

Te ao hurihuri

The changing world

Sustainable Development Report 2022-2023



REIMAGINEERS



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He pānui – a message from our Chief Executive

Greek philosopher Heraclitus once said, “Change is the only constant in life” and, in today’s world, this couldn’t be more true.

Change can be challenging, though - whether it’s behaviour change needed from individuals, or changing the systems we all play a part in to protect our environment.

The need for climate action – carbon reduction, adaptation and resilience – was brought home to us in February 2023, when New Zealand experienced, first-hand, the very real and devastating effects of a warming planet in the form of Cyclone Gabrielle.

By comparison the space we work in most, reducing waste and building a more circular, resource-efficient economy through product stewardship, can seem less urgent.

But it offers huge potential for system-level change which can reduce the need for costly resource extraction, avoid consigning valuable resources to ever-expanding landfills (which no-one wants in their backyard), and operate entire industries in a less carbon-intensive, more efficient way.

The challenge lies in both achieving broad agreement on what needs to change, and bringing people along with us on the journey, particularly when immediate worries, such as the economy and cost of living overshadow environmental concerns for many businesses, individuals and whānau.

In this reporting period we’ve seen policies consulted on, and implemented, which move Aotearoa New Zealand in a more sustainable direction. The Transforming Recycling consultation was particularly encouraging – laying out a plan to overhaul how the nation collects and deals with recyclables and food waste, as was the publication of the country’s first Emissions Reductions Plan.

And while government policy settings can help guide industries towards more sustainable outcomes, the businesses and industries we work with recognise they can be in the driver’s seat for positive change which benefits us all.

For us, using the UN Sustainable Development Goals as a framework provides the opportunity to check in with our stakeholder communities about the areas they see us making an impact, and provides us with a sense of the bigger picture we are contributing to.

We can be disheartened by change, or we can see how far we have come towards our goals, build our adaptability and resilience, and look to the future. To me this is encapsulated in the whakataukī “i oreā te tuatara, ka patu ki waho” - a problem is solved by continuing to find solutions.

Adele Rose

Chief Executive
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At a glance



Emissions

250.19 tCO_{2e}

Total emissions per \$M operating revenue



Glass Packaging Forum

\$222,742

in grants awarded to 15 projects



Tyrewise

Scheme prepared for implementation in 2024



ChemCollect

135%

increase in tonnage collected

10 tonnes

of material collected through two MyHazWaste events



Paint and packaging take back

15%

increase in material collected

89%

diversion from landfill



SeatSmart child car seat recycling

12%

increase in seats collected

70%

diverted from landfill



Battery Industry Group

Second phase work progressed



140 hrs

Donated time and Good Friday leave

What we're about

Purpose

We're reimagining a world without waste

2030 vision

3R is a place where talented people partner to deliver the full potential of the circular economy across the motu.

Values

In 2020 we developed three values which help us connect our passion for sustainability with our culture and the way we work.

In this reporting period, after a values discussion with our team, we introduced a fourth value, Tuakana-teina / Mentorship, which is about knowledge-sharing within 3R and in our wider communities.

We work to foster an environment where this is commonplace – not only between 'senior' and 'junior' reimagineers, but between everyone.



Kaitiakitanga
of our environment, people
and resources



Manaakitanga
for our people, community,
partners and clients

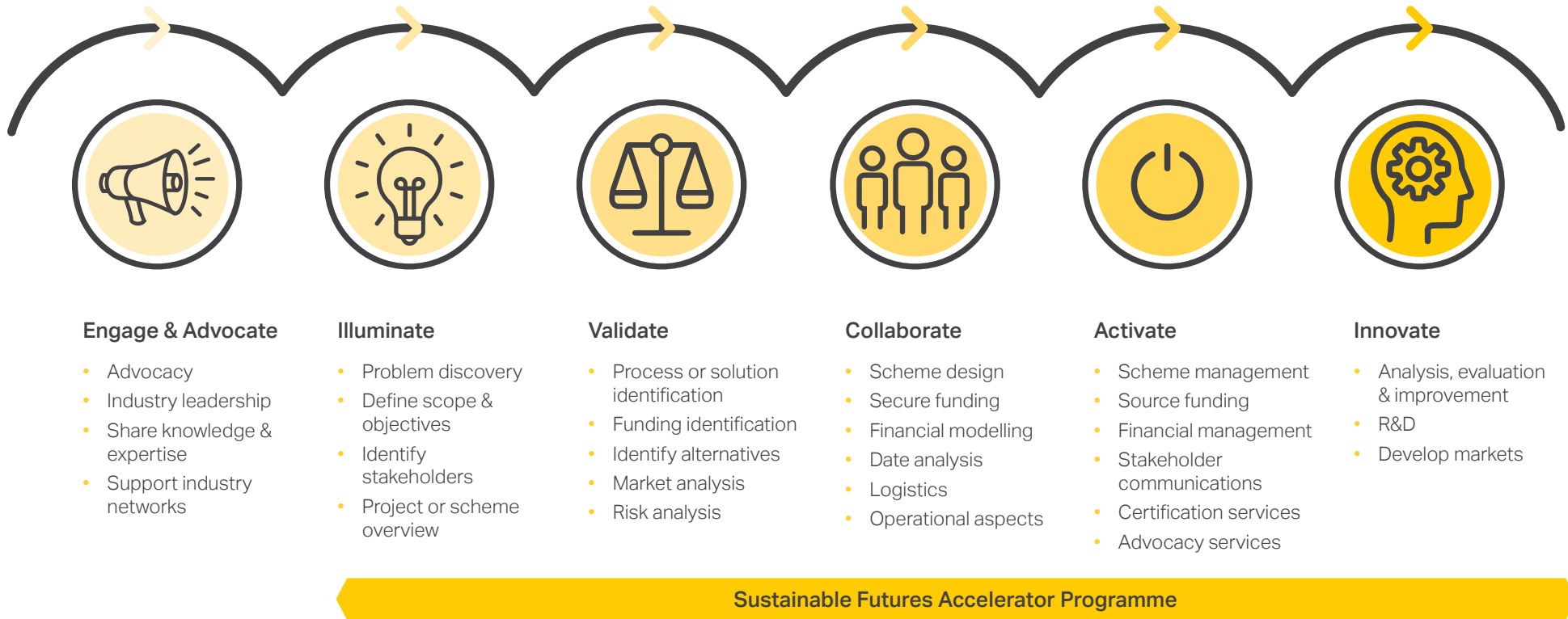


Financial guardianship
allows us to deliver on our
duties of care to people and
our environment

