PANDE-TEMANE GAS FIELDS
SASOL – CMH – IFC PPA UJV

Initiating development and monetization of Mozambique’s substantial natural gas resources in an environmentally sustainable manner, thereby contributing towards economic growth and poverty reduction.

Maputo Gas Competence Seminar, September 2015
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Summary of the PPA Temane and Pande Fields

The PPA UJV is made up of Sasol Petroleum Mozambique (SPT) 70%, Companhia Moçambicana de Hidrocarbonetos SA (CMH) 25%, and the International Finance Corporation (IFC) 5%

**Temane Field**
- Discovered: 1957 (Gulf Oil)
- Acquired by Sasol: 2003
- Acreage: Mozambique Basin
- Brought on Production: 2004
- Production Wells: 12

**Pande Field**
- Discovered: 1961 (Gulf Oil)
- Acquired by Sasol: 2003
- Acreage: Mozambique Basin
- Brought on Production: 2009
- Production Wells: 12
The PPA UJV as Part of a Southern African Integrated Gas Project

A 865km 26-inch diameter Pipeline between the Gas Fields and Sasol’s plant in Secunda, South Africa, including 5 take off-points in Mozambique for domestic gas use.

Development of Gas Fields in Mozambique Inhambane Region (Pande and Temane)

A Central Processing Facility (CPF) to process/clean the gas before transport.
## Components in Mozambique and South Africa

### Mozambique
- Temane/Pande Gas Field Development
- Central Processing Facility (CPF)
- Pipeline between Temane and Ressano Garcia (at the border)

### South Africa
- Pipeline between Komatipoort and Secunda
- Secunda Synthetic Fuels Plant Expansion
- Sasolburg Plant Conversion
- Natural Gas Network Conversion
Offtake to Facilitate the Development of Gas Fields in Mozambique

**Mozambique**

- Pande: Central Processing Facility
  - Natural gas fields
  - 2016: 197 MGJ/a
  - 2012: 183 MGJ/a
  - 2004: 120 MGJ/a

- Temane: Central Térmica Ressano Garcia 175 MW
  - 3rd parties

- ENH Maputo Reticulation
  - Royalty gas to ENH: Vilanculos
  - 2016: ~9 MGJ/a
  - 2012: 4 MGJ/a
  - 2004: <1 MGJ/a

- >300% Growth consumption
  - 2016: >300%

- 865km Rompco Pipeline

- South Africa

- Temane: Growth consumption
  - 2016: >300%
  - 2012: 4 MGJ/a
  - 2004: <1 MGJ/a

- 3rd parties

- Central Térmica Ressano Garcia 175 MW

- Royalty gas to ENH: Vilanculos

- ENH Maputo Reticulation

- 865km Rompco Pipeline
World Bank Group Approach to Mobilize Private Financing and Mitigate Political Risks

**IFC**
International Finance Corporation

*Solutions in private sector development*

**MIGA**
Multilateral Investment and Guarantee Agency

*Guarantees of foreign direct investment’s non-commercial risks*

**IBRD**
International Bank for Reconstruction and Development

*Loans to middle-income and credit-worthy low-income country governments*

**IFC Investment and Advisory Role:**
- Equity investment in Upstream
- Advisory assistance to CMH in mobilizing financing for the Upstream
- Facilitating local participation

**Political Risk Cover for equity and debt to SPT & Rompco including:**
- Breach of contract
- Currency transferability
- Expropriation
- War & Civil Disturbance

**Political Risk Cover for debt to SPT & Rompco including:**
- Sovereign obligations including changes in laws
- Currency transferability
- Expropriation
MIGA Phase I: Political Risk Cover for Equity

- **SPT Equity Guarantee USD27 m**
- **ROMPCO Equity Guarantee USD45 m**

**Diagram:***
- **MIGA**
  - SASOL
    - SPT
    - ROMPCO Branch
  - ROMPCO
    - Equity

**Locations:**
- South Africa
- Mozambique
Using IBRD Guarantees to Support Private Enclave Project in Mozambique

First IBRD enclave guarantee:
• Proposed guarantee for an export-oriented, commercial project generating foreign-exchange outside of Mozambique
• Adequate arrangements ensuring that the borrower will be able to meet its obligations to IBRD in respect of IBRD guarantee of the loan

Use of a PRG is critical in achieving financial close:
• Risk of the transaction
• Benefits from an explicit counter-guarantee
• Linkage with Bank’s remedies, Bank’s sector dialogue and conditionality
IFC as Equity Investor in Upstream at the PPA UJV: Enabling Mozambican Participation

