NSROC
Northern Sydney
Regional Organisation
of Councils

15 February 2021

Productivity Commissioners
Righty to Repair Inquiry
Productivity Commission
Locked Bag 2
Collins Street East
Melbourne Victoria 8003
Submitted on line to: www.pc.gov.au/inquiries/current/repair

Dear Commissioners Abramson and Lindwall

NSROC feedback to the Productivity Commission's Right to Repair Inquiry

Northern Sydney Regional Organisation of Councils (NSROC) appreciates the opportunity to make a submission to the Productivity Commission's Right to Repair Inquiry on the 15 February 2021 and would like to thank you for the extension of two weeks past the original submission date of 1 February 2021.

NSROC is a voluntary association of eight local government authorities in northern Sydney whose member councils service an area of 639km^2, stretching from the Hawkesbury River in the north to Sydney Harbour and Parramatta River as far upstream as Meadowbank in the south and generally west of Middle Head and Middle Harbour Creek.

This report represents the views of the Organisation although it has not been formally endorsed by the NSROC Board. It has been prepared with the assistance of the waste staff from our member councils and the Institute of Sustainable Futures at the University of Technology NSW and also reflects previously endorsed views from a range of submissions.

Local government has significant responsibilities for waste management across Australia which include our activities related to policy, operations and community education. The waste management hierarchy (avoid, reduce, reuse, recycle) provides a high-level framework for how local government manages waste. Therefore, our councils are interested in repair as an approach to product life extension which has a direct benefit in reducing both waste to landfill and the premature disposal of products and materials that could otherwise be kept circulation in the economy through productive use.

This submission seeks to highlight a local government perspective on the Right to Repair, and repair more generally. It provides some aggregated insights from our member councils, as well as more specific commentary and views on issues that we believe the Productivity Commission should consider, investigate and make recommendations on.

Our essential position is that repair is an important activity with diverse social, economic and environmental benefits, when carried out in compliance with relevant safety standards, policies and regulations.

The value of consumer empowerment through community participation (eg. repair cafés), is also noteworthy given the public appetite for waste reduction and sustainable lifestyles being demonstrated by the public, and communicated through programs such as ABC's War on Waste.

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In summary, NSROC supports the right to repair and highlights the following points:

1. Repair is very relevant to local government as the key manager of domestic waste, because it reflects the top half of the waste management hierarchy which is the most effective point of intervention in reducing the amount of waste/resources sent to landfill;
2. In particular, increased repair activity has the potential to avoid and reduce e-waste and the associated impacts arising from the premature disposal of electrical and electronic goods.
3. There are potentially more jobs associated with repair and reuse than recycling; there are costs savings to consumers; there are new business opportunities for the repair industry and social enterprise; there is a more equitable and appropriate allocation of environmental responsibility to those who produce and consume electrical and electronic equipment; there is a cost saving to local government in not having to carry as much of the economic burden of managing e-waste; and there is an opportunity for manufacturers and brands to develop new business models and products that are designed for durability and reparability
4. NSROC supports the move towards a circular economy and notes that its key principles incorporate designing-out waste from the outset as well as prolonging the life of products through design for durability repair, refurbishment, remanufacturing and reuse. So repair and reuse can also contribute to achieving a circular economy in a very practical way;
5. At a national level, the recently enacted Commonwealth Recycling and Waste Reduction Act 2020 includes a much stronger life-cycle approach to products, materials, waste and the associated impacts. The Objects of the Act and specific subclauses cite reparability reuse and design for durability. The Act also supports product stewardship as an essential policy tool for transitioning to a circular economy and councils in this region support the effective and proportionate use of regulatory and co-regulatory instruments for such stewardship;
6. While local government may have limited ability to influence some major stakeholders such as manufacturers, brands and retailers, it can play a key role in capturing community attitudes on environmental issues, sustainability and the circular economy. This can inform the development of relevant solutions and programs;
7. Some NSROC member council are seeing/offering an increasing number of community-based Repair Cafés/workshops reflecting the growing appetite for repair and reuse by households.

