

New Zealand
Green Building Council

Today

- About the NZGBC
- The current state of play
- Building Assessment Systems
- NZ's adaptation
- Case Study
- Where is there opportunity for you?
- What next.....

NZGBC

New Zealand Green Building Council

Vision:

To use market-driven solutions to bring New Zealand's Building and Construction industry to the forefront World's Best Practice and beyond. Ensuring that we live and work in the healthiest, most efficient, productive buildings today and into the future.

Mission:

To facilitate the transformation of the industry through education, tools, and knowledge sharing to reduce impact of building development & use

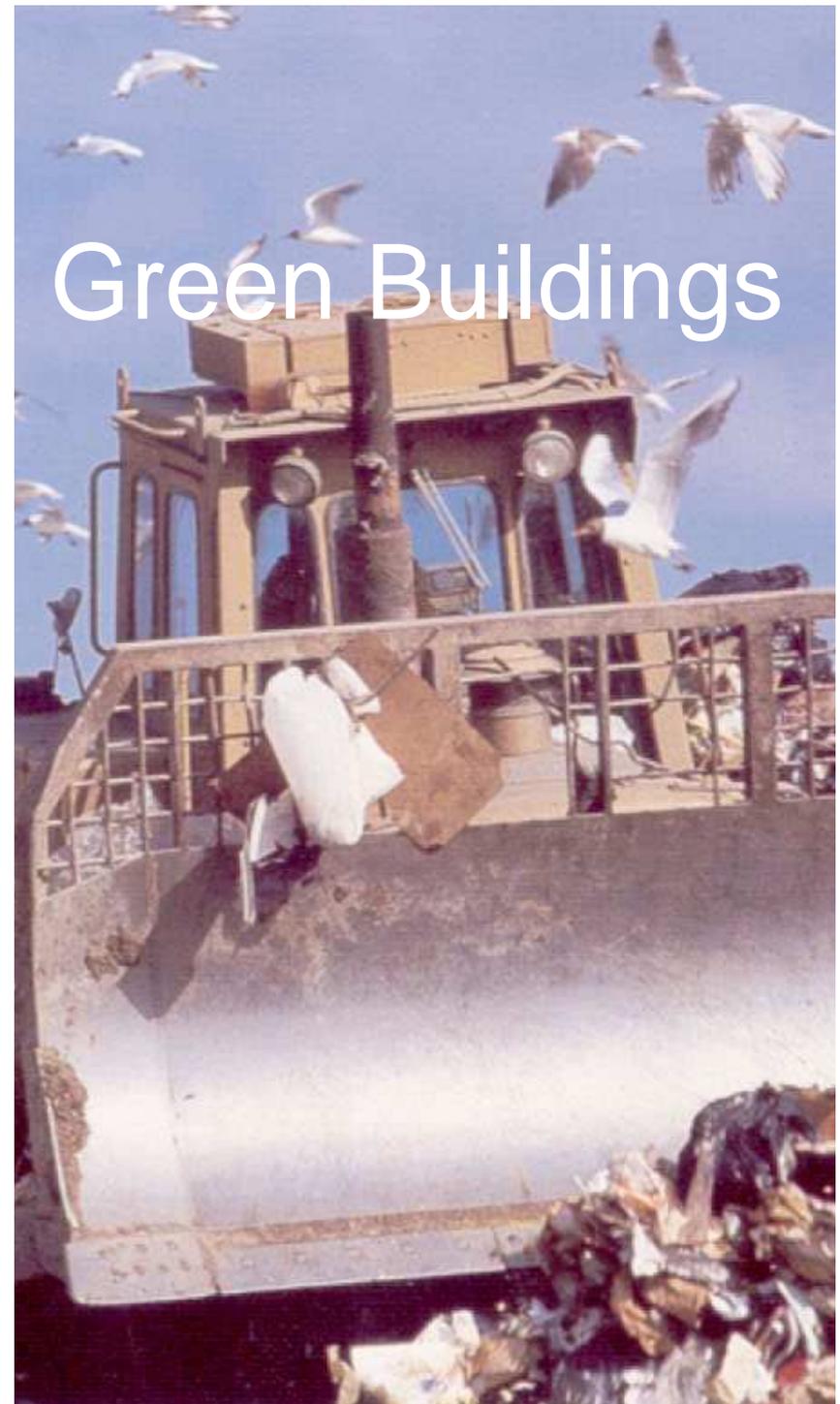
Why?

40 to 50% of the world's energy is used in buildings

25% of the waste in New Zealand's landfills was produced by the building industry.

