



# M&A, Private Equity and Renewable Energy

Brian Kennedy – Group Managing Executive: Nedbank Capital

JP Morgan Conference

17 November 2010

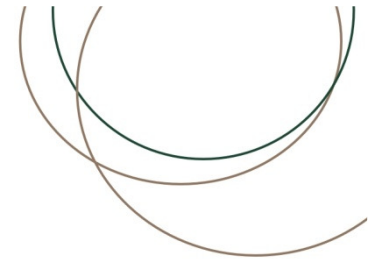


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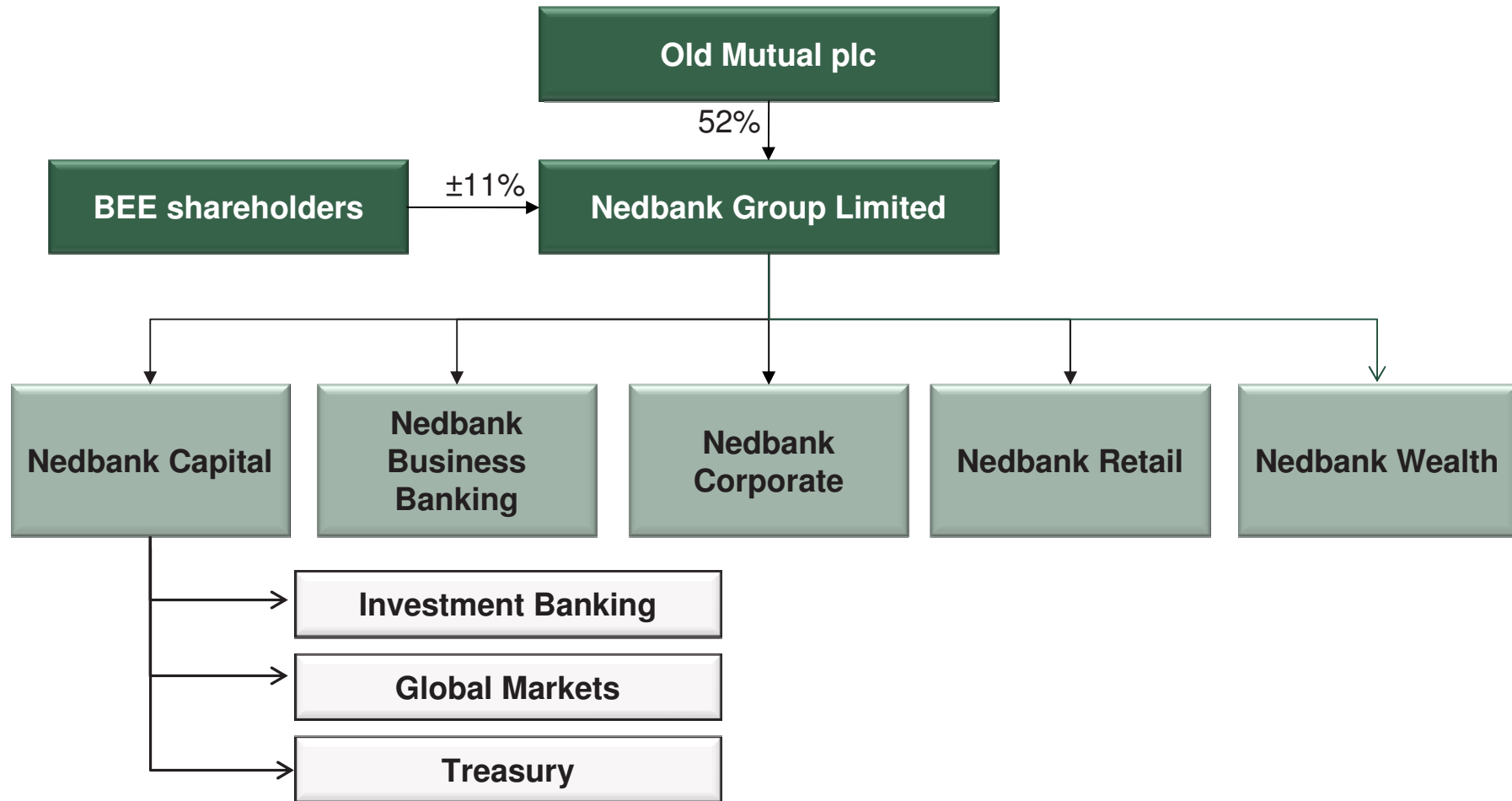
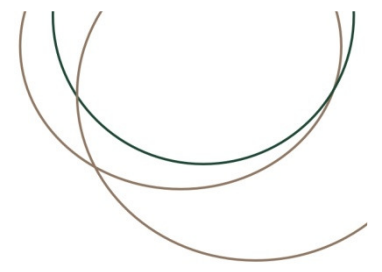
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- Global and Local Advisory and M&A trends
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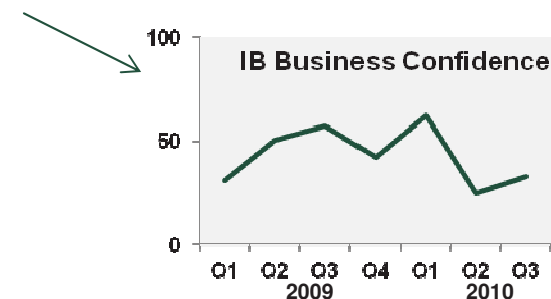
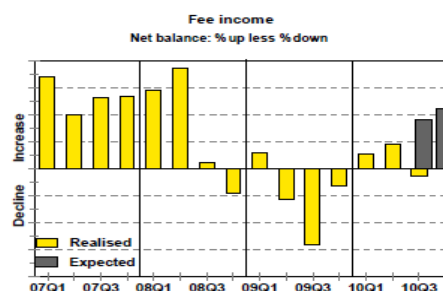
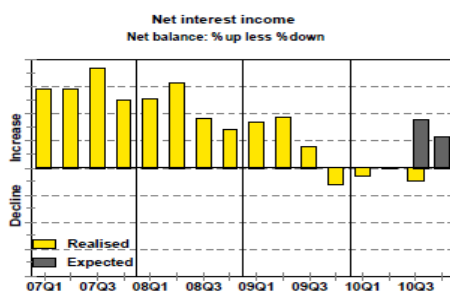
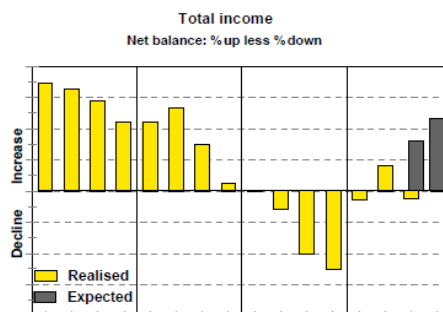
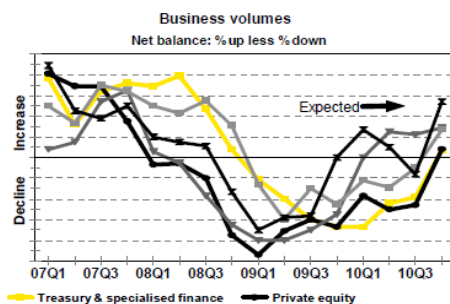
# Nedbank Capital in Context





# Macro Environment – Investment Banking

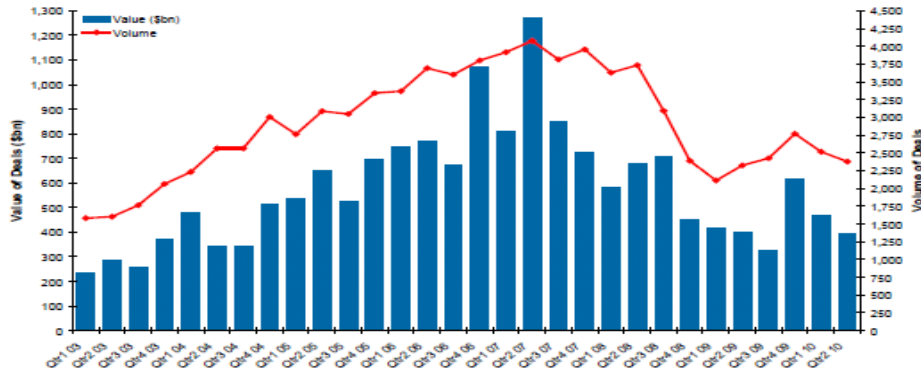
- Post the crisis of 2009, economies were moving into recession
- However, by the 1<sup>st</sup> quarter of 2010, positive sentiment had returned but the rebound in earnings did not materialise
- The sovereign debt crisis in the Eurozone reversed the positive sentiment and created greater uncertainty -the IB confidence index dropped from a revised 62 in 1Q10 to 33 index points in 3Q10
- The recovery in the equity markets have not translated into IB earnings
- Activity contracted in all divisions except corporate finance



