



**HERETAUNGA
HASTINGS** DISTRICT COUNCIL

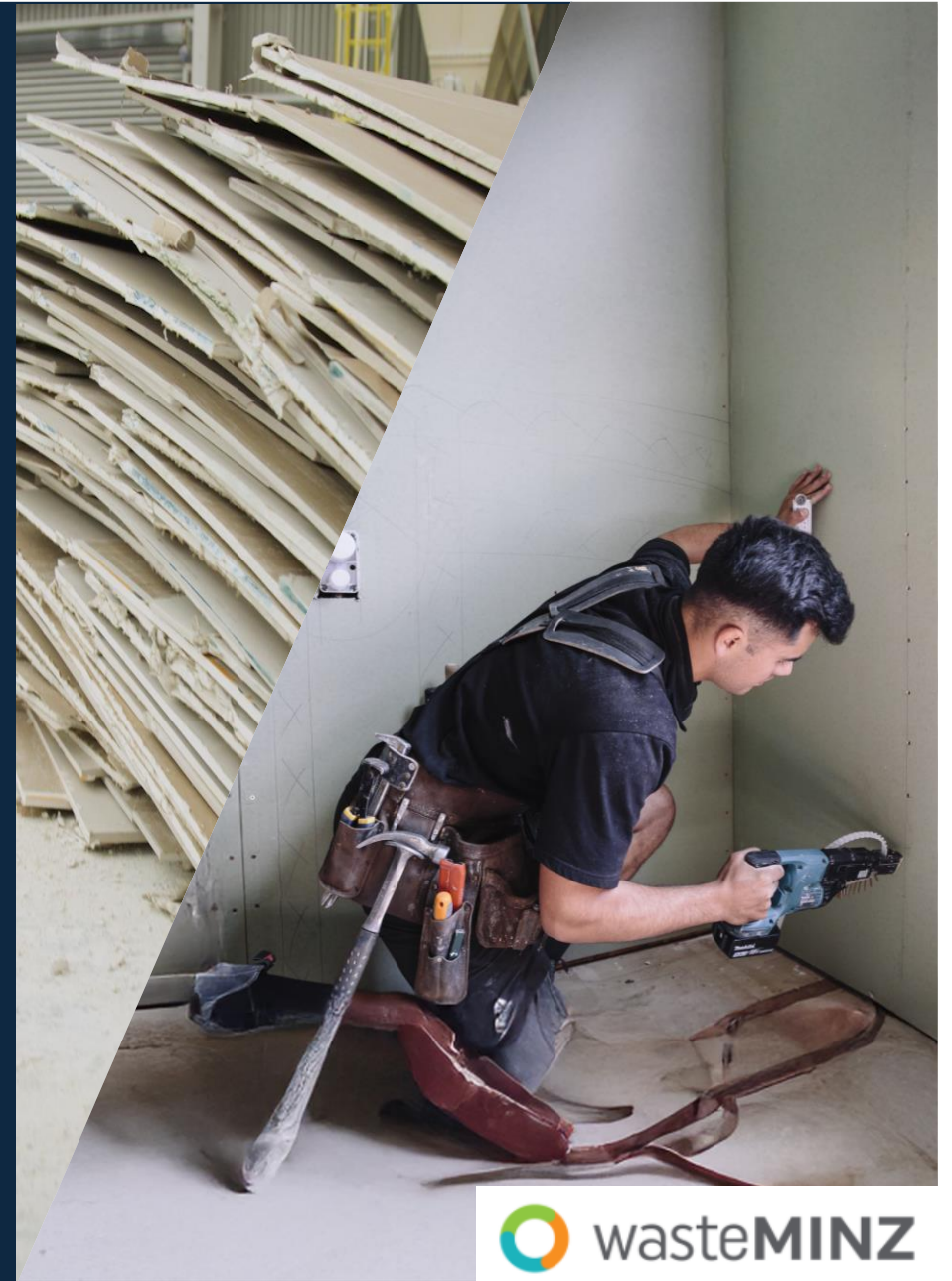


Plan the Build, Nail the Waste

Closing the loop on GIB® plasterboard: An industry and council collaboration

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Hastings District Council/Napier City Council



