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Argentina

Biofuels Annual

2014

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Report Highlights:
Argentine biodiesel production for 2015 is forecast at 3.1 billion liters, the highest ever. In 2013 there was a significant output drop with exports limited by EU measures and a domestic market affected by higher export taxes and lower official mandate prices. Both internal and external demand is expected to increase significantly in 2014 and 2015 as a result of an important reduction in export taxes, an increase to 10 percent in the domestic blending mandate and a temporary reduction of internal taxes on biodiesel use. Bioethanol production and consumption in 2015 are projected at 720 million liters, also a record high. While production of bioethanol from the sugar industry is expected to remain relatively flat, the five recently built grain plants are expected to be producing at full capacity. Bioethanol is currently mixed at a 7.5 percent blending ratio with gasoline and is estimated to remain at a similar ratio in 2015, but with a significant higher volume of gasoline

sales.

Post:
Buenos Aires

Executive Summary:

Argentina has a Biofuels law in place since early 2010, by which ethanol and biodiesel use is obligatory. These blends began at a 5 percent mix with diesel and gasoline, but were increased since then. Biodiesel mix is currently at 10 percent and ethanol, in practice, ranges between 5-10 percent (the current average is 7.5 percent).

Since 2007 there has been huge investment in the biodiesel industry, initially geared towards exports to the EU to comply with its biodiesel mandate. However, in 2013 the EU implemented an average countervailing duty of 24.6 percent for 5 years on biodiesel imports from Argentina due to alleged dumping, which caused on imports of Argentine biodiesel to drop to almost nil. No changes in EU policy are expected for 2014 and 2015. The Argentine Government has recently launched a series of measures to promote the local biodiesel industry which was operating at a very low capacity. These are: a reduction in biodiesel export tax, an increase in the official mandate price, a temporary reduction of local taxes on biodiesel for energy use and, to a lesser extent, for transport use. These measures are expected to encourage biodiesel production in 2015 at a record 3.1 billion liters. Domestic consumption is also expected to reach a record high of 1.45 billion liters. Exports are projected at 1.7 billion liters, similar to 2014, but higher than in 2013. The Argentine biodiesel export business has shifted from supplying markets needing to meet their biofuels mandate (like the EU) to a market which competes at a par with the diesel market. The price spread between soybean oil and diesel will determine the final volume which will be exported. Argentine biodiesel production is almost exclusively produced from soybean oil produced by the huge crushing plants concentrated around Rosario city. In the past five years, Argentina produced on average 7 million tons of soybean oil and exported 4.5 million tons.

Argentine Bioethanol production and consumption in 2015 are forecast at a record 720 million liters. In 2015 the 5 recently built grain bioethanol plants are forecast to be operating at full capacity. Bioethanol production is projected to be made half from grains and the other half from sugar cane and molasses. Until 2011 bioethanol was exclusively produced by sugar refineries.

Author Defined:

Argentine Policy and Programs

Since 2007, Argentina has in place a regulatory framework to promote the production and use of biofuels. The main objectives of this framework are to diversify the supply of energy, to become more environmentally friendly, and to promote the development of rural areas (primarily nontraditional production areas), especially in benefit of small and medium sized agricultural producers. The framework focuses primarily on conventional biofuels, as Argentina has a large biodiesel industry based on soybean oil and a growing ethanol industry based on sugarcane and more recently grains. Current policy does not specifically focus on second generation or advanced biofuels. However, there are some government, private and university programs already researching in these types of feedstocks and technology.

Law #26,093, of 2006, mandated the use of biofuels beginning in 2010, with an obligatory mix of 5 percent of ethanol in gasoline and 5 percent of biodiesel in diesel. Under this Law, companies which produce biofuels have three alternatives: 1) to produce for the domestic market, taking advantage of various tax incentives; 2)

produce for self-consumption, with similar advantages as in 1; and 3) produce for the export market, and not be eligible to receive tax incentives.

