

# PETROLEUM EXPLORATION AND PRODUCTION ACTIVITIES IN SOUTH AFRICA

**Restriction Notice on Applications**  
 As of the 28 of June 2018, no new applications for Technical Cooperation Permits, Exploration Rights and Production Rights will be received until a notice of invitation for application is published.  
 This affects all acreage offshore  
 It does not affect:  
 • Reconnaissance permits - i.e. spec surveys/multi-client surveys  
 • Applications made before the 28th June 2018  
 • Current permit and right holders' exclusive rights to apply for exploration rights (from a TCP) or production rights (from an ER)  
 The above-mentioned restriction does not apply to onshore areas under restriction notice dated 3rd February 2014.

**Mineral and Petroleum Resources Development Act, No.28 of 2002.**  
**Role of Petroleum Agency SA**  
 Under section 71 of the above Act, Petroleum Agency SA has been appointed the designated Agency, with the following responsibilities:  
 • Promotion and regulation of exploration and production on and offshore  
 • Receive applications, evaluate and recommend the award of permits and rights  
 • Review, evaluate and recommend approval of EMPs  
 • Monitor compliance of licence conditions  
 • Maintain and add value to the national petroleum exploration and production database  
 • Acquire reconnaissance data  
 • Collect all prescribed fees

**Permits and rights**  
 The above Act defines the following permits and rights:  
 • Reconnaissance Permit - 12 months, non-exclusive  
 • Technical Cooperation Permit - 12 months, exclusive desk-top study, exclusive right to apply for Exploration Right  
 • Exploration Right - exclusive, transferable, 3 years, renewable for a maximum of 3 periods of 2 years each  
 • Production Right - exclusive, transferable, 30 years, renewable

**PANDE & TEMANE GAS FIELDS**  
 Combined reserves in excess of 5.5 Tcf.  
 Now operated by Sasol/ENH partnership.

ONSHORE RIGHTS			ONSHORE APPLICATIONS		
REF NUM	TYPE	CLIENT NAME	REF NUM	TYPE	CLIENT NAME
12/2/248	TCP	Serpentine Energy	12/2/234	TCP	Rhino Oil
12/2/253	TCP	Oakleaf Energy	12/2/238	TCP	Solium Energy
12/2/254	TCP	Oakleaf Energy	12/2/239	TCP	Solium Energy
12/2/255	TCP	Jacana Energy	12/2/271	TCP	Light of the Nation Pet
12/2/256	TCP	Jacana Energy	12/2/272	TCP	Manazite Industries
12/2/257	TCP	Booi Brothers	12/2/273	TCP	Motuoane Energy
12/2/258	TCP	Motuoane Energy	12/2/274	TCP	Temla 13 CC
12/2/259	TCP	Motuoane Energy	12/2/275	TCP	Edrose Consulting (Pty)
12/2/260	TCP	Motuoane Energy	12/2/276	TCP	Sasol
12/2/261	TCP	Ooievaar (Pty)Ltd	12/2/277	TCP	Sasol
12/2/262	TCP	Houtkaper (Pty)Ltd	12/3/031/1A	ER	Tetra 4 (Pty)Ltd
12/2/264	TCP	Booi Brothers	12/3/202	ER	Bundu Gas and Oil
12/2/265	TCP	Serpentine Energy	12/3/208	ER	Falcon Oil and Gas
12/2/266	TCP	Aerios Energy (Pty)Ltd	12/3/214/1A	ER	Gold One Africa
12/2/267	TCP	Aerios Energy (Pty)Ltd	12/3/262/1C	ER	Booi Brothers
12/2/268	TCP	Aerios Energy (Pty)Ltd	12/3/270/1B	ER	Afro Energy (Pty)Ltd
12/2/269	TCP	Aerios Energy (Pty)Ltd	12/3/271/1B	ER	Afro Energy (Pty)Ltd
12/2/270	TCP	Aerios Energy (Pty)Ltd	12/3/272/1B	ER	Afro Energy (Pty)Ltd
12/3/315/1B	ER	Motuoane Energy	12/3/288/1A	ER	Twala Mnyamande
12/3/318/1A	ER	Rhino Oil	12/3/294/1A	ER	Rhino Oil
12/3/370	ER	Karabelo Energy	12/3/345	ER	Crowne Royale Energy
12/3/373	ER	Imbokodo	12/3/350	ER	Rhino Oil
12/3/374	ER	Imbokodo	12/3/367	ER	Boston
12/3/381	ER	Platau Helium SA	12/3/368	ER	Boston
12/3/382	ER	Platau Helium SA	12/3/369	ER	Boston
12/4/007	PR	Tetra 4 (Pty)Ltd	12/3/376	ER	Panora2B
			12/3/377	ER	Rhino Oil and Gas
			12/3/378	ER	Rhino Oil and Gas
			12/3/379	ER	Rhino Oil and Gas
			12/3/383	ER	Afro Energy
			12/3/386	ER	Motuoane Energy
			12/3/388	ER	H2Au Limited
			12/3/389	ER	H2Au Limited
			12/4/016	PR	Motuoane Energy
			12/4/017	PR	Thungela Operations

**KUDU GAS FIELD**  
 BW Kudu (56%) Namcor (44%)  
 Discovered in 1974 by a Chevron / Regent / Soekor consortium. The reservoir comprises Barremian (Early Cretaceous) aeolian sandstones with average porosities up to 22% at 4400m.

