



ASSOCIATION OF CEMENTITIOUS MATERIAL PRODUCERS



**Imposition of carbon tax and associated
impacts in the cement sector:
A high level overview**

12 March 2018
National Council of Provinces
Parliament

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**HAVE YOUR SAY
CARBON TAX BILL
SUBMISSIONS AND HEARINGS**

The Select Committee on Finance invites stakeholders and interested parties to submit written submissions on the Carbon Tax Bill.

The Carbon Tax Bill aims to: provide for the imposition of a tax on the carbon dioxide (CO₂) equivalent of greenhouse gas emissions; and to provide for matters connected therewith

Public hearings will be conducted at Parliament on Tuesday, 12 March 2019.

Submissions and your indication to make oral presentation must be received by no later than 12:00 on Friday, 8 March 2019.

Submissions must be directed to the Committee Secretary, Mr. Zolani Rento, 3rd Floor, 90 Plain Street, Cape Town 8000 or zrento@parliament.gov.za tel. 021 403 8071.

Copy of the Bill can be requested from the Committee Secretary.

Issued by Mr. CJ de Beer, MP, Chairperson: Select Committee on Finance (National Council of Provinces)

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www.sundaytimes.co.za SUNDAY TIMES ENG 110978 www.bancandcompany.co.za



CARBON TAX BILL

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1. INTRODUCTION: Who is the ACMP?

The ACMP acts as an umbrella body for five South African clinker and cementitious material producer companies, specifically guiding and representing their interests in the fields of

- environmental stewardship,
- health and safety practices, and
- community and stakeholder interaction

All members produce cement in **compliance SABS standards**

The ACMP's member companies include:



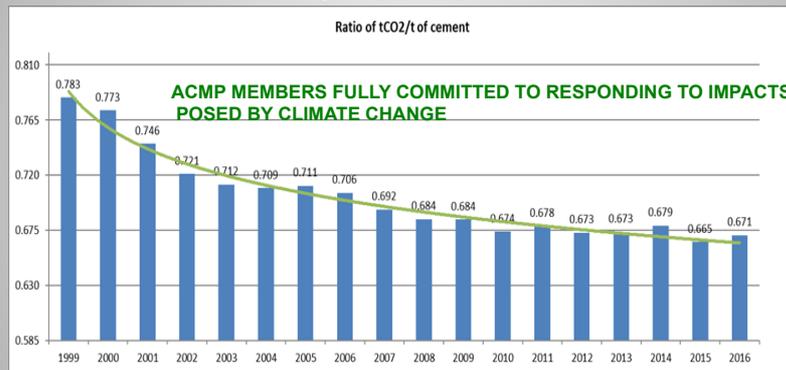
❖ AfriSam: www.afrisam.com
❖ Lafarge South Africa: www.lafargeholcim.com
❖ NPC: www.npc.com
❖ PPC Ltd: www.ppc.co.za
❖ Sephaku: www.sephakucement.co.za



REFLECTING COMMITMENT TO APPROPRIATE RESPONSE TO CLIMATE CHANGE
ACMP



The cement sector has over the past years *proactively* addressed climate change concern as can be noted in the Figure below



2. CEMENT PRODUCTION:BACKGROUND



- **Cement is a basic construction material**
 - Key sector in terms of infrastructure development to support the national development plan
 - Demand is directly linked with government spending targets on infrastructure projects, and
 - Policies affecting housing development in the country

- **Cement Production challenges**
 - Bulky commodity
 - Low value
 - Facilities mainly regionally based near limestone mines
 - Transport costs from mining areas to blending facilities and or consumers a challenge
 - 8-20% cost
 - Cement quality and integrity to be maintained in compliance with SABS standards
 - Capital intensive
 - Cash flow return on investment: 2-5% (International benchmark = 8%)
 - Energy intensive
 - Increasing electricity costs: 15-20%
 - Key emitter in terms of climate change and hence significant pressure to mitigate GHG emissions
 - Imports
 - Significant oversupply in market

3. CARBON TAX AS A POLICY INSTRUMENT TO DIRECT MITIGATION ACTION IN THE CONTEXT OF THE CURRENT DEVELOPMENTAL STATE OF SOUTH AFRICA