Source: Ernst & Young FS Index SA, Q3 2010

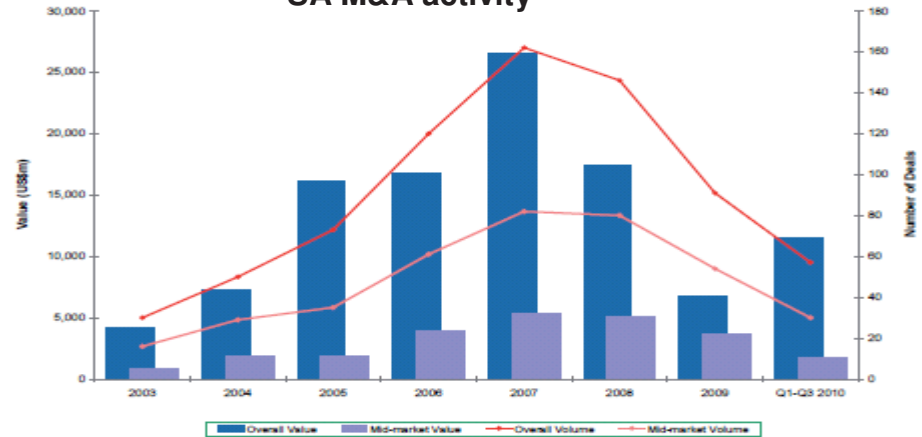
# Global and Local M&A Trends

### Global M&A activity



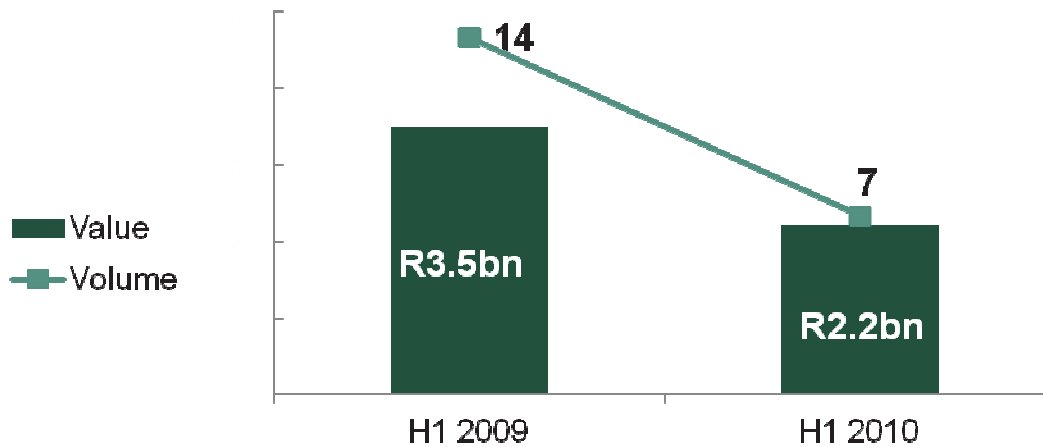
Source: Mergermarket

### SA M&A activity



Source: Mergermarket  
NB. Mid-market = \$10m-\$250m deal size

### BEE deals (Value and Volume)

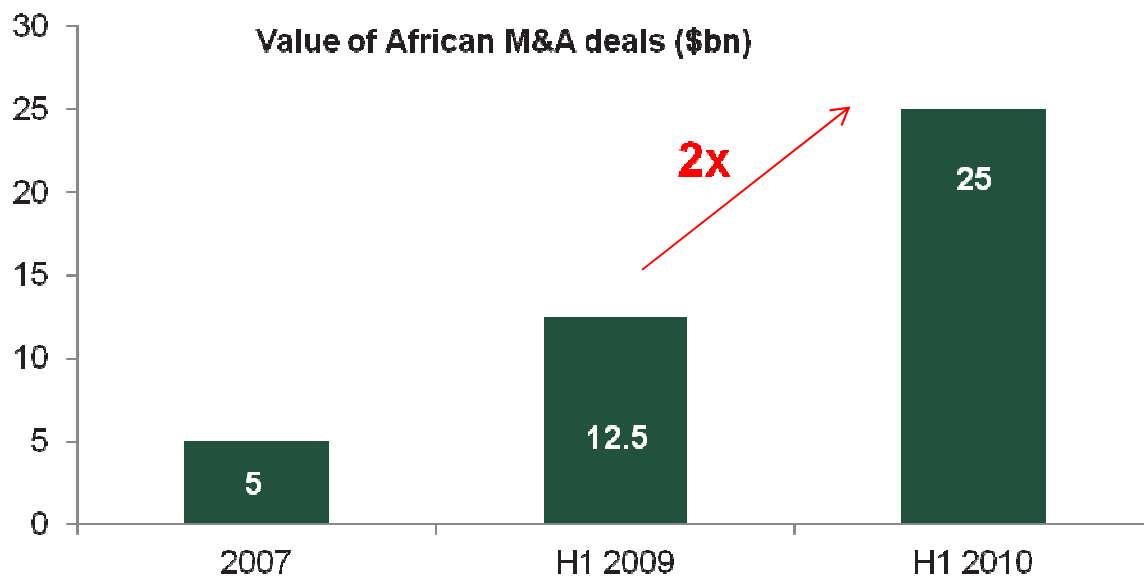


- M&A activity is recovering slowly from the previous year lows
- Traditional BEE dealmaking has slowed
- Much of the BEE activity is in the general corporate finance and funding space



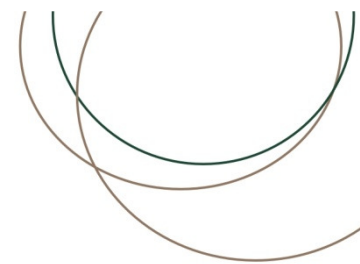
## M&A in Africa

- Reliable statistics on M&A activity in SSA (ex-SA) are difficult to obtain but the trend is clear – an increase in African M&A



- Sub Saharan Africa one of the fastest growing regions in the world (6.3% - World Bank)
- Drivers for M&A activity are :
  - SA as a conduit for investment in the continent (95% of deals recorded were SA companies acquiring into the continent)
  - Increased interest in inward acquisitions by foreign players (Massmart, Didata, Nedbank)

Source: Thomson Reuters



# Nedbank Capital M&A rankings

## 2005-2009 League Tables

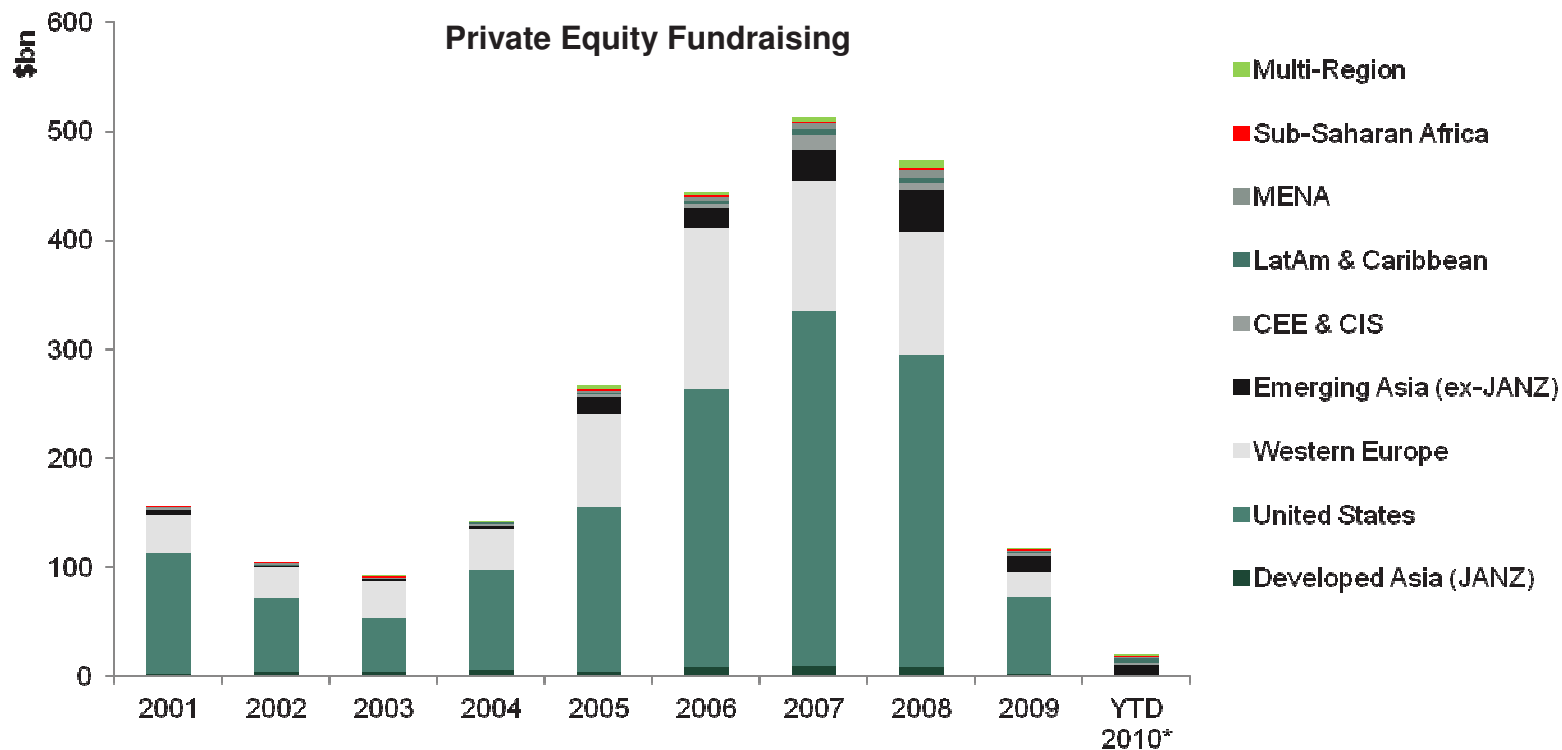
House	Value (Rm)	House	Volume
RMB	443,276	Investec	236
Deutsche	317,408	<b>Nedbank Capital</b>	<b>142</b>
Goldman Sachs	262,287	Java Capital	133
Standard Bank	210,837	RMB	120
<b>Nedbank Capital</b>	<b>193,293</b>	Standard Bank	98
Morgan Stanley	172,997	Deloitte	46
JP Morgan	154,647	PWC	46
Investec	139,245	Deutsche	42
UBS	139,116	ABSA	41
ABSA	120,804	JP Morgan	28
Rothschild	117,413	Morgan Stanley	24
PWC	93,162	Ernst and Young	23
Java Capital	52,570	Rothschild	22
Deloitte	49,725	UBS	18
Ernst and Young	35,404	Goldman Sachs	16
Bravura	22,256	Bravura	16

