

OFFICIAL MAGAZINE OF THE WASTE MANAGEMENT INSTITUTE NZ

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CHALLENGE THE STATUS QUO

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WasteMINZ is the leading professional body for waste management, resource recovery and contaminated land management in New Zealand. We deliver value to our members through the shaping and sharing of policy and the development of industry good practice.

WasteMINZ publishes revolve magazine four times a year. It plays a vital role in ensuring our members are upto-date with the latest in industry news, policy and legislative changes as well as innovations and advances.

revolve magazine is a forum for positive sector debate and discussion. The articles contained in revolve do not necessarily represent the views of WasteMINZ or the WasteMINZ Board.

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Nic Quilty
Chief Executive, WasteMINZ
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Talk to me 021 611 337

FROM NIC'S DESK

CLIMATE CHANGE EVENTS - ARE WE PREPARED?

The start of the year has been overshadowed by the recent floods and Cyclone Gabrielle. My thoughts go out to our battle-weary members who are faced with the cleanup. These events wreaked havoc. Recovery from them, particularly the cyclone, will take many years. Disaster waste management will be a topic at the upcoming WasteMINZ Conference, Expo + Workshops. Are our sectors prepared for the next event, whatever form this takes? What can we learn from these experiences? Does your organisation have a risk management plan and emergency plan? What should a national plan and regional plans comprise? Should WasteMINZ be leading work on a national plan?

DEFERRAL OF A CONTAINER RECYCLING SCHEME

We were hoping there would be an announcement about the proposed container return scheme in the first quarter of this year. However, the announcement by the Prime Minister on 13 March that work on the scheme would be deferred, due

to the prioritisation of the cost of living and the recovery from Cyclone Gabrielle, wasn't one many of us were expecting. The Prime Minister did note that it remains on the agenda, and the government will look to assess it again in the future. The Product Stewardship Sector Group and Territorial Authorities' Officers Forum expressed their disappointment with the deferral in a media release on 16 March, which can be viewed on our website. With diverse views amongst our membership on the impact of CRS, let's hope the government gives some indicative timelines sooner, rather than later.

NATURAL AND BUILT ENVIRONMENT BILL

Four of our sector groups;
Contaminated Land Management,
Disposal to Land, Organic Materials,
and Territorial Authorities' Officers
Forum, made submissions on the
Natural and Built Environment Bill.
You can read the submissions on
our member portal. Some of the
submissions will have commonalities,
but there will also be differences on
how the sectors will be affected if
this Bill becomes an Act. We'll have a

whole session dedicated to the NBA at our conference in May.

WASTEMINZ CONFERENCE, EXPO + WORKSHOPS

The preliminary programme for our annual conference was released last week. I hope you are as excited by it as we are. The programme includes two workshops; the Territorial Authorities' Officers Forum on 22 May, and the 'Paint the town red: Residential lead workshop' on 25 and 26 May.

There will also be an amazing array of topics presented throughout the event, too many to mention here. Suffice to say, you will be spoilt for choice. Just check out the programme!

There is a wealth of information about the conference in this edition of *revolve*, so have a good read and let me know if you have any questions.

I hope to see you there!





Dave Bull
WasteMINZ board member
dbull@hailenvironmental.co.nz

TREATED LIKE DIRT

We send a lot of soil to landfill. Data for Class 1 landfills considers soil in the 'potentially hazardous' category, which is approximately 800,000 tonnes per year, over 20% of the total. It seems this category is predominantly soil, and the amount of soil going to lower classes of landfill is about five times greater. On my estimate, this probably costs the country \$500M a year in disposal charges, haulage fees, clean soil replacement, resource consenting and site investigation. Plus the indirect impact of many heavy vehicle return trips.

This doesn't make a lot of sense. It seems most of this soil poses little risk in place. Indeed, it's straightforward to show that driving truckloads of soil around the country poses a greater risk to road users than leaving it in place would pose to site users. Arguably, soil doesn't belong in Class 1 landfills. Many soil contaminants leach more readily in municipal fill leachate, than they do

when exposed to rain. Most soils have a relatively low organic content and don't emit greenhouse gases, so they don't need to undergo expensive gas collection systems.

There is nothing stopping soil going to landfill and no system or guidance for reducing, reusing, recycling or remediating waste soil in New Zealand, nor for tracking soil waste or for assessing the environmental risks posed by soils. The New Zealand Waste Strategy does not mention soil; the 2021 update mentions 'cleaning up contaminated sites' but does not consider the consequent waste. The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health does not require remediation to be sustainable in any way. Even Standards New Zealand's Subdivision for people and the environment does not seek to minimise waste soil, though it does promote preservation of high-quality soils. No government agency has a

strategy to reuse soils from land they are developing; nor any councils have plans to reuse soils from land they have zoned for redevelopment by others. The National Policy Statement for Highly Productive Land will reduce soil waste, but that's not one of its stated aims.

We go to extraordinary lengths to push soils into landfill. It's technically almost impossible for topsoil to meet our cleanfill definition: concentrations within natural background. I heard of a council threatening to reclassify a site as contaminated if cleanfill from a location with a different background concentration was placed on it. Councils have classified hundreds of thousands of hectares of market gardens, orchards and vineyards as contaminated soil, in case it's not safe to grow food there, absent any published evidence of contaminated food or persistent pesticide use.

For a country that lives by its soil, we are very eager to treat it like dirt. **R**

HOW TO CONTACT YOUR BOARD MEMBERS



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emailWayne



Parul Sood
DEPUTY CHAIR
email Parul



Alice Grace email Alice



Dave Bull email Dave



Alec McNeil email Alec



Paul Evans email Paul

SECTOR GROUPS

RECYCLING & RESOURCE RECOVERY

TAO FORUM

HEALTH + SAFETY

BEHAVIOUR CHANGE

PRODUCT STEWARDSHIP

DISPOSAL TO LAND

ORGANIC MATERIALS

CONTAMINATED LAND MANAGEMENT



SARAH PRITCHETT



TESS BROTHERSEN



LENA KOVAC



GEL LIM

BEHAVIOUR CHANGE

Lena Kovac is the new sector projects manager for the Behaviour Change Sector Group.

Some members asked for foundational training in behaviour change design principles last year. WasteMINZ is hosting a webinar by NZ-based research organisation The Workshop on 30 March. The committee is also planning to organise another drop-in session in the coming months, similar to that held late last year. Details will be shared soon.

HEALTH & SAFETY

Lena Kovac is the new sector projects manager for the Health & Safety Sector Group.

In March, WasteMINZ released a survey on behalf of the sector group around the need for unit-based training for anyone working in or on the road corridor. This comes at a time when current warrant cards like KCTL are being phased out. The group will also focus on reviewing and updating the H&S Guidelines Part Four this year, as well as sharing opportunities for improvement and information alerts

TAO FORUM

The Steering Committee has drafted its strategic vision, which builds on the work of the previous committees to provide a clear and cohesive voice for local government in relation to waste and resource recovery. The strategic areas of focus for 2022–2024 are:

Collaboration within and across sectors on common issues

- Capacity building within sector through training and sharing knowledge
- Best practice services to move to a circular economy
- Participation in investment and strategic planning

In late 2022 the Ministry for the Environment waste operations team asked to have regular meetings with the Steering Committee to facilitate communication and engagement between their team and local authorities. The committee has in turn invited MfE to provide an update at the beginning of their quarterly meetings.

The Steering Committee submitted on the Natural and Built Environment Bill at the end of February. The submission can be found in the member portal.

PRODUCT STEWARDSHIP

At a recent Board meeting, it was agreed that Board members cannot also be Sector Group Steering Committee members. As a board member, this means Alec McNeil will no longer be a Product Stewardship Sector Group Steering Committee member, but will stay on as Board Champion. Alec's place on the committee has been filled by Tony Wilson from AgRecovery who just missed out on a committee place last year. A big thank you to Alec for all of his work as one of the original Steering Committee members, and a very warm welcome to Tony. Rob Wilson of EcoCentral has been elected as Committee Chair.

The Committee has drafted their strategic vision and work plan, which builds on the work of the previous committees to advocate

for mandatory product stewardship schemes with a particular emphasis on sustainable life cycle consideration of goods and services as they come to market. Their work plan focus is:

- Expertise use the collective expertise of the committee to further develop product policy in Aotearoa NZ
- Communicate the critical role product stewardship has in helping Aotearoa progress to a circular economy
- Research initiate and support research that highlights the importance of product stewardship in helping Aotearoa reach its circular ambitions.

The Committee has already begun working on its work plan and has met with central government staff working on product policy and waste minimisation for central government agencies.

CONTAMINATED LAND MANAGEMENT

RESIDENTIAL LEAD WORKSHOP: PAINTTHE TOWN RED – THE PROBLEM WITH EXPOSURE TO RESIDENTIAL LEAD

The Residential Lead Working Group are organising the CLM workshop at the 2023 WasteMINZ Conference, Expo + Workshops. This 1.5 day workshop (1.30pm Thursday 25 May to 4pm Friday 26 May) aims to:

 Bring together all those who work in this space: contaminated land practitioners, environmental health officers, public health staff, and local government and central government officers.

- Provide background to health risks and standard settings
- Discuss new data (particularly from large housing providers such as Kāinga Ora, but also SoilSafe Aotearoa)
- Share how cases are managed
- Identify what gaps or opportunities there might be and how we could collectively seize these.
- Natural and Built Environment Bill submission

The Contaminated Land Management Sector Group Steering Committee submitted on the Natural and Built Environment Bill at the end of February. The submission can be found in the member portal.

ORGANIC MATERIALS

Lena Kovac is the new sector projects manager for the Organic Materials Sector Group.

FIBRE COMPOSTABLE GUIDELINES

A working group was established towards the end of 2022 to develop guidelines on fibre and biomass compostable products. The guidelines aim to:

- give brands, collectors, processors, retailers and consumers certainty about the meaning of different claims made about fibre based and biomass compostable products and packaging.
- influence the terms brands use to advertise their products in such a way that consumers are fully informed and greenwashing is avoided.
- clarify what different types of fibre and biomass packaging contain in the absence of a requirement to fully label contents of packaging.

The guidelines will be finalised by the working group, then reviewed by the Organic Materials Sector Group Steering Committee before being published later this year.

SUMMER SCHOLARSHIP RESEARCH

Research on "Quantifying benefits of circularising NZ's agricultural economy in terms of soil carbon, fertiliser offsets, and GHG emissions" was undertaken by a student from the University of Canterbury and sponsored by Marlborough District Council on behalf of the Organic Materials Sector Group Steering Committee. The desktop research was completed at the end of February and the results will be made public soon.

NATURAL AND BUILT ENVIRONMENT BILL SUBMISSION

The Organic Materials Sector Group Steering Committee submitted on the Natural and Built Environment Bill at the end of February. The submission can be found in the member portal.

DISPOSAL TO LAND

CLIMATE CHANGE COMMISSION

The Disposal to Land Sector Group Steering Committee met with the Climate Change Commission (CCC) in January and February to provide feedback on the CCC's advice on the direction of policy for the Government's second emissions reduction plan for Aotearoa New Zealand, and to gain a better understanding of the emissions modelling used in developing that advice.

NATURAL AND BUILT ENVIRONMENT BILL SUBMISSION

The Steering Committee submitted on the Natural and Built Environment Bill at the end of February. The submission can be found in the member portal.

WEBINAR

Waste Management, EnviroNZ and AB Lime presented a webinar, Lessons learnt from implementing the waste disposal levy at class 1 landfill, on 22 March. In this webinar they shared their thoughts around what class 3 and 4 landfills should be considering as they begin to implement processes and procedures at their facilities to fulfil their reporting and levy obligations under the expanded waste disposal levy. The webinar was very well-attended.

RECYCLING & RESOURCE RECOVERY

GUIDELINE ON RECYCLABILITY, RECYCLED CONTENT, REUSABILITY AND REPAIRABILITY

The working group tasked with producing guidance on claims related to recyclability, recycled content, reusability and repairability have completed their draft.

The draft has been reviewed by members of the Recycling & Resource Recovery Sector Group Steering Committee and is now being peer reviewed by other WasteMINZ members.