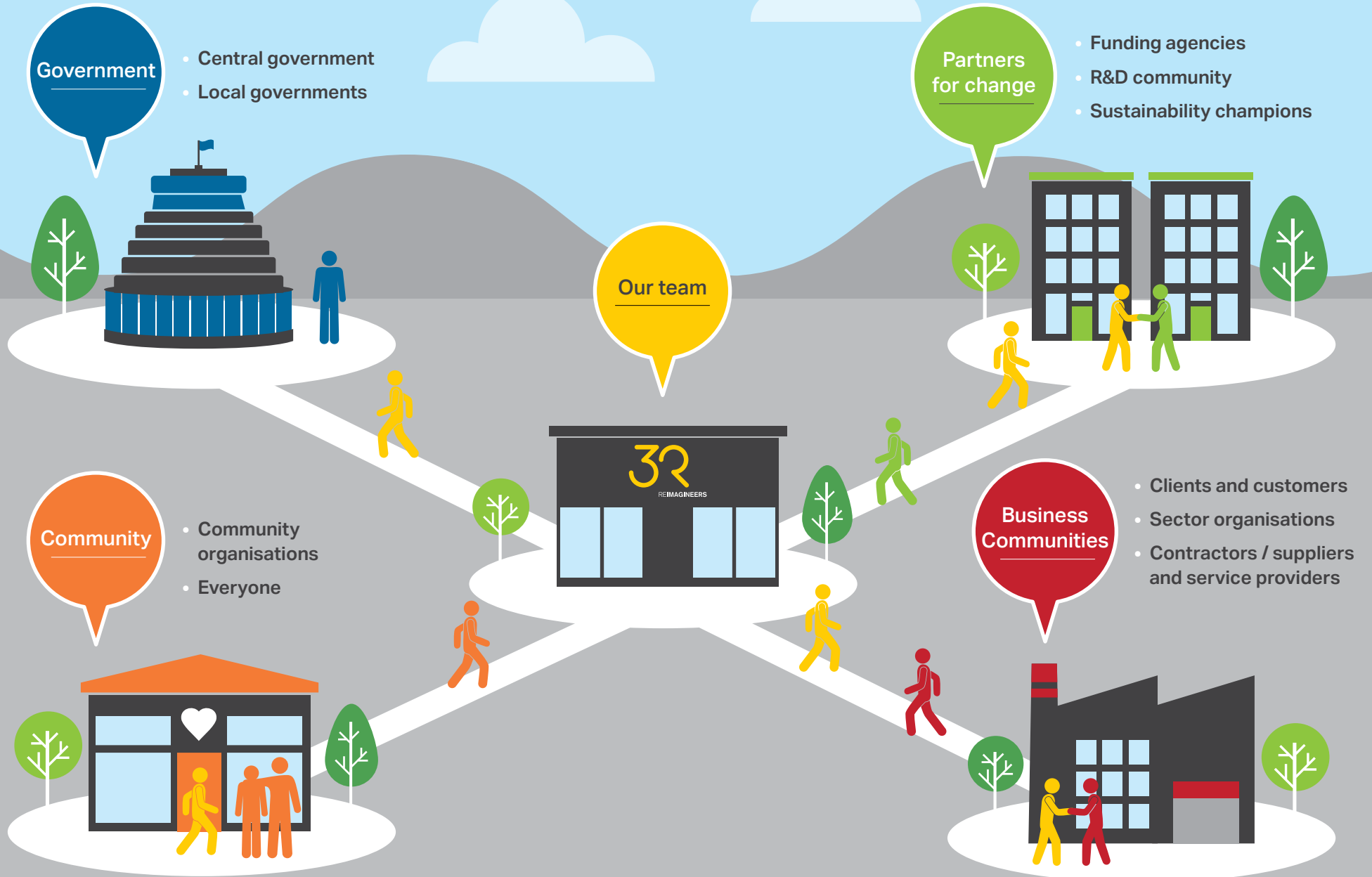


Tuakana-teina
knowledge sharing and
mentorship is at the heart
of how we work

How we create value



Our stakeholder communities



Finding out what matters most to our communities

Every three years we do a materiality survey, then recalibrate the areas of sustainability we focus on, to ensure our work has the most positive impact. To do this, we partner with an independent consultant to facilitate a 360° view.

First, a team workshop defines the topics where our work could have a material impact, and how those topics align to the UN Sustainable Development Goals (SDGs).

Each of our team then scores each topic, as did 19 representatives of our stakeholder communities, via our independent partner. Stakeholder feedback was also provided.

It's important to bear in mind that topics considered low importance were not included. All scores fell within a narrow range, as shown on the Stakeholder Concern graph, and were divided into medium and high importance based on scores.

The work we do at 3R has a particular focus on the following SDGs:

- 8** DECENT WORK AND ECONOMIC GROWTH
- 13** CLIMATE ACTION
- 9** INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 17** PARTNERSHIPS FOR THE GOALS
- 12** RESPONSIBLE CONSUMPTION AND PRODUCTION

However, it is acknowledged some of the material topics also touch on other goals, in particular:

- 10** REDUCED INEQUALITIES
- 11** SUSTAINABLE CITIES AND COMMUNITIES



- People
- Supply chain
- Partnerships
- Advocacy
- Environment
- Data/Systems
- Innovation

High importance

	Topic	Theme	SDG Alignment
1	Health Safety and wellbeing of people	People	3.4, 3.9 Good Health and Wellbeing 8.8 Decent Work and Economic Growth 10.2-4 Reduced Inequality
3	Team culture	People	1—2,4-5 Gender Equity 8.4 Decent Work and Economic Growth 11.4 Sustainable Cities and Communities
5	Sustainable and ethical procurement	Supply Chain	8.4-5, 8.7-8 Decent Work and Economic Growth 10.2-4 Reduced Inequalities 12.1-2, 12.4-6 Resp. Consumption & Production 13.1, 13.3 Climate Action
8	Product stewardship partnerships with industry	Partnerships	9.4 Industry Innovation and Infrastructure 11.6 Sustainable Cities and Communities 12.1-6, 12.8 Sustainable Consumption and Production 17.17 Partnerships for the Goals
9	Thought leadership	Advocacy	9.4 Industry Innovation and Infrastructure 11.6, 11.b Sustainable Cities and Communities 12.2-8 Responsible Consumption and Production
11	Circular economy growth	Environment	8.4 Decent Work and Economic Growth 9.4 Industry Innovation and Infrastructure 11.6, 11.b Sustainable Cities and Communities 12.2-6, 12.8 Responsible Consumption and Production
13	Resource recovery	Environment	9.4 Industry Innovation and Infrastructure 11.6, 11.b Sustainable Cities and Communities 12.1-8 Responsible Consumption and Production
14	Natural resource protection	Environment	6.3 Clean water and sanitation 14.1-2 Life below Water 15.1, 15.5 Life on land
18	Data privacy	Data/systems	9.4-5 Industry Innovation and Infrastructure
19	Authentic and transparent reporting	Data/systems	12.6 Responsible Consumption and Production
20	Best practice governance	Data/systems	5.1, 5.5 Gender Equality 12.1-2, 12.6 Responsible Consumption and Production 13.1-3 Climate Action 16.6-7 Peace Justice and Strong Institutions

