

Presentation of PMR Expression of Interest

Country: SOUTH AFRICA

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Policy Context for GHG Emission Reduction

- ◆ Taking into account equity and the common but differentiated responsibilities and respective capabilities of all nations as well as the inter-generational commitment of the Environmental Right contained in Section 24 of South Africa's Constitution, our climate change response objectives are to:
 - make a fair contribution to the global effort to achieve the stabilisation of greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system; and
 - effectively adapt to and manage unavoidable and potential damaging climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity.
- ◆ South Africa is committed to contributing its fair share to the global greenhouse gas mitigation effort and has aspired to its emissions peaking between 2020 and 2025, remaining stable for a decade and declining in absolute terms from around 2035. In December 2009 and in the context of this trajectory, South Africa announced at Copenhagen that the country would reduce its greenhouse gas emissions by 34% by 2020 and 42% by 2025 below business as usual, on condition that it receives the necessary finance, technology and support from the international community that will allow it to achieve this.





Mitigation Policy Strategies

- ◆ Development of a carbon tax policy to provide the necessary, credible long term price signals to stimulate behavior changes in both producers and consumers towards to energy efficient and low carbon alternatives.
- ◆ Consideration of the Integrated Resource Plan for Electricity Generation (IRP) and its future iterations are modeled so as to take account of the peak plateau and decline trajectory described above through the diversification of our energy mix, the implementation of energy efficiency measures, investments in the development of new and cleaner technologies and industries and the initiation of the transition to a low-carbon economy.
- ♦ Establish a business environment that facilitates the development of a local renewable energy technology manufacturing, implementation and export industry and that maximises its job creation potential in the energy, transport, agriculture, whilst investigating potential instruments for specific sectors and associated abatement costs.
- ◆ Design and roll out research, development and demonstration programmes that result in new, novel and innovative approaches to the diversification of our energy mix, development of alternative energy sources, energy efficiency, cleaner technologies and industries, carbon capture and storage and the transition to a low-carbon economy.
- ◆ Identify and resolve the financial, regulatory and institutional barriers that may impede the implementation of the financial support mechanism for renewable energy at a level adequate to incentivise large-scale investment





Key Sectors Targeted by GHG Mitigation Strategy

- ◆ The energy sector is the largest contributor to greenhouse gas emissions, generating over 80% of South Africa's emissions.
- Electricity generation and refineries are the most significant energy industries in South Africa, with electricity production from the national utility company accounting for more than 90% of total electricity generated in the country.
- ◆ The South African economy depends to a large extent on energy production and use, with energy-intensive sectors such as mining, minerals processing, a coal-based electricity and liquid fuel supply sector and energy-intensive beneficiation.
- ♦ The main fuel of power generation is coal, which is abundantly available, accounting for more than 92% of fuel used in electricity generation.
- ◆ Successful climate change mitigation in South Africa must *inter alia* focus on the energy sector.





Policy Context for the Development of Market Based Instruments to Address Climate Change in South Africa

- ◆ 2006 Draft Environmental Fiscal Reform Policy Paper entitled "A Framework for considering market-based instruments to support Environmental Fiscal Reform in South Africa"
- ◆ 2011 National Climate Change Response White Paper recognises that:
 - A mix of economic instruments including market-based instruments such as carbon taxes and emissions trading schemes and incentives complemented by appropriate regulatory policy measures are essential to driving and facilitating mitigation efforts and creating incentives for mitigation actions across a wide range of key economic sectors.
- ♦ 2010 Publication of the carbon tax discussion paper entitled "Reducing Greenhouse Gas Emissions: The Carbon Tax Option"
 - Role of carbon taxes as a policy measure to price carbon emissions stimulate behavioural change towards less energy intensive, low carbon emitting alternatives. Document currently being revised into a policy document for publication towards the end of 2011.