MATERIAL FLOWS ANALYSIS

At the end of 2022, the Steering Committee decided to focus its Material Flows Analysis work on:

- Treated timber (drafted)
- Plasterboard (drafted)
- Concrete & rubble (drafted)
- Textiles (no need Usedfully have produced one)
- Furniture / mattresses (in progress)
- Rigid PP, non kerbside recyclable, i.e., commercial (not started)
- Refillable LPG gas bottles (not started)

If anyone is interested in seeing these draft MfA's or can contribute to them please contact Sarah.

C&D WASTE WORKING GROUP

The Recycling & Resource Recovery Sector Group Steering Committee has initiated the establishment of a C&D Waste working group to support the aims of preventing C&D waste and recovering more of what is produced. Please contact sarahp@ wasteminz.org.nz if you would like to be part of this working group.

Expert testing.

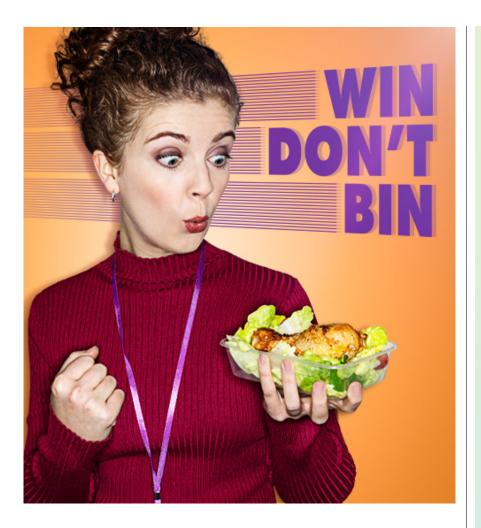
Excellent customer service.

After almost 40 years providing analytical testing services to the agriculture, environmental and food sectors, the quality of our testing speaks for itself.

But it's the quality of our customer service that completes the package, and keeps us at the forefront of the industry.







LOVE FOOD HATE WASTE

What can I use instead of eggs in baking? This was a question stirred by the egg shortage we've been facing and became the start of an 'ingredient substitutes' series of posts on our social pages. In this series we learnt how versatile mashed bananas and apples (turned into applesauce) can be as a substitute for eggs, butter, and yoghurt! Find more ingredient substitutions @ lovefoodhatewastenz on Facebook and Instagram or on our blog.

In collaboration with NewWorld, the 'Budget Friendly Family Dinners' weekly meal plans were re-released at the start of the year with recipes for summer, autumn, winter, and spring. In the autumn meal plans you'll find recipes for dishes such as salmon kedgeree, satay chicken, lamb roti rolls, and Mexican-inspired baked eggs.

These meal plans are designed to be zero food waste, and each recipe has plenty of tips to substitute ingredients and what to do with leftovers. The meal plans also come with a ready to go shopping list and are made to be nutritionally balanced. This resource is free to view and download here.

WIN. DON'T BIN.

We kicked off the month of March with Food Waste Action Week to celebrate leftovers by sharing tips for storage and leftover makeovers, recipe ideas for leftover potatoes and rice, and more. Check it all out here.

WELCOME TO OUR NEW MEMBERS

COLD

Container Waste

CORPORATE

Geostabilization NZ Global Metal Solutions Rare Voyage

SMALL BUSINESS

Easy Bins Southland
Engineered Compost
Systems
GC Group Management
Kiwi Waste & Recycling
SI Lodec NZ
Pacific Hygiene Solutions

INDIVIDUAL

Jessica Carrad Suzy McCall Trudy Hutchison

STUDENT

Anna Reid

If you would like to know more about our membership options, please contact irma@wasteminz.org.nz

MULTI-SECTOR WORKING GROUPS

A number of multi-sector working groups are being established to address the lack of training in the sector, as well as the need to promote the sector to encourage workers to enter it.



Committed to a sustainable future

Communities are at their best when connected, resilient, productive, inspired and shaped by the people within them. We're dedicated to helping create places and spaces where people thrive.

ghd.com

→ The Power of Commitment



MOVERS & SHAKERS



Lena Kovac Sector Projects Manager WasteMINZ

Ko Lena toku ingoa. Ko Tiamana ahau. Kei Orewa taku kāinga. Nō reira, tēnā koutou, tēnā koutou, tēnā koutou katoa

Lena is passionate about all things sustainable. Inspiring behaviour change in our society towards more conscious consumerism is one of her key drivers in being an advocate for change. Lena loves to encourage others how to live more lightly, and try to lead by example. Previously, Lena held managerial roles in NZ's community arts sector as well as a role within Auckland Libraries. but she is delighted to have found a position that speaks to her inner passion here at WasteMINZ. Lena will look after the Behaviour Change, Organic Materials, and Health & Safety sector groups.



Rachel Rait
Senior Environmental Geochemist
Mine Waste Management

Rachel has recently started work at Mine Waste Management, part of the Green Road group of companies that provide simple, creative, and sustainable solutions to the resources industry. The Green Road group of companies (Mine Waste Management, Hydro Geochem Group, Resource Stack) have offices in Christchurch, Brisbane, and Perth.

Rachel brings a wealth of expertise to the team, having worked in the areas of contaminated land, hydrogeology, and mine environmental geochemistry in New Zealand and Australia. Her passion for finding sustainable solutions for clients makes her a valuable addition to the team, which focuses on delivering effective environmental outcomes for the natural resources industry.



Daniel YallopBusiness Development Manager
Re.Group

Daniel joined Re. Group in 2022 to lead partnering opportunities in Aotearoa New Zealand. Daniel is excited to support an organisation focusing on the higher end of the waste hierarchy. Re. Group has the largest recycling network across Oceania, with 35 facilities handling over 1,500,000 containers every day, recycling 500,000 tonnes per annum, and serving over four million people (close to the total population of New Zealand) yearly. Re. Group has designed and developed some of New Zealand's leading recycling over the past 15 years. The team is passionate about everything circular - composting, material beneficiation, MRF operations and container deposit schemes.



Specialists in Treating Aotearoa's Medical and Quarantine Waste

As a New Zealand owned business specialising in the treatment of medical and quarantine waste, we play an important role in keeping our country safe. Being the largest specialised waste processor we have four facilities nationwide.

Our Medicycle Recycling Programme within majority of Te Whatu Ora (DHB's), works to divert waste from going to landfill — part of Interwaste's commitment to reducing our carbon footprint by partnering with companies offering alternative solutions.

Talk to us about how we can work alongside your business to reach your sustainability goals

0800 10 21 31 www.interwaste.co.nz







TOHEA TE ĀHUA O NĀIANEI E TAURIKURA AKE AI TE ANAMATA **CHALLENGE THE STATUS QUO** TO CREATE A BETTER FUTURE

For an opportunity to share ideas, learn from each other and network with likeminded professionals, look no further than the WasteMINZ Conference. Expo + Workshops. Being held from 22-26 May, it is the pinnacle of the WasteMINZ events calendar. Chief executive Nic Quilty explains why.

> T'S THE EVENT that we've all been waiting for, and one which hasn't been held in person since 2019.

This year's theme, Tohea te āhua o nājanej e taurikura ake aj te anamata - challenge the status quo to create a better future - is more relevant now than ever, WasteMINZ chief executive Nic Quilty says.

"In New Zealand, we're now seeing the effects of climate change. The North Island has been ravaged by severe storms over the past few months, and it's an important topic to discuss.

"The Conference theme asks delegates to think: how do we create a legacy for the future? How do we leave the environment in a better place for our future children, grandchildren and greatgrandchildren?

"It will take a lot of shared experiences, collaboration, innovation and challenging the status quo."

The Conference will be action-packed, with a TAO Forum Workshop kicking the week off and a residential lead workshop rounding it out. A preliminary programme is now available on the WasteMINZ website.

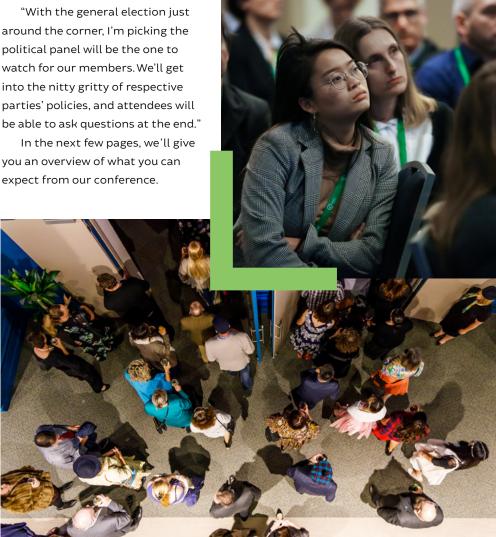
Nic said the organising committee considered a whopping 93 presentation pitches from members across the sectors. The programme also includes seven keynotes, a political panel, and a presentation from Environment Minister David Parker.

"The programme is jam-packed," Nic said.

around the corner, I'm picking the political panel will be the one to watch for our members. We'll get into the nitty gritty of respective parties' policies, and attendees will be able to ask questions at the end."

In the next few pages, we'll give you an overview of what you can

THE CONFERENCE THEME ASKS DELEGATES TO THINK: HOW DO WE CREATE A LEGACY FOR THE FUTURE? HOW DO WE LEAVE THE ENVIRONMENT IN A BETTER PLACE FOR OUR FUTURE CHILDREN. GRANDCHILDREN AND GREAT-GRANDCHILDREN?



CELEBRATE OUR INDUSTRY SUPERSTARS

Nominations for the Awards for Excellence opened on 20 March, 2023. This year, we'll have eight awards; one for each sector group.

We're looking for industry superstars who have been part of an amazing initiative or project over the past 12 months in the following sector groups:

- · Behaviour change
- · Contaminated land management
- Disposal to land
- Health & safety
- · Organic materials
- Product stewardship
- Recycling & resource recovery
- TAO Forum

This is a great opportunity to recognise those people in the industry who have been part of a project that provided innovative solutions and, had a positive impact on customers, communities or colleagues.

When submitting your entry, think about the following questions:

- · What was the project?
- · Why was it undertaken?
- What issues or opportunities did it address?
- · Who was involved?
- · What was your involvement?
- How was it successful?

Entry criteria:

- Entries for the Awards close at 5pm, Monday 17 April.
- The WasteMINZ Awards of Excellence are open to all WasteMINZ members.
- If the initiative involves multiple parties, a WasteMINZ member must have led or had significant involvement.
- Applications should be submitted using an online form

Learn more about the Awards for Excellence on our website.





PAINT THE TOWN RED: THE PROBLEM WITH EXPOSURE TO RESIDENTIAL LEAD

This 1.5 day workshop takes a deep dive into the public health risks from residential lead. We'll discuss the health impacts of lead and how guideline values are set, what we know about residential lead contamination in New Zealand, how industry manages risks from lead paint, and finish with a workshop session to brainstorm ways the health sector, industry and contaminated land practitioners can work together to protect people.

When 1.30pm Thursday 25 May through 4.00pm Friday 26 May

Who should attend

Environmental health officers, local government, contaminated land management practitioners, public health officers and central government agencies who hold housing stock.

Learn more on our website.

OUR KEYNOTES



EZRA HIRAWANI Born out of a promise

After living the life of his dreams - Ezra returned home and found his Nana still struggling to make ends meet. When she told Ezra how life had been, he made a promise to run back into the burning house of poverty and carry her out.

Ezra is the co-founder of Nau Mai Rā, an initiative working to end power poverty in Aotearoa. The company works by charging normal power rates and using some of that to subsidise power bills for whānau who may struggle to pay them. Nau Mai Rā was born out of a promise to Ezra's Nana.



JEHAN CASINADER Tell me the good news

We're drowning in negative information. From breaking news to social media, we're often bombarded with negative, anxiety-inducing content

Most of us have no idea how to regulate the content we consume.

How do we choose what to read and watch? How do we stay informed – without being overwhelmed? How do we process news that makes us distressed?

Jehan Casinader offers a unique "insider's view" on how the media works. He explains how each of us can take back control – and find the good news.



JONATHAN CHAPMAN Design that Lasts

Jonathan's talk investigates why we throw away things that still work, and shows how we can design products and services that last.