GENERAL COMMENTS

- ACMP acknowledges that carbon tax could be one of the policy instrument to facilitate a transition to a lower carbon economy, but ACMP members **are very concerned about the consequences of implementation of the Bill in the current economic climate:**
 - South Africa's socio-economic situation and its developmental state requires support
 - Other policy measures to give effect may be effective
 - Our committed national trajectory is not compromised at present in terms of NDC
 - Readiness of outstanding policies and reporting mechanisms
 - Alignment on various policies and strategies such as carbon budgets, energy, greenhouse gas emissions, mitigation potential analysis, and planned infrastructure development programmes.
 - Sectoral benchmarks in terms of levels of mitigation achievable.
 - In the case of the cement sector, the process related emissions are more than half of the total emissions which cannot be mitigated due to the chemistry of the raw material
 - No certainty to the carbon tax regime beyond 2022: future investments and technology spend budget preparation a challenge?

CARBON TAX AS A POLICY INSTRUMENT TO DIRECT MITIGATION ACTION IN THE CONTEXT OF THE CURRENT DEVELOPMENTAL STATE OF SOUTH AFRICA



• SPECIFIC COMMENTS: IMPACT ON CEMENT SECTOR

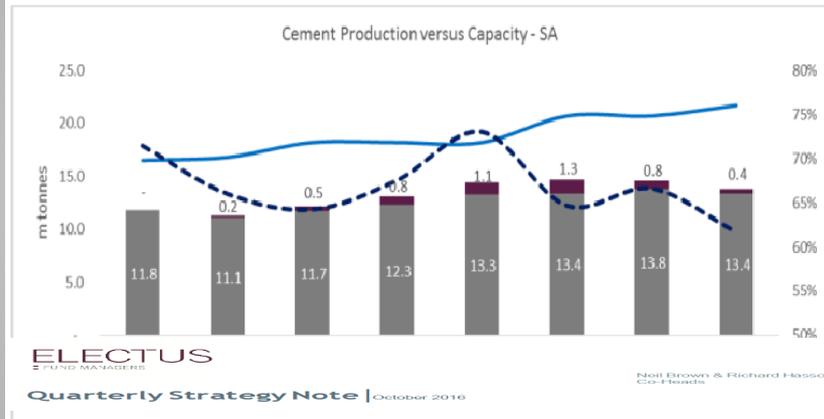
- Carbon tax regime will pose a significant challenge to the cement business: Result in higher costs of doing business
 - **Socio-economic impact assessment:** Is carbon tax an appropriate mitigation policy option to facilitate GHG emission reduction for the cement sector in South Africa?
 - **Geography:** Cement producing hubs are located far from the metropolitan economic activities and the knock on effects to these regions will be significant in terms of both the cement sector as well as its supply/value chain in terms of logistics, etc.
 - **Cost to do business:** Cement industry ranks amongst the
 - **most capital-intensive** industries with a lower than average **capital turnover** when compared to others such chemical, steel, aluminium or paper and pulp
 - **most energy-intensive** of all manufacturing industries.
 - **most process-intensive** – >50% emissions related to chemistry of raw material
 - **Social and infrastructure development** Cement remains an integral part of sustainable development and hence requires careful consideration in the context of its capital intensive and energy intensive characteristics
 - **Trade exposed.** Carbon tax burden will have further negative consequences to the local industry
 - **Process related allowance:** The 10% allowance may not be sufficient to effect behaviour change as >50% related to chemistry and cannot be mitigated (process related)
 - Result in higher costs of doing business
- Carbon tax as a fiscal mitigation policy instrument for the cement sector may not necessarily be appropriate for its mitigation action as the sector is continuously embracing latest technology and abatement strategies, which adds significant overall costs to cement production. Figure 1 reflected above illustrates our sectors effort to date since 1999

4. Cement production vs Industry capacity

http://www.electus.co.za/media/88880/electus_quarterly_strategy_note_october_16.pdf



