Environment - South Africa

Responding to climate change: the carbon tax option

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Introduction

The South African government undertook to reduce its carbon emissions by 34% by 2020 at the meeting of the Conference of Parties (COP) to the Kyoto Protocol at the Copenhagen Conference. With South Africa hosting the next crucial meeting of the COP in December 2011, international focus on South Africa's proposed approach to climate change has increased.

South Africa is the world's 12th largest emitter of carbon dioxide, but is classified as a developing country under the Kyoto Protocol. Mechanisms to reduce greenhouse gas emissions (GHG) and their effect on the economy has therefore needed to be carefully balanced.

Several discussion documents have been published recently regarding possible legislative approaches to climate change. The most recent is "Reducing Greenhouse Gas Emissions: The Carbon Tax Option" published by National Treasury. All of the discussion papers to date recommend market-based instruments to combat climate change. Some market-based instruments have already been implemented, such as:

- fuel taxes on petrol and diesel;
- carbon emission taxes on new passenger vehicles;
- tax exemptions from income earned on carbon emission reductions; and
- accelerated depreciation allowances from investments in biofuels and renewable energy.

The latest discussion paper similarly recommends a market-based approach.

Proposed carbon tax

The latest discussion paper proposes taxation on carbon emissions by setting a uniform tax rate that equals the marginal external cost of emitting an additional unit of GHG, thereby influencing consumer and producer behaviour. While it does not guarantee a quantitative reduction in such emissions in the short term, the paper concludes that a carbon tax, phased in over time, will be an incentive for long-term environmentally friendly behaviour. An initial tax of R75 per ton of carbon dioxide, with a gradual increase to around R200 per ton (at 2005 prices), is proposed. The initial tax is well below estimates of actual external costs, but the rationale is that gradual phase-in of the tax rate would provide certainty to taxpayers and allow the markets to adjust as the rate is increased over time.

The paper recognises that the emissions tax should ideally be levied on entities responsible for emitting carbon dioxide, based on actual quantities emitted. Due to administrative difficulties and the technological capacity and system required to monitor and measure quantities of many emissions sources, a proxy tax base (a tax on the carbon content of energy products) is therefore proposed - that is, a fuel input tax.

As in previous discussion papers, the market-based tax approach is favoured over emission trading schemes. South Africa's energy sector has an oligopolistic structure; it is concluded that the limited industry players and appropriate market structure with diverse abatement costs would result in inadequate opportunities for domestic trade. Recent falling carbon prices and price volatility were also raised as concerns. It was concluded that a carbon tax regime would have several advantages over carbon trading, including:

- potential oversight by the existing revenue authority;
- fewer players and costs involved;
- a simpler structure; and
- a lower administrative burden.

A further discussion paper evaluating emission trading will also be published shortly.

Carbon taxes are also viewed as being more efficient than regulatory policy instruments as they create ongoing incentives, are easier to implement and can support environmental objectives at the least cost to the economy. Regulatory instruments, on the other hand, give companies no reason to go beyond compliance, while market-based instruments allow companies flexibility in the manner and quantities that emissions are reduced.

Concerns

South Africa's industry is extremely energy intensive and carbon based; 80% of its carbon dioxide emissions are produced by the electricity, metals and transport sectors. In the metals sector, South Africa exports important minerals such as coal, platinum and uranium. There are concerns that the carbon tax on these sectors will simply be passed on to end users, resulting, for example, in the end price of exported minerals being higher. Being an input tax, the carbon tax would also have a financial impact on mining companies' profits.

Due to the lack of a global carbon pricing regime, several concerns have been raised regarding industry competitiveness of South African companies. A carbon tax would have different effects on different industries, depending on factors such as emission intensity and participation levels in international markets. The paper concludes that competitiveness concerns may be addressed by gradually phasing in a carbon tax at a relatively modest level initially and increasing over the medium to long term to reflect full external costs. Sectoral exemptions and tax reductions were proposed, but it was acknowledged that exemptions for emission-intensive sectors would reduce the tax's effectiveness.

Commentators have proposed border tax adjustments through import taxes, to level out comparative advantages of trading countries with no carbon taxes and act as a disincentive to shift production to countries with no such tax regime. However, the carbon content of products is not readily available. The World Trade Organisation rules would also create legal impediments to such import taxes.

Comment

Choosing the correct legal approach to combat climate change poses difficulties for many developing countries, including South Africa. It has extremely high unemployment rates and development is a key agenda for the government. The potential impact on low-income households has been raised as a concern. The mining sector is South Africa's biggest gross domestic product contributor and vital to its economy; the effect of carbon taxes on this sector's international competitiveness is therefore a concern.

Critics of the carbon tax have proposed that until there is a global carbon pricing regime and developing countries receive more support from developed nations, green fiscal incentives should be introduced before business is penalised in the form of carbon tax.

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