\* includes ICBC transaction R36.7bn

- **Nedbank Capital Corporate Finance has ranked exceptionally against competitors over a five year period**
- **These were typically locally based deals**
- **Maintained a balance between steady flow and sizable deals**
- **Less reliance on “once off” large deals**



# Global Private Equity trends

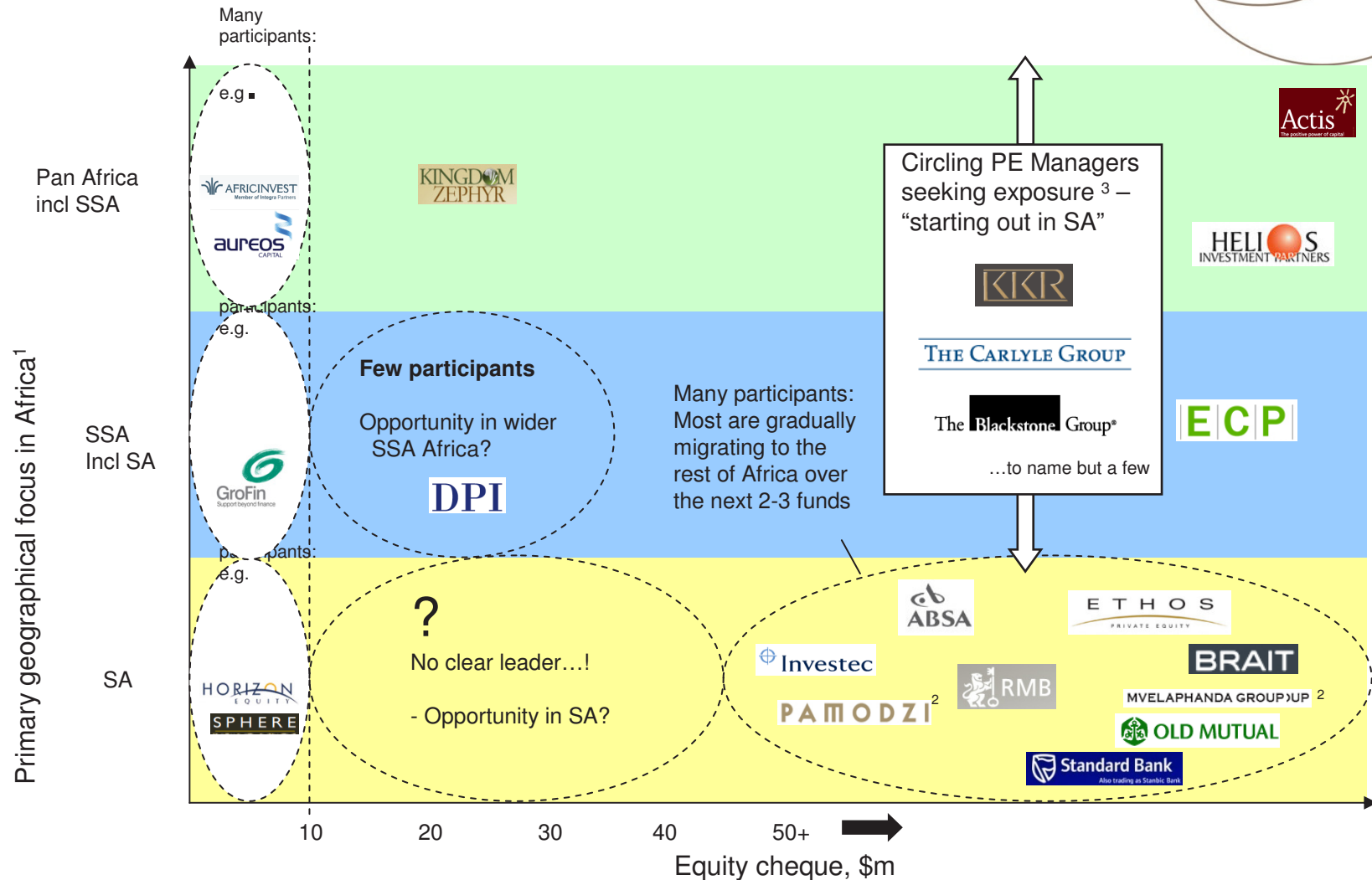


- Impact of Basel III – need to hold more capital against exposure on balance sheet
- Relatively large effect on earnings leads to increased volatility
- Absence of large deals seen previously
- Opportune time to raise funds?

Source: Emerging Markets Private Equity Association, Sep 2010



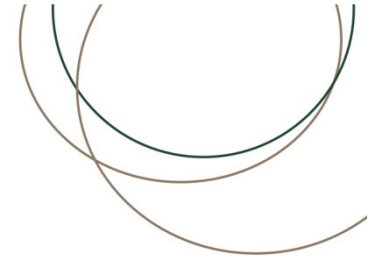
# Private Equity – Key participants positioning in Africa



<sup>1</sup> More than 50% of the fund  
<sup>2</sup> Mainly resources focussed  
<sup>3</sup> based on investor insights, press reports, past discussions

The information presented on this slide is based on internal research/analysis utilising information collated from PE investor discussions and press articles and therefore has not been verified and may contain inaccuracies. The information has been presented for high level discussion purposes only and further work will need to be undertaken before any reliance may be placed on it.

# Nedbank Capital Private Equity Performance Summary



Fund	IRR
Notional Fund 1	137.0%
Notional Fund 2	33.1%
Notional Fund 3	40.4%

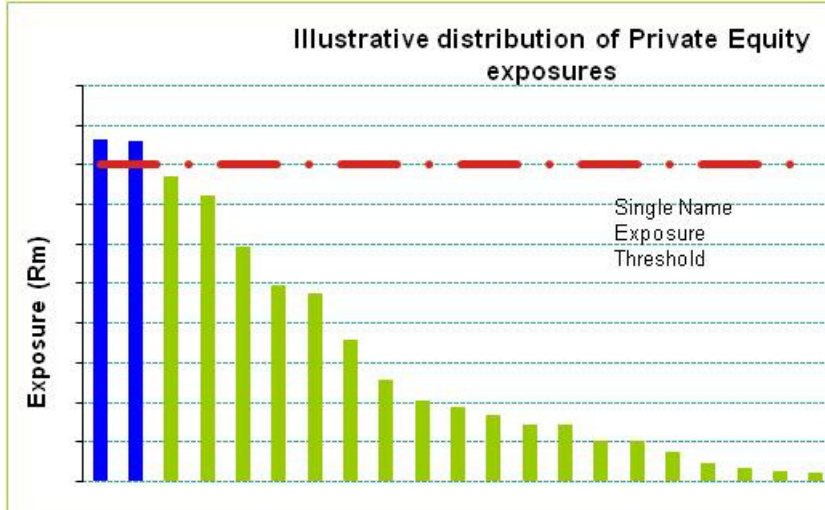
- Team in place since 1996 - stability
- Good returns – most success in mid-market space
- Portfolio approach to risk management
- Concentration risk to counters in sectors monitored

