



# Ratings Snapshot

Built environment sustainability frameworks commonly used in New Zealand

NZ Green Building Council + Property Council New Zealand

Version 1.0 | September 2022



# Introduction

In Aotearoa New Zealand, as in markets around the world, the links between environmental, social and governance (ESG) reporting, climate risk mitigation and investment appeal continue to grow. From multinational companies to small businesses, organisations are voluntarily setting net zero carbon targets and committing to ESG reporting frameworks that help them to measure performance against their own values and goals, as well as providing a way to communicate their performance to stakeholders and investors.

The built environment contributes 20% of New Zealand's emissions. Building better has the potential to improve health, reduce emissions, and improve resilience to climate change.

A plethora of standards, rating tools and frameworks have emerged to help benchmark and measure various aspects of sustainability with some focussed more on occupier and tenant comfort. Aotearoa's property, construction and investment markets are increasingly adopting these tools to measure and verify that building assets – both residential and non-residential – are demonstrating a level of performance that clients and investors are looking for. This Ratings Snapshot provides an overview of the different rating tools available in Aotearoa and their key objectives, scope, governance and assessment processes.

Given the ever-evolving nature of these tools, this document is not designed as a comprehensive compendium of all sustainability rating tools. Rather, it is intended to provide stakeholders with an overview of the rating tools available in New Zealand and how they may be applied.

The document covers tools across the property sector. Urban communities and infrastructure are also included to reflect New Zealand Green Building Council (NZGBC) and Property Council New Zealand's policy priorities and the interests of our broad member and stakeholder bases.

This Ratings Snapshot has been produced by NZGBC and Property Council New Zealand based on a version originally developed by the Australian Sustainable Built Environment Council (ASBEC) and in consultation with representatives from the rating organisations and managing entities of featured standards and rating tools. 」 NZGBC



## A note to the reader

While every effort was made to ensure the accuracy of this document, all good frameworks are updated from time to time. While we will do our best to keep this document up to date, we encourage readers to get in touch with the local team with any detailed questions. This document has been compiled with information provided by the featured standards and ratings organisations, which is presented in good faith. While every effort was made to capture enough information to allow the reader to gain an understanding of each framework, and to ensure it's accurate, not all information can be presented and detail may have been lost in the interests of readability.

#### **Revisions, corrections or additions:**

NZGBC and Property Council New Zealand reserve the right to change this document and update it to ensure it reflects the strategic objectives and priorities of the respective organisations. NZGBC and Property Council New Zealand will also review the document periodically to ensure it is up to date.

Date of publication: 8 September 2022

## Following up

For detailed information, please consult the website of each framework operator.

To update or otherwise follow up on any details in this document, please contact info@nzgbc.org.nz.

## Why verification matters

The only way to confirm a project complies with a thirdparty verified sustainability standard or scheme is for it to be certified.

Green Star, NABERSNZ and Infrastructure Sustainability (IS) certifications all rely on mechanisms which are repeatable and auditable so that you can trust the certifications as a measure of impact.

Some projects make claims of sustainability standards that are not independently verifiable or transparent. For example, claims that a project has 'Green Star equivalence' or has been 'designed/built to a high NABERSNZ rating', or is 'aligned with the IS Rating Scheme'. These claims are misleading. For example, if claims are made around targeting a specific NABERSNZ rating, these claims must be verified to be true.

There is growing awareness about the misuse of so-called "equivalency".

For example, a report by Ministry of Business, Innovation and Employment found that:

Certification by a rating system can provide independent assurance that what was intended at design stage to achieve good performance in sustainability is what is built. Experience from other countries suggests that if certification does not take place, it is very likely that buildings will not meet sustainability objectives and will not perform to the level they were intended to.<sup>1</sup>

Projects that claim to meet the requirements of trademarked certification schemes, such as Green Star and NABERSNZ, are potentially in breach of trademark rules. It is important to remain vigilant and ensure a project making these claims is verified.

<sup>1</sup>MBIE. 2021. Carbon neutral government programme – Report back on the use of sustainable building rating systems. https://www.mbie.govt.nz/dmsdocument/18636carbon-neutral-government-programme-report-back-on-the-use-of-sustainablebuilding-rating-systems-proactiverelease-pdf



# How to read this document

#### The tables presented in this document are descriptive.

They summarise a significant amount of detail that describes each framework with a view to inform the reader with a high-level outline. This document is not intended to compare the performance of different schemes against each other.

