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Report Highlights:
South Africa is not yet actively involved in big scale bio-fuels production. Interest is high and the industry is eagerly awaiting the formal announcement of the official policy on bio-fuels, which will set the stage for the development. Government support and inclusion legislation is essential to make the industry economically viable. Government has, however, spent considerable time and effort in assessing the situation as twelve government departments were involved. South Africa has experience with synthetic fuel production as 36% of its liquid fuel needs are supplied from fuel from coal and fuel from gas industries. Local bio-fuels production is only expected to start in 2009 as the 2007 planting season starts in October and no plants have yet been built.

Includes PSD Changes: No
Includes Trade Matrix: No
Unscheduled Report
Pretoria [SF1]
[SF]

Summary

South Africa is not yet actively involved in big scale bio-fuels production. Interest is high and the industry is eagerly awaiting the formal announcement of the official policy on bio-fuels, which will set the stage for the development. Government support and inclusion legislation is essential to make the industry economically viable. Government has, however, spent considerable time and effort in assessing the situation as twelve government departments were involved. South Africa has experience with synthetic fuel production as 36% of its liquid fuel needs are supplied from fuel from coal and fuel from gas industries. Local bio-fuels production is only expected to start in 2009 as the 2007 planting season starts in October and no plants have yet been built.

Sources:

www.saba.za.org	Southern African Bio-fuels Association.
www.dme.gov.za	Department of Minerals and Energy.
www.sapia.org.za	SA Petroleum Industry Association.
www.cef.org.za	Central Energy Fund.
www.petrosa.co.za	Petroleum Oil and Gas Corporation.
www.sasol.co.za	SASOL.
www.ethanol-africa.com	Ethanol Africa.

Attachment: Draft Bio-fuels Industrial Strategy

Government Bio fuels Policy.

As a signatory to the Kyoto Protocol the South African government is keen to be seen moving towards the use of cleaner, renewable energy. In December 2005 the South African cabinet approved the development of a bio-fuels industrial strategy and the establishment of a Bio-fuels Task Team. The task team includes 12 national government departments chaired by the Department of Minerals and Energy. The team had to develop the strategy and investigate establishing a bio-fuels industry, and to report on the financial implications involved.

Cabinet has approved the Draft Bio-fuels Industry Strategy compiled by the task team and released it for consultation. The draft, based on a detailed feasibility study, proposes a 4.5% inclusion bio-fuels industry in South Africa to achieve 75% of the country's renewable energy target by 2013. The strategy is based on the national blending specifications of 8% for ethanol (E8) and 2 % for Bio diesel (B2). The following crops, namely, corn and sugar (Ethanol), as well as soybean and sunflower (Bio diesel) were chosen as inputs. This is based on existing crop production patterns but other crops are being considered. Technical specifications for bio-fuels were also developed.

The draft strategy proposes a mandatory blending of bio-fuels with petroleum-based fuels. This includes a proposal that the existing fuel levy exemption for Bio diesel be extended to Bio ethanol based on the energy content. A hedge fund similar to the Equalization Fund is proposed to deal with oil price variations. The proposal is that during periods of high international crude prices the bio-fuels producers will pay

some money back to the National Treasury and during times of low crude prices the producers will then receive some government protection.

The final policy document is to be presented to Parliament in June 2007 and at this stage the industry is on hold as the viability of the whole industry depends on government policy and assistance.

Currently petrol and diesel are produced in South Africa using 3 methods, refining of imported crude oil, the fuel from coal process employed by SASOL and the fuel from gas process used by PetroSA at Mossgas. Diesel production is a by-product of the production of petroleum from crude oil. Refining capacity in South Africa is utilized to maximize petrol production. The supply of diesel, produced as a by-product, generally exceeds domestic demand. On average 0.72 liters of diesel is produced for each 1 liter of petrol produced causing an imbalance in local supply.

South Africa produced 24.4 million liters of liquid fuel products in 2006.

Million liter	2005	2006	% Change
Petrol	11.165	11.279	+1%
Diesel	8.115	8.789	+8.3%
Other	4.291	4.320	+0.7%
Total	23.571	24.388	+3.5%

Synthetic fuels (synfuels) supply about 36 percent of the demand. Products refined locally from imported crude oil meet the remaining 64%. The petrol price in South Africa is linked to the price of crude oil in international markets. Crude oil prices combined with the Rand/Dollar exchange rate therefore have a major impact on petrol prices.

An indication of the price formula for petrol and diesel can be given to highlight the leeway Government has to support Bio-fuels.

