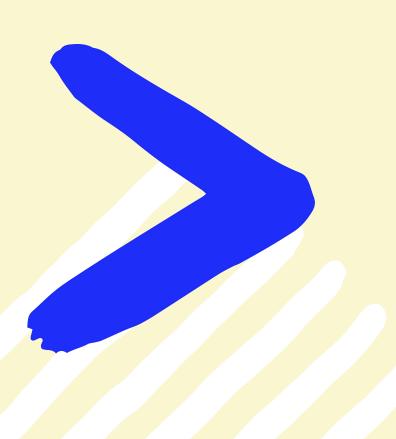
Silverstream Landfill outcomes and impact framework





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# akina

## 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.

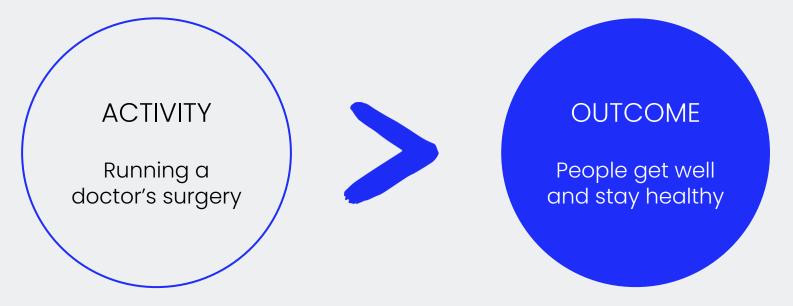
Akina mai.

kina atu





"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)"

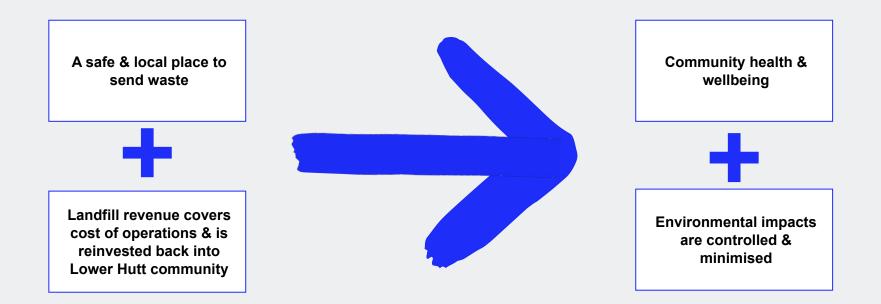


3



### 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:



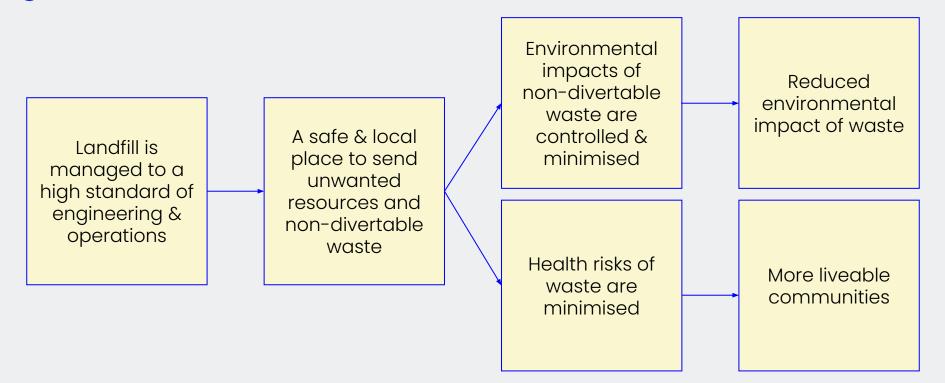


# The essence for the story of impact for the Landfill **and** the broader Waste System

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

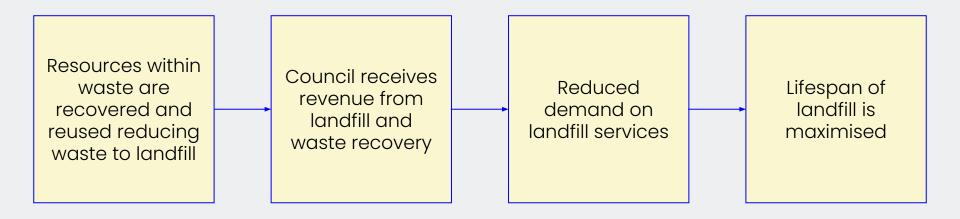


# Example: Managing a landfill to a high standard leads to good outcomes for both our environment and communities





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





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

Business and community contribute to waste challenges Increased local economic activity as a result of resource recovery

Better collaboration with waste minimisation education initiatives Community benefit from local volunteering, events & social procurement

