Regulatory barriers in key building supplies

Submission to the Commerce Commission on behalf of Affordable Building Coalition

May 2022

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Executive summary

The Commerce Commission, as part of its ongoing building materials market study, is seeking submissions on the regulatory barriers to the entry or expansion of key building supplies. The Affordable Building Coalition (ABC) represents a group of building sector consumers, civil society groups, and other parties that are interested in improving the efficiency and affordability of New Zealand's construction sector. ABC engaged Castalia to prepare this submission. The submission comprises economic and regulatory evidence as well as collected examples and observations from building sector participants.

ABC is a solutions-focussed group. ABC has identified regulatory barriers to entry that stifle competition and innovation, thereby contributing to higher costs. However, ABC also sets out potential solutions to these barriers.

Regulatory barriers exist throughout the building process in urban planning, urban design, consent standards, and consent processes. These barriers contribute to a risk-averse building industry with low innovation and poor competition, delivering suboptimal outcomes for New Zealanders. The barriers have contributed to high concentration in key product markets, which causes high materials prices and low productivity overall.

BCA interpretation and behaviour entrench incumbent interests

Building consent authorities' (BCAs) inconsistent interpretation of, and risk-averse behaviour in response to, the Building Code reduce competition and innovation in building materials markets. The allocation of risk among building sector participants is not proportionate, often placing a heavy burden on BCAs. This incentivises BCAs to be risk-averse.

Across different BCAs, and sometimes even within the same BCA, there is varying application of product performance standards. Despite this fragmentation and inconsistency, BCAs remain inflexible to individual circumstances and local differences. Because of these, BCAs repond to consents in a slow, complex, and inconsistent way, creating costs for the entire sector. This makes the entire construction industry risk averse. Reforming and streamlining BCAs' standards and processes is a potential way to improve competition and innovation in the building materials market.

We highlight the plasterboard case study in Box 2.1. It shows how regulatory barriers built up over decades through regulatory accommodation and industry behaviour have created a monopoly that has failed New Zealand and caused a crisis in the construction industry.

Building code and product appraisal barriers entrench incumbent interests

Regulatory authorities have designed standards that improve quality, but also increase costs to an unreasonable degree. These standards are well-intentioned, but \contribute to increased costs, reduced competition, and lower innovation in the building materials market.

The Building Code helps lock in incumbent manufacturers and materials at the expense of new entrant and innovators. It generates misaligned incentives, creating a principal-agent problem between everyday New Zealanders and the building industry. There is also a risk that standard setters like BRANZ have been captured by large incumbent interests, preventing regulatory barriers from being removed. Therefore, regulators should consider policies that encourage standardisation, interoperability, and improved professional conduct. These policies could help resolve issues in the building materials market.

Planning and consenting disincentivise market entry

Planning and consenting standards artificially restrict supply, limit economies of scale, and create additional burdens for developers. Developers cannot achieve economies of scale because planners have reduced the supply of land through zoning constraints that discourage both brownfield and greenfield developments. While aesthetics are important, planners have sometimes elevated them to an excessive degree. Regulation of building designs, such as character overlays, setback requirements, and the encouragement of bespoke designs, further frustrate builders and developers.

Together, these regulatory barriers prevent the building industry from achieving productivity gains through either economies of scale, or introducing innovation. While these barriers do not necessarily directly apply to building materials, they operate in the same value chain. They create additional risk for the same people who participate in the building materials market, forcing them to become even more risk-averse. Therefore, relaxing planning and consenting standards could both directly and indirectly resolve the issue of lacking compeititon and innovation in the building materials market.

Government procurement of housing can be the tool to unwind regulatory barriers

The Commission should explore how the government can reform planning and consenting standards and processes to reduce building sector participants' compliance burden and uncertainty. The Commission has identified—in response to ABC's last submission—that the government has a major role and influence as a scale purchaser of key building supplies and construction services. The government can play a significant role in unwinding the barriers to entry and encourage competitive dynamics and improve consumer welfare.

Note on building sector reticense in this market study

Finally, we make a note about participation by construction firms, builders and major customers of the two large distributors of supplies. The Commisison has had relatively low participation in its surveys and sector engagement. We have managed to get feedback from very busy builders to prepare this submission. We note:

- Builders are trying to survive the current Fletcher Building-caused plasterboard shortage. The Commission will be aware of the current crisis in plasterboard supply in New Zealand caused solely by Fletcher Building's failures to adequately plan and develop contingencies
- Builders are very alive to the vulnerability they have to the two major vertically integrated distribution firms. Builders are reluctant to speak up for fear of retaliation by the major suppliers.

The Commission should be alive to very real risks that its market study does not adequately take into account the impacts of market structure on consumers. It should pay special attention to perspectives from independent interests.

1 Introduction

The Commission is carrying out a market study into residential building supplies. It has requested building sector stakeholders to provide feedback on potential regulatory barriers in relation to key building supplies and possible solutions to them. ABC appointed Castalia to analyse the regulatory barriers to entry and also provide a conduit for collecting views of building sector participants in one single submission for the Commission's information.