We live in a predominantly linear economy and have done so for the past hundred years or so.

This extractive, wasteful mode of production follows a straight path, with untold social and environmental destruction at either end. In sharp contrast, a circular economy redefines growth by decoupling economic activity from the consumption and waste of resources.

Through this talk, you will experience an array of circular design principles, methods, and tools. We will explore design strategies for thinking of products in terms of the material value locked into them, and design innovative

systems for product take-back, disassembly, and reuse. We will consider ways to extend product longevity, by encouraging users to take better care of their things and fix them when they fail. These tactics accelerate the design-led transition to a circular economy.



KATE HALL Most people working in sustainability are not working sustainably

Many of us have heavy workloads and are sacrificing our health while trying to positively impact the environment. We can't save the environment if we are not working sustainably.

How do we change this unsustainable working culture? What can we do to sustain ourselves while continuing to do the work that we love? Is it really possible to work sustainably in sustainability or should we let our eco anxiety continue to fuel our obsessive working habits?

Kate Hall, known as Ethically Kate, encourages us to live sustainably in all facets of life and explains how taking practical steps towards eradicating the burnout culture will benefit both people and the planet.



MIRANDA MIROSA

Our food waste crisis: The five

Our food waste crisis: The five Ws and how you can help

The need for action on food waste is clear. It puts unnecessary pressure on our environment, creates emissions, contributes to food poverty, and is a lost economic opportunity.

The good news is that reducing food waste is key to fighting climate change and makes business sense. Using the "5W1H" framework, this presentation provides an overview of who is responsible for food waste, what we know about quantities and drivers for food waste at each stage of the supply chain, when and where key prevention and reduction initiatives have been implemented with success, why more urgent action is needed and how you can help fight Aotearoa New Zealand's food waste crisis.



SACHA COBURN Leading from the inside out: Thriving despite the challenge of constant change

We are living and leading through a period of unprecedented change, both in terms of volume and velocity. How do we find a way through to achieve success for ourselves and our organisations? We are all leaders and increasing our own impact and influence is critical to ensuring that we are living on purpose and with purpose.

In this highly entertaining and energetic presentation, Sacha explores the science of high performance and unpacks how it can be applied on an individual and team basis. You'll learn the latest thinking around coping with uncertainty and be challenged to think more deeply about your approach to work/life balance and the role we all play in making our workplaces vibrant communities in spite of, well, everything. Get ready to laugh, to learn and be inspired by one of New Zealand's most highly rated speakers.



SHAMUBEEL EAQUAB Risks and opportunities in the interregnum

The economy has been bruised and battered by unprecedented shocks. But we aren't done. There are many foreseeable shocks to come from rising costs, people shortages, changing preferences, pressured central and local government budgets, and changing politics. We also appear to be on the cusp of regime change, which we cannot predict, but will bring many opportunities. Shamubeel will provide an economic lens to our recent history, the current state, and gaze decades forward to what it means for our sector.

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tonkintaylor.co.nz Jo Ferry jferry@tonkintaylor.co.nz +64 9 359 2773 Sites 33, 34 + 38 T+T is proud to be a platinum sponsor of the 2023 WasteMINZ Conference. We deliver projects throughout Australia, New Zealand and the Pacific, focussing on collaboration, materials recovery, and the safe disposal of unrecoverable materials. T+T strives to provide leading expertise, and weave safety and sustainability in everything we do.

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RE.GROUP

regroup.com Daniel Yallop daniel.yallop@regroup.com +64 21 0295 9060 Re.Group operates one of the largest network of recycling facilities across Australia. Founded in 2013, Re.Group has rapidly expanded to deepen the impact of our recycling work around Australia and New Zealand. We provide kerbside recycling services for more than four million people across over 35 local government areas, handling 1.5 million containers every day, processing over 500,000 tonnes of recycling annually.

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countdown.co.nz sustainability@countdown.co.nz Countdown is committed to helping make Aotearoa a great place to live, where our people and environment thrive. We've set ourselves some ambitious sustainability goals, which we're determined to meet by 2025, including reducing our emissions, making our packaging 100% sustainable and sending zero food waste to landfill.



MORRISON LOW

morrisonlow.com Alice Grace a.grace@morrisonlow.com Morrison Low are public sector consultants with offices in Wellington, Auckland, and Sydney. We are well known in local government as sector experts. In waste we are seen as a market leader, involved in a wide range of projects involving feasibility studies, business cases, policy development operational reviews and procurement.

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PIONEER GROUP

pioneergroup.co.nz Arne Strachen sales@pioneergroup.co.nz 0508 474 663 Pioneer Group is the largest manufacturer and supplier of innovative waste and recycling equipment in New Zealand. Incepted in 1964 as a general engineering company, it has transformed into a leading solution provider for organisations wanting to effectively manage their waste. We provide effective compaction, size reduction and containment solutions.

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ENVIRO (NZ)

envirowaste.co.nz Stephanie Quantrill stephanie.quantrill@environz.co.nz +64 21 505 133 We see waste as a resource that keeps giving. Because of that, we're able to bring about positive change by focusing on resource recovery and environmental solutions. We're proud to sponsor the WasteMINZ Conference, working together to help drive New Zealand towards a more sustainable, low-emissions future.

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FOODSTUFFS NZ

foodstuffs.co.nz Emma Harding emma.harding@foodstuffs.co.nz +64 22 368 3053 Foodstuffs is 100% New Zealand owned and operated with more than 500 PAK'nSAVE, New World, Four Square and On-the-Spot stores across NZ. All are committed to being here for NZ by providing access to healthy and affordable food, meaningful work, community support, and leadership in sustainability including waste minimisation.



SLR

slrconsulting.com Kevin Tearney ktearney@slrconsulting.com +64 29 496 3765 SLR is a global leader in end-to-end sustainability solutions: providing clients with strategic advice and on the ground support, partnering with them in making sustainability happen. Founded in 1994, we have over 20 years' experience in sustainability from a network of offices in Asia-Pacific, Europe, North America and Africa.

WE ASKED SOME OF OUR SPONSORS WHY THEY WANTED TO JOIN US FOR THE WEEK. HERE ARE THEIR RESPONSES

SLR

SLR are proud to continue our support by taking out a bronze sponsorship at this year's conference. The theme for the conference, to challenge the status quo to create a better future, directly aligns with our purpose as a global leader in end-to-end sustainability solutions: providing clients with strategic advice and on the ground support, partnering with them in Making Sustainability Happen. We recognise the importance of building a sustainable tomorrow and the integral contribution of our consultants in the waste and contaminated land sectors and WasteMINZ to achieve this.

MORRISON LOW

Morrison Low are a sponsor at WasteMINZ for the first time. We are public sector consultants (not a law firm) and do a lot of work in the waste area for councils across New Zealand. We also work with central government in New Zealand and local government in New South Wales. Sponsorship is a great opportunity to promote our company in one of our key sectors. It's also great to be able to support WasteMINZ to put on the first inperson conference after so long, an important gathering of our peers. Look forward to seeing everyone there.

RE.GROUP

For Re.Group it was a fantastic opportunity to support a cause that we care deeply about and support the delivery of an awesome conference. For the last two decades, WasteMINZ conferences have been the go to event for the industry, both at home and abroad. We may have differing opinions from time to time, yet the conference is a wonderful place to see familiar faces, meet new people and collaboratively tackle the industry's challenges positively.

COUNTDOWN

Countdown is proud to again be a key silver sponsor for the 2023 WasteMINZ conference. The theme of challenging the status quo to create a better future is something that Countdown is committed to doing. Our 2025
Sustainability Plan - Kia pai ake to apōpō - A better tomorrow, demonstrates our dedication to creating a better future for Aotearoa.

The plan is central to the theme of challenging the status quo, such as achieving zero food waste to landfill from our store operations by 2025. The WasteMINZ Conference is an excellent opportunity for us to connect with industry leaders, share ideas, and drive positive and much needed change in Aotearoa – we look forward to seeing you there.

ENVIRONZ

We see waste as a resource that keeps giving. Because of that, we're able to bring about positive change by focusing on resource recovery and environmental solutions. We're proud to sponsor the WasteMINZ Conference, working together to help drive New Zealand towards a more sustainable, low-emissions future

TONKIN + TAYLOR

T+T is thrilled to continue our tradition of sponsoring the WasteMINZ conference in 2023. The WasteMINZ conference is always a key event in the calendar for our team and our industry, providing a platform to hear about activity across New Zealand and internationally.

This is where we can exchange ideas and reconnect with a wider network to improve and progress the waste and resource recovery sector.

We look forward to a conversation informed by the circular economy framework, with both business and government looking to realise the broader benefits of collaboration, recovery and most importantly actively designing waste out of our economy.



WASTEMINZ EXPO - WILL YOU BE THERE?

WE ASKED SOME OF OUR EXHIBITORS WHY THEY WANTED TO JOIN US FOR THE WEEK. HERE ARE THEIR RESPONSES:

ENVIRONMENTAL EDUCATION FOR RESOURCE SUSTAINABILITY TRUST - MARTY HOFFART

I remember my first WasteMINZ conference in 1999 (a long time ago). And I remember walking though the trade exhibition and being really impressed with the trade stands. A few years later, we were there as an exhibitor with our first trade stand and we have attended almost every year since. For us, it is the smartest way to spend our marketing budget. We have our target audience for three days. With our Paper4trees and Zero Waste Education school programmes spread around the country, there is no other way we could catch up and be available to all our council partners.

INTERWASTE

As a New Zealand owned business that specialises in the treatment of medical and quarantine waste, we play an important role in keeping our country safe. We are the largest, and have the only national, network of autoclaving treatment facilities (Auckland, Wellington, Christchurch, Dunedin). This minimises the need to transport special waste long distances, helping reduce our carbon footprint, which is becoming an increasingly important aspect of our

customers' requirements. Exhibiting at the WasteMINZ conference will help grow the understanding of what Interwaste does and how it can help and support other waste management providers, and customers.

ATRAX GROUP

Weightrax and the Atrax Group are delighted to be exhibiting at the 2023 WasteMINZ Conference. Our weighbridge solutions play an integral part in helping organisations involved in waste management and resource recovery to operate more efficiently and effectively and meet any reporting obligations. We're excited to demonstrate how our Weightrax reporting capabilities facilitate collecting, collating and presenting meaningful and accurate waste data that is useful both at an organisational level, to track waste collection and increase productivity and, at a national level, informing how to track and report on waste issues, and develop and prioritise solutions to help drive New Zealand towards a truly circular economy.

Want to learn more about exhibiting at our Expo? Read about our Exhibition Opportunities here and view our expo sites that are still available.

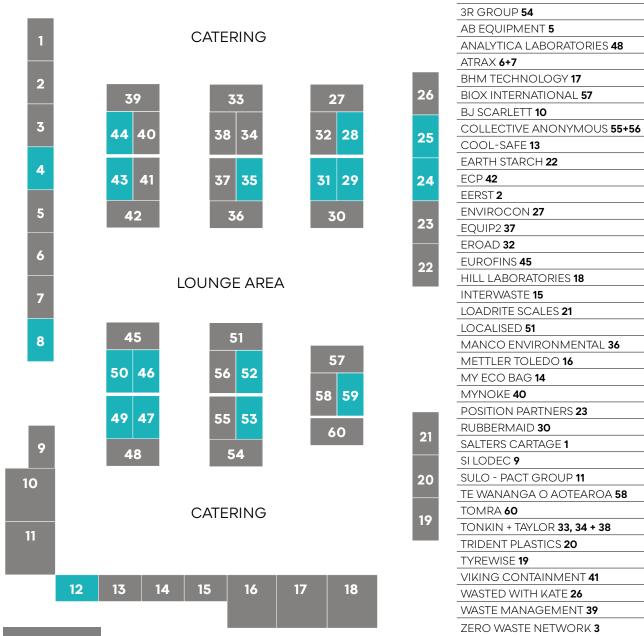
Read more about our awesome exhibitors on pages 42.

