CEMENT INDUSTRY FEDERATION

Cement Industry Federation

Submission:

CLIMATE CHANGE AUTHORITY

SPECIAL REVIEW SECOND DRAFT REPORT

Australia's climate policy options

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Adelaide Brighton Cement Ltd | BORAL | CEMENT AUSTRALIA

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Australia's climate policy options

The Cement Industry Federation (CIF) welcomes the opportunity to respond to the Climate Change Authority's *Special Review Second Draft Report – Australia's climate policy options*.

The CIF is the national body representing the Australian cement industry, and comprises the three major Australian cement producers - Adelaide Brighton Ltd, Boral Cement Ltd and Cement Australia Pty Ltd. Together these companies account for 100 per cent of integrated clinker and cementitious supplies in Australia.

CIF member companies have five integrated manufacturing facilities located in Berrima (NSW), Gladstone (Queensland), Railton (Tasmania), Birkenhead and Angaston (South Australia).

CIF members also have five stand-alone cement mills, eight limestone mines and a national distribution network to move raw materials, as well as our intermediary and finished products.

Sales of cementitious materials were 9.1 million tonnes in 2014-15, with an annual industry turnover of $2.4 billion. The cement industry is also a key employer with over 1,300 directly employed in Australia, with many thousands more involved in the downstream production and distribution of concrete.

Cement is a critical input into concrete – the most used man-made material in the world due to its unique properties (strength, durability, thermal mass, affordability and abundance of raw materials). The versatility of concrete is evident in its widespread use in our houses, schools, hospitals, pavements, roads, bridges, dams and sewage systems.

1. Key Points

- It is critical that any climate policy measures include provisions to maintain the international competitiveness of key Australian industries, such as cement manufacturing, and aim to deliver abatement at least cost to the economy.

- Climate policy should be developed and applied in a consistent manner across jurisdictions with a preference for a single, national climate policy supported by all states and territories.

- Climate policy should result in stable and predictable programs and measures that avoid unnecessary complexity in order to minimise market distortions and the regulatory burden on industry.

- Climate policy should be subject to regular reviews and easily adjusted to accommodate for a change in the target, either up or down as required, in order to maintain economic stability whilst achieving the desired environmental outcome.

- Consideration should be given to the benefits of a sectoral approach to reducing emissions – taking advantage of the opportunities within key manufacturing industries to achieve effective and affordable emissions reductions.

- It is important that costs of any climate change policy are distributed equitably across the economy and address competitiveness issues within individual industries and sectors.

Climate policy in Australia has, over recent years, involved the consideration and application of different approaches to emissions reduction. Examples include the Renewable Energy Target, the Carbon Pollution Reduction Scheme, the Clean Energy Futures program and most recently Direct Action.

Whilst these policies represent differing approaches and mechanisms targeting emissions reductions, they each had to take account of the potential implications for key industries and the economy as a whole. These issues remain and must be considered in the development and application of future policy.

2. Cement Industry and Climate Change – A Sectoral Approach

Cement manufacturing accounts for around 5 per cent of global anthropogenic carbon emissions[1] and approximately 1 per cent in Australia. Approximately 60 per cent of these emissions are attributable to the calcination of limestone (the basic chemical de-carbonisation of limestone into lime releasing CO_2), with the remaining 40 per cent of emissions resulting from producing the energy required for the process.

The cement industry globally has been at the forefront of identifying actions to reduce emissions. Cement producers collaborated in 2009 with the World Business Council for Sustainable Development (WBCSD) Cement Sustainability Initiative (CSI) and the International Energy Agency (IEA) to develop the first sectoral Cement Technology Roadmap[2].

The Cement Technology Roadmap (2009) outlined a transition path for the industry to make continued contributions towards reducing global emissions out to 2050. Four levers were identified for carbon emissions reductions from the sector:

- Thermal and electrical efficiency;
- Alternative fuels;
- Clinker substitution; and
- Carbon capture and storage.

