



**WOOD – HEALTH,
WELLBEING AND
RESTORATION**



Positive environmental actions, for everyone.

Objectives:

To **promote** sustainable resource use

To **encourage** a low carbon lifestyle

To **connect** people with nature





Positive environmental actions, for everyone.

Our Campaigns



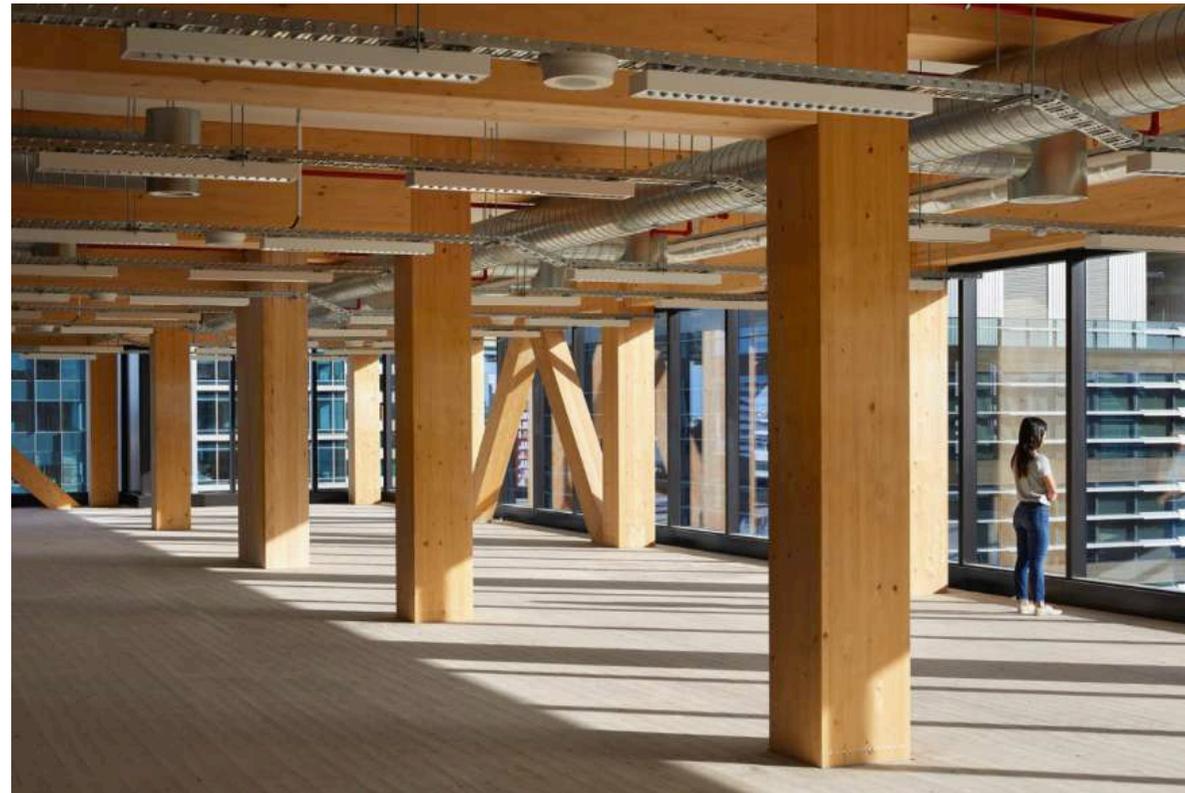


Make It Wood Campaign

The *Make It Wood* campaign aims to increase the use of responsibly sourced wood as a building material

Provide credible, research-based information on environmental and health benefits as part of the solution to climate change

25 King, Brisbane





Wood is good for health and wellbeing

Planet Ark report:
Wood – Nature Inspired Design

Outlines the importance of connecting buildings with the natural world

Shows a positive effect on our health and wellbeing

Planet Ark report, March 2017





What is good health?

According to the WHO, health is defined as; ***“a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.”***

Western society has changed its relationship with nature

Planet Ark report, March 2017





A disconnect with nature

Increasing urbanisation rates have caused a disconnect with nature

We now spend over 90 per cent of our time immersed in man-made environments

Corresponds with reports of increasing levels of obesity and mental health issues





Physiological response controlled by SNS

Our physiological responses are controlled by the sympathetic nervous system (SNS) – activated when the body prepares for stress (i.e. increased blood pressure and pulse rate)

Long-term exposure to environments that induce stress can trigger serious health consequences