Reduced local resource

dependency

Increased local training and employment Resilient and thriving local economy



HCC Landfill & Waste	Short-term	outcomes	Medium-term outcomes	Long-term outcomes	Impact
Minimisation Activities HCC operates and maintains a Class A landfill to the highest	Landfill is managed to a high standard of engineering &	A safe & local place to send unwanted resources and non-divertable waste	An emissions efficient place for non-divertable waste	More liveable communities	
engineering standards HCC delivers on the Wellington Regional	operations	Data informs decision-making	Environmental impacts of non-divertable waste are controlled &	Reduced environmental impact of waste	Local environment remains at healthy
Waste Management and Minimisation Plan (reporting, waste min plans for projects, education & promotion of	waste and recovered materials	Business and community contribute to waste challenges	minimised Health risks of waste are minimised	Reduced demand on landfill services	Improved
waste reduction) Hutt City Council strategically uses pricing signals to drive behaviour	More infrastructure and networks to support resource recovery	Resources within waste are recovered and reused reducing waste to landfill	Landfill processes adapt to changing waste streams	Reduced local resource dependency	Environment
Silverstream Landfill acceptance criteria is strengthened in line with waste min policies	The flow of waste to landfill is reduced	Better collaboration with waste minimisation	Council receives revenue from landfill and waste recovery	Community benefit from local	maximised Resilient and thriving local economy
recycling service & infrastructure organisations       Strategic collaboration between Council,	Central government	education initiatives	Increased local economic activity as a result of resource recovery	volunteering, events & social procurement	
contractors & private sector	supports waste minimisation	Businesses and consumers support waste minimisation	Changing perspectives on waste and disposal behaviour	Increased local training and employment	High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020

HCC Landfill & Waste	Short-term	outcomes	Medium-term outcomes	Long-term outcomes	Impact
Minimisation Activities	Landfill is managed	A safe & local place to send unwanted resources and	An emissions efficient place for	More liveable	
HCC operates and maintains a Class A landfill to the highest	to a high standard of engineering &	non-divertable waste	non-divertable waste	communities	
engineering standards	operations	Data informs decision-making	impacts of non-divertable waste	Reduced environmental impact	
HCC delivers on the Wellington Regional Waste Management	Better data about	Business and	are controlled & minimised	of waste	Local environment remains at healthy levels
and Minimisation Plan (reporting, waste min plans for projects, education & promotion of	waste and recovered materials	community contribute to waste challenges	Health risks of waste are minimised	Reduced demand on landfill services	Improved
waste reduction) Hutt City Council strategically uses pricing signals to	More infrastructure and networks to support resource	Resources within waste are recovered	Landfill processes adapt to changing	Reduced local	Environment
drive behaviour Silverstream Landfill acceptance criteria	recovery	and reused reducing waste to landfill	waste streams	resource dependency	Lifespan of landfill is maximised
is strengthened in line with waste min policies	The flow of waste to	Better collaboration	Council receives revenue from landfill		
HCC procures from resource recovery, recycling service &	landfill is reduced	with waste minimisation	and waste recovery	Community benefit from local	Resilient and thriving local economy
infrastructure organisations Strategic		education initiatives	economic activity as a result of resource	volunteering, events & social procurement	
collaboration between Council, contractors & private sector	Central government supports waste minimisation	Businesses and consumers support waste minimisation	recovery	training and Landfill + w	High level
			Changing perspectives on waste and disposal		[DRAFT] HCC Silverstream Landfill + waste system Theory of Change
			behaviour		

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HCC delivers on the Wellington Regional Waste Management	Better data about	Business and	are controlled & minimised	environmental impact of waste	Local environment remains at healthy
and Minimisation Plan (reporting, waste min plans for projects, education & promotion of	waste and recovered materials	community contribute to waste	Health risks of waste are minimised	Reduced demand on landfill services	levels
waste reduction)	More infrastructure	challenges Resources within			Improved Environment
strategically uses pricing signals to drive behaviour	and networks to support resource recovery	oport resource waste are recovered	Landfill processes adapt to changing waste streams	Reduced local resource dependency	Lifespan of landfill is maximised
Silverstream Landfill acceptance criteria is strengthened in			Council receives		
line with waste min policies HCC procures from resource recovery,	The flow of waste to landfill is reduced	Better collaboration with waste minimisation	revenue from landfill and waste recovery	Community benefit	Resilient and thriving local economy
recycling service & infrastructure organisations		education initiatives	Increased local economic activity as	volunteering, events & social procurement	
Strategic collaboration between Council,	minimisation consume		a result of resource recovery		
contractors & private sector		Businesses and consumers support waste minimisation	Changing perspectives on waste and disposal	Increased local training and employment	High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020
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Wellington Regional Waste Management and Minimisation Plan (reporting, waste min plans for	Better data about waste and recovered materials	Business and community contribute to waste	Health risks of waste	Reduced demand on	remains at healthy levels
projects, education & promotion of waste reduction)	More infrastructure and networks to	challenges	are minimised           Landfill processes	landfill services	Improved Environment
strategically uses pricing signals to drive behaviour	support resource recovery	support resource waste are recovered	adapt to changing waste streams	Reduced local resource dependency	Lifespan of landfill is
acceptance criteria is strengthened in line with waste min policies		Better collaboration with waste	Council receives revenue from landfill and waste recovery		maximised
HCC procures from resource recovery, recycling service & infrastructure organisations	landfill is reduced	minimisation education initiatives	Increased local economic activity as	Community benefit from local volunteering, events	Resilient and thriving local economy
Strategic collaboration between Council, contractors & private	Central government supports waste		a result of resource recovery	& social procurement	
sector	minimisation	Businesses and consumers support waste minimisation	Changing perspectives on waste and disposal behaviour	Increased local training and employment	High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020

