

# South Africa's Policy Interaction Experience

*PMR – Policy Mapping, WASHINGTON, DC*

Mpho Legote | 14 March 2013



**national treasury**

Department:  
National Treasury  
**REPUBLIC OF SOUTH AFRICA**

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# Introduction

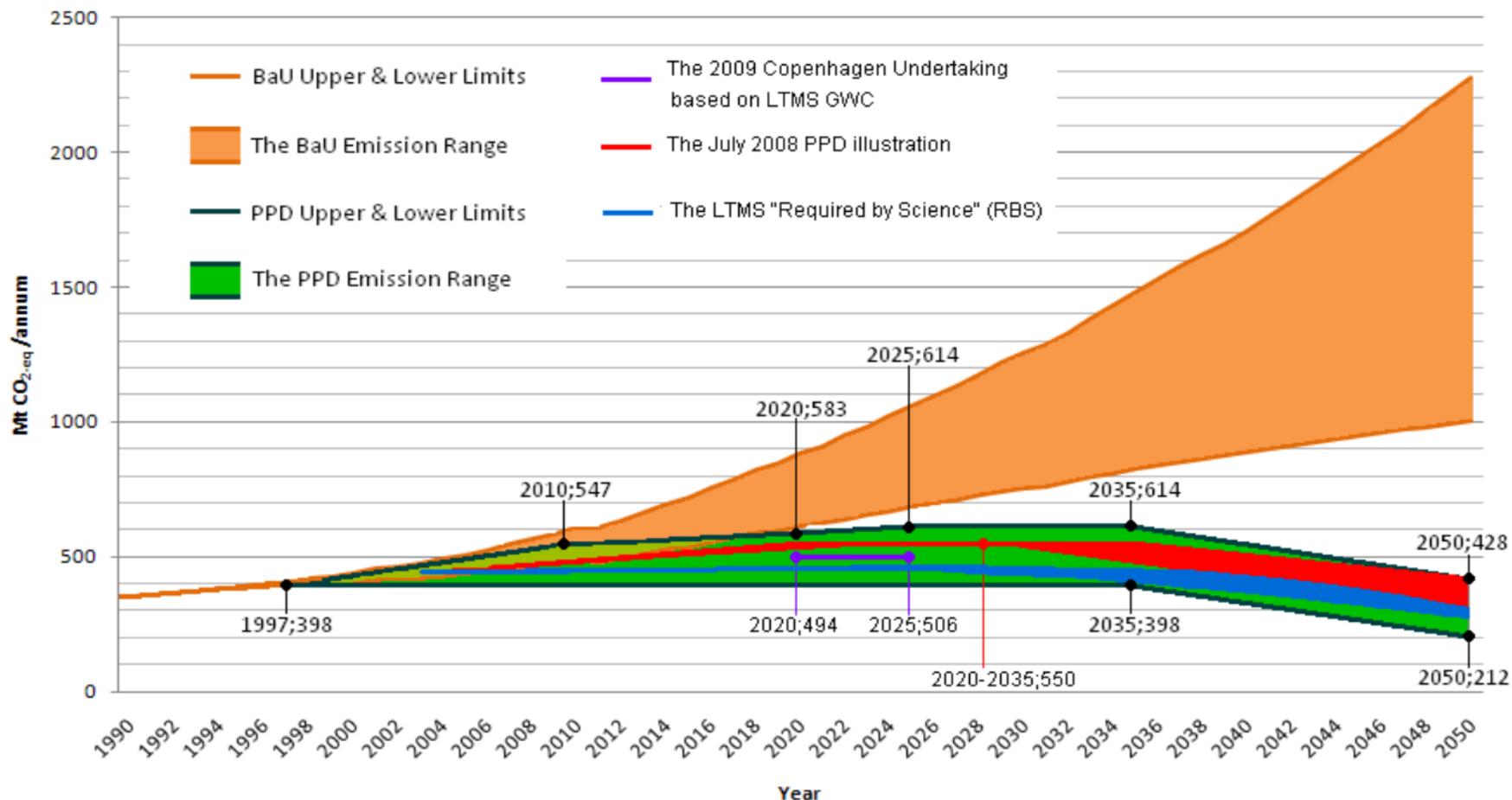
- “The South African government is committed to addressing the global threat of climate change but this will not come at the cost of growing the economy, creating jobs or boosting international competitiveness;
- Climate change itself poses a critical threat to socio-economic development, in areas as diverse as water and sanitation, food security, health, energy, industrial development and housing;
- ...the goals of creating jobs, developing infrastructure and preserving our natural resources, are not at odds;
- ...the conservation of the environment and economic development are not mutually exclusive, but are two sides of the same coin;
- The South African government recognises that the impacts of climate change have the potential to completely undermine development gains that have been made.” *Minister Edna Molewa, Pretoria News, November 9 2011*