Further detail on these points can be found in the attached.

Should you require further information, please do not hesitate to contact NSROC's Regional Waste Management Coordinator.

Yours sincerely

Maxine Kenyon
Executive Director

NSROC
Northern Sydney
Regional Organisation
of Councils

Submission

Productivity Commission

Right to Repair Inquiry

15 February 2021

Prepared by Northern Sydney Regional Organisation of Councils

Member Councils: Hornsby Council

Hunter's Hill Council

Ku-ring-gai Council

Lane Cove Council

Mosman Council

North Sydney Council

City of Ryde Council

Willoughby City Council

Contact: John Carse

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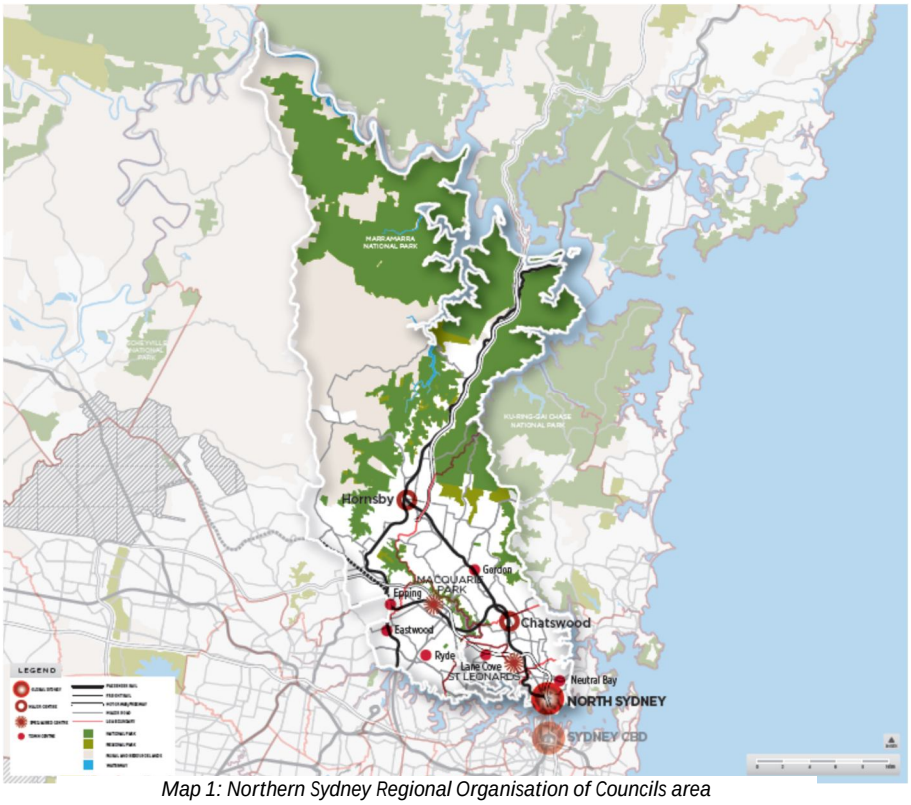
INTRODUCTION

The Northern Sydney Regional Organisation of Councils (NSROC) is pleased to make this submission to the Productivity Commission's *Issues Paper on the Right to Repair.*

NSROC is a voluntary association of eight local government authorities in Sydney. The councils service an area extending from the Hawkesbury River in the north to Sydney Harbour in the south, west from Middle Harbour Creek to Meadowbank on the Parramatta River, as shown in Map 1. The region is home to about 652,809 (2019) people and is projected to grow to over 827,550 by 2041.



Map 1: Northern Sydney Regional Organisation of Councils area

NSROC and all our member councils contribute towards The Bower's Household Collection and Rehoming Service which supports residents in finding a new home for items they no longer have a use for. Some items are collected by The Bower including some (typically furniture) where repairs could efficiently extend the item's usefulness for a charitable purpose or resale. Participation of the Service also allows a council to host Repair cafes/Workshops for their residents. There has been an increased interest and patronage in these workshops in recent years, although the pandemic has affected them over the last year.

