

Author: 3R Group Ltd, for Tyrewise Working Group
Date: 15th June 2015

INTRODUCTION

This document outlines:

- Recent history and research on disposal for end-of-life tyres (ELTs) in NZ
- The tyre industry's recommended stewardship model (Tyrewise)
- Government's current stance on ELT stewardship and regulation
- Actions being taken to help promote progress for ELTs, and an appeal for support

END OF LIFE TYRES IN NZ - BACKGROUND

Around five million tyres come to the end of their useful life in New Zealand every year, representing 62,000 tonnes of material. By weight, 52% is from passenger vehicle tyres, 38% is from heavy road-vehicle tyres and 10% is from off-the-road (OTR) vehicles tyres.

It is estimated that 30% of the tonnage of ELTs goes to material recovery – the rest is presumed to be stockpiled, dumped illegally or going to landfill (consented or otherwise).

In the majority, ELTs are seen as a waste issue, not a resource to be utilised. This contrasts with overseas experience where, provided there is supporting rule making which requires participation and registration, a wide range of end use and energy recovery options have developed.

A survey undertaken in New Zealand in 2012 demonstrated that:

- Most retailers charge consumers a disposal fee ranging from \$2.50 to \$4.00 for a standard car tyre (equivalent passenger unit or EPU); and from \$6.00 - \$16.00 for the truck tyres range. These fees vary widely, are not applied nationally and do not guarantee appropriate recycling or end-uses.
- Tyre Collectors charge the retailers between \$2.00 and \$3.50 per tyre to collect ELTs.
- Processors that do not have an integrated collection model charge collectors to drop off ELTs. Some processors are limited by secure supply of tyres and compete against each other for the small portion of ELTs that companies were prepared to pay to be responsibly managed, while missing out on the larger portion of end of life tyres that still go to landfill.

TYREWISE

Since 2003 the Ministry for the Environment (MfE) has commissioned a number of reports relating to improving outcomes for end-of-life tyres (ELTs). Tyres are consistently identified in these reports as one of New Zealand's most significant and potentially hazardous waste streams, for which no large-scale and sustainable disposal solutions currently exist in New Zealand.

One of the more significant pieces of work undertaken was the Tyrewise Project (2011-2013). This was funded primarily via a minister-initiated application to the Waste Minimisation Fund. It was tasked to research and develop to the point of programme launch a national product stewardship programme for ELTs that would be industry led and government supported.

"We have a significant environmental problem in New Zealand with the disposal of about 4 million tyres annually at the end of their useful life. 85% of those tyres end up in landfills where they leach contaminants that pose a long term risk to the environment. We need to find economic ways in which these used tyres can be put to better use."

Hon. Dr Nick Smith, Minister for the Environment, Tyrewise announcement 14/03/2012

The project was delivered by a mandated working group which represented the tyre industry and other affected parties. These included manufacturers, importers, retailers, consumers, collectors, processors, fleet managers, council and other landfill operators. 3R Group were the project managers and continue to act as facilitators for the industry group. (see appendix 2)

BEST PRACTICE STEWARDSHIP FOR ELTs

The final Tyrewise report, presented to the former Minister for the Environment, Amy Adams in mid-2013, outlined an industry-supported model for a nationwide stewardship programme to deliver vastly improved recycling outcomes by investing in end-use markets, applying a code of practice to tyre storage, collection and transport, and generally bringing order to what has appropriately been described as ‘market failure’. The programme was launch-ready subject to regulation with the purpose of improving the value for end of life tyres in cost effective and environmentally sound ways.

The programme would be funded by collection of an advanced disposal fee (or eco-fee) on all tyres imported to NZ, both loose and on vehicles. This would replace the tyre disposal fees commonly charged to consumers by tyre retailers. The fee would be used for auditing registered collectors, transporters and processors against a code of compliance, applying incentive payments and managing the tyre inventory, and funding research and development to support market development for recycled products. It would also cover the cost of orphan and legacy tyres (e.g. existing stockpiles) and create a contestable fund for community grants to develop regional solutions.

