

The Australian Green Infrastructure Council



Driving Sustainable Solutions in Australian Infrastructure

QTC/LGIS FORUM

Doug Harland

Chief Executive Officer

May 15th 2009

AGIC's Background



- **Feb 2007 – Engineers Australia Society of Sustainable and Environment Engineering (SSEE) Seminar – 76 people.**
- **Organizational need identified at Seminar.**
- **June 2007 – SSEE Workshop held.**
- **Interim Steering Group formed – now governing Board.**
- **Dec 2007 – Freehills developed Constitution.**
- **May 2008 – AGIC Incorporated.**
- **Sustainability in infrastructure focus.**

How is Sustainability Defined?



Engineers Australia has defined ESD based on Bruntland as:

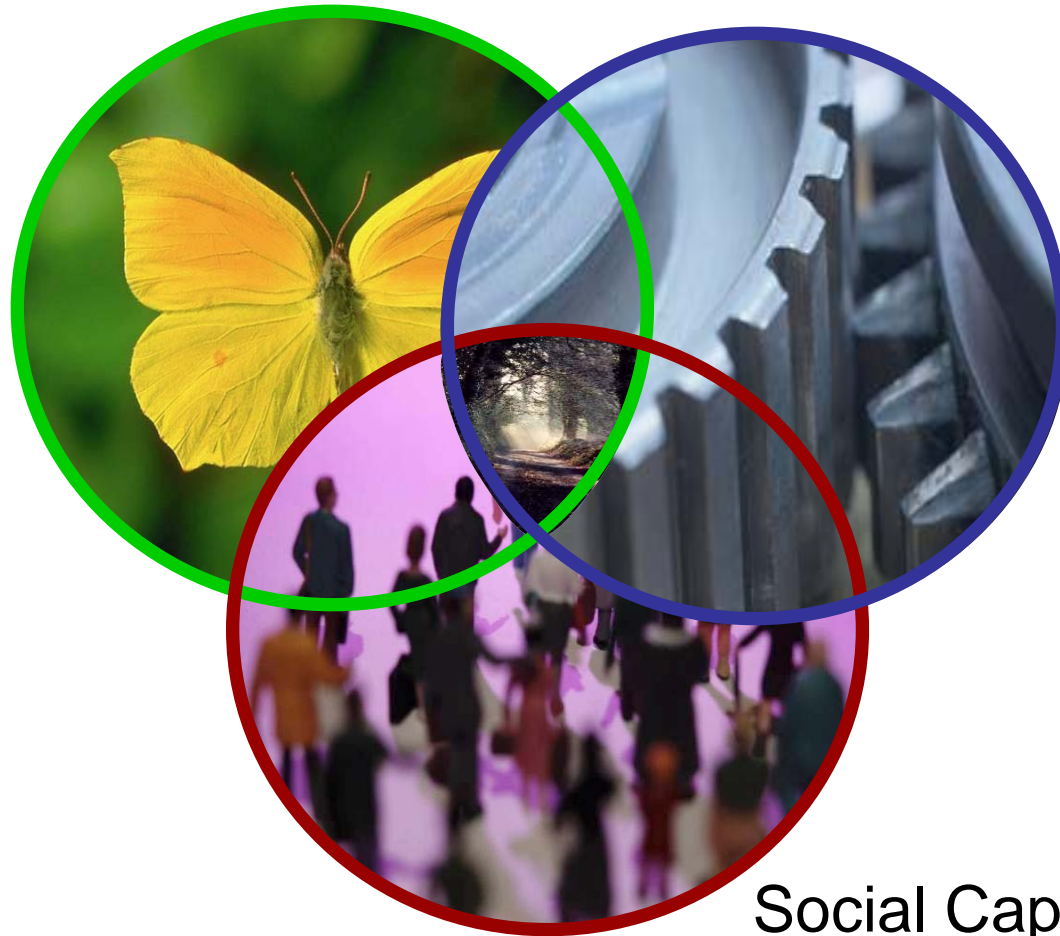
“Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”

A broader definition other than Ecological Sustainable Development is needed, and this is currently subject to much debate globally.

However it will be our grand children who will decide if we acted in a sustainable manner and I have the view our scorecard will be very much lacking.