If seeking to apply these frameworks in practice, the reader should confirm the information in this document with the scheme's managing entity.

# **Glossary:**

#### Assessment process

Provides a summary of the process that someone can follow to show compliance or achieve certification under each of the frameworks. There are different types of assessment process:

- Self-assessed, where the user of the scheme declares their compliance with minimum verification.
- Independently verified, where the assessment is verified by a contracted entity separate from the asset owner or developer. The independent entity could be employees from the scheme's managing entity or their governance body.
- Third-party independently verified, where the assessment is performed by a separate entity to the scheme's managing entity and the asset owner. In this scenario, the managing entity can act as an interface between the asset owner and the independent verifier. If this is the case, the scheme operator has the appropriate mechanisms to maintain a high degree of quality and independence.

#### Description

Outlines a brief summary of what the framework is and how it describes itself to its stakeholders.

#### Framework

A guideline, rating tool or rating system that outlines performance or achievement.

#### Governance

Describes the consultation and development method, as well as the mechanism for ongoing maintenance for the framework.

#### Managing entity

Names the entity responsible for managing the governance of the framework.

#### Origin

Describes where the framework was developed.

#### **Quality assurance**

Describes any certification, process, or standard that the scheme follows to ensure the assessment is of high quality.

#### **Rating scale**

Presents the achievement scale for each system. Each framework awards achievement on their own scale (though for some rating systems, a certification is awarded or not, with no scale of achievement attached). The scales in each system as presented in the tables are not comparable. They are just descriptive of the scale within their own system.

#### Sector

Refers to the tool's applicability to a particular industry or sector.

#### **Topics of interest**

Outlines the issues that the framework is covering. The issues change from sector to sector. For example, the residential sector is mostly targeting issues related to homes such as envelope, energy consumption, comfort, and water consumption. At the precinct scale, issues such as governance and socio-cultural sustainability may be included.

#### Type of system

Identifies the scope of the framework. There are two aspects considered:

- Application: Defines whether the system is part of a regulatory framework (e.g., New Zealand's Building Code or the Building Act 2004) or voluntary (where its use is due to market forces or corporate requirements).
- Scope: Defines what the rating tool addresses. A framework can be singleissue (influences or measures one issue), multi-issue (influences two or more issues independently), or holistic (influences multiple issues comprehensively at the same time).

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# Frameworks included in this document



#### **Green Star**

An internationally recognised rating system that aims to create healthy, resilient and positive places for people and the natural environment. Green Star covers new and existing buildings, fitouts, and precincts.

## **IS Rating Scheme**

A comprehensive rating system for evaluating quadruple bottom line sustainability outcomes across the planning, design, construction & operation of infrastructure assets of all types. Rating tools include the following types: Planning, Design and As Built, Operations, Program and IS Essentials (for smaller projects - currently in pilot).

## HomeFit

HomeFit is a no-nonsense, straightforward way to check if an existing home is warm, safe and dry through online self-assessment or by independent assessment and certification.

## CarbonNZero for Building Operations

A building operations certification programme, which gives New Zealand building owners a robust pathway to certify their building operations as zero carbon.

## Homestar

Homestar is a nationally-recognised comprehensive sustainability standard and rating system that sets best practice benchmarks for the design and construction of all housing types.

## NABERSNZ

A rating system (adapted for New Zealand from the National Australian Building Energy Rating Scheme (NABERS)) that measures the energy performance of office buildings.

# Developed internationally

## Core

The Core Green Building Certification (Core) is a framework that outlines 10 best practice achievements that fit within the requirements of Living Building Challenge.

## **Living Certification**

The Living Building Challenge and Living Community Challenge (LCC) together form a rigorous green building and precinct scheme.

## LEED

The Leadership in Energy and Environmental Design (LEED) is a global rating tool that addresses the entire lifecycle of buildings; interior fitouts; and neighbourhoods, cities and communities.

## WELL

A third-party verified certification program which focuses on health and wellbeing outcomes for occupants of buildings by integrating design strategies with improvements to ongoing operational and policy protocols.

