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Colombia

Biofuels Annual 2018

Colombia Increases Biofuel Blend Mandate to 10%

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Report Highlights:
Colombia recently increased their biofuel blend mandate to 10 percent for most of the country. The increase is aimed to tackle pollution problems in large metropolitan cities, achieve Colombia's climate change commitments under the 2015 Paris Climate Agreement COP21, and incentivize local production. In May 2017 the Colombian government lifted all restrictions on fuel ethanol imports as long as these imports comply with quality and carbon footprint standards that will allow the country to achieve its climate change commitments. Since mid-2017, the Colombian market has relied heavily on imports from the United States because of competitive prices and decreased domestic production. However, in the long-term Colombia's carbon footprint standards could become a trade barrier for U.S. corn-based ethanol as the biofuel index quotient becomes more restrictive. Colombian biofuels production is expected to recover in 2018 because of the higher blend rate and normal weather conditions.

Post:
Bogota

I. Executive Summary

Colombia manages its biofuel markets using a system of mandates, tax relief, environmental regulations and price controls. Tax incentives have been in place since 2002, but the implementation of Colombia's mandates has slowed industry growth. However, in March 2018 the Colombian government introduced E10 and B10 across most of the country. This Ministry of Mines and Energy (MME) measure was introduced to help with high levels of pollution in major metropolitan cities, to contribute to Colombia's climate change commitments under the 2015 Paris Climate Conference (COP21), and incentivize local production.

Colombia's biofuels policy gives a unique advantage to palm oil and sugarcane production as the government established formulas to calculate the price of biofuels based on the opportunity cost of using raw materials to supply other markets (sugar and palm oil). This mechanism of administered prices creates market opportunities for biofuels producers abroad that use less expensive feedstocks or in general are able to produce at lower costs.

The Colombian sugar industry, concerned about competitively-priced imports of U.S. ethanol due to zero import duties under the U.S - Colombia Trade Promotion Agreement (CTPA), has convinced the government to establish measures to control ethanol imports when they threaten the domestic industry. For instance, in April 2014 the government established a resolution that allowed imports only if there was a shortage in domestic production. In May, 2017 this measure was repealed but it was followed by technical regulations that require all ethanol, produced and imported, to comply with fuel quality and carbon footprint standards.

FAS/Bogota estimates Colombian biofuels production will recover in 2018. This is the result of larger biofuel demand and expected normal weather conditions for sugarcane and palm-oil crops. Colombian sugarcane-based ethanol production is supplied by seven ethanol plants with a nameplate capacity of 600 million liters. In 2018, Post estimates fuel ethanol production to reach 480 million liters and fuel ethanol imports will increase to 130 million liters. Colombian palm oil-based biodiesel production is supplied by eight plants with a capacity of 700 million liters. Biodiesel production is estimated to reach 620 million liters in 2018.

II. Policy and Programs

General Overview

The Colombian policy on biofuels was primarily developed to support additional revenue streams for the sugarcane and palm oil industries. It also aimed to diversify Colombia's sources of energy by decreasing its dependency on fossil-fuels, and more recently has added the additional goal of introducing environmentally friendly fuels to reduce greenhouse gas (GHG) emissions. The legal instruments that originated the Colombian biofuels strategy were two laws issued by the Ministry of Mines and Energy (MME) (Law 693 of 2001 for ethanol, and Law 939 of 2004 for biodiesel) that set fuel quality standards and cover tax, price setting and mandate support.

To promote biofuels use and production, the government passed a 2002 tax reform that eliminated the value-added tax (VAT) for biofuels and exempted them from a global tax. In addition, the ethanol blended with gasoline is relieved from local surcharge fees. The most recent tax reform (Law 1819 of 2016) did not modify these conditions that still apply but established a new tax imposed on fossil fuels. This tax is known as a "Green tax" or "Carbon tax." This bill creates a tax on the carbon content of all fossil fuels, including all oil derivatives and all types of fossil gas used for energy purposes. The rate is based on the release-of-carbon-dioxide (CO2) factor for each fuel, which would be expressed as the volume or weight of the fuel. The table below illustrates the current taxes on fossil fuels and biofuels:

Table 1. Current fuel and biofuel tax rates in Colombia

Tax	**Gasoline**	**Diesel**	**Biofuels**	**Regulation**
Global tax	$ 510.04 per gallon on regular gasoline (US¢18) $ 968.04 per gallon on higher octane gasoline (Premium) (US¢34)	$488.18 per gallon (US¢17)	Exempt	Art. 167,168,173 - Law 1607 of 2012 Art. 218,219,220 - Law 1819 of 2016
Value added tax (VAT)	19 percent	19 percent	Exempt	Art. 183 - Law 1819 of 2016 Art. 477 - Estatuto Tributario (Biofuels exempt)
Carbon tax	$ 142 per gallon (US¢5)	$ 160 per gallon (US¢6)	Exempt	Dec. 926 of 2017 Art. 221, 222, 223 - Law 1819 of 2016
Local surcharge fee	25 percent of the reference price. Reference price for June 2018: $4,751.05 per gallon (US$1.67)	6 percent of the reference price. Reference price for June 2018: $4,667.96 per gallon (US$1.64)	Exempt on ethanol blended with gasoline. There is not surcharge tax relief on biodiesel.	Art. 117 to 121 - Law 488 of 1998 MME's resolution 40575 of 2018
Note: Values are in Colombian pesos (COP). Specific tariffs are valid for 2018 and updated on annual basis. Exchange rate used 1USD=2,850 COP				

Source: Fuel Information System (SICOM), MME.

The MME is the authority that regulates Colombia's biofuels policy, including market prices, volumetric blend mandates, and issues technical regulations. Biofuels blend mandates have changed over time and across the country, and the degree to which they have been successfully implemented is tied to the development of marketing chain infrastructure, domestic industry production, and

imports.

Fuel and biofuel prices are controlled by the Colombian government. The MME sets the price for gasoline and diesel at wholesale markets periodically. These prices include the price that fuel distributors or blenders must pay to domestic producers of biofuels, and are calculated based on a formula previously defined by the regulation. The current price structure is established through MME's resolution 41281 of 2016. Reference fuel prices change across the country depending on the transportation and distribution costs to each region. Table 2 illustrate how fuel prices are structured with current blend mandates in the capital city, Bogota:

Table 2. Current components of consumer fuel prices in Bogota

Component	**E10**	**B10**
Fossil fuel cost	46.0%	48.8%
Biofuel cost	7.7%	11.5%
Taxes	28.9%	21.3%
Transportation and distribution costs	17.4%	18.4%
Total	**100.0%**	**100.0%**

Source: Colombian oil and gas information system (SIPG), Unit of Mining and Energy Planning (UPME), MME.

The most recent MME mandated price for a liter of ethanol is approximately $0.67. For biodiesel, the most recent MME mandated price per liter is about $0.91. However, imported biofuels are not subject to MME mandated prices, creating opportunities for imports.

The formula to calculate the ethanol price to be paid to producers is defined by the MME's resolutions 181232 of 2008 and 91865 of 2012. The fuel ethanol price is established as the higher of the following two calculations: the opportunity cost of using refined sugar to produce ethanol (the international price equivalence for refined sugar at the London market) and the international price for gasoline adjusted by technical factors (increased octane and reduction on sulfur content).

The formula to calculate the biodiesel price to be paid to producers is defined by the MME's resolutions 181780 of 2005, 181966 of 2011, and 181489 of 2012. The biodiesel price is established within a price band: the ceiling price is calculated as the import parity price of fossil diesel adjusted by technical factors, and the floor price is expressed as the export parity price of palm oil at the Rotterdam market adjusted by freight costs and technical factors.

Since 2012 Colombia has been working on a Low-Carbon Development Strategy to identify and prioritize mitigation measures in different economic sectors. In addition, under COP 21, Colombia committed to reduce its GHG emissions by 20 percent with reference to the Projected Business as Usual Scenario (BAU) emissions by 2030. Environmental commitments were established given the potential increase in Colombia's GHG emissions as the economy grows, driving up energy demand.