AGIC's Tool's Three Dimensions

Natural Capital

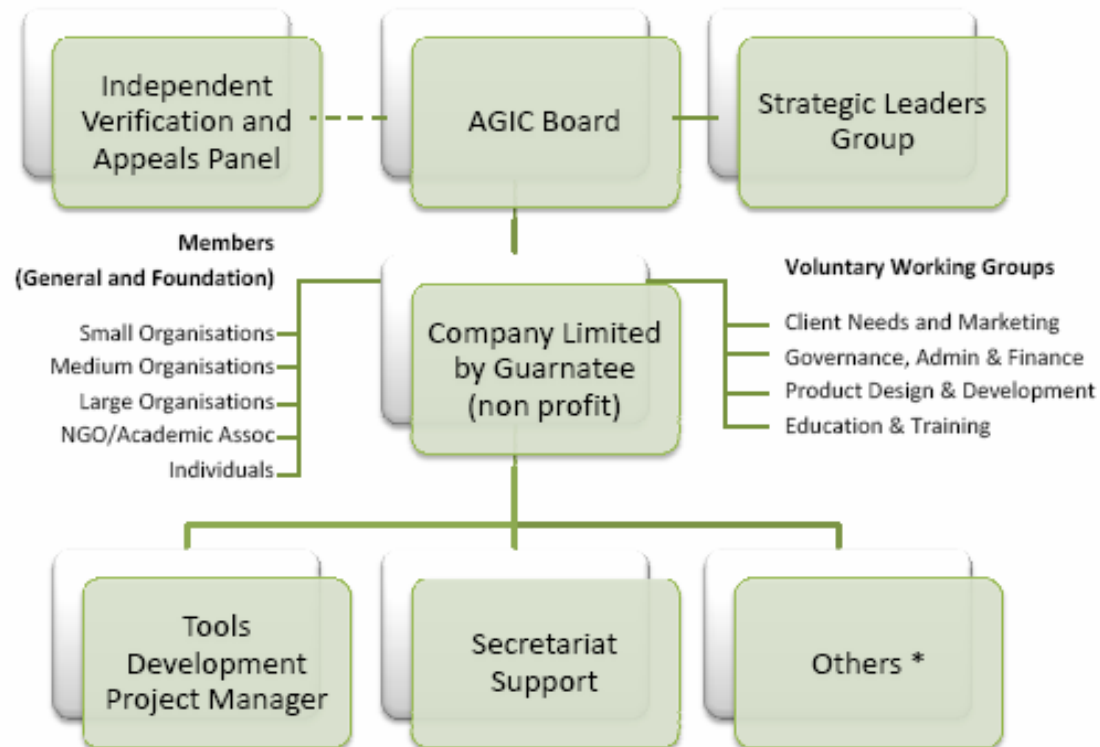


Economic
Capital

Social Capital

AGIC Organisational Chart

AGIC Organisational Chart



* Optional committees, consultants and contractors for training delivery, Category Development, Award Assessments, Advocacy, Governance and administration.

AGIC Board



Name and Qualifications	Board Position	Name and Qualifications	Board Position
David Hood FIE Aust CPEng Registered Engineer (NPER & APEC) David Hood & Associates	Chairman & Director	Rob Turk BSc (Env) Grad Cert Env Law ARUP	Director
Glenn Hedges MIE Aust CPEng (UK) Thiess	Executive Director Secretary to Board	Simon Cavendish MIE Aust Fellow MEIANZ MIE Aust Fellow EIANZ Enviropartners	Director
Doug Harland AICD Be (Mech Eng) FIE Aust AGIC	CEO & Executive Director	Steve Fermio Bsc(Hons) Geology MEIANZ Grad Dip Land Rehabilitation TIDC	Director
Scott Losee BES MPhil MEIANZ MPIA CPP Maunsell	Director	Dr Tony Stapledon Reg'd Architect (NSW) BArch (Hons) Grad Cert IRHRM Phd (Economics) Leighton Contractors	Director
Rick Walters MEIANZ MIE Aust BSc Be (Materials) MBA Worley Parsons	Director		