The fee proposed was between \$4.50 and \$5.50 for a standard car tyre (equivalent passenger unit or EPU) which is comparable to best practice stewardship programmes internationally.

In summary, this represents a change from the current situation to address the market failures:

- All tyre importers register with Tyrewise and pay the advanced disposal fee
- At retail, the fee is transparently shown on the invoice to inform the consumer
- All retailers and generators of tyres register with Tyrewise to qualify for free collection
- Collectors register with Tyrewise and are paid to collect ELTs
- Processors register to receive ELTs at no charge. Depending on the end use could qualify for an incentive payment designed to encourage market development for products
- As regional solutions were available, landfill bans would follow.
- A research and development fund specifically invests in market development

The proposed programme was independently assessed under MfE’s own Product Stewardship accreditation criteria and was found to be eligible for accreditation if it went ahead.

LEGISLATION AND REGULATORY CONTROLS

While there are no central or local government regulations that are specific to tyres a number of pieces of legislation exist that could control the storage and disposal of end of life tyres. (Note these do not address market development). Specifically these are:

1. Litter Act – Section 15: It is illegal to dump tyres on any property whether publicly or privately owned, without the owner’s permission. An individual can be fined \$500 and in the case of a body corporate the fine can be up to \$20,000.

2. Resource Management Act (RMA):

Section 9.1 Under the Resource Management ACT no person may use any land in a manner that contravenes a rule in a district plan unless the activity is expressly allowed by a resource consent granted by the territorial authority responsible for the plan. Storing of tyres would be considered a form of land use.

Section 15 Discharge of Contaminants: where tyres are a contaminant.

- 3. National Environmental Standards for Air Quality Regulations 2004 – Clause 7: This regulation prohibits the burning of tyres:**
 - (1) The burning of tyres is prohibited.
 - (2) Sub clause (1) does not apply if the tyres are burnt at industrial and trade premises that have—
 - (a) A resource consent for the discharge produced; and
 - (b) Emission control equipment that is designed and operated to minimise emissions of dioxins and other toxics from the process.
- 4. Local Government Act (Part 8):** This gives local authorities the right to make bylaws to protect the public from nuisance and to maintain public health and safety. It states that this includes the right to pass bylaws on waste management, trade waste and solid wastes.
- 5. Waste Minimisation Act 2008:** This provides a regulatory framework, administered by the Ministry for the Environment for the establishment of product stewardship of end of life products.

SEEKING REGULATORY SUPPORT

A key aspect of the Tyrewise group's recommendations for the model was to request the Minister to declare tyres a 'Priority Product' under the Waste Minimisation Act 2008.

Among a range of benefits, this would enable two critical elements used in successful programmes internationally:

1. Mandatory participation from all tyre importers (no free-riders), and
2. Collection of the advance disposal fee at point of importation for loose tyres via NZ Customs and NZTA for tyres on vehicles. This was considered to be the fairest and most efficient means of collecting the fee at import. The alternative option for loose tyre fee collection was upon quarterly declaration by the importer; this is considered to be more administratively expensive and would require audits to be undertaken to ensure accuracy.

Previous MfE policy statements regarding implementation of regulation had advised that:

"...neither economic instruments nor regulation will be introduced by the Ministry to manage waste unless industry wants those policy tools to be used."

(Parliamentary Commissioner for the Environment, Report on Changing Behaviour: Economic Instruments in the management of waste, 2006, p46)

"The Act provides a regulatory framework for establishing and accrediting product stewardship schemes. At this time, product stewardship schemes are voluntary, but priority products may be regulated to ensure producers and others in the supply chain share responsibility for end-of-life products" (MfE's 'New Zealand Waste Strategy', 2010, p10)

Before a Minister declares a priority product, he or she must (as per section 8 of the WMA): obtain advice from the Waste Advisory Board, consider public concerns, provide the public with an opportunity to comment, and consider the effectiveness of any relevant voluntary product stewardship scheme.

