



The South African Coal Industry Challenges and Opportunities

Danie Mouton
Exxaro Resources

ADEA Summit
Johannesburg
13 November 2008

ex **aro**

POWERING POSSIBILITY

-
- **Introduction to Exxaro**
 - **South African Coal Fields**
 - **Eskom Coal Requirements**
 - **Domestic – Non-Eskom Market**
 - **Logistics – RBCT (Richards Bay Coal Terminal) & TFR (Transnet Freight & Rail)**
 - **Opportunities – Current Strong Export and Domestic Markets**

Our commodities



COAL

the fourth largest coal producer in South Africa



MINERAL SANDS

one of the world's top three producers of zircon and chlorinatable TiO₂ slag



BASE METALS AND INDUSTRIAL MINERALS

the only zinc producer in South Africa

IRON ORE

20% holding in Sishen Iron Ore Company

At a glance...

- One of the largest South African based diversified resources company
- An ALSI Top 40 company, listed on the JSE
- Over 9 000 employees
- Revenue: R5.8bn* (±US\$ 0.8bn)
- Net operating profit: R806m* (±US\$107m)
- Operations in South Africa, Australia, Namibia and China
- 53% BEE ownership

* H! 2008 (6 months) results

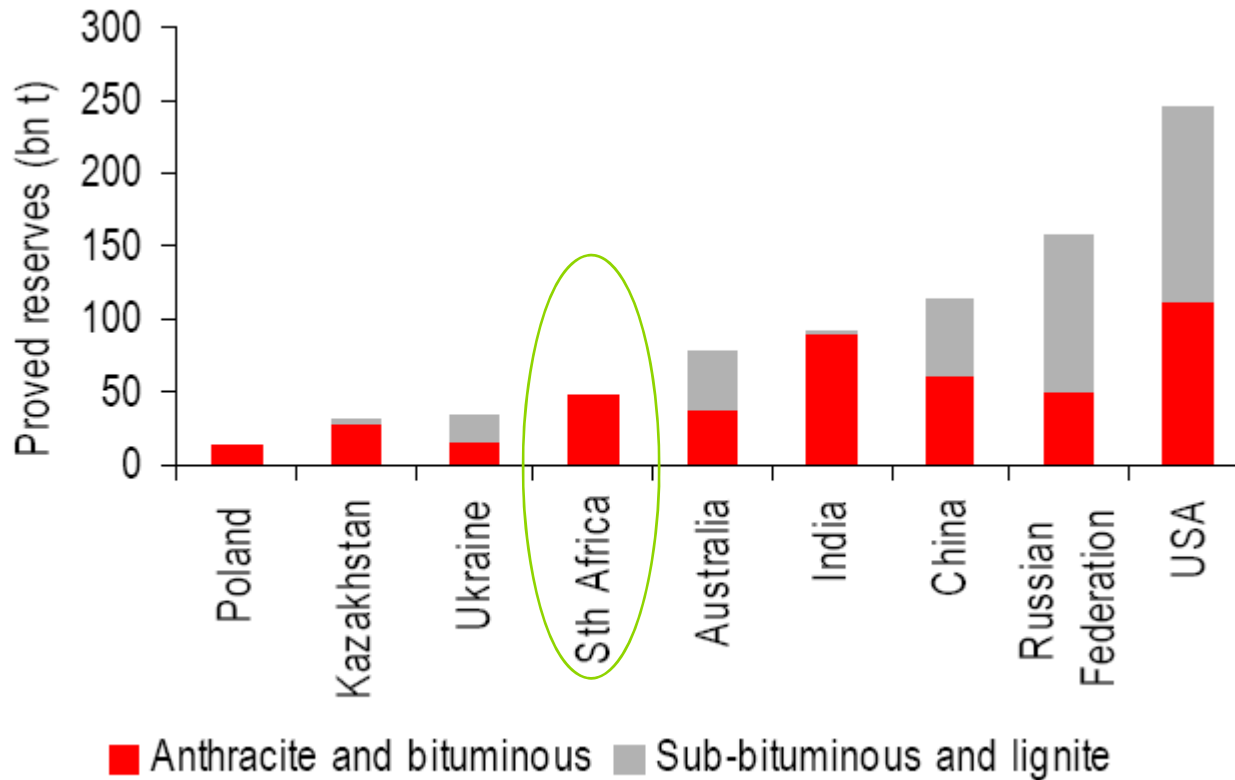




The South African Coalfields and South African Coal Production

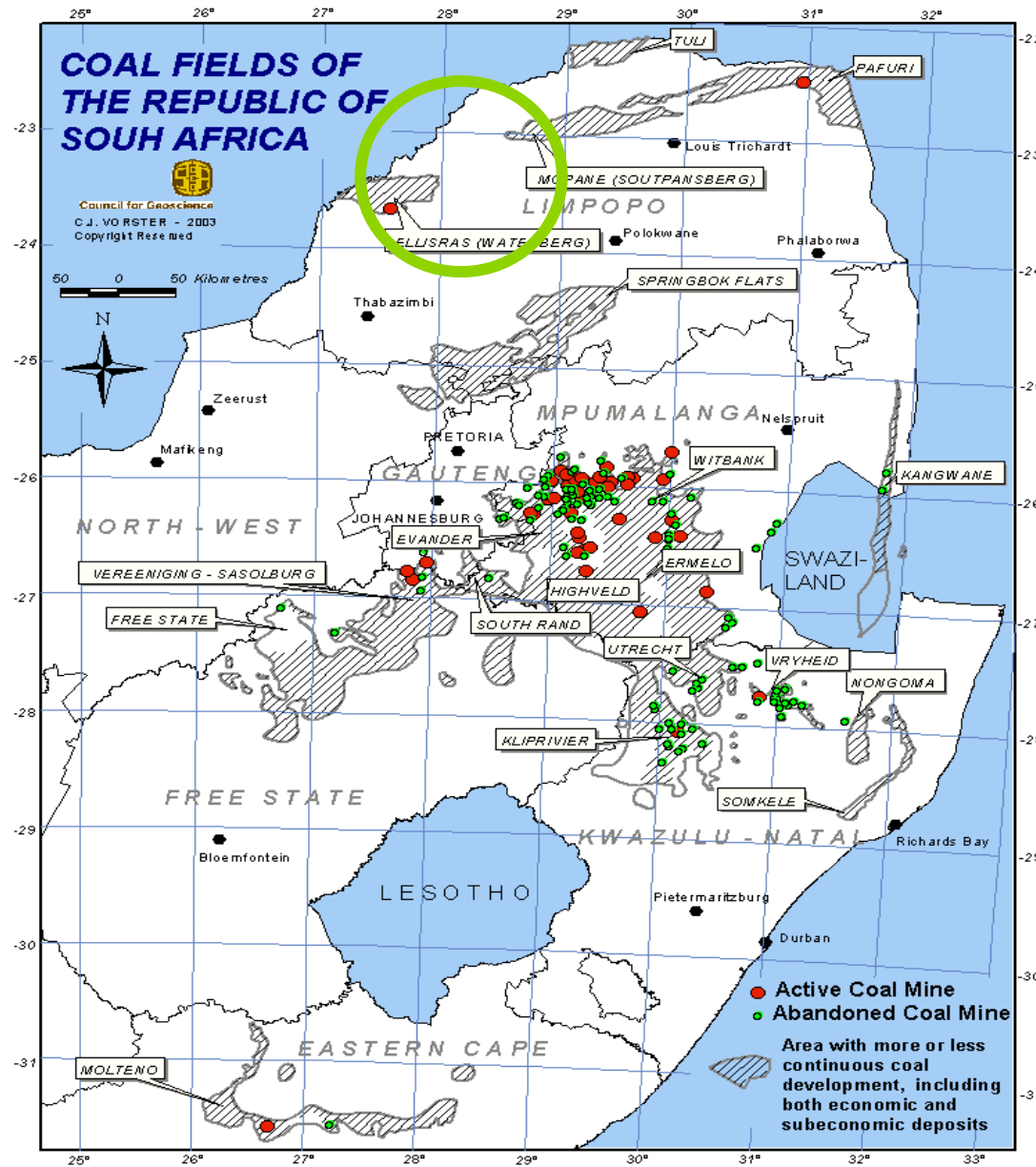


XX Proven Coal Reserves



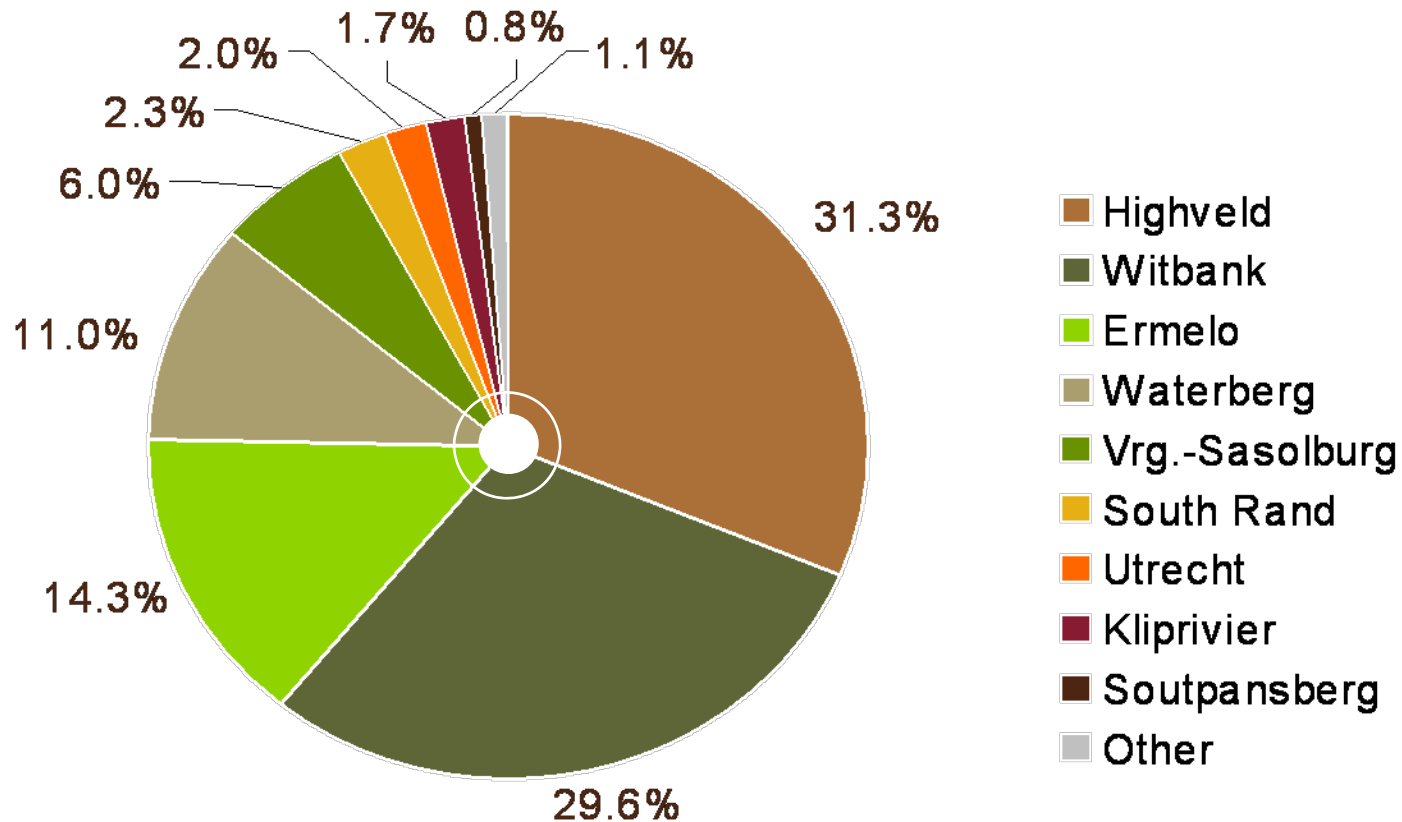
XX Coal fields of SA

- Major South African Coalfields
 - Witbank / Highveld Coalfields (Mpumalanga)
 - Waterberg Coalfield (Limpopo)
- Exxaro is currently the only company mining in the Waterberg Coalfield





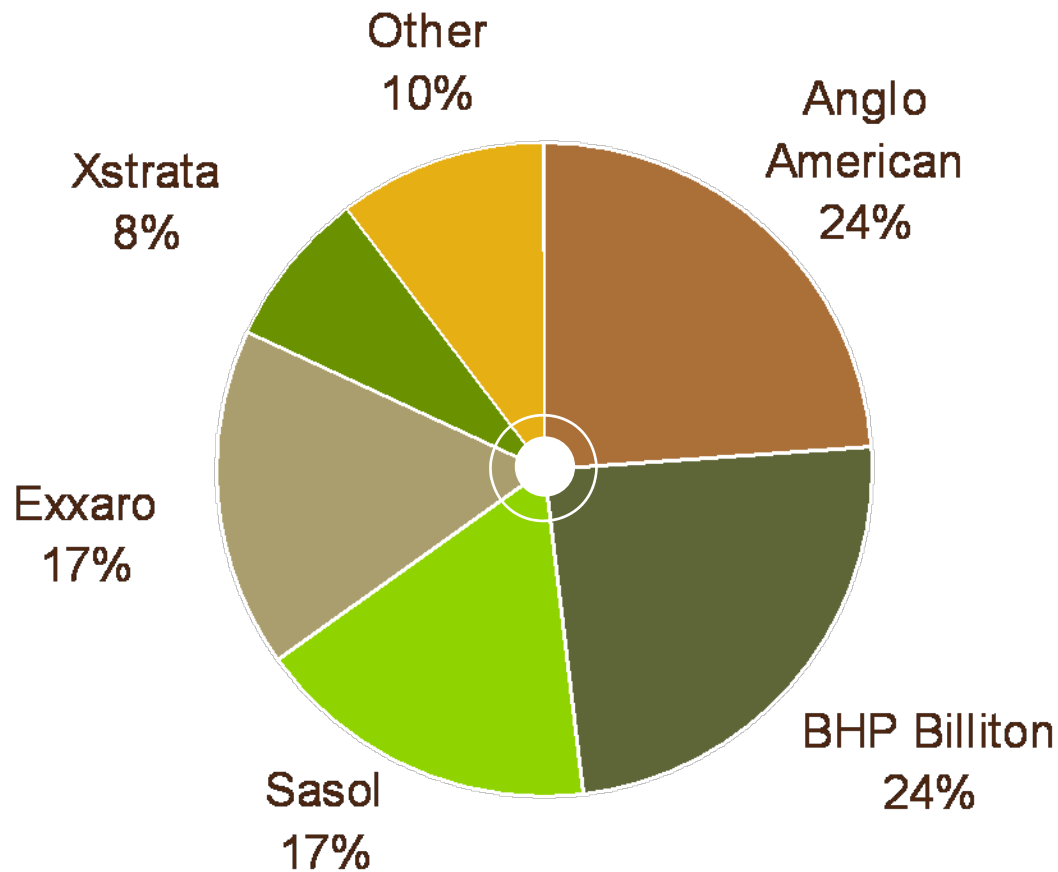
Official reserves in different SA coal fields



Total official reserves at ~31 022Mt

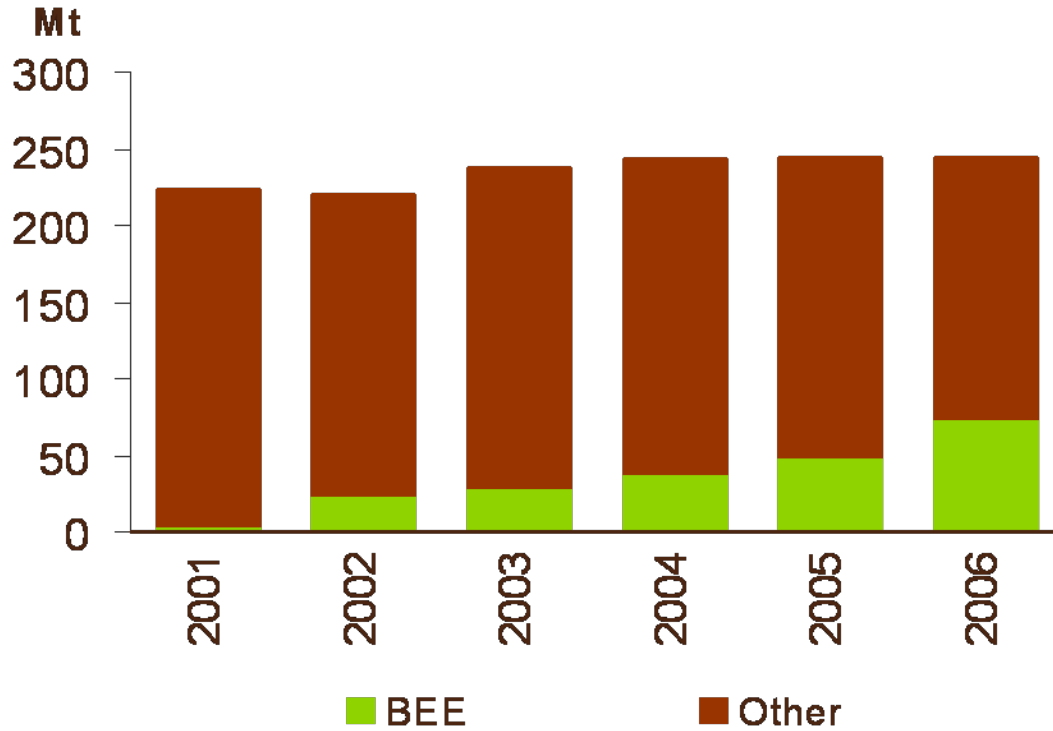
Recent exploration indicates Waterberg reserves to be up to 40 % of remaining coal reserves

