

# Regulatory Impact Statement: Modular component manufacturer scheme regulations

## Coversheet

Purpose of Document	
Decision sought:	<i>Analysis produced for the purpose of informing Cabinet decisions for new regulations to implement the modular component manufacturer certification scheme, introduced by the Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021.</i>
Advising agencies:	<i>Ministry of Business, Innovation and Employment</i>
Proposing Ministers:	<i>Minister for Building and Construction</i>
Date finalised:	<i>20/10/2021</i>
Problem Definition	
<p>The <i>Building Act 2004</i> was recently amended by the <i>Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021</i> (Building Amendment Act) to provide more efficient and consistent building consent approaches for manufacturers of modular components that meet prescribed quality assurance criteria. Regulations are needed to implement the new voluntary scheme introduced by the Building Amendment Act.</p>	
Executive Summary	
<p><b>Background</b></p> <p>In September 2019, Cabinet agreed to a number of proposals intended to improve the building consent process for manufacturers of modular building components. These changes included introducing a certification and registration scheme for modular component manufacturers. The Building Act 2004 was recently amended by the Building (<i>Building Products and Methods, Modular Components, and Other Matters</i>) Amendment Act 2021 (Building Amendment Act) to provide for this new scheme.</p> <p>The new voluntary modular component manufacturer scheme enabled under the Building Amendment Act provides more efficient and consistent building consent approaches for modular component manufacturers (ranging from individual components to whole buildings) where they are able to meet the prescribed quality assurance and performance measures.</p>	

Participating modular component manufacturers may be certified and registered to:

- manufacture modular building components to a Building Code compliant design that has been approved by a building consent authority through either a standard building consent application or a current MultiProof (refer to **Annex One** for a comparison of the key schemes within the Building Act); or
- design and manufacture modular building components to a Building Code compliant design that they have developed themselves (or a design that has been approved by either a standard building consent application or MultiProof).

Regulations are needed to implement the new voluntary scheme introduced by the Building Amendment Act. This Regulatory Impact Statement considers the scope of these regulations. The preferred option (Option Three) may be viewed as a package of connected and interlinked regulations that need to be considered together to provide for an effective, and voluntary, modular component manufacturer certification scheme.

### Options

MBIE considered three options for scheme regulations against the following assessment criteria: confidence, certainty and clarity, cost effective, proportionate, and flexible.

**Option One** – Regulatory framework for the modular component manufacturer scheme, with no regulations (status quo)

- This option is not preferred as the modular component manufacturer scheme would not be implemented and the existing issues such as building consent authorities have difficulty assuring themselves of build quality and code compliance would continue.

**Option Two** – Regulatory framework for the modular component manufacturer scheme, with all elements for regulations that were consulted on during public consultation

- This option is not preferred as it includes a proposal that was identified during stakeholder engagement as not being the most effective way to achieve the objectives and criteria of a successful modular component manufacturer scheme.

**Option Three** – Regulatory framework for the modular component manufacturer scheme, with revised elements for regulations based on stakeholder feedback received during public consultation

- This is the preferred option as it includes elements that were originally consulted on and were deemed fit for purpose, and makes an amendment to the proposals for regulations that were consulted on and discussed in Option 2.

The results of the cost benefit analysis show that there are material benefits to make regulations to implement the scheme. There was a strong benefit cost ratio ranging from 4.54 to 8.50 based on three scenarios that were modelled<sup>1</sup>.

Modular component manufacturers are expected to incur a large portion of the costs to participate in the scheme (ongoing compliance costs being the highest cost). This is because the benefits of participating in the scheme will be realised by those businesses

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<sup>1</sup> The cost benefit analysis is based on the proposals for regulations considered under Option Two, but is also reflective of Option Three as the changes are minor.

who choose to participate in the scheme. That is, certified and registered manufacturers who see business benefits from participating in the scheme.

### **Stakeholder feedback:**

In April-June 2021, the Ministry of Business, Innovation and Employment (MBIE) conducted public consultation on the proposals for regulations for the modular component manufacturer scheme. Stakeholders were largely supportive of the proposals for regulations that were consulted on:

- Prescribing the kinds of 'modular components' will provide manufacturers with clarity around what kinds of building products can be manufactured within the scope of the scheme.
- Robust systems and processes are necessary to instil confidence in the scheme.
- Audit requirements are standard practice and would provide certification bodies and manufacturers with certainty regarding the auditing process.
- Most manufacturers are currently responsible for the end to end process from manufacture to installation.

## **Limitations and Constraints on Analysis**

### **Scope of proposals for regulations**

The scope of the proposals for regulations are provided through the regulation-making powers set out in section 402 of the Building Act, modified by the Building Amendment Act.

These powers enable a package of regulations to be made in the following areas so that the modular component manufacturer scheme may be implemented:

- prescribing the kinds of building products that are 'modular components'
- accreditation and registration criteria for modular component manufacturer certification bodies
- certification and registration criteria for modular component manufacturers
- audit processes and fees
- requirement for modular component manufacturer's certificates.

The proposals for regulations for the scheme fees are covered separately in the associated Stage 2 Cost Recovery Impact Statement.

These regulations will be supported by scheme rules, operational guidance and information that will be developed in parallel with the regulations. Separate work programmes are under way to address these matters.

### **Assumptions**

The modular component manufacturer market is diverse and emerging, ranging from manufacturers that produce individual modular components to those who produce whole buildings. MBIE recognises that manufacturers have a variety of different business

models, production methods and approaches to manufacturing modular building components.

The wide range of manufacturers in New Zealand and offshore makes it difficult and complex to make accurate estimates of likely scheme uptake and to design settings that will function equally well for all potential participants. Stakeholder engagements conducted by Sapere as part of work commissioned by MBIE to inform the cost benefit analysis has been used to help ensure assumptions are as informed as possible. A conservative approach has also been taken in assessing the benefits and uptake of the scheme to reflect this.

**Responsible Manager(s) (completed by relevant manager)**

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20 October 2021*

**Quality Assurance (completed by QA panel)**

Reviewing Agency:	Ministry of Business, Innovation and Employment
Panel Assessment & Comment:	MBIE's Regulatory Impact Analysis Review Panel has reviewed the attached Impact Statement prepared by MBIE. The Panel considers that the information and analysis summarised in the Impact Statement meets the criteria necessary for Ministers to make informed decisions on the proposals in this paper.

## Section 1: Diagnosing the policy problem

### What is the context behind the policy problem and how is the status quo expected to develop?

#### Current situation

1. A new voluntary modular component manufacturer scheme (MCM scheme) has recently been introduced to the *Building Act 2004* by the *Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021* (Building Amendment Act).
2. The MCM scheme is intended to provide more efficient and consistent building consent approaches for modular component manufacturers (ranging from individual modular components to whole buildings) that are able to meet quality assurance and performance standards. These manufacturers will also have a demonstrated ability to produce modular components that comply with the Building Code.
3. The MCM scheme is voluntary, meaning manufacturers that do not wish to use it will still be able to use existing building consent approaches for their modular components.
4. Modular components are building products that are manufactured offsite and transported to site for installation, and can range from part of a building up to a whole building.
5. If manufacturers meet the certification and registration criteria (to be set in regulations), they may be certified to:
  - manufacture modular building components to a Building Code compliant design that has been approved by a building consent authority, through either a standard building consent application or a current MultiProof (refer to **Annex One** for a comparison of the key schemes within the Building Act); or
  - design and manufacture modular building components to a Building Code compliant design that they have developed themselves (or a design that has been approved by either a standard building consent application or MultiProof).
6. Under the amendments to the Building Act, building consent authorities will only inspect work that is not completed by the certified and registered manufacturer, such as foundations and site work. The MCM scheme transfers compliance responsibilities and liability from the building consent authority to certified and registered manufacturers in order to support more efficient consenting for modular approaches; meet demand for building and housing; and support manufacturers to grow, diversify and deliver economies of scale within the sector. The timeframe for processing building consents involving modular components that are whole buildings is reduced from 20 working days to 10 working days.
7. The legislative framework for the modular component manufacturer scheme defines the roles and responsibilities for different parties as shown by the following figure:

**Figure 1: Roles and responsibilities of different parties under the MCM scheme**



- 8. Under the amendments to the Building Act, an accreditation body may be appointed by the Ministry for Business, Innovation and Employment (MBIE). Certification bodies must be both accredited by the accreditation body and registered with MBIE before they can perform functions under the MCM scheme. Similarly, manufacturers must be certified by an accredited certification body and registered with MBIE before they can perform functions under the modular component manufacturer scheme.
- 9. This legislative framework clarifies responsibility and potential liability in the event of a building or modular component defect and ensures that consumers and building consent authorities can have confidence in the MCM scheme. An adequate means requirement for certified and registered manufacturers will be a key part of building consumer confidence in the scheme.

**Recent regulatory history**

- 10. In September 2019, Cabinet agreed to a number of proposals intended to improve the building consent process for manufacturers of modular building components. These changes included introducing a certification and registration scheme for modular component manufacturers. MBIE consulted on these proposed changes in April-June 2019<sup>2</sup>.
- 11. The Building Amendment Act implemented these changes. This legislation was introduced on 8 May 2020 and received Royal assent on 7 June 2021.
- 12. Regulations are needed to support and implement the Building Amendment Act. This Regulatory Impact Statement considers the scope of these regulations.
- 13. In April-June 2021, MBIE publicly consulted on proposed regulations for the scheme that would be implemented under new regulation-making powers in the Building Amendment Act<sup>3</sup>.

**New regulatory framework**

**Regulations**

- 14. Regulation making powers in the Building Amendment Act include:

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<sup>2</sup> The Regulatory Impact Assessment for the 2019 consultation can be found here: <https://www.mbie.govt.nz/dmsdocument/7024-ris-building-law-reforms-phase-one-proactiverelease-pdf>

<sup>3</sup> The discussion document can be accessed at: <https://www.mbie.govt.nz/dmsdocument/14150-building-amendment-bill-proposals-for-regulations-discussion-document>

- prescribing the kinds of building products that are ‘modular components’
- accreditation and registration criteria for modular component manufacturer certification bodies
- certification and registration criteria for modular component manufacturers
- audit processes and fees
- requirements for modular component manufacturer’s certificates.