The adopted Regional Waste Strategy developed by NSROC on behalf of its member councils supports resource usage in accordance with the waste hierarchy, but notes the challenge for local government as a waste manager in addressing the higher elements of waste avoidance, reduction and reuse. NSROC's main role in regard to those features has been advocacy such as endorsed submissions to the Review of the Product Stewardship Act and other federal and state waste legislation or policy.

In particular, NSROC is very supportive of the move towards a Circular Economy and is examining ways it can contribute towards the development of the circular economy at both a regional and local scale. This attitude has been reflected in previous endorsed submissions have been made to the NSW government in regard to both its Circular Economy policy and the proposed 20 Year Waste Strategy.

NSROC has very limited access to useful data about the right to repair, reflecting the fact that most aspects of an individual's resource acquisition, usage and even disposal are outside a local council's sphere of operations and influence. However, it is clear from the Commission's Issues Paper questions that such data is being sought to better inform the Commission's proposed draft report. Accordingly NSROC sought whatever data our councils could provide in this regard.

It is in this context that NSROC makes this submission which represents the view of our member councils, although not formally endorsed by the NSROC Board nor by individual councils' resolutions. In addition to the responses to relevant questions posed in the Productivity Commission's Issues Paper, I have attached an aggregated summary of the input we received from our member councils about the paper. While the specific data is limited, I trust that it will be of some value to the Commission.

RESPONSES TO QUESTIONS IN THE ISSUES PAPER

Information request 1

What would a 'right to repair' entail in an Australian context? How should it be defined?

A Right to Repair in the Australian context should reflect the diversity that can constitute repair, be it self-repair or that undertaken by professional repair businesses, social organisations, Men's and Community Sheds, retailers, brands and manufacturers.

It should reflect priorities, needs and wants that have cultural, social, economic and environmental relevance to those who design produce, sell, use and consume goods. The Right to Repair in Australia has potential to serve multiple objectives that can:

- prolong the functional life of products and components;
- contribute to waste avoidance and reduction through repair and reuse that extends overall product life;
- save users and consumer money by not necessarily having to purchase new products when otherwise minor faults and problems can be repaired;
- empower consumers to work collectively to undertake practical measures that help achieve a more sustainable lifestyle that is not premised on a 'throw-away' culture;
- enable the development and training of practical skills that deliver social, economic and environment benefits; and
- create employment opportunities that are aligned with circular economy principles.

In part, a Right to Repair responds to a growing social desire to have more direct and unencumbered control over the products they purchase and own, as opposed to being governed by what brands, retailers and manufacturers find appropriate or commercially preferable. More specifically, a Right to Repair in an Australian context will need to balance the delicate relationships between consumer rights and producer requirements eg. IP, warranties, safety, performance.

A Right to Repair policy needs to look at the entire product life-cycle from the design phase through to maintenance, repair, reuse, upgrade, recyclability through to the end-of-life waste and disposal to ensure that all aspects have environmental and circular-economy factors front of mind. Recent advancements in technology mean that more of our daily devices and appliances are computerised. Planned and premature obsolescence must be addressed to help slow down, if not reverse the current projections in e-waste generation. The impact of software upgrades is 'bloating' products and triggering unnecessary disposal and/or purchase of the 'latest' model. The need for the Right to Repair to incorporate attention to how software upgrades do not render otherwise functional products obsolete is an area of specific concern to be addressed through policy, regulation and/or hardware, software and associated standards.

Information request 2

What types of products and repair markets should the Commission focus on?

The Right to Repair has relevance to almost every class of manufactured product, from apparel, clothing and footwear, through to furniture, automotive and mobility equipment, electrical and electronic devices, as well as other speciality products.

From a local government perspective, some priority might be given to expensive items which should last a long time. Councils' interest are broadly to address any products where it is feasible to delay or prevent them being discarded or even recycled. Potentially that might include commonly discarded materials, or those that are difficult/dangerous to landfill, which may also reflect commonly dumped materials.

