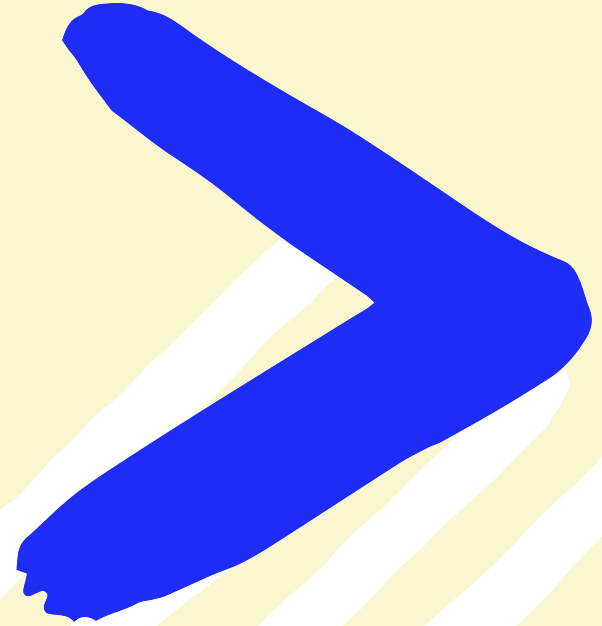


# Silverstream Landfill outcomes and impact framework



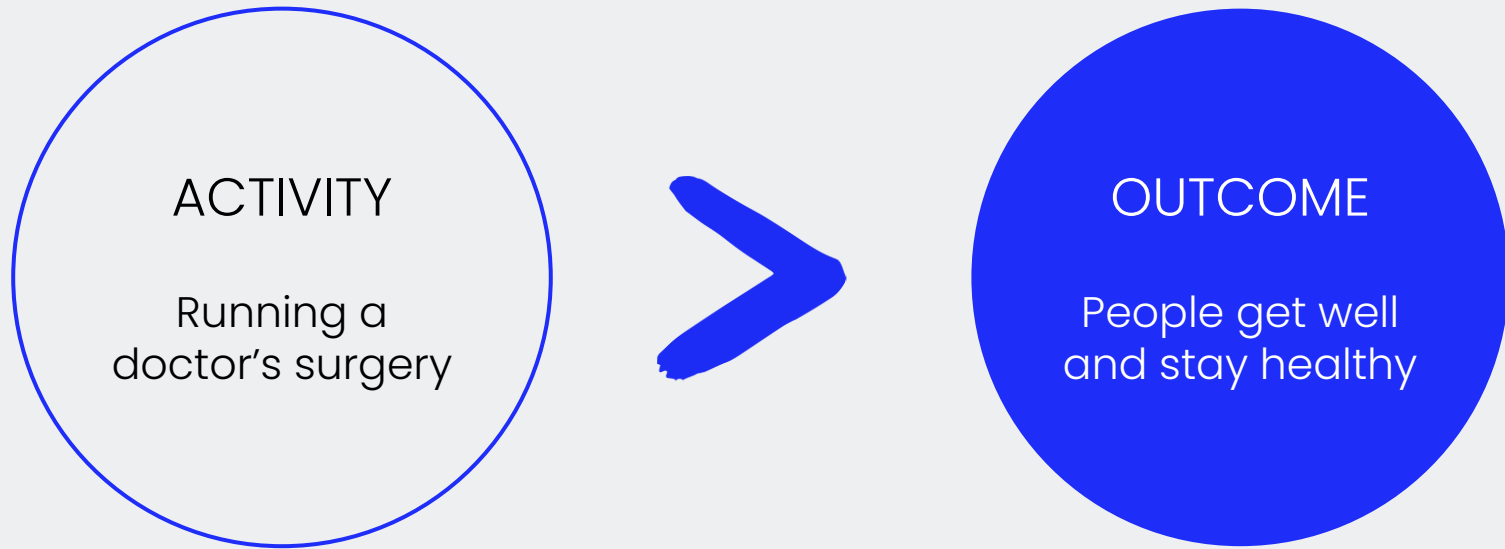


# ākina

**Aotearoa New Zealand's leading  
impact development organisation.**

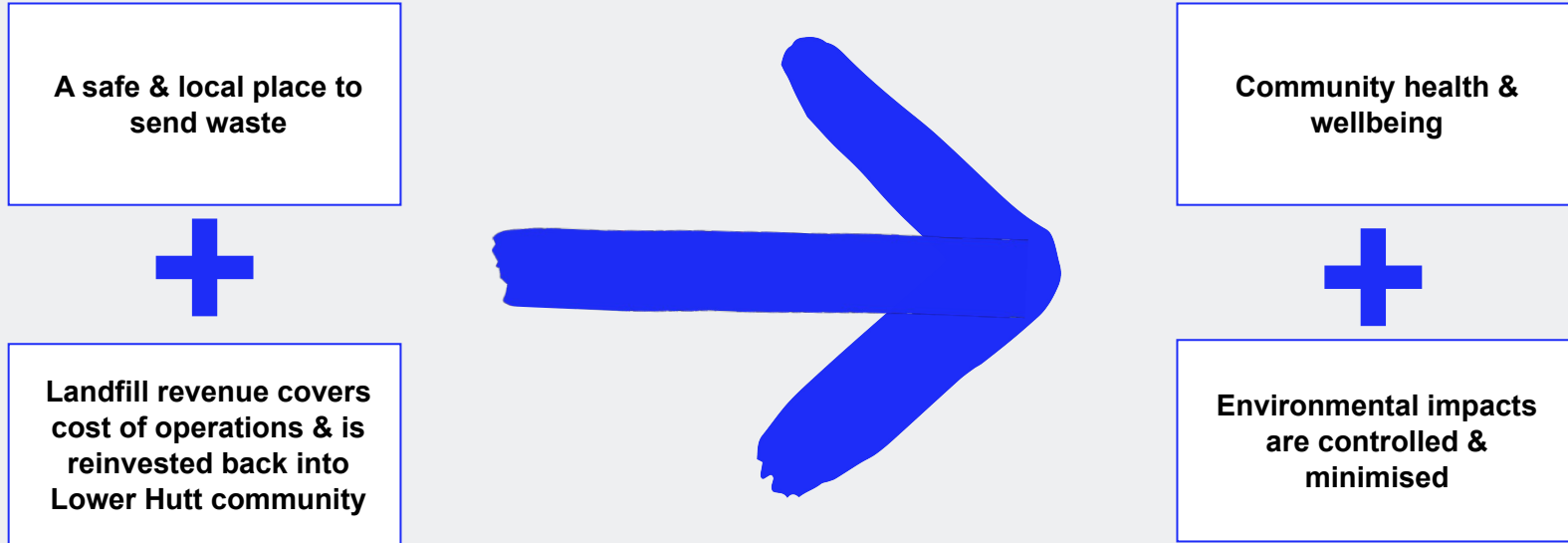
We're on a mission to put positive social and environmental outcomes at the heart of how New Zealand does business.

“Impact is the positive social, environmental or cultural changes – or outcomes – that happen because of an activity (as determined by the person experiencing the outcome)”



