



# **FINANCING SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA**

**PRESENTATION TO THE CONFERENCE ON SUSTAINABLE FINANCE  
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*For an Equitable Sharing of National Revenue*



# I. BACKGROUND AND CONTEXT

# CLIMATE CHANGE AND ENVIRONMENTAL CHALLENGES

- Electricity and non renewable resources (coal-fired power stations (providing 80% of SA energy supply))
- Construction: buildings and construction one of the biggest consumers of electricity
  - Recycling
  - Green materials (cement)
  - Energy saving devices
- Mining: level of pollution caused in the process of extracting and processing minerals, and the environmental legacy left by past mining, acid mine drainage, surface and groundwater pollution, soil contamination, siltation, contamination of aquatic sediments and fauna, air pollution from dust

# CLIMATE CHANGE AND ENVIRONMENTAL CHALLENGES

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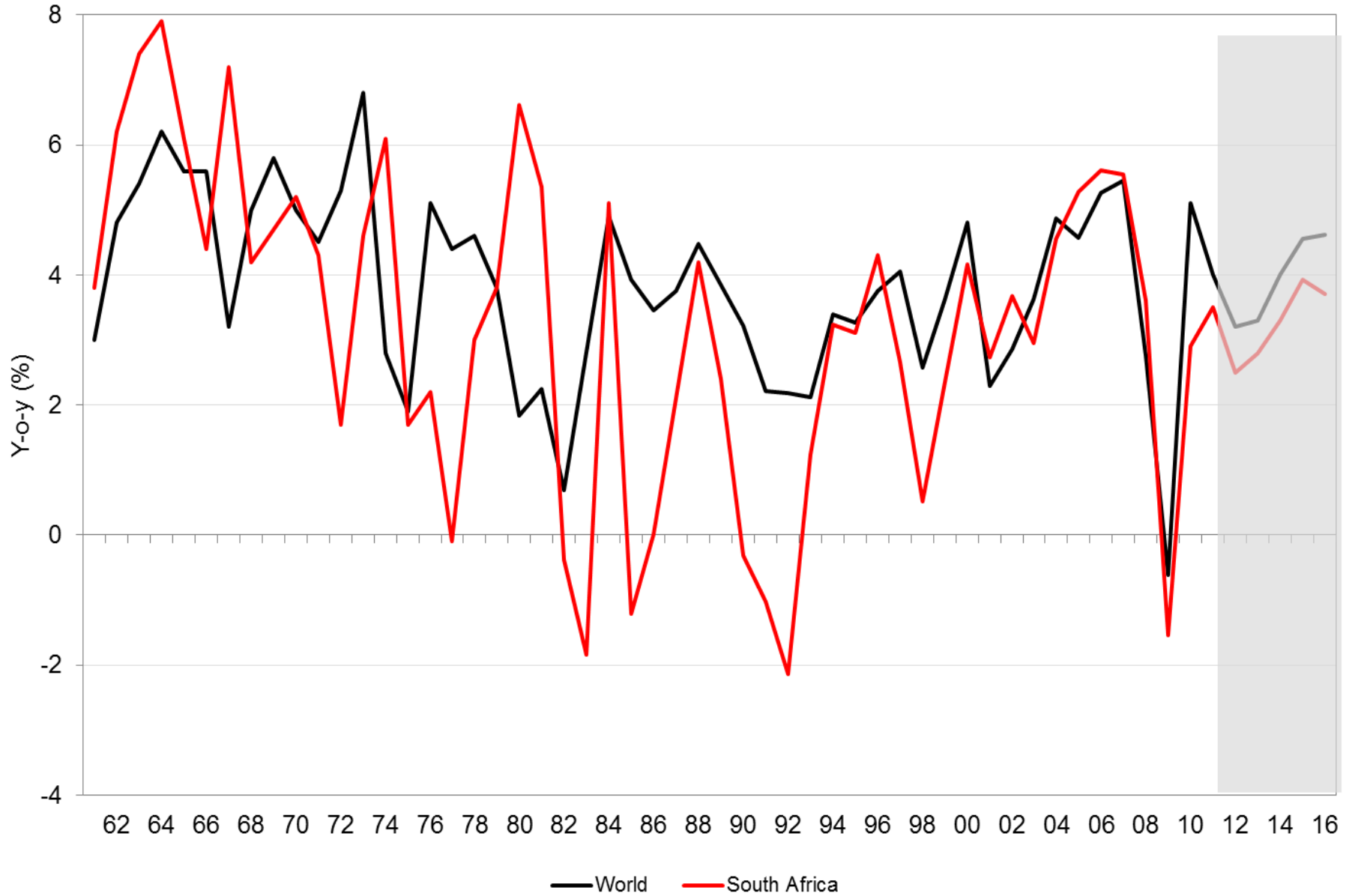
- South Africa's coastal regions will warm by around 1-2°C by about 2050 and around 3-4°C by about 2100
- South Africa's interior regions will warm by around 3-4°C by about 2050 and around 6-7°C by about 2100
- There will be an increase in the frequency and severity of extreme weather event
- Impact of climate change could be dramatic in the long term threatening the livelihoods of thousands of South Africans