- **Saleable coal production by group 2007 (total 247Mt)**

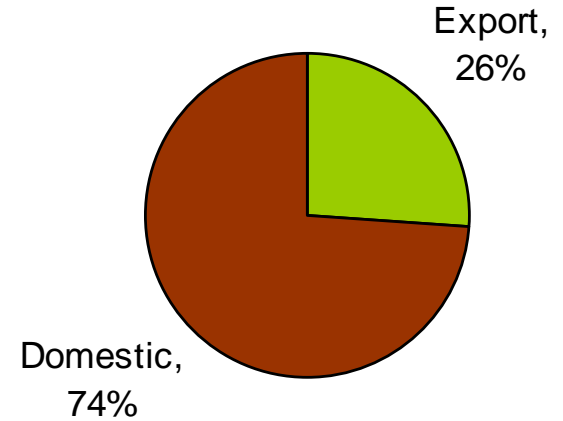




Production 2001-2007



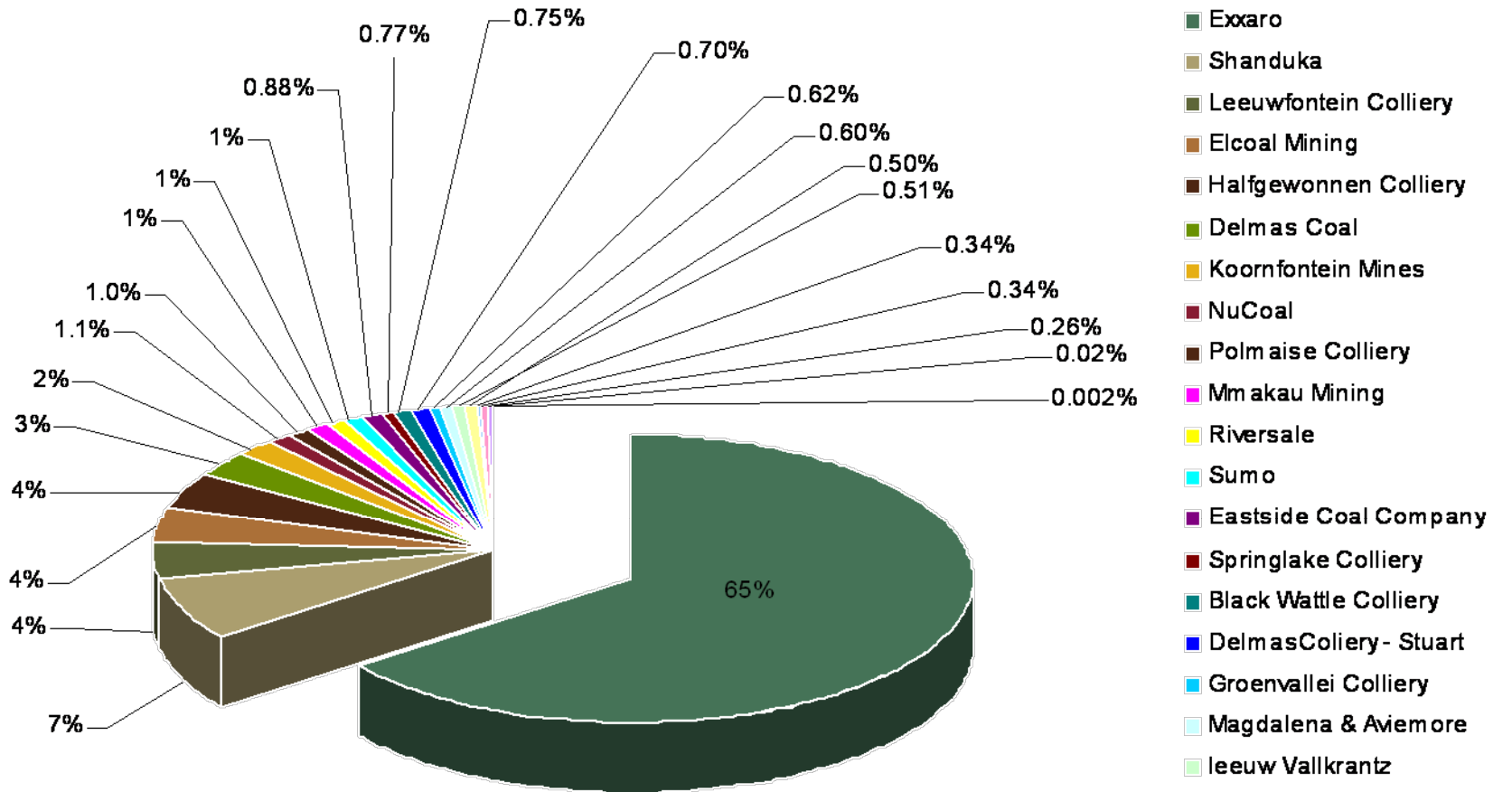
Total Saleable Coal – 2007
247 Mt



BEE sector consist of many small new producers

BEE contribution has increased to 30 %

XX BEE in SA Coal (2006)



Local coal industry becoming very fragmented



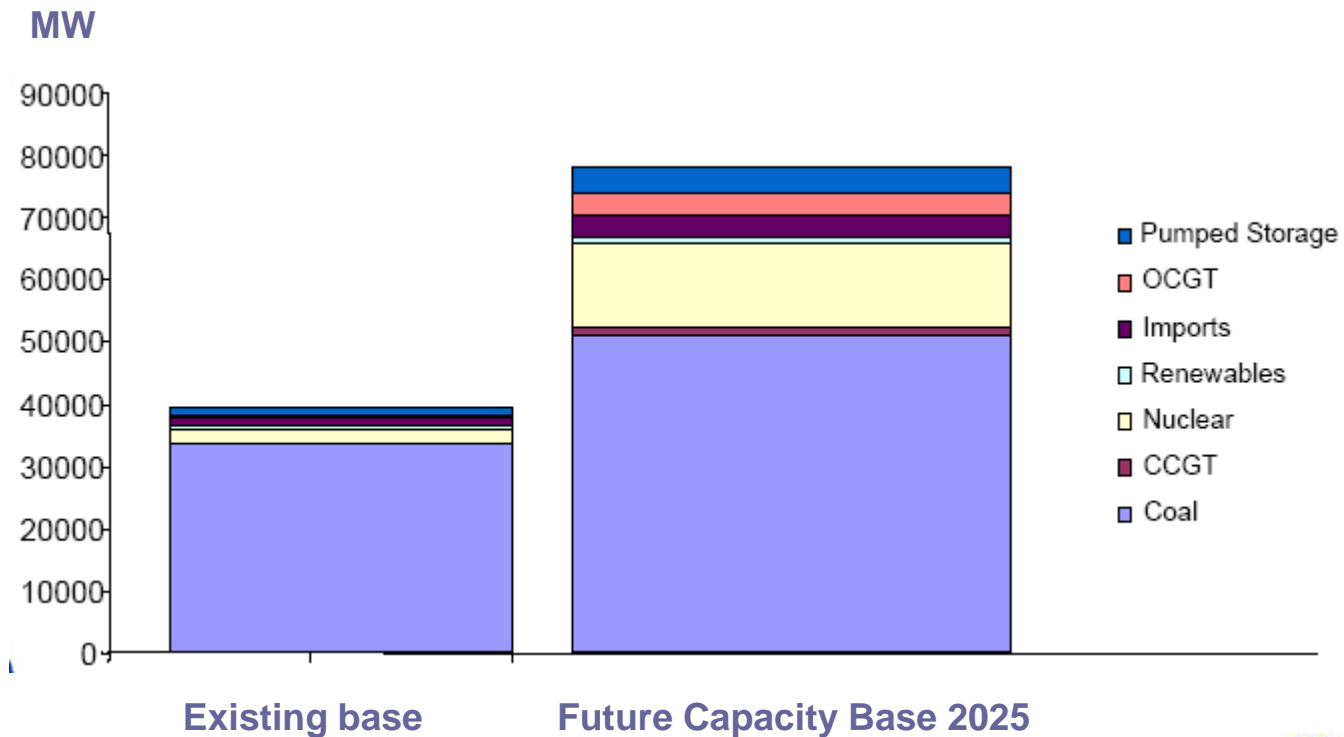
Eskom – Future Coal Demand





Eskom's changing primary energy mix

4% growth pa



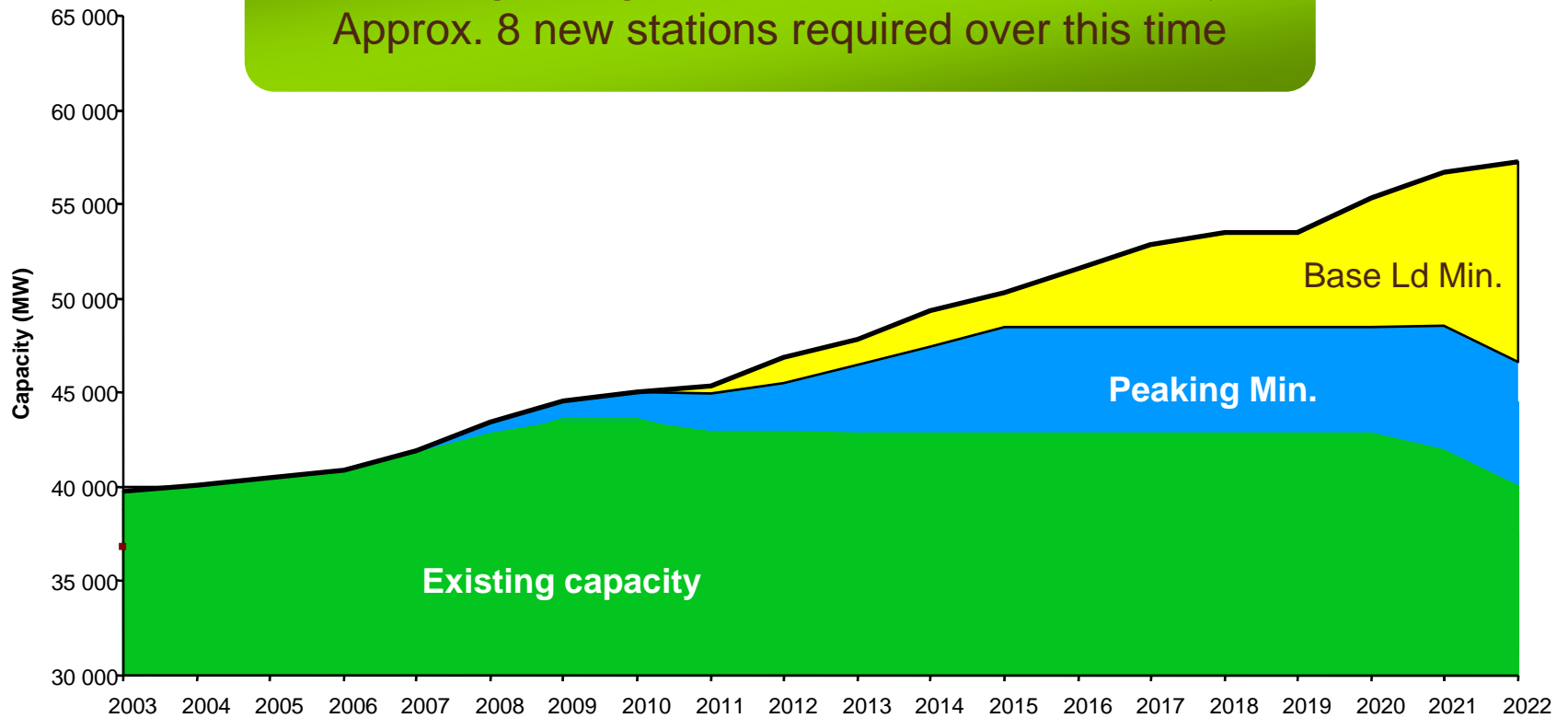
Coal consumption growth between 40% and 50 % by 2025



