

Carbon Tax in South Africa

Silvana Claassen, CES Carbon & Energy Solutions and Justine Bolton, Bright Green Solutions

This article touches on factors that drive the implementation of climate change mitigation measures such as the carbon tax; the objective of the carbon tax; its design; and what can be done to reduce one's tax-liability.

Over the past six years there has been a lot of speculation and uncertainty on whether or not a carbon tax would be introduced in South Africa. And if so, when this would happen. The ongoing debate between supporters and opponents of the carbon tax commenced when the National Treasury released a discussion paper on 'The Carbon Tax Option' in 2010. Subsequently, proposed implementation dates have been delayed several times. With the National Treasury's closure of comments on the draft carbon tax bill on 15 December 2015, it is safe to assume that the carbon tax will come into force; the only question is when?

Why Carbon Tax?

In 2014, South Africa was number 13 on the list of world's largest greenhouse gas emitting economies in terms of its absolute emissions. South Africa emitted 476 MtCO_{2e} of greenhouse gases in this year. China featured on top of this global list and the United States was ranking second [1]. South Africa's high ranking can be attributed predominantly to a history of cheap coal-fired electricity, resulting in South Africa's economy to rely heavily on an energy- and therefore carbon-intensive industry. Increased global pressure to reduce greenhouse gas emissions calls for a transformation to an economy that is less driven by carbon. Also, South Africa is a developing country, similar to most countries on the African continent. Increasingly, studies are pointing in the direction that developing countries will be most affected by the adverse consequences of climate change [2]. Negative impacts are already felt like the recent drought which can be partly attributed to climate change, according to experts at the University of Cape Town. It is therefore to the benefit of the entire continent's long-term perspectives that effective policy is in place to mitigate and adapt to the negative effects of a rising average global temperature.

Border Carbon Adjustment

If not addressed domestically, South African export-goods are at risk to be penalised for its carbon content through a so-called 'Border Carbon Adjustment'. These are taxes imposed by importing nations in order to prevent carbon-leakage as a result of their own policies. Hence, unless South Africa is taking its own measures to reduce the carbon intensity of its export-goods, this could have a negative effect

on its export-market and therefore on its entire economy.

In 2009, at COP15 in Copenhagen, South Africa pledged to reduce its emissions below 'business as usual' by 34% in 2020 and 42% in 2025. This is aligned to the targets presented in South Africa's Intended Nationally Developed Contribution (INDC) which was submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in September 2015. South Africa's INDC stipulates to achieve emissions levels of between 417 – 633 MtCO_{2e} over the period 2025-2030, without taking into account the CO₂ captured by the Land Use, Land Use Change and Forestry (LULUCF) sector. This translates to a 20 – 82% increase in the 1990 emissions level. Although this target represents a substantial range, based on the current policy projections, South Africa would not be able to make it [3]. Hence, in order to achieve what it pledged to do as a nation to contribute to keeping the average global temperature rise below 2°C, as well as to mitigate the associated risks, South Africa has to implement drastic measures. The carbon tax is among the instruments of a mix of measures that are proposed to do so. Moreover, if acted upon now, measures can still be implemented in a relative gradual way which would reduce the need to hastily implement instant and ill-designed measures to reduce emissions in the future.

What is the Carbon Tax?

The carbon tax is based on the 'polluter-pays'-principle in the form of a price that companies have to pay for each ton of CO_{2e} that they emit, as a result of their activities. The proposed implementation trajectory is characterised by phases and allowances in order to facilitate companies to progressively adapt to the implications of this regulation. The first phase features a carbon price of R120,00 for each ton of CO_{2e} emitted. Depending on the sector, a business will receive a basic tax-allowance of between 60% - 100% on its total emissions. This means that at maximum 40% of a company's emissions are taxable. A 100% tax-allowance is applicable to the agricultural-, residential- and LULUCF- sectors during the first phase. Only 'direct' scope 1 emissions are taxed and include emissions associated with fossil fuel combustion, fugitive emissions and emissions related to industrial processes. Indirect emissions such as the use of electricity and emissions associated with activities along a company's supply chain are not covered by the tax as it is. Next to the basic allowance,

CDM	– Climatological Dispersion Mode
COP	– Conference Of the Parties
DOE	– Designated Operational Entity
INDC	– Intended Nationally Developed Contribution
LULUCF	– Land Use, Land Use Change and Forestry
UNFCCC	– United Nations Framework Convention on Climate
VCS	– Verified Carbon Standard