More recently and continuing with a sectoral approach to reducing carbon emissions, leaders in the global cement industry came together once again under the banner of the WBCSD as part of the Low Carbon Technology Partnerships initiative: Cement (LCTPi).

This initiative recognises that further action is needed to build upon the efforts already underway by cement companies worldwide as part of the roadmap process. The LCTPi includes a shared statement of ambition by which:

'…CO_2 emissions should be reduced in the range 20 to 25% by 2030 compared to business as usual, an average emission rate equivalent to the emissions of the best-in-class CSI company 2020 targets.'

[1] Low Carbon Technology Partnerships initiative – Cement; WBCSD (http://lctpi.wbcsdservers.org/wp-content/uploads/2015/12/LCTPi-Cement-Report.pdf)
[2] Cement Technology Roadmap 2009, http://www.iea.org/publications/freepublications/publication/technology-roadmap-cement.html

In order to move towards this goal the LCTPi sets out seven steps in its action plan:

1. Enhance the coverage of the sector's CO_2 emissions and energy consumption database, with a specific focus on China (about 60% of worldwide cement production).

2. Enhance overall energy efficiency of the current manufacturing process.

3. Scale up the collection, availability and usage of good quality alternative fuels and raw material, including relevant waste from other sectors in a circular economy approach.

4. Further reduce the clinker content in cement to minimise the share of energy intensive part of the process.

5. Develop new cements with reduced net CO_2 emissions over the full life cycle.

6. Engage the full building and infrastructure value chain in local markets to identify and maximise the avoided emissions by usage of cement and concrete products.

7. Evaluate cross-sectoral initiatives, particularly on the opportunity to capture, use and store carbon (CCS-U).

The Australian cement industry is already well versed in many of the actions identified by the global industry – with a heavy focus on energy (thermal) efficiency, increased use of alternative fuels and raw materials, and reducing the clinker content in cement.

Strong action already taken by the Australian cement industry has resulted in significant carbon emissions reductions since 2005 – with a greater than 20 per cent reduction in terms of total emissions from the sector.

When considering Australia's policy options to meet established targets, the following options need to be considered:

- In the first instance a global sectoral approach applying the same rules across countries and regions would be the preferred option. Such an approach would target reduced emissions while avoiding competitiveness concerns.

- In the absence of a truly global sectoral approach, a national sectoral approach could be used to capitalise on the significant opportunities that exist to reduce emissions across key sectors within the economy (e.g. cement, steel and aluminium). Such an approach would need to be flexible and designed so as to balance out competitiveness, economic and environmental concerns.

3. Answers to Specific Questions

Q.14 *Which international competitiveness impacts are most important to designing Australia's climate policy toolkit, and why?*

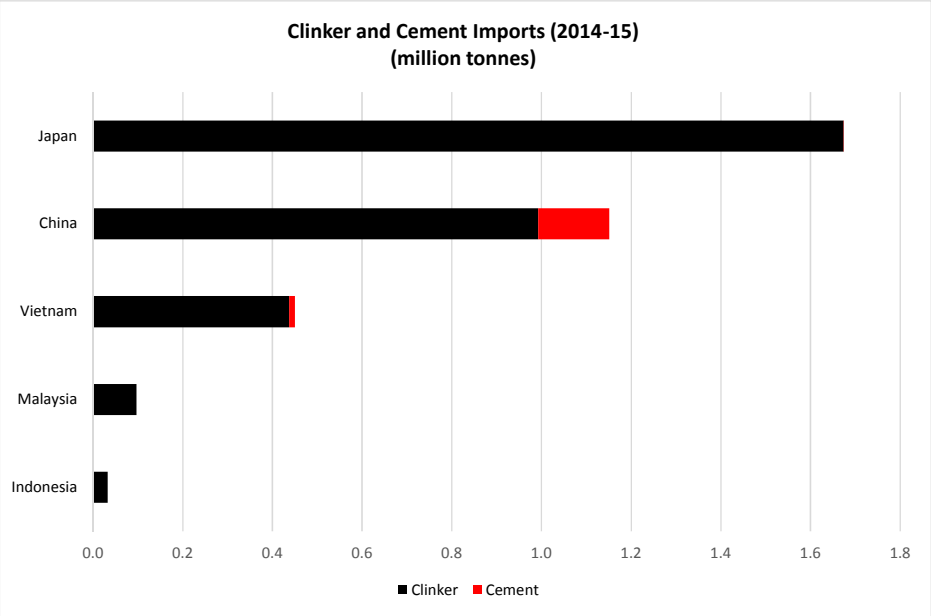
Despite an increasing number of countries and regions adopting targets and policies, it is important to note the significant difficulties involved in comparing the various levels of commitment, particularly in terms of overall ambition relative to actual flow on affects to national and regional economies.