An alternative option is for the Minister to utilise Section 23 of the WMA - Regulations in relation to products (whether or not priority products), materials, and waste – which would require a product regulation be placed on imported tyres. The pathway for consultation is similar to priority product declaration.

PUBLIC CONSULTATION & ECONOMIC ANALYSIS

In the next step of the process, former Minister for the Environment Amy Adams announced public consultation on priority waste streams for stewardship intervention. This commenced in 2014. Tyres were one of four waste streams identified as most likely for intervention (along with electronic waste, agrichemicals and farm plastics, and refrigerants and other greenhouse gases.)

Minister Adams also initiated a further body of work, “Waste Tyre Economic Research” by KPMG, an economic assessment of three scenarios: the current market failure situation (Enhanced Status Quo); a model where government required stewardship activity but took no direct part (Bounded Free Market); and a mandated stewardship programme (the Tyrewise model).

WIDE SUPPORT FOR STEWARDSHIP ACTION

The summary of submissions of the public consultation on priority waste streams was strongly in favour of government intervention on all four waste streams including tyres. Extracts of the executive summary and summary data are below.

“For all four identified waste streams, a majority of submitters were supportive of these products as being the focus of potential government intervention. Many submitters want regulations to be developed to create a ‘level playing field’ for managing these product waste streams...”

“...the majority of submitters were supportive of priority product declaration, with most submitters wanting it to happen sooner rather than later...”

“All the local government submissions were positive for prompt action on the four proposed – and other – waste streams. From a local government perspective, regulatory intervention from central government could achieve benefits that outweigh the costs.”

“Do you think the Minister should declare any product groups as a priority product under the Waste Minimisation Act?” 185 (86%) said yes, while 4 (2%) said no.

Of the submissions relating to tyres, 148 submissions (69%) agreed that tyres should be a priority for the government to consider regulatory interventions, vs. 1 against (<1%). The remainder did not comment on tyres or were unsure.

While the final KPMG report has not yet been made public, Mike Mendonça, Director of Operations for MfE, advised attendees at a recent tyre summit (see next page) that the report concluded the Tyrewise model gave a net economic benefit of +\$16m vs. Bounded Free Market at +\$15m and Enhanced Status Quo at +\$14m.

From these figures we can also conclude that any of the three options are economically favourable compared with taking no action.

SUMMARY OF REPORT FEEDBACK

MfE has commissioned three reports relating to ELTs since 2013. In those,

- ✓ **Industry has recommended a stewardship model, supported by regulation,**
- ✓ **Public consultation has confirmed widespread support for this approach, and**
- ✓ **Independent analysis has found this to be the most economically favourable of three scenarios.**

INDUSTRY COMES TOGETHER AT SUMMIT

As the Tyrewise recommendations came from the mandated industry working group itself and the scheme proposal had been reviewed by the Waste Advisory Board in July 2013 and the public consultation process on priority waste streams had commenced, indicators for a Ministerial response were strong and regulatory action was eagerly anticipated.

To focus industry interest and support for change, 3R Group hosted NZ's first Tyre Industry Summit on 2-3 June 2015. The event focused on ELT stewardship and hosted experts from Canada, USA and Australia who shared their experiences on their own regulated programmes with 87 industry attendees.

Local speakers also highlighted examples where ELTs had caused significant issues for councils, resulting in costly court cases and ratepayer funded clean-up of abandoned stockpiles. The Minister for Environment was invited to open this event but declined due to other commitments. MfE Director of Operations Mike Mendonça was invited to update the attendees on priority waste streams for product stewardship intervention.

MINISTRY REVISES STANCE

In his address, Mike Mendonça told summit attendees that regulatory action for ELTs was not on the Minister's work plan for at least the next 12 months, but also that:

"Right now, landfill is as safe a place as any for ELTs in New Zealand."