Chart 3: Cement Production vs Industry Capacity - SA



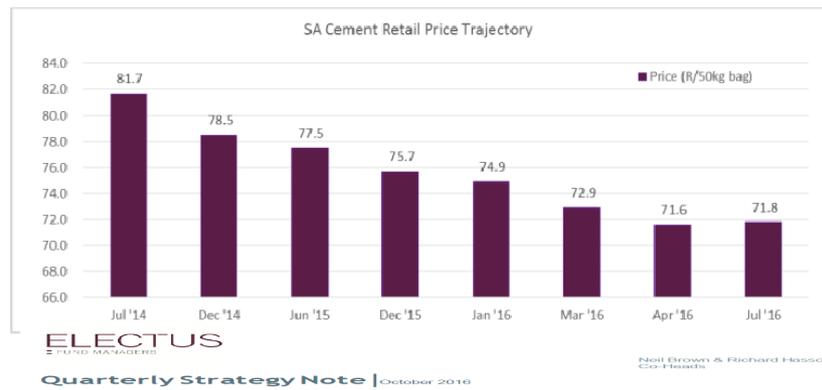
Source: PPC Company data, UBS

5. SA retail price trajectory

http://www.electus.co.za/media/88880/electus_quarterly_strategy_note_october_16.pdf



Chart 4: SA Cement Retail Price Trajectory

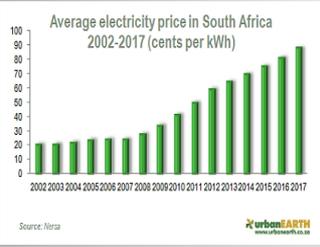


6. PRICE ABSORPTION CAPACITY

CEMENT PRODUCTION: MOST CAPITAL INTENSIVE

CEMENT PRODUCTION: MOST ENERGY INTENSIVE OF ALL MANUFACTURING

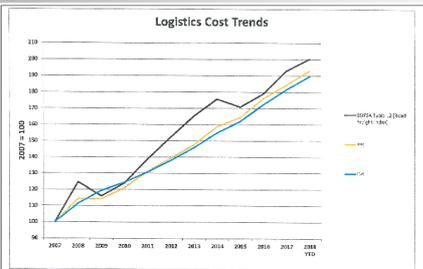
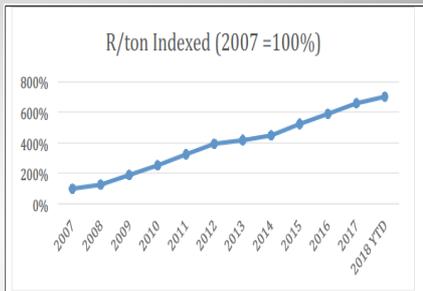
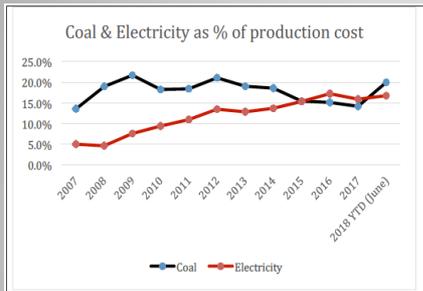
- Share of national energy use roughly 10 times its share of the nation's gross output of goods and services.
- Other energy intensive industries' share of energy use is roughly twice their share of gross output.



Industry cannot absorb any additional costs

* Cement designated by DTI Industry cannot absorb this to address cheap imports: <R60/bag

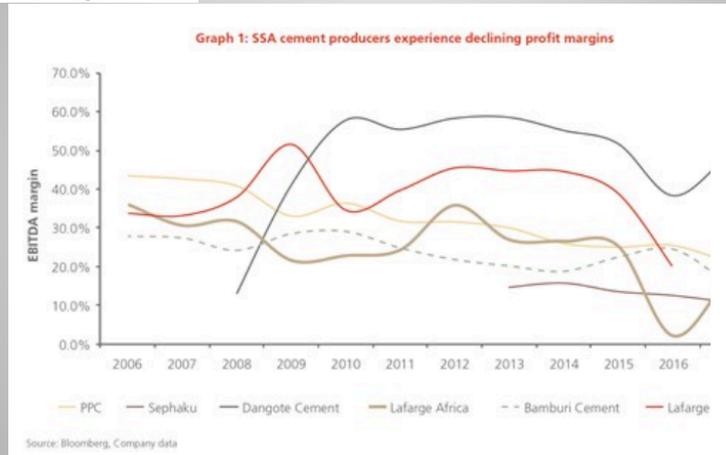
PRICE ABSORPTION CAPACITY (cont)



