

# The GBCA and Sustainable Property

Key drivers and future expectations





# What does the Green Building Council of Australia do?

We lead the sustainable transformation of the built environment

**We rate**



**We advocate**

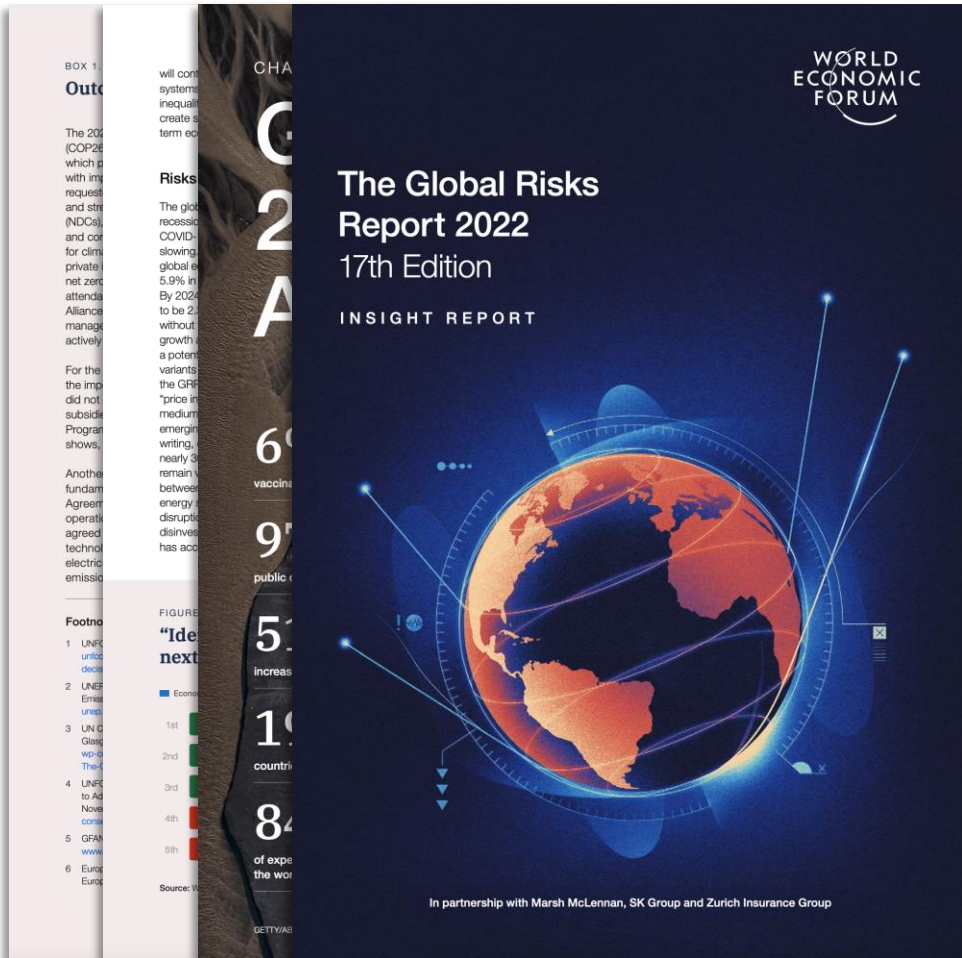


**We educate**



**We collaborate**





# The global risks report 2023

The World Economic Forum asked more than 1,000 global experts and leaders to identify the critical risks of the next decade



# How risks are expected to change over time

Over the next decade, the risk profile for the planet will change\*.

## Short term risks (0-2 years)

1. Cost-of-living crisis
2. Natural disasters and extreme weather events
3. Geoeconomic confrontation
4. Failure to mitigate climate change
5. Erosion of social cohesion and societal polarization
6. Large-scale environmental damage incidents
7. Failure of climate change adaptation
8. Widespread cybercrime and cyber insecurity
9. Natural resource crises
10. Large-scale involuntary migration

## Long term risks (10 years)

1. Failure to mitigate climate change
2. Failure of climate-change adaptation
3. Natural disasters and extreme weather events
4. Biodiversity loss and ecosystem collapse
5. Large-scale involuntary migration
6. Natural resource crises
7. Erosion of social cohesion and societal polarization
8. Widespread cybercrime and cyber insecurity
9. Geoeconomic confrontation
10. Large-scale environmental damage incidents