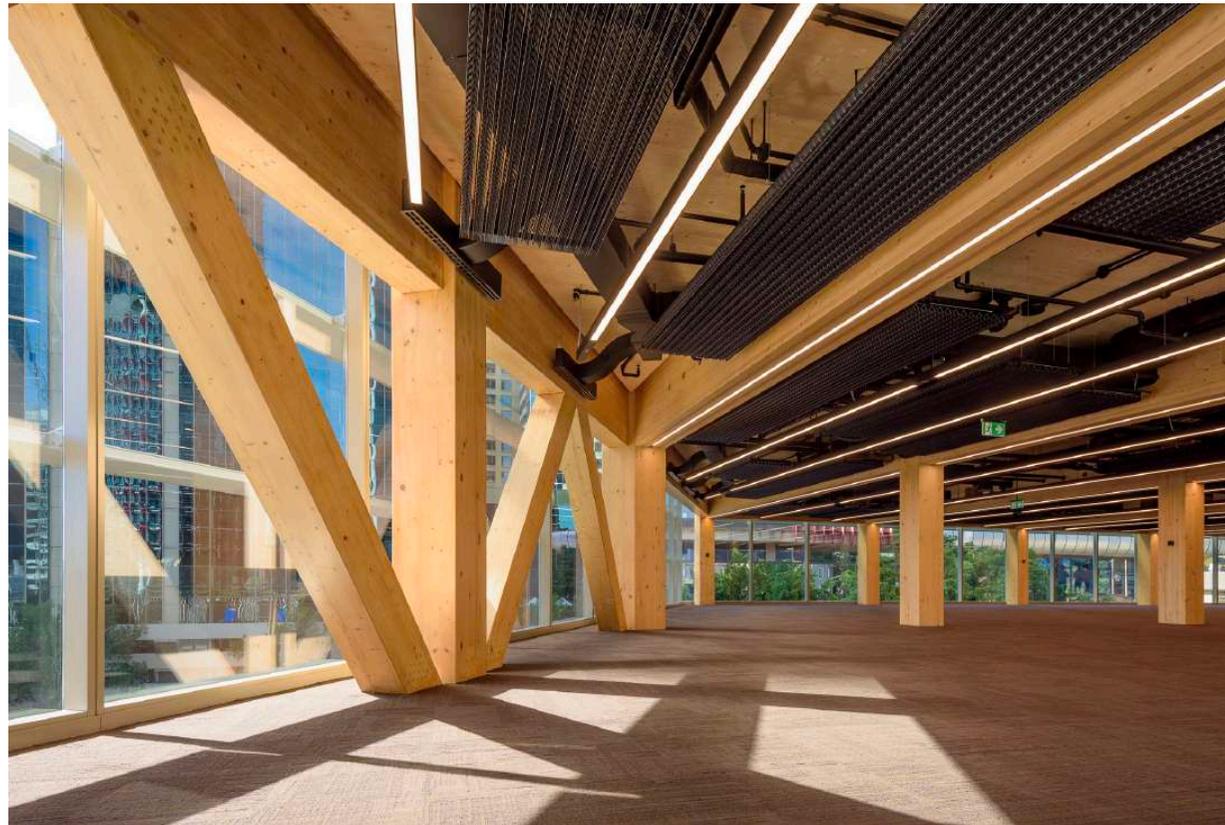
What is biophilic design?

Biophilia is the ‘love of life’ - our innate human need to connect with nature, resulting in improved health and wellbeing

Biophilic design is focused on enabling a human connection to nature in the built environment

