

Sasol

50 YEARS *of*
INNOVATION



In this publication, Sasol commemorates five decades of people, events and achievements that shaped the company into the respected global enterprise it is today. Looking into the future, we explore the exciting opportunities and challenges being presented by an ever-changing world.

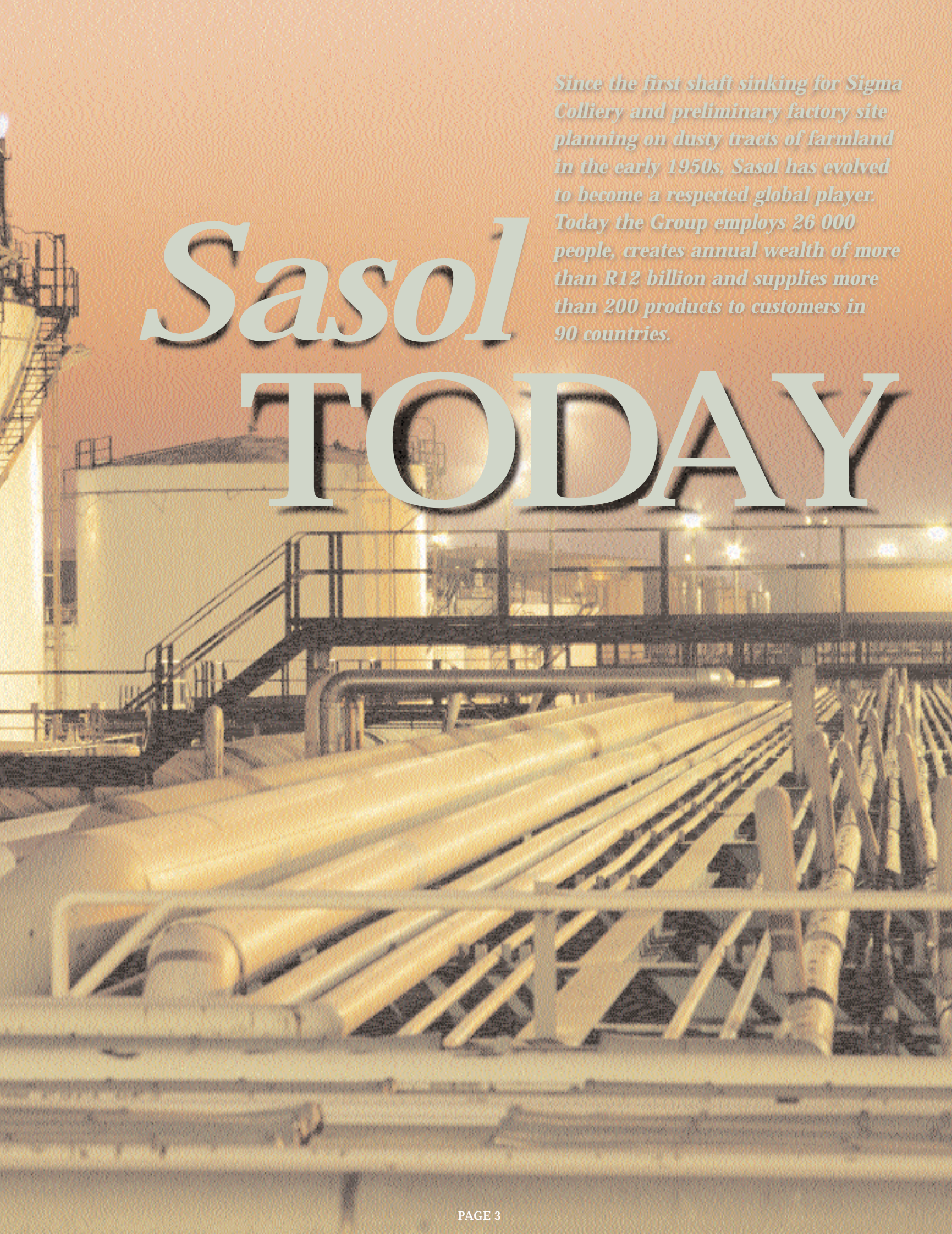


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CHAPTER ONE



Since the first shaft sinking for Sigma Colliery and preliminary factory site planning on dusty tracts of farmland in the early 1950s, Sasol has evolved to become a respected global player. Today the Group employs 26 000 people, creates annual wealth of more than R12 billion and supplies more than 200 products to customers in 90 countries.

Sasol TODAY

50 YEARS OF INNOVATION

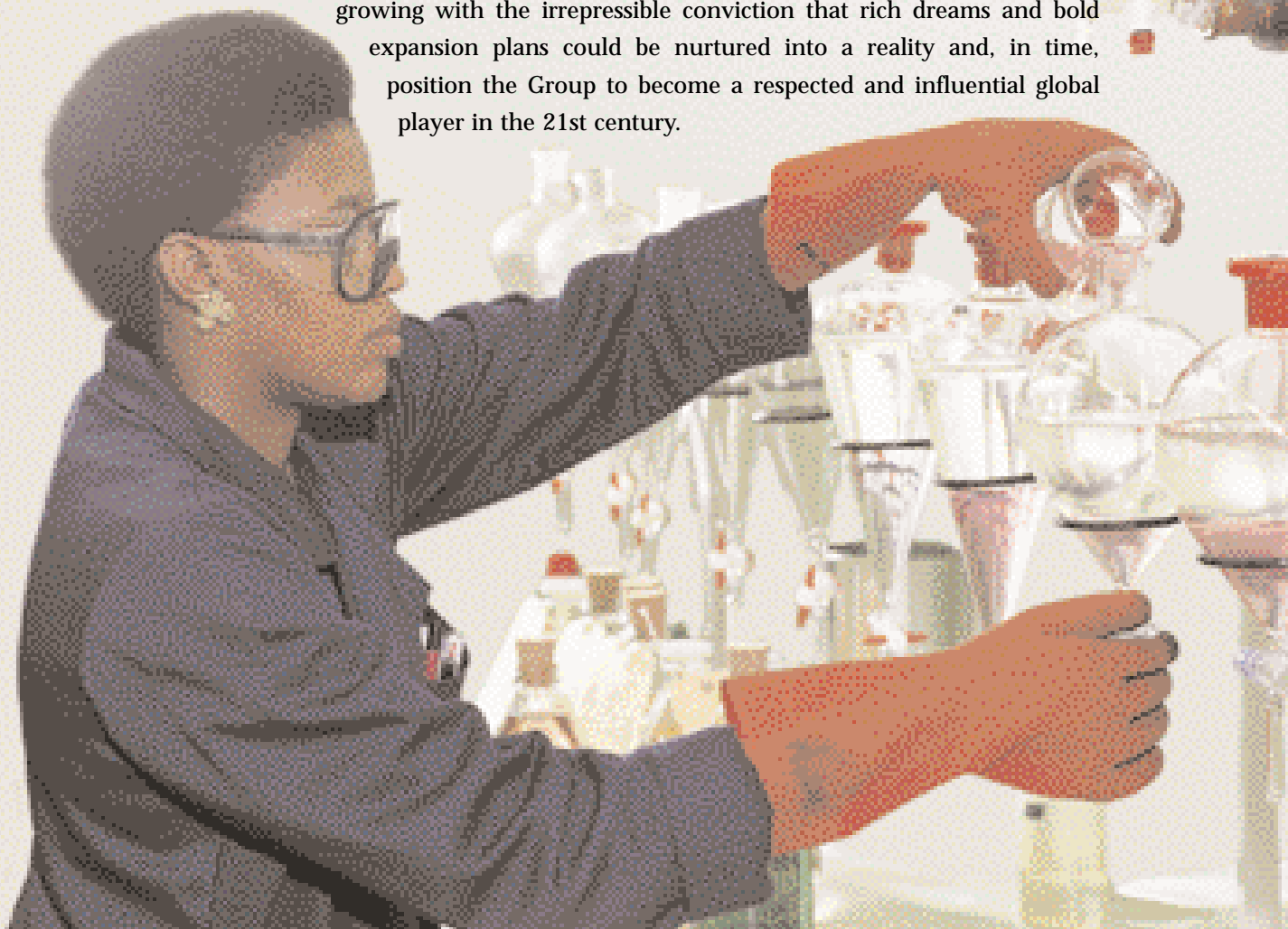
Sasol TODAY



Touching the world in so many ways

A sustained culture of technological innovation and sharp business focus has taken Sasol from being a comparatively small synfuels producer to a globally focused giant in five decades. Sasol reached the age of 50 on 26 September 2000 – and, symbolically, announced record profits, record production and record sales on the eve of celebrating its golden anniversary. The resourceful synfuels and petrochemical producer is today a Top 10 South African enterprise with growing marketing and manufacturing interests on all five continents.

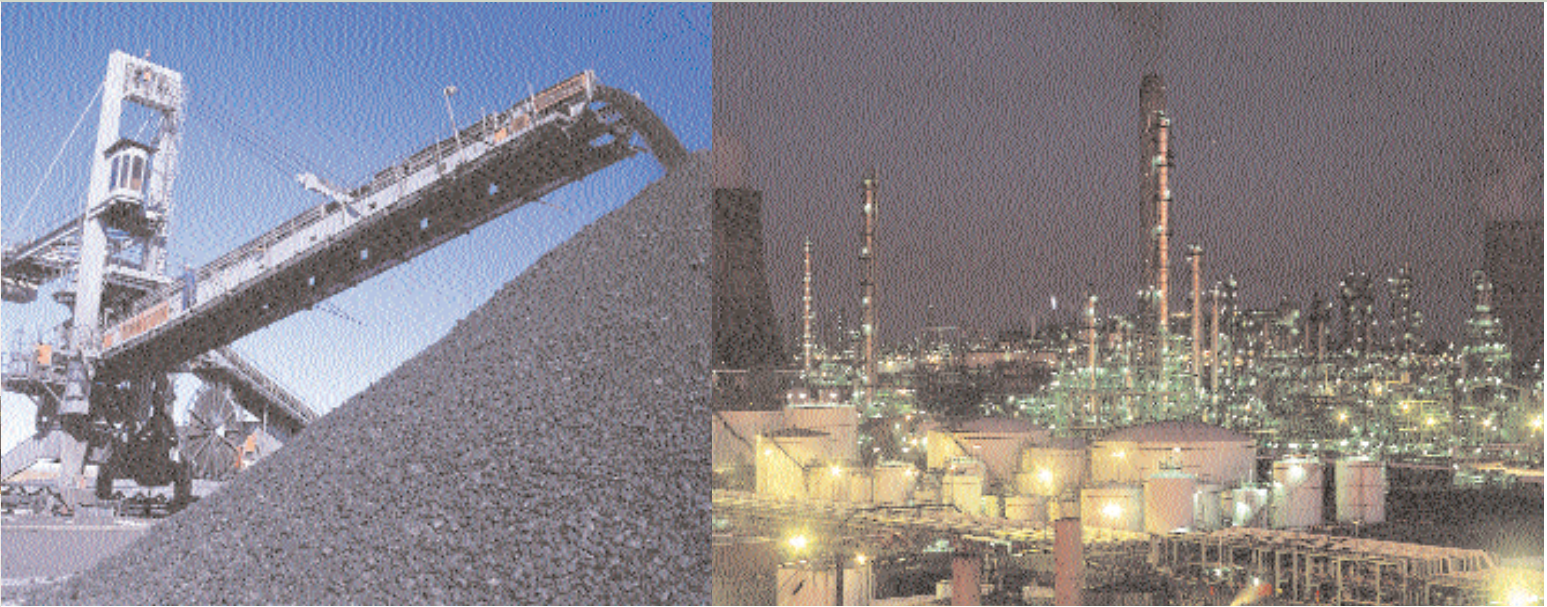
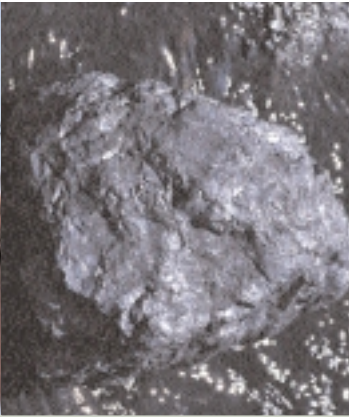
Sasol created major media ripples in November and December 1955 when its first sales of coal-derived petrol in the South African hinterland were publicised. The ensuing years would witness the Group progressing and growing with the irrepressible conviction that rich dreams and bold expansion plans could be nurtured into a reality and, in time, position the Group to become a respected and influential global player in the 21st century.



From coalface to world marketplace

Sasol feeds coal into the gasifiers of Sasol Chemical Industries (SCI) at Sasolburg and Sasol Synthetic Fuels (SSF) at Secunda for conversion into crude synthesis gas. Gasification also yields essential co-products for downstream recovery, including ammonia, sulphur, phenolics and pitch for speciality carbon products.

At Sasolburg, SCI reacts the crude synthesis gas in the low-temperature Slurry Phase Distillate reactor to produce linear-chained hydrocarbon waxes and paraffins. At Secunda, SSF reacts the crude synthesis gas in the higher-temperature Sasol Advanced Synthol (SAS) reactors to produce, in one step, C1 to C20 hydrocarbons, including synthetic crude oil for downstream refining and fuels production. The chemical streams are routed through various downstream processes to produce ethylene, propylene, solvents and alpha olefins, for example.

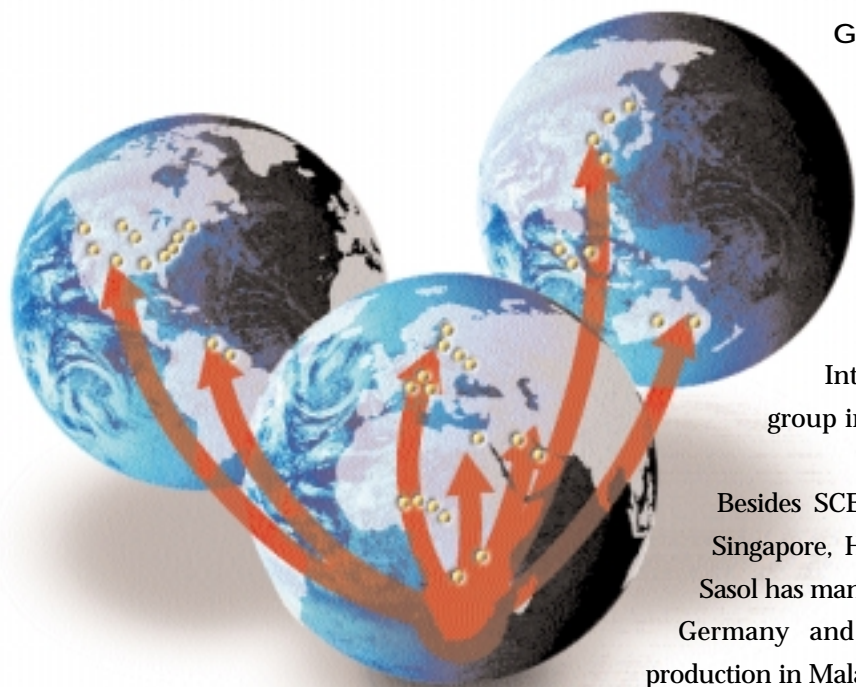


Fuelled by skilled people

Sasol's world-renowned technological prowess and its many other notable feats are attributable solely to its enduring legacy of highly skilled people. Today, Sasol employs 26 000 people, most of them in South Africa. Every employee is skilled and empowered to fuel Sasol's growth well into the 21st century. At least R90 million a year is invested in developing and training employees to help the Group to realise its ambitions of becoming (and remaining) a world-class synfuels and chemicals producer. More than 500 employees have postgraduate degrees. Sasol Technology, alone, boasts one of the strongest concentrations of science and engineering doctorates in the southern hemisphere.



Sasol TODAY



Globalising with vigour

In 1990 Sasol formed the first of its international marketing companies, Sasol Chemicals Europe (SCE), at Birmingham in the English Midlands. As new international markets opened to South African businesses, Sasol was among the pioneers looking to establish new global customers. Sasol supplies more than 200 products to customers in 90 countries. International sales of R6,525 billion accounted for 25% of group income in the 2000 financial year.

Besides SCE, Sasol has various marketing offices at Houston, Dubai, Singapore, Hong Kong, Kuala Lumpur, Brisbane, Caracas and Harare. Sasol has manufacturing operations in Canada, America, the Netherlands, Germany and China and will commence joint-venture monomer production in Malaysia in 2001. The Group plans to build gas-to-liquids plants in Nigeria, Qatar and in due course, in several other locations and is engaged in petroleum exploration and production ventures in the Congo, Gabon and Mozambique.

Creating substantial prosperity for a nation

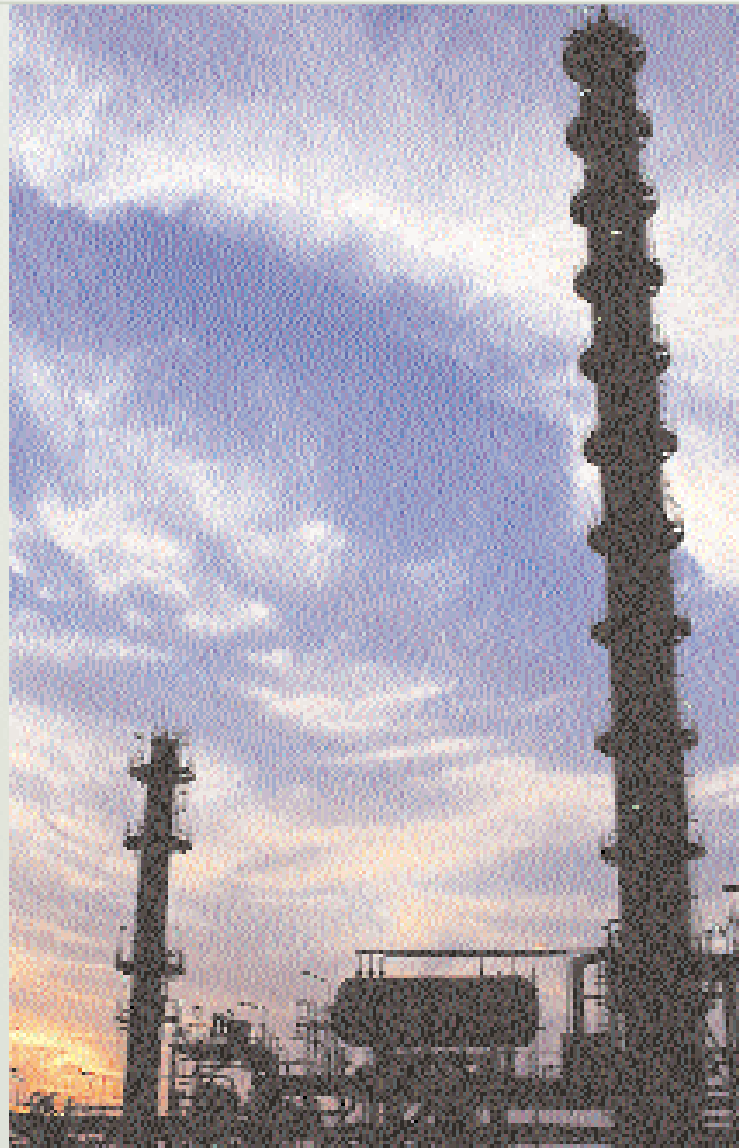
Sasol has grown remarkably in 50 years to become one of South Africa's most significant contributors to socioeconomic development. During its 2000 financial year ended 25 June 2000, Sasol created wealth of R12,6 billion and posted attributable earnings of R4 billion, bringing its four-year attributable earnings to R11,1 billion.