# Portfolio snapshot and risk appetite monitoring – Private Equity

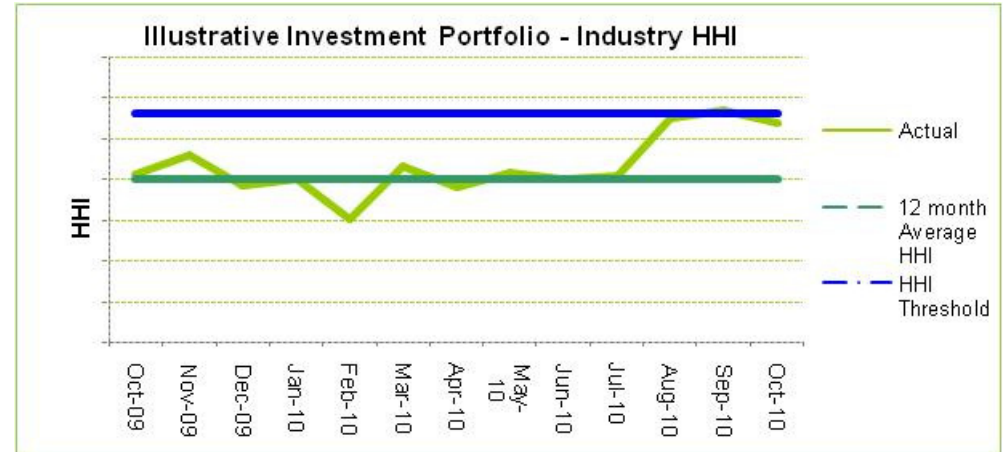
- Monitoring of key portfolio information:

Total portfolio size
Number of deals in portfolio
Average deal size
Number of deals in the portfolio > threshold
Cumulative value of deals > threshold
Value of deals > threshold as percentage of total portfolio value
Number of deals approved - YTD
Average deal value approved - YTD

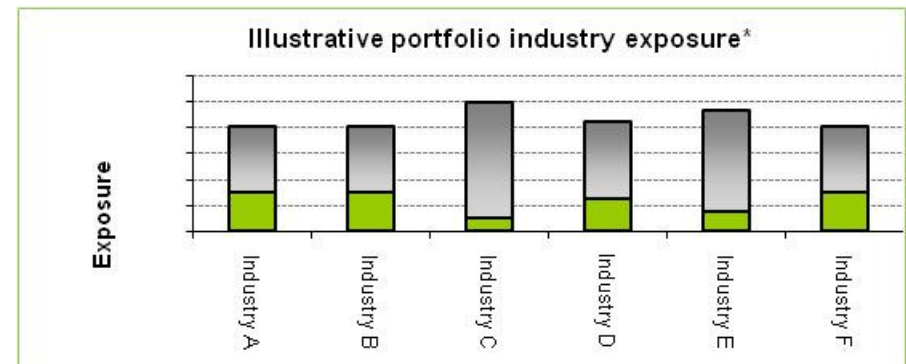
- Spread of exposures is monitored against defined risk appetite threshold



- Portfolio concentration monitored using the Herfindahl-Hirschmann Index (HHI)



- Additional exposure that can be taken on within specific industry without causing the portfolio industry exposure concentration metric to breach the upper threshold



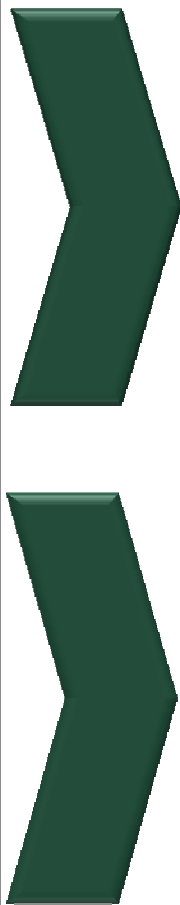
N.B. Graphs are constructed using illustrative data only

# Overview of the South African Electricity Sector



## CURRENT CHALLENGES

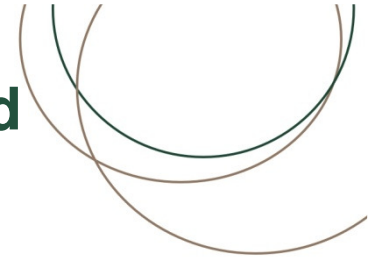
- **Inadequate generation capacity to meet projected demand growth over next 4 years**
- Inadequate Reserve Margin leading to load shedding and insufficient time for generation plant maintenance
- Too much reliance on coal based generation, with negative impact on the environment
- Low electricity price encourages wasteful use
- Customers are experiencing an increase in electricity costs
- Inadequate electricity price increases have lead to increased risk to the Eskom New Build Programme



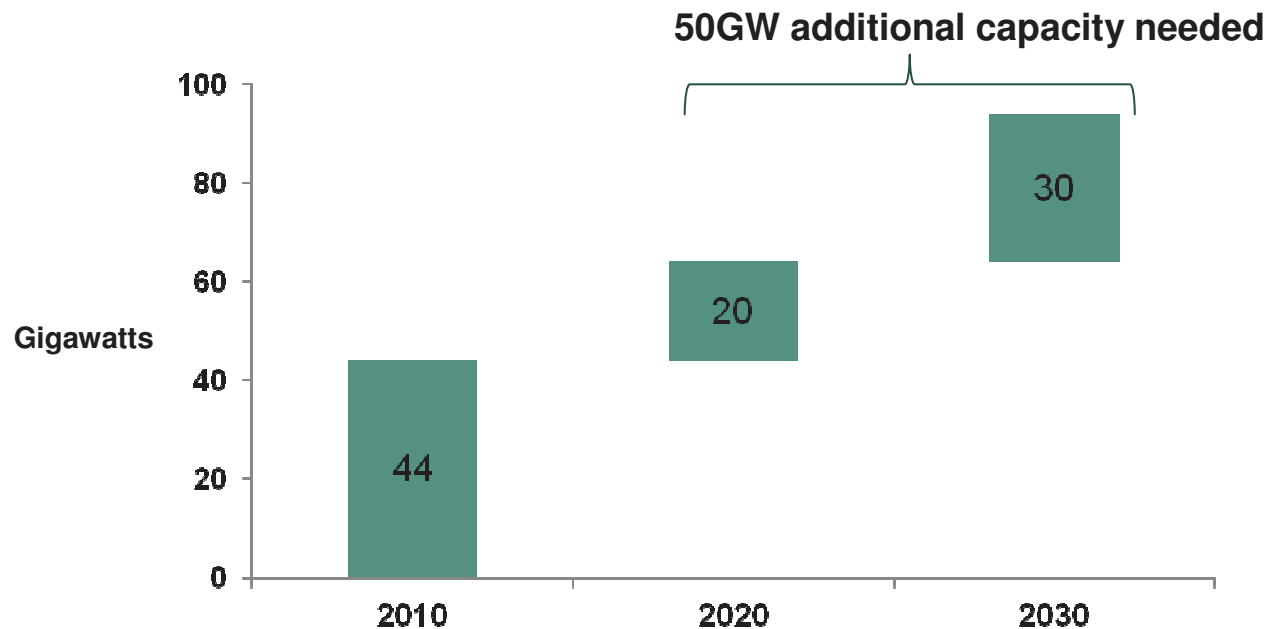
## ANALYSIS

- High Demand Growth over past few years
  - Construction of new generation plants started too late and capacity will therefore be constrained until 2013
  - New base load power stations take > 5 years to construct and is expensive
  - IPPs (Co-gen / Renewables) need PPAs and approx 2 years to construct
  - Reduction in demand is the quickest and cheapest
  - Supply side management
- Eskom's Carbon Footprint is a major concern
  - Coal-based generation is, however, the cheapest base load option
  - Nuclear is a better option (GHG free), but very expensive and less affordable in current financial circumstances (Construction costs vs Operating costs)
  - Possibility of carbon taxes
- Pricing signal not strong enough to encourage investment in energy efficient equipment or behaviour
  - Standard electricity tariff too low to attract investment in alternative generation
- Electricity price increases are inevitable due to increased generation cost
  - The only way to counter price increases, is by reducing consumption through increased efficiency
- Eskom may have to delay new power stations due to cash flow challenges
  - Reduction in demand will have positive impact in reducing risk of power outages and the cost to the consumer
  - Possibility of Power Conservation Programme (PCP) penalties

