



Oil and Gas Indaba presentation

Overview of the Natural Gas Value Chain and BEE Opportunities

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Gas

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Natural Gas



LPG liquid petroleum gas

Produced from underground reserves



- Sasol Petroleum International
 - Exploration, production, processing
- ROMPCO
 - Transportation
- Sasol Gas
 - Marketing
- Sasol Chemical Industries & Sasol Synfuels
 - Consumption

Produced in refinery process



- Sasol Synfuels & Natref
 - Production
- Sasol Oil
 - Wholesale
- Afrox
 - Supply contract

What is natural gas?

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- **Natural gas is a clean burning fossil fuel**
- Natural gas is a combustible mixture of hydrocarbon gases, mainly methane (over 90%)
- It is one of the cleanest, safest, and most useful of all energy sources
- It is found in reservoirs underneath the earth and commonly associated with oil deposits
- Once brought from underground, it is refined to remove impurities like water, other gases, sand, and other compounds



What is a Gigajoule?

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A **GJ** is approximately:

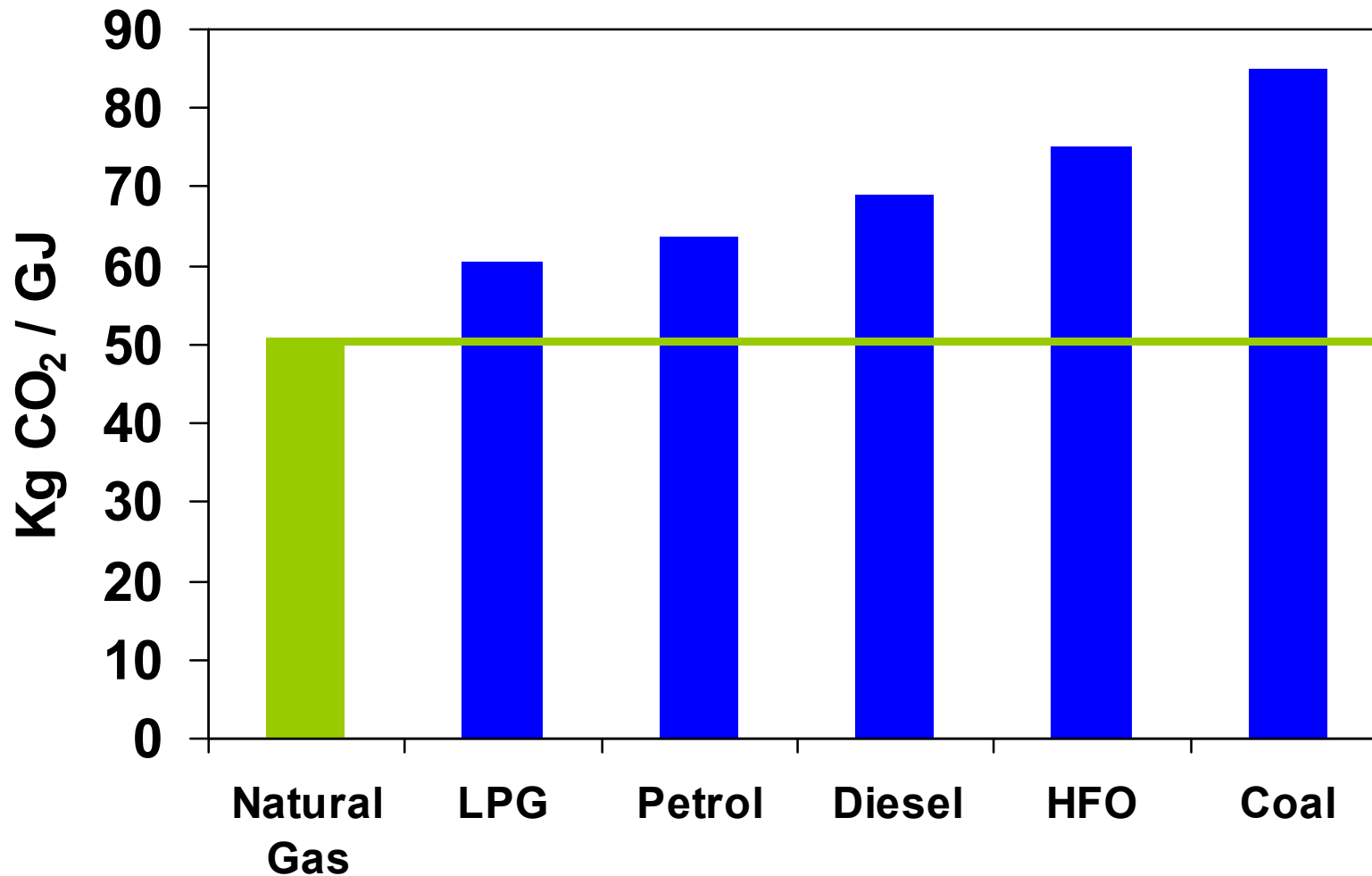
- 980 Kit-Kat 48g bars (normal not chunky)
- two 9kg bottles of LPG
- 36.4kg of coal
- 26L of diesel
- 42L of ethanol
- 4630 60W bulbs burning for an hour
- a 3x3x3 room full of natural gas



