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Argentina

BIOFUELS ANNUAL

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Report Highlights:

Argentina is one of the world's top producers and exporters of biodiesel. In 2009, it is projected to produce 880 million liters, representing roughly 40 percent of the production capacity the country will have by the end of the year. Practically all production will be exported, with the EU being the main market by far. Domestic consumption is negligible, but it will grow significantly as from 2010 when the official B5 mandate is in place. Production of fuel ethanol will begin in late 2009, with the focus mainly on the domestic market. The local sugar industry is investing heavily in order to meet the E5 mandate in 2010, which some believe will not be fully complied.

Post:

Buenos Aires

Commodities:

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Author Defined:

Situation and Outlook

Argentina's biofuel law 26,093 of 2006, provides the framework for investment, production and marketing of biofuels. It mandates that gasoline and diesel be mixed with 5 percent biofuel as from January 2010. The law clearly separates the domestic market, which will have quotas and will enjoy tax cuts and advantages, from the export market, which does not benefit from any of these. So far, the government has only specified parameters for ethanol production, but not for biodiesel. The bio ethanol industry is focused mainly in the domestic market and is just beginning to expand and recondition its infrastructure to meet demand. On the contrary, the biodiesel sector has invested heavily since 2006, with the primary focus on the export market. By the end of 2009, Argentine biodiesel production capacity is projected at 2.4 billion liters. However, due to market conditions, biodiesel production would only total 880 million liters, of which practically all will be exported. There are some talks about advancing the biodiesel mandate mix date to mid-2009, in order to use part of the unused capacity, but most contacts believe this will not happen. Ethanol production for fuel use is forecast at 45 million liters in 2009, which will be effectively sold to end users in 2010 when the mandate is in place. Some 10 million liters will likely be exported.

Argentina has abundant natural resources, a very efficient agricultural production sector, and good processing and export infrastructure. Biodiesel is almost exclusively produced from soybean oil, while ethanol will be produced from sugar cane and molasses. The current export tax regime guarantees a low cost supply of feedstock for biodiesel production by charging a substantially lower export tax for biodiesel (16.6 percent) than for soybean oil (currently at 32 percent).

To meet official mandates in 2010, Argentina will need approximately 270 million liters of ethanol to mix with gasoline and 700 million liters of biodiesel to mix with diesel. Despite large current and future investments in alcohol distilleries and dehydrators, some contacts indicate that total supply in 2010 could be somewhat short of the mandated volume. The biodiesel mandate could be met in 2010 with product made by large plants, but a change in the biofuel law would be needed to allow companies registered as exporters to sell in the local market under the promotional regime. Most contacts are confident this will be the case.

Biofuel Policy

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 law mandates the use of biofuels by 2010, with an obligatory mix of 5 percent of ethanol in gasoline and 5 percent of biodiesel in diesel. The GOA will control investment, production and marketing of biofuels for the domestic market. Companies which produce biofuels will 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.

Although most players indicate that the establishment of the regulatory framework in 2007 was very important, they point out that many aspects of these regulations need to be defined. In the case of ethanol, the government established the parameters late last year. The GOA is currently working in setting rules for biodiesel for the domestic market (price; criteria to select projects; if price of fuel increases due to the mix who will pay the difference; etc.) which are expected to be established in the second half of 2009. Most executives are optimistic and indicate that if measures are attractive, it will stimulate future investment in the industry.

A summary of Argentina's biofuel law and regulation 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 controlling authority 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 on fossil fuels. In addition, biofuel producers for the domestic market will enjoy tax breaks and other advantages (e.g. exemption from the value added tax and other taxes). 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 sugar cane. The new law now allows sugar mills to participate under the biofuel promotional regime, maintaining the basic norms and regulations of the biofuel law.

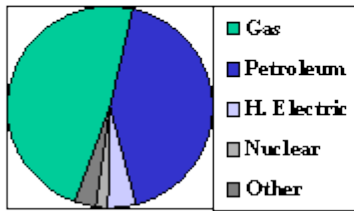
The Energy Market

For the generation of energy, Argentina is very dependent on fossil fuels. Argentina continues to be a net gas and oil exporter, but energy analysts report that if the country does not increase investment in this sector, it could soon become a net importer. With six successive years of strong economic recovery, Argentina has had to import diesel oil and fuel oil, with significant increases of these purchases in 2007. Imports for 2008 remained stable.

