Timber Waste uncovering the scale of the issue

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50% of all waste sent to landfill annually is from construction and demolition (C&D) activities.

(BRANZ, 2024)

It is estimated that 31% of this (205,856 tonnes) is timber.

(Nelson, Elliot, Pickering, & Beg, 2022)

Project timeline

Connections with industry

July 22
Project start

Nov 22
Methodology confirmed

Oct 22 - Nov 23
Securing three projects for data collection

May 24
Residential sites complete

July 24
Commercial project (Phase 1) complete

Oct 24
Data review & analysis

Feb 25
Final report delivered

Data focus areas

Project stages:

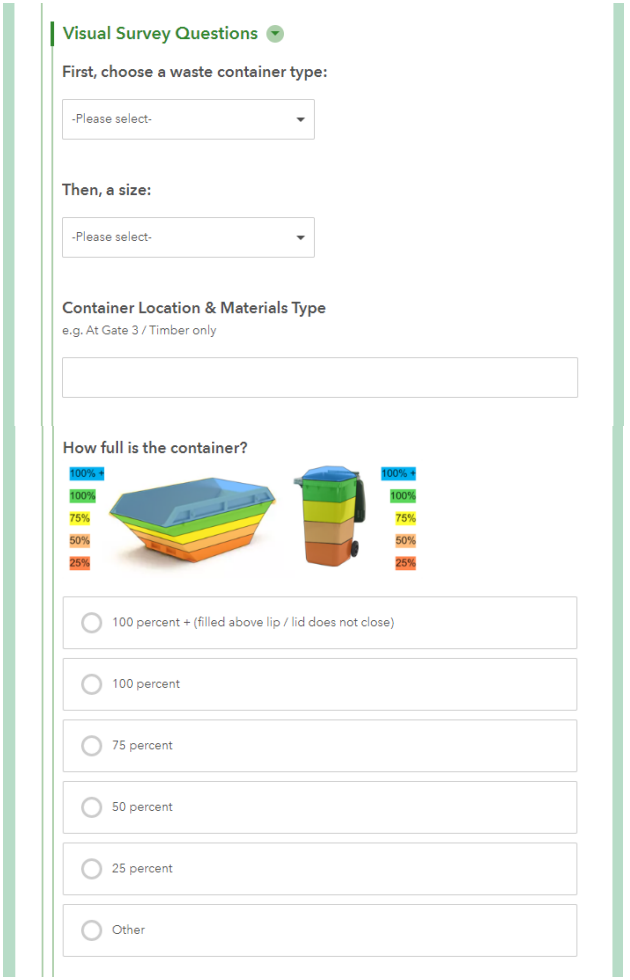
1. Foundation
2. Wall framing
3. Mid-floor framing
4. Roof framing
5. Cavity and cladding
6. Roof cladding
7. Internal wall linings
8. Internal finishing and trim
9. Fit out

Condition:

1. Offcut
2. Like new (whole)
3. Damaged (unusable)

Timber types:

1. Sawn (untreated)
2. Sawn (treated)
3. Native timber
4. Prefabricated / precoated
5. Engineered (untreated)
6. Engineered (treated)
7. Pallet