48 kg cylinder
= 2 GJ

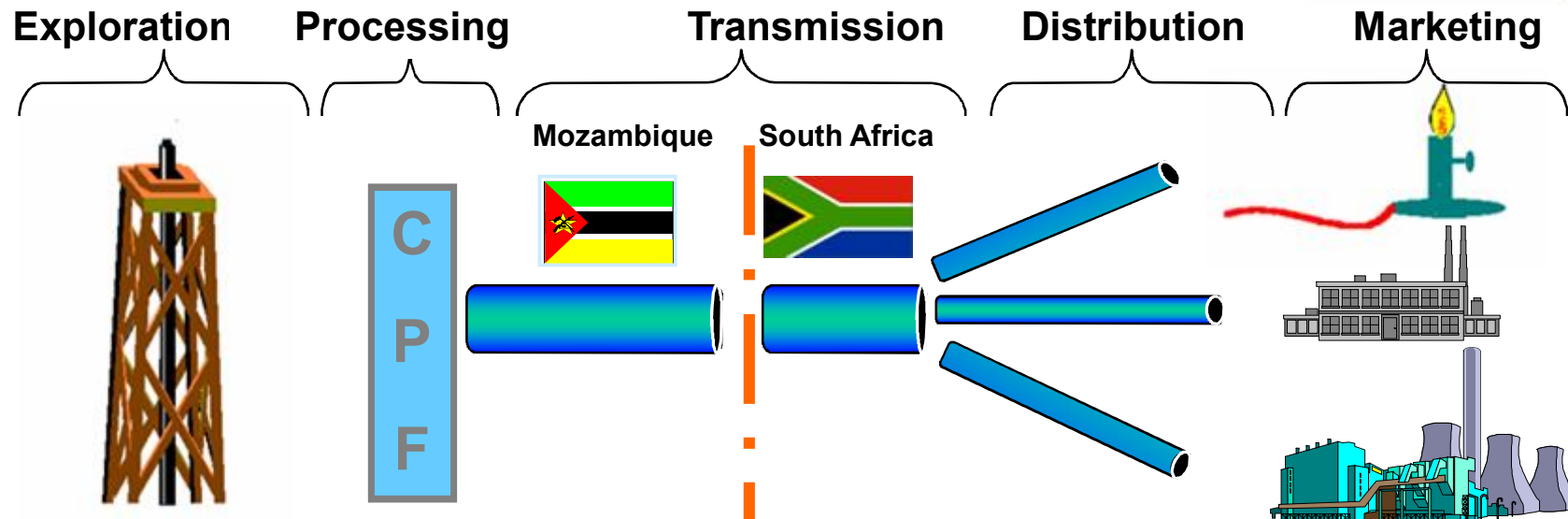
***CO₂ Emission from Natural Gas vs.
Various Other Fossil Fuels***

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**Conversion of 10 ton coal boiler to natural gas
→ 9 253 ton CO₂/annum**

