Enhancing public value for NZ Government owned buildings

Prepared for the New Zealand Green Building Council
Prepared by Beca Limited

29 May 2026

New East Wing, Taranaki Base Hospital

Contents

Appendices

Revision History

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A	Ben Masters	Draft for NZGBC review	9th September 2025
B	Ben Masters	Updated to address NZGBC comments	21st April 2026
C	Ben Masters	Additional minor update	29th May 2026

Document Acceptance

Action	Name	Signed	Date
Prepared by	Ben Masters		29th May 2026
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on behalf of	Beca Limited		

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Executive Summary

This document provides guidance for entities undertaking building construction works in alignment with NZ Government Procurement's (NZGP) sustainability-related requirements.

Changes were made to procurement rules on 1st December 2025. These changes mean that Green Star certification is no longer mandatory for Government owned buildings. However, Government agencies wanting to utilise Green Star to verify health, efficiency and environmental performance can still make the case for this by including Green Star certification in their business proposals.

This report aims to support government agencies and their partners with knowledge and strategies for navigating these changes, with the intent to deliver long-term public value, efficient operation, and sustainability outcomes for government-owned buildings. Emphasis is placed on adopting a robust sustainability framework, establishing responsibilities and accountability, and acknowledging not just initial project costs but whole-of-life value, while aligning with broader government sustainability objectives.

Key Procurement Changes

Previously, procurement rule 69 required that government-owned non-residential projects apply the *Construction Procurement Guides*, which included a range of sustainability related requirements, and a requirement to achieve a minimum 5-Star Green Star certification for projects greater than $9 million (from 1 April 2023).

However, the Construction Procurement Guides no longer include the Green Star certification requirement.

Potential Building project impacts

Green Star compliance (when combined with government specific Green Star focus areas) was used as a proxy for adherence to a range of sustainability requirements within the Construction Procurement Guides.

Government agencies are still required to address sustainability outcomes in their projects. Removal of the Green Star certification mandate means agencies need to demonstrate that they meet these outcomes in different ways if not certifying. This shift carries potential opportunities but also risks. While it offers flexibility, it may impact effectiveness, consistency, and accountability in achieving sustainability outcomes across projects. Some departments may choose to make the case that certification is an efficient way to demonstrate delivery of their objectives.

Suggested Approach

Should government agencies seek to maintain compliance with the Construction Procurement Guides, they could adopt a best practice sustainable design approach, aiming to maximise public value from initial project inception to end of life stages. To be effective, this would follow a structured framework that starts by identifying the most important sustainability drivers considering each agency's core purpose. Key design principles, and clear articulation of target sustainability outcomes could then be cascaded into a comprehensive breakdown of opportunities that align with project objectives so these can be evaluated and managed through the design and construction process. However, it should be noted that writing and managing such a framework comes with its own costs and complexities, particularly for smaller agencies. Work is also needed to stay up to date with the latest science and construction practices and maintain standards.

Establishing robust accountability measures from the outset is crucial to maintaining focus on sustainability throughout the project lifecycle. Without these controls, there is a known risk that sustainability outcomes are often not achieved. The original sustainability goals are diluted through value engineering activities with a

narrow focus on upfront cost. Establishing these accountability measures comes with its own costs and risks. Using existing frameworks with accountability measures can help to avoid these costs.

An early decision should be made on how to validate sustainability outcomes. This should consider the potential costs, benefits, and limitations of either a standardised framework (e.g. Green Star) or a bespoke framework (at portfolio or project level). Green Star certification (or other industry recognised third-party certifications) remains an appropriate approach to manage sustainability outcomes for many agencies and building typologies.

For many projects, the use of a standardised certification framework will represent the best pathway to delivering *Public Value*. This is especially true for "one-off" projects for agencies that do not regularly deliver buildings, and have limited experience or the appropriate internal governance required to implement and manage a bespoke sustainability framework.

For agencies with large capital works programmes or complex buildings, the development of a bespoke Sustainability Framework may represent a good investment, as it could effectively allocate capital to their specific priorities. We note that many standardised sustainability frameworks allow for complex buildings and produce sector specific guidance so that it is tailored to specific building types. For example, the Green Star framework has specific guidance for Healthcare Buildings.

1 Introduction

Beca has been commissioned by the New Zealand Green Building Council (NZGBC) to consider what options may be available to enhance / retain sustainable building outcomes following recent procurement changes.

This summary guidance is intended to support Government departments that are considering next steps following these procurement changes.

The aim of this guidance is to amplify the positive disruption from changes to the procurement rules and help agencies manage the risks associated with implementing sustainability frameworks on projects, helping to deliver building projects that are cost effective and efficient.

Limitations

Beca has a significant track record integrating sustainability outcomes for public buildings including healthcare, defence, education, corrections, police, and crown research institute government agencies, both through standardised frameworks like Green Star, and bespoke approaches.