- South Africa is ranked among the top 20 countries measured by absolute carbon dioxide (CO<sub>2</sub>) emissions
- The key GHG emitted are carbon dioxide (79%), methane (16%) and nitrous oxide (5%) of total GHG emissions (DEA, 2009)
- In absolute terms, total GHG emissions in 1994 and 2000 amounted to 380 and 461 million tons, respectively
- The energy sector emissions (i.e. electricity generation, petroleum refining) and transport accounted for more than 80% of total emissions in 2000
- Agricultural and industrial sectors accounted for 8.4 and 7%, respectively
- Power Utility (Eskom) accounts for more than 90% of total electricity generated in the country, with coal accounting for more than 92% of fuel input

# Background

(2)

The desired South African climate change mitigation outcome - the "Peak, Plateau and Decline" (PPD) greenhouse gas emission trajectory – comparison with other popularised conceptions of PPD

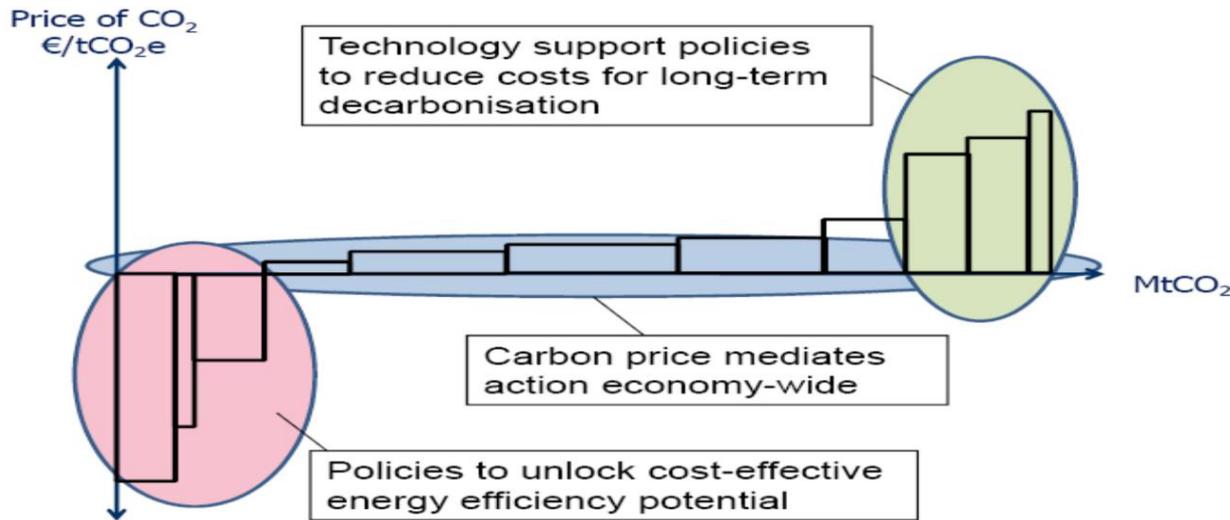


# South Africa's Climate Change Policy Context

- **2006 – Draft Environmental Fiscal Reform Policy Paper entitled “A Framework for considering market-based instruments to support Environmental Fiscal Reform in South Africa”**
  - provides a foundation to build on and support environmentally related initiatives
  - It maintains a coherent tax policy framework for considering and evaluating environmental taxes
- **2011 – National Climate Change Response White Paper recognises that:**
  - It elaborates on the government's role in developing and implementing a suite of policy measures and strategies aimed at both mitigating and adapting to the impacts of climate change
  - It recognises that a mix of economic instruments including MBIs such as carbon taxes, ETS and incentives complemented by appropriate regulatory policy measures are essential to drive and facilitating mitigation efforts and creating incentives for mitigation actions across a wide range of key economic sectors

# Climate Change Policy Measures

- Carbon pricing should be the “core” policy measure to mitigate GHG emissions. However it is not a complete solution on its own due to possible incomplete coverage or design compromises. This may warrant further supplementary policies.
- Such supplementary policies should include energy efficiency (short-term) and technology support policies (long-term)



(IEA, 2011. Summing up the parts: Combining Policy Instruments for Least-Cost Climate Mitigation Strategies.)

# South Africa's Carbon Pricing Policy

- **2010 – Publication of the carbon tax discussion paper entitled “Reducing Greenhouse Gas Emissions: The Carbon Tax Option”**