Existing Sustainability Schemes

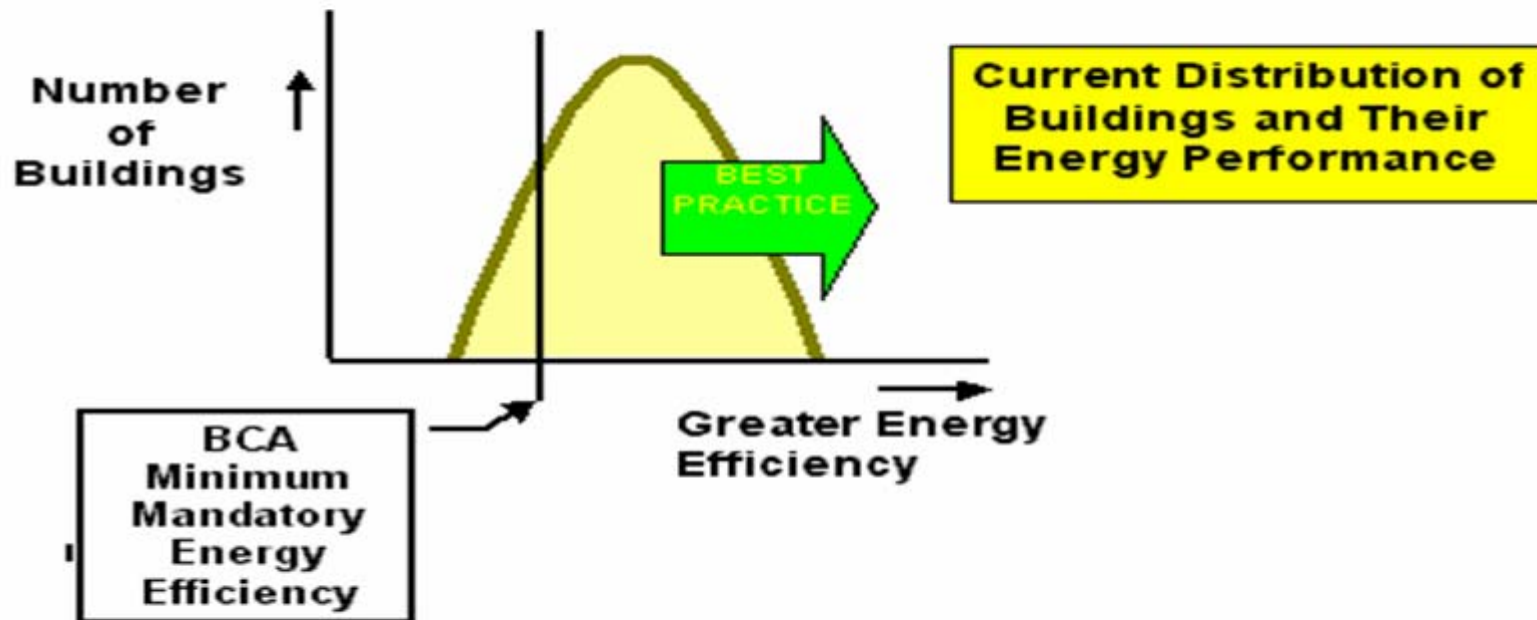


Do any other Sustainability Assessment Schemes Exist?

Green Star	Australia	Buildings (design)
NABERS/ABGR	Australia	Buildings (operation)
BREEAM	UK	Buildings
NEAT	UK	Health Facilities
LEED	USA	Buildings
CEEQUAL	UK	Civil Engineering
VicRoads/TCI	Australia	Roads
FIDIC's PSM	Global	Development projects
Arup's SPeAR©	Global	All projects