We spend 95% of our time in buildings

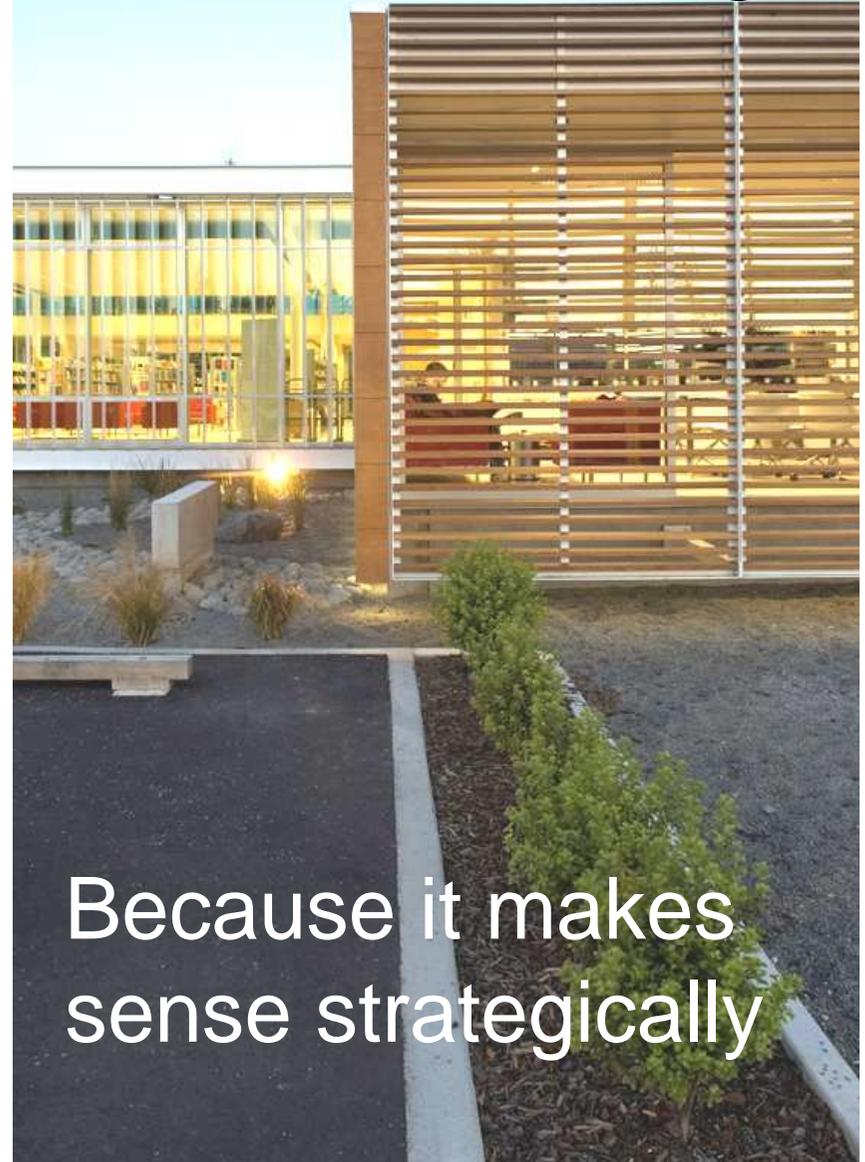
Because we are in a position of influence



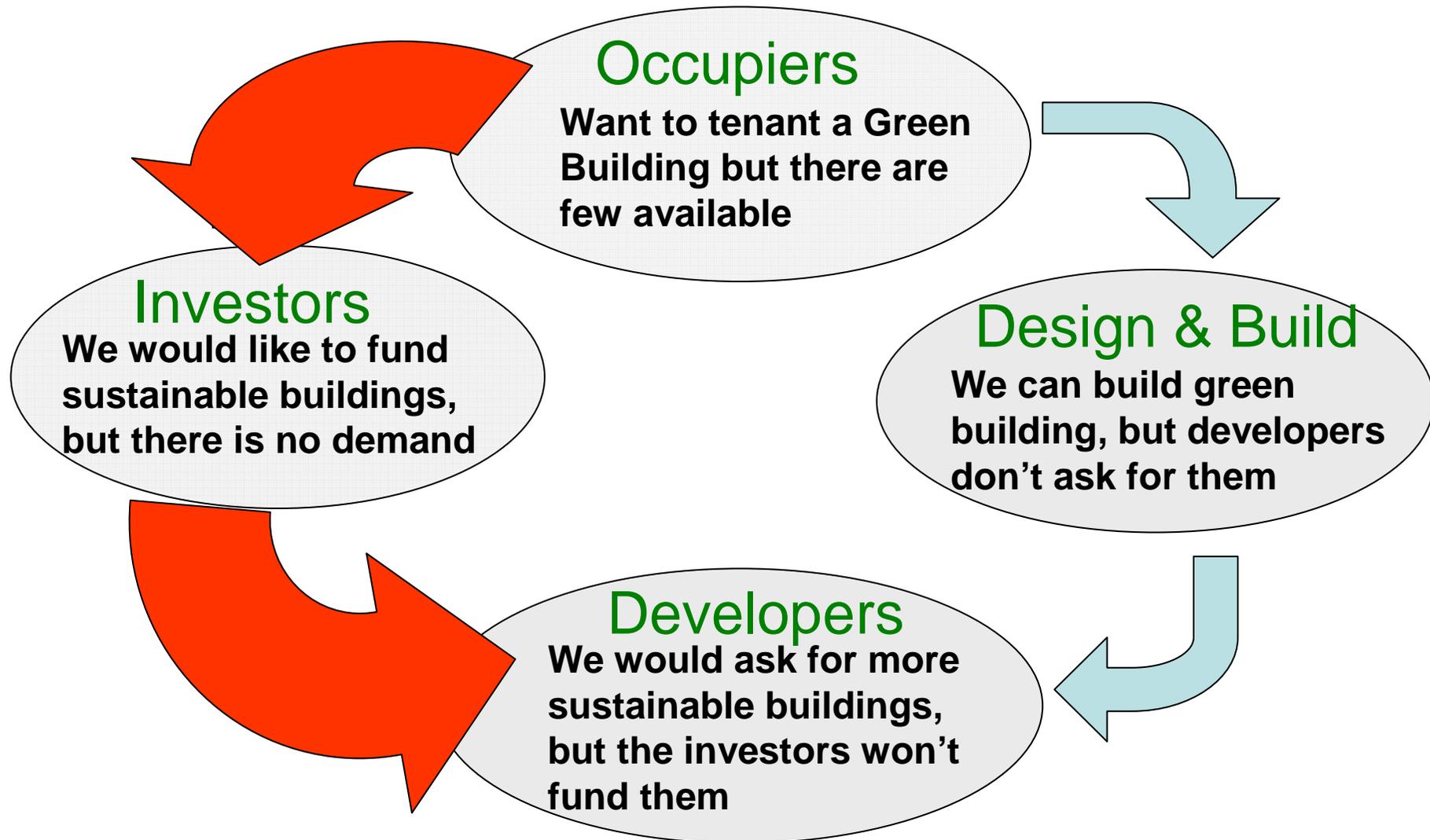
Why?