The Group employs about 26 000 people, mostly in South Africa. Its operations have directly and indirectly created an estimated 194 000 jobs in the country. Sasol contributes R13 billion a year to the nation's gross domestic product, R2 billion of which goes to the fiscus. The Group's mining and manufacturing operations save the country more than R18 billion a year in foreign exchange.

In the 10 years to June 2000, Sasol's fixed investment in new South African production capacity exceeded R20 billion. This commitment will be sustained over the next 10 years. Besides producing 40% of South Africa's liquid transport fuels, Sasol manufactures most of the country's chemical building blocks.

Ensuring mutually beneficial interaction

Derived from the Greek *sumbiosis*, meaning “living together”, symbiosis is a term used by biologists to refer to organisms living close to, and interacting with, one another, especially when the interaction is mutually advantageous. Such is the case with Sasol’s operations at Sasolburg and Secunda. Without coal being mined and supplied by Sasol Mining to prescribed quality and volumes, gasification plants cannot produce raw gas for downstream beneficiation into fuels and chemicals. The same principle applies to chemical plants. At Secunda, Sasol Alpha Olefins relies on Sasol Synthetic Fuels (SSF) for raw alpha olefin streams from which to extract 1-hexene, 1-pentene and 1-octene for the polymer industry, including Sasol Polymers. The unwanted alpha olefins are returned to SSF for fuel production, including the diesel needed for Sasol Mining’s vehicles. Coal also enables the extraction of ammonia after primary gasification. Ammonia undergoes value-adding steps to become ammonium nitrate-based explosives, some of which are used by Sasol Mining.



Synergistic business operations

- *Sasol Mining produces 50 million tons of coal a year at Sasolburg and Secunda mainly for the South African plants (3,2 million tons for exports)*
- *Sasol Synthetic Fuels produces seven million tons a year of synthetic fuels, pipeline gas and chemical feedstock from coal at Secunda*
- *Sasol Chemical Industries’ operations in South Africa, North America and Europe produce monomers, polymers, ammonia, explosives, fertilisers, solvents, phenolics, alpha olefins, chlor-alkali chemicals, mining reagents and waxes, among other products*
- *Sasol Oil markets all Sasol fuels and lubricants, including petrol, diesel, jet fuel, fuel oils, liquefied petroleum gas and pipeline gas*
- *Sasol Technology provides research and development, new business development, engineering, project management and related services*
- *Sasol Petroleum International undertakes oil and gas exploration and production in Africa and plans to start gas production in Mozambique in 2004*
- *Sasol Synfuels International is developing international business ventures based on Sasol Fischer-Tropsch technology and is planning ventures in Nigeria and Qatar*
- *Sasol Financing is responsible for Group cash and liquidity management, external funding, forex management and treasury risk management*



CHAPTER TWO

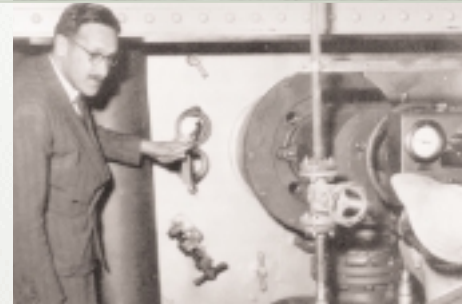
FIVE DECADES *of* INNOVATION

Sasol's history revolves around creative thinking to enable continuing innovation and progress, especially in the fields of mining and petrochemical technology. As the world's only commercial oil-from-coal producer, Sasol's initial quest was to synthetically produce liquid fuels and chemicals from coal, a milestone that was achieved in 1955.

This historical photograph from Sasol's archive shows the Sasol One plant in Sasolburg shortly after commissioning in the mid-1950s

FIVE DECADES *of* INNOVATION

After commissioning the first petrochemical factory, the ensuing 15 years were concentrated primarily on evolving Fischer-Tropsch process technologies, as well as mining technologies, to achieve greater productivity. The ideal economies of scale would start materialising after the Sasol Two operations were commissioned in 1979. Symbolically, this was the year that Sasol was listed on the Johannesburg Stock Exchange. The next decade would see the Group commence its first chemical beneficiation programme when it initiated investments for the manufacture of fertilisers, explosives and polymers. The second beneficiation wave gathered impetus in the 1990s and was complemented by the start of a focused globalisation programme.



Indebtedness to Franz Fischer and Hans Tropsch

Sasol's original dream of converting coal into liquid fuels and chemicals is indebted to two innovative German chemists, Dr Franz Fischer and Hans Tropsch, who in the early 1920s developed the process to produce synthetic

fuel from coal. Their discovery, patented in 1925, remains the basis of Sasol's conversion technologies at Sasolburg and Secunda. Fischer-Tropsch technology was commercialised in the mid-1930s for the production of synthetic petroleum and diesel in the Ruhr

Valley by Ruhrchemie, which worked in partnership with other companies, notably Lurgi Gesellschaft für Wärmetechnik. These companies later sold the technology rights to Sasol to gasify coal and convert syngas into hydrocarbon products.





Sasol One: The genesis of synfuels in South Africa
Construction of the original synfuels complex at Sasolburg (Sasol One) was undertaken between 1952 and 1955. In 1954 the first steam boiler was fired, the oxygen plant trapped its first volumes of air and the gasification plant produced its first flare. Gasification testing commenced in November. The first syngas co-product, creosote, was produced in March 1955. In August the Synthol reactor completed its first synthesis reaction and in September the Arge synthesis plant commenced operations.



Six wise pioneers

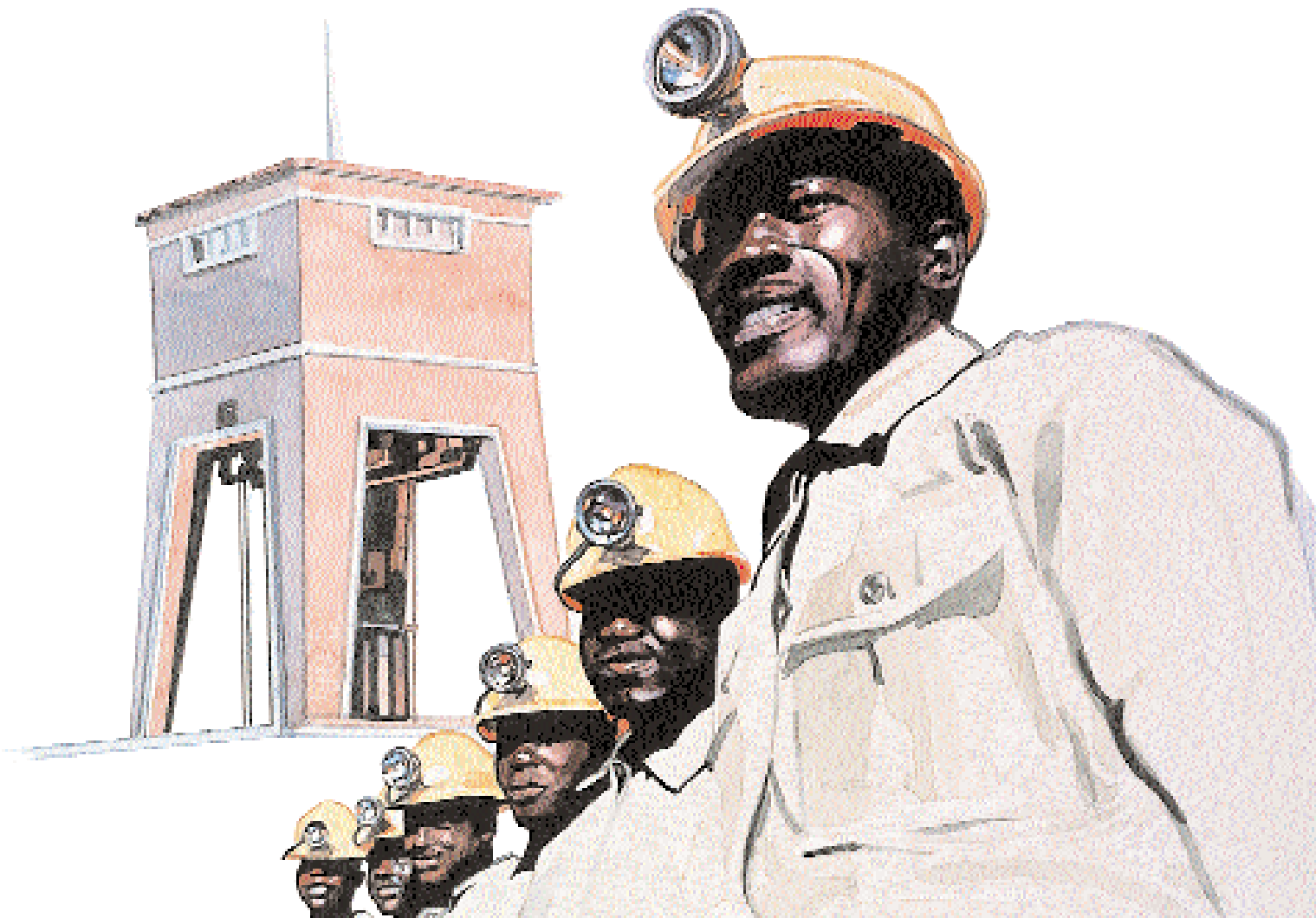
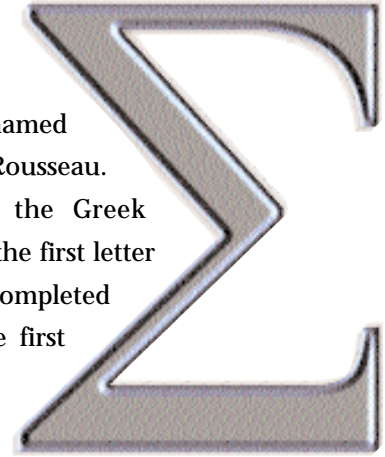
The original Sasol board of directors (pictured) comprised six men. Back row, from left: Dr Marthinus Louw, an executive of the Industrial Development Corporation; former Iscor research engineer, Etienne Rousseau, as managing director; and David de Villiers, company secretary and later managing director. Front row, from left: Dr Hendrik van Eck, vice-chairman and formerly an engineer with Iscor and later Anglovaal; Francois du Toit, chairman and a former professional advisor to the Minister of Economic Affairs; and Andrew Faickney, a Briton who had been involved in the previous Anglovaal project to develop a South African fuels-from-coal industry.

FIVE DECADES *of* INNOVATION



Making sense of Greek

Sigma Colliery, the first Sasol mine, was named by founding managing director Etienne Rousseau. He suggested the eighteenth letter of the Greek alphabet (Σ, transliterated as 's') to reflect the first letter of Sasol. The first Sigma incline shaft was completed on 31 August 1953, 13 months after the first ceremonial spadeful of earth was dug.



Sasol commences crude oil refining through Natref

In August 1966 some people must have considered it ironic when Sasol (as a noted synfuels producer) and its original partners, Total South Africa and the National Iranian Oil

Company, announced that South Africa's only inland crude oil refinery was to be built at Sasolburg. A new company, National Petroleum Refiners of South Africa (Natref), was incorporated in December 1967, when engineering work commenced. The first Iranian oil consignments were shipped to Durban from where they were piped inland to Sasolburg. The R80 million refinery was opened in May 1971. Natref, owned by Sasol and Total since the Iranian Revolution of 1979, is one of the world's most efficient refineries.



The stirring of a giant in the Mpumalanga coalfields

In response to the 1970s' international oil crises, Sasol committed itself to its most ambitious projects in 1975 and 1976: the construction of Sasol Two, the Secunda Collieries and the towns of Secunda, eMbalenhle and Thistle Grove. This was followed by Sasol Three, which commenced as a fast-track project alongside Sasol Two after the Shah of Iran was deposed in 1979. Sasol Two and Sasol Three were conceived to achieve far greater economies of scale – a 20-fold scale-up of the Sasol One facilities. These two factories, the world's largest engineering project to be undertaken at one time, were completed at a cost of R7 billion.

FIVE DECADES *of* INNOVATION



Sasol Two and Sasol Three: Amazing facts

Millions and billions were par for the course

- The Sasol Two and Sasol Three factories (now Sasol Synthetic Fuels) required as many as 28 700 workers on site simultaneously plus a further 4 500 people fulfilling essential support services (a total of 33 200 workers).
- Sasol Two and Sasol Three's development required 250 million man-hours and an investment of R7 billion.
- The combined Sasol Two and Sasol Three site can accommodate 2 090 football fields.
- By the time Sasol Three was completed in June 1982, Fedics Food Services had served 60 million meals, included 15 million kilograms of meat and 19 million loaves of bread.
- Site workers representing 39 nationalities spoke 30 languages, including Danish, French, German, Hungarian, Italian, Polish, Portuguese and Spanish.

EVOLUTION

1947 – 2000



● **1947**

South Africa's Liquid Fuel and Oil Act passed and Liquid Fuel and Oil Industry Advisory Board formed as South Africa seeks its place in a post-World War Two industrial economy.



● **1950**

South African Coal Oil and Gas Corporation Limited (Sasol) established on 26 September with Etienne Rousseau as managing director and Frans du Toit as chairman.

● **1951**

In July the world's first commercial jetliner, the Comet, landed at Johannesburg's temporary Palmietfontein airport near Alberton.



● **1955**

Eight drums of creosote, produced in March, is the first Sasol product dispatched. Synthol reactor completes first reaction in August. Employees fill their cars with Sasol petrol for first time in November.

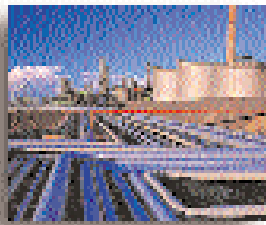
● **1979**

Sasol listed on Johannesburg Stock Exchange and is 31 times oversubscribed.



● **1980**

First Sasol Two product, ammonia, dispatched in February to fertiliser industry. First Secunda Synthol synthesis reaction occurs in March.



● **1960**
After five years of commercial production, Sasol yields a profit of R1,36 million amid 10th anniversary celebrations.

● **1966**
Sasol starts production of butadiene and styrene for synthetic rubber industry. Ammonia production commences for fertiliser industry. Sigma Colliery produces 20 millionth ton. South African Gas Distribution Company (Gascor) formed to market and distribute pipeline gas.

● **1967**
Construction of National Petroleum Refiners of South Africa (Natref) oil refinery starts at Sasolburg. Sasolburg receives municipal status and coat of arms.

● **1968**
Two of America's foremost public figures died by the hand of an assassin. Civil Rights leader, Martin Luther King, and politician Senator Robert Kennedy.

● **1976**
Construction of R2,3 billion Sasol Two starts on Secunda site, the size of 2 090 football fields

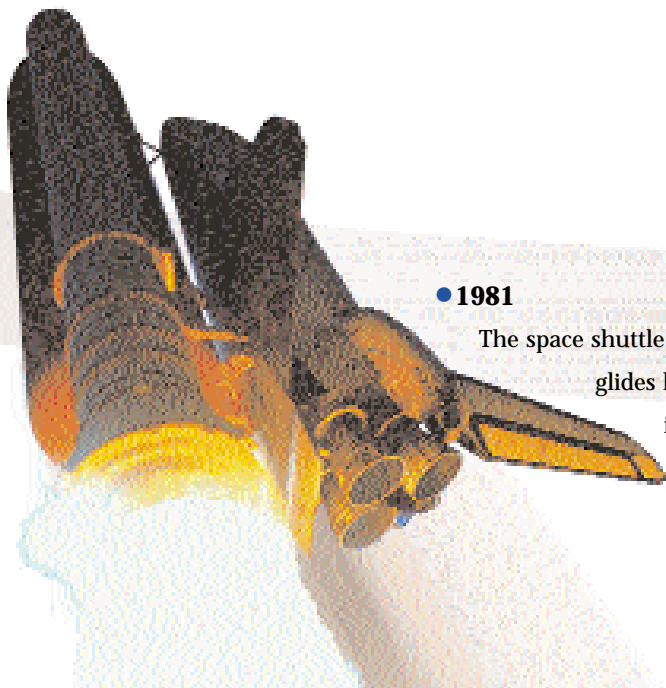


(814 hectares). First functional Secunda colliery, Bosjesspruit, starts production in July. Joe Stegmann becomes managing director.

● **1975**
Britain's first north sea oil begins to flow. The oil came from the Argyll field in the north sea, 200 miles east of Edinburgh.



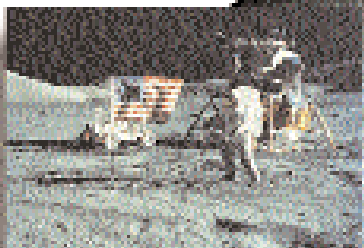
● **1973**
International oil crisis erupts with the outbreak of the Yom Kippur War in the Middle East and the crude oil price rockets to US\$17 a barrel.



● **1981**
The space shuttle Columbia glides home from its maiden voyage.



● **1983**
With Sasol Two and Three running smoothly to capacity, Sasol Fertilizers formed to manufacture and market ammonium nitrate fertilisers. Plans commence for 1984 launch of Sasol Explosives (now Sasol SMX).

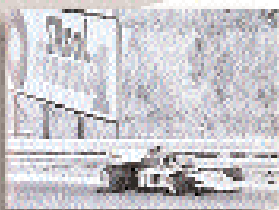


● **1969**

Neil Armstrong took “one small step for man, one giant leap for mankind” by walking on the moon on 21 July.

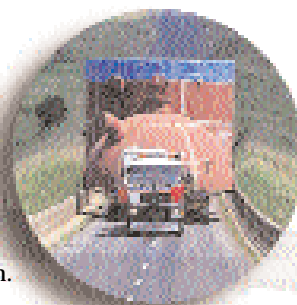
● **1971**

Natref starts fuel production in February. Sasol petrol, developed for Formula One motor racing, is supplied for the first time in July.



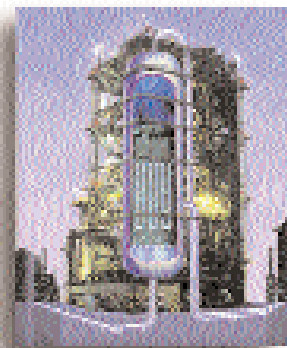
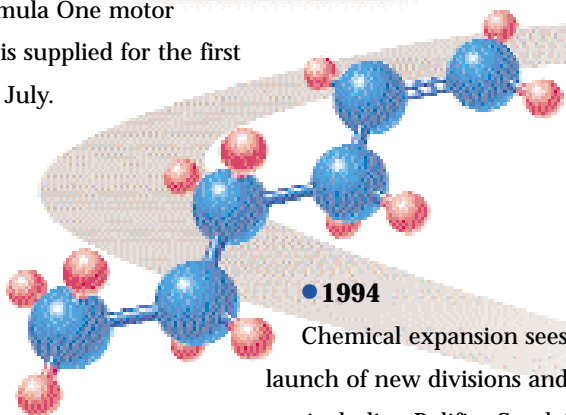
● **1997**

Coal exports begin. Commissioning starts for new-generation Sasol Advanced Synthol reactors. Sasol Synfuels International founded to market synfuels technology worldwide. Sasol Alpha Olefins commences construction of octene plant.