Partners in the Sasol Natural Gas Value Chain



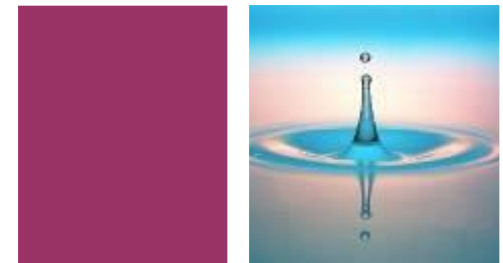
INP (Regulator in Mozambique)		NERSA (Regulator in SA)	
Field - onshore <ul style="list-style-type: none"> ▪ SPT 70% ▪ ENH / CMH 25% ▪ IFC 5% Field - offshore <ul style="list-style-type: none"> ▪ SPS 50% ▪ ENH 15% ▪ Petronas 35% 	CPF <i>(central processing facility)</i> <ul style="list-style-type: none"> ▪ SPT 70% ▪ CMH 25% ▪ IFC 5% 	Pipeline (ROMPCO) <ul style="list-style-type: none"> ▪ Sasol Gas Holdings 50% ▪ iGas 25% ▪ CMG 25% 	Market <ul style="list-style-type: none"> ▪ Sasol Gas external markets ▪ Sasol Gas internal markets <ul style="list-style-type: none"> • Spring Lights Gas (49%) • Sasol Synfuels • Sasol Chemical Industries
External Financiers			

What is Unique in the South African Natural Gas Market



Types of Gas:

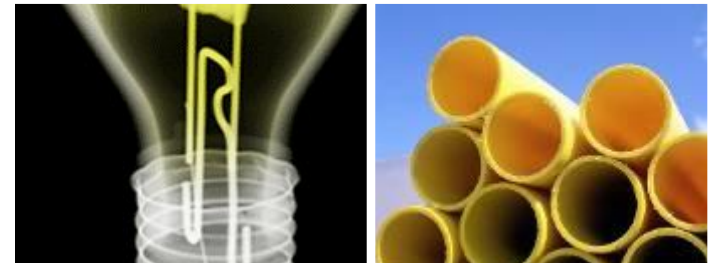
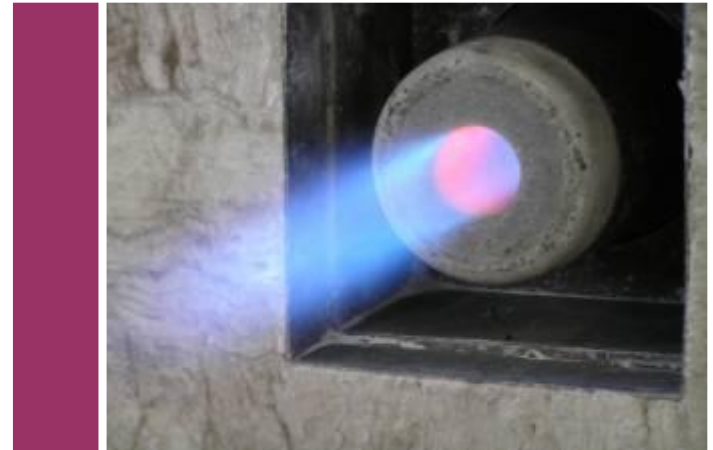
- Natural Gas from Mozambique
 - Mossgas NG from EP off-shore
 - MRG from Secunda
-
- Limited proven gas resources
 - Single source value chains
 - Abundance of cheap coal available
 - Coal dominates electricity generation
 - Domestic gas market only viable in niche areas

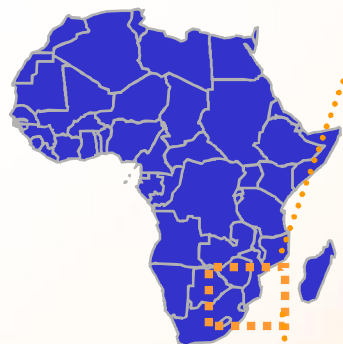


Sasol Gas Pipeline Business



- South African Gas Distribution Corporation (Gascor) formed in 1964, supplying gas from coal to few localised customers
- Natural gas introduced in March 2004
- Products
 - *Natural gas and*
 - *Methane rich gas*
- Pipelines
 - 1977: ~800 km
 - 1997: ~1 350 km
 - 2007: ~2 600 km
 - (of which 580 km is owned by Petronet and used for methane rich gas)*
- Approximately 550 customers