Mimics the effect of time spent in nature

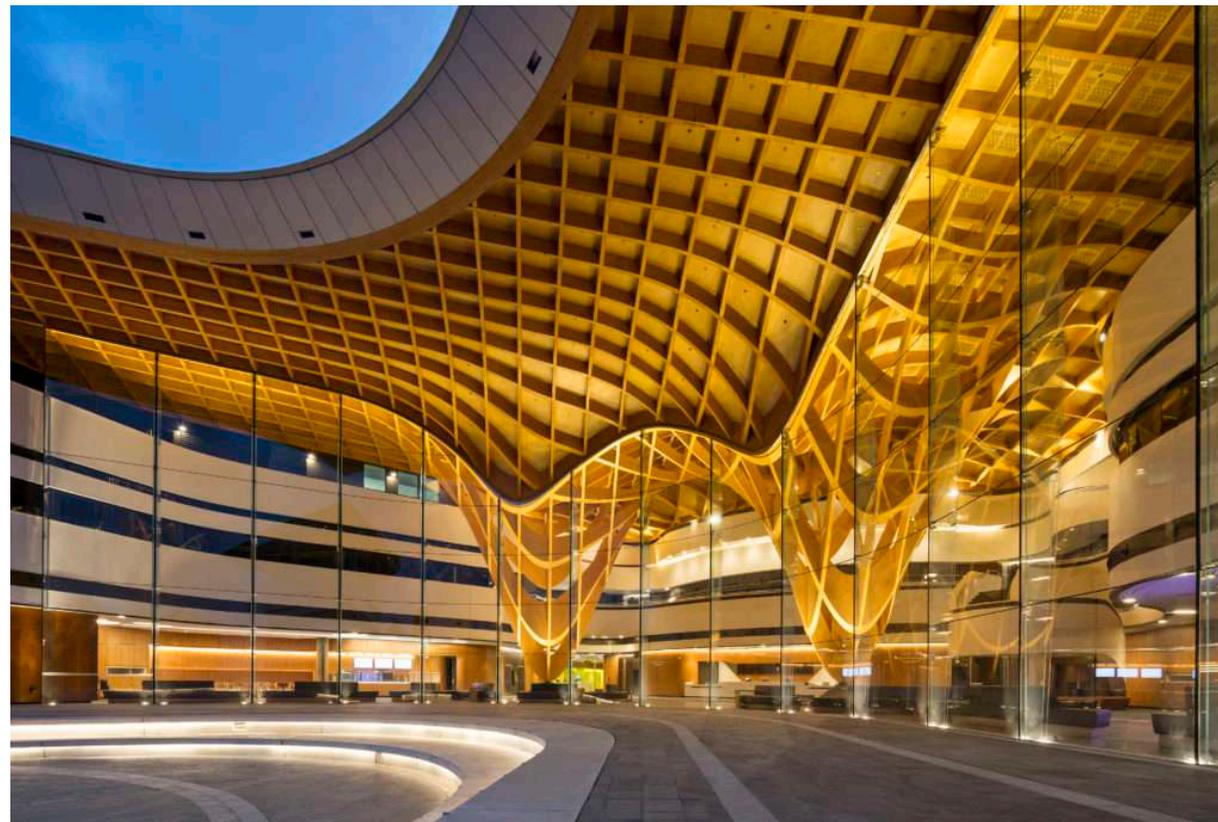
International House Sydney





Wood and biophilic design (*Kellert*)

- 1. Environmental features;** wood provides a direct link to nature
- 2. Shapes & natural forms;** patterns in wood grain are naturally developed
- 3. Natural patterns & processes;** grain patterns, wood's colour spectrum and presence of knots



Bunjil Place, Narre Warren, Vic



Wood and biophilic design (*Kellert*)

4. Light & space; wood has natural colour diversity and can be used in varying sizes

5. Place-based relationships; using locally sourced wood can evoke a regional connection to nature

6. Evolved human-nature relationships; long-term use for shelter, tools, transport and art



Krakani Lumi, Tas



Restoration theory

Restoration: “A process of renewal that replenishes a depleted social, psychological or physical resource”

Our resources can be depleted by the effort to adapt to our environment (e.g. building interior)

Attention Restoration Theory (ART)
replenish ability to maintain attention

Kambri Precinct, ANU, Canberra





Psycho-physiological stress recovery theory

Natural environments, even views of nature from within a building, will aid recovery from both psychological and physical stress (e.g. recovery from an operation)



Tempe House, NSW



Restorative Environmental Design – RED (Kellert)

Goals of RED:

1. Reduce the environmental impact of new buildings
2. Ensure buildings provide health benefits to occupants
3. Promote a stronger connection between occupants and nature

GP Superclinic, Caboolture





Reduced stress response

Positive physiological effects - lowering of blood pressure and heart rate

Decreasing stress at school by incorporating natural wood in classrooms can have a significant and long-lasting positive impact



JSRACS Kindergarten, Perth WA



Improved emotional state

The use of wooden products has been shown to increase social interactions among the elderly

