



AUSTRALIA

RIGHT TO REPAIR – WWF-AUSTRALIA SUBMISSION

WWF-Australia is part of the WWF International Network, the world's largest independent conservation organisation. WWF's global mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. WWF is active in more than 100 countries, and has approximately five million supporters worldwide.

WWF-Australia welcomes the Productivity Commission's (PC) Issues Paper into Australians' right to repair. Enabling repair is a critical component of Australia's transition to a circular economy and WWF is interested in how repair can lead to improved environmental outcomes and address Australia's pressing waste concerns.

Our current production model of 'take-make-dispose' has created a disposable culture, influencing how products are made and how they are consumed. This linear approach to using materials comes at a cost with environmental challenges ranging from the depletion of non-renewable materials, the use of toxic substances and the substantial amount of waste that enters landfill each year. In Australia, some 2.5 million household appliances are discarded each year.¹ 88% of the 4 million computers and 3 million TVs purchased in Australia will end up in landfill.² And over 750,000 vehicles will reach the end of their life and enter the waste stream each year.³

Our organisation strongly supports greater investment, policies and regulations to support and promote repairability in the Australian market across a range of relevant product categories. Specifically, policies to improve product design and information provision are key to drive more durable, repairable products and enable a more informed consumer-base.

TOWARDS A CIRCULAR ECONOMY

The Federal Government has committed to addressing impediments to a circular economy as part of Australia's National Waste Action Plan. A circular economy model means that products should be reused, repaired, remanufactured many times, and finally, recycled before final disposal in landfill is considered.⁴ The more times a product circulates in a system, the more value is extracted from the materials and energy initially invested into making the product.

Efforts to move towards a circular economy both worldwide and in Australia have disproportionately focused on activities further down the waste hierarchy, such as recycling and disposal. While increased

¹ Cleanaway, 2021, 'How to recycle white goods' <https://www.cleanaway.com.au/waste/white-goods/>

² Clean Up Australia, 2021, 'E Waste', <https://www.cleanup.org.au/e-waste>

³ MTaiQ, 2019, 'Scrap car recyclers promote responsible recycling initiative', <https://www.mtaiq.com.au/scrap-car-recyclers-promote-responsible-recycling-initiative/>

⁴ Hernandez, Ricardo J., Constanza Miranda, and Julian Goñi, 2020, 'Empowering sustainable consumption by giving back to consumers the 'right to repair'', *Sustainability*

effort to improve and address issues of recycling in Australia is very welcome, this is not always the most efficient solution and often results in a loss of material and downgrading of resources.⁵

Greater energy needs to be focused on activities towards the top of the waste hierarchy, such as waste avoidance, reuse and repair. Making goods more repairable and encouraging and facilitating repair would bring Australia closer to achieving a circular economy, and fulfils key objectives within the National Waste Action Plan. The EU Directive on repair recognises these benefits and their repair reform is directly linked and driven by the development of a circular economy. Achieving circular economy outcomes should therefore be a driving force behind Australia's approach to right to repair.

Recommendation 1: Ensure circular economy outcomes are a driving objective for Australia's right to repair reforms.

IMPACTS OF E-WASTE ON THE ENVIRONMENT

E-waste is one of the fastest growing waste streams in the world. Once discarded, items such as electronics, appliances, TVs and batteries pose considerable risks to the environment and human health. The amount of electronics generated and then disposed not only has a substantial impact on the amount of waste entering landfill but the nature of e-waste means these items can leach substances that are hazardous or toxic into the environment. It is estimated that e-waste is responsible for 70% of the toxic chemicals such as lead, cadmium and mercury found in landfill.⁶

The latest Global E-waste Monitor reported that in 2019, the world generated 53.6 million metric tonnes of e-waste, of which only 17.4% was recycled.⁷ Australia is ranked 7th in the world for e-waste generated per capita. Australia produces 554 kilotonnes of e-waste each year, equivalent to 21.3 kilograms of e-waste per individual.⁸ The National Television and Computer Recycling Scheme (NTCRS) reported that over 33 million units of televisions, computers, printers and computer accessories were imported in 2016/17.⁹ Meanwhile approximately five million mobiles are sitting in people's homes broken and no longer working.¹⁰

There are a number of positive initiatives aimed at addressing end-of-life collection and recycling of e-waste including the NTCRS and Mobile Muster. The NTCRS reported a 43% recycling rate in 2015/16 of items within its scope (televisions, computers, printers, computer parts and peripherals)¹¹ while Mobile Muster states that 70% of Australians are aware of their program.¹² Nevertheless the sheer volume of consumption and disposal of electronic goods presents a compelling argument for incentives and solutions that preference repair over the purchase of new goods.

Premature or planned obsolescence is highly prevalent in the electronics industry and contributes to the growing demand for new e-goods. Research from the Oeko-Institut in Germany has shown that product life spans of several types of electrical and electronic devices are getting progressively shorter.¹³ This contributes to increased waste generation and is in direct conflict with a circular economy.

