

Pathways for Right to Repair in Aotearoa New Zealand

A report by WasteMINZ's Product Stewardship Sector Group Right to Repair working group

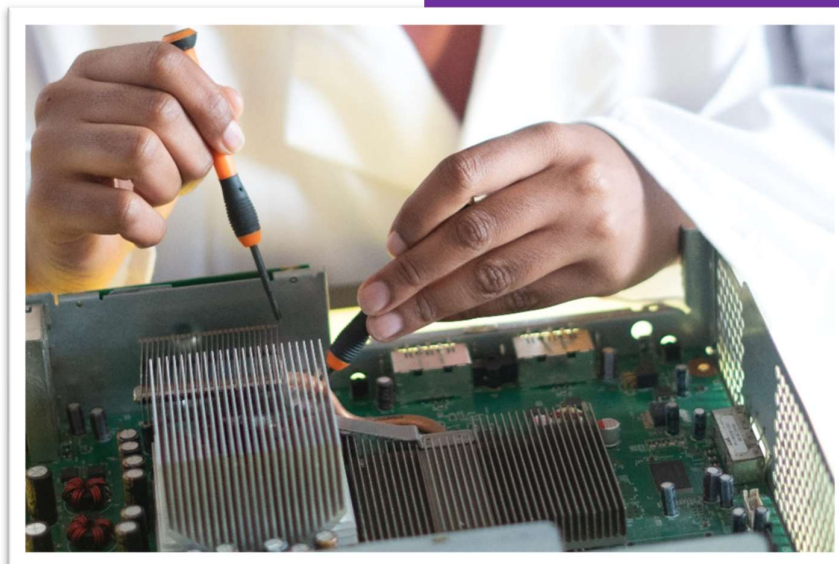


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Coordinator:

Sarah Pritchett (WasteMINZ)

Members:

Professor Graeme Austin (School of Law, Te Herenga Waka – Victoria University of Wellington)

Vicktoria Blake (Bay of Plenty District Health Board)

Hannah Blumhardt (New Zealand Product Stewardship Council and The Rubbish Trip)

Karen Driver (Envision and Zero Waste Network)

Dr Paul Smith (Consumer NZ)

Peter Thorne (Reclaim)

In August 2019 a right to repair working group was established as part of WasteMINZ's Product Stewardship Sector Group. The group comprised people with a professional interest in Right to Repair. The initial focus of the group was to research what was happening around the world in the area of right to repair legislation. This initial research led to an article for WasteMINZ's magazine *revolve*.¹ This article was later published in the *American Public Works Association magazine*.² Following the publication of the *revolve* article, the group decided on a broader approach to the issue due to the challenges of advocating for right to repair, particularly if items are not designed to be repairable in the first instance. This report, therefore, provides an introduction to the broader issue of a circular economy and design for repairability, before examining right to repair and how it could be legislated for in Aotearoa New Zealand.

¹ <https://www.wasteminz.org.nz/wp-content/uploads/2020/03/E-REV-March-2020.pdf>

² <https://apwa.partica.online/reporter/june-2020/columns/shiny-new-things>

CONTENTS

Executive summary	3
1. Introduction – The problem.....	3
2 Ōhanga Āmiomio - Circular Economy	5
3. A tool for getting there - Right to Repair	5
3.1 Planned obsolescence.....	5
3.2 Cost and ease of repairing over replacement.....	6
3.3 Lack of knowledge about consumer right to repair.....	7
4. The global scene - legislative steps towards right to repair.....	8
4.1 The European Commission	8
4.2 The USA.....	9
4.2 Australian laws with right to repair principles.....	10
5. recommendations: the key to unlocking the right to repair toolbox in Aotearoa	11
5.1 The Consumer Guarantees Act	11
5.2 Waste Minimisation Act 2008.....	11
5.3 Additional legislation	12
5.4 Right to Repair in the context of other obligations	13
6. Conclusion.....	13
7. Bibliography	15

EXECUTIVE SUMMARY

E-waste is a growing problem both in Aotearoa New Zealand (Aotearoa) and globally, and a symptom of the linear economy. This report investigates how right to repair (RtR) principles could address the problem of e-waste and accelerate the transition to an *ōhanga āmiomio*/circular economy. RtR tackles issues such as planned obsolescence, the costs of repair over replacement, and a lack of knowledge about consumer rights.

Globally, attempts to mandate RtR remain nascent, but small steps have been made in the United States of America (USA), Australia and more definitively in Europe. Aotearoa has some existing legislation that, with the right amendments, could provide a clear pathway for embedding RtR principles. These include the Consumer Guarantees Act, with specific recommended amendments being:

- The removal of section 42 so that retailers and manufacturers cannot avoid obligations to repair faulty items but the removal of this obligation for secondhand resellers of products
- The inclusion of a defined useful life for electrical products that the CGA covers, and also a period of time to which a consumer should expect an electrical product to remain “fault free”
- The removal of the (refundable) fee required by many retailers before an item is sent to the manufacturer to be assessed for repairs to remove a barrier to people seeking repairs for a faulty item.