A summary of Argentina's biofuel law and regulations follows:

In April 2006, the Argentine Congress passed Law 26,093, which regulates and promotes the production and sustainable use of biofuels. In February 2007, the Executive Branch, through Decree 109, published the regulations for implementing the above law. Salient points of the Argentine biofuel law (and regulations) are:

Chapter I - Creates incentives for production and use of biofuels in the domestic market with a duration of 15 years (beginning on the date of the enactment of the law). It establishes that the Secretariat of Energy will be the controlling authority. The oversight of tax breaks will be under the control of the Ministry of Economy (every year this Ministry will set the maximum overall amount of the fiscal incentives directed to biofuels, and the percentage of this total that will accrue to individual companies participating in the domestic market). Some of the responsibilities of the controlling authority, in general, are to establish quality levels, security conditions, registration of participating companies, approval of projects that benefit from incentives, and the percentage mix of biodiesel with diesel and ethanol with gasoline for the domestic market. Every year the Secretariat of Energy will establish the volumes of biofuels needed to comply with the law, determine and modify the percentage mixes, set prices of biofuels for the domestic market, establish volumes, terms and conditions for those producing for their own consumption, and approve exports.

Chapter II - provides details concerning the incentives of the biofuels promotional regime for domestic use. To be eligible for incentives, companies have to operate in Argentina and be dedicated exclusively to biofuel production, with the majority of the company's equity in the hands of the government (i.e. government at either the national, provincial, or municipal levels) or agricultural producers (and producers' cooperatives). Companies have to operate under the above regulations and specifications, and will be assigned a percentage of the total tax break granted by the GOA (the law gives priority to small and medium enterprises, farmers, and entities that operate in nontraditional production areas). Biofuels governed by this promotional regime will be exempt from three specific taxes applied to fossil fuels. In addition, biofuel producers for the domestic market will enjoy tax breaks and other advantages (e.g. anticipated reimbursement of the value added tax or accelerated depreciation on capital investment). Eventually, Chapter II leaves open the possibility for producers to receive direct subsidies.

In January 2008, Congress passed Law 26,334, which promotes the production of bioethanol from sugarcane. This law allows sugar mills to participate under the biofuel promotional regime, maintaining the basic norms and regulations of the biofuel law. It also promotes exports of surplus ethanol.

More than ten provinces have adhered to the Biofuels Law, and in some cases, they provide additional tax advantages for investment and construction of bio-refineries in their territory.

In December 2013 the Government announced that the mandatory biodiesel mix would be increased to 9 percent in January 2014 and to 10 percent in February 2014. In this announcement it also included, for the first time, a 10 percent mix for the use in heating power plants. In the case of bioethanol, with the rapid incorporation of new grain bioethanol plants, the national average mix in 2014 and 2015 is expected at 7.5 percent or somewhat higher.

In June 2014 the Government announced a reduction of the export tax on biodiesel from 21.75 to 10.32 percent

(nominal tax) and 9.36 percent (effective tax), a measure taken to alleviate the industry's complicated situation due to the EU's limitations on imports of Argentine biodiesel. One of the key factors of the rapid expansion of the local biodiesel industry in the past seven years has been the differential export tax on biodiesel vis-à-vis soybean oil. Soybean oil exports are taxed 32 percent while biodiesel exports were originally taxed effectively 16.6 percent (nominal tax is 20 percent), and benefited from a 2.5 percent rebate until mid-2012. Since then the government has modified the export tax on biodiesel to a "flexible" export tax. The local industry claims that due to the nature of their business they need the export tax to remain fixed at least for 6 months in a row.

In August 2012, the GOA made important changes to the biodiesel sector policy by reducing the official domestic price by 15 percent. It also left aside the original formula (which took into account production costs) to calculate the price, which is supposedly announced every month. However, the government has been delaying 2-3 months the publication of the official price which biodiesel producers have to sell to oil companies. With high inflation, estimated at 35-40 percent in 2014, the delay brings uncertainty and supplies drop as producers cannot calculate their returns.

In December 2012 the GOA announced a new price scheme for biodiesel for the local mandate, based on the size of the plants. It set a higher price for processors of up to 20,000 tons/year, a lower price for processors of up to 100,000 tons a year and an even lower price for large companies (most big exporters) with production over 100,000 tons/year. In September 2013 the government created a new category of large plants called "non-integrated" (which need to purchase the feedstock from third parties). These prices have fluctuated since its implementation, while current prices (June 2014) are Pesos $7446 per ton (US$916 per ton) for small plants, Pesos $7330 per ton (US$901 per ton) for medium plants, Pesos $6927 per ton (US$852 per ton) for large "non-integrated" plants, and Pesos $5871 per ton (US$722 per ton) for the large companies.

