# Portfolio Committee Energy

# Briefing on the South African
## Gas Sector

9 September 2014

# Sasol Gas Video

# Presentation overview

- **Sasol video**
- **Sasol overview**
- **The gas market**
- **Recommendations and the way forward**

Sasol forecourt, Secunda

Lake Charles, Louisiana

# Sasol Overview

# A product of South Africa's success

## Proudly flying the South African flag

- An integrated energy and chemical company, with 64 years experience in coal-to-liquids (CTL) and gas-to-liquids (GTL) technology;
- Global leader in GTL and CTL - world's largest producer of synthetic fuels;
- Strong intellectual property portfolio (490 registered patent families); and
- Nurture and grow strategy - maintaining and enhancing SA business and exploring growth opportunities in Africa and the rest of the world.

**1000 MW**
**of electricity,** taking pressure off the national grid

**8 billion litres**
**of liquid fuels, results in savings in foreign exchange**

**3.5m tons**
**of chemicals**

# Continued commitment to South Africa

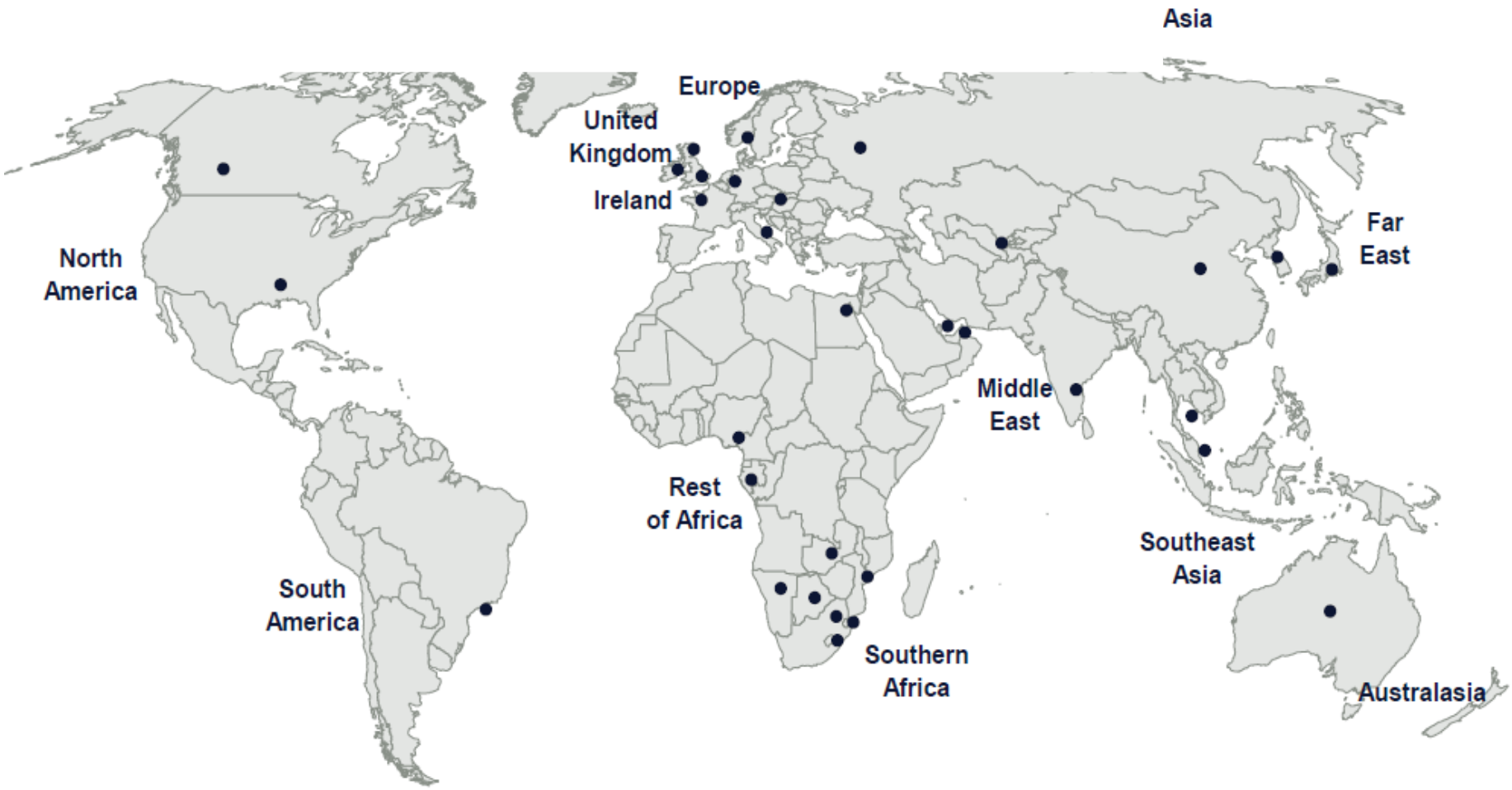
## Accelerated contributions in FY14

- Strategies well-aligned with the National Development Plan;
- Invested R22 billion in capital expenditure:
  - R60 billion in the last 3 years.
- Contributed R32 billion to direct and indirect taxes:
  - R91 billion in the last 3 years.
- Spent over R1 billion on skills and socioeconomic development:
  - Over R3 billion in the last 3 years.
- Water conservation partnership delivering results.
- Advancing energy efficiency improvements.