Mechanisms available under the Waste Minimisation Act (WMA) could also be amended to prioritise RtR. Specifically, a product stewardship scheme for the recently announced priority product of e-waste could include:

- requirements that manufacturers make available diagnostic information, tools and parts to consumers and independent repairers
- economic levers to incentivise the repair and refurbishment of electronic goods over recycling, including for demo models or “last year’s models” that have not been used by a consumer but are no longer being sold by a retailer
- a mandatory labelling system that allows consumers to determine before purchase whether goods can be repaired easily and affordably (i.e. availability of spare parts; ease of repair (e.g., whether non-proprietary tools are needed to repair the product); and whether batteries can be replaced easily by the consumer)

In addition under s 23(1)(a) of the WMA a regulation could also be passed to ban landfilling of e-waste.

Additional measures, such as an explicit focus on the waste hierarchy in the WMA, could also make Aotearoa a leader in RtR measures.

1. INTRODUCTION – THE PROBLEM

In a 2019 Consumer NZ survey, 65% of respondents expressed concern about e-waste.³ E-waste can be broadly defined as anything with a plug or battery.⁴ This concern is justified given New Zealanders produce approximately 20.1kg of e-waste per person per year (about 99,000 tonnes collectively).⁵ This figure is expected to rise to 26.9kg per person by 2030.⁶ The United Nations (UN) identifies e-waste as

³ Consumer NZ (2019). Consumer Issues Survey 2019.

⁴ See the European Commission’s definition at www.legislation.gov.uk/ukxi/2013/3113/schedule/2/made

⁵ Blake, V, Farrelly, T and J Hannon (2019) “Is Voluntary Product Stewardship for E-Waste Working in New Zealand? A Whāngarei Case Study” In *Sustainability* 2019,11, 3063.

⁶ Dreaver, Charlie (2018) The Fight against e-waste continues. RNZ.

the fastest growing part of the world's domestic waste stream⁷ and a United Nations University report singled out New Zealand and Australia for the high rates of e-waste they produce.⁸

The rise in e-waste reflects the ever-increasing demand for appliances, devices, phones and computers. This drives an increased demand for the raw materials used to make them, such as oil, iron, gold, palladium, platinum, copper and lithium-ion. The mining, transportation and processing of these materials use large amounts of energy and produce significant greenhouse gas emissions and pollution.⁹ In addition, some of the minerals used in electronic goods, such as cobalt and mica, are linked with unethical and dangerous child labour in developing countries with significant health risks.¹⁰

Only an estimated 20% of the approximately 45 million tonnes of e-waste produced globally per year is actually recycled.¹¹ Data on how much e-waste is recycled in Aotearoa is lacking. However, research¹² undertaken in 2018 found that only 1.8% of the estimated e-waste generated in the Whāngarei District each year was recycled through available municipal services. The research found that cost and lack of knowledge of available services were barriers to engagement in e-waste recycling, while general recycling behaviours and socio-demographic factors did not significantly influence e-waste behaviours in the district.

Even when recycled, global e-waste material flows still present other serious issues, including:

- e-waste is often transported to developing countries, sometimes illegally. At the time of writing, all e-waste collected in Aotearoa is exported for reprocessing.
- e-waste contains harmful materials such as lead, cadmium, chromium, brominated flame retardants and polychlorinated biphenyls, presenting risks to human and environmental health (including all ecosystems) if not disposed of safely.¹³
- the harmful materials contained in e-waste can be released into the global environment through the dumping of material along riverbanks, burning of e-waste to recover precious metals, manual disassembly, or disposal to landfills or open dumps.¹⁴

Measures are needed to ensure that e-waste is recycled responsibly and ethically. However, for the reasons outlined above, significant reductions in demand for products that result in e-waste is the first priority. Reducing demand for these products will address the environmental and ethical issues associated with using raw materials to make these goods, while minimising the environmental and health impacts of disposal. Policies that enable an item's repair (over replacement) would better ensure an item is used for its original purpose for as long as possible, before eventually being recycled. Recognition of the need to reverse the linear economy model of extraction-use-disposal has triggered an aspiration to transition to a circular economy in many countries, including Aotearoa.

⁷ United Nations University (2017) E-waste Rises 8% by Weight in 2 Years as Incomes Rise, Prices Fall.

⁸ Baldé, C.P., Forti V., Gray, V., Kuehr, R., Stegmann, P (2017) The Global E-waste Monitor – 2017, United Nations University (UNU), International Telecommunication Union (ITU) & International Solid Waste Association (ISWA), Bonn/Geneva/Vienna

⁹ United States Environmental Protection Agency (n.d) Basic Information about Electronics Stewardship.

