The Registered Master Builders Association's comments on the Emissions Reduction Plan preliminary questions

QUESTIONS

70. The Commission recommended the Government improve the energy efficiency of buildings by introducing mandatory participation in energy performance programmes for existing commercial and public buildings. What are your views on this?

RMBA supports measures required to improve the energy efficiency of all buildings. A mandatory energy performance programme would encourage hesitant building owners to think about energy efficiency and how to maximise the potential efficiency a building can have. The programme would need to encompass all areas where energy efficiency can be achieved, to account for entire life embodiment of carbon emission. This would include heating, cooling and lighting, as these are the main areas of energy use during the life of a building. Examples of specific areas of consideration for commercial buildings are replacing incandescent lighting with LED and making sure window seals are maintained to prevent thermal leakage.

An area of consideration when implementing a mandatory programme, is the probable wide variance in the energy efficiency of existing buildings. Therefore, we recommend a grace period for building owners to allow for the undertaking of necessary maintenance work to get buildings to maximum efficiency during the transition period.

There should also be clarity on how any mandatory energy performance programme would integrate with RMA reform, the Building Act and the Building Code. This would ensure builders are aware of their obligations as whole during any build or renovation.

71. What could the Government do to help the building and construction sector reduce emissions from other sectors, such as energy, industry, transport and waste?

<u>Waste:</u>

Waste is a large issue in the construction industry, and it makes up around half of all waste going to landfill.[1]

There are initiatives in the private industry to combat waste, such as Green Gorilla based in Auckland, who divert up to 70% of waste away from landfills by sorting through material waste manually and recycling it to other industries such as agriculture and horticulture. Government needs to support private companies doing great work with construction waste. However, unfortunately there are not Green Gorilla's in every regions, and so what happens to waste on building sites can differ greatly across New Zealand. We have members who use Green Gorilla, others in Hawkes Bay which use a company that separates waste and recycles it, and other regions, such as Tauranga, where even though waste is separated on site, it all ultimately ends up in landfill, as there is no facility to process this waste in an environmentally friendly way. Government needs to encourage waste companies to manage waste generated from construction with environmental impacts as a key consideration.

[1] How the construction industry is tackling waste - OurAuckland (aucklandcouncil.govt.nz)

Government could also supply recycling equipment on site for personal waste generated from lunch breaks. If construction workers are encouraged to recycle and reduce waste in their personal waste generated on site, then this will encourage workers to bring similar thinking to the waste produced as part of their role.

Energy:

Government can encourage the construction sector to reduce emissions created from energy by promoting and strengthening the sector's understanding on how to offset emissions created from energy. The Naylor Love Carbon Calculator is a resource used by some of our members to help them calculate how much carbon a build will use and, then, how to either reduce this, or how much offsetting is required to balance this. Some of our members have started to plant trees as they complete builds to offset emissions created from the building process.

Homes should be designed to maximise the natural heat provided to us from the sun. Homes that are positioned to maximise sun and shade, along with sufficient insulation, will use less energy in their lifetime. There is not enough focus on the importance of site position in the legislative reform, yet it is an integral component. As up to 35% of heat in a home can be lost from a lack of roof insulation, it is important that insulation and other materials that retain heat in a building a used widely and correctly. [2]

Transport:

New Zealand needs to become more efficient in how goods are transported to sites. We have heard from members of products used in construction being made in Nelson, finished in Christchurch and then shipped to Auckland for distribution. The transport of these goods across multiple sites will be adding to the carbon emissions of the sector, and the Government should provide incentives to companies to streamline their transport processes of goods to minimise unnecessary movements..

In addition to how frequently goods are transported before they are used, there needs to be emphasis on options for decarbonising heavy fleet. Increased rail and sea freight options are beneficial for some industries, but not all. Road transport will remain necessary for freight and the construction industry in the long term and will be an area of transport that will need further increased options for suppliers.