May 2007, SA C/liter	Petrol	Diesel
Inland	95 Octane unleaded	0.05% Sulfur
Basic fuel price	411.313	404.630
Fuel tax	121.00	105.00
Customs duty	4.00	4.00
Road accident fund levy	41.50	41.50
Transport costs	13.90	13.90
Wholesale margin	39.487	39.260
Slate levy	4.810	4.810
Delivery costs	7.00	7.00
Retail margin	48.00	- free market
Selling price	691.00	620.00+

The fuel tax, customs duty, slate levy etc. can be cut for bio-fuels to make them more competitive in the market.

At this stage the Bio- fuels industry does not yet feature in the overall energy picture and is unlikely to do so in 2008 as, depending of the outcome of the Government Bio-Fuels policy, plants will still have to be built and farmers contracted to produce the inputs. As the planting season starts in October it is unlikely that this will happen in time.

Historically Sasol, South Africa's fuel from coal giant, supplied alcohol to the oil companies for blending into petrol. The supply agreement between the parties allowed for up to 12% alcohol in petrol but this ran out in the eighties. Later Sasol started to purify the alcohol for sale into industrial markets, as well as for conversion to other chemicals. The use of alcohol in fuel is thus not new although based on mineral ethanol. The Sugar industry also produces ethanol as a by-product for domestic and export markets.

Over the past few years Bio-fuels created a lot of interest and hype and as can be expected various schemes have been announced mostly based on imported inputs. The major potential player, based on locally produced corn, is Ethanol Africa.

Ethanol Africa's first bio ethanol plant was to be built at Bothaville in the Free State province of South Africa. Bothaville lies in the center of the South African corn area, and has been selected to ensure ready access to corn supplies, as well as access to the required logistical and infrastructure support. The manufacturing facility at Bothaville was to be built over the 2006/2007 period, with production starting in the second half of 2007. This has been delayed by financial uncertainties and the company is awaiting the final government policy determination. Once the difficulties have been overcome and the Bothaville facility built and operating, Ethanol Africa will proceed with the planning of additional plants.

In spite of the current drought, South Africa's potential to produce corn surpluses is well documented and an additional outlet for corn is welcomed. This is in contrast to oilseeds where there is a chronic shortfall necessitating imports exceeding the oilseed equivalent of more than a million tons a year.

Ethanol Africa was planning to contract farmers for 350,000 to 400,000 tons of yellow corn, or about 150,000 hectares, within a radius of 80 kilometers from Bothaville. As the area is predominantly a white corn growing area this is not seen as affecting food supply. A fixed SAFEX derived price will be paid in the first season to establish standards. Once starch percentages produced by various cultivars are established, Ethanol Africa will pay a premium for high starch cultivars or test for starch content. The company is planning to process 1,150 tons per day at moisture content as high as 18%. This will be drawn from direct deliveries where the high moisture will mean significant savings in drying costs for the farmers. Other stocks will be drawn from the 100,000-ton silo, which is to be built at the plant. The equation becomes even more attractive as suppliers will not be paying silo storage costs either (about R7/ton per month). Production loans will also be offered to farmers willing to contract a part of their crop.

This is only an example of the various schemes being announced, some of which seem to be not much more than pipe dreams or fraudulent scams. Most include

some form of small-scale farmer participation or new developments in the rural, communal areas. This type of development has not been successful to date. Some are based on imported oilseed products, which is subject to international price changes and the volatile exchange rate and where the feasibility is suspect. The sugar industry's enthusiasm also waned somewhat after international sugar prices increased.

At the moment SASOL, the oil from coal giant is producing some mineral ethanol while the sugar industry is producing some bio ethanol. As these products do not fall under the Petroleum Products Act details are not known. Imports are duty free. Very small quantities of bio diesel are produced on farms.

As fuel from food is a sensitive issue in the current high food price inflation phase, proponents of Bio-fuels are quick to announce that crops will be planted especially for this purpose. There is room to expand corn production but expanding oilseed production has not been successful. Sugar production expansion will be more for export growth while this industry is also vulnerable because of its high water requirements. Government will probably also have to adjust its import tariff regime to make the local production of inputs viable. At the moment the tariffs are low and more than a million tons each of wheat, corn and oilseed products are imported annually. These products could probably be produced locally but not without further pressure on food price inflation. International price movements in these products already have a major effect on costs.

At the moment South Africa is not involved in Bio-Fuel production and there is very little data to be entered in the statistical section.

Quantity of Feedstock use in bio-fuels production:

MT	2003	2004	2005	2006	2007
Biodiesel					
Veg. Oil*	0	0	10	15	25
Ethanol					
Corn*	0	0	0	75	150

*Estimate of on farm use

Estimated Bio-fuels production/consumption/trade

Million liters	2004	2005	2006	2007
B/stocks				
Production				
Imports	5.2	5.4	2.5	3.0
Supply				
Exports	146.8	1,688.5	1,229.5	1,450.0
Consumption				
E/stocks				