This submission sets out key regulatory barriers impeding competition in New Zealand's building supplies markets. We explain how the regulatory framework stifles innovation and healthy competition due to:

- Inconsistent interpretation of product performance standards and biased allocation of liability amongst sector participants lead to risk-averse BCAs (Section 2), reducing competition and innovation
- Specific barriers in the building code and product appraisal process (Section 3)
- Excessive planning rules and inefficient consent processes (Section 4) increase risks for developers and hamper innovation
- We also discuss ways to resolve these challenges by:
  - proposing possible policy solutions in each of the above sections
  - examining how the government can directly encourage a healthier building market by leveraging its role as a major purchaser of building supplies and services (Section 5).

This submission reflects the views of some of New Zealand's largest building firms and developers, as well as smaller building firms, civil society groups and individuals motivated to improve public policy. Some of the individuals and firms that provided information to ABC are concerned about retaliation by the major incumbent interests. We note that the Commission has had low engagement on its surveys. Castalia and ABC are happy to facilitate the Commission making contact with the sector stakeholders that contributed to this submission to further discuss the points raised.

2 BCA interpretation and behaviour

The interpretation of the Code and behaviour by BCAs create regulatory barriers to entry in building supplies product markets. This occurs in the interpretation of product performance levels and in the allocation of risks on BCAs.

2.1 Product performance levels

New Zealand's current product specifications are often overly strict, complex, cumbersome, and opaque. We also suggest potential solutions.

2.1.1 Problem with product performance levels

Product performance levels, compounded by building sector participants' risk-averse nature, stifle competition and innovation in the building materials market

Examples include:

- Lack of generic standards for systems—when specifying products to be used alongside each other, suppliers often only specify their own products throughout the system, rather than some standard of performance. This reduces competition since suppliers can leverage market share in one product to distort the market in its favour for another product within the system
- Overly complex standards—certain assessments, such as acoustics, require specialist approval rather than providing a rule-of-thumb standard (and specialist approval only when necessary). These complex standards increase costs
- Potential for delays—even BRANZ approved substitutions require a lengthy and unnecessary formal council amendment. This introduces uncertainty and time costs for builders. For example, one stakeholder took 18 months secure approval to change the type of timber in their construction design, despite the timber types being effective substitutes for each other
- Restrictive process—developers must specify the CodeMark system prior to design and consent. This reduced competition as the specified suppliers are effectively selected at an early stage without robust procurement
- Lack of consistency—different BCAs have different standards and consenting processes, often inconsistently interpreted. This increases costs since specifiers default to the highest possible standards to minimise their risk of failing consent
- Dubious patents—certain suppliers have obtained cosmetic patents aligned with international standards. This reduces competition since new entrants must alter their existing products from established international standards to avoid infringing the local supplier's patents.

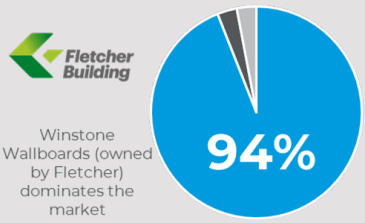
2.1.2 Possible policy interventions

We set out possible policy interventions suggested by our stakeholders:

- Streamline substitution process for approved products without the need for council amendment (notably plasterboard and timber cladding)
- Remove the need to specify CodeMark at an early stage
- Create simple, rule-of-thumb standards, and require specialist evaluations for complex situations only
- Mandate generic design standards for building systems
- Enable certified designers to fast-track the approval of minor design changes
- Remove duplicate signoffs by BCAs where qualified builders have already approved decisions
- Unify consent standards and processes across BCAsExpand the role of the Licensed Building Practitioners Scheme to replace Certified Builders and Master Builders
- Relax cosmetic patents.

Box 2.1: Plasterboard crisis—a case study in regulatory barriers to entry and inefficient allocation of liability

The GIB branded plasterboard system is a gateway bottleneck building product. Fletcher Building Limited has an effective monopoly. There is a current serious crisis in plasterboard supply. The crisis threatens the viability of a range of firms and will have major implications for the livelihoods of builders and associated trades (and their families) that have building project work held up. This crisis, and the inability to use substitute plasterboard illustrates the problems of regulatory barriers to entry and the inefficient allocation of liability in the New Zealand building sector.



Regulatory and BCA behavioural barriers prevent market entry in the plasterboard market. Many building projects are effectively "tied in" to GIB-branded plasterboard systems. The GIB system has been a common technical solution for bracing. It is often specified by Building Consent Authority (BCA) staff to meet compliance or included in the consent. Changing to alternative bracing solutions or substitute products after the consent has been issued is time-consuming, costly and subject to BCA discretion. BCA's risk of liability for building defects also disincentivises use of alternative products.

Regulatory treatment of plasterboard prevents substitution

GIB brand plasterboard is widely used as a system to meet wall bracing requirements under NZS 3604:2011. New Zealand is unusual in permitting plasterboard as a bracing element.[1] This creates network effects, where Fletcher/Winstone effectively control an entire building production network.