¹⁰ Cavazuti Lisa, Christine Romo, Cynthia McFadden and Rich Schapiro (2019) 'Zone Rouge': An army of children toils in African mines NBC News AND Amnesty International (2016) Exposed: Child labour behind smart phone and electric car batteries.

¹¹ Vianney Vaute (2018) Recycling Is Not The Answer To The E-Waste Crisis Forbes.

¹² Blake, Vicktoria (2018) The e-waste management behaviours of household consumers in Whangarei, New Zealand A thesis submitted partial fulfilment of the requirements for the degree of Master of Environmental Management at Massey University.

¹³ World Health Organisation (n.d) Children's health: electronic waste.

¹⁴ World Health Organisation (n.d. 2) Electrical/Electronic Waste and Children's Health DRAFT.

2 ŌHANGA ĀMIOMIO - CIRCULAR ECONOMY

The Ministry for the Environment (MfE) has a stated preference for transitioning to a circular economy,¹⁵ and has announced new priority products for regulated product stewardship.¹⁶ The kaupapa behind circular design is not new and is still reflected in many indigenous worldviews that are based on an understanding of interconnectedness and the need, if humans are to survive, to respect nature and minimise harmful effects on the environment. In 2019, MfE and the Ellen MacArthur Foundation hosted Ōhanga Āmiomio – Circular Economy Pacific Summit in Rotorua to explore how indigenous knowledge can inform and guide a radical shift towards a global circular economy.

The Ellen MacArthur Foundation describes the Circular Economy as being “based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems”.

The European Green Deal “Circular Economy Action Plan”¹⁷ (2020, p 6) articulates the challenges faced in transitioning to a circular economy:

While up to 80% of products’ environmental impacts are determined at the design phase, the linear pattern of “take-make-use-dispose” does not provide producers with sufficient incentives to make their products more circular. Many products break down too quickly, cannot be easily reused, repaired or recycled, and many are made for single use only.

One way of addressing these challenges is to adopt legislation that requires a circular approach to product design and marketing, so that products are made to last longer and be more easily repaired. Such legislation would render single or limited use items the exception, rather than the rule.

RtR principles, when legislated, can be a step towards a circular economy where repair is prioritised and enabled through various measures. As noted, the concept of ōhanga āmiomio - circular economy is echoed in indigenous worldviews, as well as pre-industrial Western society. Even in recent times, repairing was the default position, out of necessity, in Aotearoa. Mandated RtR could reinstate this default and may be the sharpest tool in the toolbox to move Aotearoa to a circular economy.

3. A TOOL FOR GETTING THERE - RIGHT TO REPAIR

In the broadest sense, RtR gives consumers access to spare parts, manuals, and diagnostic information. Access to diagnostic information is especially important for consumer products with embedded software. With some products, where there are serious safety concerns, access to spare parts, manuals, and diagnostic information might be limited to registered technicians. Even so, while consumers might be precluded from conducting repairs themselves, RtR measures could encourage competition in aftermarket for registered repair services and make getting items repaired more affordable. RtR could also encourage better product design while highlighting consumer rights; for example, by addressing planned obsolescence.

3.1 Planned obsolescence

Planned obsolescence is one of the main issues RtR aims to address. Planned obsolescence has existed for nearly 100 years and is a deliberate policy of encouraging replacement over repair by, for example, frequently changing the product design, not providing spare parts, gluing batteries into mobile phones

¹⁵ Ministry for the Environment (n.d) Circular Economy – Ōhanga Āmiomio.

¹⁶ Ministry for the Environment Regulated Product Stewardship (29.7.20).

¹⁷ European Parliament, Council of the European Union (2020) A New Circular Economy Action Plan.

to inhibit replacement, requiring proprietary tools to access a product's mechanism or preventing software updates for older models of electronic goods.

Planned obsolescence has become so ubiquitous that many consumers don't seek to repair broken products anymore, choosing to replace them instead. Planned obsolescence is linked to the marketing of new models of existing products that aims to convince consumers that buying the latest model is essential.¹⁸ This can be seen in the over-hyped release of new iPhone models where people queue overnight to be one of the first to purchase it.¹⁹ New top of the line vacuum cleaner models are also regularly released without much improvement on the old model but are marketed so as to compel consumers they need to "upgrade".²⁰ The 2018 Whāngarei study²¹ noted that respondents had disposed of 25% of information communications technology, 23% of handheld devices and 29% of phones due to a lack of new or advanced features. Qualitative responses to the study included respondents commenting on the need to upgrade electronics because the memory is no longer large enough to run current programs or because old devices were so "outdated" they couldn't buy replacement parts for them.