In response to the above, a Tyrewise working group member and summit attendee, David Vinsen of the Imported Motor Vehicle Industry Association (IMVIA) issued a media release, with a resulting Rotorua Daily Post article stating:

"Mr Mendonça's announcement was greeted with "a stunned silence" followed by "extreme disappointment verging on anger", especially given the impetus for the Tyrewise project had come from the Environment Minister originally."

In the same article, an unnamed ministry spokesperson repeated the revised stance, stating:

"...end-of-life tyres, while important, were not currently "a primary candidate" for regulation..."

"Overseas experience is that any model is dependent on enduring markets for end-of-life tyres. These markets are not yet mature in New Zealand...."

"Disposal of tyres to municipal landfills is still considered a safe disposal option while markets emerge."

While the first and third statements contradict evidence from previous Ministry commissioned reports and international stewardship programmes, the Tyrewise working group strongly agrees with the second statement regarding development of end-use markets. This is the reasoning behind the allocation of significant funds to research and develop end-use markets in the Tyrewise model.

MINISTRY ACTION IS REQUIRED NOW

In the view of the Tyrewise working group, using the lack of end-use markets to justify taking no regulatory action is a self-fulfilling prophecy.

Every international example shows that appropriate regulation is required to provide the initial framework and conditions for end-use markets to develop. Currently New Zealand has no such regulation.

This was further reiterated by the leading expert on this subject, Mr Glenn Maidment President of the Tire and Rubber Association of Canada, and Chairman of the Canadian Association of Tire Recycling Agencies at the recent tyre summit where he encouraged the industry to “not give up as they were so close to a solution; but not to proceed without that critical piece of regulation that requires all importers of tyres to participate in product stewardship”.

This is based on Mr Maidment’s over 30 years international experience of what leads to successful outcomes for developing markets for ELTs.

The Ministry’s response, and the current ‘downgrading’ of ELTs to an insignificant environmental issue to be dealt with by local council is contrary to all reports commissioned by the Ministry itself.

It also dismisses the tyre industry’s recommendations for a stewardship model that is proven overseas to bring environmental benefit and create jobs, and ignores clear public support for positive change.

American and Canadian governments were forced into regulatory change by massive tyre fires in stockpiles in the 1990’s that created billions of dollars of damage and environmental harm. We have an industry who are proposing a stewardship model that mitigates tyre stockpiles.

The Tyrewise working group are seeking broader political and public support to encourage the Minister to re-prioritise his work-plan to urgently address the ELT issue.

TYREWISE GROUP: NEXT STEPS

Following the recent summit and MfE address, the following actions have commenced.

- *The Tyrewise working group has sent a letter to Minister Smith, requesting an urgent meeting for clarification of his and MfE's revised stance around ELTs*
- *Several additional tyre importers and other industry members have asked to join the Tyrewise working group to show their support for the group's stance*
- *Group representatives have responded to numerous media enquiries and been quoted in resulting articles on the ELT issue*
- *The group is considering a public response in relation to the current situation (some individual member organisations have already issued their own statements)*
- *Council group members are preparing a guide for safe storage of ELTs in conjunction with the recommendations by New Zealand Fire Service for water access*
- *The Territorial Authority steering group are writing a letter of support and will be seeking feedback from authorities on local tyre issues in order to build a stronger national picture*
- *Council group members are circulating this briefing document to mayors and elected councillors in order to raise awareness and generate support for a nationwide approach*
- *Group members are circulating this briefing document to any organisations or individuals who wish to be informed on the issues and help petition for positive change*

WHAT CAN YOU DO TO HELP?

Tyres are used in all aspects of our business and personal activities. How end-of-life tyres are sensibly disposed of is a responsibility that we all share as consumers.

Whether a consumer or industry member, we can all positively influence the outcome of tyre management in our region by staying informed and taking action.