  - The negative external costs of GHG emissions are not reflected in market prices of certain goods and services, e.g. energy
  - A carbon tax is a means by which government can intervene by way of a market based instrument to appropriately take into account the social costs resulting from carbon emissions
  - It's a policy measure to price carbon emissions to stimulate behavioural change towards less energy intensive, low carbon emitting alternatives
  - It seeks to level the playing field between carbon-intensive (fossil-fuel based firms) and low carbon emitting sectors (renewable energy and energy efficient technologies)
  - To provide the necessary, credible long term price signals to stimulate behaviour changes towards energy efficient and low carbon alternatives
  - Although it does not set a fixed quantitative limit to carbon emission over the short term, a carbon tax at an appropriate level and phased in over time to the “correct” level will provide a strong price signal for behavioural change over the medium to long term
  - Document has been revised into a policy document for publication at the end of March 2013

# Proposed Carbon Tax Design

(1)

- To apply to all direct, stationary (i.e. Scope 1) sources of emissions including process emissions based on fuel inputs
- Will be implemented from 1 January 2015 at a rate of R120 per ton of CO<sub>2e</sub> emissions above a threshold
- The tax rate to increase annually at 10% for the first phase (2015 - 2020)
- For first phase – temporary tax exemption threshold will apply:
  - A basic threshold of 60% of actual emissions (rather than absolute emissions threshold)
  - Additional relief of a maximum 10% to allow for process emissions (i.e. cement, iron and steel, aluminium and glass sectors, etc.)
  - Additional relief of a maximum 10% for trade exposed sectors to deal with competitiveness concerns
  - An offset mechanism, similar to the CDM, to offset carbon tax liability up to a maximum of 5% and 10% for the different sectors to invest in projects outside their normal operations

- The overall maximum tax-free threshold (including offsets) will be limited to 90 per cent during the first phase
- Basic percentage threshold below which a tax is not payable will be adjusted according to reduction in carbon intensity against a base year or industry benchmark
- Firms doing better than benchmark qualifies for higher basic percentage threshold while those doing worse will be penalised for poor performance
- Revenues from the tax will not be earmarked, but consideration will be given to spending to address environmental concerns.
- Incentives such as the proposed energy-efficiency tax incentive and measures to assist low-income households will be supported.