A recent Consumer NZ study, however, found that this consumer behaviour may not apply to appliances with 78% of respondents saying they only replace appliances when they break down.²²

3.2 Cost and ease of repairing over replacement

RtR also seeks to address the sometimes prohibitive cost of repairing goods. In Consumer NZ's annual survey of members (2019) only 41% of respondents said they 'usually' or 'always' get something repaired rather than replacing it, while 53% said they 'sometimes' do and 6% said they 'never' do. The Whāngarei study found that one of the reasons consumers don't get items repaired is the high repair costs or the inability to have an item repaired, particularly for small household appliances (66%), large household appliances (72%), audio visual equipment (63%), and electrical tools (59%). Research in the United Kingdom (UK) found that an item's original purchase price may influence whether an item is repaired, with over 50% of the respondents saying they would not repair an item they paid less than £ 50 (approximately NZD\$90) for.²³ This could be because more expensive items are considered worthy of repair (because of the original investment) or because cheap electrical and electronic equipment is perceived to automatically have a short lifespan and thus not worth fixing. One respondent in the Whāngarei study stated "[I can't] afford the stuff that doesn't break", implying that repair is not even an option to be considered for cheap items. The Consumer NZ survey mentioned above found that 78% of New Zealanders said they are willing to pay more for kitchen or laundry appliances that last longer – but fewer than half (46%) find it clear which appliances will be more durable.

The discrepancy between repair costs replacement costs is partially, but not always perhaps, due to the cost of labour in the country where an item is made and the cost of labour for a New Zealand repairer, as explored in the examples below.

¹⁸ Hamilton, C (2010). Consumerism, self-creation and prospects for a new ecological consciousness. *Journal of Cleaner Production*, 18(6), 571–575. As cited in Blake, V. (2018) *ibid*.

¹⁹ Field, Matthew (2018) Apple fans queue to buy new iPhone XS and XS Max despite £1,449 price tag. Telegraph online.

²⁰ James, Faye (2018) Dyson releases super-powerful cordless vacuum that will 'deep clean anywhere in your home' - but would you pay \$899?. Daily Mail Australia online.

²¹ Blake, Vicktoria (2018) *Ibid*, fn 8.

²² Consumer NZ (2020) 78% of Kiwis willing to pay more for appliances built to last, but lack information they need. Consumer NZ online.

²³ Martin, Williams and Clark (2006) as cited in Blake, V. (2018) *Ibid*.

When repairing becomes more expensive than replacing

Two recent examples highlight the discrepancies between repair and replacement costs.

A 5-year-old vacuum cleaner had lost its automatic cord retraction functionality. The owner enquired about having it fixed while having the vacuum cleaner serviced. The quote was \$500 (approximately \$100 more than the cost of replacing with a new one of the same model) even though the vacuum cleaner was a Miele, manufactured in Germany, which has similar wage rates to Aotearoa.

A one year old Huawei smartphone (retailing for approx. \$250) had a broken screen repaired for \$100. The high cost compared to the price of the phone was explained by New Zealand's high labour costs compared to the country of manufacture (China).

3.3 Lack of knowledge about consumer right to repair

Another issue RtR could seek to address in Aotearoa is the lack of knowledge consumers have about their rights to have an item repaired by the manufacturer or retailer. In Aotearoa this right is enshrined in s 12 of the Consumer Guarantees Act 1993 (CGA):

Section 12, Guarantee as to repairs and spare parts states:

Subject to sections 41 and 42, where goods are first supplied to a consumer in New Zealand (whether or not that supply is the first-ever supply of the goods), there is a guarantee that the manufacturer will take reasonable action to ensure that facilities for repair of the goods and supply of parts for the goods are reasonably available for a reasonable period after the goods are so supplied.

However, as noted in s 12, s 42 provides a way out of this obligation for manufacturers and retailers:

Section 42 Exception in respect of repairs and parts states:

(1) Section 12 does not apply where reasonable action is taken to notify the consumer who first acquires the goods from a supplier in New Zealand, at or before the time the goods are supplied, that the manufacturer does not undertake that repair facilities and parts will be available for those goods.

(2) Where reasonable action is taken to notify the consumer who first acquires the goods from a supplier in New Zealand, at or before the time the goods are supplied, that the manufacturer does not undertake that repair facilities and parts will be available for those goods after the expiration of a specified period, section 12 shall not apply in relation to those goods after the expiration of that period.

So while the CGA places a general obligation on manufacturers and their retailers to ensure that spare parts and repair facilities are available for an undefined period after a product has been sold, this is undermined by s 42 that allows the repairer or manufacturer to warn buyers they will not be providing repairs or spares. This significant loophole enables retailers and producers to easily opt out of the repair requirement.²⁴ In addition, under the CGA, repair facilities don't need to be available to a consumer or independent repairer and can be located overseas. Although the Act specifies that repairs be completed in a "reasonable" amount of time, "reasonable" is not defined and can, according to complaints made to Consumer NZ, in reality, take a long time to complete. Some retailers also require

²⁴ Consumer (2020) Right to Repair: Too many products being dumped. Available from Consumer NZ online.

a significant fee from the consumer before sending the product back to the manufacturer for assessment and repair. While the fee is refundable if the claim is accepted it can be off-putting for consumers in making a CGA claim.