Medium importance

	Topic	Theme	SDG Alignment
2	Diversity, equity and inclusion	People	5.1, 5.4-5, 5.b-c Gender Equity 8.5 Decent Work and Economic Growth 10.2-4 Reduced Inequality
4	Supply chain relationships	Supply chain	8.4 Decent Work & Economic Growth 12.1-2, 12.4-6 Resp. Consumption and Production
6	Community wellbeing	Partnerships	8.4-6, 8.8 Decent Work and Economic Growth 10.2-4 Reduced Inequalities 12.5, 12.8 Responsible Consumption and Production 17. 17 Partnerships for the Goals
7	Partnering with Tangata Whenua	Partnerships	4.7 Quality Education 10.2-4 Reduced Inequalities 17.16-17 Partnerships for the goals
10	Advocacy for te taiao (our natural environment)	Advocacy	6.3, 6.6 Clean Water and Sanitation 8.4 Decent Work and Economic Growth 9.4 Industry Innovation and Infrastructure 11.6, 11.b Sustainable Cities and Communities 12.1-8, 12.c Responsible Consumption and Production 13.2, 13.3 Climate Action
12	Accessible product end-of-life solutions	Environment	6.3 Clean Water and Sanitation 11.6 Sustainable Cities and Communities 12.1-6, 12.8 Sustainable Consumption and Production
15	Decarbonisation	Environment	13.1, 13.3 Climate Action
16	Innovation	Innovation	9.4 Industry Innovation and Infrastructure 12.1, 12.5 Responsible Consumption and Production
17	Continuous improvement focus	Innovation	9.4-5 Industry Innovation and Infrastructure 12.1, 12.5 Responsible Consumption and Production

Key themes

The knowledge, expertise and commitment of the team are at the heart of the impacts that 3R deliver.

"3R are professionals in their field, they are the only ones in their space in Hawke's Bay, and New Zealand, doing it well."

Stakeholders see further opportunities for positive impact through leadership, advocacy, and industry partnerships.

"3R are especially effective at cross-sector partnerships... the impact of the work Adele does is very strong via her partnerships across sectors, govt etc."

Positive impacts achieved from the circular economy and product stewardship will grow in demand.

"There is opportunity for wider impact by having capability and capacity to do more in their space for more businesses, as demand grows."

Increased communication, education and engagement across business and communities will drive greater adoption of product stewardship.

"3R has so much expertise and opportunity to bring the community along with them."

An interesting theme in feedback from our external stakeholder communities was that some felt that communication could have been a material topic on its own, both as a way of influencing other businesses and a way of growing our own business.

"Businesses don't yet see the value proposition of the circular economy. That's why we need companies like 3R to share what they do."

Making the goals more visible in our work and to our communities

Working towards any goal is more achievable if it's visible.

This reporting period, we've worked to better communicate these goals to our teams and communities, along with how they relate to our day-to-day work. We've done this through:

- Tying them to our work streams in our internal newsletter
- Adding SDG alignment as a field in our project management software
- Adding them to the work and case studies sections on our website
- Incorporating them into our Capability Statement, presentations and proposal templates

Operating environment



Political

The Government continued its work programme of sustainability-focused policies for waste to advance the goals of the Te Rautaki Para Waste Strategy. Heading into an election year saw a consolidation of priorities towards the end of the reporting period.



Social

Over the past decade, the percentage of people who say they are committed to a sustainable lifestyle has doubled. The gap between intention and action remains, with economic factors having a bearing - as highlighted in the 2022-2023 Kantar Better Futures report. When times are economically-tough people focus less on sustainability.



Environmental

The 2022-2023 period showed that the effects of climate change are in action, worldwide. Almost every news cycle contained stories of extreme weather driven by global warming. Most notable for New Zealand was flooding, such as the January 29 event in Auckland and surrounding areas, and the devastating impact of Cyclone Gabrielle. Managing water and threats to biodiversity are also topics of intensive discussion.



Economic

The 2022-2023 period was marked by challenging economic conditions, primarily driven by growing inflation, rising interest rates and the resulting cost of living crisis.

There was also a sharp rise in diesel fuel costs. While this began to decrease towards the end of the period, it impacted fleet running costs.



Technological

One of the most notable developments in technology has been a rapid surge in AI platforms, as well as tools which harness its power. There is also heightened interest and investment in renewable energy technology, with advances in non-fossil fuel vehicles continuing.



Legal

This reporting period saw a continuation of legislative and regulatory work by Government around waste reduction, with two consultations. Most notable was the Transforming Recycling consultation, which proposed sweeping changes to the country's waste and recycling system.

Government also published the country's first Emissions Reduction Plan.

Environmental impact

Handprints and footprints

Environmental impact is often described as a footprint, however it only measures one half of the equation. The concept of measuring an environmental handprint, too, is emerging as a means to balance the footprint and more accurately demonstrate one's overall environmental impact.

While an environmental footprint refers to the negative impact of activities on the environment, an environmental handprint can be seen as positive impacts, or the reduction of harm.

For businesses like 3R, the negative environmental impact of what we do to recover resources must be measured, but so too should the positive impact of resource recovery. We are aiming for our handprint to be bigger than our footprint.

The development of ways to measure our handprint would help us accurately demonstrate the true value of our work.



Climate action

Material topics:

- Decarbonisation (medium importance)

In effect, our emissions are generated by diverting waste from disposal. This prevents the greater emissions which would occur if it were not diverted.

For example, recycling and remanufacturing plastic saves between 30% and 80% of the carbon emissions than original processing, and manufacturing with virgin materials, produces.¹

To achieve diversion, we must use fuel and dispose of the residual portion of waste which cannot be diverted – our two biggest sources of emissions. For example, an increase of 15% of material collected in one programme inevitably means higher emissions from fuel to collect it.

Our paint and packaging schemes saw a 15% of material collected, 80.8% is diverted from landfill. Our SeatSmart programme had a 12% increase in seats collected, about 70% of these by weight are diverted from landfill.

For this reason, an absolute reduction in emissions is challenging and, in fact, we saw an overall increase in emissions this year, largely driven by fuel (74.8% of total emissions), and waste (10.2% of total emissions).

The corresponding increase in material collected meant, overall, our emissions intensity decreased in terms of total tonnes of material collected and operating revenue.

Despite a focus on keeping hui online where possible, passenger travel also increased, accounting for 7.4% of our total emissions.

Our biggest initiative this period was to replace our South Island truck, which travels longer distances, with a more fuel-efficient model which has a larger capacity. This saw fuel efficiency leap by 9.41% in the first three months of operation, avoiding the same percentage of emissions compared to the previous truck.

We minimise our emissions from electricity by using Ecotricity at our Christchurch and Hastings sites. The energy provider became Aotearoa's only Toitū climate positive certified electricity provider in March 2023.

