

# **Offshore Oil & Gas Exploration and Production in South Africa: An overview of current and planned activities**



**Kick start Meeting for the South African Marine Research and Exploration Forum (SAMREF)**  
**23 July 2015**

# **Outline**

- Introduction: Petroleum Agency SA's mandate
- Brief exploration history in SA
- Oil and gas permits and rights
- Offshore current and future planned activities

# Introduction

- Petroleum Agency SA (the Agency) is designated in terms of the MPRDA by the Minister of Mineral Resources to perform the following key functions related to petroleum activities:
  - ✓ Regulatory;
  - ✓ Data Archiving; and
  - ✓ Promotion and Resource Evaluation.
- Functions of the Agency are set out in terms of section 71 of the MPRDA.

In terms of MPRDA, s.71: The designated agency must—

- ✓ promote onshore and offshore exploration for and production of petroleum;
- ✓ receive applications for reconnaissance permits, technical co-operation permits, exploration rights and production rights in the prescribed manner;
- ✓ evaluate such applications and make recommendations to the Minister;



# Functions of designated agency

- ✓ monitor and report regularly to the Minister in respect of compliance with such permits or rights;
- ✓ receive, maintain, store, interpret, evaluate, add value to, deal in all geological or geophysical information relating to petroleum submitted in terms of section 88;
- ✓ bring to the notice of the Minister any information in relation to the exploration and production of petroleum which is likely to be of use or benefit to the State;

The Agency has dual reporting lines of accountability:

- ✓ **Ownership:** Agency is a state-owned entity reporting through its shareholder CEF SOC Ltd to the DoE, and
- ✓ **Mandate:** The Agency receives its mandate from the Mineral & Petroleum Resources Development Act of 2002 (Act No. 28 of 2002). The said Act is administered by the DMR.



# History of Exploration & Production in SA

**First organised search for hydrocarbons**

Geological Survey of South Africa

**Mining Rights Act -1967**

Granted to number of international oil companies (i.e Total, Shell)