The recommendations in this guide have been based on this experience in conjunction with general building industry guidance.

This guidance does not replace individual project sustainable design responses and adoption / development of suitable project frameworks should be considered by entities.

This report is provided to NZGBC to provide options / context for their engagement with Crown Entities. This has not been undertaken on behalf of, or with input from these Crown Entities.

2 Changes to NZ Government Procurement

In March 2025 the NZ Government issued a proposed set of updated Government Procurement rules. This included significant implications on the procurement, design and delivery of buildings. This section identifies the key changes that have now been included in the updated rules, and the impact they could have on the building construction sector with respect to sustainable building outcomes.

Previous government procurement sustainability requirements

There were previously several operative government sector sustainability requirements with a focus on social, environmental and carbon reduction outcomes that impact on building design and delivery. These include:

- The Carbon Neutral Government Programme which has been set up to accelerate emission reductions within the public sector
- Broader Outcomes (previously Rule 16) which required each agency to consider, and incorporate where appropriate, broader outcomes when purchasing goods, services, or works. Broader Outcomes are secondary benefits that can address environmental, social, economic or cultural benefits.
- Planning for New Construction Works (previously Rule 69) - Agencies were required to apply the Construction Procurement guides, where appropriate, when procuring construction works, and be able to produce documented evidence of the rationale where they have not been followed.

Within the Construction Procurement guides, sustainable building practices are incorporated through the following:

- A requirement to address Whole of Life outcomes including through-life-cost, benefits and the environment.
- A requirement to create a specific project skills and training development plan for significant construction contracts >$50M and/or >3 years construction programme
- The Sustainable Construction Guidance v1.0 (Oct 2019) requires projects to address environmental impact, social responsibility, and economic efficiency by:
  - Utilising low-impact, sustainable materials
  - Minimising construction waste and re-using existing built assets
  - Minimising energy and water consumption
  - Providing opportunities for employment
  - Improving conditions for workers
  - Supporting prosperous regions and the construction sector

The Construction Procurement Rules also introduced a requirement for new government owned non-residential buildings to use an approved sustainable building rating system. The only approved rating listed was the NZGBC's Green Star Design and As Built rating tool – with a 5 Star rating required.

The Green Star framework covered many of the sustainability aspects that are required by the Construction Procurement guides. This certification (in conjunction with NZGP minimum points requirements) acted as a proxy for the requirements in the Construction Procurement guides and serves to evidence compliance. It also provided independent third-party validation of a building's sustainability credentials, covering design, construction, and building handover phases. Importantly, certification ensured delivery of the procurement rules at the built stage.

This requirement had been in place since 2022 and was implemented on the following government owned building typologies:

- Archival

- Crown research institutes
- Crown entities
- Defence
- Hospital / healthcare
- Parliamentary accommodation

Current Procurement Changes

The previous procurement rules evolved over time, resulting in significant amounts of duplicate content and a network of requirements that were challenging to follow and implement in a consistent way.

The government has now provided new rules with the aim of simplifying and streamlining procurement for NZ businesses.

Focus on Public Value

The current Procurement Rules are focussed on delivering better *public value*. This is getting the best possible result from procurement and is intended to deliver Good Quality, Good Outcomes and Good Price. This perspective underpins the Government Procurement Rules, and from a sustainable buildings perspective, replaces some of the more explicit rules related to Broader Outcomes. Proposed Rule 8 (Economic Benefit to New Zealand) is similar in intent as it identifies environmental, social and cultural benefits as being of relevance to the decision-making.

This approach attempts to embed a focus on *public value* throughout all procurement processes and should result in better building outcomes when projects are managed skilfully, with robust processes proportionate to the value, risk and complexity of the project.