Potential products might also be informed by data from illegal dumping reports (although that is usually an incident, rather than material specific) or data from Repair Workshops and Cafes held for community members.

Council bulky goods kerbside clean up services may offer some data. Although some audits have been undertaken of them, councils would not normally know the *reason* for disposal. However, anecdotally there appears to be a relatively common perception that reusable items will be directed to others for reuse. That is often not the case and most of the waste collected is landfilled, although some councils will recover metals separately.

All of the NSROC member councils are part of The Bower's Collection and Rehoming service, so residents in the region can arrange for collection of suitable materials/equipment. These items would normally have some value and it's not known what percentage is being discarded in need of repair. We do know tonnages collected but not what was refused or referred elsewhere.

Based on figures from our community recycling centres, electrical and electronic goods make up most items discarded. One can assume that these items have malfunctioned or become obsolete. Items using hard-wired or embedded rechargeable batteries (e.g. shaver, electric toothbrush) are commonly discarded due to battery (not instrument) failure. Encouraging manufacturers to provide replacement batteries (and to accept used batteries at end of life for recycling) would significantly reduce the need for replacement items, and therefore generate less e-waste for which there is currently no national collection and recycling scheme or stewardship program.

The EU Ecodesign Directive provides specific objectives and clear metrics for durability and reparability improvements that can increase the lifespan of appliances, including:

- spare parts are available over a long period of time after purchase, for example:
    - 7 years minimum for refrigerating appliances (10 years for door gaskets);
    - 10 years minimum for household washing-machines and household washer-dryers;
    - 10 years minimum for household dishwashers (7 years for some parts for which access can be restricted to professional repairers);
- moreover, during that period, the manufacturer shall ensure the delivery of the spare parts within 15 working days;
- spare parts can be replaced with the use of commonly available tools and without permanent damage to the appliance.

Are there common characteristics that these products share (such as embedded technology and software or a high/low degree of product durability), and which characteristics would allow policy issues to be considered more broadly?

While some product classes may be more prone to, or perceived as being less durable or difficult to repair, all manufacturers, brands and retailers placing products on the market should take life-cycle responsibility for their products and provide consumer-friendly repair services that help to prolong the life of those products while also minimising the generation of e-waste.

Electrical and electronic equipment is an obvious product class for focused policy attention and action due to its rapid growth and the presence of hazardous and/or toxic substances found in some materials and components. The proliferation of low-cost, short-life electrical and electronic products such as solar garden lights, power tools, toys, small appliances and portable consumer electronic devices (eg. cameras, wearables), together with the projected growth in Internet of Things (IoT) devices, signals some obvious categories that the Commission should investigate.

Policy reforms that support consumers to make better buying choices, informed by independent standards and certifications can also assist. Lifespan indicators (similar to energy/water consumption indicators), such as the French Durability Index can highlight information on designed product life expectancy with normal domestic use. Knowing this at the time of purchase may be an incentive for favouring more durable and reparable products.

Improved clarity for consumers (at the time of purchase) about embedded software requiring regular upgrades/planned obsolescence and restricting practices that intentionally shorten the lifetime of a product should be considered.

If there are particular products that the Commission should focus on, what are the unique issues in those product repair markets that support such a focus?

As a start, low-cost items which are readily discarded due to failure (e.g. low-cost small appliances, power tools, and miscellaneous consumer electronics devices) should receive greater attention. They can be discarded after a relatively short lifespan which is further encouraged by a low replacement cost and a lack of repair options including spare parts availability.

The role and benefit of advanced disposal fees at the time of product purchase should be considered more closely with a view to creating incentives that enable and facilitate product life extension through repair and reuse.