Under Law 26,190 of 2006, named National Support for the Use of Renewable Energy Sources, and its regulatory framework established in 2009, the government created program Genren (Renewable Generation). Its objectives are to produce 895 Mega Watts (MW) in a sustainable manner, reducing emissions of carbon dioxide and other GHG, diversifying Argentina's energy matrix, while promoting regional economies throughout the country. The Law establishes that eight percent of the country's electricity consumption has to be supplied by renewable energy sources (including wind, biofuels, biomass, photovoltaic, solar and small hydro power projects) by 2016. Almost 32 private projects were approved through bids, of which the vast majority was wind generation. In 2010 the government announced a second stage Genren II, for 1200 MW, exclusively for wind energy. In all cases, just a few projects are operating, while several others are delayed because of lack of financing and difficulties with investors.

Argentina consumes nowadays about 16.5-17 billion liters of diesel per year, of which 2.5-3 billion liters are used to generate electricity, and 9 billion liters of gasoline. The country has been energy self-sufficient until a few years ago. The combination of a declining oil production and a growing demand forces the country to import gas, gasoline and diesel (private analysts estimate energy imports of at least US$13 billion in 2014). Record car sales in the past several years, plus the projection of a continuously growing agricultural sector promise diesel and gasoline demand to continue to grow. There are no flex fuel cars sold in the country and only one automaker imports a hybrid model, sold at a very expensive price. In 2010 Argentina discovered a huge shale oil and shale gas field, named Vaca Muerta. This non-conventional energy source in the province of Neuquen is the third world largest of its kind. However, until it goes into production (a minimum of 5 years and several billion dollars of investment needed), most analysts project Argentina expanding its energy imports.

Fuel Use Projections (Million Liters)

Calendar Year	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Gasoline Total	9,675	10,531	11,464	12,478	13,582	14,785	16,093	17,517	19,068	20,755
Diesel Total	14,280	14,552	14,830	15,114	15,402	15,697	15,996	16,302	16,613	16,931
On-road										
Agriculture										
Construction/mining										
Shipping/rail										
Industry										
Heating										
Jet Fuel Total	1,677	1,696	1,714	1,733	1,753	1,772	1,792	1,812	1,832	1,852
Total Fuel Markets	25,632	26,779	28,008	29,325	30,737	32,254	33,881	35,631	37,513	39,538

Source: Ministry of Agriculture

There are no specific official environmental or social sustainability criteria for biofuels in Argentina. However, being a major exporter of biodiesel, the government closely monitors other country's criteria and regulations in order to avoid restrictions on Argentine exports. In the case of the EU, which through its Climate and Energy Package, established that biodiesel from soybean oil does not meet the minimum GHG emissions saving level. Argentina challenged this decision. The government presented a study prepared by its Agricultural Research Institute (INTA), in which it takes into account the extensive adoption of no-till cropping, the short distance from the farms to crushing facilities, refining and port facilities, and its modern and efficient industries. CARBIO, the Argentine Chamber of Biodiesel, has presented the EU a voluntary certification scheme addressing all their requirements. So far, none of the two have been officially recognized by the EU. In the case of the U.S., in mid-2009, the government of Argentina presented comments to EPA's Regulation of Fuels and Fuel Additives, and the changes to the U.S. Renewable Fuel Standards (RFS). It showed that Argentine soy-based biodiesel reduced GHG emissions far more than the established 22 percent. EPA's rulemaking currently establishes that soy-based biodiesel meets the 50 percent reduction in GHG emissions required to qualify for the biomass-based diesel category. In September 2012, the Argentine biodiesel chamber (CARBIO) consortium presented EPA a certification scheme to show that Argentina does not produce soybeans in land deforested after 2007 and be eligible to export biodiesel under the RFS quota scheme. EPA is still analyzing Argentina's certification proposal. There are several local biodiesel export plants approved by EPA and in 2013 one exported a small volume which generated RINs. A few more plants are expected to follow this path in 2014 and 2015.

The Argentine biofuel law establishes that the Secretary of Energy will encourage cooperative agreements between the public and private sectors to promote and encourage the development of production technology, and the use of biofuels.