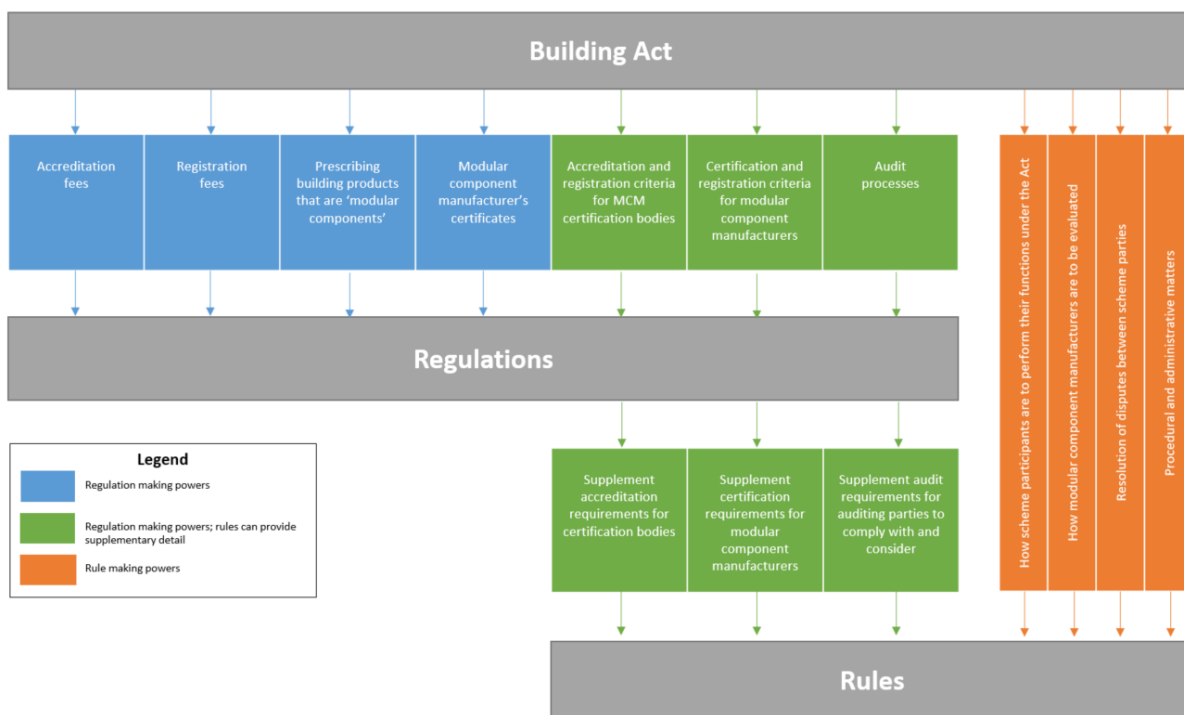
### Scheme rules

- Following passage of the Building Amendment Act, the Building Act allows for scheme rules to be made relating to the following:
  - how the scheme parties are to perform their functions under the Act
  - how modular component manufacturers are to be evaluated
  - the resolution of disputes between scheme parties
  - procedural and administrative matters.
- Scheme rules may also supplement regulations related to audit procedures and criteria for accreditation of scheme certification bodies and certification of modular component manufacturers.
- A separate programme of work is underway to consider and consult on scheme rules.

### Regulatory framework

- The regulatory framework for the scheme is summarised in Figure 2 below.

**Figure 2: Modular component manufacturer scheme regulatory framework**





## What is the policy problem or opportunity?

### Prior to the passing of the Building Amendment Act, offsite manufacturing approaches were not well supported by building consent processes

19. Evidence from New Zealand and overseas indicates that offsite manufacturing approaches for whole buildings and components can lift building sector productivity, reduce building costs and time, and contribute to better environmental outcomes through a reduction in waste and transportation.
20. However, the uptake of offsite manufacturing approaches in New Zealand is low. BRANZ estimates that 10% of non-residential buildings and 35% of new housing in New Zealand utilise offsite manufacture, compared to 80% in some parts of Europe, where many countries have industry-led certification schemes<sup>4</sup>. Though some kinds of offsite manufacturing are widely accepted in New Zealand, e.g. pre-nailed frames and trusses, more complex kinds of offsite manufacturing like pods and whole buildings remain rare.
21. Modular components and modular component manufacturers must comply with a range of overarching laws including the Act (which outlines the building consent process) and the New Zealand Building Code (which ensures buildings meet a minimum standard and are safe, healthy and durable for everyone who may use them).
22. MBIE is steward of the building regulatory system and administers the Building Act. Building Consent Authorities assess and issue building consents, inspect building work and issue Code Compliance Certificates once building work is complete.
23. Under the Building Act, a building consent is generally required before carrying out building work (unless work is exempt or there is an emergency). The manufacture and installation of modular components is building work, therefore, offsite manufacturers are required to go through the existing building consent process.
24. While this process works for traditional onsite construction, it does not provide an efficient pathway for offsite manufactured modular components or adequately respond to the potential risks within offsite manufacturing<sup>5</sup>. This in turn creates barriers to the uptake of manufacturing approaches in the building sector. These issues are discussed in more detail in the Regulatory Impact Statement for the Building Amendment Act.<sup>6</sup>

## What objectives are sought in relation to the policy problem?

25. The objectives are to implement the scheme in a way that strikes a balance between:

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<sup>4</sup>[https://d39d3mj7qio96p.cloudfront.net/media/documents/ER45\\_Compliance\\_and\\_assurance\\_for\\_manufactured\\_buildings.pdf](https://d39d3mj7qio96p.cloudfront.net/media/documents/ER45_Compliance_and_assurance_for_manufactured_buildings.pdf)

<sup>5</sup> Building consent authorities have difficulty assuring themselves of build quality and code compliance where traditional inspection practices can't be used. This is the case with many buildings and components manufactured by modular component manufacturers. This is because the manufacture of these components can occur from some distance where the component will ultimately be installed, or when the manufacturer's products arrive at a building site already enclosed, limiting the effectiveness of visual inspections.

<sup>6</sup> <https://www.mbie.govt.nz/dmsdocument/7024-ris-building-law-reforms-phase-one-proactiverelease-pdf>



- building and maintaining confidence in the MCM scheme and the certified and registered manufacturers undertaking work within it; and
- providing an appropriately accessible and flexible pathway for offsite manufacturers of different kinds to become certified.

26. The proposed regulations are intended to align with other regulatory regimes in the Building Act, including CodeMark, MultiProof and the building consent authority accreditation scheme. The proposed regulations also integrate with the Building Act's regulatory framework for building consents and code compliance certificates.

## Section 2: Deciding upon an option to address the policy problem

### What criteria will be used to compare options to the status quo?

27. For consistency, the same criteria has been considered across all three regulatory proposal areas enabled under the Building Amendment Act (building product information requirements, modular component manufacturer certification scheme and product certification scheme). The criteria for assessing options is outlined below in Table 1.
28. Note there are trade-offs between these criteria. For instance, a system that provides a high level of certainty to scheme parties is likely to have a lower level of flexibility. For this reason, the assessment of options aims to strike a balance between these criteria. The trade-offs between these criteria are discussed in the next section (what options are being considered) and the stakeholder feedback section.

**Table 1: Criteria for assessing options**

<b>A scheme that promotes...</b>	<b>... means the regulations will</b>	<b>To achieve this, the regulations will seek to:</b>
Confidence	Provide system participants' (including users, manufacturers and building consent authorities) with confidence in the proposed settings for the modular component manufacturer scheme.	Align with regulatory frameworks for consumer protections in the Building Act Provide accessible pathways for complaints and dispute resolution.
Certainty and Clarity	Provide clear and transparent processes and responsibilities that enable scheme participants (including users, manufacturers and building consent authorities) to understand what is required of them; Provide reasonable compliance costs; and,	Provide clarity on the roles and responsibilities of different scheme parties, including the accreditation body, certification bodies, and manufacturers. Provide clarity on the standards that prospective parties must meet, and continue to meet, to participate in the scheme.

	Where practical, provide consistency with existing building system regulatory regimes.	
Cost effective	Be feasible to implement, and where practicable consistent with existing building system regulatory regimes.	Align with existing Building Act and insurance requirements.
Proportionate	Be proportionate in the way they treat regulated parties, and put in place compliance costs that are proportionate to risk	Appropriately balance the risks of modular component failure – particularly the risks to people – against compliance costs to scheme participants.
Flexibility	Provide sufficient flexibility to allow regulated parties to participate in the scheme and adopt efficient or innovative approaches, while continuing to meet their regulatory obligations.	Set a high-level framework for accreditation, certification and registration requirements that enables parties to tailor or interpret them in a way that is relevant to their business.

### What scope will options be considered within?

29. The scope of proposals for regulations are provided through the regulation-making powers set out in section 402 of the *Building Act 2004*, as modified by the Building Amendment Act.
30. These powers enable a package of regulations to be made in the following areas:
  - prescribing the kinds of building products that are ‘modular components’
  - accreditation and registration criteria for modular component manufacturer certification bodies
  - certification and registration criteria for modular component manufacturers
  - audit processes and fees
  - requirements for modular component manufacturer’s certificates.
31. For the modular component manufacturer scheme in the Building Amendment Act to meet all the objectives outlined in paragraphs 25 and 26, regulations are needed across all five categories of regulation making powers listed above. Within some of these categories of regulations, sets of interlinked proposals are needed to meet the scheme’s objectives (e.g. accreditation and registration requirements both need to be specified and both need to work together).

The proposals for regulations across all five regulation making powers should be considered as an integrated package that needs to work together in order to realise the objectives of the MCM scheme.

## What options are being considered?

32. The three options considered for MCM scheme regulations are listed below:
- **Option One** – Regulatory framework for the modular component manufacturer certification scheme, with no regulations (status quo)
  - **Option Two** – Regulatory framework for the modular component manufacturer certification scheme, with all elements for regulations that were consulted on during public consultation
  - **Option Three** – Regulatory framework for the modular component manufacturer certification scheme, with revised elements for regulations based on stakeholder feedback received during public consultation (**preferred option**).
33. These options are outlined below and compared in Table 2 (pages 14 to 20).