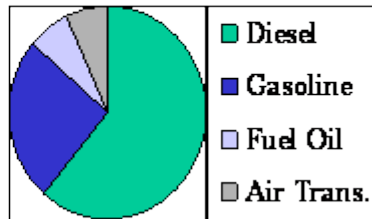
Gas is used primarily by the industrial sector to generate electricity, and to a lesser extent it is used in households and in cars fueled by natural compressed gas. Of the total local demand for petroleum, diesel accounts for the largest percentage. Diesel is used in most of the transport sector, and it replaces gas in some cases. Gasoline usage is significantly smaller and is used primarily for cars. There are close to 1.5 million vehicles, which use natural compressed gas. Argentina exports gasoline and imports diesel and fuel oil.

Argentine Energy Matrix and Petroleum Use

Energy Matrix



Petroleum Use



Ethanol

Almost twenty years after the "Programa Alconafta" (Gasohol Program) was discontinued, Argentina will re-initiate production of bio ethanol for fuel use. Although the mandate mix is expected to commence in January 2010, a few sugar mills will produce ethanol in late 2009 in preparation to meet the new demand. Contacts report that probably four distilleries will produce 45 million liters of bio ethanol, of which 10 million will likely be exported. The new biofuels law and its regulations established late last year promise good returns to producers, as the set price and its adjusting formula (by production cost or gasoline price) are very attractive. Most contacts believe that this will help the local sugar industry as a whole, as it usually operates in a volatile market and it is affected by large sugar surpluses, which have to be exported. Tucuman province will account for approximately 60 percent of the official ethanol quota, Jujuy with 23 percent, Salta with 12 percent, and Santa Fe with the rest.

Until now, local ethanol production was used almost exclusively for non-fuel uses. A large ethanol distillery was inaugurated in 2007 in the province of Tucuman, with the twin objectives of producing fuel ethanol for export and for the domestic market. Private sources indicate that more than US\$200 million will be invested in the next few years in this industry. Most sugar mills are in the process of modernizing their distilleries and expanding their capacity. Major investments will also be made in the construction of large dehydrators in Jujuy, and probably, Tucuman. The latter one is projected to be built by an oil company together with most sugar mills in Tucuman. Its capacity is expected to be about 130 million liters and would be ready during the last part of 2010. A few mills are also investing to make cogeneration of electricity from bagasse more efficient and to be able to sell the excess production to near-by towns. There are very few projects to produce bio ethanol from corn or sorghum, and currently none are in the construction stage.

Argentine ethanol production in 2008 was slightly over 200 million liters. The main producers were 15-16 sugar mills (using sugar molasses) in the northwestern part of the country. A large local food manufacturer produces small volumes of ethanol primarily from sorghum. Local beverage manufacturers and the agricultural chemical and pharmaceutical industries

consumed about 60 percent of the output. The balance was exported, but not for fuel use. Some sugar mills indicate that they will fulfill the mandated volume for the domestic biofuel program in 2010. However, various contacts indicate that total output could be short of the 270 million liters needed to mix at a 5 percent ratio with gasoline. There are talks that the mandate could be smaller in the first semester of 2010 and larger in the remaining months. In addition, some indicate that just a few types of gasoline could be mixed in early 2010. However, by 2011 all the new investments should be on-line to produce 350-400 million liters of bio ethanol.

The local sugar industry is in good financial shape, having increased efficiency and production significantly in the past 4-5 years. In crop year 2009-10, about 700-800 thousand tons of sugar is projected to be exported in order to maintain a balanced domestic market. The industry believes that biofuels present a good opportunity to divert part of the cane production into ethanol, providing mills more flexibility in their production mix, and increasing overall operational efficiency. Sugar cane area has been growing in the past few years. More sugar cane supply will likely put pressure on the market, encouraging sugar mills to expand their ethanol production. The 270 million liters of ethanol required for the mandate represent approximately the equivalent of 400,000 tons of sugar.

Argentina is one of the world's largest corn exporters after the U.S. Several farmer groups have indicated interest in adding value to their corn production through ethanol, but the interest seems to have declined.

Biodiesel

Argentine biodiesel production for 2009 is projected at a record 880 million liters. Production capacity in 2008 was approximately 1.6-1.7 billion liters and it is expected to expand to almost 2.4 billion liters by the end of 2009. There will be 8 plants with a production capacity of 120-480 million liters each, and some 30 small-to-medium-sized plants with a capacity ranging between 4-60 million liters each. There are several more projects, especially large plants duplicating capacity, but under current circumstances of low returns, almost all were put on hold.