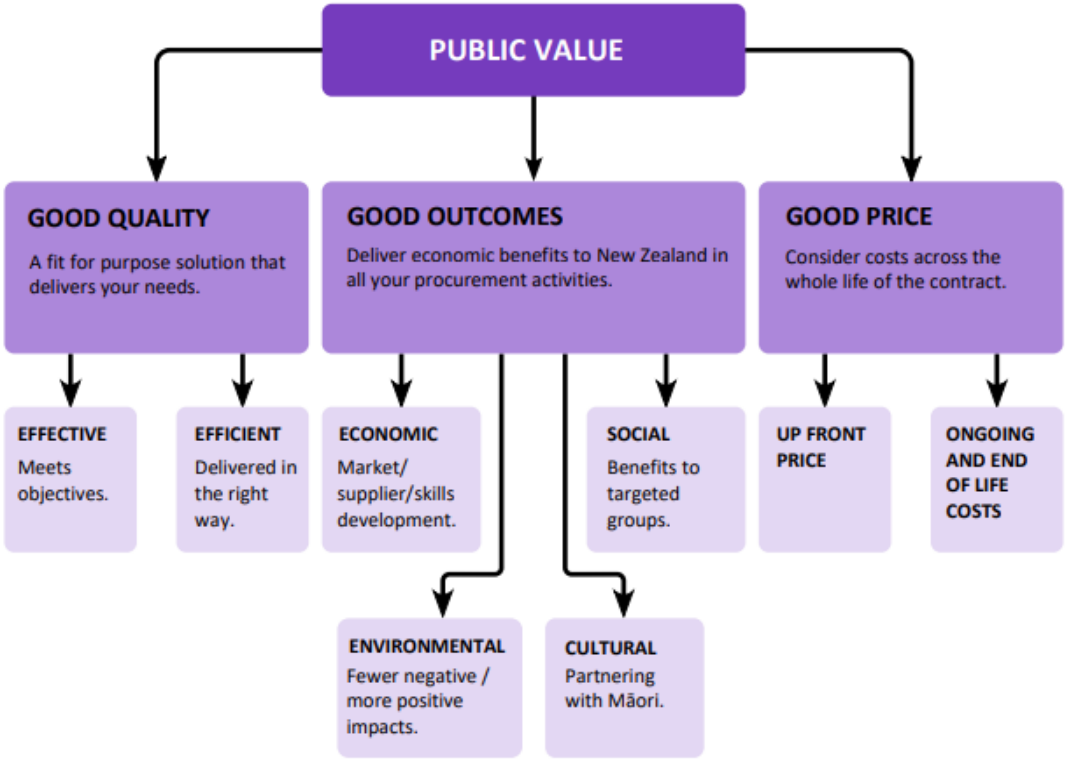


Figure 1 - Public Value diagram reproduced from "GP Rules for consultation"

Building Rating System

The Construction Procurement guides currently referenced under Rule 69 remain operative under the proposed changes. However, the Government has removed the requirement for Green Star certification.

Impacts of the Proposed Changes

The removal of Green Star as a proxy for complying with the sustainability elements of the Construction Procurement guides, and the focus on project specific definitions of *public value*, will introduce some flexibility and variability into the delivery of government-owned buildings.

This presents an opportunity to focus on the most significant sustainability objectives for a building project in the context of the developing agency, directing investment towards the best financial, cultural, environmental and social outcomes in accordance with proposed Rule 8 (Economic Benefit to NZ).

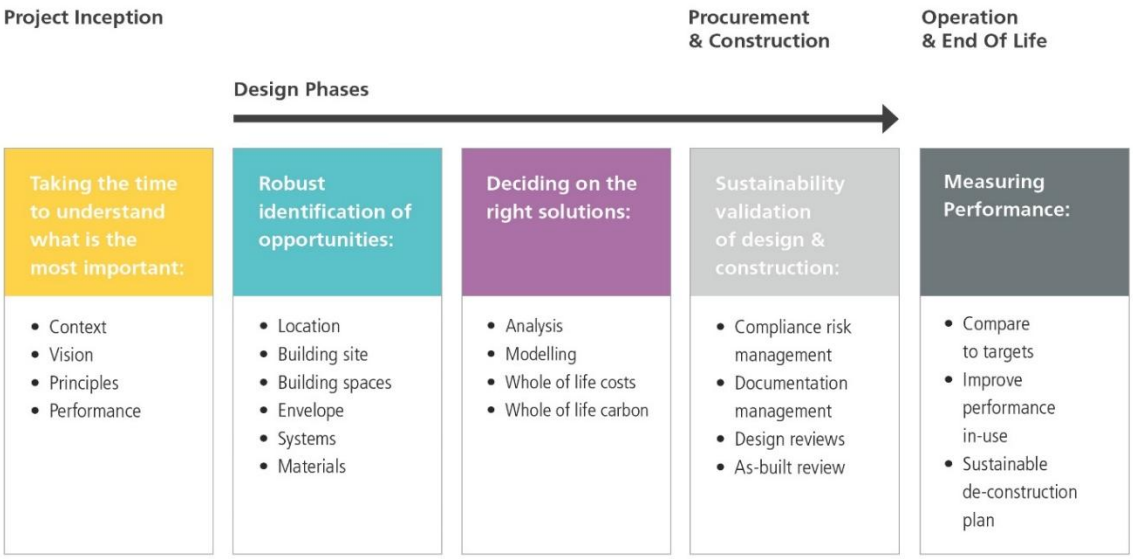
To successfully do this, a robust and skilfully implemented process of managing these wider economic costs and benefits at the project level is required. There is a risk that, without a robust framework to help manage these perspectives in the project, public value will be diminished.

3 Approach to Project Delivery

This section describes a best-practice approach to incorporating sustainability objectives and targets into a project's design and construction. This approach focuses on delivering *Public Value* by implementing a robust and rigorous process of identifying, assessing, and managing sustainability-related risks (both threats and opportunities).