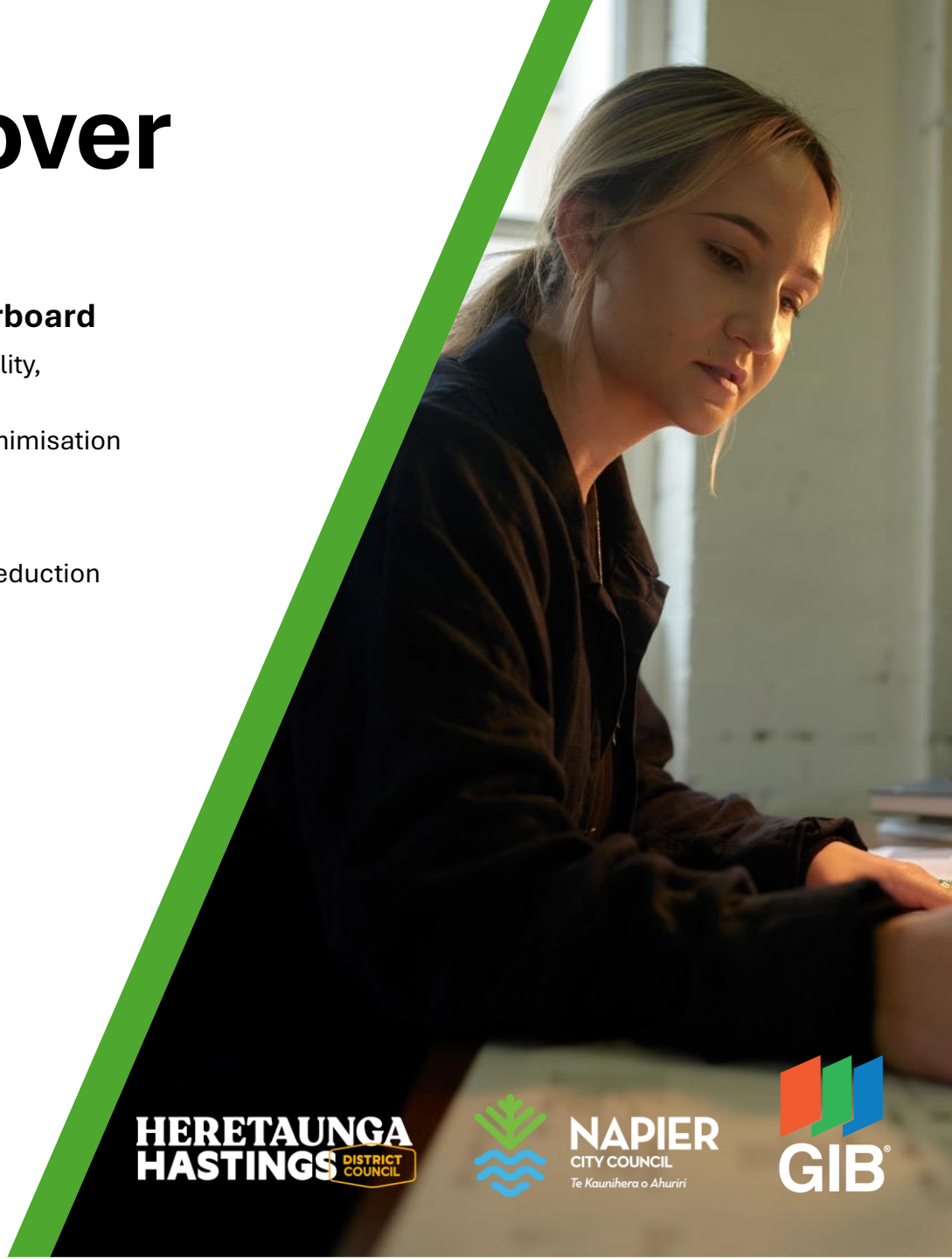
Today, together we will cover

- **Our aligned partners**
- **Our shared ‘why’ we are collaborating on Closing the Loop on GIB® plasterboard**
 - **Winstone Wallboards (GIB®)** – the business and our unique opportunity and responsibility, approach to sustainability, focus on waste reduction, resource efficiency and circularity
 - **Hastings District Council / Napier City Council** – the joint Waste Management and Minimisation Plan 2025-2031 for actions on reducing construction waste
- **Industry-led stewardship**
 - An adapted waste hierarchy for the plasterboard industry to guide construction waste reduction and circular solutions
- **Designing Closed Loop recycling pathway for NZ plasterboard**
 - A message from GIB®
 - Opportunities and challenges at the start of the journey
- **Case study: Hawke's Bay GIB® plasterboard collection trials**
 - Partnering to initiate plasterboard collection trials
 - Making it work – WIIFM, quality-driving resources, steps in the trial process
 - Select learnings and pivots in the trial so far
- **What’s next?**
