Current Petroleum Activities in South Africa

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• Roles of the Agency
• Types of permits and rights
• Petroleum Exploration and Production Activities
• Open Acreage
• Application processes
• Oil and Gas Bill
• New Developments
• Publications
1. Promotes and regulates all upstream activities onshore and offshore

2. Custodian of the national petroleum exploration and production database.
**Permits**

**Reconnaissance Permit**
Allows holder to acquire multi-client geo-physical data by conducting speculative surveys i.e. seismic, multi beam bathymetry, airborne surveys.

(Valid for 12 months, not transferable or renewable, not exclusive, Holders receives exclusive right to market and sell data for a maximum period of 10 years)

**Technical Co-operation Permit:**
Allows holder to undertake desktop study of the area

(Valid for 12 months, not transferable or renewable, holder has exclusive right to apply for Exploration right)
Exploration Right:
Allows holder to explore for petroleum and produce for testing purposes subject to Minister’s written permission

- Valid for initial period of 3 years and renewable for 3 periods of 2 years each (9 years in total);
- Transferable subject to Minister’s written permission;
- It’s exclusive and holder has exclusive right to apply for Production Right.

Production Right:
Allows holder to produce petroleum

- Valid for initial period of 30 years and renewable for further periods not exceeding 30 years each;
- Transferable subject to Minister’s written permission;
- It’s exclusive and holder has exclusive right to apply for renewal.
OFFSHORE SA - EXPLORATION ACTIVITY AND DEVELOPMENTS
Offshore rights and permits:

6 Production Rights
17 Exploration Rights
2 Technical Cooperation Permit
Several applications/conversions in process
Rights and major operators

- **Shallow-water** – AEC, Simbo, Sasol, Rhino Oil, Tosaco
  - Sunbird - Production right around Ibhubesi
- **Mid-Basin** – Sungu Sungu and Sezigyn
- **Deep-water** – Ricocure, Sezigyn, Impact
- **Southern basin** – Anadarko and PetroSA
GREATER OUTENIQUA BASIN
Bredasdorp, Pletmos, Gamtoos, Algoa and Southern Outeniqua sub-basins
Total, CNR, Silverwave in the deep water.
SOUTH COAST DEEPWATER DRILLING

Total 45% Qatar Petroleum 25% CNR 20% Main Street 10%
Drilling first 1/4 2019 – Odfjell’s Deepsea Stavanger

Block 11B/12B:

Brulpadda Discovery
175 km offshore to the south east of Mossel Bay
Well: Brulpadda-1AX
Status: Successful
Reservoir: 57 m of gas condensate
Well depth: 3 633 m
RIGHTS AND MAJOR OPERATORS

**EAST COAST**

**Shallower water** – ExxonMobil, Statoil and Impact - 2 ERs
Sasol and ENI – ER in **deep water**
Silver Wave and ExxonMobil in the **ultra deep water**

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**Graphic**

- **ExxonMobil (40%)**
- **Statoil (35%)**
- **Impact Africa (25%)**
- **SASOL (60%)**
- **ENI (40%)**
- **Silver Wave**
Onshore SA - Exploration Activity and Developments
Onshore rights and permits:

1 Production Right
17 Exploration Rights
8 Technical Cooperation Permits

CURRENT ONSHORE ACTIVITY

Tshipise Energy
TOSACO
KINETIKO
SUNBIRD ENERGY
Rhino Resources Ltd.

Biogenic Gas
Coal Bed Methane
Shale Gas
Gas shows were discovered in the Free State and Evander goldfields and are the most promising targets for biogenic gas at present.

- First onshore natural gas Production Right awarded in September 2012.
- Renergen’s TETRA4 - Compressed natural gas used to power Megabus local service.
- Independent reserve valuation* of ZAR 6.6bn.
- Assets in Virginia in the Free State - 2P 127.4 Bcf.
The Mopane Project
- Best Estimate GIP of 1.9 Tcf

Lephalale Project
- Recoverable 1 Tcf

Amersfoort Project
- Contingent resources GIP 2.4 Tcf
Play fairway in southern part of basin
EIA: reporting 370 Tcf (2015)
Petroleum Agency SA’s conservative
Previous Best estimate 36 Tcf
recoverable (Whitehill only)

Revised to 205 Tcf recoverable

• All target formations
• Additional legacy data – prospective area increased 3 fold
• Estimates now include adsorbed as well as free gas
• Detailed basin modelling
OPEN ACREAGE
Oil and Gas Bill

- Current Oil and Gas including minerals are governed by the Mineral and Petroleum Resources Development Act (MPRDA), 2002
- The Agency is currently involved in the process of drafting separate Oil and Gas Legislation (Process currently ongoing)
NEW DEVELOPMENTS

• Moratorium: No new applications
• Shift in licensing regime – allowing all new licensing by invitation
  (Does not affect the rights of current holders – eg TCP to ER, renewals, ER to Production)
PUBLICATIONS FOR PURCHASE
OFFSHORE

Studies: East Coast Basin Analysis and Gamtoos Basin Analysis
2013 – 2017
Regional Basin Analysis Study

Purpose of Study: to fully understand basin development, architecture and its petroleum potential (from an Agency perspective)

Output: 2 Publications

Available for purchase
PUBLICATIONS

ONSHORE

Studies: Shale Gas and Coalbed Methane

Purpose of Study: to assess the petroleum potential for the relevant basin

Output: 2 Publications

Available for purchase
**CURRENT STUDIES: PLETMOS BASIN ANALYSIS**

- **Phase 01 (2017)**: Project plan & Data Loading (plus QC)
- **Phase 02 (2018)**: Seismic & Structural interpretation
- **Phase 03 (2019)**: Sedimentological interpretation including well analysis and seismic/sequence stratigraphy
- **Phase 04 (2020)**: Basin Analysis including maturity modelling, play fairway analysis and hydrocarbon potential
- **Phase 05 (2021)**: Publication
- **2022**