**Soekor (with Rand Mines) extend to offshore**

Sole explorer due to political sanctions

**Petroleum Agency SA 1999 and PetroSA 2001 (Merger of Soekor and Mossgas)**

1940's

1960's

1970-1980

1990

2000

Soekor (Formed by government) in 1965- onshore Karoo, Algoa and Zululand Basins

First offshore well in Pletmos basin -1969 by Superior

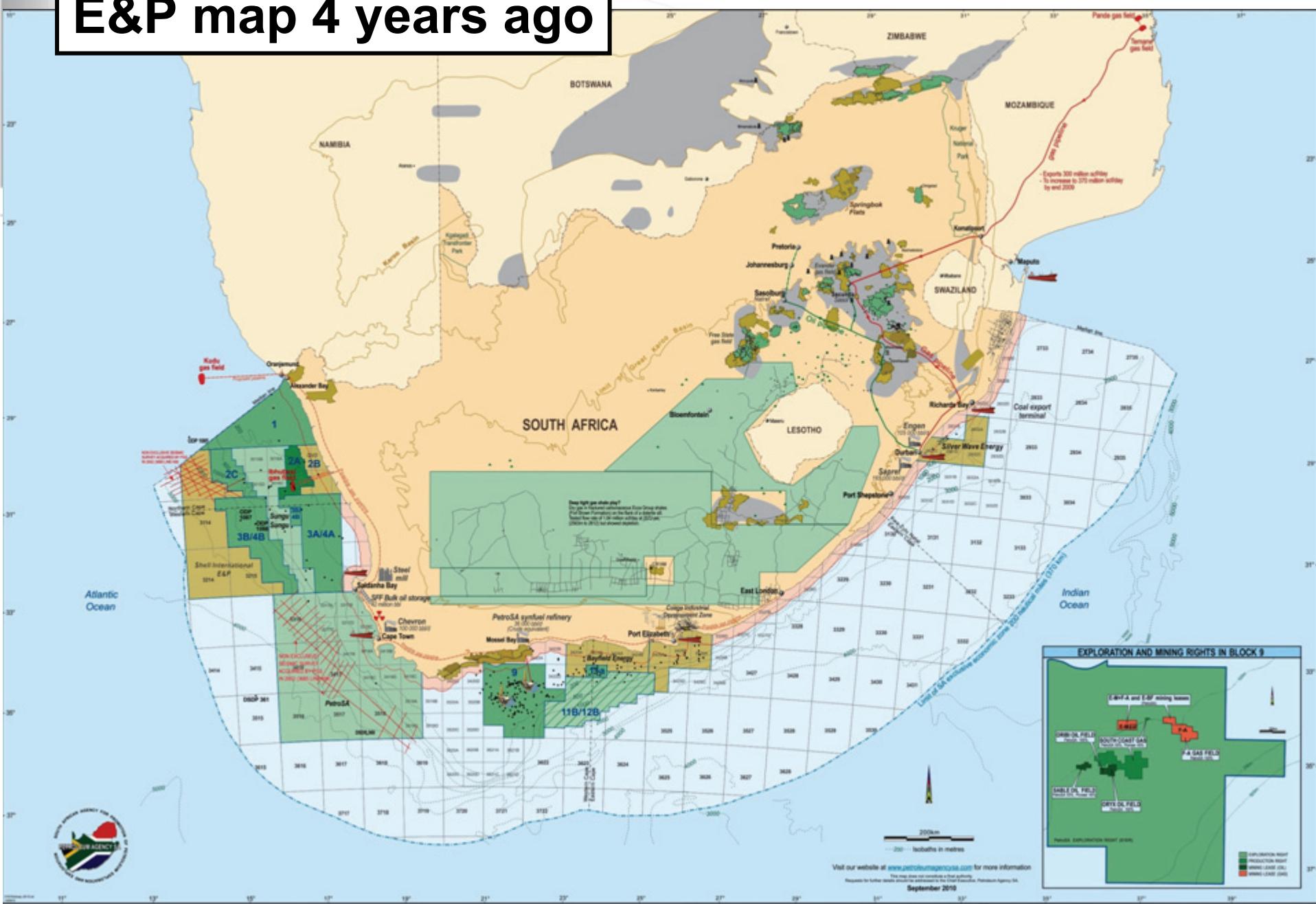
Licensing Round held in 1994- Offshore areas open to international investors

