

Not Just Rubbish: What Three Years of Waste Sortation Really Looks Like

Jacob Stapleton (EnviroNZ)

Shannon Ball (Christchurch International Airport)

Why We Needed to Change Our Approach


1 THE CONTEXT



 **Busy, high traffic environment**
~18,000 passengers per day

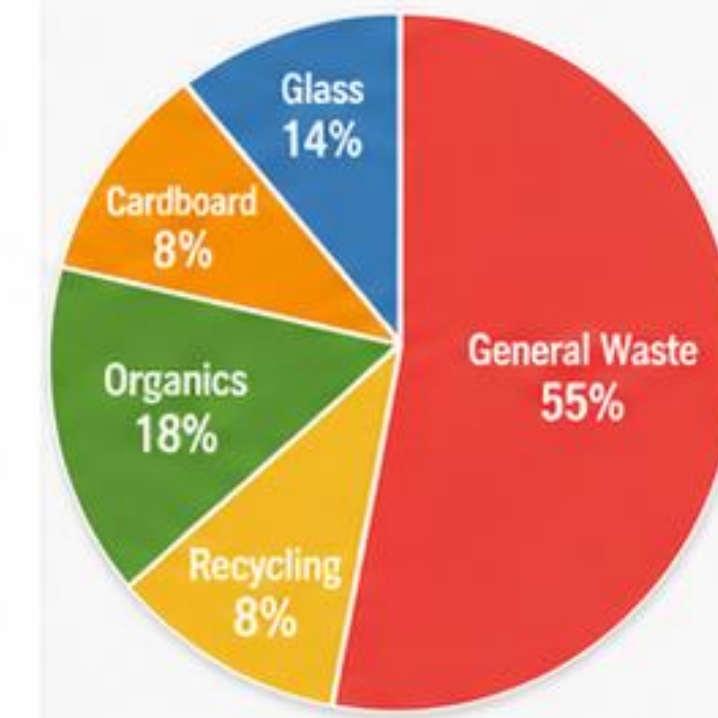
2 THE PROBLEM



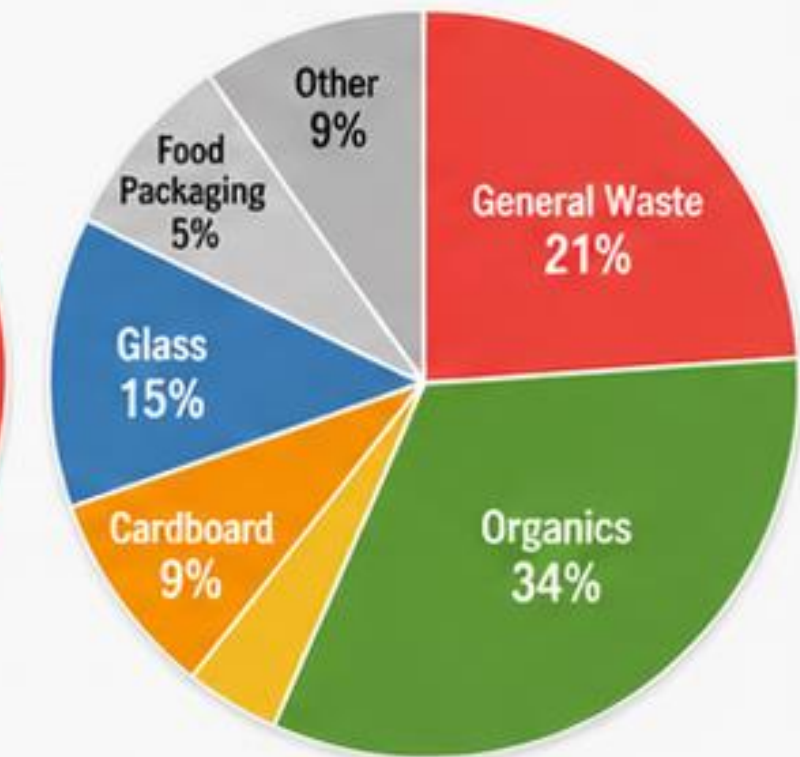
 **Recycling wasn't working**
High contamination across waste streams