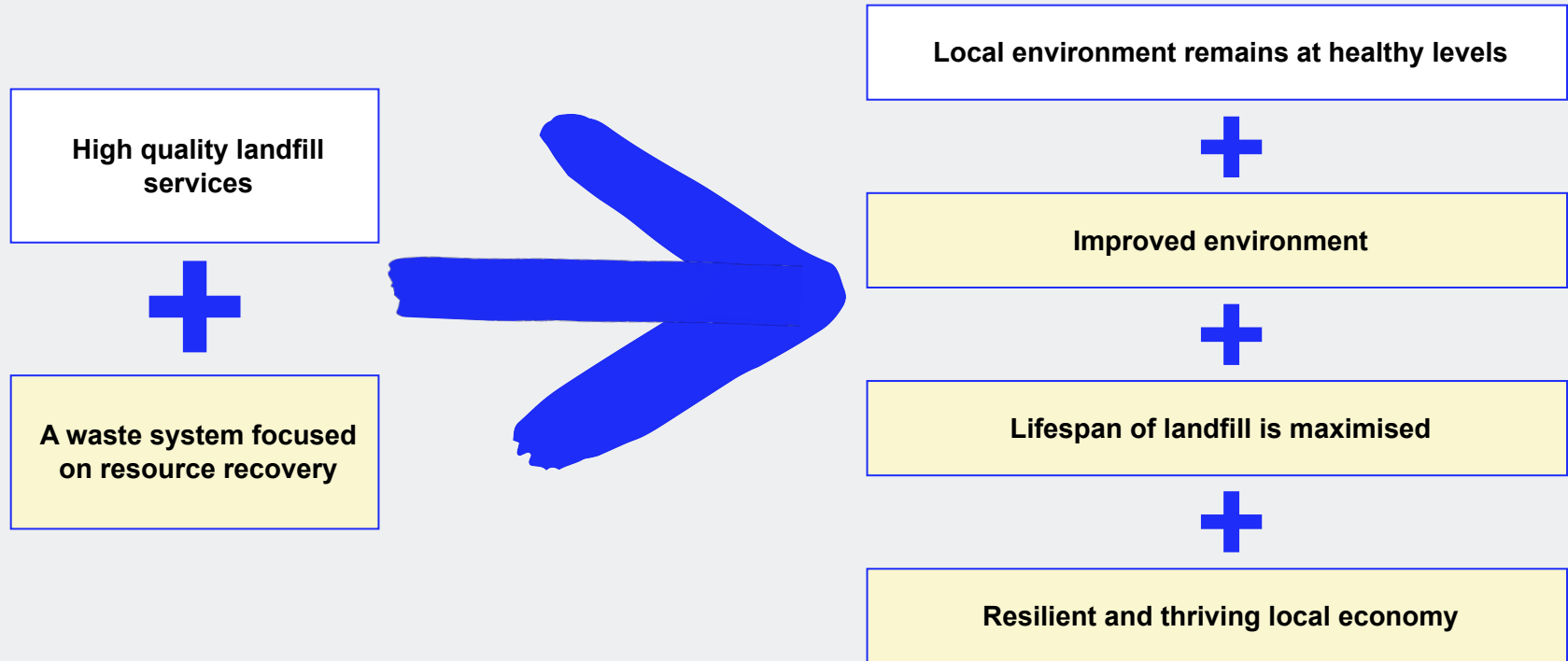
# The essence of the story of impact for the Landfill

A high quality landfill that generates revenue will lead to minimal environmental impacts and better community outcomes:

