The Canadian Trade Commissioner Service
Le Service des délégués commerciaux du Canada

Canada

Prospects for the Oil & Gas sector in South Africa

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2. Exploration potential (offshore / onshore)
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South Africa
1,219,912 km²

Ontario
1,140,835 km²

53 million people

79%	Black
9%	Coloured
9%	White
2%	Indian
1%	Other

11 official languages

80% of population is Christian.

Others are Muslims (1.5%), Hindus (1.3%) Jews (0.2%) or non-religious

"South Africa's burgeoning black middle class is the country's largest driver of growth"

Mail and Guardian, May 3, 2013

More jobs and higher earnings have improved the lives of many ... and in eight years 2.5-million joined the black middle class

"Meteoric growth of black middle class"

Strong inequalities…

- **Human Development Index: ranked 116 (2014)**
- **Poverty headcount ratio at $2 a day: 31.3% of population**
- **26% of South Africans experience hunger, 28% are food insecure**
- **Service delivery protests**

Rich in Natural Resources

A Gateway into Africa

Bilateral Relations

- Shared values in support of equality, democracy, peace, security and prosperity
- Support for anti-apartheid struggle
- South Africa's 1996 Constitution and Bill of Rights draw heavily on Canada's Charter of Rights and Freedoms
- Both countries participate in the UN, G20, Commonwealth, WTO etc, and work closely on multilateral issues
- Annual bilateral consultations on foreign policy, trade and development issues
- Some disagreement (Middle East, rebalancing international organizations)
- Irritant: Canadian visa for members of the African National Congress

People to People

- An estimated 38,300 South Africans reside in Canada (OECD)
- An estimated 3,500 Canadians reside in South Africa
- In 2016 :
  - 151,800 Canadians visited South Africa
  - More than 22,000 temporary resident visas were issued to South Africans

Broaden and deepen our relationship through:

- Academic and student exchanges
- Science and technology collaboration

Total Canadian Exports to South Africa

Source: Industry Canada

Top 10 Merchandise Exports to South Africa (6 digit level)

1. Meslin and Wheat
2. Airplanes of an unladen weight (2,001-15,000kg)
3. Iron Ores and Concentrates
4. Helicopters of an unladen weight (2,000kg or less)
5. Medicaments
6. Turbo-Propellers – Power not exceeding 1,100 Kw
7. Parts of boring or sinking machinery
8. Injection-moulding Machines
9. Sulfur (Sublimed, Precipitated or Colloidal)
10. Parts of Electric Sound or Visual Signaling Apparatus

Source: Industry Canada

Total Canadian Imports from South Africa

Source: Industry Canada

Top 10 Merchandise Imports from South Africa (6 digit level)

1. Gold
2. Motor Vehicles – spark ignition cylinder capacity 1501-3000 cc
3. Grape wines
4. Filtering or Purifying Machinery & Apparatus
5. Palladium in other Semi-Manufactured Form
6. Oranges – Fresh or Dried
7. Unsaturated Acyclic Hydrocarbons
8. Grapes
9. Ferro-Manganese – more than 2% of carbon
10. Lemons and Limes – Fresh or Dried

Source: Industry Canada

Examples of Canadian Investment/Presence

Mining

Platinum Group Metals Ltd.

Ivanhoe

Superior Mining

Rockwell Diamonds

Agriculture/ Agrifood

McCain (frozen foods)

L'Allemand / Anchor Yeast (bakery ingredients)

AGT - Alliance Grain Traders (pulses)

ICT

Black Berry

Smart Technologies

Open Text

Transportation

Bombardier

Services

Hatch

SNC Lavalin

Golder & Associates

Fasken Martineau

Norton Rose Fulbright

O&G Exploration Potential

Exploration map of South Africa

6 years ago

Currently

Sources: Petroleum Agency of South Africa

2013 / 2016 Offshore Exploration Activity

3D SURVEYS
>25 000 km²

2D SURVEYS
>50 600 km²

Offshore rights and permits:

- 6 Production Rights
- 16 Exploration Rights
- 1 Technical Cooperation Permits
- 3 Reconnaissance Permit
- Several applications/conversions in process

Sources: Petroleum Agency of South Africa

West Coast

Rights and major operators

- **Shallow-water** – Cairn India, PetroSA, AEC, Simbo, Sasol
- Sunbird - **Production right** around Ibhubesi
- **Mid-Basin** – Sungu Sungu
- **Deep-water** – applications
- **Southern basin** – Anadarko and PetroSA

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Greater Outeniqua Basin

Bredasdorp, Pletmos, Gamtoos, Algoa and Southern Outeniqua sub-basins

PetroSA, NewAge with Rift Petroleum, ExxonMobil with Impact, Sungu Sungu and OK Energy in shallower waters.
Total, CNR, Silverwave and Brilliant Oil in the deep water