The following diagram describes the process that we recommend on building projects. It starts by identifying the most important sustainability drivers. It takes into account the project context and provides an overall vision for the project, key design principles, and clear articulation of target outcomes. For a government agency, this should align to *Public Value*, and act as the underlying driver behind subsequent activities.

The design management phase involves the identification of opportunities, analysis to inform decisions (including whole of life studies), and the validation of sustainability outcomes. Monitoring of performance helps with benefits realisation work and informing future projects.



In our experience, success occurs when a framework:

- Maintains a focus on organisational level outcomes
- Has mechanisms to negotiate compliance in line with organisational delegations of authority
- Is proportionate to the outcomes available, and strikes the right balance between explicit requirements, design processes, and reporting
- Unifies the objectives of the project team and provides a "way of thinking" to the design process
- Challenges the project team to seek innovations
- Requires the project team to provide feedback on financial impacts of the framework and its design response
- Requires the project team to report on project decisions against the framework priorities
- Establishes project governance that holds the team accountable
- Establishes an assurance process to validate sustainability claims
- Helps identify risks of green washing or reputational damage

Further details on the recommended process are presented in Appendix A along with a description of emerging focus areas that are being included in sustainability frameworks for buildings.

4 Sustainability Framework Options for Consideration

When agencies are establishing a sustainability framework, three core options could be considered:

1. **Bespoke project framework:** Develop and adopt a specific sustainability framework for individual projects
2. **Bespoke agency portfolio framework:** Develop and adopt an agency specific sustainability framework to consistently cover all agency related building projects
3. **Industry certification:** Adopt a standardised certification framework as a means of demonstrating sustainability outcomes have been achieved

Each option presents potential benefits and drawbacks. Selected key considerations have been compared that will each influence the delivery of effective sustainability outcomes:

Key Considerations	Bespoke project Framework	Bespoke agency portfolio framework	Green Star Certification (5 Star)
Addresses government priorities			Addresses industry consensus and generally aligns with Government priorities
Ability to demonstrate Rule 69 has been met			
Framework development costs (per project)	Dependent on extent of individual projects	Dependent on extent of individual projects	
Flexibility to adjust approaches to suit individual project requirements		Dependent on individual project flexibility within framework	Likely to require project specific rulings, clarifications, and negotiations with rating agency (NZGBC)
Supports the delivery of *Public Value*, recognising agency priorities		Dependent on individual project flexibility within framework	Includes a large number of minimum expectations and compliance pathways that risk some misalignment to broader agency priorities
Management and validation of sustainability outcomes	Requires development of bespoke approach	Requires development of bespoke approach	Validation methodology well understood by industry
Understanding via NZ Construction sector	Requires clear communication of requirements to reduce increased risk allocation	Requires clear communication but understanding should improve over time	Roles and responsibilities well understood by building sector
Quality assurance and accountability	Requires a credible means of holding project team to account	Requires a credible means of holding project team to account	

Preferable
Mid
Least preferable

4.1 Framework Scenario 1: Bespoke Sustainability Frameworks at Project Level

Key Benefits:

- Offers tailor-made solutions specific to individual project needs and constraints
- Encourages innovation in achieving sustainability goals without being constrained by a single certification model
- Allows agencies to leverage unique strengths and circumstances, tailoring approaches to specific project demands

Potential Drawbacks:

- Development and implementation are resource-intensive and require specialist expertise leading to higher individual project costs. Under a design and build delivery model these sustainability requirements must be articulated prior to engagement of a main contractor
- Risk of inconsistency across projects due to variable methodologies
- Lacks the independent assurance provided by third-party certifications leading to a risk of the sustainability approach eroding without accountability and a robust validation methodology at end of construction
- Potential variability in project outcomes due to differing interpretations of guidelines
- Projects may default to initial-cost-driven decisions, neglecting long-term sustainability and economic benefits. Value engineering could undermine critical design elements that offer lifecycle efficiencies
- The absence of a unified framework might lead to fragmentation in sustainability practices, weakening overall impact

4.2 Framework Scenario 2: Bespoke Frameworks at an Agency Portfolio Level

Key Benefits:

- Promotes consistency within government agency approaches, facilitating easier monitoring and benchmarking
- Reduced costs to develop bespoke frameworks per project
- Economies of scale can be achieved by applying uniform standards across multiple projects

Potential Drawbacks:

- Initial establishment requires significant investment in time and resources. Still requires specialist expertise to develop, manage and assess implementation for every project
- May still lack the independent assurance provided by third-party certification
- Needs to cover all potential building typologies within portfolio or include an effective means of deviation that still maintains the integrity of the framework

4.3 Framework Scenario 3: Third-Party Certification (e.g. Green Star)

Key Benefits:

- Provides a clear, structured approach with widespread recognition and credibility through the building sector