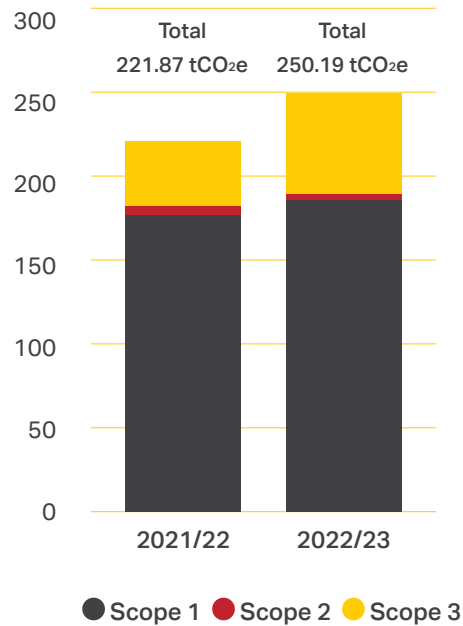
This reporting period we calculated our emissions using the Ministry for the Environment's Emission Factors Workbook. As this is a slightly different calculation method to previous reports, we also re-calculated our emissions from the 2021/22 period for reference.

KPI (tCO ₂ e)	2021-22	2022-23
Total gross GHG emissions per total tonnes of material collected	0.19	0.17
Total gross GHG emissions operating revenue (\$millions)	45.28	37.91
Total emissions	221.87	250.19

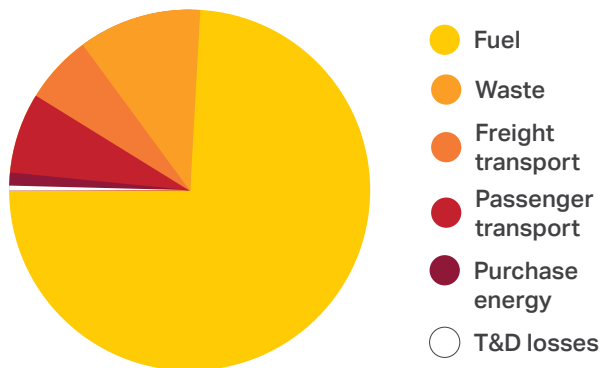
1. Examining material evidence the carbon fingerprint N.Voulvoulis et al.



Total gross GHG emissions (tCO₂e)



Percentage of emissions by source 2022-2023



Identified physical risks

Our identification of climate-related risks, potential impact and risk to the business were tested during the aftermath of Cyclone Gabrielle with some staff cut-off and part of the business having to shut for several days.

Climate related risks	Potential impact	Risk to 3R Group
<ul style="list-style-type: none"> Increased severity of extreme weather events Changes in precipitation patterns/extreme variability in weather patterns Rising mean temperatures Rising sea levels 	Disruption to transportation	Reduction in revenue from decreased 'production'/lower sales/output
	Negative effects on staffing – e.g. transport disruption, absenteeism due to illness or injury	Reduced productivity and revenue and higher staff costs
	Damage to plant and building	Write-offs/early retirement of assets Increased capital costs
	Increased insurance premiums/ reduced availability of insurance	Increased operating/compliance costs Increased risk of unexpected capital expenditure

Aim	Impact	Progress	Target SDGs	On track?
Reduce emissions	Limit impact of climate change	Emissions have increased this reporting period	13 Climate Action	●
Improve visibility of emissions in each scheme/workstream	Enable each scheme/workstream to take individual action	Some work has been undertaken to consider options	13 Climate Action 17 Partnerships for the Goals	●

Resource recovery and waste

Material topics

- Circular economy growth (high importance)
- Resource recovery (high importance)
- Natural resource protection (high importance)




Reducing waste and recovering resources is our central purpose. However, the more work we do and the more resources we divert from landfill, the more residual waste we generate.

Between 70% and 80% of waste from our two key programmes is recycled, avoiding waste to landfill, leaving 20-30% to be disposed of. The more waste we divert, in absolute tonnage, by expanding the programmes, the more we must dispose of to landfill.

We have continued to put significant investment into developing outflows for the material we collect. Developing a truly circular economy, where nothing is wasted, must get beyond innovation at the end of the pipeline. Change must occur at the design phase, along with behaviour change to avoid issues like contamination.

For example, a primary reason for waste from our child car seat recycling programme is plastic which carries no plastic resin code – a factor easily solved in the design and production phase.

Therefore, partnership and collaboration are key to improving waste outcomes.

Aim	Impact	Progress	Target SDGs	On track?
Partner with others to create best practice product stewardship schemes	Grow Aotearoa New Zealand's circular economy	Continued or formed new partnerships with various industry members, government (local and central) and other organisations to progress product stewardship and promote circular economy principles across a range of areas.	9.4 Industry Innovation and Infrastructure 11.6, 11.b Sustainable Cities and Communities 12.1-8, 12.c Responsible Consumption and Production 13 Climate Action	
Recover resources and reduce waste	Reduce virgin resource extraction Reduce need for new landfills	Renewed focus on R&D – continued partnership with Sustainable is Attainable; re-engaged on paint-into-concrete project; and progressed other paint outflow projects.	9 Industry Innovation and Infrastructure 11 Sustainable Cities and Communities 12 Responsible Consumption and Production 6 Clean water and sanitation 14 Life below Water 15 Life on land	
Improve visibility of residual waste by scheme/workstream	Enable each scheme/workstream to take individual action	In planning	17 Partnerships for the Goals	

Advocates for te taiao

Material topics

- Advocacy for te taiao, our environment (medium importance)
- Thought leadership (high importance)



Everything we do has an effect on the environment. Business has a particularly big impact, which is why we work to bring organisations together to achieve positive environmental, economic and social change.

For the purposes of our materiality survey, advocacy for te taiao was defined as working with, and influencing, central and local government, while thought leadership was defined as creating awareness and influence among businesses, communities.

We continue to demonstrate thought leadership and inspire others through our activities, such as taking part in panels, presenting at events, participating in industry groups, creating and facilitating events (such as the Tradie Breakfasts we helped local council run), or through articles written for publications and our communications channels.

The perceived value of our work in this area was also captured in the emerging theme of 'communication' from our materiality survey. This is an area stakeholder communities would like to see us do more. The challenge is to reach, and influence, larger audiences with the resources and channels available to us.

We advocate directly - through engaging with local and central government for policy, legislation and regulation, which furthers Aotearoa New Zealand's circular economy. While this may be less visible to external stakeholders, we consider it an important part of what we do, both as 3R Group and on behalf of our clients

Aim	Impact	Progress	Target SDGs	On track?
Better legislation and policy	Government levers support the SDGs	Engaged in government consultations, both directly and on behalf of clients	8 Decent Work and Economic Growth 9 Industry Innovation and Infrastructure 11 Sustainable Cities and Communities 12 Responsible Consumption and Production 13 Climate Action	
Elevate conversations about sustainability in business	Businesses are more equipped to make better decisions to improve environmental impact.	Led Tradie Breakfast events; regular blog posts and articles focused on sustainability; regular email newsletters to stakeholder communities; took part in business-focused events	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production 13 Climate Action	

Our partnerships

Material topics

- Product stewardship partnerships with industry (high importance)
- Circular economy growth (high importance)
- Resource recovery (high importance)
- Natural resource protection (high importance)
- Decarbonisation (medium importance)
- Accessible end-of-life solutions (medium importance)
- Innovation (medium importance)
- Continuous improvement (medium importance)
- Data privacy (high importance)
- Authentic and transparent reporting (high importance)
- Best practice governance (high importance)

While creating more sustainable business practices is possible alone, so much more can be achieved through partnerships.