Fuel Ethanol

The Colombian ethanol policy guidance came out in 2002 when Law 693 was issued. This law made it mandatory to use a 10-percent blend of ethanol in gasoline (E10) in cities with populations larger than 500,000 inhabitants (approximately 10 cities countrywide), and it also established the regulatory

framework for ethanol production. Due to Colombia's lack of ethanol facilities, the law went into effect three years later in September 2005, when the first ethanol plant started operation. The country's potential demand for E10 was far above domestic production, thus the government established a phase-in period throughout the country for mandatory E10 use.

The ethanol blend mandate has changed over time and across the country. It fluctuated among E8 and E10. In some cases, the government has removed the blend mandate entirely for periods of time due to a shortage of domestic production. The most recent ethanol blending mandate increased from E8 to E10 as of March 1, 2018. This MME's measure was motivated to face the country's environmental crisis in Medellin and Bogota. In addition, the decrease in sugar prices encouraged local production of ethanol resulting in large inventories that threaten to disrupt production.

From April 2014 to April 2017 the MME established a measure that limited trade access for imports if the blend mandate could be satisfied with domestic production. However, the legislation was repealed on May 1, 2017, amid a sharp domestic shortage. All restrictions on ethanol imports were lifted as long as ethanol, produced and imported, complies with quality standards, and also with carbon footprint standards that will allow Colombia to achieve its climate change commitments.

The quality standards (water content, acidity and conductivity) were established through resolution 789 issued in May 2016, which has been in place since May 2018. Regarding the carbon footprint regulation, the Ministry of Environment published Resolution 1962 on September 25, 2017 to be effective on December 29, 2017. This regulation establishes a maximum footprint limit associated with the greenhouse gas inventory of denatured anhydrous ethanol fuel. The Colombian sugar-ethanol industry committed to reach a 20 percent reduction of GHG emissions. According to the Ministry of Environment, a 20 percent reduction by 2021 would mean that the calculations for the biofuel index quotient would set a value of 780 kg of CO2e/Cubic meter fuel ethanol. By 2021, the limit will represent an approximate 61 percent reduction in GHG emissions of ethanol relative to gasoline. The table below illustrates the gradation included in the regulation on fuel ethanol:

Table 3. Maximum allowable limit graduation of GHG emissions index

Year	Baseline	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)	Year 4 (2020)	Year 5 (2021)
Limit: kg CO2e/Cubic meter fuel ethanol	962	924	889	853	817	780
Relative GHG reduction of fuel ethanol relative to gasoline	51.8%	53.7%	55.5%	57.3%	59.1%	61%

Source: Ministry of Environment Resolution 1962, 2017.

The U.S. government unsuccessfully requested a reasonable interval for implementation of six months per WTO Technical Barriers to Trade (TBT) best practices. Colombia's carbon footprint regulation for fuel ethanol took effect on December 29, 2017, restricting most U.S. exporters from shipping ethanol to Colombia. This regulation included a sugarcane ethanol modeling example and excluded a corn ethanol-based model, which leads to many modeling uncertainties regarding the treatment of corn ethanol and its diverse co-products. Colombia could reduce the effects of the regulation on corn-based ethanol by changing the modelling accounting methodologies for this type of ethanol and using a broader certification system than ISO.

Biodiesel

Law 939 of 2004 was the first legal instrument for the promotion of biodiesel production to be used in diesel engines. The MME has issued a series of comprehensive measures to establish the regulatory framework for the biodiesel market, including quality standards, blending mandates and market prices.

The current mandate for biodiesel blending in diesel fuel is B2 in the three border departments amid ongoing problems with cross-border smuggling, and B10 for the rest of the country. On February 27, 2018, considering Colombia's environmental commitments and the increased production capacity of biodiesel plants, the MME increased the biodiesel blend mandate from B9 to B10 in Colombia's central region, Bogota and eastern plains. As in the case of ethanol, the biodiesel blend mandate has changed over time across the country showcasing the insular nature of GOC biofuel policies that cater to domestic industry concerns, as opposed to meeting blend mandate goals through domestic production and, if necessary, imports.

