanol at that time. While the Eco País program is now a nationwide initiative, ethanol usage occurs primarily in lowland areas due to beliefs that it does not work well at altitude.

In 2015, Executive Decree 675 set the price of ethanol based on the cost of production of ethanol and that of domestically-refined gasoline. Ecuador's three major sugarcane companies produce the majority of this ethanol. The GOE pays a price of \$0.90 cents/liter to two companies which made new investments after 2015. A third company which did not make any new investments following the enactment of Executive Decree 675, a condition to receive the higher rate of \$0.90 cents/liter, receives a price of \$0.75 cents/liter. In 2017, the total production of ethanol reached over 80 million liters. Ethanol is available for sale at 41 percent of Ecuador's gas stations.

In 2015, the GOE stated to its domestic industry that its objective is to increase the nation's ethanol blend rate from 5 percent to 10 percent. The country will need to significantly increase ethanol production to reach this goal. Ecuador must continue to develop its ethanol infrastructure; including a significant expansion of sugarcane fields, refinery and storage capacity, the adoption of new technologies and management practices, and the creation of incentives for its domestic industry to increase production. All of this will require significant investments.

The Alcohol Producers Association of Ecuador (APALE) estimates that 314 million liters of ethanol are needed to move Ecuador from gasoline E5 to E10 (10 percent ethanol content), in addition to the 83 million liters currently produced. Assuming that the size of Ecuador's potential ethanol consumption at E10 levels is 400 million liters, and a U.S. f.o.b. price of \$0.40/liter, a conservative estimate of the size of the Ecuadorian market is \$160 million.

Current Barriers to Exporting Ethanol to Ecuador: If Ecuador were to increase its blend rate to create a more enabling environment to complement its domestic ethanol industry with foreign sources, potential trade barriers could include: (i) Current tariffs and taxes on alcohol imports make it prohibitive to source ethanol from foreign countries. (ii) Ecuador's petrochemical sector (refineries, oil companies, venders) could see a higher-blend mandate as operationally costly but most importantly as a substitute for petroleum-derived fuel, the core of their business.