- Does not require the creation of a bespoke framework at a project or portfolio level thereby reducing project consulting costs
- Facilitates independent verification, reinforcing accountability and encourages high-performance outcomes and alignment with whole of life cost approach
- Focuses on a number of sustainability themes covering government focus areas
- Simple star rating is easy to understand and promotes engagement via staff (and community), potentially leading to increased staff attraction and retention

Potential Drawbacks:

- Adopting a formal framework risks not aligning sustainable design approach with government agency core purpose and the building's functional requirements – this can often be managed through co-ordination with the ratings agency
- Rating may overshoot government sustainability focus areas (especially for 5 or 6 Star)
- Whole of life cost impact of design opportunities are not assessed by Green Star meaning capital costs may be diverted if not well considered and aligned with project requirements
- Could potentially stifle innovation and sustainability ambition by adhering too rigidly to set criteria, although frameworks such as Green Star are becoming more performance-based these days, meaning that they do not specify means of compliance generally.

5 Potential Approach for Agencies

Agencies could adopt a best practice approach to sustainable design, with the overarching goal of maximising *Public Value* from project inception through to the building's end-of-life. A successful approach requires a structured and intentional framework that aligns sustainability efforts with both the specific agency's core purpose and broader government sustainability objectives.

Integrating Sustainability into a Project Vision

To begin, agencies should take the time to identify the most critical sustainability drivers for each project. These drivers should reflect the agency's core purpose (e.g. whether the focus is on public health, education, infrastructure, or cultural preservation etc.) and align with New Zealand's government sustainability objectives, such as achieving net-zero carbon emissions, promoting resource efficiency, and enhancing community resilience.

The first step in this process involves articulating an overall project vision that defines the intended outcomes for sustainability across all phases of the project's lifecycle. By establishing this vision early, agencies set a strong foundation for integrated decision-making moving forward. This vision could consider:

- A commitment to reducing long-term environmental impacts, including carbon reduction and resource efficiency
- Delivering social value outcomes such as improved accessibility, health and well-being, and local job creation
- Supporting economic sustainability through whole-of-life cost optimisation, ensuring projects deliver long-term value and reduced operational expenses

From Vision to Action: Cascading Key Design Principles

Once the overarching vision is established, it should then be translated into a set of design principles which will guide the project and act as a common language for reporting. These should be supported by measurable performance criteria.

These principles and performance criteria should then inform a comprehensive breakdown of opportunities including specific initiatives and design decisions that align with the project objectives. For example, this could include options like achieving carbon-neutral construction, integrating mātauranga Māori perspectives into design, or providing spaces that foster collaboration and innovation.

Managing and Validating Sustainability Outcomes

An essential early decision is to determine if there is a suitable third-party certification scheme (such as Green Star) that aligns with the project's design principles and targets. This avoids the cost of bespoke framework development and can leverage industry knowledge and capability throughout the supply chain in a more effective way.

Factors to Consider in Decision-Making

Bespoke Frameworks:

- Allows greater flexibility to address unique project needs and agency-specific goals
- Can reduce upfront certification costs, though may involve additional cost, effort and expertise to develop

- Risks variability in execution, making consistent accountability harder to achieve without rigorous governance

Third-Party Certification:

- Offers an independent, credible mechanism to validate sustainability performance
- Aligns with industry-recognised best practices, minimising ambiguity in implementation
- Ensures transparency for stakeholders, including accountability to taxpayers
- Familiarity within industry and supply chain

Agencies should evaluate these options based on factors such as:

- Alignment with the project's scale and complexity
- Long-term benefits and return on investment
- Stakeholder expectations for validation and reporting

Regardless of the chosen path, it is vital to formalise strategies early in the process to avoid ad hoc approaches during later phases of the project.

Accountability Mechanisms

Establishing robust accountability measures from the outset is crucial to maintaining focus on sustainability throughout the project lifecycle. Without these controls, there is a known risk that sustainability outcomes may be diluted through "value engineering" activities with a narrow focus on upfront cost.

Key strategies to mitigate these risks include:

- Governance Structures
- Performance Monitoring
- Whole-of-Life Costing

These measures come with their own costs and deployment effort.

Conclusion

Adopting a sustainable design approach requires deliberate leadership, detailed planning, and ongoing accountability. By starting with a well-defined project vision based on both agency-specific priorities and national sustainability goals, government agencies can position themselves to deliver buildings that perform well across every stage of their lifecycle.

Integrating a robust and rigorous sustainability framework, creating a mechanism for accountability, and carefully validating sustainability outcomes helps to support high-value, resilient, and impactful public infrastructure.

For many projects, the use of a standardised certification framework will represent the best pathway to delivering *Public Value*. This is especially true for "one-off" projects for agencies that do not regularly deliver buildings, and have limited experience or the appropriate internal governance required to implement and manage a bespoke sustainability framework.