Leads to improved emotional state and expanded self-expression

Reduces the risk of dementia, a disease that costs AU\$5B every year

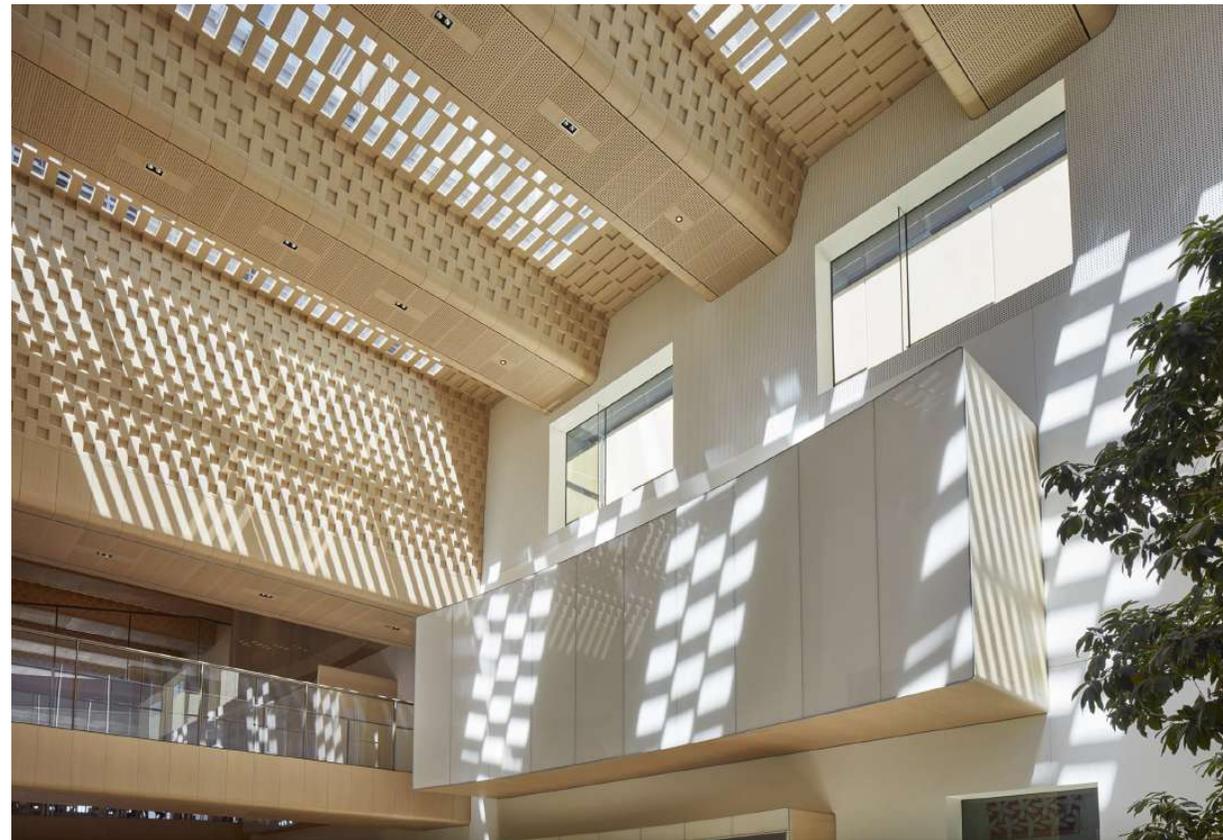


Salvation Army Aged Care, Victoria



Improved indoor air quality

Wood is hygroscopic – it contributes naturally to humidity control by absorbing moisture from the air when the humidity level in a space is high and releasing it when the humidity level is low