Sasol forecourt, Tembisa

Artist's impression of Sasol's new global headquarters, Sandton

# Our global presence

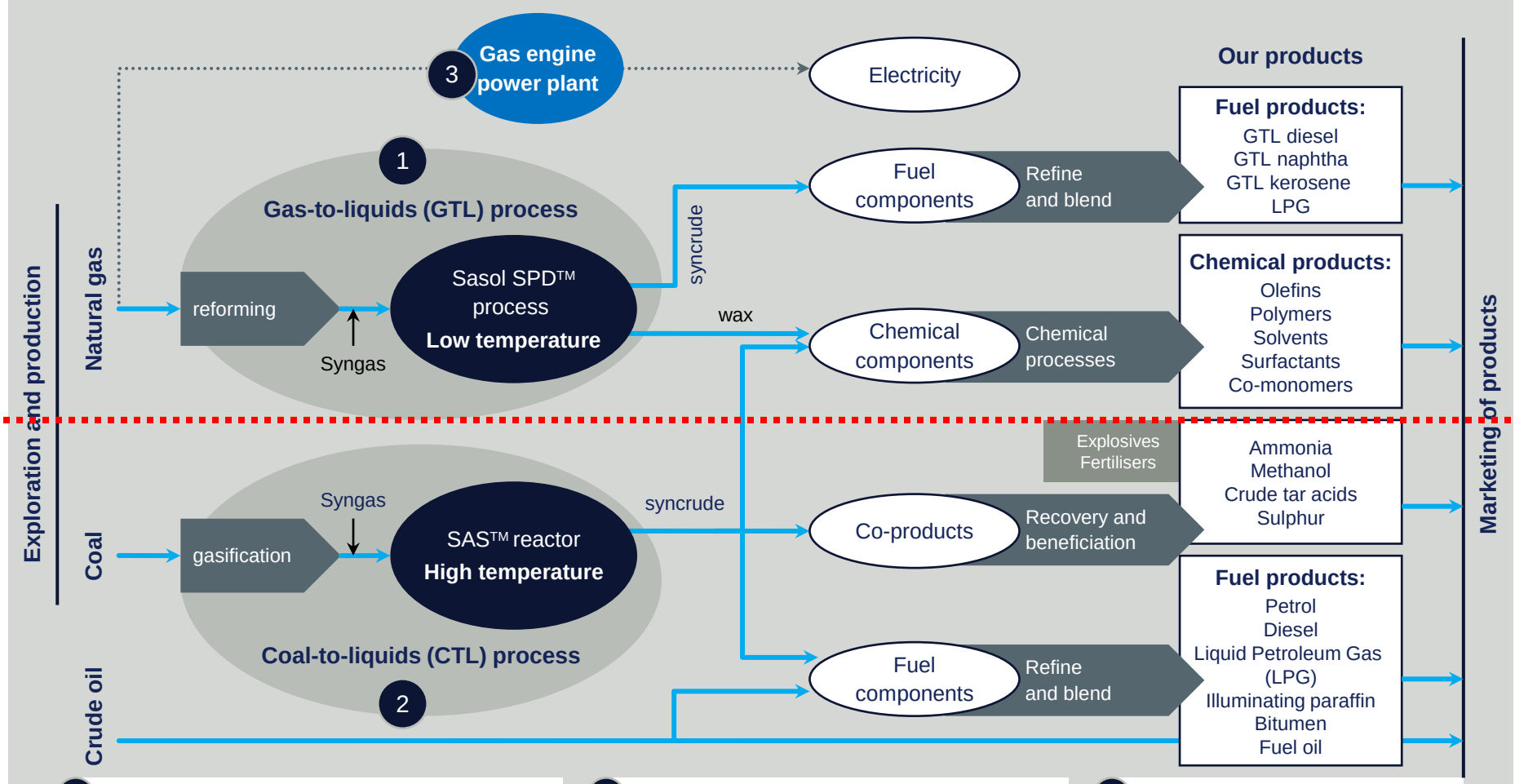



This map is a broad indication of Sasol's global presence and of its continuing operations, but is not location-specific

**Sasol has a presence in 37 countries across the world comprising a combination of exploration, development, production, marketing and sales operations**

# Gas based growth in Southern Africa

# Gas is key in our innovative technology & integrated value chain




1 A proprietary version of Sasol's