The Commonwealth Recycling and Waste Reduction Act 2020 provides a significant opportunity to identify and address specific products for increased repair potential. The product stewardship provisions in the Act covering the Minister's List and accreditation of voluntary product stewardship arrangements and schemes provides an avenue for local government and its communities to suggest products for the Minister's List. NSROC believes that the following products should be considered for the Minister's List with specific attention to reparability and durability objectives:

- Clothing & textiles including bedding;
- Household furniture;
- Mattresses, beds and couches;
- Whitegoods;
- Electrical items.

Attention to these products and their inclusion on the Minister's List should also include a process of monitoring and reporting and, if necessary, escalation, to ensure that appropriate actions on each product on the list progress over time.

Information request 3

Do the consumer guarantees under the ACL provide adequate access to repair remedies for defective goods? If not, what changes could be made to improve access to repair remedies? Are there barriers to repairing products purchased using new forms of payment technologies, such as 'buy now pay later'?

NSROC is not aware of available data on the performance of consumer guarantees, as this falls outside the core responsibilities of local government, however it could be argued that options such as extended warranties do not necessarily help facilitate repair, extend product life or generate less waste. It may be in fact that extended warranties are an unnecessary barrier to repair, if the consumer considers the cost of extended warranty as a proportion of the cost of the goods outweighs the perceived risk of failure and replacement cost. If no warranty is purchased, repair in future is potentially less likely. It is also likely that the market for third-party consumer guarantees and associated product insurance is highly profitable due to the lack of information for consumers about the designed life of products and their reparability.

NSROC would encourage the Productivity Commission to consult more directly with CHOICE, the Consumer Electronics Suppliers Association (CESA) and Charitable Recyclers Australia to investigate this question more thoroughly.

Is the guarantee of available repair facilities and spare parts effective in providing access to repair services and parts? Or is the opt-out clause being widely used, making the guarantee ineffective?

NSROC has no data or specific information about such scenarios, however, the availability and promotion of repair facilities and spare parts would help expand the range of options available to residents and businesses eager to fix and repair products, both as a waste reduction measure and a costs savings benefit.

NSROC would encourage the Productivity Commission to consult more directly with CHOICE, CESA and Charitable Recyclers Australia to investigate this question more thoroughly.

Should consumer guarantees seek to balance the broader societal costs of remedy choices (such as the environmental impacts of replacements) with consumer rights, and if so how? For example, should repairs be favoured as a remedy?

As a general position, our member councils support a strong product stewardship approach focused on Extended Producer Responsibility (EPR), whereby the producers, brands and/or retailers, take greater responsibility for the products they place on the market, including the fate of those products at the post-consumer stage.

More specifically, product stewardship should cover packaging and end of life disposal of goods. EPR should cover the whole product lifecycle via new business models, guidance on take-back and support for repair services. Product Stewardship programs and approaches should be designed such that the responsibility for products is covered at the time of purchase to avoid 'orphan' products becoming the

burden of consumers or local government. This is especially relevant in the case of a manufacturer or brand no longer being in the market.

Consumers have a right to an informed choice about the product they purchase (including life expectancy reparability/cost and end-of-life disposal fee included in purchase price). The Productivity Commission could consider incentives for repair services such as lower (or zero) GST and explore the possibility of a repair grant to encourage repair of small consumer items/whitegoods (e.g. 50% of total repair cost up to $150).

Are consumers sufficiently aware of the remedies that are available to them, including the option to repair faulty products, under the ACL's consumer guarantees? If not, would more information and education be a cost-effective measure to assist consumers understand and enforce guarantees? What would be the best way to deliver this information? What other measures would be more effective?

More effective measures could include increased consumer education about consumer guarantees and how they may enable greater repair activity, especially if such initiatives are enduring, in plain-English, culturally relevant and adequately resourced. Consumer education programs should be co-funded by government as well as those businesses placing products on the market eg. manufacturers, brands and retailers.

However, educating consumers of their rights under ACL is only part of the solution. Providing cost-effective repairs and incentivising repairs would be a complementary measure to reduce waste and empower consumers. Manufacturers, brands and retailers could explore new business and service models that can facilitate increased repair resulting from guarantee-related returns.

