

Sustainable Construction

Construction Procurement Guidelines

October 2019 v1.0





Construction Procurement Guidelines

The purpose of the Construction Procurement Guidelines is to provide government agencies with guidance on the government's standards of good practice for the development of their construction procurement strategy. The Guidelines are intended to support government agencies to improve the quality and consistency of their construction procurement practices.

The Guidelines consist of a suite of sections, each covering a subject matter area. They are considered to be live documents which we may update and add to, from time to time, to ensure they remain current and relevant. You can download the latest version of each section, along with any accompanying tools and templates, from www.procurement.govt.nz.

To provide feedback on the Guidelines, email procurement@mbie.govt.nz.

Major infrastructure project guidance

Major infrastructure projects by their very nature are large scale and complex – they have bespoke issues, risks and challenges that may require more sophisticated project planning, management, procurement and governance approaches. The New Zealand Infrastructure Commission - Te Waihanga, publishes major infrastructure guidance for projects with a total cost of ownership of greater than \$50m.

For more information about major infrastructure project guidance and the support provided by the Infrastructure Commission, see www.infracom.govt.nz or contact the Infrastructure Commission at info@infracom.govt.nz.

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Sustainable construction

Overview

Sustainable construction considers three elements; environmental impact, social responsibility, and economic efficiency.

Sustainable practices can be incorporated into your construction processes in a range of ways, including:

- utilising low-impact, sustainable construction 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.

Procuring agencies can influence improvements in sustainability through the procurement process by setting expectations for sustainability at an early stage through the project brief, and ensuring that these requirements are reflected in consultants' scopes of service and the tender documents for contractors. Placing a greater emphasis on evaluating consultants' and contractors' capability to achieve these requirements during the tender selection process, will also improve the chances of achieving sustainable outcomes.



Agencies must document how the sustainable construction practices outlined in the guidelines will be implemented in their procurement strategy/plan.



Agencies must consider and incorporate broader outcomes, where applicable, and document their approach to these in their procurement strategy/plan.

The Value Case for Sustainable Building in New Zealand

It's important to consider sustainable construction practices in the business case stage. The Value Case for Sustainable Building in New Zealand is a Ministry for the Environment publication that provides information that you can use to demonstrate the business case for sustainable buildings to key decision-makers. As well as providing relevant case studies, it describes the New Zealand context for sustainable building, along with its economics and implementation.

For more information, see Value Case for Sustainable Building in New Zealand.



Utilising low-impact, sustainable construction materials

Sustainable material use means present consumption levels will not compromise the availability of the material in future, and that environmental harm will not occur as a result. When selecting materials, they should be:

- sourced from other building sites
- from renewable or replaceable sources
- recycled
- naturally plentiful
- of a low whole-of-life environmental impact.

For more information on sustainable material use, see:

- Level.org.nz Material Use
- Information Sheet Benefits of Wood in Construction
- Information Sheet Benefits of Wool in Construction



Minimising construction waste and re-using existing built assets

Building materials make up a significant proportion of all material used worldwide, and construction and demolition waste accounts for over a third of all solid waste generated. There is a need to reduce the amount of waste the construction industry generates through recycling, reusing and reducing.

For more information, see: <u>Broader outcomes guidance on reducing emissions and waste.</u>



Effective design that minimises waste during construction, operation, refit and demolition helps to protect people and the environment, and can generate significant cost savings.

A waste management plan can provide targets and incentives for reducing waste to landfill by setting objectives for waste minimisation and measures that all staff working on the project should follow.

Agencies, designers and contractors should work together to:

- incorporate the principles of the <u>circular economy</u>
- use materials that are durable and can be reused and recycled continually
- reuse and repurpose existing built assets
- design for deconstruction instead of demolition wherever possible
- identify potential types and sources of waste, methods of storage and means of disposal
- agree on appropriate measures to reduce waste, including targets to incentivise reuse/recycling and limits on the percentage of waste to be sent to landfill
- outline on- and off-site responsibilities for waste management
- identify and plan for waste education training.

Resource Efficiency in the Building and Related Industries (REBRI), from BRANZ, provides a range of guides, case studies and tools with a focus on reducing the amount of building material waste generated on construction and demolition sites that would otherwise be sent to landfill.