## **Zero Energy Certification**

Zero Energy (ZE) Certification is a standard that recognises the highest levels of energy performance that can be achieved by built projects. The program is based on measured energy performance rather than predicted outcomes.

## **Passive House**

A world-leading standard in energy efficient building design. The standard focuses on energy efficiency, health and comfort, and is based on decades of building science and research.

## BREEAM

The Building Research Establishment Environmental Assessment Method (BREEAM) is a sustainability assessment method for masterplanning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle. **NZGBC** 

# Frameworks at a glance

Developed/adapted for New Zealand	Application	Scope	Residential	Non-residential	New	Existing	Precincts	Infrastructure
Green Star	Voluntary	Holistic		•	•	•	•	
HomeFit	Voluntary	Multi-issue	•			•		
Homestar	Voluntary	Holistic	•		•			
IS Rating Scheme	Voluntary	Holistic					•	٠
NABERSNZ	Voluntary	Multi-issue		•		•		
CarboNZero for Building Operations	Voluntary	Carbon		•		•		

Developed internationally								
BREEAM	Voluntary	Holistic	•	•	•	•	•	
CORE	Voluntary	Multi-issue	•	•	•	•		•
LEED	Voluntary	Multi-issue	•	•	•	•	•	•
Living Certification	Voluntary	Holistic	•	•	•	•	•	•
Passive House	Voluntary	Energy	•	•	•	•		
WELL	Voluntary	Health	•	•	•	•	•	
Zero Energy Certification	Voluntary	Single-issue		•	•	•		

Part 1: Most commonly used rating tools in New Zealand

		Green Star	NABERSNZ
Building sta	ge	Planning; Construction; Operational	Operational
Type of syst	em	Multi-issue, voluntary	Single issue, voluntary
Origin		Australia	Australia
Description		Green Star is an internationally recognised holistic rating system that aims to create healthy, resilient and positive places for people and nature, with a strong focus on decarbonising the built environment.	NABERSNZ is a national rating system that measures the operational energy performance of office buildings and tenancies. It creates a fair comparison between different offices by taking into account carbon intensity, climate zone, floor area, occupancy hours and utilisation, based on New Zealand data.
Assessment	t process	Documents are submitted to NZGBC who appoint an independent assessment panel to review the evidence and assign a rating.	A NABERSNZ Accredited Assessor is hired by the building owner. They assess the building and submit the information to NZGBC. Ratings are subject to standard checks and some are selected for third-party auditing.
Governance	•	Green Star is developed in consultation with industry and reviewed by expert technical and industry Advisory Groups. Oversight rests with NZ Green Star Advisory Committee and NZGBC Board. GBCA sublicences Green Star to NZGBC. Green Star trademarks are registered in NZ and maintained by GBCA.	The NABERS scheme was created by the NSW Government in Australia and is licenced for use in New Zealand by the Energy Efficiency Conservation Authority (EECA), a government agency. NABERS is governed by the NSW Government who undertakes consultation with the industry upon any major changes. NZGBC is contracted to administrate the scheme, raise industry awareness, manage and deliver certifications, and build capability through professional development in New Zealand. EECA and the NZGBC look after NABERSNZ's development, adapting any Australian changes to suit the New Zealand context.
	Commercial	New, refurbishments, and operations	Operations or existing building performance
	Retail	New, refurbishments, and operations	
Conton	Education	New, refurbishments, and operations	
Sector	Health	New, refurbishments, and operations	
	Industrial	New, refurbishments, and operations	
	Other	Social infrastructure, railway stations, other	

Part 1: Most commonly used rating tools in New Zealand (cont.)

		Green Star	NABERSNZ
	Net zero targets	•	
	Embodied carbon	•	
	Decarbonised energy source	•	•
	Energy use reductions	•	•
Topics of	Climate resilience	•	
interest	Health & wellbeing	•	
	Materials & waste	•	
	Water use	•	
	Transport & place	•	
	Biodiversity & nature	•	
	Social sustainability	•	
	Higher	6 stars	4-6 stars
Rating scale		4-5 stars	3 stars
	Lower	1-3 stars (operations only)	0-2 stars
Managing entity		NZGBC	Licensed in New Zealand by the New Zealand Government through the Energy Efficiency and Conservation Authority (EECA) and operated by NZGBC.
Quality assurance		All projects are reviewed by third party assessors (auditors) who ensure the projects has fulfilled the requirements listed in the technical manuals.	100% of ratings go through a Level 1 audit compliance check. 10% of all ratings, undergo a Level 2 audit where an independent, third- party auditor verifies the rating by recreating the rating from scratch using the Accredited Assessor's documentation.
Website		nzgbc.org.nz	nabersnz.govt.nz