Mineral and Petroleum Resources Development Act passed- 2002 operational 2004

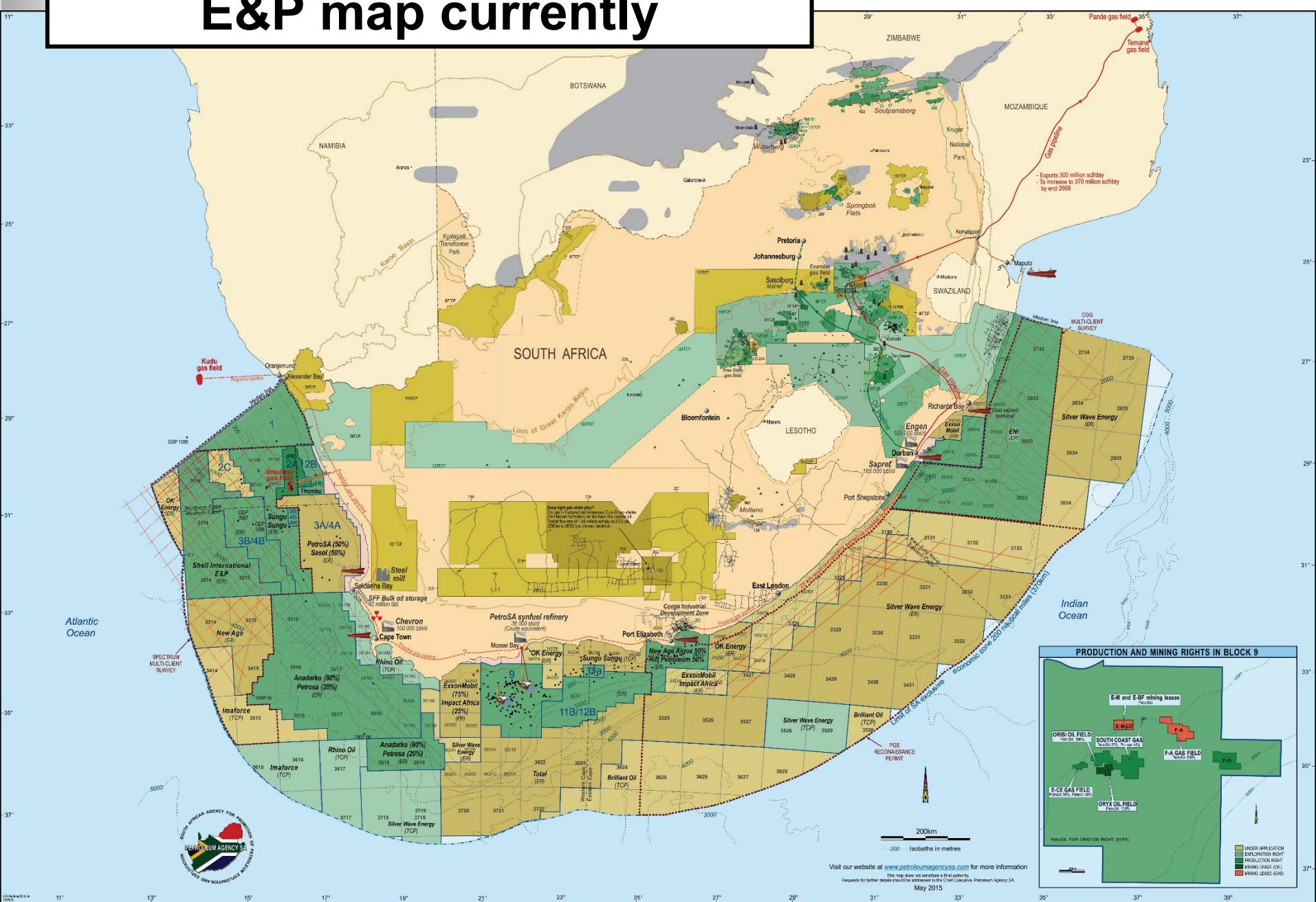
Exploration drilling was most active from 1981 to 1991 during which some 181 exploration wells were drilled. The Bredasdorp Basin has been the focus of most seismic and drilling activity since 1980.



