

GLOBAL BUSINESS REPORTS

INDUSTRY EXPLORATIONS



SOUTH AFRICA CHEMICALS 2013

Economy - Regional Opportunities - Research and Development - Megatrends - Infrastructure

Domestic Giants

Executives from South African multinational Sasol discuss various facets of their company, with exclusive interviews from the polymers division and research and technology division, and a case study on their most recent investments at home and abroad.



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From the GBRoundup

Global Business Reports' own researchers provide their insights into the South African chemical industry and their opinions on the steps that it must take to guarantee its future success.



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Quantitative Data

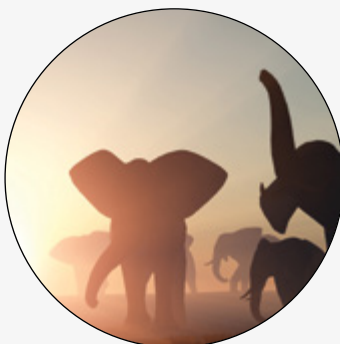
The most relevant quantitative data presented in the most easily accessible format, allowing you to view economic and market statistics, identify trends and visualize infrastructure.



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 gbroundup.wordpress.com.

An Introduction to South Africa

A brief overview of the country and economy

For a long time, South Africa was an entirely separate entity, in every respect, from the rest of the African continent. It gained legislative independence in 1931, earlier than any colonized country on the continent bar Egypt. During the 1960s, when the nationalist movements of Africa finally resulted in the wide-scale demise of colonialism and newly sovereign nations started to find their economic feet, South Africa was already substantially more developed and wealthier than any of them. Its GDP was almost double that of its nearest continental competitor, Nigeria, in 1960 and remained 50% larger in 1970. Its GDP per capita was similarly dominant. In the entire history of "independent Africa" South Africa has slipped to second position in rankings of GDP just once: for one year in 1976, at the height of Nigeria's oil boom.

South Africa's economic exceptionalism was such that until the late 1990s and early 2000s organisations such as the World Bank, when

presenting economic statistic on Africa, would habitually South Africa from measurements for fear of skewing overarching trends. Yet this prosperity did not reflect a thriving political or social situation. South Africa was also distinguished from its continental peers by its position in the international community. During decades in which foreign aid was poured into Africa by Western countries eager to salve their consciences, South Africa was isolated economically, politically, and culturally.

The apartheid era first led to suggestions of sanctions by the United Nations in 1962, and really only ended with the 1994 elections. Caused by the repressive enforcement of divisions within the country, it led to divisions between the country and others, both in the region and in the world.

Today, South Africa is a radically different entity, and one that is integrated with its continent and its world in a way that would have been unimaginable not too long ago. It

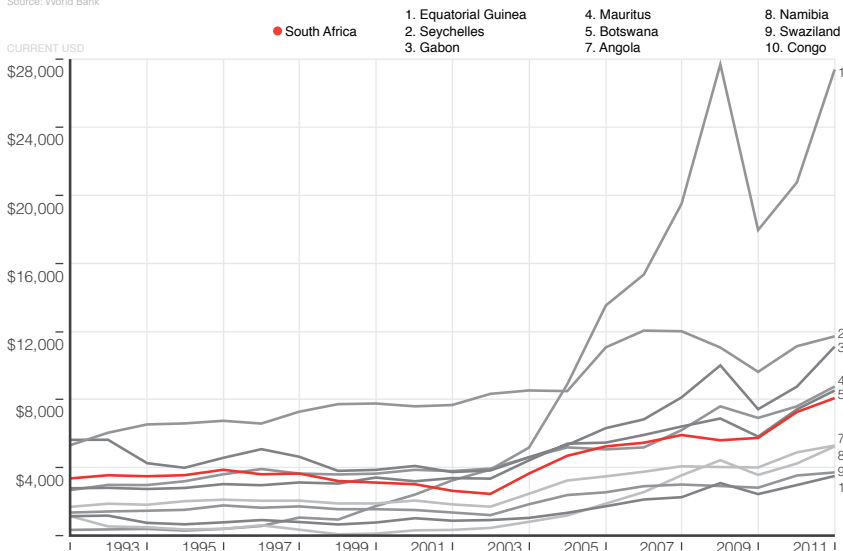
was in Durban that the African Union (AU) was launched and a South Africa, Nkosazana Dlamini-Zuma, is the chair of the AU Commission. It is the dominant player in the Southern African Development Community (SADC), and one of the four original members of the SADC Free Trade Area. On the global stage, its entrance into the BRICS association of emerging influential economies in December 2010 shows the country has a desire to be seen as a leader both continentally and globally.