The growing interest in alternative models of consumption and product use should also be considered. In other words, encouraging products and services that are intrinsically less waste-intensive through sharing, renting and leasing eg. community-managed tool libraries and commercial product hire and leasing services.

Walter Stahel, the widely accepted 'father' of circular economy thinking and founder of the Geneva-based Product Life Institute, has highlighted the environmental value of intensifying product use by sharing products across multiple owners and for longer periods than individuals purchasing and owning equipment used infrequently:

> *"Most power tools owned by do-it-yourselfers suffer from the phenomenon of "slow-motion use," i.e., a low intensity of use over a long period of time, which means that many tools probably never reach the end of their theoretical technical life. Precise information on this could only be obtained by installing meters in the tools to count the operating hours. This phenomenon can be overcome by a strategy of intensification of utilization. Multiple use through rental systems: A fleet manager (owner of a fleet of tools) rents these out to users for short, medium, or long periods, for example, in the form of an operational lease of new equipment (exists for power tools in Great Britain). This form of rental could be implemented by the manufacturer via the hardware dealers, or by the mail order companies all over the country through their catalogues and mail delivery, or by public institutions in a "tool library" system similar to public libraries (which according to this system are the "fleet managers" of books). Multiple use through user associations (also called sharing associations): The individual ownership and the use of consumer items that are not used daily are separated from each other in that these products are either lent out among the association members, or owned and used jointly by user groups."*[1]

[1] Intensifying use of power tools – a case study by Walter Stahel, Product Life Institute, Geneva, http://www.product-life.org/en/archive/case-studies/power-tools

It should also be noted that the prominence and marketing of some recycling programs can overshadow (and under-promote) reuse options and product life extension measures eg. print cartridges recycling is supported by more expensive cartridges which can only be used once even though refills up to 8 times can be possible.

Information request 4

The Commission is seeking information on the nature of repair markets in Australia, including detailed data on the repair markets for specific products, covering:

- **market size — by employment, revenue, number of businesses, profit margins**
- **market composition — such as market share between authorised, independent and DIY repairers.**

While NSROC does not have extensive data on repair markets, some of our member councils collect basic information that may be relevant:

- Council runs a number of repair cafes and Men's Shed services with a growing in interest in repairing household items (furniture & electric items). These are independent repair 'workshops' whereby repairs are conducted by consumers themselves using guidance from qualified professionals.
- Face to face workshops attracted 31 attendees in Feb 2020 with repaired items including: CD player; Jaffle maker; hand mixer; TV; hand massager; shaver; electric carving knife; chairs and other furniture.
- Recently these workshops have been conducted online due to Covid-19 and have had an increase in popularity suggesting potential for a government funded repair workshop series. Four workshops are planned for the first half of 2021 with potential for more in the second half of the year.

Community interest in repair services across some of our member councils appears to be trending upwards, especially with regard to self-repair for small appliances and furniture.

NSROC would encourage the Productivity Commission to consult more directly with Charitable Recyclers Australia, CESA, The Bower and Men's and Community Sheds to investigate this question more thoroughly.

Is there any evidence of a difference in quality, safety or data security between authorised repair networks and independent repairers? Are there ways to address concerns around quality, safety or data security while promoting a vibrant independent repair market?

NSROC does not have any data or specific information in response to this question, however as a general comment, it is important that 'safety' concerns are not presented as a barrier or perceived obstacle to increased repair activity. NSROC would encourage the Productivity Commission to consult more directly with Charitable Recyclers Australia, The Bower and CESA to investigate this question more thoroughly.

Are there available examples of the contracts between OEMs and authorised repairers? Do these contracts limit effective competition in repair markets (such as by limiting the number

and reach of authorised repairers or requiring authorised repairers to not be authorised by a competing brand)?

Are there specific examples or other evidence of practices by OEMs or their authorised repairers that create barriers to competition in repair markets?

NSROC does not have any data or specific information in response to these questions, however we would encourage the Productivity Commission to consult more directly with Charitable Recyclers Australia, The Bower Reuse and Repair Centres, CHOICE and CESA to investigate this question more thoroughly.