⁵ APSRG, 2014, 'Triple Win, the social economic and environmental case for remanufacturing. A report by the All Party Sustainable Resource group of the UK Parliament'

⁶ Clean Up Australia, 2021

⁷ Forti, V., Baldé, C., Kuehr, R. & Bel G. 2020, The Global E-waste Monitor 2020

⁸ Forti, V., Baldé, C., Kuehr, R. & Bel G. 2020

⁹ Department of Energy and Environment, 2018, Review of the Product Stewardship Act 2011, including the National Television and Computer Recycling Scheme - Consultation paper

¹⁰ Mobile Muster, 2020, Insights into mobile phone use, reuse and recycling

¹¹ Department of Energy and Environment, 2018

¹² Mobile Muster, 2020

¹³ Oeko-Institut, 2016, 'Obsolescence Causes, effects, strategies'

Improving product design to enable repair is extremely pertinent to reduce e-waste. While our recommendations speak broadly to repair across a number of product classes, it is important to specifically consider the needs of electronic goods so as to address the harmful effects of e-waste to the environment.

BARRIERS TO REPAIR IN AUSTRALIA

There are a number of unnecessary impediments to making repair a feasible, cost-effective and convenient option for individuals, resulting in a throw-away culture which preferences buying new products over repairing existing ones. These barriers include;

- **Lack of design and manufacturing features allowing for repairs**
 - Product design can make products impossible to repair and, in many instances, does not facilitate processes such as disassembly, cleaning, replacement of parts and upgrades. Products, especially electronic products, may have glued attachments, parts that cannot be removed, cases that break when opened and products that require special tooling - making them non-repairable.¹⁴ For example, disassembling the iPhone 12 requires four different types of screwdrivers and eight specialised tools.¹⁵
- **Lack of spare parts and technical information to facilitate repair**
 - In many instances, producers are not required to provide spare parts or technical information for their products beyond warranties.¹⁶ This means that users only have the chance to repair their products for a short period of time and/or only with the manufacturer. There is also the growing issue of exclusive in-built software in items such as electronics, cars and machineries which precludes independent repairers from fixing these items.
- **Lack of economic incentives to repair**
 - In many cases, there is no compelling incentive to repair a product when you can buy a new product for a lesser cost. This is especially true for electronics due to fast cycles of development and innovation as well as planned obsolescence.
- **Economic cost of repair**
 - Currently individuals bear the economic cost of repair. There is an economic punishment for individuals wanting to repair their products in the form of waiting times, costs and tasks required.
- **Information asymmetry between sellers and buyers**
 - Individuals do not have the appropriate information to make informed decisions in relation to the durability or repairability of products. This means individuals cannot enforce their consumer power to buy more cost-effective and sustainable goods.
- **Potential lack of trust in repairs**
 - There are currently no standards or certification systems for repair in Australia, potentially preventing people from accessing third party repairers or buying repaired goods. Proper procedures for testing and tagging items to ensure that a product is safe to use again would build trust and confidence in the repair market.

RECOMMENDATIONS

In simple terms, for repair to occur the manufacturer must make a repairable product and an individual must decide to repair it. However, establishing an effective right to repair in Australia requires a broad and comprehensive approach that considers all actors and dimensions involved.

¹⁴ Hernandez, Ricardo J., Constanza Miranda, and Julian Goñi, 2020

¹⁵ IFIXIT, 2020, iPhone 12 and 12 Pro Teardown, <https://www.ifixit.com/Teardown/iPhone+12+and+12+Pro+Teardown/137669>

¹⁶ Hernandez, Ricardo J., Constanza Miranda, and Julian Goñi, 2020

Our recommendations centre around improving product design to facilitate repair and empowering informed choice through the provision of clear and accurate information. The recommendations can be applied broadly to a number of product classes however further research should inform tailored solutions to suit specific product categories.

Design for repair

Choices made at the design stage can determine a product's longevity, ease of disassembly, repairability and then recyclability at the end of its life. Products should be designed to easily facilitate the fixing of devices by third party repairers as well as consumers who wish to engage in home repairs. The review of Australia's Product Stewardship Act 2011 emphasised the importance of design and recommended that the objectives of the Act be broadened to include product design improvements related to durability, reparability, re-usability and recyclability.¹⁷ Producers should be rewarded for sustainable design whereas those who design unsustainable products or intentionally shorten the lifespan of their products should be penalised. In 2015, France outlawed planned obsolescence which is punishable by two years imprisonment and a fine of 300,000 Euros.

Recommendation 2: Establish a product design standard to ensure products are durable and can be easily disassembled, repaired and reassembled.

Recommendation 3: Ban or penalise manufacturers for intentionally shortening the lifespan of their products. This includes software updates that may trigger obsolescence in digital devices.

Recommendation 4: Require manufacturers to make spare parts, tools and technical information available to third parties or individuals for a reasonable period of time.

Recommendation 5: Ensure warranties are more flexible to allow for third parties to perform repairs on a product.