 - Designing a **GIB® Plasterboard-to-Plasterboard waste recovery + take-back scheme**
- **Key takeaways:** partnering to make construction more circular in NZ

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**NAPIER
CITY COUNCIL**
Te Kaunihera o Ahuriri



Acknowledging our aligned partners



Atlas Fibrous Plaster Ltd



Winstone Wallboards (GIB®)

GIB® is New Zealand's leading manufacturer of plasterboard products and systems. Operating under Winstone Wallboards Ltd, the company has been a cornerstone of Kiwi construction for 99 years, known for its commitment to quality, innovation and customer service.



We play a critical role in leading the industry to improve how construction materials are made, used, managed, recovered and valued.

System-level improvements depend on **aligned partnerships and collaboration** across the construction, manufacturing, waste and public sectors.

Founded:
1927



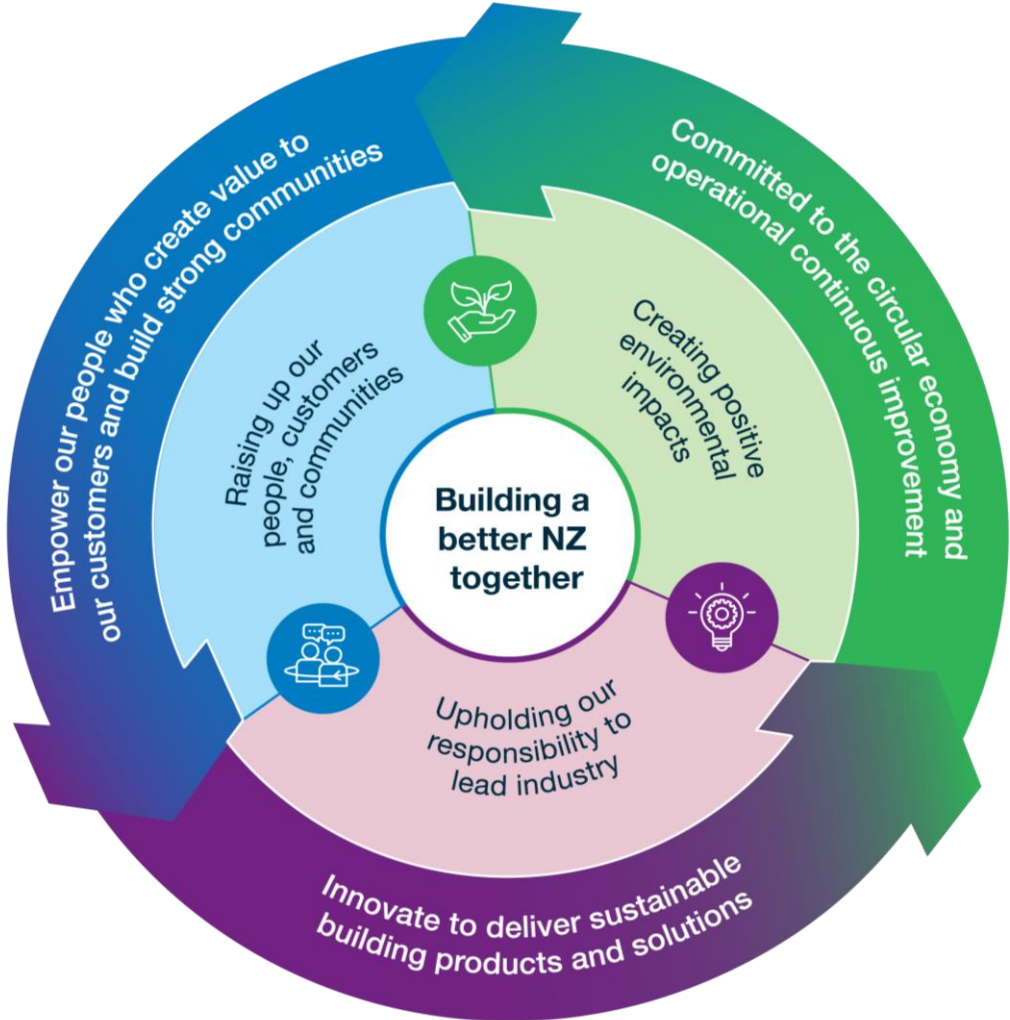
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GIB® Sustainability in the NZ construction industry: Approach to deliver Environmental, Social & Governance outcomes



