





Message from our Chief Executive

There is no Planet B. This statement encapsulates the urgency of the current environmental and climatic problems we face across the globe.

Over a number of years, the circular economy has been gaining traction as something of the Holy Grail to help reverse or reduce the impact of climate change, and to help us live sustainably on this planet. It's a model where resources are maximised and reused, there is no waste and there are huge benefits for society, the environment and the economy. However, unlike the fabled biblical relic, the circular economy is within our grasp and is in fact starting to happen here and abroad – albeit not yet on the national or global scale which is needed.

At 3R, our work is fundamentally about protecting this precious planet that we all live on. However, while our primary focus may be environmental, 3R must provide value for our stakeholders across the full spectrum – financial, social and natural capital, and measure its impact in all three areas.

Supporting the move to a circular economy has become a primary focus for 3R to do just that. We know effective product stewardship, from design to recovery of materials, underpins the efficient use of resources in a circular economy. It opens up an exciting new way of doing business and brings with it a wealth of opportunities for New Zealand companies. It will take a collaborative approach, which we fully embrace as we work with small and large businesses alike on reimagining our resource use.

Alongside this, we also have an important role in helping businesses make sense of sustainability, to cut through the buzzwords and, critically, take practical steps to achieve it.

The second half of 2017-2018 has seen an unprecedented change in attitudes towards waste and sustainability, with the new Coalition Government putting climate change, waste reduction and sustainability firmly on the agenda.

This, combined with China's National Sword policy, has created a 'perfect storm' in which waste and sustainability have become topical among the public.

It is vital we make the most of the opportunities that have arisen, not only as a business, but as a community and as a country.

In our last sustainable development report, we focused on our materiality survey as well as our engagement with the United Nations Sustainable Development Goals (SDGs). These have remained important for the business, and in particular we continue to measure our progress against key SDG8 Decent Work and Economic Growth, SDG9 Industry Innovation and Infrastructure, SDG12 Responsible Consumption and Production, and SDG17 Partnerships. We have also added SDG13 Climate Action reflecting both the urgency with which this needs to be addressed and our ability to make an impact through reducing waste to landfill and recovering useful resources as a replacement for virgin material.

Last year's materiality survey measured what matters most to our stakeholders and the business to create economic, social and environmental value in the short, medium and long term. In line with our expectations, some of the mega trends of action on the environment and changes in consumer expectations around business impact and sustainability, fell in line with what was material to our stakeholders. We continue to hold these material aspects and the SDGs front and centre as our business grows and changes.

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Unfamiliar with the UN's SDGs? The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. Find out more on p5-6 or go to the **UN SDGs**

Purpose

● Taking the circular route

To go forward we need to start moving in circles. It's possibly a confusing statement, but when taken in the context of the economy and more specifically the flow of resources within the economy, it makes perfect sense.

Moving from a linear, 'take, make, waste' economy, to a circular economy of regeneration, efficiency and zero waste, is a major focus for us. We believe product stewardship – industries taking responsibility for their products at the end of their life – is a cornerstone for the development of this new economy.

Stewardship, our core business, provides a mechanism to encourage manufacturers to design products that can be repaired rather than replaced, that have longer lifespans, and use more recyclable materials – all crucial to moving to a circular economy.

In recognition of this focus on a circular economy we joined the Sustainable Business Network's Circular Economy Accelerator (CEA) as a Foundation Partner in November 2017. Together we aim to speed up the adoption of the circular economy in New Zealand and see everyone reap the rewards, not only environmental but economic.

The first major report of the CEA was the 'Circular Economy Opportunity for Auckland' mapping out the benefits of a circular economy model in Auckland. This stated Auckland could be \$8.8 billion better off in 2030, if it installed the circular economy. Our key role as a regional business is in helping spread the opportunity beyond the Bombay Hills to the rest of New Zealand. We use a circular approach to work with new or existing customers and will bring this expertise to a series of CEA workshops aimed at helping businesses find out how to start implementing circular solutions in their operations.

It has been exciting to see talk of developing a strong circular economy in New Zealand extend to government level with the Ministry for the Environment and Ministers using this term. Financial support will also be made available in the form of the Waste Minimisation Fund May 2018 round which has a circular economy focus.

A circular economy is ripe for disruption and exciting opportunities abound!

● VNC is the new GDP

Natural capital can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things.

As 3R Chief Executive Adele Rose points out in her opening message, "there is no Planet B". The earth and all its resources are all we have. We see the concept of valuing natural capital (VNC) as a key contributor to the development of circular economy thinking.

One of the most detrimental, and unseen, effects of the linear economy comes from externalised costs. We need to place a fiscal value on the air, land, water and other natural resources that are critical to the growing and manufacturing of products and the viability of our businesses.

New Zealand Treasury has begun work on this concept with their first report **"The Start of a Conversation on the Value of New Zealand's Natural Capital"**. This is about taking a holistic approach to measuring the economy and wellbeing.

As Robert F Kennedy said in 1968 "[Gross domestic product] measures everything... except that which makes life worthwhile." It's reassuring to see a broader view being adopted.

While we don't produce a product, we are acutely aware that our operations still have an impact on New Zealand's natural capital, predominantly through fuel and travel – it's one of the reasons we are carboNZero^{Cert}™ certified.

Helping other businesses understand their impacts on natural capital is also an important part of product stewardship.

If natural capital was a line on the balance sheet, then product stewardship and the circular economy would already be common place.

“ Ultimately, nature is priceless. ”
However, it is not valueless

World Forum on Natural Capital

● It's a material world

In our 2016-2017 report we highlighted the materiality work we did, largely driven by a survey of 20 external and 6 internal stakeholders, and how that impacted on the business and helped drive our strategy. We also tied these material aspects to the UN's Sustainable Development Goals to enhance their relevance to our business within a broader context.

