

Insights into the Responsible Products Framework

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Who is the Green Building Council of Australia?

GBCA is a world renowned organisation dedicated to transforming the built environment.

Since 2002, we have driven real change by creating market-based solutions that empower industry to embrace sustainable practices.

“We lead an industry that is building for people today, tomorrow and for future generations.”

Davina Rooney
Chief Executive
Green Building Council of Australia



What does the Green Building Council of Australia do?

We lead the sustainable transformation
of the built environment



We rate



We advocate



We educate

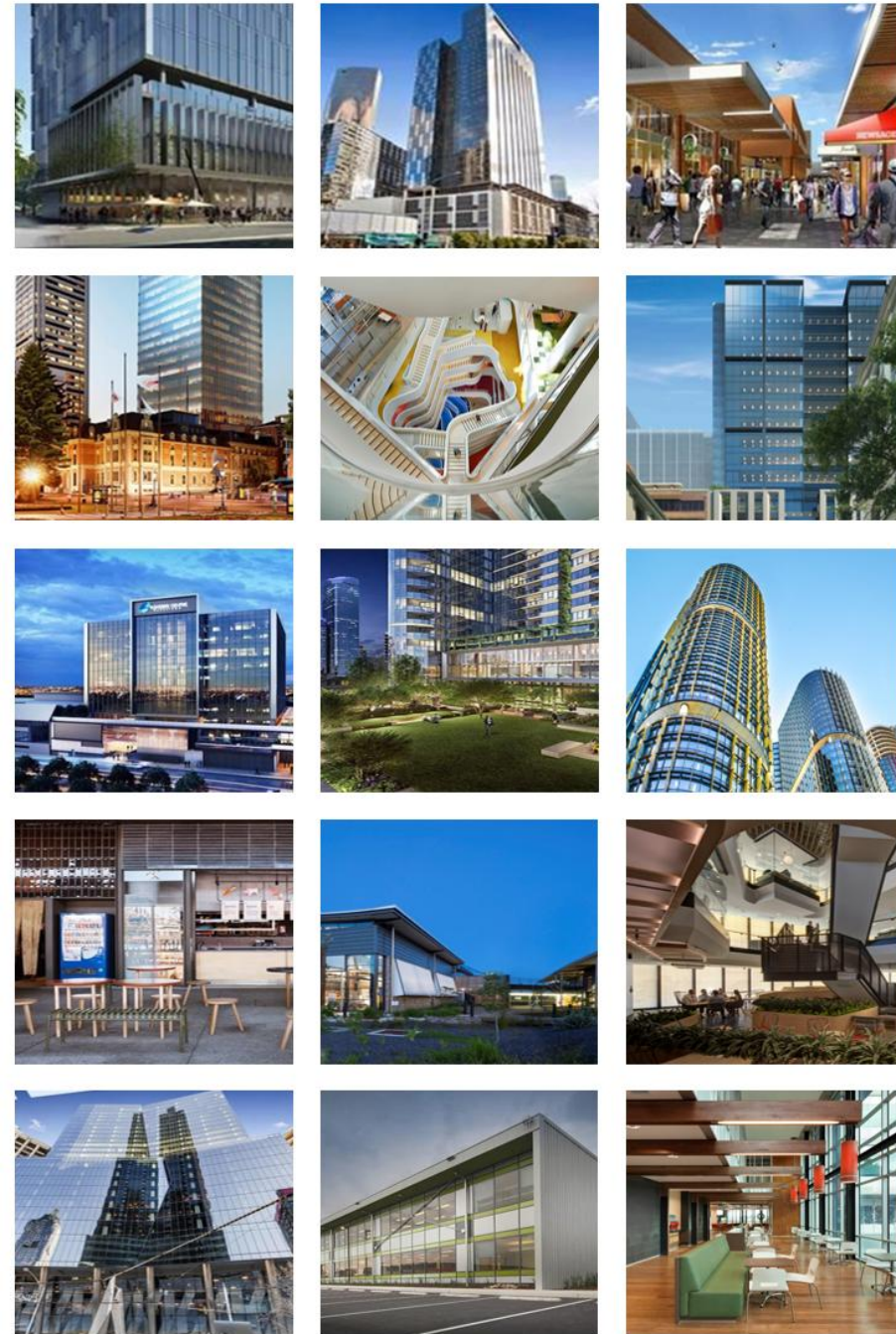


We collaborate



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.