Economically, South Africa may not enjoy quite the dominance that it once had. Although its GDP still remains double that of its nearest competitor (still Nigeria), it has been overtaken in GDP per capita, now lying in sixth position. It still enjoys a high position in sub-Saharan Africa in most ease of doing business indicator rankings, but loses out in many to countries such as the Indian Ocean island nation of Mauritius, or the new oil producer Ghana. Its 2012 GDP growth rate of 2.6% was significantly lower than that of all of its neighbours, bar the tiny and recession-hit kingdom of Swaziland.

Yet South Africa, in its modern cooperative incarnation, is embracing the economic success currently sweeping through the African continent. As sub-Saharan Africa in particular experiences market growth, South Africa's government and industry are eager to demonstrate South Africa's influence in regional affairs, both assisting in the regional growth and benefiting from it. South African logistics companies crisscross the continent; South African mining companies search for minerals from Mozambique to the Democratic Republic of the Congo; South African consultancies guide foreign investors in their first hesitant steps into a continent long ignored; and South African chemical companies provide the products that a newly wealthy African population increasingly desire. •

Top 10 largest economies in sub-Saharan Africa (by GDP)

Source: World Bank





NAMIBIA

BOTSWANA

ZIMBABWE

MOZAMBIQUE

NORTHERN PROVINCE

Pietersburg (Polokwane)

Gaborone

Nelspruit

Pretoria

Maputo

Mmabatho

Johannesburg

MPUMALANGA

SWAZILAND

NORTH-WEST

GAUTENG

FREE STATE

KWAZULU-NATAL

Kimberley

Bloemfontein

Maseru

LESOTHO

Pietermaritzburg

NORTHERN CAPE

SOUTH AFRICA

EASTERN CAPE

Indian Ocean

South Atlantic Ocean

Cape Town

WESTERN CAPE

300km

Domestic Population

Source: CIA World Factbook, Various

48,601,098

Population (2012)

24.4%

Unemployment Rate (2012)

17,890,000

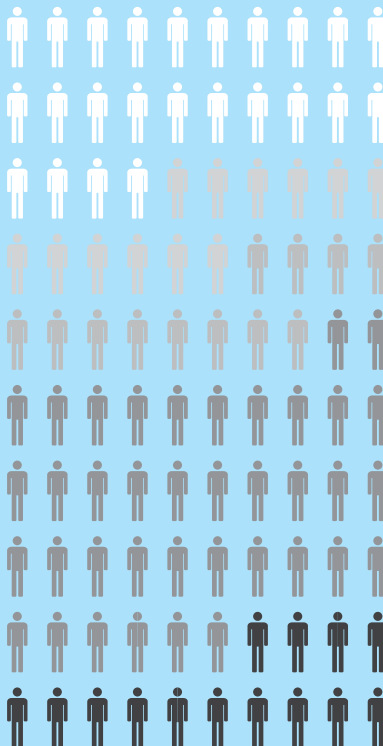
Labour Force (2012)

48.2%

Youth Unemployment Rate (2012)

86.4%

Literacy Rate (2012)



South Africa at a Glance

Source: CIA World Factbook

Population: 48,601,098 (July 2013 est)

Capital: Pretoria

Chief of State: President Jacob Zuma

Head of Government: President Jacob Zuma
GDP (official exchange rate): \$390.9 billion (2012 est)

Growth Rate: 2.6% (2012 est)

GDP per Capita: \$11,300 (2012 est)

Economic Sector Breakdown: agriculture: 2.4%, industry: 32.1%, services: 64.9% (2012 est)

Exports: \$101.2 billion (2012): gold, diamonds, platinum, other metals and minerals, machinery and equipment

Imports: \$106.8 billion (2012): machinery and equipment, chemicals, petroleum products, scientific instruments, foodstuffs

Major Trade Partners: China, Germany, USA, Japan

3.12%

GDP GROWTH RATE 2011

Source: World Bank



INTERVIEW WITH

Hilton Lazarus

SBU: HEAD OF CHEMICALS AND ALLIED INDUSTRIES
IDC

Could you give us an overview of IDC's role within the chemicals and manufacturing sectors in South Africa?