As last reported, it was reassuring to find that overall, responses from our stakeholders were largely consistent with our own views but they did also give more clarity in some areas. It led us to set down a 2020 goal of:

"3R demonstrates thought leadership by increasing use of research and development to accelerate the circular economy in New Zealand; encourages producers to include recycling and recovery costs in product cost; and demonstrates that our initiatives reduce costs and reinforce a social license to operate."

Thought leadership ranked highly in the materiality survey and we have taken on this challenge to position ourselves in this space. We do this through regularly attending, speaking at or being on discussion panels at conferences and events on the circular economy, product stewardship, resource recovery and waste reduction. Being active in the media space - both social and mainstream - have been a focus, so as to further our thought leadership position.

The materiality survey and the 2020 goal continue to underpin our work and provide a guide by which to measure and focus our efforts. We plan to conduct a second materiality survey in 2018-2019.



● Aligning our goals

In our last sustainable development report, we put the United Nations Sustainable Development Goals at the centre.

The SDGs provide a simple framework with language that is easy to understand, no matter if you are in business, not-for-profit, politics or a private citizen. They aim for a better future for everyone and do not distinguish between developed and developing nations.

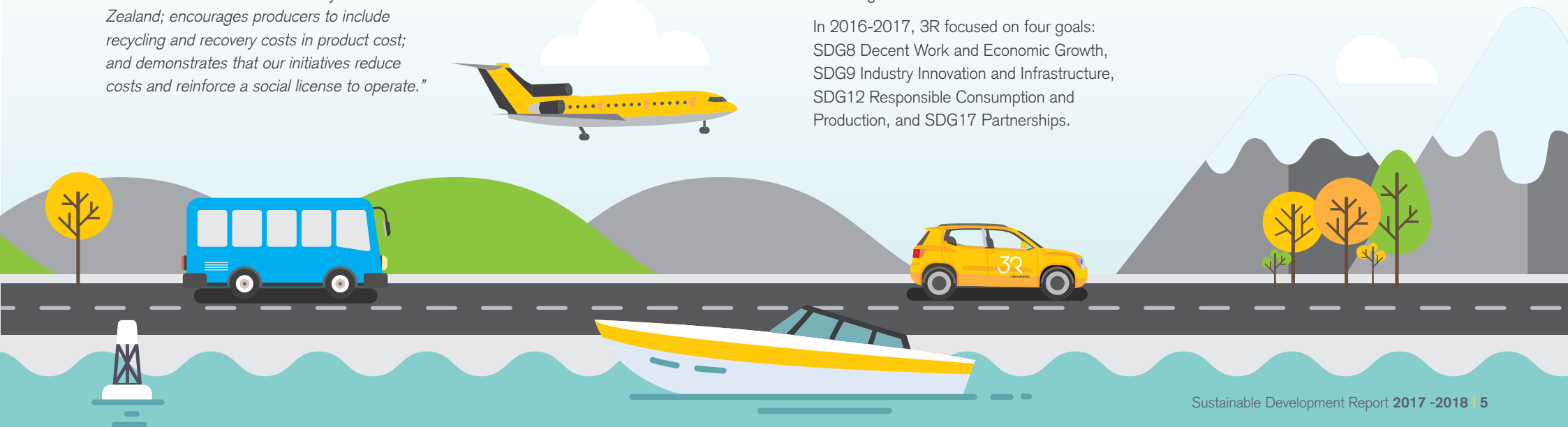
They also allow us to look to the future – perhaps 50, 100, 500 years from now – and imagine what it might look like and how we can get there. Similar to the circular economy, the SDGs take a systemic approach in striving to bring about rapid change across interrelated but separate aspects of the economy and wellbeing.

In 2016-2017, 3R focused on four goals: SDG8 Decent Work and Economic Growth, SDG9 Industry Innovation and Infrastructure, SDG12 Responsible Consumption and Production, and SDG17 Partnerships.

These have particular relevance to 3R, not only in terms of the work we do but in the values we share as a company.

This year we also added SDG13 Climate Action as a central pivot for the other four goals, underlining the increasingly critical role we believe this SDG plays in our efforts to achieve all other goals.

3R has worked hard to align progress on key SDGs with the 3R business strategy to ensure they don't sit independently of one another. We also remain committed to actively support and influence customers, councils and government to positively engage with and contribute to these goals.





● Our values

Our values of innovation, integrity and environmental best practice are simple and shared across the company, from our bases in Auckland, Hastings and Christchurch. They fundamentally shape what we do and how we do it.

● Creating value

At 3R we have used a combination of “design, deliver and do” to create a unique business centered around resource recovery. We:

- foster interconnectedness by sharing knowledge and building capacity within our team and networks,
- enable partnerships that support social enterprise and regional job creation,
- allow our customers to be part of and influence our service design, and
- invest in and support those working in the business.

● Our value proposition

Few businesses are entirely motivated by the environment and our value proposition reflects that. The outcomes of working with 3R are broad; from cost savings to compliance, customer retention to reducing reliance on virgin materials, the benefits reach further than the environment.

● Our networks

Collaboration is key to our business. Our expertise lies in drawing together the right partners to create an innovative solution for the ‘waste’ at hand, while membership to key organisations allows us to share and grow and helps us achieve specific goals.

● Our SDGs



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



17 PARTNERSHIPS
FOR THE GOALS



SUSTAINABILITY SNAPSHOT 2017-2018

Staff travelled **88,251 air km**
65% reduction
 in CO₂e (on 2013-2014 baseline)



2:1 male to female
staffing ratio.