Through resolution 182142 of 2007, the MME issued the technical and safety requirements for the production, distribution and import of biofuels to be used in diesel engines, in accordance with Law 939 of 2004. In addition, this regulation established that all biodiesel importers must be authorized by the MME, it was not until July 12, 2017 that the MME issued resolution 31537 to authorize the first biodiesel importer. This has created concerns in Colombian biodiesel industry about competitively priced imports from Brazil and Argentina.

III. Gasoline and Diesel Market

According to the MME's Unit of Mining and Energy Planning (UPME), gasoline and diesel demand will rise during the next ten years mainly due to growth in the Colombian economy. The table below presents the history and outlook for fuel in Colombia.

Table 4. Total Fuel Use in Colombia

Fuel Use History (Million Liters)										
Calendar Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018f**
Gasoline Total	4,402	4,519	4,748	4,908	5,155	5,502	6,144	6,278	6,502	6,818
Diesel Total	6,294	6,702	7,206	7,637	7,620	7,747	8,112	8,373	8,630	8,903
On-road	5,909	6,084	6,547	6,745	6,879	7,056	7,389	7,626	7,860	8,109
Agriculture										
Construction & Mining										
Shipping & Rail										
Industry										
Heating										
Jet Fuel Total										
Total Fuel Markets	10,696	11,221	11,953	12,545	12,775	13,249	14,256	14,651	15,132	15,722

Source: Unit of Mining and Energy Planning (UPME), MME.

MME established temporary fleet efficiency goals for new vehicles in 2012, but that policy was eliminated shortly after its announcement due to domestic auto industry complaints. The Colombian Vehicle Manufacturers Association (ANDEMOS) only supports voluntary blends up to E10 and B5. However, tests performed in Colombia show that vehicles can run on E15 and higher blends.

IV. Fuel Ethanol

Production

Colombian ethanol production is derived entirely from sugarcane. Ethanol production has displaced about 40 percent of the country's sugar exports with little impact on domestic sugar prices and consumption, which has remained around 1.5 MMT during the last 10 years.

Colombia's ethanol production is supplied by seven ethanol distilleries with a production capacity of 600 million liters. Six ethanol plants with an annual capacity of 540 million liters are located near the city of Cali in south central Colombia and are clustered within larger industrial sugar production and milling facilities. These six plants are able to produce almost year round, except for a period of 30 to 40 days when the plants close operations due to technical maintenance. One additional ethanol facility called *Bioenergy* is located in the eastern plains in the Meta Department. *Bioenergy* has a current annual capacity of 60 million liters. Once at full capacity, the *Bioenergy* plant will add 120 million liters to Colombia's ethanol production capacity. This new distillery is sourcing sugarcane from 20,000 hectares established near the area. In this region, climate conditions only allow to harvest sugarcane during eight months per year. This plant processes sugarcane for ethanol production only and it is the first ethanol facility in Colombia not linked to the sugar industry.

Despite the increase in ethanol production capacity, excessive rains at the beginning of 2017 in the primary sugar-producing region, created harvesting challenges, and limited feedstock availability for ethanol. In addition, competitive price ethanol imports increased and discouraged ethanol local production. In 2017 ethanol production reached 393 million liters, a 10 percent decreased compared to the year before.

Post estimates Colombian ethanol production to reach 480 million liters in 2018 assuming sugarcane production recovers as weather conditions are expected to be normal, and supposing normal growth and cane sugar content. Moreover, the increased ethanol blend mandate (E10) should motivate local industry to produce more to meet a larger demand.

Consumption

Post estimates that 2018 fuel ethanol consumption will reach 608 million liters driven by a higher blend rate, larger imports and increased local production.