- *Write to your local MP or the Minister for the Environment*
- *Join the discussion; Comment on the 3R blog or email Tyrewise*
- *Sign up for the Tyrewise e-newsletter to receive updates and stay informed*
- *Industry queries? Contact 3R or the working group representative relevant to you*
- *If you are a tyre processor or recycler not familiar with Tyrewise, contact us for more information, and make sure we have your details on our database to receive updates*
- *If you work in Local Government and want to join the discussion on ELT regulation and the Resource Management Act, please contact 3R Group*

See appendix 2 for contact details of all Tyrewise working group members

APPENDICES

1. MINISTRY FOR ENVIRONMENT BACKGROUND ON THE ELT ISSUE

Reproduced from MfE web page: *Responsibly managing waste from tyres. Last updated 02/07/2014*

Why tyres are a problem

Old and unwanted tyres can be a problem in New Zealand and overseas because:

- whole tyres cause problems in landfills because they are bulky, trap air, and rise to the surface
- tyres dumped or stockpiled above ground are a major fire risk. Tyre fires produce highly toxic gases and are hard to control. The last major New Zealand tyre fire cost local authorities and the Department of Conservation over \$90,000 in fire-fighting and clean-up costs, polluted local soil and streams, and required evacuation of local residents
- illegally dumped tyres create an eyesore and impose costs on ratepayers and landowners for removal
- stored tyres can attract vermin and provide breeding area for mosquitoes
- tyres disposed of to landfill represent a significant waste of resources which could be recycled or recovered for energy.

The number of tyres requiring disposal in New Zealand has increased sharply since the early 1990s. An estimated 4 million car and light truck tyres, or one tyre for every New Zealander, reach end-of-life each year.

When large truck and off-road vehicle tyres are included, an estimated 62,000 tonnes of waste tyres are generated each year, of which an estimated 29 per cent are re-treaded, reused on farms as silage weights, recycled into other products, or exported for tyre-derived fuel. Most of the remainder are put in landfills, and some are dumped illegally. Regions that have experienced significant illegal dumping or stockpiling of tyres in recent years include Auckland, Waikato, Hawke's Bay, Whanganui, and Invercargill.

What New Zealand is doing to manage waste from tyres

Research

In 2003, two research reports were commissioned by the Ministry to find out the extent of the end-of-life tyre problem in New Zealand and suggest possible solutions.

- [Management of end-of-life-tyres](#) – Firecone
- [End-of-life-tyre management: storage options](#) – MWH

Tyre Track

From 2004 to 2009, the Motor Trade Association and the Ministry ran the Tyre Track pilot programme. This voluntary good practice programme facilitated and tracked tyre collection for recycling and environmentally sound disposal.

By its conclusion the programme had engaged about a third of the industry nationwide but had not successfully increased recycling. Tyre Track finished in 2009 as the Waste Minimisation Act 2008 had been passed and implemented.

Tyrewise

In 2012, the Product Stewardship Foundation secured funding from the major tyre companies, the wider motor trade industry, and the Waste Minimisation Fund to involve key stakeholders in the design of an effective product stewardship model for end-of-life tyres in New Zealand under the Waste Minimisation Act. The [Tyrewise project](#) has published working papers and made recommendations to the Minister for the Environment in 2013.

