

## Engineering Alchemy: The Galkangu Bendigo GovHub Story

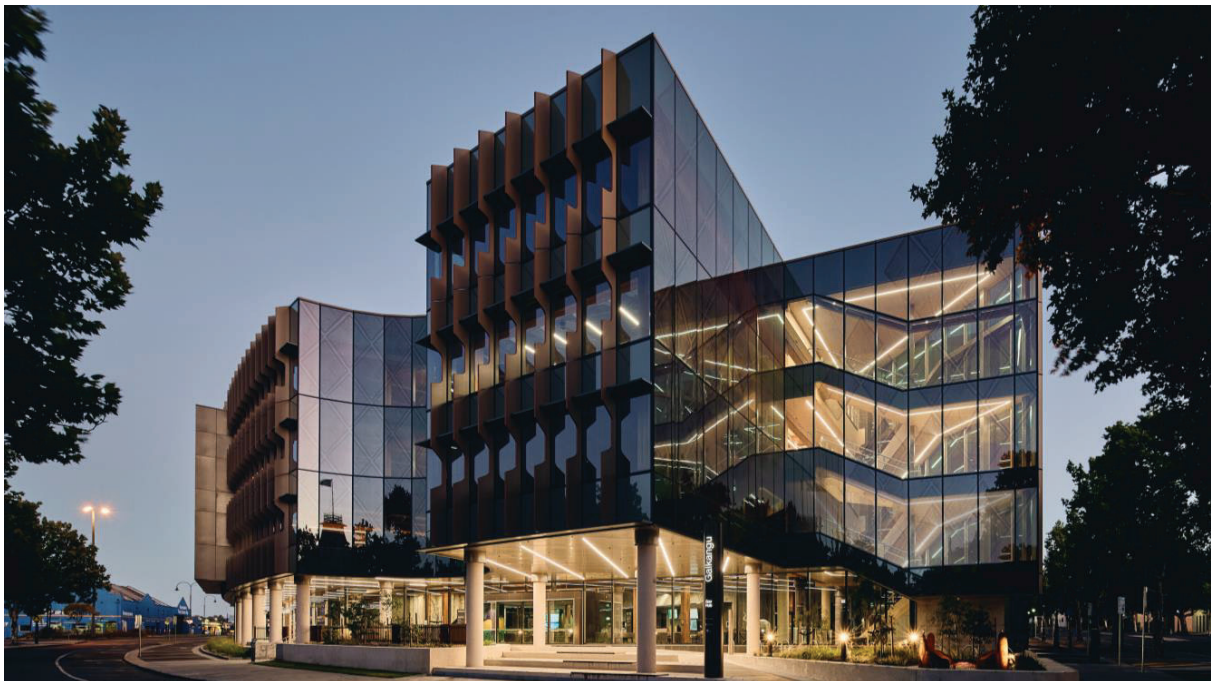
WCTE 2025



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Structural Leader:  
Clients & Markets  
*Arup*