JUNE 2018

Cement's Changing Landscape

PRUDENTIAL INSIGHTS



<https://www.prudential.co.za/media/31099/cement-s-changing-landscape.pdf>

ELECTRICITY



NERSA approved electricity prices increase – 2019 and beyond:

- **October 2018:**
 - 4.41% hike for the next three years: Eskom's Regulatory Clearing Account (RCA)
- **March 2019:**
 - 9.41% in 2019/2020
 - 8.1% in 2020/2021, and
 - 5.2% in 2021/2022
- **Total increase:**
 - 2019/2020: 4.41% + 9.41% = **13.82%**
 - 2020/2021: 4.41% + 8.1% = **12.51%**
 - 2021/2022: 4.41% + 5.2% = **9.51%**

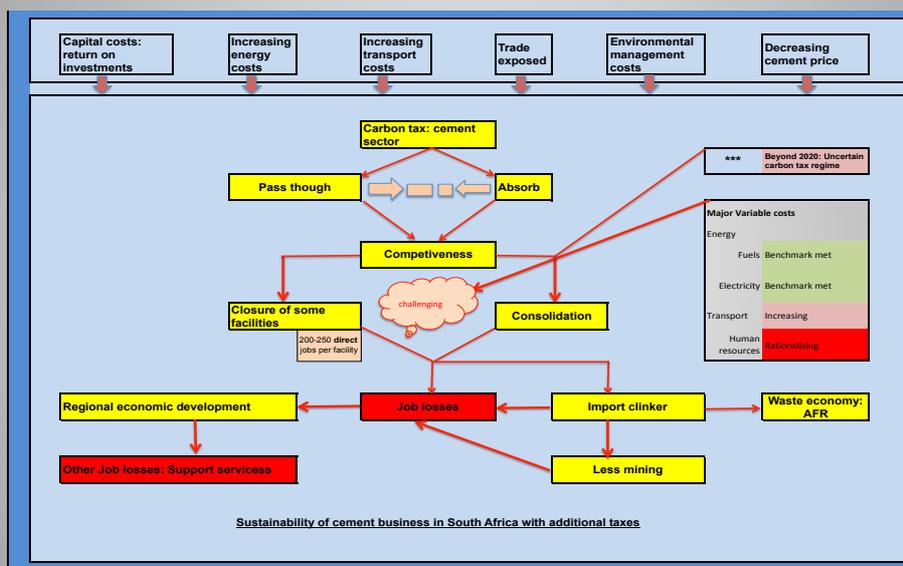
COST TO DO BUSINESS:

- This hike is already a major concern to energy intensive industry.
- The additional carbon tax burden and associated mitigation costs to comply with allocated carbon budgets will have major socio-economic consequences to both regional and national economic development due to job losses and cheap imports.

7. SOCIO-ECONOMIC IMPACT ASSESSMENT

- Carbon tax regime will pose a significant challenge to the cement business
 - Result in **cement price escalation**: Result in higher costs of doing business
- Cement producers unable to absorb the carbon tax related costs and will **pass on the increase**.
 - Price escalation by more than 2.5 % is expected
- The gap between cheap imports and local production costs is widening due to the increasing costs related to different levies and taxes (fuel, electricity etc), evolving local environmental regulatory environment as well logistics (cement production facilities are located at long distances and transport costs are ever increasing).
- Trade exposure challenges:
 - It is appreciated that the proposed carbon tax regime addresses trade exposure to some extent but it may just not be enough to address our members local vulnerability.
 - Although some of the imports are designated products for import purposes, the carbon tax implications to local producers will favour the importers as there has been no details provided in the Bill with regards to carbon tax levies for imports.
 - The trade exposure allowance threshold may not be sufficient to protect local production leading to increasing in process or even retrenchments and drastic reduction in investments, etc.

8. Cement sector: consequences to jobs on exposure to carbon tax



FIN24 article on cement industry consolidation



Too many players in cement industry - PPC CEO

Nov 16 2016 19:33 Lizeel Hill

Johannesburg - South Africa's cement industry would benefit from consolidation because there are too many players for the size of the market, according to Darryll Castle, the chief executive officer of the country's largest producer, PPC.

