



Comments on the Draft Carbon Tax Bill of November 2015

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Summary

The ERC is pleased to see Treasury is moving from policy to lay a legal basis for the carbon tax and offers these comments in the hope that they may contribute to the implementation of a well-designed and environmentally effective carbon tax. In general we are of the view that the legislation could benefit from a legal review on general and specific issues, including clarity on objectives, how these can be achieved, precise definitions, administrative simplicity, consistency in principles of operation and placement on elements in the Act and Regulations. Also, considering that the implementation of the tax has already been postponed a number of times, the ERC recommends that intensive work be done ensure that a well-designed tax is implemented from 1 January 2017.

On the specific details of tax, if the tax rate starts as low as has been proposed in the draft Bill, then it should increase every year as previously proposed in Treasury's 2013 carbon tax policy paper. Such an increase would be better dealt with in a schedule in regulations, which itself would be provided for in section 20 of the Bill. Another concerning issue is that existing allowances, together with the new additional allowances in the Bill such as those for carbon budgeting, will reduce the effective tax rates. Carbon budgets will, however, have no regulatory effect in 2016–2020, so allowances for them would only seem warranted once they are in effect. In addition, the exclusion of fugitive emissions seems contrary to the objective of a carbon tax, with no sound basis being provided. Not including GHG emissions from petrol and diesel under any instrument would also ignore a significant and fast-growing sector. We note that the combination of a wide set of allowances, together with deductions for emissions from petrol /diesel and sequestration, allows for instances of R0 tax.

The ERC is also of the view that an enabling provision should be included in the legislation on recycling of revenues, establishing a jobs and competitiveness programme that would ensure a) assistance to poor households, and b) transitional assistance for mitigation by energy-intensive and trade-exposed firms, against agreed plans.

On the objective of the legislation, we recommend that it should be clearly and simply stated. The objective, which should be to reduce GHG emissions, needs to be clearly linked to the legal mechanisms, with a provision for the assessment of the impact of the legislation being made in the Act. There is also no provision to improve the design of the tax over time in the Bill. The ERC recommends that legislation should be reviewed every five years and provide for the Minister to update regulations more frequently.

1. General comments

The Energy Research Centre (ERC) welcomes the publication of draft legislation to implement a carbon tax in South Africa (RSA 2015a), and the opportunity to comment on the Bill. The Bill follows on an extensive process of consideration, including the earlier carbon tax policy paper (National Treasury 2013) and discussion document (National Treasury 2010). ERC took the opportunity to comment on the earlier documents, based on our own extensive research on carbon pricing. We are pleased to see that Treasury is moving from policy to lay a legal basis for the carbon tax. We offer these further comments in the hope that they may contribute to the implementation of a well designed and environmentally effective carbon tax. Note that in the text below, the indented, bold-face paragraphs generally offer a brief summary of the recommendations made in the preceding discussion.

On the basis of extensive research undertaken over many years (Jooste et al 2009; Merven et al 2014; Vorster et al 2011; Winkler et al 2010a; Winkler & Marquard 2009; 2011; Winkler et al 2010b), engaging in academic research and collaboration with others studying carbon pricing options in South Africa (Alton et al 2012; Blignaut 2001; Brick & Visser 2009; 2010; 2011; Cloete & Robb 2010; Cloete & Tyler 2012; Eunomia & UP 2004; Goldblatt 2010; Tyler & Cloete 2015; Tyler & du Toit 2008; Tyler et al 2011; Tyler et al 2008; Winkler et al. 2010b), we have found that introducing a carbon price would be an efficient and effective and practical approach to decreasing net greenhouse gas (GHG) emissions. National policy indicates that a mix of measures for mitigation will include both economic and regulatory instruments (RSA 2011). A carbon tax, if well designed and administered, can be an efficient mechanism to implement a carbon price and achieve significant emission reductions (SBT 2007; Winkler et al 2007; Winkler 2010). National Treasury has indicated a preference for a carbon tax rather than emissions trading (National Treasury 2006; 2010; 2013), which is now in draft legislation.

The introduction of a well-designed carbon tax is supported by findings of ERC and other South African research as a key instrument for reducing GHG emissions.