Recommendation 6: Encourage and invest in physical and digital infrastructure to promote repairs and increase support for second-hand goods markets and tool libraries.

Recommendation 7: Explore economic incentives that reward more durable, repairable products.

Recommendation 8: Explore minimum repair standards and certification systems to build trust and competition in the repair market. This should also include recertification systems for items that are not commonly resold for safety reasons, such as helmets and car seats.

Empowering and incentivising consumers

Clear and transparent information on a product's repairability and durability is critical to allowing people to choose more sustainable, cost-effective products. Enabling informed choice gives consumers market power, stimulating demand for more innovative and better designed products. The European Parliament recently voted for new Right to Repair provisions which will require companies to label products with information indicating how long they will last, and how repairable they are.¹⁸ In 2021, France will require electronic products to display a repairability index which will inform consumers about the possibility of repairing a product.¹⁹ In 2024, France's repairability index will be upgraded to a durability index, so that individuals can not only understand if a product is easy to repair but also if it is durable.

¹⁷ Department of Agriculture, Water and the Environment, 2020, 'Review of the Product Stewardship Act'

¹⁸ European Parliament, 2020, 'REPORT - Towards a more sustainable single market for business and consumers'

¹⁹ Right to Repair EU, 2020, 'French repairability index; what to expect in January?', <https://repair.eu/news/french-repairability-index-what-to-expect-in-january/>

To overcome the economic burden of fixing an item, the PC should also explore rewards for individuals for choosing repair. This is critical to addressing a culture of disposal and waste. For example, Sweden has introduced tax deductibility for the repair of larger household appliances and electronic items, and has reduced GST from 25% to 12% for repairs of items such as bikes and clothes.²⁰

Recommendation 9: Introduce mandatory labelling for electronic devices and household appliances that provides clear and easy-to-understand information about the estimated lifetime and repairability of a product at the time of purchase.

Recommendation 10: Introduce economic incentives, such as subsidies, discounts and/or extended warranties to encourage repair over re-purchasing.

Recommendation 11: Provide funding for education and awareness campaigns highlighting the environmental impact of waste to landfill to encourage repair, reuse and proper end-of-life collection for products.

BENEFITS TO RIGHT TO REPAIR

Policy interventions that remove barriers to and encourage repair presents overwhelming benefits to individuals, the environment, the economy and manufacturers. The above measures would extend products' useful lifetime, save costs for consumers, address inefficient product design and importantly reduce waste.

- There are significant cost-savings for **individuals** who would benefit from more durable, resource-efficient and easily repairable products, reducing the need to replace old or broken products. Americans spend approximately \$1,480 a household on new electronics each year and it is estimated that repairing electronics instead of buying new products could save families \$440 USD a year, totalling \$40 billion USD across America.²¹ Greater information provision would also support a more informed and empowered consumer base, allowing people to enact their buying power and drive a more competitive marketplace.
- Making goods more repairable would have substantial **environmental benefits**. It would reduce inefficient product design, ensuring that products are repaired rather than discarded into landfill which would reduce waste and help transition Australia towards a circular economy. It would reduce our reliance on non-renewable and scarce resources and in relation to e-waste, would lessen the generation of hazardous waste.
- An increase in repair would have significant **economic benefits**. In the EU, it is estimated that an increase of 1% in the repair sector would increase GDP by 7.9 billion Euros through direct and indirect impacts.²² New jobs would also be created in product design, reuse and the repair industry – sectors where it is difficult to introduce automated processes.
- **Manufacturers** also benefit as repair provides a market opportunity to increase customers' loyalty. It presents a potential new income stream and way to have additional touch-points with customers. Stronger demand for products which support a circular economy will create new business and growth opportunities for companies offering cost-effective, sustainable and innovative solutions.

²⁰ World Economic Forum, 2016, Sweden is paying people to fix their belongings instead of throwing them away, <https://www.weforum.org/agenda/2016/10/sweden-is-tackling-its-throwaway-culture-with-tax-breaks-on-repairs-will-it-work/>

²¹ U.S. PIRG, 2021, 'Repair saves families big'

²² Montelvo, C., Rietveld, E. & Peck, D. 2016, 'A longer lifetime for products: Benefits for consumers and companies', *International Journal of COPD*

CONCLUSION

Our current production model preferences unsustainable product design, single-use consumption and premature disposal. This is an inefficient use of resources and creates negative externalities in the form of dangerous and toxic waste.

There are many barriers to repair which makes it easier to throw an item away rather than fixing it. Addressing these barriers and incentivising repair is essential to address a looming waste crisis in which appliances, white goods and electronics are sent to landfill at an unsustainable rate. WWF welcomes the PC investigating the barriers and solutions to repair in Australia. Progressing policy responses will be imperative to Australia's adoption of a circular economy; it would complement the Federal Government's waste agenda and deliver significant benefits to consumers.

WWF would be happy to continue to engage with the Productivity Commission on this inquiry. Please feel free to reach out to Katinka Day, No Plastic in Nature Policy Manager



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