South Africa electricity generation capacity¹⁵

2.3% pa growth scenario

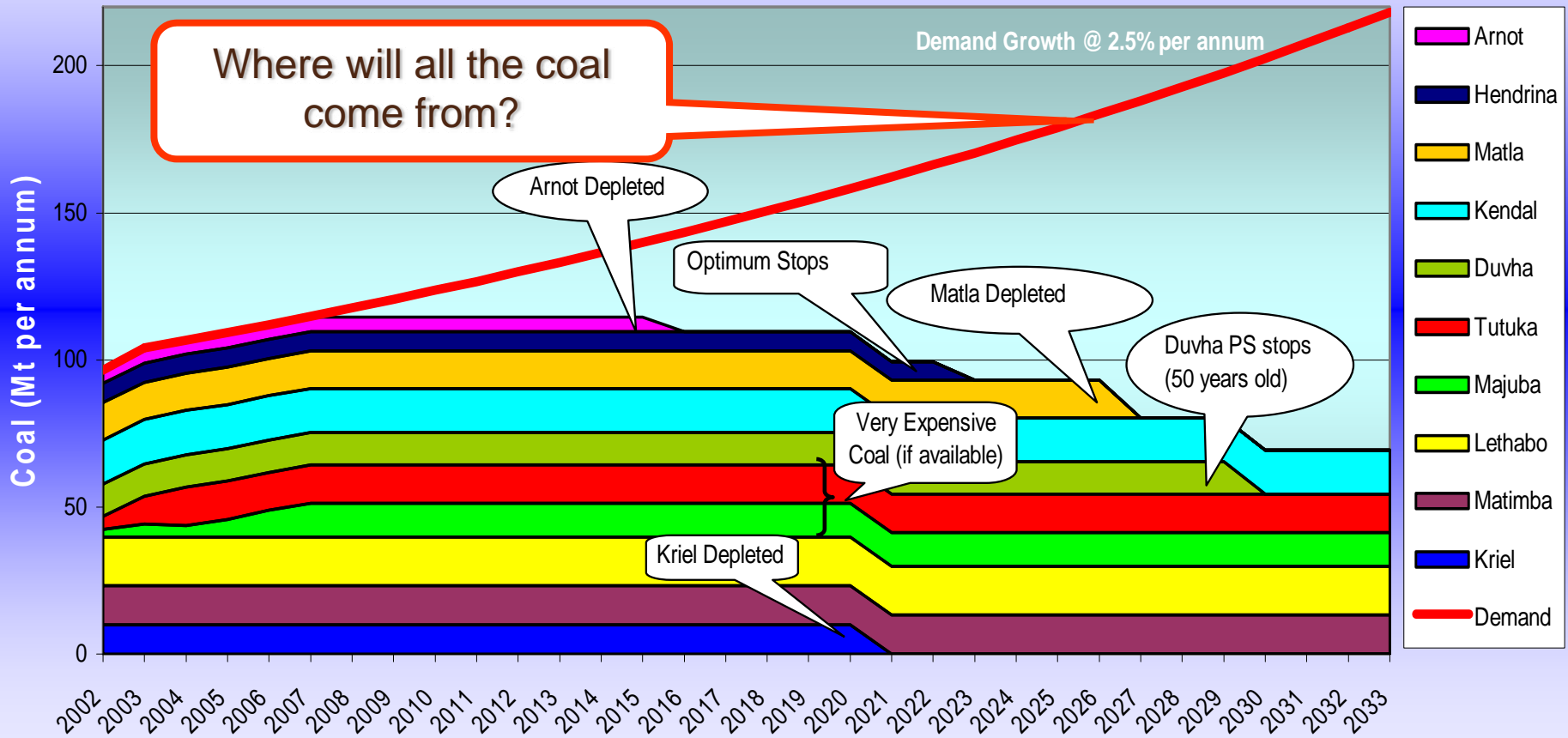
Demand growing at 1200MW pa over next 20 yrs
Approx. 8 new stations required over this time





Coal availability from current sources

AVAILABILITY OF COAL TO ESKOM'S POWER STATIONS (CURRENT SOURCES)



The Waterberg.....?

Exxaro's Development Plan for the Waterberg... 17

Phase 2: New Mine & PS

- Greenfield's expansion with a new coal mine and a new coal-fired (clean technology) power station (4,200MW).
 - *Products (coal tons pa):*
 - 14 mt to Power Station
 - 2.5 mt to other markets
 - Time-frame: 2013 to 2017

Phase 1: GG6 & Medupi

- Completed GG6 plant in 2006
 - 720ktpa to other markets
- Brownfields expansion of Grootegeluk coal mine near Lephalale with Medupi power station (4,800MW).
 - *Products (coal tons pa):*
 - 14.6 mt to Medupi Power Station
 - Time-frame: 2009 to 2013

Phase 3: Mega Export Mine

- Greenfield's new coal mine for exports near Lephalale.
 - *Products (coal tons pa):*
 - 10 mt for exports
 - Time-frame: in 2015 to 2018

Other Downstream Opportunities:

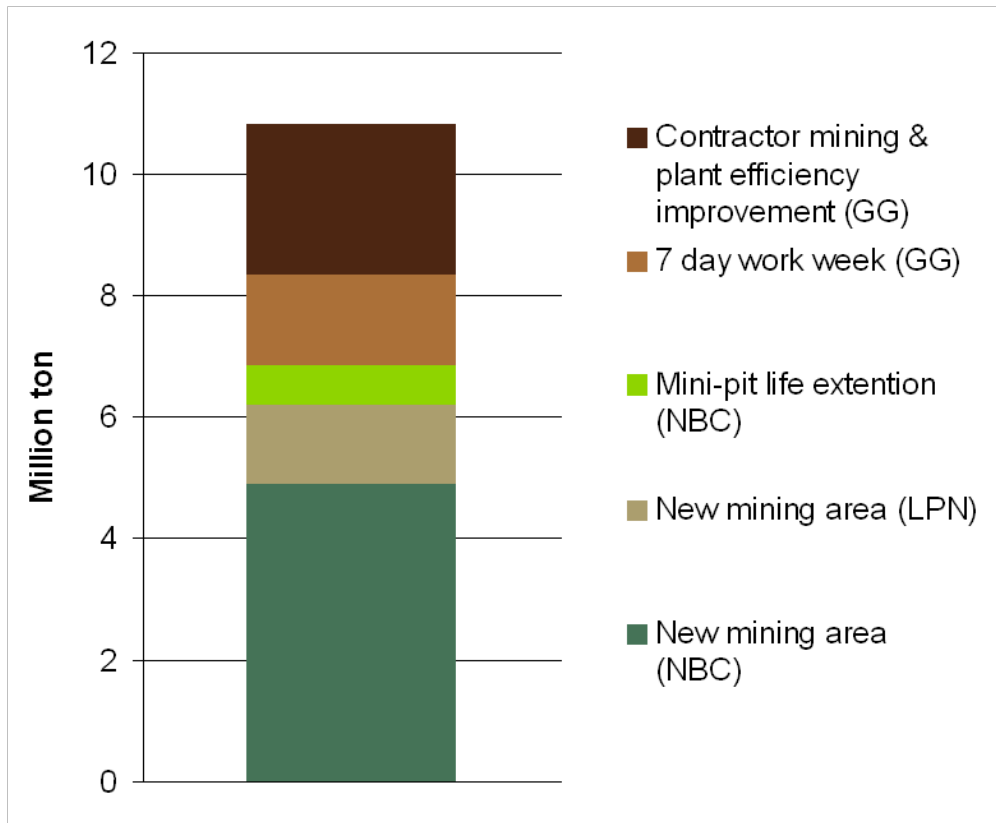
- Char plant
 - being commissioned
- Market Coke
 - under Feasibility Study
- Activated Carbon
- Coal Liquefaction (Diesel)



Eskom 2008 Emergency supply

Source of additional coal supplied by Exxaro

Total 10.8 million tons



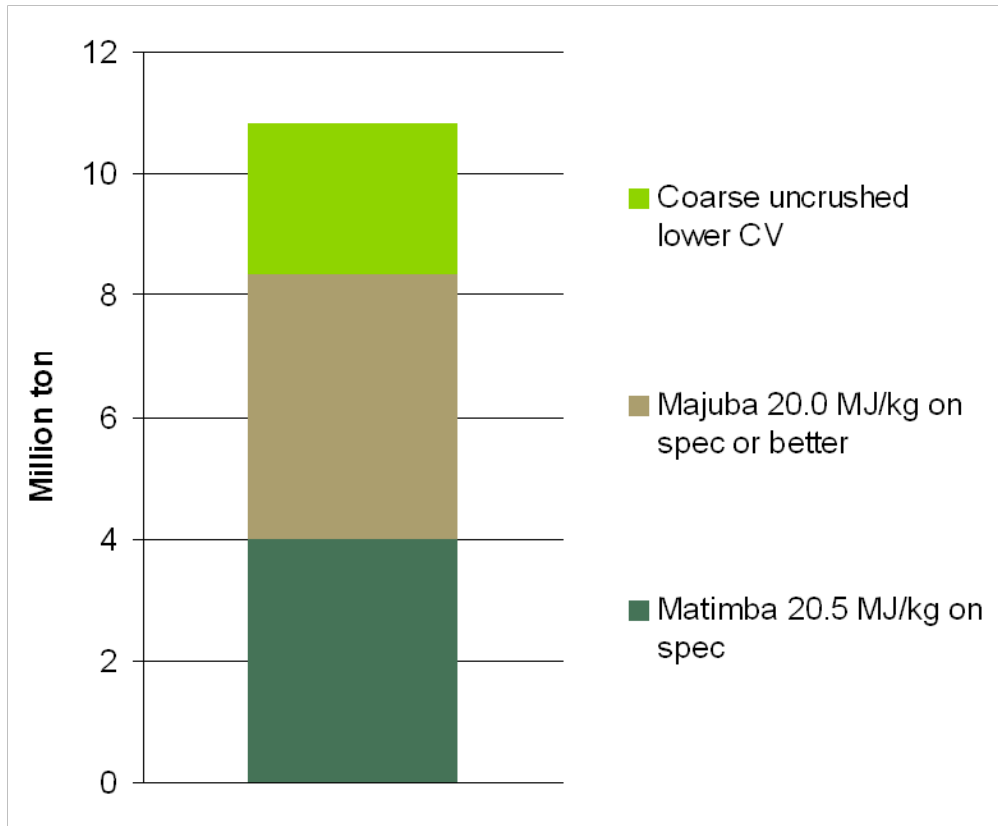
- **4.4 Mt by conveyor**
- **1.3 Mt by rail**
- **5.5 Mt by road (2.5 Mt delivered)**



