



CEMENT INDUSTRY FEDERATION SUBMISSION TO THE

2020 Review of the Emissions Reduction Fund Consultation Paper

Discussion Paper

May 2020



1. INTRODUCTION

Thank you for the opportunity to provide input into the Climate Change Authority's review of the Emissions Reduction Fund.

The CIF is the national body representing all Australian integrated cement manufacturers 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. Cement is a critical input for Australia's residential and commercial construction industry, as well as for our major infrastructure projects. See **Appendix 1** for more information.

2. OVERALL PERFORMANCE OF THE ERF

2.1 How is the Emissions Reduction Fund (ERF) performing overall?

While the ERF has been successful in terms of sourcing least cost emissions reduction projects, these have largely been focussed around land sector emission reductions with very limited uptake from the industrial sector.

Changes to the design of the ERF and its application could potentially increase the participation of industrial users and drive significant abatement across numerous sectors.

2.2 What parts of the ERF could be improved and how?

It is important to note that industrial abatement projects, which generally fall under the ERF Facilities Method or the Industrial Energy Efficiency Method, would typically need to be large projects that involve significant upfront investment.

Such investments are almost always driven by multiple considerations and involve lengthy time frames that, in most cases, preclude them from being considered under the ERF in its current form.

As such, there is substantial scope for change under the ERF to target a wider range of sectors and projects.

2.2.1 Criteria and Method Development

Criteria underpinning the development of methods and projects could be redesigned to ensure other suitable projects can be targeted in Australian manufacturing and other sectors.

This could include encouraging bespoke projects with variable clearing prices and/or a formal grants scheme for large projects with either matching public and private funds or finance.

This approach is being progressed in California where it has been identified there are significant barriers to increased alternative fuel use in cement manufacturing and public funding support being found to be warranted.¹

2.2.2 Statement of Activity Intent

The requirement under the Facilities Method for a Statement of Activity Intent, signed off by the Chief Financial Officer, is a potential barrier. Having to declare that a project would not have occurred in the absence of the ERF incentive is very black and white – and is most likely high on the list of reasons why so few projects have been registered under the Method.

¹ https://climatepolicyinitiative.org/wp-content/uploads/2014/07/Cap-and-Trade-in-Practice-Full-Report.pdf

There is no question regarding the importance of ensuring additionality when considering projects under this or any other ERF method. This is not disputed. However, the meaning conveyed by the term 'unlikely' suggests a level of flexibility not contained in the more definite 'would not' terminology.

Other ERF methods do not appear to require similar levels of commitment. The Industrial Energy Efficiency Method provides an example of less definitive, and therefore less prohibitive, language around additionality - namely:

'...an explanation of how the implementation could reasonably be expected to result in eligible carbon abatement; \dots ²

A potential solution for consideration relates to the wording of the additionality clause of the offsets integrity standards – namely that projects should result in abatement that is unlikely to occur in the ordinary course of events:

⁽Projects covered by the determination should result in abatement that is unlikely to occur in the ordinary course of event (i.e. unlikely to occur in the absence of the incentive provided by the scheme).⁽³⁾

Consideration should be given to reviewing the requirement for a statement of activity intent with the aim of aligning the language and intent with that found in the additionality test of the offsets integrity standards. This would require changes to the Methodology Determination and to the Statement of Activity Intent form provide by the Clean Energy Regulator.

Requiring a statement of activity intent that the project is unlikely to occur, as opposed to would not occur, would be much less of a barrier for potential projects under the Facilities Method.

2.2.3 Counterfactual Emissions Intensity

The current approach that uses grid average emissions intensity at the time of project declaration as proxy should be retained over the crediting period, i.e. seven years. This method provides clarity and certainty when calculating the expected abatement over the period.

Attempts to capture potential changes to the emissions intensity of electricity grids over the period, related to either fuel switching or changes in technology, have the potential to introduce the uncertainties of forecasting into the decision-making process and potentially become a barrier for projects under the method. This should be avoided.

The method for determining the counterfactual emission intensity for a project must be set at the time the project is registered and not be subject to variation over the project period.

2.2.4 Baseline Setting

Cement kilns require regular maintenance that is typically carried out during shutdown periods that occur every 12-18 months depending on the requirements of the facility. A reasonable baseline setting period is required to ensure that these and similar events are captured in the data set.

The existing method for setting the baseline – using the lowest <u>annual</u> emissions intensity of the facility over four to six years of historical NGERs data – may not capture routine events such as shutdowns and therefore is unlikely to be representative of the business as usual operating range.

Consideration should be given to using an average emissions intensity, rather than the lowest annual emissions intensity, over the baseline setting period.

² Carbon Credits (Carbon Farming Initiative-Industrial Electricity and Fuel Efficiency) Methodology Determination 2015 – pp16

³ Carbon Credits (Carbon Farming Initiative) Act 2011 – pp 157

2.2.5 Standard Seven Year Crediting Period

Large, capital intensive projects resulting in emissions reduction are likely to have payback periods longer than the existing crediting period of seven years and should be credited as such.

Consideration should be given to specifying different crediting periods for different projects – as exemplified by the Committee's recent recommendation that landfill gas projects that used flaring receive longer crediting periods⁴.

Such an approach would, however, raise questions around the setting the counterfactual emissions intensity for crediting periods significantly longer than seven years and introduce some uncertainty around total abatement.