EXHIBITOR SITE PLAN

at 14.03.23

conference sessions

_ entrance _



MANCO ENVIRONMENTAL **36** TE WANANGA O AOTEAROA 58 TONKIN + TAYLOR **33, 34 + 38** VIKING CONTAINMENT 41 WASTE MANAGEMENT 39 ZERO WASTE NETWORK 3 SOLD SITES



REDUCING C&D WASTE ONE STEP AT A TIME

Waste from demolition and construction is New Zealand's largest source of waste, and plasterboard manufacturer Winstone Wallboards (WWB) knew this needed to change. **Barbara Nebel** from Thinkstep-ANZ explains.

ASTE FROM demolition and construction makes up a third of the waste that goes to city landfills each year and contributes significantly to our emissions of greenhouse gases.

Zoom in to an average residential building site, and the numbers are similarly stark: each year around 23% of construction materials, including about 700kg of plasterboard waste, end up in a skip bound for landfill.

Plasterboard manufacturer Winstone Wallboards (WWB) knew this needed to change. The company produces plasterboard under the GIB® brand. It is New Zealand's only manufacturer of the product.

So the team set themselves a challenge. They would reduce plasterboard waste across New Zealand by 30% without redesigning their product. They would do this in three ways:

- by reducing the waste builders create during construction,
- by cutting back the waste they generate when they make GIB® plasterboard, and
- 3. by recycling gypsum, the main material in plasterboard.

Reducing waste during construction

WWB began by tackling the waste their customers create when they use GIB® plasterboard on a building site. First up, they identified why and how this waste occurs. Three sources stood out. Builders create waste when they:

- 1. use GIB® plasterboard,
- 2. order it, and
- 3. store it.

With this information in hand, WWB set about changing their manufacturing and distribution processes to 'design waste out'.

In the first situation, builders often need to cut sheets of plasterboard down to size when they use it. This leads to waste in the form of offcuts. Inevitably, cutting down involves mistakes. More offcuts, more waste.

To reduce this offcut waste, WWB now offers builders who buy 100 or more sheets of their product plasterboard that is already cut into custom sizes. The company also encourages modular design. Less cutting, Less waste.

In the second situation, builders sometimes order too much plasterboard. When they do this, they often find it easier to bin the extra product than to transport it to another project.

In the third situation, builders working on larger sites may mislay plasterboard and need to reorder it. Sometimes the surplus stock gets damaged while it waits to be used.

To reduce these issues, WWB encourages 'materials logistics plans'. These plans help builders ensure they have the 'right amount of materials onsite at the right time' – not too much and not too little. The company also advocates for clauses in construction contracts that make builders responsible for minimising waste.



manufacturing

Manufacturing GIB® plasterboard creates waste too. The solution comes in the form of a new plant. WWB will open its 12.7-hectare Tauriko plant in Tauranga later this year. Once this plant is operating, the company will be able to recycle the plasterboard waste it creates during manufacturing into new plasterboard.

Recycling waste gypsum

Recycling lies at the heart of WWB's third initiative too. This time it involves recycling the materials it uses to make plasterboard. Gypsum is a mineral that occurs naturally in some sedimentary rocks. It is valued in agriculture and horticulture for improving soil structures and is an ingredient in many fertilisers.

WWB is giving waste gypsum a 'second life'. It has set up partnerships across the country to recycle the mineral for use in our land-based industries.

business benefits too

WWB's actions are helping New Zealand's building industry to manage its waste and cut down on its greenhouse gas emissions. These practices add value to WWB's business too. Reducing manufacturing waste reduces the costs of disposing of waste. By designing out greenhouse gas emissions, the company is managing its risks. It is preparing to avoid carbon taxes if the government decides to levy these in the future.

The new processes have other benefits too. They build relationships, brand loyalty, and employee engagement. For example, customers appreciate WWB's efforts to help them reduce their waste, make their materials go further, and reduce their project's carbon footprint. WWB's team values being part of a business that is working hard to become more sustainable.

A pragmatic, well-executed strategy to reduce waste is reaping benefits for the New Zealand construction industry and WWB too. R



Barbara Nebel's passion is to enable organisations to succeed sustainably. As CEO of thinkstep-anz, a locally owned business, she often describes her job as a translator - translating sustainability into traditional business language. Together with her team, she delivers a full range of sustainability services from strategy and materiality assessments through to detailed Carbon Footprinting, Life Cycle Assessments and Cradle to Cradle® projects.













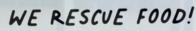
























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FOOD TO THE RESCUE!

Food rescue organisations have been out in force following Cyclone Gabrielle. **Iain Lees-Galloway** tells us why food rescuers are so valuable, both in emergencies and in peace times.

IRES, FLOODS, earthquakes, droughts and even a global pandemic - Aotearoa has seen it all in the last decade.

The devastation wrought by cyclones Hale and Gabrielle tells us that climate change is real, it's here, and we urgently need to respond, adapt, and mitigate its impact.

Food rescue organisations help us do all that and make our communities more resilient.

Food rescuers collect good, nutritious food that won't be sold and would otherwise go to landfill. Then they distribute it to people experiencing food insecurity. Food rescue takes an environmental problem - food waste - and turns it into a social solution - food relief.

In recent weeks, the value of food rescue has been on clear display with the likes of KiwiHarvest and FairFood getting food out of Auckland's flooded supermarkets and into community organisations that deliver it to people in need.

Meanwhile, Gizzy Kai Rescue and Hawke's Bay's Nourished for Nil have used their resources and networks to get food to people impacted by the devastating weather.

The impact of food rescue in emergencies is clear. But what about during 'normal times', whatever those are these days?

Last year, the Aotearoa
Food Rescue Alliance and Otago
University published a Social
Return on Investment (SROI) report
demonstrating that for every \$1
invested in food rescue, \$4.50
of social value is generated. The
research, led by PhD candidate Grace
Clare, was accredited by Social Value
International. One of their principles
is "don't overclaim." The research
focussed only on what was genuinely
measurable and was conservative in
its findings.

The study confirmed that food rescue has a positive impact for four key groups:

- 1. food businesses,
- 2. food rescue volunteers,
- 3. recipient organisations, and
- 4. food recipients.

Food businesses benefit in multiple ways. Increased awareness of food waste helps to change internal practices, reducing unnecessary surplus and waste. Waste disposal costs are reduced. Their reputation is enhanced from doing social good. Their impact on the environment, especially carbon emissions, is reduced.

Volunteers enjoy considerable wellbeing benefits from increased social interaction, the satisfaction of helping others, and contributing to an environmental solution.

Recipient organisations, for example foodbanks and schools, benefit from increased organisational capacity through access to free food.

Food recipients gain from increased connection to social services, for which food is often a gateway, and access to a greater variety of food. That last point is key. Food rescue is often the way that fresh food such as fruit, vegetables, meat and dairy get into food relief parcels. Foodbanks naturally rely on non-perishable packaged food to maintain their stocks. Food rescue organisations add fresh, nutritious food to the food parcels which significantly improves their quality, positively impacting recipients' health and wellbeing.

Food rescuers are first responders. They step in to save food from going to waste and make it available to meet urgent needs. Work must continue to reduce surplus and waste in our food production and retail systems. Likewise, we need to do a lot more to improve food

security for everyone in Aotearoa. Food rescue organisations celebrate when their partners find new ways to prevent unnecessary surplus and when people no longer need food relief. But events happen every day that generate unexpected surplus and put people in unexpected need. Food rescuers are there to respond.

Every \$1 that goes into food rescue delivers \$4.50 worth of social and environmental impact. That's an incredible return on investment for central and local government, philanthropic trusts and individuals, and corporate sponsors. With more resources, food rescue organisations could work with even more partners and rescue more food that is still needlessly going to waste. Let's back our food rescuers. **R**

FURTHER READING impact.afra.org.nz

"EVERY \$1 THAT GOES INTO FOOD RESCUE DELIVERS \$4.50 WORTH OF SOCIAL AND ENVIRONMENTAL IMPACT."



Iain Lees-Galloway is the Engagement and Partnerships Lead for the Aotearoa Food Rescue Alliance (AFRA). Iain's background is in union advocacy and political campaigning. He is a former Member of Parliament for Palmerston North





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POLYSTYRENE COMPACTORS



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GENERAL WASTE COMPACTORS



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Discover more at: re-group.com

Our services include:





A CALL TO ACTION

How can Aotearoa New Zealand drive meaningful change in the climate change space? By standing up and taking action. Re.Group's **Daniel Yallop** explains his call to action.

HE RECENT natural disasters in New Zealand have helped focus the mind on what's important. It was only the third time in our history that a nationwide emergency was declared. We are a small nation and only part of a global issue. But the world needs us to stand up. Unlike other countries, we have the resources and expertise to drive real change. Here is my call to action...

I chose the theme of my article back in December 2022 during the usual Christmas activities, supported by overindulgence and unnecessary consumption. Although I had a wonderful time during the holidays, on reflection, it left me feeling guilty and empty. It prompted me to evaluate my role in climate change; our role as an industry, Aotearoa's role, and the world's role.

Sadly, the recent natural disasters in New Zealand are a confronting reminder of how our actions as individuals, businesses and organisations impact the world we live in. It was only the third time in our history that a nationwide state of emergency had been declared the outbreak of Covid-19 in 2020 and the Christchurch earthquakes were the other two reasons: two occurrences, in my opinion, that were heartbreakingly unavoidable. However, the same cannot be said for extreme weather intensified by climate change.

Think about the wide-ranging climate change declarations that have been made, the sustainability reports and actions plan that have been developed, our engagement work with our communities, all the tonnes handled, and materials

processed – we all work bloody hard and deeply care about the work that we do. Still, something is not right, and our communities and natural environment are taking the brunt of it.

In the wider world, some individuals, industries, and politicians question our contribution to climate change. Why does it matter?

As a small nation we can do our bit to address this global issue by starting now and starting simply Change is driven by small actions made by many, and everyone needs to play their part. Critically, Aotearoa New Zealand can and should be a world leader. The world needs us to stand up. Unlike other countries (take the tragic events in Turkey and Syria as a stark reminder), we have the resources and expertise to deliver real and meaningful change quickly.



"CHANGE IS DRIVEN BY SMALL ACTIONS MADE BY MANY, AND EVERYONE NEEDS TO PLAY THEIR PART."

For instance, Cabinet took just 72 hours to introduce stronger gun laws and immediate action for unlawful gun owners whilst the legislative process took place following the Christchurch mosque terror attacks in March 2019. It was not the perfect introduction of a new policy or the best example of drafting legislation and making law, but undoubtedly New Zealand is a safer place for it. Why can't we act with the same urgency regarding climate change? Here is what I think we could do immediately as an industry, both as policymakers and organisations that support and deliver services:

 Embrace Tikanga Māori principles and have these values embedded throughout our industry, which would make a profoundly positive impact on our environment, our communities and the work that we do.

- Place a greater emphasis on behaviour change; elimination and reduction should always be prioritised where possible.
- Prioritise product stewardship approaches that ensure the people who profit from and use items are paying the cost of appropriate end of life management up front.
- Work together collaboratively and transparently to tackle big issues – no more "them vs us," we all need to be aligned and working together.
- Increase landfill levies to a level that drives meaningful change and supports the transition to a circular economy.
- No new landfills. Instead, make the ones we have more efficient and effective. On an aggregated basis, we have more than enough disposal capacity in NZ – we need

- to be smarter about how we work together and preserve this capacity for unavoidable waste, such as disaster clean up.
- Capture all relevant data and be transparent with it for the benefit of the industry – not just recycling but disposal volume, cleanfills and carbon emissions too.
- Finally, have clear restrictions on what we make and import; if it cannot be repaired, reused or recycled, why are we letting it into Aotearoa? R



Daniel joined Re.Group in 2022 to lead partnering opportunities in Aotearoa New Zealand. Daniel is excited to support an organisation focusing on the higher end of the waste hierarchy. Daniel has 15 years' experience in the industry and is committed to using this to bring positive change to the work that we do.

NGĀ RANGAHAU - RESEARCH

Research forms one of the pillars of the WasteMINZ approach to providing expert, validated information and support across the waste management and resource recovery industry. Some international research may or may not adapt to the New Zealand context, but we hope these thought-pieces will provoke discussions and potentially lead to solutions here.