Group's direction... ... shapes the GIB® strategy...



... enabling GIB® to focus on leading outcomes that embed sustainability into our industry...



Waste reduction, resource efficiency and circularity



... through collaboration with industry partners...

Enabling our customers and ourselves to do better

Addressing climate change and enabling low carbon solutions

Accreditations and responsible systems

... in areas that matter most to our people, our customers, and **our planet.**



- ✓ Identify, initiate and accelerate local circular construction waste solutions.
- ✓ More regional resource recovery opportunities to reduce waste to landfill and minimise waste sector emissions.
- ✓ Partner with industry for sector aligned outcomes.

Te Mahere Whakahaere me te Whakaiti Para

Joint Waste Management and Minimisation Plan (WMMP)

2025 - 2031



Stewardship for the New Zealand plasterboard industry: A hierarchy to reduce waste and retain resource value

Waste reduction pathway -
most preferable

Circular Management



Reduce, Rethink, Redesign

Reuse, Repair, Repurpose

END OF USEFUL LIFE:
CONSTRUCTION OR PRODUCT MANUFACTURING

Recycling: Closed Loop &
Circular Recycling

Recycling: Linear or
down-cycling
pathway

Other Waste
Recovery Pathways

Dispose to
landfills

Waste
Management

Least preferred option

A critical decision point – retain OR lose value?

CLOSED LOOP & CIRCULAR RECYCLING
is a repeatable recycling process,
retaining the value and quality of GIB®
product materials by recovering its waste
then reprocessing it back to the same product.



LINEAR RECYCLING / DOWN-CYCLING
is a one-off recycling process, decreasing
the value and quality of GIB® product
materials by recovering its waste then
reprocessing for other lower quality purposes.

DISPOSAL TO LANDFILL
should only include residual plasterboard
that cannot be recycled, or demolition waste
that is potentially harmful to human health
or the environment.

GIB® performance and transparency:



“An industry-led stewardship approach to reduce New Zealand’s construction waste to Build a Better New Zealand together”

A message from GIB®

We take our **environmental stewardship** seriously and are committed to reducing New Zealand's plasterboard waste to landfill by making our products more **circular**.

Through **closed-loop recycling**, we have already increased recycled content in high quality GIB® plasterboards by recycling our manufacturing waste.

We are now designing a **take-back scheme** to **recycle construction plasterboard waste** – responding to growing demand from the construction and waste sectors, as well as local councils.

We are all in this together.

Let's **Build a Better New Zealand together**.



At the start: plasterboard collection trials for a closed loop recycling pathway – opportunities & challenges



OPPORTUNITIES

- ✓ Tauranga GIB® plant has in-built reprocessing + recycling infrastructure, on-shore circularity is possible
- ✓ Gypsum can be recycled into new plasterboard over and over, and the high-quality of GIB® plasterboard is not compromised
- ✓ Demand for a GIB® led scheme and recycling service from it's customers and by councils
- ✓ Extensive **distribution network**, strong customer base & industry partnerships.
- ✓ **Trust** in the **GIB® brand**, technical support and systems
- ✓ Construction waste resource recovery is a **growing industry** – increasing opportunities for partnerships
- ✓ Landfill **disposal fees are increasing** making resource recovery pathways more appealing + **plasterboard is heavy**

GIB® plant needs:

- High quality plasterboard offcuts
- Regular and continuous supply,
- Offcuts from most of the NI for 10% recycled content



★ Locally led plasterboard collection trials initiated.