- > ability to attract and retain staff
- > healthy productive environment
- > anticipating the new market
- > future proofing
- > long term investment value
- > Reduction in operating costs

Green Buildings



Changing the cycle...



Our Focus

- Building Assessment Systems
- Education & Training
- Information and resources

Who are we?

- Not for profit organisation
- Aim to be part of World Green Building Council 2006
- Inclusive and collaborative
- Membership based
- Focus on market driven solutions

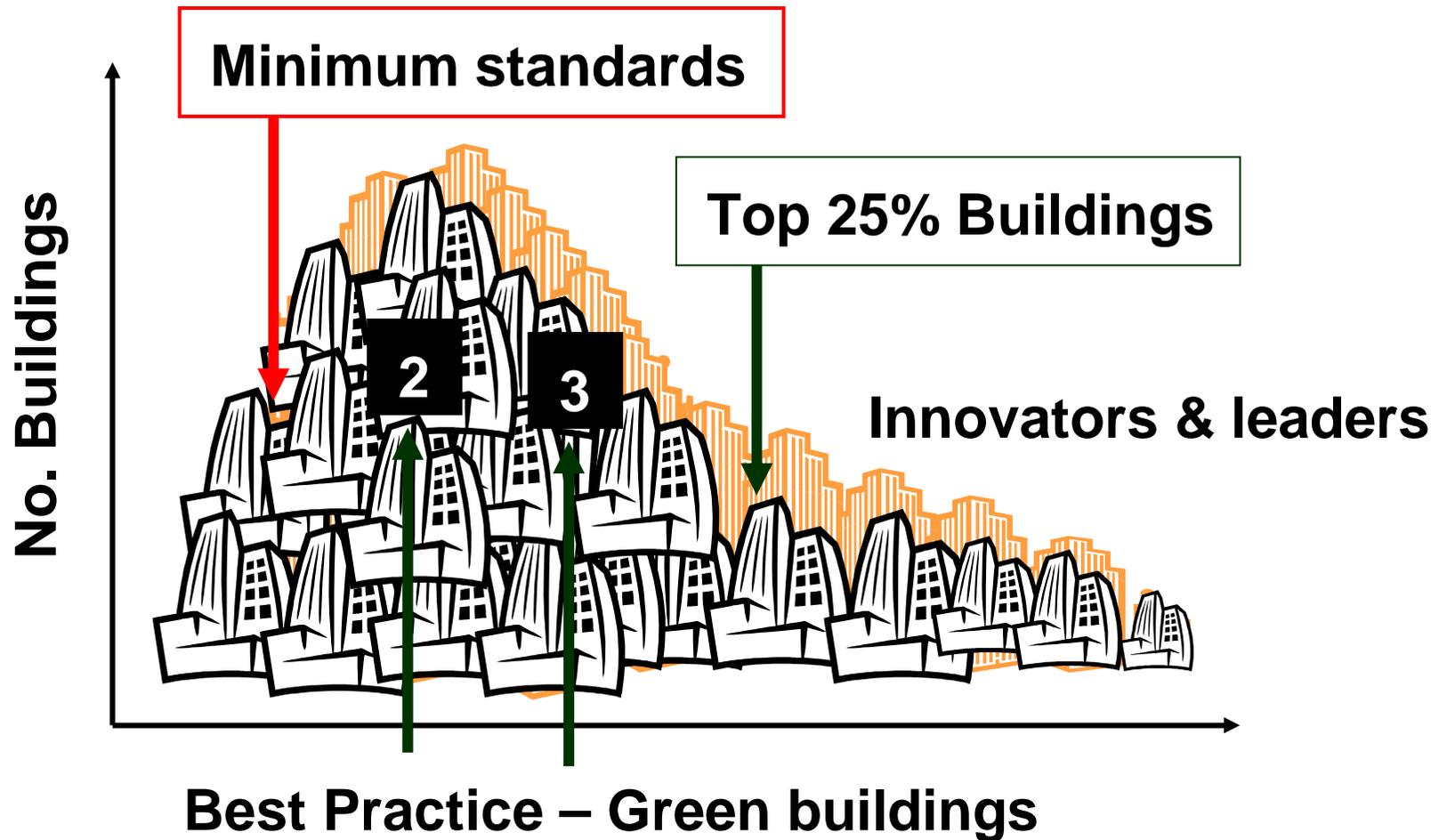
Membership Categories

Group A	1	Commercial Property Developers
	2	Investors & Owners, Property Managers
	3	Residential – Developers or major portfolio owners
Group B	4	Owners Occupiers- e.g. Education, central and local government , Defense, corporate
	5	Major Corporate Tenants & Retail
Group C	6	Building Contractors
	7	Building Product Manufacturers & Distribution
Group D	8	Architects & Draftsman
	9	Engineers
	10	Property & Construction Professionals: including Quantity Surveyors, Project Managers, Property consultants, legal
Group E	11	Research, NGO's, Higher Education
	12	Related interests- Utilities, Financial, Insurance