Additional coal for Eskom - quality

Qualities of additional supply

Total 10.8 million tons

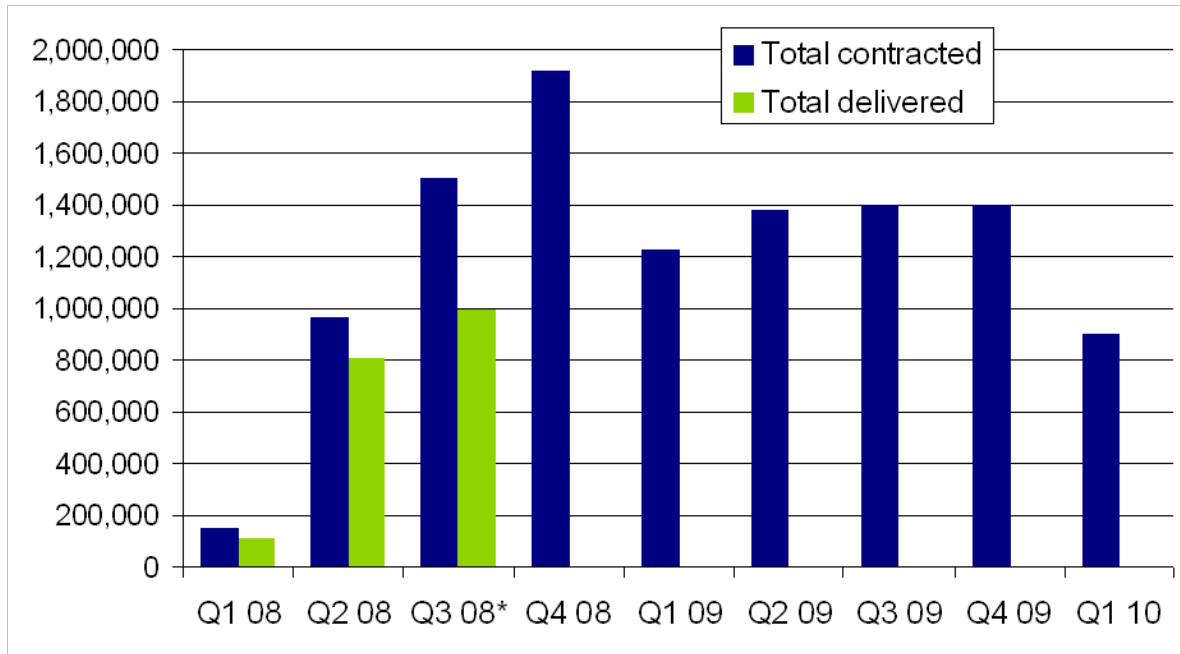


- **No slimes**
- **No slurry**
- **No discard**



Delivery schedule

Delivery schedule for additional Eskom supply



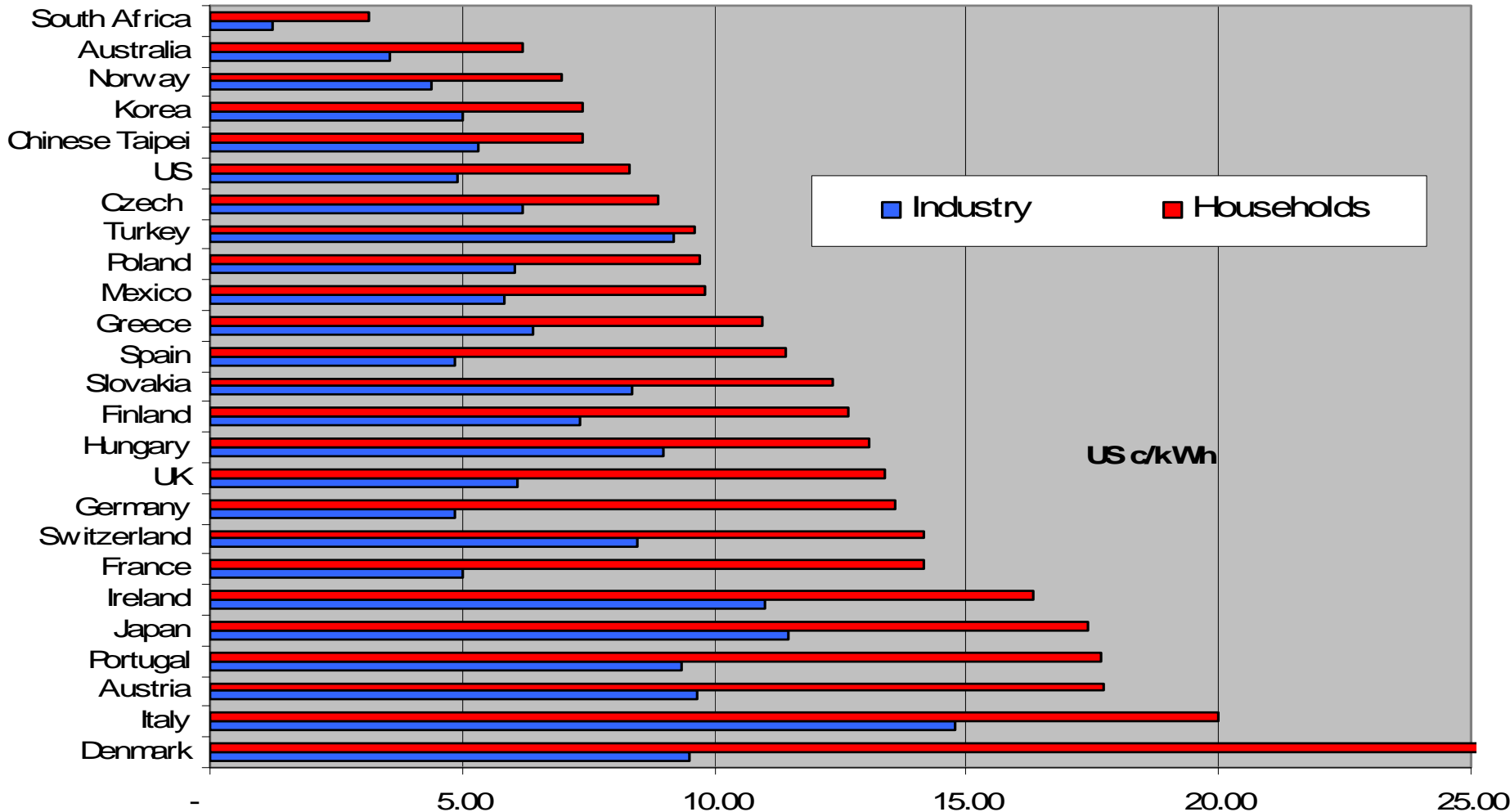
* Q3 08 only for July and August

- **Ramp-up still in progress**
- **Leeuwpan new mining area approved – mining to commence in Q4-08**
- **Monthly deliveries planned in consultation with Eskom on continuous basis**



Costs of electricity - worldwide

Foreseen that the cost of energy will treble in the foreseeable future but even so the cost of South African electricity will remain in the lower quartile

