

## **FMANZ Submission on Climate Change Commission draft advice on second emissions reduction plan (2026 – 2030) [DRAFT]**

### **Chapter 8: Built environment**

#### **41. Do you support the overall draft advice in this chapter?**

Fully support ✓  
Somewhat support  
Neutral  
Do not support  
Don't know

Why or why not?

The Facilities Management Association of New Zealand is fully supportive of the draft advice in the built environment chapter. Buildings are responsible for around 20% of New Zealand's carbon footprint, meaning that our country will simply not meet the necessary emission reductions demanded by the science unless there are swift and deep cuts in the built environment.

Improving New Zealand buildings to reduce carbon will also bring a host of co-benefits. People are inside nearly all the time. Studies in North America and Europe have found that folks spend around 90% of their time indoors, and it's likely that the figure here in Aotearoa is similar.

Well-run, low emission facilities keep people safer and healthier. Well-run facilities use less energy, and therefore produce less climate change pollution, and lower operational costs for businesses. Well-run facilities are, to use a phrase bouncing around in Wellington recently, a bread and butter issue.

However, despite being fully supportive, FMANZ feels that the overall advice, including the language, ambition and direction does not always reflect that we are in a climate emergency. The overall advice could – and should – be more ambitious.

**42. Do you support our proposed recommendation 10?**

***Proposed recommendation 10***

*We propose that the emissions reduction plan for the second budget period must:*

- 10. Implement an integrated planning system that builds urban areas upward and mixes uses while incrementally reducing climate risks.*

Fully support ✓

Somewhat support

Neutral

Do not support

Don't know

Why or why not?

FMANZ fully supports this recommendation. Upwards is better than outwards. Bringing people and the facilities they use closer together makes active forms of transport and public transport more likely, reducing reliance on private cars. This will also have health and well-being benefits, on top of reducing emissions.

Increased intensification will need thought and consideration of the overall landscape, form and building typologies, especially from a climate risk perspective. Recent storms and floods have shown that buildings are on the frontline of climate change impacts, and facilities managers are among the first called to step in to batten down the hatches and then deal with the consequences. Densification should very much take into account that these events will increase in severity and frequency, and facilities management experts can and should be encouraged to offer advice on increased density and climate resilience.

Redesigning urban form normally takes lots of time – and we no longer have the luxury of lots of time when it comes to tackling climate change. We therefore suggest researching an interim solution to fast-track some densification projects.

### 43. Do you support our proposed recommendation 11?

#### ***Proposed recommendation 11***

*We propose that the emissions reduction plan for the second budget period must:*

- 11. Incentivise comprehensive retrofits to deliver healthy, resilient, low emissions buildings.*

Fully support ✓

Somewhat support

Neutral

Do not support

Don't know

Why or why not?

FMANZ fully supports this, although we feel the language could be stronger – and that ‘incentivise’ does perhaps not go far enough, nor recognise the climate emergency, and the carbon cuts that could be made by retrofitting rather than building new.

Saving existing buildings and retrofitting avoids the embodied carbon costs of demolishing and the embodied carbon costs of building again. Far and away the best way to reduce the embodied carbon of buildings is retrofitting. This is especially important as steel and cement are both hard to abate industries, with enormous carbon footprints.

In a low carbon Aotearoa, the future – and the present – of buildings has to be retrofitting.

Therefore we say that the word ‘incentivise’ is not enough. Comprehensive refits must be guaranteed wherever possible, not merely incentivised. We urge the Climate Change Commission to examine stronger alternatives, including the potential for regulation.

Retrofitting works best when it is lasting, and sufficient consideration is given to ensuring building systems run as effectively as possible, and avoid having to be overly replaced or maintained. Involving facilities managers at the design phase will help retrofitting to be as effective as possible when the building is operational. This will reduce operational carbon, and also embodied and whole of life carbon by, for example, advising on equipment needed whose replacement parts can be sourced locally rather than internationally. As sustainable, low embodied carbon materials need to be used in retrofitting, more research is required on embodied carbon in materials and products used in retrofits, and potentially more industry education and training may be required.

Steps should be put in place to ensure that so that the whole-of-life embodied carbon of building systems becomes a consideration when selecting systems (rather than just selecting the cheapest or easiest to maintain).

A whole-of-life approach considers the raw material extraction and embodied carbon of producing and installing the system through to the maintenance tasks and tools and refurbishment and replacement strategies through to end-of-life or disposal. As retrofitting of existing building stock rightly becomes a key way to reduce emissions, the upfront embodied carbon of the systems becomes a more important consideration to tackle, as it will become a large contributor to the whole-of-life embodied carbon of buildings.

The best way to gather sufficient information to ensure the above considerations are being made at the design and operational stages is to make sure that environmental product declarations are provided – essentially a report card showing the emissions, energy and environmental impacts of products, materials, and building systems.