It is difficult to substitute GIB due to regulatory treatment. First, it is common practice for Building Consent Authority (BCA) inspectors to informally require it. Second, if developers, builders, or their customers wish to change to an alternative system after a consent has been issued, consultation with the BCA and a variation to the building consent is required. BCAs can use discretion to determine whether the variation is a major or minor change. Major variations typically require a formal amendment to the building consent (that is, re-submission and re-consideration). Minor variations also require permission from the BCA to authorise and process the change.

In short, it is difficult for builders and developers to change from the common GIB system once the building consent has been submitted and approved by the BCA. Changes are costly in terms of time delays, additional holding costs, the need to identify alternative bracing solutions, and flow-on impacts on other building components (for example, painting and finishing).

We also note that Fletcher/Winstone has trademark protection for basic plasterboard colours. These colours are widely used around the world. For example, green is often used for wet area plasterboard, red or pink for fire-resistant plasterboard. Winstone has a trademark for "blue" colour for use in wet areas, even though it does not manufacture or sell blue-coloured wet area board. Blue-coloured board is common overseas for wet areas. Therefore, international suppliers are required to do special and expensive factory runs of different colours to supply the New Zealand market. This further "locks in" Fletcher/Winstone's near monopoly status.

BCAs are already very busy due to the record high numbers of building consents. BCAs are failing to respond within statutory timeframes (20 working days) and failing to meet the requirements of the regulations, according to media[2] and MBIE.[3] Builders are threatening to bypass inspections altogether because they cannot afford to wait for delayed consents.[4]

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1 BRANZ, September 2020, Research Now: Seismic resilience #1, (link)

2 Newstalk ZB, 12 April 2022, What's going on at the Christchurch City Council?, (link); Otago Daily Times, 2 April 2022, Frustration at permit delays, (link); Stuff, 30 March 2022, Housing hold up: Hutt City Council going months beyond statutory 20-day consent applications, (link); Stuff, 5 March 2022, Frustrating delays for new homes as consents pile up, (link); Radio New Zealand, 9 October 2021, Building consent bottleneck slows residential construction, (link)

3 MBIE, December 2021, Biennial BCA Accreditation Report Round Seven, (link)

4 Radio New Zealand, 14 April 2022, Builders threaten to bypass inspections over delays, (link)

Liability issues for BCAs add to reluctance to permit substitutes

BCAs (which are mostly local authorities) are further reluctant to permit an alternative bracing system or plasterboard product due to liability risk. BCAs seek to limit liability by implementing an expensive and time-consuming substitution process when faced with less familiar building materials. Alternatively, the BCA simply withholds approval to substitution.

BCAs face the risk of full liability for any defects in a building due to the legal principle of joint and several liability. BCAs are liable if they approve buildings in which builders substituted materials.[5] The leaky building crisis also led to risk aversion at BCAs. Therefore, BCAs tend not to encourage novel techniques or products which they have limited experience with.

The financial risk to BCAs is real, as research by Sapere for MBIE establishes. Between 2008-2018, around 2.5 percent of residential building consents resulted in disputes.[6] BCAs, on average, paid out 36 percent of total costs, at a combined total of around $1 billion.[7][8] Although the overall rate of defective building is low, these costs lead to risk averse consenting.

We understand that the government is considering reform in the sector under "Building System Legislative Reform", however, we are not aware of any change since the publication of a discussion paper requesting submissions by 16 June 2019.[9] The Law Commission recommended in 2014 that BCA liability be capped at $300,000 for a free-standing dwelling.[10]

ABC has proposed solutions to the government

ABC has proposed and discussed solutions to this crisis with the government. The solutions illustrate the key issues with regulatory barriers. ABC is happy to present on this matter to the Commission and connect the Commission's market study expert team with relevant government and sector experts.

2.2 BCAs' inconsistent approaches to consenting and decisions

Complexity and inconsistency in consenting processes among BCAs adds compliance costs to the building process. Most BCAs are located within territorial authorities plus Consentium, the BCA within Kāinga Ora. BCAs tend to differential treatment, which creates uncertainty and leads designers, consultants and builders to favour "tried and true" products, not innovative or imported products due to risk of failing to obtain consent.

2.2.1 Problem with BCAs' approaches to consenting and decisions

There is inconsistent interpretation and application of the building code across the at least 70 plus BCAs of New Zealand, as different BCAs are known to treat the same building technique differently.

The BCAs are branches of territorial authorities which include district, regional (for some building work), and city councils (plus Kāinga Ora as a special case), and often the consent process of these authorities do not align. For example, gaining consent approval from BCA on

[5] The New Zealand Initiative, 4 February 2022, Submission on residential building supplies preliminary issues paper, (link)

[6] MBIE, April 2019, Risk and liability summary, (link)

[7] MBIE, April 2019, Risk and liability summary, (link)

[8] Sapere Research Group, 13 November 2021, Liability outcomes in the building sector - glimpses from available data, (link)

[9] MBIE, April 2019, Risk and liability summary, (link)

[10] https://www.lawcom.govt.nz/our-projects/joint-and-several-liability

the North Shore can add 3–5 percent to overall building cost relative to an identical project in South or East Auckland. Some BCAs require a builder to submit Producer Statement—PS4 construction review which typically requires civil engineering input and liability. This can cost around $20,000 to attain. Other BCAs might not require the same level of comfort for an identical project.