For more information, see Resource Efficiency in the Building and Related Industries



Minimising energy and water consumption

One of the best ways to achieve sustainable construction is by minimising energy and water consumption.

Sustainable energy use

All energy consumption has environmental impacts. Sustainable energy use means designing buildings to conserve energy, obtaining energy from sources that do the least possible long-term environmental harm (renewable energy) and using it efficiently.

Energy efficiencies can be achieved via a variety of measures, including the use of:

- appropriate thermal insulation
- low-carbon building materials that require less energy in manufacture
- optimised passive design features, such as using natural sunlight for lighting and heating.

Agencies, designers and contractors can work together to:

- employ strategies that reduce power consumption
- identify opportunities to increase the use of renewable energy sources
- create designs that use passive heating and lighting
- regularly adjust building systems for maximum efficiency.

For more information, see EECA Business

Sustainable water use

Efficient use of water, without affecting service levels, helps lower costs and reduces both pollution and health risks. Both indoor and outdoor design should include water saving and management features for both freshwater consumption and wastewater discharge. Water use efficiency and conservation also applies during construction eg mixing concrete, wetting dry surfaces, and washing equipment.

Agencies, designers and contractors can work together to:

- provide water conservation education to staff
- conduct regular checks on installations for leaks
- prioritise the installation of low-flow toilets and bathroom fixtures and fittings
- incorporate efficient water treatment and recycle systems.

For more information, see <u>Level.org.nz - Water</u>



Providing opportunities for employment and upskilling

There are certain population groups in New Zealand that have significant barriers to employment and/or education and training pathways and whose unemployment rates are disproportionate to the 4.3% unemployment rate of the general population (Stats NZ, 2019).

The approach outlined in the Construction Skills and Training guide can be used to incorporate objectives, requirements and targets to help improve social outcomes, and increase the capacity and capability of the construction workforce.

For more information, see Construction Skills and Training.



Improving conditions for workers

The government's commitment to fair employment environments is strengthened through a <u>Supplier Code of Conduct</u> that sets out the Government's expectations of suppliers, including their sub-contractors, in relation to:

- ethical behaviour
- labour and human rights
- health, safety and security
- prompt payment
- environmental sustainability
- corporate social responsibility.

It's important that business practices that help improve conditions for workers are supported. This may include working with suppliers to address forced labour and other forms of modern slavery and initiatives aimed at increasing the living standards of workers and their families.

For more information, see:

- Broader outcomes guidance on improving conditions for New Zealand workers
- Health and Safety guide



Supporting prosperous regions and the construction sector

The Government encourages the development of thriving and sustainable New Zealand regions and a healthy construction sector.

Prosperous regions

Regional economic development is important as a substantial proportion of New Zealanders (49%) live outside of the main urban centres of Auckland, Wellington and Christchurch, and because the regions make a significant contribution (40%) to New Zealand's Gross Domestic Product (GDP).

Government Procurement Rules support providing opportunities for regional businesses, including Māori, Pasifika and social enterprises, to participate in government procurement processes.

For more information, see Broader outcomes guidance on increasing access for New Zealand businesses.

Healthy construction sector

A successful construction sector is critical to New Zealand's social and economic wellbeing. We all rely on the sector for the built environment we live, work and play in and the infrastructure we depend on.

A healthy construction sector is:

- sustainable and resilient
- able to maximise productivity through a high-performance culture
- able to invest in the capacity and capability of its people
- successful and profitable with businesses that have strong balance sheets
- based on trust, confidence and certainty
- focused on the wellbeing of people and communities.

Issues affecting the health of the sector have an effect on projects as contractors and consultants change how they run their businesses. BDO's 2019 Construction Sector Report highlights some of these issues and associated behaviour changes, such as:

- being more careful and selective about which clients they work with, favouring reputable clients and those who make sure healthy margins are maintained (and refuse to work for reduced margins)
- being more selective about which opportunities they tender for, or moving away from tender work in favour of negotiated contracts
- undertaking a more detailed review of conditions of contract and favouring standard forms of contract
- limiting scope of work within their own speciality
- being more diligent about undertaking detailed risk analysis and pricing risk into margins.

For more information, see the 2019 BDO Construction Survey report

You can support a healthy construction sector by:

- allowing contractors and consultants to make fair margins
- appropriately allocating risk
- making prompt payments
- providing pipeline visibility.