3250+

Green Star Certifications
across thousands of fitouts, buildings &
communities



Buildings

Homes

Performance

v1.2 available now

V2 coming
mid-2022

Communities

v1.1 available now

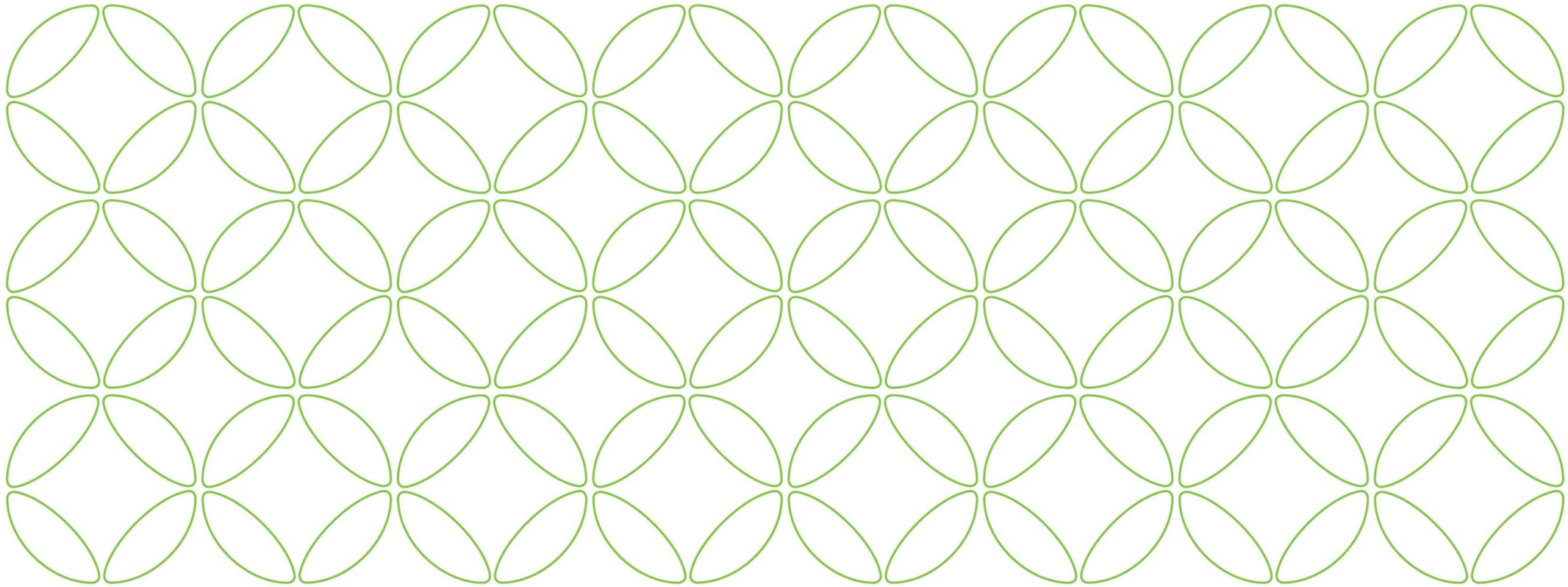
V2 coming
late-2022

Interiors

V1.2 available now

Fitouts v1
In development

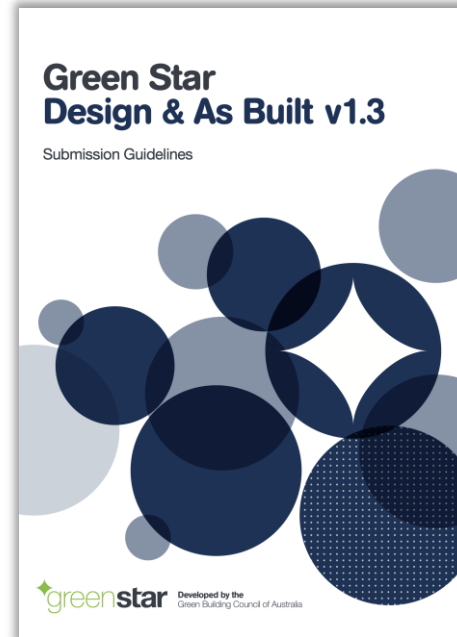
Let's talk about products



We have evolved Green Star over time



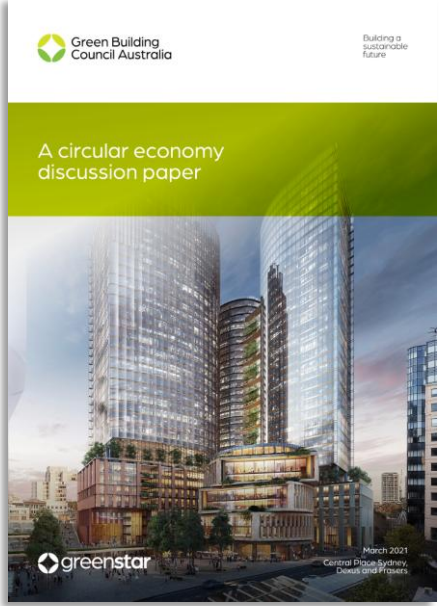
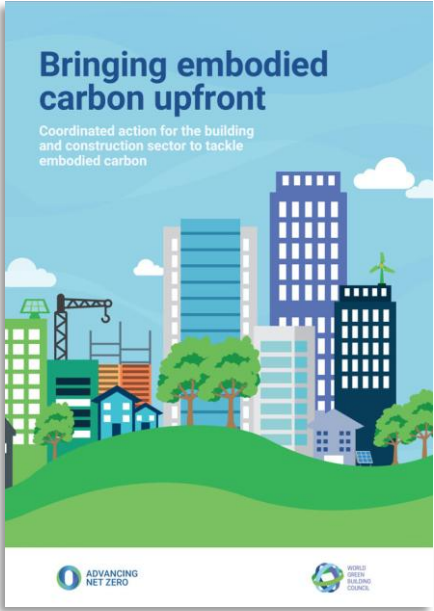
Recognised product certifications schemes and credit requirements for best of class materials
(timber, steel, concrete, PVC)



Recognised product certifications, and life cycle assessment or best of class key materials.
(timber, steel, concrete, PVC, finishes, furniture)



Our work in products and materials over the past three years



Over the past three years we've laid the groundwork for a more comprehensive advocacy and engagement strategy on products and materials

Impacts of buildings and products

Climate Action

- Buildings account for ~40% of energy-related global carbon emissions
- ~25% of all building emissions are related to material production and construction

Resource & circularity

- Buildings are responsible for 50% of global material use
- 42.4bn tonnes of materials consumed annually

- Resource prices have become more volatile and are expected to rise over the long term
- Easy-to-access, high-grade stocks of key commodities are dwindling
- Governments are imposing new restrictions on pollution and waste that apply along entire product life cycles
- There is an increased focus on emissions happening today, particularly as energy systems decarbonize

In a resource-constrained world, how we get, use and dispose of materials, and make the most of our current resources, will be key for a successful and sustainable global economy.

Transforming the supply chain

The building materials sector accounts for 8% of Australia's total emissions. It has an economic value of 70 billion dollars a year. It is the next step in decarbonising our economy.