Our Focus

Building Assessment Systems
or
Rating Tools

Building Assessment Systems



40 Albert Road, Melbourne - Szencorp Group HQ

*Wellington 20th Sept

Client: Szencorp Group
(owner/occupier)

Architect: SJB Architects and
Interiors

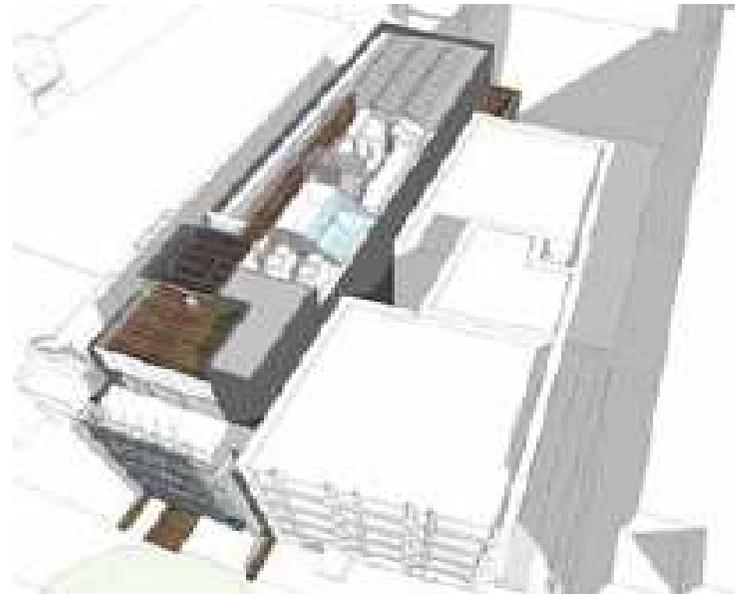
Engineers: Connell Mott
MacDonald

Project Value: Aus\$3.5 million
refurbishment cost

Completion Date: 2005 (1987)

Building Population: unknown

Building Area: 1,200m²



4 Star

5 Star

6 Star

30 The Bond, Sydney – Lend Lease HQ

Client: Deutsche Office Trust
and Lend Lease Development
(80% primary tenant)

Architect: Lend Lease Design
& PTW

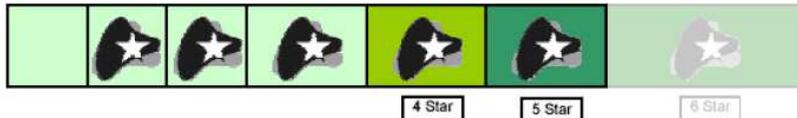
Engineers: Lincolne Scott,
AEC

Project Value: Aus\$112 million

Completion Date: 2004

Building Population: unknown

Building Area: 20,000m² NLA



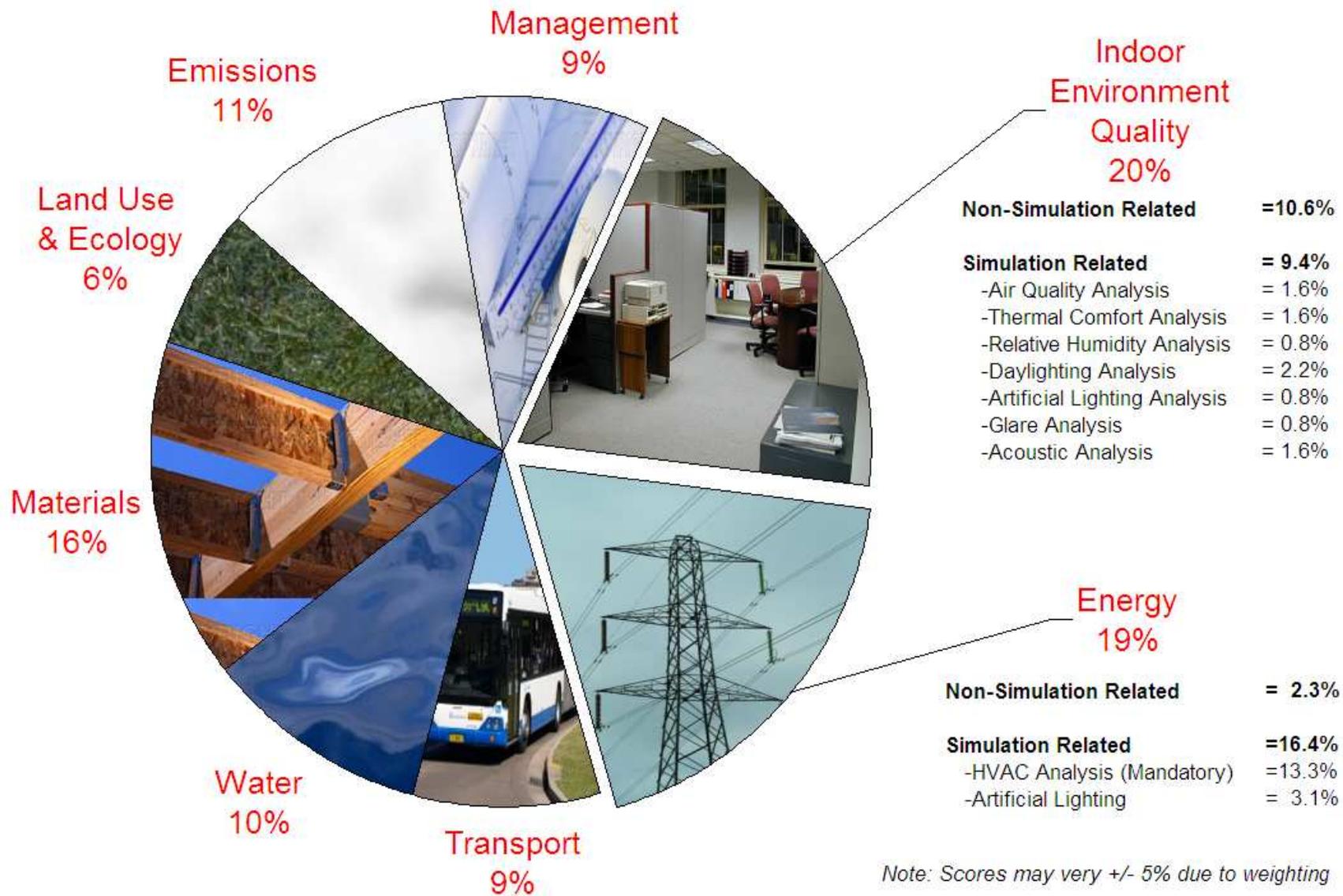
How systems work...