The Ministry of Agriculture, through the research agency INTA, conducts and coordinates most of the research in biofuels in Argentina. The National Bioenergy Program goals are to ensure the supply of sources of bioenergy in support of sustainable development, national energy security, the reduction of poverty, the attenuation of climate change and environmental equilibrium. There are three specific objectives: 1) identification and characterization of the potential of different crops, waste and byproducts to produce energy, 2) the study and development of non-traditional crops with energy potential, and 3) the development of second generation

biofuels, through the identification of new enzymes to degrade cellulose.

The Ministry of Agriculture and the Secretariat of Energy manage a project called Probiomasa, with the objective of producing electric and thermal energy using biomass feedstock from the agricultural and forestry sectors, and urban waste. There are several projects presented in 12 provinces and the program basically supports the foundation and bases to launch each different project.

There are also provincial entities, public and private universities, and the private sector working on different projects. Some of these programs focus on jatropha, algae, castor oil plant, canola, sweet sorghum and miscanthus. Research is primarily focused on feedstocks which can be produced in areas not suited for crop production and which do not compete with food production. A few programs are working on cellulosic biofuels, based on sugar cane, sugar beets, harvest residues, sweet sorghum, and switch grass. There are also a few industries and municipalities developing biogas facilities to use waste and reduce the cost of energy they consume. There are also some small operations which recycle used vegetable oil.

Since 2009 Argentina is a member of the Global Bioenergy Partnership (GBEP) which promotes bioenergy for sustainable development. The government received financial support from the IDB and it is already coordinating public/private studies of 24 sustainability indicators for bioenergy.

The National Institute of Agricultural Research (INTA) and an agricultural research station in the north western part of the country are working on life cycle and energy balance at farm level for traditional crops (sugarcane, soybeans) and others (such as sweet sorghum, castor oil plant). INTA, through funds of the Dutch Government, will also measure GHG emissions of soybean plantations in commercial fields.
In late 2007, Argentina passed Law 26331 on Conservation of Native Forests to help its conservation, and to regulate the expansion of land for crop use and any other change in land use.

Ethanol

Production

Bioethanol production in Argentina is projected at 720 million liters in 2015, reaching a new record high. Since the implementation of the biofuels mandate in 2010, ethanol production has been growing every year. In the first three years it was all originated by sugar mills, but in 2012 two grain ethanol plants began to operate. By 2015 there will be 5 plants of this type in operation and they are responsible for the majority of Argentina's bioethanol additional production. Their annual production capacity is approximately 500 million liters. There are 9 local sugar mills that produce bioethanol with a capacity of approximately 450 million liters. Argentina also produces some 200 million liters of alcohol for industrial purposes. The demand for this type of alcohol is expected to remain quite flat in 2014 and 2015. Most production is made by sugar mills, but there is a new plant in Cordoba which utilizes grains and has a production capacity of 50 million liters. The main uses of this alcohol are beverages, pharmaceutical, cleaning, cosmetics, etc.

In April 2014 the largest local farm cooperative inaugurated a 145 million liter bioethanol plant, the largest in the country. Over US$ 100 million were invested, using US technology. A medium plant in the province of San Luis is expected to come in line in 2014, with a production capacity of 80 million liters. No serious investment in additional capacity is anticipated in the sector for at least the next year and a half. Contacts indicate that the investment climate, more difficult access to credits and the change of rules in the biodiesel sector have put in

halt several projects.

The new grain plants are capable of using corn or sorghum, but they are all using almost exclusively corn. Almost all grain processing plants are now drying the distillers grains (DDG). At the beginning some of the new plants were not capable of drying, but now almost all are able to dry them. This allows them to market a product which has a good price and can be stored, not like in the case of the WDGS which have to be consumed within a very short period of time and has a high cost of transportation. The new plant which will be inaugurated during 2014 is expected to produce wet distiller's grains at the beginning. The sugar industry is having a big problem with the vinasse, a byproduct of the distilleries, which is highly contaminant. Although it can be used to produce fertilizer, it is still a big environmental problem which sugar mills are addressing and trying to resolve as government pressure on them is big.

The plants opening in 2013 and 2014 already received market quotas from the government to sell under the domestic mandate. The current official price of ethanol set by the government (currently at Pesos $8.616 per liter, equivalent US$1.06 per liter), allows producers (both from sugar cane as well as from grains) to have good returns.

In the case of ethanol produced from grains, it allows the use of corn in areas (far from ports) which suffer big discounts from commercialization and high freight costs. It also supports the addition of value in remote rural areas. Bioethanol producers purchase corn locally at prices well below international prices (due to the 20 percent export tax on corn, and government administration of export volumes).