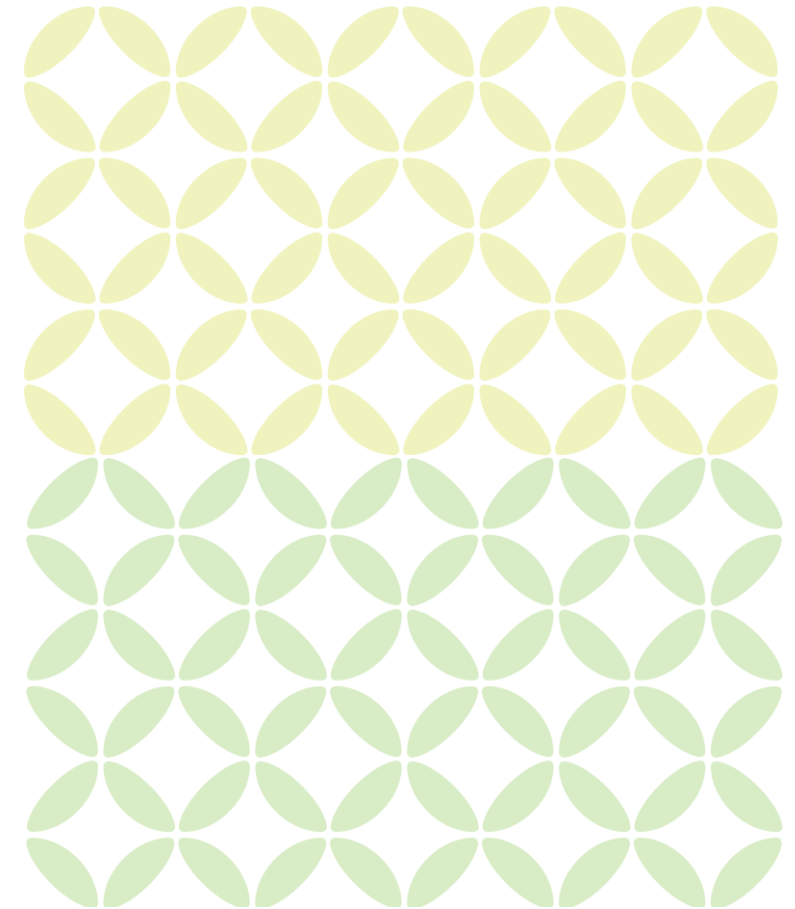
The built environment needs responsible, healthy and positive products that are part of a circular economy. We need to help influence the entirety of the supply chain, not just deliver some better products.



What should you know about



1. Delivers a new definition of a sustainable building
2. Responds to climate science
3. Responds to sustainability megatrends
4. Drives opportunities for supply chain transformation
5. Creates clear expectations for new buildings



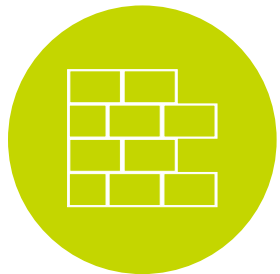
Drives opportunity for supply chain transformation

Green Star Buildings aims to create market demand for innovative, responsible, and low carbon products.



Creating a drive for low carbon products

Green Star Buildings introduces a new minimum expectation to ensure all buildings are built with good design choices and lower carbon products.



A new definition for responsible products

Our new Responsible Products Framework aims to reward products that have lower environmental impact, are transparent, respect human rights, and are taking action to reduce in carbon content.

Transforming the supply chain

Green Star Buildings features 8 credits and one leadership challenge that directly impact the supply chain. They aim to drive responsible, healthy, positive, and circular products. They represent more than 25% of the points available in the rating tool, the highest ever dedicated to transforming the supply chain.



Responsible

- Industry development
- Responsible construction
- Verification & Handover
- Responsible procurement
- Responsible structure
- Responsible envelope
- Responsible systems
- Responsible finishes



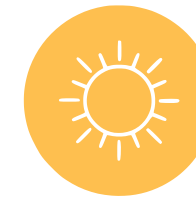
Healthy

- Clean air
- Light quality
- Acoustic Comfort
- Exposure to toxins
- Amenity and comfort
- Connection to nature



Resilient

- Climate change resilience
- Operations resilience
- Community resilience
- Heat resilience
- Grid resilience



Positive

- Upfront carbon emissions
- Energy use
- Energy source
- Other carbon emissions
- Water use
- Life cycle impacts



Places

- Movement and place
- Enjoyable places
- Contribution to place
- Culture and heritage



People

- Inclusive construction practices
- Indigenous inclusion
- Procurement and workforce inclusion
- Design for inclusion




Nature

- Impacts to nature
- Biodiversity enhancement
- Nature connectivity
- Nature stewardship
- Waterway protection



