



Innovation underpinning Australia's
built environment industry



Project Steering Group Chair

John V McCarthy AO

Chairman AEH Property,
Former National President of the
Property Council of Australia

1.42: Innovative Industrialised Buildings - Accelerating the Mainstreaming of Building Manufacture in Australia (October 2015-March 2017)

Project Team

John McCarthy AO	Chairperson, SBEnrc Board Chairperson
Keith Hampson	CEO, SBEnrc
Peter Newman AO	Curtin University, Project Leader
Charlie Hargroves	Curtin University
Carolyn Marshall	WA Building Management and Works
Phil Surridge	BGC
Daniel Ellis-Jones	WA Building Commission
Patience Lindhjem	WA Housing
Stephen Holden	NSW Family and Community Services
Hugh Phemister	NSW Family and Community Services
Rosemary Axon	QDHPW
Lam Pham	Swinburne University
Emad Gad	Swinburne University
Saman Fernando	Swinburne University
Daniel Conley	Curtin University

Growth in Building Manufacture

- The global manufactured buildings market was worth AUD\$120 billion in 2012 and will **reach \$265 billion by 2020**.
- Asia-Pacific was the largest regional market in 2012, worth just under \$60 billion, **outperforming all other markets**.
- China constituted the largest share of the Asia-Pacific market with just over 60% in 2012, followed by Japan at 22%, **Australia at 7%**, and Indonesia at 5%.
- Given current levels of domestic production imports are anticipated to reach a value of \$30 billion by 2025, **costing around 75,000 jobs nationally**.

Perception of Prefabricated Buildings



Well designed manufactured buildings



Manufacturing Advantages

- **Reduced Materials Cost:** Allows for 24 hour receipt of deliveries and the ability for greater stores of materials, while significantly reducing materials wastage, transportation costs, dumping costs, and onsite theft.
- **Reduced Operational Costs:** Faster construction times together with reduced delays from delivery, coordination, and inclement weather lead to reductions in the cost of finance and insurances, hire equipment, plant and equipment fuel, and staffing costs, while also reducing the time homebuyers may need to rent during construction.

Manufacturing Advantages

- **Increased Safety:** Significantly improved workplace occupational health and safety with construction indoors with 24 hour lighting and climate control. This also allows for easy use of elevated platforms, mini-cranes, moveable scaffolds, roped harnesses, and other safety equipment.
- **Access to Services:** A central facility will allow for lineside services such as tool shops, scaffolding hire, materials stores, building component manufacture (such as window frames), and access to fixed cutting and fabricating equipment (rather than relying on handheld equipment).

Overcoming Barriers to Finance

- **Progress Payments:** Long standing financing structures based on onsite progress payments need to be rearranged to support factory style construction.
- **Completion Risk:** There is uncertainty around managing completion risk, such that the building is in the possession of the manufacturer up until delivery and may not be able to be easily completed should the manufacture halt.
- **Warrantees and Defect Rectification:** There is a need for a clear and accountable process for the rectification of defects, especially when sourcing building modules from overseas, along with insurance and warrantee structures that support offsite construction and onsite erection.

Overcoming Barriers to Financing Building Manufacture - Stakeholder Outreach Workshop

Sustainable Built Environment National Research Centre (SBEnc)
Friday, May 27, 2016 from 9:00 AM to 3:30 PM (AWST)
Perth, WA



Ticket Information

TYPE	REMAINING	END	QUANTITY
Event with Seated Lunch This is an invitation only event.	35 Tickets	May 27, 2016	Free <input type="text" value="1"/>

[Register](#)

Event Details

Overcoming Barriers to Financing Building Manufacture - Stakeholder Outreach Workshop

The [SBEnc](#) and the [EU Centre for Global Affairs](#) invite you to participate in a workshop to identify strategic areas and associated activities to overcome current barriers to financing building manufacture. In conjunction with EU Green Week the event seeks to put the saying 'Think Global Act Local' into action by considering international examples to inform discussions around how innovative financing approaches can unlock environmental, economic, and social benefits associated with building manufacture in Australia. The event will be at the **Western Australia Club** and will involve a moderated expert panel, a facilitated workshop processes, and a formal lunch.

[Save This Event](#)

When & Where



The Western Australian Club
12 St Georges Terrace, Level 11
Perth, WA 6000
Australia

Friday, May 27, 2016 from 9:00 AM to 3:30 PM (AWST)



INVESTING
for a greener future



Outcomes

- **Investigating Performance:** The project has compiled a set of metrics around the leading building manufacture case studies in Australia to provide an updated appreciation of actual performance to inform a shift in perceptions.
- **Financial Barriers:** The project has researched worlds best practice in overcoming barriers to finance to see greater investment in the sector and has made recommendations to State agencies around how such value can be harnessed.
- **Industry Engagement:** The industry workshop allowed for stakeholder engagement with representatives from the banking sector along with SBEnrc Core Partners. The workshop provided an indication of the perceived strengths of key risks and rewards influencing investment in this sector.