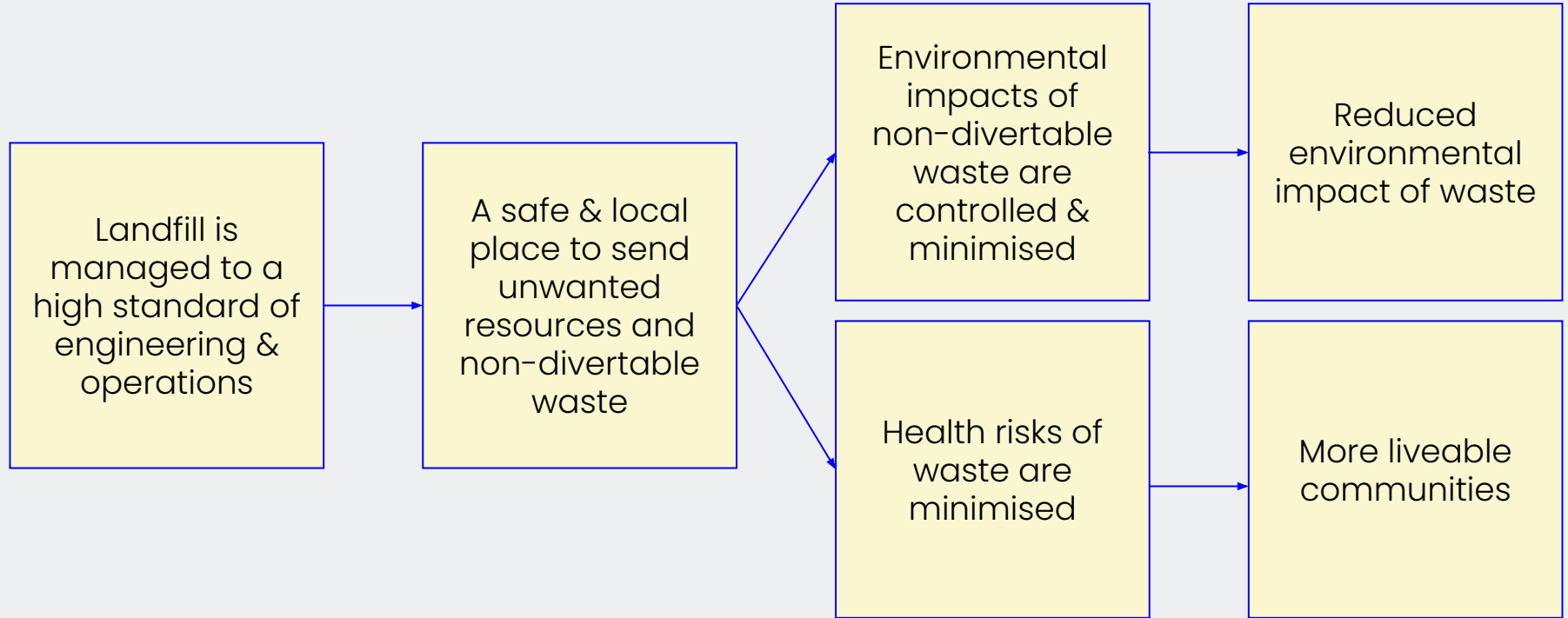


# The essence for the story of impact for the Landfill and the broader Waste System

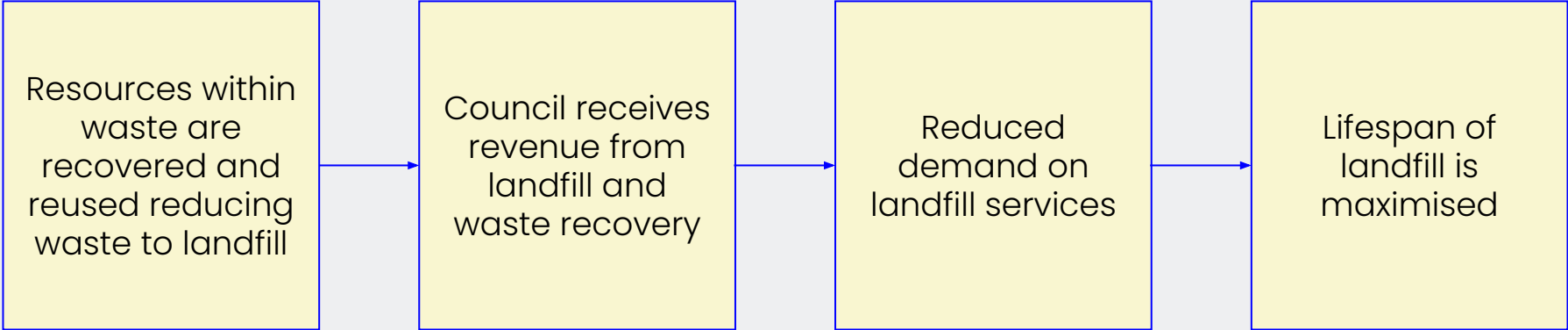
Closer integration of the landfill with resource recovery will lead to optimised local and global environmental impacts, maximised lifespan of landfill and a resilient, thriving local economy