The ERC does not specialise in legal research, but we closely observe energy policy and law, as well as climate change policy and negotiations. From that perspective, our comment is that the draft legislation would benefit from an overall legal review. The following specific matters would benefit from attention in such a review: (1) the objective of the legislation; (2) how the legislation will achieve the objective; (3) precision in the legal text; (4) ensuring administrative simplicity; (5) consistency in principles of operation; and (6) allocation of items to the Act and regulations, the latter to be promulgated under the Act. The specific comments in section 2 below provide further information on how the draft could be improved.

The draft legislation would benefit from a legal review in general and on specific issues, including clarity on objectives, how to achieve it, precise definitions, administrative simplicity, consistency in principles of operation, and placement of elements in Act and Regulations.

We note that the introduction of a carbon tax has been delayed repeatedly. Budget speeches by the former Finance Minister deferred the tax to 2015 and then 2016, and it was then mooted to start in mid-2016. The draft legislation indicates 1 January 2017 as a starting date. On the one hand, further delay should be avoided; on the other hand, further work to improve the design seems warranted.

ERC would recommend intensive work during 2016 to ensure that a well-designed Carbon Tax Act can be implemented from 1 January 2017.

2. Specific comments

2.1 Low, flat tax rate: schedule should provide for increase

The tax rate is a flat R120 / ton of CO₂-eq [para 5]. The 2013 discussion document provided for a 10% increase in the nominal tax rate. The draft Bill is clear that the effective tax rate will range between R6 and R48 / ton of CO₂-eq. Our analysis suggests that significant mitigation requires a changes in the energy economy seen at significantly higher tax rates (Merven et al 2014; Winkler et al 2007), a finding confirmed by other studies (Alton et al 2012; Devarajan et al 2009) and National Treasury's own modelling. An increase off the low tax starting tax rate is essential to achieve the intended purpose: significant GHG emissions. Previous documents included a 10% p.a. increase in the nominal tax rate (National Treasury 2013); given the low base, and in order to achieve the objective, an increase is essential.

If the tax rate starts as low as proposed, it should increase every year as previously proposed. Such an increase would be better dealt with in a schedule in regulations; such regulations can be provided for in Section 20.

2.2 A suite of allowances guarantees exemptions for major emitters

Allowances effectively exempt firms from paying the full tax rate. As indicated, this leads overall to an effective tax rate that is R6 to R48 / t CO₂-eq. The list of allowances or exemptions is clearly elaborated in the Explanatory Memo [p. 5], and includes a 60% 'basic' allowance; another 10% for industrial process emissions; another 10% for trade exposure (not energy-intensity); and an off-set allowance (on the latter, see earlier ERC comments¹). All of these allowances have been previously indicated, and we have commented on them. Here we focus on changes.

The Z-factor, which was $\pm 5\%$, is now a performance allowance for 'additional measures' of -5% ; there is no $+5\%$ for non-performance

A percentage for fugitive emissions seems to potentially exempt all shale gas development, as well as coal-bed methane. It is hard to see why these emissions should be exempt (another issue, see below).

A new carbon budget allowance has been included in the Bill. Company-level carbon budgets will, however, have no regulatory effect in 2016–2020. There is therefore no sound basis for reducing tax liability until a regulatory limit applies.

While the wording is difficult to interpret, it appears that para 6 (2) (c) gives Eskom a reduction in tax for increased costs of the Renewable Energy Independent Power Producer Procurement Programme (REI4P). Our understanding of NERSA's methodology for multi-year price determinations is that it does not determine such a premium. It is possible to calculate a premium on/ due to renewable energy *from* the multi-year price determination, but no such methodology is specified in the draft legislation. However, this would a) require NERSA's concurrence; b) assume that Independent Power Producers (IPPs) are higher cost, which is questionable, as levelized costs of energy (LCOEs) for wind and solar PV in the fourth window of REI4P are below the cost of new coal; and c) imply that Ministerial determinations have been made for baseload IPPs, including coal and gas. ERC would recommend that significant technical work be undertaken before such a provision is included in legislation. If such a provision were later included, details should be placed in the regulations.