# Future Generation Requirements to Meet Expected Demand



- South Africa needs to **double generation capacity in 20 years** to ensure security of supply for the country for the next 20 years
- Current expansion plans are based on the moderate growth scenario (averaging 3% electricity consumption growth rate over a 20 year period).
- Every 1% of GDP growth requires 0.75% increase in electricity supply
- IRP 2010 is the proposed master plan to address the generation challenges faced in South Africa

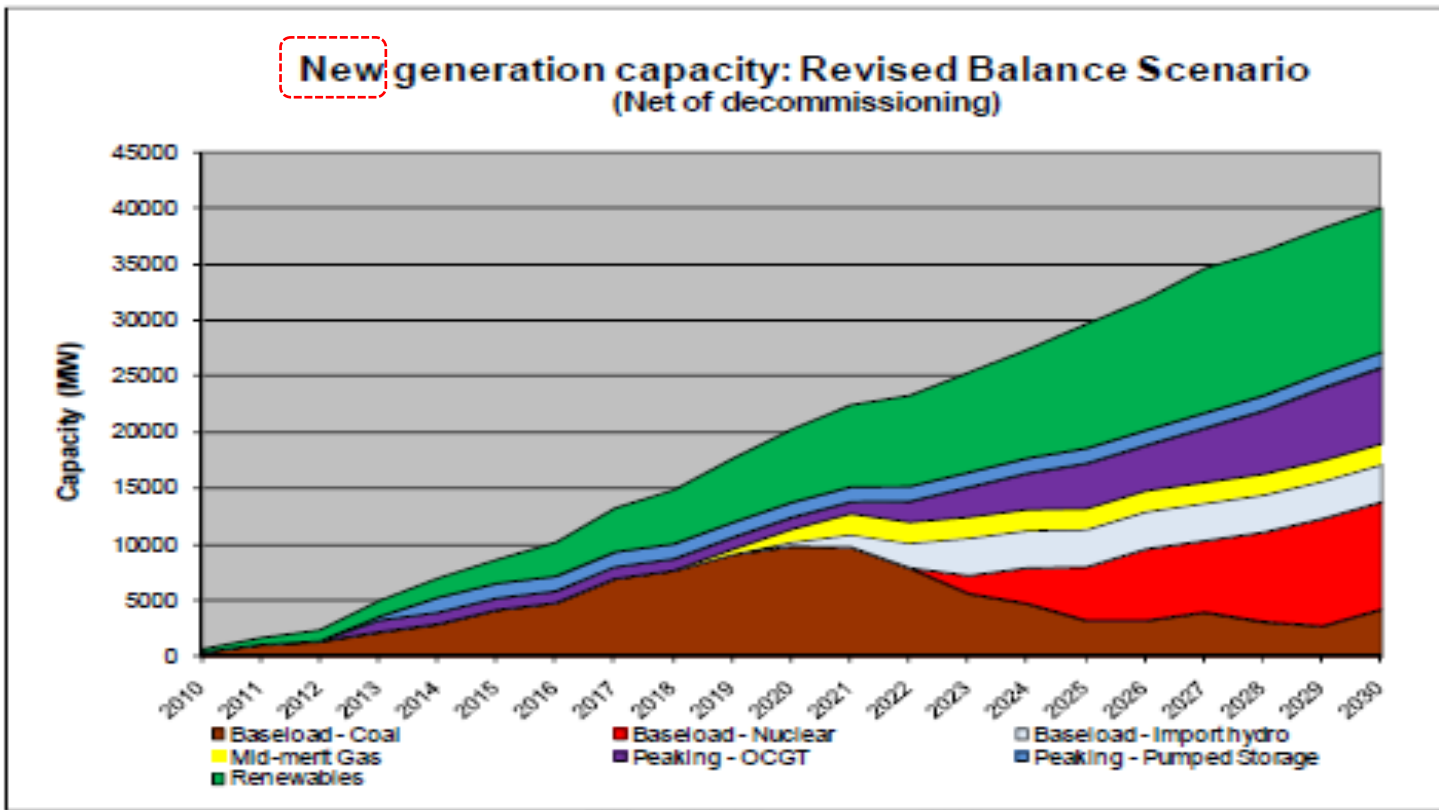


This includes the decommissioning of 10GW of existing capacity (from 2023 onwards)



# Electricity Generation Mix

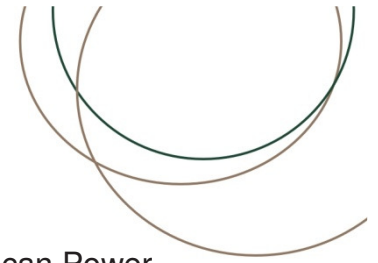
- An increasing amount of non-coal based electricity generation



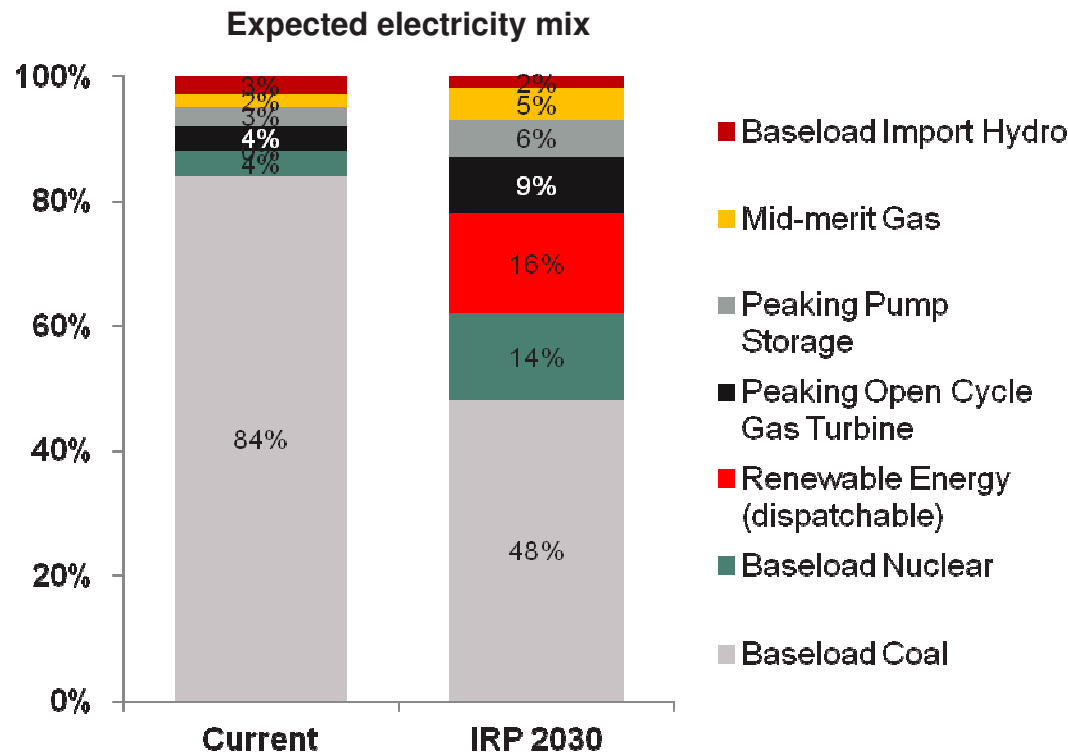
Nuclear Energy has been identified as the main source of new base load generation

Source : IRP 2010

# SA Government Intervention : Integrated Electricity Resource Plan 2010



- Government through the Department of Energy (DOE) has accelerated the introduction of IPPs to the South African Power landscape by releasing the draft IRP 2010 for the South African revised electricity supply scenario for the period until 2030
- South Africa is the 11th highest emitter of carbon in the World. The DOE has signalled a carbon emission reduction in the long term by substituting fossil fuel with both renewable and nuclear energy. The IRP 2010 also aims to achieve this
- Several regulatory milestones has occurred in support of the introduction of IPPs in South Africa:
  - National Treasury will underwrite the Power Purchase Agreement (PPA)
  - NERSA and DOE has issued a draft PPA for the REFIT scheme
  - DOE has issued a Request for Information on the REFIT scheme in October 2010



- 33% of all new build will be Renewables, 25% Nuclear, 9% Coal. Of the Renewables, 4.5GW will be allocated to wind (600MW by 2019)
- The DOE has estimated that this new capacity would require an additional R790 billion in capital expenditure



# Renewable Energy for South Africa

*The South African government has committed to produce renewable energy as part of national supply*

- The Renewable Energy Feed in Tariff scheme in South Africa is generally referred to as REFIT
- South Africa has very good potential for wind and solar power generation. To a lesser extent, landfill gas and small hydro generation is possible. Wind has the largest allocation
- The Renewable Energy target for the first phase of REFIT is 1025 MW, which is less than 5% of total generation. This will increase in following phases as per IRP 2010
- In 2009, Eskom's average selling price was R0.33/kWh. NERSA approved a 24.8% increase for 2010/11, 25.8% for 2011/12 and 25.9% for 2012/13. Therefore with these exponential increases, RE will not be as expensive as initially contemplated
- NERSA approved the following REFIT tariffs for electricity generated from the various potential renewable sources

*These feed in tariffs are close to the international benchmarks. They have attracted significant attention from IPP developers, many of whom have commenced development work*

2010 *	R / kwh
Wind	1.25
Small Hydro	0.94
Landfill Gas	0.9
Solar (CSP)	2.1
CSP without storage	3.14
Large scale PV	3.94
Biomass solid	1.18
Biogas	0.96
CSP with storage	2.31

\* this will escalate at CPI





# Main Large Scale Renewable Technologies

*Nedbank financed a wind farm project in India, through which valuable experience was gained*

*No commercially funded renewable project has been closed in South Africa to date.*

## Wind



- **A mature technology.** Global wind capacity is over 150 GW.
- **An increasingly affordable energy alternative.** Wind energy production has reduced in cost by around 50% over the past 15 years as turbines have increased in size and height and efficiency has improved.
- **Some cost reductions achievable through scale of projects,** but although ongoing development is continuing in turbine design and material, learning curve is flattening out.