● **1994**

Chemical expansion sees launch of new divisions and joint ventures, including Polifin, Sasol Alpha Olefins, African Amines and Sasol Fibres. Plans commence for start of Sasol’s international petroleum exploration and production company.



● **1989**

Sasol Technology unveils groundbreaking Sasol Advanced Synthol (SAS) reactor and the technology to produce high-grade coke from pitch for metallurgical industry. New phenol and cresylic acid plant approved for construction. Secunda polypropylene plant nears completion.

● **1986**

Sir Tim Rice’s acclaimed musical, Phantom of the Opera, makes its debut in London.





Founding father: Pierre Etienne Rousseau

Dr Pierre Etienne Rousseau graduated from the University of Stellenbosch in 1930 with a Master of Science degree at the age of 20. He worked for Iscor (1931 – 1937), South African Torbanite Mining and Refining Company (1938 – 1940) and was managing director of Federale Nywerhede before becoming a consultant to Anglovaal, the company then interested in commercialising oil-from-coal technology in South Africa. In January 1948 Rousseau was appointed to chair the Liquid Fuel and Oil Industry Advisory Board and then managing director of Sasol in 1950, a post he held until he became chairman in 1966. He retired to Hermanus with his wife Marie in 1976, and passed away on 12 April 1993, aged 83.



• 1999

NASA's Mars mission is a major success, landing an exploration vehicle, "Pathfinder", on the red planet.



• 2000

Sasol announces record profits. Annual Group value-addition exceeds R12.5 billion. Record production by Sasol Mining, Sasol Synthetic Fuels and Sasol Chemical Industries. Sasol Polymers furthers R1.2 billion investment as equity partner in two new Malaysian plants.



Smoke, even if tired

Sasol Two's exhausting construction schedule demanded strict compliance with challenging deadlines. In the commissioning phase, Deutsche Babcock was told that the first steam plant's chimney must start smoking on 15 January 1979. Deutsche Babcock, mischievously, devised a Plan B: stack and light used car tyres inside the chimney! Plan A, fortunately, was achieved timeously.

Highest free-standing structure in the south

Sasol Three's steam plant chimney – built from concrete using the sliding construction method – became the tallest structure in the southern hemisphere in the late 1970s when it reached a height of 301 metres. One chimney tower has four discrete flues surrounded by a shell with a diameter of 22,5 metres.



Alfons, Sasol's endearing during mark

in a cap and waving a chequered flag. Alfons is the energetic racetrack who has been Sasol's endearing anthropomorphic mark since February 1956. He symbolises "the winning petrol" of the mark was devised in 1954 by Johannesburg advertising Van Zyl & Van Zyl, when the original Sasol Marketing began developing its first advertising campaign. Etienne van Zyl, Sasol's first managing director, coined the nickname. Why his name is unclear. Significantly, Alfons originates from the Old High German *alf* (ready) and *funsa* (ready or apt). Alfons is now the mark of Sasol Oil in 1994.



CHAPTER THREE



SASOL TECHNOLOGY AND *operations*

Much of the rich history of Sasol has revolved around the spirit of creativity and the inexhaustible drive to innovate and improve the quality of life. The Sasol Group of companies has earned international respect for its continuing ability to maintain a proud track record in technological innovation. This innovation has been focused primarily on geological exploration, mining and on fuel and chemical product development and manufacturing.

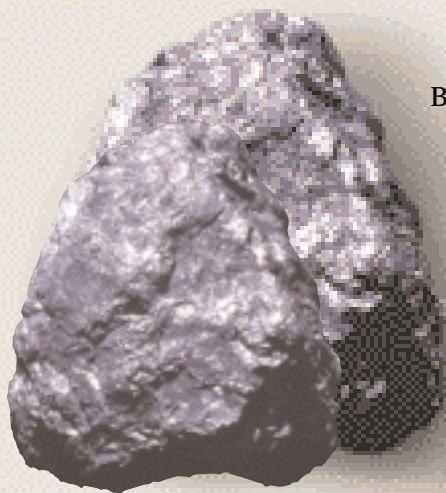
“EUREKA”

Formed many millions of years ago and composed mainly of lithified plant remains, coal remains the principal lifeblood of Sasol's South African operations. Rich in hydrogen and carbon, Sasol converts almost 50 million tons of coal a year into synthetic fuels, industrial pipeline gas and a diverse treasure chest of chemicals.



World-class coal-mining operations

The dynamic growth and wealth-creating abilities of Sasol's South African synfuels and chemical interests rely extensively on the enterprising teamwork of Sasol Mining. Since 1955, Sasol Mining has maintained a proud track record as a reliable, efficient and low-cost supplier of coal to the Sasolburg gasification plant and, over the past two decades, to the Secunda gasification plants.



By world standards, Sasol Coal is a successful and entrepreneurial mining company. It has often been cited for its pacesetting advances in geological exploration and directional drilling, mining technology, human resources development, safety achievement, environmental management and corporate social investment. It has received many awards for excellence in technology, safety and environmentalism. The company is the world's seventh largest coal-mining enterprise and operates the world's largest underground coal-mining complex. It mines more than 50 million tons a year – about 22% of all coal mined in South Africa.

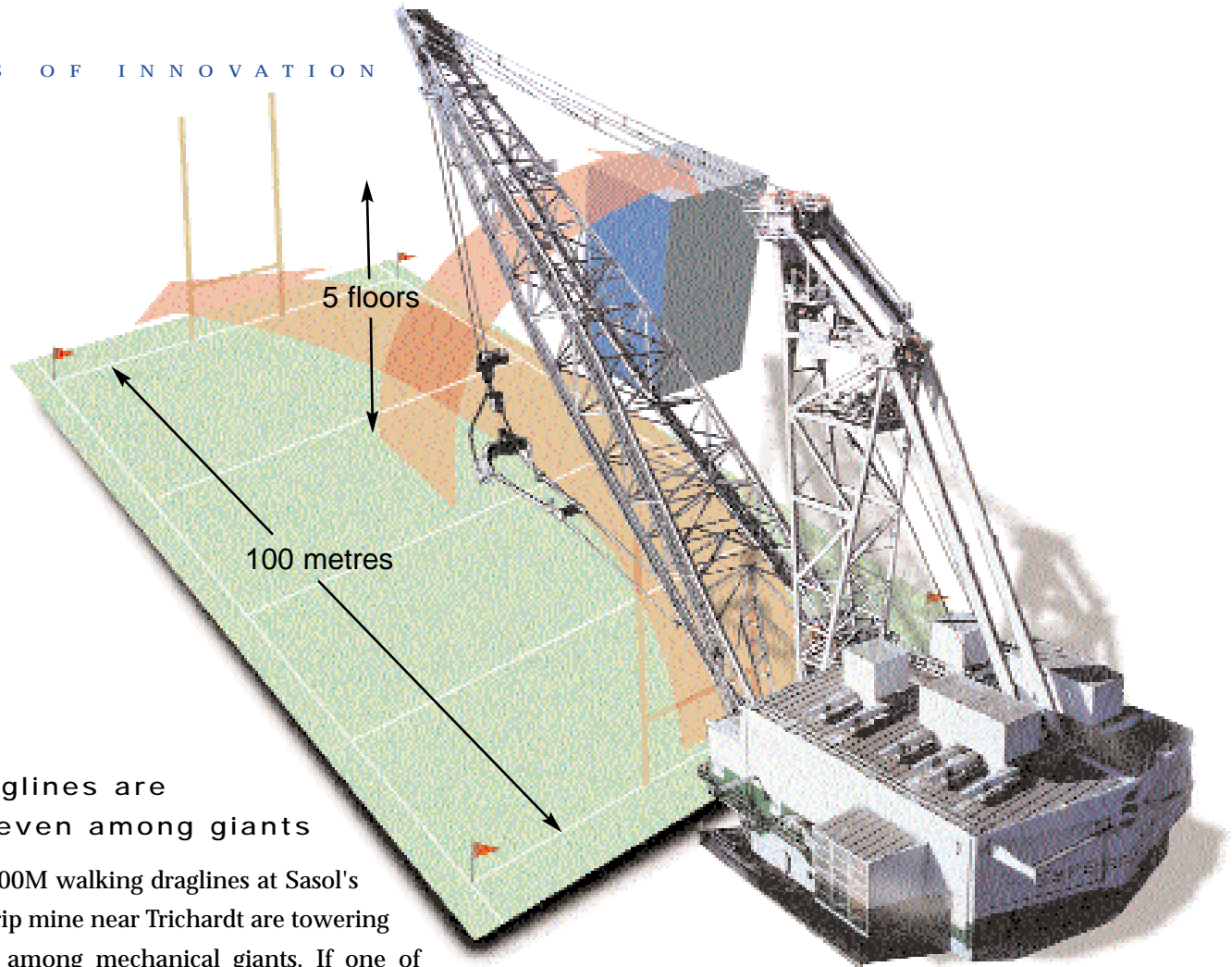
Sigma sets the pace and becomes the role model

While South Africans monitored in awe the development of Sasol's first oil-from-coal complex at Sasolburg, geologists and mining engineers were progressing with the trendsetting development of Sigma Colliery, Sasol's first mine. The first incline shaft for Sigma was completed on 31 August 1953, 13 months after the first spadeful of earth was dug. Besides completing a fast-track project in record time, Sigma Colliery's people were noted for their ability to introduce new-generation mining technologies. From the outset, Sigma was to be a highly mechanised mine – the proving ground for modern-day coal mining. Sigma Colliery commenced operations in 1954 with a high degree of advanced mechanisation and, in 1961, introduced state-of-the-art continuous miners. The strong technological foundation established over the next 20 years provided the ideal springboard Sasol needed to develop the Secunda coalfields during the latter 1970s.



Did you know?

- In the 2000 financial year, Sasol Mining's run-of-mine production reached a record 50,9 million tons, which is roughly equivalent to the total annual coal consumption of Eastern Europe.
- The Secunda Collieries form the world's largest underground coal-mining operations and annually produce about 45 million tons.
- Sixty state-of-the-art continuous-miners are used for underground mining at Secunda.
- Wonderwater Mine near Sasolburg was the first South African strip coal-mining operation to achieve ISO 14001 certification for its environmental management system. Bosjesspruit Mine at Secunda was the first underground colliery to achieve this feat.
- Sasol Mining – an innovator in many technical disciplines – is believed to be the first South African mining company to have introduced virtual reality technology to its training programmes, thereby ushering in the era of virtual mining in Africa.



Super draglines are Goliaths, even among giants

The Marion 8200M walking draglines at Sasol's Syferfontein strip mine near Trichardt are towering Goliaths, even among mechanical giants. If one of these mighty machines was parked on the halfway line of the rugby field inside Johannesburg's Ellis Park Stadium, it could lift an 85 m³ bucket of soil and rock (the volume of two large family swimming pools) from the field and swing it out over the stadium roof and into the street. A Marion dragline – weighing an amazing 4 200 tons – has a 102 metre boom, a dump height of almost 51 metres and the ability to reach to a depth of 60 metres. It operates with 23 motors generating a combined horsepower of 31 490. One dragline consumes as much electricity daily as one small city, the costs of which are amply covered by its phenomenal productivity.



Hard-working CATs lighten the burden

Sasol's Syferfontein Mine near Trichardt employs a range of hard-working, heavyweight Caterpillar earthmoving machines costing tens of millions of rands. Caterpillars – known as CATs – are used for such mining tasks as dozing, shovelling, dumping and rehabilitating. At the Syferfontein strip operations, for example, 170 ton rear-dump trucks are used to remove overburden in the pre-strip operations. The largest CAT employed, the 16-cylinder, diesel-powered 789B, weighs 317,46 tons when fully laden, has a top speed of 54 km/h and can load up to 105 m³ of overburden. The fuel tank can store 3 222 litres of diesel. The CAT 789B is 12,18 metres long, 7,67 metres wide and its height from ground to canopy rock guardrail is 6,15 metres.

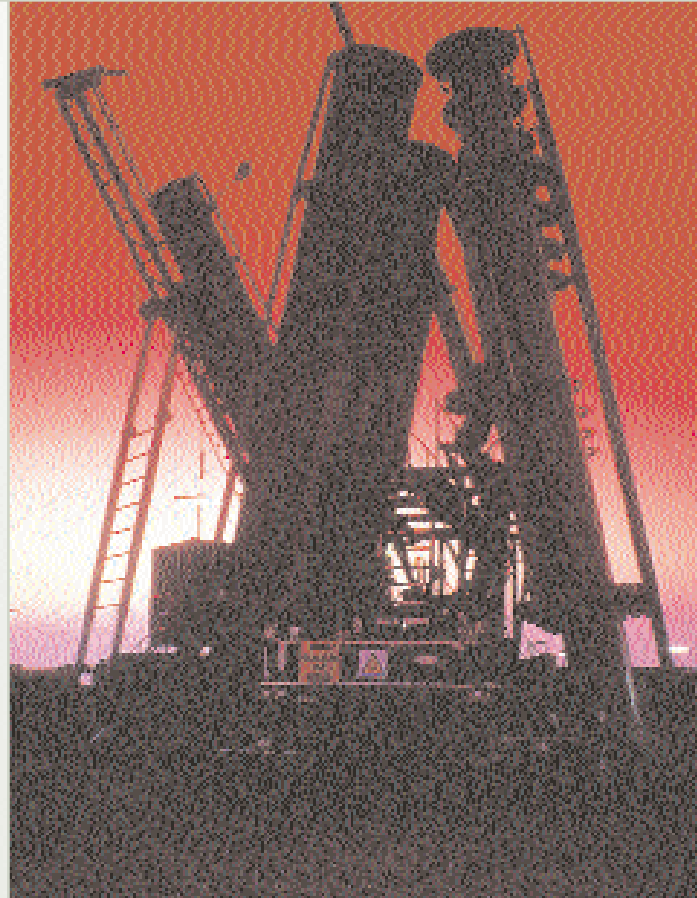
Leslie moniker ensures desired secrecy

Bringing Sasol Two into fruition would be inconsequential without adequate coal reserves. A Sasol geological exploration team under the leadership of Toelie Vorster began preparing for exploration drilling in the Mpumalanga coalfields in December 1973. There was a snag: the name Sasol was too conspicuous. If geologists explored under the Sasol name, feverish land speculation could start in the farming community. Absolute secrecy was required. Sasol therefore registered the Leslie Coal Development Company with Barend Buys as its sole director. The name Leslie was taken from a nearby Highveld Ridge town.



New directions in drilling for better planning

Sasol Mining revolutionised its exploration and planning operations in the mid-1990s with the introduction of uniquely developed directional drilling technology. Drilling vertically from the surface and drilling horizontally into coal-seams underground both had their restrictions. Directional drilling is far more flexible and accurate. Once the drill bit reaches a predetermined depth from the surface rig, it can be deflected from its vertical position into one of many curved borehole trajectories. Survey instrumentation behind the drilling system's down-hole motor monitors the trajectory continuously. Encoded geological information about coal-seam dimensions and dolerite intrusions is transmitted to the surface control room through pulses in the drilling fluid and then decoded by a computer.



Ushering in Africa's era of virtual mining

In 1998 Sasol Mining and Fifth Dimension Technologies developed and commissioned an interactive and affordable training programme incorporating virtual reality technology. Continuous-miner procedures have been synthesised into a virtual environment. This technology is incorporated into two networked personal computers and software. Through the software, a virtual image of an underground production section is projected into a head-mounted display helmet worn by the trainee and onto a screen for general viewing. The operator dons the helmet to experience digitised mining events in simulated three-dimensional form. The instructor can select any series of possible mining scenarios based on the real use of continuous-miners. With a handheld control panel linked to the computer, the operator can mine virtually, complete with virtual sound, dust and other signs of movement.





Fischer-Tropsch process technology in a nutshell

The Fischer-Tropsch process to produce synthetic fuels and petrochemicals from coal was developed in Germany during the early 1920s and patented in 1925. Coal is gasified in the presence of steam under pressure at high temperature to produce rawgas, which is then purified to produce synthesis gas consisting roughly of a mixture of hydrogen and carbon monoxide in a two-to-one ratio. This synthesis gas (syngas) is then passed over (fixed bed tubular-ARGE-reactors), circulated with (circulating fluidised bed-CFB reactors), or percolated through (SSPD and SAS reactors) iron- or cobalt-based catalyst at between 230°C and 350°C. At Sasolburg, Sasol reacts the syngas in the low-temperature Sasol Slurry Phase Distillate (SSPD) reactors to produce linear-chained hydrocarbon waxes and paraffins and chemicals. At Secunda, Sasol reacts the syngas in the high-temperature Sasol Advanced Synthol (SAS) reactors to produce mainly motor fuels and chemicals.

Genesis of formal R&D dates back to 1957

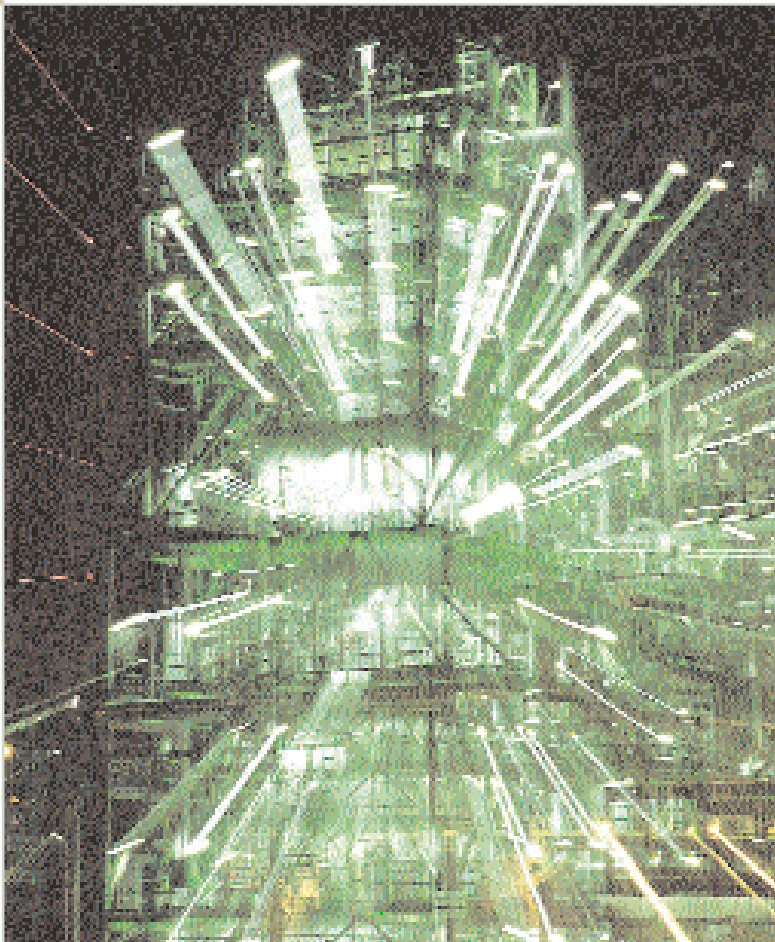
In preparation for the commissioning of the Sasol plant, Sasol established a laboratory and staffed it with 70 scientists and technicians in 1955. Their function was to assist with quality and process control. A formal research operation commenced in 1957 and is now Sasol Technology's Research and Development (R&D) division. An annual budget of R100 000 was formulated in 1957 and the main laboratories were first expanded in 1960. Sasol Technology today employs 450 R&D personnel.