REDUCING RECYCLING BIN CONTAMINATION

Behaviour Works Australia have released research on what kind of messaging works best to reduce recycling contamination. They found:

- It is not easy for people to identify the 'right thing' to do, while contextual factors can also constrain cooperation.
- Current recycling schemes are not necessarily designed to optimise correct recycling.
- Interventions aiming to improve convenience and ease of preferred recycling behaviours are the most widely effective.
- Effective communications need to be tailored to the specific characteristics of schemes, populations and preferred behaviours, and utilise social modelling/norms and persuasive messaging alongside information.

bit.ly/R123-NRR4

REUSE SYSTEMS IN NELSON AND TASMAN

Reuse Aotearoa was commissioned by Nelson City Council and Tasman District Council to do a report on Reusable Packaging Systems in Nelson and Tasman. Desktop research and interviews with 12 local businesses and stakeholders inform the report, which found that the opportunity to purchase everyday household products in reusable or refillable packaging is relatively normalised and available in Nelson-Tasman, and that there is a community of willing businesses who could be supported to establish, sustain or further expand their reusable packaging offerings.

bit.ly/R123-NRR3



KEEP BRITAIN TIDY

Keep Britain Tidy conducted research on shifting the public's focus from recycling to waste prevention and have produced a report which found that most people still think of waste prevention as throwing away less rather than buying less, and that recycling has been prioritised

and normalised at the expense of waste prevention. As a result of this research KBT has launched a Buy Nothing for a Month campaign.

To request a copy of the research, go to: bit.ly/R123-NRR2



THE ROLE OF APPS IN CHANGING BEHAVIOUR

In this study, researchers analysed 208 apps from the Apple App Store and classified them according to the Self-Determination Theory to produce a taxonomy of apps. This taxonomy can be used to evaluate how specific features, and combination of features, may work to motivate users towards their desired goals.

bit.ly/R123-NRR1

WASTE DISPOSAL LEVY WAIVER FOR HARD HIT COMMUNITIES

Disposal facilities in hard hit areas can apply to have a waiver of the waste disposal levy. Read more about who is eligible and how to apply below.

ECENT FLOODING in
Auckland and the impact
of Cyclone Gabrielle across
the North Island have had
a significant impact on waste and
its disposal in the past few weeks.
As well as the devastation to homes,
livelihoods and infrastructure,
these weather events have created
an enormous number of wastedamaged items to be disposed of,
resulting in a significant financial
impact on households, businesses,
and local authorities.

We are here to help. We know that this is a challenging time for communities and businesses across New Zealand. The thoughts of everyone at the Ministry for the Environment are with the many people who have been affected by these events.

We have seen that many affected councils have responded by providing free or subsidised waste disposal services and other support to communities.

The Waste Minimisation Act 2008 provides for disposal facility operators to apply for a waiver of the levy on waste in exceptional circumstances.

Disposal facilities can apply to have a waiver of their levy on waste generated by the flooding and cyclone events. Even if the levy has already been paid, we will still accept applications for the waiver from operators who have been affected. We will consider each application on its merits.

The Waste Disposal Levy, administered by the Ministry for the Environment, is charged per tonne on waste entering Class 1 (Municipal disposal facility) and Class 2 (Construction and Demolition fill disposal facility) landfills for final disposal. The cost of the levy is \$30 per tonne for Class 1 facilities and \$20 for Class 2 facilities. Money raised from the levy is distributed for waste

minimisation initiatives, with 50% being distributed directly to territorial authorities.

We hope the following information is useful in helping to understand the process and how to apply for a waiver. Applications will need to show:

- the specified waste was a result of the flooding event on 27 January or Cyclone Gabrielle
- the waiver can be returned to those that incurred the cost of disposal.

Submit your waiver application directly via the Online Waste Levy System (OWLS) at wastelevy.govt.nz. For assistance with OWLS please contact info@wastelevy.govt.nz. or 0800 WDLEVY (0800 935 389)

If you are having difficulty meeting your reporting or levy obligations due to the flooding or cyclone, please contact us as soon as possible so we can help provide solutions at levy. admin@mfe.govt.nz. R





Trucks are a common sight on Australian and New Zealand roads, but which country has a higher rate of fatal truck crashes and why? Reclaim's **Ajith Fernando** delves into the statistics to find out.

atal truck crashes are
usually referred to as headon crashes, trucks leaving
roads, trucks rolling over, or
hitting another vehicle from behind
or from the side.

In fatal crashes where trucks and drivers are at fault, the contributory factors include extreme and reckless behaviour, driver distraction, mechanical failures (particularly brakes), overloading and incorrect judgement due to lack of situational awareness. A research study by Transport Engineering Research New Zealand shows that two-thirds of fatal crashes involving trucks were the fault of other road users.

The purpose of this article is to compare the fatal truck crash statistics between New Zealand and Australia and discuss the reasons why the number of Australian fatal truck crashes and deaths is much lower than in New Zealand.

Fatal Crashes: New Zealand vs Australia

The data shown in the table on page 32 indicates that the number of registered trucks has grown by 26% in New Zealand and 24% in Australia during the 10-year period from 2012-2021.

During that period, the number of fatal truck crashes on NZ roads increased by 48% whilst crashes on Australian roads decreased by 27%. During the same period, the number of

deaths on New Zealand roads involving trucks increased by 54% whilst deaths on Australian roads decreased by 33%.

Statistics show that during the past decade, the average number of fatal truck crashes (per 100 million kilometres travelled) on New Zealand roads is twice the number of similar crashes on Australian roads.

As can be seen from the data,
Australian road safety performance for
trucks is much better than that on New
Zealand roads. The reasons Australia
has comparatively much improved
safety performance than New Zealand
are explained below.

Australia road safety strategy

Since 1970, Australia has continuously achieved large and lasting road safety gains from: high-risk road improvements, safer vehicles, vehicle telematics, fatigue monitoring, alcohol interlocks, autonomous emergency braking, lower speed limits, driver training, improved chain of responsibility obligations, partnership between regulators to share responsibilities, graduated licensing, and a range of successful behavioural programmes targeting drink driving, seatbelt usage and speeding.

Under the National Road Safety Strategy 2001–2010, Australia was one of the first countries to formally adopt the Safe System, which takes a holistic view of the road transport system and the interactions of its various elements. The Safe System aspires to create a road transport system in which human mistakes do not result in death or serious injury.

In Australia, a National Road Safety Strategy 2011-2020 was put in place, which continues to advance the Safe System, and commits federal, state and territory governments to an action plan to reduce fatal and serious injury crashes on Australian roads. Australia's 2011-20 strategy presented a 10-year plan to reduce the annual numbers of both deaths and serious injuries on Australian roads by at least 30%. An actual reduction in road fatalities of 19% was achieved over the period. In December 2021, the National Road Safety Strategy 2021-2030 was launched.

New Zealand road safety strategy

New Zealand implemented its road safety programme only in the year 2000, whilst Australia had been working on its since 1970. In April 2004, a road safety education initiative, Up to Scratch, was launched across New Zealand to test people's knowledge of the Road Code and the road rules.

Safer Roads was the New Zealand government's strategy to guide improvements in road safety over a ten-year period: 2010–2020. Like Australia, the strategy focused on road safety gains from road improvements, safer vehicles, and lower speed limits, graduated licensing and programmes targeting drink driving, seatbelt usage, and speeding. Overall, road travel in

Fatal Crashes: New Zealand vs Australia

	NEW Z	EALAN	ID		AUSTE	RALIA		
YEAR	NUMBER OF FATAL CRASHES	NUMBER OF DEATHS FROM TRUCK CRASHES	NUMBER OF TRUCKS	TRUCK KM (MILLIONS) TRAVELLED	NUMBER OF FATAL CRASHES	NUMBER OF DEATHS FROM TRUCK CRASHES	NUMBER OF TRUCKS	TRUCK KM (MILLIONS) TRAVELLED
2012	46	52	127,820	2,521	208	245	534,401	16,900
2013	47	48	129,571	2,582	156	181	548,049	17,299
2014	56	67	133,265	2,674	175	202	558,975	17,685
2015	49	57	136,740	2,730	172	193	567,299	17,978
2016	60	75	140,050	2,806	165	186	576,423	18,331
2017	70	82	144,663	2,945	174	191	589,657	18,658
2018	61	73	149,168	3,034	141	160	605,692	19,025
2019	57	67	153,271	3,051	173	188	623,769	19,211
2020	55	61	156,490	3,017	149	172	640,651	19,517
2021	68	80	161,004	3,172	151	163	662,245	19,825
10 YEAR CHANGE %	48%	54%	26%	26%	-27%	-33%	24%	17%

Source: Annual Motor Vehicle Fleet Statistics (Ministry of Transport, New Zealand) & BITRE (Bureau of Infrastructure, Transport and Regional Economics, Australia) Truck Fatal Crash Statistics.

New Zealand has become safer in the last 25 years. However, since 2013 the levels of fatalities and serious injuries have not continued the downward trend experienced prior to 2012.

In December 2019, New Zealand
Transport Agency (Waka Kotahi)
committed to decisive action on
road safety under Road to Zero: New
Zealand's road safety strategy 2020–
2030. Road to Zero adopts a vision of a
New Zealand where no one is killed or
seriously injured in road crashes, and a
target for reducing annual deaths and
serious injuries by 40% by 2030.

New Zealand Road to Zero safety strategy

The journey towards a Road to Zero vision will require significant effort to: enhance the quality of our roads, strengthen regulation and social expectations for safer vehicles, improve people's compliance with traffic laws, and create a more empathetic transport culture that protects human life.

The strategy document highlights five focus areas that will require sustained focus over the next decade, and the strategic directions that will be required to address them:

- Infrastructure and speed management: Roads and roadsides protect road users if they make a mistake.
- Vehicle safety: Safe vehicles help drivers and riders avoid crashes and protect occupants and other road users when crashes do happen.
- **3. Work related road safety**: Road safety is treated as a critical health and safety issue in workplaces.
- **4. Road user choice**: Road users comply with road rules and are enabled to make safe choices.
- **5. System management**: System designers and policy makers share the responsibility to ensure New Zealand has a safe road system. Road to Zero aims to achieve reductions in deaths and serious

injuries through a combination of engineering, enforcement, legislation, advertising and education, and community interventions. With the implementation of this programme, it is expected that by the year 2030, the road safety gap for fatal truck crashes between Australia and New Zealand would be narrowed.

Conclusion

Statistics show that New Zealand has suffered a greater number of fatal truck crashes and deaths over the last decade when compared with Australia. Over the 2012-2021 period, New Zealand's fatal crash rates have increased by 48% whereas Australia's fatal crashes have decreased by 27%. In addition, average fatal truck crashes (per 100 million kilometres travelled) on New Zealand roads are twice that of Australian roads. This is mainly because Australia has implemented better road safety and strategic programmes than New Zealand.

It can be concluded that New Zealand needs to put pressure on the trucking industry to improve safety standards. Relying on regulation through licensing will never be sufficient. Let's hope that the Road to Zero initiative will help to achieve a substantial reduction in fatal truck crashes in New Zealand by 2030. **R**



Ajith Fernando is the Health, Safety, Environment Quality and Risk Manager for Reclaim. Ajith has more than 15 years' experience in developing and managing risk frameworks, business continuity plans, incident management, and health and safety management.



You probably don't spend much time thinking about garbage, but as experts in food waste, we think about it a lot.

General waste is a big problem, each of us generate 3,200kg per year in New Zealand, that's an eye-watering 15.5 million tonnes of waste a year going to landfill!

While there's no single solution for reducing the world's waste, even the little things we do can have an important impact on the environment, like using an InSinkErator® Food Waste Disposer to keep your food waste out of landfills.



FOOD WASTE AT THE CENTRE OF THE CRISIS



Each year New Zealanders send around 229,000 tonnes of food waste to landfills.



If food waste globally could be represented as its own country, it would be the third largest emitter of greenhouse



Globally, food waste generates the equivalent of 485 million metric tons of CO2 each year, equal to the annual emissions of 100 million cars.