# CONTEXT: SOCIO ECONOMIC BACKGROUND

- Deep structural unemployment
  - 25% national average
    - Over 30% if discouraged work seekers are included
  - North West, Mpumalanga, Limpopo and Eastern Cape have an unemployment rate of over 40%
- Youth Unemployment
  - Majority of the unemployed (just under 70%) are between ages of 15 to 34
  - 90% of those unemployed are between ages of 15 and 44
- Small informal sector
- Current economic model struggling to create jobs rich people centered economic growth

# The Age of Globalisation

## World GDP vs South Africa GDP





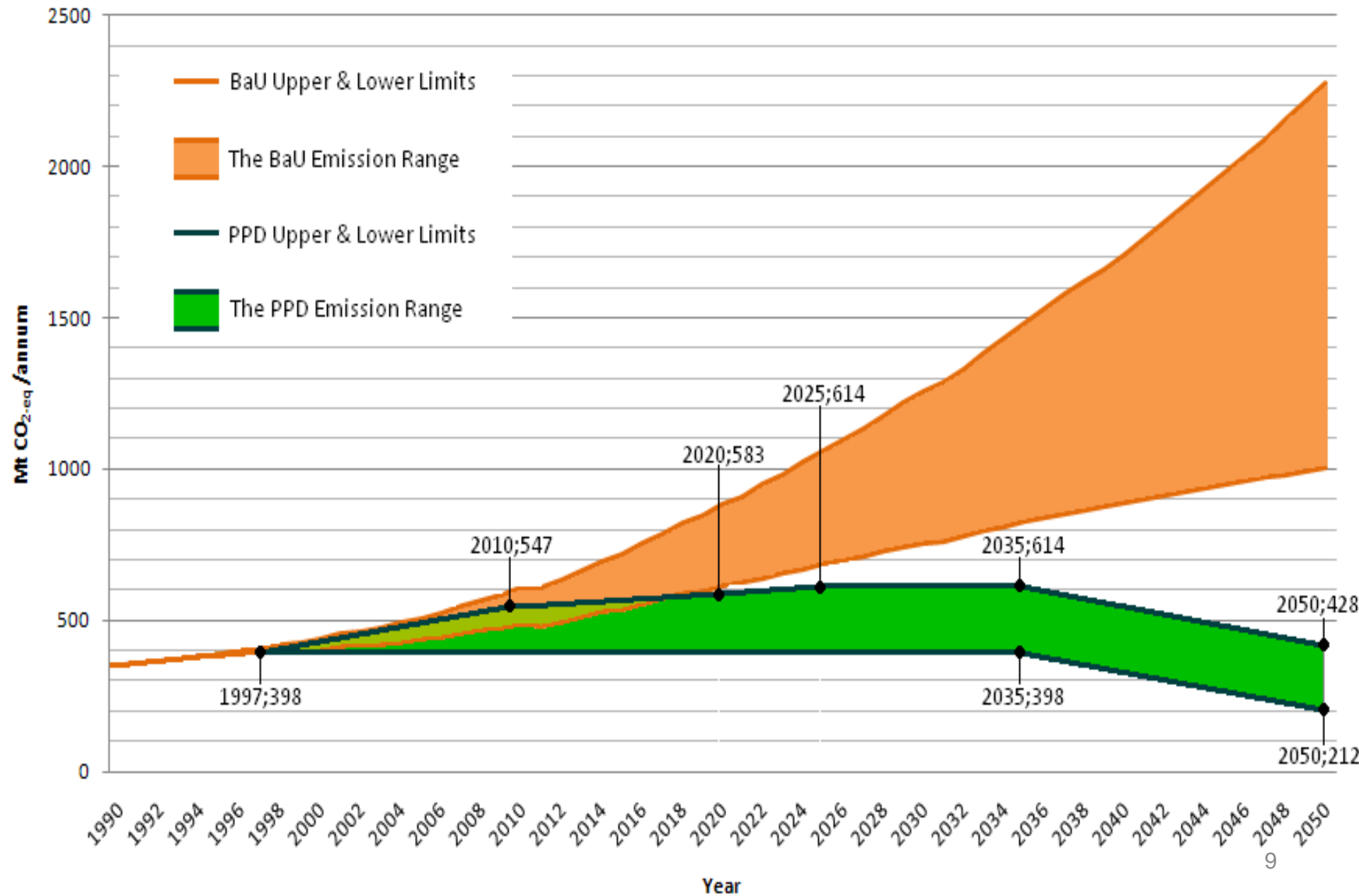
## II. CURRENT STATUS, TARGETS AND ACTIONS TO REDUCE CARBON CONTENT

# CO<sub>2</sub> EMISSIONS, TOTAL, PER CAPITA AND PER \$1 GDP (PPP)

Category	1994 Baseline	2010 Report Status	2012 Report Status	Target
CO <sub>2</sub> emissions in total (Million Tons)	258.4	356.5 (2007)	369.4 (2009)	A 34% reduction of “Business as Usual” by 2020 and 42% reduction by 2025
CO <sub>2</sub> emissions per capita (Tons)	6.84	7.39 (2007)	7.49 (2009)	
CO <sub>2</sub> emissions per 1\$ GDP (Kg)	0.79	0.69 (2007)	0.70 (2009)	



# The desired South African climate change mitigation outcome - the "Peak, Plateau and Decline" (PPD) greenhouse gas emission trajectory



# WHAT STEPS ARE BEING UNDERTAKEN?

- Implementation of the National Climate Change Response Policy, including:
  - i. Analysing mitigation potential in key economic sectors as the basis for establishment of desired emission reduction outcomes (DEROs) and optimal mix of measures for achieving the DEROs
  - ii. Developing a set of long term adaptation scenarios for key sectors, on the basis of a set of consensus locally relevant climate scenarios, that would inform an integrated approach to South Africa's adaptation response
  - iii. Developing a national monitoring and evaluation system that tracks South Africa's transition to lower carbon and climate resilient economy and society

# KEY POLICY FOCUS AREAS

- Adaptation: water, health and agriculture defined as absolutely key areas for interventions. Emerging approach is that sound sustainable development is climate friendly development
- National Development Plan – Chapters 3-6, 8, 10, 11, 13
  - Strong emphasis on interventions that focus on poor, vulnerable and women. Also focus on scaling up of programmes that achieve both poverty eradication, job creation and climate objectives.
    - Examples include: Work for Water, Working for Wetlands, Rural Economy, Health, Housing etc
  - Framework for considering MBIs to support environmental fiscal reform
  - Basis for taxes and levies imposed to promote sustainable development