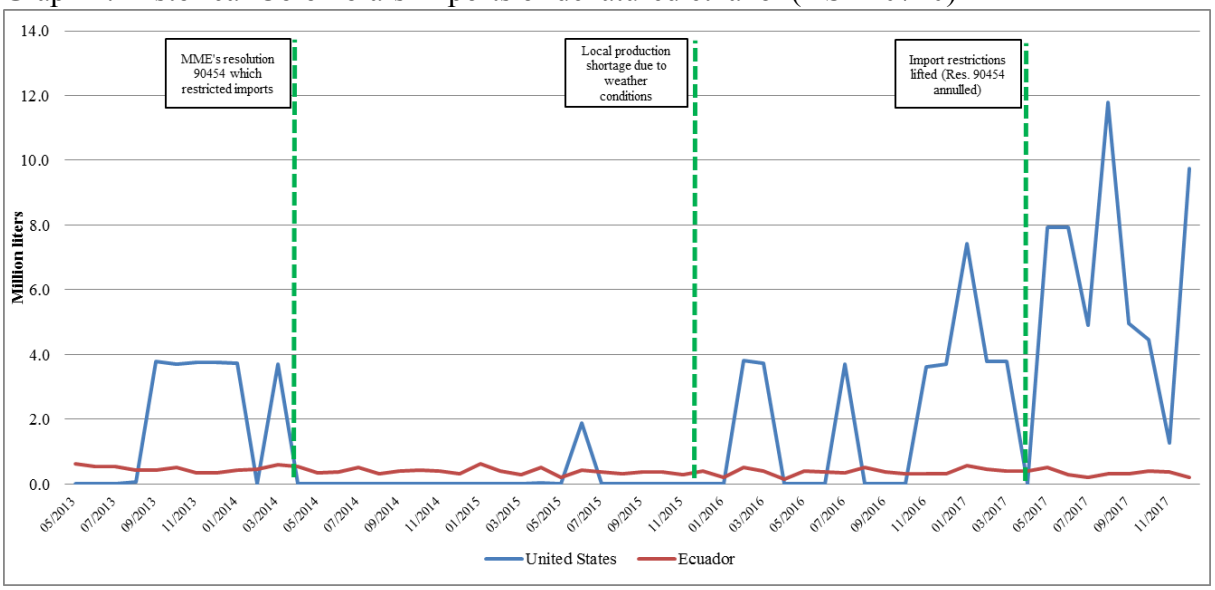
The blend mandate changes across the country primarily along with the ethanol industry growth and import supplies. In the three border departments with Venezuela no blend mandate is established due to ongoing problems with cross-border smuggling, but in most of the rest of the country close to E8 is met. In several periods, the MME has suspended the ethanol blend mandate due to shortage in local production. There is no official data on the nationwide blend level. However, Post calculations based on annual ethanol production and gasoline consumption show that the sugarcane-based ethanol industry has been unable to supply the country with enough biofuel to reliably meet the previous E8 blend mandate. The new ethanol plant (*Bioenergy*), which brings additional production capacity on line, along with increase in imports should permit the country to reach an average E9 blend rate by the end of 2018, which is below the current E10 blend mandate.

Trade

Under the CTPA, Colombia's import duties for the provision HS 220710 (un-denatured ethanol) were immediately eliminated when the agreement entered into force (2012). In the case of the provision HS 220720 (denatured ethanol) the 15 percent base rate duty was removed in five equal annual stages beginning in 2012. Therefore, since 2016, U.S. denatured ethanol, which is the one used as fuel ethanol, enters duty-free.

However, from April 2014 to April 2017, U.S. ethanol imports were subject to a MME's prior authorization, given resolution 9-0454, that restricted free access to the Colombian market. Regulatory restrictions notwithstanding, smaller volumes of fuel ethanol imports, primarily from Ecuador, continued. Colombia does not export fuel ethanol. The graph below illustrates fuel ethanol monthly imports from the United States compared to the primary competitor, Ecuador.

Graph 1. Historical Colombia's imports of denatured ethanol (HS 220720)



Source: DANE - Global Trade Atlas.

After resolution 9-0454 was issued, and denatured ethanol imports were restricted to the volume authorized by the MME, fuel ethanol imports from the United States immediately dropped to zero, except for some periods in 2015 and 2016, when the MME allowed the importation of the biofuel due to a shortfall in local production.