This is especially true for product stewardship, which is why we aim to facilitate, create, and foster partnerships which can work towards common goals. These partnerships enable industry best practice, innovation, knowledge-sharing, and reduced environmental impact.

Over this reporting period we've worked with a range of businesses and industries to advance their sustainability goals. Some projects are not listed due to commercial sensitivity.





Product stewardship programme/project

Programme/project	Description	Related SDGs	SFA	Reach	Work undertaken
Resene PaintWise™	Government-accredited, voluntary product stewardship scheme for paint and packaging	9, 12, 14	Illuminate, validate, collaborate, activate, innovate	National	Logistics and processing, R&D for material outflows, project managers for paint and packaging stewardship group
Glass Packaging Forum	Government-accredited, voluntary product stewardship scheme for container glass	12, 13, 17	Activate, innovate	National	Advocacy, member engagement, marketing and communications, glass flow facilitation, grant funding, mass balance and impact reporting
Tyrewise™	The development of a co-designed, regulated product stewardship programme for end-of-life tyres	9, 12, 14, 17	Illuminate, validate, collaborate, activate, innovate	National	Prepared for implementation of regulated scheme, stakeholder engagement, marketing, software development
Synthetic Refrigerant Stewardship		12, 13, 17	Illuminate, validate, collaborate	National	Supported accreditation, application, and appointment of CEO, supported marketing and communications
Battery Industry Group		12, 13, 17	Illuminate, validate, collaborate	National	Reviewed work to date, form working group, research, worked on business plan and accreditation application
Nationwide paint and packaging working group	Project to develop a nationwide product stewardship scheme for paint and its packaging	9, 12, 14	Illuminate, validate, collaborate	National	Appointed as project managers

Take back or recycling programme/project

Programme/project	Description	Related SDGs	SFA	Reach	Work undertaken
Dulux Paint and Packaging Take Back Programme	Paint and packaging take back	9, 12, 14	Illuminate, validate, collaborate, activate	National	Logistics and processing
Wattyl Paint & Packaging Take Back Programme	Paint and packaging take back	9, 12, 14	Illuminate, validate, collaborate, activate	National	Logistics and processing
SeatSmart™	Child car seat recycling programme	3, 9, 12	Illuminate, validate, collaborate, activate, innovate	National (with some exceptions e.g. Northland, Gisborne, West Coast)	Logistics and processing, outflow R&D, marketing, furthered voluntary stewardship

Chemical collection and disposal service

Programme/project	Description	Related SDGs	SFA	Reach	Work undertaken
ChemCollect™	Chemical collection and disposal service MyHazWaste events	3, 12, 14	Illuminate, validate, collaborate, activate, innovate	North Island	Logistics, disposal, compliance, marketing and communications

Other

Programme/project	Description	Related SDGs	SFA	Reach	Work undertaken
Sustainable is Attainable Hawke's Bay	Initiative to support and promote better utilisation of waste in the primary production sector	9, 12, 17	Illuminate, validate	Hawke's Bay	Hosted and guided interns working on circular solutions for by-products of Hawke's Bay's food sector



Paint and packaging

Continued growth

This reporting period saw a continued increase in the material we collected, with a total of 15% more collected when compared to the last reporting period.

Material outflow

Finding outflows for paint and its packaging is a big focus. The metal and plastic packaging represent relatively straight-forward material flow, with the metal going to recyclers. White plastic pails collected in the North Island are recycled into new pails for a circular solution. Coloured plastic from the North Island, and all plastic collected in the South Island, is sent for recycling into rPP or rHDPE.

We investigated several solutions for paint. The most promising was our re-engagement with Allied Concrete and Resene on the PaintCrete project, which uses paint as a replacement additive for aeration in low-strength concrete.

We worked with Allied and Resene to redesign the equipment used to add the paint at an Allied concrete plant, which improves the sustainability of paint and concrete through reuse. Results so far have been encouraging, with the project expected to be operational by mid-2024.

15%

increase in material collected

80.8%







of material diverted from landfill

All-of-industry stewardship

Work on an industry-wide paint stewardship scheme continued and, in August 2022, the project got the go-ahead from industry through the New Zealand Paint Manufacturers Association (PaintMan).

An 18-month, five-milestone project, to design a national Product Stewardship scheme for paint and packaging will begin in the next financial year.

While the impetus for this project stemmed from the declaration of single-use packaging as a priority product in 2020, its scope has widened beyond that. The industry working group view paint itself as an important part of any packaging scheme. It also has the potential for the highest circular economy impact through reuse and repurposing.

Aim	Impact	Progress	Target SDGs	On track?
Recover resources and reduce waste	Reduce virgin resource extraction	Engaged in government consultations, both directly and on behalf of clients	8 Decent Work and Economic Growth 9 Industry Innovation and Infrastructure 11 Sustainable Cities and Communities 12 Responsible Consumption and Production 13 Climate Action	
Prevent potential harm from incorrect disposal of paint and solvent	Protect waterways	Recovered paint processed	14 Life below Water 15 Life on land	
Create value add products from unwanted paint	Create a circular economy for paint	Partnership with Resene has seen progress towards commercialisation of one outflow; others at R&D stage	9 Industry Innovation and Infrastructure 17 Partnerships for the Goals	
Maximise plastic pail-to-pail recycling	Reduce virgin resource extraction	All white plastic from North Island collection is recycled into new pails	12 Responsible Consumption and Production	
Maximise metal recycling of cans	Reduce resource extraction and carbon emissions	All recovered metal goes to metal recyclers	12 Responsible Consumption and Production	
Create an industry-wide product stewardship scheme	Maximise the circular economy for paint and packaging	Project plan approved, funding in place	17 Partnerships for the Goals	



Glass Packaging Forum

The Glass Packaging Forum (GPF) is a membership organisation which aims to improve the environmental outcomes of container glass in New Zealand.

We have managed its day-to-day functions, member engagement, funding allocation, and marketing functions since 2017.

Glass recovery and recycling

During the Jul 2021- Jun 2022 reporting period* the container glass recovery rate dropped to 68%. New Zealand's glass consumption increased 6.9% and tonnage recovered fell 2.5% from the previous period.

The cause of this drop was unable to be identified due to a lack of detailed data. A Grant Thornton review of the data methodology showed the best available data was being used to calculate glass volumes to market, volumes recovered, and outcomes.

Grant funding

Grants, funded through member levies, are the main GPF stewardship tool. The 2021-2022 period saw 15 projects awarded a total of \$222,742.

The majority of funding (\$150,844) was allocated to infrastructure projects – in line with the GPF strategy of enhancing glass recovery through improved logistics.

15
projects funded

\$222,742
in funding







Regulated stewardship

It is our view that voluntary container glass stewardship in Aotearoa can only achieve incremental improvements. A regulated stewardship approach is needed to significantly move the dial.