South Coast

SOUTH COAST GAS PIPED TO GTL PLANT

Petrol
Diesel
Kerosene
LPG
Distillates
Fuel oil

1992 F-A gas field
and later E-M field

About 1 TCF
Operating for over 20 years 195MMscf/day
Supplemented through E-M and South Coast Gas
20 wells – 70MMscf/d single train
50 to 100 Bscf remains produceable

SOUTH COAST DEEPWATER DRILLING

Total's Brulpadda-1AX well in Block 11B/12B was spudded on 21 July 2014

The well was drilled to 1835m (~500m below mud line)

Suspended on 27 September
Work programme renegotiated to continue drilling in 2016/17

Offshore – Challenges

- Extended dramatic slump in oil price and slow recovery
- Uncertainty – amendments to MPRDA (process, timing, result)
- Hydraulic fracturing – increase in environmental awareness, extending to offshore
- Governments planned energy mix – what role for gas?

Trends

- Use of risk sharing mechanisms (multi-client surveys) & Partnerships over licence areas
- Some explorers leaving, new explorers taking up opportunities
- Deep to ultra-deep water, but uncertainty of economics
- Gas on East coast?

KAROO PETROLEUM POTENTIAL

Current activity:
1 Production Right
33 Exploration Rights
3 Technical Cooperation Permits

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Shale Gas

Play fairway in southern part of basin:

- Initial Reporting 370 Tcf (2015)
- Petroleum Agency SA's conservative previous best estimate 36 Tcf recoverable
- Recently revised to 183 Tcf recoverable

Going Forward

Latest on shale gas exploration

- Existing applications are now being processed
- Work programmes for first 3 years do not include hydraulic fracturing
- Moratorium on new applications remains

Latest on shale gas regulations

- Regulations finalised

Latest on MPRDA amendments

- Parliamentary process

Saldanha Bay Industrial Development Zone

Port of Saldanha: future (artist impression)

TYPE OF INVESTMENTS/SECTORS

Operators (Tier 1)
All types of exploration, development and production companies; integrated majors, large and small independents, energy utility companies, non-operating companies, exploration companies

	Reservoirs	Wells	Facilities	Marine & Subsea	Support Services
Tier 2 Main contractors and consultancies	Reservoir engineering/ management consultancies Seismic data acquisition & processing contractors	Wells services contractors Drilling contractors Well engineering consultancies Cement contractors	Engineering, operation, maintenance and decommissioning contractors Engineering consultancies Structure and topsides design and fabrication	Marine/subsea contractors Heavy lift contractors Pipe lay contractors Floating production storage units	Catering/ Facilities Management Sea/air transport Warehouse/logistics Communications Recruitment Training Health, safety and environmental services Medical services Banking/finance Legal Insurance Accountancy Energy Consultancies
Tier 3 Products and services suppliers, components subcontractors and sub-suppliers	Geoscience consultancies Data interpretation consultancies Seismic instrumentation Data storage IT Hardware/software	Drilling & well equipment design and manufacture Drilling tubalars Laboratory services	Machinery/plant design and manufacture Engineering support contractors Specialist engineering services Inspection services Specialist steels and tubulars	Subsea manifold/riser design and manufacture Marine/subsea equipment Subsea inspection services	

Gas to Power: LNG Import Unit

The Department of Energy (DoE) will procure 3126 MW of new generation capacity from gas-fired power generation (Gas to Power):

- Floating Storage and Regasification Unit located in Richards Bay and Coega (maybe also in Saldanha at a later stage).
- Richards Bay power station to produce 2,000 MW, Coega 1,000 MW
- Independent Power Producers: 20-year power-purchase agreement with Eskom
- Final request for proposals is expected in August 2017
- Liquefied natural gas supply, Development of a jetty / infrastructure / pipelines

The Department of Industry (DTI) has recently launched its Gas Industrialisation Unit (GIU), with the aim to develop a gas industrial policy. It has conducted several fact-finding missions (Mozambique, Tanzania/Botswana, US, Australia).

Midstream/Downstream: Multiple Infrastructure Options

Key

- Key centres
- Fuel Switch Peaker
- Potential New IPP Peaker
- Gas-to-Liquids
- Coal-to-Liquids
- Refined Product Pipeline
- Gas Pipeline
- Potential Gas Pipeline
- Potential New Transmission
- New Gas
- Potential FSRU
- Offshore O&G Prospects
- Shale Gas Prospects
- Non-Shale Prospects
- Eskom's fleet

South Africa Faces Multiple Scenarios (SBSA illustration)

Conclusions

Why South Africa?

- Diverse & large economy
- Portal to the African continent
- Robust legal, banking and other institutional infrastructure
- Strong & improving infrastructure

Potential Challenges

- Lack of market regulatory certainty
- Skills shortage / cost of labour
- Canada not considered to be a natural partner
- Lack of awareness of what Canadian companies can offer
- No bilateral FTA in place

Thank you !

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