Leadership

- Market Transformation
- Leadership Challenges
- Circular Economy

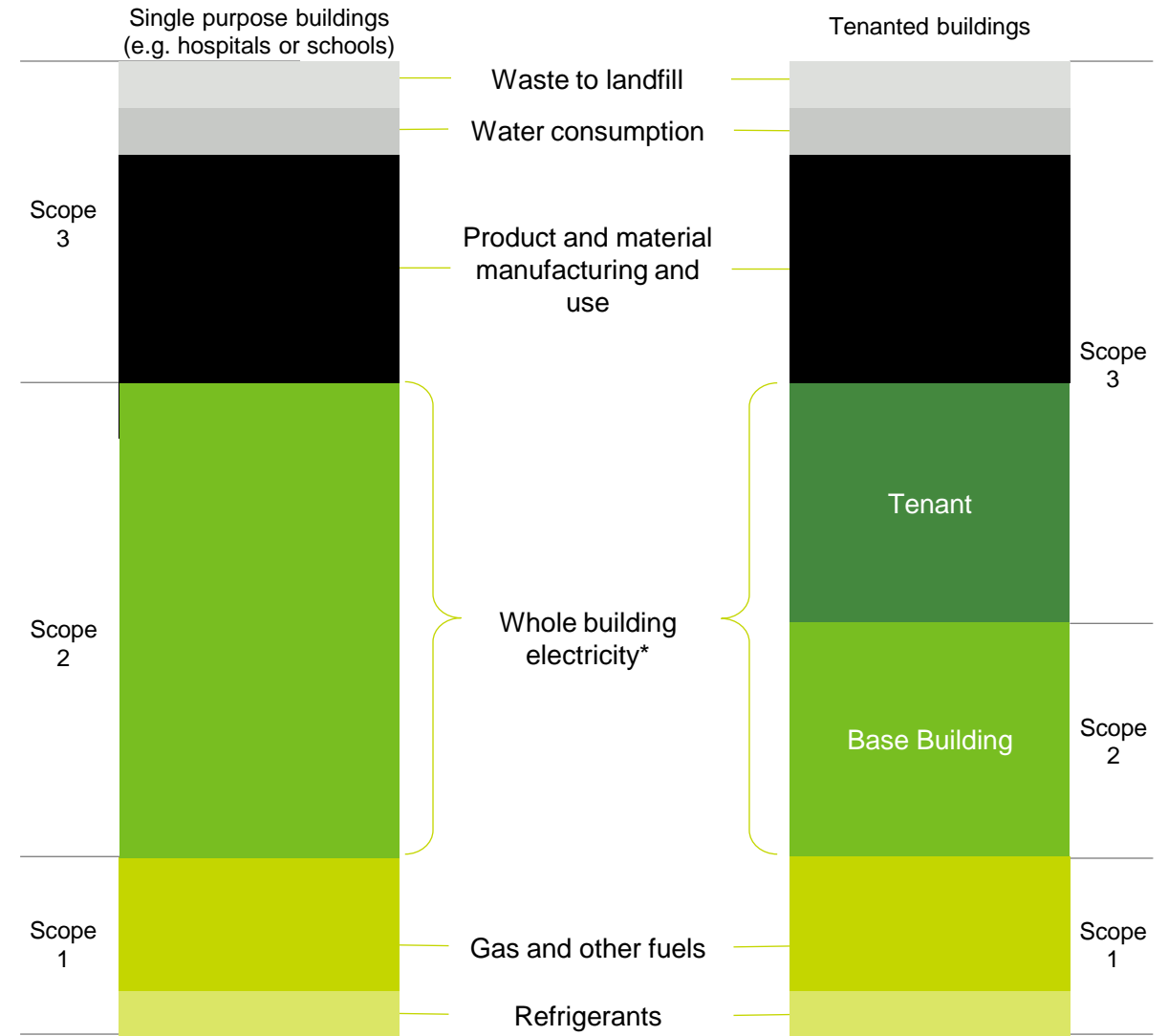
 Supply chain credits impacted by Green Star Buildings and the Responsible Products Framework

 Other credits impacting the supply chain

These are the emissions of typical buildings over their lifetime

In terms of building emissions, electricity in Australia continues to be the largest portion of typical building's emissions then, depending on location, embodied carbon, followed by 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 carbon positive future.