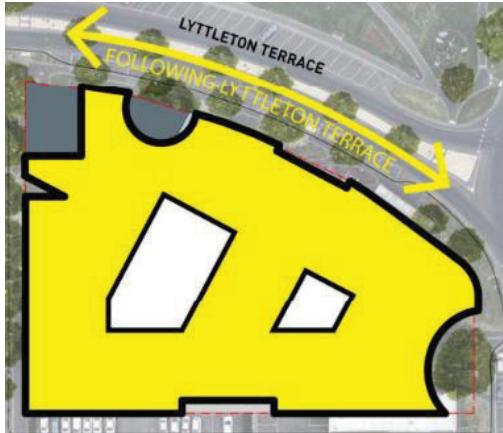
**ARUP**

Galkangu is a great ~~timber~~ building.  
and it's made from **timber**



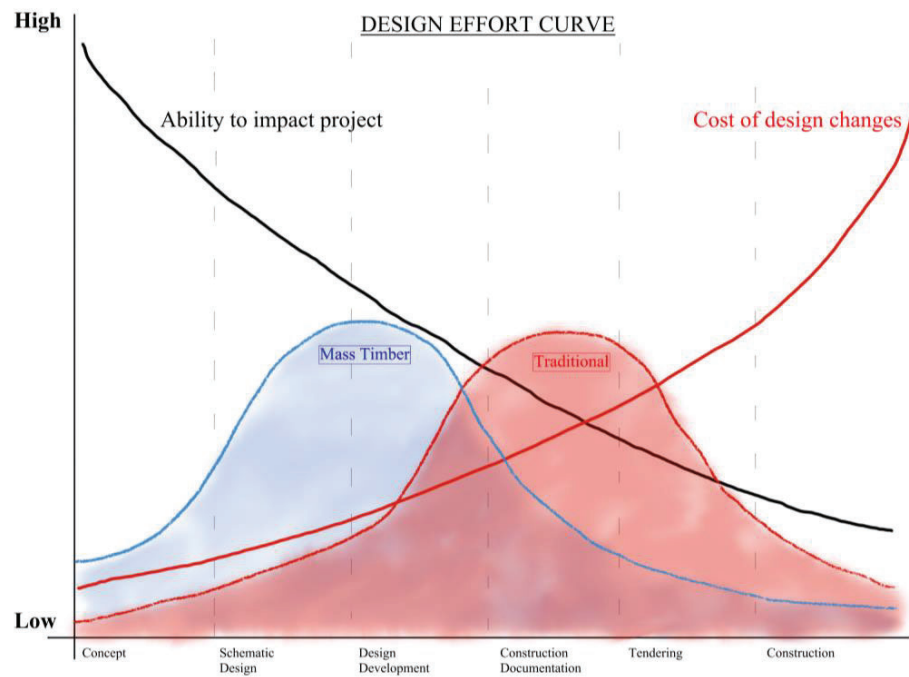
## In The Beginning

Early Architectural Concept



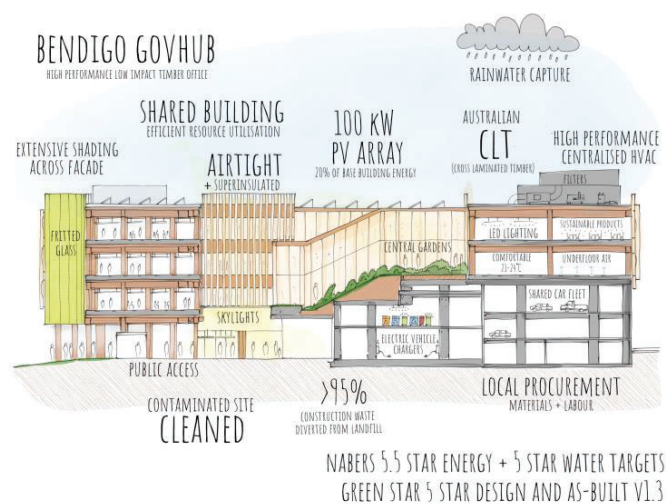






## Sustainability Strategy

ARUP

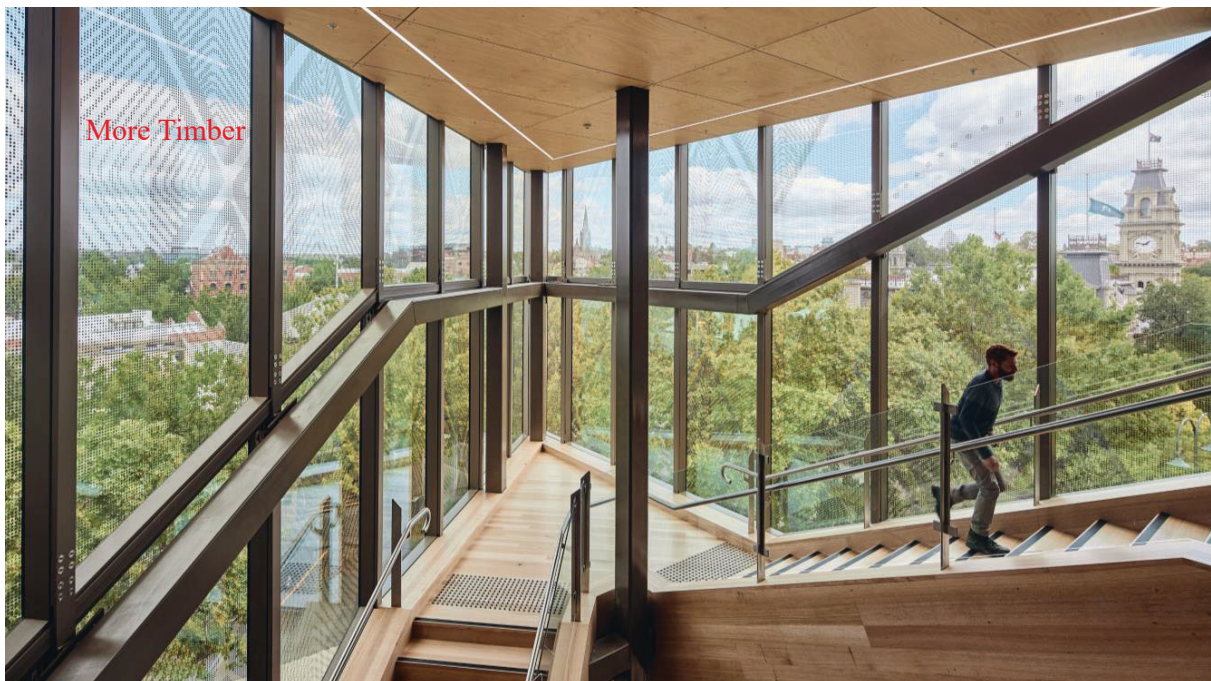
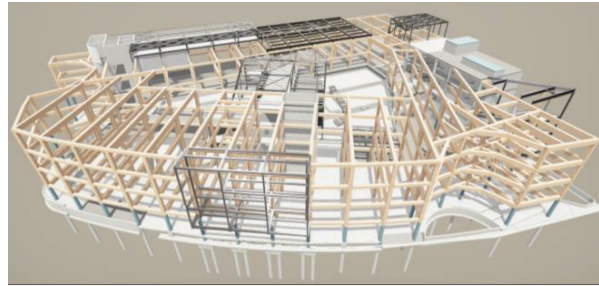




# Timber Engineering

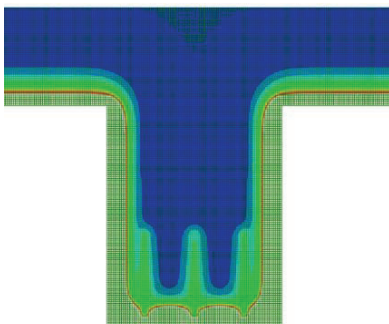
## Structure

- GL18 Hardwood glulam from ASH
  - 9x6m “typical” grid
  - 420x420 columns
  - 660x420 beams
- CLT from XLam
  - 260mm (with 90min FRL)
- No façade bracing
  - Timber diaphragm & precast cores
- Not just timber



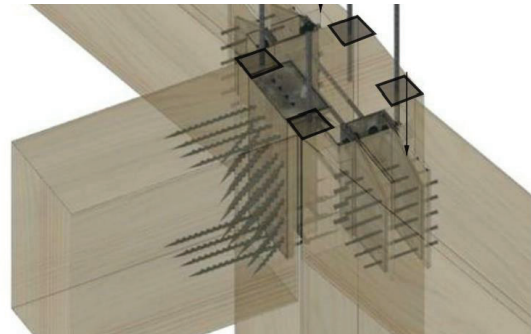
More Timber

# Fire Engineering





## Connections







Client Aspiration Realised  
Exposed Timber Showcased  
100% Australian Supplied Mass-Timber  
30% Reduction in Embodied Carbon  
Holistic Design & Collaboration