Management systems	4
Indoor Air Quality	10
Energy Efficiency	11
Transport	2
Water Efficiency	8
Materials	5
Land Use and Ecology	2
Waste/Emissions	3
Innovation	3
Total	48

Rating with single score (eg. Greenstar)

Rating	Score Required	Comment
1 Star	10	No certification
2 Star	20	No certification
3 Star	30	No certification
4 Star	45	Best Practice
5 Star	60	Excellence
6 Star	75	World Leader

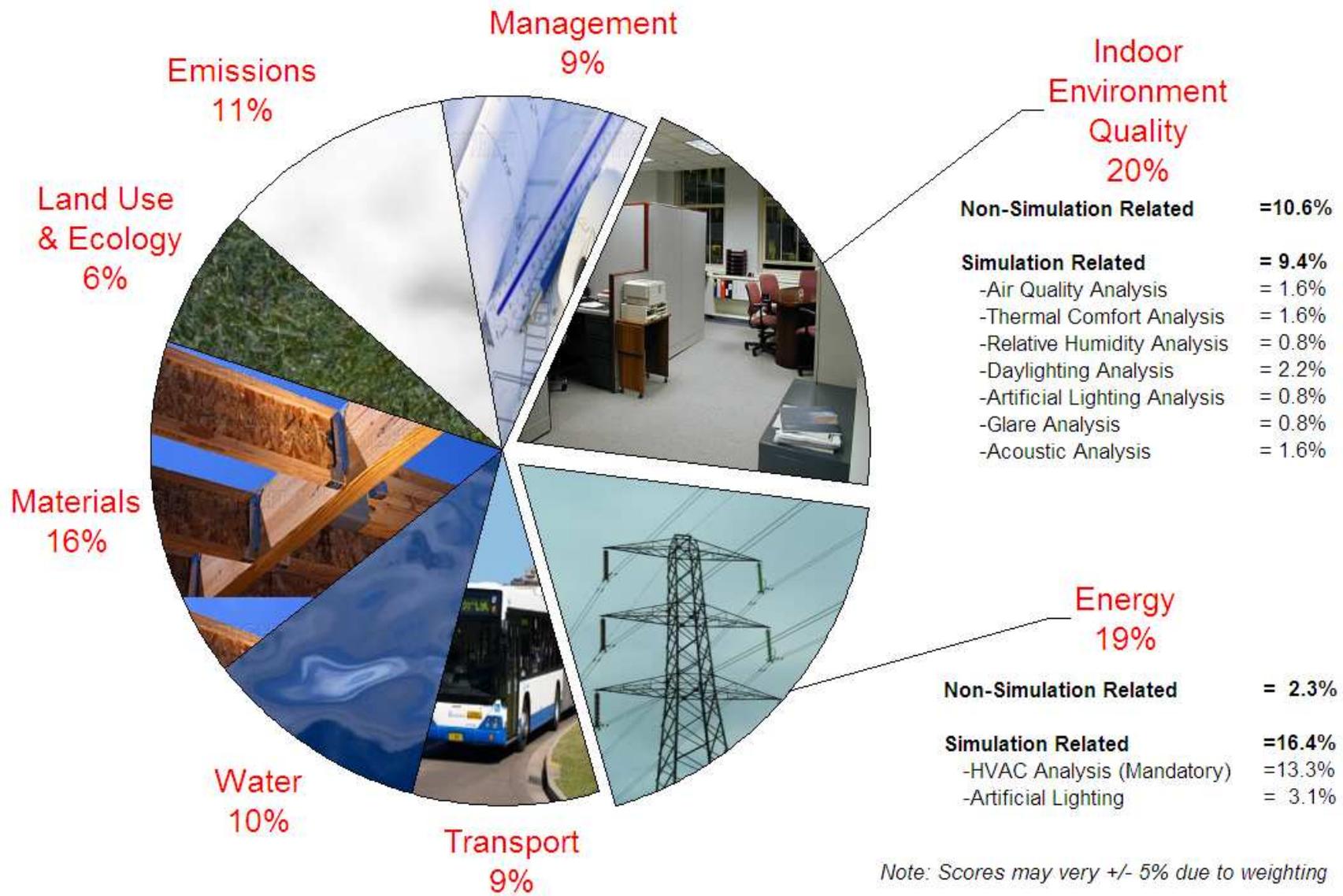
Allocation of Green Star Credits: Green Building Council Australia