144 tonnes
of agri-chemical
plastic recycled

Energy saved is
equivalent to
264K
litres of petrol

1,214 tonnes
of paint and packaging
diverted from landfill,
that's enough to paint
3,300 houses

3,081
expired child car
seats collected
12 tonnes
of plastic and metal
diverted from landfill

23.5 tonnes
of chemicals collected

ChemCollect

Resene
PaintWISE

SeatSmart
CHILD CAR SEAT RECYCLING

3 Sustainable Business
Network Regional
Connector events hosted

sustainable
BUSINESS NETWORK
Reshaping Profit

101
industry governance
hours donated to
WasteMINZ &
Sustainable Business
Network

1,399 tonnes
of material
collected through
programmes

1,325 tonnes
of material
diverted
from landfill

That's about as
much rubbish that
is produced by a
small town
in a year

Only 5.3%
of material
collected was
sent to landfill

Good Friday
initiative
80.5
staff hours
donated to
community
projects

CEMARS certified
2014-2016
carboNZeroCert™
since 2016

35% reduction
in 3R's fuel consumption
(on 2013-2014 baseline)
Enough to fuel 15
passenger vehicles
for a whole year

FUEL

CO₂e

41% reduction
on CO₂e from all 3R activity
(on 2013-2014 baseline)

2 nationally
accredited
Product Stewardship schemes

\$200/tonne
of chemicals collected donated
to Million Metres Stream Project
24 metres
of trees planted

Impact influencer
through consultancy and thought leadership



combining imagination and science to repurpose waste



Environment

3R looks at its environmental impact from two angles. Firstly, what is the impact our business operations have on the environment, how can we measure that impact, and what actions can we take to reduce it. Secondly, what is the impact of our business has on our clients' businesses, on consumers, on society and on New Zealand's environment as a whole.

1. Our Operations

● Target Zero: zero waste, zero emissions

The very nature of our business means that it would be wrong for us not to constantly look to measure and minimise our impact on the environment. That view is shared by the board and staff, meaning there are few activities undertaken that don't first consider what is necessary, what could be minimised or improved.

However, the nature of our business, involving nationwide programmes, clients and stakeholders, means achieving a goal of zero waste and zero emissions is some way off. Nevertheless, progress continues to be made and, in the meantime, we offset our emissions with New Zealand carbon credits.

The biggest reduction in emissions in the 2017-2018 year was fuel (diesel and petrol).

Fuel usage went down by 22%. This was largely due to a change from managing the Agrecovery Rural Recycling programme, with its highly operations-focused contract involving collections from Invercargill to Kaitiaia, to a contract managing the Glass Packaging Forum's stewardship scheme. This work is more focused on utilising our expertise in

increasing collaboration between stakeholders and improving processes and material flows. This change saw us drop a truck and diesel-powered granulator from our fleet.

With fuel usage top of our emissions we regularly review our fleet and logistics – from the age and type of vehicle, to the routes, loads and fuel provider. Combining logistics across our programmes is also key to maximising efficiency, as is the decision whether to carry out collections ourselves or to contract to a third party.

We have decided to change our fuel provider to Z Energy, effective of May 2018, as their sustainability practices align more closely with our own.

2017-2018 saw our total GHG emissions (tonnes CO₂e) back on a steady downward trend after increasing last year. The same change of contract that led to a decrease in fuel emissions had the converse effect on staff travel due to the need to work with recyclers, processors and collectors of glass cullet across the country as part of our management of the GPF's stewardship scheme.

While we measure the emissions created through our work on behalf of the GPF, we do not include any benefit from the emission reductions achieved through glass cullet being returned to the furnace for recycling. This makes reductions in areas like staff travel more challenging to achieve, and reduction in our key measurement of emissions per tonne of waste diverted from landfill less meaningful.

To that end we constantly assess what travel can be avoided by using other communications channels (our new phone system is a critical element of that) or what other visits and meetings we can combine to create efficiencies.

An unexpected increase in our waste to landfill from 39 tonnes in 2016-2017 to 74 tonnes this year is the subject of further monitoring and review in 2018-2019. Some of this increase is due to growth in the programmes which have some portion of non-recyclables, such as SeatSmart and the paint and packaging take back programmes we manage for Resene and Dulux. However, it's an increase we seek to reduce through our R&D work.

Overall, we maintained the downward trajectory of our total gross emissions per \$M turnover and total gross emissions per tonne of material collected.



● Emissions reduction initiatives

We believe reducing emissions should be ongoing – after all the target of zero emissions is still some way off. This can be as simple and inexpensive as having a compost bin in the staff kitchen (something we invested in a few years back) or as complex as reducing the emissions from our vehicles.

Ongoing initiatives:

- Clean air filters in fleet vehicles and office heat pumps
- Bokashi compost bin (Hastings office)
- Terracycle Oral Care recycling (Hastings office)
- Reusable shopping bags
- Soft plastic recycling (Hastings office)
- In-house waste sorting
- Bike stands (Hastings office)
- Default double sided printing
- Use CEMARS certified Ecotricity (Christchurch and Hastings sites)
- LED lighting (Auckland and Christchurch sites)

Initiatives being investigated:

- Biofuel availability for trucks
- Alternative freight service providers
- Double glazing front of Hastings office
- Setup worm farm



● Annual emissions

INDICATOR	UNITS	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Material collected	tonnes	1,288	1,225	1,177	1,472	1,399
Total GHG emissions from all 3R activity	tonnes CO ₂ e	404	275	244	262	237
Total direct energy consumption (diesel, petrol)	litres	88,118	64,801	65,883	73,690	57,249
Total direct energy consumption (electricity)	kilowattt hours	29,776	31,387	35,371	36,080	34,411
Total waste to landfill	tonnes	11	19	20	39	74
GHG emissions from freight and staff travel	tonnes CO ₂ e	87	47	36	28	30
Total gross emissions per \$M turnover	ratio	119	90	64	66	62
Total gross emissions per tonne of material collected	ratio	0.31	0.22	0.21	0.18	0.17
Material to landfill as a % of tonnes collected			1.5%	1.7%	2.6%	5.3%

● Offsetting our impact

Following on from previous years, we continued with our carbonZero^{Cert™} certification. This Enviro-Mark Solutions programme sees participants not only reduce emissions but also offset any unavoidable emissions with carbon credits.