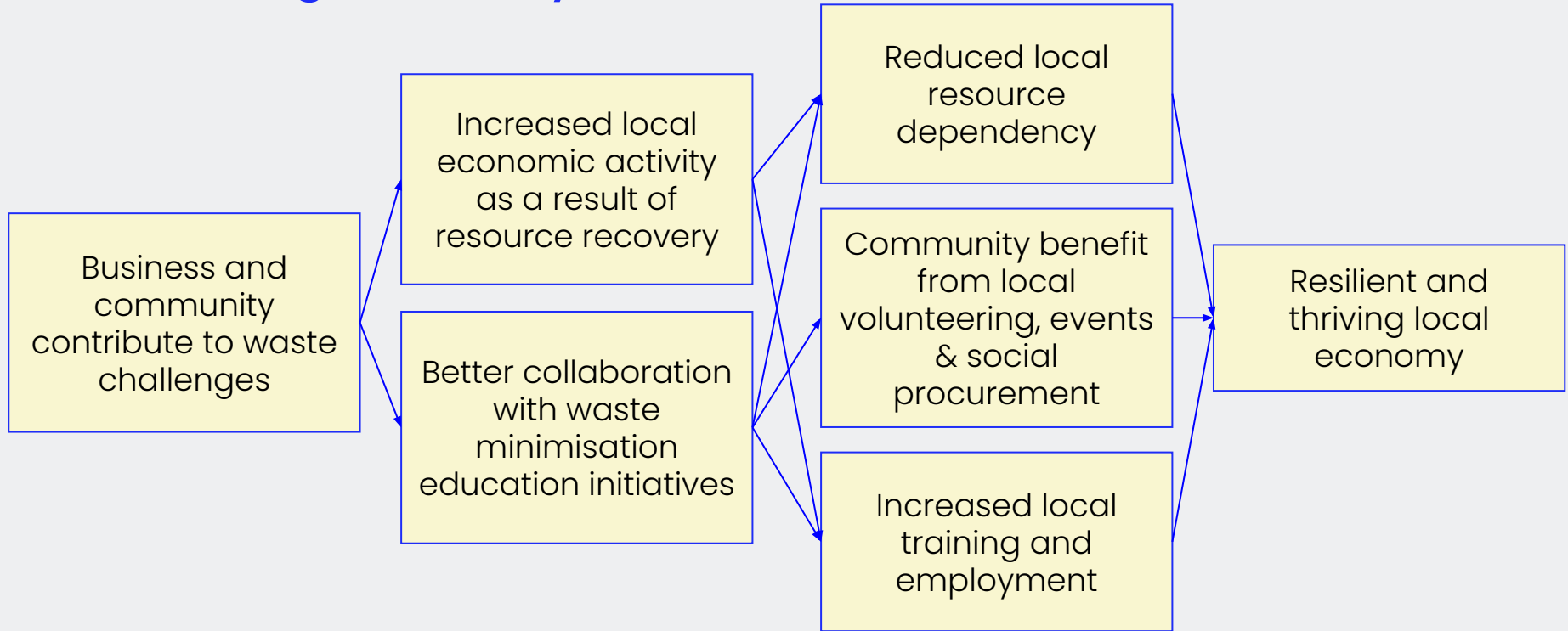
# Example: Managing a landfill to a high standard leads to good outcomes for both our environment and communities



# Example: Recovering resources leads to maximising the lifespan of the landfill



# Example: Partnering to reduce waste leads to a resilient and thriving economy





**HCC Landfill & Waste Minimisation Activities**

HCC operates and maintains a Class A landfill to the highest engineering standards

HCC delivers on the Wellington Regional Waste Management and Minimisation Plan (reporting, waste min plans for projects, education & promotion of waste reduction)

Hutt City Council strategically uses pricing signals to drive behaviour

Silverstream Landfill acceptance criteria is strengthened in line with waste min policies

HCC procures from resource recovery, recycling service & infrastructure organisations

Strategic collaboration between Council, contractors & private sector

**Landfill is managed to a high standard of engineering & operations**

**Better data about waste and recovered materials**

**More infrastructure and networks to support resource recovery**

**The flow of waste to landfill is reduced**

**Central government supports waste minimisation**

**Short-term outcomes**

**A safe & local place to send unwanted resources and non-divertable waste**

**Data informs decision-making**

**Business and community contribute to waste challenges**

**Resources within waste are recovered and reused reducing waste to landfill**

**Better collaboration with waste minimisation education initiatives**

**Businesses and consumers support waste minimisation**

**Medium-term outcomes**

**An emissions efficient place for non-divertable waste**

**Environmental impacts of non-divertable waste are controlled & minimised**

**Health risks of waste are minimised**

**Landfill processes adapt to changing waste streams**

**Council receives revenue from landfill and waste recovery**

**Increased local economic activity as a result of resource recovery**

**Changing perspectives on waste and disposal behaviour**

**Long-term outcomes**

**More liveable communities**

**Reduced environmental impact of waste**

**Reduced demand on landfill services**

**Reduced local resource dependency**

**Community benefit from local volunteering, events & social procurement**

**Increased local training and employment**

**Impact**

**Local environment remains at healthy levels**

**Improved Environment**

**Lifespan of landfill is maximised**

**Resilient and thriving local economy**

High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020

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High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020