# III. CLIMATE CHANGE COOPERATIVE GOVERNANCE AND CONSULTATION ARRANGEMENTS

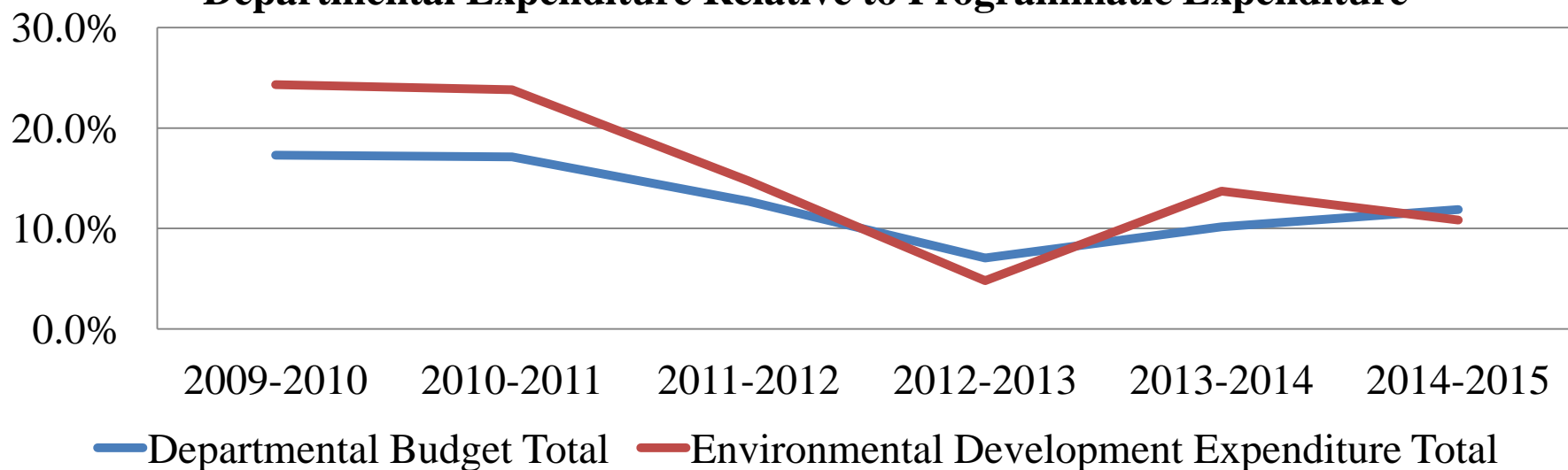
# INSTITUTIONAL ARRANGEMENTS

- Established Intergovernmental Committee on Climate Change (IGCCC) to foster exchange of information, consultation, agreement, assistance and support among spheres of government with respect to climate change and government's response to climate change
  - IGCCC is the recognized “delivery forum” for climate change outputs required for delivery of Presidential Output 10
  - The IGCCC is constituted to consist of at least two, and at most five representatives from relevant national government departments and representatives from the nine provincial environmental government departments
- Also established National Climate Change Committee (NCCC) to provide representation from main stakeholder groups involved in climate change issues
  - Members include those that are part of the IGCCC but also representative from local government, business and industry and the NGO sector

# GOVERNMENT EXPENDITURE IN RESPECT OF ENVIRONMENTAL DEVELOPMENT

- High priority attached to expenditure in environmental development
  - Growth in this component set to outpace growth in general departmental expenditure in the medium term expenditure framework
  - Includes expenditure on interventions to mitigate effects of climate change but also other aspects contributing to sustainable environmental development

**Growth in Environmental Development Expenditures-Selected Departmental Expenditure Relative to Programmatic Expenditure**