Furthermore, New Zealanders may be unaware of their rights under the CGA, given retailers are increasingly offering extended warranties where a customer pays extra with their purchase for an “extended warranty” beyond the manufacturer’s usual year-long warranty. Consumer NZ estimates 50-60% of big appliance and tech purchases, as well as furniture and bed sales (mainly from Noel Leeming and Harvey Norman), are offered an extended warranty.²⁵ Extended warranties are generally unnecessary as the CGA sets minimum guarantees for all products and services so a consumer can seek repairs, replacements or refunds for faulty goods beyond the one-year manufacturer’s warranty. For example, if a two-year-old appliance breaks down one week after the manufacturer’s warranty expires, it should still be fixed under the obligations imposed by the CGA because an appliance subjected to normal use is expected to last longer than 2 years.

One of the key selling points behind the extended warranty is the offer of a replacement for faulty products rather than the obligation to have an item repaired or attempt to have it repaired. This can lead to the practice of retailers and consumers (if given the choice) opting for replacement over repair, leading to the creation of more unnecessary e-waste.

In overseas jurisdictions, some steps have been taken to address these issues using specific legislation or by enacting clauses within existing legislation.

4. THE GLOBAL SCENE - LEGISLATIVE STEPS TOWARDS RIGHT TO REPAIR

In recent years the European Union (EU), and several states in the USA, have attempted to legislate for the RtR. In addition, Australian consumer and copyright law includes some RtR principles.

4.1 The European Commission

Globally, examples of regulations requiring design for repairability are difficult to find. However, in 2009, the European Commission (EC) established Directive 2009/125/EC “for setting of ecodesign requirements for energy-related products”,²⁶ to regulate energy efficiency and increase “some circularity features of energy-related products”. In 2019 the EC adopted new rules that incorporate RtR principles and require that by 2021 appliance makers operating in the European Union (and Britain) will:

- make spare parts and manuals available to independent repair shops for up to a decade; and
- ensure parts must not require specific (i.e. proprietary) equipment to fix.

The new rules will initially apply to refrigerators, washing machines, dishwashers and televisions and are aimed at making it easier to get items repaired by registered technicians, rather than enabling consumers to do their own repairs.²⁷

This year the EC released a 2020 Circular Economy Action Plan²⁸, which aims to address circularity by proposing a revision of EU consumer law to ensure that consumers receive trustworthy and relevant

²⁵ Consumer NZ readers are presumably a lot more informed about their existing consumer rights than the general public.

²⁶ European Parliament, Council of the European Union (2009) Directive 2009/125/EC - Establishing a framework for the setting of ecodesign requirements for energy-related products. OJ L 285, 31.10.2009, p. 10.

²⁷ European Commission (2019) New rules make household appliances more sustainable.

²⁸ Ibid, fn 12. Other measures include increasing recycled content in products, while ensuring their performance and safety; enabling remanufacturing and high-quality recycling; reducing carbon and environmental footprints; of hazardous chemicals in products, and increasing their energy and resource efficiency; mobilising the potential of digitalisation of product information, including solutions such as digital passports, tagging and watermarks.

information on products at the point of sale, including about their lifespan and the availability of repair services, spare parts and repair manuals, as well as strengthening consumer protection against greenwashing and premature obsolescence, and setting minimum requirements for sustainability labels/logos and for information tools.

The Circular Economy Action Plan 2020 also specifically mentions RtR principles relating to electronics and Information and Communications Technology (ICT), with the inclusion of a planned Circular Electronics Initiative aimed at mobilising existing and new instruments to ensure:

- devices are designed for energy efficiency and durability, reparability, upgradability, maintenance, reuse and recycling;
- implementation of RtR, including a right to update obsolete software;
- introduction of regulatory measures on chargers for mobile phones and similar devices, including the introduction of a common charger and improving the durability of charging cables; and
- improvement of the collection and treatment of e-waste, including by exploring options for an EU-wide take back scheme to return or sell back old mobile phones, tablets and chargers.

This Directive could have both positive and negative impacts for Aotearoa. Manufacturers with product lines that do not comply with the Directive will still want to sell them and countries not bound by the Directive, such as Aotearoa, could become the perfect market to move them on to. However, if spare parts are made available in Europe, they should be made available in Aotearoa, too.