CHALLENGES

- ❖ **High-quality off-cuts are vital** in plant processing (0% contamination tolerance), minimal truck movements
- ❖ **Not all plasterboards can be recycled** at the plant; **confusion linked to differences** in recommended product recycling to linear pathways
- ❖ **Reprocessing + recycling infrastructure** - BUT still need **regional consolidation infrastructure. Long-skinny islands + fluctuating costs**
- ❖ **No regulatory requirements** to compel designing a scheme (i.e. requiring site waste reduction plans, minimum recycled content, product stewardship)
- ❖ Changing behaviour is hard, throw away culture (and contracts!) still dominate, waste VS construction industry culture + practices differ
- ❖ Perceived vs actual cost + effort is hard to reconcile
- ❖ ‘Carrot and stick’ incentives and controls are possible, but important to get right to make sure an industry-led collection scheme works long-term



What about the South Island?

Dunedin: desk-top transport by rail assessment.

Hawke's Bay GIB® plasterboard collection trial



Making it work: Hawke's Bay GIB[®] plasterboard collection trial



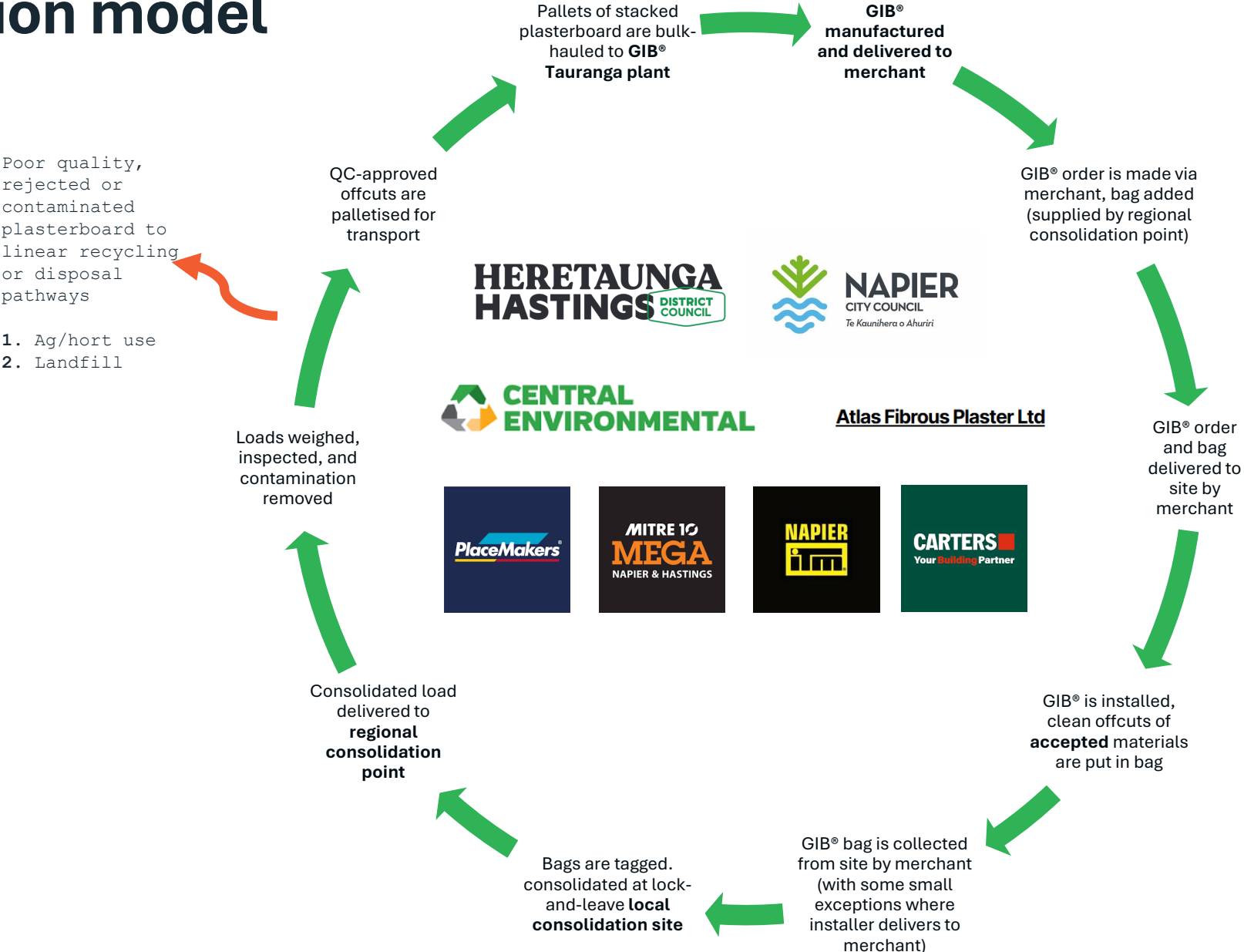
Atlas Fibrous Plaster Ltd

Getting buy-in and commitment was not easy.



So, WIIFM?
[What's in it for me?]

Current Hawke's Bay pilot GIB® plasterboard collection model



Hawke's Bay Plasterboard GIB® RECYCLING TRIAL

WHAT'S ACCEPTED:

- ✓ GIB® Standard
- ✓ GIB Fyreline®
- ✓ GIB Ultraline®
- ✓ GIB Braceline®
- ✓ GIB Noiseline®
- ✓ GIB Wideline®

New, construction waste plasterboard only. Keep dry.

WHAT'S NOT ACCEPTED:

- ✗ GIB Toughline®
 - ✗ GIB Barrierline®
 - ✗ GIB Weatherline®
 - ✗ GIB Aqualine®
 - ✗ GIB X-Block®
-  No timber, plastic, screws, general rubbish
 -  Do not overfill the bag
Get a second bag if required
 -  No renovation or demolition waste
 -  No plasterboard dust

SUPPORTED BY:



Why did this work?

Merchant branded

Clear & precise information

Trade speak

Hawke's Bay Plasterboard GIB® RECYCLING TRIAL

FAQs

What is the trial?

We are working in partnership with Winstone Wallboards, Central Environmental, Hastings District Council and Napier City Council to collect and recycle only a limited range of GIB® plasterboard waste from construction sites.

What is the trial trying to achieve?