For agencies with large capital works programmes or complex buildings, the development of a bespoke Sustainability Framework may represent a good investment, as it could effectively allocate capital to their specific priorities. It is important that any bespoke framework is backed by a robust assurance regime to make sure that value is not being diluted through the design and construction process.

A

Appendix A – Incorporating Sustainability

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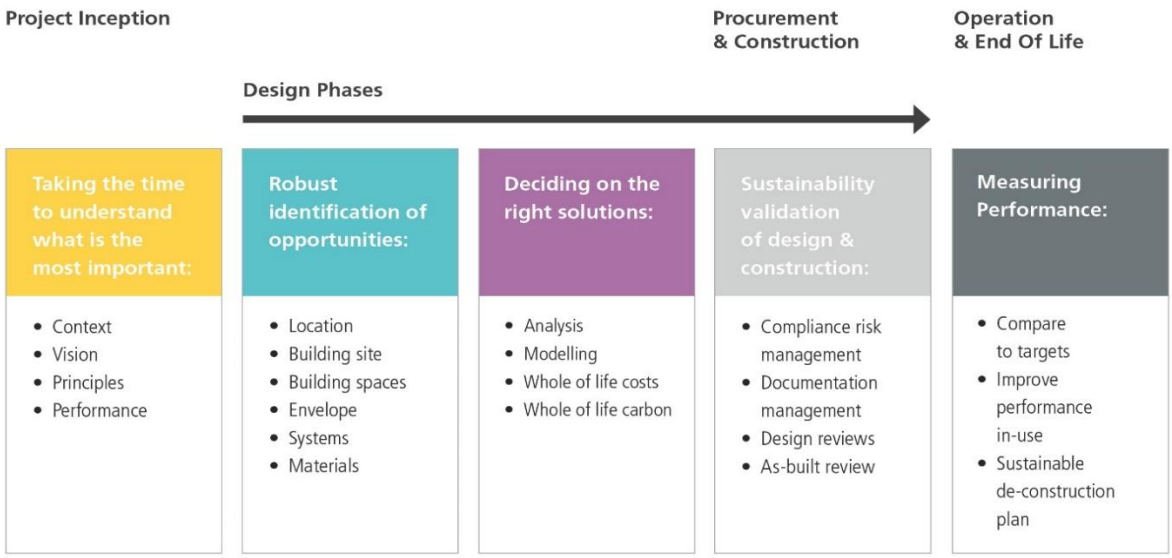
The following diagram outlines the suggested steps for incorporating government and agency specific sustainability objectives into a project across the delivery life-cycle.



Project Inception

- Establish sustainability as a core priority. Take the time to establish a clear vision that aligns with overall government sustainability policies and unique government agency core purpose
- Translate this vision into project design principals and targets
- Establish project team roles and responsibilities
- Determine the means of sustainability validation whether this be via third-party certification or use of a bespoke framework. This framework could be at an individual project or agency portfolio level
- Identify a project budget estimate that aligns with this sustainability strategy
- Include these requirements into procurement documentation prior to the engagement of the project design or construction team (Principal's requirements – Sustainability)

Design Phases

- Identify "must-have" design approaches and opportunities
- Create a register of sustainability opportunities to be analysed and assessed against project objectives
- Promote the use of an integrated design approach utilising computer modelling analysis to inform a number of key performance attributes:
  - Environmental performance – energy, operational carbon, daylight / glare, thermal comfort
  - Upfront embodied and whole of life carbon
  - Whole of life cost impact of selected opportunities e.g. HVAC plant and system options, renewable energy generation
- Review and measure sustainability performance and alignment with targets after each major design stage

Procurement and Construction

- Embed sustainability requirements of the contractor within tender documents. This will be essential to include clearly articulated sustainability requirements within Principles requirements documentation for design and build project delivery models
- Set measurable Key Performance Indicators (KPIs) to track and report progress toward sustainability targets, with regular audits to maintain accountability

Operation and End-of-Life

- Include the requirement for comprehensive commissioning of building services
- Complete post-occupancy building tuning to continually improve performance outcomes
- Establish procedures for evaluating the realised sustainability outcomes via post-occupancy reviews once the building is operational. This offers invaluable insights for continuous improvement in future projects
- Plan for adaptability to accommodate future needs, minimising the need for extensive renovations
- Consider deconstruction and material reuse at the end of a building's life to minimise landfill impact

Accountability Mechanisms: Preventing Erosion of Sustainability Objectives

Establishing robust accountability measures from the outset is crucial to maintaining focus on sustainability throughout the project lifecycle. Without these controls, there is a known risk that sustainability outcomes may be diluted through "value engineering" or cost-cutting exercises during design refinement or construction stages.