\*According to the World Economic Forum's Global Risk Report 2023



# The sustainability megatrends





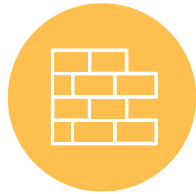
# Challenges and predictions to 2030



Fossil fuel free



From net zero to zero



Upfront carbon



Circularity & resources



Building with nature

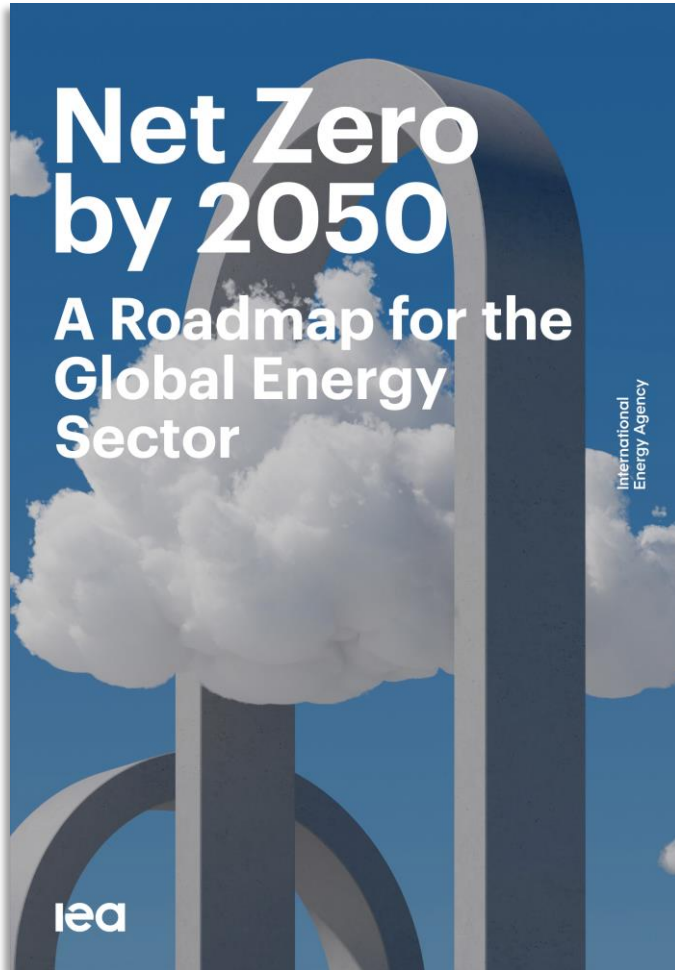


Resilience

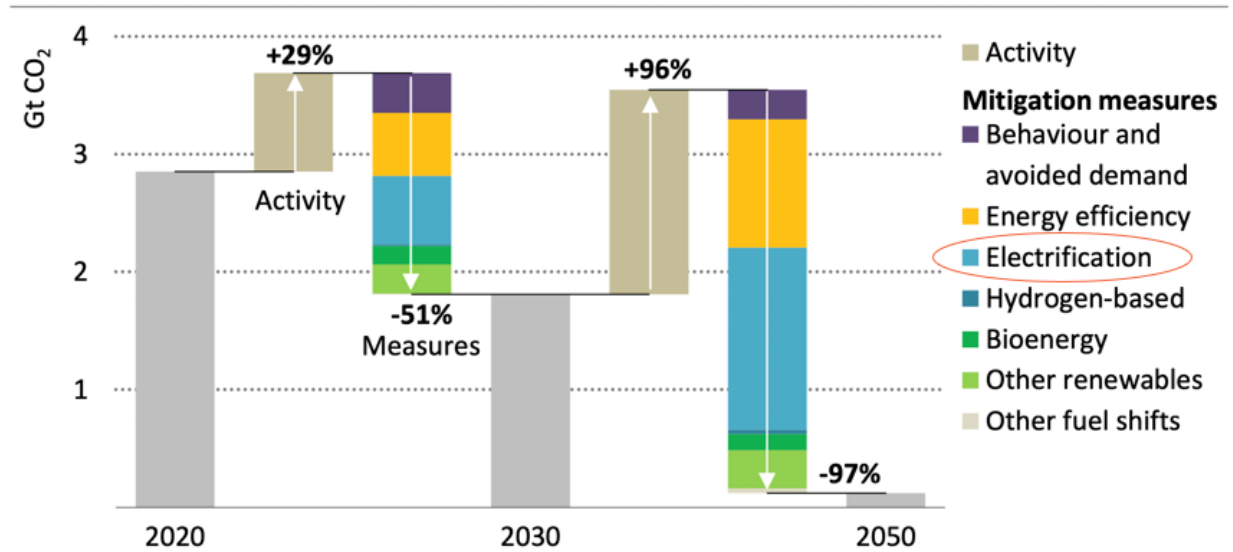




# Electrification of buildings and getting off gas



**Figure 3.27** ▶ Global direct CO<sub>2</sub> emissions reductions by mitigation measure in buildings in the NZE



IEA. All rights reserved.