The company is "keeping an eye on the whole industry", Castle said in a phone interview on Wednesday, after declining to comment on whether PPC is in talks with rival AfriSam Group. The two Johannesburg-based companies have revived discussions about a merger almost two years after talks were abandoned, people familiar with the matter said this week.

"There's fairly clear rules and regulations around when you need to announce things, and there's nothing to announce," Castle said. "In the longer term there's no doubt that there needs to be some kind of consolidation in the industry and you can be sure that as PPC it would benefit us because we are the big player."

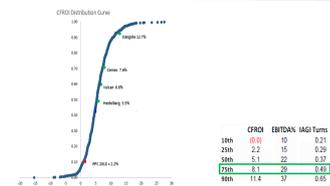


New PPC CEO Darryll Castle.

RELATED ARTICLES

9. Current financial return on investment: scenario based on data from a public listed company

Benchmarking Key Performance Indicators: Target 8/30/0.5



SA Cement Industry Performance

High level indication of current financial performance: CFROI

	Low	Mid	High	Average	
Cash Flow					
Revenue ZAR/t	1 000	1 180	1 340	1 173	
EBITDA margin	11%	16%	22%	16%	
EBITDA ZAR/t	110	189	295	198	
Ongoing capital cost	2%	-65	-57	-54	-59
Taxation	28%	-13	-37	-67	-39
Working capital	1%	-10	-12	-13	-12
Cash flow ZAR/t	23	83	160	89	
Carbon tax impact (estimate)	-37	-37	-37	-37	
Cash flow after carbon tax impact ZAR/t	-14	46	123	52	
Capital cost					
Replacement cost (USD/t)	240	210	200	217	
Capacity utilisation	60%	75%	90%	75%	
ZAR:USD	13.50	13.50	13.50	14	
Capital cost (ZAR/annual ton)	5 400	3 780	3 000	4 060	
CFROI	-6.1%	-1.2%	3.8%	-1.4%	<<< Vs. target of 8%
CFROI after carbon tax impact	-8.8%	-3.3%	2.1%	-3.3%	<<< Vs. target of 8%



RETURN OF CAPITAL EMPLOYED (ROCE)

The cement industry ranks amongst the most capital-intensive industries with a lower than average **capital turnover** (EU study)

ROCE for a fair evaluation

The cement industry ranks amongst the most capital-intensive industries, with a lower than average capital turnover when compared to others, such as chemical, steel, aluminium or pulp and paper. An appropriate financial assessment of the cement industry should therefore take into account the extent to which returns cover investments in both fixed assets and the maintenance needed to maintain operations. Indicators such as gross margins or earnings before interest, taxes, depreciation, and amortisation (EBITDA) only capture one part of the equation, while ROCE reflects a company's ability to see a return on all the capital that an industry has invested in order to run its operations.

$Return\ on\ Capital\ (ROCE) = Profit\ margin \times Capital\ turnover$

The Cement Sector: A Strategic Contributor to Europe's Future; Mark Freedman; Boston Consultancy Group; BCG New York.
freedman.mark@bcg.com

CASH FLOW RETURN ON INVESTMENT: General target = 8%
■ PROBABLY 2 -5 %: **CAPITAL INTENSIVE NATURE**



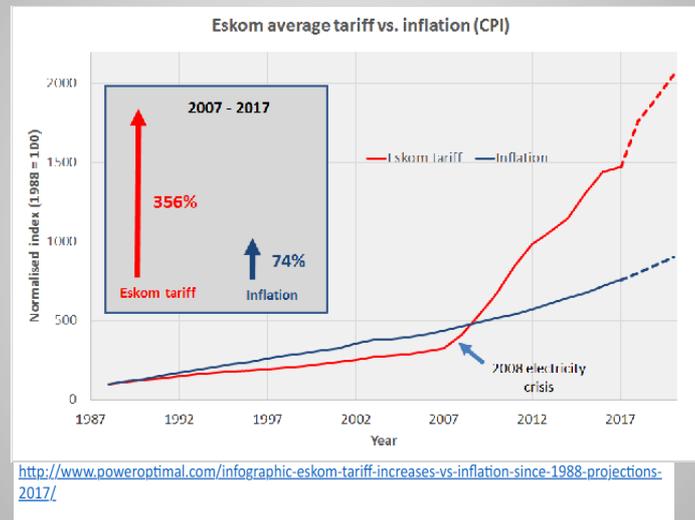
CEMENT PRODUCTION: MOST ENERGY INTENSIVE OF ALL MANUFACTURING

- Cement is the most energy-intensive of all manufacturing industries (USA example)
 - Share of national energy use roughly 10 times its share of the nation's gross output of goods and services.
 - Other energy intensive industries' share of energy use is roughly twice their share of gross output.