72. The Building for Climate Change programme proposes capping the total emissions from buildings. The caps are anticipated to reduce demand for fossil fuels over time, while allowing flexibility and time for the possibility of low-emissions alternatives. Subsequently, the Commission recommended the Government set a date to end the expansion of fossil gas pipeline infrastructure (recommendation 20.8a). What are your views on setting a date to end new fossil gas connections in all buildings (for example, by 2025) and for eliminating fossil gas in all buildings (for example, by 2050)? How could Government best support people, communities and businesses to reduce demand for fossil fuels in buildings?

Capped emissions will drive innovation within the construction and building sector.

Current infrastructure in homes should not be replaced before it has expired or is in need for maintenance. This would only create further unnecessary work and waste in the industry.

[2] Insulation | BRANZ

Government will need to support the transition of homes, particularly through financial incentives to lessen the burden on homeowners through the transition.

Switching to alternative forms of electricity generation for domestic housing is encouraged, particularly for solar and wind. Government support and investment should be focused on low carbon energy solutions that can be scaled to service the entire New Zealand population.

Although supportive of reducing demand for fossil fuels by customers, this overlooks the heavy reliance on fossil fuels such as coal by some of the biggest industries in New Zealand. Addressing it at the customer level without addressing New Zealand's reliance on coal will have minimal impact. It is putting the focus in the wrong place.

73. The Government is developing options for reducing fossil fuel use in industry, as outlined in the Energy and industry section. What are your views on the best way to address the use of fossil fuels (for example, coal, fossil gas and LPG) in boilers used for space and water heating in commercial buildings?

Not Applicable

74. Do you believe that the Government's policies and proposed actions to reduce building related emissions will adversely affect any particular people or groups? If so, what actions or policies could help reduce any adverse impacts?

Much of the current proposed actions are focused on people living in rental homes. It is true that a rental property is unlikely to meet the required standard on energy efficiency. Some improvement has been provided for by the Healthy Homes Standard, requiring insulation and appropriate heating and cooling sources, but a . healthy home is different to an energy efficient one.. A home without an efficient heating source will require more power to heat, and therefore heating a home will put financial pressure on occupants. Due to potential financial pressures, an occupant may choose to not use an appliance and therefore the home will less healthy and warm but will have a reduced carbon footprint. However, reduced carbon footprint does not equal energy efficiency, which should be the focus here. RMBA wants homes that are healthy for people to live in, as well as have reduced consequences for the environment. Any policy introduced by government on tackling building related emissions needs to consider both emissions and efficiency in a way that provides a healthy home for both its occupants **and** the environment.

A consideration that has not been explicitly outlined in the report is first home buyers. Renters, Māori, and Pacific peoples are at risk of living in homes that are not energy efficient or have poor energy heat sources in their homes. However, people entering the housing market for the first time are also facing financial pressure due to the current housing market, potentially pushing first time buyers to purchase older, or less energy efficient homes. As these homes are not protected under the Healthy Home Standards, there is little being done to improve these older homes as they are owned by those without the funds to improve energy efficiency. This is not only low income families, but also those with high debt due to the current housing market. As the median house price for Auckland in September 2021 was $1,150,000, any policies need to improve carbon emissions need to include everyone, not just low income households or renters.[3]

[3] • New Zealand: median house prices by region 2021 | Statista

75. How could the Government ensure the needs and aspirations of Māori and iwi are effectively recognised, understood and considered within the Building for Climate Change programme?

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76. Do you support the proposed behaviour change activity focusing on two key groups: consumers and industry (including building product producers and building sector tradespeople)? What should the Government take into account when seeking to raise awareness of low-emissions buildings in these groups?

RMBA supports taking different approaches towards consumers and industry as they each have different roles in the sector.

Industry:

Builders and contractors need to be considered as a major focus when it comes to raising awareness around construction of new buildings and implementing any new policies. Builders are involved throughout the entire construction and life of a building, from products used during construction and lifetime maintenance after completion. Builders talk to consumers and make recommendations from their experience and expertise working with building materials and products, and so any changes required to the way products are used in a building will need full support and understanding from builders. Education programmes and an encouragement to shift away from the current status quo will be required to achieve this. Any education programme will need to have detail on how any changes will improve impacts on the environment. This could be achieved through mandatory education modules as part of the points in the Licensed Building Practitioner programme. Modules focusing on environmental issues could even become an annual requirement, as advancements in environmental products changes very quickly. No matter what vehicle is used to educate builders, it will need to be far reaching – as builders can work on multiple sites that can be hard to access, due to the nature of the sector.