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## Short-term outcomes

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# Optimising resource recovery leads to better social, economic and environmental outcomes for Hutt City

## Current Impact of Landfill



Employ ~10 people



Access to easy and safe disposal



Maintain current revenue

## Impact of Landfill that optimises resource recovery



**Increased** employment



Access to easy and safe disposal



Maintain **or increase** current revenue



Increased environmental benefits



Local economic growth



Increased longevity of landfill



Increased community resilience



Matthew Luxon  
Mahurangi Wastebusters



# Optimising resource recovery leads to better social, economic and environmental outcomes for Hutt City

**US\$274**

more in goods and services for every tonne recycled

**80% of earnings**

back into the local economy by community recyclers

**2 x** landfills

**=**

**2 X** environmental harm



**6x cheaper**  
to dispose of recycled waste than general refuse<sup>i</sup>

<sup>i</sup>[Friends of the Earth](#)

# New Zealand experience: Waste diversion is producing results



**70%+** diversion of waste from landfill

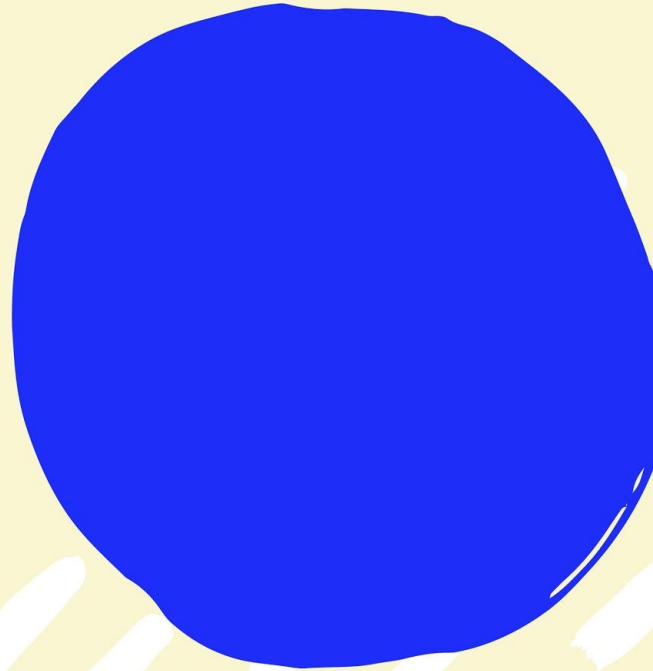


**5 out of 6** Visitors to waste centre are visiting to buy

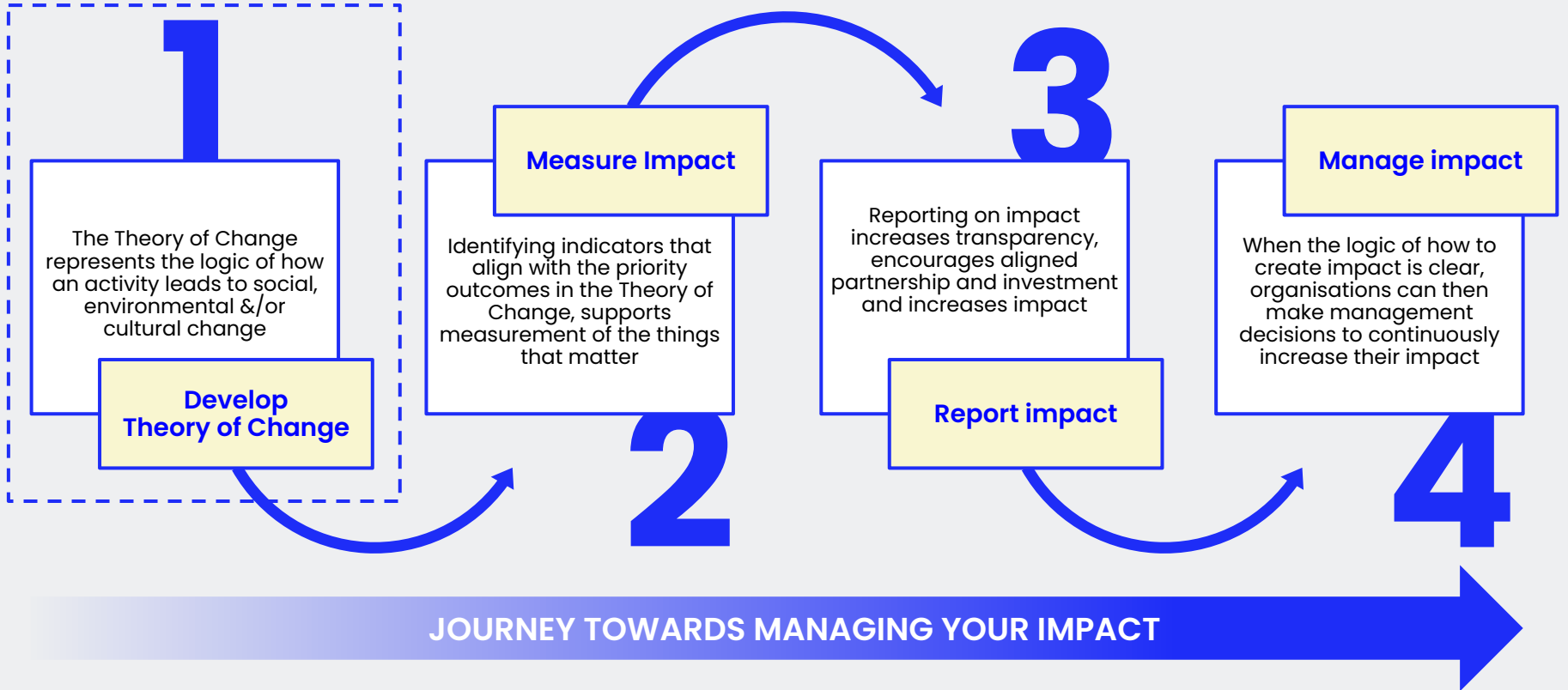


**~100%** of Gold recovered from e-waste

# Questions?



# This work is the first step on an impact journey



# Next Steps / Recommendations



Review successful approaches elsewhere in NZ



Leverage social procurement and identify community and business collaborators



Undertake feasibility studies to understand which resource recovery initiatives will most likely create community benefits