“Electricity distribution is already well developed in many regions compared to essentially nonexistent hydrogen infrastructure”

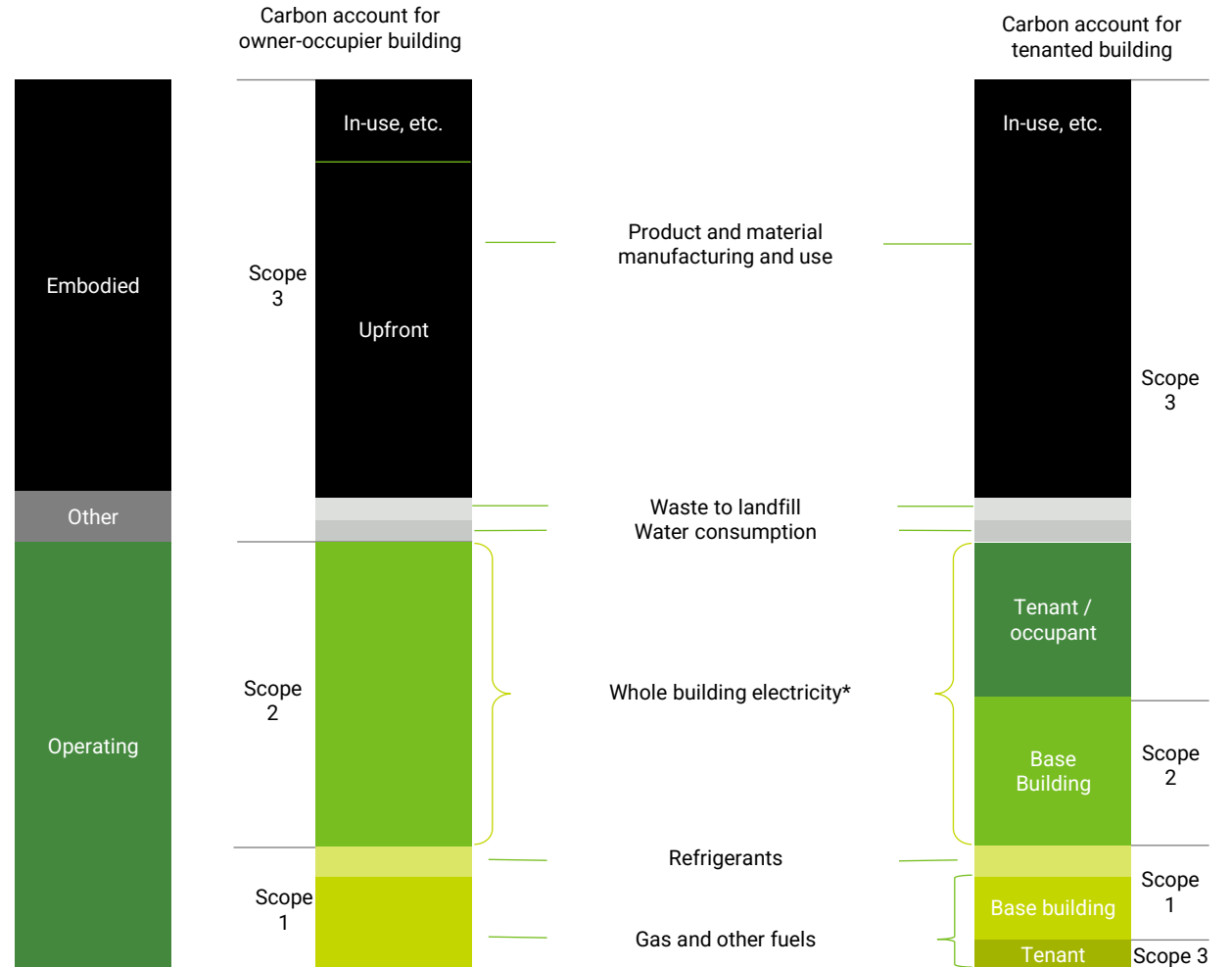
IPCC – Sixth Assessment Report ‘Mitigation of Climate Change’



# These are the emissions of typical buildings over their lifetime

In terms of building emissions, upfront carbon is now the single largest portion of a typical building emissions. This is followed by electricity then gas, refrigerants, emissions from water consumption and waste.

Each of these issues has different strategies that should be followed to address and get to a climate positive future.







# The sustainability megatrends

These are the issues that will drive change in the built environment over the next decade and beyond



- 1 Net zero emissions
- 2 Climate resilience
- 3 Embodied carbon

- 4 Circular economy
- 5 Nature & biodiversity
- 6 Water cycle

- 7 Health and wellbeing
- 8 People and equity
- 9 Community resilience

# EVERY BUILDING COUNTS

Innovating for a greener, healthier  
and more equitable built  
environment

FOR THE FEDERAL GOVERNMENT



Green Building  
Council Australia



PROPERTY  
COUNCIL  
*of Australia*

# POLICY THEMES

## THEME 1

ZERO-CARBON-  
READY RESILIENT  
BUILDING PLAN

## THEME 2

ELECTRIFICATION

## THEME 3

INCENTIVISE HIGH  
PERFORMANCE

## THEME 4

MINIMUM  
STANDARDS

## THEME 5

ENERGY  
MARKET REFORM

## THEME 6

GOVERNMENT  
LEADERSHIP

## THEME 7

ROBUST RATING  
TOOLS FOR ALL  
BUILDING TYPES

## THEME 8

TOWARDS  
ZERO EMBODIED  
CARBON

# THEME 4 MINIMUM STANDARDS

## Key Recommendation:

4.1 Deliver an accelerated trajectory for resilient, all electric, zero-carbon-ready buildings in the National Construction Code.