3 THE EVIDENCE

WASTE AUDIT RESULT 2022



POTENTIAL TO DIVERT



 **What the data showed**
Significant opportunity to divert waste from landfill



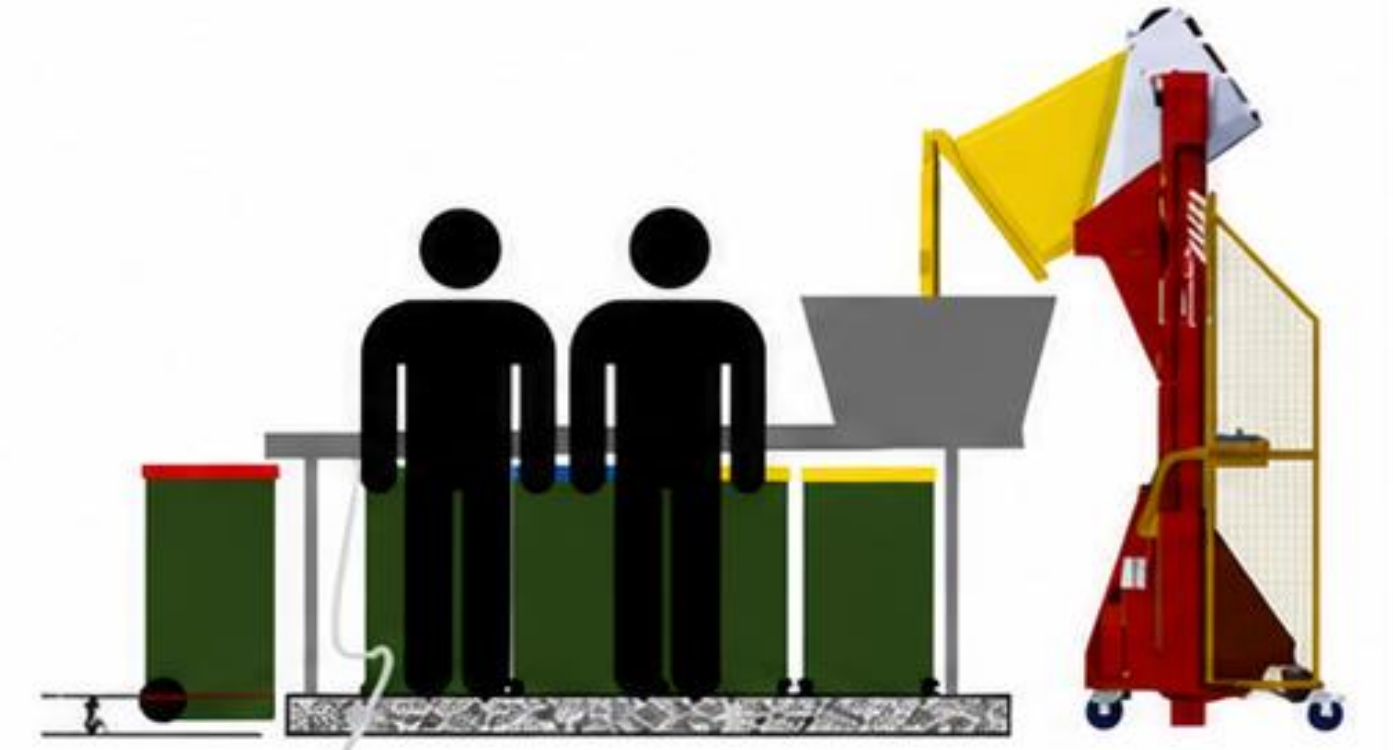
So we decided to sort our waste ourselves