### Option One – Regulatory framework for the modular component manufacturer scheme, with no regulations or rules (status quo)

34. This option is equivalent to the status quo discussed in Section 1 – Diagnosing the problem and is, therefore, not preferred.
35. Without regulations, the MCM scheme set out in the Building Amendment Act would not be implemented and the policy intent of the changes to the Building Act would not be achieved.
36. Under this option, manufacturers will have to continue using the existing building consent process and deal with the issues identified in Section 1:
- building consent authorities will continue to deal with the difficulty of assuring themselves that offsite manufactured modular components are Building Code compliant
  - offsite manufacturers continue to encounter inconsistent approaches from building consent authorities when making an application for building consent.
37. If the status quo remains, manufacturers may seek to prioritise developing ad-hoc or inconsistent working relationships with building consent authorities in order to minimise the extent of barriers that exists. In such cases, building consent authorities who have confidence in manufacturers' quality assurance processes are able to process consent applications relatively quickly and are willing to use online documentation/photos in lieu of physical inspections. However, this is not a cost effective option as manufacturers noted that it often requires 1 to 2 years of intensive engagement, facilitating factory visits (including overseas) and building prototype modular components for building consent authorities to inspect. The inconsistent or irregular treatment of manufacturers may also be perpetuated.
38. There is a significant level of support from stakeholders for the establishment of the clear and certain MCM scheme in the Building Amendment Act. This includes offsite manufacturers, building consent authorities, accreditation and certification bodies and construction businesses.

39. Of those who submitted on the proposals for regulations, only one stakeholder did not support the creation of a specific framework for modular component manufacturers. The rationale being that existing certification schemes such as the Product Certification Scheme (CodeMark) is already well suited to cover modular component manufacturers.
40. Although CodeMark is available to offsite modular component manufacturers, it does not adequately meet the objectives of the modular component manufacturer certification scheme because this scheme targets individual products rather than the manufacturer. The CodeMark also does not address the challenges currently experienced by modular component manufacturers as outlined in Section 1.

### **Option Two – Regulatory framework for the modular component manufacturer scheme, with all elements for regulations that were consulted on during public consultation**

41. This option incorporates all the proposals for regulations set out in **Annex Two**, which were also outlined in a public discussion document for stakeholder consultation. Stakeholder perspectives and support for the proposals for regulations are outlined in the next section (Stakeholder feedback).
42. This option is not preferred as the fit and proper person test, as outlined in the discussion document, was identified during stakeholder engagement as not being the most effective way to achieve the objectives and criteria of a successful MCM scheme. This is because it did not take into account the range of potential corporate structures for the MCM scheme certification bodies and manufacturers.
43. Further analysis also showed that the proposed audit settings could be refined to clarify the auditing requirements while still ensuring the scheme is robust. This issue is discussed further in Option 3 below.

### **Option Three – Regulatory framework for the modular component manufacturer scheme, with revised elements based on stakeholder feedback**

44. This is the preferred option as it includes elements that were originally consulted on and deemed to be fit for purpose, and makes an amendment to the proposals for regulations that were consulted on and discussed in Option 2.
45. The following changes have been made to the fit and proper person test based on stakeholder engagements:
  - Clarifying that the fit and proper person test applies to the applicant body, and the chief executive would assess whether elements of the test are met by the modular component manufacturer certification bodies' and manufacturers' authorised representatives and anyone directing or controlling the certification bodies and manufacturers functions.
46. The audit proposals consulted on have been amended following further analysis and to ensure audit settings are clear. The proposals for regulations no longer require auditing bodies to use a prescribed process to determine audit frequency. Audits of modular component manufacturer certification bodies and modular component manufacturers

must take place at least once every 12 months, consistent with the requirements in the Building Amendment Act.

47. MBIE considered whether audits need to be required more frequently by regulations in certain circumstances. We are satisfied that the provisions of the Building Amendment Act and separate proposals for scheme rules will be sufficient to provide certainty of the auditing requirements.
48. The proposals have also been amended to set out a clear hierarchy between regulations and scheme rules, which may set out detailed operational requirements.
49. In addition to the discussion on the proposals for regulations outlined in Option 2 above, Option 3 also ensures that the regulatory settings to participate in the MCM scheme are similar, as far as possible, to the CodeMark scheme. This will provide a more cost effective option as the regulatory settings will allow enough flexibility for CodeMark scheme participants to add on to existing systems and processes if they decide to participate in the MCM scheme.
50. Stakeholders that submitted on the MCM scheme proposals for regulations were largely supportive of the registration criteria for certification bodies and manufacturers. However, stakeholders that submitted on the CodeMark proposals for regulations commented that the proposed scope of the fit and proper person test does not take into account the range of potential corporate structures for product certification bodies. This option provides a further level of clarity and confidence to the MCM scheme as roles and responsibilities are clearly defined.

**Table 2: Comparison of options across scope of proposals for regulations**

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
<p><b>Prescribing the kinds of building products that are ‘modular components’</b></p>	<p>Do not prescribe the kinds of products that are ‘modular components’.</p> <p><b><u>Assessment of proposal against criteria</u></b></p> <p>This would lead to a lack of clarity and certainty around the scope of building products that can be manufactured under the MCM scheme.</p>	<p>Prescribe ‘modular components’ as building products that meet the following criteria:</p> <ul style="list-style-type: none"> <li>• includes elements of the building, such as open frames and trusses, enclosed panels or units, volumetric structures, and whole buildings and may include services such as plumbing or electrical wiring</li> <li>• excludes non-structural building products or systems such as bathroom vanities, storage systems, or heating, ventilation and air conditioning systems</li> <li>• must be constructed or manufactured off the site on which they are to be installed, though some onsite assembly or installation may be required.</li> </ul> <p><b><u>Assessment of proposals against criteria</u></b></p> <p>Prescribing the kinds of building products that would be ‘modular components’ will provide manufacturers with clarity and certainty around the scope of building products that can be manufactured under the MCM scheme. This will also contribute to gaining consumers’ trust and confidence in the MCM scheme.</p> <p>The proposed description is broad enough to incorporate a wide range of manufacturers and business models, which will help to future-proof the scheme to accommodate technological development and innovation.</p>	<p><b><u>Changes from Option 2 and assessment of proposals against criteria (where applicable)</u></b></p> <p>Option 3 has no changes from Option 2.</p> <p><b><u>Variations of Option 3</u></b></p> <p>A variant of this option could exclude frames and trusses, however this is not proposed because it would reduce the flexibility of the scheme and preclude frame and truss manufacturers from participating in the scheme in future.</p>
<p><b>Accreditation and registration criteria for modular</b></p>	<p>Do not prescribe any accreditation and registration criteria for modular component</p>	<p><b><u>Accreditation proposals</u></b></p> <p>To be accredited, a certification body must have:</p> <ul style="list-style-type: none"> <li>• policies, procedures and systems in place to oversee, assess and inspect modular component manufacturers to determine if they meet</li> </ul>	<p><b><u>Changes from Option 2 and assessment of proposals against criteria (where applicable)</u></b></p> <p>Option 3 makes amendments to the fit and proper person test that is proposed to apply to certification bodies. The test will only apply to the</p>

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
<p><b>component manufacturer certification bodies</b></p>	<p>manufacturer certification bodies.</p> <p><b><u>Assessment of proposal against criteria</u></b></p> <p>This would mean that certification bodies would not be able to operate and the benefits of the scheme would not be realised. Offsite manufacturers would continue to face additional barriers when applying for building consents.</p>	<p>criteria required for certification</p> <ul style="list-style-type: none"> <li>• policies, procedures and systems in place to undertake risk assessments and audits of certified manufacturers</li> <li>• policies, procedures and systems in place that ensure appropriate staff perform its functions</li> <li>• a system to retain records in relation to their decisions, and the policies, procedures and systems required by regulations</li> <li>• a process to notify the modular component manufacturer accreditation body of changes to key personnel or other circumstances that might impact its accreditation</li> <li>• suitable complaints handling policies, procedures and systems.</li> </ul> <p><b><u>Registration proposals</u></b></p> <p>To be registered, a certification body must:</p> <ul style="list-style-type: none"> <li>• satisfy a prescribed fit and proper person test</li> <li>• provide evidence that it has a process to notify MBIE of changes to key personnel or other circumstances that might impact its registration.</li> </ul> <p><b><u>Assessment of package of proposals against criteria</u></b></p> <p>This package of interlinked proposals aimed to strike a balance between robustness and flexibility, while also providing clarity and certainty for certification bodies. The proposed criteria also aimed to provide consumers with confidence that those who certify and audit manufacturers in the MCM scheme have been approved by appropriately skilled bodies.</p> <p>This is evidenced through the requirement for certification bodies to have a robust and detailed understanding of the Building Code and relevant legislation, regulations and other relevant settings in the New Zealand</p>	<p>relevant roles within an organisation. This provides greater flexibility for a range of corporate structures and is more cost effective to implement.</p> <p>The proposal for a certification body to notify MBIE of changes that might impact its registration has been moved to scheme rules to be set by MBIE rather than being set by regulations. This will improve the flexibility of the scheme and better reflects the split between regulations and scheme rules under the Building Amendment Act in relation to ongoing operational requirements.</p> <p><b><u>Variations of Option 3</u></b></p> <p>A variant of this option could prescribe ISO 17065:2012 <i>Conformity assessment – requirements for bodies certifying products, processes and services</i> or other relevant standards as a requirement for accreditation but this is not proposed in order to allow flexibility for different approaches to meeting the requirements.</p>



Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
		<p>building system; to have procedures and systems in place to undertake risk assessments and audits of certified and registered manufacturers, retain records and handle complaints, and ensure staff are competent; and to satisfy a fit and proper person test and notify MBIE of key changes.</p> <p>While the Building Amendment Act also enables adequate means requirements to be prescribed for MCM certification bodies' registration, an adequate means test is not proposed at this time. This is because the package of proposals above are expected to meet the scheme objectives.</p>	
<p><b>Certification and registration criteria for modular component manufacturers</b></p>	<p>Do not prescribe any certification and registration criteria for modular component manufacturers.</p> <p><b><u>Assessment of proposal against criteria</u></b></p> <p>This would mean that manufacturers would not be able to operate and the benefits of the scheme would not be realised. Offsite manufacturers would continue to face additional barriers when</p>	<p><b><u>Certification proposals</u></b></p> <p>To be certified, a modular component manufacturer must:</p> <ul style="list-style-type: none"> <li>• have a quality plan and quality management system</li> <li>• provide evidence that it has manufacturing processes and systems appropriate to the scope of certification they are seeking</li> <li>• provide evidence that it has design processes and systems appropriate to the scope of certification it is seeking in order to be certified to 'design and manufacture'</li> <li>• have policies, procedures and systems in place that ensure appropriate staff perform its functions</li> <li>• have a system to retain records in relation to its decisions, and policies, procedures and systems required by regulations</li> <li>• have a process to notify the responsible modular component manufacturer certification body of changes to key personnel and other circumstances that might impact its certification</li> <li>• have suitable complaints handling policies, procedures and systems.</li> </ul>	<p><b><u>Changes from Option 2 and assessment of proposals against criteria (where applicable)</u></b></p> <p>Option 3 makes amendments to the fit and proper person test that is proposed to apply to manufacturers. The test will only apply to the relevant roles within an organisation. This provides greater flexibility for a range of corporate structures and is more cost effective to implement.</p> <p>The proposal for a manufacturer to notify MBIE of changes that might impact its registration has been moved to scheme rules to be set by MBIE rather than being set by regulations. This will improve the flexibility of the scheme and better reflects the split between regulations and scheme rules under the Building Amendment Act in relation to ongoing operational requirements.</p>

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
	<p>applying for building consents.</p>	<p><b><u>Registration proposals</u></b></p> <p>To be registered, a certified modular component manufacturer must:</p> <ul style="list-style-type: none"> <li>• satisfy a prescribed test to indicate it has adequate means to cover any civil liabilities that may arise in relation to their manufacture and design (if applicable) of modular components</li> <li>• satisfy a prescribed fit and proper person test</li> <li>• provide evidence that it has a process to notify MBIE of changes to key personnel or other circumstances that might impact its registration.</li> </ul> <p><b><u>Assessment of package of proposals against criteria</u></b></p> <p>This package of interlinked proposals for certification and registration criteria aims to ensure the manufacturers that participate in the MCM scheme meet appropriate standards and can carry out their functions within the scheme. The adequate means test will also provide MBIE with sufficient information to assess whether a modular component manufacturer may have adequate means to cover consumer protection in the case of an act or omission by the manufacturer. The proposed regulations are important as the MCM scheme will reduce building consent authorities' oversight.</p> <p>The proposals aim to strike the right balance between increasing the efficiency of consenting timeframes by transferring compliance responsibilities from building consent authorities to the manufacturers, and instilling confidence in the MCM scheme.</p>	<p><b><u>Variations of Option 3</u></b></p> <p>A variant of this option could prescribe ISO 9001:2015 <i>Quality management systems</i> or other relevant standards as a requirement for certification but this is not proposed in order to allow flexibility for different approaches to meeting the requirements.</p>
<p><b>Audit processes</b></p>	<p>Do not prescribe audit processes.</p> <p>Audits of modular component</p>	<p>The modular component manufacturer accreditation body must use a prescribed process to decide appropriate audit procedures and audit frequency to apply to modular component certification bodies.</p>	<p><b><u>Changes from Option 2 and assessment of proposals against criteria (where applicable)</u></b></p> <p>Option 3 makes amendments following further analysis and to ensure audit settings are clear</p>

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
	<p>manufacturer certification bodies and modular component manufacturers must take place at least once every 12 months, consistent with the requirements in the Building Amendment Act.</p> <p><b><u>Assessment of proposal against criteria</u></b></p> <p>Not prescribing audit processes would reduce certainty and clarity as to what matters auditing bodies must take into account when carrying out an audit.</p>	<p>A modular component manufacturer certification body must use a prescribed process to decide appropriate audit procedures and determine the audit frequency for the modular component manufacturers for which it is responsible.</p> <p>Following the completion of an audit, the modular component manufacturer accreditation body and modular component manufacturer certification bodies must issue an audit report to the audited party and to MBIE in a timely manner.</p> <p>Modular component manufacturer certification bodies and modular component manufacturers must make any changes required by an audit report within three months of receiving that audit report.</p> <p>When a modular component manufacturer certification body or modular component manufacturer passes an audit and has made all changes required by the audit report, the modular component manufacturer accreditation body and modular component manufacturer certification bodies must issue an audit certificate to the audited party in a timely manner.</p> <p><b><u>Assessment of proposals against criteria</u></b></p> <p>Audits are a key safeguard within the MCM scheme and will assure scheme users that accredited or certified modular component manufacturer certification bodies and manufacturers continue to meet relevant criteria and standards. The proposals aimed to provide confidence while being cost effective and proportionate.</p> <p>Clear audit setting will also help to ensure audits are beneficial to all parties and contributes to the robustness of MCM scheme participants.</p>	<p>and robust.</p> <p>The proposals for regulations under Option 3 no longer require auditing bodies to use a prescribed process to determine audit frequency. Audits of modular component manufacturer certification bodies and modular component manufacturers must take place at least once every 12 months, consistent with the Building Amendment Act. This change will improve clarity and certainty for scheme participants regarding when audits must be undertaken compared to Option 2.</p> <p>The audit proposal now prescribes matters that must be taken into account by the modular component manufacturer accreditation body and modular component manufacturer certification bodies in carrying out an audit. This change will improve clarity and certainty for scheme participants regarding what matters auditing bodies must take into account when carrying out an audit.</p> <p>The proposals for regulations for issuing audit reports, requiring audits to be acted on, and audit certificates to be issued have been moved to scheme rules to be set by MBIE rather than being set by regulations. This will improve the flexibility of the scheme and better reflects the split</p>

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
			<p>between regulations and scheme rules under the Building Amendment Act in relation to ongoing operational requirements.</p> <p><b><u>Variations of Option 3</u></b></p> <p>A variant on this proposal could require audits to be carried out more frequently by regulations in certain circumstances, but MBIE is satisfied that the provisions of the Building Amendment Act and proposals for scheme rules sufficiently address risk at this time.</p>
<p><b>Requirement for modular component manufacturer's certificates</b></p>	<p>Do not prescribe requirements for manufacturer's certificates.</p> <p><b><u>Assessment of proposal against criteria</u></b></p> <p>This would mean that the roles and responsibilities of scheme participants would not be clearly defined, which would create risk to consumers if things go wrong and</p>	<p>Prescribe requirements for modular component manufacturer's certificates issued at building consent application stage by registered modular component manufacturers that are certified to:</p> <ul style="list-style-type: none"> <li>• 'manufacture' modular components</li> <li>• 'design and manufacture' modular components.</li> </ul> <p>Prescribe requirements for modular component manufacturer's certificates issued at code compliance certificate application stage by registered modular component manufacturers that are certified to:</p> <ul style="list-style-type: none"> <li>• 'manufacture' modular components (Proposal 28)</li> <li>• 'design and manufacture' modular components (Proposal 29).</li> </ul> <p><b><u>Assessment of proposals against criteria</u></b></p> <p>The proposed requirements for modular component manufacturer certificates (Proposal 25 – 28 outlined in Annex Two) clarifies responsibility between manufacturers and building consent authorities, and between the</p>	<p><b><u>Changes from Option 2 and assessment of proposals against criteria (where applicable)</u></b></p> <p>Option 3 has no changes from Option 2.</p>

Scope	Status quo (Option 1)	Proposals for regulations, with all elements consulted on in discussion document (Option 2)	Proposals for regulations, with revised elements based on feedback (Option 3)
	reduce confidence in the scheme.	<p>manufacturer and other sub-trades that may be working on a site. Clearly defining the roles and responsibilities of scheme participants will minimise the risk to consumers if things go wrong.</p> <p>The information requirements will also support certified and registered manufacturers to gain the confidence of building consent authorities by supporting them to understand and plan for what parts of the building they may need to inspect and which they do not as it is covered by the scheme.</p>	

51. The table on the following page provides an overview of the high-level packages of options assessed against the criteria.

## How do the options compare to the status quo/counterfactual?

	Option One – Status Quo	Option Two – All elements consulted on	Option Three – Revised elements based on stakeholder feedback
<b>Confidence</b>	0 The modular component manufacturer scheme is not implemented.	+	++
		Scheme accreditation, certification and registration requirements (including the requirement for suitable complaints handling policies and procedures) <i>mostly</i> provides scheme participants and users with confidence in the scheme.	Scheme accreditation, certification and registration requirements (including the requirement for suitable complaints handling policies and procedures) provides scheme participants and users with confidence in the scheme.
<b>Certainty and Clarity</b>	0 Existing uncertainty in how the building consent process works for offsite manufactured modular components remains.	+	++
		Roles and responsibilities of all scheme participants defined. Standards and criteria that scheme participants are required to meet are specified.	Roles and responsibilities of all scheme participants more clearly defined. Standards and criteria that scheme participants are required to meet are more clearly defined.
<b>Cost effective</b>	0 Requires extensive time and resource commitment from offsite manufacturers to build relationship and trust with building consent authorities.	++	++
		The certification and registration requirements for streamline the building consent process for offsite manufacturers. The cost benefit analysis also confirms that the benefits of participating in the scheme far outweigh the costs.	The certification and registration requirements for streamline the building consent process for offsite manufacturers. The cost benefit analysis also confirms that the benefits of participating in the scheme far outweigh the costs.
<b>Proportionate</b>	0 Offsite manufacturers continue to face additional barriers when applying for building consent.	++	++
		The compliance costs for scheme participants are proportionate to the risks associated with their respective roles and responsibilities.	The compliance costs for scheme participants are proportionate to the risks associated with their respective roles and responsibilities.

<b>Flexible</b>	0 Offsite manufacturers continue to experience additional barriers to co	<b>++</b> Certification and registration requirements provide sufficient flexibility to allow certification bodies and manufacturers to participate in the scheme and adopt efficient and innovative approaches, while continuing to meet their regulatory obligations.	<b>++</b> Certification and registration requirements provide sufficient flexibility to allow certification bodies and manufacturers to participate in the scheme and adopt efficient and innovative approaches, while continuing to meet their regulatory obligations.
<b>Overall assessment</b>	0	<b>+</b>	<b>++</b>

### Key

<b>++</b>	Much better than the status quo
<b>+</b>	Better than the status quo
<b>0</b>	About the same as the status quo
<b>-</b>	Worse than the status quo
<b>--</b>	Much worse than the status quo



### What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

52. MBIE's preferred approach is Option 3 – the regulatory framework for the modular component manufacturer scheme, with revised elements based on both stakeholder feedback received during public consultation and further analysis.
53. Option 3 includes the benefits of Option 2, whilst providing further confidence and clarity in the MCM scheme by ensuring the roles and responsibilities are clearly defined and distributed. This option will also ensure the MCM scheme is consistent, as far as possible, with CodeMark.

