



SOUTH
AFRICA

Factsheet
2020

Investing in South Africa's Chemicals and Advanced Materials Industry



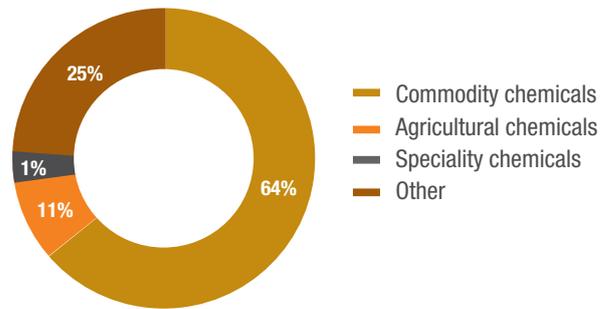
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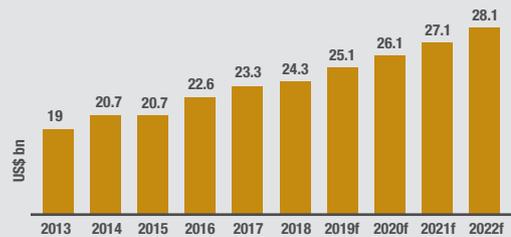
Chemicals and Advanced Materials in South Africa

- > South Africa is home to Africa's most advanced and largest chemicals sector, valued at approximately US\$25bn. It is estimated to be four times and thirteen times larger than the chemicals markets of Nigeria and Egypt, respectively.
- > South Africa's chemicals industry is highly mature and diverse, spanning fuel and plastics fabrication to pharmaceuticals, and supplies a wide range of industries.
- > According to the Chemical and Allied Industries Association, the sector provides input to 23% of the country's total manufacturing gross value.
- > In 2018, the chemicals (organic and inorganic chemicals, as well as plastics) sector exported close to US\$4bn in products. Plastics accounted for 37%, inorganic chemicals for 35% and organic chemicals for 29% of the sector's export earnings.
- > The sector is dominated by a few integrated, local and international manufacturing companies, of which the 20 largest account for close to 90% of the sector's revenue.

South Africa's chemicals market by category, 2017



South Africa's chemicals market value (US\$bn), 2013-22f



US\$25bn
chemicals market

US\$4bn
in annual exports

Why invest?

Availability of raw materials

South Africa has close to 10 billion tonnes of proven coal reserves, among the largest in the world. Given its leading expertise in coal-to-liquid technology, the country's coal deposits present key inputs for the chemicals industry.



7th
largest coal producer in the world

US\$23bn
global advanced carbon material market by 2024

Rising demand for biodegradable materials

South Africans use about two billion single-use plastic bags a year. Close to 90% of these bags are conventional petroleum-based plastic bags. Due to the rise in environmental awareness, an increasing number of retailers have committed to reduce or fully phase out the use of single-use plastic bags in the next few years and offer biodegradable bags. This will lead to a substantial increase in demand for biodegradable materials.

2bn
plastic bags sold per year



Emerging material capabilities

South Africa has developed advanced capabilities for the production of emerging materials including advanced carbon materials. The world market for advanced carbon materials is expected to record a compounded annual growth rate (CAGR) of 11.5% between 2019 and 2024.



2.6% pa
agricultural output growth to 2025

Rising demand for agro-chemicals in Africa

In order to keep up with population growth, agricultural output has to increase in Africa. The FAO and OECD expect agricultural output to grow by 2.6% per annum in the next decade, driving demand for agro-chemicals such as fertilisers and pesticides.

Integrated value chain

South Africa offers a fully integrated value chain that includes the production of raw materials, intermediate products and final chemical products.

600+
local companies



Where to invest?

- > A large number of chemicals companies and related manufacturing activities, including explosives and fertilisers, are clustered in the Vaal Triangle (near Johannesburg). This includes the cities of Vereeniging, Vanderbijlpark (both in southern Gauteng) and Sasolburg (in northern Free State). Further activities are along the coal-rich Vaal River valley, stretching from northern Free State to southern Gauteng and western Mpumalanga.
- > Other hubs of chemical manufacturing are in areas where the products are consumed, e.g. in the mining and farming regions or in urban areas, such as Johannesburg, Durban and Cape Town, with large manufacturing and consumer industries.
- > Specialised clusters include the Durban Chemicals Cluster and the Mandela Bay Composite Cluster. The Durban Chemicals Cluster is public-private partnership between the local chemical manufacturing sector and eThekweni Municipality. The Mandela Bay Composite Cluster is an industry-led advanced manufacturing cluster, focusing on composites for various industries.