# THEME 7

## ROBUST RATING TOOLS FOR ALL BUILDING TYPES

### Key Recommendations:

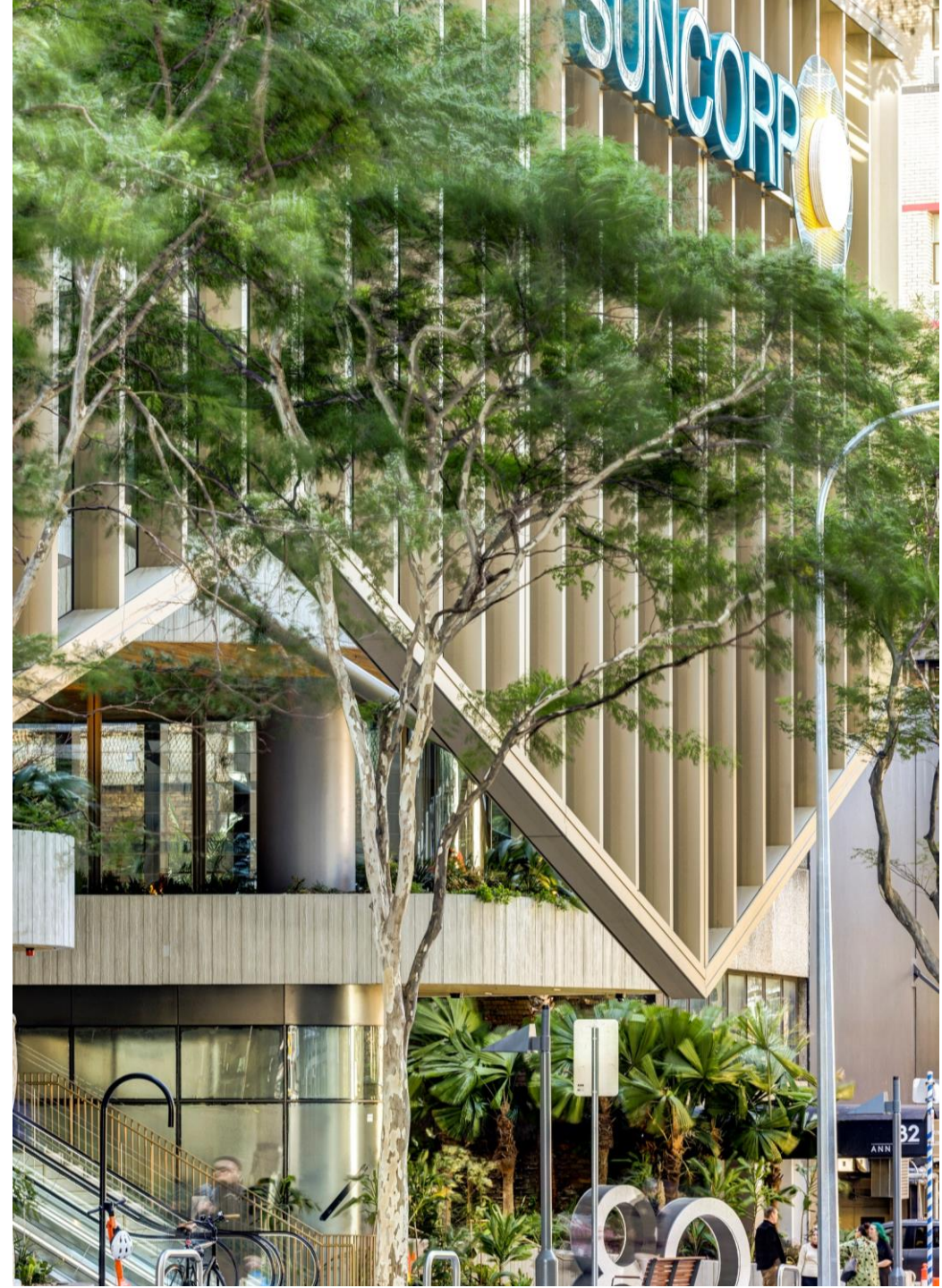
7.1 Expand the coverage of NABERS to all building types and extend the Commercial Building Disclosure Program.

