

## Case study

Kenny Crescent case study summary

# Project overview

Hamilton City Council's Resource Recovery Team collaborated with Kenney Cres Ltd to audit and divert construction and demolition waste from a redevelopment project at 61 Kenney Crescent, Fairfield.

The 857m<sup>2</sup> site was transformed from two run down dwellings into four three-bedroom duplex units for Kāinga Ora. The project aimed for a waste diversion rate above 60%, ultimately achieving 63.9%.

## Waste Minimisation Strategy

Kenney Cres Ltd developed a waste minimisation plan aligned with REBRI and Kāinga Ora's sustainability guidelines. The plan targeted 3.0 Homestar points and emphasised on using low-waste and low-maintenance materials. Waste goals were communicated to all stakeholders (including staff, suppliers and subcontractors), site inductions and regular monitoring were conducted to ensure compliance.

**Waste diversion rate** - The amount of construction and demolition waste diverted from landfill through methods like reusing and recycling.

**REBRI** - Stands for 'resource efficiency in the building and related industries'. It offers a set of sustainability guidelines and resources for the building industry, developed by the Building Research Association of New Zealand (BRANZ).

**Homestar points** - [Homestar](#) is a sustainability certification for new home design and construction, by New Zealand Green Building Council (NZGBC).

Developed a waste minimisation plan.



**Hamilton  
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Te kaunihera o Kirikiriroa

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### Demolition phase

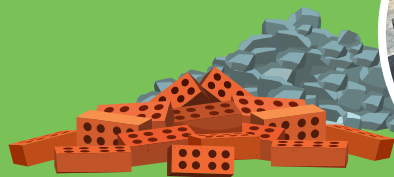
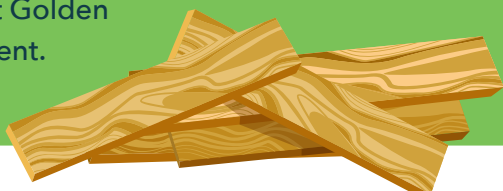
Relocation of existing structures was deemed unfeasible due to construction limitations. Instead, materials were salvaged and repurposed:

- Metals (80kg) recycled via Scrap Palace Frankton.
- Timber-framed windows, doors, weatherboards repurposed through DIY Supply Hamilton.
- Household items redistributed via community platforms such as Facebook marketplace, neighbourly and via local community network.
- Remaining waste sorted and processed by Pro Demolition Frankton.

### On-site waste management for construction waste

Kenney Cres Ltd partnered with Purpose Fill to manage and recover key construction waste streams:

**Wood:** To manage wood waste effectively, Purpose Fill supplied a dedicated 9m<sup>3</sup> skip bin, strategically placed on-site after the foundation work and before the framing stage. This allowed carpenters to easily segregate wood off-cuts from the beginning of the project. The skip remained on-site for up to three months, during which 730kg of wood were diverted from landfill. After collection, the wood was sorted at Purpose Fill's facility into treated and untreated timber. Untreated wood was sent to Horotiu to be shredded and used as animal bedding, while treated wood was transported to Auckland, where it was chipped and repurposed as biofuel at Golden Bay Cement.



**Bricks and hardfill:** A 3m<sup>3</sup> skip bin was provided for bricks and hardfill, placed on-site after brick delivery and before bricklaying began. This ensures a timely collection of brick off-cuts and hardfill from landscaping activities. The bin was on-site for less than four weeks. Over the course of the build, 800kg of waste were collected in this category. Once offsite, concrete was separated and crushed where feasible, while the remaining hardfill was taken to consented clean fill sites around Hamilton for appropriate disposal.

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**GIB and plasterboard:** Four 2m<sup>3</sup> plasterboard bags were delivered and placed outside each unit immediately after GIB materials arrived and before installation commenced. This proactive placement enabled efficient collection of offcuts during wall lining. The bags remained on-site for no more than two weeks and were able to collect a total of 1730kg of GIB and plasterboard offcuts. Carpenters were responsible for disposal, and their clear understanding of the process ensured effective segregation. Offsite, the plasterboard was shredded into gypsum powder, which was then sold to horticultural businesses for use in soil amendment.



2x  
9m<sup>3</sup> skip  
bins



**General waste:** Two 9m<sup>3</sup> skip bins were allocated for miscellaneous construction waste, placed on-site after foundation work and before framing. These bins remained on-site for up to six months and collected a total of 3520kg of general waste. Purpose Fill managed to recover 1100kg of material from this skip through additional sorting, reducing the net landfill waste to 2420kg. The diverted materials included 52kg of plasterboard, 544kg of hardfill, 204kg of wood, 174kg of concrete, and 94kg of metal, demonstrating the effectiveness of post-collection segregation in enhancing overall waste recovery.

Efficient  
collection of  
offcuts during  
wall lining.



## Challenges

**Bin placement:** Limited space and construction logistics made bin placement difficult, leading to contamination from neighboring properties.

**Compliance:** Manual sorting was necessary to ensure consistency with the established guidelines within the team. The developer often had to manage multiple roles as site manager or waste management supervisor.

**Packaging waste:** High volume of packaging materials contributed to general waste. Lack of dedicated bins for other potentially recyclable materials like wiring, piping offcuts and metals was a missed opportunity.



Packaging  
waste has  
significant  
potential for  
recycling



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### Recommendations

#### Strategic bin placement:

Essential for effective waste sorting.

#### Pre-construction waste meetings:

Improve accountability and compliance.

#### Weekly monitoring:

Ensures ongoing adherence to waste plan with the contractors.

#### Packaging waste capture:

Explore on-site solutions despite space constraints.

#### Demolition waste reporting:

Should be included in demolition service scope.

#### Incentives for developers:

Improve infrastructures and systems to help the industry adopt low-waste practices in a simple and affordable way.

### Conclusion

The Kenny Crescent project demonstrates the feasibility and impact of proactive construction and demolition waste management, especially for emerging developers.

With 63.9% of waste diverted, the case highlights the importance of planning, collaboration, data collection, and industry incentives to drive sustainable practices. Empowering developers and improving infrastructure for recovery can accelerate industry-wide change.



**63.9%**  
waste  
diverted