# E&P map 4 years ago



# E&P map currently



# Granted Permits and Rights

PR: 6, ER: 12, TCP:1 & RP: 0



Taking on the world's toughest energy challenges.™



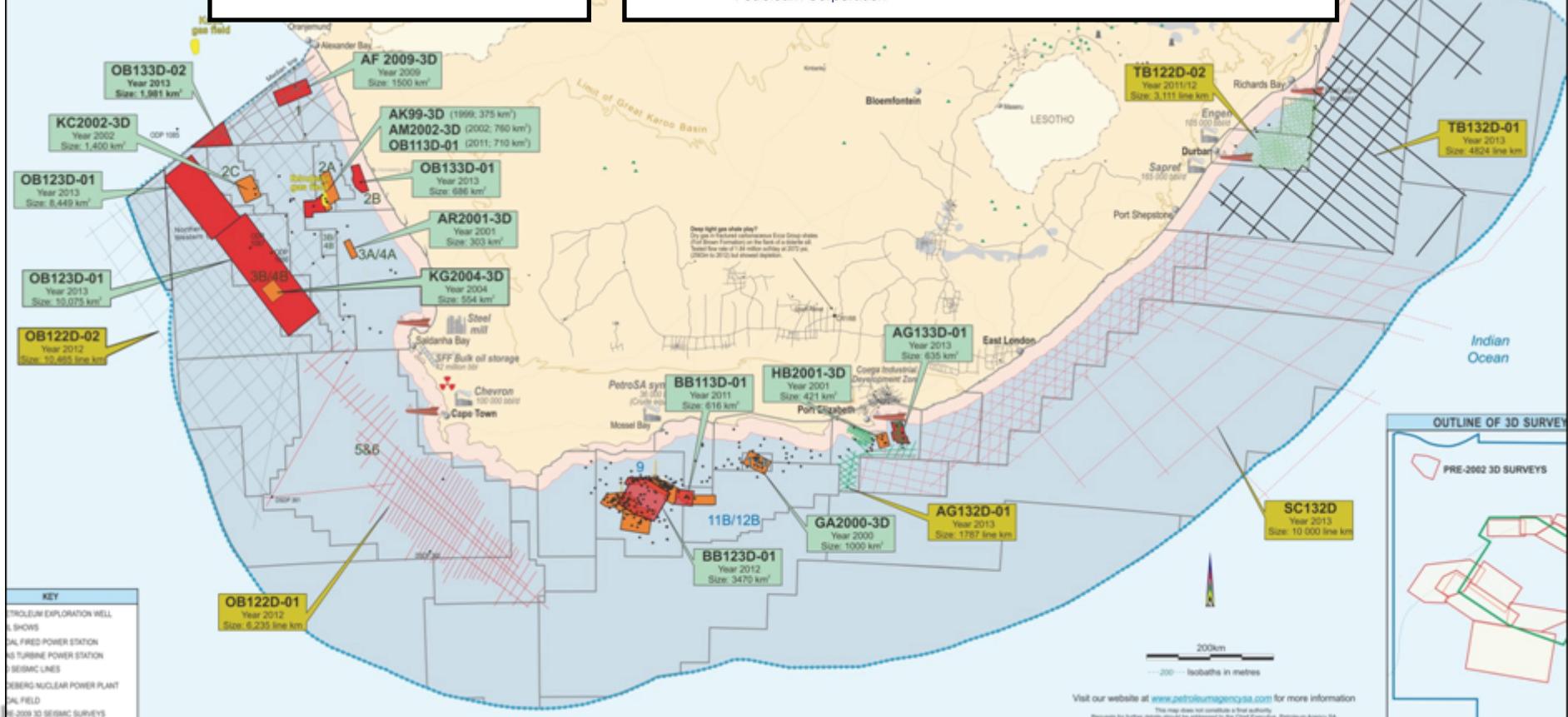
**TOTAL**



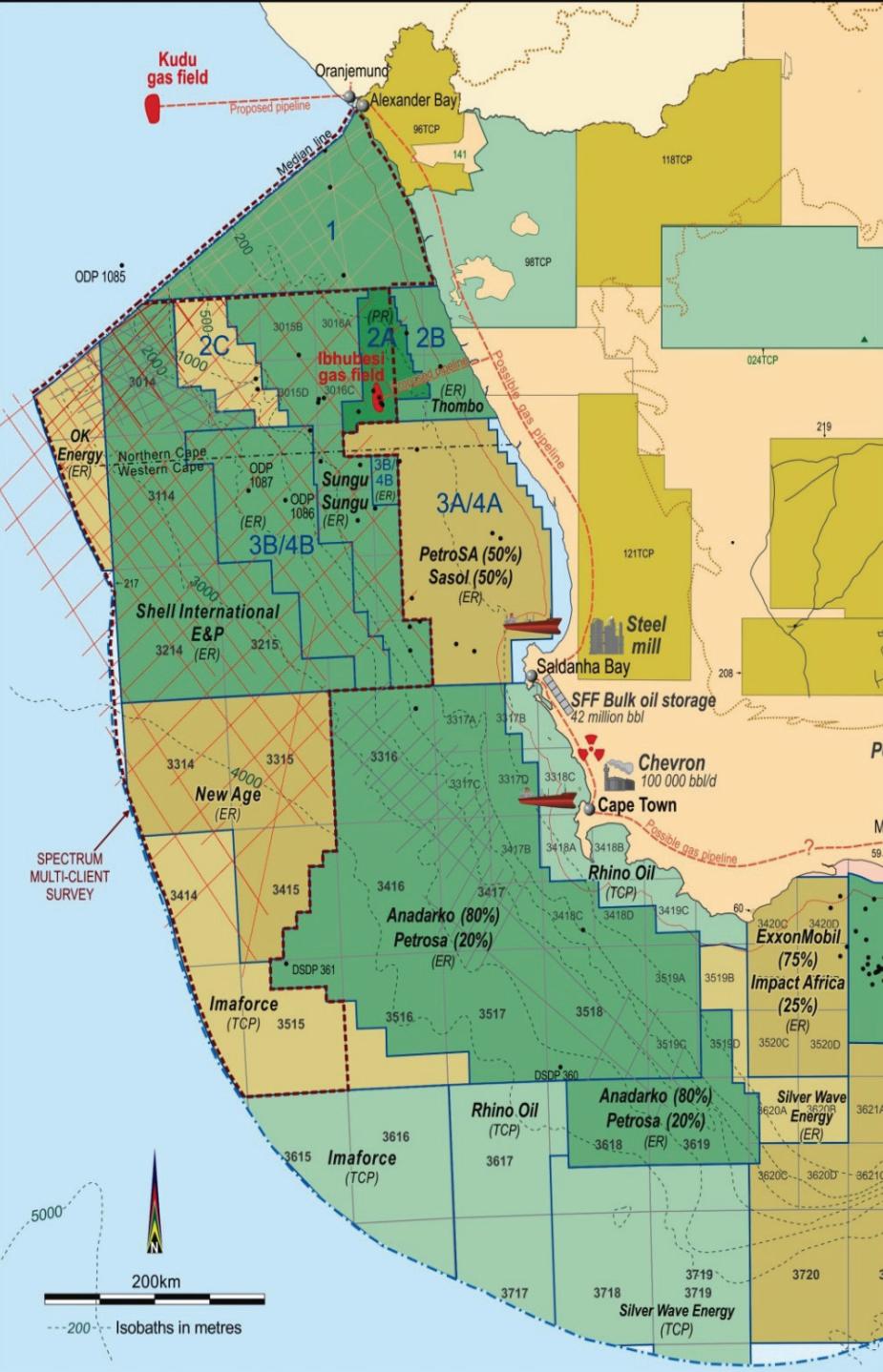
# Recent exploration/development activity

**3D SURVEYS**  
**>21 000 km<sup>2</sup>**

**2D SURVEYS**  
**>36 200 km**



# Current and Planned Activities: WEST COAST



## Current activities

- ✓ Static and dynamic reservoir model building and simulations,
- ✓ Interpretation of various datasets and prospectivity evaluation