Experience with climate change related market-based instruments in South Africa

Environmentally-related taxes

- General fuel levy applied to petrol, diesel
- Electricity generation tax applied to non-renewable based electricity generation (2c/kWh)
- Motor vehicle emissions tax purchase tax of R75 gCO₂/km for each emission exceeding120gCO₂/km (passenger vehicles) and double cabs subject to tax of R100 for emissions exceeding 175gCO₂/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 ...)





Rationale for a carbon tax

- ◆ The negative external costs of GHG emissions are not reflected in the market prices of certain goods and services, e.g. energy
- ◆ A carbon tax is a means by which government intervenes by way of a market based instrument to appropriately take into account the social costs resulting from carbon emissions
- ◆ A carbon tax seeks to level the playing field between carbon intensive (fossil fuel based firms) and low carbon emitting sectors (renewable energy and energy efficient technologies).
- A carbon tax: on emissions or carbon tax base proxies are being explored.
 - Although this option 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 to both producers and consumers to change their behaviour over the medium to long term.





Feasibility of trading schemes in South Africa

- Policy instruments to address climate change:
 - The carbon tax discussion paper acknowledges that carbon taxes and emissions trading schemes are key policy instruments that could be used to price carbon and provide the necessary and credible price signals to stimulate behaviour change. (a number of other options may also be viable and a hybrid application of these in the country in different sectors also needs investigation)
- Developing an adequate, transparent, credible and competitive emissions trading mechanism to protect the atmosphere could complement the proposed carbon tax.
- An alternative or possibly a complementary mechanism to price carbon by way of an emission trading scheme can be considered over the longer term, however such a mechanism is probably not feasible in South Africa over the medium term
 - In the South African context, the oligopolistic structure of the energy sector is likely to reduce efficiency gains that would result from such a mechanism.
 - The lack of many industry players and appropriate market structure with diverse abatement costs suggests limited opportunities for domestic trade, resulting in inappropriate permit prices.
 - This could result in the lock-in of emission-intensive technologies where permits could be used as a barrier of entry for newcomers.





Carbon Tax vs. Emissions Trading

Carbon Tax

- Price certainty fixed price
- Emission reductions —quantity uncertain
- Administration and compliance piggy back on existing administrative systems
- Visibility of tax
- Design tax base, collection point, price level

Emissions trading

- **Price uncertainty** volatility
- Emissions are capped quantity certain
- Complexity negotiations, high transaction costs, new institutions.
- Some costs (and benefits) are hidden
- Coverage, point of obligation, cap level





Interest in Market-Based Initiatives and Support from PMR

- ◆ The role and appropriateness of emissions trading scheme and offset mechanisms to effectively complement the carbon tax needs to be further investigated.
- ♦ South Africa will benefit from support to understand:
 - the interaction between carbon taxes and emissions trading policy to effectively stimulate behaviour changes and least cost emission reductions;
 - the key design aspects of emissions trading schemes and offset mechanisms that are implemented or are being proposed internationally;
 - the necessary institutional requirements and governance structures to effectively implement trading schemes / offsets mechanisms;
 - the necessary financial regulatory regime and the appropriate tax treatment of revenues and transactions related to emissions trading; and
 - the optimal allocation and / or auctioning of permits.





Other Relevant Initiatives and Partners

◆ A partnership with the German government on the development of MRV capacity in the country is underway. There is potential for linkage with the PMR.





PMR Focal Point & Envisaged Institutional Partners

◆ The Department of Environmental Affairs and the National Treasury would lead the effort and coordinate South Africa's inputs and participation through already existing structures that deal with climate change such as our Intergovernmental Committee on Climate Change (IGCCC) which has representation from all Ministries within the country.

Stakeholder engagement

• South Africa has an established forum called the National Committee on Climate Change (NCCC) through which such initiatives will be coordinated. The NCCC has representation from all Ministries, Civil Society, Business and Labour.





Contact Information for PMR Focal Point

♦ South Africa's Climate Change Focal Point

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