Existing allowances reduce the effective tax rates, with new additional allowances. The allowance for carbon budgets would only seem warranted once those budgets have regulatory effect.

¹ http://www.erc.uct.ac.za/Research/publications/14-ERC-Comments_Treasury_Carbon_Offsets.pdf

Allowances are vaguely defined: ‘ “**Allowance**” means any amount allowed to be taken into account in terms of Part II, subject to section 14, for the purposes of determining the amount of carbon tax payable.’ This is vague. The units in the Schedule appear to be percentages, so the definition should presumably be a share of tax liability from which a firm may be exempt.

2.3 Fugitive emissions factors

The fugitive emissions factors [Table 2] appear to be customised for coal-bed methane, shale gas and possibly other developers of fossil fuel projects. It is unclear why such emissions should be exempt from the tax. In relation to shale gas, for example, behaviour to reduce physical leakage through good practice and control technologies is required. This can be incentivised by a carbon tax, and so the tax should apply.

The exclusion of fugitive emissions seems contrary to the objective of a carbon tax, with no sound basis.

A related matter of definition: It is not explained what is meant by fugitive emissions (which by nature are gaseous) from solid fuels and given in units of tonnes [4(1)(b)(ii)]. Is this a reference to coal-bed methane? The legislation or explanatory memorandum should clarify.

2.4 Total allowances or exemptions

The total exemptions due to allowance are supposed to be limited to 95% (previously 90%) [14]. This does not apply to all sectors: for example, electricity generation (Eskom and any thermal IPPs) would have a maximum of 75% [Schedule 2]. Coal-to-liquids and all chemical industries, for example, have the maximum limit.

The combination of a wide set of allowances, together with deductions of for emissions from petrol /diesel and sequestration, allows for instances of R0 tax.

2.5 Emissions from petrol and diesel excluded

It appears that GHG emissions from petrol and diesel for transport fuels are not taxed. The formula for ‘calculation of amount of tax payable’ [6] includes a term ‘D’, representing GHG emissions from petrol and diesel, which is deducted from total fossil fuel emissions. 4(1)(a) excludes bunker fuels, for international aviation and maritime transport, but all GHG emissions from domestic use of petrol and diesel seem excluded. GHG emissions from road transport rank high in the analysis of key categories in South Africa’s GHG inventory, with 42 515 Gg CO₂-e (in 2010), or 7% of total national emissions (DEA 2014); these are almost entirely from petrol and diesel, as GHG emissions from electricity is accounted for under energy industries. The intention is unclear – is it to exclude small mobile sources, such as personal vehicles? Or is the intention to address petrol and diesel through other means, perhaps also under the Customs and Excise Act, but separately?

Not including GHG emissions from petrol and diesel under any instrument would ignore a significant and fast-growing sector.

2.6 Missed opportunity for a jobs and competitiveness programme

No provision seems to have been made to spend tax revenue on socio-economic benefits, in the draft legislation. The media statement does include extensive reference to ‘revenue recycling’, and indicates five purposes:

- i. funding for the energy efficiency tax incentive already being implemented;
- ii. a reduction in the electricity levy,
- iii. additional tax relief for roof top (embedded) solar photovoltaic (PV) energy as already provided for in the 2015 tax legislation;
- iv. a credit for the premium charged for renewable energy (wind, hydro and solar, as per the Integrated Resource Plan);
- v. additional support for free basic electricity to low income households; and

- vi. additional allocations for public transport.
Measures to encourage the shift of some freight from road to rail will also be supported.

This intention is very welcome, as it is crucial to the acceptability of the carbon to use revenue to ensure a) that poor households do not face increased costs, and b) to incentivise energy-intensive and trade-exposed firms to reduce GHG emissions (rather than exempting them from tax).

The law, however, simply says that carbon tax revenues go to the National Revenue Fund [para 2]. While Treasury's position that there should be 'no earmarking' is sound public finance, there is a missed opportunity to indicate that there will be a 'jobs and competitiveness programme' that can be supported, or some other means of balancing the socio-economic impacts. This might be included in an enabling provision, while retaining the flexibility that Treasury requires for good public finance management.

