

SUBMISSION



8 June 2018

The Productivity Commission
info@productivity.govt.nz

Fletcher Building welcomes the opportunity to make a submission on the Productivity Commission's *Low Emissions Economy Draft Report* (April 2018).

Fletcher Building is one of New Zealand's largest listed companies with a market capitalisation of over \$5 billion. We are a significant employer, manufacturer, home builder and partner on major construction and infrastructure projects in New Zealand.

Our roots go back to 1909, when James Fletcher built his first house with Albert Morris in Dunedin. From those humble beginnings we today employ over 11,000 people across almost every region of New Zealand and make a significant contribution to both the national economy, and many regional economies.

The value we add to the New Zealand economy has been calculated at \$1.3 billion and our contribution to GDP is \$1.5 billion¹.

Fletcher Building is dual listed on the NZX and ASX and operates through five divisions – Building Products, Distribution, International, Construction and Residential and Land Development.

Overall comments

Fletcher Building understands and supports the Government's objective of transitioning to a low emissions economy.

The proposed changes principally impact our business across the following operations:

1. Cement production (Golden Bay Cement)
2. Transport (Winstone Aggregates, Firth and Higgins)
3. Heat and industrial processes (Winstone Wallboards, Fletcher Insulation, Pacific Coilcoaters and Laminex)
4. Built environments (residential and commercial construction, and building materials)

In moving to a low emissions economy we stress the importance of doing so in a manner that does not undermine New Zealand's manufacturing industry, and disadvantage local employers against international competitors.

As the owner of the only remaining local manufacturer of cement, Golden Bay Cement (GBC), we outline below how the proposed transition to a low emissions economy could undermine the viability of this business if a level playing field cannot be achieved with our international

¹ NZIER, Building New Zealand, Fletcher Building's economic contribution, June 2018

competitors. This would threaten hundreds of local jobs in our regions, and simply move carbon emission production offshore.

To provide further context, we make comments on specific questions and recommendations raised in the draft report below.

Chapter 4 – Emissions Pricing

F4.3 Both an ETS and an emissions tax can be designed to protect emissions-intensive, trade-exposed (EITE) firms from emissions leakage by allocating free emissions units or a level of tax exemption to the firms. New Zealand's method of allocating units incentivises firms to reduce their emissions intensity but not reduce emissions through reducing output. Free allocation costs the government revenue. The case is strong to withdraw the free allocation of units to EITE firms over time as competing firms in other countries also face emissions pricing.

As outlined above, GBC is New Zealand's only remaining local manufacturer of cement. GBC has been operating in New Zealand for over 100 years, and continues to be an industry leading, efficient cement manufacturer who innovates at every opportunity to reduce carbon emissions. We refer you to GBC's separate submission, which outlines in more detail the range of reduction initiatives currently in place or in testing.

The removal of the free allocation currently provided under the ETS will have a materially detrimental impact on GBC.

If the current free allocation was removed, and the cost of carbon reached \$150/tonne, this would cost GBC approximately \$80 million a year – moving the business to break-even or loss making very quickly. This puts at risk the last local manufacturer of cement in the country, approximately 150 local jobs directly employed by GBC, and approximately 280 indirect jobs created through GBC's operations, based predominantly in the regions.

GBC not only produces cement for the NZ market but also generates export earnings through trade with Pacific countries.

By comparison, GBC's international competitors would not be impacted, as their operations are not subject to the ETS.

GBC continues to invest in alternative fuel strategies to reduce the carbon emissions intensity of its operations. For example, it is currently implementing a project with Government support to utilise waste tyre product to substitute coal in the kiln process, which will reduce total emissions.

However, cement production is an inherently carbon intensive process, and companies such as GBC will at some point run out of options to generate meaningful year-on-year reductions.

Chapter 7 – Laws and Institutions

F7.2 Long-term political commitment and durability is essential to the success of climate change laws and institutions. Substantial cross-party support for the core elements of statutory and institutional arrangements will help provide policy permanence regardless of the make-up of the Government.

Fletcher Building fully supports the need for bi-partisan climate change policy. Climate change policy and the proposed changes to the ETS create significant risks for many businesses and their subsidiaries. These risks will likely spur the need for substantial capital investment at many manufacturing facilities within New Zealand. Without certainty that the policy settings will continue over the medium-long term, it will be difficult for businesses to justify these investments to their owners and/or shareholders.