Gas Pipelines: South Africa & Mozambique



Vilanculos

Germiston

Sasolburg

Nelspruit

Secunda

Maputo

- ROMPCO Pipeline
- Sasol Gas Pipelines
- Petronet Pipeline
- Motola Gas Pipeline

Produced by:
SASOL GAS GIS TEAM
Alrode
March 2006
REV 001

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The South African Gas Market



- Mainly industrial and commercial customers

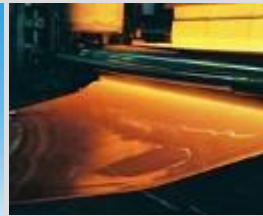
Metal Industries



Bakeries, hotels, restaurants



Glass manufacturing



Paper manufacturing

Ceramic products



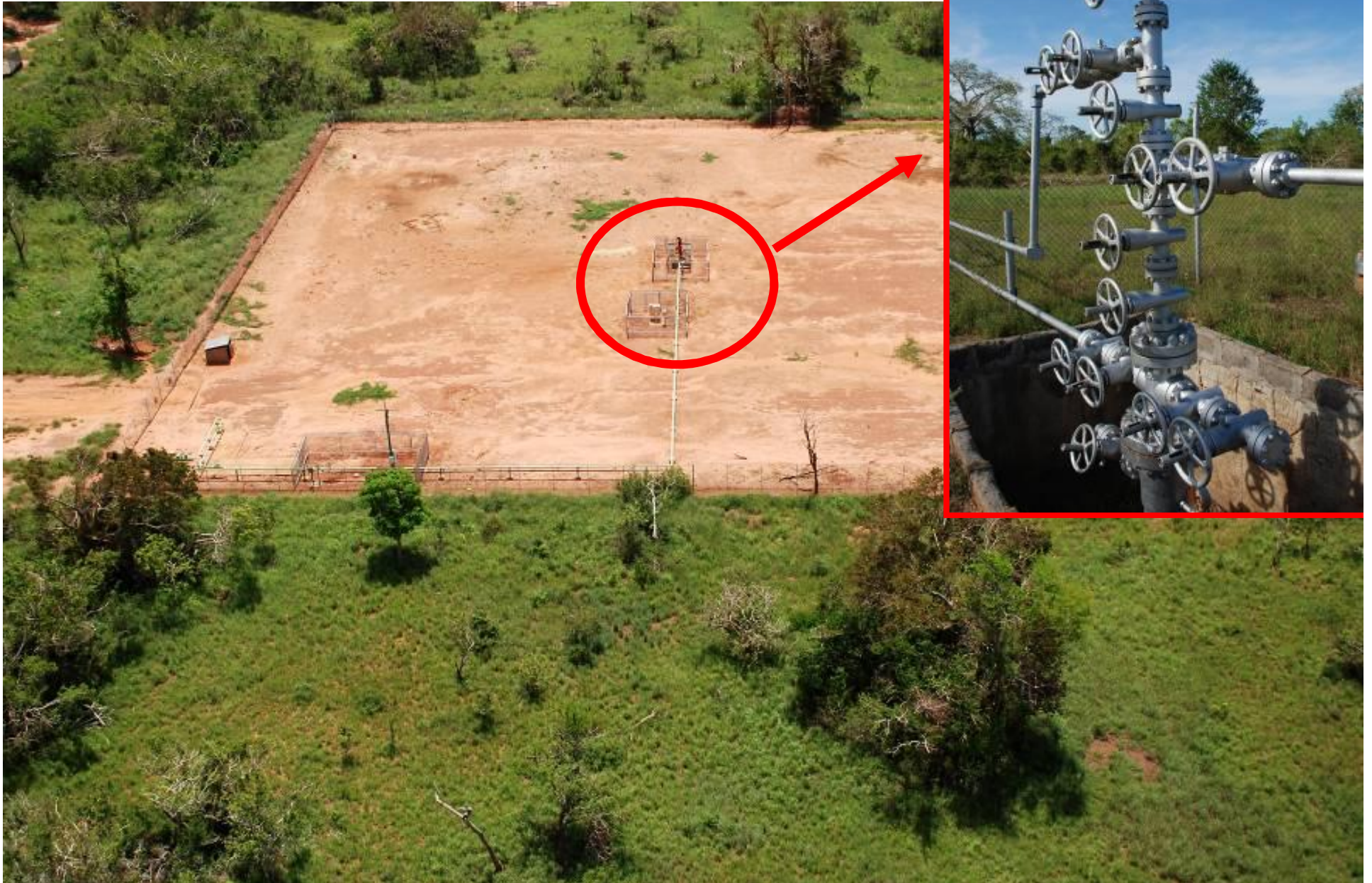
Brick manufacturing

- Competes with existing alternative energy sources (LPG, IP, fuel oil, electricity, coal etc)
- Growth reliant on price competitiveness with alternative energy sources

*From the beginning....
Pande Drilling in Mozambique*



Well head – Temane Mozambique



Central Processing Facility, Feb 2004

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Aerial view of CPF, Temane Mozambique, 2007

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Lowering gas pipes

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*First compressor station site, before construction,
Komatipoort, South Africa*

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*Komatipoort Compressor Station construction,
June 2009*



Aerial view of the complete Komatipoort Compressor Station in 2010



CMS – Point of supply at the customer end

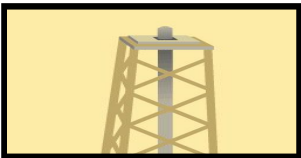
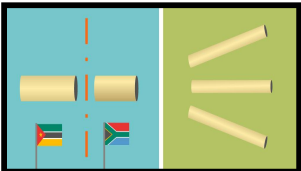