IDC Chemicals is one of the biggest units within IDC as a consequence of two significant investments made around 1950. Since then the company has continued to invest in many different areas across chemicals such as plastics, mining chemicals and water treatment. At the same time we have been eager to expand our product portfolio and we are now looking for opportunities within the biochemical's sector.

What is the significance of the economic policy for the industry?

The industry is very much influenced by the policies implemented by the government and it has been shrinking as a result of the most recent changes. The IDC has been actively participating in various discussions with many stakeholders, including the government and the major industry players, with the goal of reversing that negative trend and to help the industry reach a growing rate of development. We work together with the government, contributing to more positive changes within the chemical sector through the development economic policy focusing on easing the access to the market and creating a healthier level of competition.

Why has the chemical industry been selected as a priority by the South African government?

The chemical industry is one of the oldest industries and it is an important contributor to the employment in South Africa. Furthermore, we can see the application of the chemical industry everywhere in our daily lives and this is indicative of the significance that it has for the economy and the

advancement of the society. Chemicals offer vital support and are growth drivers to many different industries such as the energy industry, the agriculture and infrastructure to name a few.

What is IDC's strategy for expanding its reach outside of South Africa?

IDC has a mandate to operate not only in South Africa, but also throughout the entire continent. We are currently looking at opportunities in Mozambique, Zimbabwe, Namibia, Botswana, and Angola and in general trying to focus on sub-Saharan African countries. In terms of sectors, we are exploring options in mining chemicals as mining is prominent in the continent. However, infrastructure is a big issue in Africa. We have already partially supported two plants and we are looking into the prospects of another smaller plant in Namibia. Agriculture is another interesting sector and we expect many opportunities there in the upcoming years. How do you manage to build partnerships with countries in the SADC region?

We work in cooperation with an Africa Unit, which deals with a lot of marketing and relationship building activities. Through engaging with them we manage to create useful contacts, which then help us in the implementation and the funding our projects. At the same time, we have created very positive relationships with the biggest banks on the continent, which also support our operations.

What would you say are the main business challenges in South Africa?

One of the main challenges is certainly the skilled labour force shortage. We have identified this issue a long time ago and we are working on different programs, together with the government, with the goal of ad-

ressing this problem and improving the skills and the knowledge of the labour force. On the other hand, the chemical industry is a capital intensive one and it is highly affected by the costs of the raw materials. This issue together with the presence of strong players on the market makes it hard for smaller companies to compete and ultimately slows down the development of the industry.

Where do you see the chemical sector in South Africa in the next three years?

The IDC's mission is to promote the chemical sector in South Africa worldwide and attract foreign investments in order to help the development of the industry. There are many opportunities in the sector in the near future and I believe that, in order to successfully explore these possibilities, the South African countries must start looking beyond the borders and enter into new countries on the continent. IDC is prepared to help any organization in their entrance into new countries and we have already started noticing a very positive movement from local to international operations. The IDC plans to invest around R11 billion over the next five years to help South African companies flourish in the industry and expand into Africa. •

South Africa's Manufacturing Sector Income by Product Type

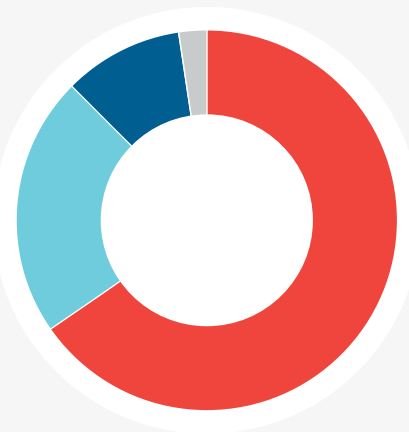
Source: Statistics South Africa



● Coke, petroleum, chemical products, rubber, plastic	29%
● Metals, metal products, machinery, equipment	19%
● Food products and beverages	17%
● Transport equipment	15%
● Wood, wood products, paper, publishing, printing	7%
● Sum of all other manufacturing	13%