Practically all these plants focus exclusively on the export market. The local market, which will impose a 5 percent mandatory mix of biodiesel in diesel by 2010, is highly regulated and still lacks key definitions (quotas per company, administered prices of product, etc.). Therefore, little investment has been directed towards the local market. In addition, the fact that diesel prices are artificially low makes the business less attractive. Biodiesel exports have fewer regulations, and a large advantage due to the differential export tax vis-à-vis soybean oil. The feedstock used in nearly all domestically produced biodiesel.

Last May, the government announced a new program, GENRE (Renewable Generation), under

which the state-owned electricity company will buy, through bids, energy produced from wind, solar, biomass, waste, and biofuels. Details have yet to be announced. In the case of biofuels, the amount would total the equivalent of approximately 200-250 million liters (primarily biodiesel). Contacts believe this program will be operational by 2010.

The local biodiesel export industry is discussing with the government the possibility of tightening the mandated mix date from early January 2010 to mid 2009, to take advantage of the large unused capacity of the big export plants. To do this, the government would have to make an exemption and allow export plants to be able to sell domestically. Negotiations include oil companies, which are not very enthusiastic about speeding up, indicating that they need to invest in logistics and distribution infrastructure. Most contacts are doubtful that the mandatory date will be tightened.

Biodiesel production in Argentina began just a few years ago as a cottage industry. The new large plants are owned by local and international companies. In most cases, they are vegetable oil crushers with large processing capacity and excellent logistics. Rosario, the area with the largest concentration of vegetable oil crushing plants in the world, hosts practically all the big biodiesel plants. Santa Fe province (Rosario being the province's capital) accounts for over 75 percent of the country's total capacity. It is located in the heart of Argentina's soybean production area and it lies on the Parana River, which has direct access to the Atlantic Ocean.

Argentina is the world's third largest soybean producer and the world's top soybean meal and oil exporter. Its current crushing capacity is roughly 155,000 tons a day with an annual oil production of about 7 million tons. Most local crushers see the production of biodiesel as an additional product that fits naturally in their global business. It provides them with new opportunities for diversifying products and markets. However, this year's short crop due to a widespread drought (soybean production will be 33 percent smaller than expected) will negatively affect supply and processing.

One component that made biodiesel exports very attractive in 2007, and the first part of 2008, was the fact that biodiesel has a smaller export tax than soybean oil. Soybean oil exports are taxed 32 percent. Biodiesel exports are only taxed effectively 16.6 percent (nominal tax is 20 percent), and benefit from a 2.5 percent rebate. Export taxes were modified in March 2008, increasing from 5 percent, with a 2.5 percent rebate. The net difference between the soybean oil export tax and the biodiesel export tax is 17.8 percent in favor of the latter.

In 2007, one of the large oil companies launched B1 biodiesel in a limited number of gas stations in the local market. The price at the pump was 33 percent more expensive than regular diesel. This company discontinued sales of the product (the biodiesel portion was imported) several months ago as consumers did not find many advantages over regular diesel.

Future Feedstock

Argentina will produce, in the short and medium term, ethanol primarily from molasses and sugar cane, and biodiesel mainly from soybean oil. Several small plants are currently using recycled vegetable oil, sunflower, and rapeseed oil for biodiesel. There is also in Buenos Aires province a small distillery for alcohol for industrial use using sorghum and a distillery in Tucuman could eventually utilize corn and sorghum in the future. A few sugar mills are improving efficiency to use their bagasse to produce energy.

There are several programs focused on developing alternative feedstocks to the ones used currently. Some public universities, official entities and the private sector are working on different projects. Some of these programs are based on the use of jatropha, sweet sorghum, algae, sugar cane and castor oil plant. Research is primarily focused on feedstocks which can be produced in areas not suited for agriculture and which do not compete with food production. A few programs are working on cellulosic biofuels, based on sugar cane, sweet sorghum, and switch grass.

The biofuel law provides that the Secretariat 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. In late 2006, the GOA created the Energy Feedstock Forum to coordinate research and development projects together with the private sector.

Local biodiesel uses almost exclusively soybean oil, which is one of the country's most important export products (only 5 percent of its production is consumed domestically as food). Since Argentina is one of the world's major agricultural exporters, the general view is that the development of biofuels is good for the local economy.