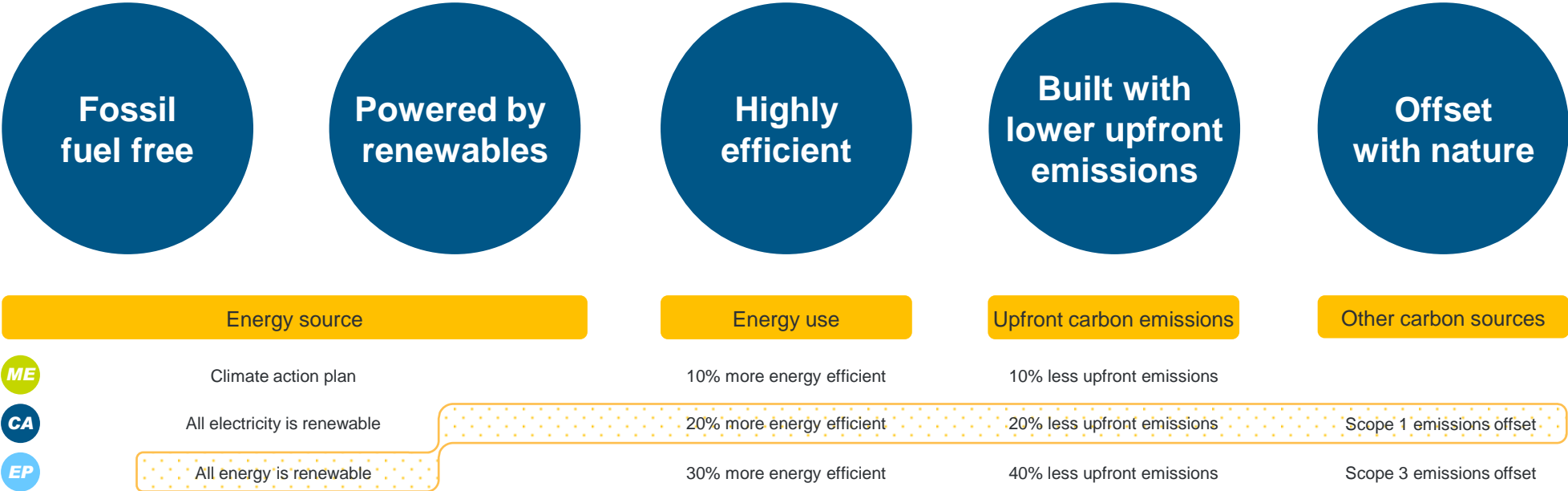



Source: Various, 2017

Responds to climate science

Our new **POSITIVE** category aims to drive every building towards being climate positive with a focus on transformational change.

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



 Climate Positive pathway, required for 6 star rated buildings today, and 5 star ratings from 2023

Responsible products credits

Responsible Structure

- load bearing / stability components, steel, timber, concrete

Responsible Envelope

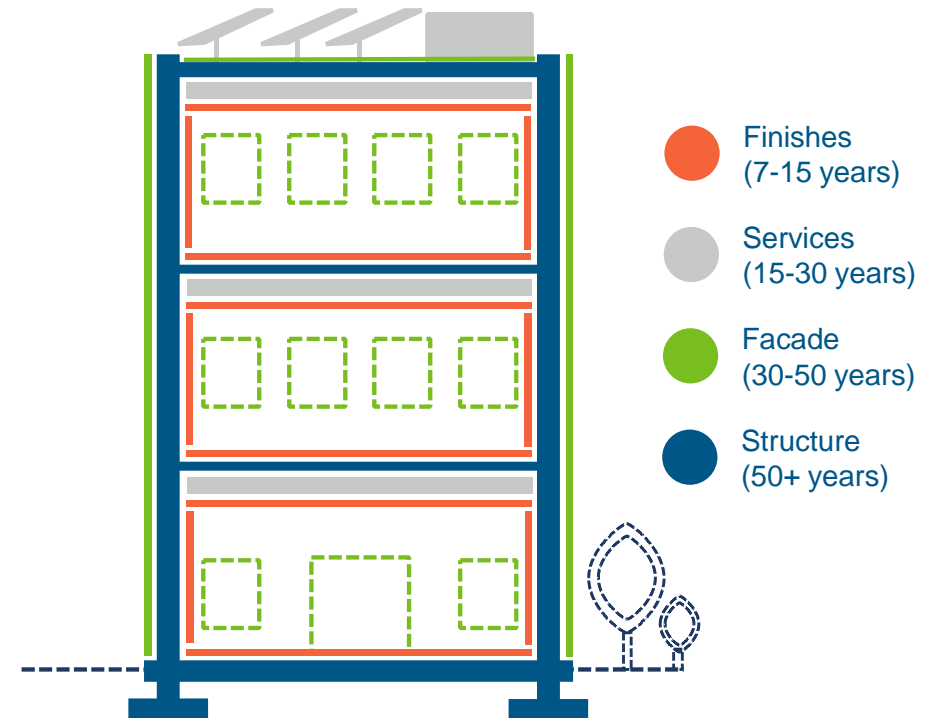
- external shell- façade and its components, roofing

Responsible Systems

- Active systems – mechanical, hydraulic, transportation, electrical

Responsible Finishes

- Internal finishes – flooring, plasterboard, paints, ceilings, partitions, doors, internal windows etc.