What is the relationship between the intensity of competition in the primary product market and the risk of consumer harm from a lack of competition in repair markets? Can competitive primary markets compensate for non-competitive repair markets?

NSROC does not have any data or specific information in response to these questions, however a diverse repair market has the potential to benefit consumers by way of increased choice and competition between service providers, be they commercial service and repair business, or community-based social enterprises. More repair services could serve to increase options and availability to consumers while also improving overall proximity to repair solutions at a local level. A diversity of repair options would help to level the playing field, and allow independent repairers and supplier-authorised repairers to provide competitive services to product users and consumers. The lack of competition in the repair market in some product classes (eg. electrical and electronic equipment) remains an ongoing barrier to consumer awareness and making repair a more acceptable or desirable option.

Are the restrictive trade practices provisions of the CCA (such as the provisions on misuse of market power, exclusive dealing or anti-competitive contracts) sufficient to deal with any anti-competitive behaviours in repair markets?

NSROC does not have any data or specific information in response to these questions as they fall outside the core responsibilities of local government, however we would encourage the Productivity Commission to consult more directly with CHOICE and the CESA to investigate this question more thoroughly.

What policy changes could be introduced if there is a need to increase competition in repair markets and improve consumer access to, and affordability of, repairs? What are the costs and benefits of any such proposal to the community as a whole? How does it balance the rights of manufacturers and suppliers, with those of consumers and repairers?

Policy reform to address the complete product life-cycle and focus more sharply on waste avoidance and reduction through design for durability and reparability is essential. As a general position, our member councils support a strong product stewardship approach focused on Extended Producer Responsibility (EPR), whereby the producers, brands and/or retailers, take greater responsibility for the products they place on the market, including the fate of those products at the post-consumer stage.

EPR should cover the whole product lifecycle via new business models, guidance on take-back and support for repair services. Product Stewardship programs and approaches must be designed such that the responsibility for products is covered at the time of purchase to avoid ‘orphan’ products becoming the burden of consumers or local government in the case of a manufacturer or importer company no longer being in the market.

Policy changes that incorporate specific product stewardship requirements for durability and reparability should be designed into schemes and programs for specific products classes. This should include clear allocation of responsibilities for specific outcomes to manufacturers, brands and retails, not unlike the EU Ecodesign Directive and aspects of the French Durability Index.

Policies, regulations and standards that help to remove unnecessary barriers protecting IP should also be considered, especially where these improve access to service manuals, specialised tools, spare parts, wiring diagrams, and diagnostic software. Uncomplicated availability of such items, without a cost-penalty will enable and encourage a more competitive repair market.

Economic measures could also be applied to stimulate increased repair activity. For example, the removal of GST on repair services and spare parts for product classes prone to planned obsolescence or unnecessary early disposal, could encourage the uptake of greater repair activity. This is not inconsistent with similar measures used in Sweden where appliance repair costs qualify as a tax deduction. While the cost of such measures may reduce overall GST impacts, the benefits would result in greater repair activity over replacement, and the associated reduction of waste to landfill, noting the World Economy Forum article[2]:

> *"To combat its 'throwaway consumer culture', Sweden has announced tax breaks on repairs to clothes, bicycles, fridges and washing machines. On bikes and clothes, VAT has been reduced from 25% to 12% and on white goods consumers can claim back income tax due on the person doing the work. The incentives are intended to reduce the environmental impact of the things Swedes buy."*

Information request 5

To what extent do current IP laws already facilitate repairs by consumers or independent third parties (e.g. the spare parts defence under the Design Act)? Are there any aspects of IP laws where consumers' rights with respect to repairs are uncertain?

NSROC does not have any data or specific information in response to these questions as they fall outside local government's core responsibilities, however we would encourage the Productivity Commission to consult more directly with Charitable Recyclers Australia, The Bower Reuse and Repair Centres, CHOICE and CESA to investigate this question more thoroughly.