low temperature Fischer-Tropsch (FT) process using an advanced cobalt catalyst, converts synthesis gas into waxes and related petrochemical streams for producing and marketing waxes and diesel.

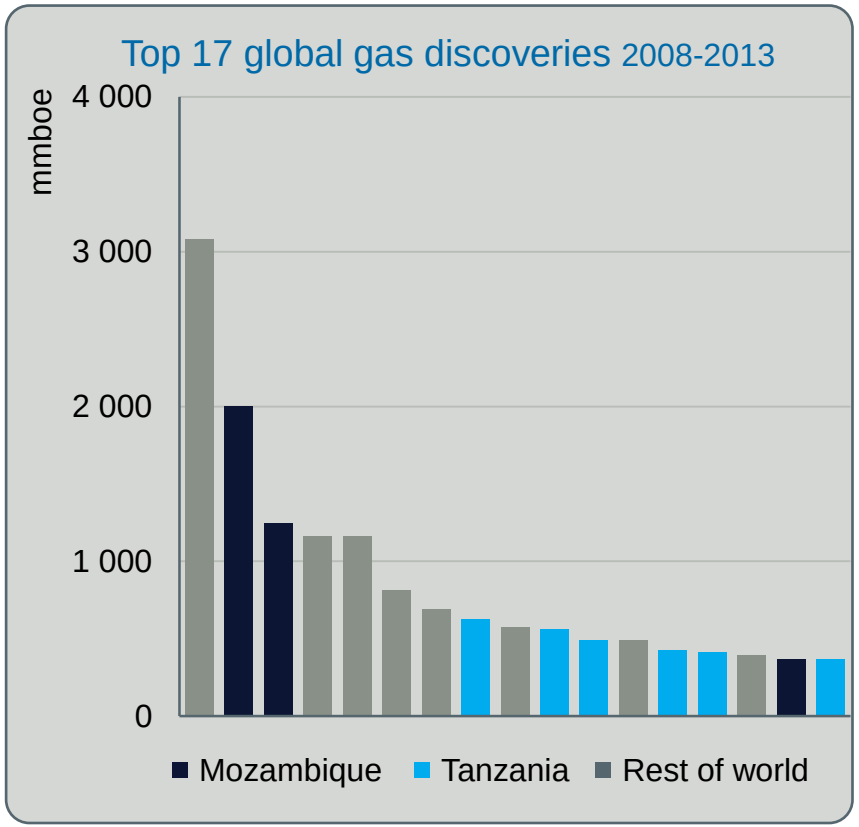
2 The proprietary Sasol Advanced Synthol™ Reactor (SAS) at the heart of the high temperature version of Sasol's FT process used at Secunda, produces a synthetic form of crude oil and chemical feedstock.

3 Lower-carbon electricity allows us to cumulatively generate up to 69% of our total internal electricity requirements in South Africa.