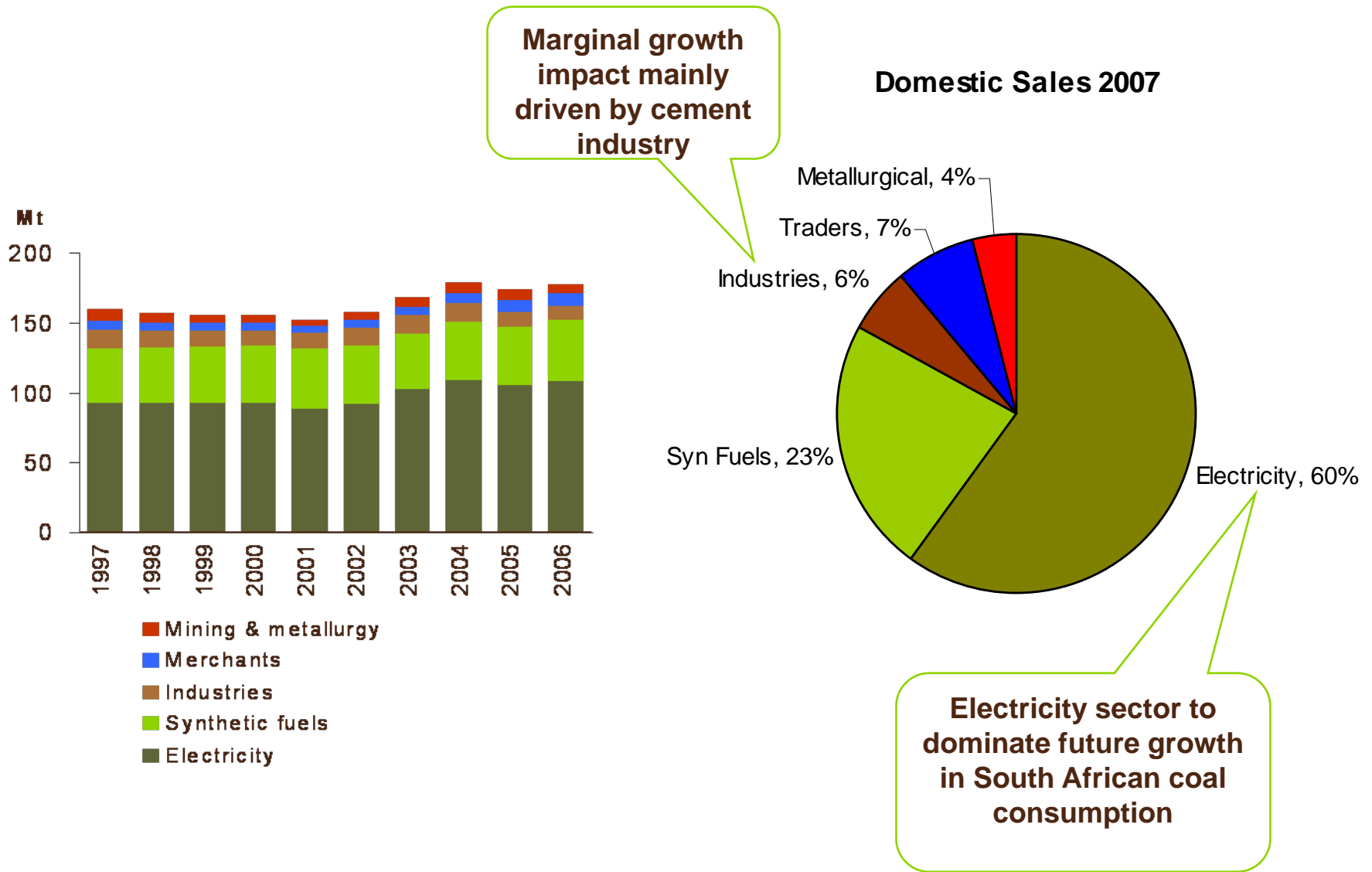


Source : ABSA



Non Eskom Domestic Market



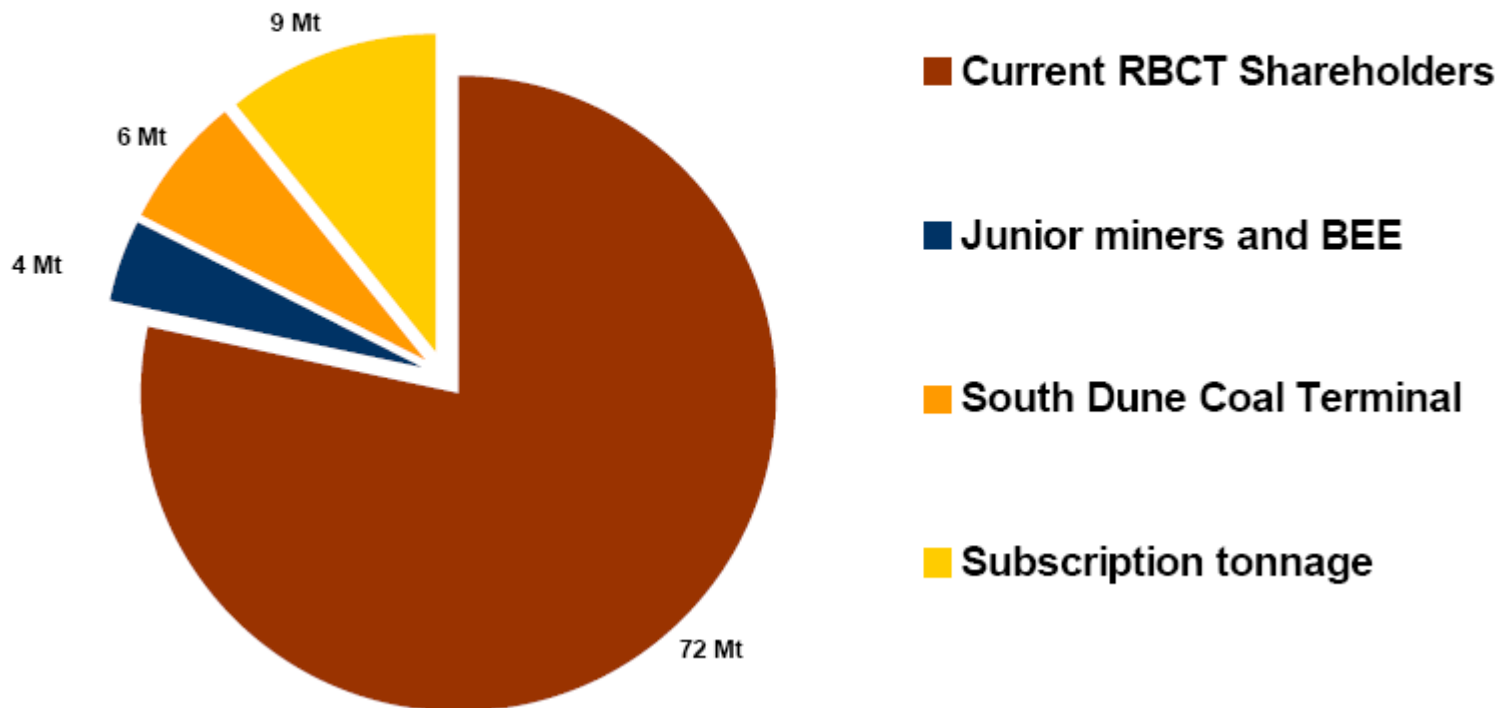




Logistics RBCT & TFR

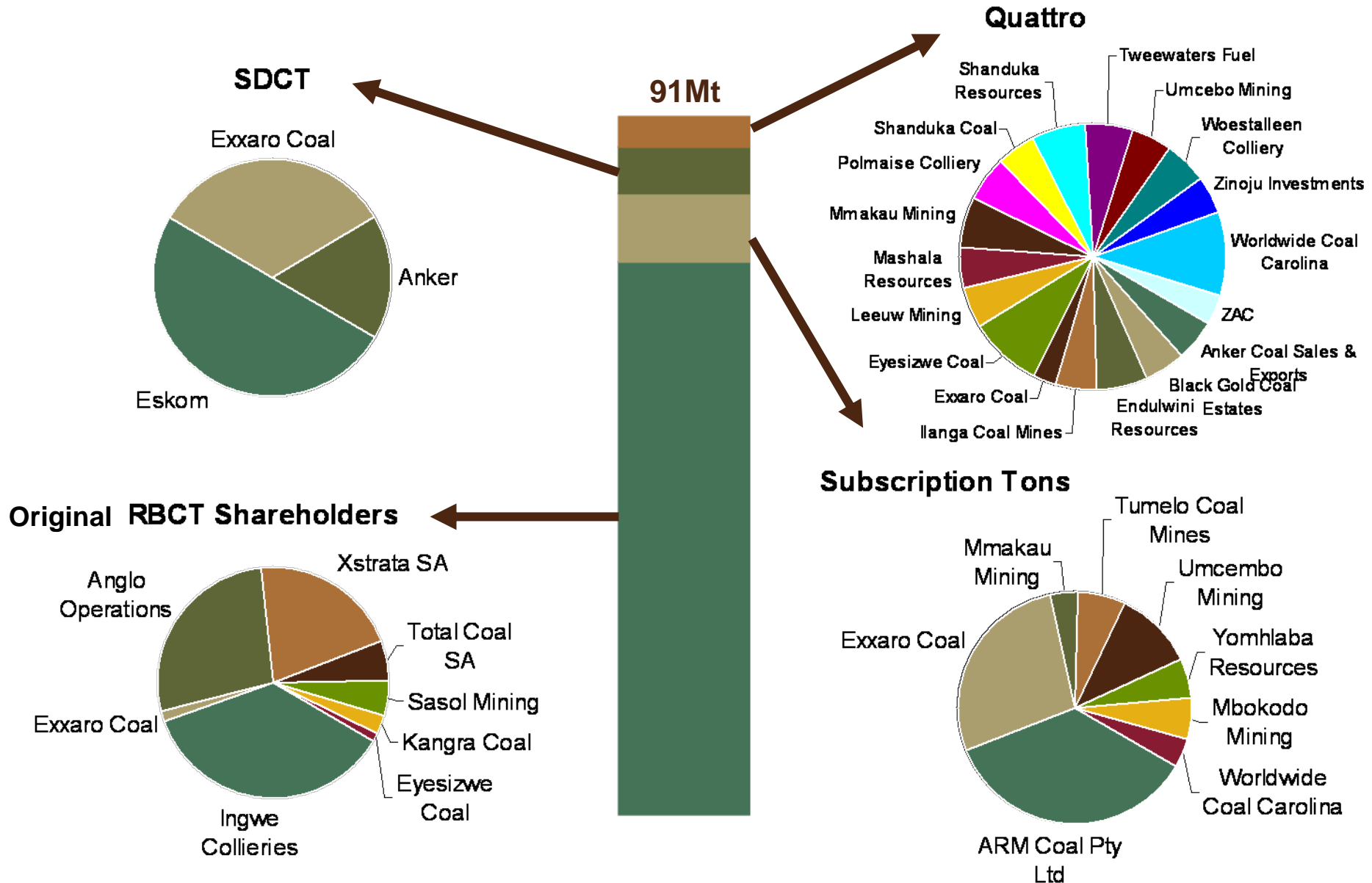


- RBCT: Projected SA coal exports (including Phase 5, 91Mt by 2011)