Part 2: International rating tools with a presence in New Zealand

	Living Building Challenge	CORE	WELL	LEED	BREEAM
Building stage	Construction, Operational, Whole of life	Construction, Operational, Whole of life	Planning; Construction; Operational	Whole of life	Planning; Construction; Operational; Refurbishment
Type of system	Multi-issue, voluntary	Multi-issue, voluntary	Multi-issue, voluntary	Multi-issue, voluntary	Holistic, voluntary
Origin	United States	United States	United States	United States	United Kingdom
Description	The Living Building Challenge (LBC) is a rigorous green building scheme. Living certification is awarded to buildings that comply with the entirety of the standard.	The Core Green Building Certification (Core) is a framework that outlines 10 best practice achievements that fit within the requirements of Living Building Challenge.	WELL is a third-party verified certification program which focuses on health and wellbeing outcomes for occupants of buildings by integrating design strategies with improvements to ongoing operational and policy protocols. Each WELL criterion is designed to address issues that impact the health, comfort or knowledge of occupants through design, operations and behaviour.	Released in 2000, LEED is a global rating tool that addresses the entire lifecycle of buildings, interior fitouts, and neighbourhoods, cities and communities.	BREEAM is a sustainability assessment method for masterplanning projects, infrastructure and buildings.
Assessment process	Certification is based on 12 months of actual building performance data once the building is occupied. Independent auditor reviews documentation which is then reviewed by International Living Future Institute (ILFI) before assigning the relevant full Living or Petal Certification.	Certification is based on 12 months of actual building performance data once the building is occupied. Independent auditor reviews documentation which is then reviewed by ILFI before assigning the relevant full Living or Petal Certification.	Documentation review is performed by Green Business Certification Inc. (GBCI) as the WELL Reviewer. On site performance verification is performed by GBCI or an approved performance testing agent. All WELL Certified projects must pass the on-site performance verification step to confirm that the space is performing as intended.	Documents are submitted to GBCI, an independent entity, who then reviews the documentation and assigns a rating.	Assessments are carried out by BREEAM Assessors. BREEAM Assessors are trained and licensed by BRE to achieve qualified Assessor status. Assessments carried out by BREEAM Assessors undergo a quality assurance process by BRE before achieving certification.
Governance	LBC and its associated programs is developed by the ILFI staff, committees and advisory groups.	LBC and its associated programs are developed by the International Living Future Institute (ILFI) staff, committees and advisory groups.	WELL is developed and managed by the International WELL Building Institute and supported by independent advisories. WELL's third party verified certification is provided by GBCI.	LEED is developed by USGBC staff, committees, and advisory groups. The independent LEED Steering Committee has process oversight. Changes are balloted to the membership for approval.	BREEAM is overseen by an independent Governing Body, responsible for ensuring that it acts with impartiality and in line with its UKAS (UK Accreditation Service) accredited processes. BREEAM works alongside industry experts during the scheme development and approval process.

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Part 2: International rating tools with a presence in New Zealand (cont.)

	Living Building Challenge	CORE	WELL	LEED	BREEAM
Commercial	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Retail	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Education	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Health	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Multi-unit	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Industrial	New and refurbishments	New and refurbishments	New, refurbishments, and operations	New, refurbishments, and operations	New, refurbishments, and operations
Other	New and refurbishments	New and refurbishments	Social infrastructure	Social infrastructure	
Net zero targets	•				
Decarbonised energy source	•	•		•	•
Energy use reductions	•	•		•	•
Embodied carbon	•	•			
Climate resilience	•				
Health & wellbeing	•	•	•	•	•
Materials & waste	•	•	•	•	•
Water use	•	•		•	•
Transport & place	•	•	•	•	•
Biodiversity & nature	•	•			
Social sustainability	•	•	•		•
Higher	Living		Platinum	Platinum	Outstanding
	Petals (7 performance areas)	Core Green Building Certification	Gold, Silver	Gold, Silver	Excellent, Very Good
Lower	-	Core Ready Recognition	Bronze, WELL D&O	Certified	Pass, Good
Managing entity	ILFI	ILFI	IWBI (IWBI has presence in Australia which also manages New Zealand- based projects)	USGBC	BRE Global Ltd
Quality assurance	All projects are reviewed by third party assessors (auditors) who ensure the projects has fulfilled the requirements listed in the technical manuals.	All projects are reviewed by third party assessors (auditors) who ensure the projects has fulfilled the requirements listed in the technical manuals.			UKAS Accredited Certification Body
Website	living-future.org	living-future.org	wellcertified.com	usgbc.org	breeam.com