Chapter 11 – Transport

Q11.1 How could New Zealand signal a commitment to a widespread transition away from fossil-fuel vehicles? For example, should New Zealand explicitly aim to phase out the importing of fossil-fuel vehicles by some specified future date?

Fletcher Building operates a large fleet of light vehicles, tractors, loaders, rollers and graders and over 1,200 heavy vehicles. We also subcontract heavy freight services from a number of suppliers, including coastal shipping. These vehicles are used by a number of our businesses, including Winstone Aggregates, GBC, Higgins and Firth, to transport raw materials and products from manufacturing sites to construction, roading and infrastructure projects across the country. This activity is vital to the achievement of the Government’s housing and infrastructure policy goals.

The phasing out of the importing of fossil-fuel vehicles could have serious impacts on our fleets if viable alternatives are not available at the time of the importing ceasing. For example, the heavy vehicles used by Winstone Aggregates are not suitable for electrification due to the weight of the vehicles and the routes driven. This is in stark contrast to heavy vehicles used for rubbish collection, or by transport authorities (including buses), that have regular start, stop, braking systems that are more suited to electrifying fleets.

Even if appropriate routes could be identified for electric trucks, Winstone Aggregates has calculated that due to the additional weight of these trucks (caused by the required battery packs), less product weight could be carted – ultimately resulting in 2.5 trucks on the road for every one truck load of material carted in a conventional truck using current technology.

We therefore recommend a sector-based approach, which takes into account the unique needs of different fleet operators, and aligns the proposed timeline to what is feasible from a technological perspective.

Chapter 13 – Heat and Industrial Processes

Q13.2 Does New Zealand need to amend its cement standards to permit greater use of lower-carbon components?

The current NZ Standards for cement manufacture provision for the use of lower carbon components. The primary standard for cement in NZ (NZS 3122:2009) references the AS/NZ 3582 series of standards for Supplementary Cementitious Materials (Flyash, Slag, Amorphous Silica) and allows for substitution rates up to 75 per cent in the case of Slag. The other substitution rates being at individual percentages lower than this.

However, the main impediment to the widespread use of these components is their high cost, whether they can be locally sourced, whether that local sourcing requires expensive extraction, processing or distribution (with its own associated carbon emissions), and their availability as a waste product from another industrial processes.

A secondary impediment is the perception that the low carbon components are merely fillers and add little to the cement (and consequently concrete) properties. In reality the components can give one or a number of added benefits, whether that be strength, durability, sulphate resistance or heat of hydration properties when used in concrete mix formulations.

Q13.3 Do any New Zealand-specific factors exist that would make the use of lower-carbon cements and concretes unsuitable (e.g., seismic or other geographic conditions)?

In many instances lower-carbon cements contribute positively to products designed for New Zealand's unique environment. For example, one of the most popular low carbon components as a cement additive is Water-Quenched Granulated Blast-Furnace Slag (GBFS) and fly-ash (a by-product of electricity generators). Both of these components have properties that when added to cement enhance the concretes that are used in geothermally active areas or in marine applications. In some cases low carbon components significantly add to the strength properties of concrete at the expense of early day strengths.

The issue regarding the use of lower-carbon cements relates more to the fact they are largely uneconomic in this market.

New Zealand's geographical isolation and relatively small market makes it economically challenging to import and/or supply low carbon components across dispersed cement manufacturing regions within the country. New Zealand also lacks the industries or industrial processes that produce the by-products sought after as cement additives or extenders.

For example, the nearest producers of GBFS, referenced above, are in China or Japan. The cost of importing these additives and transporting them to a re-processing or distribution facility in New Zealand is uneconomic. It would make the end product excessively expensive for all but the highly specialised project applications.

Customers and consumers are reluctant to pay the cost premium for these low carbon component cements and companies could not absorb the cost increases without significant detrimental impacts to their operations and long-term viability.

Q13.4 Would a higher effective emissions price be sufficient to encourage greater use of lower-carbon cements? Would doing so require more active government policy (such as procurement standards and targets)?