Food waste contributes to other environmental problems as well. The numbers above don't include the additional energy required to transport waste to the landfill, which is getting more and more expensive as landfills get further away from urban centers.



Since food waste is 75% to 90% water, it is a significant contributor to landfill leachate—the toxic liquid that 'leaches' from a landfill as trash decomposes—and there's a significant cost to capturing and treating it before it reaches and pollutes water sources.





On average, the energy used to run a disposal comes out to less than \$1.60 a year. When a community of 30,000 households grinds its food waste in a disposal instead of sending it to landfills, it could have a similar effect on greenhouse gas emissions as planting 31,435 trees; diverted to a properly equipped waste-water treatment facility, it could create enough electricity to power 322 homes.



Globally, over the past 80 years, InSinkErator has kept 80 million tons of food scraps out of landfills.

Less food waste decomposing into methane gas and fueling climate change means a better environment for all of us. Using an InSinkErator garbage disposal to grind your food scraps is a small action you can take that can have a big impact on your kitchen, community and environment.





THE ISSUES WITH THE NATURAL AND BUILT ENVIRONMENT BILL

The Natural and Built Environment Bill which is proposed to replace the resource management system in New Zealand was open for consultation earlier this year. In this article, **Natalie Webster** explains the top five issues related to contaminated land management highlighted in the Contaminated Land Management Sector Group Steering Committee's submission.

HE CONTAMINATED Land
Management Sector Group
Steering Committee reviewed
the Natural and Built
Environment (NBE) Bill which was
recently introduced to Parliament on
15 November 2022. This legislation
is proposed to form the basis of a
new resource management system
for New Zealand, in conjunction
with the Spatial Planning Act, and
The Climate Change Adaptation Bill,
which together replace the Resource
Management Act 1991.

In reviewing the NBE, the objective of the Steering Committee was to identify any issues relating to contaminated land

management which could result in adverse outcomes or unintended consequences. The following 'top five' issues were identified, and were communicated, among other issues, via a submission to the Select Committee.



DEFINITIONS

The broad issue of definitions relates to a number of terms that are utilised within the Natural and Built Environment Act (NBA). In some cases, the Steering Committee noted that terms are used which do not have a definition provided, for example

the use of the word 'soil' in relation to contaminated land, where there is no definition of this term within the bill and further, no accepted definition of the term within the soil science industry. In other cases, the definitions provided are considered to be insufficiently precise, such that the possibility of unintended consequences exists, for example in relation to the definition provided for 'contaminant', which has the potential to result in beneficial activities being interpreted as creating contaminated land. The Steering Committee has requested a number of changes to the definitions provided to remedy these issues.



THE STEERING
COMMITTEE
PROVIDED STRONG
ENCOURAGEMENT
... FOR THE SETTING
OF LIMIT AND
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WERE NATIONALLY
CONSISTENT, AND
WHICH WERE
APPROPRIATE FOR A
RANGE OF DIFFERENT
LAND USE SCENARIOS
AND ENVIRONMENTAL
RECEPTORS.

2

POLLUTER PAYS' LIABILITY REGIME

The Steering Committee noted that the polluter pays principal, as outlined in the NBA, is unclear about whether it will be effective from the date the legislation takes effect or if it will apply retroactively. It is considered that a regime that is only forward-looking will introduce a dual system of accountability, whereby a landowner who pollutes before the date the NBA is enacted will not have to pay, but those who pollute after this date will. In addition, perverse outcomes could be the incentivisation of pollution prior to the NBA coming into effect; and providing a defence for landowners that where pollution occurred before the date of the NBA, they are not liable. There is clear international precedent for retrospective liability regimes. The Steering Committee has submitted that the NBA should be amended to clearly make liability for pollution retrospective; this should drive clarity around what is in fact intended to be.

3

SETTING OF LIMITS AND TARGETS

A significant proportion of the functionality and success of the NBA will hinge on the setting of environmental limits and targets. These are discussed in the NBA, but detail has not been provided about how they will be set, or what they are. As such, the Steering Committee provided strong encouragement via our submission for the setting of limit and targets that were nationally consistent, and which were appropriate for a range of different land use scenarios and environmental receptors. In addition, specific insertion of provision to allow the setting of site-specific limits and targets through appropriate risk assessment was requested.



REGULATOR DUTIES

The NBA sets out duties for both territorial and regional authorities. Regional authorities are required to identify all Hazardous Activities and Industries List (HAIL) sites in their region. There is no apparent timeframe within which this must be completed, and the Steering Committee considers that this will be difficult to achieve for organisations that are already limited in resource. Similarly, the NBA contains a mandate for territorial authorities to consider the effects of proposed development on contaminated land, which is considered to be an overlap with regional council roles under consenting/discharge and management of contaminated land. The Steering Committee has expressed concern that this overlap could result in a void, or gap in

completion of these elements.



LANDOWNERS' OBLICATIONS

The NBA contains obligations for landowners to the effect that landowners must notify regional councils if their land use used for an activity or industry listed on the HAIL and must provide regional councils with any environmental reports that exist for the land. The Steering Committee submits that this regulation may be unworkable as it requires a level of knowledge and understanding that few landowners are likely to possess, particularly as it relates to the HAIL. In addition, the HAIL is not considered to be a fit tool for the purpose of identifying all contaminated land, nor was it intended for it. A key point made by the Steering Committee is that the HAIL does not include all sources of contamination. Therefore, not all contaminated and/or potentially hazardous sites will be required to be notified, managed or remediated. R

FURTHER READING

Read the submission on the WasteMINZ website.



Natalie Webster is an environmental scientist with 18 years of experience in the environmental management sector and is a technical director in the contaminated land team at Pattle Delamore Partners. She has been a member of the CLM Sector Group Steering Committee since 2020.

A NEWCOMER'S VIEW TO WASTE MANAGEMENT IN NEW ZEALAND

Eunomia's **Mark Hilton** recently arrived in New Zealand from Britain. In this article, Mark tells us why he was transported back to the 1990s when learning about our waste management and product stewardship regulations, and what can be done to get us back up to speed.

Scratching the surface reveals the gaps

Having arrived here in Aotearoa New Zealand just over six months ago, as a Brit with 28 years in environmental consultancy, the WasteMINZ team kindly invited me to give my first impressions.

To begin with, it all seemed as expected – gorgeous scenery, friendly locals, more cows and sheep than people, quirky small towns, and fascinating and profound Māori culture. But the outside world's view of New Zealand as a pristine environment, with largely green policies, started to look somewhat shaky as I began to have conversations that took me back to the mid-1990s. Through these conversations, I discovered the gaps in regulation and the lack of

strategic environmental thinking and investment!

The first real surprise was finding that there is still no Duty of Care for waste producers, and no Waste Licencing for waste operators: UK law since 1974, reinforced in 1994. This is going to be fixed – subject to how 'waste' is defined here, I understand, in the forthcoming change to the Waste Minimisation Act (WMA), so I'll move on to the next elephant in the room: the very high levels of landfilling, in particular of biodegradable waste, and a lack of other waste infrastructure.

Biodegradable waste still going to landfill

The 1999 Landfill Directive in the EU came into force to control landfill engineering, and drive biodegradable waste out of landfill into composting

and anaerobic digestion. This has largely been done - only 24% of waste in the EU is now landfilled, with a 10% 2035 target for municipal waste, and an obligation to collect biodegradable waste separately by 2024. The Directive was implemented because the control of leachate from landfill was a problem, as it is generally not possible to capture the methane emissions completely (especially over the whole lifetime of a landfill), and because it is a waste of valuable resources. According to the European Union Methane Strategy, published in October 2020, 26% of the continent's methane emissions still came from waste, and methane is 84 times more potent than CO2 on a 20-year timescale.

It was a surprise to find that the waste strategy consultation of 2021

(Te kawe i te haepapa para | Taking responsibility for our waste) appears to have no firm plans to phase out biodegradable waste landfilling, to bio-stabilise it, or to sort it before landfilling, and only aspires to increase diversion and improve gas capture for energy generation. While greenhouse gas emissions from waste are covered under the New Zealand emissions trading scheme, this, and the waste disposal levy - which is very low by EU standards (the UK landfill tax is currently close to NZ\$200, versus only \$30 as of July 2022, increasing to \$50 by July this year before rising to \$60 in July 2024) - seem to have done relatively little to abate the landfilling of waste. Despite slight improvements in 2019 and 2020, the long-term trend suggests that waste to landfill is still increasing.

Waste-to-energy is not the answer

In terms of waste-to-energy, there is nothing but guidance from Ministry for the Environment (MfE) as yet, while councils and iwi, large and small, get pursued by technology providers of various kinds. I want to make clear that the dash for incineration in Europe, once viewed as a sensible way to avoid emissions from coalfired power stations, has increasingly become unhelpful in carbon terms as:

- electricity generation is decarbonised (the UK is now below 6% coal/oil fired, and below 40% gas); and
- we move to a circular economy (CE).
 In my view, incineration is something that New Zealand, with such a high proportion of renewable electricity, should avoid in favour of greater emphasis on reduction, reuse and recycling.

"THERE IS AN ARGUMENT THAT LOW-INCOME KIWIS NEED LOW-COST PRODUCTS, BUT WHAT THEY DON'T NEED IS THE EXPLOITATION THAT POOR QUALITY PRODUCTS REPRESENT - REQUIRING REPEAT PURCHASES AND GENERATING EXTRA WASTE."

The UK now has over 56 wasteto-energy incineration plants, taking more than 48% of the waste (2020/21), which many believe is constraining England's ability to meet recycling targets, whilst even incinerator operators are asking the Government for a moratorium on new plants to help support a more circular economy. In Denmark, incinerators are being mothballed as the country moves to a more circular economy; incineration now being considered 'leakage' from the system, alongside landfill. The EU has excluded waste-to-energy incineration from a list of economic activities (the EU Taxonomy)

considered suitable for 'sustainable finance'. To cut overcapacity, seven incinerators in Denmark will need to close, however, because many of the facilities were financed and/ or owned by local municipalities, central government is having to offer financial incentives for incinerators to close.

A lack of product policy

The next thing to mention is product policy. In Aotearoa I have noticed things on sale here that would be unacceptable or restricted in Europe, including poor-quality appliances and non-recyclable packaging.

Another concern is the large
number of abandoned cars on
paddocks and properties across the
country. In Europe they have
to be de-polluted
of their fuel,
oils, and

batteries in licenced facilities. The producers pay for their collection and treatment under the End of Life Vehicles Directive, partly to avoid problems created by scrap metal market fluctuations. I was also concerned to see that hazardous substances, like chrome copper arsenic used on timber, are still allowed here, having been effectively banned in the EU since 2004, and bizarrely, refrigerants - many with extremely high global warming potential - are only partially treated, and even then, outside the fledgling e-waste regulated product stewardship scheme and will instead be managed within a separate product stewardship scheme for refrigerants and other greenhouse gases. The approach in Europe is more holistic and comprehensive.

Product policy, in its most holistic sense, is fragmented and incomplete in New Zealand, with only partial coverage of key product groups in terms of product stewardship (PS) schemes; different approaches to these schemes where they do exist; a focus on waste management at end of life; and a lack of coordination between related schemes. As yet, there are very few policy instruments in New Zealand to help drive product circularity at the top-end of the waste hierarchy, and to reduce demand for new products made from virgin materials. As Eunomia studies have recently shown, even the very highest levels of material recycling will not be enough to ensure that a 1.5 degree increase in average climate temperatures is achieved. A CE for products can make a major contribution to accelerating the reduction in emissions and resource depletion, as well as creating local jobs.

Whilst I understand that things have improved with the introduction of regulated PS for priority products,

"IT SEEMS THAT NEW ZEALAND IS PERHAPS 20 YEARS BEHIND EUROPE IN SOME WAYS, BUT HAS THE OPPORTUNITY TO LEAPFROG TO THE PRESENT – AVOIDING THE MISTAKES OF THE PAST."

it still seems a relatively weak system with a number of key gaps, in particular:

- Some intensive carbon sectors are still missing (some not even in development), including vehicles (which could be integrated with the large batteries and tyre schemes), textiles and shoes, mattresses, furniture, construction, and potentially food (although not normally subject to EPR, it could be used to help develop infrastructure);
- The Government sets no targets for the schemes, which seems like a serious problem in terms of driving progress – all EU legislation has progressively tougher targets, year on year; and
- A lack of strong central government governance - the Gazette Guidance is not currently mandatory and somewhat incomplete, as are the WMA criteria, and existing vested interests take the lead in the 'codesign' of most of the PS schemes.