Facilities managers are best placed to consider that whole-of-life impact, and it should be encouraged for them to take a lead role in retrofitting.

‘Soft landings’ is the term used by facilities management professionals for a strategy to ensure the transition from construction to occupation is bump-free and that operational performance is optimised after completion. All too often, buildings that have been designed to be green and low carbon don’t have facilities management or operational expertise round the table so when they get handed over, they don’t work as they should and aren’t as low carbon in performance.

Guaranteeing that retrofitted buildings address this and have ‘soft landings’ will reduce operational and embodied carbon. This approach should be formally adopted for all projects initially over \$10million and then after two years for all projects over \$5million, driving lower carbon, healthier, energy efficient buildings.

Driving a strong focus on energy efficiency in retrofits will also reduce carbon emissions by reducing energy demand, and thereby the need for fossil fuels, aligning strongly with recommendation 12.

Guaranteeing retrofits will also drive greater investment into more retrofits. A retrofitted building is lower carbon than a new build, and this will be reflected favourably in ESG sustainability reports, which in turn are used to attract the booming market in green investment.

Besides retrofits, more could be done to reduce emissions from new buildings, and their construction. The advice mentions the government’s Building for Climate Change programme fleetingly. We feel that the advice should encourage this programme to be more ambitious. There is certainly suspicions within the industry that it has been

slightly de-prioritised, and the foot has been eased on the pedal. The opposite should be happening.

#### **44. Do you support our proposed recommendation 12?**

##### ***Proposed recommendation 12***

*We propose that the emissions reduction plan for the second budget period must:*

- 12. Prohibit the new installation of fossil gas in buildings where there are affordable and technically viable low emissions alternatives in order to safeguard consumers from the costs of locking in new fossil gas infrastructure.*

Fully support ✓

Somewhat support

Neutral

Do not support

Don't know

Why or why not?

We fully support this recommendation, the pragmatism shown, and the clarity showing what this recommendation is not intended to include.

Many facilities currently use fossil fuel generators as a fall-back option in emergencies and extreme weather events, which will likely become more frequent and more extreme. To provide resilience we feel that supporting infrastructure needs building up to enable removing fossil gas from buildings.

Territories around the world, including many countries in Europe, and numerous states in the US, and in Australia, are already making moves to prohibit fossil gas in buildings, and many facilities managers in New Zealand are already following suit. The industry is ready for this necessary shift.

Designing new buildings without the need for gas is absolutely feasible. This advice should also look to existing facilities which often have fossil connections to use as back-up in case of extreme events, including storms and floods. These will only become more frequent and ferocious, unless deep and swift emissions cuts are made, which will in turn mean more facilities using fossil back-up. Retrofitting these out can be challenging, and should be done, which means many facilities may need support to do so.

**45. Are there any other aspects of the built environment sector that you think should be covered in our final advice?**

Some of the feedback below touches on other sections, such as transport, but we've included here as it is all relevant to the built environment.

Facilities and the built environment need to be more resilient to increasing storms and floods, and doing this resilience well can also help to reduce emissions and help the wider community.

A key way to do this is through electrification and decentralised energy – making buildings independent of the national grid. When the grid is compromised in, say, a storm, decentralised energy can keep buildings running, and the buildings – still operating when others are not – can shelter and support the wider community in emergencies and times of crisis.

Buildings also come with land, which can and should be better utilised to reduce emissions. For instance, this land can be used for large-scale on-site storage batteries, which can store clean energy.

It can also be used for electric vehicles facilities, including charging points for ebikes and other vehicles and secure places to lock and store bikes and ebikes. Many facilities have large car parks, but encouraging these to be better used by transforming them instead to charging points and green spaces will help drive a greater uptake of active transportation, and increase health and wellbeing.

Hair dryers can also drive down emissions. Encouraging buildings to have end-of-trip facilities, such as showers, lockers and hair dryers has also been shown to greatly increase the amount of active transport used, as it encourages running and cycling, and less car use.

More and more people are working flexibly, and not going into the workplace as much as a few years ago. This is a chance to reduce emissions as buildings have the chance to use less power, produce less waste, and thereby reduce emissions. Building owners should be encouraged to provide their facilities managers with the resources – such as time to produce a plan – to realise this opportunity.

Many large buildings already have diversion facilities in place to divert waste from landfill. Offering these to others to use would help reduce emissions and promote a circular economy. For instance, one facility could operate a place where chillers are taken apart and useful pieces reused, which could be encouraged to promote itself for other organisations to use.

The built environment must play a large part in a healthier, low carbon Aotearoa, and facilities managers and their expertise have a key role.

#### **46. Other evidence**

Is there additional evidence or reference material that you think the Commission should consider as we generate the final advice we provide to government?

This might include things like:

- Reports from expert bodies
- Examples of actions from other jurisdictions