- Large project needed Mozambican participation to allay political risk and to give a sense of ownership
- Mozambique’s dilemma: How to fund its equity without recourse to government money?
- IFC advised on strategic options to fund equity with a focus on local participation
- IFC also a 5% equity holder that invests alongside SPT and CMH
Macro Level Project Benefits

- **Long-term benefits from the provision of major infrastructure**
  - Local gas market development through 5 take off points
  - Gas exploration and gas-based industries

- **Fiscal Benefits: Royalties and taxes over 25 years**
  - Revenues transparently accounted for in the budget
  - Monitoring arrangements for expenditures through MTEF

- **Additional revenues from returns on GoM equity participation**

- **Environmental benefits through usage of cleaner fuel**
Facilitating Shared Value in Mozambique

- Targeted skills development of Mozambican nationals to sustain the oil and gas industry at various levels
- Advance the bursary and learnership program as well as university collaboration

- Local content policy stipulates local ownership, but also local employment and purchase of local materials
- Preferential procurement giving preference to Mozambican businesses wherever possible without compromising on safety and quality standards

- Dedicated focus on driving localisation and allocation of Mozambican nationals to various levels
- Central Processing Facility is led by a Mozambican national and the maintenance department is being run by 100% Mozambicans
- To enhance the employee value proposition, currently building a housing village in Vilanculos to accommodate CPF employees and their families
Community Social Responsibility Initiatives – Education

- Building and supporting schools in Inhambane, Gaza and Maputo provinces;
- Provision of learning equipment and material for different schools including desks and computers;
- Infrastructure support for the development of Mabote Vocational School;
- Enhance students skills to improve access to learning techniques and therefore improve their performance;
- A capacity building program to strengthen teachers’ skills in science related subjects in order to impact on the students’ performance;
- A bursary program in partnership with MIREM, is in its third year and provides bursaries annually for tertiary study in the oil and gas sector.
Community Social Responsibility Initiatives (continued) – Vocational training, Health and Water

- A learnership program, established in 2011 to fast-track the development of artisans in the fields of electrical, instrumentation, mechanical fitting and production;
- A Memorandum of Understanding with Eduardo Mondlane University aimed at leveraging Sasol’s university collaboration approach to build the necessary value adding capabilities;
- Contribution to improved health and sanitation through the construction of water systems in Inhassoro (Manusse) and Funhalouro districts;
- Implementation of a small-scale community-based savings and credit association with the objective to promote community savings for small investments within the Chinhacaneni and Ndonga villages in Gaza province.
Objective of the PPA UJV is to Increase Local Content with the following benchmarks by end of 2015

Local Mozambican supplier content will be maximized to the fullest possible extent.

The local content strategy has been rolled out at the CPF, with the process of identifying local content in country initiated;

95% positions will be based in-country and occupied by local Mozambique’s (mix of 95% Mozambicans and 5% expatriates). To achieve the following changes will be implemented:

- Localize Mozambique workforce to Vilankulo once the housing complex is completed;
- Phasing out the rotation system and implementing shift system where required;
- Reduce the number of South African Expats/Rotation staff working at the CPF from the current 50 to 9 over the course of 2015.
Objectives Of the FV TOOL

- Strengthen stakeholder analysis and integration of community priorities
- Develop a business case for strategic community investments
- Design a long-term risk management strategy
- Facilitate internal decision-making through objective analysis across business functions
- Monitor effectiveness of local investments over time
Key terms: value creation & value protection

Direct Value Creation - The discounted cash flows of a cost-benefit analysis of the sustainability investments (e.g. input savings or productivity gains).

Indirect Value Protection - The value assigned to the risk mitigation achieved through sustainability investments (e.g. reduced risk of delay, disruption, added costs)

**Value Creation (Direct Benefits)**

- **Increased efficiency** local labor inputs
- **Increased productivity** and quality of tree crop
- **Savings** resulting from local contractor development and reduction in extension and administrative costs
- Building goodwill and ‘social license to operate’ resulting from improved local livelihood opportunities, improved local skills base, contribution to local economy, etc.

**Value Protection (Savings from Avoided Risks)**

- **Reduce added costs**: reduce # of community complaints and demands for employment opportunities; reputation management costs
- **Reduce project delays and disruption**: community disturbance due to lack of livelihood/economic opportunities and revenue-generating activity (road blockage, outrage, sabotage/arson, lock out)