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# Frameworks for defining net zero carbon in buildings

		Carbonzero Building Operations	Living Building Challenge	Zero Carbon Certification	Zero Energy Certification		
Net ze	ero energy				٠		
Net ze	ero carbon	•	•				
	Highly efficient	•		٠	٠		
Framework Requires	Fossil fuel free	•	•	٠	٠		
	Fully powered by renewables		•	•	٠		
	Reduce embodied carbon (new buildings)		•	•			
	Offset remaining embodied carbon (new buildings)		•	•			
	Offset remaining emissions	•	٠				
Stage		Operational	Construction; Operational	Construction; Operational	Planning; Operational		
Туре с	of System	Single-issue, voluntary	Single-issue, voluntary	Single-issue, voluntary	Single-issue, voluntary		
Origin		New Zealand	USA	USA	USA		
Description		rigin New Zealand   To achieve carbonzero base building certification the building owner must measure the lifecycle greenhouse gas (GHG) emissions required under the international standard for organisational carbon footprints, ISO 14064-1:2018. The emissions are measured annually, and the inventory is independently verified to ensure it is accurate and complete.		To achieve carbonzero base building certification the building owner must measure the lifecycle greenhouse gas (GHG) emissions required under the international standard for organisational carbon footprints, ISO 14064-1:2018. The emissions are measured annually, and the inventory is independently verified to ensure it is accurate and complete.		The ILFI Zero Carbon Certification is the first worldwide Zero Carbon third-party certified standard. The ILFI Zero Carbon Standard states that: One hundred percent of the operational energy use associated with the project must be offset by new on- or off-site renewable energy. One hundred percent of embodied carbon emissions impacts associated with the construction and materials of the project must be disclosed and offset.	Zero Energy (ZE) Certification is a standard developed by ILFI that recognises energy performance of built projects. The program utilises an approach to certification that is based on measured energy performance rather than predicted outcomes.

# Frameworks for defining net zero carbon in buildings

		Carbonzero Building Operations	Living Building Challenge	Zero Carbon Certification	Zero Energy Certification
Assessme	nt process	The project is registered with NZGBC then documents submitted with emissions calculators, carbon reduction plan, public disclosure template, and supporting evidence. Once checks are complete, documents are passed to Toitū Envirocare to audit. Carbon offsets are then procured to offset the residual emissions of the building operations. Certification is valid for 12 months.	Mix of onsite and documentation verification is performed by an independent auditor licensed by ILFI. It is based on a minimum 12 months' actual data of the project once occupied.	12 months' worth of information must be submitted to ILFI for assessment.	Documents are submitted to ILFI, and a third-party audit is conducted. ZE certification is awarded through a two- step process with a Ready Audit upon completion of construction and a Final Audit after a 12-month performance period.
Governanc	e	Developed by NZGBC and Toitū Envirocare.			Written by ILFI staff
Review		After at least 12 months in operation.	After at least 12 months in operation.	After at least 12 months in operation.	After at least 12 months in operation.
	Commercial	•			•
	Retail	•			•
	Education	•			•
Sectors	Health	•			•
	Multi-unit				
	Industrial	•			•
	Other	Yes			
Emissions	boundary	1,2	1, 2, 3	1, 2, 3	1, 2
Managing	entity	NZGBC	ILFI	ILFI	ILFI
Quality ass	surance	ISO 14064-1:2018, PAS 2050			
Website		nzgbc.org.nz	living-future.org	living-future.org	living-future.org