To the power of 10 (scaling up in the 1970s) and then duplicating it in the early 1980s



When Sasol reviewed its formative ideas for the preliminary design of the Sasol Two plant, greater economy of scale was considered vital if Sasol was to achieve both significant growth and product diversification. The business leaders at the time agreed to design a plant with at least 10 times the capacity of the Sasolburg plant. Sasol Two would commence with eight CFB Synthol reactors; 36, and eventually 40 Lurgi gasifiers and six, and eventually seven oxygen plants, with the capacity to process at least 48 000 tons of coal a day. This plant was eventually duplicated with the subsequent decision to develop Sasol Three. These ventures have yielded very pleasing results over the years.



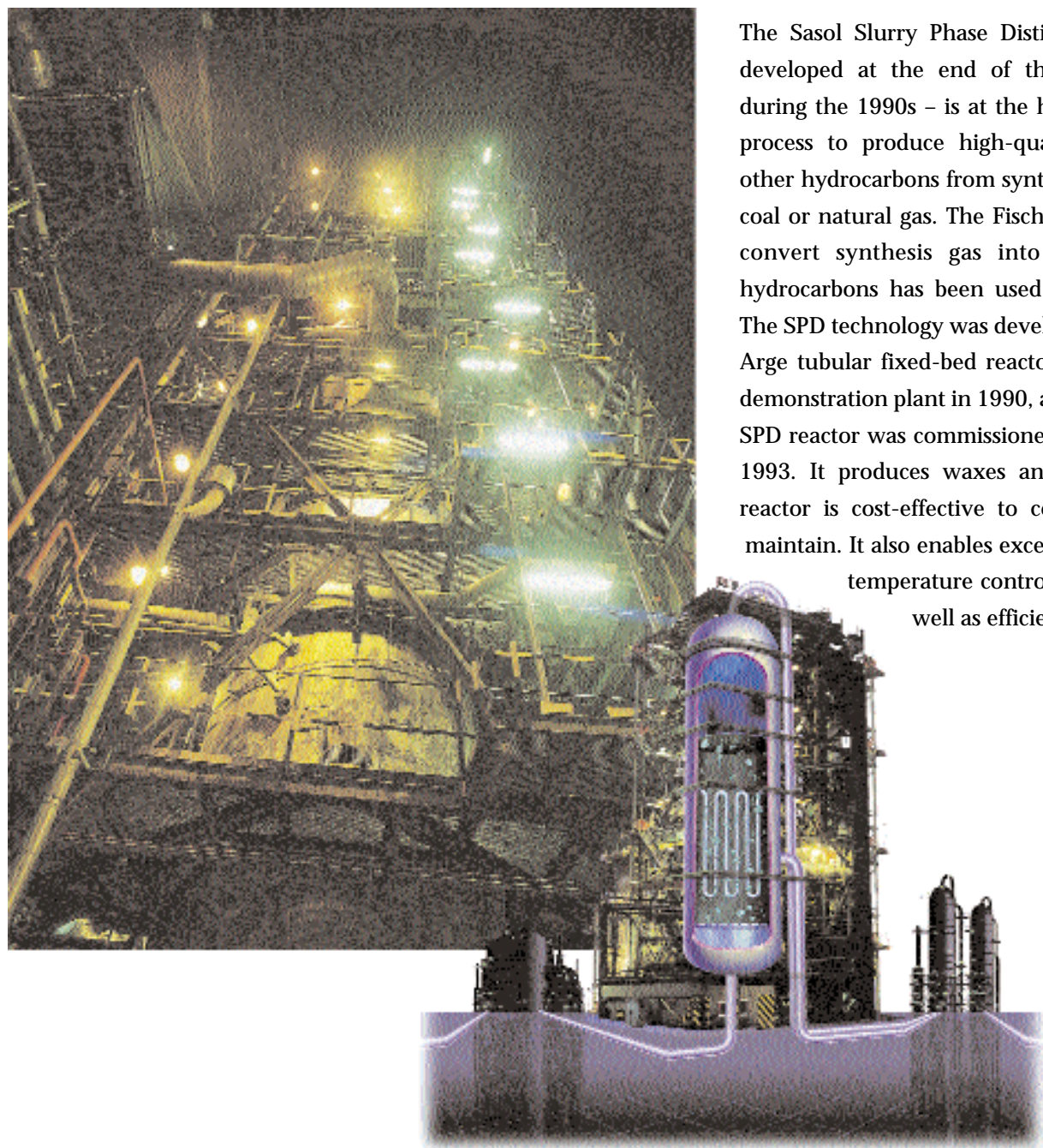
Advanced Synthol reactors as replacement project

The Sasol Advanced Synthol (SAS) reactor, the successor to the circulating fluidised bed (CFB) Synthol reactor, was developed by Sasol scientists and engineers during the late 1980s and early 1990s. Besides the pilot production reactor operated at Sasolburg in the early 1980s, the first SAS reactor of Sasol Synthetic Fuels (SSF) has been operating since 1996. SSF now operates eight SAS reactors and a ninth reactor is to be commissioned in 2001. Sasol's new-generation Synthol technology is more compact and efficient and therefore easier and more cost-effective to build and operate than its predecessor. Maintenance costs have been slashed by 80% and catalyst costs halved. The SAS reactor's improved thermal efficiency increases the production of high-value steam, thereby promoting environmentally benign production by reducing the coal volumes burned for energy. SAS reactors react purified syngas under pressure in the presence of a fluidised, iron-based catalyst at moderate temperature to yield C1 to C20 hydrocarbons.

“EUREKA”

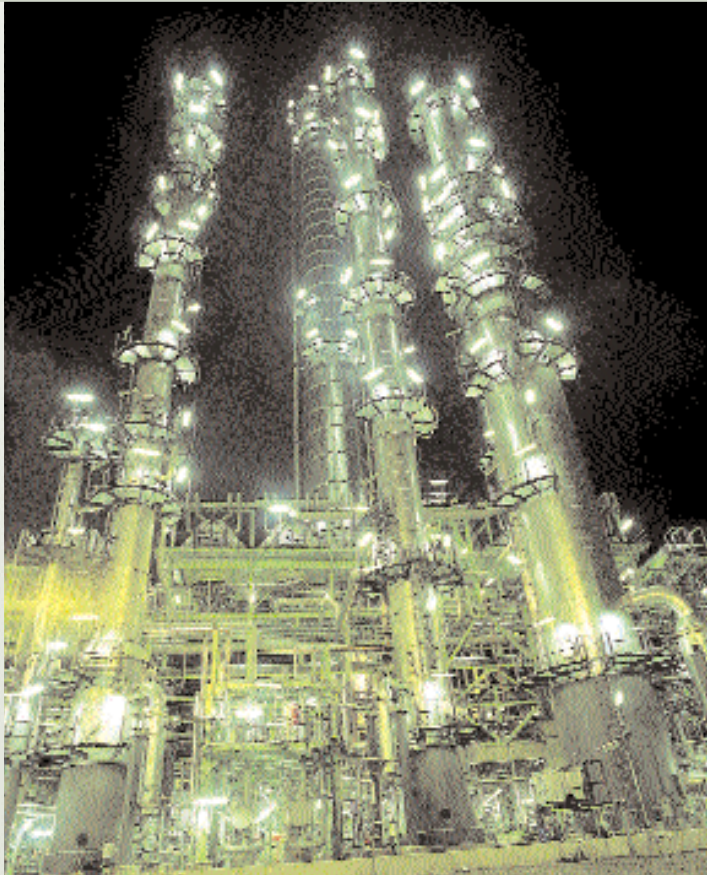
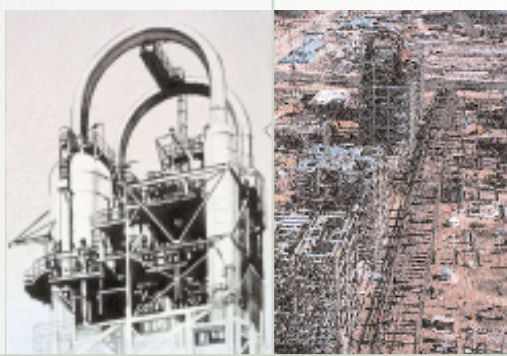
Evolving Slurry Phase Distillate reactors for global benefits

The Sasol Slurry Phase Distillate (SPD) process – developed at the end of the 1980s and refined during the 1990s – is at the heart of the three-step process to produce high-quality, clean fuels and other hydrocarbons from synthesis gas derived from coal or natural gas. The Fischer-Tropsch reaction to convert synthesis gas into longer-chain, waxy hydrocarbons has been used by Sasol since 1955. The SPD technology was developed from the mature Arge tubular fixed-bed reactor. After unveiling the demonstration plant in 1990, a full-scale commercial SPD reactor was commissioned at Sasolburg in May 1993. It produces waxes and paraffins. The SPD reactor is cost-effective to construct, operate and maintain. It also enables excellent heat transfer and temperature control inside the reactor, as well as efficient product separation.



Early CFB Synthol reactors

The original 16 circulating fluidised bed (CFB) Synthol reactors built for Sasol Two and Sasol Three at Secunda ran until 1999 by when the new-generation Sasol Advanced Synthol (SAS) reactors had been commissioned. Used to convert syngas into synthetic oil and chemical feedstock, each 61 metre high CFB synthol reactor, with a mass of 400 tons, including the catalyst, was built on a reinforced concrete base. Their distinctive crowning arches (obviated by the smarter design of their SAS successors) had a diameter of 1,65 metres, weighed 28 tons and spanned 17 metres.



Unlocking coal's wealth: The primary step

Unlocking coal's wealth at Sasol's plants commences with gasification. At Sasol Synthetic Fuels, coal is fed at a rate of about 125 000 tons a day from the mines by conveyor belt to two plants comprising 80 giant Lurgi gasifiers. Coal under pressure and in the presence of steam and oxygen is converted into crude synthesis gas (mostly hydrogen and carbon monoxide). After cooling, the gasification condensates yield the co-products of tar, oil, pitch, nitrogenous compounds, sulphur and phenolics.

Major breakthroughs in process technology

Recent innovations by Sasol Technology include the development of:

- the Sasol Advanced Synthol reactor;
- the Sasol Slurry Phase Distillate process;
- processes to extract high-purity 1-pentene, 1-hexene and 1-octene from the Secunda alpha olefins stream;
- new-generation base-metal Fischer-Tropsch catalysts;
- separation technologies for phenol and cresols, mining chemicals, alcohols, ketones, acetic acid and propionic acid;
- technology to convert waste pitch and other residues into high-quality products for the metallurgical, glass-making and other industries;
- novel polymers and copolymers;
- synthetic lubricants;
- a world-first water-based emulsion from Sasol hard wax;
- a competitive vapour-phase esterification process using Sasol alcohols and acids; and
- the use of effluents as cooling medium.

The Sasol SMX division of Sasol Chemical Industries has also formulated unique products and systems, including the novel Expan™ porous prilled ammonium nitrate technology.



A world-class giant: Sasol Synthetic Fuels today

Sasol Synthetic Fuels (SSF) at Secunda operates the world's only commercial coal-based synthetic fuels manufacturing operation. SSF beneficiates low-grade coal to produce seven million tons a year of products with a market value about fivefold that of coal. The company uses unique Sasol technologies, notably the Sasol Advanced Synthol reactor, to produce synthesis gas, which is converted into a large range of valuable hydrocarbons. SSF's products comprise sulphur-free liquid fuels, pipeline gas and chemical feedstock. SSF's operations comprise two almost identical (and now integrated) sets of world-scale production facilities, including coal gasification, Rectisol gas purification and Synthol reactor units. These were designed and built in two phases between 1976 and 1982 and were known, until recently, as Sasol Two and Sasol Three. SSF's facilities required an original investment of R5 800 million. Their replacement value is now about R75 billion.



Super SAS project for the new century

Sasol's new Synthol era began in earnest towards the end of 1998 when more than half of the eight new-generation Sasol Advanced Synthol (SAS) reactors were brought into commercial production at Secunda. The SAS reactor project was executed in two phases. The first SAS reactor, fabricated in South Korea, was commissioned in June 1996 at a cost of R123 million. Within weeks it was performing to specification and inspired a full-scale project later in 1996 to fabricate, build and commission another seven SAS reactors at a cost of R1 010 million before the end of February 1998. These reactors were manufactured in Japan and shipped in sections to Richards Bay. The construction work scope entailed 1,35 million man-hours. Up to 950 construction personnel a day were on site during peak construction.



Noble achievement to lighten our lives

By virtue of operating the world's largest oxygen production facilities, Sasol Synthetic Fuels is able to trap comparatively large volumes of two rare or noble gases, krypton and xenon. During the 1990s SSF commissioned two identical plants at Secunda to extract a mixture of krypton and xenon. This mixture contains 9,5 million litres of krypton and 2,5 million litres of xenon a year. The West plant was commissioned in 1992 and the East plant in 1999. The gases, separated in France by L'Air Liquide, are used in advanced lighting systems, lasers, medical scanners and high-speed photographic systems, among other applications.



Secunda's legacy to the world

The Secunda operations of Sasol – one of the world's largest petrochemical operations – manufacture more than seven million tons of fuels and chemical feedstock a year in their primary production phases. Sasol Oil markets the liquid and gaseous fuels for the South African market. Various divisions of Sasol Chemical Industries process the chemical feedstock into a wide variety of products for the Southern African and international markets. Secunda's treasure chest of products manufactured and marketed includes ammonia, nitrogenous fertilisers and commercial explosives, phenolics such as phenol and cresols, solvents such as alcohols and ketones, monomers, polypropylene, alpha olefins such as 1-hexene, coke, sulphur and noble gases.

Gigantic oxygen plants: The world's biggest

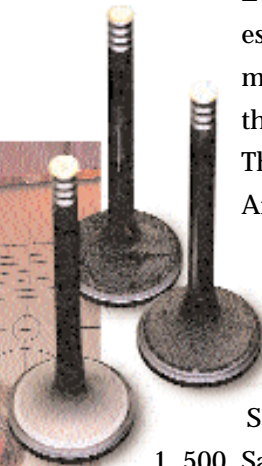
Sasol Synthetic Fuels (SSF) operates two oxygen plants, the second biggest volume producers of their kind in the world. Each plant has seven production trains that extract air and produce oxygen from the atmosphere for utilisation in the process. SSF commenced a R372 million project in 1994 to renew the 12 original oxygen trains. The project was completed in mid-1997. Besides improving plant integrity and lifetime, the project enabled oxygen throughput to be increased by 8%. Industrial oxygen is produced at a typical daily rate of 35 000 tons.

“EUREKA”

Fuelling the nation . . . and pumping up performance

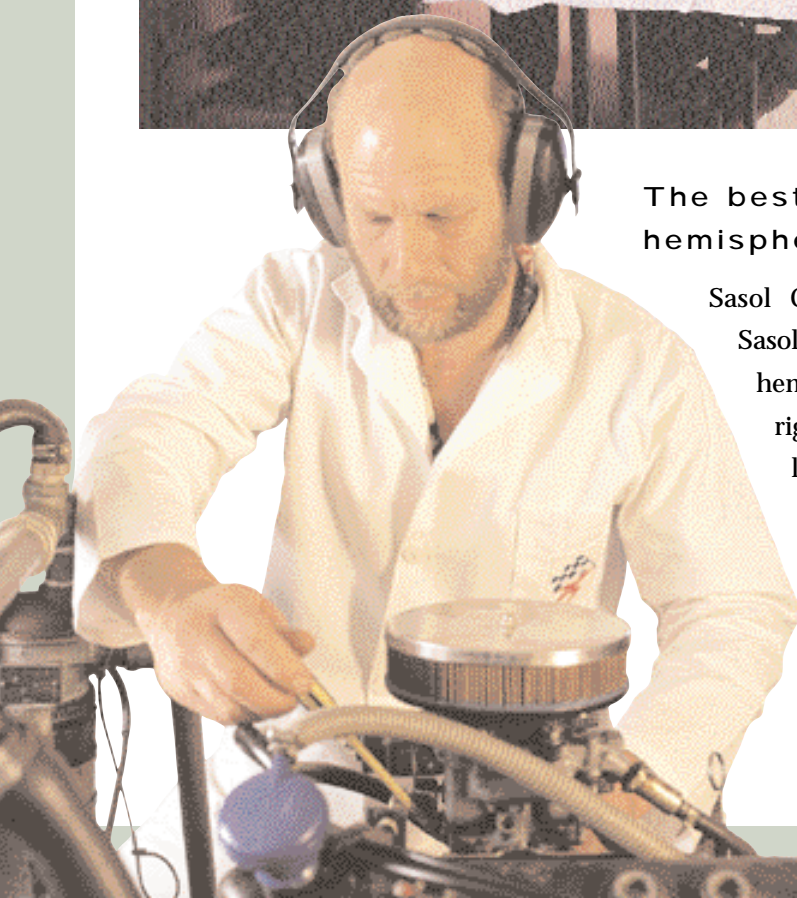
Evolved from the Sasol Marketing Company established at Sasolburg in 1954, Sasol Oil markets all the liquid and gaseous fuels, as well as the lubricants, manufactured by the Sasol Group. The company plays a vital role in fuelling South Africa and supplies through the wholesale and retail sectors almost 40% of the nation's liquid fuels from coal and crude oil, including sulphur-free diesel, petrol, jet fuel, illuminating paraffin and liquefied petroleum gas.

Sasol Super 100™ petrol is dispensed through 1 500 Sasol Blue Pumps at service stations in South Africa's inland provinces. Through the Sasol Gas division, the company is South Africa's leading marketer of pipeline gas and supplies 40 million gigajoules a year of clean-burning gas, mostly to industrial and commercial customers in Gauteng, Mpumalanga and KwaZulu-Natal. The Fuel Oil division markets low-sulphur residual and distillate fuel oils derived from coal and other synthesised forms, as well as crude oil. Sasol Oil has embarked on a programme to establish service station networks in Southern Africa, starting with Mozambique in 2000 with the commissioning of the first station in Maputo.



The best fuel R&D facilities in the southern hemisphere

Sasol Oil's state-of-the-art research and development (R&D) division at Sasolburg is regarded as being the best fuels R&D facility in the southern hemisphere. Highly trained scientists, engineers and technicians conduct rigorous testing, formulation and development work for all Sasol fuels, lubricants and bituminous products. The R&D facilities – frequently commissioned by major international automotive producers – feature cutting-edge chemical laboratories, many test engine bays and various advanced mechanical and electronic testing systems. It has formulated unique fuels and lubricants, including superior fuel for Formula One racing. The division conducts R&D for alternative automotive fuels, including gaseous and solid fuels.



World-class yields from Natref oil refinery

National Petroleum Refiners (Natref) is South Africa's only inland oil refinery. Sasol owns almost 64% of Natref; Total South Africa owns the balance. Natref is one of the world's most technologically advanced and efficient refineries and is a world leader in refining heavy crude oil to petrol, diesel and other white products. Due to the inland location with a limited fuel oil market, the refinery process is complex and enables a high conversion of crude oil to distillate fuels (petrol, diesel and kerosene). Natref has a typical white product yield of 90%. The competitive refinery process also allows Natref to remove 50% of the sulphur in oil compared with 30% achieved by typical European refineries.



Beyond 2003: The age of Sasol service stations looms

Sasol is unique because its fuel sales have been governed by agreements that prevent Sasol Oil from competing directly with other oil companies in what has long been a regulated industry. The long-serving Main Supply Agreement between Sasol and other oil companies expires on 31 December 2003 and frees Sasol Oil to enter into new supply agreements with other oil companies, while enabling it to develop its own service station network. Sasol Oil operates 1 500 Sasol Super 100™ Blue Pumps in South Africa's hinterland through the fuel forecourts franchised to service station operators by the other oil companies. No forecourt can operate more than one Blue Pump.