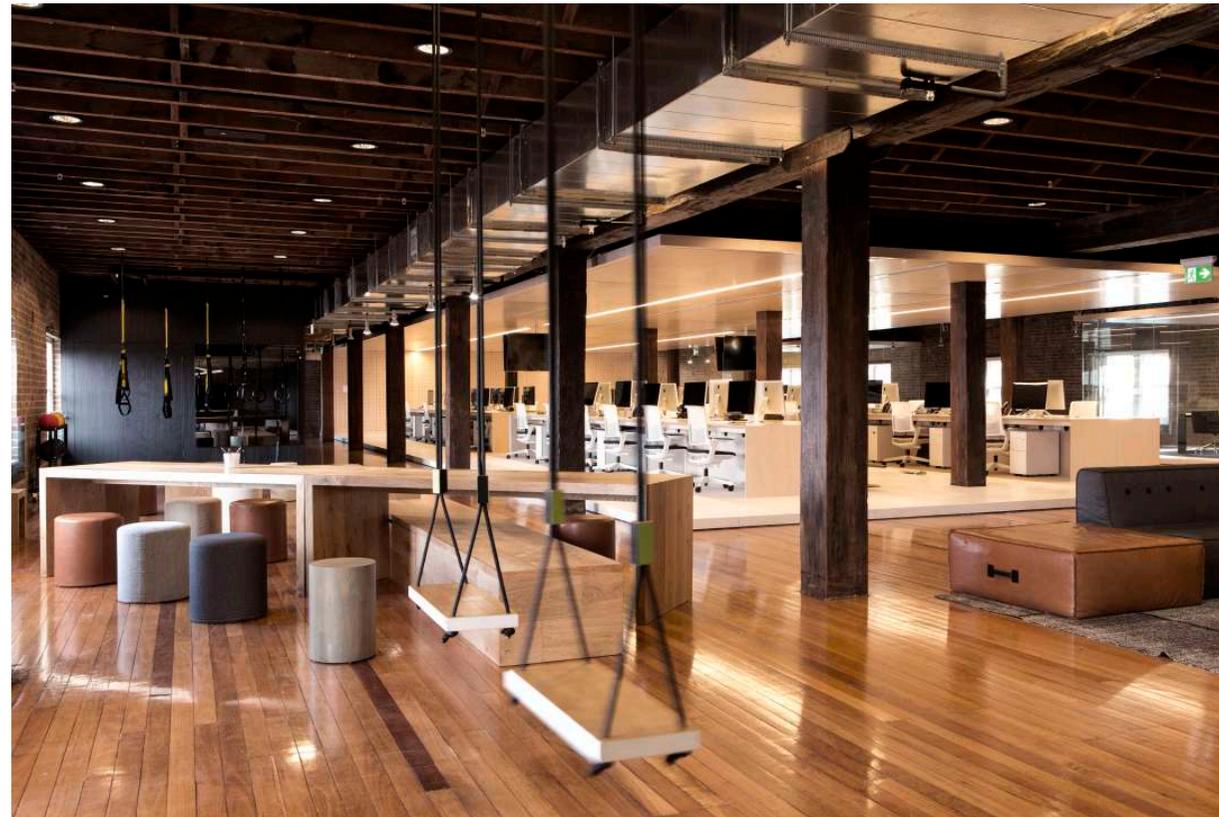
Bendigo Hospital, Bendigo, Vic



Increased productivity and reduced absenteeism

Office environments shown to have an effect on occupational health

High correlation between the use of wood in office buildings and increased productivity and reduced absenteeism



Ansarada Offices, NSW



What is a Wood Encouragement Policy?

A Wood Encouragement Policy requires responsibly sourced wood to be considered, *where feasible*, as the preferred structural material in all public new-build and refurbishment projects



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 **Wood Encouragement Policy**

Reference Number:	3.15
Classification:	Policy – Public
Subject:	Development
Department:	Development Services
Responsible Officer:	Director Development Services
Community Plan Reference:	Strategic Direction Five – Economic Vibrancy Strategic Direction Six – Environmental Sustainability Strategic Direction Seven – Asset Management
First Issued/Approved:	11 August 2015 (Folio 6124; Item 11.3.1)
Review Frequency:	Every 4 years after each general election.
Last Reviewed:	
Next Review Date:	August 2018
Council File Reference:	GF/3.63.1
Applicable Legislation:	There is no legislation relevant to this policy.
Relevant Council Policies / Procedures / Guidelines	There are no known relevant documents related to this Policy.
Consultation:	ELT/Council/Public

1. STATEMENT

Wattle Range Council recognises the importance of the forest and wood products industry to both the Council region and the Limestone Coast and Greater green Triangle regions.

The key to Council's commitment to job retention and creation is supporting significant local industry in order to secure jobs and leverage further investment.

The policy has four objectives:

- Facilitating and encouraging the use of wood as a preferred, sustainable building material for projects in the district;
- Requiring wood to be used in council building projects if appropriate; and
- Actively supporting and advocating for timber and the wood industry - locally, regionally and at a national level.
- Encouraging the use of regionally produced timber products that come from sustainable plantation grown resources.

Further goals include:

- To stimulate sustainable economic development within the Wattle Range Council area's timber and wood products industry and encourage the development of value added products within the timber sector.
- To encourage the use of verified sustainable sourced timber and wood products in the construction and fit out of Council buildings and Infrastructure.
- To recognise all of the benefits that make timber a smart choice for Council buildings and infrastructure.