South Africa's Chemical Industry Market Share by Value

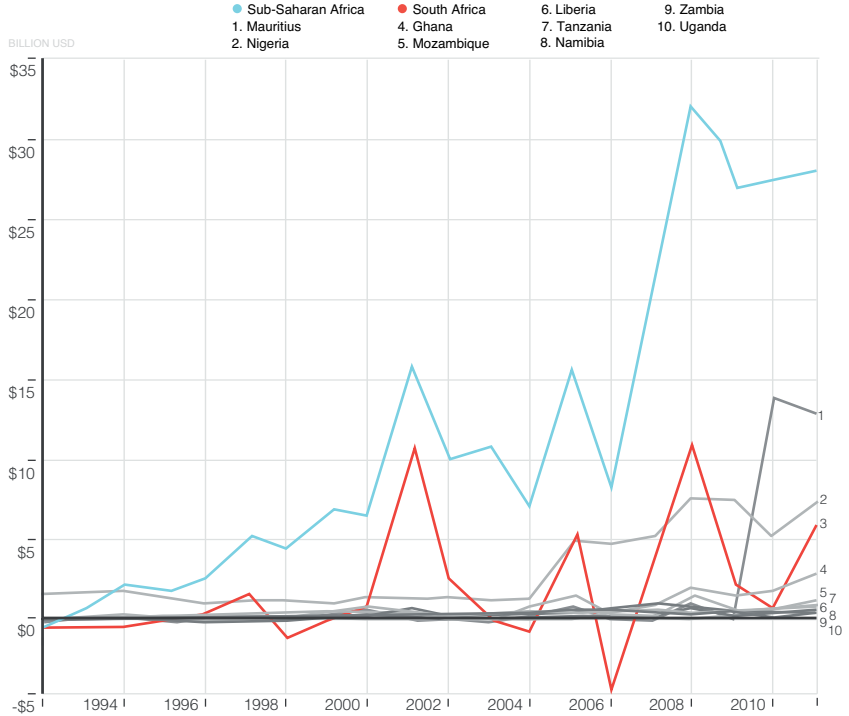
Source: Various



● Base chemicals	65.6%
● Pharmaceuticals	22.1%
● Agricultural chemicals	10.1%
● Specialty and fine chemicals	2.2%

Foreign direct investment into sub-Saharan Africa (top 10 recipients)