Consumers:

Consumers will need to be aware of any potential impacts a policy change will have on building to their property. As consumers fund new buildings, particularly new residential homes, there would be follow on costs that they may need to be aware of. A cost of building a home may increase (this is almost certain and will be added to the year on year increases we are seeing), and so this would need to be factored into any contract or agreement a consumer may enter into when looking to build. Consumers will need to be educated on how building techniques with low emissions outcomes will improve their home, as well as limit the environmental impacts.

RMBA supports the implementation of a simple programme to show consumers which building practices and changes to homes can improve energy efficiency. This could be similar to the current energy star rating on appliances. A programme such as this is easy for consumers to understand without having to undertake their own research.

RMBA would also support Government incentives and funding to consumers to upgrade their home, as our existing housing stock needs significant improvement to meet energy efficiency standards. A

BRANZ 2015 House Condition Survey found that 53% of homes would benefit from retrofit insulation in the ceiling and/or subfloor.[4] Schemes such as the Warmer Kiwi Homes programme, which provides up to 90% of the cost for insulation in lower incomes areas, should be widened to ensure all New Zealanders in older existing homes can be improved to help New Zealand meet its carbon emissions requirements.

77. Are there any key areas in the building and construction sector where you think that a contestable fund could help drive low-emissions innovation and encourage, or amplify, Transitioning to a low-emissions and climate-resilient future emissions reduction opportunities? Examples could include building design, product innovation, building methodologies or other?

Builders have an important role in driving the future of low emission innovation due to their unique position in the construction industry. Builders are often consulted or involved in all areas of the construction process, and so need to be encouraged to contribute to the low emission future for any government policy to succeed. RMBA welcomes any funding that would drive the industry to design and build with the environment in mind. A separate criterion for new builds and for upgrading the existing housing stock would ensure fairness as they face different challenges. Renovation of an existing home will need to allow for ideas that improve the home without making such serious changes that it then becomes more beneficial to demolish and rebuild. Any incentive or policy changes that requires rebuild will be creating more waste, rather than achieving less environmental impact. RMBA supports a targeted fund for those in existing homes, as existing property has been excluded from other reforms in building requirements recently, such as the H1 insulation review. Our existing stock needs targeted improvements options.

78. The Ministry of Business, Innovation and Employment (MBIE) is considering a range of initiatives and incentives to reduce construction waste and increase reuse, repurposing and recycling of materials. Are there any options not specified in this document that you believe should be considered?

RMBA believes that there does need to be further innovation on how building products are recycled. Building products can be diverted from landfill and reused across the sector to reduce waste. In the UK, site waste plans are part of the building consents process, and this has resulted in bricks from a demolished building being widely reused for new builds. The solutions already exist, we just need waste plans and the use of recycled materials to be done consistently and on a wider level, to ensure that waste is kept to a minimum.

Insulation and other supplies where there are currently shortages also need imagination on how these can be sourced from elsewhere. If disruption in the supply chain can be eased through recycling domestically, this will reduce reliance on the international market and ease some of the pressures around supply which the building industry is currently facing at extreme levels. This is hard to achieve currently, as it is not often economical to recycle a residential home. Existing property on land, is often given away for removal, and it is then up to the removal company as to what happens with it. MBIE will need to consider how existing property that is going to be removed has materials that could be recycled and how to incentivise the building industry to reuse those materials where possible. Focus could be on areas such as insulation, untreated wood, and flooring. BRANZ have

[4] Insulation | BRANZ

formed a calculator to determine the cost of sending materials to landfill.[5] Calculators such as this should be promoted to show the financial cost to a business of sending waste to landfill, which will incentivise business to recycle materials where they can.

79. What should the Government take into account in exploring how to encourage low emissions buildings and retrofits (including reducing embodied emissions), such as through financial and other incentives?

