Hot topics
Global warming and climate change

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The case against introducing a carbon tax in South Africa

A carbon tax is an environmental tax on energy sources that emit carbon dioxide. By taxing the burning of fossil fuels in proportion to their carbon content, the primary purpose of such a tax is to reduce emissions of carbon dioxide and thereby slow global warming.

Some economists favour carbon tax because it places a cost on the negative environmental consequences of burning fossil fuels and so directly addresses the problem of emitters of greenhouse gases not facing the full social cost of their actions.

While a number of countries, most notably in northern Europe, have implemented carbon taxes or energy taxes related to carbon content, most of these are levied on energy products and motor vehicles rather than on CO_2 emissions.

There are a number of reasons why the introduction of a carbon tax in South Africa would not be appropriate at this time. The most important of these include:

- Carbon emissions are a global problem, not a local one. South Africa's contribution to total global emissions is negligible in comparison to the largest emitters. Nearly half of global carbon emissions emanate from the United States and China, while South Africa contributes about 2% of global emissions. Even on a per capita basis, South Africa's emissions are far below those of most developed countries. The scope for South Africa to make reductions in carbon emissions and the extent to which any reductions would contribute to the reduction of global emissions are therefore limited.

- If South Africa introduces a carbon tax it will be the first developing country to introduce such a tax of any significance. This will place the country at a significant competitive disadvantage relative its competitors. It would also result in South Africa placing a price on carbon before many developed countries, most notably the United States.
- Most countries that have introduced a carbon tax or are planning to introduce a carbon tax are far less carbon intensive than South Africa, primarily as a result of South Africa's heavy reliance on coal for energy relative to other countries. Notwithstanding the fact that South Africa's economy is relatively carbon intensive, it is not exceptional in terms of energy intensity. The reason for the difference between South Africa's energy intensity and its carbon intensity is that coal emits far more carbon than other fossil fuels. As a result, a carbon tax would have a far greater economic impact in South Africa than in other countries.
- South Africa's undertakings to reduce emissions are subject to financial and technological support from developed countries for the implementation of adaptation mitigation action in developing countries. The introduction of a carbon tax in the absence of binding commitments by developed countries to provide such support is questionable.
- Carbon emissions are a global problem requiring a global solution and any unilateral action by South Africa will be totally ineffective in reducing global emissions while coming at great cost to the economy.
- Carbon tax is only one of a number of possible policy interventions available to reduce carbon emissions and would not be a panacea to the problem. Other instruments that can be used to achieve the same objective include incentives and subsidies, regulation of emission quotas and energy efficiency standards and voluntary agreements with emitters.
- The electricity sector is responsible for approximately 48% of South Africa's carbon emissions as a result of its dependence on coal. However, the electricity sector is highly regulated and the energy mix and price of electricity is determined by the National Energy Regulator of South Africa (NERSA) and the Government. Since the energy mix is regulated by the Department of Energy by means of its Integrated Resource Plan, there is a disconnect between the introduction of a carbon tax and emission reductions in this sector. Levying a carbon tax on the likes of Eskom will have no impact on South Africa's energy mix and the additional cost will simply be passed on to consumers in the form of higher tariffs.
- A carbon tax of R100/ton will increase the cost of a kWh of electricity supplied by Eskom by approximately 10c. The increased price would represent a 15% increase in the price of electricity over and above the average price of 65.85c/kWh approved by NERSA for the period 1 April 2012 to 31 March 2013 and would therefore have serious inflationary implications.
- The increased cost of electricity will undermine the competitiveness of South Africa's economy relative to other countries, particularly those that do not put a price on carbon emissions. The increased cost of electricity would have a severe impact on the competitiveness of the mining and manufacturing industries. A carbon tax levied on steel producers would also have a significant impact on the international competitiveness of this industry, which uses significant amounts of coal in its processes.
- South Africa has one of the lowest ratios of carbon consumed to carbon produced of any country. The implementation of a carbon tax will therefore amount to a tax on South Africa's exports with consequential implications for their international competitiveness and the foreign currency earnings that any country relies on to balance its current account and pay for imports.
- Increased electricity and fuel prices will have severe implications for poor households in the absence of measures taken to alleviate their impact. Any such measures, however, are likely to come at the cost of other consumers who will have to bear even greater price increases in order to subsidise the poor, unless this is done through the state out of the carbon tax revenues.
- A carbon tax could have a significant negative impact on economic growth and employment creation as there is a direct correlation between energy consumption and economic development. A carbon tax therefore amounts to a tax on development.
- Levying a carbon tax on liquid fuels used for motor vehicles would result in double taxation. South Africa already levies a vehicle emissions tax based on the theoretical carbon emissions of fuel burnt by a vehicle over its lifespan. It would therefore be inappropriate to levy an additional carbon tax on actual emissions.

The case for a carbon tax

- A carbon tax would put a limit on the cost of emissions reduction;
- The tax can be implemented quickly;
- It is the most economically efficient means to convey crucial price signals and encourage carbon-reducing investment;
- The costs of a carbon tax are predictable and by establishing stable price signals can help business and consumers plan energy spending and provide greater certainty for investments in energy efficiency;
- A carbon tax provides are a permanent incentive to reduce emissions;
- It is economically efficient in that it is transparent, simple and can have a wide coverage;
- Because it can be implemented across a wide variety of economies, it is a suitable instrument for coordinated international action on reducing greenhouse gas emissions.
- As a source of revenue, a carbon tax could assist in the reduction of other taxes and/or be redirected to mitigate the economic impact on those most affected by the introduction of the carbon tax.
- Sources: The Carbon Tax Centre (www.carbontax.org) and The Parliament of Australia Parliamentary Library (http://www.aph.gov.au/library/pubs/climatechange/index.htm)

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