EIA US Energy Information Administration:
Today in Energy
July 1, 2013

Data: U.S. Energy Information Administration, Department of Commerce, Bureau of Economic Analysis

Electricity tariff vs Inflation (CPI)



10. IMPLICATIONS OF CARBON TAX

- **Pass through by adjusting cement price :**
 - Trade exposed sector:
 - Dumping of imported cement
 - Competitiveness may be compromised
- **Absorb**
 - Cost cutting:
 - Mechanisation
 - *Staff rationalisation*
 - Sector consolidation as witnessed internationally



SECTORAL CONSOLIDATION

- **International experience:** Sector consolidation
- **National experience:**
 - PPC: annual report - YEAR END RESULTS FOR THE PERIOD ENDING 31 MARCH 2017
 - **PPC reports on consolidation and mergers as follows:**
 - “
 - The creation of a South African cement producer that is financially stronger, operationally more efficient and has deeper technical capability
 - Synergies which might arise from a combination of the parties' operations “
 - **IMPOSITION OF CARBON TAX**
 - **ADDITIONAL COSTS TO BUSINESS**
 - **MAY HAVE IMPLICATIONS ON PACE OF SECTOR CONSOLIDATION WITH CONSEQUENCES TO JOBS**



11. TIMING OF IMPOSITION OF THE TAX

CONCERNS	ISSUES
Finalisation of overall climate change related legislation	<ul style="list-style-type: none"> • Carbon tax and its associated regulations
GHG reporting guidelines	<ul style="list-style-type: none"> • Not yet finalised
NAEIS system at DEA	<ul style="list-style-type: none"> • Update of NAEIS is still outstanding for electronic reporting <ul style="list-style-type: none"> ▪ Manual submission of company data ▪ Interface for tax SARS ▪ Confidentiality of data a concern ▪ Verification of data by DEA and SARS
Carbon budgets	<ul style="list-style-type: none"> • Methodology for allocation to be transparent <ul style="list-style-type: none"> ○ Approval criteria for carbon budget applications are not well understood ○ Appears to be subjective
Relationship between carbon budget and carbon tax	<ul style="list-style-type: none"> • Alignment has not been finalised to date. • Future technology investment decisions compromised • Choice of interface options not finalized
Carbon offset:	<ul style="list-style-type: none"> • Purpose of carbon tax is to mitigate GHG emissions: hence - offset allowance should not be capped. <ul style="list-style-type: none"> ▪ Support best cost options, unavaided process related emissions (eg cement), etc. • More than half emissions are process related for cement production and offsets may need to be considered
Monitoring and verification systems for carbon reporting	<ul style="list-style-type: none"> • Specialised auditors to support Companies, SARS, and Department of Environment • Require improved understanding to inform such monitoring along the chain of events.
Adequate policy interventions at present	<ul style="list-style-type: none"> • Carbon budget • Pollution prevention plans • Mitigation potential analysis • Etc
Allowances: Some examples	<p>Performance benchmarks</p> <ul style="list-style-type: none"> • Sector benchmarks not yet published. Impact on investment decisions and carbon tax budget projections <p>Waste related allowances</p> <ul style="list-style-type: none"> • The approach to adjust for cement sector not yet finalised
Post 2022	<ul style="list-style-type: none"> • Uncertainty and budgeting challenges • Industry sustainability impacts



12. CONCLUSION

- The impact of the proposed additional carbon tax cost will have a serious impact:
 - Further diminishing returns of an industry in distress
 - Likely to result in the inability to attract investors to fund continuous investment required to sustain the industry based on returns on investment
 - Local economic development will be compromised due to knock on effects in cement producing hubs such as Lichtenburg (North West)
 - Broader national socio-economic impacts



Thank you!