As of May 2017, the Colombian market is open to ethanol imports without any regulatory restrictions, except for the compliance with quality standards since May 2018, and also with carbon footprint standards since December 2017. This has resulted in imports of U.S. ethanol exports at a record pace.

Post estimates that 2018 ethanol imports will double to reach 130 million liters, given the competitive prices of imported ethanol. The main origin for imports will continue being the United States, but Colombian importers are looking for sugarcane-based ethanol providers in Peru and Central America considering that in the long term, Colombia's carbon footprint standards could become a trade barrier for U.S. corn-based ethanol if they favor sugarcane-based ethanol. The mechanism of administered prices for ethanol based on the international price for refined sugar creates market opportunities for

ethanol producers abroad that use less expensive feedstocks or in general are able to produce at lower costs.

Stocks

Colombia does not have programs to encourage storage or long-term stocks of biofuels. However, gasoline and diesel fuel regulations require stocks to adequately supply the market at 10 days of total fuel demand, which represents approximately 15 million liters of fuel ethanol.

Ethanol Used as Fuel and Other Industrial Chemicals (Million Liters)										
Calendar Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018f
Beginning Stocks	9	12	8	11	12	15	11	10	10	13
Fuel Begin Stocks	9	12	8	11	12	15	11	10	10	13
Production	327	291	337	370	388	406	456	434	393	480
Fuel Production	327	291	337	370	388	406	456	434	393	480
Imports	32	70	55	89	138	98	108	106	160	190
Fuel Imports	4	6	7	8	21	18	7	23	75	130
Exports										
Fuel Exports	0	0	0	0	0	0	0	0	0	0
Consumption	356	365	390	457	523	508	566	540	550	668
Fuel Consumption	328	301	341	377	406	428	464	457	465	608
Ending Stocks	12	8	11	12	15	11	10	10	13	15
Fuel Ending Stocks	12	8	11	12	15	11	10	10	13	15
Total BalanceCheck	0	0	0	0	0	0	0	0	0	0
Fuel BalanceCheck	0	0	0	0	0	0	0	0	0	0
Production Capacity (Million Liters)										
Number of Refineries	5	5	5	5	5	5	6	6	7	7
Nameplate Capacity	378	378	378	412	412	412	465	540	600	660
Capacity Use (%)	87%	77%	89%	90%	94%	99%	98%	80%	66%	73%
Co-product Production (1,000 MT)										
Bagasse	1,182	1,053	1,220	1,336	1,402	1,469	1,650	1,569	1,419	1,733
Feedstock Use for Fuel (1,000 MT)										
Sugarcane	3,940	3,509	4,065	4,454	4,673	4,897	5,499	5,229	4,736	5,784
Market Penetration (Million Liters)										
Fuel Ethanol	328	301	341	377	406	428	464	457	465	608
Gasoline	4,402	4,519	4,748	4,908	5,155	5,502	6,144	6,278	6,502	6,818
Blend Rate (%)	7.5%	6.7%	7.2%	7.7%	7.9%	7.8%	7.6%	7.3%	7.2%	8.9%

V. Biodiesel

Production

In 2017, biodiesel production increased by three percent from the previous year to 545 million liters as a result of better weather conditions. Post forecasts biodiesel production to continue recovering in 2018 to reach 620 million liters assuming normal weather and responding to the higher biodiesel blend mandate. There are eight biodiesel plants using palm oil as the feedstock, but one of them has produced small quantities of biodiesel from used cooking oil.

Only six of the eight plants are members of the National Biofuels Producers Association (FEDEBIOCOMBUSTIBLES). Nonetheless, these six plants are fully operational and produce about

95 percent of the total Colombian biodiesel production.

Consumption

Colombia biodiesel consumption is dependent on local production to meet the government blend mandate, which varies by location. On February 27, 2018, the MME increased the blend mandate on-road from B9 to B10 in Colombia's central region, Bogota and the eastern plains. The blend mandate for the Caribbean and Pacific coasts and the south-central part of the country keeps on B10. Some remote areas and border departments with Venezuela are permitted to blend at a lower rate (B2).