### What are the marginal costs and benefits of the option?

54. MBIE procured the services of Sapere to conduct a cost benefit analysis on the proposals for regulations for the modular component manufacturer scheme that were consulted on. This analysis is based on the proposals outlined in Option 2. The cost benefit analysis is also reflective of Option 3 (the preferred option) as the differences between Option 2 and 3 are minor.
55. Sapere modelled three marginal scenarios for the modular component manufacturer certification scheme compared to the status quo:
  - **Scenario 1:** limited uptake of the scheme and volumes (based on manufacturers that indicated that they would participate in the scheme in its first year). This scenario assumes one modular component manufacturer certification body and four modular component manufacturers certified for design and manufacture.
  - **Scenario 2:** credible expansion of the scheme, with annual growth that displaces traditional construction methods. This scenario assumes one modular component manufacturer certification body initially, increasing by one with every fifth modular component manufacturer. Assumes four modular component manufacturers initially, and one additional modular component manufacturer each year.
  - **Scenario 3:** similar to Scenario 2 but including an additional benefit where by suppliers are producing at sufficient scale that enabled them to produce cheaper modular components.
56. Table 3 below reflects the impact of scenario 1 as outlined above. **Annex Three** provides a further breakdown of the costs and benefits for all three scenarios, compared to the status quo (not implementing the scheme).

**Table 3: Additional costs and benefits of preferred option versus status quo**

<b>Affected groups</b>	<b>Comment</b> <i>Nature of cost or benefit (e.g. ongoing, one-off), evidence and assumption (e.g. compliance rates), risks.</i>	<b>Impact</b> <i>\$m present value for monetised impacts; high, medium or low for non-monetised impacts.</i>	<b>Evidence Certainty</b> <i>High, medium, or low, and explain reasoning in comment column.</i>
<b>Additional costs of the preferred option compared to the status quo</b>			
Regulated group: Accreditation Body	One-off compliance costs and ongoing operating costs	\$0.56m	High
Regulated group: Certification Bodies	One-off compliance costs, ongoing compliance costs and auditing costs	\$0.53m	High
Regulated group: Modular Component Manufacturers	One-off compliance costs, ongoing compliance costs and auditing costs	\$3.63m	Medium
Regulators: MBIE	Implementation costs and ongoing system monitoring and enforcement costs	\$1.1m	High
Consumers	Manufacturers may pass on the one-off set up costs and ongoing compliance costs to consumers	Low	Med - Uncertain whether manufacturers will pass costs on to consumers and how significant this will be
<b>Total monetised costs</b>		\$5.82m	
<b>Non-monetised costs</b>		Low	
<b>Additional benefits of the preferred option compared to the status quo</b>			
Regulated groups: Modular Component Manufacturers	Reduced time spent on consenting administration, avoided delays from processing consent applications and avoided consent and inspection fees	\$26.44m	High
Consumers	Construction savings being passed down to consumer having access to more affordable building methods	High	Low - Uncertain whether cost savings for manufacturers will be passed on to consumers
<b>Total monetised benefits</b>		\$26.44m	High
<b>Non-monetised benefits</b>		<i>High</i>	<i>High</i>

## Cost benefit analysis findings

57. The results of the cost benefit analysis show that there are material benefits under each of the three scenarios considered. There was a strong benefit cost ratio for all three scenarios ranging from 4.54 for scenario 1 to 8.50 for scenario 3.
58. Certified and registered manufacturers will take on the majority of costs associated with participating in the scheme (63 percent of the total costs under scenario 1), with the largest individual cost being the ongoing compliance costs that manufacturers will face in participating in the scheme (\$2.86m under scenario 1). However, this is complemented with the benefits of the scheme predominantly being realised by manufacturers (all the benefits identified under scenario 1 will be realised by participating manufacturers).

Figure 3: Distribution of costs - Scenario 1

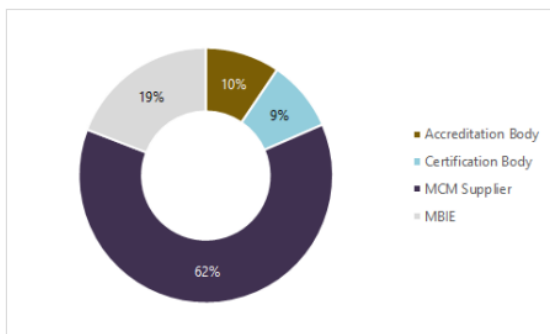
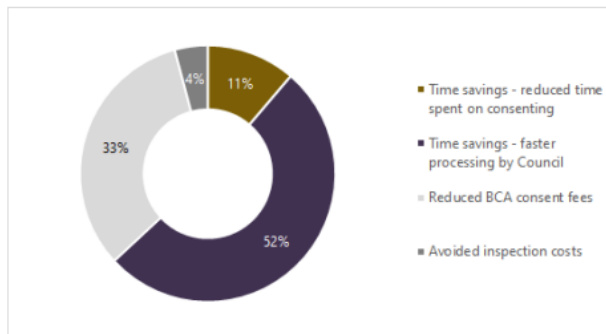


Figure 4: Distribution of benefits - Scenario 1



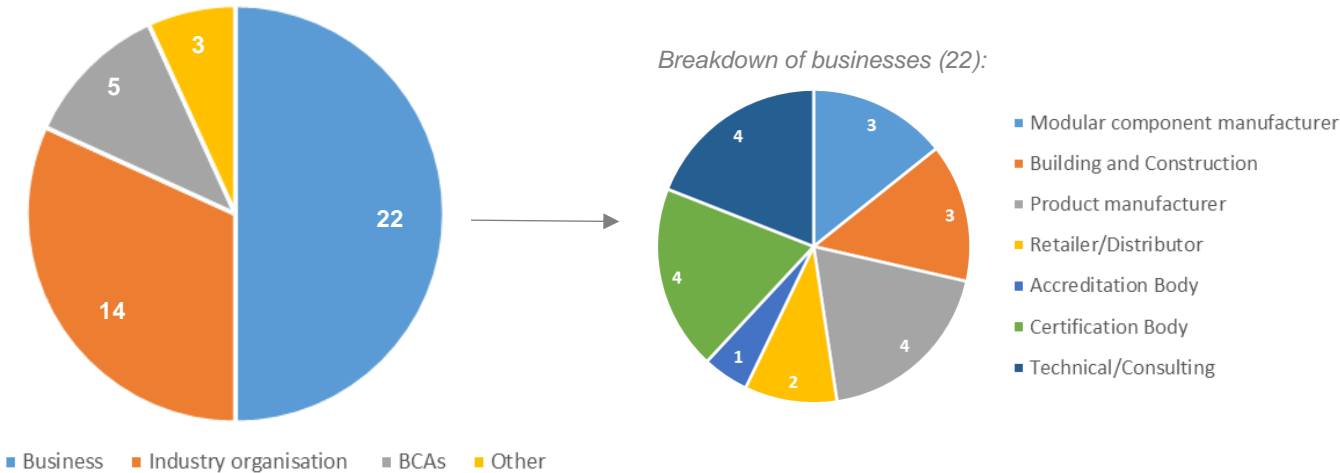
## Environment benefits

59. In addition to the benefits outlined in the table above, Sapere calculated that Scenario 2 and 3 would generate environmental benefits by producing less construction waste. Both scenarios would reduce CO2 emissions by 849 tCO2e over the 10 year period (approximately equivalent to the annual emissions of 450 cars). Other additional benefits from scenario 2, with new growth includes:
- Faster build time (cash flow and financing benefits) – offsite manufacturing is recognised as being a faster means of constructing new buildings.
  - Reduced serious harm (incidents in the workplace) – offsite manufacturing is recognised as providing a more controlled building environment
  - Reduced wastage of materials – offsite manufacturing is recognised as generating considerably less wastage of building products.
60. Although the benefits of participating in the scheme are clear, a failure rate of just 1 percent of modular components consented under the modular component manufacturer scheme (if requiring a full rebuild) would reduce the benefit cost ratio in all three scenarios to 1 or below. This emphasises the importance of ensuring there are adequate quality assurance measures and regular risk based audits to reduce the risk of component defects and to instil trust and confidence in offsite manufacturing.

**Stakeholder feedback**

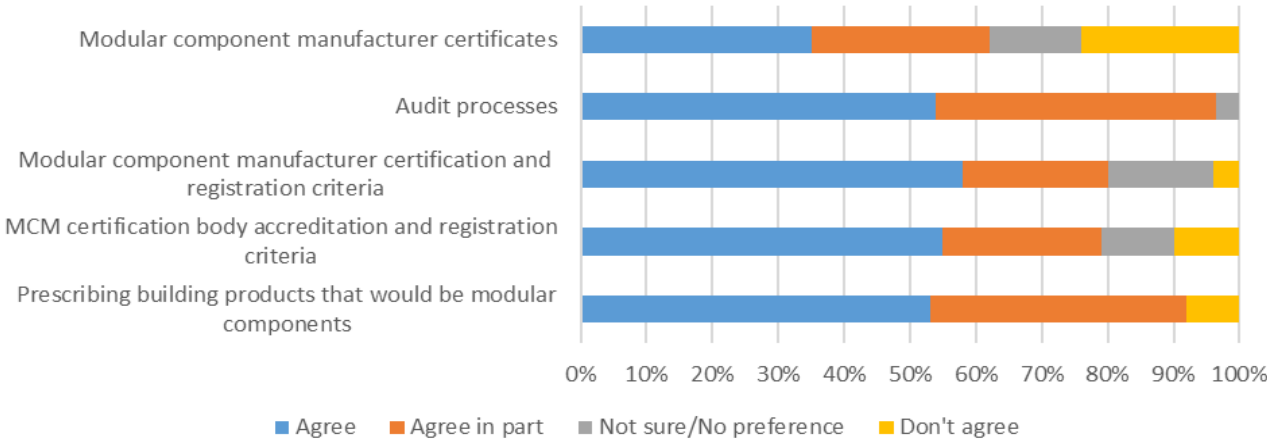
- 61. In April-June 2021, MBIE publicly consulted on proposals for regulations for the MCM scheme that would be implemented under the new regulation-making powers in the Building Amendment Act (**Annex Two**).
- 62. MBIE received 57 submissions in total. Forty-four submissions commented on the MCM scheme proposals for regulations in the discussion document. Stakeholders ranged from an accreditation body and certification bodies, a range of offsite manufacturers, building consent authorities and industry membership bodies.

