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National Treasury
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Date: 15th of December 2015

Subject: Public comments by the Clay Brick Association on the Draft Carbon Tax Bill.

Dear Dr. Memory Machingambi,

The Clay Brick Association (CBA) represents the (formal) clay brick producers of South Africa. The CBA's members are committed to a greener economy and welcome the opportunity to comment on the Draft Carbon Tax Bill (the 'Bill'). On previous occasions, the CBA has engaged with National Treasury (NT) and the Davis Tax Committee (DTC) on the topic of the proposed Carbon Tax in response to:

- The call for public comments on the Carbon Tax Policy Paper (August 2013);
- The call for public comments on the Carbon Offsets Paper (June 2014);
- An invitation by NT to have bilateral meetings with industry associations (February 2015);
- Davis Tax Committee's submission and clarification meeting (May 2015).

To not over burden the content and purpose of this letter, we have not included these submission which were developed in conjunction with EcoMetrix Africa (Pty) Ltd. into this letter but they can be found on the CBA website[1] or upon request directly from the CBA. Holistically speaking they aim to address three concerns of the CBA in relation to the design of the proposed Carbon Tax:

- Economic versus climate change implications of the Carbon Tax;
- Application of an international carbon intensity benchmark on locally produced bricks;
- The use of carbon credits generated within the sector as offsets against the Carbon Tax.

[1] See: http://www.claybrick.org/content/download-your-carbon-tax-booklet

Before clarifying the concerns on all of these tree points and providing potential solutions to address them the CBA would like to address an overall short coming it feels is built into the stakeholder consolidation process. It is the CBAs understanding that upon incorporation of the comments of the different stakeholder the bill will presented to Cabinet for approval for tabling in Parliament. The Bill in its current form deference some the primary elements that companies can use to mitigate their exposure such as the offset and benchmark component to regulations to be published in future by the Minister while asking for input on the Bill as a whole by the 15th of December. Furthermore the CBA would like to clarify that it agrees and supports the recommendations made by the DTC in its first interim report on the Carbon Tax.

Economic versus climate change implications of the Carbon Tax

Due to the fact that it is not economical to transport clay bricks over long distances, they are used and produced domestically in most cases. In practice, this means that competition between companies within the clay brick sector is local. For this reason, the commercial proposition of clay brick production in South Africa, in- or excluding the externality generated by GreenHouse Gas (GHG) emissions, is relatively insensitive to its direct production costs. As a result, the introduction of a Carbon Tax would predominately result in an increase of the price of clay bricks across the country, making houses and schools more expensive to construct, rather than partaking in the country's efforts to reduce its emission of GHGs.

The majority of GHG emission within the clay-brick making process results from a firing process during which fossil fuels are used to 'bake' the bricks and convert them from mouldable clay into solid bricks. Although there are firing technologies available that would reduce the energy consumption and thereby the carbon intensity below the most commonly-used firing technology in the country, these technologies require material capital investments where the most commonly-used method for firing bricks currently requires almost no capital investment. Due to the fact that the production of clay bricks is a high-volume / low-margin business, an increase of the cost of production from a Carbon Tax would not provide a material incentive for the sector to change to less-carbon-intensive technologies, since the increased capital requirements are not addressed in such a way that a bankable payback period on these investments is realised.

Although the Bill proposes a number of revenue recycling options none of these options address the 'capital bump' dynamic as explained above. to address this concern within the confines of the Carbon Tax, the CBA would recommend that an options is created in which the Carbon Tax that a clay brick producer would have to pay can also be used by the clay brick producer to invest in more carbon efficient firing technology via an investment tax incentive.

This re-investment option does not only address the sectors concerns around the 'capital bump' that needs to be overcome to kick-start investments in energy-efficient and low-carbon and move towards more carbon efficient firing technologies but it also provides access to a number of 'discount' that are built into the Carbon Tax design but are not realistically accessible to clay brick producers.

Summary of concern and proposed solution:

- **Concern**: Due to the localised, high volume/ low margin and limited capital nature of the clay brick industry the introduction of the Carbon Tax would primarily increase the costs for building homes and schools and have almost no impact on level of GHG emissions. Although the Bill provides revenue recycling options none of these options address the 'capital bump' dynamic relevant to the clay brick sector.

- **Proposed solution**: Include the option for entities covered under the Carbon Tax to reinvest the Carbon Tax they would have to pay into their operations by introducing a tax incentive for the improvement of an operation's carbon efficiency as a result of the capital investment underpinning the improvement. The re-investment option should not exceed the minimum Carbon Tax threshold of 10% and the carbon efficiency improvement should be properly monitored and verified.