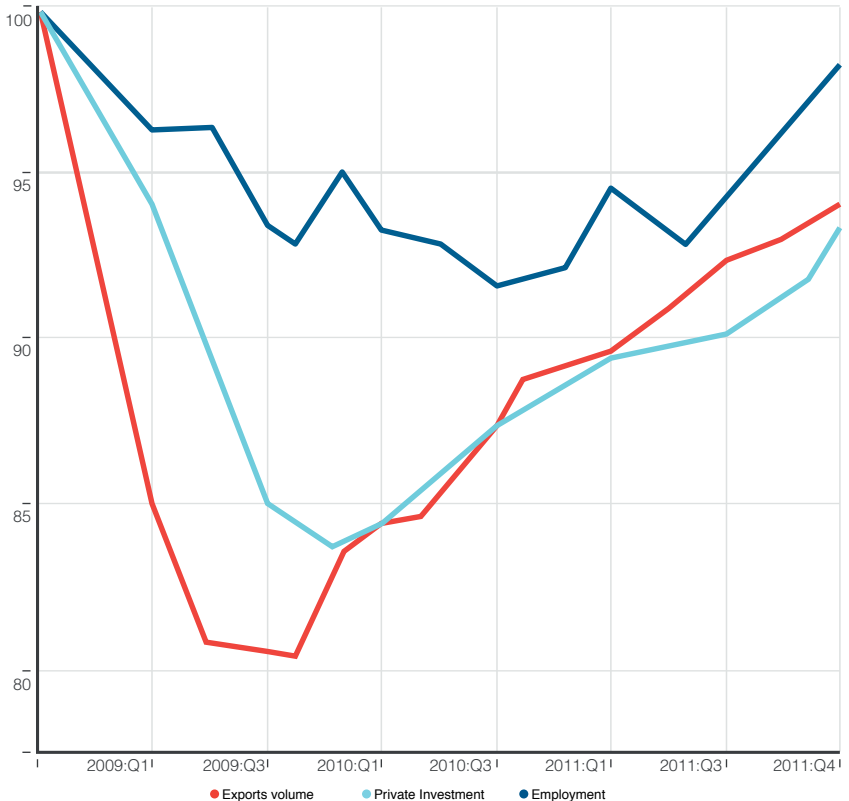
Source: World Bank



South Africa and the financial crisis

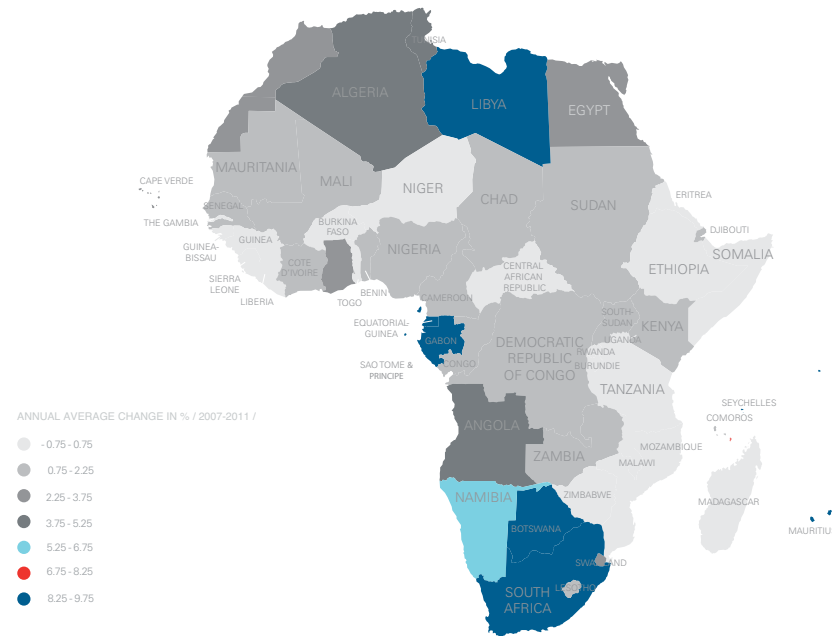
Source: IMF

INDEX: 2008:Q4 = 100



African GDP Growth by Country

Source: IMF, Economist Intelligence Unit



COUNTRY	GDP PER PERSON / 2011 ESTIMATE, \$ '000 /	COUNTRY	GDP PER PERSON / 2011 ESTIMATE, \$ '000 /
Morocco	3.2	Burkina Faso	0.7
Tunisia	4.6	Ghana	2.8
Algeria	5.0	Cote d'Ivoire	1.0
Lybia	10.9	Liberia	0.3
Egypt	2.9	Sierra Leone	0.3
Mauritania	1.2	Guinea	0.4
Mali	0.8	Guinea Bissau	0.4
Niger	0.4	The Gambia	0.6
Chad	0.9	Senegal	1.1
Sudan	1.9	Cape Verde	3.7
Eritrea	0.5	Equatorial Guinea	14.4
Djiboute	1.5	S.Tome & Principe	1.4
Ethiopia	0.4	Gabon	10.9
South Sudan	1.9	Congo	1.5
CAR	0.5	DRC	0.2
Cameroon	1.2	Uganda	0.4
Nigeria	1.5	Rwanda	0.6
Benin	0.8	Burundie	0.2
Togo	0.5	Kenya	0.9
Somalia	0.3	Botswana	8.8
Tanzania	0.5	Zimbabwe	0.7
Comoros	0.9	Mozambique	0.5
Malawi	0.3	Madagascar	0.4
Zambia	1.4	Mauritius	8.5
Angola	5.1	Swaziland	3.3
Namibia	6.1	Lesotho	1.0
		South Africa	8.3

Quality of African Governance

Source: Ibrahim Index of African Governance 2012

RANK AND COUNTRY	SCORE / 100	6 YEAR CHANGE
Mauritius	82.8	4.5 ▲
Cape Verde	78.4	4.1 ▲
Botswana	77.2	0.9 ▲
Seychelles	73.4	-0.5 ▼
South Africa	70.7	-1.1 ▼
Namibia	69.8	0.2 ▲
Ghana	66.3	2.0 ▲
Tunisia	62.7	-2.0 ▼
Lesotho	61.0	-0.2 ▼
Tanzania	58.8	0.4 ▲

Ease of Doing Business in Sub-Saharan Africa

Source: World Bank Doing Business 2013

COUNTRY	EASE OF DOING BUSINESS RANK
Mauritius	19
South Africa	39
Rwanda	52
Botswana	59
Ghana	64
Seychelles	74
Namibia	87
Zambia	94
Uganda	120
Kenya	121

Chemical Production Predicted Growth 2012-2020

Source: American Chemical Council

COUNTRY	PERCENT CHANGE 2012 / 2020
North America	25%
United States	25%
Canada	27%
Mexico	28%
Latin America	33%
Brazil	35%
Other	31%
Western Europe	24%
Emerging Europe	35%
Africa and Middle East	40%
Asia - Pacific	46%
Japan	22%
China	66%
India	59%
Australia	23%
Korea	35%
Singapore	35%
Other	44%



INTERVIEW WITH

André de Ruyter

SENIOR GROUP EXECUTIVE
SASOL

How is the chemicals cluster an important part of Sasol's operations in South Africa, especially given Sasol's unique value chain?