**Figure 5: Breakdown of submitters by category (number)**



- 63. Stakeholders were largely supportive of the proposals for regulations (as highlighted below in Figure 6).

**Figure 6: Stakeholder support for the MCM scheme proposals for regulations**



**Prescribing the kinds of building products that are ‘modular components’**

- 64. The majority of stakeholders are supportive of this proposal as it will bring consistency and certainty as to the scope of the proposed scheme.
- 65. The main concern raised by stakeholders was the inclusion of open frames and trusses in the scope of ‘modular components’. These industry stakeholders were concerned

that the inclusion of open frames and trusses would create unintended consequences for the industry by creating additional compliance costs if consumers begin demanding certification. Stakeholders considered that the traditional consenting process already works successfully for open frame and truss organisations, and the challenges identified in the problem definition are not reflective of these manufacturers' experiences.

66. MBIE considered the proposal to remove open frames and trusses from the kinds of building products that would be 'modular components'. However, MBIE has prioritised the need to ensure enough flexibility to future-proof the potential scope of the scheme so that it doesn't inadvertently preclude manufacturers that may wish to participate in the MCM scheme in the future. The potential impact on open frame and truss manufacturers will be minimised through the implementation of the scheme to ensure its aim of the scheme is clear.

### **Accreditation and registration criteria for modular component manufacturer certification bodies**

67. The majority of stakeholders that submitted on the proposed regulatory settings to be an accredited and registered certification body agreed that the proposals would provide confidence in the certification bodies that would be accredited and registered to participate in the MCM scheme. Stakeholders that supported the proposals cited the importance of having robust and fit for purpose quality assurance systems in order to give confidence that the scheme is robust, protects consumers and maintains the trust of scheme participants, users and the general public.
68. Stakeholders also proposed that the relevant international standards be prescribed in regulations (ISO17065) to ensure certification bodies' quality management meets international best practice and New Zealanders are appropriately protected. MBIE considered this proposal and concluded that the proposals that were consulted on struck the right balance between industry best practice compliance with international standards and providing enough flexibility to allow certification bodies to participate in the scheme.

### **Certification and registration criteria for modular component manufacturers**

69. Most stakeholders that submitted were supportive of these proposals. Stakeholders agreed that the proposed regulatory settings will provide confidence in manufacturers that will be certified and registered to manufacture modular components with the MCM scheme. Similar to the accreditation requirements for certification bodies, stakeholders also proposed that the relevant international standards be prescribed in regulations (ISO9001). However, as noted above, MBIE decided not to prescribe specific standards to ensure the regulatory settings strike a balance between building confidence in certified and registered manufacturers and providing enough flexibility to allow certification bodies to participate in the scheme.
70. The majority of stakeholders that submitted on the proposals, including JAS-ANZ, Prefab NZ and all the building consent authorities generally agreed that the proposed regulatory settings will provide for adequate consumer protection.

## Audit processes

71. There was strong support from submitters for the proposed regulatory settings for audits. The majority agreed that the proposed settings were standard practice and would provide manufacturers and certification bodies with certainty regarding the auditing process.
72. A number of submitters on the audit processes highlighted the importance of enabling enough flexibility within the prescribed timeframes to reflect the urgency of issues that are highlighted. The legislative settings provides scope for certificates to be automatically suspended or revoked if scheme parties no longer meet the criteria or fail to comply with the MCM scheme rules.

## Requirement for modular component manufacturer's certificates

73. Stakeholders were largely supportive of the proposals for regulations that were consulted on, noting support for keeping responsibility in one place where it is best managed. However, some stakeholders thought it was unfair to expect manufacturers to be responsible for the transportation, storage and assembly of modular components if they do not have control over the process. These stakeholders proposed that the responsibility for transportation, storage and assembly be determined based on the manufacturer's contract of service.
74. In considering this proposed amendment to responsibility, MBIE concluded that ensuring there are no gaps in responsibility is a priority, in order to ensure consumers are adequately protected and scheme participants, users and the general public have confidence in the MCM scheme. Further, MBIE understands that most manufacturers would prefer to oversee the full continuum of activities from manufacturing through to transportation to the site to avoid the risk of damage or component deterioration.
75. The distribution of responsibility among scheme participants will be monitored and may be reviewed in the future if business models begin to change.

## Section 3: Delivering an option

### How will the new arrangements be implemented?

76. Regulations for the MCM scheme are intended to commence no later than 15 months from the date that the Building Amendment Act received Royal assent (June 2021). A commencement date of three months after the regulations are made is being proposed for Cabinet's consideration to allow sufficient preparation time for the MCM scheme to be set up and to allow sufficient time for the development of scheme rules.
77. MBIE intends to seek Cabinet decisions on the MCM scheme policy proposals in October 2021, with the intention of drafting the regulations to begin in November 2021.
78. There will be a separate programme of work for the following activities to support the implementation of the MCM scheme:
  - develop scheme rules as defined under section 272Z of the Building Amendment Act

- set up and appoint the scheme accreditation body
  - create and deliver customer facing information and education and guidance material
  - develop a communications plan to facilitate awareness of the scheme
  - set up MBIE's registration function.
79. MBIE is currently in the final stages of appointing the scheme accreditation body as work is already underway to develop the scheme rules. The registration of scheme participants is an internal function that MBIE will set up based on previous experience.
80. MBIE has also set up a technical working group made up of manufacturers of different scales and types to provide input into the development and implementation of the modular component manufacturer scheme. The technical working group is meeting quarterly, or more frequently where necessary, and will feed into the development of the scheme rules, identify any potential implementation issues to be addressed, and provide input into the type of information and education materials needed to support the successful implementation of the scheme. The first meeting of the group was on 13 August 2021. Four subsequent meetings will be scheduled for November 2021, February, April and June 2022.
81. The proposed regulations will be communicated through public communications (e.g. ministerial press release) and targeted communications to the industry and stakeholders.

#### **Modular component manufacturer scheme rules**

82. Scheme rules will provide certainty to scheme participants about their roles and responsibilities (as outlined in the Building Amendment Act and the proposed regulations), the operating process, evaluation criteria and any other matters to ensure consistency and align with regulatory best practice.
83. The rules will be developed by MBIE with input from the appointed accreditation body and the technical working group. There will be an opportunity to stakeholder input into the development of these rules.

#### **Appointing the modular component manufacturer scheme accreditation body**

84. The role of the appointed accreditation body will have a significant impact on the implementation of the modular component manufacturer scheme. In the first instance, MBIE will work closely with the appointed accreditation body to set up the accreditation function and the appointed body will feed into the development of the scheme rules.
85. MBIE has assumed that the organisation that has expressed interest in being appointed the modular component manufacturer accreditation body will be appointed. If a third party accreditation body is not appointed, MBIE will carry out the functions of the accreditation body.

#### **Customer facing information and education material**

86. Creating guidance material and information and education resources to support the implementation of the scheme will ensure scheme participants are clear on their roles



and responsibilities. The development of guidance materials will also support modular component manufacturers to meet the certification and registration criteria

87. The technical working group will feed into identifying the types of guidance and educational resources that will be required to support uptake from modular component manufacturers. Given the level of flexibility provided through the proposed regulations, providing scheme participants with guidance on their roles and responsibilities and the certification and registration criteria will support uptake of the scheme.
88. Forms to meet the scheme's requirements will be created or updated and made available online.

### Compliance and enforcement

89. The structure of the modular component manufacturer scheme introduces a number of mechanisms to ensure that modular component manufacturers and certification bodies comply with the requirements of the scheme, which have been outlined elsewhere in this document. Where these requirements are not met, modular component manufacturers or certification bodies could have their status suspended or revoked.
90. The accreditation body that will oversee the certification bodies will be appointed by the chief executive and monitored by MBIE. The Building Amendment Act requires the accreditation body to notify the chief executive in a range of situations, and enables the appointment of the accreditation body to be revoked at any time.
91. The Building Amendment Act outlines a number of offences to prevent any person from representing themselves as the accreditation body, a certification body, or a certified or registered modular component manufacturer. Fines of up to \$50,000 for individuals or \$150,000 for body corporates may be issued for any convicted offences.
92. It is also an offence to misrepresent a modular component as being manufactured by a register modular component manufacturer, with fines of up to \$300,000 for individuals and \$1.5 million for body corporates. MBIE will monitor the modular component market for products or manufacturers that may be misrepresenting their products or status in relation to the scheme and take action as appropriate.

### How will the new arrangements be monitored, evaluated, and reviewed?

93. MBIE will be responsible for monitoring the performance of the modular component manufacturer scheme. To support this, MBIE will develop a reporting and monitoring framework for post-implementation assessment. Complaints handling policies, procedures and systems will also provide all scheme participants, users and the general public with a feedback loop should any issues or concerns arise through the modular component manufacturer scheme.
94. A draft intervention logic model for the building system legislative reform programme was initially developed in 2019 (refer to **Annex Four**), and MBIE is currently in the process of reviewing this model. It is expected that an evaluation framework will be developed, taking into consideration the following factors for the effectiveness of the modular component manufacturer scheme requirements:

- number of modular component manufacturer certification bodies and manufacturers participating in the scheme
- number of working days for a consent to be processed and observed reductions in the duplication of process
- cost savings for manufacturers (consenting and inspection fees)
- number of modular components manufactured
- frequency and significance of complaints made against scheme participants.

## Annex One: Comparing key schemes under the Building Act 2004

### CodeMark

- Voluntary scheme that **certifies that a building product or method** complies with the Building Code
- **Targets a particular product** as opposed to the manufacturer of a product.

