

Submission to He Pou a Rangi Climate Change Commission on Draft advice on Aotearoa New Zealand's fourth emissions budget

31 May 2024

Introduction

The Aggregate and Quarry Association (AQA) is the industry body representing quarrying companies which produce 45-50 million tonnes of aggregate and quarried materials consumed in New Zealand each year. The New Zealand Limestone Producers Association is a sub-group within the AQA, and this submission is on behalf of our members producing limestone products.

Funded by its members, the AQA has a mandate to increase New Zealanders' understanding of the need for aggregates, improve our industry and users' technical knowledge of aggregates and assist in developing a highly skilled workforce within a safe and sustainable work environment.

We welcome the opportunity to provide feedback on the draft advice on Aotearoa New Zealand's fourth emissions budget (draft advice).

Key points

AQA recommends the following to the Climate Change Commission in finalising its advice to the Government on the 4th emissions budget:

- We generally support the draft advice.
- We would like to see formal recognition in New Zealand of carbon uptake in the use of hydrated lime for water treatment, industrial processes such as sugar manufacture, and in agriculture.
- We would like to see the introduction of new sources of CO₂ removal into the policy mix.

Meeting fast-changing societal expectations

For the New Zealand quarry sector, the challenge is clear: we need to collectively lift our game on ESG – in other words, on how we measure and manage the environmental, social and ethical expectations of local iwi and our stakeholders.

The AQA has prepared a “Road Map for the Aotearoa New Zealand Quarry Sector” to deliver on this challenge. This sets out the sector’s material environmental and social impacts, and identifies actions the sector can take, and is taking, to address those impacts. It also has points for government to consider in helping quarry operators meet their ESG objectives.

Besides the political and regulatory drivers for change, a commitment to ESG is to do the right thing by the communities in which the quarry sector lives and works, and by the environment.

Carbon uptake – a source of CO2 removal

While the emitting of carbon during production of calcium oxide is calculated in these budgets, there is no calculation of the reabsorption of that carbon when hydrated lime is used in water treatment, processes involved with the production of sugar, and other agricultural applications.

While carbon capture or sequestration is referred to in relation to land-use change and forestry, there is no reference to carbon capture or sequestration from hydrated lime uses. Both the water treatment process, and processes used by Chelsea Sugar to make precipitated calcium carbonate result in an almost immediate 100% reabsorption of carbon dioxide emitted during the production of calcium oxide.

The CO2 absorbing process accounts for on average 33% of direct emissions from lime manufacture (European Lime Association commissioned research) including industrial applications and cement in concrete, or 20-100%, most of this sequestered within one year.

The IPCC recognised in its 6th Assessment Report (AR6) “recarbonation”, or “carbon uptake” as the cement and concrete industry terms this process, as a mechanism for removing atmospheric CO2 and proposes policy steps to recognise other removal mechanisms.

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