Despite the fact that the biodiesel blend mandate increased in 2017 from B8 to B9, consumption increased slightly to reach 543 million liters as a result of minor recovery in domestic production. Post forecasts that biodiesel consumption will increase to 623 million liter in 2018 assuming increasing production motivated by higher blend mandate and the beginning of imports.

Trade

There were no authorized biodiesel importers until July 12, 2017, when the MME issued resolution 31537 to authorize the first biodiesel importer. To date there have been no biodiesel imports registered under the provisions HS 382600 or HS 271020, though Post estimates 5 million liters of biodiesel will be imported from South American countries in 2018.

There are currently no biodiesel exports from Colombia. However, the biofuels industry aspires to export biodiesel as palm area continues to expand and biodiesel facilities have exceeded capacity, improving the potential for more biodiesel production. Nonetheless, Colombia is one of seven countries warning of a trade dispute with the European Union (EU) as the EU approved a resolution calling on the European Commission to phase out the use of palm oil by 2020, claiming that it drives deforestation. The countries will have to comply with a single sustainability certification scheme for palm oil entering the European Union. In addition, the United States Environmental Protection Agency (EPA) has not granted renewable identification numbers (RINs) to Colombian biodiesel due to environmental concerns. Colombia has provided information to the United States and the EU claiming that the palm oil biodiesel produced in the country complies with all social and environmental standards, as palm oil crops are in already existing agricultural land and do not destroy virgin forest.

Stocks

Colombia does not have programs to encourage storage or long-term stocks of biofuels. However, gasoline and diesel fuel regulations require stocks to adequately supply the market at 10 days of total fuel demand, which represents approximately 17 million liters of biodiesel.

Biodiesel (Million Liters)										
Calendar Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018f
Beginning Stocks	0	5	4	8	10	14	15	16	14	16
Production	185	384	506	557	573	590	583	530	545	620
Imports	0	0	0	0	0	0	0	0	0	5
Exports	0	0	0	0	0	0	0	0	0	0
Consumption	180	384	502	555	569	589	582	532	543	623
Ending Stocks	5	5	8	10	14	15	16	14	16	18
BalanceCheck	0	0	0	0	0	0	0	0	0	0
Production Capacity (Million Liters)										
Number of Biorefineries	2	5	5	6	6	6	6	6	8	8
Nameplate Capacity	204	525	525	590	590	590	590	590	700	700
Capacity Use (%)	90.8%	73.1%	96.4%	94.3%	97.1%	100.0%	98.8%	89.8%	77.9%	88.6%
Feedstock Use for Fuel (1,000 MT)										
Crude Palm Oil	170	353	466	512	527	543	515	463	480	550
Used Cooking Oil	0	0	0	0	0	0	22	25	26	30
Market Penetration (Million Liters)										
Biodiesel, on-road use	180	384	502	555	569	589	582	532	543	623
Diesel, on-road use	5,909	6,084	6,547	6,745	6,879	7,056	7,389	7,626	7,860	8,109
Blend Rate (%)	3.0%	6.3%	7.7%	8.2%	8.3%	8.3%	7.9%	7.0%	6.9%	7.7%
Diesel, total use	6,294	6,702	7,206	7,637	7,620	7,747	8,112	8,373	8,630	8,903

VI. Advanced Biofuels

There is no production of advanced biofuels in Colombia. Some universities and private sector companies have conducted research on advanced biofuels without relevant results.

VII. Notes on Statistical Data

The source of production data for biofuels is FEDEBIOCOMBUSTIBLES, which receives information from the Colombian National Association of Sugar Producers (ASOCAÑA) for ethanol and the National Federation of Palm Oil Growers (FEDEPALMA) for palm oil and biodiesel. The Colombian Customs Authority (DIAN) and the National Department of Statics (DANE) are the primary source for trade data. Fuel consumption data is source by the MME's Unit of Mining and Energy Planning (UPME). Biofuels consumption (treated as a "residual") is used to balance supply and demand once production and trade is accounted for. Stocks are unknown and estimated by an average of 10-day fuel supply according to fuel regulations.