1. Executive Summary

The Cement Industry Federation (CIF) and Cement Concrete & Aggregates Australia (CCAA) welcome the opportunity to provide comment on the Setting Future Victorian Energy Efficiency Targets Consultation Paper April 2015.

The proposed strengthening of the Victorian Energy Efficiency Target (VEET) has the potential to impose additional costs on industry, primarily through increases in energy prices. The CIF and CCAA do not support the implementation of programs that lead to an increase in energy prices and therefore reduce the competitiveness of Australian manufacturers.

Higher energy prices not only impact on the production of cement and supplementary cementitious materials, they also impact on related activities in the heavy construction material sector, such as the extraction and processing of quarry products and the production and supply of pre-mixed concrete.

Australia’s integrated cement manufacturing industry is energy intensive and trade exposed. As such our members are constantly focused on achieving the highest levels of energy efficiency within the context of a wide range of business considerations, in order to maintain their competitiveness.

Our industry no longer has a cement kiln operating in Victoria. The decision to suspend clinker production at Waurn Ponds in 2013 was attributed to a number of factors, including “…rising energy and other manufacturing costs.” The VEET had an impact on energy prices and therefore was one of the cost pressures that influenced the decision to close.

In order to encourage the uptake of energy efficiency measures where there is a perceived market failure in the economy, the CIF and CCAA support the use of alternative approaches that do not impact on the overall cost of electricity in the market – such as through the use of direct subsidies and/or more targeted measures to increase awareness of energy efficiency opportunities.

In terms of greenhouse gas reduction targets – the CIF and CCAA consider that a single, national approach is the most efficient means to achieve greenhouse gas reductions. Multiple, uncoordinated approaches are likely to lead to market distortions that result in higher energy prices.

2. Background

CIF

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

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Cement Australia Pty Ltd. Together these companies account for 100 per cent of integrated clinker\(^2\) and cementitious supplies in Australia.

CIF member companies have five integrated manufacturing facilities\(^3\) located in Berrima (NSW), Gladstone (Queensland), Railton (Tasmania) and 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 9.4 million tonnes in 2013-14, with an annual industry turnover of $2.3 billion. The cement industry is also a key employer with over 5,000 directly and indirectly employed in Australia, and many thousands more involved in the downstream production and distribution of concrete.

**Cement Concrete & Aggregates Australia**

CCAA is the peak industry body for the $12 billion-a-year heavy construction materials industry in Australia. Our members are involved in the extraction and processing of quarry products, as well as the production and supply of pre-mixed concrete, cement and supplementary cementitious materials.

### 3. The Australian Heavy Construction Materials Industry and Energy

Cement, concrete and aggregates are vital commodities for the Australian economy, providing significant social and economic benefits both now and into the future. Cement itself is a strong and versatile material that is a critical input for Australia’s building and construction industry, our resources industry (e.g. LNG plants) as well as for infrastructure development (roads, rail, airports, bridges and ports).

Competitively priced supplies of cement, concrete and aggregates are essential to Australia’s continuing economic growth.

Energy is a key component of cement manufacturing in Australia, representing approximately 25-30 per cent of total costs. This includes thermal energy for the cement kiln and electricity for the cement grinding plant.

With energy representing such a large portion of production costs, cement producers are continuously investigating and, where economically feasible to do so, adopting more energy efficient technologies to improve productivity and competitiveness.

\(^2\) Clinker is the main ingredient used to produce cement. It is a pebble-like material made by heating limestone, clay and sand in a kiln at around 1,450°C. Clinker is then ground with gypsum and other materials to make cement. It is the main ingredient that gives cement its binding properties.

\(^3\) An integrated cement manufacturing facility is where all stages of the production process occur at the one site – that is, raw material preparation, clinker production and cementitious milling.
Since 1990 the industry has invested in world class energy efficient clinker production technology through the increased use of precalciner kilns and a reduction of clinker production using less efficient long wet kilns.

Efficient precalciner kilns accounted for 90 per cent of total clinker production in the Australian cement industry in 2013-14, significantly above the 8 per cent market share held by this technology in 1989-90 (Figure 1).