Regional differences in regulatory treatment are desirable. There are different climatic conditions, seismic risks, topographical and geotechnical differences. Building materials and techniques of course need to be appropriate for local conditions. However, the wide differences in treatment between BCAs are not explained by these good reasons.

The net effect of BCA arbitrariness is that designers and builders tend to favour lower-risk building materials and known building techniques to minimise the risk that BCAs will impose additional costs through more onerous requirements.

It therefore becomes more difficult for designers, builders and other construction sector participants to use building products from different manufacturers. This means that higher productivity and lower-cost building materials and techniques remain out of the New Zealand market.

Furthermore, building materials manufacturers and suppliers exploit the BCAs' inconsistent approach. The perceived "lower risk" of products is marketed by suppliers to designers/architects and other consultants.

2.2.2 Possible policy interventions

Possible policy interventions would address the inconsistency in BCA conduct, while providing for regional differentiation:

- BCAs could retain regional jurisdiction, however, they should be subject to hierarchy and bound to follow precedents in other BCA areas. Similar to how the planning system has had national planning standards created, parties interacting with the system can point to precedents and binding rulings to force local BCAs to maintain consistency
- Alternatively, introduce a national BCA with different criteria to accommodate climatic and seismic difference across regions.

2.3 Risk and liabilities allocation among building sector participants

The allocation of liability among building sector participants contributes to reduced competition and innovation in the sector.

2.3.1 Problem with risk and liability allocation

All building sector participants face risks with respect to building supplies installed in a residential building:

- Homeowners face the risk of delayed projects (costs) or a defective building
- Builders face the risk of delays, cost of fixing defects, and reputational costs
- Product manufacturers face reputational costs from defective products or incorrectly installed products

- BCAs face liability risk from approving/consenting buildings with certain installed building supplies.

However, these risks are not equal nor are they proportionately or efficiently distributed. Manufacturers and suppliers bear the least burden since they are typically not responsible for regulatory failures (BCAs are responsible) nor operational failures such as delays (builders and homeowners are responsible).

Conversely, homeowners and BCAs bear the highest burden. Homeowners face particularly high risks because they tend to be the least informed (information asymmetry) and ultimately own defective properties.

Risks to BCAs incentivises perverse behaviour

The misallocation of liabilities to BCAs hurts competition and innovation in NZ's building sector. It encourages BCAs to favour existing products in the market.

BCAs face particularly high risks because:

- They cannot become insolvent, so they often pay costs despite not being at fault due to BCAs being the "last man standing"
- They cannot decline work or enter risk-sharing agreements
- BCAs tend to encourage moral hazard because the government is prone to assuming liability or a duty of compensation to out-of-pocket homeowners via government entities such as BCAs.

Empirical research (commissioned by MBIE)[11] shows that because of these reasons, BCAs indeed face unreasonably high liabilities disproportionate to their role. Since BCAs face excessive and misallocated risks, they behave in a suboptimal risk-averse manner.

The risk-averse behaviour undermines the entire building sector because BCAs:

- Tend to over-specify standards, adding costs for builders
- Default to specifying existing suppliers with known products , entrenching these suppliers' already dominant market position
- Are conservative in approving alternative suppliers/materials, raising the barrier for potential new entrants
- Are hesitant to approve innovative approaches, removing the incentive for innovation for builders, architects, and suppliers
- Are slow and exacting in approving consents, incentivising builders to use pre-approved materials to avoid delays

Designers reinforce market power of product suppliers due to risk allocation

Furthermore, specifiers/designers (architects, draftspeople and other design-related consultants) can avoid liability risk (or perceived risk) by relying on product warranties from building supplies firms. Since the leaky homes crisis, designers have been more risk averse with products. By specifying products by name (rather than referring to a product category),

[11] Sapere, Liability outcomes in the building sector—glimpses from available data, available: https://www.mbie.govt.nz/dmsdocument/4960-liability-outcomes-in-building-sector

designers “lock in” those products in the consent. The designers and the building contractors do not face the higher costs of those products.

Warranties further distort specifiers’ incentives because they provide perceived relief from liability. Often, these are of questionable value to consumers because of limitations to the manufacturer’s liability thus ultimately not reducing the risk. Specifiers, who narrowly seek to minimise their own risk, will favour products with warranties over those that do not, even when the latter would achieve better outcomes for consumers.

2.3.2 Possible policy interventions

We suggest the following possible policy interventions:

- Urgently progress the government’s work to reform BCA liability allocation. We understand that the government is considering reform in the sector under “Building System Legislative Reform”, however, we are not aware of any change since the publication of a discussion paper requesting submissions by 16 June 2019[12]
- Consider a capping of BCAs’ liability
- Introduce contractual obligations and liabilities for suppliers
- Consider changes to a system of baseline standards across New Zealand (like New Zealand Standards 3604), rather than product-based guidelines.