Source: Global Wind Energy Council



## Concentrated Solar Power "CSP"



- **An emerging technology,** established commercially since 2006. Global capacity installed to date is 1 GW with 15 GW worth of projects in development.
- **Becoming competitive.** In the sunniest countries, CSP can be expected to become a competitive source of bulk power in peak and intermediate loads by 2020, and of base-load power by 2025 to 2030.
- **Provides base-load power.** The possibility of integrated thermal storage and fuel-power backup is an important feature of CSP plants

Source: Deutsche Bank (2009) The CSP industry: An awakening giant





# Concentrated Solar Power (CSP) Technology Options

South African climate is ideal for solar power generation

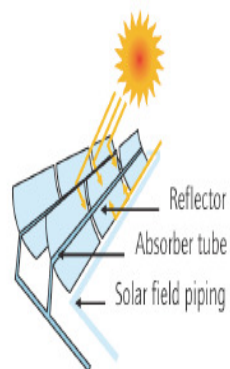
Conventional photo voltaic (PV) generation is still very expensive at \$6,8 million/MW

CSP uses mirrors to concentrate sun light, heating a liquid; the liquid exchanges heat with water at high enough temperatures to drive a conventional steam turbine

CSP creates more jobs (to clean the mirrors) than any other RE technology. This is a very positive consideration for rural communities with high unemployment

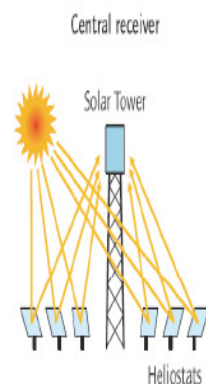
Although solar is relatively expensive, South Africa is very suitable and the potential capacity is huge

## Parabolic trough



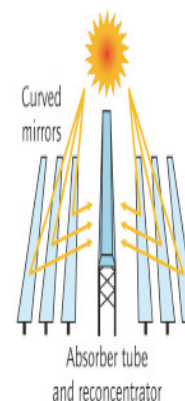
- Most mature: account for the largest share of the current CSP market.
- Most existing plants have no thermal storage and rely on combustible fuel as a backup.
- Proven technology: evidence of costs from established 50MW plants.

## Tower



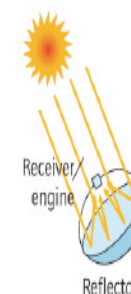
- Extremely high temperature, increased efficiency, reduced cost of storage and better capacity factors.
- Still to be scaled up. Evidence of costs is only from Current plants are 10MW.

## Linear Fresnel

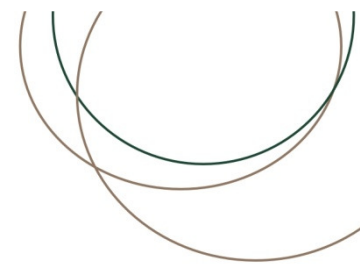


- Simple design, lower investment costs.
- Less efficient than troughs or towers. difficult to incorporate storage capacity.
- No large plants developed yet. Evidence of costs is only from 5MW installations.

## Parabolic dish



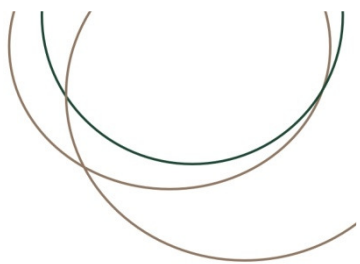
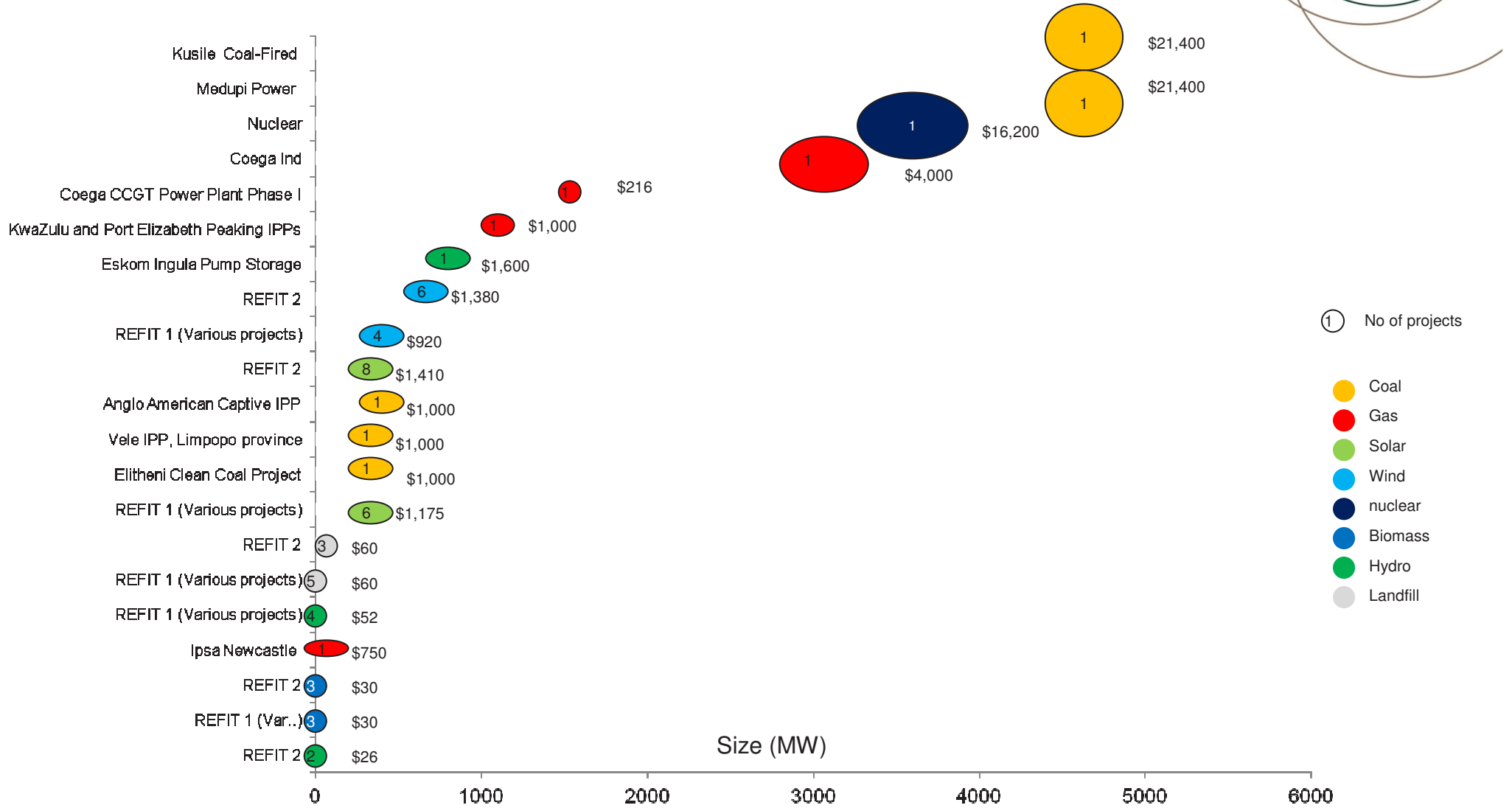
- Highest solar to electricity efficiency option.
- Low water use.
- Harder to incorporate storage, not a base load option.