3R's credits come from the ecological restoration project at Hinewai Reserve on Banks Peninsula, near Christchurch. Purchasing our carbon credits from Hinewai appeals due to the added benefits of the restoration of native habitats for fauna, biodiversity and conservation, as well as being New Zealand-based.

In December, 3R staff took advantage of the locality during our annual strategy days held in Christchurch and visited the reserve. Hinewai is an excellent example of allowing nature to do the work as the land has been allowed to naturally regenerate, from gorse-covered farmland to native forest.

Ever-entertaining reserve manager Hugh Wilson took us on a tour and helped us understand the value of offsetting our emissions at a site like Hinewai. The reserve serves an important secondary function of connecting adjoining sections of native forest, as well as allowing public access and research.



2. Our Work

● An impact enterprise

During 2017-2018, 3R managed the following programmes:

- Resene PaintWise™
- Dulux Paint and Packaging Takeback Programme
- Agrecovery™ Rural Recycling (until 30 June 2017)
- Glass Packaging Forum Product Stewardship Scheme
- SeatSmart™ Child Car Seat Recycling
- The Great DDT Muster™

We also continued the Rebound™ Mattress Recycling project as well as re-commenced work on the Tyrewise™ project for end-of-life tyres.

In addition to the large projects or industry programmes we manage, 3R does a range of work for individual clients. These include waste assessments, waste audits, resource recovery projects and behaviour change campaigns, through to help with meeting compliance and accreditation obligations.





● A clearly sustainable solution

Glass bottle and jar recycling is an excellent example of the circular economy in action, as well as being a highly sustainable packaging material. We were therefore excited to be appointed as scheme managers for the Glass Packaging Forum's accredited product stewardship scheme in April 2017.

The Forum works to increase the quality and quantity of glass bottles and jars going back to the furnace at the country's only container glass manufacturer, O-I New Zealand, in Auckland for recycling.

Due to the nature of New Zealand's geography, factors such as the Kaikoura earthquake, and the many methods used by collectors and recyclers, means container glass recycling is a challenging area of work. 3R's expertise in collaboration and process improvement were key factors in our appointment to this role.

Alongside our facilitation role, three substantial areas of our work for the Forum have been to increase awareness of the recyclability of container glass in New Zealand, encourage investment in glass cullet collection and storage infrastructure, and to maximise the effectiveness of grants for projects which result in more glass cullet going back to the furnace.

A key short-term focus in the 2017-2018 financial year has been working towards the re-accreditation of the product stewardship scheme by Government, with an announcement due in the coming months. We also did a complete review of scheme operations, including the grant process and mass balance data.

During this first year as scheme managers we believe we have made a substantial impact on behalf of the Forum's 100+ voluntary members and look forward to working with the wider industry to achieve the recovery rate of 82% by 2024 set by the Forum.





● 6000 seats and counting

The last year of the SeatSmart child car seat recycling programme can best be summed up in one word: growth.

Growth in terms of collection sites, number of seats collected and demand for the programme around New Zealand. The 2017-2018 financial year saw no less than 19 new sites open in Greater Wellington, Whanganui, Palmerston North and Canterbury. This expansion was largely driven by local councils partnering with SeatSmart to make the programme available in their areas.

One site closed due to changes in the Plunket car seat services in Tauranga.

The increase in sites has resulted in a surge in seat numbers, with 3,081 collected during the year. In all, a 56% increase in seats collected on the year before.

The growth has been hugely encouraging as it shows an ever-improving attitude to

sustainability, engagement with councils, and an increasing desire by the public to minimise their waste and recover resources. However, the extra demand has created challenges, particularly as the programme currently runs on a user-pays model rather than a product stewardship scheme – as was, and still is, the aim.

3R continues to keep the user-pays fee low through the provision of free dismantling services by Department of Corrections community work programmes. This provides useful indoor work for offenders. However, current growth could mean that additional paid dismantling services are likely to be required in 2018-2019, with a resulting increase in the user-pays fee.

We continue to work towards a voluntary product stewardship scheme whereby seat manufacturers and retailers take responsibility for their products at the end of life.





REBOUND MATTRESS RECYCLING

● Houston, we have problem

Tackling waste issues which others put in the 'too hard basket' is what we do at 3R, and mattress recycling is no different.

Our Rebound project has been running for three years, with the aim of tackling the literal mountain of some 300,000 mattresses which go to landfill in New Zealand each year. Taking a circular economy approach to mattresses is at the heart of the project, as these mattresses represent a large pool of resources which could be reused and recycled rather than lost to landfill.

Getting buy-in from mattress manufacturers and retailers for a voluntary product stewardship scheme is something we are still working towards. A three-month retail trial was held in partnership with Big Save Furniture in Hastings and Napier, allowing anyone who purchased a mattress during the period to have their old mattress recycled for free.

Rebound also arranged the free collection of 43 mattresses from Ronald McDonald House in Auckland. This not only gave 3R the chance to support a charity but helped raise awareness around the need for a mattress recycling programme in New Zealand.

These activities proved valuable as it provided proof of concept; that mattresses could be collected, dismantled and recycled. This not only means the wood, metal, coir (a natural product from coconut fibre) and foam – making up to some 90% of the materials in a mattress – can be recycled, but also provides work for social enterprises.

While we will continue to work towards a product stewardship approach for mattresses, Rebound will look at other ways that the programme can run in the meantime, such as working with councils to provide this service.

