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RE: MBIE Procurement Guide to Reducing Carbon Emissions in Building and Construction

Submitted by email to: ConstructionAdvisory@mbie.govt.nz

Metals New Zealand thanks the Construction Advisory team at MBIE for the opportunity to provide input into the prepared guidance (to be published on the web) on enabling those involved in government projects to steer a project towards the goals of the Building for Climate Change Programme, while influencing the sector along the way.

Metals New Zealand is firmly of the belief that the best chance of New Zealand achieving its zero carbon vision will be through MBIE working openly in partnership with the construction sector.

Metals New Zealand recognises the role of Government Procurement in leading the transition to a low emission, circular economy by supporting government agencies in their procurement practices and setting the benchmarks, which ultimately the rest of the sector will follow.

Metals New Zealand would like to raise the following issues with the document and offer constructive additions:

1. Draft document

The release of this procurement guide raised serious concerns across the sector as it was not labelled as draft for consultation, giving the impression that government had finalised its policy, which is unfortunate as MBIE had been consulting on embodied and operational emission.

The sector has not been advised as to the outcome of the consultation processes and as recently as 4 Feb in the latest MBIE update it states

We've received a huge amount of information from a number of respondents and are still working on the summary of submissions which will be released in the first half of this year¹.

¹ <https://www.building.govt.nz/about-building-performance/all-news-and-updates/building-for-climate-change-update/>

1.1. Guideline provides technical guidance

The guideline claims not to be a technical document, but provides technical guidance on where to begin, the relationship between embodied and operational emissions over time and reducing embodied carbon.

1.2. Inconsistencies between Guideline and MBIE discussion documents

To further complicate matters there are inconsistencies between the guideline and the MBIE discussion documents:

- The guide refers to life cycle / replacement of products like windows and doors. However maintenance is out of scope in the embodied emission proposal.
- The guide incorrectly quotes the NZGBC / thinkstep report in stating that – “It is estimated that construction contributes around 20% of New Zealand’s greenhouse gas emissions (Thinkstep, 2018)”. The thinkstep report actually refers to the built environment not construction. We also question the accuracy of its estimate of GHG.

A more reliable source of emissions data would have been the Climate Change Commission draft advice to government.

- Figure 2 in the document, states “as operational carbon reduces over time, whole of life carbon becomes more significant over building life”. A reference would be helpful.

2. The leadership role government must take

Government’s role in construction procurement is enormous, not only as a procurer of products and services, but as an owner and operator of buildings, the majority of which government owns for the life of the building.

2.1. Proposed additions to the Guideline

2.1.1. Whole of life approach

Government should be leading the way in adopting a whole of life, whole of building approach to life cycle impacts.

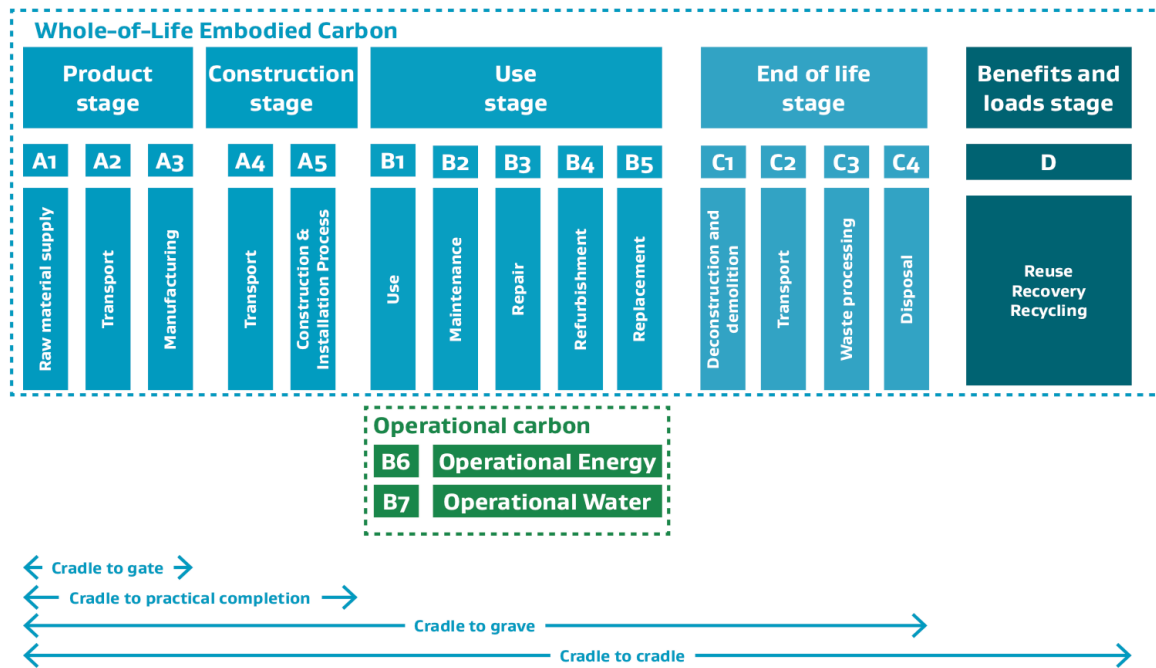


Figure: Module framework for the life cycle assessment of buildings

2.1.2 Modelling at design, monitor over life

Given the significant maintenance, repair and on-going refits over the life of government buildings it is critical to be not only modelling the total life cycle at design stage, but to actually monitor life cycle costs over the life of government buildings and for that data to be publicly available so the whole sector can learn from government experience.