Sasol's chemical business in South Africa is divided into two separate components. The first component is intimately integrated in our Fischer-Tropsch process. As part of this process, we manufacture a rich stream of different organic compounds, which is then beneficiated into fuel and chemicals. The product of this process is arguably one of the more diversified portfolios of chemical products in existence. Second, we have non-integrated chemicals which are found in our plant in Sasolburg supported by natural gas. These include products such as wax, ammonia, solvents, and polyethylene.

How does Sasol benefit from integration with the Fischer-Tropsch process as compared to other petrochemical companies that are similarly fully integrated?

Sasol is essentially a mine to mouth operation. The fact that we are integrated on one site right into our feedstock is a distinct advantage for us and gives us a degree of flexibility between chemical production and fuel production.

One of the strongest aspects of Sasol is our fully integrated value chain that maintains our robust business throughout the cycle. Another important feature is our geographic proximity to the industrial heartland of South Africa. Normally, production facilities are located close to rivers or ports rather than close to their feedstock like Sasol's facilities at Sasolburg and Secunda.

Gas to liquid has been identified as Sasol's focus as it starts to move away from coal to liquid projects; what effect will this have on Sasol's chemical business?

Coal to liquid is based predominantly on the

high temperature Fischer-Tropsch process where as gas to liquid is based on the low temperature Fischer-Tropsch process. The low temperature Fischer Tropsch process is far more selective in the products it manufactures and therefore it does not offer the same quantity of some chemical products such as olefins from the feed stream; however the gas to liquid process does offer unique chemical feedstocks that will add value to our gas to liquid operations.

What do you see as the key markets for expanding in Africa over the next five years?

There is a tipping point in GDP per capita at which people become significant chemical consumers and Africa is still not yet at that point. Our local production is built upon the parts of the South African market that do behave like Western European or North American markets. At the same time, it is clear that the policies currently instated in many Sub-Saharan African countries are indeed conducive to economic growth. The political stability, adherence to sound market policies, and respect for democracy found in most Sub-Saharan African countries reflect that countries understand the need for business-friendly policies to attract investment. This is coupled with the potential for market growth and access to natural resources. Moreover, there has been the development of markets such as agriculture in which we can introduce our fertilizer products and minerals extraction business; explosives in particular have been a focus area for us as Africa's mineral wealth is increasingly explored and developed.

What challenges do you foresee for Sasol over the next three to five years in South Africa?

Sasol needs to deliver on some of our large current projects including our 1.9 billion rand C3 stabilization project, our 1.1 billion rand

Ethylene Purification Unit Five and, most importantly our 8 billion rand Fischer-Tropsch hard wax expansion project based in Sasolburg. This will significantly add to our capacity to produce our unique Fischer-Tropsch hard wax. This has been a challenging project because it is on a brownfield site, but we are confident that we will meet the sizeable and growing market demand.

How would you rate the current business environment in South Africa?

With the appropriate policies there is significant room for investment in the South African chemical industry, so it is important that we foster these policies. We are in regular contact with the government to explain what needs to be done to make South Africa a competitive investment destination. Capital is like water in that it flows to the point where it encounters the least resistance; barriers to financing can be regulatory, socioeconomic, political, or ideological. Competitive countries fundamentally understand what drives investment behaviour, and so try within their own governmental objectives to create an environment conducive to investment.

What effect will Sasol's expansion abroad have on South Africa's image?

When Sasol makes a substantial investment in a foreign country, we are representing South Africa, establishing a positive image of the country regarding technological capability and financial strength. If Sasol only invests in South Africa, then we will grow at some multiple of South Africa's GDP; our ambitions are higher than that. •

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www.thedti.gov.za

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www.economic.gov.za

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napm.co.za

Pharmaceutical Industry Association of South Africa (PIASA)

www.piasa.co.za

South African Chemical Workers Union (SACWU)**South African-German Chamber of Commerce**

suedafrika.ahk.de

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