# Frameworks for the construction or refurbishment of homes and apartments

	Homestar	Living Building Challenge	CORE	Passive House	WELL
Building stage	Planning & Construction	Construction	Planning, Construction, Operational	Planning; Construction	Planning; Construction; Operational
Type of system	Holistic, voluntary	Holistic, voluntary	Holistic, voluntary	Multi-issue, voluntary	Single issue, voluntary
Origin	New Zealand	United States	United States	Germany	United States
Description	Launched in 2010, Homestar is an independent rating tool for assessing the health, efficiency and sustainability of single dwelling homes and multi-unit dwellings where the same design (typology) is used for multiple dwellings.	The Living Building Challenge (LBC) is a rigorous green building scheme. Living certification is awarded to buildings that comply with the entirety of the standard.	The Core Green Building Certification (Core) is a framework that outlines 10 best practice achievements that fit within the requirements of Living Building Challenge.	Passive House is a standard for energy efficient building design. The standard focuses on energy efficiency, health and comfort, and is based on decades of building science and research.	WELL is a third-party verified certification program which measures the health and wellness in buildings by integrating design strategies with improvements to ongoing operational and policy protocols. Each WELL criterion is designed to address issues that impact the health, comfort or knowledge of occupants through design, operations and behaviour.
Assessment process	Independent Home Star Assessors (trained and accredited by NZGBC) carry out Homestar assessments then submits the assessment to NZGBC for audit.	Mix of onsite and documentation verification is performed by an independent auditor licensed by ILFI. It is based on a minimum 12 months actual data of the project once occupied.	Certification is based on 12 months of actual building performance data once the building is occupied. Independent auditor reviews documentation which is then reviewed by ILFI before assigning the relevant full Living or Petal Certification.	The PHPP energy balance tool is used to model the design. The model is submitted to an independent PHI- accredited Passive House Certifier along with detailed project documentation for pre-construction verification. During construction, and at practical completion, on- site testing, verification, and documentation for the insulation, airtightness, thermal bridging, mechanical systems (etc) is completed and submitted to the certifier for final verification. The Passive House Institute in Germany performs a final quality assurance check before certification is issued.	Documentation review is performed by Green Business Certification Inc. (GBCI) as the WELL Reviewer. On site performance verification is performed by GBCI or an approved performance testing agent. All WELL Certified projects must pass the on-site performance verification step to confirm that the space is performing as intended.
Governance	Homestar has been developed in consultation with the industry with version 5 being the latest to be reviewed by expert technical and industry Advisory Groups. Oversight rests with the independently chaired Homestar Advisory Committee, Expert Review Panels and the NZGBC Board.	Written by the International Living Future Institute (ILFI) staff.	LBC and its associated programs are developed by the International Living Future Institute (ILFI) staff, committees and advisory groups.	Developed by a rigorous scientific process, the standard and the PHPP energy balance tool is continuously improved by a team of researchers at the Passive House Institute in Germany.	WELL is developed and managed by the International WELL Building Institute and supported by independent advisories. WELL's third party verified certification is provided by GBCI.

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# Frameworks for the construction or refurbishment of homes and apartments (cont.)

**Passive House** 

WELL

Living Building Challenge CORE

Homestar

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Sector	Houses	New and refurbishments	New and refurbishments	New and refurbishments	New and existing	
	Multi-unit	New and refurbishments	New and refurbishments	New and refurbishments	New and existing	New and existing
Origin		New Zealand	United States	United States	Germany	United States
	Net zero energy		•	•	Passive House Plus	
	Thermal envelope	•	•	•	•	
	Energy use reduction	•	•	•	•	
	Decarbonis-ed energy source	•	•	•	٠	
	Ventilation amenity	•	•	•	•	٠
Topics of	Indoor pollutants	•	•	•	•	•
Interest	Comfort	•	•	•	•	٠
	Water	•	•	•		٠
	Climate resilience	•	•			
	Embodied carbon	•	•	•		
	Notes:	Homestar can be used in multi- unit developments where the same design (typology) is used for multiple dwellings.			Detailed modelling and verification requirements	
	Higher	10 stars	Living	CORE Ready Recognition	Passive House Premium EnerPHit Premium	Platinum
Rating scale		8-9 stars	Petals (7 performance areas)	CORE Green Building Certification	Passive House Plus EnerPHit Plus	Gold & Silver
	Lower	6-7 stars	-		Passive House, EnerPHit PHI Low Energy Building	Bronze, WELL D&O
Managing	entity	NZGBC	ILFI	ILFI	Passive House Institute, promoted in New Zealand by the Passive House Institute of New Zealand	IWBI (IWBI has presence in Australia which also manages New Zealand-based projects)
Quality as	surance	Independent auditing and verification by qualified professionals	Independent auditing and verification by qualified professionals		Independent auditing and verification by PHI-accredited certifiers and the PHI	
Website		nzgbc.org.nz	living-future.org	living-future.org	passivehouse.nz	wellcertified.com