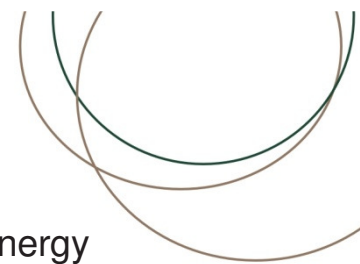


# Challenges to the REFIT program

Challenge	Status
<b>Identifying the buyer of Renewable Energy</b>	<ul style="list-style-type: none"><li>• NERSA initially indicated that Eskom would be the “single buyer” of renewable energy. This would be underwritten by Government</li><li>• Government has subsequently announced that it is planning to set up an independent system operator(ISO)</li><li>• Interim solution to meet 2013 deadline would be that the PPA will be signed by Eskom and then transferred to the ISO. This PPA will have Government support</li></ul>
<b>Procurement process</b>	<ul style="list-style-type: none"><li>• NERSA guidelines has suggested that procurement would take place on a first come, first serve basis, but Government seems to prefer a tender process</li><li>• Current market sense indicates that the REFIT program will be oversubscribed a few times, therefore the procurement process and guidelines will be critical</li><li>• This process still needs to be finalised</li></ul>
<b>Power Purchase Agreement</b>	<ul style="list-style-type: none"><li>• It is expected that new drafts of the PPA have achieved a balance of risk allocation between buyer and seller, and would be bankable</li></ul>
<b>Grid connection</b>	<ul style="list-style-type: none"><li>• The REFIT program would need guaranteed and priority grid access. This still needs to be finalised</li></ul>

# South African Energy Projects

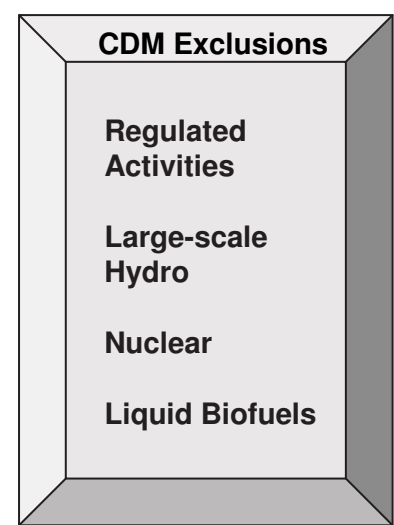
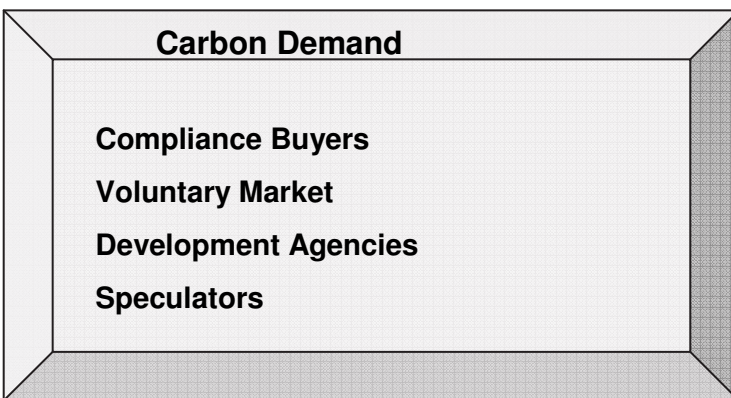
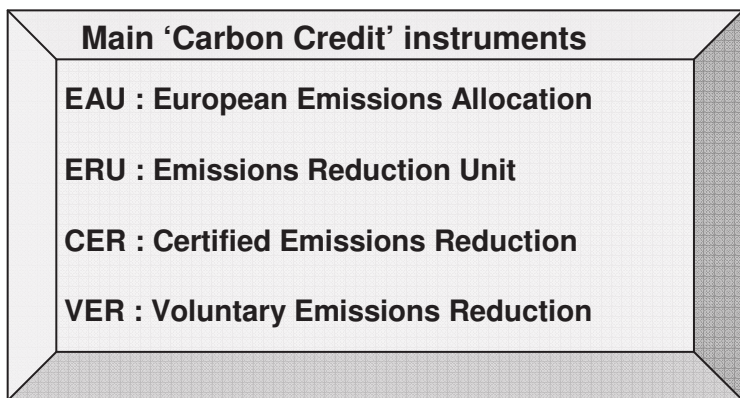




# Carbon Credits

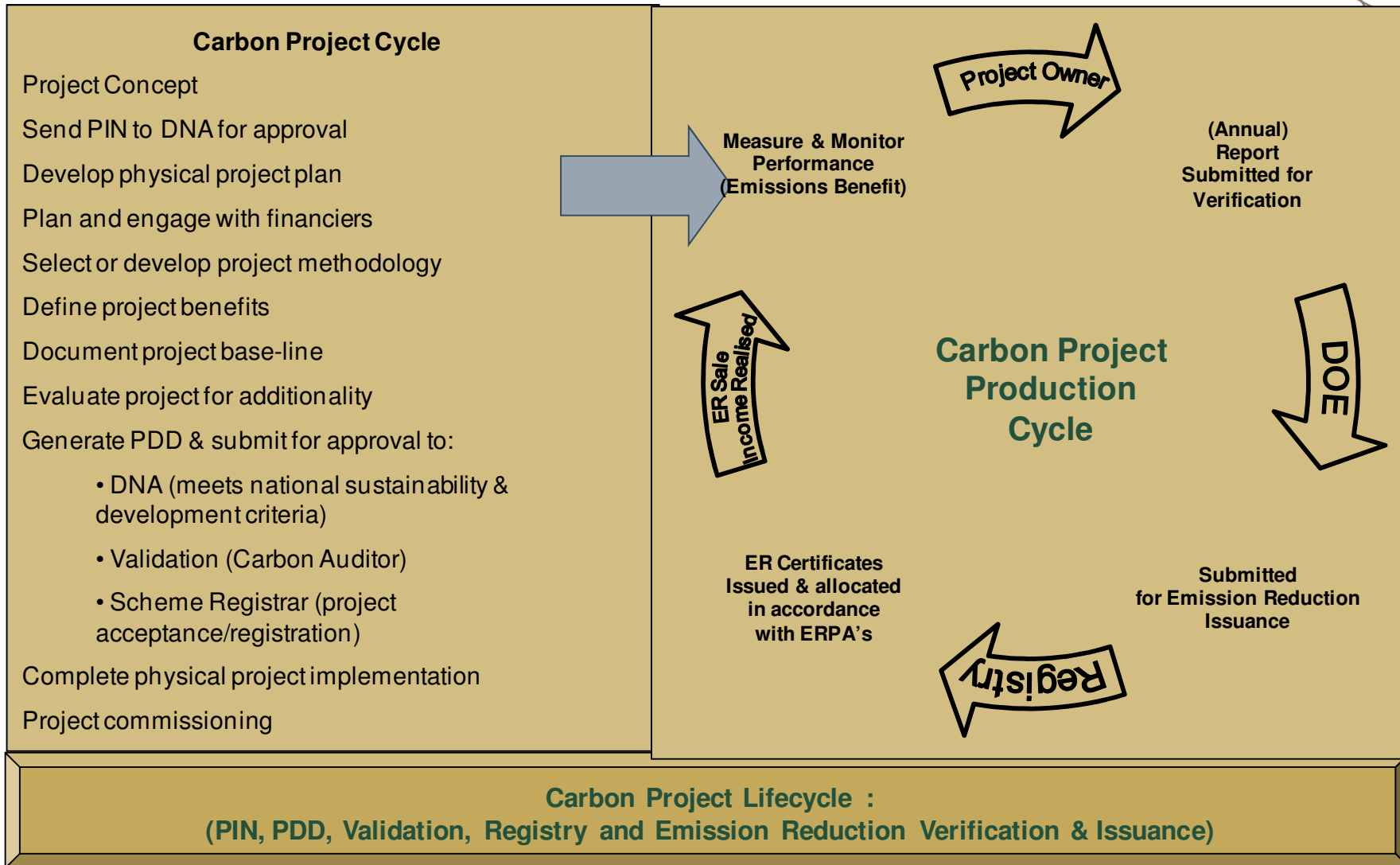
- The Kyoto Protocol provides for a mechanism to monetise the benefit of companies shifting to energy efficient or clean energy sources
- Carbon credits are the instruments that allows the benefit of these initiatives to be quantified across different projects and jurisdictions

	CDM Projects	CERs issued to date (m)	Approx value (€ m)
Worldwide	2 303	421.1	5 763
Africa	39	1.9	25
South Africa	17	1.8	23

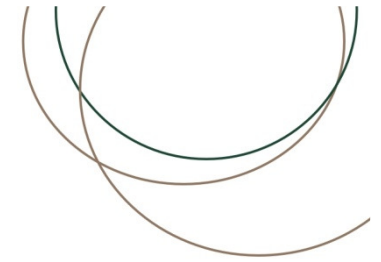


**The generation of carbon credits can be monetised to reduce the project cost**

# Carbon Markets and Mechanism Overview



PIN = Project Idea Note  
 PDD = Project Design Document  
 DNA = Designated National Authority