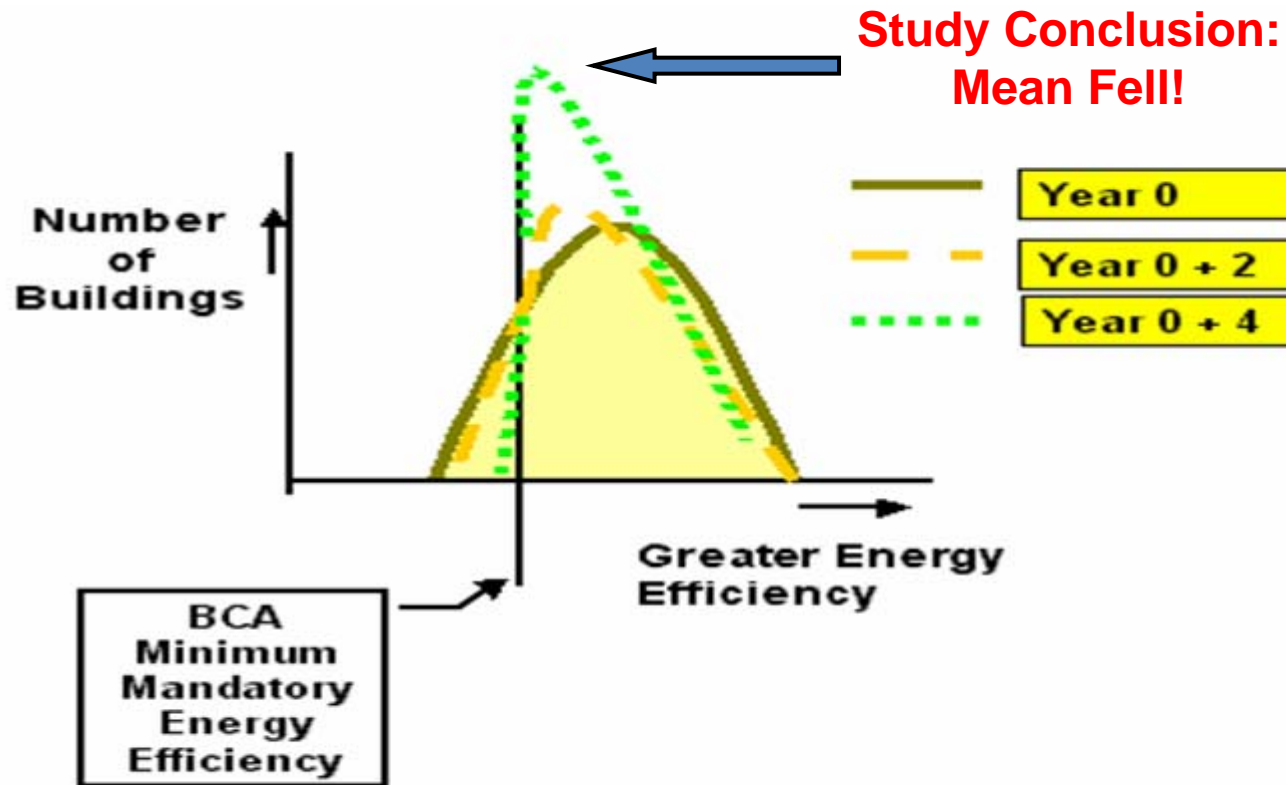
Role of Rating Schemes To Drive Change

Consider means to improve energy efficiency in buildings



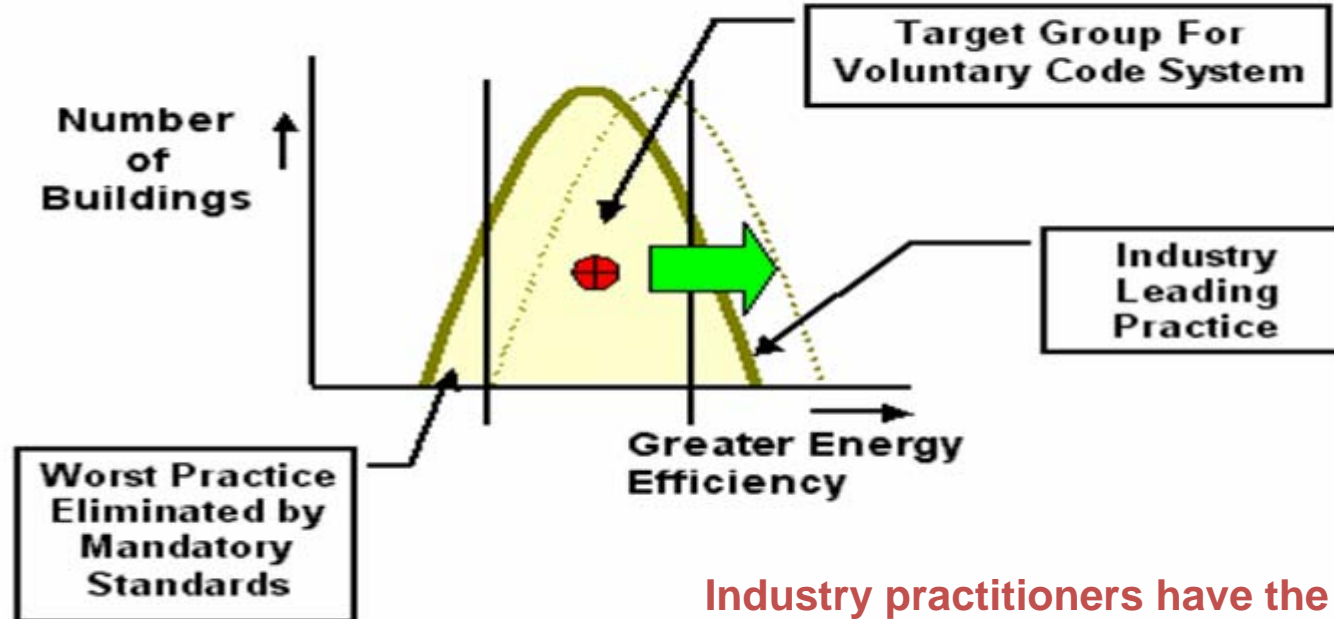
Mandatory Schemes Only Encourage Compliance