Application of an international carbon intensity benchmark on locally produced bricks

The Carbon Tax Policy Paper that underpins the design of the proposed Carbon Tax utilises a discount based on an installation's carbon intensity in relation to a sector carbon intensity benchmark. This so called 'Z-factor' allows an installation to increase or decrease its Carbon Tax by five percent either way. The Bill reveres to this concept under the title 'Performance Allowance' and diverse the benchmarking aspect to be determined by the Minister at a later stage. In the absence of this information we would like to re-iterate our concerns in relation to the Z-factor as outlined in the Carbon Tax Policy Paper.

The Carbon Tax Policy Paper looks at the benchmarking approach used under the European Union Emission Trading Scheme (EU ETS) as a guideline on how to develop a robust benchmark as well as utilize the EU ETS Phase 3 values as fall-back values for the benchmark.

When determining an appropriate carbon intensity benchmark for the South African clay brick industry, it is important to consider that the clay used to make bricks in South Africa is more refractory and therefore requires a much-higher temperature when firing bricks, resulting in substantially higher fossil fuel usage in the clay brick production process than would for example be the case in the European Union. The application of an international benchmark would therefore be inappropriate.

To address this concern the CBA in conjunction with Swisscontact, the University of Pretoria and EcoMetrix (see annex 1 for details) has conducted several studies into the carbon intensity of the clay brick industry. The most elaborate study was conducted by the University of Pretoria and forms part of the so-called Life Cycle Assessment (LCA) study. To apply a realistic benchmark for the industry from which the Z-factor per installation can be derived, the CBA proposes to use the already existing benchmark for the sector as was developed by the sector as part of the LCA process. This benchmark should be seen as a starting point and be improved and updated going forward when more information becomes available. The CBA proposes the following benchmarking continuous improvement process:

- Develop and maintain a clay brick producer database that captures stationary data per brick maker (e.g. firing technology);

- Collect multi-year production volume, electricity and fossil fuel consumption (incl. energy value) data;
- Apply the latest IPCC data on GHG emissions per energy value and fuel type (volume 2) to determine scope 1 and the Eskom annual report to determine scope 2 emissions of the sector;
- Divide the combined scope 1 and 2 emissions by the total production in brick equivalent to determine the average carbon intensity of the sector (tCO_{2e}/Brick Equivalent) per baseline year;
- Extrapolate the annual carbon intensity to cover the first period of the Carbon Tax;
- Take the average of the annual carbon intensity over the first period to determine the appropriate Z-Factor benchmark for the clay brick sector.

Following this process, the CBA on behalf of its members can assist in developing a South African clay brick carbon intensity benchmark that can be applied to determine the Z-Factor per installation within the industry.

Summary of concern and proposed solution:

- **Concern**: In the absence of details on the Z-Factor approach in the Bill the concern on this point as derived from the Carbon Tax Policy Paper is re-iterated. Due to more refractory nature of South African clay an international benchmark should not be applied to determine the Z-factor benchmark for clay producers under the South African Carbon Tax.

- **Proposed solution**: Build on the benchmarking work that has been done for the industry via the CBA and apply a domestic benchmarking approach that is appropriate and effective.

The use of carbon credits generated within the sector as offsets against the Carbon Tax

The Bill recognises the possibility of using offsets to reduce an entity's exposure under the Carbon tax it is silent on the details as these are referend to regulations to be issued by the Minister at a later stage. In the absence of this level of detail we would like to re-iterate our concerns in relation to the source of offsets as outlined in the Carbon Tax Offsets Paper.

A good example of the clay brick's industry's commitment to climate change mitigation are the disproportionate large number of projects (compared to much larger and more carbon intensive industries within the country) that are registered under the Clean Development Mechanism (CDM), including the:

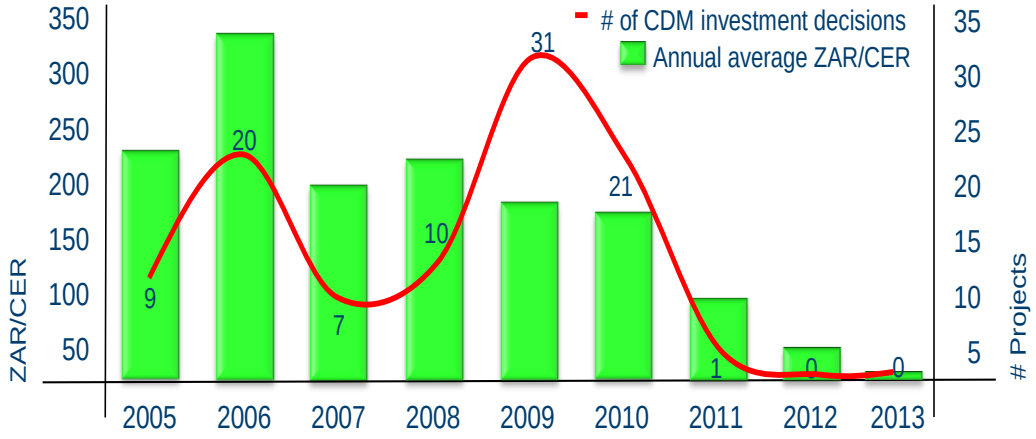
- Lawley Fuel Switch Project (UNFCCC reference: 0177);
- Fuel Switch at Corobrik's Driefontein Brick Factory in South Africa (UNFCCC reference: 6567);
- Vertical Shaft Brick Kiln (CDM Programme of Activities (PoA)).