[12] MBIE, April 2019, Risk and liability summary, (link)

3 Building code and product appraisal barriers

The way the Building Code functions tends to lock-in particular brands. This is exacerbated by misaligned incentivesand the capture of standard-setting bodies by incumbents. Furthermore, a range of building improvement regulations with laudable aims actually impose excessive costs, have unintended consequences and favour incumbents. Many industry stakeholders have said we should "start again on regulation" as the current system has failed.

3.1 Building code locks-in brands and specific products

New Zealand's building code and processes have created a high degree of product lock-in. For many important materials, the performance appraisals lock in products rather than create accepted standards that are product neutral. Product specification by designers into building consents cements the dominant position of incumbent product manufacturers and suppliers.

Alternative products, which could be more cost-effective, more innovative, or better suited for particular situations, face substantial barriers to being appraised. These barriers include: long approval times, administrative costs, or the risk of not being appraised at all. The real benefits of alternative materials are frequently outweighed by the artificial costs imposed by the building code. As a result, builders are reluctant to work with alternative products, contributing to product lock-in for incumbent manufacturers and suppliers.

Even among approved products, builders are further locked-in to specific brands because of the need to specify brands at an early stage of design. Changing brands later requires additional council approval, despite the substitute having been otherwise cleared for use. In section 2.3.1 above we identify the role of risk aversion by designers that incentivises them to specify costly incumbent products.

Overall, these patterns of product lock-in contribute to high market concentration, low product innovation, and low productivity in New Zealand's construction sector.

3.1.1 The incentives of consumers and specifiers are not aligned

New Zealand's Building Code incentivises building material specifiers to focus excessively on product quality over affordability to the detriment of consumers. Consumers of housing want high quality yet affordable housing. However, there is a trade-off between quality and cost, so consumers must balance quality and affordability.

Principal-agent problem causes market entry barriers

There is a principal-agent problem embedded in the New Zealand Building Code's application. The incentives of consumers and product specifiers are not well aligned. Building product specifiers (designers and architects and so on) tend to specify excessively high-quality components and excessively complex systems. This comes at the expense of standardisation and the resulting economy of scale and interoperability.

In New Zealand's unaffordable housing market, consumers generally prefer more affordable housing, provided that some baseline of quality has been met. Specifiers are stakeholders in the building process that decide on the building materials and designs for a specific build, including architects, designers, engineers, and project managers. Consumers tend to defer to

specifiers when making decisions, since consumers are most likely less knowledgeable and experienced in construction than specifiers.

In principle, specifiers should base their decisions off account consumers' actual preferences to maximise consumers' welfare. This would contribute to rising welfare for all New Zealanders because virtually all New Zealanders consume housing of some kind. In reality, specifiers care about quality to a far higher degree than they do costs.

Specifiers prioritise quality because they:

- are skilled professionals that take pride in the quality of their work
- want to appear as quality driven to regulators and consumers
- want to avoid any liability from substandard products, whether real or perceived

Specifiers do not prioritise costs because they:

- are not the ultimate bearer of higher costs
- risk damaging their relationships or reputation with other sector stakeholders if they bargain for lower costs
- would profit from higher costs since they are often paid by commission[13]
- would incur more effort finding a cheaper alternative to preapproved products

Examples of misaligned incentives causing high costs

In New Zealand, these misalignments has resulted in instances where:

- a 3-storey walk up required 890 distinct structural drawings due to a bespoke design and a lack of standardisation
- eight different types of plasterboard products exist (bracing, sound, wet area, fireproof), whereas overseas markets tend to only have two types of plasterboards
- builds are bespoke even across large greenfield developments.

3.1.2 Standard-setting authorities appear to have been captured by incumbent interests

Standard-setting agencies may be captured or unduly influenced by the interests of industry incumbents across a range of product lines. This completes a feedback loop, continuously reinforcing the lock-in of existing products and manufacturers. Standard-setting agencies, most notably BRANZ, provide accreditation and certification for building products, downstream of government regulators but upstream of specifiers.

However, like that of specifiers, the incentives of BRANZ also do not always align with that of consumers. The reasons for misalignment are similar, and could include unwillingness to:

- incur potential liability from certifying alternative products
- suffer reputational damages from certifying alternative products

[13] New Zealand Institute of Architects, Frequently asked questions, available: https://www.nzia.co.nz/connect/working-with-an-architect/faqs

- damage relations with existing sector stakeholders, such as firms where staff may later work (or have former close colleagues).