What You Need to Make Sortation Work



2. SORTING TABLE



3. OPERATION



HOW THE SORTATION PROCESS WORKS



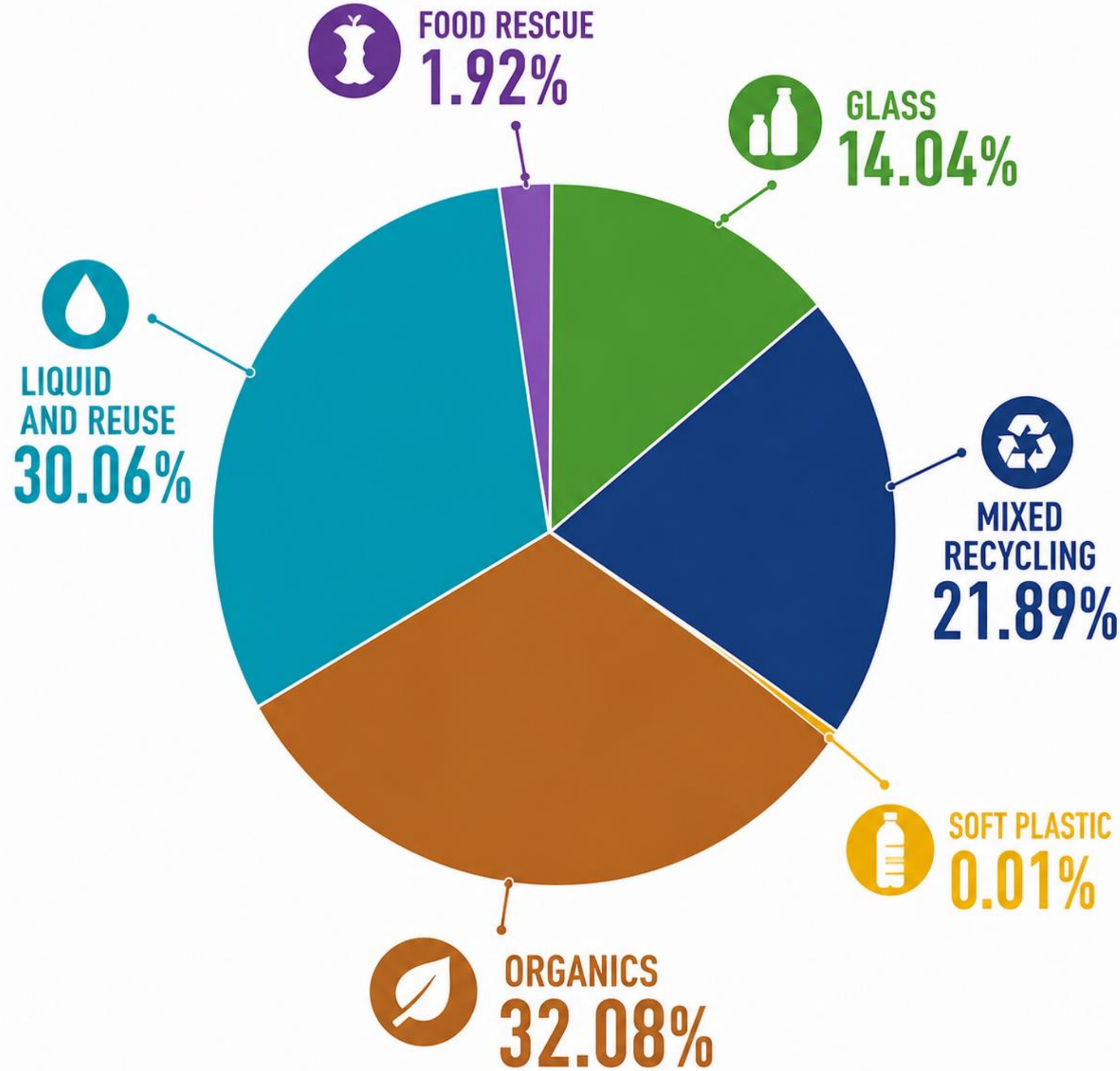
WHERE THE WASTE GOES AFTER SORTING





— 3 YEARS OF SORTATION IMPACT —

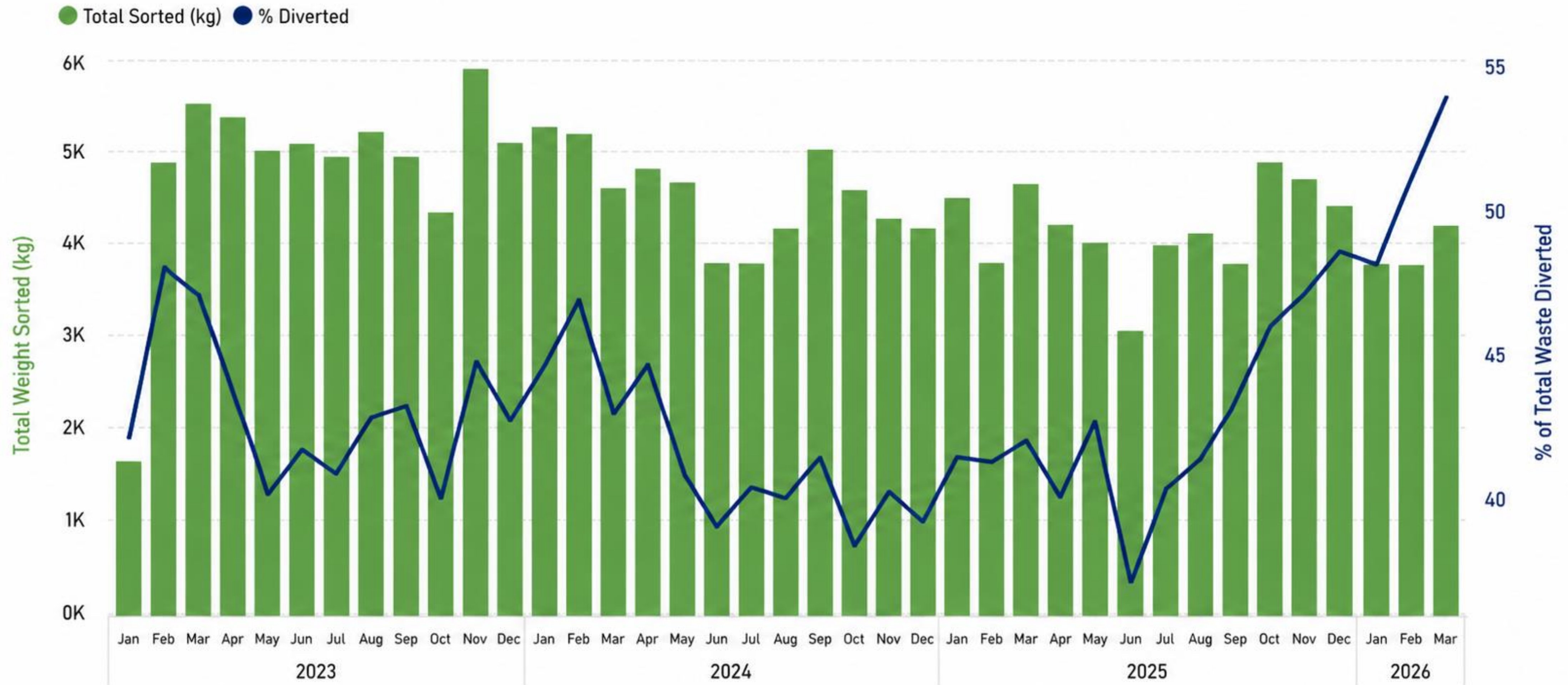
WHAT WE'RE RECOVERING



Mā te mahi tahi
Driving impact through collaboration



% DIVERSION VS WEIGHT SORTED



Mā te mahi tahi
Driving impact through collaboration



SORTATION BUILT ON STRONG EXISTING SYSTEMS

Improving performance, not replacing it.



