Carbon Tax Brief

This brief outlines the context, current proposals and concerns around the proposed carbon tax and summarises the recommendations of the Davis Tax Committee on the carbon tax, which were released as part of a longer report (available at Davis Tax Committee) in November 2015.

Context and current proposals for the carbon tax

South Africa has committed to reducing greenhouse gas (GHG) emissions below a business-as-usual trajectory by 34% by 2020 and 42% by 2025 (DEA, 2011). This represents a tremendous challenge for the country, notably due to its historical reliance of cheap, coal-fired electricity and energy-intensive industries. The South African Government is progressively establishing the measures and instruments aimed at implementing the country's climate change policy. After five years of debates and the publication of three papers on the carbon tax (National Treasury, 2013, 2010) and on carbon offsets (National Treasury, 2014), the National Treasury released the Draft Carbon Tax Bill (Minister of Finance, 2015) for public comment on 2 November 2015. Written comments can be submitted to National Treasury by the close of business on 15 December 2015. Click here to download the Draft Bill and associated documents.

The proposed carbon tax seeks to price carbon by obliging polluters to internalise the external costs of GHG emissions. It is meant to form part of a package of measures, including an increased share of renewable energy in electricity generation and a carbon budget. The first tax would be levied on GHG emissions produced during the period commencing on 1 January 2017 and ending on 31 December 2017.

An initial marginal carbon tax rate of R120 per tonne of carbon dioxide equivalent (tCO_2e) would apply from implementation. A number of tax exemptions are proposed to ease the burden on emitters during the first phase of the carbon tax, from implementation date up to 2020: a basic 60% tax-free threshold; an additional 10% tax-free allowance for process emissions; an additional tax-free allowance for trade exposed sectors of up to 10%; an efficiency factor, i.e. a recognition for early actions and/or efforts to reduce emissions that beat the industry average in the form of a tax-free allowance of up to 5%; a carbon offsets tax-free allowance of 5 to 10%; and an additional 5% tax-free allowance for companies participating in phase 1 (up to 2020) of the carbon budgeting system proposed by the Department of Environmental Affairs. Overall, the combined effect of all of the above tax-free thresholds would be capped at 95%, except for residential, agriculture, forestry and land use, and waste sectors which would be totally exempted. Taking into account all of the proposed tax-free thresholds, the effective carbon tax rate will vary between R6 and R48 per tCO_2e.

Davis Tax Committee

While the intent of proposed exemptions has been acknowledged, their scope has been deemed too strict by the Davis Tax Committee. In addition, the Committee warns that the mechanisms necessary for the offset programme and the efficiency factor to be effective are unlikely to be ready in time for the proposed implementation of the carbon tax (Davis Tax Committee, 2015).

Overall, no specific mention is made in the Draft Bill of a minimum level of GHG emissions above which the tax will be collected, but only companies that own or control combustion installations (e.g. boilers, industrial furnaces, etc.) around 10 MW or higher will be directly eligible for the carbon tax in the first phase (up to 2020). There would nevertheless be no thresholds for process or fugitive emissions. Fuel (petrol or diesel) for mobile combustion would also be taxed under the fuel tax regime. The carbon tax would be implemented together with complementary measures to ensure that its overall impact (when taking into account revenue recycling measures) would, in the initial phase, be revenue neutral, and also neutral on the price of electricity (for instance, through a reduction in the electricity levy). The direct impact on fuel prices is however not expected to be offset. The lack of details about recycling measures and the possibility of double taxation have been clearly highlighted as a risk to the South African economy by the Davis Tax Committee (2015). The impossibility of assessing the potential fiscal effects raises particular concerns on the neutrality (from a revenue perspective) and progressivity of proposed tax. Furthermore, no clarity has been provided about the medium-term changes (beyond 2020) under consideration, raising uncertainty about the future fiscal regime.

The impact of the proposed carbon tax on the economy is a contentious point. Modelling exercises suggest a marginal negative impact on economic growth in the short term and positive benefits in the longer run. On the one hand, the implementation of a carbon tax may help reduce the vulnerability of the local economy to climate change response measures by other countries. On the other hand, it may generate a short-term loss in competitiveness in some sectors. As highlighted by the Davis Tax Committee (2015), the lack of up-to-date knowledge and information on the impact of the proposed tax on the economy (in terms of balance of payment, exchange rate, inflation, transport and electricity prices, employment, revenues, inequality, competitiveness, etc.) is a critical shortcoming of the current proposal.

A broader view on the carbon tax

While the proposed carbon tax rate is located at the lower end of the spectrum compared to existing schemes, South Africa would form part of the early adopters. Only about 40 jurisdictions have implemented a carbon price, most of them being European countries. Moreover, South Africa would constitute one of the first developing country (with Mexico, Costa Rica and part of China) to implement a carbon tax (World Bank and Ecofys, 2015).

In any case, impacts will not be uniform and some companies will be more impacted than others. Pass-through increases, notably for fuel, could moreover have negative effects. From a climate change perspective, the success of the carbon tax hinges on the transformation of South Africa's energy systems. The bulk of South Africa's GHG emissions (87%) indeed results from the energy sector, with power generation accounting for the lion's share (60% of total emissions). Industries only account for 6% of direct GHG emissions, although they are primary drivers of energy generation (DEA, 2013). In this situation, it remains unclear whether the carbon tax would successfully trigger the necessary shift in the quantity and the quality of energy use. The capacity of South Africa's industries to absorb the additional fiscal cost and transition towards lower-carbon practices is also a point of contention.