2. TYREWISE WORKING GROUP MEMBERS
(Updated 12/06/2015)

Organisation	Representative	Position	Email Address	Contact
3R Group Ltd Develop recycling programmes for used products	Adele Rose	CEO & Tyrewise Facilitator	adele@3R.co.nz	w 06 872 7235 m 021 3555 82
Motor Trade Association (Inc.) (MTA) representing tyre generators	Liezel Jahnke	Environmental & Fuel Services	liezel.jahnke@mta.org.nz	w 04 381 8843 f 04 385 9517
	Greig Epps	Industry Relationship Manager	Greig.epps@mta.org.nz	w 04 381 8816 m 027 846 9768
Bridgestone NZ Ltd	John Staples	Group General Manager Bridgestone/Firestone	John.Staples@bridgestone.co.nz	w 09 589 4235 m 021 957 432 f 09 919 5302
Goodyear Dunlop Tyres (NZ) Ltd	Bill Prebble	Head of Technical, Product and Aviation	bill_prebble@goodyear.com	0800 386567 m 0274 425 632 w 04 5288 009
Value Tyres NZ Ltd representing the independent tyre importers	Bruce Donaldson	Managing Director	admin@valuetyres.co.nz	w 03 344 8801 f 03 349 7868
Motor Industry Association Incorporated (MIA) representing tyres on <u>new</u> vehicles	David Crawford	Chief Executive Officer	david@mia.org.nz	w 04 972 5663 m 027 569 8263
Imported Motor Vehicle Industry Association Incorporated (IMVIA) representing tyres on <u>used</u> vehicles	David Vinsen	Chief Executive Officer	vinse@imvia.co.nz	w 09 573 3058 m 021 840 520 f 09 5733062
The NZ Automobile Association Incorporate (AA) representing consumers	Stella Stocks	General Manager Motoring Services	sstocks@aa.co.nz	w 09 966 8908 m 021 772242
NZTRACA (NZ Tyre Recyclers and Collectors Association) representing members	Jo Knight & Jim Laughton	Facilitator / Representative	jo@zerowaste.org.nz	w 09 48 235 25 m 021 279 9487
Local Government NZ nominated representative Taupō District Council	Brent Aitken	Asset Manager Solid Waste	baitken@taupo.govt.nz	w 07 376 0899 f 07 378 0118
Insight Perspectives Ltd	Mark Gilbert	Chair of Auto Stewardship NZ and Tyrewise Group	mark@gilbert.kiwi	m 021 972 244

3. REFERENCES AND LINKS

Tyrewise Project: Outline

<http://tyrewise.co.nz/project-phase/>

Milestone reports (all on same link)

<http://tyrewise.co.nz/project-phase/milestones/>

Milestone		Tasks
1	Launch Project	Ensure mandate supplied from each partner organisation Develop and launch information portal website – www.tyrewise.co.nz Prepare Stakeholder Consultation Plan and publish to website
2	Critique of Existing Systems and Stakeholder Consultation	Investigate NZ and international situation regarding used tyres and their collection and disposal Hold session at WasteMINZ Roundup in Hawkes Bay in May 2012 to describe preliminary findings and receive feedback
3	Investigate alternative uses	Investigate alternative uses for collected tyres (NZ and international)
4	Identify options	Identify range of feasible product stewardship options and their costs and benefits (economic, environmental and social)
5	Identify industry preferred option	Develop set of guiding principles for the ELT product stewardship programme
6	Consult with industry stakeholders	Run session at WasteMINZ Annual Conference in October 2012 Complete feedback report Share summary of findings and ELT working group interim views with WasteMinz stakeholders and report feedback
6A	Additional public consultation	Run two additional public consultation workshops following the release of Scoping Report 4 Share outline of the proposed scheme and how it will apply to stakeholders throughout the supply chain and obtain feedback Complete feedback report, share with the Working Group and publish on website
6B	Waste Advisory Board	Prepare a briefing paper for the Waste Advisory Board in response to question raised in July 2013 as result of review of progress to date.
7	Scheme launch preparation	Prepare for product stewardship programme accreditation application Develop business plan including financial model & cost benefit analysis Prepare for programme launch including marketing & comms. plan Summarise project events and findings Complete final project report, share report with Stakeholders and publish on website

Ministry for Environment: Published items (available on MfE website) – links below

[MfE: Priority waste streams for product stewardship intervention: Summary of submissions](#)

[MfE: Priority waste streams for product stewardship intervention: A discussion document](#)

[MfE: New Zealand Waste Strategy: Reducing harm, improving efficiency](#)

Links to the Firecone and MWH reports from 2003 are in Appendix 1.