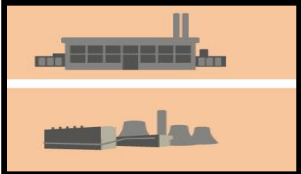
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BEE opportunities



- Opportunities can be in the form of equity, ownership or service rendering
- BEE opportunities can be found in the following areas of the natural gas value chain:

	Natural Gas Value Chain
	Exploration – The process of extracting gas occurs upstream of the value chain in Mozambique. Opportunities are there for capital investment in this area.
	Pipeline Infrastructure – Infrastructure consists of both transmission and distribution of gas downstream between RSA and Mozambique through the Mozambique- Secunda pipeline. Opportunities include construction, maintenance and provision of supplies
	Trading - Gas is sold to various markets by traders who buy gas from Sasol and re-sell at a determined price. The price of selling gas is subject to various factors including the rand/ dollar exchange and the international price of crude oil.



- Spring Lights is a natural gas trader that operates in Kwazulu-Natal
- The company is 51% owned by Spring Lights Gas and 49% owned by Sasol Gas Limited
- Spring Lights Gas currently operates in the following areas in Kwazulu-Natal:
 - *Durban North*
 - *Jacobs*
 - *Mobeni*
 - *Athlone / Umbogintwini*
 - *Isipingo/ Prospecton.*

BEE Success: Komatipoort Compressor Station Project
BEE and Local content – 25 Sept 09



Category	BEE	Local content
Target	30% (excl Compressors)	50% (excl Compressors)
Actual % of total	66.61%	59.66%