Indoor Environment Quality

- Ventilation rates
- Carbon dioxide monitoring & control
- Daylight
- Daylight glare control
- High frequency ballasts
- Electric lighting levels
- External views
- Individual comfort control
- Asbestos
- Internal noise levels
- Volatile organic compounds
- Formaldehyde minimisation
- Air supply ductwork
- Tenant exhaust
- Indoor plants

Allocation of Green Star Credits: Green Building Council Australia



Note: Scores may vary +/- 5% due to weighting

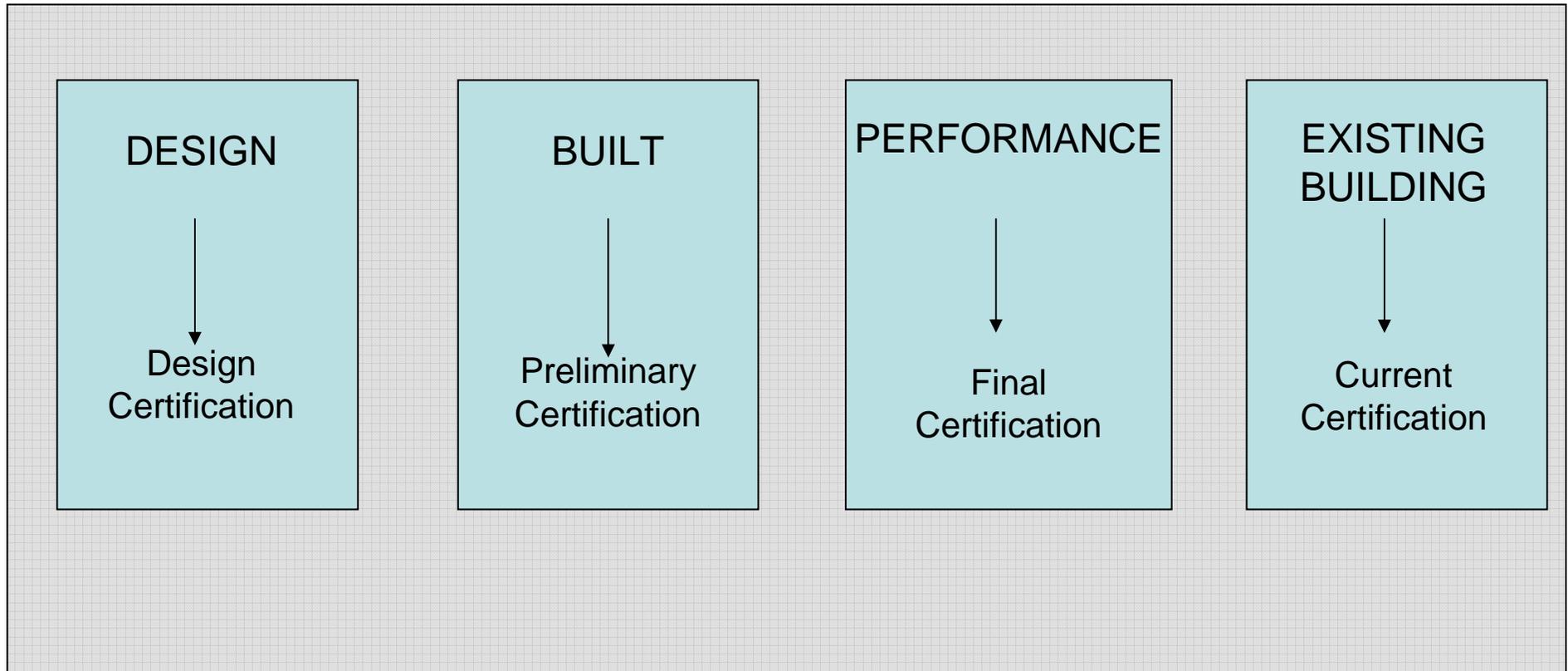
Management - *Interiors*

- Green Star accredited professional
- Commissioning clauses
- Commissioning – fit-out tuning
- Tenant users guide
- Environmental management during tenancy fit-out
- Waste management during tenancy fitout

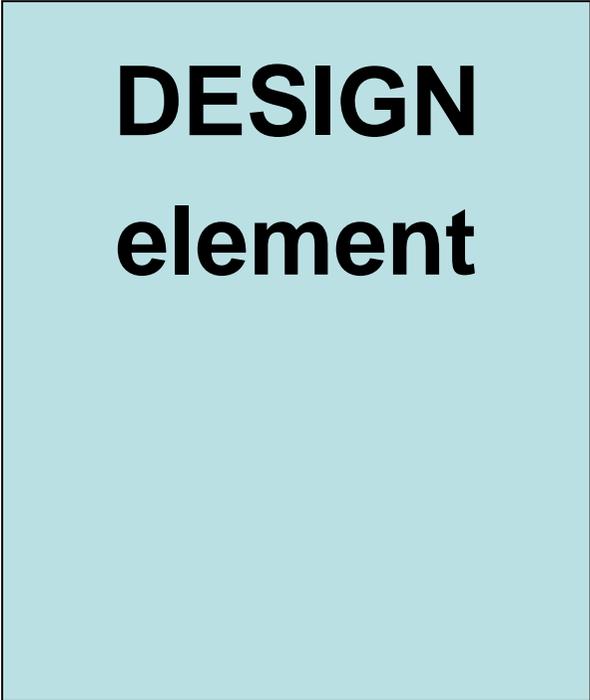
Materials - *Interiors*

- Workstations
- Floor coverings
- Walls and partitions
- Chairs
- Tables
- Storage
- Joinery
- Ceilings
- Waste management for tenancy operation
- PVC minimisation
- Timber