4.2 The USA

4.1.1 Starting with farmers

In 2019 RtR became a political issue in the USA when the then presidential hopefuls, Bernie Sanders and Elizabeth Warren, indicated their support for federal RtR legislation to allow farmers to fix their own tractors. Currently, companies like John Deere build software into their products that restrict repairs to authorised dealers only. These dealers may be expensive and a long distance from the farm, causing farmers to resort to software hacking and illegally sourced firmware to diagnose problems and make repairs.²⁹ These strategies are also contrary to farming traditions; farmers have always carried out repairs on their own equipment when needed.

The first RtR legislation to be passed in the USA is the 2012 Massachusetts H4362 (An Act protecting motor vehicle owners and small businesses in repairing motor vehicles).³⁰ The Act requires vehicle owners and independent repair facilities in Massachusetts to have access to the same vehicle diagnostic and repair information that is available to authorised repair facilities. While this legislation was enacted only in Massachusetts, motor vehicle manufacturers operate in a national market so the Massachusetts measures resulted in a Memorandum of Understanding amongst the major car manufacturers in the USA to share repair information with independent mechanics across the entire country.

4.1.2 Electrical appliances

Campaigners in the USA are now working to have RtR legislation enacted that targets electrical appliances and devices with a Model State Right-to-Repair Law that would standardise rules for the national products market. Under the proposed legislation, manufacturers would be required to share diagnostic and repair information with independent repairers as well as with authorised ones (see

²⁹ Weins, K (2018) John Deere Just Swindled Farmers out of Their Right to Repair in Wired online. AND Gault, Matthew (2019) Bernie Sanders calls for a right to repair-law for farmers Vice online.

³⁰ Commonwealth of Massachusetts (n.d.) Bill H. 4362.

section 4.1.3 below for more on this). It would also be illegal for companies to use software updates to disable devices that have been repaired by non-authorized repair shops.³¹ However, a strong lobby group of tech giants such as Apple, along with the Association of Home Appliance Manufacturers (AHAM), has so far ensured that while 20 states have considered or are considering digital RtR legislation, no state has yet successfully enacted it.

Those opposing RtR have raised concerns about consumer safety and decreased security, as well as intellectual property rights (IPRs). Meanwhile, RtR proponents argue that releasing diagnostic tools would reduce the likelihood of people resorting to illegal hacking to fix items. While safety is always an important concern, the authors of this report believe that it should not become a pretext for protecting monopolies in spare parts and after markets for repair services.

4.1.3 Right to repair and Intellectual property

One of the arguments against RtR is that allowing access to repair manuals could impinge on the intellectual property rights (IPR) of a company. Section 1201(a)(1) of the Digital Millennium Copyright Act (DMCA) 1998³² prohibits the circumvention of technological protection measures (TPMs) that control access to computer software embedded in consumer products. The Act defines “circumvent” as “to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.” However, to ensure that IPRs continue to provide appropriate incentives to innovate while not creating unwarranted barriers to competition in the spare parts and repair services markets, the DMCA also allows exemptions to this prohibition. In a positive step towards RtR, in 2018 exemptions were adopted (or renewed) that:

- enable interoperability between software applications and computer programs on the device or permit removal of software from the device, and is not accomplished for the purpose of gaining unauthorized access to other copyrighted works.
- allow diagnosis, maintenance, or repair of a range of consumer products, when this is not accomplished for the purpose of gaining unauthorized access to other copyrighted works.
- to allow diagnosis, repair, or modification of motorized land vehicle³³ functions contained or controlled by computer programs.³⁴

The exemptions (which remain in place for three years, or longer if renewed) allow consumers to circumvent TPMs in order to access software for the above purposes. US agencies are likely to come under increasing pressure to widen these exemptions – e.g., to ensure third party repairs can be carried out more easily and safely.³⁵ Some manufacturers are listening: in 2019, Apple announced it would loosen the requirement for only authorized Apple repair shops to fix their devices. However, so far this is only limited to out-of-warranty items and US-based customers.³⁶

4.2 Australian laws with right to repair principles

In Australia the Copyright Act 1968 also prohibits the circumvention of TPMs, generally. However, section 10(1)(d) of the Act specifically excludes measures that limit access to software embedded in consumer products.³⁷

³¹ Singh, Manish (2016) iPhone error 53: Apple Wants A monopoly on repairs says Fixit. Gadgets 360 online. 32 17 USC, s 1201(a).

³³ Including personal automobiles, commercial vehicles and agricultural vehicles.

³⁴ The Ohio State University (n.d.) 2018 DMCA Section 1201 Exemptions Announced.

³⁵ Consumer Reports (2018) Right to Repair Model State Law Updated.

³⁶ Goode, Lauren (2019) Apple will give indie repair shops the tools to fix iPhones. Wired online.

³⁷ Copyright Act 1968 (Cth), s 10(1)(d) (definition of ‘access control technological protection measures.’)