## Nedbank Capital Approach : Client 1

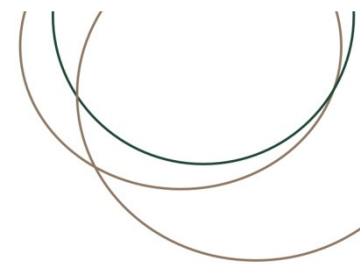
- The company, established in 1991, is a high quality brick manufacturer
- The company has introduced eco friendly fuel in June 2009 that is used to manufacture the only renewable-energy fired “eco-bricks” in South Africa, if not worldwide, which also uses local renewable biomass
- They have reduced their Carbon dioxide emissions by 7 000 to 10 000 tons of Carbon dioxide per annum, reducing their “carbon footprint” by approximately 26 %
- This qualifies them to register a project with the UN under its Clean Development Mechanism (“CDM”) Program
- Once registered the company will produce one CER for every tonne of CO<sub>2</sub> that it reduced, which is currently estimated to be 7 800 tonnes per annum
- The transaction involved the ff steps:
  - Nedbank registered the project under the CDM program
  - Arranged the validation of the project by independent advisors
  - Forward purchased CERs
  - Negotiated the forward sale of these CERs/VERs with a European utility

## Nedbank Capital Approach: Client 2

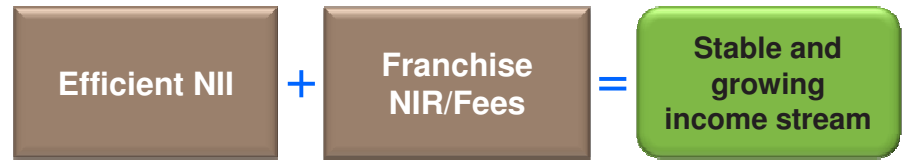
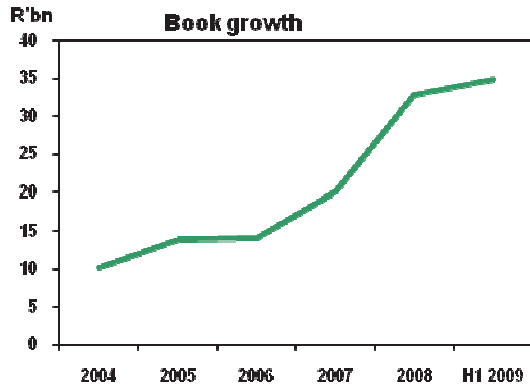
- The Client's main business objective is to assist with the development and protection of the Kasigau Wildlife Corridor in Kenya
- The client qualifies for carbon credits based on their preservation of forest and wildlife in terms of two standards, the Climate, Community and Biodiversity Alliance ("CCBA") standard and the Voluntary Carbon Standard ("VCS")
- Due to the high quality community work attached to the project it will receive gold standard accreditation from the CCBA, which is the highest level of accreditation given by the CCBA
- In terms of both VCS and CCBA rules the project will qualify for credits from 2006 for a period of 20 years
- Nedbank Capital facilitated trading of VERs into local and international markets



# Nedbank Capital Growth drivers...



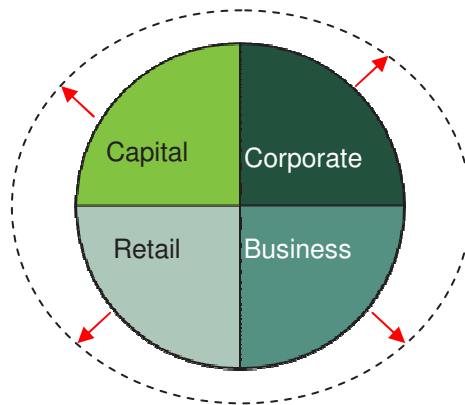
Investment Banking



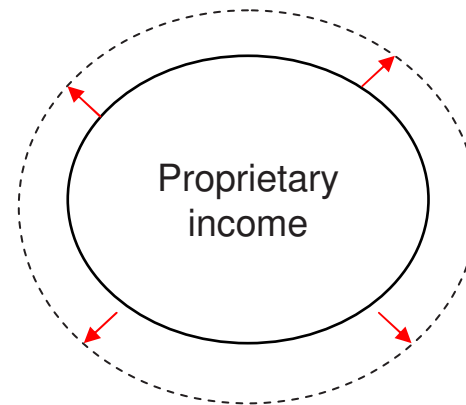
Shift to sector specialised teams



Markets



Nedbank Primary franchise growth

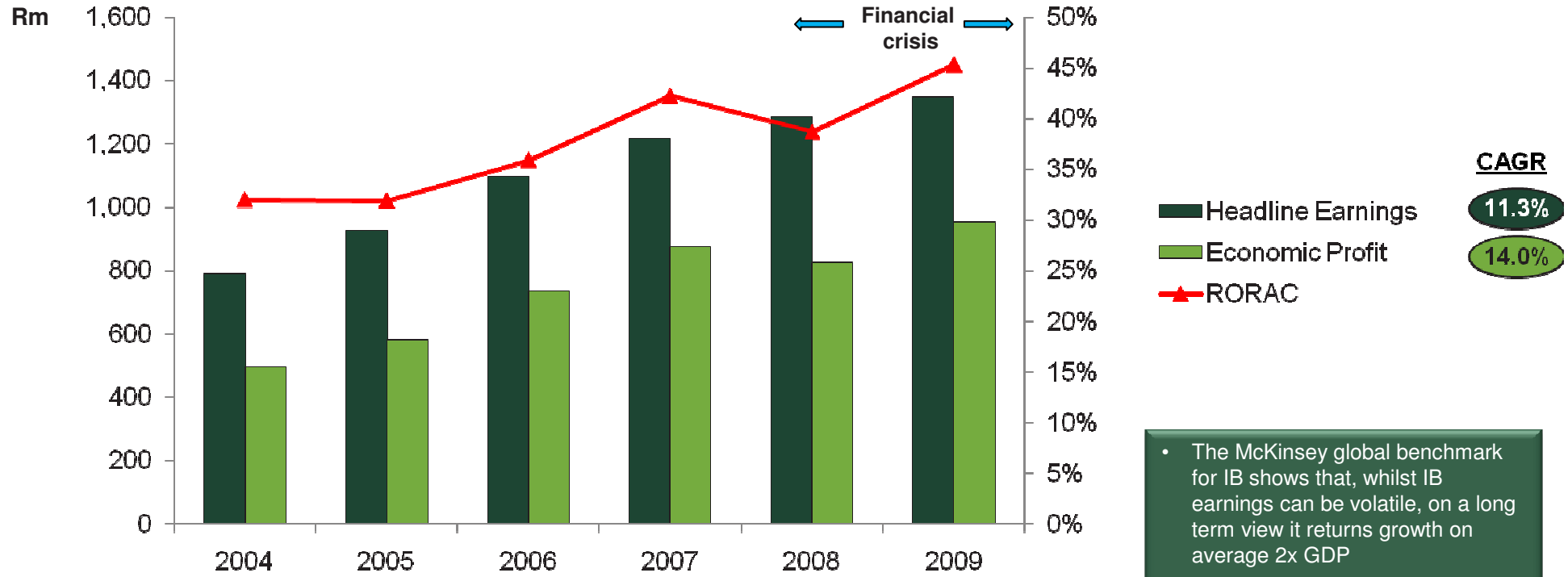
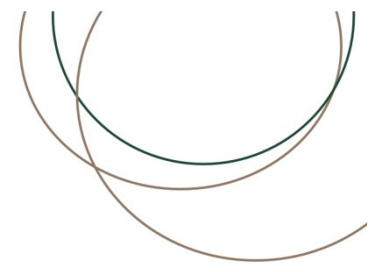


Function of risk appetite

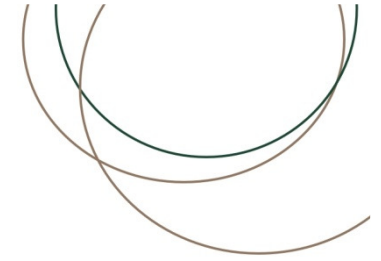


... steady managed growth over time

# ...resulting in steady growth in earnings and economic profit – 6 year EP CAGR 14%



- The McKinsey global benchmark for IB shows that, whilst IB earnings can be volatile, on a long term view it returns growth on average 2x GDP
- Nedbank Capital targets a growth rate of GDP + CPI + 5% 'through the cycle'



## Nedbank Capital – prospects

- Good credit quality book generating NII
  - Stable earnings platform
- Focus on reduced volatility & disciplined risk management
  - YTD asset creation & market opportunities lower than expected
- Full spectrum of profitable investment banking products & services
  - Good portfolio diversification
- Strong focus on stable & diversified funding sources for the bank
- System rationalisation – WALL STREET implementation is well under way
- Reinforce integrated investment banking model
  - To trap more group NIR
- Continue to focus on talent & leadership development