7.2 Empower owners, buyers and renters with a single national rating for home energy performance.





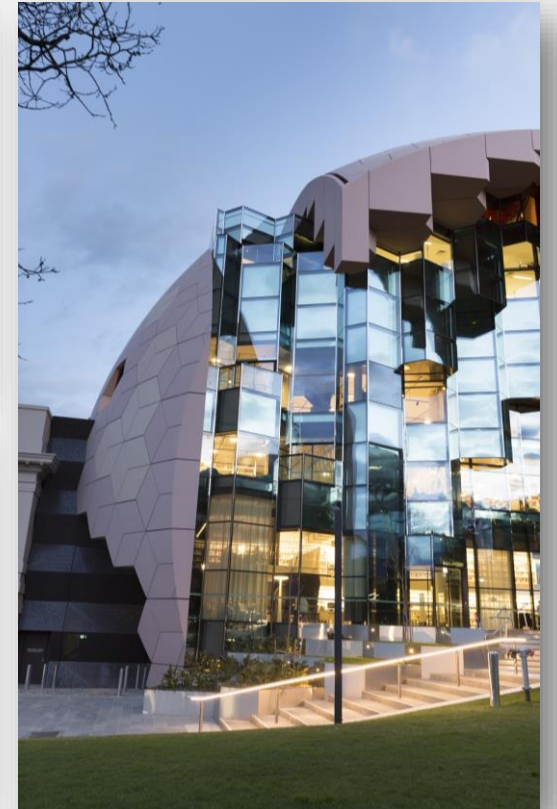
# Translating the megatrends into action: Green Star Future Focus





## We set the standard for Australia

From libraries to hotels and from offices to the biggest regeneration projects in the country, Green Star drives the creation of **healthy, resilient, and positive** places for people and nature.





**Green Star -  
Communities**

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Precinct  
planning and  
development



**Green Star  
Buildings**

Building design  
and  
construction  
  
Supersedes Green Star  
– Design & As Built



**Green Star -  
Performance**

Building and  
portfolio  
operation and  
management



**Green Star -  
Interiors**

Fitout design  
and  
construction



**Green Star  
Homes**

Single dwellings  
by volume  
home builders  
  
Released 2021



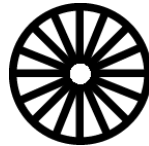


## The definitions and green building standards are changing

Green Star – Design & As Built featured nine categories representing the issues that defined best practice in environmental design.



Management



Transport



Land Use and Ecology



Indoor Environment Quality



Water



Emissions



Energy



Materials



Innovation



## A new definition

Green Star features eight new categories representing the issues that will define the next decade of the built environment.



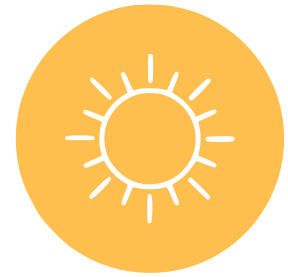
**Responsible**



**Healthy**



**Resilient**



**Positive**



**Places**



**People**



**Nature**



**Leadership**



# Drives leading outcomes

**Green Star Buildings** drives meaningful improvements to the built environment with clear distinction between ratings, and a leading position for 6 Star rated buildings.

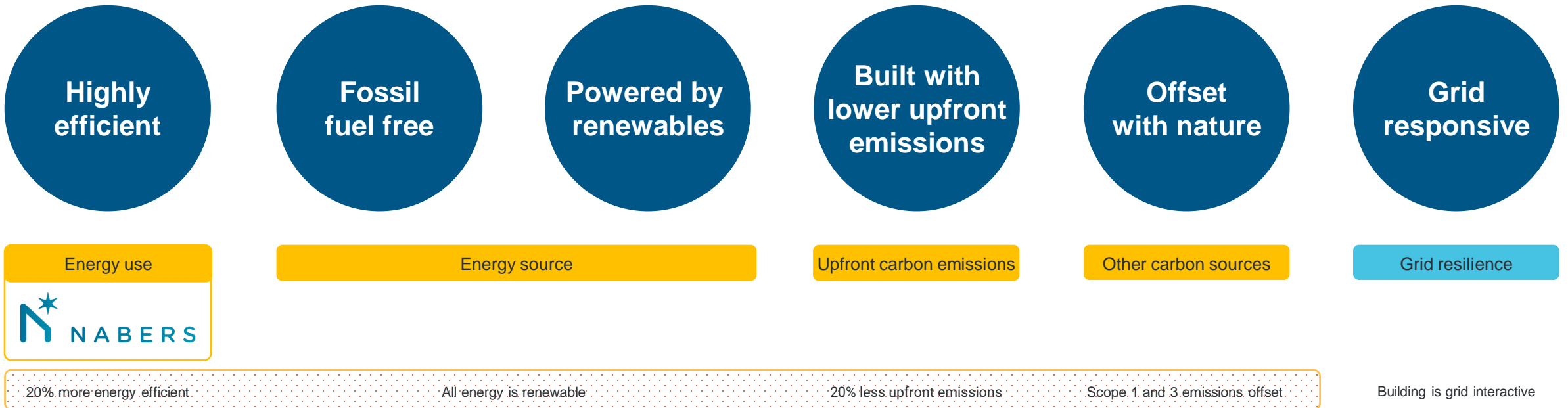




# Green Star Exceeds the Paris Agreement targets

Our new rating tools aim to decarbonize every building with a focus on transformational change.