In the case of bioethanol produced by sugar mills, it allows them to diversify their production and have an alternative depending on the size of the sugar cane crop and the level of world sugar prices. Argentina is self-sufficient in sugar and normally has a significant volume of sugar surplus to export in order to balance the domestic market.

Argentina is the world's third largest corn exporter, averaging around 15 million tons in the past 3-4 years. Domestic consumption ranges between 8-9 million tons, with the poultry, feedlot, and dairy industries as the main consumers. The government supports the value added of agricultural commodities in the areas where production is located. There is plenty of room to consume grains (sorghum exports are also important, with volumes ranging between 1.5-2.0 million tons) for the local ethanol industry, which at full swing by the end of 2014 would demand approximately 1.2 million tons of grains.

Consumption

Bioethanol consumption for 2015 is projected at 720 million liters, the highest ever. This is primarily as a result of an increased production capacity due to the incorporation of new grain bioethanol plants which would all be producing at high capacity. Another reason for the continuous increase in demand is the country's growing need of fuel imports due to a smaller domestic production and an increased demand.

Gasoline consumption represents approximately 40 percent of the consumption of local on-road fuel use, while the balance is diesel. In the case of ethanol, the mandate began in 2010 with a 5 percent mix rate with gasoline. However, the current mix is on average 7.5 percent, with the Secretariat of Energy allowing gasoline distributors to mix between 5-10 percent. The national oil company, which has over 50 percent of market share, is estimated to be using approximately 7 percent, while other companies are using a higher blend. Due

to logistical preferences, there are a few areas in the country (e.g. very down south) which do not blend at all, while blends in the northern part of the country are higher due to the fact that most distilleries are located in this area. There are strong rumors which indicate that the mix could be pushed up to 10-12 percent in 2015. In 2014 the local automobile industry will test cars at a 12 percent blend with bioethanol.

Argentina has a huge trucking system which has slowly replaced a decaying railway system. The country is very extensive and being an agricultural powerhouse demands large volumes of diesel to produce and move cargo and passengers. Most cars run on gasoline.

In the case of ethanol, there is much less controversy on the level of mix that engines can take without making adaptations. The case of neighboring countries Brazil and Paraguay are good cases that support mixes of 20-25 percent of ethanol. However, car manufacturers do not support high mixes. Contacts indicate that the national oil company prefers to import gasoline instead of mixing ethanol due to logistical limitations. There are no other limitations to the use of bioethanol.

The country is doing little in becoming more fuel efficient. Engines have no limitations on minimum mileage they need to run on a liter of fuel, there are no flex fuel cars sold in the country and hybrid and electrical cars are practically nonexistent and do not have import duty advantages. Argentina has an extensive fleet of vehicles which run on liquefied petroleum gas since a long time ago. More than 2 million cars out of 10 million run on this fuel. There are several railway lines of passengers with some running on electricity and some on diesel. Cargo lines all run on diesel.

Trade

Contacts indicate that bioethanol exports from Argentina in 2014 and 2015 are unlikely. The industry needs to consolidate first the domestic mandate and then start thinking of exporting.

Once the biofuel mandate was in place in early 2010, Argentine ethyl alcohol exports dropped significantly as most production excess was redirected to supply the local ethanol mandate which was more profitable. Before the mandate, Argentina exported 80-100 million liters of ethyl alcohol (not for fuel use) a year. Exports dropped to 9 million liters in 2013 mostly to neighboring Chile and Uruguay.

Ethanol imports from Mercosur countries (including Brazil) are duty free, but from countries outside the region pay 20 percent. Exports are taxed 5 percent, but receive a 4.05 percent rebate.

Ending Stocks

Bioethanol ending stocks for 2015 are forecast at 48 million liters. Stocks are mainly in the hands of the local sugar industry which produces ethanol in the last semester of the year which then is distributed throughout the following months until the new sugar crop begins.