We are looking to establish a viable collection system to divert plasterboard waste from landfill. This includes sending processed gypsum back to Winstone Wallboards to be recycled into new GIB® plasterboard.

How will my plasterboard collections work?

You can purchase a plasterboard bag from your local Carters, which will be accompanying your plasterboard order delivery. Once the customer has filled the bag with only new plasterboard offcuts that meet the acceptance criteria, call Carters to pick up the full bag.

What is contamination?

Contamination is anything that is not plasterboard, which can compromise its ability

to be recycled. Examples of contamination are nails, timber, plastic, general rubbish such as cans and food scraps.

What are the benefits for me?

In addition to helping reduce your site waste going to landfill, there is a cost saving for using this service verses sending plasterboard to landfill.

Why can't I put all plasterboard types in this bag?

Recycling plasterboard back into new plasterboard has never been done in New Zealand before. Winstone Wallboards is in its first trial phase of recycling offcuts back into plasterboard. They are still working on how best to incorporate the boards not accepted in this trial, to create the high performing and great product you trust.

What happens at the end of the trial?

If successful, this could lead into a long-term plasterboard recycling solution for the region.

SUPPORTED BY:



Some of the learnings & pivots in the Hawkes Bay trial so far...



QUALITY

- Planning data collection and consistent tracking is key.
- Off-cuts only returned to the plant (no pre-processing).
- Regional consolidation points are key for quality.
- Training, signage, information needed on all QA points contamination with a GIB® quality training certification requested.

LOGISTICS

- Transportation is the biggest challenge and cost to resolve. HUB + SPOKE works at a Local & a Regional level BUT every region will differ.
- Pros and cons to various waste collection and transport packing methods – both local from a site, and regional to the plant (e.g. bags vs bins, commercial vs residential build typology etc.).
- Scheme steps should align ‘as best as possible’ with sustainability ethos.
- Simplify the design as much as possible e.g. regional consolidation is more effective than multiple collection points.