# Holistic frameworks for precincts and infrastructure

		Green Star Communities	IS Rating Scheme	Living Communities Challenge
Building stage		Planning; New & revised masterplans	Planning; Design; As Built; Operations	Planning, Design, Construction, Operations
Type of system		Multi-issue, voluntary	Multi-issue, voluntary	Multi-issue, voluntary
Origin		Australia	Australia and New Zealand	United States
Description		Launched in Australia in 2012, Green Star Communities assesses the planning, design and construction of large-scale development projects at a precinct, neighbourhood and/or community scale. In 2016, NZGBC adapted the rating tool to suit New Zealand-based projects	IS is a comprehensive rating system for evaluating sustainability across the planning, design, construction & operations of infrastructure assets.	The Living Community Challenge (LCC) provides a holistic philosophy, advocacy tool and certification process for the vision plan, master plan, construction and evolution of a Living Community.
Assessment process		Documents are submitted to GBCA who appoint an independent assessment panel tasked to review the evidence and assign a rating. If NZ specific issues are identified NZGBC assists with the review.	Documents are submitted to the ISC who appoint independent verifiers tasked to review the evidence and assign a rating. Final certification is confirmed by the ISC.	Mix of onsite and documentation verification is performed by an independent auditor licensed by ILFI. It is based on a minimum 12 months actual data of the project once occupied.
Governance		Green Star is developed in consultation with industry & reviewed by expert industry and technical Advisory Groups. Oversight rests with Green Star Advisory Committee & GBCA Board. It is subject to Australian Competition & Consumer Commission (ACCC) certification trademark rules.	The IS Rating Scheme has be developed in consultation with industry and collaboration with industry advisory groups, subject matter experts and peer reviewers. Oversight rests with the ISCs Internal Technical Panel and the ISC Board.	Managed by the International Living Future Institute (ILFI).
	Planning	•	•	•
Sector	New precinct	•	•	•
	New infrastructure		•	
	Precinct operations		٠	٠
	Infrastructure operations		•	

# Holistic frameworks for precincts and infrastructure (cont.)

		Green Star Communities	IS Rating Scheme	Living Communities Challenge
Topics of interest	Energy & GHG	•	•	•
	Health & wellbeing	•	•	•
	Liveability	•	•	•
	Governance	•	•	•
	Economic	•	•	•
	Sociocultural	•	•	•
	Resource use	•	•	•
	Environmental impacts	•	•	•
	Ecology	•	•	•
	Notes:	Resilience	Place, Resilience, Workforce in IS v2.0/1	Resilience
Rating Scale	Higher	6 Stars	Commended, Excellent, Leading for ISv1.2	Living
		4-5 stars	Bronze, Silver, Gold, Platinum, Diamond for IS v2.0/1	Petal
	Lower			Masterplan certified, Emerging Living Community
Managing entity		GBCA	Infrastructure Sustainability Council	ILFI
Quality assurance		ISO9001		
Website		nzgbc.org.nz and gbca.org.au	iscouncil.org	living-future.org

# How building-scale schemes relate to each other in New Zealand

# Non-residential sector (new construction)

#### GOVERNMENT MANDATED REQUIREMENTS

From 1 April 2022, new non-residential government buildings with a capital value over \$25 million must achieve a minimum of 5 Star **Green Star** certification. From 1 April 2023, this requirement will apply to new non-residential government buildings with a capital value of over \$9 million.<sup>2</sup>

From 1 January 2021, government agencies planning a new build project need to achieve a minimum 5 star NABERSNZ rating.<sup>3</sup>

# Non-residential sector (existing buildings)

#### GOVERNMENT MANDATED REQUIREMENTS

Government agencies entering a new lease, or renewing an existing lease should target a **NABERSNZ** rating above 5 stars and achieve a minimum rating of 4 stars.<sup>4</sup>

Government agencies that own/lease office accommodation at or above 2000m2 are required to achieve a **NABERSNZ** rating by December 2025.<sup>5</sup>

#### VOLUNTARY

For office buildings, Green Star Performance uses NABERSNZ to fulfil the greenhouse gas emissions credit and reward points.