This is our formula that every building should follow. And every 6 Star and 5 Star rated building does **this** as a minimum.



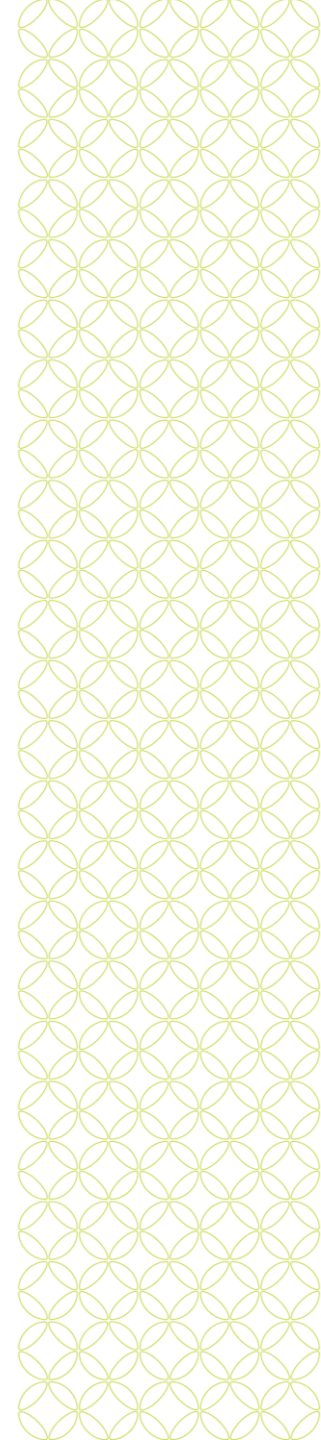
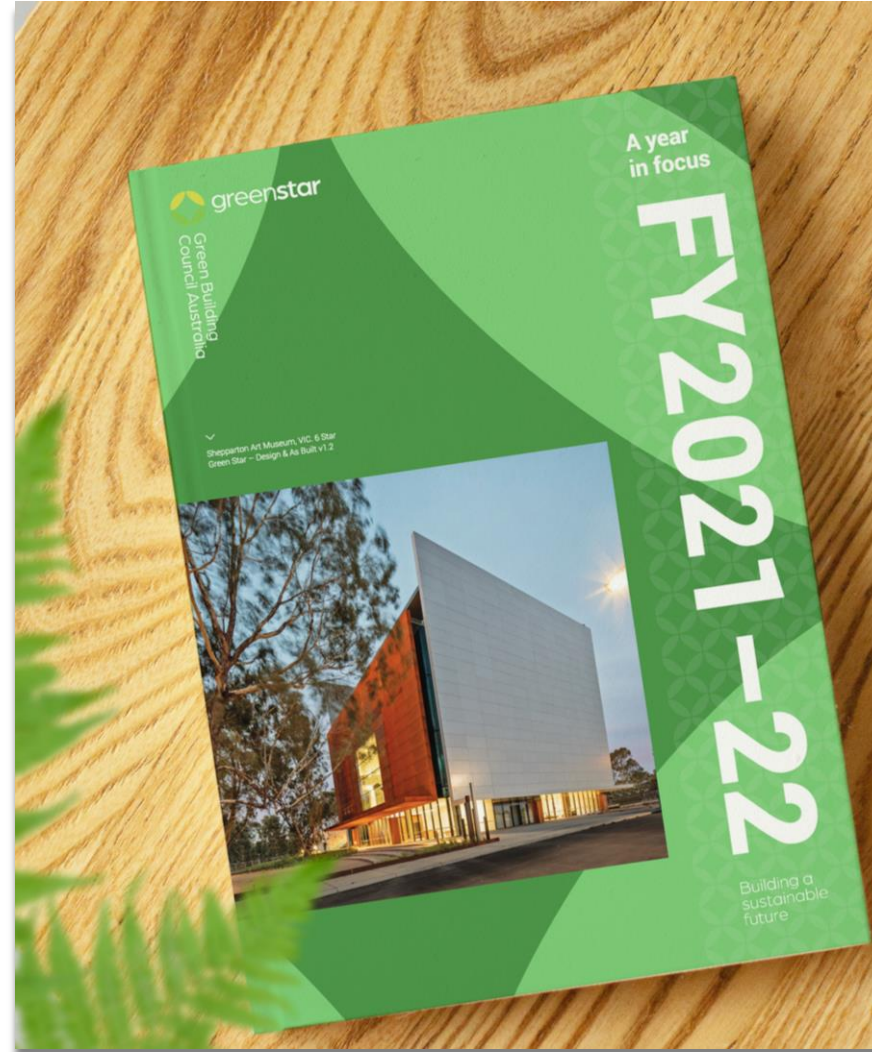
Climate Positive Pathway, required for 6 Star and 5 Star rated buildings



# Green Star: A year in focus

Our annual report provides you with valuable statistics, case studies, and insights to Green Star’s continued success.