EXISTING RECYCLING SYSTEMS

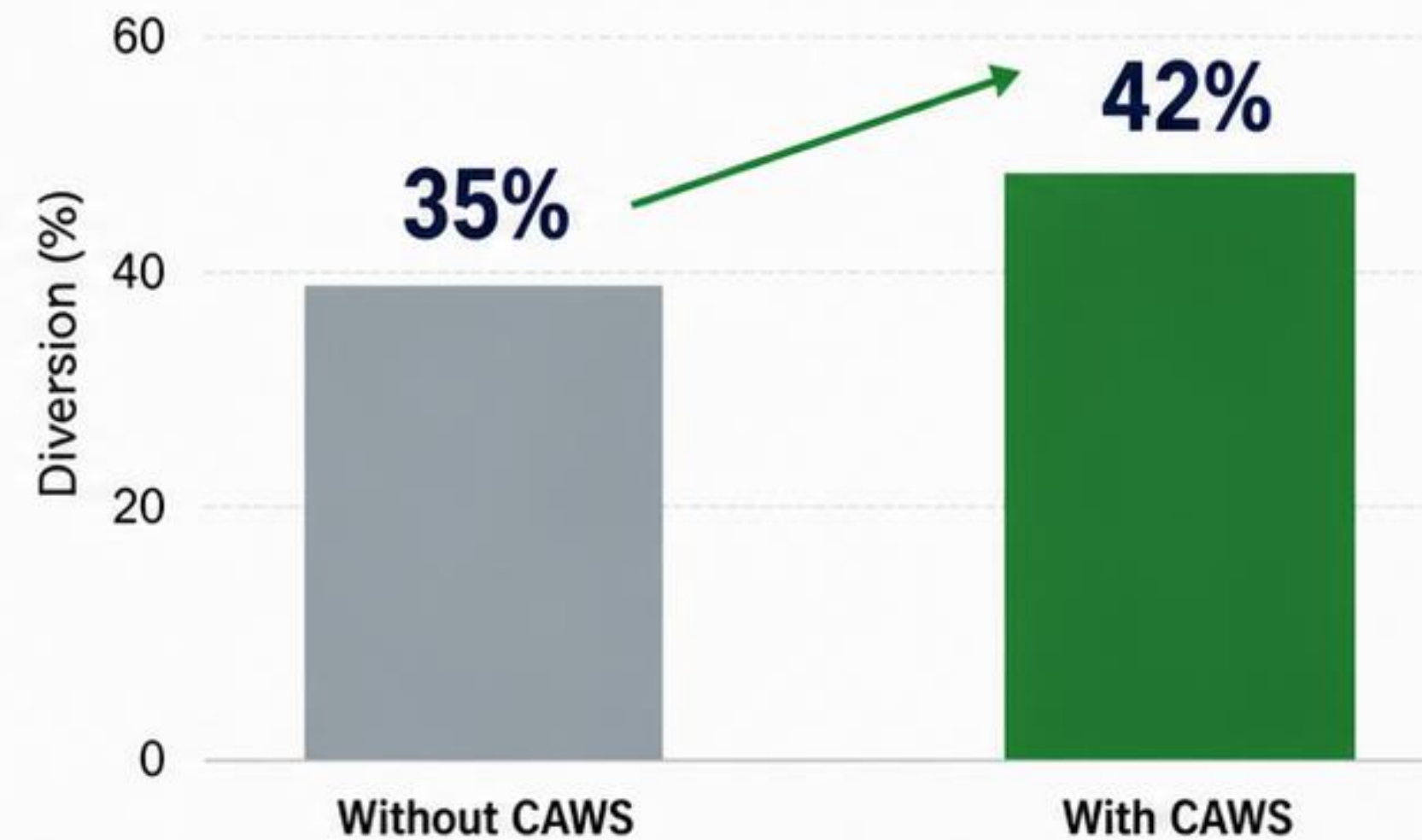
Good source separation already in place in the waste room.



IMPROVEMENT WITH SORTATION

Diversion Increased with Sortation

+7 percentage points



WHAT SORTATION ACTUALLY DELIVERED

Recovery. Data. Visibility. Action.

01



MATERIAL RECOVERY AREA

We sort our general waste to keep recycling and composting out of landfill.