### MCM Scheme

Voluntary scheme that **certifies manufacturers** that meet specific certification and registration criteria to:

- **Manufacture** modular components to a Building Code compliant design (through MultiProof or approved by a building consent authority), or
- **Design and manufacture** modular components to a Building Code compliant design that they have developed themselves

**Targets the manufacturer** (within their scope of certification) not the product itself

Reduces consenting process to **10 days** for whole buildings.

### MultiProof

- Voluntary scheme that **establishes that a design** complies with the Building Code
- Designs need to be for a **whole building and repeated** at least 10 times in a two year period
- MultiProof can **complement the MCM scheme** for manufacturers that are certified to 'manufacture only'.

## Annex Two: Description of suite of proposals for regulations for the scheme in MBIE's public discussion document (Option Two)

### Prescribing the types of building products that would be 'modular components'

#### 1. MBIE proposed to prescribe the kind of building product that is a 'modular component' in a way that incorporates the following:

- includes elements of the building such as open frames and trusses, enclosed panels or units, volumetric structures, and whole buildings, and may include services such as plumbing, or electrical wiring
- does not include non-structural building products or systems such as bathroom vanities, storage systems, or heating, ventilation and air conditioning systems
- must be constructed or manufactured off the site on which they are to be installed, though some onsite assembly or installation may be required.

#### Accreditation and registration criteria for modular component manufacturer certification bodies

#### 2. Policies, procedures and systems in place to oversee, assess and inspect MCM's to determine if they meet the criteria required for certification

To be accredited, certification bodies will be required to:

- have the processes and ability to undertake the certification body function within the MCM scheme. This would include evidencing a robust and detailed understanding of the Building Code and relevant legislation, regulations and other relevant settings in the New Zealand building system.
- show how they can conduct the MCM certification body role at geographic distance to cope with situations where they or the MCMs for which they are responsible may be based offshore.

This could be evidenced by the MCM scheme certification body being accredited to or compliant with ISO17065:2012 Conformity assessment – requirements for bodies certifying products, processes and services or other relevant standards.

#### 3. Policies, procedures and systems in place to undertake risk assessments and audits of certified manufacturers

To be accredited, certification bodies will be required to have processes and procedures to undertake audits appropriately and robustly, helping to ensure that certified modular component manufacturers continue to meet certification criteria.

#### 4. Policies, procedures and systems in place to ensure appropriate staff perform its functions

To be accredited, certification bodies will be required to provide evidence that they have the right people in the right places and are undertaking the right work to perform their functions effectively and consistently. This could involve showing evidence that:

- the certification body has sufficient employees and contractors to perform its functions
- employees are appropriately trained and compliant with relevant occupational regulation frameworks
- work is allocated to employees or contractors who are competent to do the work

- the competence of employees and contractors to perform the work that is allocated to them is established.

#### **5. System to retain records in relation to decisions, and policies, procedures and systems required by regulations**

To be accredited, certification bodies will be required to operate an information management system that can create, maintain and archive robust records for a variety of issues, including decisions, staffing, supply chains, products, and so on.

This would likely be a digitally-accessible database, though MBIE does not propose that a specific method or system be used. Records could be maintained in an easily-accessible format for seven years and in an archived format for a longer period of time. The records would be a key focus of audits that take place following accreditation.

#### **6. Process to notify the MCM accreditation body of changes to key personnel or other circumstances that might impact the accreditation**

To be accredited, certification bodies will be required to keep the MCM accreditation body informed of changes to their staffing, processes and systems. This could help inform whether the MCM accreditation body may wish to undertake an out-of-cycle audit to ensure the MCM certification body continues to meet accreditation requirements following any such changes.

#### **7. Suitable complaints handling policies, procedures and systems**

To be accredited, certification bodies will be required to have suitable complaints handling policies, procedures and systems. This would help to ensure complaints, disputes and potentially adverse events are handled in an appropriate manner and where possible reach practical resolutions without needing costly and time-consuming legal intervention. Note that this would not limit consumers or MCMs from contacting MBIE, as the MCM scheme's steward to resolve complaints or using the legal system.

#### **8. Satisfy a prescribed fit and proper person test**

To be registered, scheme certification bodies will be required to satisfy a prescribed fit and proper person test. The proposed test would assess the history and non-technical suitability of MCM certification bodies and applicants to the scheme, which would complement accreditation assessments which assess an MCM certification body's technical suitability. The proposed test would require the following to be taken into account to establish the sustainability of certification bodies, and their directors for the MCM scheme:

- civil proceedings history
- offences/convictions history
- history in similar schemes
- professional history
- financial management history
- conflict of interest
- other relevant factors.

## **9. Process to notify MBIE of changes to key personnel or other circumstances that might impact its registration**

To be registered, certification bodies will be required to keep MBIE informed of changes its status, processes and systems. This could help inform whether MBIE may wish to undertake an out-of-cycle audit to ensure the MCM certification body continues to meet registration requirements following the change.

## **Certification and registration criteria for modular component manufacturers**

### **10. Quality plan and quality management system**

To be certified, manufacturers will be required to demonstrate the ability to consistently provide modular components and services that meet customer and regulatory requirements. This may be evidenced by the manufacturer by being accredited to or compliant with ISO9001: 2015 Quality management systems.

### **11. Provide evidence that it has manufacturing processes and systems appropriate to the scope of certification it is seeking**

To be certified, manufacturers will need to demonstrate the ability to consistently manufacture modular components to a Building Code compliant standard. This would include having established robust defect detection systems and having strong supply chain management for building products and materials, and could take into account the kinds of manufacturing machinery used.

The scope of certification a manufacturer is seeking would drive an MCM certification body's judgement of what an appropriate manufacturing processes and systems might be. For instance, if a manufacturer only wishes to be certified to manufacture frames and trusses, it would not be assessed for its processes to produce whole buildings. This proposal would require manufacturers to evidence and demonstrate a robust understanding of and ability to manufacture to the Building Code and relevant legislation, regulations and other relevant settings in the New Zealand building system.

### **12. In order to be certified to 'design and manufacture', a modular component manufacturer must provide evidence that it has design processes and systems appropriate to the scope of certification it is seeking**

MBIE proposed that manufacturers be required to evidence and demonstrate the ability to design modular components to a Building Code compliant standard. This would include having established quality assurance or peer review mechanisms and processes for designs that they produce. It would also take into account the design or modelling programmes and systems used. This proposal would require manufacturers to evidence and demonstrate a robust understanding of and ability to design to the Building Code and relevant legislation, regulations and other relevant settings in the New Zealand building system.

### **13. In order to be certified, a modular component manufacturer must have policies, procedures and systems in place that ensure appropriate staff perform its functions**

MBIE proposed that manufacturers would provide evidence that they have the right people, in the right places and undertaking the right work to perform their functions effectively and consistently. This could involve showing evidence that:

- the manufacturer has sufficient employees and contractors to perform its functions

- employees are appropriately trained and compliant with relevant occupational regulation frameworks
- work is being allocated to employees or contractors who are competent to do the work
- the competence of employees and contractors to perform the work that is allocated to them has been established.

**14. Modular component manufacturer must have a system to retain records in relation to its decisions, and policies, procedures and systems required by regulations**

To be certified, manufacturers will be required to have systems for creating, maintaining and archiving robust records of a variety of issues, including decisions, staffing, supply chains, products, and so on. This would likely be in a digitally-accessible database, though MBIE does not propose a specific approach or system is proposed. Records could be maintained in an easily-accessible format for seven years and in an archived format for a longer period of time. The records must be sufficient to establish clearly that all relevant regulatory requirements have been met, and would be a key focus of audits that take place following certification.

**15. Modular component manufacturer must have a process to notify the responsible modular component manufacturer certification body of changes to key personnel and other circumstances that might impact its certification**

To be certified, manufacturers will be required to keep their MCM scheme certification body informed of changes to the staffing, processes and systems. This could help inform whether the MCM certification body may wish to undertake an out-of-cycle audit to ensure the MCM continues to meet certification requirements following the change.

**16. Modular component manufacturer must have suitable complaints handling policies, procedures and systems**

To be certified, manufacturers will be required to have suitable systems for ensuring that complaints, disputes and potentially adverse events are handled in an appropriate manner and, where possible, reach practical resolutions without needing costly and time-consuming legal intervention. Note that this would not limit consumers from contacting MBIE, as the MCM scheme's steward, to resolve complaints or using the legal system to address contractual disputes.

**17. A certified modular component manufacturer must satisfy a prescribed test to indicate it has adequate means to cover any civil liabilities that may arise in relation to its manufacture and design (if applicable) of modular components**

To be registered, a certified manufacturer will be required to meet a prescribed test to ascertain if they have sufficient means to cover any civil liabilities they may incur through their activities in the scheme. This test would take into account the following factors:

- organisational structure
- exposure to risk (types of modular components being designed and/or manufactured)
- risk identification and management (likely liabilities, amount and duration of each liability, and organisational risk management framework)



- transferred risks (e.g. through contracts, insurance, bonds, etc., with no building warranty product covering a 10 year limitation period being required)
- retained risks (what they are and how managed)
- financial status (accounts for the last 2-3 years plus 2-3 year projections)
- any legal proceedings currently in train.

The proposed test is largely based on the adequate means test applied as part of private building consent authority registration. This would be a non-technical assessment that complements certification assessments, which assess an MCM's technical suitability to quality assure, manufacture and in some cases design modular components.

### **18. A certified modular component manufacturer must satisfy a prescribed fit and proper person test**

To be registered, a certified manufacturer will be required to satisfy a fit and proper person test that would assess the history and non-technical suitability of the manufacturer and applicants to the scheme, complementing certification assessments that assess an MCM's technical suitability. The proposed test would require the following to be taken into account:

- civil proceedings history
- offences/convictions history
- history in similar schemes
- professional history
- financial management history
- conflict of interest
- other relevant factors.

The proposed test is largely based on the fit and proper person test applied as part of private building consent authority registration. A similar test is proposed within this paper for the registration of MCM certification bodies and PCBs.

### **19. A certified modular component manufacturer must evidence it has a process to notify MBIE of changes to key personnel or other circumstances that might impact its registration**

To be registered, certified manufacturers will be required to keep MBIE informed of changes to their status, processes and systems. This could help inform whether MBIE may wish to undertake an out-of-cycle audit to ensure the MCM continues to meet registration requirements following the change.