According to the Carbon Tax Policy Paper, firms can utilise emission reductions verified under the internationally recognised carbon offsetting standards such as Certified Emission Reductions (CERs) from CDM to reduce their Carbon Tax liability by up to five or ten percent of their scope 1 emissions. The Carbon Offset Paper elaborates on this design feature by introducing a set of eligibility criteria for these CERs to determine if they would be eligible as offsets under the Carbon Tax. Although the convoluted rationale provided for some of the eligibility criteria indicates that the distinction between a 'Tax' or a 'Cap and Trade' system as an instrument towards the mitigation of GHG emissions is not entirely clear, the argument is made for the exclusion of CERs generated within the

sectors covered under the Carbon Tax on the basis that this would result in a double economic benefit for such an entity. This rational (commonly known as double dipping) is correct in the sense that by investing in a project, it reduces the emissions of a clay brick producer's Carbon Tax liability. If the CERs generated from that project are used as offsets against the Carbon Tax, the clay brick producer's Carbon Tax liability is reduced even further. On the one hand, the same incentive could be realised by raising the Carbon Tax level to 240 ZAR/tCO_{2e}, but on the other hand the introduction of a tax at that level would lie beyond what the country's economy could absorb in the short term.

The CBA's concern is that an additional benefit for those entities that make actual investments in a low carbon economy is in fact a requirement to drive investment into low carbon technology and not a double dipping concern.

Although the CDM and the trading in CERs generated by a project under the CDM started years earlier, reliable price information from liquid trading platforms only exists since 2005. After a number of years where the market price fluctuated 180 ZAR/CER and 340 ZAR/CER the price started to drop in 2009 and collapsed in 2011 after which it did not recover. Currently, the CER price lies around 4 ZAR/CER. The registration of a project under the CDM is a cumbersome and a time-consuming process, which takes approximately 18 months. One of the CDM rules implies that a CDM project cannot be started after the investment decision for the project has been taken. The figure below shows that historically, material numbers of mitigation activities were only undertaken at a price level above 200 ZAR/tCO_{2e}.



Hence, a theoretically higher that 120 ZAR/tCO_{2e} incentive for entities making actual investments in more carbon efficient technologies could be seen as a desired accumulation of benefits to a level that is required to drive real impact, instead of a double counting concern. By excluding carbon credits generated within the South African clay brick industry from being utilised as offsets under the carbon tax, because the South African clay brick sector would otherwise be double incentivised to implement GHG mitigation activities, does not sufficiently consider the minimum incentive needed within the sector to not only continue the implementation and operation of current emission reduction activities, but also diminishes the ability of the sector to contribute to the development of a greener economy going forward.

Summary of concern and proposed solution:

- **Concern**: In the absence of details on the eligibility of different types of offsets in the Bill the concern on this point as derived from the Carbon Tax Offsets Paper is re-iterated. The exclusion of carbon credits generated inside the tax net from being eligible as offsets against the carbon tax is based on a misunderstanding as to the difference between a tax and a cap and trade scheme and removes the additional tax benefit that stimulates active change via investments in low carbon technologies.

- **Proposed solution**: Remove the 'outside of the tax net only' eligibility criterion for the use of CERs and by doing so distinguish between entities that absorb the tax and entities that act in accordance with the primary objective of the Carbon Tax by reducing their emissions via the investment in low carbon technologies.

The South African clay brick industry employs thousands of people and produces bricks to build homes, schools, clinics, offices, etc. As a responsible corporate citizen, the industry is dedicated to a greener economy and has implemented a wide range of activities over the last decade and will continue to do so going forward. The South African clay brick industry as represented by the CBA would appreciate further engagements with National Treasury and other relevant departments like, the Department of Environmental Affairs and the Department of Energy to further investigate the design of the Carbon Tax before implementing it in South Africa.

Respectfully,

Jonathan Prior

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