Ethanol Used as Fuel and Other Industrial Chemicals (Million Liters)										
Calendar Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015

Beginning Stocks	0	0	0	0	0	0	0	0	0	0
Fuel Begin Stocks	0	0	0	0	20	24	28	48	48	48
Production										
Fuel Production	0	0	0	23	122	170	253	475	660	720
Imports										
Fuel Imports	0	0	0	0	0	0	0	0	0	
Exports										
Fuel Exports	0	0	0	0	0	0	0	0	0	
Consumption										
Fuel Consumption	0	0	0	3	118	166	238	475	660	720
Ending Stocks										
Fuel Ending Stocks	0	0	0	20	24	28	48	48	48	48
Production Capacity										
Number of Refineries	0	0	0	3	9	9	11	12	14	14
Nameplate Capacity	0	0	0	120	215	355	600	680	880	950
Capacity Use (%)	#DIV/0!	#DIV/0!	#DIV/0!	19%	57%	48%	42%	70%	75%	76%
Co-product Production (1,000 MT)										
Distilled Wet Grains				0	0	0	28	100	35	70
Distilled Dry Grains								65	250	270
Feedstock Use (1,000 MT)										
Grains	0	0	0	0	0	0	58	420	870	1,000
Molasses/Juice	0	0	0	90	470	650	880	1,175	1,200	1,240
Market Penetration (Liters - specify unit)										
Fuel Ethanol	0	0	0	3	118	166	238	475	660	720
Gasoline				5,760	6,240	6,970	7,500	8,200	8,800	9,600
Blend Rate (%)	#DIV/0!	#DIV/0!	#DIV/0!	0.1%	1.9%	2.4%	3.2%	5.8%	7.5%	7.5%

Biodiesel

Production

Argentine biodiesel output for 2015 is forecast at 3.1 billion liters, a record high. This would be as a result of projected high exports and a record high domestic consumption. The recent changes in policy, which reduced significantly the export tax on biodiesel, the reduction of local taxes for biodiesel use and the increase of the mandate to 10 percent for transport use and thermo electrical plants is expected to make consumption increase and thus force biodiesel production up. Traders indicate that estimating exports is very difficult as most of the exports will depend on the spread between the price of diesel and soybean oil as most buyers will be international oil companies mixing biodiesel with diesel whenever it is price convenient. Very little biodiesel exports will be shipped to countries which need to meet biodiesel mandate programs.

The local industry is coming out from several months of complications which negatively affected both production and exports. In 2012 the government lowered the official price under the mandate, modified the way that prices used to be calculated, set official prices with a considerable delay (in an economy suffering very high inflation), and increased the export tax. Then, in early 2013 the EU applied temporary countervailing duties (then confirmed in November) to Argentine biodiesel due to antidumping. Biodiesel production dropped as the local market operated under a high degree of uncertainty and the reduction and the virtually closing of Argentina's number one export market. In addition, local oil distributors preferred to import much needed diesel instead of buying local biodiesel because it paid lower fuel taxes. Production capacity in 2013 and the first months of 2014 run between 40-50 percent, with many plants closed.

Argentine biodiesel is made practically all from soybean oil. There are a few small plants which recycle used vegetable oil. So far there is no other feedstock which could be used in the near future to produce biodiesel in significant volumes. Argentina's soybean oil production in the past five years has averaged 7 million tons with average exports of 4.5 million tons. Most domestic consumption is for production of biodiesel.

After many years of heavy investment (more than US$1.5 billion since 2007), production capacity went from 0 in 2007 to 5.15 billion liters in 2014. Investment in the past two years has slowed down significantly due to a complicated business affected by local policy and foreign market limitations. Production capacity for 2015 is projected at 5.3 billion liters, the highest ever. A rebound in demand would increase the production capacity to almost 60 percent.

Of the total capacity in 2014, over 77 percent is in the hands of large companies, most of which are international traders which already had large vegetable oil crushing facilities. These are 11 companies which have plants with a capacity ranging between 140-700 million liters per year and account for practically all exports and supply roughly 25 percent of the local mandate. The other 23 percent capacity is distributed among 28 smaller companies, with plants with a capacity ranging between 12-110 million liters per year. This group accounts for approximately 75 percent of the local mandate. Most of these plants need to buy the feedstock from third parties and have higher production costs than the large plants which most are fully integrated.

Although the local biodiesel sector is not flourishing, the low use of capacity hurts the competitiveness of the companies. In some cases large plants are shut and others operate a few days a month. There are a few cases of new plants which have not been put into production yet. However, the financial situation of the biodiesel industry is good in general terms. Most of the big plants are owned by large corporations (many are

international grain traders and/or large agricultural local companies) which have been operating in the grain sector for many years and do not have biodiesel as their core business. The smaller companies are in a varied financial situation, and that explains why the government has set higher prices for the biodiesel they supply to the local market under the mandate.