**AZINAM(75%) TOSACO(25%) 362ER**  
 Prospects/leads mapped in the drift sequence

**SUNBIRD (Operator) (76%) PETROSA (24%) 003PR**

**PETROSA (100%) 248ER**

**SHELL (40.5%) QATAR (40.5%) UMBONO (10%) OK ENERGY (9%)**

**IBHUBESI GAS FIELD**  
 Ibhubesi gas field comprises fluvial type channels and lobes of Albian to early Cretaceous age. Currently, this production right is under a Gas Market Development Plan with an Integrated Field Development Plan (IFP) ongoing.

**SUNGU-SUNGU Petroleum (100%) 223ER**  
 Reprocessed 2D seismic data. Currently evaluating prospectivity in the drift sequence

**ONSHORE / OFFSHORE KEY**

- PETROLEUM EXPLORATION WELL
- OIL SHOWS
- COAL FIRED POWER STATION
- GAS TURBINE POWER STATION
- POSSIBLE FUTURE GAS PIPELINE
- SEISMIC LINES
- KOEBERG NUCLEAR POWER PLANT
- COAL FIELD
- ONSHORE OPEN ACREAGE
- OFFSHORE OPEN ACREAGE
- AREAS UNDER APPLICATION
- TECHNICAL COOPERATION PERMIT
- EXPLORATION RIGHT
- PRODUCTION RIGHT
- MINING LEASE (OIL) - Block 9
- MINING LEASE (GAS) - Block 9

**Shell / PetroSA 224ER**  
 Interpretation of the recently acquired 3D seismic data is ongoing. Several prospective areas have been identified in the drift sequences

**E-CE GAS FIELD (PetroSA 100%)**  
 Originally the Sable oil field, gas was produced from this Aptian age deep marine channel sandstone reservoir. Block 9 production has been suspended.

**ORIBI/ORYX OIL FIELD (PetroSA 100%)**  
 Submarine fan deposits of Albian (Early Cretaceous) age. Production has been suspended.

**PETROSA BLOCK 9**  
 Ongoing exploration and appraisal of oil and gas discoveries. 061ER

**PADDAVISSIE FAIRWAY BLOCK 11B/12B**  
 Two discoveries on the Brulpadda and Luiperd wells confirmed a world class petroleum province, while three giant prospects remain untested in the Aptian-Albian basin floor fans of Block 11B/12B. Further prospectivity was identified to the east and northeast, following more recent seismic surveys across the license area.

**F-A GAS FIELD & SATELLITES (PetroSA 100%)**  
 Block 9 production has been suspended. Early Cretaceous shallow marine sandstone reservoirs. Separate 91km pipelines conveyed gas and condensate to the PetroSA GTL synfuels refinery at Mossel Bay where petrol, diesel, kerosene, etc has been produced. F-O Field, 4 wells drilled.

**IBHUBESI GAS FIELD**  
 TotalEnergies (33%)  
 QatarEnergy (24%)  
 Rivier (19.75%)  
 Africa Oil (17%)  
 Azinam (6.25%)

**PetroSA (100%) 283ER**

**Sungu Sungu**  
 TotalEnergies (40%)  
 Sezigyn (20%)  
 Qatar Energy (30%)  
 Petrobras (10%)

**Sungu Sungu Petroleum (100%) 223ER**  
 TotalEnergies (48.61%)  
 Impact Africa (22.22%)  
 Qatar Petroleum (29.17%)

**Karoo Basin**  
 Resource type: Shale gas  
 Applicants: Falcon & Bundu  
 Current status: Under application

Deep tight gas shale play?  
 Dry gas in fractured carbonaceous Ecca Group shales (Fort Brown Formation) on the flank of a dolerite sill.  
 Tested flow rate of 1.84 million scf/day at 2072 psi, (2563m to 2612) but showed depletion.

**PETROSA - BLOCK 11a 061ER**  
 Early Cretaceous shallow marine gas fields currently under appraisal.

**NEW AGE ALGOA (50%) 201ER**  
**RIFT Petroleum (50%)**  
 Prospectivity evaluation of the synrift and post rift sequences ongoing

**BG INTERNATIONAL (55%) IMPACT AFRICA (45%) 252ER**

**PRODUCTION AND MINING RIGHTS IN BLOCK 9**