Effects of introducing minimum compliance standards



Voluntary Rating Schemes Drive Change

Market efficiency achieved by the Green Star Rating Scheme



Industry practitioners have the view this will be replicated for infrastructure

The AGIC Tool Categories

AGIC Infrastructure Sustainability Assessment Categories

1. Project Management & Governance.
2. Economic Performance.
3. Using Resources.
4. Emissions, Pollution & Waste.
5. Biodiversity.
6. People & Place.
7. Workforce.



A total of 27 sub-categories within the 7 categories above were developed through industry engagement and AGIC working groups.

The 27 AGIC Tool Sub-Categories



1.1 Purchase & procurement

1.2 Reporting and responsibilities

1.3 Making decisions

1.4 Climate change vulnerability

1.5 Knowledge Sharing & capacity building

2.1 Value for money

2.2 Due diligence

2.3 Economic life

3.1 Energy use

3.2 Water

3.3 Material selection & use

4.1 Greenhouse gas management

4.2 Discharges to air, water and land

4.3 Land management

4.4 Waste management

5.1 Functioning ecosystems

5.2 Enhanced biodiversity

6.1 Health, wellbeing, safety

6.2 Natural & cultural heritage values

6.3 Participatory processes

6.4 Positive legacy for current & future generations

6.5 Enhanced urban & landscape design & aesthetics

6.6 knowledge sharing, shared intellectual property

7.1 Safety, health & well being of workforce

7.2 Capacity building

7.3 Increased knowledge of applied sustainability

7.4 Equity

Infrastructure Types Covered by The AGIC Scheme

- Roads and tunnels.
- Railways and bridges.
- Airports.
- Ports and marinas.
- Cycle and pedestrian pathways.
- Distribution grids.
- Telecommunication infrastructure.
- Water and wastewater supply and treatment infrastructure
- Civil engineering head works of industrial processes.



Rating Scheme PRI Alignment & Tool Development Schedule



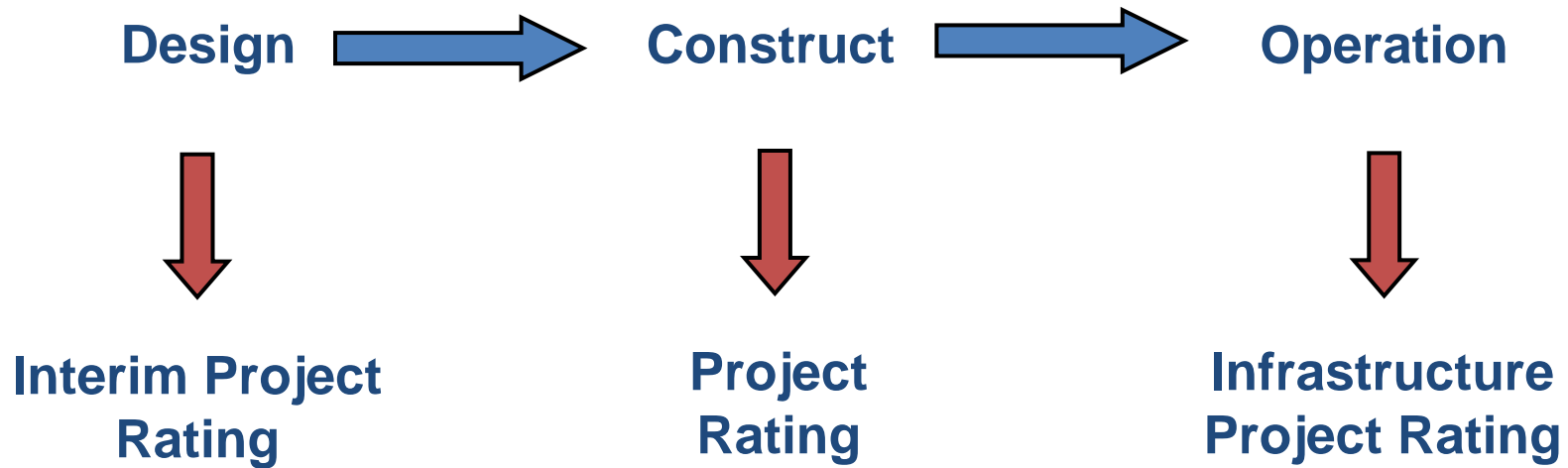
The AGIC scheme has sub categories that align with the United Nations Principles for Responsible Investment.