BRANZ also sets relatively high costs to assess performance of new products. It also takes significant time. This favours incumbent interests contributing to product lock-in. BRANZ approach to appraisal probably contributes to risk-averseness of product specifiers and builders by further entrenching the dominance of existing suppliers and eroding confidence in the possibility of new alternative materials being approved. This creates a feedback loop that strengthens the lock in effect on existing products and existing players, while creating frictions for innovative products and new entrants

We are informed that historically close relationships between large incumbent firms and standard-setting agencies (such as BRANZ) exist. Staff move from large suppliers to the standard setting agencies and back, which creates the possibility of undue influence or regulatory capture and deserves more scrutiny.

3.1.3 Product lock in exists across many building materials

Building material lock in exists beyond the market study's three key building supplies (concrete, plasterboard, and structural timber). Our stakeholders have also highlighted market issues and regulatory barriers in the following materials:

- Building wrap
- Sealing tape: The 3M brand is specified, whereas generic options are available at 5–10 percent of the price
- Colour coat and colour steel is specified when alternative steel roofing has equal performance. Despite a range of suppliers of roofing steel, there is only one manufacturer (NZ Steel)
- Reinforcing steel of all types

3.1.4 Possible policy interventions

Possible policy interveentions include:

- Mandate the specification of clear performance standards over particular products
- Allow substitution of approved materials without additional council involvement
- Develop standardisation and interoperability guidelines that enable greater competition and economies of scale
- Reform LBPs to encourage professional conduct aligned with consumer needs
- Require BRANZ to foster innovation with incentive-based oversight. It tends to lack ambition to conduct, fund, or otherwise support innovation in building materials, despite a professed aim and mandate to do so. It has $42 million in current assets on its balance sheet from its levy funding and should demonstrate that these assets are being put to productive use.

3.2 Regulations aimed at building improvement overreach and impose excessive costs

The government, mostly through MBIE, has introduced many building improvement regulations. These impose costs that often exceed benefits, have unintended consequences and tend to favour incumbent interests preventing market entry.

The building improvement regulations include:

- Double glazing requirement[14]
- Healthy homes standards[15]
- Safety on worksites[16]
- Expansion of seismic codes[17]
- Energy efficiency requirements for new builds[18]
- Natural light and weathertightness for high-density housing[19]
- Fire protection standards[20]
- Safety of users (for example, pool access, escape route visibility, hazardous substances)[21]
- Surface water and moisture solutions[22]
- Accessibility (for example, light switches, sockets, fire escape)[23]

While individually these regulations appear to regulate desirable matters, the aggregate effect can be to impose excessive costs and regulate matters that builders and their clients and end customers can determine through market interactions that set prices and quality levels. Regulators do not sufficiently take costs into account when designing building standards.

Regulatory changes such as the building improvement regulations should be subjected to cost-benefit analysis (CBAs), typically in a Regulatory Impact Statement (RIS). However, these statements often overlook the impact of the requirements on the competitive landscape of building supplies. Many RISs fail to identify the underlying policy problem (market failure) and intervention logic. Many RISs and CBAs simplify costs and benefits so that they fail to properly

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[14] Double-glazing is not a strict requirement but is typically the easiest way to achieve increased thermal resistance performance requirements, as specified by H1.3.2A, H1.3.2A, and H1.3.2E of the Building Act

[15] Residential Tenancies (Healthy Homes Standards) Regulations 2019

[16] Building Performance, Record of amendments (1992_2021), available: https://www.building.govt.nz/building-code-compliance/how-the-building-code-works/different-ways-to-comply/acceptable-solutions-and-verification-methods/record-of-amendments/

[17] November 2019 Building Code Update revision of B1/AS1

[18] 2021 Building Code Update revision of H1

[19] 2021 Building Code Update revision of G7 and E2/VM2

[20] November 2020 Building Code Update revision of C1–C6

[21] Building Performance, Record of amendments (1992–2021), available: https://www.building.govt.nz/building-code-compliance/how-the-building-code-works/different-ways-to-comply/acceptable-solutions-and-verification-methods/record-of-amendments/

[22] November 2020 Building Code Update revision of E1, E2, and E3

[23] November 2020 Building Code Update revision of G9

justify the regulatory intervention. For example, the RIS will overlook regional nuances in temperatures and provide imprecise estimates of benefits. Nobody represents consumers when building improvement regulations are developed to ensure that the regulations provide building quality benefits that exceed the costs.

The unintended consequences of building improvement regulations is to favour existing suppliers and make market entry by overseas suppliers (with overseas standard sizing, designs and performance standards) harder. This is because those suppliers then have to overcome additional regulatory hurdles than typical performance standards.

The government has not examined international best practice for construction practice and building supplies integration into building process. There are no initiatives under the Building Code and building standards laws that incentivise lower cost products that are the result of innovation and cost reduction. In other industries, innovation and scale production have reduced costs. For example, automotive, information technology and clothing manufacturing have all had significant falls in real costs over the past 30 years. Yet real construction costs are rising.

Some examples of the outcomes of excessive regulation from our stakeholders include:

- Over emphasis on heating requirements, and in many cases have constructed fully compliant homes which have had to be retrofitted with cooling. This is particularly concerning medium density homes
- Less than 5 percent of the last 300 buyers of medium density housing in Auckland from a major building firm recorded actually using the two kilowatt heater that was required under regulations.