● Thank you

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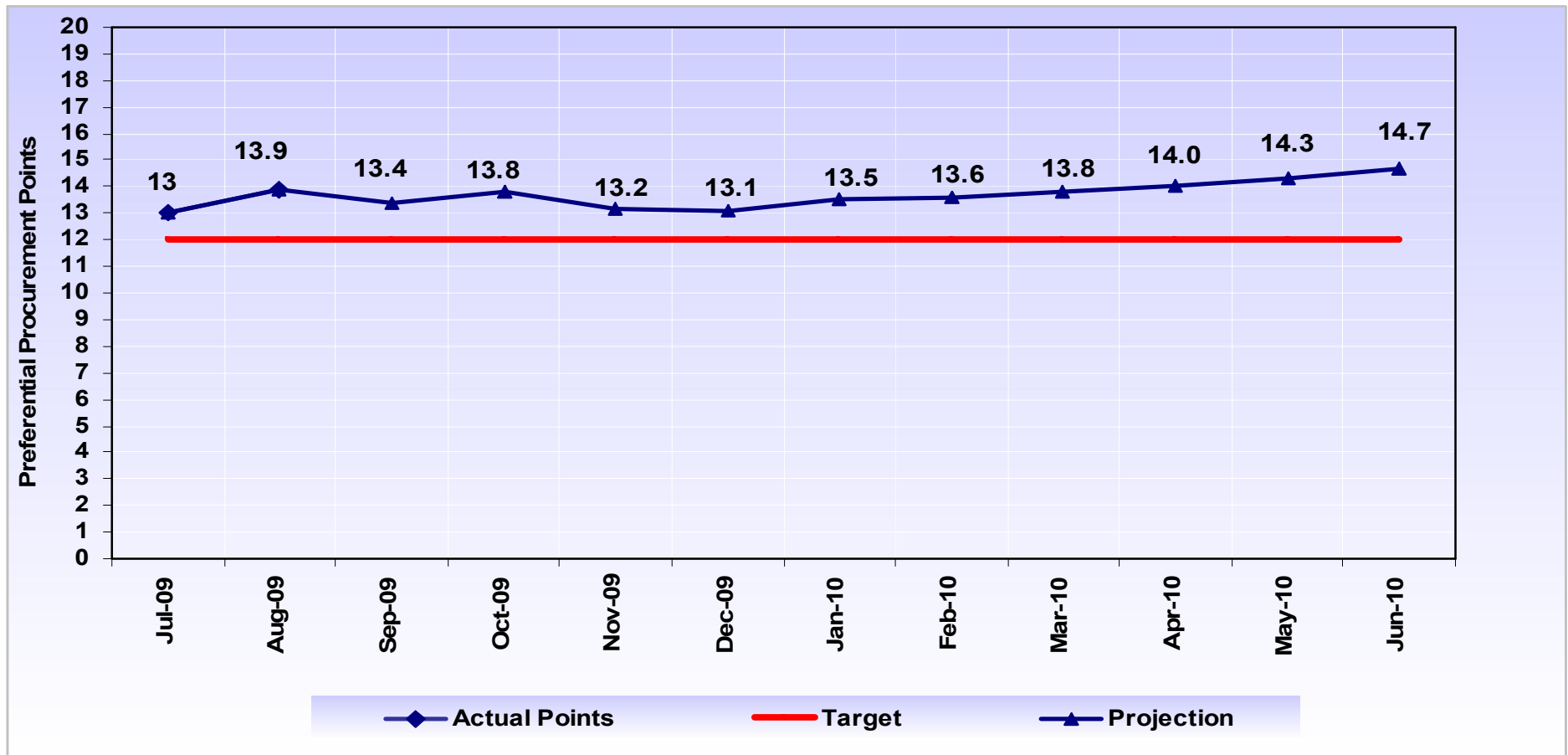


***BEE Incentive
FY10
Sasol Limited***

21 July 2010

Preferential Procurement reporting FY10

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Skills Development reporting FY10



SKILLS DEVELOPMENT		Weigh ting	Target	Achieved	Score
Skills Development					
	Skills Development Expenditure on Learning Programmes specified in the Learning Programmes Matrix for black employees as a percentage of Leivable Amount using the Adjusted Recognition for Gender	6	3%	90.52%	5.40
	Skills Development Expenditure on Learning Programmes specified in the Learning Programmes Matrix for black employees with disabilities as a percentage of Leivable Amount using the Adjusted Recognition for Gender	3	3%	0.00%	0.00
Learning Programmes					
	Number of black employees participating in Learnerships or Category B, C and D Programmes as a percentage of total employees using the Adjusted Recognition for Gender	6	5%	100.00%	6.00
SKILLS DEVELOPMENT TOTAL		15			11.40