However, this could be dealt with to a degree by periodic reviews over a period determined by the length of the crediting period – but not longer than seven years (e.g. every seven years if the crediting period is set at 14 years, or every 5 years for a 20-year period).

In either case the counterfactual emissions intensity should be applied to a set period and not change during that period.

2.2.6 General Issues

- The time and resources required to develop an ERF application particularly for a large industrial project – are significant and can add another layer of complexity to an already complex project. Any measures taken to reduce the administrative burden while maintaining the integrity of the ERF process would be welcome.
- The timing of ERF crediting does not currently align with the safeguard mechanism requirements.
- There is currently a lack of alignment between external audit requirements and internal ERF project reviews. This misalignment adds to the administrative and cost burden of the ERF on industry.
- The interaction of production and emissions when a project is considered for potential suitability under the ERF. The choice of ERF methodology for a project with both emissions reduction benefits and production volume increases can be limited due to restrictions within the methodology.

Mechanisms to reduce the administrative burden associated with the ERF would be welcomed by our industry and could be strengthened through measures such as focussed industry engagement programs and workshops focussed around the application process.

3. MAINTAINING INTEGRITY AND OPTIMISING GOVERNANCE OF THE ERF?

3.1 Do you have any views on the operation of the offsets integrity standards and the additionality provisions as key principles supporting the integrity of abatement under the ERF?

As discussed above, consideration should be given to reviewing the requirement for a statement of activity intent with the aim of aligning the language and intent with that found in the additionality test of the offsets integrity standards.

This would require changes to the Methodology Determination and to the Statement of Activity Intent form provided by the Clean Energy Regulator.

⁴ ERAC Consultation Paper – *Review of the Carbon Credits (Carbon Farming Initiative-Facilities) Methodology Determination 2015, pp 15.*

3.2 Do you think the governance structures of the ERF remain fit for purpose?

The existing governance structures appear to be functioning adequately in terms managing the complexities involved in administering the scheme (Clean Energy Regulator), policy and method development (the Department) and method assessment (Emissions Reduction Assurance Committee).

Ensuring that each of the governing bodies remains focussed on the overarching goals of increased abatement (e.g. through incentivising non-land sector abatement) and streamlining administrative process to reduce the administrative burden is critical to achieving significant levels of additional abatement under the scheme.

4. OPPORTUNITIES FOR ENHANCING OUTCOMES

4.1 What role could the ERF play in future economic recovery efforts?

The cement industry is a strong contributor to jobs, growth, and productivity in Australia (especially regional Australia) and can prosper if not burdened with excessive and unnecessary regulation and related compliance costs.

Ineffective regulation reduces our import trade competitiveness (especially with Asia) and therefore our ability to sustain growth and contribute to the Australian economy.

Recognising that many businesses will be heavily focussed on recovering from COVID-19 impacts – i.e. looking after their workforce as well as rebuilding supply lines and markets – it is important that the ERF and associated programs and measures are as streamlined (and aligned) as possible to reduce the regulatory burden on participants.

There must also be a focus on providing opportunities for the increased uptake of non-land sector abatement opportunities, while maintain the integrity of the program overall.

5. FUTHER INFORMATION

For further information relating to this submission please contact Ms Margie Thomson, Chief Executive Officer, using the details below.

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1. AUSTRALIA'S CEMENT INDUSTRY

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The Australian cement manufacturing sector is a critical component of the domestic economy. Our products underpin major sectors of the economy such as residential and commercial construction, as well as major infrastructure such as bridges, roads, airports, and dams.

In 2018-19 the Australian cement industry recorded a turnover of around \$2.4 billion dollars. Our industry employs around 1,300 people directly – mostly in regional areas of Australia as well as suburban and industrial areas of our cities – and underpins a further 5,000 jobs indirectly and many thousands more in terms of downstream concrete and aggregate production and distribution.

2. SUMMARY OF CEMENT INDUSTRY EMISSIONS

Total emissions from the integrated production of clinker and cement were 5.1 million tonnes in 2018-19 - 18 per cent lower than in 2010-11.

The main source of carbon emissions from Portland cement manufacturing results from the manufacture of clinker from limestone. This chemical transformation involves the heating of limestone to generate clinker (lime) and carbon dioxide.

Process emissions accounted for around 60 per cent of emissions in 2018-19 (Figure 2.1).

Approximately 30 per cent of emissions resulted from the burning of fuels such as coal and gas to generate heat for the process, and the remaining 10 per cent came from the use of electricity across the facilities.

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Figure 2.1: Greenhouse gas emissions profile of Australia's cement industry in 2018-19

Limeston CaCO3	$e \longrightarrow Clinker + Ca$ CaO	rbon Dioxide CO2		Heat (fue	ls) Electricity	
			60%	30%	10%	
						1
0%	20%	40%	609	% 80	0% 10	0%
Pro	cess Emissions	Therm	al Emission	ns ∎Indire	ect Emissions	

Source: CIF Survey

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- Process emissions from cement manufacturing cannot be avoided and therefore pose the most challenge in terms of abatement measures.
- Thermal emissions can be reduced through the increased uptake of alternative fuels and raw materials (AFRs) and the continued optimisation of the process.
- Electricity emissions can be reduced through the continued strong focus on industrial energy efficiency.

The cement industry has identified four main emissions reduction levers – the increased use of AFRs, clinker substitution, industrial energy efficiency and the development of innovative technologies such as CCSU.

Further detailed information of the four main emissions reduction levers can be found in previous submissions and is available upon request.