Adapted from Brand, S., 1994, How Buildings Learn: What Happens After They're Built

Credit

Credit Achievement

Responsible Structure

50% of products are 'Good Practice'

Exceptional Performance

Responsible Structure

80% of products are 'Good Practice'

-or-

Alongside the 50% that are good practice, 10% of all products are 'Best practice'

Recognising responsible products

Our new framework encourages action today to create opportunities for future transformation in four distinct building components



Responsible

Responsible structure

Responsible envelope

Responsible systems

Responsible finishes

Responsible

your product's impacts and content are transparent and meet high standards

Healthy

your product is low or non-toxic and drives valuable social outcomes.

Positive

your manufacturing process avoids significant environmental impact, and delivers net zero products.

Circular

your product is ready for low-carbon production and the circular economy

Leadership

Rewards additional achievement for issues critical to the built environment

The framework in detail



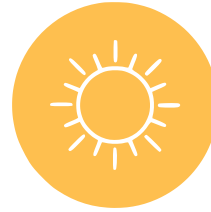
Responsible

- Corporate commitment on climate
- Environmental Management
- Greenhouse gas emissions account
- Responsible extraction of material resources
- Environmental impact disclosure
- Health impacts disclosure
- Ingredient disclosure



Healthy

- Occupant health and safety
- Manufacturing health and safety
- Chemicals of concern
- Modern slavery
- Social accountability



Positive

- Energy use
- Energy source
- Carbon emissions reduction
- Water use
- Other impact reductions



Circular

- Impacts to nature
- Material extraction
- Waste generation



Leadership

To reward initiatives of Product Suppliers, Manufacturer and Sourcing initiatives that are deemed new and break barriers, and in turn inspire others to follow.

Responsible Products Initiatives

The following initiatives have been recognised within the framework as of May 2021.

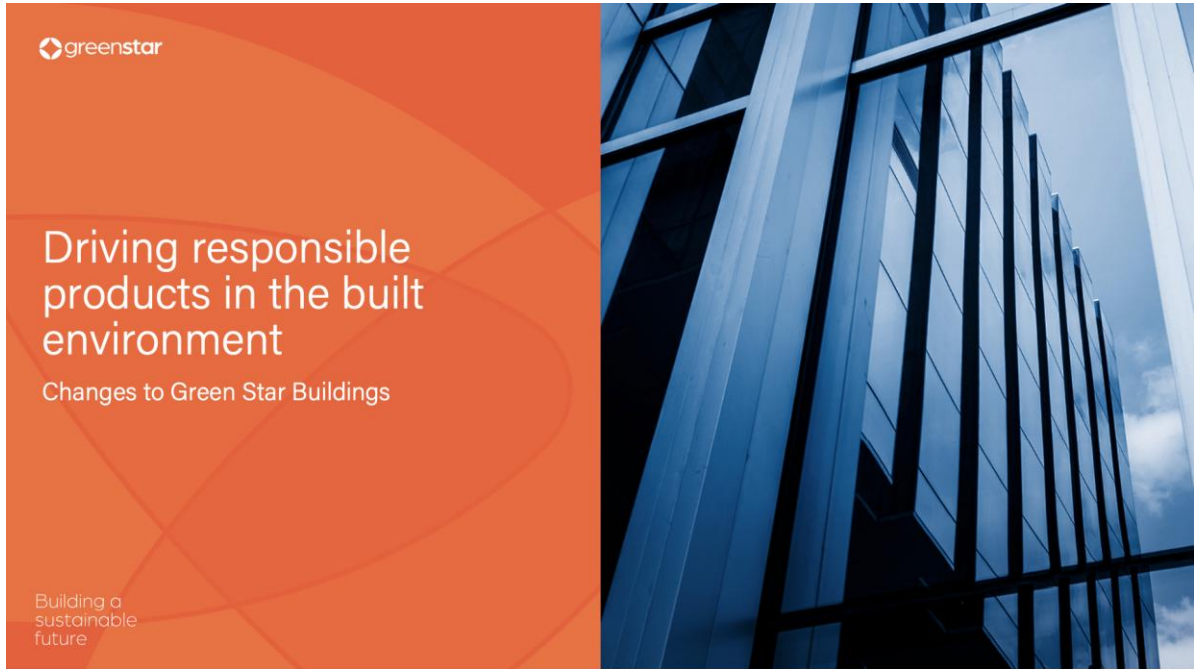
- Reused products or building components
- Climate Active Carbon Neutral Standard for Products & Services
- Cradle to Cradle
- Declare
- Environmental Product Declarations (Industry-wide)
- Environmental Product Declarations (Product-specific)
- Environmental Choice New Zealand
- The Forest Stewardship Council (FSC)
- Green Rate - Level A, B. and C)
- Healthrate
- Good Environmental Choice Australia (GECA)
- Living Product Challenge
- Literature Review and Best Practice Guidelines for the Life Cycle of PVC Building Products
- Responsible Wood (only timber certified to the upcoming revision to AS4708. For more information on the release contact Responsible Wood).