Abbreviations/Acronyms

companies can further reduce their tax-liability by utilising one or more of the allowance-schemes which come with the implementation of the tax. A maximum of a 95% tax-free allowance of total greenhouse gas emissions can be achieved. The applicability of a specific allowance depends on:

- A company's sector: Schedule 2 of the draft carbon tax bill comprises an overview of sectors and allowances applicable, including the allowance-maximum per scheme
- The emissions-source: combustion of fossil fuels; fugitive emissions; emissions associated with industrial processes
- Trade-exposure
- Performance in terms of measures implemented to reduce carbon emissions and/or participation in the carbon budget system during or before the tax period [4]

On top of these allowances, a company can decide to offset its taxable greenhouse gas emissions by purchasing carbon credits. At maximum, 10% of total greenhouse gas emissions can be compensated by this proposed mechanism. Although the exact structure of the carbon-offset mechanism is not yet defined, it is likely that only carbon credits that are generated outside of the tax-net will be eligible for reduction of tax-liability through this scheme. Consequently, an interesting question is whether or not the waste, LULUCF, and residential sectors fall within the tax-net, although receiving a 100% allowance; or that they are exempt from carbon tax, and therefore outside of the tax-net? The current forecasts predict the introduction of the carbon tax in January 2017, with its first phase ending on 31 December 2021 [5].

Carbon Tax Revenue

A carbon tax is a popular instrument among policy makers to reduce carbon emissions at lowest costs. However, without the effective recycling of the revenue it falls short in terms of stimulating and accelerating the development of and transition towards a low carbon economy [6]. Around the world carbon taxes have been enacted or proposed. This has resulted in many research being done on the topic. An important outcome of these studies, is the suggestion that tax should be revenue-neutral, e.g. by using the revenue to stimulate research into zero-carbon technologies to replace the conventional carbon-intensive systems that are currently at the basis of South Africa's economic activity [6]. Or by subsidising the parties that are most affected by the proposed tax, in their efforts to replace their dated processes with clean technology. In this way the adjustment costs and investment constraints that companies are facing are taken into consideration which may stimulate the biggest polluters to switch to cleaner technology and consequently accelerate the transition to a low carbon economy. As it currently is the only revenue recycling proposed is to use some of the carbon-tax revenue to sponsor the 12l energy efficiency tax rebate [7]. It is with no surprise that arguments, often brought up by opponents of the carbon tax, are those suggesting that a price on carbon emissions will slow down economic growth.

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Interestingly, the impression occurs that without the current economic depression, South Africa would have experienced disruptive energy- and water-shortages. In turn this suggests that it will be the negative consequences of climate change themselves that will halt the economy from expanding if not addressed; instead of measures to mitigate these adverse impacts such as the proposed carbon tax.

Conclusion

Keeping in mind that the ultimate goal of a carbon tax is to decarbonize a country's economy, it is evident that the parties most effected are those with the highest carbon emissions. However, the design of the South African carbon tax as it currently is, allows affected companies to reduce their tax-liability significantly to a maximum of 95%. Moreover, the design of a carbon tax regulation should not only involve taxing but rather focus on spending too. In order to facilitate the objective: A transition to a low carbon economy.

References

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Silvana Claassen has been an environmental consultant since 2006, focusing on sustainability and waste and working for both industry and governmental institutions. In 2011, when she relocated to South Africa, she started specialising in climate change and energy. As an auditor at a UNFCCC accredited Designated Operational Entity (DOE), Silvana performed validation and verification assessments of CDM-, VCS-, and Gold Standard- projects. Then, as a carbon advisor at a small advisory firm in Sandton, Silvana provided strategic advice related to an array of matters on carbon- and energy-management. Her clients included Small- and Medium- Enterprises as well as major international corporations, predominantly in the manufacturing-, mining- and waste-sectors. At the beginning of 2016, Silvana established her own consultancy named 'CES Carbon & Energy Solutions', through which she works in close cooperation with



Justine Bolton; director of 'Bright Green Solutions' (BGS). Both companies are based in Johannesburg. Through this collaboration, CES and BGS are able to offer integrated solutions on the interconnected topics: carbon, energy, sustainability and corporate social responsibility. Enquiries: Email: silvana@carbon-energy-solutions.co.za or justine@bright-green-solutions.co.za