Rebound has been running for three years, tackling a mountain of some 300,000 mattresses which go to landfill in New Zealand each year.



● Protecting our waterways through safe disposal of chemicals

We have put our 10 years of expertise in chemical collection and disposal to good use with the introduction of the ChemCollect service in 2016. This service provides chemical users with a safe disposal option for their unwanted, expired or banned chemicals – preventing them from entering the environment through unforeseen circumstances such as natural disasters or accidental spills.

For this reporting period we focused on targeting the industrial and commercial sectors, broadening our offering beyond the rural sector.

From 1 December 2017 the rules around managing hazardous substances that affect human health and safety in the workplace have been transferred from the Hazardous Substances and New Organisms Act (HSNO) to the Hazardous Substances Regulations under Health and Safety at Work Act (HSWA). Key changes related primarily to keeping a register of all chemicals on site, but the knock-on effect was to raise awareness of appropriate chemical management including safe storage and of course safe disposal within these sectors. This should in turn help drive new business.

During this period steady growth was achieved in the number of new customers from the

industrial and commercial sectors and resulted in 3R collecting 23,494kg of chemicals. 3R will continue with this commercial focus in the coming year, as well as market our new customisable, household chemical collection service for district and city councils called MyHazWaste.

A key point of difference for ChemCollect is our commitment to protect our waterways. We know incorrect disposal often means harmful chemicals end up in our waterways. Safely collecting and disposing of these hazardous materials helps to preserve these precious ecosystems.

However, we wanted to take it a step further and in early 2017 pledged to donate \$200 for every tonne of chemicals collected as part of ChemCollect to a Million Metres Streams Project.

Our first donation of \$1,720 went to the Silver Stream Restoration Project in Clarkville, outside Christchurch. This was based on the 8.6 tonnes of chemicals collected between 1 April and 31 September 2017. The project raised \$24,500 to plant 302 metres, of which our donation saw just over 24 metres of planting achieved.

Silver Stream Restoration Project ►





● Muster gathers pace

Our programme to rid the country of persistent organic pollutants (POPs) has proven there are far more, and far bigger, stockpiles of these banned chemicals still lingering in rural New Zealand.

An initial funding deed for 7 tonnes of POPs over two years was exceeded in the first 12 months, with a further 3.19 tonnes collected in 2016-2017.

An extension to funding in 2017-2018 saw 3R advertise a third national muster of POPs with a deadline of end of October 2017. As

expected, demand was immediate and over 4.6 tonnes were collected in the 2017-2018 financial year.

In one instance some 2.3 tonnes of DDT was found on one property, further highlighting the need for the programme to continue.

The New Zealand government is obligated under the Stockholm Agreement to clear POPs from the country, and the Muster receives funding from the Waste Minimisation Fund, administered by the Ministry for the Environment. The collected chemicals are sent to France for high temperature incineration.





● Painting up a storm

One of the areas to show the biggest growth over the 2017-2018 financial year has been the paint and packaging take back programmes we manage.

The past reporting period saw 1,214 tonnes of material collected – enough to paint 3,300 houses – a 15% increase on the previous period. The Dulux Paint and Packaging Take Back Programme saw the biggest increase, of 36%, while the Resene PaintWise programme grew by 12%.

These increases are in line with the year-on-year increase the programmes have been

experiencing. The increase in volume has put extra emphasis on the need to develop sustainable solutions for the paint collected.

We continue to work towards scaled up production of PaintCrete™, which uses an admixture produced from waste paint for cementitious applications developed in conjunction with 3R, Allied Concrete and Resene. PaintCrete™ is currently produced at Allied's Penrose plant.

This solution remains a high priority as it would provide a pathway for nearly all of the paint we collect.



● Finding outflow solutions

While the material we collect means hundreds of thousands of tonnes of waste is diverted from landfill, the challenge can be finding outflow solutions. We aim to find New Zealand solutions where possible but limited demand for recycled content means this is not always possible. Alongside this, increasing changes in the trade in recycling commodities mean that the number and type of products falling into the "too hard basket" are growing.

This dual challenge of programme growth and outflow limitations has led to an increased focus at 3R on research and development and the creation of a Materials Innovation Manager role.

This role means we have a dedicated resource for adding value to the material we collect, which in turn adds value for our customers. It also allows us to prioritise circular solutions where possible.

We were delighted to recruit former NZ Steel process engineer Harman Sandhu, who joined us in August. She immediately began tackling the challenge of finding ways to repurpose, reuse and recycle the materials we collect.

Her work has included conducting trials on a number of products we collect to find better end uses – with a focus on paint. We are excited to see where this takes us.



● A strong finish

The Agrecovery product stewardship programme was one of the first schemes developed by 3R. It contributed significantly to our reputation for success in getting competing brands to collaborate and taught us a thing or two along the way.

Our 10-year management of this successful voluntary stewardship programme came to an end in June 2017. It was with great satisfaction that the team completed another record year of collections for the programme with 303 tonnes of agrichemical containers, 26.9 tonnes of chemicals and 3,428 large drums collected for recycling or safe disposal. (YE June 2017)



● Rolling on

End-of-life tyres (ELTs) represent one of the biggest waste issues facing New Zealand. The total volume of tyres (car, truck, aircraft etc) coming into the country each year equalling 7.75 million passenger tyre equivalents – some 73,000 tonnes worth. This despite ELTs representing a valuable resource.

3R has been project manager of Tyrewise – an industry-led working group to provide a framework for a stewardship programme for ELTs – since its inception in 2012. Industry has consistently indicated its desire for tyres to be declared a priority product along with



all importers mandated to participate in a stewardship scheme – something requiring Government to declare ELTs a priority product under the Waste Minimisation Act 2008. However, the previous National government chose not to take this route.