Scan the code below or go to [bit.ly/gs-annual-report](https://bit.ly/gs-annual-report) to learn more.





“Companies and industries that are not moving towards zero-carbon emissions will be punished by investors and go bankrupt”

**Mark Carney, Former Governor, Bank of England.**



# External frameworks shaping finance in property



United Nations Sustainable Development Goals



The Global Risks Report 2021



GRESB



IPCC report on climate change 2022



International Sustainability Standards Board



Carbon-risk real estate monitor (CRREM)



Task-force for Climate Related Financial Disclosures



EU Taxonomy on Sustainable Finance



Science-based Targets Initiative



Task-force on Nature-related Financial Disclosure



International Capital Market Association





# Accelerating a net zero built environment through bonds and Sustainability Linked Loans



&



**The following complies with CBI's Commercial and Residential Buildings Criteria:**

- 6 Star Green Star rating under Green Star Buildings rating tool
- All other buildings with a Green Star Buildings rating that follow the climate positive requirements – fossil fuel free, highly efficient and powered by renewables
- All single-family dwellings with a Green Star Homes rating





**Use of Proceeds**  
Green, Social, Sustainability Bonds (“GSS” or “UoP”)

**Core Components:**

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

**Key Recommendations:**

1. Bond Frameworks
2. External Reviews

**General Purposes**  
Sustainability-Linked Bonds (“SLBs”)

**Core Components:**

1. Selection of Key Performance Indicators (KPIs)
2. Calibration of Sustainability Performance Targets (SPTs)
3. Bond characteristics
4. Reporting
5. Verification

**Financial Instrument Guidance**



**Climate Transition Finance**

**Climate Transition Finance Handbook (CTFH)**  
(Guidance may be applied to GSS/UoP Bonds or SLBs)

**Thematic Guidance**



# Green Star and the EU Taxonomy for sustainable finance

**Green Star Performance v2** directly addresses both the *substantial* and *do no significant harm* criteria for existing building renovations and building acquisitions in the taxonomy.

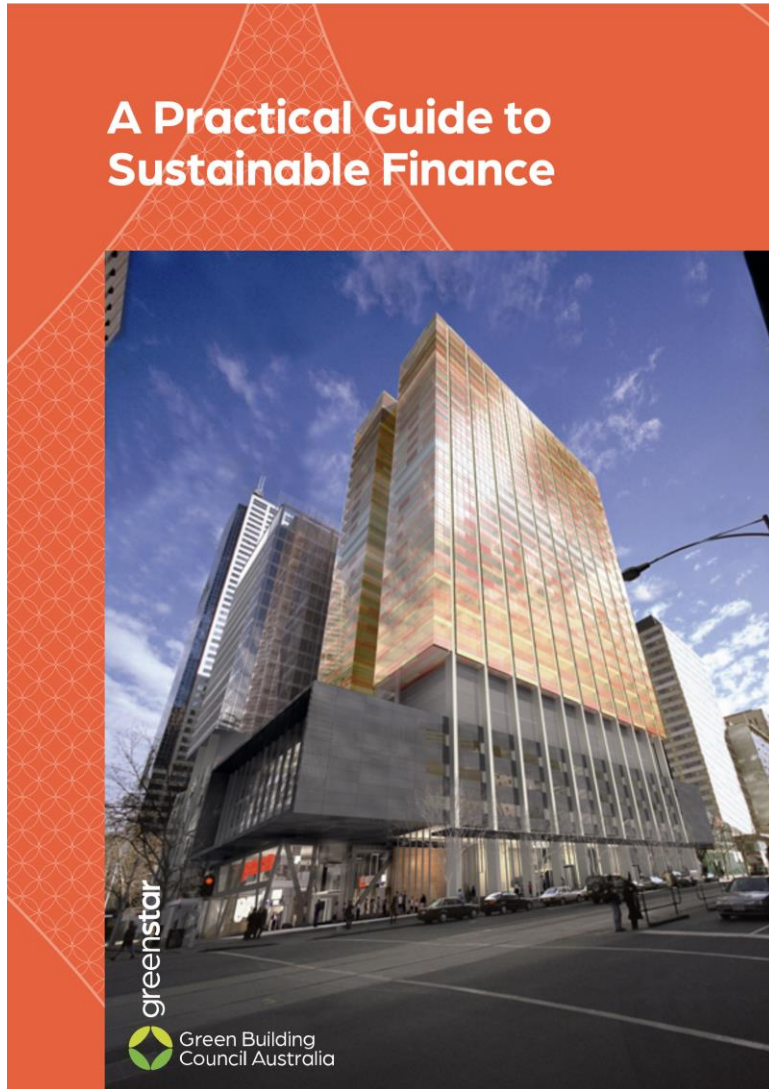
Topic	Requirement for existing building renovations	Requirement for building acquisition	Green Star Performance credit or requirement	Met	Notes
<b>Carbon and energy</b>	<ul style="list-style-type: none"> <li>30% energy savings after refurbishment, or</li> <li>Building sits in the top 15% of each national stock</li> </ul>	The performance of the building must be within the top 15% of the local existing stock.	<b>Climate Positive Pathway</b>	●	4 star rated buildings or above would need to meet this requirement as part of the Climate Positive Pathway.
<b>Circular economy</b>	<ul style="list-style-type: none"> <li>70% of all construction must be recycled or recovered</li> </ul>	-	<div style="background-color: #4CAF50; color: white; padding: 2px;">Responsible resource management</div> <div style="background-color: #FFC107; color: white; padding: 2px;">Waste Emissions</div>	●	The two credits require reductions in emissions volume from waste activities
<b>Climate adaptation</b>	<ul style="list-style-type: none"> <li>The building's activity must reduce all material physical climate risks.</li> </ul>	The building's activity must reduce all material physical climate risks.	<b>Resilient category</b>	●	The Resilient category includes Climate Change resilience, Operations Resilience and Grid Resilience. The Climate Change assessment is required for 4 star rated buildings.
<b>Water</b>	<ul style="list-style-type: none"> <li>Water appliances and fixtures are efficient</li> </ul>	-	<div style="background-color: #FFC107; color: white; padding: 2px;">Water use</div>	●	
<b>Pollution</b>	<ul style="list-style-type: none"> <li>Building has no substances of high concern. Noise, dust, and pollutant emissions are minimized.</li> <li>Occupants are not exposed to toxic materials</li> </ul>	-	<div style="background-color: #4CAF50; color: white; padding: 2px;">Exposure to toxins</div>	●	The credits have requirements to reduce these toxins and emissions during refurbishments and use.