- Durban and Matola: 3Mtpa at higher cost

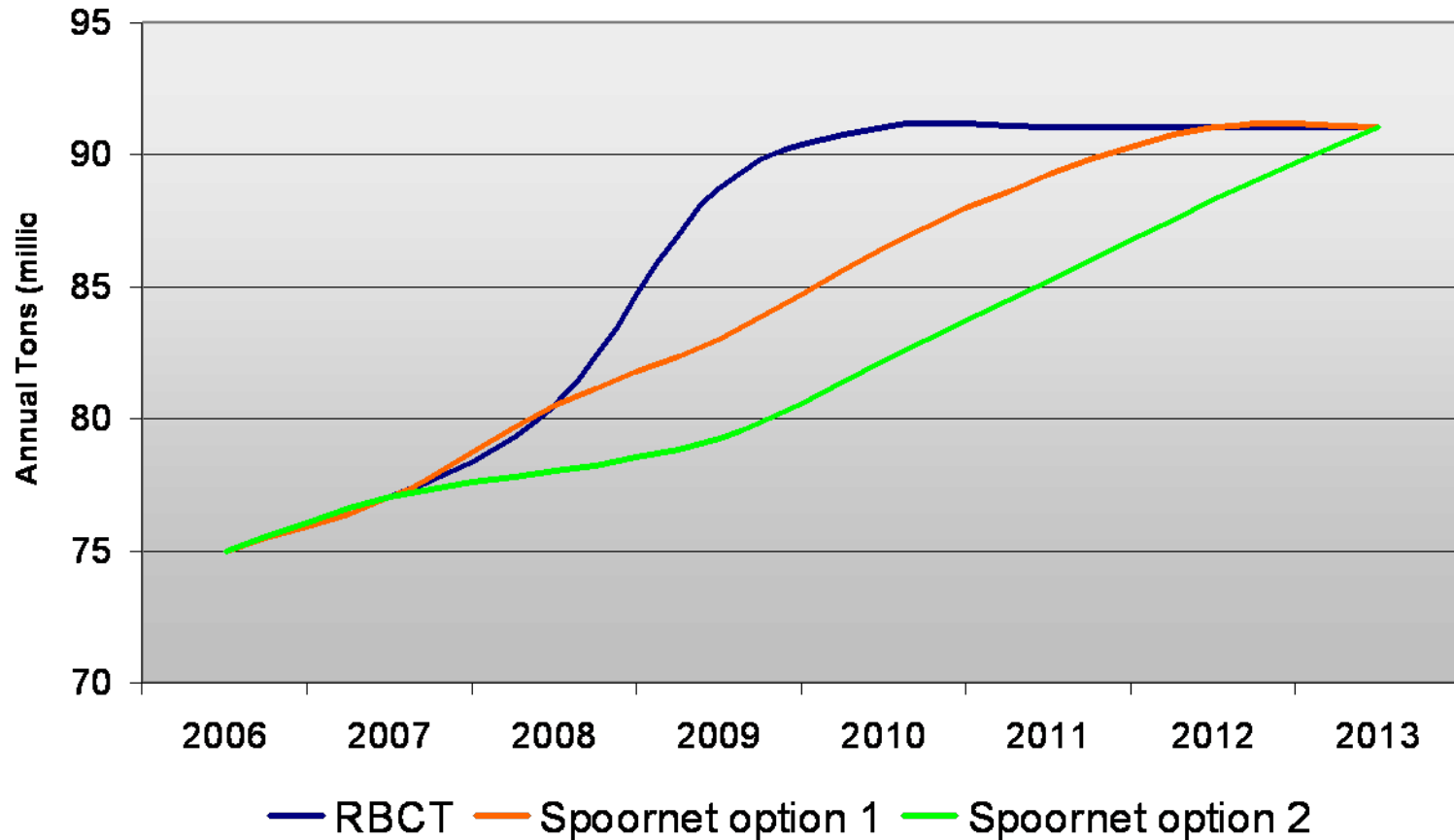
XX Export allocation





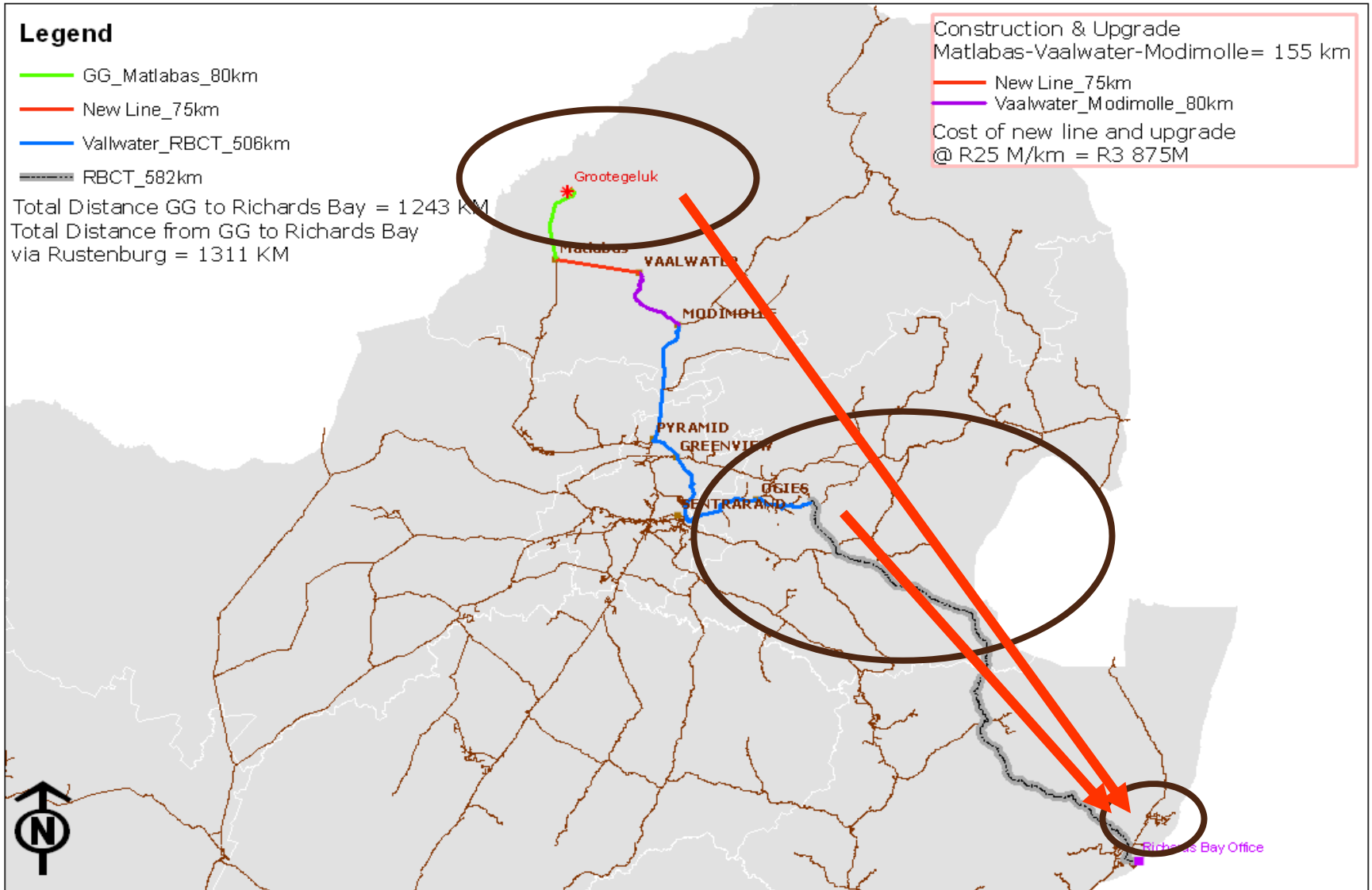
RBCT capacity expansion

Port Capacity versus Rail ramp up options



Rail ramp up currently being negotiated between TFR and industry

Waterberg Rail development





Opportunities - Strong Domestic and Export Markets

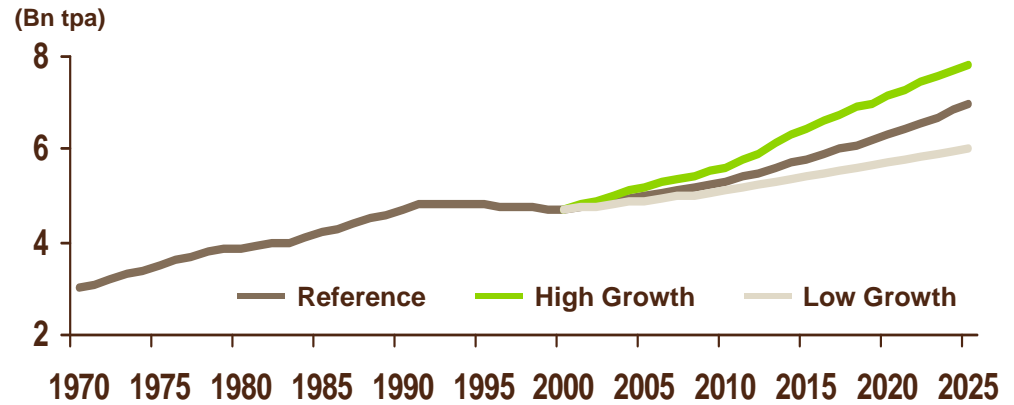




Strong Industry Outlook

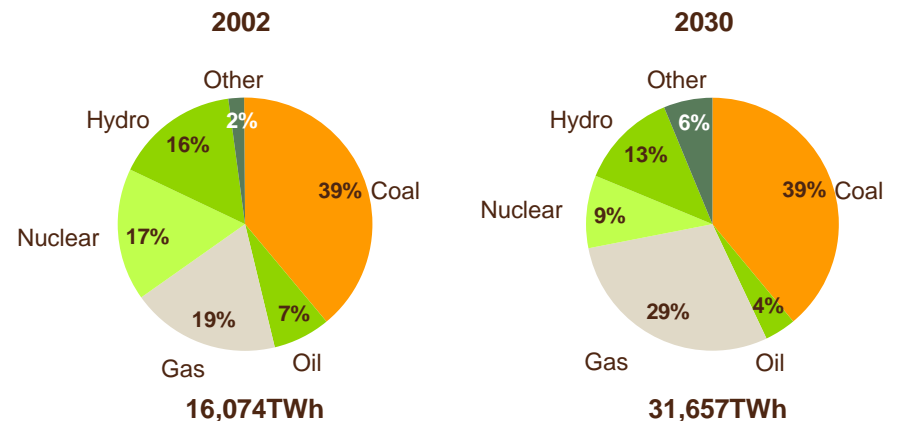
- Strong fundamentals for the local and global coal markets
- Significant power generation investments to be made in South Africa to meet demand following long period of underinvestment
 - Electricity demand growing at 1,200MW per annum for the next 20 years, approximately eight new power stations will be required
 - 89% of Eskom’s installed capacity is coal-fired
- Coal’s share of global power generation expected to be sustained while total capacity continues to grow
- China continuing to drive global demand while supply constraints remain
 - RBCT expansion will enable increased exports from South Africa
 - Prices expected to recede but remain at high levels from a historical perspective