Possible policy interventions

Many building sector participants would like New Zealand's standards to be aligned with international peers. Furthermore, acceptable solutions and products for should be recognised in New Zealand without need for duplicative local performance assessment.

Simple calculations and methods to estimate building quality (not safety) performance should be used. For example, for heating standards, simple calculations involving energy (kilowatts) per room volume (cubic metres) would be simpler, better suited to more locations and cheaper to apply and enforce.

Finally, all recent building improvement regulations should be evaluated *ex post* using contestable cost-benefit analysis that better reflects the interests of consumers. This should also occur for future regulations *ex ante*. Cost-benefit analysis and RISs for building improvement regulations do not adequately take into account consumer interest, instead favouring building supply firms, market particpants but no-one adequately represents the consumer perspective on optimum cost and quality trade-off.

4 Planning and consenting

New Zealand's complex and stringent planning rules and consent processes increase risks and reduce economies of scale for developers. This raises costs and disincentivises innovation, preventing innovative suppliers from entering New Zealand's building materials market.

4.1 Lack of building sector scale caused by regulatory land rationing

Rationing of development potential through regulation is a direct contributor to a lack of scale in the construction sector. This, in turn, rewards building supply industry incumbents and prevents entry by innovative or lower-cost suppliers.

4.1.1 Problem of regulatory land rationing

New Zealand has a shortfall of available development capacity due to a scarcity of:[24]

- Greenfield development sites near urban peripheries
- Available and viable brownfield sites for intensification near urban centres[25]

The shortfall of available development capacity is fundamentally due to regulatory land rationing. New Zealand has one of the lowest population densities in the OECD and is only about 4 percent urbanised. Land availability is not a problem, however, zoned and serviced land is.

Developers do not have access to large development opportunities because:

- Large greenfield sites for at-scale urban expansion are unavailable
- Zoned spaces in brownfield areas are unavailable, unpredictable, or cost prohibitive
- Small urban sites where intensification makes sense are not zoned to do so.

Land rationing causes a lack of scale projects which drives building supplies costs higher

The regulatory land rationing means that developers and builders cannot carry out scale replicable projects with a steady pipeline of construction. Instead, developments are episodic. Lack of scale in building means that building supplies tend to be purchased in smaller order lots with bespoke features. If planning authorities permitted a more predictable and steadier stream of development, developers could standardise building designs, modularise the build process and maximise economies of scale.

The regulatory land rationing leads to higher land prices and drives developers to mostly service the premium and luxury end of the market since these buyers are the only ones that can afford the high land prices. This results in building projects that lack scale and tend

[24] The National Policy Statement on Urban Development (2020) states that "Zone provisions, the cumulative impact of rules, and lengthy appeals processes can hinder intensification and expansion in areas where it would otherwise contribute to a well-functioning urban environment."

[25] The Regulatory Impact Statement: Bringing Forward the Upzoning of Land for Housing (2021) states that "Rising land prices in areas of high demand such as inner-city suburbs of Auckland or Wellington should, in theory, support more intensive land use in these suburbs, yet this is not occurring due to restrictive rules and an unresponsive planning system. For instance, suburbs close to Auckland's CBD are zoned to only allow single dwellings, which prevents multi-unit housing close to jobs, transport options, and services."

towards bespoke, premium homes. Further, international developers choose not to enter, which hinders competition and innovation.

We note that the current regulatory land rationing has not been the norm in NZ's history. In the 1970s, when significant developments were permitted (and when New Zealand last had record building consents), building firms used efficient, replicable techniques and innovated. The building sector led a major expansion in housing supply using standardised building forms, components, and a dynamic range of building supplies manufacturers or housing assemblers. In the Wellington region, suburbs like Newlands, Hutt Valley's western hills (Maungaraki, Normandale and Belmont) were developed. In Auckland, the same occurred in Massey, Howick, Otara, Mangere.[26]

Regulatory land rationing removes incentives to innovate and standardise in building supplies

The tendency to ration land and development capacity drives out scalable, standardised housing builders. This segment of the market tends to be where innovations in building supplies occur. Where supplies are commoditised, manufacturers and distributors compete with one another over innovative features to lift construction productivity (and lower costs).

For example:

- Timber trusses: Scale developments tend to have replicable timber trusses, driving innovative approaches to truss manufacturing, off-site assembly, automation
- Plasterboard: Scale developments can optimise the configuration and sheet size of plasterboard, enabling manufacturers and vendors to deliver standardised packs for housing unit typologies
- Concrete: Scale developments can use off-site cast concrete panels at standard sizes
- Windows: Scale developments will require significant volumes of same-sized windows. New Zealand window manufacturers tend to produce individually measured windows for every project, even in developments with common features. In Europe and North America, windows and door units are in standard sizes and mass produced
- Kitchens and bathrooms: Scale allows standard size kitchens and bathrooms to be built off-site and transported and connected at the development site. Factories in Europe and North America produce hundreds of such kitchen or bathroom units daily in common configurations.