# Ngā mihi nui

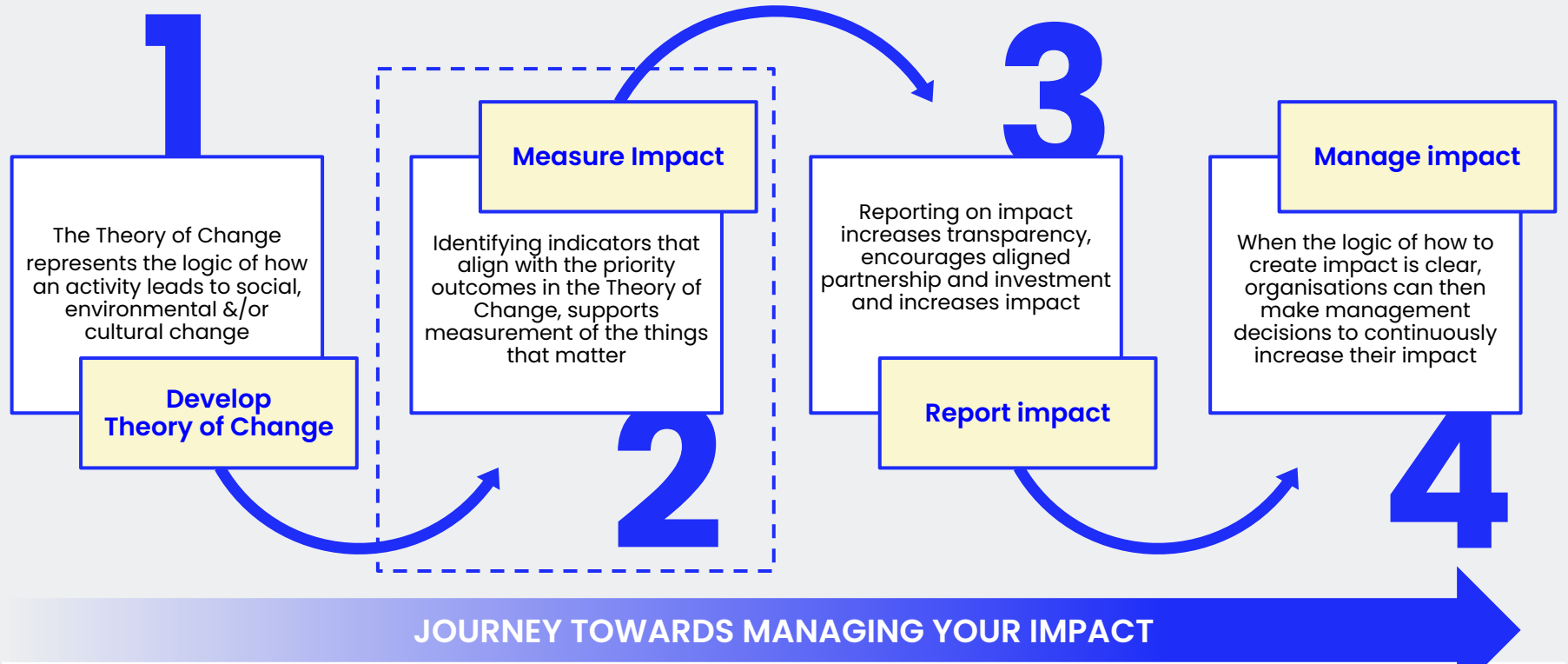
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Matthew Luxon  
Social Procurement Advisor

Laura Ansell  
Impact Consultant

[akina.org.nz](http://akina.org.nz)

# Stages of impact – you are now in a good position to develop indicators to measure your impact



# [DRAFT] Summary of indicators for outcomes in the Landfill Theory of Change

Indicator	Outcome(s)	Reference
No. of surface methane concentration exceedances in the past quarter	Environmental impacts are controlled and minimised. (Sub-outcome improved air quality around landfill)	HCC existing measures
No. of exceedances of leachate trade waste conditions in the past quarter	Environmental impacts are controlled and minimised. (Sub-outcome Leaching into waterways)	HCC existing measures
Number of illegal dump sites identified and remediated annually	Environmental impacts of non-divertable waste are controlled & minimised	Ministry for the Environment
No. of breaches of resource consent compliance	More liveable communities Reduced environmental impact of waste	Assume HCC is measuring
Permanent Employees (FTE)	Increased local economic activity as a result of resource recovery	IRIS

We assume you are already measuring these things



# [DRAFT] Summary of indicators for outcomes in the Landfill and waste system Theory of Change

Indicator	Outcome(s)	Reference
Composition and source of waste to landfill in the following WAP categories: Paper, Plastic, Glass, Metal, Organic, Rubble, Timber, Rubber and textiles, Potentially hazardous, Other	A safe & local place to send unwanted resources and non-divertable waste Better data about waste and recovered materials	Ministry for the Environment
Tonnes of waste to landfill per person annually	A safe & local place to send unwanted resources and non-divertable waste	SDG (modified)
Funds invested in projects related to each tier of the waste hierarchy	More infrastructure and networks to support resource recovery	Zero Waste Network Research
Employees Dedicated to Social and Environmental Performance (FTE)	Landfill is managed to a high standard of engineering & operations	IRIS
Social and Environmental Performance Reporting occurs	Environmental impacts of non-divertable waste are controlled & minimised	IRIS

These indicators might not be measured already