The easiest way to encourage retrofits for both homeowner and builder is to have a rebate scheme. As costs to retrofit a home can be substantial and are set to continue due to the short supplies in the construction industry, a rebate scheme based on performance and improved energy efficiency of a home would be beneficial. A rebate scheme would stimulate the industry and encourage homeowners to take the first step of consulting a builder on how to improve energy efficiency in their home. Specific areas rebates could focus on are insulation, double glazing of windows and overall thermal leakage reduction.

Rebate schemes would also work in the commercial construction industry, as there would be incentive for commercial property to improve their property portfolio. Potential areas of focus are improved lighting efficiency, thermal leakage production and technology use within the building.

In addition to existing stock, rebate schemes could apply to new builds, and would be welcomed by those financing new builds as the cost of building in the current market is a continuing struggle due to continually changing supply market prices. A scheme for new builds would need to differ and operate separately to a scheme for existing stock, as there will be different needs in getting buildings in each category to standard, due to the different building standards being applied at the time of a property being built. Energy efficiency and reduction of carbon emissions for new builds starts with design. Therefore, any rebates or financial incentives would need to be targeted at the design process of a build. This could include rebates around solar power ability, EV points for vehicles and thermal leakage reduction.

80. What should the Government take into account in seeking to coordinate and support workforce transformation, to ensure the sector has the right workforce at the right time?

RMBA supports and encourages government consultation with the construction industry in making any policy decision. This is also true for decisions made around the Emissions Reduction Plan and future environmental decisions that could impact the sector. Government currently has access to the Construction Sector Accord, and RMBA encourages the use of the Accord to drive any change successfully in the industry. Part of this could be the use of compulsory environmental education in the sector, particularly through the Licensed Builders Practitioners scheme. Cooperation across the sector, including cooperation of competing industry leaders, is what RMBA would support and encourage in a transition to a low emission industry.

81. Our future vision for Aotearoa includes a place where all New Zealanders have a warm, dry, safe and durable home to live in. How can we ensure that all New Zealanders benefit from improved thermal performance standards for our buildings?

Incentives should be easily accessible and available to a wide range of people.

RMBA supports an approach to environmental issues around construction to be considered with healthy homes in mind. This means building with low emissions and low waste in addition to

[5] REBRI resource routing calculator | BRANZ

producing buildings that are warm, dry, safe, and durable. To ensure all New Zealanders benefit from improved thermal performance, all buildings need to have improved thermal performance. All New Zealanders need a home to live in, and all New Zealanders access buildings as part of our daily lives. If a home is left out of any new scheme or policy which improves the thermal performance of a building, then disparity is created between groups who are benefitting from changes in government policy, and those who are not. Groups in our society with lesser access to quality housing are already suffering via negative health outcomes and these outcomes need to improve for everyone, not just those who have access to funds or Government schemes to improve only their property.

82. Are there any other views you wish to share on the role of the building and construction sector in the first emissions reduction plan?

Any Government policy to improve emissions from the building industry needs to consider possible improvements in two separate ways.

First, there are new builds. Improvement in emissions for our new builds starts with the design process, as this determines how the building will be positioned to use natural heat and light, and how the features a home will have, such as insulation and solar energy, in its lifetime. Government needs to support education for those in the design process, so that new builds have the best chance of fitting in with carbon budget.

Secondly, there are existing builds. As two thirds of existing homes were built before 2000, our existing building stock needs improvement, some serious.[6] Education for this needs to happen at the consumer level, as it is homeowners who will initiate the works for home improvements. Builders will also need to be educated on how to improve an existing home, and this will need to be done in collaboration with the Construction Sector Accord.

Rebates and other financial incentives are greatly encouraged to enhance the move to better carbon emissions in our sector. These can be formed in many different ways, and be applicable to businesses in the sector, as well as property owners. Government needs to consider how to best use financial options to ensure maximum reduction in carbon emissions over the lifetime of a property.

[6] housing-in-aotearoa-2020 (1).pdf, Housing in Aotearoa:2020, Stats NZ, Page 26.