2.1.3 Driving use of modular componentry rather than bespoke solutions

Taking a modular, rather than bespoke approach to schools, hospitals and housing, has the potential to drive significant waste out of the construction and maintenance cycles of buildings.

2.1.4 Designing for deconstruction and re-use

Our “take, make, waste” approach to construction is wasteful and in the future we may not have sufficient materials or sufficient holes in the ground.

Given that only 8.6% of global economy is circular², there is significant opportunity for improvement. The Circularity Gap report identifies that 70% of GHGs result from materials handling and use and identifies enormous opportunities in transitioning to a circular economy – “through smart strategies and reduced material consumption, we find that the circular economy has the power to shrink global GHG emissions by 39% and cut virgin forest use by 28%”³

We would encourage government procurement guidelines to lead our construction sector in the design and delivery of circular solutions to reduce waste, conserve materials and thereby significantly reduce resulting GHG emissions.

² <https://circularity-gap.world/2020>

³ Ibid page 8.

2.2. Broad sector consultation critical to getting sector on the journey

Metals New Zealand encourages MBIE to continue to consult widely with the building and construction sector. You may not always hear what you want to hear. Broad consultation ensures the sector is informed and has the opportunity to comment.

We note that this Guidance was only sent to selected organisations for comment, which of course can cause problems in terms of skewing the feedback obtained.

3. Summary

The transition to a low emission, circular economy is complex, particularly for the construction sector which will need to deliver on the goal. This guideline has been produced at a time when, to the best of my knowledge MBIE policy on building for climate change is not finalised. Our members are currently preparing submissions on the Climate Change Commission's draft advice to government as to how New Zealand can achieve its targets and the role of emissions reduction from buildings and industry, heat and power will enable New Zealand to achieve our goal.

The inconsistencies and assumptions detailed above do not help in providing a clear direction. Having said that Metals have provided constructive input in the past to other Construction Guidelines which support the Rules of Procurement and are keen to continue to do so.

We would suggest that the best time to do so is when policy is finalised.

Yours faithfully



Nick Collins

CEO Metals New Zealand

Metals New Zealand member organisations



www.hera.org.nz

The New Zealand Heavy Engineering Research Association (HERA) was established in 1979 as a non-profit research organisation dedicated to serving the needs of the metals-based industries in New Zealand. Its membership consists of approximately 600 companies representing metals-based fabrication and manufacturing companies, the associated design and consulting industry, related education providers, and the supporting material supply and services industry. HERA is base funded through an industry generated R&D contribution in the form of a levy on heavy steel and welding consumables administered by the Heavy Engineering Research Levy (HERL) Act. HERA's current research is in the areas of steel construction, general heavy engineering industry development and welding fabrication innovation. HERA works with other research providers such as universities, independent research organisations and CRIs to deliver its programmes.



Steel Construction New Zealand Inc. (SCNZ) aims to advance the interests of New Zealand's diverse steel construction industry by promoting the benefits of steel solutions in building and infrastructure projects. Members include manufacturers of structural steel and steel products, distributors, fabricators, designers, detailers, galvanisers, and paint and building supply companies. SCNZ provides its members with technical advice on the latest in steel design trends and standards, networking opportunities, and a representative voice with key industry and Government decision-makers.



Casting Technology New Zealand (CTNZ) aims to be a major contributor to the success and prosperity of the metal casting industry. The organisation is an advocate for maintaining high industry standards and encourages members to participate in quality training programmes. It provides a network for technical and business activities among its membership at national and international levels. At a Government level, CTNZ keeps abreast of legislation relevant to the metal casting industry and, importantly, represents the industry's position on issues affecting the sector.



The New Zealand Metal Roofing Manufacturers Association Inc. (NZMRM) represents companies that roll-form steel and other metals for roofing and cladding purposes. Commonly known as 'Rollformers', NZMRM has 30 member companies. Members are involved in producing a wide range of profiled product, both painted and unpainted. The Association is active in the development and promotion of industry standards, and in conducting research that promotes the use of metal roofing and cladding.



Formed in New Zealand and Australia in 1982, the National Association of Steel-Framed Housing (NASH) is an advocate for all forms of low and medium rise steel-framed construction. NASH represents the interests of suppliers, practitioners and customers of steel-framing systems, and provides a representative voice for the sector at Government level.

www.nashnz.org.nz



The New Zealand Stainless Steel Development Association (NZSSDA) was formed in 1998 to promote and develop the stainless steel market in New Zealand. Its members include engineers, architects, fabricators, merchants and end-users with an interest in the supply or application of stainless steels. NZSSDA supports and encourages technical excellence in the industry and provides specialised training courses on stainless steel for the New Zealand market.

www.nzssda.org.nz



New Zealand's major aluminium extrusion companies work collaboratively, (supported by Metals NZ), on areas of common interest which include fair and free trade, non-conforming products, government procurement and sustainability.



The Sustainable Steel Council (SSC) was reconstituted by Metals NZ, HERA, SCNZ, NZMRM, NZSSDA, NASH, New Zealand Steel, Fletcher Steel and Steel and Tube in 2018. Members of the Sustainable Steel Council are committed to a vision where steel is valued as a critical enabler in New Zealand's journey to a low emission economy. The vision is achieved by a financially sound industry taking leadership in delivering to the living standards framework, measured across human, social, natural and financial / infrastructure capitals.