As indicated in the 2010 Budget Review, the National Treasury today publishes the Carbon Tax Discussion Paper for public comment. This paper, which seeks to complement the regulatory efforts of the South African government in addressing environmental challenges, is available on the National Treasury website: www.treasury.gov.za.

The paper follows the announcement by South Africa at the 2009 Copenhagen conference of our intention to reduce greenhouse gas emissions by 34 per cent by 2020 and 42 per cent by 2025 below the business as usual scenario. The Long Term Mitigation Scenarios and the recently published National Climate Change Response Green Paper (2010) recognise the use of market-based policy measures, such as an escalating carbon tax, to price carbon so that the cost of climate change can be reflected in the price of goods and services.

Carbon Tax Discussion Paper

The carbon tax discussion paper, “Reducing Greenhouse Gas Emissions: The Carbon Tax Option”, follows the 2008 announcement of an electricity generation levy of 2c per kWh, which was the first explicit carbon tax to be introduced in South Africa.

A carbon tax seeks to reflect the external costs of greenhouse gas emissions causing climate change, and should help to create a level playing field between high- and low-carbon emitting sectors. The early adoption of a low-carbon growth path can also result in competitive advantages in low-carbon technologies and create incentives for research, development, and increased levels of innovation.

The paper discusses the economics of climate change, the role of carbon taxes in reducing emissions at the least cost possible, and compares regulatory and market-based policy measures as well as carbon taxes and emissions trading schemes. The design of a carbon tax is best addressed by focussing on the definition of an appropriate tax base and measures to mitigate potential adverse impacts on low-income households and on the trade competiveness of certain sectors. The paper argues that the gradual phasing in of a carbon tax is the best way to deal with competitiveness concerns.

Three options for imposing a carbon tax are explored:

1. An emissions tax applied directly on measured carbon dioxide emissions;
2. An upstream tax on fossil fuel inputs based on the carbon content of the fuel (for example, coal); or
3. A downstream tax imposed on the outputs or products generated from fossil fuels (for example, electricity or liquid fuels).

A carbon tax imposed directly on all measured emissions of carbon dioxide appears to be the most appropriate. The second best option is to tax fossil fuel inputs such as coal, crude oil and natural gas, based on the carbon content of these fuels. Both options create adequate incentives to encourage behavioural changes. A tax on actual measured emissions would require appropriate institutional capacity to measure, monitor and verify actual emissions. An upstream tax would be based on the estimated carbon content of the fuel in question and could piggyback on the existing tax administrative system. In the case of an upstream tax, its design could also include a crediting system to encourage the development and adoption of technologies such as carbon capture and storage.

Other design considerations include:

- To provide certainty to taxpayers, the level of the tax should be phased in.
- That the tax rate should over time be equivalent to the marginal external damage costs of carbon dioxide emissions to effect the appropriate incentives.
- Distributional concerns need to be dealt with in a transparent and targeted manner (for example, improved targeted provision of free basic electricity and improved subsidised public passenger transport).
- The tax should as far as possible cover all sectors.
- Relief measures to deal with competiveness concerns, if any, should be limited and of a temporary nature. The proposed tax incentive for energy efficiency savings might be an appropriate intervention in this regard.

The phased introduction of the tax at initial low rates, with a commitment to phase-in increased levels of taxation over a specific time period, would provide certainty and an opportunity for taxpayers to adjust to the new tax. This will also provide a strong price signal to both producers and consumers to change their behaviour over the medium to long term.

Comments on the carbon tax discussion paper should be submitted to Sharlin Hemraj on email: sharlin.hemraj@treasury.gov.za by 28 February 2011.

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