Trade

Fuel ethanol exports for 2009 are projected at 10 million liters. One of the large sugar companies in Tucuman has a contract with a European company. A similar volume is also expected to be exported in 2010. Thereafter, when the domestic mandate is in place, ethanol exports are projected to be practically negligible. Distilleries will prefer to sell domestically at higher prices than export at world prices.

Argentina has rapidly become one of the world's top biodiesel exporters. Private sources project exports for 2009 at 900 million liters, higher than in 2008. Exports could be more than double, based on installed capacity, but current market conditions are not attractive and exporters are presently shipping with very thin margins, or in some cases at a loss. So far, there are 12 plants authorized to export. Exports through April 2009 totaled 260 million liters valued at US\$170 million (average price of US\$760 per ton). The European Union purchased 85 percent of the total exports, followed by the United States at 8 percent. The balance was

sold in neighboring countries.

Contacts in the sector believe that the European Union is the natural market for Argentina's biodiesel since it has to meet mandatory biofuel mixes which will probably not be totally fulfilled by local production. During 2008, Argentine official statistics indicated that the U.S. purchased over 80 percent of its biodiesel. However, due to the payment blenders enjoyed in the US (Splash and Dash), most Argentine exports went first to that market, were mixed in a low proportion with petroleum diesel, and then were re-exported to the EU. In October 2008, the U.S. Congress finally closed this loophole and exports of third countries' biodiesel no longer qualify for the blenders support. At the same time, in early 2009 the EU imposed countervailing duties to several US biodiesel traders.

Local exporters welcome the elimination of these subsidies, which have been distorting the market. As indicated above, Argentina remains in an excellent position to supply biodiesel to the EU. However, the EU's Renewable Energy Directive, threatens to complicate trade from different countries. The Directive requires that biofuels need to reduce greenhouse gas emissions by at least 35 percent, and it established that biodiesel from soybean oil only reduces by 31 percent. Therefore, it is in question what will happen to Argentina's exports in the future, but exporters are optimistic. The local industry claims that, because of no-till soybean production and the new and very efficient high technology processing plants, its product is well above the minimum requirement. Europeans propose that if Argentina wants to export its product, it will have to be certified and traced by a European company to establish the level of greenhouse gas emission savings the product has.

Argentina is also concerned about EPA's proposed revisions to the National Renewable Fuel Standard program -- particularly, regarding greenhouse gas emissions and indirect land use, and the potential effects of those rules on future biodiesel exports.

Export companies are beginning to diversify their markets. In the first four months of 2009, Argentina has exported biodiesel to Peru and Brazil. Small quantities were also shipped to Chile, Colombia, and Paraguay. In April 2009, for the first time in 18 months, there were no exports to the U.S. Some local traders believe that Argentina will export in the future some bio heating oil to the U.S.

Ethanol imports are assessed a 20 percent duty while biodiesel imports are assessed 14 percent. In both cases, there are neither quotas nor limitations for imports.

Biodiesel exports are taxed at 16.6 percent and benefit from an export rebate of 2.5 percent. Ethanol exports are taxed at 5 percent, but receive a 4.05 percent rebate. There are no restrictions on exports.

Statistical Information

Quantity of Feedstock Use in biofuel Production in MT						
		2005	2006	2007	2008	2009
Biodiesel						
Vegetable Oil						
	Soybean oil	17,500	17,400	180,000	740,000	775,000
	Rapeseed Oil					
	Palm oil					
	Coconut oil					
	Animal Fats					
	Recycled Vegetable oil	150	250	250	300	350
	Other					
Ethanol						
	Corn					
	Wheat					
	Sugarcane					260,000
	Sugar beat					
	Rye					
	Molasses					96,000
	Wood					
	Cassava/tubers					

Biofuel production/Consumption/trade (million liters)					
	2005	2006	2007	2008	2009
Biodiesel					
Beginning stocks*					40
Production	20	20	205	840	880
Imports	0	0	0	0	0
Total supply	20	20	205	840	920
Exports	0	0	185	780	900
Consumption	20	20	20	20	20

Ending stocks*				40	0
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Biofuel production/Consumption/trade (million liters)					
	2005	2006	2007	2008	2009
Ethanol					
Beginning stocks*					
Production				0	45
Imports				0	0
Total supply				0	45
Exports				0	10
Consumption				0	0
Ending stocks*					35