The National Treasury today publishes the Carbon Tax Policy Paper, *Reducing greenhouse gas emissions and facilitating the transition to a green economy* for public comment. This is the second and final round of comments requested on carbon tax policy, before government proceeds with the publication of draft legislation to give effect to carbon taxes later this year for implementation from 1 January 2015.

Climate change poses a major challenge to humankind, and one of the most significant ways to mitigate this risk is by reducing greenhouse gas emissions such as carbon dioxide. There is also a growing concern that climate change could slow or possibly even reverse progress on poverty reduction. South Africa’s strategy to make a contribution towards greenhouse gas mitigation and adaptation was adopted by government in 2011 when Cabinet approved the National Climate Change Response White Paper. This was after the commitment made by South Africa at the 2009 Copenhagen conference of parties (COP17) to undertake appropriate national actions to curb greenhouse gas (GHG) emissions by 34 per cent by 2020 and 42 per cent by 2025 below business as usual.

This Carbon Tax Policy Paper updates the 2010 discussion paper “*Reducing Greenhouse Gas Emissions: The Carbon Tax Option*” and takes into account the public comments received. It takes account of the principles in both the 2010 paper as well as the 2006 Environmental Fiscal Reform Policy Paper, which provides a policy context and foundation for the use of taxes and incentives to support the attainment of environmental objectives in a cost efficient, socially equitable and fiscally effective manner.

**The primary objective of implementing carbon taxes is to change future behaviour, rather than to raise revenue.** It therefore starts with a relatively low carbon price, and then progressively rises significantly after five to ten years and beyond. This approach provides industry and other major emitters sufficient time to innovate and invest in greener technologies for the future. There are at least three ways in which a carbon tax will work to drive changes in producer and consumer behaviour and therefore address climate change:

a. First, carbon pricing will *encourage a shift in production and consumption patterns* towards low carbon and more energy efficient technologies by altering the relative prices of goods and services based on their emissions intensity and encouraging the uptake of cost effective, low carbon alternatives. Pricing carbon emissions addresses the problem of negative externalities, as polluters should pay for their emissions.
b. Second, carbon intensive factors of production, products and services are likely to be replaced with low carbon emitting alternatives. To achieve the extent of emission reductions committed to in Copenhagen, the production technologies will need to become less carbon intensive and/or the consumption of certain carbon intensive products such as cement, steel, and aluminium will need to be reduced. Given that these industries are important with respect to the country’s proposed infrastructure build programme appropriate policies are required to ensure mitigation and adaption strategies are taken into account in investment decisions that have long term lock-in effects.

c. Third, a carbon price will create dynamic incentives for research, development and technology innovation in low carbon alternatives. It will help to reduce the price gap between conventional, carbon intensive technologies and new low carbon alternatives.

The tax base

The carbon tax will be based on emissions derived from emission factors linked to the fuel inputs used. It will cover emissions from all stationary sources, including process emissions.

The key design features of the carbon tax are:

a. A phased approach to the implementation of the carbon tax. The first phase (introductory) will be for five years, effective from 1 January 2015 to 31 December 2019 followed by Phase 2 of another five years, from 2020 to 2025. Follow up phases can be explored at a later stage.

b. An across the board basic 60 per cent tax free threshold of actual emissions below which the tax will not be payable.

c. Additional 10 per cent relief for certain sectors to allow for technical or structural limitations to reduce emissions (process emissions).

d. Up to an additional 10 per cent relief for emissions intensive and trade intensive sectors, e.g. iron and steel, cement, glass, etc. to take into account the risk of carbon leakage and competitiveness concerns.

e. Offsets could be used by firms to reduce their carbon tax liability up to limits of 5 or 10 per cent, depending on the sector.

f. Emissions from the agricultural and waste sectors will be exempt during the first phase. This complete exemption will be reviewed during the second phase.

g. The electricity sector will qualify for a tax free threshold of up to 70 per cent and some sectors will be able to qualify for a tax free threshold of up to 90 per cent during the first phase.

The tax rate

A carbon tax rate of R120 per ton of CO₂e increasing at 10 per cent per annum will be implemented during the first phase. When the tax-free threshold and additional relief are taken into account, the effective tax rate will range between R12 and R48 per ton of CO₂e (and zero for Agriculture and Waste).
Emission reductions and macroeconomic impact

Economic modelling undertaken suggests that a broad-based carbon tax will make a significant contribution towards emissions reduction with limited negative macroeconomic impacts. The impact on the country’s economic growth is shown to be largely neutral if accompanied by effective revenue recycling measures. Such revenue recycling measures include on-budget government expenditure (both general and targeted), tax incentives and tax shifting, i.e. no increases in other more distorting taxes and where possible reduction in some taxes. The carbon tax design features (especially the transitional tax free thresholds) and the revenue recycling measures should effectively address concerns about competitiveness and the distribution impact of the carbon tax. The National Climate Change Response White Paper identifies a number of flagship programmes that would require additional funding in support of climate change mitigation and adaptation. See section 8.3 Carbon Tax Policy paper for a summary of these programmes.

The electricity levy

As mentioned above, one of the ways to recycle the expected carbon tax revenue is by reducing other taxes. One such tax that could be reduced is the existing electricity levy on electricity produced from non-renewable sources (e.g. coal) and nuclear energy. This tax will however not be abolished as part of the revenue generated from this levy funds some of the demand-side measures currently being implemented by Eskom. This funding stream was previously included in the electricity tariffs. NERSA recently reduced Eskom’s revenue request in this regard, noting that revenue from the electricity levy partly accommodates such revenue requirements. This decision by NERSA contributed towards the lower tariffs increase that was subsequently approved.

Energy efficiency and technology support

The core policy mix to mitigate climate change constitutes a carbon pricing mechanism, energy efficiency and technology policies. Energy efficiency savings can be seen as one of the “low-hanging fruits” to help address concerns relating to both energy security and climate change. In the context of energy efficiency savings, the conversion of old technologies to new ones often involves a substantial amount of capital expenditure. The perceived long payback period tends to discourage businesses from making upfront investments relating to energy efficiency savings. The regulations that will provide for the implementation of the energy efficiency tax incentive will be published in the government gazette within the next two weeks. The tax revenue forgone as a result of this tax incentive should be seen as part of the revenue recycling measures.

Government already provides support of new and innovative technology through the research and development tax incentive and its on-going support for the carbon capture and storage (CCS) research project.

Comment period

The Carbon Tax Policy Paper, Reducing greenhouse gas emissions and facilitating the transition to a green economy, is published for public comments and is available on the National Treasury website: www.treasury.gov.za
Written comments should be submitted to Dr. Memory Machingambi, email: Memory.Machingambi@treasury.gov.za by the close of business on **2 August 2013**.

**Issued by:** National Treasury  
**Date:** 2 May 2013