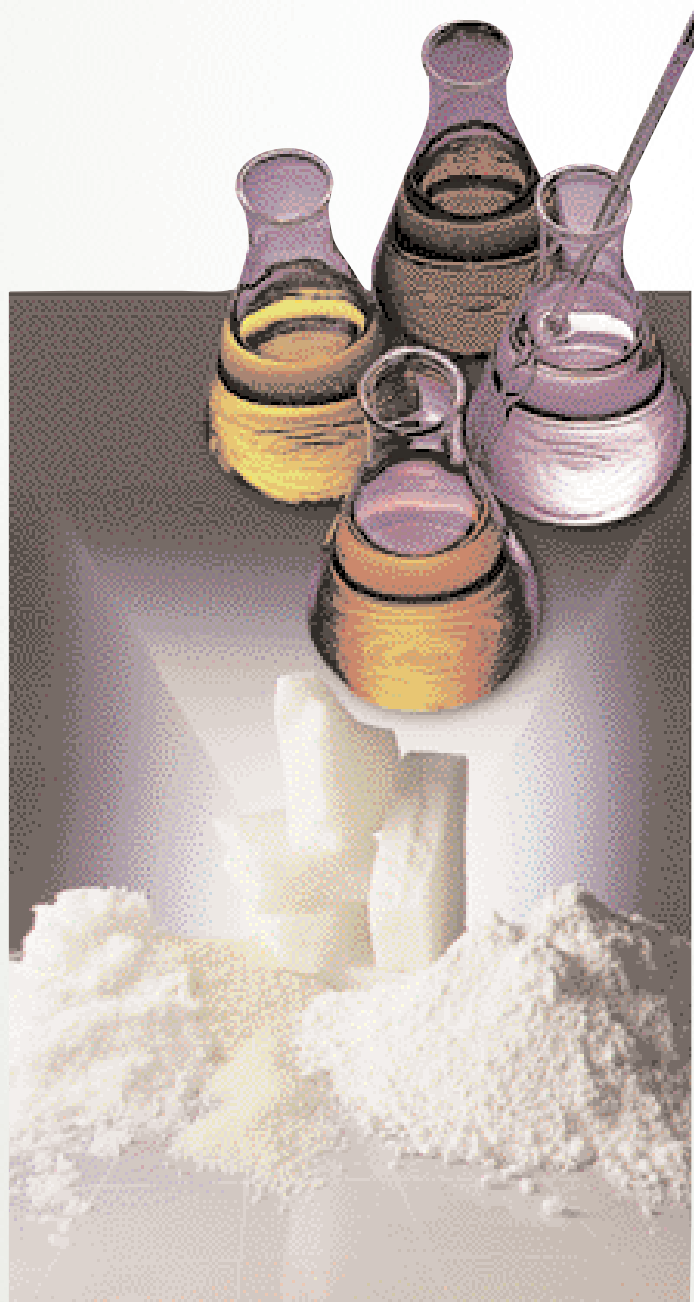


"glug-glug" . . . the racy ad that wowed a nation

The original Sasol Super 100 "glug-glug" television advertisements – one featuring a black boy and another a white boy playing with a red toy Ferrari sports car – wowed the nation and generated a phenomenal likeability rating of 91% by television viewers. Devised in 1991 by a Sandton advertising agency, the "little boy" TV advertisements earned prestigious Loerie Award, an M-Net Plum of the Year Award and other awards in recognition of its creative excellence.

Waxing with unrivalled strength, worldwide

Through Schümann Sasol International, Sasol is the world's largest wax producer and manufacturer of the strongest waxes because of the advantages inherent to the Fischer-Tropsch technology used in South Africa. Schümann Sasol is the 67:33 joint venture formed in May 1995 by merging Sasol Waxes with the Schümann group controlled by Vara Holdings of Germany. Schümann Sasol manufactures Fischer-Tropsch and paraffin waxes, wax blends and waxy oils. These products have more than 400 industrial applications, among them protective coatings, hot-melt adhesives, textiles processing, food coatings and thermal storage systems. The Group has production and marketing operations in Germany, the Netherlands, China, South Africa and the USA and marketing offices in Malaysia and Venezuela.



Exploiting the great chemical treasure chest

Through the advantages of its Fischer-Tropsch and downstream process technologies, Sasol has a large treasure chest of petrochemicals from which to extract, refine and market a diverse and growing range of chemicals. Through the operations of Sasol Chemical Industries (SCI), Sasol manufactures about 200 chemical products in South Africa, North America and Europe. These products, marketed in more than 90 countries, are derived mainly from coal beneficiation at Sasolburg and feedstock purchased from Sasol Synthetic Fuels at Secunda. Sasol's beneficiation drive to unlock higher-value chemicals was intensified in the 1980s when the group invested in new plant to manufacture fertilisers and commercial explosives derived from ammonium nitrate. SCI has since expanded into the fields of polymers, alpha olefins and higher-value carbon and tar products – and has also expanded its range of solvents, mining chemicals, phenolics and waxes. SCI generates an annual turnover of more than R12 400 million.



Expan™-ding globally on strength of innovation

After extensive research and development, including mine trials, Sasol SMX launched its unique Expan™ technology to the world mining explosives market in the 1990s. Expan™ is a modified form of porous prilled ammonium nitrate. Unique, sensitising polymeric microspheres are incorporated in individual porous prills to modify product density, improve sensitivity and thus enhance explosive performance. Through new American joint ventures, high-performing Expan™ is also manufactured in America and used in Australia and the Americas.

Shocking developments break new ground

After forming Sasol Fertilizers, Sasol pushed its ammonia beneficiation strategy one bold step further in 1984



by establishing Sasol Explosives (now Sasol SMX). Inspired by the groundbreaking work of Alfred Nobel, the Swedish inventor of dynamite, Sasol commenced explosives production by acquiring a technology licence from Nobel Nitro of Europe. Innovation would lead to the development of Sasol's own commercial explosives – and, during the 1990s, the start of global expansion through North American joint ventures.



Finding fertile ground, thanks to ammonia

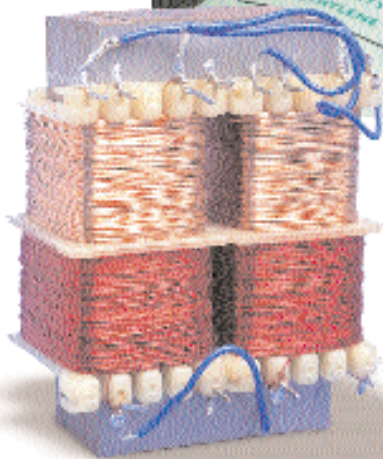
As the southern hemisphere's largest ammonia producer, Sasol was well placed to initiate an ammonia beneficiation strategy in the 1980s. Sasol Fertilizers was formed and commenced ammonium nitrate-based fertiliser production at Secunda in 1983. Sasol Agri, the holding company of Sasol's fertiliser and related chemical interests, produces nitric acid, ammonium nitrate and various granular and liquid fertilisers. Through Agrisol, it produces and markets ammonium sulphate, calcium nitrate and magnesium nitrate. Besides its Sasolburg and Secunda production facilities, the company owns 100% of Fedmis Phalaborwa. Fedmis beneficiates phosphate rock into phosphoric acid for exports and for local phosphate fertiliser production. Through the 1995 acquisition of Delmas Fertilizers, Sasol Agri manufactures liquid fertilisers in Mpumalanga and the Free State.

“EUREKA”



Plastic fantastic: From polypropylene and onwards

Well endowed with olefins, Sasol entered the world plastics market in 1990 after commissioning its Secunda polypropylene plant. The fast-track construction of this plant earned Sasol Technology the worldwide Project Management Institute's 1991 Project of the Year Award. In 1994 Sasol expanded its plastic interests when it launched Polifin, a joint venture with AECI until 1999. Polifin – now Sasol Polymers – also manufactures polyethylene and polyvinyl chloride at Sasolburg. It will start polyethylene production at Kertih in Malaysia as an equity partner (40%) with Petronas (Malaysia, 40%) and DSM (Netherlands, 20%) when the partners commission their world-scale Petlin (Malaysia) plant in 2001.



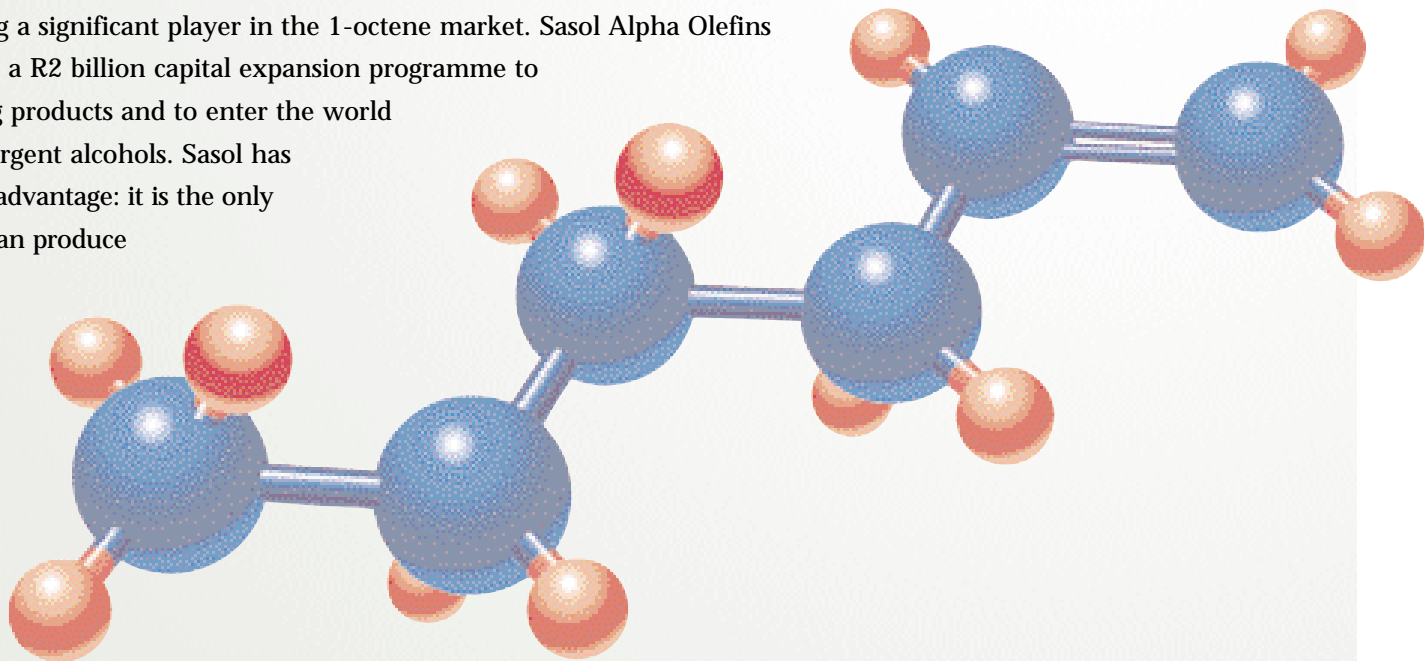
Phenolical global growth: Merisol leads the way

Blessed with the world's largest pool of natural phenolics (cresol and phenols derived from coal gasification), Sasol rapidly developed its position during the 1990s as a leading world producer and marketer of phenolics. To strengthen this position, the Group formed the Merisol joint venture in

October 1997 by merging the phenolics manufacturing and marketing operations of Merichem Company of America with Sasol Phenolics. Merisol's headquarters are at Guildford, England. The company has plants in South Africa, America and Japan. Merisol generates an annual income of more than R900 million from sales in more than 50 countries. Phenolics are used in the automotive, coatings, construction, electrical, electronics, foundry and pharmaceutical industries, among others.

Hexene unleashes new growth potential

Sasol's Secunda operations produce the world's largest pool of alpha olefins (1,2 million tons/year). This considerable advantage has been exploited since June 1994 when the Sasol Alpha Olefins division of Sasol Chemical Industries (SCI) commenced the global supply of high-purity 1-hexene, one of three alpha olefins currently produced at Secunda. From a zero base six years ago, Sasol Alpha Olefins has become a major contributor to SCI's profits. The division generates annual sales of more than R800 million almost entirely from exports to the Americas, Europe, Asia and Australia. It is the world's pre-eminent producer of 1-pentene and 1-hexene and is becoming a significant player in the 1-octene market. Sasol Alpha Olefins is committed to a R2 billion capital expansion programme to expand existing products and to enter the world market for detergent alcohols. Sasol has another strong advantage: it is the only company that can produce both odd- and even-numbered alpha olefins.



Big solvents portfolio ensures solutions for the world

The unique configuration of the Sasol processes enables Sasol Solvents, a division of Sasol Chemical Industries, to manufacture large volumes of alcohols, ketones, acids and related solvents. Sasol Solvents annually markets 525 000 tons of solvents and generates a turnover of more than R1,2 billion. A major global player supported by marketing operations in America, Britain, the United Arab Emirates and China, the division markets almost 70% of its products in more than 80 countries. Committed to a R2,5 billion capital expansion programme, Sasol Solvents is to expand its product portfolio over the next five years with n-butanol, acrylic acid, acetates and acrylates projects.



CHAPTER FOUR

A better quality of
LIFE IN SO
MANY WAYS

The extensive products manufactured by Sasol have grown in volume, diversity and in value to our lives. Whether we are at the office, travelling, relaxing at home, competing on the sport field or learning in a classroom, we depend on Sasol products for our comfort, convenience and quality of life.



A BETTER QUALITY *of* LIFE IN SO MANY WAYS



Sasol products

Sasol's many products add tremendous convenience and quality to our lives. Besides producing liquid and gaseous fuels such as petrol, diesel, jet fuel and industrial pipeline gas, the group markets more than 200 chemical products. There are fertilisers for farmers and horticulturists; commercial explosives for mines; phenolics for coating microchips in our computers, cellphones and other electronic equipment; and noble gases used for high-tech lighting systems, laser systems and high-speed photography. A trip to your neighbourhood supermarket brings Sasol products well within your reach: detergents made with sodium tripolyphosphate; cling-wrap and freezer bags made from polypropylene or from polyethylene with 1-hexene; juice bottles moulded from polyvinyl chloride; cardboard boxes sealed with hot-melt adhesives containing wax and printed with solvent-based inks; polishes, candles and crayons made from wax; bread preserved with calcium propionate derived from propionic acid; and perfumes, aftershave lotions and deodorants containing ethanol.

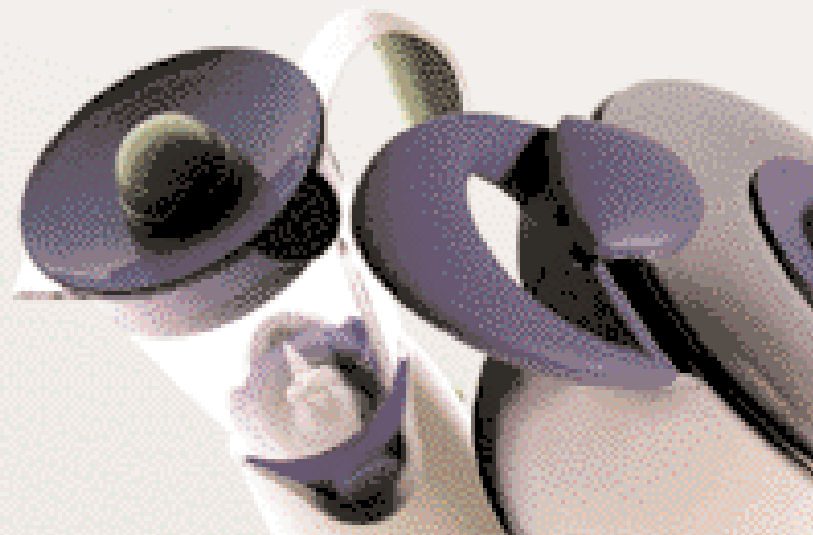


THE RIGHT FIBRE . . .

Durable carpets and mats use fibres derived from Sasol's production of acrylic fibres at Durban and polypropylene at Secunda.

HARDY PLASTIC . . .

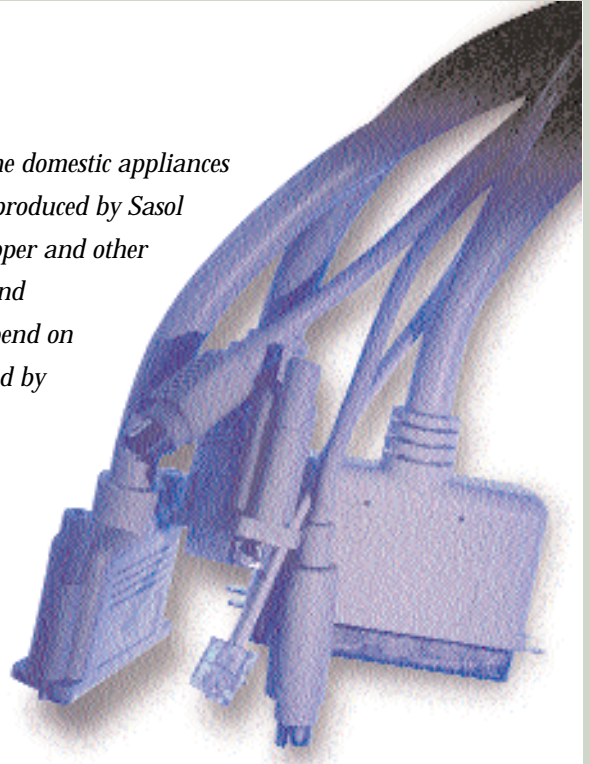
Polypropylene produced by Sasol Polymers at Secunda is converted into a wide range of moulded plastic products, including automotive components such as bumpers and battery casings.





CURRENT AFFAIRS . . .

Electrical cabling and some domestic appliances are encased with plastics produced by Sasol Polymers. In addition, copper and other metals used in electrical and electronic applications depend on mining chemicals produced by Sasol Minchem.

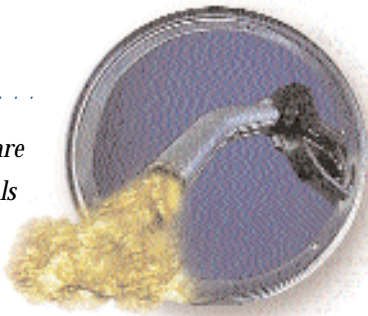


SHOCK TACTICS . . .

High-performance explosives produced by Sasol SMX are used extensively in the Southern African and international mining industry to break ore containing gold, platinum, iron and other important metals.

FUELLING A NATION . . .

About 40% of South Africa's liquid fuels are produced by Sasol through the Sasol Synthetic Fuels synfuels operations at Secunda and from crude oil at the Natref oil refinery at Sasolburg.



ALL IN THE BAG . . .

1-Hexene produced by Sasol Alpha Olefins for the world market is an important copolymer used to optimise certain properties of linear low-density polyethylene (LLDPE), the plastic commonly used to make high-quality plastic shopping bags, cling-wrap films and related consumer plastics.



SOLUTIONS FOR THE WORLD . . .

Sasol Solvents exports about 350 000 tons of solvents a year to customers in more than 80 countries across the globe. Some of these solvents are used in the manufacture of paints, inks, personal-care products and pharmaceutical products.