ORGANIC COMPOSTING

MIXED RECYCLING

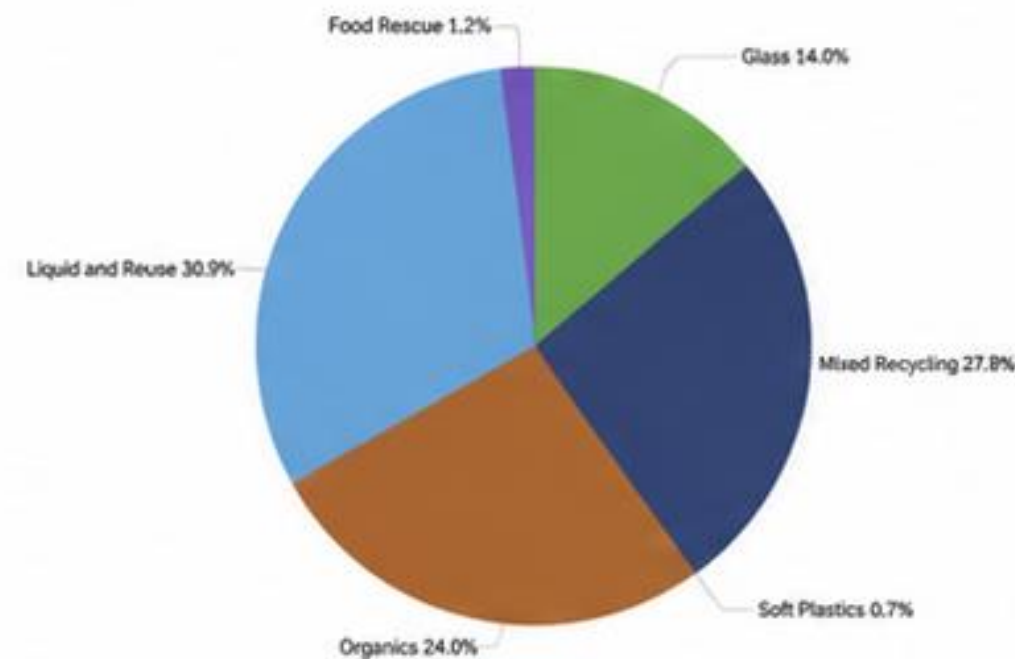
GLASS RECYCLING

CARDBOARD RECYCLING

HIGHER RECOVERY

More materials diverted from landfill.

02



DATA & TRACKING

Clear, accurate data on what's actually in the waste stream.

03



VISIBILITY

See contamination and missed opportunities.

04



PROBLEM SOLVING

Identify issues and fix them at the source.

This Work Goes Beyond Waste Management

It unlocks people, partnerships and new opportunities



1. PEOPLE BEHIND THE SYSTEM

Making waste visible – and owned



2. FOOD RESCUE

Edible food diverted to community use



3. MORE ORGANICS RECOVERED

Expanding what can be composted

Packaging that can be diverted to organics



4. NEW OPPORTUNITIES

Identifying new streams and solutions



What Still Isn't Working



1. OPERATIONAL CONSTRAINTS

Labour effectiveness and limited space impact efficiency



2. CONTAMINATION PERSISTS

Upstream behaviour still drives contamination



3. BEHAVIOUR & ENGAGEMENT

Transient users and low accountability reduce effort

Sortation improves outcomes – but it doesn't fix everything upstream

WHAT WE LEARNED FROM THREE YEARS OF SORTATION



1

YOU CAN'T MANAGE WHAT YOU DON'T MEASURE

Sortation gave us accurate data on what's actually in the waste stream



2

TARGETING CONTAMINATION DELIVERS THE BIGGEST GAINS

Focusing on key problem materials drives real improvement



3

SORTATION IS A TOOL – NOT THE END GOAL

It enables better decisions, not just better recovery



4

SYSTEMS MATTER – BUT BEHAVIOUR MATTERS MORE

Upstream engagement and staff management are critical to long-term success



Questions?

Jacob Stapleton (EnviroNZ)

Shannon Ball (Christchurch International Airport)