## Planned Activities

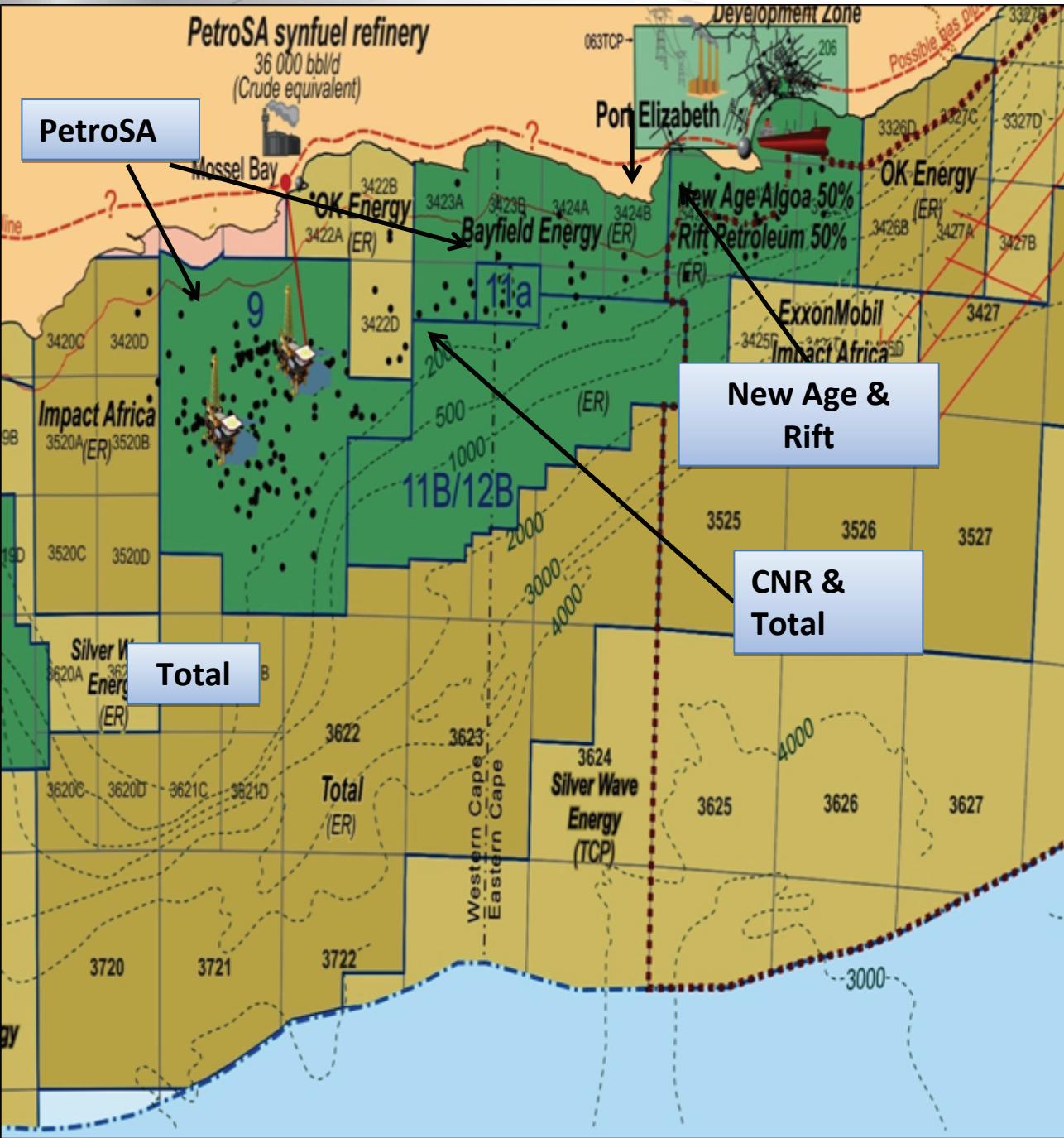
- ✓ Possible acquisition of geophysical data (seismic and airborne gravity) and well drilling

## Other studies

- ✓ 4 separate Environmental Impact Assessment studies underway for potential exploration drilling and production operations.



# SOUTH COAST



## Current Activities

- ✓ Maturation of prospects,
- ✓ Post drilling engineering studies

## Production

- ✓ Production of gas and condensate in 3 production fields via FA Platform.