It was therefore very encouraging to see the agreement to develop a fund for stewardship of ELTs make the new government's Coalition Agreement. We are ever hopeful a declaration of ELTs as priority product is likely and have begun to work with the industry to ensure their readiness for any such declaration.

● A bumper issue

Car bumpers are another automotive component, along with ELTs, which are a reusable resource going to waste in landfill in New Zealand. In 2016 more than 77,000 bumpers were imported to replace damaged units, while around a further 142,500 cars were taken off the road the same year – equalling approximately 1,400 tonnes in bumpers.

During March and April 2018, 3R partnered with the Motor Trade Association (MTA) and six of its affiliated collision repair workshops in Christchurch to conduct a 1-month collection trial. The partnership is an example of an industry keen to find a solution to a waste stream.

The trial, which saw 273 bumpers (approx. 1 tonne) collected, will provide the material needed to conduct tests to determine the best method for recycling. A lack of automotive manufacturers means New Zealand doesn't have the infrastructure to create a fully circular recycling solution for bumpers back into bumpers. Options being looked at include granulating the bumpers and using the material as an additive in other plastic products or as an aggregate in the manufacture of concrete.



People

Social capital can be defined as the networks of relationships among people who live and work in a particular society, enabling that society to function effectively.

The nature of our business means social capital plays a huge role in the impact we can have. In this we include:

- the health and wellbeing of our staff;
- the networks that we participate in, contribute to and learn from; and
- our contribution to our community.

● Total worker health

It wouldn't be an exaggeration to say that at 3R we're as passionate about the health of our staff as we are about the health of the environment. Over the last 10 years New Zealand has seen a significant shift in the focus of worker health being simply the avoidance of accidents to a broader view of wellbeing, incorporating both mental and physical health.

At 3R we extend this further to include empowering our staff to create a pathway for their future – where do they want to go and how can we help them get there? This isn't just a box to be ticked off in the annual review but a multi-faceted approach which underlies the complex employee-employer relationship. After all, our staff spend almost as many waking hours at work as they do outside it.

Firstly, our approach means employees need to have a full understanding of the business at all levels – from a multi-week induction in all areas of the business for new employees, to an open-book policy when it comes to finances. Secondly, flexibility and development are critical – ongoing training, both internal and external; opportunities to change or enhance their role to support both the desired direction of the employee and the business; and the chance to spend time helping a charitable cause or doing further education (our Good Friday leave policy).

The nature of our varied and ever-changing work at 3R means that this deep understanding of the business and a focus on employee development is both a benefit and a necessity for our continued collective success.



● H&S - focusing on the positives

3R's aim has always been to use the markers of early reporting and near misses as tools to improve, rather than wait for accidents to happen. A culture of continuous improvement is about looking at what is happening when things are going right, not when they're going wrong – by then it's too late.

The new Health and Safety at Work Act 2015 (HSWA) has a similar aim: "HSWA shifts the focus from monitoring and recording health and safety incidents to proactively identifying and managing risks so everyone is safe and healthy." (Worksafe)

A major challenge following the introduction of this new legislation wasn't the change in focus, as we were already working in line with this principle. Our challenge, like many other businesses, was the workload. While the new Act came into effect on 4 April 2016, there was a 1-year implementation period to make the appropriate changes. However a part-time health and safety role made this a challenge.

Another impact of the limited resourcing in this area was noticeable in the recording of Quality Improvement Records (QIRs) in Mango, our H&S and environmental software, during the period. While there is a strong culture of making improvements in the business, they simply weren't being recorded.

This lack of resource is being addressed in the 2018-2019 financial year with the addition of a full time health, safety and quality position.

In May we passed our annual ISO 14001 audit. The audit identified two minor non-conformances – relating to the storage of a few 200 litre drums and not having completed the changes to our Environmental Management System documentation for the new requirements of ISO 14001: 2015. The audit also highlighted opportunities for improvement. This was an improvement from our previous audit in which two areas of concern were raised, but have since been closed.

In 2018-2019, we have a reaccreditation audit which will cover the change from ISO 14001 to ISO 14001:2015(E). This will be a major focus for the business.

“ To understand safety, we need to assess how things go right, on an everyday basis, under varying conditions. ”

Dr Daniel Hummerdal, Worksafe



It's the small things...

Working vertically – standing desks continue to be popular with office-based staff with around half the staff opting for these.

More than physical – staff have access to and are encouraged to use an Employment Assistance Programme (EAP) which gives practical help with personal or work issues such as personal or work stress, depression, anxiety or grief.

Insuring our health – space for bikes, showers (Hastings only), and providing flexible hours to allow time for exercise are small ways in which we can encourage staff to stay fit and healthy. However, sometimes an apple a day just isn't enough, so 3R provides health insurance for staff through Southern Cross.



● Face-to-face

In a modern world of smart phones, Skype, e-mail and social media we are more connected than ever, but nothing can replace making face-to-face connections.

Networking provides a great deal of value to 3R. Within our business it has a business development function resulting in leads, new business, and new connections to help advance current projects. It allows us to fulfil our thought leadership role as endorsed by our stakeholders in our 2016 materiality survey. It is also invaluable as a tool for our staff to learn, develop and make connections that enhance their personal and professional lives.

We also believe we have a role to play in helping New Zealand reach zero waste by 2050 (a goal of the Sustainable Business Council's Vision 2050 project), develop a circular economy, and reduce climate change. We use our networking opportunities to encourage other businesses in New Zealand to work towards those goals and a broader adoption of the UN's SDGs.

NZBPT

The New Zealand Business and Parliament Trust is an educational charity which 3R sees great value in being a part of. The Trust aims to foster goodwill and understanding between the business community and members of parliament. 3R has a particular interest in understanding the processes of parliament which impact on our work and also raising awareness of the Waste Minimisation Act 2008 amongst politicians.