Policy No. 3-15 – Wood Encouragement -1-

MAKE IT WOOD

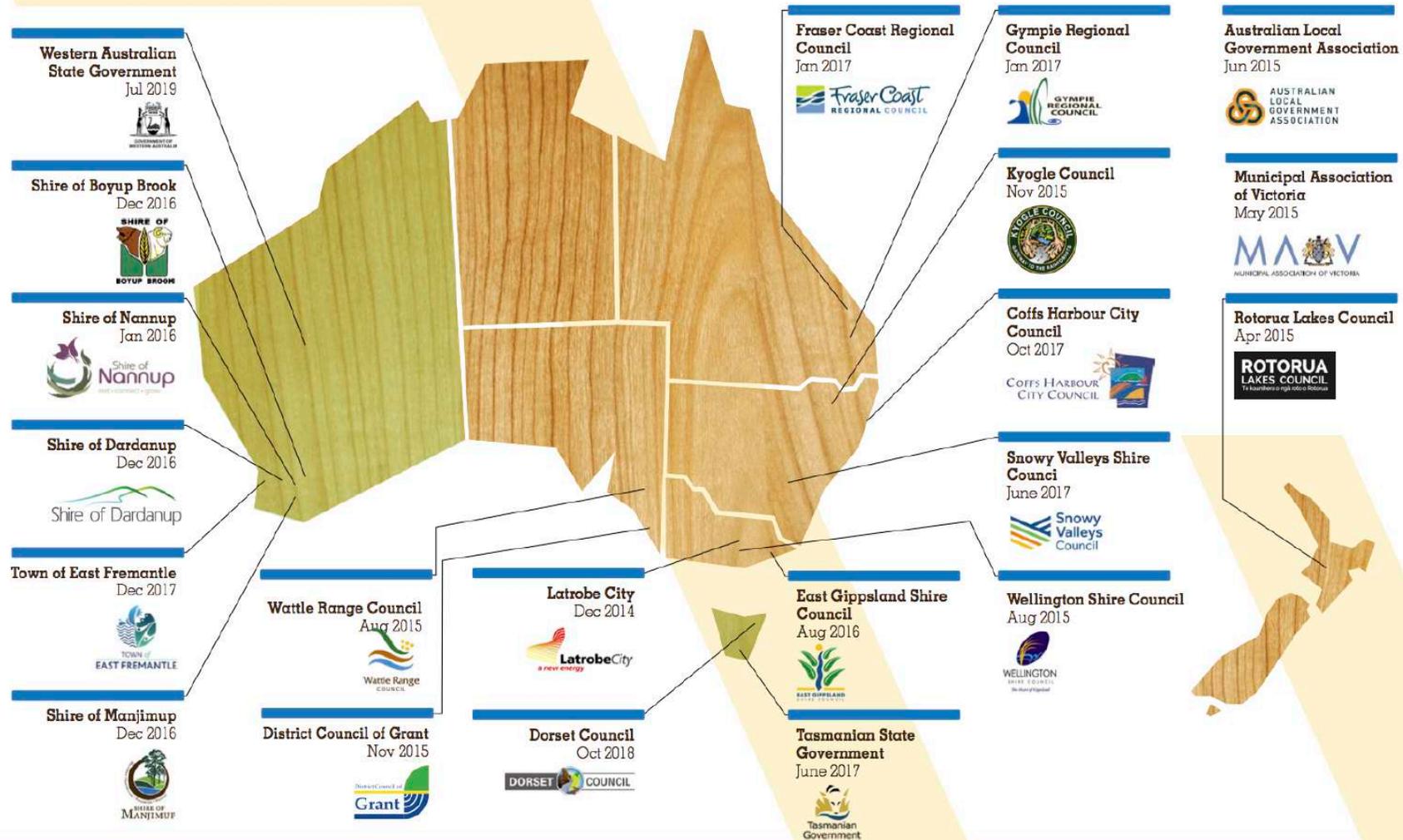
Do your world some good

PLANET ARK

Wood Encouragement Policies

July 2019

Local government associations and councils that have adopted Wood Encouragement Policies.



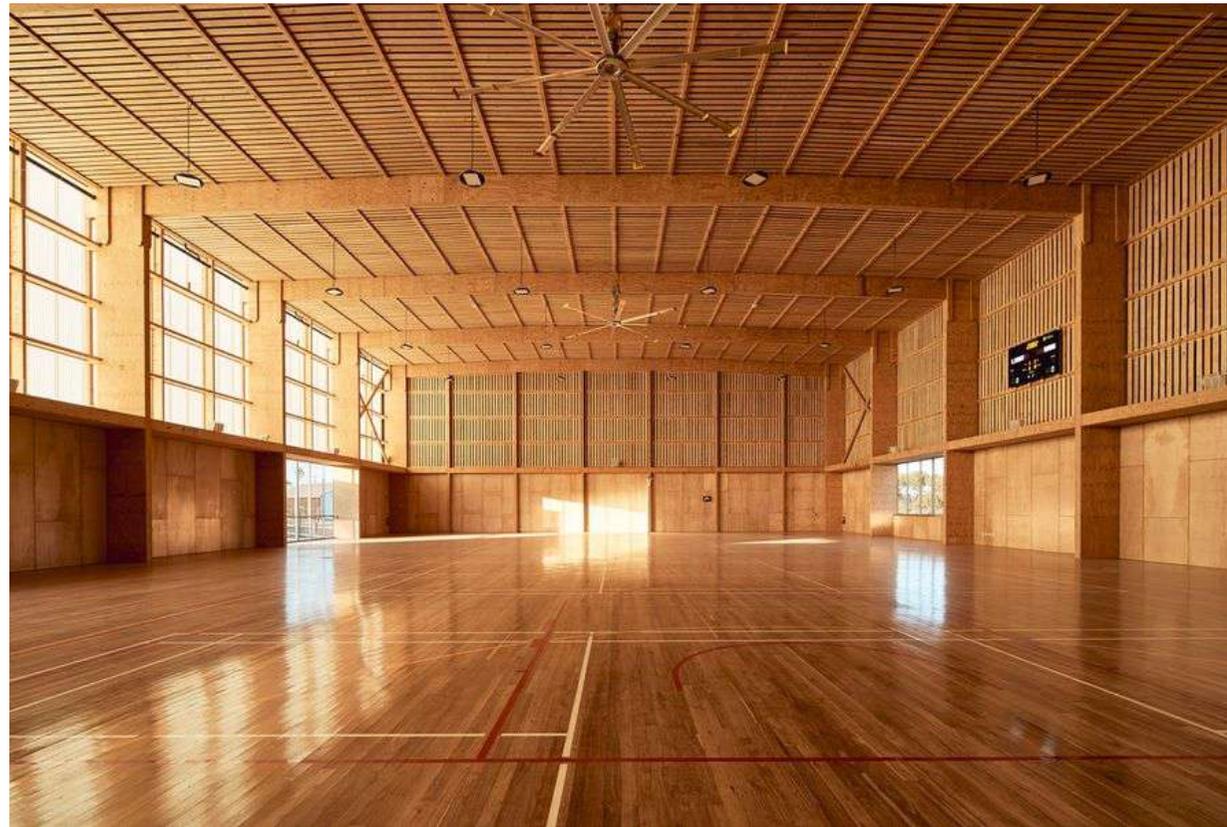


Inspiring projects

Pingelly Recreation & Cultural Centre
Pingelly, WA
2019

“The Pingelly centre is Western Australia’s largest timber building constructed since then end of the second world war.”