4.1.2 Possible policy interventions

Possible interventions include:

- Relaxation of zoning constraints in areas of high development potential
- Relaxation of urban-rural boundaries
- Coordinated purchase and development of large sites.

[26] For an audio-visual example, this documentary illustrates the scale development and efficient building industry prevalent in New Zealand during the late 1970s: https://www.nzonscreen.com/title/johnstones-journey-episode-five-1978

4.2 Planners' involvement in building design and aesthetics

Planners can impose subjective preferences into designs at the consenting stage, which increases costs and risks. This tends to lock in current building supplies firms and prevents market entry by alternative suppliers. Planners are different to BCA staff, even though both typically work in territorial authorities. Planning relates to compliance with district and city plans, made under the Resource Management Act. BCAs are responsible for building standards and code compliance.

4.2.1 Problem of planners' involvement in building design

Planners can impose their preferences or make inconsistent decisions about for certain design and aesthetic concerns. This increases risks for builders and developers and therefore prevents innovative solutions and new products being used. The design and aesthetics of buildings are important, but ultimately secondary to quality and affordability. Planning and consent frameworks discourage innovation in building supplies and technologies.

Planners impose stringent and subjective standards on resource consents

Currently, planners specify overly stringent design and aesthetic standards at the detriment of affordability.[27] These standards include:

- Blanket special character protection, particularly in areas ripe for development
- Excessive setback requirements
- Excessive view-shafts[28]
- Indiscriminate Height in Relation to Boundary Checks (HiRB)
- The need to consent individual houses that share the same/similar design
- Other minor case-by-case aesthetic objections.

Planners, in many cases, tend to exceed the scope of the role and public policy justification for the function (managing externalities and providing public goods). This contributes to excessive regulatory costs. Planners can sometimes act cautiously and reject certain designs or building approaches because they anticipate objections of nearby property owners.

Regardless of the impact on building supplies, these costs are passed on to consumers. When not built, housing supply does not meet demand, so consumers still face higher costs.

Planners' subjective approach locks in incumbent building products

Together, these challenges create additional burdens and risks for developers. Developers then tend to fall back on building supplies and design approaches that have passed the planners' review previously. This locks in incumbent building products.

Further, the lengthy consent times, uncertainty around treatment, and subjective interpretation of requirements are large risks to developers. Since developers have a fixed risk

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[27] A 2021 report commissioned for the New Zealand Infrastructure Commission identified that "New Zealand is not a low-cost consent regime for infrastructure and is likely to be at the upper end of regulatory approval costs", Report available at: https://www.tewaihanga.govt.nz/assets/The-cost-of-consenting-infrastructure-projects-in-NZ-final-report.pdf

[28] Geoff Cooper of the NZ Infrastructure Commission calculated that Auckland's E10 view-shaft for Mount Eden has a net local policy cost of $1.6–3.1 billion on Auckland CBD alone, available: https://www.greaterauckland.org.nz/2018/11/08/viewshaft-e10-the-full-cost-could-easily-be-double/

tolerance over the entire build, increased risks from consenting incentivise developers to reduce risks in other areas of the build, such as building materials.

This makes developers risk averse to novel or innovative building supplies, whether locally produced or from overseas. Developers and builders then fall back on the incumbent suppliers.

4.2.2 Possible policy interventions

Policy interventions include:

- Relax planning and design standards (including heritage, view-shafts, HiRB, rural-urban boundary, and city fringe zoning rules)
- Improve infrastructure financing to enable greater development capacity
- Enable one-off consent/fast-track of pre-approved standard designs (with minor changes allowed without additional amendments)
- Constrain the ability of planners to impose subjective aesthetic preferences if the product meets a reasonable cost-quality trade-off.

5 Government procurement of housing

Government agencies' operational policies have the potential to both encourage and impede competition. As our previous submission noted, the government is a major purchaser of building supplies and construction services through Kāinga Ora (and other entities in the commercial and social sectors).

Kāinga Ora's approach to contracting multiple firms (each responsible for a dozen or so housing units) prevents economies of scale developing. It also creates a bottleneck and inequality of bargaining power between Kāinga Ora builders that bid against each other at geographic dominant vendors.

Government could remove barriers to entry in its procurement approach

The contracting of new suppliers could provide an attractive entry point and testing ground for international entrants. Entering a new market carries costs—a contract for social housing or other government procurement reduces the risk of market entry. We note the government tried this with the Christchurch rebuild and encouraging Knauf, the world-leading German family-owned plasterboard firm, to enter the market. However, it also contracted with Fletcher's Winstone Wallboards, effectively quarantining Knauf's competition to the rebuild contract and leaving the rest of the market alone (where Winstone has 94 percent market share).

The government should avoid these errors and emulate more successful approaches, such as the "Warm Up New Zealand" programme which led to the establishment of new insulation suppliers.

5.1.1 Policy interventions

- Structure procurement contracts to enable scale
- Negotiate on behalf of contracted developers

- Incentivise new entrants through exclusive government contracts.

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