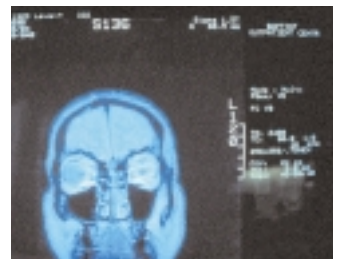


BRAKE AWAY . . .

Phenolics produced through the Merisol joint venture in South Africa and America are used in the manufacture of brake fluid and brake pads, as well as various applications in the coatings, metallurgical and other industries.



A BETTER QUALITY *of* LIFE IN SO MANY WAYS



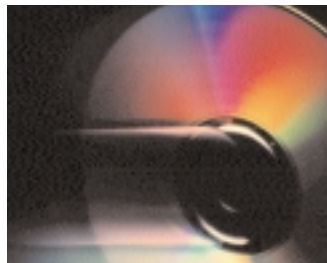
LIGHTING UP OUR LIVES . . .

Light bulbs use argon extracted from Sasol's air-separation plants, while two other noble gases extracted by Sasol, krypton and xenon, are also used for high-tech lighting systems, lasers, medical scanners and high-speed photographic systems.



HEALING TOUCH . . .

Certain Sasol chemicals are used in the production of analgesics, cough remedies, skin creams and disinfectants, while some Sasol plastics and other chemicals are also used for making disposable syringes, drip tubing and bags, latex gloves, disposable diapers and even intra-ocular lenses.



POLYRHYTHMS UNDER POLYCARBONATE . . .

The polycarbonate used to encase digital video discs (DVDs) and compact discs (CDs) is produced from bisphenol A, a product produced from Sasol raw material. Sasol's methyl ethyl ketone is used as a carrier solvent in the production of audio and videotapes.

FUNOLICS . . .

Televisions, video cassette recorders, digital video disc players and stereophonic hi-fi audio systems are among the entertainment-related electronic products that depend on Sasol phenolics for microchip coatings and the production of printed circuit boards.

RUNNING SMOOTHLY . . .

The lubricants division of Sasol Oil produces and markets an extensive range of long-lasting, high-performance lubricants for use in mining and industrial machines and automotive engines, among other applications.



FROM A TO Z . . . FOR OUR CONVENIENCE

ACETONE

IS USED TO PRODUCE SPECIALISED PLASTICS AND NAIL POLISH REMOVER

BUTANOL

IS CONVERTED INTO BUTYL ACETATE, A LACQUER SOLVENT

CHLORINE

IS EXTRACTED FROM SEA SALT TO PRODUCE PVC

DIESEL

POWERS TRUCKS AND TRACTORS

ETHANOL

IS USED TO PRODUCE PERFUMES AND DEODORANTS

FERTILISERS

DERIVED FROM AMMONIA ARE USED TO GROW MAIZE

GASES

SUCH AS CARBON DIOXIDE AND NITROGEN HAVE MANY INDUSTRIAL USES

HYDROGEN

IS USED IN THE MANUFACTURING OF MARGARINE

INDUSTRIAL PIPELINE GAS

IS USED FOR HEATING FURNACES, OVENS AND KILNS

JET FUEL

DERIVED FROM CRUDE OIL AND SYNTHETIC COMPONENTS, POWERS AIRCRAFT

KRYPTON

IS USED FOR LASERS AND LIGHTING

LINEAR-CHAIN ALPHA OLEFINS

ARE USED TO ENHANCE PLASTICS

MONO-METHYLAMINE

IS USED FOR AGROCHEMICALS AND EXPLOSIVES

NITRIC ACID

IS USED TO PRODUCE NITROGENOUS EXPLOSIVES

ORTHO-CRESOL

AND OTHER PHENOLICS ARE USED FOR SPECIALISED COATINGS

PROPYLENE

IS USED TO MAKE POLYPROPYLENE FOR PACKAGING AND CAR PARTS

RECARBURISER COKE

IS USED FOR METALLURGICAL PRODUCTION

SODIUM TRIPOLYPHOSPHATE

IS USED TO MANUFACTURE WASHING POWDERS

TERTIARY AMYL METHYL ETHER

IS AN OCTANE-BOOSTING PETROL ADDITIVE

UREA, DERIVED FROM AMMONIA

IS USED TO PRODUCE ANIMAL FEEDS

VINYL CHLORIDE MONOMER

IS MADE FROM CHLORINE TO PRODUCE PVC

WAXES

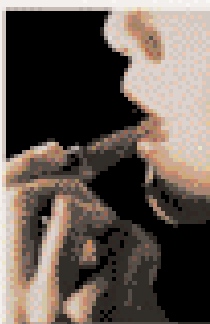
ARE USED FOR CRAYONS, MAKEUP AND COATINGS

XENON

IS USED FOR MOTION PICTURE PROJECTORS

THE RIGHT METTLE . . .

The next time you come into contact with a steel-based product such as a car, or you enjoy a refreshing drink from a green-glassed bottle on a hot day, spare a thought for Sasol Carbo-Tar. The division's high-quality carbon products, such as calcined pitch coke, have extensive metallurgical, glassmaking and other industrial applications.



APPEALING TO OUR VANITY . . .

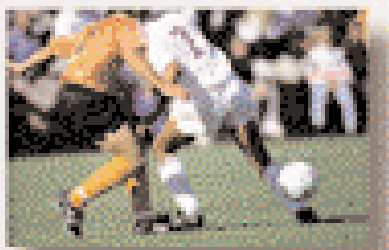
Sasol waxes are used in lipsticks and other cosmetics; Sasol acetone is used to formulate nail varnishes and nail varnish removers; and Sasol ethanol is used to formulate perfumes, aftershave lotions and deodorants.

WAXING LYRICAL . . .

Children can express themselves freely by drawing bright pictures with wax crayons, while amorous couples can wax lyrical over a candlelit dinner thanks to the waxes produced by Schümann Sasol.

GOOD SPORTS . . .

Sasol's chemicals find their way into products used in several sports. The netting of goal nets, such as those used for soccer and hockey, as well as the moulded soles of boots and the skins of balls are produced from polymers.



FERTILE MINDS . . .

Vitamin- and mineral-rich fruit, vegetables and cereals to nourish growing bodies and enquiring minds often depend on soils that have been enriched with fertilisers produced by Sasol Agri.



A low-angle photograph of a large tree with dense green foliage against a blue sky. The tree's branches and leaves fill most of the frame, creating a canopy effect. The sky is visible through the gaps in the leaves, appearing as a bright blue. The overall mood is serene and natural.

CHAPTER FIVE



THE TALE *of* TWO TOWNS

Unique to the history of Sasol are the two well-designed, community-friendly towns designed and built under Sasol's guidance to become homes to the company's mines, petrochemical plants and, most important, its large complement of employees. First came Sasolburg in the Free State during the late 1950s, then came Secunda in Mpumalanga during the late 1970s.

THE TALE *of* TWO TOWNS

The tale of two garden towns designed by Kirchhofer

The construction of the first Sasol-developed town, Sasolburg – like its first petrochemical complex – was close to miraculous, having been taken from a seed idea into a vibrant town within five years. At the outset, Sasol envisaged a clean, safe and well-organised garden town to be masterminded by a town planner bustling with fresh ideas. Swiss-born town planner Max Kirchhofer was hired. His conceptual work commenced in Johannesburg in 1951.

The same town planning philosophy would be resurrected almost 25 years later when the site for Sasol's second town, Secunda, was announced in June 1975. In September 1975 the first sod was turned for the construction of infrastructure and houses. Although Secunda suffers from the disadvantage of having clay-laden soils, which restrict tree growth, it remains today a well-planned, friendly garden town that stands proud as a testimony of Kirchhofer's fluid and innovative town planning ideas.





Sasolburg: The garden town of the Free State

To develop Sasolburg, Sasol formed Sasol Townships Limited and commissioned town planner Max Kirchhofer in 1951 to mastermind a home for at least 12 000 people. Functionalism aside, Kirchhofer and Sasol were adamant that Sasolburg would break from the prosaic convention of developing urban spaces in a rigid grid pattern. A tranquil and aesthetically pleasing organic design was envisaged. From this philosophy evolved curved roads, generous spaces between streets and homes, large greenbelts and an abundance of deciduous trees. The safety of future generations of children was accommodated when locating schools, pedestrian areas and cycling tracks. Almost 50 years later, Sasolburg retains its distinction as the Free State's garden town.

Arboring verdant dreams

Sasolburg's greening and its eventual flourishing as the arboreal garden town of the Free State was masterminded by Aart Jurriaanse, an ornamental tree enthusiast and a former research officer of the South African Department of Forestry. This diligent man developed a nursery at Sasolburg and coordinated the planting of several species of deciduous trees, among them ash, elm, sycamore maple and oak. For many visitors to Sasolburg today, these trees remain its most enrapturing feature.



Unique among OIL towns

Prior to South Africa's reforms which commenced in 1994, the Free State was the Orange Free State (OFS). To distinguish the OFS, "O" prefaced its vehicle number plates. For example, OB denoted Bloemfontein. When the time came in 1956 to allocate distinct Sasolburg registration letters, there was no dispute when OIL was suggested. Sadly, the new vehicle registration system precludes town-specific letters. Various names had been proposed for the town, including Olieshoogte, Petrolia, Sasolfontein, Sasolia, Sasolium, Sasolon and Solville.

THE TALE *of* TWO TOWNS

The admiral and his mule

Early Sasolites travelling from Johannesburg to Sasolburg had to cross the Vaal River on the Baddrift pontoon. The pontoon was operated by a Transvaal Provincial Administration employee nicknamed “Admiral” Botha, with the help of an assistant and a mule. The pontoon operated between sunrise and sunset, with “sunset” time being decided arbitrarily by Botha, often to the ire of motorists. The pontoon was later motorised and the mule retired. In 1954 army engineers constructed a temporary Bailey-style pontoon bridge.



Early milestones at Sasolburg

Conceptual town planning for Sasolburg commenced in February 1951 and the main factory site was levelled and fenced in April 1952. A month later, construction of the first 25 houses was commenced. Sasolburg was proclaimed by Jim Fouché, the Administrator of the Orange Free State, in August 1954. At the time the town had about 3 000 residents and several flourishing recreational and sporting clubs. Sasolburg received municipal status and a coat of arms in 1967.



Ze great Danish paradox over nuzzing

To construct the original Sasol plant, European artisans had to be recruited. The first artisans to arrive were the Danes in July 1952, followed by the Dutch, Germans and Belgians. After the splendour of North-West Europe, dusty Sasolburg was a sight to behold. One Dane remarked in broken English: “I arrived at ze place at night and saw nuzzing. Next morning there was still nuzzing, but I could see it better.”



The Etienne Rousseau Theatre

As a keen patron of the arts and community recreation facilities, Sasol decided in 1974 to construct a multipurpose civic theatre as a gift to the people of Sasolburg. Sasol donated R750 000 towards its R1,1 million construction costs and opened it in October 1975 to coincide with its 25th anniversary celebrations. The beautifully designed building in the heart of the town – named the Etienne Rousseau Theatre after Sasol's founding managing director – accommodates 456 patrons. In 1985, Sasol donated the Johannes Stegmann Theatre, a twin to the Etienne Rousseau Theatre, to Secunda.



Max Kirchhofer, man of vision and inspiration

The Swiss-born town planner Max Kirchhofer – commissioned by Sasol to design and plan (the as yet unnamed town of) Sasolburg in 1951 – was a man of inspirational vision and innovative ideas. Trained in Europe and later based at Johannesburg, he brought a fresh, humane and organic vision to town planning. So successful was his Sasolburg design and planning, Sasol had no second thoughts about commissioning Kirchhofer to design and plan Secunda in the 1970s.

Distinctive street names acknowledge pioneers

Founding a town has many challenges, one of which is naming streets. In Sasolburg, early Sasolites and residents participated keenly in the process. Key Government ministers of the time were acknowledged, among them Finance Minister Klasie Havenga and Economic Affairs Minister Eric Louw. German chemists Franz Fischer and Hans Tropsch were immortalised on signboards, as were political and business pioneers. The farms on which the town was built were commemorated with names such as Geduld.

Zamdela, a place of striving

Apartheid legislation compelled Sasol in the 1950s to build a satellite township for black people near the main Sasol factory. Named Zamdela – from the Zulu for “we are forgotten”, this suburb was founded in 1952. The first school built at Zamdela had 700 learners in 1956 and the first community soccer team emblazoned its shirts with the letters OIL. Zamdela remains a vibrant part of Sasol's community today.



THE TALE *of* TWO TOWNS

Secunda: From mud to modern metropolis

Sasol financed the design of Secunda and its satellite towns of eMbalenhle and Thistle Grove. The locations of these towns were announced in June 1975. In September 1975 the first sod was turned for the construction of homes and infrastructure. In June 1976 the first family moved into a Secunda home. The expanding infrastructure soon included electrification, streets, day-care centres, schools, clinics, a sewerage system, a library, public transport and postal services. A local authority was established in September 1979. Ten years after construction began Secunda had 36 000 inhabitants and excellent infrastructure, services and facilities. City status was accorded in November 1985. Today Secunda is a bustling “green” town. A nature reserve in the valley adjacent to the Sasol factories provides a peaceful getaway, as do recreational dams outside the town. The well-developed central business area is also the hub of the town’s social and cultural facilities.

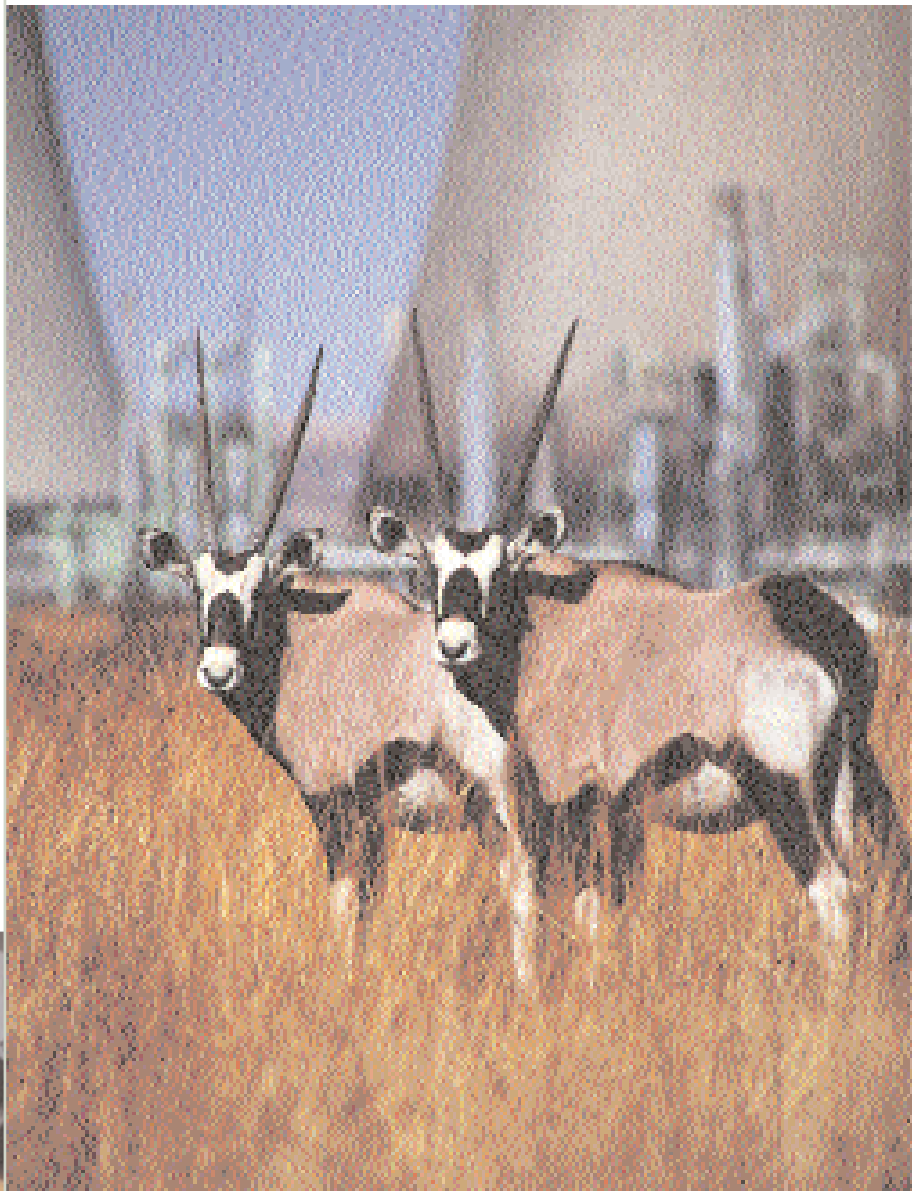


A touch of Latin in the Highveld Ridge

When the time came in 1975 to name its second town, Sasol turned to medieval Latin and chose *Secunda*, meaning “second”. Significantly, Sasol was also embarking on work for its second colliery, second factory and, in many respects, its second wave of development. Sasol also opted for a Latin motto when the heraldic artist was commissioned to design Secunda’s distinctive coat of arms: *Virium Fontem Mutamus* – We transform the source of energy.

A wild idea to let nature and technology co-exist

Secunda is a green metropolis with conspicuous green expanses, including parks, dams, picnic spots and conservancies. True to the innovative touch of Sasol people is the suggestion of pilot Nico Maritz that Sasol develop a game park alongside its Secunda factory site during the development phase. Sasol has long believed that nature and technology should co-exist – and today the teeming game grazing peacefully little more than a stone's throw from the Secunda factories is a heart-warming reminder of the hidden value within a seemingly wild idea.