Key strategies to mitigate these risks include:

Governance Structures:

- Assign clear roles and responsibilities to ensure sustainability objectives are championed at all levels of decision-making
- Include sustainability leads or advisors in governance teams to provide oversight throughout the project

Performance Monitoring:

- Embed sustainability key performance indicators (KPIs) into procurement requirements and contracts, ensuring all stakeholders are aligned
- Conduct regular checks during design and construction to verify compliance with agreed-upon goals and commitments

Whole-of-Life Costing:

- Mandate whole-of-life costing as a decision-making tool, ensuring that long-term operational savings and residual asset value are prioritised over initial capital cost reductions
- Implement regular reviews to reassess the value of critical sustainability features throughout the project cycle

Other Considerations

There are a number of key building industry drivers and trends that influence the sustainability impact of New Zealand buildings:

Building Code Changes

Through the Building for Climate Change (BfCC) programme, MBIE are proposing significant improvements in the energy efficiency requirements of the Building Code that will be progressively implemented over time.

Recently upgraded building thermal envelope and HVAC efficiency requirements have already been included.

Operational Emissions

MBIE are proposing additional implementation of operational energy and carbon caps for buildings. The proposed changes also include limits on water consumption, requirements for low carbon transport and a banning of on-site fossil fuel combustion and internal temperature limits.

Embodied Emissions

The BfCC programme also proposes a requirement for all new buildings to report on Upfront Carbon Emissions associated with material supply and construction. This will initially be a reporting requirement only.

New Zealand CIC Guidelines

The New Zealand Construction Industry Council guidelines serve the following purpose:

- To clearly define and communicate to all parties involved in a project
- Responsibilities each party has through all project stages
- The interactions and coordination required between all parties

The Guidelines underwent a revision in late 2022 to reflect the strategic imperatives of both NZCIC and the government on the topic of sustainability in construction.

The updated guidelines now represent a benchmark for good practice sustainability scope for the construction sector and includes many aspects that are covered by the Construction Procurement guides and the Green Star framework.

Te Ao Māori

The Māori world view acknowledges the interconnectedness and inter-relationship of all living and non-living things. Integrating both Māori design narratives and design processes into development is increasingly important as it respects Te Tiriti o Waitangi obligations and Mana Whenua's role as a partner.

Bringing a Māori world view to projects through "Te Aranga Design Principles" (TADP) compliments and supports sustainability objectives. This covers not only cultural integration, but environmental, social, and economic realms.

Social impacts

Promoting building solutions that address the social health of the community. This can come in many forms, for example:

- Allowing construction workers to feel safe and benefit form physical and mental health initiatives
- Regeneration and enhancing the mauri of the environment and communities through partnership and/or leadership by local hapu/iwi
- Adopting a more inclusive view to enable buildings to operate seamlessly with equity and dignity

Biophilia

Biophilia (or biophilic design) is the incorporation of natural elements into building form and design features. Replicating natural forms can provide benefits across a wide range of sustainability metrics such as energy consumption, occupant wellbeing, water consumption, etc. It has gained traction mostly in the healthcare space, with Biophilia seen as a way of promoting healing and recovery.

The use of natural form structures can add significant complexity to building design and construction, but the integration of discrete natural elements, such as planting, atria, natural materials, and water features, are achievable in most building typologies.

Regenerative Design

Achieving absolute sustainability means “meeting the needs of the present without compromising the ability of future generations to meet their own needs”. Regenerative design goes beyond this test, and enhances the ability of future generations to meet their needs by improving the environmental, social, and cultural systems that the building interfaces with.

Whilst this is an incredibly challenging requirement to achieve across these holistic sustainability themes, it is possible to exceed a sustainability threshold for individual outcomes (e.g. local biodiversity, stormwater quality etc) which could be of significant value to the development.

Circularity

Circularity in design refers to the creation of buildings and systems that minimise waste and maximise resource efficiency by keeping materials and products in use for as long as possible. This approach challenges the traditional linear model of “take, make, dispose” by promoting reuse, recycling, and regeneration of materials throughout the building lifecycle.

Circular design strategies can include modular construction, material passports, deconstruction planning, and the use of reclaimed or recycled materials. These strategies not only reduce environmental impact but can also create long-term economic value and resilience in the built environment.

While implementing circularity can introduce complexity in procurement, design coordination, and end-of-life planning, many principles are achievable within standard building typologies. The adoption of circularity is growing across commercial and public sectors, particularly where lifecycle cost and carbon reduction are key drivers.

B

Appendix B – Green Star Certification

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Green Star Overview

Green Star is an internationally recognised rating system to certify the sustainable design of a building. It is administered by the New Zealand Green Building Council (NZGBC) and supported with development input by the Green Building Council of Australia (GBCA). The rating tool provides independent verification of the sustainable design outcomes of a building development and the reduced life cycle impact it has on the environment.

Green Star is a holistic rating tool for the design and construction of new buildings, including major refurbishments. This tool is applicable to every building type and market segment.

Certification is awarded by the NZGBC following their review once the building had been constructed based on as-built construction evidence.