From an industry perspective, understanding the extent to which individual facilities operating in key competing countries are financially (or otherwise) impacted by country or regional targets and policies is critical when it comes to considering Australia's policy options.

The ramifications for industry and the wider economy resulting from the imposition of costs that are not borne by our competitors are likely to be significant and difficult to recover from, especially with regards to capital intensive industries such as cement manufacturing.

Major competing countries from an integrated cement manufacturing industry perspective include: Japan, China, Vietnam, Malaysia and Indonesia - Figure 1.

Figure 1: Clinker and cement imports into Australia 2014-15



Source: Australian Bureau of Statistics (2015)

Q.15 *What is the current risk of climate leakage, in light of the Paris climate conference and associated national commitments?*

The importance of reducing the regulatory, and therefore cost burden on Australia's energy intensive industries cannot be overstated. Australia's cement manufacturing industry has been exposed to significant adverse conditions extending back to the 2008 Global Financial Crisis (GFC).

The challenging domestic macroeconomic environment, coupled with increased regulatory costs being imposed by various state and federal governments during the post GFC period, has led to a significant rationalisation of integrated plants within the Australian cement manufacturing sector - with five out of ten integrated cement facilities no longer operating.

Domestic climate policies, both state and federal, must therefore seek to minimise the regulatory burden on critical Australian industries such as cement manufacturing or risk the loss of further capacity from the cement market.

Disparate state and federal climate policies have the potential to significantly impact on the competitiveness of energy intensive industries, creating market distortions that result in higher electricity and fuel prices.

The CIF advocates for a single, national approach to achieving greenhouse gas reductions that does not reduce the international competitiveness of key industries such as cement manufacturing.

Q.16 *Which sectors are most likely to face adverse impacts on their international competitiveness from climate policy and why?*

Climate policy should continue to recognise the exposure of energy-intensive trade-exposed industries (EITEs) to risks associated with programs and measures to reduce national emissions.

These risks will remain as long as the majority of our international competitors are not demonstrably exposed to similar measures – independent of national or regional commitments to reducing emissions.

Industries such as cement, steel and aluminium have been recognised as EITE industries and, as such, are most likely to face adverse impacts from climate policies that do not adequately address competitiveness issues.

Q.17 *How do you think these impacts should be addressed?*

Existing and future climate policies that have the potential to reduce the competitiveness of Australian manufacturing industries must include measures to minimise the potential impact until a level playing field can be guaranteed.

What these measures would look like in practice is depended upon the particular policy mechanism of choice (e.g. compensation/exemption under an emissions trading scheme).

In broad terms existing and future climate policy, independent of the favoured measures and/or programs, should:

- take into consideration the actual carbon costs borne by key comparable facilities in competing countries and/or regions – irrespective of the stated ambition for emissions reduction at the country/regional level; and
- be subject to regular review and flexible enough to be adjusted (in either direction) in order to maintain the balance between economic stability and environmental effectiveness.

4. Conclusion

It is critical that any Australian climate policy recognises the importance of not impeding the competiveness of Australian industry, such as integrated cement manufacturing, when their direct competitors do not face similar carbon costs.

CIF members remain committed to reducing their carbon footprint and working with the Federal Government to ensure Australia's climate policy is designed to ensure competitiveness issues are addressed.