



SOUTH AFRICAN COMPANY BECOMES A GLOBAL ENERGY PLAYER

'Sasol recognises and shares global concerns regarding the increased atmospheric concentrations of greenhouse gases that contribute to climate change. We believe that meeting the growing global demand for energy will accelerate greenhouse gas emissions unless effective technological solutions and management interventions are developed and implemented.' Pat Davies, Sasol Chief Executive

Sasol is an integrated oil and gas company with complementary interests in coal, chemicals and the international development of synthetic-fuel ventures based on its proprietary Fischer-Tropsch technology. Sasol mines coal in South Africa and converts it, along with Mozambican natural gas, into liquid fuels and chemical feedstock. In South Africa, Sasol refines imported oil and retail transportation fuels and lubricants through Sasol convenience centres and Exel service stations.

Sasol is a partner in the ORYX gas-to-liquids (GTL) joint venture recently commissioned in Qatar, in the Persian Gulf, and

is providing technology and risk-based financing for a joint-venture GTL facility scheduled to be completed in Nigeria in 2009. Sasol and its joint venture partners are also exploring further GTL opportunities in Africa, Australia and the Middle East.

In the light of declining oil reserves, high oil prices, concerns around energy security and the abundance of coal reserves and uncommitted natural gas throughout the world, Sasol's integrated GTL and coal-to-liquids (CTL) fuel production technologies are likely to play an increasingly significant role in meeting growing energy demand. What makes GTL and CTL technology particularly compelling is the superior quality

of fuel. The GTL and CTL diesel produced through the Sasol SPD™ process will have better environmental and performance attributes than the cleanest conventional diesels currently being produced from crude oil.

In 1999, Sasol commissioned independent life-cycle assessment studies to investigate the climate change implications and other environmental attributes of its GTL and CTL technologies. These studies provide a holistic view of the impact of GTL and CTL technologies on the environment by measuring impacts caused by producing, transporting and using the fuels on a 'well-to-wheels' basis.

The studies found that in several environmental impact categories GTL fuels perform better than the refinery system and can potentially emit less greenhouse gas. However, the results of the study also indicate that the CTL option is significantly more carbon-intensive than the refinery or GTL options, both of which are similar in their carbon emissions. The difference in CTL is almost entirely due to the gasification of coal. Fortunately, the bulk of the carbon dioxide produced in the gasification step is in a concentrated form, thus allowing for relatively easy carbon capturing for the purposes of storage, when compared to other technologies utilising coal.

'Our technology offers enhanced energy security, which is high on the agenda of most major oil-consuming regions that are dependent on imported crude oil from the Middle East. Finding new oil reserves will prove to be more difficult and more expensive to produce – it is not a question of if we run out of oil, but when. The world will need viable alternatives to oil. While GTL and CTL technology is clearly not the only alternative to crude oil, it is undoubtedly part of the solution.'

Lean Strauss, Group General Manager

Climate change and Sasol's global growth plans

In light of the carbon footprint associated with Sasol's activities, it is evident that climate change considerations will have a significant influence on Sasol's ambitious global growth plans. In the belief that Sasol's activities will be increasingly important in satisfying current and future energy demands, Sasol acknowledges that a comprehensive approach to greenhouse gas management needs to be adopted for all of its activities, based on a combination of technological solutions and sound governance practices.

Following an extensive process of internal review and external benchmarking, Sasol has agreed on a set of targets and objectives aimed at reducing its greenhouse gas intensity, introducing renewable energy and raw material sources, and implementing sustainable technology solutions to improve carbon and energy efficiency.

Sasol intends to achieve these objectives by:

- Switching, where possible, to a more carbon-efficient feedstock at existing facilities, such as the introduction of natural gas in Sasolburg (South Africa).

- Using a less carbon-intensive feedstock at new production facilities, such as the use of natural gas at its ORYX GTL facility in Qatar.
- Implementing an enhanced carbon and energy-efficiency drive at all facilities.
- Reducing greenhouse gas emissions at its nitric acid facilities.
- Providing for improved carbon management in the design of new facilities.
- Investigating opportunities to capture and store carbon dioxide.



Sasol has agreed on a set of targets and objectives aimed at reducing its greenhouse gas intensity

In 2005 Sasol agreed a group-wide target of achieving at least a 10 per cent reduction in GHG emissions per ton of product, on the baseline of the 2004 financial year, by July 2015. Sasol has prepared a detailed road map with milestone targets to guide them towards achieving this goal.

Sasol's climate change governance practices

Underpinning Sasol's commitment to identifying technological solutions for climate change is the belief that these need to be informed by open and transparent climate change governance practices. With this in mind, Sasol has embarked on the following initiatives:

- Assigning responsibility for climate change issues to a member of the group executive committee.
- Measuring, auditing and reporting on its global emissions annually, using the international recognised Reporting Protocol of the World Business Council for Sustainable Development and the World Resources Institute. (Sasol's first environmental report, which included disclosure of its carbon emissions, was published in 1996.)
- Undertaking and publishing frank benchmarks of its emissions and governance performance as compared with international good practice.
- Submitting quarterly reports to the Sasol board on the company's performance against its greenhouse gas emission intensity target.
- Setting corporate targets for the reduction of greenhouse gas emission intensity and tracking these targets in a transparent manner.
- Actively pursuing greenhouse gas-related financial instruments as a means of accelerating a reduction in its global carbon footprint.

Sasol has identified and calculated numerous opportunities for emission reductions throughout the group and has made progress in registering Clean Development Mechanism (CDM) projects. Sasol's affected European sites are participating in the European Union's Emission Trading Scheme. Internationally, the company continues to participate in the activities of the Intergovernmental Panel on Climate Change (IPCC) and Carbon Sequestration Forum with the aim of identifying opportunities for sequestering carbon dioxide. The Sasol Technology research and development group has recently launched an ambitious research and development programme to support initiatives for reducing greenhouse gas emissions.

While climate change presents the company with significant challenges, Sasol has a record of developing and implementing innovative solutions. A combination of technology and effective management processes, undertaken in dialogue with stakeholders, will contribute measurably to a sustainable future.

These pages were written and paid for by Sasol.

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