Overall, it appears that further efforts are required to ensure the complementarity of the proposed carbon tax with other climate change mitigation instruments as well as the country's energy and industrial policies (Montmasson-Clair et al., 2014). This challenge finds particular expression in the

design of the proposed carbon tax, the timing of its implementation and its integration with other measures impacting the domestic economy. This was clearly highlighted by the Davis Tax Committee (2015), which notably stressed the lack of alignment of the carbon tax with the carbon budget approach developed by the Department of Environmental Affairs. The compatibility between the proposed fiscal regime and some of the country's industrial policy choices, such as those articulated through the Department of Mineral Resources's Beneficiation Strategy, also remains questionable.

In light of numerous areas of uncertainty, the Davis Tax Committee recommended the introduction of the carbon tax with an initial zero liability (i.e. a 100% tax-free threshold). Firms would be required to comply and submit returns but would incur no tax liability in the first tax year after implementation. Such an option would provide companies, the South African Revenue Service, the National Treasury and other government departments the opportunity to plan accordingly and fine-tune systems and mechanisms (Davis Tax Committee, 2015).

The success of South Africa's ambitions on these three fronts – climate change mitigation, energy security and industrial development – ultimately depends on adopting an integrated and holistic view bringing it all together (Montmasson-Clair, 2015), prioritising the efforts while supporting the development of the economy and a trajectory shift towards a low-carbon path.

Annexure A: Extract and summary of the recommendations by the Davis Tax Committee (DTC)

The recommendations of the Davis Tax Committee's initial report read essentially propose that the tax be zero rated at least for the first few years. Its recommendations read as follows.

> "It is suggested .. that the carbon tax be implemented in 2017 but the threshold be set to 100% for the first year, i.e. firms producing Scope 1 emissions should be required to comply and submit returns but should incur no tax liability in the first tax year after implementation. Such an option would provide companies with the necessary data to plan more effectively, allow SARS to fine-tune tax reporting systems and provide National Treasury with additional information to allow for more accurate modelling and revenue forecasting. It would also assist government in developing and testing the necessary administrative systems.
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> "This proposal stems from a concern that a number of key aspects of the carbon tax policy do not at this stage appear to be fully ready for implementation, such as:
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> 1. It is essential that agreement is reached with industry about the Z-factors to be used to promote carbon efficiency improvements. It is recommended that Z-factors of 1 be used in the first two years. This will allow firms to quantify emissions so as to provide historical data on which Z-factors can be based.
> 2. The offsets market is immature with a very low number of approved projects, all of small size, that meet the stringent criteria for use by the firms. Banking of CO2e credits in the period should be allowed so that the immaturity in the market is addressed and investment may begin prior to the use of these offsets.
> 3. Confusion exists in the market as to whether penalties will be applied to firms exceeding proposed carbon budgets from 2020. While carbon budgets are important in assisting the setting of carbon tax policy, the imposition of penalties is a command-and-control procedure is at odds with the economic principles of a market-based carbon tax.
> 4. The DTC is required to assess South Africa's entire tax regime holistically. Without more up to date modelling, which includes the specifics of the carbon tax policy such as Z-factors and offsets, it is not possible to provide a fully informed assessment of the tax policy. In particular, the total revenue expected from the carbon tax under different scenarios is required. The most recent modelling presented is from 2012 (Alton, et al., 2012) while other studies predate 2010 (Van Heerden, et al., 2006; Pauw, 2007; Devarajan, Go, Robinson, & Thierfelder, 2009). As a carbon emission mitigation instrument, carbon taxes must represent one of a set of "least regrets options … that improve the competiveness of local industry, create jobs and represent a net saving rather than cost to the economy and gross domestic product" (National Planning Commission, 2011). The DTC is in need of recent modelling, demonstrating that the proposed policy is indeed the "least regrets option". No tax, holding such important implications, can be introduced without a rigorous analysis of its fiscal consequences, particularly concerning the burden that is likely to fall upon those least able to shoulder a further tax load.

5. A more detailed analysis of revenue recycling is needed in order to fully understand the distributional effects of the carbon tax. Although the revenue recycling options have been provided (National Treasury, 2015), the amount of expected revenue recycling should also be provided. Since recycling options include a reduction in electricity levies, a proposed realignment of the tax-mix needs to be studied in order for the DTC to be able to comment on the tax system as a whole.
6. A clarification of the extent of changes to the fuel levy to account for CO_2 emissions from transportation should be provided.
7. The NDP indicates that a carbon tax is to be implemented in a flexible manner, sensitive to employment and environmental impacts (National Planning Commission, 2011). A more detailed analysis of the impact of the carbon tax proposals and revenue recycling is required for the DTC to meet its mandate. Not only should the modelling address total employment but also the impact on employment at different skill levels.
8. More up-to-date modelling results are required to show the impact of a carbon tax on the balance of payments, exchange rates, inflation and fuel, transport and electricity prices. Modelling results would be required that covered both the short and medium term.
9. An analysis of the likely size of double taxation where there are existing levies should be provided.
10. The DTC is mandated to address the South African tax regime beyond the short-term, i.e. beyond the initial 5-year period of the carbon tax. More detail is required about medium term changes under consideration, in particular, the impact on overall revenue generated and revenue recycling.

"In conclusion, the Committee is deeply cognisant of the impact of a delay in the introduction of a carbon tax. Given the manifest uncertainties, set out above, and notwithstanding the laudable objective of reducing carbon omissions, it may be that such a tax should initially be introduced with a zero liability in order to ensure that problems of reporting can be addressed and to assist with gathering relevant information. This will subsequently permit rigorous modelling to be undertaken to test, in particular, the potentially regressive effects and recycling options, as well as the implications for employment and the concomitant development of solutions to circumvent these potential problems."

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