# FLAGSHIP PROJECTS

<b>Near term Priority Flagship Programmes (DEA)</b>	<b>Green Economy Summit (DEA,DBSA)</b>	<b>Green Accord (DW&amp;EA,NEDLAC,IDC,EDD,DT I,DOE,DPE,DHET,DOT,DIRCO)</b>
Climate change response Public works	Green buildings and built environment Green Cities	Retrofitting
Water conservation and demand management	Resource conservation & management Water management	Investment in the green economy
Renewable Energy	Clean energy	Rollout of renewable energy
Energy Efficiency and energy Demand Management	Energy efficiency	Energy efficiency Rollout of solar water heaters
Transport	Sustainable transport	Carbon emission reductions on roads
Waste Management	Sustainable waste management practices Sustainable consumption and production	Waste recycling, reuse & recovery
Carbon Capture and Sequestration	Agriculture, food production and forestry	Clean coal
Adaptation Research		Electrification of poor communities & reduction of fossil fuel open fire cooking & heating
		Biofuels



# IV. ROLE OF THE PRIVATE SECTOR



# WHY PRIVATE SECTOR?

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- Climate management is to a large degree a private sector activity
- Private sector companies are potential investors and funders of energy supply and demand through core business activities and corporate social responsibility schemes
- Small power producers, wood gatherers and farmers are private sector actors that operate and invest in the energy market and important partners in market-based mechanisms

# WHY WOULD THE PRIVATE SECTOR PARTICIPATE?

- Regulatory compliance
  - Taxes, fines, polluter-pays principle, Subsidies
- Direct business benefits
  - Business opportunities
  - Secure, sustain or reduce costs of key natural resource inputs required for business operations
  - Securing license to operate and avoiding losses from protests
- Indirect business benefits
  - “Green” branding, marketing
  - Improved staff pride and morale and enhanced recruitment
  - Reflect broader business values of the corporation
- Not-business related
  - Philanthropy / Charity

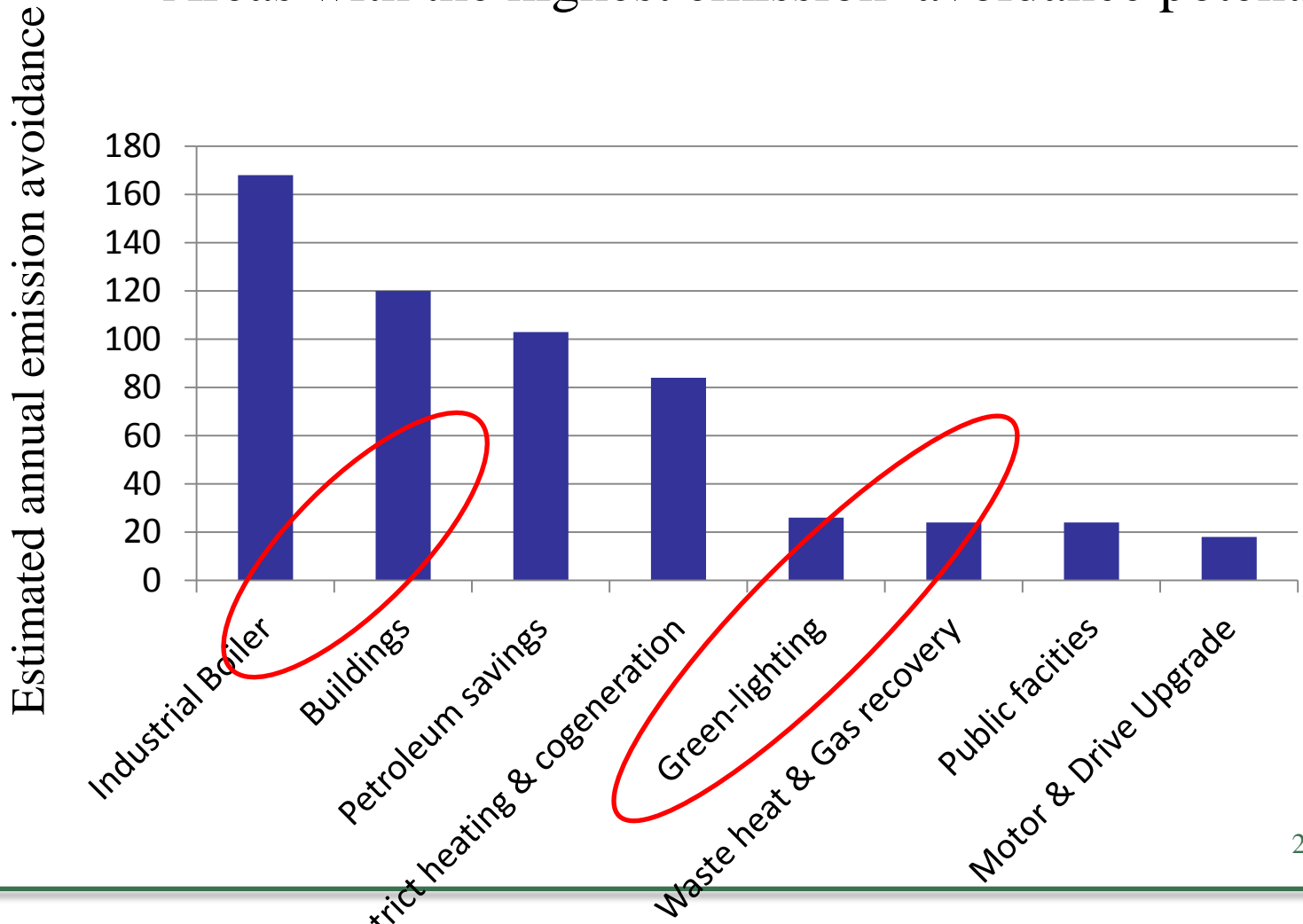
# PRIVATE SECTOR OPPORTUNITIES: TECHNOLOGY