Category Author Tender Submissions are currently under review:

Tool Development Schedule:

- **First trial: September 2009**
- **Second trial: December 2009**
- **Tool release: July 2010** (Subject to Government funding)

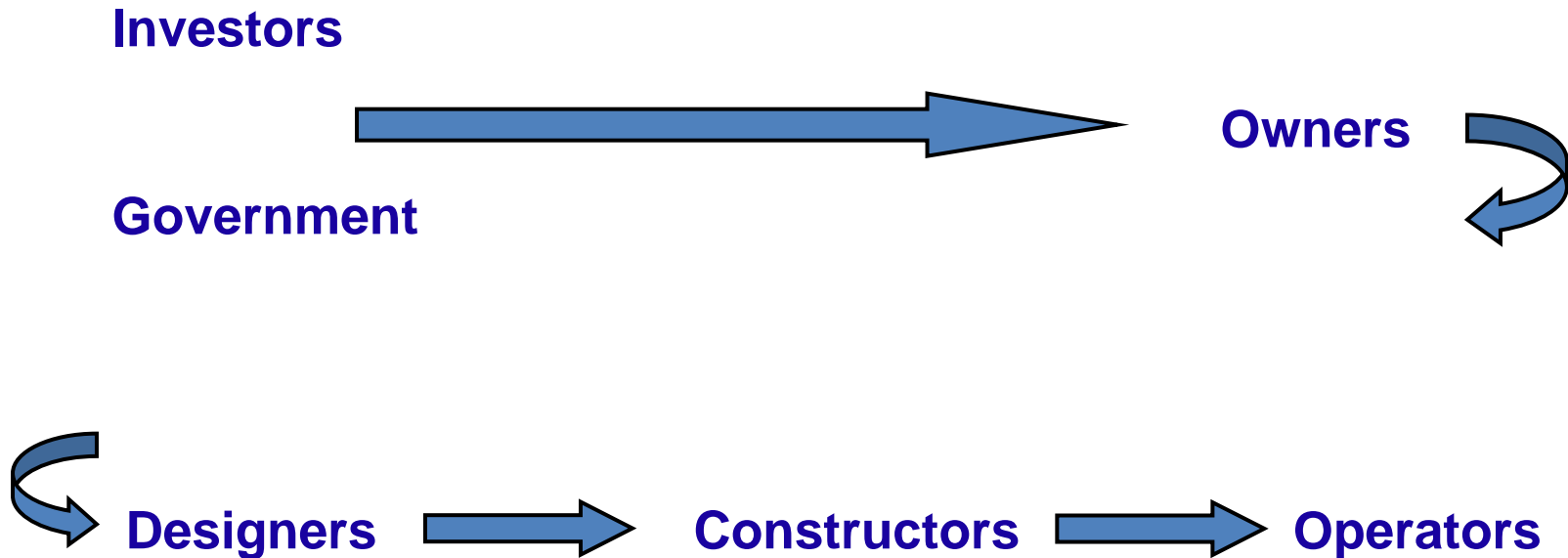
Project Assessment / Rating Stages



(Badging yet to be decided)

The Potential National Benefit

A common national structured approach / language/ metrics to the assessment of infrastructure sustainability benefits all stakeholders.



Cradle to Cradle Considerations

AGIC Current Members



Abigroup
ACTEW Corporation (F)
Arup (F)
Bilfinger Berger
Bluescope Steel
Brisbane City Council (F)
Connell Wagner (Aurecon)
CRC for Construction Innovation
Evans & Peck
GHD (F)
Leighton Contractors
Local Gov't Infrastructure Services (F)
Maunsell (Aecom)
MWH
Parsons Brinckerhoff
Port of Melbourne
Powerlink



Qld EPA (F)
QUT
SMEC Australia
Thiess (F)
TIDC (NSW) (F)
Worley Parsons

- **16 Individual members**
- **100+ volunteer participants**

Contacts:

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Chairman

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