ECONOMICS

- Forward planning capital investment in plant upgrades is key.
- A single fee transaction to cover scheme costs is ideal (linear) recycling markets.
- Waste disposal or other waste recycling costs are a useful comparison for identifying the ball park fee threshold.
- Identify as many transportation efficiencies as possible, reverse logistics & shares truck space.

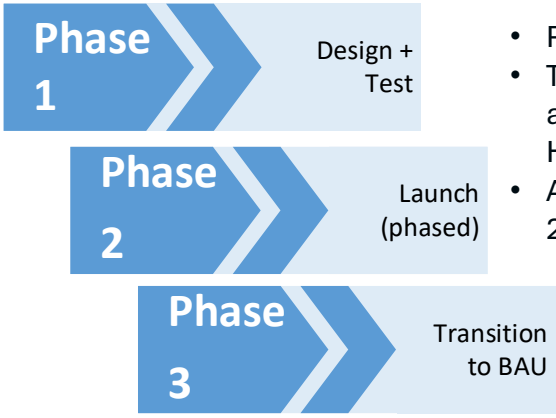
ALIGNED PARTNERING

- Communicating the ‘why’ upfront for the trial bigger picture goes a long way for stakeholders involved. Almost essential for key partners to align on how success looks. Partners not using a trial for immediate commercial gain will help the trial succeed **and** develop long-term partnerships
- Long-term success will depend on shared responsibility. Listen and observe – seek feedback and pivot the trial as needed. Be accommodating.
- Participation has increased over-time, face-to-face stakeholder engagement matters.
- Collaborative design with those that create the waste, check quality and manage key transport routes is crucial in the scheme design process.
- Communicate the next steps and remain engaged with all stakeholders.

What's next? We are co-designing a GIB® Plasterboard-to-Plasterboard waste recovery + take-back scheme



The goal isn't to run a great pilot – we want to continue co-design to create a plasterboard waste recovery & take-back scheme for NZ that becomes *business as usual*.



- Phase 1 continues.
- Transition to GIB® initiating and leading trials, incl. Hawke's Bay
- Aiming for Phase 2 in 2026-27 for the North Island.

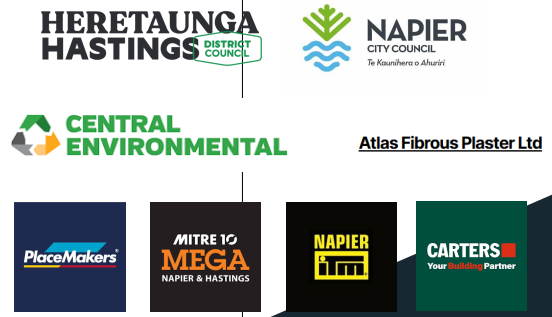
Quality + Logistics + Economics + Aligned Partnering = increased success.
Every region will differ.



- ★ Pilot trials are feeding into Phase 1: 'design + test' a proposed GIB® led scheme. Continuous improvement and active lesson learning (and pivoting!) throughout.
- ★ Aligned stakeholders are engaged, pilot trial planning (logistics) are underway – *watch this space!*
- ★ Early stakeholder engagement underway, very early pilot trial planning is underway – *watch this space!*



What about the South Island?
TBC, we will explore options once the North Island scheme is launched.



Key takeaways: partnering to make construction more circular in NZ



Quality + Logistics + Economics + Aligned Partnering = increased success.

Every region will differ.

- ❖ Identifying your aligned partners early helps i.e. those who share the same vision for success (and it's not all about the \$).
- ❖ Close and regular collaboration is key – in-person (as much as possible). Have transparent and honest conversations.
- ❖ Establish and maintain your partner relationships – build trust **and** trust others. Reminding all it is only a trial, not a final model. Sometimes there is pain for gain.
- ❖ Listen more, speak less. Keep listening.
- ❖ Be agile together, do everything possible to not give up! See failure as opportunity to improve and future proof systems. **Be prepared to pivot and evolve as the trial progresses.**

A helpful reminder - **we are all in this together.**

Let's **Build a Better New Zealand together.**



Patai?

*Plan the Build,
Nail the Waste*

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