# Gas-based growth in Southern Africa

## 9 of 17 largest gas discoveries in the last 5 years are in sub-Saharan Africa

- Increasing production from Pande and Temane:
  - Gas production up 13% year-on-year to 116mGJ (Sasol share);
  - 175 MW Central Térmica de Ressano Garcia power facility being commissioned;
  - Gas loop-line completed next two months; and
  - Submitting PSA field development plan in February 2015.
- Large gas reserves in northern Mozambique:
  - GTL pre-feasibility study with ENI in progress.
- Continued Exploration in the region:
  - Offshore Durban: ENI farmed in for 40%;
  - Area A Mozambique: planning to drill; and
  - Offshore West Coast.




**Source: IHS; EIA; lit search 2013**

**Building on gas production experience in Mozambique since 2004**

# Medium term

## Other medium term opportunities to address South Africa's national imperatives of economic growth, job creation and energy security

- Regional energy security:
  - Sasol is currently studying the feasibility of a gas to power, chemicals and a GTL facility in Mozambique; and
  - Regional cooperation and economic growth will benefit of all countries in the region.
- Increasing the resource base in the region:
  - Sasol is currently exploring for natural gas in South Africa and Mozambique.

# Looking longer term

## Shale gas will be a game changer for South Africa

- Shale gas enabled the USA to recover from the financial crises and is greatly improving energy security;
- This can also be the case for South Africa with:
  - South African Government support;
  - Significant investment in infrastructure;
  - Experienced partners; and
  - A favourable investor climate is required.
- Sasol will consider:
  - Participating in the exploration of shale gas, should the right acreage become available; and
  - A GTL facility in South Africa, should sufficient gas become available at an economically viable price.

# Gas market in South Africa

# Gas market in South Africa

## Tripled over the last 10 years

- 2014 marks the **10th anniversary** of our natural gas project in Mozambique;
- 50mGJ/a in 2004 vs **170mGJ/a** as at end June 2014;
- Together with our partners we grew the gas industry significantly;
- With our partners invested more than R21 billion in developing and producing natural gas in Mozambique;
- Today 2200km of transmission pipelines + 1000km of distribution pipelines;
- Expanding the MSP with a R2 billion loop line - 128km of pipeline – increasing pipeline capacity to monetise 25mGJ/a directed to Mozambican electricity markets; and
- +/- 350 large industrial customers in South Africa.

Central Processing Facility, Mozambique

Gas drilling rig, Temane - Mozambique

# Tariff Regulation

| | |
|---|---|
| **Regulated returns** | • Predictable return on investment |
| **Open access** | • Uncommitted spare capacity can be used by third parties<br>• “Use it or lose it” applies<br>• Principles encapsulated in the Network Code |
| **Operational + capital efficiency** | • Only efficient capital investment and cost will be rewarded by the regulated tariff<br>• Encourages fit for purpose investment and discourages pre-investment/over-investment |
| **Cross border regulation** | • Regulatory harmonisation<br>• Tariff setting for cross border assets |

# Molecule regulation

| | |
|---|---|
| **Price Cap** | • Maximum price set by a basket of alternatives<br>• Needs to be set at a level which encourages investment |
| **Non Discrimination** | • Standardised price curve<br>• Standardised contracts<br>• Rules of supply applicable to all customers |

# Recommendations and Way Forward

# A few lessons

## Sasol has been involved in the gas industry in South Africa for over 50 years, only company to have monetised Mozambican gas

- Multilateral involvement underpinned by public private partnership:
  - Sasol partnered with the governments of Mozambique and South Africa; and
  - Both governments own a stake in the ROMPCO pipeline.
- Enabling regulatory and fiscal environment – regulatory certainty:
  - The Regulatory Agreement between Sasol and the government of South Africa provided the regulatory certainty required & led to the tripling of the size of the gas industry in 10 years; and
  - An appropriate degree of regulation that incentivises investment in and growth of the industry.
- Demand for gas: secure anchor customers to provide base load:
  - An anchor customer in the form of Sasol provided the base load certainty to achieve bankability of the Mozambican gas project.
- Investment in infrastructure slightly ahead of demand.
- Sources of gas molecule.

sasol
reaching new frontiers

# Thank you