Other Australian legislation that includes RtR principles is the Australian Consumer Law, which is similar to New Zealand's CGA in that it guarantees that if a product does not work as expected, a consumer can expect it to be repaired, replaced or refunded. In 2018, the Federal Court of Australia ordered Apple to pay \$9 million in reparations after the Australian Competition and Consumer Commission (ACCC) took Apple to court. An investigation by the ACCC had found that iPads or iPhones that had been repaired by an unauthorised (by Apple) repairer for an issue such as a cracked screen were disabled when users downloaded an Apple IOS update. The Court declared "the fact that an iPhone or iPad had been repaired by someone other than Apple did not, and could not, result in the consumer guarantees ceasing to apply, or the consumer's right to a remedy being extinguished."³⁸ However, conversely, the decision also went against some RtR measures, such as finding that Apple's provision of refurbished products goods as replacements for faulty goods "may not be sufficient to meet the requirements of sections 261 and 263 of the Australian Consumer Law."³⁹

Aotearoa also has further existing legislation, as well as the potential for additional legislation, that could unlock the key to meaningful RtR measures.

5. RECOMMENDATIONS: THE KEY TO UNLOCKING THE RIGHT TO REPAIR TOOLBOX IN AOTEAROA

If the increase in e-waste is to be meaningfully addressed, policies that increase consumers' ability to have electronic items repaired are essential. In Aotearoa, existing legislation could enable RtR principles to be mandated.

5.1 The Consumer Guarantees Act

As outlined in para 3.3, the CGA contains the bare bones of a first step towards RtR. This Act could be amended in three ways to better embed RtR principles:⁴⁰

1. Section 42 could be removed so that retailers and manufacturers cannot avoid obligations to repair faulty items.
2. The Act could mandate that spare parts and a way to offer repairs be available for a *defined* useful life (instead of the current "reasonable" period of time). As noted above, the EC Directive specifies a 10 year period for spare parts to be available. It is recommended that useful life be used instead of a period of time to ensure excessive use of a product and there be a defined period of how long an electrical product should expect to remain "fault free".
3. The current requirement that includes secondhand retailers in the obligation to offer repairs and spare parts could be removed as this could potentially discourage the resale of items by secondhand shops. The emphasis should be on original retailers and manufacturers; secondhand retailers are already enabling an item's life to be extended.
4. An amendment could be made to remove the (refundable) fee required by many retailers before an item is sent to the manufacturer to be assessed for repairs as this can put people off seeking repairs for a faulty item.

5.2 Waste Minimisation Act 2008

Another promising pathway to the RtR is the recent announcement of Priority Product status for e-waste under the provisions of the Waste Minimisation Act 2008 (WMA). Early indications from the MfE consultation carried out in 2019 are that those designing the product stewardship schemes (that

³⁸ ACCC (2018) iPhone and iPad misrepresentations cost Apple Inc \$9 million in reparations. ACCC online.

³⁹ ACCC (2018b) Apple Pty Limited. ACCC online.

⁴⁰ During the final stages of this report being written the Green Party of Aotearoa released its suite of policies and these included amending the Consumer Guarantees Act to include right to repair.

must be developed for any product declared a ‘priority product’) will need to prioritise actions that produce outcomes at the top of the waste hierarchy (that is, the prevention, reduction and reuse of ‘waste’, not just recycling and safe disposal). Actions specified in a regulated e-waste product stewardship scheme design could potentially include RtR elements, such as:

- requirements that manufacturers make available diagnostic information, tools and parts to consumers and independent repairers
- economic levers used to incentivise the repair and refurbishment of electronic goods over recycling, including for demo models or “last year’s models” that have not been used by a consumer but are no longer being sold by a retailer.

These measures would increase the reusability of electronic parts and effectively extend the life of electronics, thus preventing and reducing waste. Incorporating RtR elements into any regulated product stewardship scheme would have wide reach as any electronics sold in NZ would need to comply with the scheme.

Section 23 of the WMA includes the regulatory power to require labelling on products (whether priority products or not). For an e-waste product stewardship scheme, the inclusion of a government-backed certification mark (i.e. the “repair” equivalent of Consumer NZ’s “Consumer recommends” tick) would allow consumers to determine before purchase whether goods can be repaired easily and affordably. The certification criteria could include:

- availability of spare parts;
- ease of repair (i.e. whether non-proprietary tools are needed to repair the product); and
- whether batteries can be replaced easily by the consumer.

Under s 23(1)(a) of the WMA, regulations can also be passed to ban landfilling of e-waste. In 2019, the Victorian State Government legislated for a landfill ban of e-waste.⁴¹ In France, unsold goods (including electronic goods) are banned from landfill.⁴²

5.3 Additional legislation

In addition to the amendments to existing legislation suggested above, the authors of this report have identified additional legislative reform that could better incorporate RtR principles.