Consumption

Argentine biodiesel consumption for 2015 is forecast at 1.45 billion liters, a record high. This volume is expected to be realistically accomplished after the government passed recent policy specifically for biodiesel which supports its use. The most significant measures are: transport, the agricultural sector and thermo electrical plants have to consume B10; the current official prices of biodiesel is profitable for most plants; the market expects the government will now start announcing the monthly price on a timely basis; the temporary (through the end of 2015) reduction of a 19 percent tax on liquid fuels for all uses; and the temporary elimination of a 22 percent tax on imported diesel only for use in thermoelectrical plants.

Diesel consumption represents approximately 60 percent of the consumption of local on-road fuel use, while the balance is gasoline.

Although the mandate mix is 10 percent since February 2014, it will not be until 2015 that it is fully reached. The real blend during the first four months of 2014 was below 7 percent and the thermal plants were not obliged to use biodiesel in the fuel mix. The potential use of biodiesel for thermoelectrical plants is estimated at 200-250 million liters annually.

Car manufacturers and oil companies prefer not to increase the mixes due to warranty conditions and logistical problems. The Argentine chamber of biodiesel has come up with very successful results after testing a diesel engine running on 10 and 20 percent biodiesel mixes. Most contacts indicate that mandate blends will continue to be set by the government depending on its needs. If it requires increasing beyond current blends the different industries will have to adapt.

The country does not have a plan to become more fuel efficient. Engines have no limitations on minimum mileage they need to run on a liter of fuel, there are no flex fuel cars sold in the country and hybrid and electrical cars are practically nonexistent and do not have import duty advantages. Argentina has an extensive fleet of vehicles which run on liquefied petroleum gas since long ago. More than 2 million cars out of 10 million run on this fuel. There are several railway lines of passengers with some running on electricity and some on diesel. Cargo lines all run on diesel.

The reduction in energy production and a growing demand is making the country import larger volumes of gas and diesel. About 2-3 billion liters of diesel are needed every year to feed electric power stations.

Trade

Argentine biodiesel exports for 2015 are projected at 1.7 billion liters; similar to what it is expected for 2014, and higher than 2013. Argentina's biodiesel exports have shifted from supplying large volumes to markets needing to comply with their biofuels mandates (primarily the EU) at very good margins to a petroleum market which competes with diesel fuel based on price. Argentina is projected to export in 2015 approximately 280

million liters to Peru and 55 million liters to Australia, both cases to comply with their mandates. Local brokers forecast exports to Africa (via the EU) at 1 billion liters and some 400 million liters to the US. The final volume of exports will depend almost exclusively on the spread between world soybean oil and diesel prices. If it is profitable, then we will see significant volumes of biodiesel going temporarily to free custom zones in the EU where oil companies mix it with diesel and then export the product primarily to Africa

Most local biodiesel exporters discard exporting to the EU in 2014 and 2015 due to the legal limitations and disputes between Argentina and the region. Current duties are way too high to have the possibility of entering that market.

The current issues/disputes with the EU are: 1) in May 2013 the Argentine government launched a dispute in the WTO accusing Belgium, France, Italy and Poland of affecting the commercialization of Argentine biodiesel as it is treated less favorably than imports from other origins, especially European countries); 2) in November 2013 the European Commission terminated the antisubsidy proceeding concerning imports of biodiesel from Argentina where the EBB accused the country to subsidize biodiesel exports, by applying a lower export tax on biodiesel than on soybean oil, its feedstock; 3) in November 2013 the European Commission confirmed antidumping duties on Argentine biodiesel for the next 5 years due to a presentation which the European Biodiesel Board (EBB) made accusing Argentine exporters of selling biodiesel below cost. After several months of investigation, the Commission set different levels of duties per exporter, which range between 22 and 25.7 percent (with fixed duties of Euros $216.64 and 245.67 per ton; 4) in December 2013, Spain announced the list of plants and their quotas assigned to supply the local mandate for 2014 and 2015. There are 42 plants which will sell a maximum of 5.5 million tons. None of the eight Argentine companies which applied were assigned quota; 5) as of January 1, 2014 Argentina, among 11 other countries, do no longer benefit from the Generalized Scheme of Preferences (GSP) as it no longer qualifies as a developing country. Argentine biodiesel lost a 6.5 percent benefit; 6) in April 2014 Carbio, the Argentine Biofuels Chamber, complained before the European Court of Justice requesting to annul the ruling which set antidumping duties on imports of Argentine biodiesel.