# Existing Environmentally Related Fiscal Measures

## Taxes

- **General fuel levy** applied to petrol, diesel (a component ?)
- **Electricity generation tax** applied to non-renewable based electricity generation (3.5c/kWh)
- **Motor vehicle emissions tax** – purchase tax of R75 gCO<sub>2</sub>/km for each emission exceeding 120gCO<sub>2</sub>/km (passenger vehicles) and double cabs subject to tax of R100 for emissions exceeding 175gCO<sub>2</sub>/km
- **Incandescent globe tax** of R3 per globe

## Tax Incentives

- **Tax exemption for revenues earned from CERs** (CDM projects)
- **Accelerated depreciation allowances** for renewable electricity generation and biofuels production
- **R&D tax incentives (including green technologies)** - 150 per cent income tax deduction for R&D expenses
- Tax incentives for **biodiversity conservation**
- **Energy efficiency savings tax allowance** (in process ...)

# Electricity Generation Levy

- The levy implemented on 1 July 2009 on the production of electricity from non-renewables including coal, petroleum-based fuels, natural gas and nuclear. The objectives were:
  - Complement demand side management efforts
  - As a first step towards developing a carbon tax to achieve long term climate change objectives
- Electricity generated from renewables and qualifying cogeneration are excluded from the levy
- To ensure the effective pricing of carbon and facilitate the structural change currently taking place in the energy sector, a gradual phasing down of the current electricity levy will be considered

# Energy Efficiency Savings Tax Incentive

- Aimed at helping to address climate change related challenges through improvement in energy use and address energy security concerns
- The value of the incentive (i.e. a tax deduction) is 45 cents per kwh saved
- Taxpayers that can prove EES from implementing an energy efficiency measures can claim the allowance
- Only accredited measurement and verification professional can verify the EES
- The South African National Energy Development Institute (SANEDI), a government agency, is responsible for endorsing and issuing EES certificates
- The taxpayer baseline is adjusted annually with the amount of EES claimed
- The legislation is already in place and the Regulations to effect the incentive await publication
- The EES incentive will run until January 2020
- It is complementary mechanism (i.e. carrot) in anticipation of the implementation of the proposed carbon tax. Some of the carbon tax revenue will be recycled through this EES Tax Incentive

# Other Tax Allowances

Instrument	Description
Renewable energy depreciation allowance (Section 12B)	An accelerated depreciation allowance exists for capital equipment used for renewable electricity generation from wind, solar, small-scale hydro and biomass at the rate of 50 : 30 : 20 per cent over three years.
Depreciation allowance for biofuels production (Section B)	An accelerated depreciation allowance exists for capital equipment used for biofuels production at the rate of 50 : 30 : 20 per cent over three years.
Tax exemption for certified emissions reductions (Section 12K)	Revenues generated from the sale of certified emissions reductions resulting from projects under the CDM are exempt from income tax.
Biodiversity conservation and management expenses (Section 37C)	Income tax write-offs are provided for expenditure incurred in the management and maintenance of biodiversity and priority areas under the National Environmental Management Biodiversity Act and the Protected Areas Act.
Research and development tax incentive (Section 11D)	There is a 150 per cent income tax deduction for scientific and technological research and development expenditure, and research and development capital expenses can be written off at the rate of 50 : 30 : 20 per cent over three years.
Industrial policy incentive (Section 12I)	Energy efficiency-related criteria are given in the Industrial Production Policy incentive scheme.

# Concluding Remarks

- A carbon tax that is implemented gradually and complemented by effective and efficient revenue recycling can contribute to significant emissions reductions,
- A carbon tax will therefore be introduced as part of a package of interventions to ensure that the primary objective of GHG mitigation is achieved,
- Also to minimise potential adverse impacts on low-income households and industry competitiveness
- In facilitating the structural adjustment to a low-carbon economy, more mechanisms for revenue recycling will be considered in addition to current programmes

# Thank You

**Mpho Legote**

**National Treasury (Republic of South Africa)**

**Economic Tax Analysis**

**Environmental and Fuel Taxes**

**[Mpho.legote@treasury.gov.za](mailto:Mpho.legote@treasury.gov.za)**

**Tel: +27 12 215 5742**