To achieve a CarboNZero Building Operations certificate, buildings will need to meet minimum carbon performance standards through NABERSNZ or the greenhouse gas emissions credit in Green Star Performance. Green Star Performance also recognises the carbonzero Building Operations certification.

# Residential sector (new construction)

#### REGULATION

Homestar's Energy and Carbon Calculator for Homes (ECCHO) and the **Passive House** Planning Package (PHPP) are recognised verification pathways within the **Building Code of New Zealand** (H1 Energy Efficiency Verification Method H1/VM1).

#### GOVERNMENT MANDATED REQUIREMENTS

Kāinga Ora policy requires all of its new homes to achieve a minimum 6 Homestar rating.<sup>6</sup>

#### VOLUNTARY

**Passive House** certification is recognised in **Homestar.** There is an exemption to the heating standard in the Healthy Homes Standards for certified Passive House buildings.

## Residential sector (existing)

#### REGULATION

All private residential rentals must comply with the **Healthy Homes Standards (HHS)**. The **HomeFit** assessment tool can be used to gather and provide the evidence required for compliance with **HHS** and **HomeFit** certification provides an independent check that a home meets **HHS**. A **HomeFit** certificate can be noted in a tenancy agreement as verification of compliance with **HHS**. **Homestar's** ECCHO can also be used to check compliance with **HHS**.

#### VOLUNTARY

HomeFit can be used voluntarily by homeowners, landlords and tenants to check whether a home meets the Healthy Homes Standards. There is an exemption to the heating standard in the Healthy Homes Standards for certified Passive House buildings.

<sup>2</sup> https://www.procurement.govt.nz/procurement/specialised-procurement/construction-procurement/building-rating-systems/ <sup>3 4 5</sup> https://www.procurement.govt.nz/property/lease-and-facilities-management/energy-efficient-buildings/ <sup>6</sup> https://kaingaora.govt.nz/news/healthier-homes-under-homestar/



# Acknowledgement

This document is based on Ratings Snapshot – Built environment sustainability frameworks currently used in Australia, produced by the Australian Sustainable Built Environment Council (ASBEC) in 2021.

ASBEC is the peak body of key organisations committed to a sustainable built environment in Australia. ASBEC's membership consists of industry and professional associations, non-government organisations and government observers who are involved in the planning, design, delivery and operation of our built environment, and are concerned with the social and environmental impacts of this sector. For more information about ASBEC, please visit asbec.asn.au

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## **Property Council New Zealand**

Property Council is the leading advocate for New Zealand's largest industry – property.

Property Council New Zealand is the one organisation that collectively champions property, bringing together members from all corners of the property eco system to advocate for reduced red tape that enables development.

Property is New Zealand's largest industry, making up 15% of economic activity. As a sector, we employ 9% of New Zealand's workforce and contribute over \$41.2 billion to GDP.

A not-for-profit organisation, the Property Council connects over 10,000 property professionals, championing the interests of 550 member companies.

Our membership is broad and includes some of the largest commercial and residential property owners and developers in New Zealand. The property industry comes together at our local, national and online events, which offer professional development, exceptional networking and access to industry-leading research.

Our members shape the cities and spaces where New Zealanders live, work, play and shop.



### **New Zealand Green Building Council**

At the New Zealand Green Building Council (NZGBC) we are passionate advocates for better buildings, because we know that better buildings mean healthier, happier Kiwis.

Created by the sector, we are Aotearoa's leading sustainable building not-forprofit.

We represent hundreds of companies and organisations who believe we can transform our built environment; from large government departments, banks, energy companies, and insurers, to property and construction companies, architects, developers, designers and tertiary education providers.

We believe all New Zealanders deserve to be safe, healthy and happy – at home, at school, at work. Everywhere.

# **Thank you**



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