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organisations Strategic collaboration	Central government		economic activity as a result of resource recovery	& social procurement	
between Council, contractors & private sector	supports waste minimisation	Businesses and consumers support waste minimisation	Changing perspectives on waste and disposal behaviour	Increased local training and employment	High level [DRAFT] HCC Silverstream Landfill + waste system Theory of Change December 2020

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strategically uses pricing signals to drive behaviour	support resource recovery		Landfill processes adapt to changing waste streams	jing Reduced local	Lifespan of landfill is
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HCC procures from resource recovery, recycling service & infrastructure organisations Strategic collaboration between Council, petween Strategie		minimisation education initiatives	Increased local economic activity as a result of resource recovery	from local volunteering, events & social procurement	local economy
	Central government				
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Optimising resource recovery leads to better social, economic and environmental outcomes for Hutt City

Current Impact of Landfill

Access to easy and safe disposal

KKK

Maintain current revenue

Impact of Landfill that optimises resource recovery

Increased Employ ~10 people employment Increased Local economic environmental growth benefits Access to easy and safe disposal KKK Increased longevity Increased Maintain of landfill community or increase current resilience revenue

Source: More jobs, less waste



Matthew Luxon Mahurangi Wastebusters

And the

1000

.Ac.

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



17 Silverstream Landfill Outcomes and Impact Framework

#### New Zealand experience: Waste diversion is producing results



# 70%+ diversion of waste from landfill



5 Visitors to out of waste centre are visiting to buy

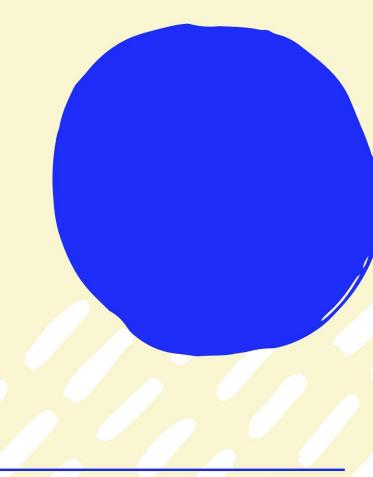


of Gold
 recovered
 from e-waste



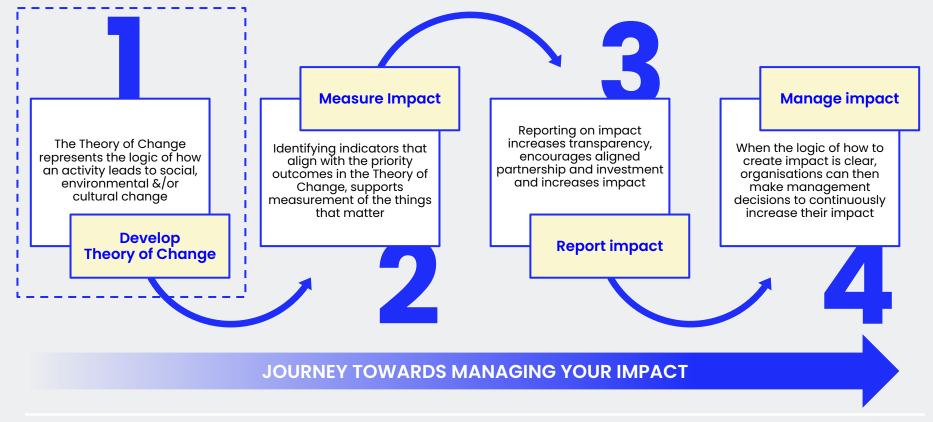


### **Questions?**





### 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



Matthew Luxon Social Procurement Advisor

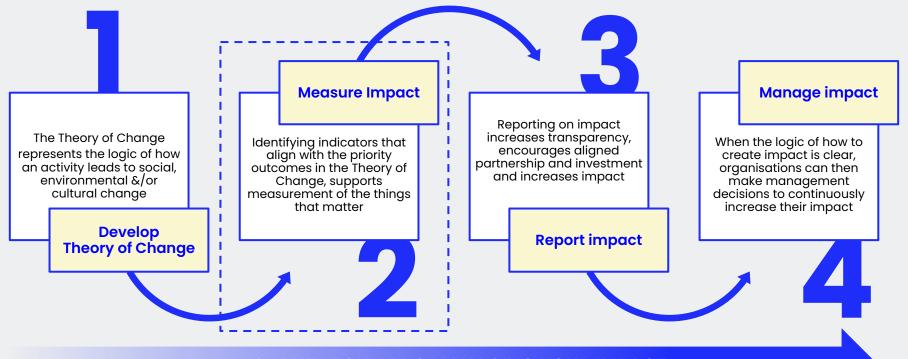
> Laura Ansell Impact Consultant

> > akina.org.nz

# Ngā mihi nui



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



JOURNEY TOWARDS MANAGING 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