Photo courtesy of Pingelly Shire Council





Inspiring projects

Dardanup Shire Council Offices
Dardanup, WA

“It will be made from wood because we want to lead the way in using our Wood Encouragement Policy.”

Image courtesy of Dardanup Shire Council





Inspiring projects

6-storey CLT Office
Fremantle

“In recent years in Fremantle we’ve seen the construction of some really exciting sustainable buildings that are better places to live and work in, better for the environment and cheaper to operate.”

Dr Brad Pettitt, Mayor

Image courtesy of Harris Jenkins Architects





Inspiring projects

Library at the Dock
Victoria Harbour, Vic
2014

“Library at The Dock is Australia’s most sustainable community building, constructed primarily from CLT and recycled hardwood.”

Photo courtesy of Lendlease





Inspiring projects

Bainbridge Island House
Bainbridge Island, WA
2017

“The home’s interiors are an ode to nature, featuring a palette of natural materials and a Feng Shui-compliant layout.”





Inspiring projects

Our Lady of the Assumption
Catholic Primary School
North Strathfield, NSW
2017

*“It’s a very different type of space
to traditional schools. We had a
big focus on the use of timber
and natural materials.”*

Photo courtesy of BVN





Inspiring projects

ANU Kambri Precinct
Canberra, ACT
2019

“This precinct is innovation rich. It incorporates a mass timber 450-bed student accommodation and 5-storey collaborative teaching building.”

Photo courtesy of BVN





Inspiring projects

Bendigo Hospital
Bendigo, Vic
2017

“Natural materials like timber can increase the wellbeing and comfort of patients, visitors and staff.”