- Business provides solutions through:
  - Enhancing delivery of existing technology
  - Developing the new breakthrough technologies needed
- Technology deployment
  - Key for energy efficiency and short/medium term emission reductions
- Technology transfer to developing countries
  - Lack of understanding of how technology diffusion happens
  - Lack of capacity/capability to absorb technology
  - Intellectual Property Rights (IPRs) – an issue?
- Technology development
  - Need for huge increase of R&D funding to achieve technical breakthroughs for key technologies
    - Next generation of nuclear
    - Renewables
  - This will require a new public-private partnership
- Technology acceptance?
  - Nuclear
  - Big hydro, e.g., Inga Dam in DRC
  - Biofuels, Jatropha etc

# UNTAPPED AREAS OF HIGH POTENTIAL

## IMPACT: BUILDINGS

Areas with the highest emission avoidance potential



# PRIVATE SECTOR OPPORTUNITIES: INFRASTRUCTURE

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- Major opportunity for companies to provide systems solutions, products, and services for “smart” and resource efficient infrastructure:
  - Buildings
  - Transport
  - Energy (massive drive by cities to provide low cost solar panels for electricity)
  - Water
  - Communications
  - Waste (e.g. eThekweni waste treatment and conversion)

# PRIVATE SECTOR OPPORTUNITIES:

## FINANCE

- Investment Based Mechanisms
  - Micro-finance (credit + insurance)
  - Environmental Funds
  - Environmental Performance Bonds
  - Green Venture Capital Funds
- Incentive and Market Based Mechanisms
  - Public payments e.g. co finance investments, subsidies
  - Open trading under regulation e.g. emissions trading, GHG mitigation
  - Self organised private deals e.g. payment to land users for environmental services
  - Certification and Eco-labeling of products and services: Payment is embedded in the product

# CONCLUSION AND TAKE HOME MESSAGE

- South Africa: conditional commitment to reduce emissions by 34% by 2020 and 42% by 2025
- Major impacts on lifestyles, consumption patterns and infrastructures are likely
- The transition will require
  - Strong public-private partnerships to implement
  - Consequences for Business
    - Tremendous growth opportunity as supplier of infrastructure, products and services for new economy
  - Climate change capacity building so that climate change issues are integrated into all development activities
  - Promotion of sustainable development



THANK YOU.

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