An enabling provision should be included in the legislation on recycling of revenues, establishing a jobs and competitiveness programme that would ensure a) assistance to poor households, and b) transitional assistance for mitigation by energy-intensive and trade-exposed firms, against agreed plans.

2.7 Objective of the legislation

The preamble, which states the intentions of the draft legislation, is too complicated, too weakly stated and also makes statements that might open the legislation to challenge in the courts. The objective of the legislation, which must be to reduce GHG emissions, should be clearly and simply stated.

2.8 How the legislation will achieve the objective

The objective should be clearly linked to the legal mechanisms. The Act should provide for an assessment of the impact of the legislation and whether and by how much GHG emissions have been reduced. If emissions have not decreased, or not to the extent required in national policy and to fulfill South Africa's international obligations, then the tax rate would need to be increased; conversely, if the tax has had a greater effect than required in reducing GHG emissions, then the tax rate could be decreased.

Clear expectations of future tax rates should be signalled. These should be specified as a range, and clearly linked to the objective.

The Explanatory Memorandum contains useful examples of the total emissions on which different types of firms should expect to pay tax. The examples stop short of the calculation of total tax liabilities. We suggest that appropriate examples illustrating effective rates for important individual emitters (Eskom and Sasol, at least) and also for important emitting sectors/categories be included in the explanatory memorandum. Once again, the link between the rate and the intentions of the legislation should be demonstrated.

2.9 Ensuring administrative simplicity

Implementation of the tax requires up-to-date data on emissions and energy supply and usage. This data needs to be highly detailed, and should be reported at the facility level. Both mechanisms for collection and energy use data would benefit from comparison to other countries. Given the history of availability of energy supply and consumption data statistics in South Africa, there is a concern over the technical and administrative challenges and capacities for collecting and maintaining the necessary statistics for implementing the tax : until recently the latest statistics available from the DOE were for 2006, and even now the latest statistics are for 2012, while the DEA faces substantial challenges in collecting emissions statistics (the latest available are for 2010, and there has been substantial push-back from emitters on making data available). There is also a concern over the debate about whether emissions statistics that are routinely published in the public domain in other countries (like EU countries and Australia),

will be kept confidential in South Africa. Public access to these statistics is an important resource for purposes of research and policy analysis.

ERC recommends that, in implementing the administrative systems used for collecting and maintaining emissions and energy supply and usage information necessary for administering the tax, international best practice should be explored and used. Details of how this would be done should be included in the Explanatory Memorandum.

2.10 Updating the tax and changing elements in regulations

There is no provision to improve the design over time. A final clause should provide for regular updating of the Act by parliament. Elements that are subject to change might be better placed in regulations than the Act itself. Such placement would avoid the need for parliamentary processes to implement technical adjustments to achieve desired impacts already decided on and implemented in the legislation. Such flexibility is important to provide for changing elements of the carbon tax, and the improvement of the carbon tax system over time. Having a full parliamentary process each time an emissions factor needs to be updated would be inefficient, and subject to lobbying for delay, leading to an unworkable system. We suggest that the legislation should explicitly provide for reviews of the Act every five years, a time period aligned with both national mitigation systems and international reporting requirements.

South Africa's intended nationally determined contribution (INDC) submitted to the United Nations Framework Convention on Climate Change in October 2015 states that:

South Africa will use five-year periods of implementation at the national level, specifically, 2016-2020 focused on developing and demonstrating the above mix of policies and measures in order to meet South Africa's Cancun pledge, and the periods 2021-2025 and 2026-2030 for this INDC. This level of effort will enable South Africa's greenhouse gas emissions to peak between 2020 and 2025, plateau for approximately a decade and decline in absolute terms thereafter. (RSA 2015b)

The Minister should be explicitly authorised to update regulations associated with the Carbon Tax Act, including but not limited to elements expected to change, so that schedule or tables, attached to regulations, can be readily and more frequently updated, including the tax rate, emission factors, and Schedule 2 (percentages of specific and overall allowances). Alternatively, the same responsibility of updating regulations might be assigned to the SARS Commissioner, under his powers under the Customs and Excise Act.

The legislation should be reviewed every five years and provide for the Minister to update regulations more frequently.

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