3R, in our role as scheme managers, has advocated for this shift. During this reporting period, a detailed submission on the Transforming Recycling consultation was prepared on behalf of the GPF.

Grant Thornton was also contracted to explore an all-of-industry stewardship model. This showed the potential for a significant increase in recovery and recycling rates, and a substantial decrease in emissions compared to the status quo.

**This period aligns with the council financial year. The 2022-2023 annual report had not been completed at the time of writing.*

Aim	Impact	Progress	Target SDGs	On track?
Improve environmental outcomes for glass in Aotearoa New Zealand (reuse, recycling)	<p>Grow New Zealand's circular economy</p> <p>Reduce resource extraction</p> <p>Reduce carbon emissions</p>	Recovery rate dropped from 75% to 68%	<p>9 Industry Innovation and Infrastructure</p> <p>11 Sustainable Cities and Communities</p> <p>12 Responsible Consumption and Production</p> <p>13 Climate Action</p>	
Increase member engagement	<p>Improve understanding and commitment to product stewardship</p>	Limited by budget; impacted by regulatory uncertainty	<p>9 Industry Innovation and Infrastructure</p> <p>12 Responsible Consumption and Production</p>	
Strengthen collaboration to improve flow of glass	<p>Increase resource recovery rate and efficiency</p>	Work with key stakeholders and grant applicants to improve and future-proof glass collection and recycling supply chain	<p>17 Partnerships for the Goals</p> <p>13 Climate Action</p>	
Improve public awareness around the sustainability of glass	<p>Improve recovery rates</p>	Limited by budget and lack of consistent nationwide system	<p>11 Sustainable Cities and Communities</p>	
Align grant funding to strategy	<p>Improve funding impact</p>	Funding aligned with strategy of improving infrastructure	<p>17 Partnerships for the Goals</p>	
Better waste legislation and policy	<p>Government policy supports an efficient glass circular economy</p>	Communicated barriers and solutions; participated in Transforming Recycling consultation; commissioned and circulated roadmap for regulated product stewardship	<p>12 Responsible Consumption and Production</p>	



Tyrewise™

Tyrewise is New Zealand's first regulated product stewardship scheme for end-of-life tyres, and the country's first regulated scheme to date.

The focus of our work during this reporting period was preparation for the implementation of the scheme. When fully operational, Tyrewise is expected to collect and process 80% of all tyres to market by year four, and 90% by year six

Growing participation

Regulated stewardship requires participation by all of industry. This means industry must be engaged and well-informed, so a key area of work was regularly communicating updates, news and information with stakeholders. Communicating the importance of registering with the scheme has also been a particular focus.

The building blocks

Being the first regulated scheme in Aotearoa New Zealand means Tyrewise will lay the foundations for other regulated product stewardship schemes. It also meant best practice for the New Zealand context had to be found abroad and adapted.

A large part of this work was tracking software development and trial, which is crucial to accounting for the tyres from collection to processing. The software will feed into the Tyrewise payment system and will be the backbone of the scheme's transparent reporting system.

The software has been developed in consultation with industry and end-users. While it's been created for tyres it can be adapted and used by other stewardship schemes in the future.

Aim	Impact	Progress	Target SDGs	On track?
Prepare for implementation of regulated product stewardship	Increase collaboration for environmental benefit	Software developed and trial run in North Island	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production 17 Partnerships for the Goals	●
Retain and grow industry participation	Increase collaboration for environmental benefit and internalise end-of-life costs	Regular engagement with industry members, promoting registration and feedback	17 Partnerships for the Goals	●
Increase recovery rate for end-of-life tyres	Improve environmental outcomes	Scheme not yet active	12 Responsible Consumption and Production	●
Create high value material outflows for end-of-life tyres	Stimulate new markets for use of recovered materials and develop circular economy	Scheme not yet active	8 Decent Work and Economic Growth 12 Responsible Consumption and Production 9 Industry Innovation and Infrastructure	●



Synthetic refrigerant gases

The Trust for the Destruction of Synthetic Refrigerants (now Cool-Safe) is working towards being the product stewardship organisation for synthetic refrigerant gases. This reporting period saw our work transition from project managers to a support role, following the appointment of Janine Brinsdon as the Cool-Safe CEO.

Our work was focused on transferring our knowledge and supporting Janine's transition to the role, as well as supporting Cool-Safe's application for accreditation. This application was submitted to the Ministry for the Environment in December 2022.

Aim	Impact	Progress	Target SDGs	On track?
Progress application for accreditation of a regulated scheme	Capture larger proportion of gases with high Global Warming Potential (GWP)	Application submitted to Ministry for the Environment	13 Climate Action 17 Partnerships for the Goals 9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production	●

Battery Industry Group



The Battery Industry Group (B.I.G) project was set up in 2019 by industry stakeholders, ahead of the Government’s declaration of e-waste as a priority product under the Waste Minimisation Act 2008.

It aims to deliver a regulated product stewardship scheme for large batteries (over 5kg) in Aotearoa New Zealand, which will, in turn, enable the innovation and collaboration required to create a circular economy for large batteries.

Scheme design

3R began work for B.I.G. in 2022, to build on the first phase of work and submit an application for accreditation under the Waste Minimisation Act 2008. A key piece of this work was the formation of a working group to provide technical expertise and industry knowledge.

Significant work was done to identify and classify battery sizes, weights, and chemistry to guide future regulation.

By the end of this reporting period, a business plan, including a financial model, and accreditation application are being completed, with submission to the Ministry earmarked for late 2023.

Engaging stakeholders

Ensuring stakeholder representation and participation across the battery supply chain was key. 3R worked with Ocean Design to create a new brand platform and created a stakeholder engagement plan (as part of the business plan). We continued to build a stakeholder database and communicate progress.

Global alignment

Crucial to future success was exploring the implications of a battery passport for New Zealand.

Battery passports have been trialled in Europe and will become a European Union requirement under regulation from 2026. The passports act as a ‘digital twin’ which identifies what the battery is made of, where the material came from, its carbon footprint, and how to recycle it, among other information.

New Zealand’s market size means we will likely align ourselves with the passport requirements of larger markets, such as the EU.

Aim	Impact	Progress	Target SDGs	On track?
Complete regulated scheme design and implementation plan for large batteries	Circular resource use	Business plan and accreditation application in progress	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production 13 Climate Action	●
Stakeholders engaged in solution development	Willing participants; more robust solution	Building relationships and communications	17 Partnerships for the Goals	●
Align work with global battery passport developments	Verify carbon footprint, human rights impact and performance of batteries	Carried out investigation of global developments in order to make recommendations	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production	●

SeatSmart



The SeatSmart child car seat recycling programme was created by 3R Group in 2014 to address the roughly 100,000 seats which go to landfill each year, despite about 70% of a seat (by weight) being recyclable or reusable plastic, metal, and straps.

Continued growth

A total of 12% more seats were collected by SeatSmart than the 2021-2022 period – a continuation of its ongoing growth. A new collection site was added in Auckland, along with a free collection trial in Taupō which led to a new permanent collection site.