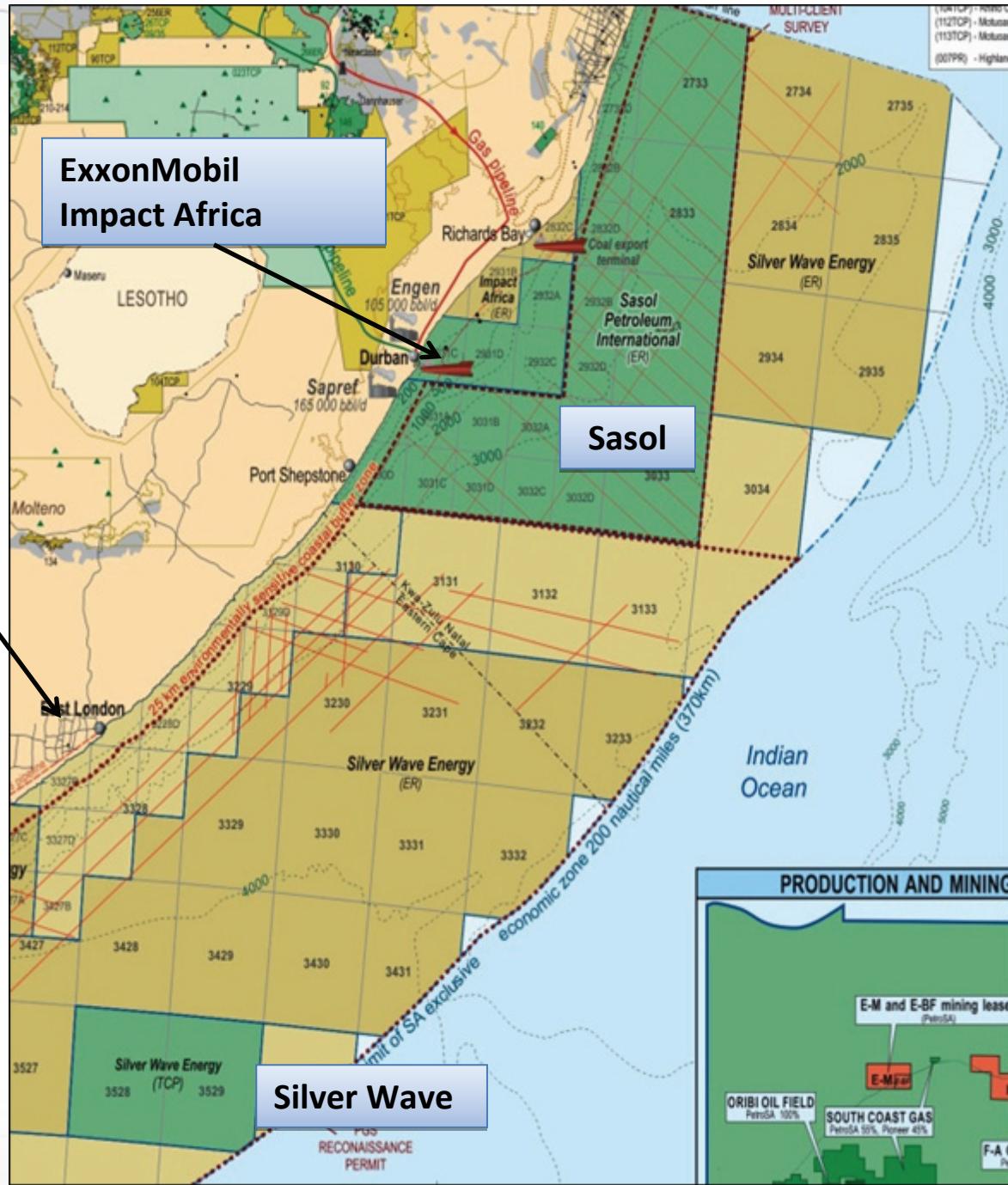
# EAST COAST

## Current activities

- ✓ Interpretation of acquired seismic data

## Planned activities

- ✓ Possible acquisition of seismic survey data (+/- 2 years).



# **Summary: Current vs Planned activities**

- Current work largely involves desktop studies
- No acquisition of geophysical data is currently taking place offshore (last seismic survey was completed 1<sup>st</sup> week of May 2015).
- No planned acquisition of geophysical surveys and drilling operations in the next 6 months.

# **Challenges/Constraints**

- Effect of low oil price
- SA – Not Proven Oil Province
  - High Risk
- Uncertainty on legislation
- Geophysical data acquisition over specific areas and short-term
- Amendments of work programmes (exploration/production)



**Thank You**