Green Star Buildings

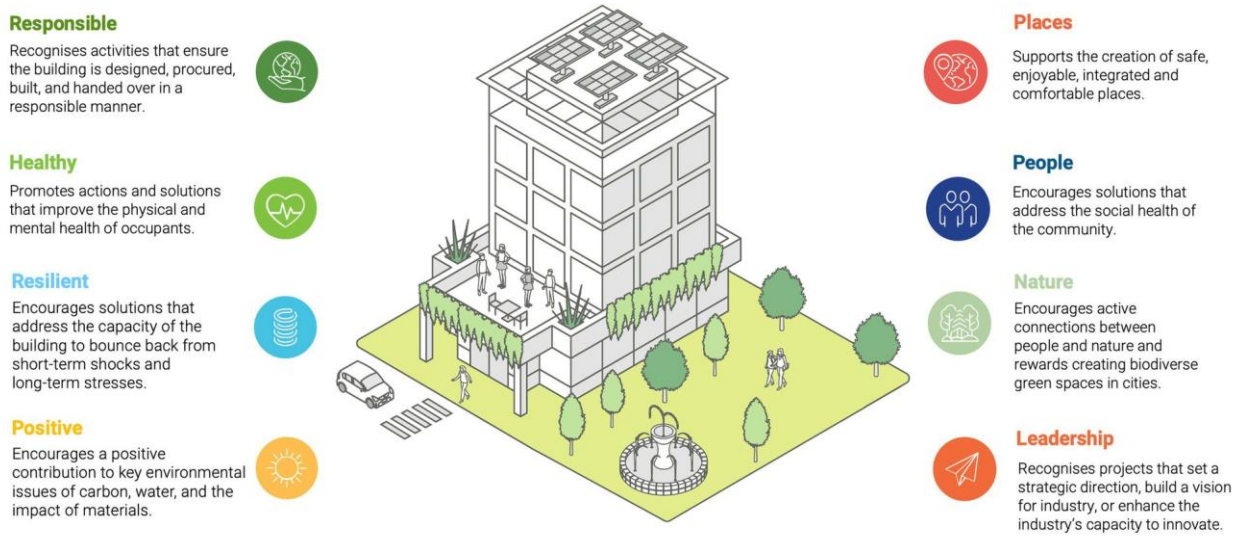
In June 2025 the Green Star 'Design and As-Built' rating tool was retired, and the introduction of its replacement 'Green Star – Buildings' was introduced. This represents the largest update to the Green Star tool in over 5-years and is intended to be the primary certification tool used by the NZGBC for the next decade.

It focuses on setting new benchmarks for environmental, social, and economic sustainability within New Zealand's construction sector. This next-generation tool is specifically designed to align with the goals of transitioning New Zealand to a low-carbon economy while creating healthy, resilient, and future-proofed buildings.

Green Star Buildings (GSB) aims to:

- Introduce new categories and credits reflecting sustainability mega-trends, such as improvements in building performance and responsible procurement of products and materials
- Better align with reporting and ESG requirements for developers and investors
- Establish a clear, well-defined entry point for best practice sustainability ratings (4-Star) by expanding the number of minimum expectations from five to 13, including big ticket items like waste diversion and airtightness testing of the thermal envelope, VOC testing, or climate change risk assessments.
- It also re-calibrates what it means to achieve a 4-, 5-, and 6-Star certification, making the higher ratings harder than before

Buildings are assessed against 8 environmental categories as well as additional credits awarded for innovative solutions.



Key Features of the Green Star Buildings Tool:

Stronger Focus on Net Zero Carbon Goals:

The tool raises the bar for reducing embodied carbon during construction.

It prioritises operational carbon neutrality, ensuring buildings are optimised for energy efficiency and renewable energy use to achieve net zero emissions.

Enhanced Sustainability Focus Areas:

While maintaining its traditional focus on energy, water, and materials, the updated tool introduces more robust criteria for addressing climate change, biodiversity, and urban regeneration.

It promotes circular economy principles, such as reducing waste, reusing materials, and maximising resource efficiency.

Health and Well-being Prioritisation:

New metrics ensure buildings contribute positively to occupant health, comfort, and productivity.

Improved air quality, lighting design, and acoustic performance are prioritised to create healthier indoor environments.

Resilience and Adaptation:

The tool reflects the increasing importance of designing buildings capable of withstanding climate-related disruptions.

Resilience-focused criteria encompass site-specific risks like extreme weather events, flooding, or seismic activity.

Social Value and Cultural Responsiveness:

The tool incorporates cultural considerations, including recognition of Māori perspectives and Te Ao Māori principles within building design.

It encourages buildings to deliver broader community and social benefits, such as training opportunities or improved accessibility.

Flexibility and Applicability:

Designed for modern construction methodologies, the tool can be applied across different building typologies, from offices and schools to healthcare facilities and beyond.

It supports innovation by allowing tailored approaches to meet specific project needs while maintaining high standards.