Carbio, the Argentine Chamber of Biodiesel Producers (it groups most large exporting companies) presented in 2012 a consortium scheme to demonstrate that it complies with EPA's environmental regulations. It is still awaiting the EPA to announce the final decision whether it allows its proposed scheme to qualify under the U.S. Renewable Fuel Standards program. Local traders believe that if Carbio's scheme is allowed, exports could range between 400-800 million liters of biodiesel to the US, especially to the east and west coasts as they are further away from the biodiesel production area. Traders indicate that there are several local large biodiesel plants approved by EPA and that in 2013 one exported biodiesel to the US generating RINs. These exports have to be segregated and traced back to the farm. Some 20 million liters were exported in 2013, approximately 90 million liters are projected for 2014, and 100-120 million liters are forecast for 2015. These exports have a significant additional cost due to the tracing of the product throughout the entire production chain.

Since 2013, local traders are exporting biodiesel to the US for heating oil, paying 4.6 percent duty. This business depends on the price spread of soybean oil and world diesel prices. With the recent reduction on export taxes from 21.75 to 10.32 percent (nominal tax) and 9.36 percent (effective tax), local exporters believe they will be more competitive to supply the US with biodiesel for heating oil. There is uncertainty about the US reinstalling the blender's credit, but if reinstalled early on, Argentine exports could range between 450-550 million liters in 2015.

With the EU market, once the largest destination by far, virtually closed, local traders continue to try to open new markets. Contacts indicate that since the EU has limited imports of Argentine biodiesel, more than 20 countries have initiated biodiesel mandate programs.

Argentine biodiesel is very competitive as a result of large production scale with the latest technology, the use of no-till and biotechnology seed, and having the soybean production area very close to the industry and ports. This provides a plus of competitiveness.

Biodiesel (Million Liters)										
Calendar Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Beginning Stocks		0	10	40	75	25	25	75	29	29
Production	20	215	830	1,360	2,070	2,760	2,800	2,260	2,800	3,100
Imports	0	0	0	0	0	0	0	0	0	0
Exports	0	185	780	1,305	1,545	1,910	1,770	1,296	1,700	1,700
Consumption	20	20	20	20	575	850	980	1,010	1,100	1,450
Ending Stocks	0	10	40	75	25	25	75	29	29	21
Production Capacity										
Number of Biorefiner.	6	9	18	22	24	27	33	38	41	44
Nameplate Capacity	175	665	1,500	2,300	2,800	3,800	4,200	4,550	5,150	5,300
Capacity Use (%)	11.4%	32.3%	55.3%	59.1%	73.9%	72.6%	66.7%	49.7%	54.4%	58.5%
Feedstock Use (1,000 MT)										
Soybean Oil	18	190	730	1,200	1,820	2,430	2,460	2,000	2,460	2,730
Feedstock B										
Feedstock C										
Feedstock D										
Market Penetration (Liters - specify unit)										
Biodiesel, on-road use	20	20	20	20	575	850	980	1,010	1,100	1,450
Diesel, on-road use	12,680	12,880	13,850	12,750	13,770	14,210	13,490	13,750	14,000	14,300
Blend Rate (%)	0.2%	0.2%	0.1%	0.2%	4.2%	6.0%	7.3%	7.3%	7.9%	10.1%
Diesel, total use										

Advanced Biofuels

There is no production so far.

Biomass for Heat and Power

All sugar mills in Argentina generate part of their energy needs from bagasse. Quite recently, four sugar mills have invested in more efficient new generation boilers which allow them to cogenerate energy for their own needs and to sell to the grid. The total capacity of these plants is approximately 100 MW. Other mills have similar plans, but investment is coming very slowly. There is an experimental station in Tucuman province which is working on evaluating the use of cane stubble to cogenerate electricity. The technology to make use of the stubble has to yet be developed and with this it will stop or limit significantly the burning of cane plantations. There are several projects to produce electricity from woody mass in Corrientes and Misiones provinces. There are also some projects to produce energy from residential waste and livestock and oil crushing facilities.