## **Audit Processes**

### **20. The modular component manufacturer accreditation body must use a prescribed process to decide appropriate audit procedures and audit frequency to apply to modular component manufacturer certification bodies**



To enable the appointed accreditation body to tailor the kinds of audit procedures they use and the frequency at which it uses them for different MCM certification bodies. It is proposed that in considering audit procedures and frequency to use for any individual MCM certification body, the MCM accreditation body must consider:

- the outcome of any risk assessment of the MCM certification body
- the MCM certification body's previous performance in the scheme
- any complaints or other feedback about the MCM certification body
- the MCM certification body's history of compliance with relevant requirements in the Building Act, the proposed regulations and any scheme rules made under section 272ZG of the Bill
- any other factors the MCM accreditation body considers relevant.

Audits may take place at intervals determined by the MCM accreditation body, but must be at least once every 12 months. It is expected that new MCM certification bodies will be audited more frequently and progressively less often as they build a history of successful audits. Audit procedures may include, but would not be limited to paper-based documentation audits, scheduled onsite audits, full accreditation reassessment, and unannounced spot check audits. Different audit procedures serve different purposes and could give the MCM accreditation body a suite of tools to confirm MCM certification bodies' ongoing compliance with accreditation criteria.

## **21. A modular component manufacturer certification body must use a prescribed process to decide appropriate audit procedures and determine the audit frequency that would apply for the modular component manufacturer for which it is responsible**

MBIE proposed to enable MCM scheme certification bodies to tailor the kinds of audit procedures they use and the frequency at which they use them to different MCMs. In considering audit procedures and frequency, the MCM certification body must consider:

- the outcome of any risk assessment of the MCM
- the MCM's previous performance in the MCM scheme
- the receipt of complaints or other feedback about the MCM
- the MCM's history of compliance with relevant requirements in the Building Act, the proposed regulations, and any scheme rules made under section 272ZG
- any other factors the MCM certification body considers relevant. Audits may take place at intervals determined by the MCM certification body, but must occur at least once every 12 months.

It is expected that new modular component manufacturers will be audited more frequently and progressively less often as they build a history of successful audits. Audit procedures may include but would not be limited to paper-based documentation audits, scheduled onsite audits, full accreditation reassessment and unannounced spot check audits. Different audit procedures serve different purposes and could give the MCM certification bodies a suite of tools to confirm compliance with the scheme. MBIE expects that the scheduling and processes for audits will be agreed between MCM certification bodies and MCMs as part of their contractual service agreement. This is also where fees would be agreed.

**22. Following the completion of an audit, the modular component manufacturer accreditation body and certification bodies must issue an audit report to the audited party and to MBIE in a timely manner**

MBIE proposed to require a record of an audit's finding to be provided to both the audited party and MBIE following the audit. This would include any recommendations or changes that the audited party may need to make before it passes the audit and receive an audit certificate. The audit report would need to be provided efficiently following the audit so it does not unnecessarily delay the audited party's activities. Further detail about audit reports, including specific information to be included in them, maybe prescribed through scheme rules.

**23. Modular component manufacturers and certification bodies must make any changes required by an audit report within three months of receiving that audit report**

MBIE proposed to provide MCM scheme certification bodies and MCMs with a three month timeframe in which to make changes outlined in an audit report that are required for them to meet relevant accreditation or certification criteria. If three months pass without the audited party making the required changes, its accreditation or certification could be suspended or revoked by the auditing party. Note that if an MCM accreditation body or certification body identifies a significant non-conformance during an audit, it can suspend the audited party or request MBIE urgently suspend their registration until it is rectified.

**24. When a modular component manufacturer or certification body passes an audit and has made all changes required by the audit report, the modular component manufacturer certification and accreditation body must issue an audit certificate to the audited party in a timely manner**

MBIE proposed to require the appointed accreditation body and MCM scheme certification bodies to issue a formal audit certificate to the audited party that confirms the audit has had a successful outcome. The proposal includes requiring the certificate to be provided efficiently following the audit so it does not unnecessarily delay the audited party's activities.

## **Modular Component Manufacturer Certificates**

**25. Prescribe requirements for certificates to be issued at building consent application stage by registered modular component manufacturers that are certified to 'manufacture' modular components**

MBIE proposed that the following information be included in manufacturer's certificates issued at the building consent application stage by registered MCMs that are certified to manufacture modular components:

- **MCM details**, including legal name, trading name and New Zealand Business Number where applicable, address for service in New Zealand, contact details, internet site and internet link to information about the MCM's complaints process.
- **Responsible MCM certification body details**, including legal name, trading name and New Zealand Business Number where applicable, address for service in New

Zealand, contact details, internet site and internet link to information about the MCM certification body's complaints process.

- **MCM certification details**, including certificate number, issue date, scope of certification, statement about audits that have taken place, disclaimer that MCM takes responsibility for the modular component for which this certificate has been issued.
- **Modular component manufacturing specifications**, which set out information about the manufacturing processes to be used for the modular component.

## **26. Prescribe requirements for certificates to be issued at building consent application stage by registered modular component manufacturers that are certified to 'design and manufacture' modular components**

MBIE proposed that the following information be included in manufacturer's certificates issued at the building consent application stage by registered MCMs that are certified to 'design and manufacture' modular components:

- **MCM details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New Zealand, contact details, internet site and internet link to information about the MCM's complaints process.
- **Responsible MCM certification body details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New Zealand, contact details, internet site and internet link to information about the MCM certification body's complaints process.
- **MCM certification details**, including certificate number, issue date, scope of certification, statement about audits that have taken place, and disclaimer that the MCM takes responsibility for the modular component for which this certificate has been issued.
- **Modular component manufacturing specifications**, which set out information about the manufacturing processes to be used for the modular component.
- **Modular component design specifications**, including a statement regarding the specific modular component's design, compliance with relevant Building Code performance requirements and any testing it has undergone/will undergo, limitations on its use, and an internet link to further information and design details that cannot be included on certificate.

## **27. Prescribe requirements for certificates to be issued at code compliance certificate application stage by registered modular component manufacturers that are certified to 'manufacture' modular components**

MBIE proposed the following information be included within manufacturer's certificates issued at code compliance certificate application stage by registered MCMs that are certified to manufacture modular components:

- **MCM details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New Zealand, contact details, internet site and internet link to information about the MCM's complaints process.
- **Responsible MCM certification body details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New

Zealand, contact details, internet site and internet link to information about the MCM certification body's complaints process.

- **MCM certification details**, including certificate number, issue date, scope of certification, statement about audits that have taken place, and disclaimer that the MCM takes responsibility for the modular component for which this certificate has been issued.
- **Manufacture statement**, which confirms that the modular component(s) that have been manufactured, stored, transported to site and installed according to the consented design, comply with details of the manufacturer's certificate that was issued at building consent application stage.

This proposal will make certified and registered manufacturers responsible for the transportation, storage and assembly of modular components that they manufacture within the scheme. Certified and registered manufacturers are considered best able to control and limit risk from these factors, so it is appropriate for MCMs to take responsibility for them

## **28. Prescribe requirements for certificates to be issued at code compliance certificate application stage by registered modular component manufacturers that are certified to 'design and manufacture' modular components**

MBIE proposed that the following information, be included in manufacturer's certificates issued at the code compliance certificate application stage by registered MCMs that are certified to 'design and manufacture' modular components:

- **MCM details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New Zealand, contact details, internet site and internet link to information about the MCM's complaints process.
- **Responsible MCM certification body details**, including legal name, trading name and New Zealand Business Number (where applicable), address for service in New Zealand, contact details, internet site and internet link to information about the MCM certification body's complaints process.
- **MCM certification details**, including certificate number, issue date, scope of certification, statement about audits that have taken place, and disclaimer that the MCM takes responsibility for the modular component for which this certificate has been issued.
- **Design and manufacture statement**, which confirms that modular component(s) that have been designed, manufactured, stored, transported to site and installed correctly and comply with details of the manufacturer's certificate that was issued at building consent application stage.

Any variations from the design provided at building consent stage should also be outlined. Note that this will make certified and registered manufacturers responsible for the transportation, storage and assembly of modular components that they manufacture within the scheme. Certified and registered manufacturers are considered best able to control and limit risk from these factors regarding modular components, so it is appropriate for MCMs to take responsibility for them.

### Annex Three: CBA results in net present value (\$million) over 10-year period

NPV (\$million)	Scenario 1	Scenario 2	Scenario 3
<b>Costs</b>			
Accreditation Body			
One-off compliance costs	\$0.10	\$0.10	\$0.10
Ongoing operating costs	\$0.46	\$0.46	\$0.46
Certification Bodies			
One-off compliance costs	\$0.07	\$0.18	\$0.18
Ongoing compliance costs	\$0.40	\$0.91	\$0.91
Cost of being audited	\$0.06	\$0.14	\$0.14
MCM Suppliers			
One-off compliance costs	\$0.39	\$0.67	\$0.67
Ongoing compliance costs	\$2.86	\$5.37	\$5.37
Cost of being audited	\$0.38	\$0.78	\$0.78
MBIE			
Implementation costs	\$0.10	\$0.10	\$0.10
Monitoring & enforcement	\$1.00	\$1.00	\$1.00
<b>Total costs</b>	<b>\$5.82</b>	<b>\$9.71</b>	<b>\$9.71</b>
<b>Benefits</b>			
Reduced time spent on consenting administration	\$2.98	\$5.81	\$5.81
Avoided delays from consent processing	\$13.71	\$23.85	\$23.85
Avoided consent fees	\$8.65	\$15.05	\$15.05
Avoided inspection fees	\$1.10	\$2.63	\$2.63
Faster build time – cashflow and financing benefits (new growth only)	-	\$8.21	\$8.21
Reduced serious harm incidents in the workplace (new growth only)	-	\$0.16	\$0.16
Construction savings (new growth only)	-	-	\$26.78
<b>Total benefits</b>	<b>\$26.44</b>	<b>\$55.71</b>	<b>\$82.49</b>
<b>NPV</b>	<b>\$20.62</b>	<b>\$46.01</b>	<b>\$72.78</b>
<b>BCR</b>	<b>4.54</b>	<b>5.74</b>	<b>8.50</b>

## Annex Four: Intervention logic for the Building System Legislative Reform Programme