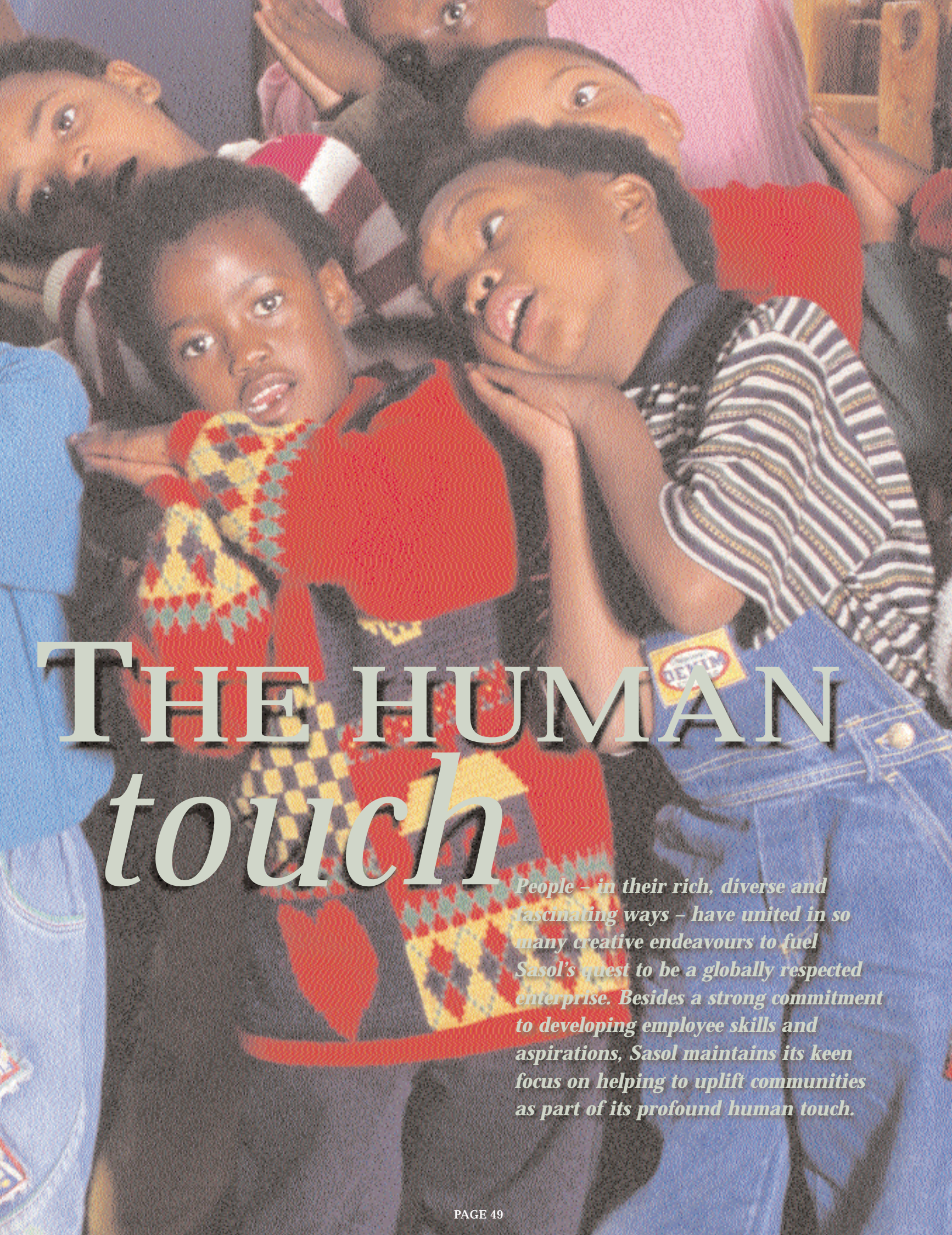


The blossoming of Secunda's two sibling towns

The development of Secunda was complemented by the development of two satellite towns, eMbalenhle and Thistle Grove, because of previous apartheid legislation. eMbalenhle – Zulu for “pretty flower” – was developed on Langverwacht farm from November 1976 onwards under the vigilant guidance of Sasol. The company envisaged a well-designed, managed and equipped town with good schools, clinics, infrastructure and other essential facilities. Thistle Grove, the town for people classified as Coloureds and Indians by apartheid regulations, followed later in the district of Kinross and was proclaimed in February 1984. These bustling communities have over the last two decades received generous contributions from Sasol for the further development of essential infrastructure and community facilities.

A group of young African children are shown in a close-up, indoor setting. They are all looking towards the camera with serious expressions. Their hands are clasped together in front of their faces in a traditional gesture of prayer or supplication. The children are dressed in casual, everyday clothing. The background is slightly blurred, showing other people and what appears to be a doorway or window.

CHAPTER SIX



THE HUMAN *touch*

People – in their rich, diverse and fascinating ways – have united in so many creative endeavours to fuel Sasol's quest to be a globally respected enterprise. Besides a strong commitment to developing employee skills and aspirations, Sasol maintains its keen focus on helping to uplift communities as part of its profound human touch.

THE *human* TOUCH



People are the key resource

It is near impossible to calculate the millions of hours of human energy that have been invested in Sasol's development over 50 years. Tens of thousands of people have worked for the group – and each has his or her own intriguing stories to share. Through their myriad skills, these men and women have worked diligently to ensure that Sasol remains their legacy to future generations of South Africans and, increasingly, global citizens.

From the seed idea of converting a remote tract of farmland into the world's first fuels-from-coal complex and commissioning that complex, along with its neighbouring Sigma Colliery, to placing the name Sasol in the minds of customers in almost 100 countries, Sasol people have written one of the greatest industrial stories in the history of South Africa's economy. Excellent leadership and an enthusiasm for nurturing teamwork aligned to common objectives have long characterised the Sasol culture and its relationship with communities.



Training philosophy ensures well-skilled people

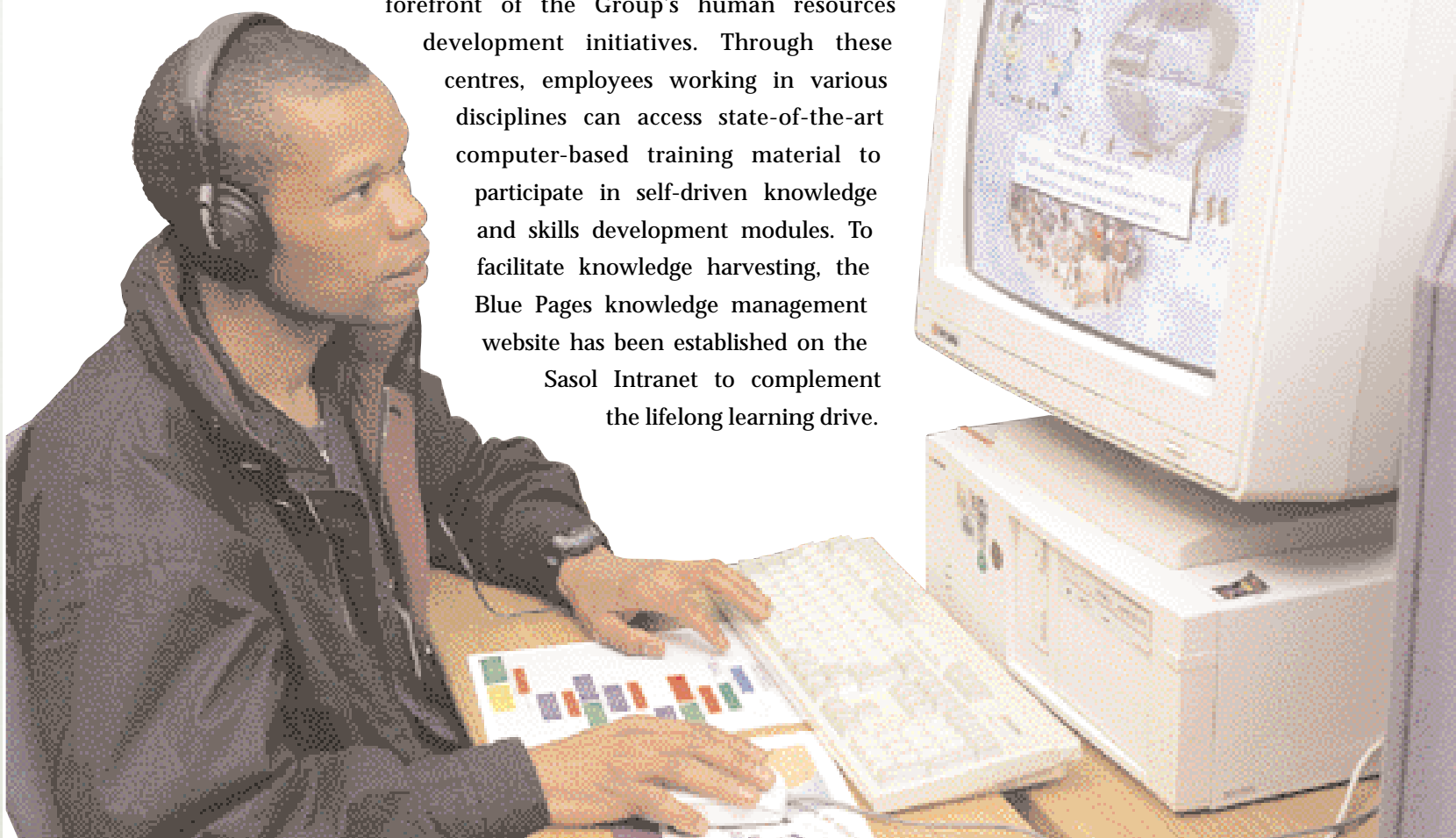
Sasol's competitive advantage is vested in the skilled people who work in disciplines as diverse as chemistry, geology, process engineering, mining, accounting, legal services, marketing, strategic development and human resources. Sasol has long been an enthusiastic promoter of human resources and invests about R90 million a year in training and development. The Group also sustains a dynamic university bursary sponsorship programme to secure its future inflow of skilled people. The Sasol bursary scheme delivered 134 graduates to businesses in 2000 and another 443 bursars are currently participating in the scheme. The Group has increased its support for students from historically disadvantaged groups. Of the 160 bursaries approved for the 2001 financial year, 50% have been allocated to people from disadvantaged groups. Almost 500 employees have postgraduate degrees and Sasol Technology has 60 PhD employees.



Self-learning centres: A smart show of initiative

Business philosophers are alluding increasingly to the importance of lifelong learning. Gone are the days of once-off workplace training as Sasol leaders promote continuous learning to empower employees for the knowledge-based economy. The successful Sasol self-learning centres at Johannesburg,

Randburg, Sasolburg and Secunda remain at the forefront of the Group's human resources development initiatives. Through these centres, employees working in various disciplines can access state-of-the-art computer-based training material to participate in self-driven knowledge and skills development modules. To facilitate knowledge harvesting, the Blue Pages knowledge management website has been established on the Sasol Intranet to complement the lifelong learning drive.



THE *human* TOUCH



Social investment philosophy supports upliftment

No major business enterprise can expect to thrive and grow in today's complex South African socioeconomic web if its surrounding communities lack development resources and opportunities. Sasol has long been an enthusiastic and committed advocate of grassroots social investment programmes. This conviction gathered tremendous impetus when the Group committed itself in 1975 to develop the town of Secunda. Sasol is especially focused on helping the communities of greater Sasolburg and Secunda in the fields of education (especially for science and technology), entrepreneurial development and job creation, healthcare, infrastructural development, recreation, sport and the arts. In its 1998, 1999 and 2000 financial years, for example, Sasol committed almost R70 million for social investment programmes. The 2000 financial year allocation of R23 million was augmented with R11 million to sponsor the construction of two new primary schools and to provide relief for victims of the 1999/2000 floods in Mozambique and Southern Africa.

Valuable community resource centre

The Osizweni Community Development Centre near Secunda was established in 1991 in partnership with the Highveld Ridge community to foster education and skills development in an enabling environment. Osizweni (Zulu for “a place where help is found”) received the 1998 and the 1999 Mpumalanga Premier Award for Best Education Project. About 5 000 people participate in Osizweni activities each year. The centre has nursery schools catering for 200 children, schools catering for 1 200 learners and a literacy centre catering for 750 adults a year. The information technology and science centre features language, science and technology laboratories, a library and career guidance centre, and a computer centre.



Boitjhorisong provides help to community

The Boitjhorisong Resource Centre at Sasolburg remains a valuable community resource, especially in the field of education. Sasol founded the centre in 1988 in partnership with businesses and the community. Boitjhorisong received the Free State Premier's Education Project of the Year Award in 1999. This centre serves 74 schools, 158 farm schools and more than 2 000 teachers and 60 000 schoolchildren in the Sasolburg education district. The adult literacy school accommodates more than 250 people a year.



THE *human* TOUCH



Esparanza reflects its name with bumper crops

In 1994 Sasol established the Esparanza (Spanish for “hope”) farming venture to create jobs in a region with high unemployment. About 60 self-employed farmers work at Esparanza. The farmers produce vegetables for sale through their

farmstall. Highveld Ridge green-grocers buy daily from the stall. Esparanza’s chicken-breeding project was established in 1995 and is a major source of poultry for the community. A fruit orchard and cut flower business is also being nurtured. Sasol provides land, water, fertilisers and business management advice to the farmers. The Sasol-initiated farming venture developed near Sasolburg on land adjacent to the Wonderwater strip mine also continues to flourish.



Expressing harmony through sanguine song

The popular Sasol Choir Festival, which assembles choirs from Swaziland and South Africa’s nine provinces, is sponsored by Sasol each year and is usually staged at either Sasolburg or Secunda. The Group also remains involved in The Sowetan Nation Building project and annually supports the national Sasol School Choirs Competition. Choir support programmes date back to the start of the Group’s Sasolburg operations. Sasol’s first African song festival was held at Zamdela, Sasolburg, in November 1954. Sixteen choirs participated in the festival and the home choir of Zamdela took the occasion to a resounding climax by winning the competition.



Promoting the arts . . . with vigour and pride

Sasol has long maintained that no community can thrive without the vigorous promotion of the arts. In helping to promote artists, Sasol sponsors the annual Sasol New Signatures art competition in collaboration with the Pretoria Arts Society. The Sasol Art Collection – housed at various Sasol buildings – is one of South Africa's largest and most definitive corporate art collections. Sasol is also a sponsor of the Klein Karoo Nasionale Kunstefees (National Arts Festival) and the Aardklop Kunstefees at Potchefstroom, among other events.

Nurturing higher education for the Rainbow Nation

For South Africa to secure its future in the world's rapidly evolving knowledge economy, Sasol believes major corporations have an obligation to sponsor tertiary education. The Group – in endeavouring to support all South African universities and technikons – makes regular financial grants and sponsors certain facilities. Recent sponsorships include the University of the Western Cape's Chair in Chemistry, a bursary for indigent students at the University of Cape Town, a University of the Free State computer centre, a University of the Transkei library and, most recently, the University of the Witwatersrand's Sasol Centre for Environmental Management. Sasol's bursary scheme produced 134 new employees in 2000. Another 160 students are to be sponsored in 2001.



Schools for centennial kids thanks to R11 million donation

In response to an appeal from former President, Nelson Mandela – and to celebrate the year 2000 – Sasol financed the construction of two new schools for learners in underresourced communities in Sasolburg in the Free State and the Highveld Ridge region of Mpumalanga. The Group committed R4,4 million for the development at eMbalenhle, near Secunda, of the Maphala Gulube Primary School. Staff and learners moved into their new school premises in August 2000. Sasol committed a further R5,7 million to fund the Credo Primary School at Leitrum, Zamdela, next to Sasolburg. Catering for about 1 000 learners a year, Credo opened its doors in September 2000.



THE *human* TOUCH

Beautiful birds inspire informative words

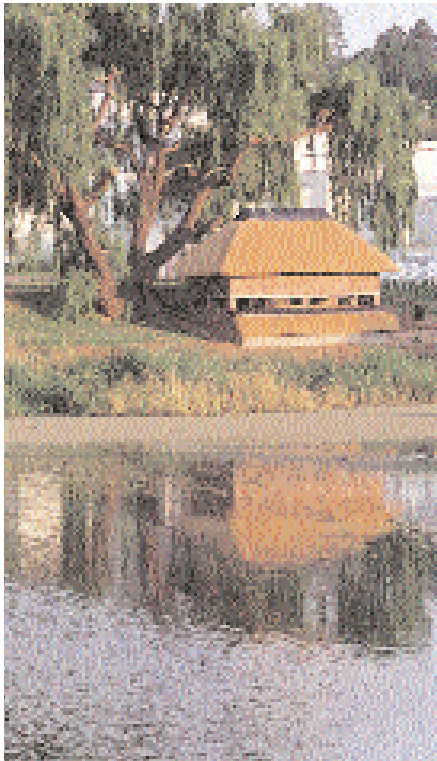
The growth of birdwatching, one of South Africa's most popular pastimes, soared to new heights when Sasol began to sponsor the publication of a series of indispensable books on Southern African birds. The best-selling first edition of Sasol Birds of Southern Africa – by Ian Sinclair, Phil Hockey and Warwick Tarboton and published by Struik in 1994 – inspired the publication of other useful ornithological publications and recordings. Sasol also sponsors the First Field Guide natural history pocket books.



Wild about dogs threatened with extinction

The Southern African wild dog (*Lycaon pictus*) is threatened with extinction, hence Sasol's generous sponsorships over the past years to help zoologists and nature conservationists protect this mammal. Sasol, for example, has sponsored the quarantine facilities of the wild dog breeding project at the De Wildt Research Station near Brits in the North West province. Wild dogs from this programme have been released successfully into conservancies, including the North West's Madikwe Game Reserve.





Hide-and-seek with feathered friends

The game of hide-and-seek has a different meaning for South African nature enthusiasts. Hides – camouflaged shelters used to view wildlife at close range – have become popular recreational destinations for adults and children. In recent years, following the success of its sponsored bird books, Sasol has financed the construction of urban and bushveld birdwatching hides, including one at Randburg's President Ridge Bird Club. The Group has also sponsored a lake walkway and hide at Roodepoort's Witwatersrand Botanical Gardens in addition to hides at Nylsvley and in the Kruger National Park.



Orchestrating young musical talent

The keen corporate support of the arts extends to Sasol's continuing and generous sponsorship of the South African National Youth Orchestra (SANYO), among other musical events and competitions. In a multicultural society, in particular, Sasol believes it is imperative that serious orchestral musical talent is appreciated and supported to ensure continuing cultural diversity. At the individual level, the Group also sponsors the biennial Sasol Music Prize for international study by a promising, young music student. Sasol, in its golden jubilee year, sponsored a tour by the acclaimed Vienna Boy's Choir to South Africa.

Amaglug-glug, world-class soccer stars

The feisty South African national Under-23 (SA U23) soccer team – affectionately known as Amaglug-glug because of their sponsorship by Sasol Oil – impressed the international fraternity by qualifying to compete in the Sydney 2000 Olympic Games. In a spectacular display of fleet-footed teamwork, the team thrashed Brazil by three goals to one. Recognising the immense popularity of soccer in Africa and inspired by South Africa's readmission into the international football community, Sasol Oil undertook in 1994 to support the SA U23 team with an initial three-year, R10 million sponsorship. Sasol's goal is to help the country to nurture world-class soccer talent.





CHAPTER SEVEN

The wellbeing of humanity, natural resources and the biosphere can no longer endure unmanaged pollution, waste and other forms of ecological damage. In future, mining and industrial companies must harmonise their operations with social and natural environmental needs, hence Sasol's growing participation in the international business community's sustainable development initiatives.

SUSTAINABILITY *drive gathers* IMPETUS

SUSTAINABILITY *drive gathers* IMPETUS



Ethos of care

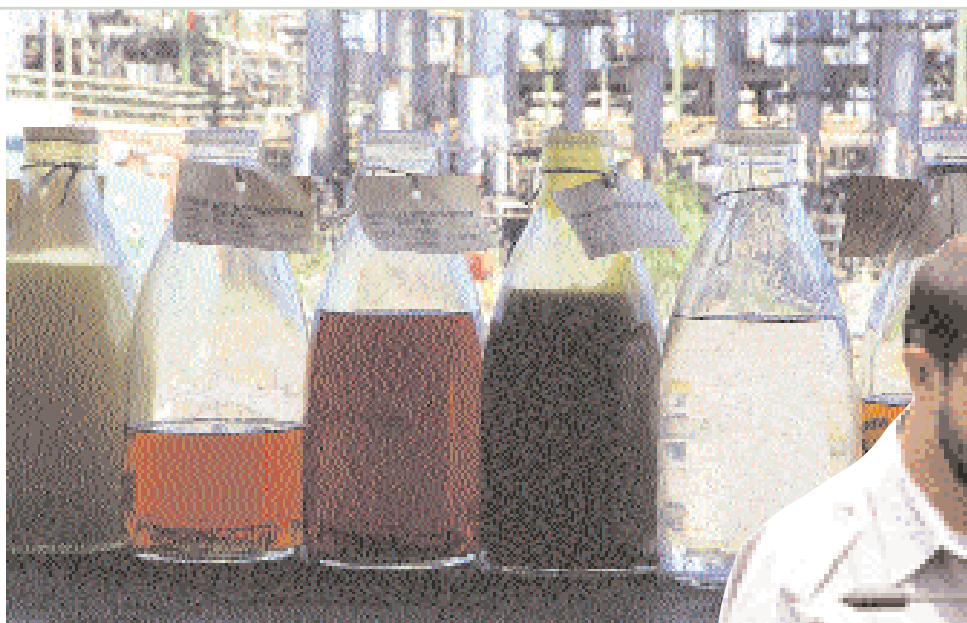
Striving towards upholding world-class environmental management systems and standards, Sasol is committed to operating all mining, production and logistical operations in line with the Responsible Care ethos. Responsible Care is the initiative of the International Council of Chemical Associations, first launched by the Canadian chemical industry in 1985, to improve environmental health and safety performance of the industry. Integral to the Responsible Care commitment is Sasol's increasing drive to uphold sustainable development principles. The Group has far-reaching objectives and programmes to reduce the volumes of emissions and waste, while also optimising water and energy consumption. Central to this commitment is Sasol's

programme to integrate into all relevant operations worldwide the ISO 14001 environmental management system developed by the International Organisation for Standardisation. During the 2000 financial year, the Group formed the Sasol Safety, Health and Environmental (SHE) Centre at Johannesburg to provide a stronger support base to all operations in their quest to make their "ethos of care" in SHE custodianship a sustainable reality.