Photo courtesy of Bates Smart



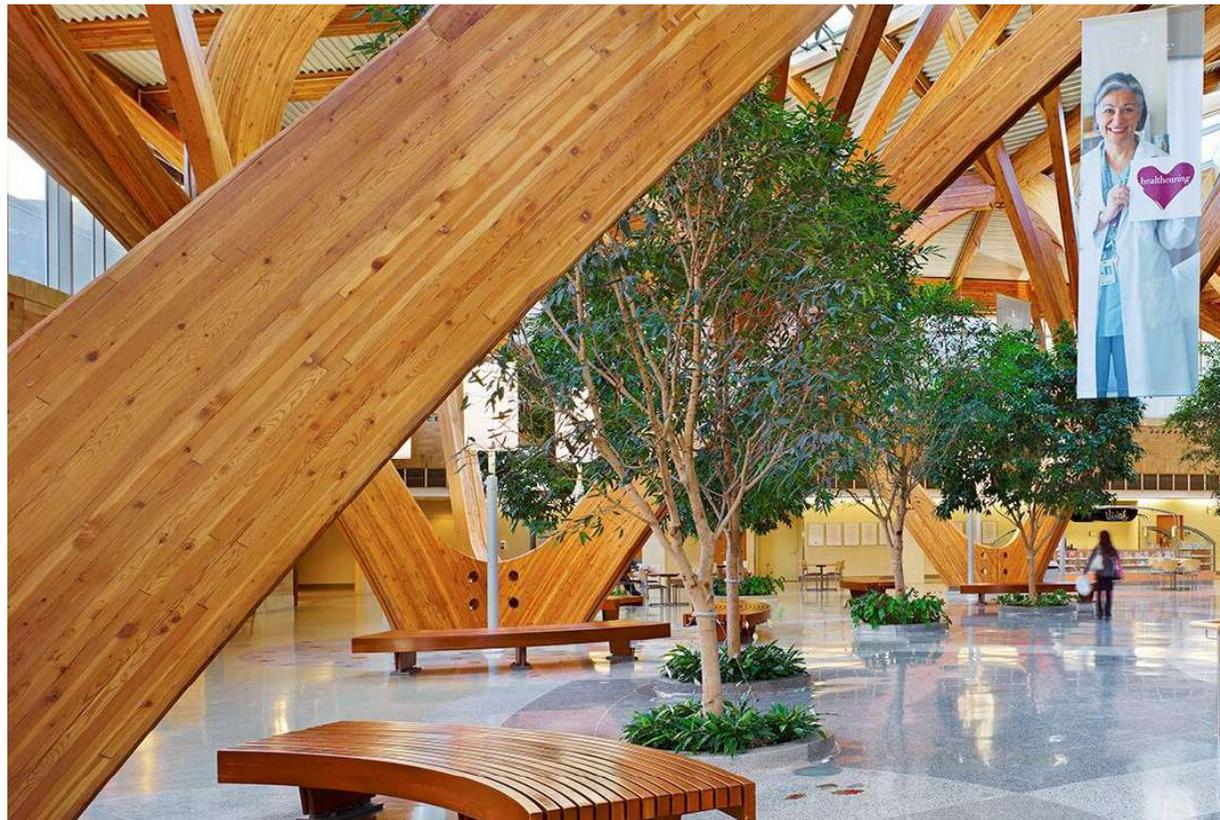


Inspiring projects

Credit Valley Hospital
Toronto, Canada
2004

“We wanted to bring the lines of nature into the built form. When people walk into the building, they feel as if they are part of something, there is a deep-rooted connection.”

Photo courtesy of Tye Farrow & Partners



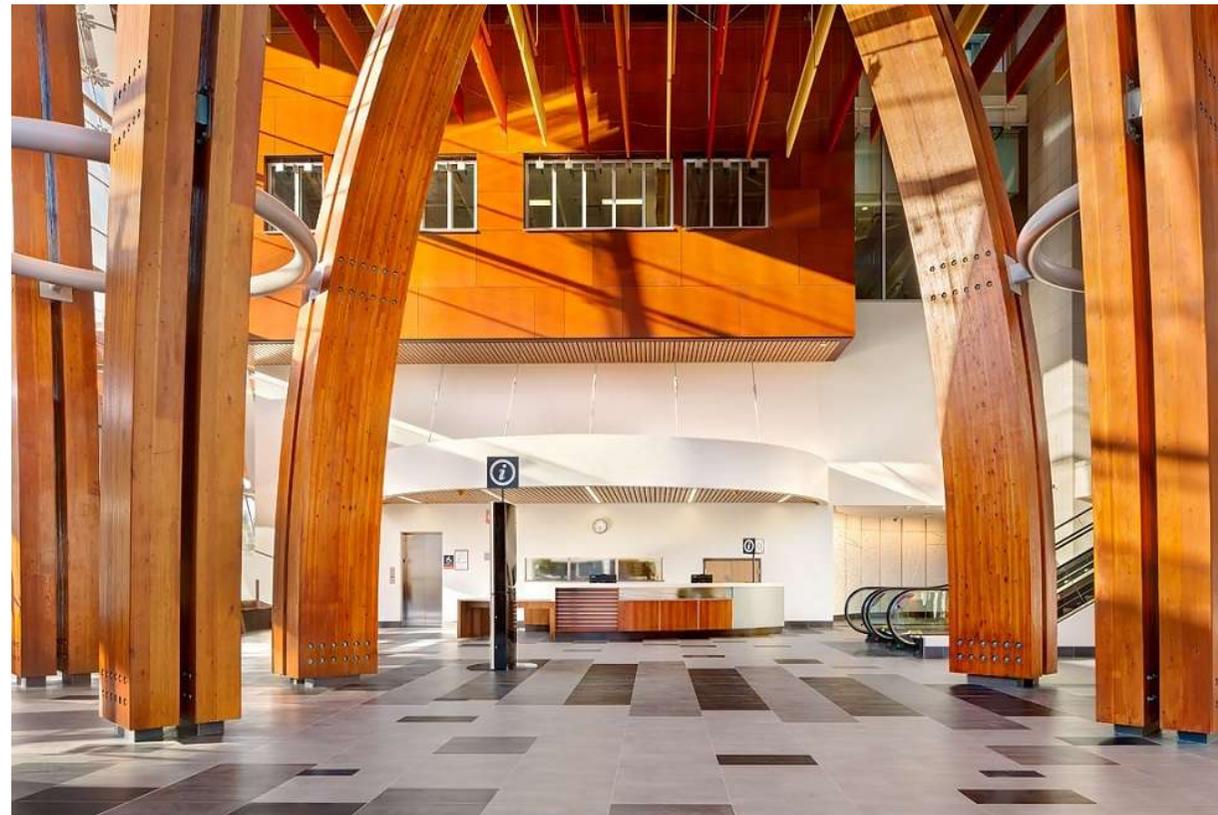


Inspiring projects

Surrey Memorial Hospital
British Columbia, Canada
2014

“Biophilic design has led to the greater use of natural daylight, access to views of nature, and the introduction of wood and other natural materials into healthcare facilities.”

Photo courtesy of CEI Architecture and Parkin Architects





Inspiring projects

Maggie's Oldham
Manchester, UK
2017

“The use of wood at Maggie’s Oldham is part of a bigger design intention to reverse the norms of hospital architecture... In wood there is hope, humanity, scale and warmth.”

Photo courtesy of dRMM





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