Partnerships and stewardship

SeatSmart continued to have strong support from partners such as Baby on the Move, AML, and many district and city councils.

This reporting period saw Auckland-based baby goods retailer Baby Bunting partner with SeatSmart to cover the full cost of recycling all their seats sold. It was the first time a child car seat retailer had committed to voluntarily stewarding the seats they sell.

Social impact

SeatSmart promotes road safety by highlighting the need to check seats for expiry dates and correct fit. It also grows awareness that recycling can, and should, go further than ‘traditional recycling’ (paper, plastic packaging, glass, and cans).

During this reporting period, we worked alongside Disability Support Service social enterprise Real World Living, with some of their clients experiencing a workplace firsthand, by dismantling seats at our Auckland depot.

Material outflow

Diverting material from landfill is one thing, finding good outflows is another. Toward the end of the period we began work on a project to reuse seat straps for stabilising newly planted trees.

Plastic that isn't marked with resin codes is a barrier to improving recycling rates, so we began a project testing recyclability of these plastics. We were able to identify more plastics which can be recycled – depending on demand from processors. Quantifying this data has proven challenging though, due to inconsistent information from processors

Aim	Impact	\Progress	Target SDGs	On track?
Increase quantity of expired or damaged seats recovered for recycling	Reduce waste to landfill Improve child safety	12% increase in seats collected; two new collection sites	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production	●
Increase material recycling rate	Reduces use of virgin materials	Work to find new outflows continues	9 Industry Innovation and Infrastructure 12 Responsible Consumption and Production	●
Create higher value solutions for materials	Develop circular economy	Lack of scale hinders ability to find higher value outcomes	9 Industry Innovation and Infrastructure	●
Progress to voluntary product stewardship scheme	Increases access to the programme for all	Conversations are ongoing	17 Partnerships for the Goals	●



Chemical and hazardous materials collections

ChemCollect is our user-pays chemical collection and disposal service, which operates around New Zealand, primarily for the commercial sector, along with hazardous household collections held for communities and funded by councils through our MyHazWaste events.

It aims to ensure harmful chemicals are kept out of the environment through industry best-practice collection and disposal methods.

Increased collections

ChemCollect saw a 135% increase in tonnage collected over this reporting period. While the number of collections was on par with the previous period, the volume of material collected was larger.

Transport efficiency

We were able to create transport efficiencies in some areas, such as Southland, where we made use of available capacity when collecting other materials. This reduced both customer costs and carbon emissions.

Household waste solutions

The lifting of Covid restrictions meant MyHazWaste events could run again, with two in Waikato - Cambridge and Waipā.

Both council-funded events were well-attended, with 4.2 tonnes collected in Cambridge and 4.8 tonnes in Waipā. These events allow residents free disposal of chemicals and hazardous waste. They also turned up some interesting finds, such as 24kg of DDT and 13kg of lindane – both highly toxic, banned insecticides from the 1940s and 50s.

Aim	Impact	Progress	Target SDGs	On track?
Increase volume of chemicals safely disposed of	Protect waterways and improve environmental outcomes	135% increase in tonnage collected and safely disposed of	12 Responsible Consumption and Production 14 Life below Water	●
Donate to Million Metres Streams to plant trees	Protect waterways and climate resilience	\$900 donated	14 Life below Water 17 Partnerships for the Goals 13 Climate Action	●
Provide a solution for residential hazardous waste collections	Protect waterways and improve environmental outcomes	9 tonnes removed from communities in Waipā and Cambridge	17 Partnerships for the Goals	●



Innovation

We had a renewed focus on research and development this year with a new full-time role - Innovation Project Lead. The purpose of this role is to develop ideas from the research phase to commercial application, alongside commercial partners.

Sustainable is Attainable (SiA)

Our innovation team hosted and supported two students, funded through the Callaghan R&D Experience Grant, working on various projects as part of the SiA Hawke’s Bay initiative.

SiA Hawke’s Bay creates a collaborative approach for identifying and tackling problem waste streams. It aims to develop innovative, long-term solutions which divert waste from landfill for reuse or repurposing into high-value products.

The students, Kezia Alexander and Anna van den Hout, focused on label backing, pallet strapping, and value extraction from waste corn and oat products.

Paint outflows

We re-engaged with Allied Concrete and Resene on the Paintcrete project – using paint as a replacement for the virgin materials that would otherwise be used to create the right aeration needed in low-strength concrete. This work will be progressed in the next reporting period.

Investigations continue into the viability of using waste paint to more easily apply rabbit repellent to orchard trees.

Titanium dioxide is a high-value component in waste paint, which could be used in new product manufacture. A lab-scale titanium dioxide extraction trial has been completed, with viability of various secondary uses and/or commercial opportunities now being explored.

Partnerships and knowledge-sharing

Construction and demolition (C&D) waste makes up a large proportion of waste to landfill in Aotearoa. We partnered with Hastings District Council to run a series of Tradie Breakfasts to bring members of the building sector in Hawke’s Bay together.

These events aimed to share knowledge through speakers, and networking industry members who want to be more sustainable.

Aim	Impact	Progress	Target SDGs	On track?
Support scheme development, improvement, and innovation	Increase outflows of collected material to high-value products	Several promising projects under way	9 Industry Innovation and Infrastructure 17 Partnerships for the Goals	●
Knowledge sharing	Increase awareness, knowledge and networking for sustainable outcomes	Continued hosting of students working on R&D; Series of events on C&D waste, with interest from other regions for similar events	9 Industry Innovation and Infrastructure 17 Partnerships for the Goals	●



Social Impact

Team wellbeing

Material topics

- Health, safety, and wellbeing of people (high importance)
- Diversity, equity, and inclusion (high importance)
- Team culture (high importance)
- Community wellbeing (medium importance)

Health & Safety

The health and safety of the team once again rated highest on our materiality survey. This reflects the hands-on nature of the work many reimagineers do, as well as the business focus on health and safety over the years.

Team members all attend at least four health and safety meetings per year, with a focus on early reporting, identifying risk and making improvements to processes. The meetings are a transparent forum for discussion, raising issues, and brainstorming solutions.

This reporting period meetings were adapted so they are longer, but less frequent. This should ensure matters are thoroughly-covered and enough time is provided for actions to be taken before the next meeting. The Health, Safety and Environment Committee also meets separately.

In July 2023 we underwent a Management System Assessment (Standard: ISO 14001:2015, ISO 45001:2018), audited by Telarc. This was a success, with no non-conformances and five opportunities for improvement identified.

A random Christchurch City Council stormwater test found concerning levels of heavy metals at our Christchurch depot. We conducted a full investigation, site clean-up, and made changes to outside storage procedures.

Further, third-party testing found the potential contamination from our operation could be ruled out, with the cause deemed to be from an external, environmental source. We continue to monitor this and have scheduled site maintenance and cleaning to ensure we are not contributing to environmental contamination.

We continued to provide health insurance through Southern Cross to all permanent employees.