The NZBPT Parliamentary Seminars offer a fascinating look at the life of parliament and we encourage our staff to attend. Our Chief Executive Adele Rose also attends the dinners hosted by the Trust which are attended by business and parliamentary members – again, these are invaluable in deepening mutual understanding between parliament and business.

Sustainable Business Council

3R has been a member of the Sustainable Business Council for a number of years, often taking an active part in many of their projects. This year CE Adele Rose was involved in the 2017 pre-election advisory group which produced a **manifesto** outlining the members' priorities for working with government to drive the sustainability agenda for New Zealand.

In mid-2017 we were delighted to be profiled in the BusinessNZ publication and video series **"Leading the Way"**, one of 10 companies sharing our stories and learnings.

Sustainable Business Network

3R is a regional champion for the Sustainable Business Network in Hawke's Bay. As such we host quarterly SBN Regional Business Connector Events, with those held this year themed on reducing food waste, designing out waste in construction and showcasing a New Zealand-made documentary on living sustainability.

We were also a Foundation Partner of SBN's Circular Economy Accelerator, aimed at

accelerating New Zealand's move to a circular economy, and an event partner for the SBN Awards to help deliver a zero-waste event in line with industry best practice.

WasteMINZ

WasteMINZ is New Zealand's largest representative body of the waste, resource recovery and contamination land sectors. We are keen to both learn from and serve our sector with 3R staff members serving on its board and in sector groups.

3R Business Development Director Darren Patterson has served on the board for 10 years, four of which have been as chair, while Dominic Salmon, Business Development – Sustainable Solutions, finished his eight-year stint on the board this year. General Manager Innovation Trevor Tutt also served for two years on the disposal to land sector group.

The WasteMINZ annual conference is always a key event for our sector with valuable connections and learnings. 3R were a bronze sponsor.





● Waste not, want not

Food waste is one of the biggest waste issues in the world - Kiwi homes alone account for a staggering 122,547 tonnes each year.

While household waste makes up the largest proportion of wasted food, businesses like supermarkets, cafes and restaurants account for a significant volume. This is where food rescue organisations like Nourished for Nil, in Hawke's Bay, are aiming to make a difference.

Every day volunteers collect food which would have otherwise been discarded and redistribute it, via their Hastings centre, to anyone who wants it.

3R Marketing and Communications Manager Toni Bye volunteers once a week, and as the collections are done during work hours, she uses her Good Friday leave for this.

● Good Friday leave

Giving staff the opportunity to help out in the community or undertake personal development is an important part of 3R's commitment to its employees and the wider community. Our Good Friday leave policy entitles staff to each have up to 6 days of annual paid leave to take part in activities such as volunteer work or self-development.

This year, the use of the leave has declined with only one staff member taking the opportunity to use it.

After a review and consultation with staff to discuss why it was in decline, staff indicated a desire for a larger portion of Good Friday leave

to be used for team events such as additional beach clean-ups and tree planting days. However it was agreed that staff would like to retain the ability to use Good Friday leave for individual causes or projects.

The first of our joint Good Friday work will be a tree planting day planned at Mangarara Station in Central Hawke's Bay and a beach clean-up at Haumoana, also in Hawke's Bay, in mid-2018.

Good Friday leave this year totalled 80.5 hours.





● Cleaning up

What would you expect to find on a beach? Sand, rocks, some seaweed and the smell of fresh, salty air?

Sadly, this isn't always the case, with beaches around New Zealand harbouring all manner of rubbish. 3R did our bit to help improve the situation by holding our annual beach clean-up at Haumoana, near Napier, inviting some of our suppliers and stakeholders to come along and help out too.

The clean-up forms part of our Good Friday leave and is set to become a twice-a-year event. We have also been in contact with Sustainable Coastlines and the Hastings District Council to see how we and other groups can keep a central register of beach clean ups to ensure efforts are spread evenly across the Bay.

Sustainable Coastlines is currently working on this and we are hopeful progress will be made.



● Ronald McDonald House

We believe social responsibility is an important part of any business. So, when Auckland charity Ronald McDonald House contacted us and asked if we could collect and recycle some of their mattresses, which were due to be changed out, we were happy to help out.

The charity, which provides a "home away from home" for families with hospitalised children, had 43 mattresses which needed to be replaced. Management wanted to see them recycled rather than go to landfill.

The collection was not only a chance for 3R to give back, but helped highlight the need for a product stewardship scheme for mattresses. Every year some 300,000 mattresses and bases are thrown away in New Zealand, despite the fact some 90% of the components can be recycled.

VOLUNTEERING

WasteMINZ	71 hours
SBN Business Connector	30 hours


GOOD FRIDAY LEAVE

Nourished for Nil	56 hours
Beach clean-up	24.5 hours

DONATIONS & SPONSORSHIPS

Million Metres Streams	\$1720
Ronald McDonald House	\$535
Special Children's Extravaganza	\$690
Red Cross	\$360

● Staff + Health & Safety

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
 Total staff (FTE) ¹	21.25	19.35	19.35	22	22
 Workforce by gender (female / male)	8 / 10 ²	7 / 13 ²	7 / 13 ²	5 / 17 ²	8 / 14 ²
 Total worked hours	42,982	38,220	41,269	45,994	41,582
 Accidents and incidents	25	28	7	13	6
 Incidents ⁴	n/a	n/a	38	42	23
 Early reporting DPI ⁵	n/a	n/a	3	2	0
 Lost time (injuries)	1	1	3	0	0
 Lost time (days)	17	6	31	0	0
 Health & Safety attendance (#of staff attending at least 1 meeting)	5 ³	11	21	16	12
 Hazards (risks identified)	n/a	n/a	34	8	2
 Quality improvements	45	39	54	25	19

¹ 40 hour full time equivalent (FTE) includes non-payroll staff and differs from "feet on the ground"

² As at March

³ Permanent Health and Safety Committee of five staff in 2013-2014, changed to a requirement for all staff to attend at least 1 meeting per quarter in 2014-2015.