Currently the WMA only refers to the waste hierarchy in s 44, which sets out a list of methods of waste management and minimisation that territorial authorities must consider, in descending order of importance.⁴³ If a review of the WMA is forthcoming, the review should consider setting out the waste hierarchy in the Act’s interpretation section, and requiring that all actors adhere to (or at least consider) the hierarchy when making decisions, designing product stewardship schemes, or making regulations under the Act. This would better embed *ōhanga āmioamio* - circular economy principles into the WMA and assist in targeting actions towards the top of the waste hierarchy. The Act’s definition of “Reuse” could also be amended to include repair activities.

Aotearoa could also follow the lead of the European Commission’s Circular Economy Action Plan 2020 to mandate that products sold in Aotearoa must be designed to last longer, and be easier to repair and upgrade, recycle and reuse. To strengthen this mandate, a collaborative approach could see Aotearoa, Australia and Pacific Island nations create a common market criteria.

⁴¹ Sustainability Victoria (n.d.) The Victorian e-waste ban.

⁴² Karasz, Palko (2019) France to End Disposal of \$900 Million in Unsold Goods Each Year. New York Times online.

⁴³ The Rubbish Trip (2020) Joint submission on the Government consultation: Reducing Waste: A more effective landfill levy.

Another item in the EC's Circular Economy Action Plan that could be imported into Aotearoa is the incentivisation for manufacturers and retailers to offer product-as-a-service options, where companies keep the ownership and responsibility for the product throughout its lifecycle, with an emphasis on repairing the item onshore or supply of spare parts being more cost effective to the company.

Any reform of New Zealand's copyright law should ensure that any prohibitions on circumventing access controls (TPMs) include a carveout allowing for the repair of products containing embedded computer programs. At a minimum, an equivalent provision to that currently contained in the Australian Copyright Act 1968 (Cth), s 10(1)(d) should be adopted.

5.4 Right to Repair in the context of other obligations

One of the arguments against restrictions, such as requiring that all products sold in a country are subject to RtR principles, is that they impinge on a right to trade. Under free trade agreements, measures that prohibit a business from trading in a country with whom their country has a free trade agreement can be challenged via the World Trade Organisation. However, exemptions on environmental (and also Te Tiriti O Waitangi) grounds can be made under the General Agreements on Tariffs and Trade (GATT), article XX (10), if the measure is:

- necessary for the protection of human, animal or plant life or health, or
- relating to the conservation of exhaustible natural resources.

Brazil successfully argued that a ban on the import of re-treaded tyres from EU countries was necessary to protect human life or health.⁴⁴ Likewise, France successfully banned imports of products containing asbestos from Canada on the same grounds.⁴⁵ Any legislative changes that incorporate RtR principles could still be consistent with the international free trade obligations of Aotearoa.

In addition, RtR measures and commitments to a circular economy align with the UN Sustainability Goals that Aotearoa has ratified. Emerging international standards in the environmental area are increasingly informing and shaping free trade expectations and exceptions, including the existing exceptions under the GATT and emerging environmental commitments in free trade agreements.

6. CONCLUSION

E-waste is the world's fastest growing waste stream for a myriad of reasons: access to cheap electronic goods and the ability to replace items more cheaply than repairing them; planned obsolescence, including constant release of new models of computers, devices, mobile phones and appliances that drives a consumer trend to 'upgrade'; a lack of consumer knowledge about their rights under the CGA; and the introduction of extended warranties that can defer to retailer or consumer preference for replacement over repairing a faulty item.

Attempts to address these issues overseas has bolstered the RtR movement. If mandated, RtR would allow consumers and independent technicians access to spare parts and manuals to more easily repair electronic equipment and appliances. It could also create a pathway to a circular economy by influencing the design of products that last longer and are more repairable.

In Aotearoa, existing legislation could embed RtR principles. Amending the CGA to close the existing loophole that allows manufacturers and retailers to opt out of the obligation to repair faulty items

⁴⁴ World Trade organisation (n.d.) Brazil – retreaded tyres.

⁴⁵ World Trade organisation (n.d.) European Communities – Asbestos

would be a good start. In addition, under the WMA, e-waste was recently declared a “priority product”, which now requires that a product stewardship scheme for e-waste be designed. Such a scheme could include measures to ensure better access to manuals, spare parts and diagnostic tools for repair, and to information (e.g. through labelling) about the expected lifespan or repairability of an item. The Government could also regulate to ban the landfilling of e-waste.

If an overhaul of the WMA takes place in the future, the waste hierarchy could be better embedded in the Act. For example, the hierarchy could be included in the Act’s interpretation section, with new sections that require those making decisions under the Act adhere to the hierarchy. RtR could be better recognised as a tool for waste minimisation (and thus more likely to appear in product stewardship schemes) if the notion of “repair” were explicitly included within the hierarchy’s definition of “reuse”. In addition, eco design components could be included in an e-waste product stewardship scheme to help make it increasingly easy and normal to repair items before seeking to replace them.

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