Mental wellbeing

We regard mental health on par with physical wellbeing, with our value of manaakitanga (taking care of our people) being central to this.

Work-life balance is important, and staff can take advantage of flexible working hours and the ability to work from home when necessary. We also maintain a system of regular check-ins to ensure support is available when needed.

We continued to offer Employment Assistance Programme through EAP Services. This is a free, independent, and confidential service for anything from work stress to depression, anxiety or grief.

More than just work

It's important for any organisation that team members feel they are contributing to a greater overall purpose than their day-to-day tasks. We feel this is especially important in the sustainability space, so we work to create a sense of purpose among all reimagineers.





We do this through regular updates on the work.

A monthly internal newsletter keeps everyone updated on what the various teams are doing, as well as celebrating wins and achievements – both professional and personal.

Team culture

Developing a strong and positive team culture is critical for any business. The geographically disconnected nature of our work – with teams in Christchurch, Auckland and two sites in Hastings – makes this challenging.

We approach this by engaging all the reimagineers as openly and often as possible. Monthly kaupapa kōrero/ topical talks bring everyone together via Teams to learn and catch-up, while all sites are encouraged to have regular morning teas.

Aim	Impact	Progress	Target SDGs	On track?
Protect physical health and safety	Team members are protected from physical harm as much as possible; Less lost time injuries	Robust health and safety processes; regular updates and staff involvement in identifying risks and solutions	3 Good Health and Wellbeing 8 Decent Work and Economic Growth 10 Reduced Inequality	
Promote mental wellbeing	Resilience in the face of challenge	Foster environment around mental health; provision of avenues to seek help and be supported by the business	3 Good Health and Wellbeing 8 Decent Work and Economic Growth 10 Reduced Inequality	
Foster sense of purpose	Greater sense of meaning in day-to-day work; sense of unity among the team	Regular, open updates on company business, objectives; regular sharing among the team regarding work, success and challenges	5 Gender Equity 8 Decent Work and Economic Growth 11 Sustainable Cities and Communities	
Promote a positive team culture	Promotes the above three aims; improves staff retention, job satisfaction and productivity		5 Gender Equity 8 Decent Work and Economic Growth 11 Sustainable Cities and Communities	



Community wellbeing

Material topics

- Community wellbeing (high priority)
- Natural resource protection (high priority)
- Advocacy for te taiao (high priority)
- Partnering with tangata whenua (medium priority)

Every organisation is part of a community and is responsible for its positive impact on it - beyond simply employing those who live in it.

We do this by staff volunteer hours, through donations and sponsorships, and participating on advisory boards or groups.

Good Friday leave

Volunteering can be difficult between work and home commitments, so we have a Good Friday leave policy which allows each team member up to six days of paid leave for volunteering or personal development.




This reporting period the team put in just over 140 hours. This ranged from helping with Hawke's Bay food rescue organisation Nourished for Nil, to helping run local events, attending reo Māori events and working in various governance positions.

Donations and sponsorships

We aim to spread our donations and sponsorships budgets as broadly as possible. This reporting period we focused primarily on charities doing work with children and families, such as Heart Kids and Caring Families Aotearoa.

We also continued our support for the House of Science, sponsoring their 'A Load of Rubbish/He Putunga Para' teaching kit in Hawke's Bay. The kit teaches children about the circular economy and waste hierarchy. House of Science is a national non-profit organisation which supports hands-on science learning in primary schools through hireable subject kits.

Donated Time (Governance)	
Āmiomio, Business Central, and Business NZ accreditation training	92 hours
Good Friday leave (Community)	
Volunteering: Triple Peaks race, Hillary Challenge event, Nourished for Nil, Tukipo Catchment Group, Hawke's Bay regional swimming champs, Riding for the Disabled	68 hours
Good Friday leave (personal development)	40 hours
Donations & sponsorships	
Environment	\$200
Community	\$5060

Aim	Impact	Progress	Target SDGs	On track?
Engage with our communities	Extend business knowledge, experience and opportunities to wider community; have greater environmental impact through partnerships	Hosted interns; worked with social enterprises; continued Good Friday activities	4 Quality Education 10 Reduced Inequalities 17 Partnerships for the Goals	
Protect our communities' environment for future generations	Keep harmful material from potentially entering the environment through safe collection and reuse, recycling or proper disposal	Expansion of stewardship schemes and chemical collection services	6 Clean Water and Sanitation 14 Life Below Water 15 Life on Land	
Include communities in co-design processes	Foster behaviour change; education on environmental challenges and solutions		17 Partnerships for the Goals	

Partnerships for the goals

We have long advocated for collaboration as the key to reaching sustainability goals.

Our work saw us engage with several different industries and industry groups, such as the New Zealand Paint Manufacturers Association, Sustainable is Attainable Hawke's Bay, a range of automotive industry and consumer associations, Fire & Emergency New Zealand.

In line with our commitment to SDG 17: Partnerships for the Goals, we continued our membership of sustainability-focused membership organisations – Sustainable Business Council, WasteMINZ, and Sustainable Business Network.

Being part of these organisations is vital to contribute to the wider conversation, as well as being able to learn and offer expertise. For example, in this reporting period, Business Development Manager – Sustainable Solutions Dominic Salmon was part of the WasteMINZ Resource Recovery Group.

Governance and Finance

Material topics

- Data privacy (high importance)
- Authentic and transparent reporting (high importance)
- Best practice governance (high importance)

Governance

Governance for 3R is provided through our board, ensuring oversight and transparency.

In our previous report we noted the board felt there was scope to improve the visibility of the Sustainable Development Goals which are core to 3R's work, throughout the business.


During this reporting period we began implementing this change, most notably by socialising how the goals relate to our various areas of work in our internal newsletter. We also held an information session with all staff at one of our monthly 'kaupapa kōrero/topical talks' sessions about the goals and what they mean for us, as a business.

We keep up to date with best-practice governance. Three of our team are members of Governance New Zealand.

Financial

Navigating financial challenges as an impact enterprise, particularly in the environmental sustainability sector, requires a blend of innovative thinking, strategic planning, and leveraging available resources. For this reporting period, we focused on diversifying our revenue streams and further cementing relationships with customers who are aligned with our mission - both in financial returns and social or environmental impact. Like every business, we have a focus on cost optimisation and efficiency. For the projects and programmes we manage, we do this through a lens of continuous improvement. Clearly articulating the social and environmental impact of our work to our stakeholders, customers and partners enables us to continue to build trust and attract support from those who prioritise impact alongside financial returns.

Percentage change from previous year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Turnover	1.7	20.8	-3.0	9.2	36.4
Operating Costs	2.8	12.6	-57.1	8.0	-35.4
Salaries and Employment Benefits	23.9	9.9	-11.0	3.9	26.2



**I orea te tuatara,
ka patu ki waho -
a problem is solved
by continuing
to find solutions.**

The logo consists of the characters '3' and 'R' in a white, rounded, sans-serif font. The '3' is on the left and the 'R' is on the right, both rendered in a clean, modern style.

REIMAGINEERS

www.3R.co.nz