**Figure 1 – Changes in Australian cement industry kiln technology (per cent of installed capacity 89/90-13/14)**

4. **Impact of GFC on Australia’s Heavy Construction Materials Industry**

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

- Reduced demand for building and construction materials in Australia, especially cement;
- A significant appreciation in the Australian dollar for a number of years;
- Higher domestic energy costs;
- Increased costs resulting from further Australian coastal shipping regulation; and the
  - Introduction of a domestic carbon tax during the July 2012 to June 2014 period.

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 policies, both state and federal, must therefore seek to minimise the regulatory burden on important Australian manufacturing industries such as cement production. Not only do programs such as the VEET have a significant impact on the competitiveness of energy intensive industries, multiple approaches are likely to lead to market distortions that result in higher electricity and fuel prices.

5. **Cost Impact of Energy Efficiency Schemes**

Energy efficiency programs now operate in New South Wales, Victoria, South Australia and the Australian Capital Territory. While each scheme differs slightly in approach, there are some common elements.

Principally the schemes operate by the setting of energy efficiency and greenhouse gas targets that are applied to the energy retailer (normally only for electricity and gas). The retailer must either invest in energy efficiency projects that create certificates, or alternatively purchase those certificates.

If the certificates are not purchased or created, the retailer must pay a penalty price for having failed to meet the target.

Any costs of the scheme faced by the retailers are being recovered from electricity users through a general increase in electricity prices. This means that the cost of funding these schemes is not on the respective government’s balance sheet but on those of electricity consumers. Transparency would be better served through other measures – such as a direct subsidy.

There do not appear to be any regulations in existing state schemes that dictate how energy companies must pass through scheme costs. A direct subsidy would apportion costs across the entire tax paying base, while schemes that involve a cost pass through will disproportionately disadvantage large energy users.

6. **National Energy Productivity Plan**

The Australian Government, through the Energy White Paper (EWP), has announced that it will lead the development of a National Energy Productivity Plan to improve national productivity by up to 40 per cent by 2030. This will be in cooperation with the states and territories and industry, covering the built environment, equipment and appliances, and vehicles.

Importantly the Australian Government recognises the complexities associated with the ‘…diverse activities that contribute to energy productivity and the need for complementary effort by all levels of government, business and households…’ – and that ‘…opportunities for
further improvements in industry will be largely voluntary action as major energy users respond
to energy price signals.\textsuperscript{4}

The focus on voluntary (national) action in the EWP and coordination across the various
jurisdictions is critical from an energy intensive industry perspective. Flexible approaches to
achieving energy productivity improvements, as opposed to white certificate or other
mandated schemes, will be essential if energy intensive industries are to remain competitive
into the future.

Any activity in this area by State Governments should be consistent with considerations of
new initiatives at the Federal level under the planned Energy Productivity Plan.

7. **VEET Target and Business Participation**

The CIF and CCAA do not consider state-based greenhouse gas reduction targets to be the
most efficient and equitable means to achieve meaningful levels of carbon abatement. The
CIF advocates for a single, national approach to achieve greenhouse gas reductions that does
not reduce the international competitiveness of key manufacturing industries.

Multiple, uncoordinated approaches to greenhouse gas reduction can only serve to increase
the regulatory burden on industry and are likely to lead to market distortions that result in
higher input costs.

Where a target is to be introduced at the state level, serious consideration needs to be given
as to how this will impact critical energy intensive industries and what measures can be put in
place to minimise this impact.

8. **Conclusion**

The CIF and CCAA do not support the implementation of programs such as the VEET that
lead to an increase in energy prices and therefore reduce the competitiveness of Australian
industry. While there were a range of business considerations that lead to the suspension of
clinker production at the last cement kiln in Victoria, recent energy price increases were a
factor in the decision.

Where there is a perceived market failure around drawing through energy efficiency measures,
the CIF and CCAA support the use of alternative approaches that do not impact on the overall
cost of electricity in the market – such as through the use of direct subsidies and/or more
targeted measures to increase awareness of energy efficiency opportunities.

Our industries advocate for a single, national approach to achieve greenhouse gas reductions
that does not reduce the international competitiveness of key manufacturing industries.

\textsuperscript{4} Energy White Paper, pg 35 (ewp.industry.gov.au)