Other initiatives being reviewed in the next six months

- GEV-Emicode
- LCA Rate
- AFRDI
- Blue Angel
- ACRS
- Responsible Steel
- RE100
- EP100
- SBTi
- Modern Slavery Declaration
- And others...

If there are other initiatives that should be recognised, or you are an initiative that would like to seek accreditation, please contact us at greenstar@gbca.org.au, subject line “Responsible Product Framework”

For the most up to date list of initiatives, please visit the [GBCA Website](#)

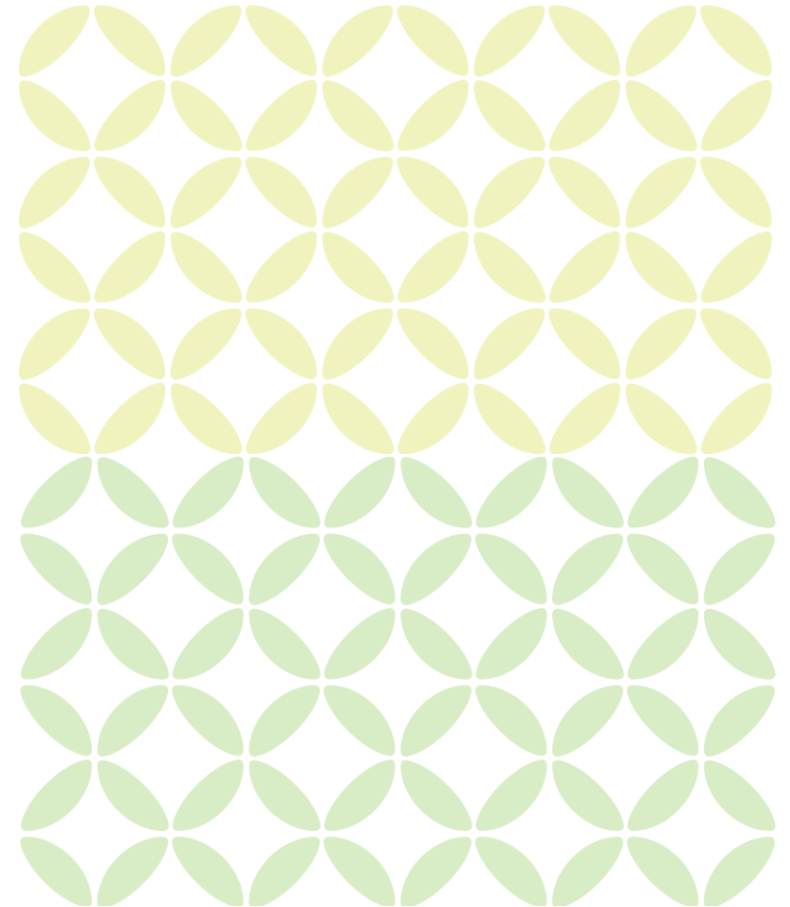


Driving responsible products in the built environment

This guidance document supports Green Star Buildings Rev. B and details how we aim to use Green Star to improve the supply chain over time, and primes industry for our upcoming roadmap in 2022.

Next Steps:

- Continue working with initiative providers and recognising new initiatives
- Update website with more schemes as they become recognised
- Work with product suppliers and manufacturers to develop appropriate marketing guidance
- Develop a Green Star Product Directory to help manage product information at the time of submission.



Thank you

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