The importance of product stewardship

Product stewardship in the WMA is, however, framed in a way that could be a vehicle for a suite of policy measures, going far beyond simple waste management cost recovery, and working in combination to drive the circular economy. This needs the MfE and Ministry of Business, Innovation and Employment (MBIE) to work together, to bring the top end of the waste hierarchy together with an invigorated green sector in

New Zealand. This needs to happen to make the most of CE business models – creating economic growth and skilled jobs in reuse, repair and remanufacture, as well as recycling, the last resort in CE terms!

To make some of this happen, I'd like to see New Zealand follow EU/ European good practice:

- Mandatory ecodesign minimum requirements for 'durable' products and buildings, removing the worst products from the New Zealand market. Design for recycling/ disassembly, recycled/biobased content, material/product 'passports' (on chemical content), tighter controls on hazardous substances, and minimum warranty periods; that follow the EU approach, including the new EcoDesign for Sustainable Products Regulation planned for 2023.
 - Mandatory minimum requirements for PS schemes, in line with EU Extended Producer Responsibility (EPR) requirements under the 2018 Waste Framework Directive, and European good practice. This would include mandatory target setting for PS schemes (standard in EU Producer Responsibility Directives), including 'preparing for reuse'/'reuse targets' as well as recycling targets, and the use of financial incentives (e.g. eco-modulation of fees) to drive eco-design progress beyond the minimum requirements noted above.
- Formal Green Public Procurement (GPP), using established criteria

- from other jurisdictions to help drive the markets.
- A virgin fossil plastics tax on single use plastics, not just in packaging, to stimulate plastics recycling/ circularity – as per the UK, Italy and Spain.
- A simple consumer eco-label for all products, along the lines of the Australian Healthy Food 1 to 5 index, that utilises relatively simple common-sense criteria including embodied carbon, recyclability/ reusability, water use, and free warranty period.
- More hands-on support for businesses to accelerate their move to CE or circular economy business models (Zero Waste Scotland offers a good example of this).

I've heard it expressed that New Zealand is a small market and it cannot influence global manufacturers and brands, but we know from our experience at Eunomia that what these companies want is global harmonisation and a level playing field. It's not so much about the small market size, but rather about another respected nation lending weight to the argument by calling for the same requirements as set out in Europe – ensuring New Zealand avoids becoming a dumping ground for products and packaging that don't meet higher international standards. There is an argument that low-income Kiwis need low-cost products, but what they don't need is the exploitation that poor quality products represent – requiring repeat purchases and generating extra waste. They need affordable, goodquality products, new and re-made, which is something else that the circular economy can bring.

On packaging, it is not such a surprise to see how compostable

packaging, which rarely - if ever - gets composted, is being used as an excuse for perpetuating humankind's obsession with convenience at any cost. It would also be great to see something along the lines of the EU Single Use Plastics Directive, and the French Anti-Waste Law, banning all inappropriate and unnecessary single use items across New Zealand, where reuse and refill make more environmental sense.

A lot of the good practice is already here, but often only in local initiatives or partial solutions. Local councils, and some bigger cities, are asked to do an awful lot with very little expertise or money. New Zealand is a small country with limited resources, and in my view it needs economies of scale, and national and strategic solutions. These solutions must still find room for, and harness, the local community experience and the guiding principles of Te Ao Māori. EPR, as part of wider product stewardship, is one way to bring finance to build the better waste and circular economy infrastructure that is so sorely needed, without the need for increased local or national taxation.

Action is needed now

This has to happen quickly, given the 'lost years' of the 2000s and 2010s. Yet the timescales around the new Waste Strategy and WMA (both delayed), and the PS schemes seem relatively slow, with the deferment of a decision on the container return scheme another disappointment. It seems that New Zealand is perhaps 20 years behind Europe in some ways, but has the opportunity to leapfrog to the present – avoiding the mistakes of the past. We are in an extremely serious situation globally with climate change currently likely to hit +2.4 degrees celsius or more, with catastrophic consequences if

we don't do more, and quickly. We are now only talking a five-year remaining carbon budget, with carbon emissions globally still rising. The recent Auckland floods and cyclones emphasise this, and while some things cannot be rushed, there does seem to be a real need for clear and science-driven regulation with teeth and a sense of urgency, to drive a more rapid move to a genuinely circular economy for New Zealand. And I'd very much like to be here to see that happen. **R**

FURTHER READING LINKS

waste strategy
waste-to-energy
UK energy brief
UK facts
EU taxonomy
landfill waste
methane emissions
Europa legal
methane matters
CCA timber regulations
zero waste Europe



Mark Hilton is an aeronautical engineer by background and has a master's degree in environmental engineering and 39 years of experience in industry and environmental consultancy. He specialises in resource-efficiency, circular economy, sustainable procurement, product stewardship, eco-design and environmental training and behaviour change. Mark will be presenting at the WasteMINZ Conference, Expo + Workshops in May.

HOW WILL PROPOSED LEGISLATION IMPACT THE WASTE SECTOR?

Councils around New Zealand are grappling with changes to legislation that will impact bylaws and guidance for local waste minimisation activities. In this article, **Eilidh Hilson** describes some of those legislations and implications.

STABLISHING AN increasingly circular economy for Aotearoa involves Territorial Authorities (TAs) being able to implement systems operating at the highest tiers of the waste minimisation hierarchy.

However, waste minimisation activities supported by proposed legislative changes in the Ministry for the Environment (MfE) waste reduction work programme, may encounter constraints from concurrent bills from other work programmes, which could override them.

The WasteMINZ Territorial
Authorities' Officers Forum Steering

Committee works to identify conflicts with implementing systems that support a circular economy. The group have also requested initial consultation with relevant central government ministries in the development of legislation in the first place.

Proposed and existing legislative changes in Aotearoa that impact the resource recovery sector, include, but is not limited to, the Waste Minimisation Act review, Resource Management Act Reform – in particular the Natural and Built Environment Act (NBA) – Local Government Reform, the Infrastructure Strategy, the Building Act, Health Act, and the Emissions Reduction Plan.

What issues should TAs be aware of?

Housing developments and waste

The proposed amendments to the building code which focus on waste reduction address the largest single source of waste in New Zealand: construction and demolition (C&D). This is timely considering ongoing development in response to housing shortages. Council waste bylaw

reviews can also be used as a tool to address individual building solid waste output once occupied, stating that multi-occupational dwellings need to allow for waste sorting receptacles and adequate removal of different streams. Traditionally, this consideration has not been at the forefront of building design, and bylaws are not yet making this mandatory.

While best practice for a circular economy is to sort waste locally, reverse sensitivities conflicts are increasingly being experienced by TAs. This is where residential subdivisions in previously rural areas are approaching pre-existing reuse facilities such as organics processing areas. There are also queries about how mixed-use operations, such as resource recovery hubs with sorting facilities, educational and hospitality facilities may co-exist in these areas.

Organics to landfill

Focus area two of the Emissions
Reduction Plan states it is exploring
limits or bans on landfilling organics,
with new legislation stated as being
enacted in 2024. Objective 4.4 of

the MfE waste reduction work programme, is "addressing individual material streams and products - organics/food waste". Reviews of individual council Waste Management and Minimisation Plans (WMMPs) are aligning with this, focused on reduction of organics to landfill.

Councils need to be well informed about how changes to land use management and existing user rights through the NBA will affect both current and future consenting of existing and new resource recovery facilities. There is some concern that legislation enacted to protect against environmentally detrimental activities may also work against those that are of benefit to circular economy outcomes for the same area.

Climate change and legacy landfill management

The removal of legacy landfills in areas vulnerable to climate change-related weather events is a costly exercise for TAs. In addition to the costs associated with relocating materials from legacy landfills, the waste disposal levy still applies to disposal of these materials. When

sorting material to recover resources from legacy landfills, councils need to consider the potential for high levels of contaminants, such as asbestos. Councils are increasingly having to plan and budget for disposing of legacy landfill materials.

Resourcing

Mandatory activities for TAs include those under the Local Government Act, Litter Act, and Waste Minimisation Act, such as reviewing WMMPs. Many of these activities require rewrites to reflect changes in the preceding years.

Due to additional mandatory waste data reporting and increasing planning for waste reduction in climate change plans, construction and demolition, procurement policies and event policies, there's an increasing need for resourcing in the sector.

The TAO Forum Steering Committee will continue to monitor any upcoming proposed legislation for impacts on local WMMPs. If you have any questions, contact your TAO Forum Steering Committee members.

"COUNCILS NEED TO BE WELL INFORMED ABOUT HOW CHANGES TO LAND USE MANAGEMENT AND EXISTING USER RIGHTS THROUGH THE NBA WILL AFFECT BOTH CURRENT AND FUTURE CONSENTING OF EXISTING AND NEW RESOURCE RECOVERY FACILITIES."



Eilidh Hilson is the regional waste projects facilitator for the Canterbury Waste Joint Committee. Previously the Christchurch City Council waste minimisation officer for three years, Eilidh mainly focused on kerbside auditing and community education in that role.

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3R.co.nz Adele Rose info@3R.co.nz 0508 3R GROUP Site **54** We're reimagining a world without waste. Our team partners with organisations to design leading product stewardship schemes to advance our circular economy, and provides sustainability support to businesses. Our ChemCollect team collects and disposes of hazardous chemicals for businesses, and together with councils runs events to remove hazardous waste from communities.



AB EQUIPMENT/BUCHER MUNICIPAL

abequipment.co.nz Guy Avery guya@abequipment.co.nz +64 21 489 346 Site **5** Bucher Municipal is a leading supplier to the Australian and New Zealand waste industries, offering an impressive range of waste collection, compaction, street sweeping and sewer cleaning machinery. AB Equipment provides sales, parts and service support for Bucher products here.



ANALYTICA LABORATORIES

analytica.co.nz Sharna McCleary info@analytica.co.nz +64 7 974 4740 Site 48 Analytica Laboratories brings a game changing approach to all your environmental testing needs. From simplicity in quotes and sample collection, to fast results, and great customer service. Analytica are at the forefront of new technologies, providing flexible and tailored services that enable you to succeed.



BHM TECHNOLOGY

bmh.fi Minna Vilkuna minna.vilkuna@bmh.fi +61 43 713 5788 Site 17 BMH Technology's vision is to create solutions for waste to be reborn as raw materials and renewable energy. The TYRANNOSAURUS® waste pre-treatment process enables separating valuable recyclables while refining the rejects into high-quality SRF/RDF for power plants and cement industry or used as feedstock for producing liquid fuels and chemicals.



BIOX INTERNATIONAL

bioxinternational.com Colin Heeney colin@bioxinternational.com +64 21 815 536 Site 57 biOx is the market leader in quality odour and dust suppression systems that work. Having extensive knowledge & experience in the waste/landfill/recycling/demolition and bulk handling industries, we understand constraints and HSWA risks. Offering a range of spraystream cannons, fixed line systems, plus odour suppression products; we have solutions to help.



COOL-SAFE

coolsafe.org.nz Ben Fechney ben@coolsafe.org.nz +64 21 955 317 Site 13 Cool-Safe is Aotearoa New Zealand's voluntary Product Stewardship Scheme for refrigerants. Governed by The Trust for the Destruction of Synthetic Refrigerants, Cool-Safe is building on the work of the former voluntary recovery scheme to inspire and enable the refrigerants industry to reduce the impact of synthetic refrigerants on the atmosphere by 90% by 2035.



COLLECTORS ANONYMOUS

collectorsanonymous.co.nz Rose Jackson rose@collectorsanonymous.co.nz +64 21 169 7430 Sites 55+56 Hamilton City Council is proud to support Collectors Anonymous to bring you a fun and interactive secondhand experience. Visit us to find your unique and sustainable gala threads and accessories. Not only will you be looking awesome but you'll be supporting some great local charities at the same time.