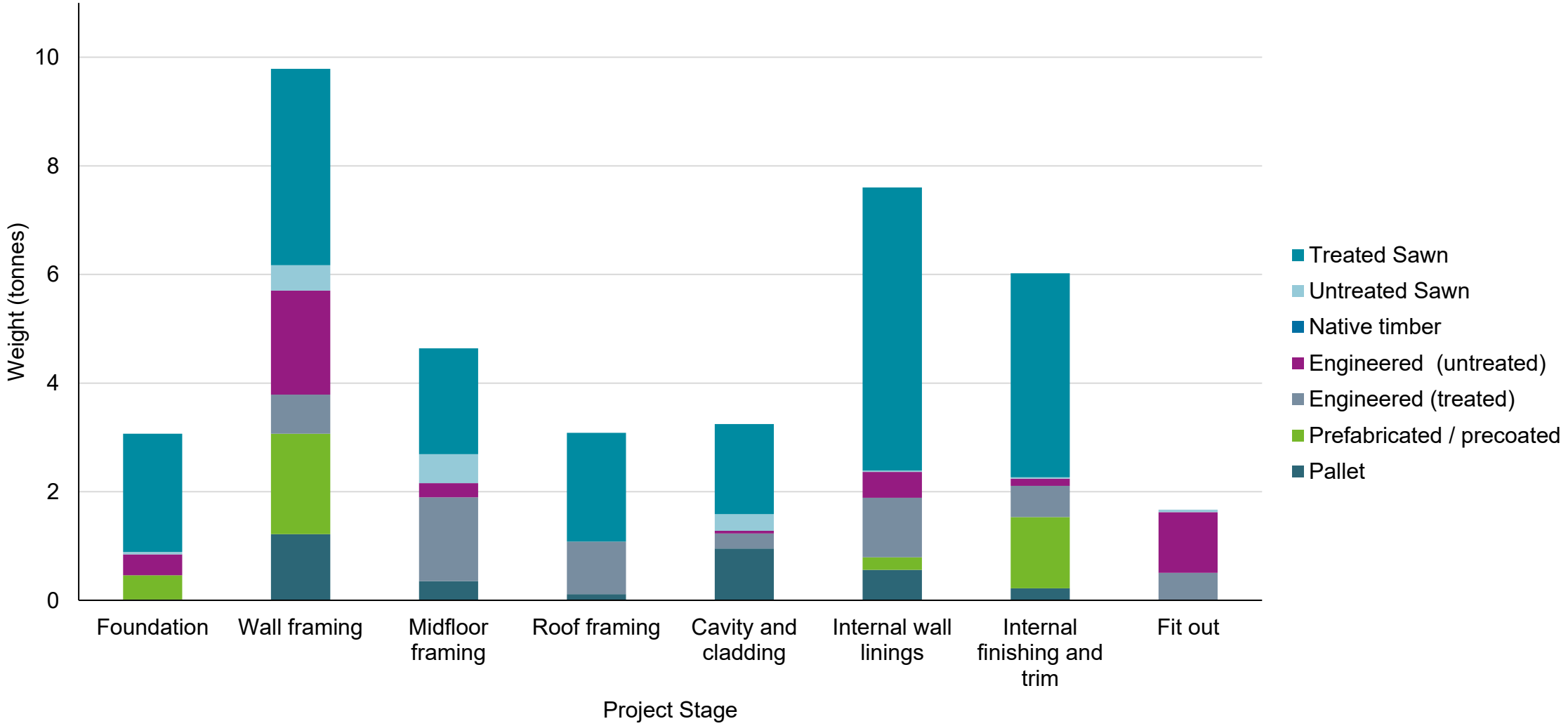


Project overview

Project	Project type	Construction		Visual data entries	Sort & Weigh data entries *No. of skips*
		Start	End		
The Youth Hub, Christchurch	Commercial	April 2023	July 2024	70	8
Wellington	Residential	November 2023	May 2024	2	0
Christchurch	Residential	October 2023	May 2024	4	0

The Youth Hub overview

The Youth Hub data



The Youth Hub insights

- Procure and reuse of treated timber for overall savings.
- Any length of timber longer than 300 mm would be kept and used as nogs.
- Off-cuts of materials were utilised on site where feasible
- Utilised community groups or product stewardship schemes where possible

Challenges of the project

- Finding suitable projects
- Visual data capture – fast pace projects
- Recovery options for timber waste
- Multiple organisations on site – lose messaging and good behaviours
- Subjectivity of visual data capture

Planning for success

- Data-driven planning
- Early investment
- Inventory management
- System integration
- Collaborative efforts

What's next?

- Investigating commercially viable options for recovery of treated timber.
- Utilising the methodology developed to build on datasets.
- Further assessment of procurement activities leading to waste.
- Improvements in data collection = improved data clarity.
- Further exploration on embedding circular systems into the C&D sector.

"Transforming timber waste management requires collective action. By integrating data-driven planning, investing in infrastructure, and fostering collaboration across the sector, we can significantly reduce waste and build a more sustainable future."

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