Largest in the world:
Sasol's coal-to-liquid plant in Secunda is the largest coal liquefaction plant in the world.

1st in 2008:
Researchers from AEL, a division of South African chemical group AECI, pioneered and patented the world's first commercial pyrotechnic spray drying plant.



What support exists?

- > Given the sector's strong linkages to the overall economy through the provision of key inputs, the South African government is committed to creating an enabling environment for both local and international investors in the sector.



Financial Assistance and Incentives

The 12i Tax Incentive is designed to support Greenfield investments (i.e. new industrial projects that utilise only new and unused manufacturing assets), as well as Brownfield investments (i.e. expansions or upgrades of existing industrial projects). The incentive offers support for both capital investment and training.



Skills Development and Research Programmes

The Chemical Industries Education & Training Authority (CHIETA) facilitates skills development in the chemical industries sector. A number of universities offer industry-related Bachelor and Master programmes. The CSIR has a strong research focus on nanostructured and advanced materials, bio-manufacturing and metal processing.



Chemical Incubators

Chemical incubators provide support to start-up companies including support services, assistance with business plans, provision of physical space, coaching and technical expertise. Incubators have been set up in Port Elizabeth, East London, Durban, Krugersdorp and Thembisa.



Innovation Support

Innovation support is available through programmes such as the Support Programme for Industrial Innovation (SPII), the Technology and Human Resource for Industry Programme (THRIP) and the SEDA Technology Programme (STP).

What are the opportunities?

- > South African industries remain dependent on chemicals imports. Local manufacturing of key chemicals and advanced materials will help to reduce this dependency and improve the competitiveness of South Africa's chemicals industry.

Key opportunities include:

- Manufacturing of organic, mineral or chemical **fertilisers** and **nitrogen compounds**
- Manufacturing of **polymers** including polyethylene used in packaging, bags and injection moulding applications
- Manufacturing of **painting** and **coating** (including for automotive industry)
- Manufacturing of organic **surface active agents**
- Manufacturing of **biodegradable materials**
- Manufacturing of **bio-composites**
- Manufacturing of prepared binders for **foundry moulds** or cores
- Manufacturing of **proteins** and **peptones**
- Manufacturing of **polypropylene** and **polyvinyl chloride** beneficiation
- Manufacturing of **composite materials**, including bio-composites
- Manufacturing of **titanium oxide pigments**
- Manufacturing of speciality and **fine chemicals**
- Manufacturing of **primary polyacetals/polyethers**
- Manufacturing of **nitrites and nitrates**
- Manufacturing of **carbon fibres**
- Manufacturing of engineering plastics – **polyamides**
- **Fluorspar beneficiation** for production of fluorochemicals
- **Silica sand beneficiation** for production of fibre glass

How to invest?

Opportunity identification

- 1 Conduct feasibility study for your product or service
- 2 Evaluate outcome of feasibility study
- 3 Take investment decision
- 4 Decide on investment strategy in order to best align to the market opportunity

Go ahead



Location identification



Resourcing requirements (HR, capital, finance, IT)



Compliance and legal affairs

Investment preparation

- ✓ • Decide on geographic location most suitable for investment
- ✓ • Consult property specialists, real estate agents to identify suitable sites for operations
- ✓ • Conduct site visits of suitable locations
- Consult with HR/recruitment agencies about staff requirements
- Determine immigration requirements
- Determine funding model (e.g. self-funding, debt, equity)
- Consult with IT systems providers
- Determine corporate structure
- ✓ • Determine licensing and permit requirements
- Consult with labour lawyers
- ✓ • Consult with InvestSA to identify eligibility for incentives, skills and other support initiatives

Investment execution

- Acquire/lease site, rent office space
- Apply for municipal services (e.g. water, electricity)
- Conduct interviews, hire staff
- ✓ • Apply for work permits for expatriate staff
- Open a bank account
- Apply for finance
- Set-up IT infrastructure/systems
- ✓ • Register company
- ✓ • Apply for licenses and permits
- ✓ • Apply for National Level Incentives Schemes, Skills and Other Support Programmes

✓ InvestSA ready to assist

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Information sources

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