EARTH STARCH ORGANIC SOLUTIONS

earthsos.co.nz Will Hansen will@earthstarch.com +64 27 552 9455

Site **22**

100% landfill diversion with Earth Starch Rapid Technology (ESRT). We have designed out the challenges associated with organics and designed in decentralised systems for community resilience. In four hours ESRT creates an organic ready-to-use soil conditioner. Modular, scalable and requiring only a small footprint whilst giving a sustainable solution.



ecpltd.co.nz Justin McIsaac justin@ecpltd.co.nz +64 27 225 3247 Site 42

ECP are an NZ owned company, delivering innovative compostable solutions, along with bin systems. Turn your organic waste back to the earth, where it originated with easy to use, compostable alternatives. Complementing our compostable "Love our Land range" ECP is the largest NZ supplier of kerbside food waste bins to NZ councils.



ENVIROCON

envirocon.co.nz Greg Heaslip greg.heaslip@envirocon.co.nz +64 27 354 9325 Site **27**

Envirocon is NZ's only low carbon, zero waste construction system. Since 2004, Envirocon has been supplying bulk material storage for the recycling and refuse industry. Our concrete block based construction system delivers a unique combination of durability, flexibility and value. Talk to Envirocon about your MRF/RTS upgrade plans.



eerst.co.nz Satsuki Takenouchi info@eerst.co.nz +64 7 213 0710 Site 2

ENVIRONMENTAL EDUCATION FOR EERST manages Paper4trees, Water4schools and Zero RESOURCE SUSTAINABILITY TRUST Waste Education. The trust conducts waste minimisation education and behaviour change initiatives for schools and the community. In over 4000 schools and preschools nationwide, Paper4trees is an award-winning recycling and tree planting programme. Zero Waste Education is offered in 21 councils.



EROAD

EROAD eroad.co.nz Matt Buckle matt.buckle@eroad.co.nz +64 21 803 684

EROAD's fleet management system has +200,000 connected vehicles and assets globally. It was the first company in the world globally to implement a GNSS/ cellular-based road charging solution across an entire country. EROAD provides fleet businesses with tools to automate regulatory compliance, ensure health and safety, and run a more efficient and sustainable fleet.



EUROFINS | ENVIRONMENT TESTING

eurofins.com Kathleen Wrigglesworth kathleenwrigglesworth@eurofins.com +61 477 322 567

Site 45

A clean and safe environment is a prerequisite for health and quality of life. Eurofins Environment Testing contributes to this by providing market-leading laboratory testing services to industry organisations, environmental consultants and government authorities across NZ. Our state-of-the-art IANZ accredited laboratories provide a range of services to support the waste, resource recovery and contaminated land industries.



HILL LABORATORIES

hill-labs.co.nz Jane Sherrard jane.sherrard@hill-labs.co.nz +64 27 478 6017

GOLD SPONSOR Site 18

Founded in 1984, Hill Laboratories has grown to become New Zealand's largest privately-owned analytical laboratory. We use the latest technologies to supply a broad range of laboratory tests to domestic and international markets in three testing areas: agriculture, environmental & food and bioanalytical.



INTERWASTE

interwaste.co.nz Jason Leong jason@interwaste.co.nz +64 21 972 360

As a New Zealand owned business specialising in the treatment of medical and quarantine waste we play an important role in keeping our country safe. Being the largest specialised waste processor, with four facilities across the country. Our Medicycle recycling programme within majority of Te Whatu Ora works to reduce waste going to landfill.



LOADRITE SCALES

loadritescales.co.nz Ross Allan ross@loadritescales.co.nz +64 27 245 9443 Site 21

LOADRITE scales are the #1 supplier of on board weighing scales to the NZ waste and recycling industries. We supply scales for: front load trucks, rear load trucks, hook trucks, gantry skip trucks, forklifts, wheel loaders, material handlers including integrated weight data to in cab PCs or direct via LOADRITE Insight for Waste. Talk to us for all your payload measurement solutions which now include Legal for Trade systems.



LOCALISED

localised.nz Ian Stupple ian@localised.nz +64 22 099 1759

Site **51**

Localised is the commercial arm of the Zero Waste Network. We partner to provide support with tendering and operations, capacity building, and financial investment to deliver local solutions. As joint-venture partners in three social enterprises we deliver services to local government, currently operating seven community-led resource recovery sites across Aotearoa.



MANCO ENVIRONMENTAL

manco.co.nz Nick Kraan nkraan@manco.co.nz +64 21 750 355 Site 36

Manco is one of NZ's largest manufacturers, distributors and exporters of specialised mobile & stationary plant for waste minimisation, kerbside recycling and materials handling efficiencies. From automated sideloaders, low entry vehicles, multi-compartment kerbside collection to fully electric vehicles, Manco prides itself in finding realistic and robust solutions, whilst being proudly kiwi owned and operated.

METTLER TOLEDO

METTLER TOLEDO

mt.com Luke Kearnev luke.kearney@mt.com +61 39 644 5752

METTLER TOLEDO is a world leading manufacturer and supplier of weighbridge systems and solutions. Weighbridges can help an operation to better track inventory in and out of their facility, gaining valuable insight into material usage. METTLER TOLEDO software solutions offer a user friendly interface for operators to manage transactions.



MY ECO BAG

myecobag.com.au Deanna Crawshaw dcrawshaw@secosgroup.com.au +61 40 333 3406

Site 14

Cardia is a highly awarded Australian global developer, manufacturer and marketer of environmentally friendly sustainable resins, film and finished products derived from renewable resources. Our focus on R&D places us at the forefront of sustainable technology, enabling us to supply the high performing and economical products. Cardia - the quality sustainable choice.



MYNOKE

mynoke.co.nz Lee Watkins lee@mynoke.co.nz +64 27 360 7519

Site 40

MyNoke, meaning 'my earthworms' in Te Reo Māori, receives various organic waste materials from organisations and councils, to create the optimum diet for a range of earthworm species. The earthworms process the waste to produce a valuable soil conditioner, 'Vermicast', which is then used by farmers, gardeners, and horticulturalists.



PACT GROUP

sulo.co.nz Vaughan Jeffares vaughan.jeffares@pactgroup.com +64 21 554 350 Site 11

Sulo Pact Group is a NZ-based manufacturer that specialises in bins and crates for the waste, organics and recycling industry. Sulo Pact Group continues to work in collaboration with NZ local government and their partners to develop customised solutions for all aspects of your collection contracts, including the ongoing supply and maintenance of these assets.



POSITION PARTNERS

positionpartners.co.nz Marcus Bland mbland@positionpartners.co.nz +64 27 5300 826

With more than 350 people in offices throughout Australia, Southeast Asia and New Zealand, Position Partners distributes and supports intelligent positioning solutions for a wide range of industries. For waste management, high precision machine guidance and mapping solutions help managers extend the life of landfill cells through accurate compaction.



RUBBERMAID COMMERICAL PRODUCTS

rubbermaidcommercial.co.nz Tania Glover tania.glover@pacifichygiene.com +64 21 674 792 | 0800 727 367

Rubbermaid Commercial Products® offer a large range of high quality, durable waste management and material handling products. Trusted for durability and productivity, satisfying the needs of many trades and industries including food service, maintenance, waste handling, warehousing and engineering. Brought to you by Pacific Hygiene.



SALTERS CARTAGE

salters.co.nz Andrea Waddell sales@salters.co.nz +64 21 966 410 | 0800 SALTER Salters Cartage specialises in automotive workshop waste disposal and operates nationwide with depots in Auckland, Feilding and Christchurch. We recycle waste oil, coolant, contaminated fuel, used plastic oil containers and oil filters. Salters enables automotive and industrial businesses to accelerate their journey to becoming a more environmentally responsible entity.



SI LODEC NZ

silodec.co.nz Mike Tennent miket@silodec.co.nz +64 21 571 575 SI LODEC started over 30 years ago and since our inception we have remained at the forefront of innovative electronic weigh technology. This makes us the country's premier onboard and in motion electronic weigh specialists, as well as a leader in weighbridge installation and technology.



TE WĀNANGA O AOTEAROA

twoa.ac.nz Jade Strother jade.strother@twoa.ac.nz 0800 355 553 Te Wānanga o Aotearoa is a uniquely Māori learning environment for everyone. No matter who you are, if you're a New Zealand citizen or resident living in NZ, we have amazing study possibilities for you, and we offer a comprehensive range of certificate to degree level qualifications across New Zealand.



TOMRA COLLECTION

tomra.co.nz Jonathan Marshall jonathan.marshall@tomra.com +64 21 728 671 Site 60 With over 10 years in the New Zealand market TOMRA employs over 300 people and is the world leader in optical sensor-based technology. Globally, TOMRA's 80,000 reverse vending machines capture over 45 billion used beverage containers annually. TOMRA Collection is part of the TOMRA Group – which employs approximately 4300 people worldwide.



TONKIN + TAYLOR

tonkintaylor.co.nz Jo Ferry jferrry@tonkintaylor.co.nz +64 9 359 2773

PLATINUM PARTNER Sites 33, 34 + 38 T+T is proud to be a platinum sponsor of the 2023 WasteMINZ Conference. We deliver projects throughout Australia, New Zealand and the Pacific, focussing on collaboration, materials recovery, and the safe disposal of unrecoverable materials. T+T strives to provide leading expertise, and weave safety and sustainability in everything we do.



TRIDENT PLASTICS

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Site 20

Trident Plastics is an established manufacturer of mobile garbage bins for councils and waste management companies, offering the best value for money. Certified to ISO9001 and ISO14001 for the manufacture and supply of wheelie bins and certified to AS4123 for 80, 120, 140, 240 and 360ltr MGBs .



TYREWISE

tyrewise.co.nz Trevor Tutt info@tyrewise.co.nz 0800 897 394 Site 19 Brawler HPS Soft Ride tyres, manufactured by Trelleborg, are designed to perform in harsh recycling and waste management applications delivering the toughness of a solid tyre but the ride comfort of a pneumatic tyre. TRS Tyre & Wheel are owned by Trelleborg Wheel Systems in New Zealand



VIKING CONTAINMENT

containment.co.nz Doug Spain info@containment.co.nz 0800 454 646

Site 41

Viking Containment is New Zealand's leading supplier and installer of geomembrane liners for environmental protection and critical containment. We have extensive experience in liner construction for landfill, municipal wastewater, water storage and agricultural waste applications. To complement our liner systems, our geosynthetic product range includes: geogrids, geonets, geocomposites and geotextiles.



WASTE-ED WITH KATE

katemeads.co.nz Kate Meads kate@katemeads.co.nz +64 27 224 1242 Site **26** Kate and her crew have been educating Kiwis for over 17 years on a variety of topics, including recycling, food waste, cloth nappies, waste free periods, and more. Through working with councils, businesses, schools, and community organisations, Kate works nationwide. Come catch up on our latest programmes and offerings!



WASTE MANAGEMENT NZ

wastemanagement.co.nz Catherine Collins ccollins@wastemanagement.co.nz +64 21 814 505 Site **39** Waste Management NZ is the largest materials recovery, recycling and waste management provider in the country. With over 70 locations across Aotearoa, our team of 1600 are trusted leaders in reliably providing a full range of collections, recovery, treatment and other modern sustainable waste management services.



WEIGHTRAX & ATRAX GROUP

weightrax.com David Wishart d.wishart@weightrax.com +64 9 634 5337 Weightrax manufactures and installs high-quality end-toend weighbridges with full automation solutions and lifetime local service and support. Our leading-edge Weightrax weighbridge software provides anywhere/anytime access (via web browser) to your data. Weightrax is part of the Atrax Group – experts in industrial weighing and dimensioning solutions.



ZERO WASTE NETWORK

zerowaste.co.nz Dorte Wray dorte@zerowaste.co.nz +64 21 975 352 Site 3 Zero Waste Network represents community resource recovery enterprises across Aotearoa. Our mission is to: connect and empower a network of zero waste community enterprises across Aotearoa; inform policy and procurement; trial and deliver zero waste solutions.