# Green Star and the EU Taxonomy for sustainable finance

**Green Star Buildings** directly addresses both the *substantial* and *do no significant harm* criteria for existing building renovations and building acquisitions in the taxonomy.

Topic	Requirement for new buildings	Green Star Buildings credit or requirement	Met	Notes
<b>Carbon and energy</b>	<p>The building's primary energy demand is at least 10 % lower than the threshold set for the nearly zero-energy building requirements</p> <p>For buildings larger than 5000 m2,</p> <ul style="list-style-type: none"> <li>they must be tested for air tightness or have a quality façade, and</li> <li>the carbon life cycle impacts are calculated and disclosed.</li> </ul>	<p><b>Climate Positive Pathway</b></p> <p><b>&amp;</b></p> <p>Verification and Handover Minimum Expectation</p>	●	All buildings are required to meet these requirements
<b>Circular economy</b>	<ul style="list-style-type: none"> <li>70% of all construction must be recycled or recovered.</li> <li>Construction and demolition waste must be reduced, and</li> <li>Buildings must be built to be adaptable and efficient.</li> </ul>	<p>Responsible Construction Minimum Expectation</p>	●	<p>All buildings are required to meet the waste requirements</p> <p>Building adaptability (ISO 20887) is not explicitly considered, planned for v1.1</p>
<b>Climate adaptation</b>	<ul style="list-style-type: none"> <li>The building must reduce all material physical climate risks.</li> </ul>	<p><b>Resilient category</b></p>	●	The Resilient category includes Climate Change resilience, Operations Resilience and Grid Resilience. The Climate Change assessment is required for all buildings.
<b>Water</b>	<ul style="list-style-type: none"> <li>Water appliances and fixtures are efficient</li> </ul>	<p>Water use</p>	●	
<b>Pollution</b>	<ul style="list-style-type: none"> <li>Building has no substances of high concern. Noise, dust, and pollutant emissions are minimized.</li> <li>Occupants are not exposed to toxic materials</li> </ul>	<p>Exposure to toxins</p>	●	The credits have requirements to reduce these toxics and emissions during refurbishments and use.
<b>Biodiversity</b>	<p>The new construction is not built on one of the following:</p> <ul style="list-style-type: none"> <li>Prime agricultural land</li> <li>Highly sensitive land that serves as habitat to endangered species</li> <li>Old Growth forests</li> </ul>	<p>Impacts to Nature Minimum Expectation</p>	●	



# Unlocking the value: A Practical Guide to Sustainable Finance in the real estate sector

This document provides practical guidance on benchmarks and targets comparing the Australian real estate sector to multiple international sustainable finance frameworks.

- Provides model use of proceeds language
- Delivers key performance indicators for general purpose instruments
- Includes guidance for second party opinions

Available last quarter 2023

# Thank you

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