The NZGBC Assessment Framework

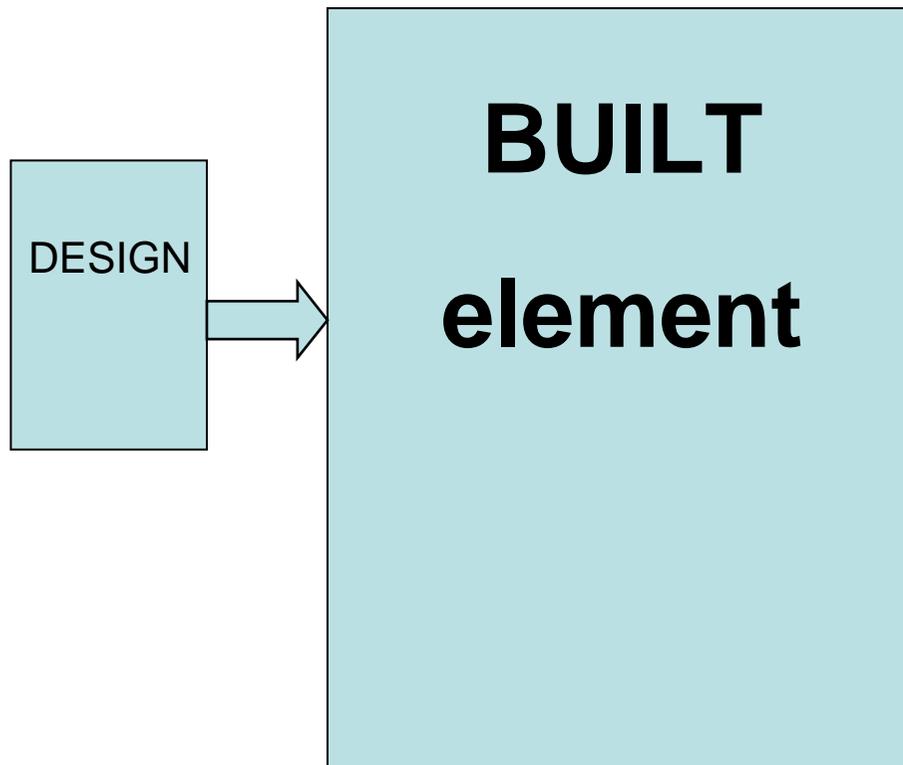


Components

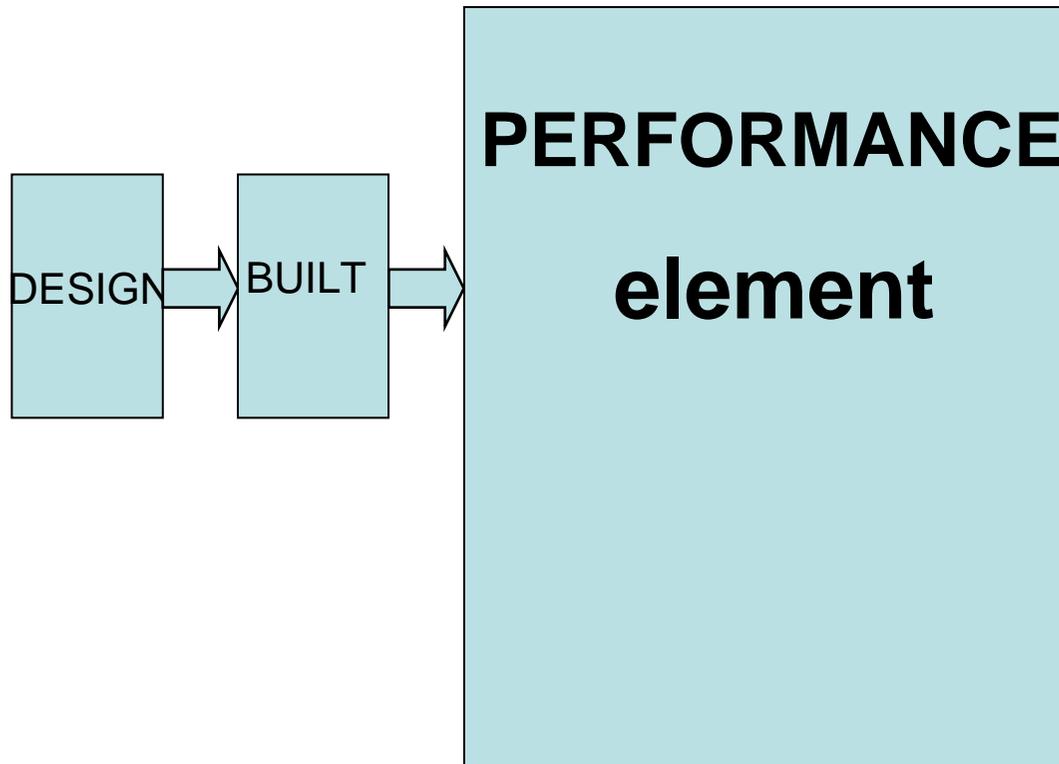


DESIGN element

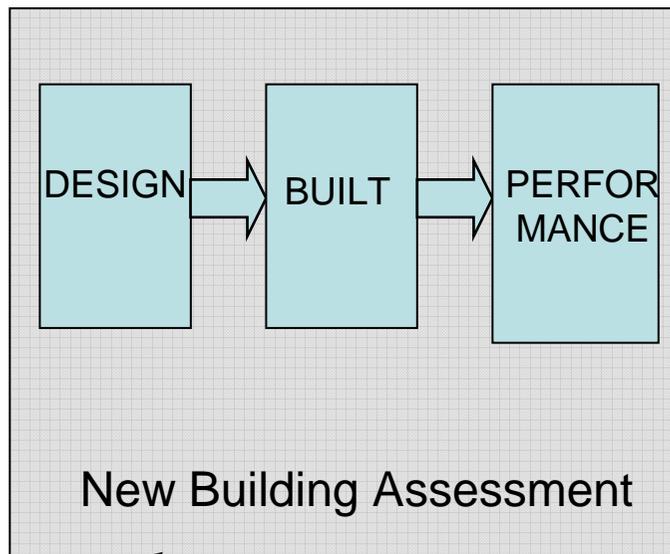
- Tool to rate the sustainability of a building **prior** to construction
- Ensures that impacts are considered at the design stage of building development
- Assesses the sustainability of a new design
- Applies to designs of greenfield and brownfield sites (i.e includes major refurbishments)
- Used primarily by architects and designers



- Rates **the same** sustainability initiatives as the design tool
- Validates that the building conforms to initial design assessment
- Results in a preliminary building certification: high value



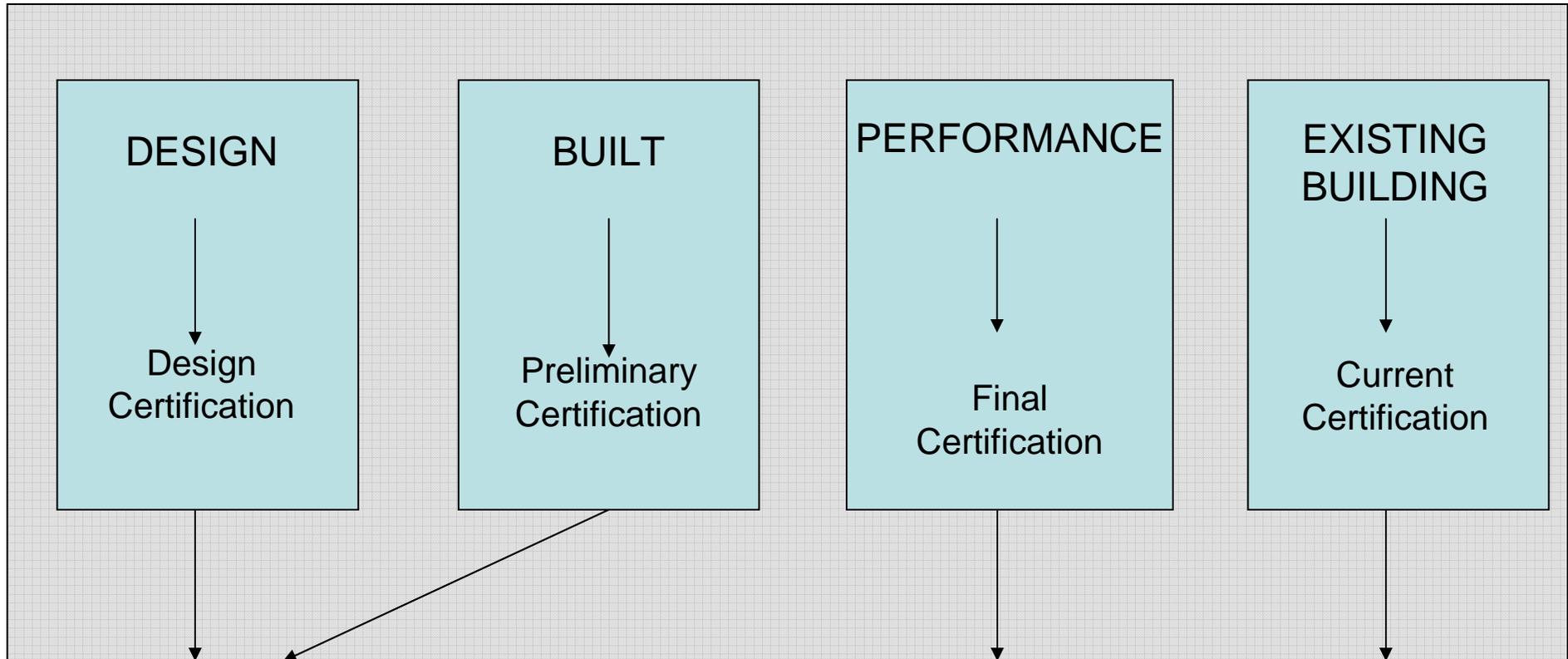
- Applied two years (TBC) after preliminary certification
- Final rating
- Rates the sustainability attributes of a building's actual performance
- Measures whether the building performs as it was predicted to do



EXISTING BUILDING element

- Any building over 2 years old
- Or, if looking at a previously rated building: assess 5 years after performance certification (by now building is 7 yrs old)
- Measures actual performance (current)

Tool Development



TOOL ONE:
DESIGN & BUILD
-Design certification
-Building as Built
preliminary certification

TOOL TWO:
PERFORMANCE
-Final building
certification

TOOL THREE:
EXISTING
-Current
certification

Benefits of a system for NZ

- Standard for all parts of the building delivery chain
- Independent credible third party
- Training and Education
- Process to achieve best practice
- Resources to assist you
- Stimulate drivers

Opportunity for you?

- Development contribution levy- TUSC
- Ability to clearly deliver of sustainability commitments as a region
- Leadership opportunity
- What else can you see?

What next?

- Rating Tool development- 2006
- Partnerships
- Alignment with Govt³
- Product rating
- Informing & providing practical resources
- Education of whole building value chain

www.nzgbc.org.nz