ISO 14001 quest gains momentum

The quest by Sasol operations worldwide to manage their environmental impacts in accordance with the ISO 14001 management system has been gaining momentum. Sasol has 24 businesses managing their environmental programmes with ISO 14001 certification. Two of them were milestones for the South African coal-mining industry, with Wonderwater being the first strip mine and Bosjesspruit being the first underground colliery to receive ISO 14001 certification. In 1996 Tosas and Sasol Gas were the first and third South African businesses to achieve this certification. Another 17 Sasol businesses are to undergo an ISO 14001 audit.



Cradle-to-grave stewardship for a greener future

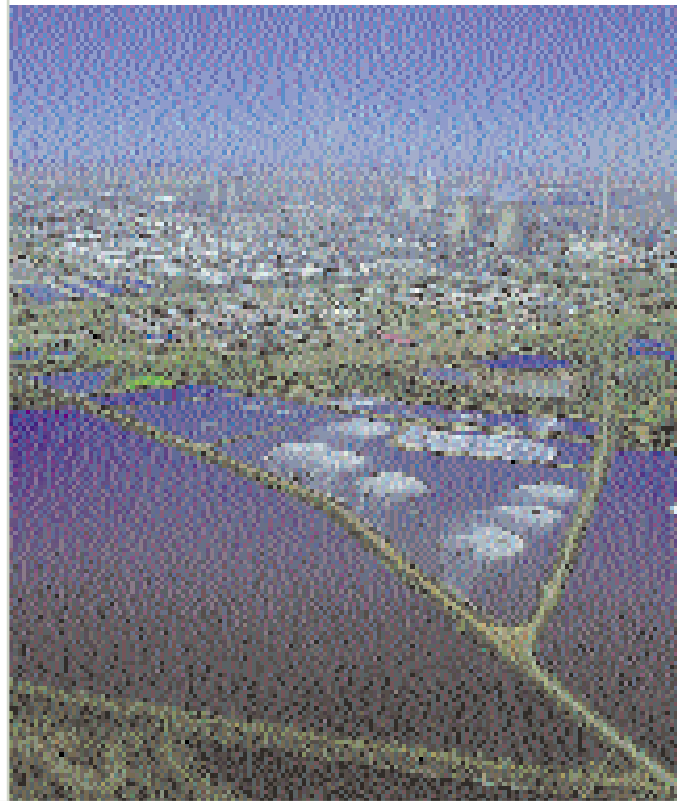
In line with its Responsible Care and sustainable development commitments, Sasol launched in the 1990s a product stewardship programme to ensure a more effective understanding of the effects of its products on people and the natural environment from when these products leave the Sasol factory gates to their final disposal. In what is known as the cradle-to-the-grave approach, the Research and Development (R&D) team of Sasol Technology at Sasolburg has commenced a comprehensive R&D programme to undertake product lifecycle analysis of Sasol's more than 200 products marketed in Southern Africa and worldwide. Lifecycle analysis includes detailed ecotoxicological tests.



SUSTAINABILITY *drive gathers* IMPETUS

Smarter water management

As a large water consumer, Sasol has been increasing its efforts to use water smartly, with an emphasis on harnessing novel techniques to purify and reuse water. In one initiative during the 2000 financial year, Sasol completed a R53 million project at Sasolburg to increase water recycling. The Sasolburg operations are to reduce water intake from the Vaal River by more than 40%. Sasol initiated an R80 million project at Secunda in 1996 for the installation of a water desalination plant. This plant processes nine million litres a day of mine seepage water from the mines and produces six million litres of boiler feedwater a day for the synfuels operations.



Reducing atmospheric emissions

Over the last two decades initiatives have increased with greater success to reduce gaseous and particulate emissions from Sasol plants into the atmosphere. A R60 million project to replace outdated electrostatic precipitators on steam boilers at the Sasolburg operations was completed in the 2000 financial year. Fly-ash stack emissions have been reduced substantially. Between the 1996 and 1998 financial years, the Secunda operations' particulate emissions decreased by 38% and hydrogen sulphide emissions decreased by 23%. In another recent breakthrough, Sasol submitted to the South African Government an inventory of greenhouse gas emissions in terms of the international Framework Climate Change Convention.



Environmental reporting initiative sets the trend

Sasol was among the few proactive pioneers in South African industry when it published the Sasol Environmental Report 1996 in 1997 and the Sasol Environmental Report 1998 in 1999. The latter publication was recognised by auditors KPMG and the University of Pretoria as South Africa's Best Corporate Environmental Report of 1999. The more comprehensive Sasol Safety, Health and Environmental Report 2000 – to be published in 2001 – is expected to reveal further advances in Sasol's environmental management.

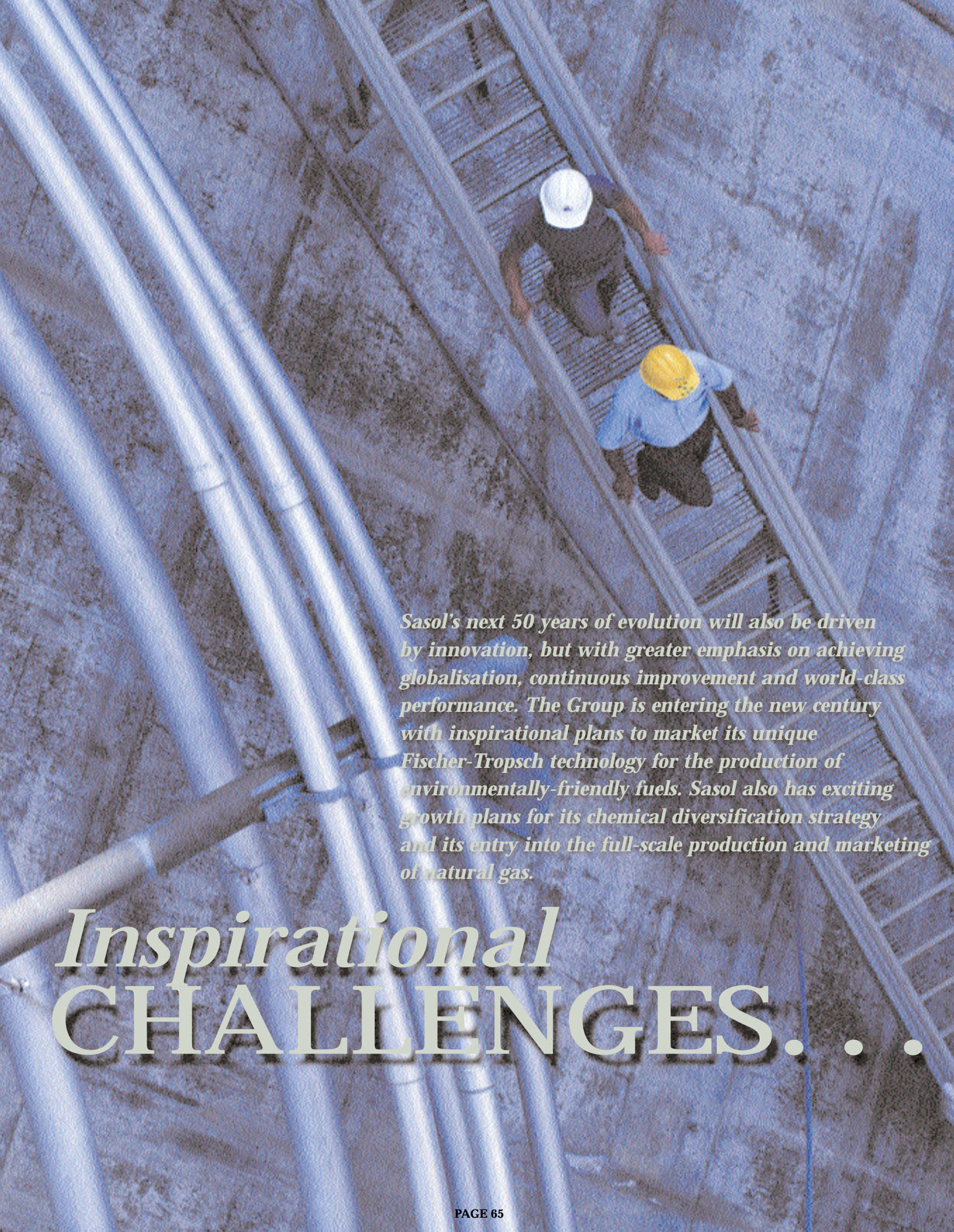


Greener groundwork for better land management

Strident efforts are made at all Sasol mines and factories to curtail impacts on the ground, including topographical, soils and groundwater systems. These efforts include a mandatory programme to rehabilitate all areas of strip mine operations once coal has been extracted. Other efforts include the initiatives to reduce landfills and eliminate chemical spillages. Land rehabilitation is integral to the Wonderwater operations near Sasolburg and the Syferfontein operations near Secunda. Wonderwater has twice received the Industrial Conservancy of the Year Award from the Free State provincial environmental authorities. Sasol Polymers, working closely with the Plastics Federation of South Africa, has also been actively promoting plastic recycling to reduce post-consumer landfills.



CHAPTER EIGHT



Sasol's next 50 years of evolution will also be driven by innovation, but with greater emphasis on achieving globalisation, continuous improvement and world-class performance. The Group is entering the new century with inspirational plans to market its unique Fischer-Tropsch technology for the production of environmentally-friendly fuels. Sasol also has exciting growth plans for its chemical diversification strategy and its entry into the full-scale production and marketing of natural gas.

Inspirational CHALLENGES...

Inspirational CHALLENGES...

The future

Inspired by its considerable triumphs of the past 50 years, Sasol is looking towards the next half-century with focus, energy and determination to succeed further. The Group is justified in its determination: it has skilled people, superb technology, ample hydrocarbon reserves, a large, satisfied and growing customer base worldwide and a farsighted strategic culture.

Lucid growth plans are being pursued by all Group operations. The world's markets have opened their doors to Sasol's growing portfolio of products and services. The Group has thriving international operations. Sasol and alliance partners plan to build new-generation gas-to-liquids plants in Nigeria and Qatar. Extensive African hydrocarbon reserves are being established and Mozambican gas is likely to be brought into production in 2004. New business acquisitions and alliances are being sought internationally. Major new investments in chemical plants are being undertaken – not to forget new measures to reduce the cost base and increase efficiency.

Right chemistry for major growth

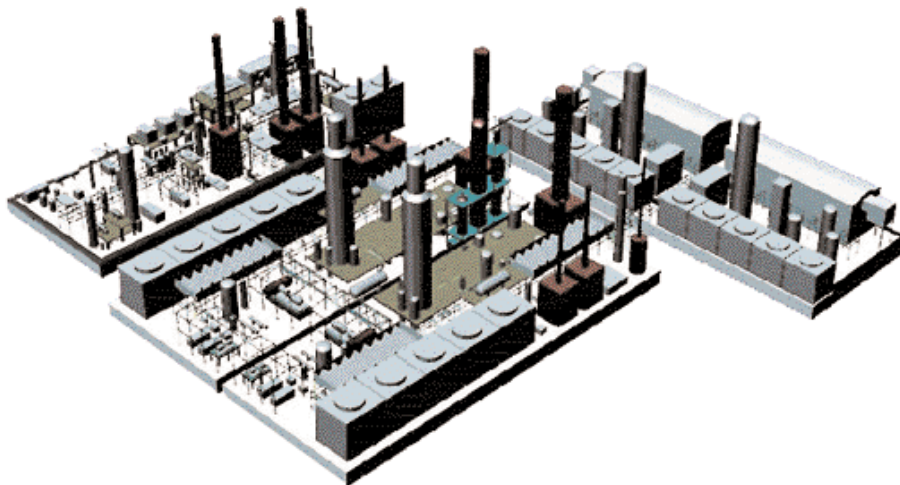
Sasol Chemical Industries (SCI) has farsighted growth plans. Certain SCI divisions are involved in a multibillion rand capital investment drive. Dynamic growth will materialise as new chemical capacity comes on stream during Sasol's next three financial years. Capital expenditure of R3,6 billion has been approved for the construction of new plants for Sasol Solvents (including n-butanol, acrylic acid and acrylates) and Sasol Alpha Olefins (including detergent alcohols and additional pentene, hexene and octene). Sasol Polymers is committed to a R1,2 billion investment as a partner in two world-scale plants to be commissioned in Malaysia in 2001: a gas cracker and a polyethylene plant.



Globalisation gathers gusto

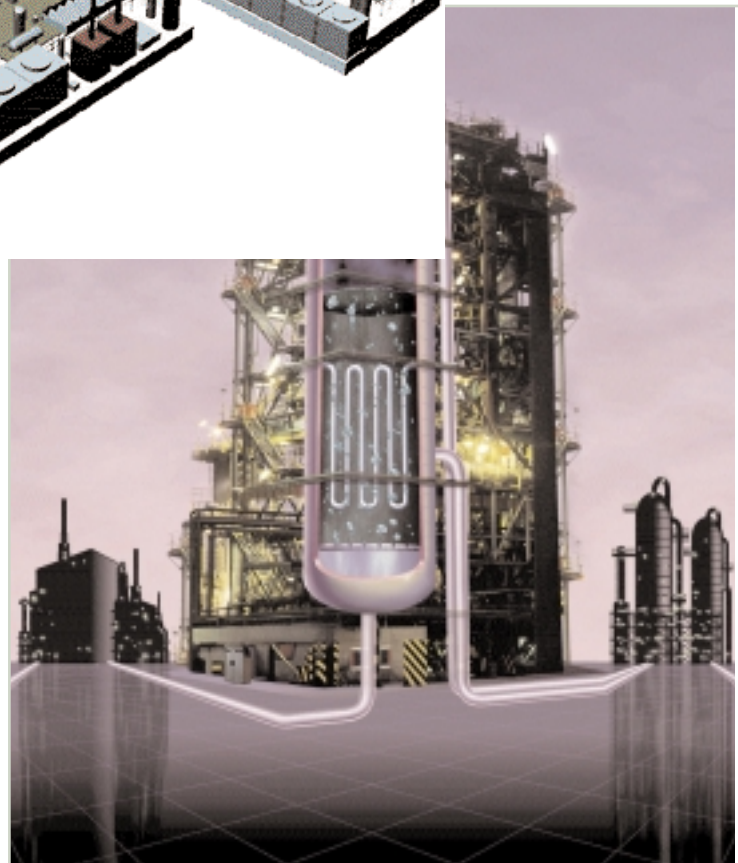
Sasol did not entertain a serious globalisation programme until Sasol Chemicals Europe (SCE) was formed in the United

Kingdom in 1990. Significant initiatives would follow, including the formation of the Schümann Sasol International wax joint venture (1995) and the Merisol phenolics joint venture (1997). Sasol now has manufacturing and marketing operations in the Americas, Europe, Asia and Australia. Its annual international sales (including South African exports) now exceed R6,5 billion (about 25% of group income).



Bringing new-generation fuels to the world

With mounting concern over the emission of greenhouse gases produced from hydrocarbon fuels, Sasol is on the brink of bringing new-generation fuels technology to the world. The Sasol Slurry Phase Distillate (SPD) reactor – developed by Sasol Technology at the end of the 1980s and refined during the 1990s – is at the heart of the three-step SPD process to produce high-quality, clean fuels and other hydrocarbons from natural gas. SPD fuels emit less hydrocarbon emissions and particulates, contain lower amounts of sulphur and aromatics and emit less smoke than conventional diesels. In a recently-announced joint venture with Chevron, Sasol plans to construct international gas-to-liquids plants incorporating SPD technology.



Inspirational CHALLENGES...



Mozambican gas could herald a new industrial era

Sasol intends to bring natural gas from Mozambique to South Africa, provided a favourable dispensation is created with Mozambican and South African stakeholders. The gas would be produced by Sasol Petroleum International (SPI), which is currently active in Mozambique. The gas will be marketed in South Africa and Mozambique by Sasol Gas. Proven and probable gas and oil reserves to which SPI has access in Mozambique and elsewhere in Africa have doubled between June 1999 and June 2000. Gas production by SPI in Mozambique could commence in 2003, delivering gas in South Africa by 2004. The gas would be used as feedstock for Sasol's plants and other industries in South Africa.



Marketing clean-burning fuels technology worldwide

Sasol's global ambitions to market its competitive synfuels technology, in particular the Slurry Phase Distillate (SPD) process, are being spearheaded by Sasol Synfuels International. Formed in 1998, the company initiates and develops potential ventures from project conception through to project execution, working with Sasol Technology as its technology and project managers. In time, Sasol Synfuels International will participate in the operation of those ventures and the marketing of the resultant low-sulphur, clean fuels and other hydrocarbon products after start-up. Sasol Synfuels International is to develop gas-to-liquids (GTL) plants incorporating Sasol's SPD technology: At Escravos, Nigeria, in partnership with Chevron; and at Ras Laffan, Qatar, in partnership with Qatar General Petroleum Corporation. Other GTL opportunities around the world are being evaluated.



Modern-day African explorers double their reserves

Formed in 1995, Sasol Petroleum International (SPI) is active in Mozambique, Gabon, the Congo and South Africa. It focuses on those gas resources that can be utilised in Sasol's plants and that can be monetised through the Group's unique gas conversion technology, thereby aligning with Sasol's globalisation strategy and its Southern African energy business. Hydrocarbon reserves established by SPI in Africa more than doubled during the 2000 financial year (estimated at 260 million barrels of oil equivalent). This was achieved at a highly competitive finding cost. Oil and gas reserves in Africa are expected to increase over the next decade.

50 YEARS OF INNOVATION

Discovering
NEW LANDS

“One doesn’t discover new lands without consenting to lose sight of the shore for a very long time.”

André Gide (1925), French writer and Nobel laureate



Sasol, 50 years of innovation

Sasol, 50 years of innovation has been produced and published by the Corporate Communications department of Sasol Limited to celebrate the 50th anniversary of the Group's founding and as part of an ongoing commitment to keeping Sasol stakeholders informed on Group aspirations, viewpoints and achievements.

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Sasol
50 YEARS *of*
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