⁴ Incidents now include "near miss"

⁵ Early Reporting DPI (Discomfort, Pain or Injury) is encouraged by ACC. We encourage employees to report any discomfort or pain early to enable pro-active follow-up by employer/employee and assessment of work tasks to be undertaken before discomfort or pain becomes a serious problem, inhibiting work.

Financial

3R is a leader in product stewardship and resource recovery in New Zealand. We are driven by our purpose to see a world without waste, brought about by strong product stewardship programmes which support a vibrant circular economy.

Our purpose, with its considerable community and environmental benefits, is at the heart of our business, with strong alignment and commitment to this right throughout the organisation.

Our drive to make an impact sets us apart from profit-driven businesses. It allows us to value our environmental and social impact over economic reward as we work with business, government and not-for-profits to maximise the benefit of our combined efforts.



● Economic performance

In the 2017-2018 financial year revenues declined by 4.8% from the previous year. This can be attributed to the implementation of our new ChemCollect chemical collection and disposal service and the fact that we no longer manage the Agrecovery programme.

We have continued to invest in people with five staff members joining the team during the year, of which three were new positions. It has been encouraging to see high interest in the roles as job seekers look to join businesses with a purpose that aligns with their personal beliefs.

The change of government has led to an increased focus on sustainability and new business opportunities for 3R, as political will to act on waste reduction, product stewardship and climate change increases.

Paint programmes continue to see volume growth year-on-year thanks to an increasingly buoyant building industry, and as the programmes become more widely utilised. This growth led to the employment of an additional full-time staff member at our Auckland site.

● Economic performance

Percentage change from previous year	2013-2014 (%)	2014-2015 (%)	2015-2016 (%)	2016-2017 (%)	2017-2018 (%)
Turnover	(2.16)	(9.53)	24.38	3.02	(4.8)
Operating Costs (excluding employee costs)	23.44	(13.84)	25.00	3.19	6.6
Salaries and Employment Benefits	8.80	(6.06)	(4.70)	13.56	7.7

Investment in conferences and networking events helps position 3R as part of the wave of industry focusing on sustainability, as well as educate the public around product stewardship and the circular economy. This investment is a critical part of our new business development.

In April 2017 we signed a new contract to be the scheme manager for the Glass Packaging Forum. This has already delivered benefits to the industry as we identify new ways of increasing the collection and recycling of glass.

Our SeatSmart child car seat recycling programme continues to see growth, which has put pressure on the current user-pays funding model. We are still pursuing a product stewardship approach which would provide a more secure funding model for the programme.

Demand for The Great DDT Muster saw us seek an extension to our deed of funding from the Waste Minimisation Fund administered by the Ministry for the Environment. This was granted and means that we can continue our work to provide free collection of persistent organic pollutants across New Zealand.

● Buying power

Buying power is one of the most potent drivers of change. It's something we all have, and at 3R we use our dollars and cents to create demand for sustainable and ethical products and services.

We apply this to as much of our spending as possible, from the fair-trade coffee beans and environmentally-friendly detergents in the staff kitchen, to the electricity supplied to our sites and the fuel in our trucks.

The most significant decision around fuel was to make the switch to Z Energy as our supplier - effective as of May 2018. Fuel is one of our largest costs and also the largest source of emissions, so it is appropriate to use a supplier whose sustainability goals align with our own.

We have also been using New Zealand's only carboNZero^{Cert}™ certified electricity provider, Ecotricity, at our Christchurch site since March 2015, and switched our two Hastings sites when this became available in the area in September 2017.

A cost saving has also been achieved after our insurer, NZI, removed the pollution exclusion from our policy. This is in recognition of management of our emissions, and is another example of sustainable practices in business leading to reduced costs.

We continue to:

- Use carboNZero^{Cert}™ certified Ricoh for our printer/photocopier
- Contract Clean Planet commercial cleaners for our two Hastings sites
- Return all toner and print ink cartridges
- Whenever possible use Green Cabs and public transport to get from airport to central city
- Review our fuel strategy
- Purchase Forest Stewardship Council and Environmental Choice certified paper
- Re-use all single-sided printed paper for draft printing
- Purchase Ecostore and Fairtrade certified products

Looking forward

The concept of the circular economy is no flash in the pan idea and developing it into the way the world does business will not happen quickly. Our focus for the next year, and well beyond that, will therefore continue to be the development of the circular economy.

We foresee a busy year to come. Nationally, work to develop the circular economy in New Zealand is ramping up, and a new, more sustainability-focused government is in power.

We are preparing by investing in new staff, increasing our focus on R&D and being ready should the Tyrewise end-of-life tyre stewardship programme reactivate, as well as continuing our core business with existing projects and stewardship programmes.

Climate change will impact on every business and household in New Zealand over the coming years. It is positive to see a strong focus on this at government level and in businesses and households across New Zealand. We will be increasingly involved in this area, both in our own operations and through the nature of our work.

Internationally, China's National Sword policy and the growing crisis around plastic pollution in our oceans will continue to put a spotlight on disposal and recycling of packaging. Will this finally be the tipping point that brings industry, government and consumers together to say "enough is enough"?

We believe product stewardship continues to be the most effective tool to bring meaningful and lasting change. But we can't do it alone. This is a journey we must all take together if we are going to succeed, and we invite anyone wanting to work towards a waste-free world to join us.

Adele Rose
Chief Executive
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If you'd like to know more about **our journey**, you can find us at:

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