World Coal Consumption Continuing to Grow



Source: EIA

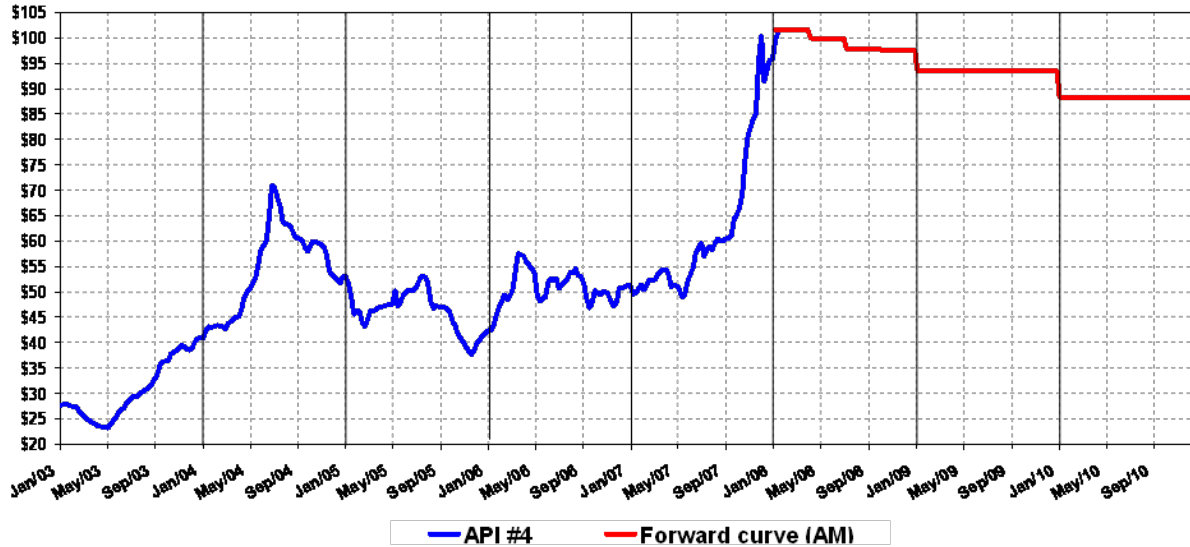
World Power Generation Mix – Coal to Maintain its Share



Source: IEA from ABSA

Market prices

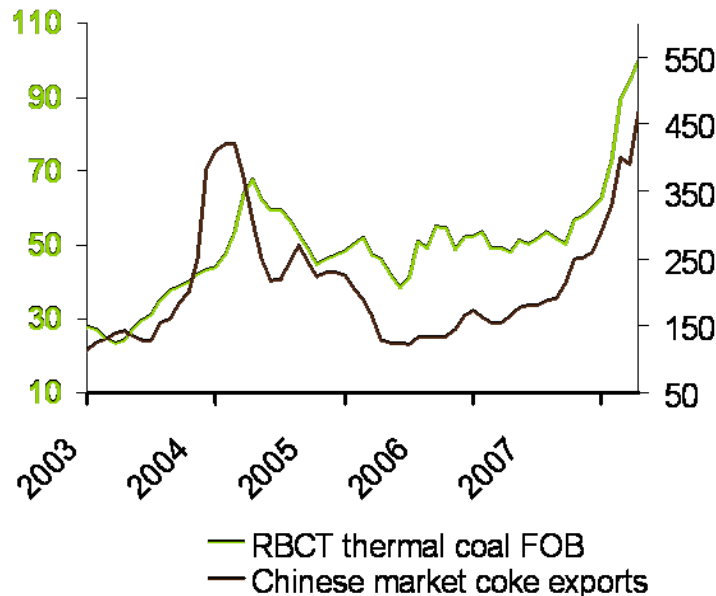
RBCT FOB (API#4)



Global demand is driven by the Asian demand factors – a structural pricing shift has occurred

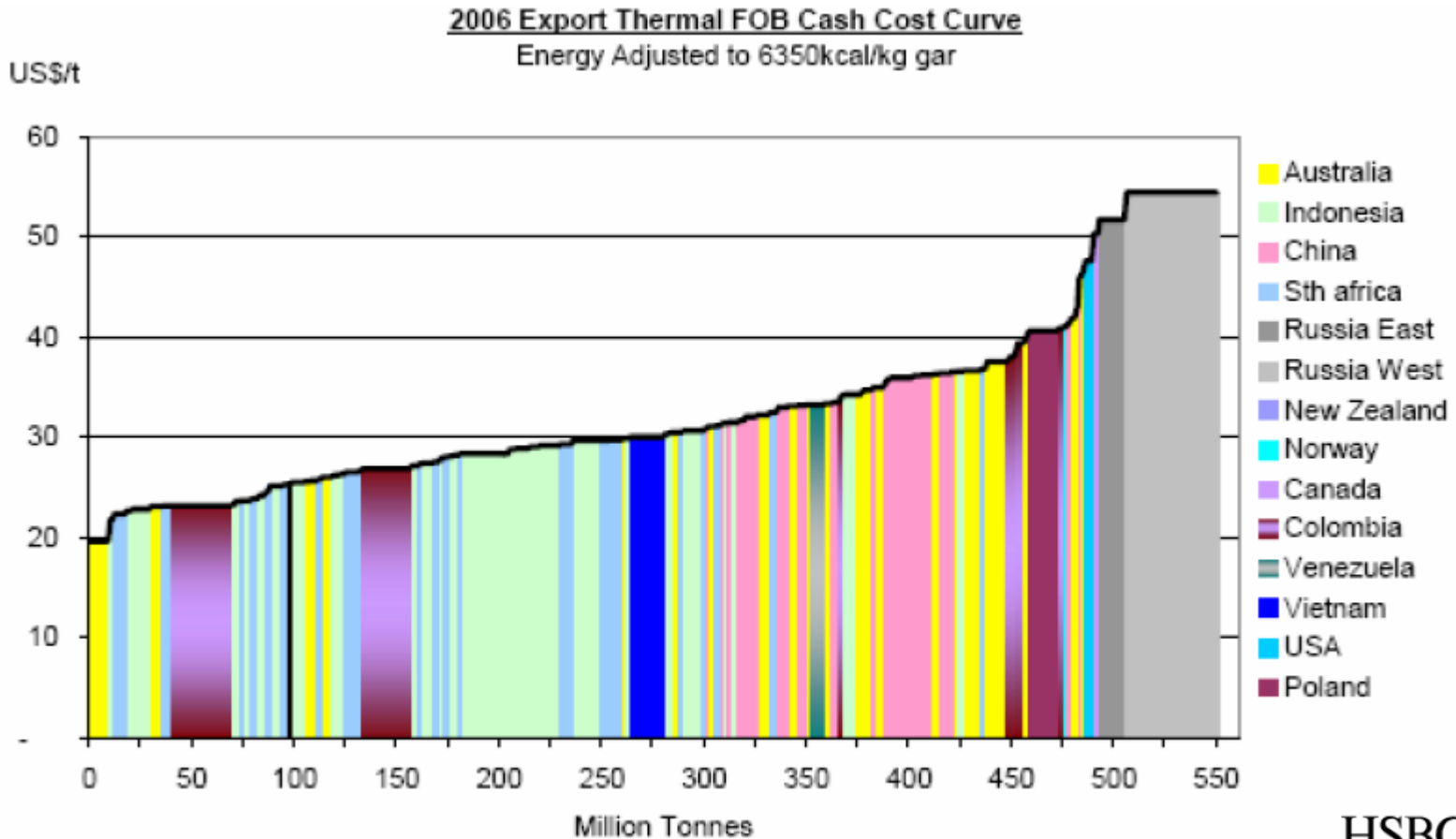
Steam coal prices driven by demand and freight rates

Commodity price rise due to weakened US dollar, generally increased world economy and 'rush' on resources supply



Advantage should be taken of the strong export prices

XX SA export competitiveness



SA in lower half of cost curve



Conclusion



- **Strong demand, both on domestic and export front**
- **Adequate resources available, but need quicker conversion to fulfill demand**
- **Need for collaboration**
- **Need for increased logistical capacity and reliability**
- **Increased prominence of Waterberg**
- **Optimization of coal qualities for domestic and export markets**
- **Exxaro's coal division is well positioned to increase participation in both domestic and export markets.**

exxaro

POWERING POSSIBILITY

THANK YOU