As outlined earlier, if the current free allocation was removed, and the cost of carbon reached \$150/tonne, this would cost GBC approximately \$80 million a year – moving the business to break-even or loss making very quickly. This puts at risk the last local manufacturer of cement in the country, and hundreds of direct and indirect local jobs in the regions.

Given the issues regarding cost and availability of lower-carbon components outlined earlier, a higher effective emissions price would be unlikely to drive the desired change on its own. The more likely outcome is that local manufacturing would cease, and only imported cement, which is not subject to New Zealand's ETS, would be used – effectively pushing the same carbon emissions offshore.

The Government can lead change from a customer perspective through its procurement practices, by utilising procurement standards and driving the increased uptake of sustainability rating tools such as Green Star, Home Star, the Infrastructure Sustainability Rating tool or Greenroads, to

encourage the use of lower-carbon cement use. This assumes, of course, that the cost of these requirements is allowed for, so as not to provide international competitors with an unfair advantage over local manufacturers. Any changes to government procurement policy should be considered in conjunction with industry.

R13.1 The statutory functions of the Energy Efficiency and Conservation Authority (EECA) should be changed to make lowering GHG emissions its primary mandate.

EECA is currently working under this mandate as energy efficiency projects ultimately result in lower carbon emissions.

Chapter 15 – The Built Environment

Fletcher Building is both a builder of residential and commercial built environments, and a supplier of building materials used in these builds – including products manufactured by Golden Bay Cement, Fletcher Insulation, Firth, Winstone Wallboards and the Fletcher Steel group of companies.

We understand the need to improve the carbon emissions performance of built environments, as part of the broader strategy to move towards a lower-carbon economy. The embodied emissions of products used in buildings are as important as the operating emissions of the building itself. Life cycle assessment (EPD) is an internationally recognised means of quantifying embodied carbon, and currently utilised by a number of Fletcher Building businesses. There is an opportunity for industry to be encouraged to increase the uptake of this tool.

Through its Fletcher Living business, Fletcher Building currently delivers approximately 500 homes a year, and has aspirations to increase this to 1,000 in the short-medium term. While living preferences of New Zealanders have typically skewed to houses on large lots, the challenges experienced with housing supply, particularly in Auckland, are increasingly influencing residential construction towards medium to high density built environments.

The majority of Fletcher Living homes are medium density, and we expect consumer acceptance of high density to increase in the future. History has shown this has been achieved in the past as the quarter acre section of the 1960s and 1970s has progressively reduced in size as lifestyle and priorities have changed over time. Designing communities in this manner is an important part of achieving a low carbon future.

In considering building materials, there are opportunities for more ‘green’ products to be used in the built environment, however the main barrier to this is the final customer’s/consumer’s willingness to pay a premium for these products.

The New Zealand Building Code could be used to reference green rating tools as a means of compliance and working towards zero carbon buildings. Likewise, Government could change procurement standards for infrastructure or KiwiBuild projects, to encourage further uptake of rating tools such as Green Star, Home Star, the Infrastructure Sustainability rating or Greenroads.

However, this must be considered in tandem with the broader policy objectives of reducing the cost of residential construction. Any changes made to carbon emissions with respect to the built environment must be achieved pragmatically, over the long term, so as not to push up the price of residential and commercial construction, at a time when the Government has committed to delivering 100,000 affordable homes under KiwiBuild over the next 10 years.

R15.1 Future reviews of the New Zealand Building Code should examine whether the Code is sufficiently flexible to enable practitioners to adopt building materials and techniques with low embodied emissions.

Fletcher Building considers that the New Zealand Building Code should not be a barrier to adopting building materials and techniques with low embodied emissions. We do, however, note that not all structures and buildings will be able to be constructed with low carbon substitutions, and so this should not become a mandatory requirement but rather a voluntary choice if feasible.

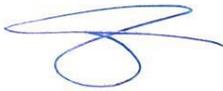
Conclusion

Fletcher Building thanks the Productivity Commission for the opportunity to comment on its Draft Report.

We would welcome the opportunity to discuss the matter further.

Please contact our Head of Communications, Leela Gantman, at leela.gantman@fbu.com if this would be of assistance.

Yours sincerely,



Ross Taylor
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