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

Do current IP protections (e.g. intellectual property rights, technological protection measures, end-user licencing agreements) pose a significant barrier to repair in Australia? If yes, please comment on any or all of the following:

- **Specific IP protections that prevent consumers from sourcing competitive repairs and/or inhibit competition in repair markets**

  Some manufacturers and brands void product warranties if repairs are conducted by 'unauthorised' repairers, including consumers.
- **Types of products or repair markets these barriers mainly affect**

  Consumer electronics, household appliances and automotive are often cited as examples where barriers exist eg. Apple,[3] LG[4].
- **Impacts of these barriers on third party repairers and consumers (e.g. financial cost, poorer quality repairs)**

  The impacts of these barriers can include consumers choosing to pay for potentially higher cost services/repairs by 'authorised' repairers or risk the cancellation of their product warranty. Access to the necessary information, tools or equipment by third-party repairers is constrained, which in turn limits their ability to deliver the necessary service to a high standard. The Australian Automotive Aftermarket Association has been active in this space and would be a useful source of data and insights. More information here: https://www.aaaa.com.au/industry-advocacy/choice-of-repairer/automotive-right-to-repair-law-another-step-closer/

In what ways might government facilitate legal access to embedded software in consumer and other goods for the purpose of repairs? What are the pros and cons of these approaches?

NSROC does not have any data or specific information on this issue as it falls outside the core responsibilities of local government. While the Commonwealth Government can create legislation and regulation to make software accessible to repair businesses and self-repairers, it is likely that manufacturers, OEMs and brands would seek to retain ownership of their IP, be it in software or hardware.

The overall objective for Government should be to the identify barriers to repair and co-design solutions with all affected stakeholders to deal with the complexity of embedded software and how it must not be used to inhibit, constrain or discourage safe and cost-effective repair.

Information request 6

What evidence is there of planned obsolescence in Australian product markets? Do concerns about planned obsolescence principally relate to premature failure of devices or in them being discarded still working when more attractive products enter the market?

The vast majority of everyday electrical and electronic products (eg. computers, appliances, power tools, cameras) are manufactured for global markets with typically minor tweaks and adjustments to ensure compliance with country-specific laws, regulations and standards. Therefore whatever is designed and manufactured for the Australian market is not dissimilar to what is produced for other countries/markets.

[3] Apple Repair Terms and Conditions, https://www.apple.com/au/legal/sales-support/terms/repair/generalservice/servicetermsen/
[4] LG Warranty information, https://www.lg.com/au/support/warranty

The literature and commentary on planned and premature obsolescence highlights the many forms of planned obsolescence. The Durability Matters website in their article Built To Fail: 7 Examples Of Planned Obsolescence[5] describes four broad headings:

- contrived durability
- software updates
- perceived obsolescence
- and prevention of repair

Lawsuits, academic research and considerable media coverage[6] highlights examples and case studies of planned obsolescence taking place. The Phoebus cartel of light bulb manufacturing companies in 1920 describe how producers colluded to artificially reduce the lifespan and increase sales.[7] In addition, policy reforms and regulatory interventions such as the EU Ecodesign Directive and the French Durability Index also respond to the need to maximise durability and reparability at the product design stage.

NSROC acknowledges that a healthy and competitive market will result in continual improvements in technology, especially with electrical and electronic products, however this may also result in increased consumption and potential disposal of 'outdated' items. Aggressive sales-driven advertising and marketing campaigns play a key role in stimulating new product purchases, upgrades and trade-ins, even when products remain functional and serviceable. A requirement to provide consumers with expected product life and reparability information could help mitigate this impact and increase the likelihood of further use of the item or its resale.

How can the Commission distinguish between planned product obsolescence and the natural evolution of products due to technological change and consumer demand?

NSROC does not have any data or specific information in response to this question, however we direct the Productivity Commission to Professor Tim Cooper who is responsible for leading research in the fields of sustainable design and sustainable consumption at Nottingham Trent University. He initiated the biennial PLATE (Product Lifetimes and the Environment) conferences and is editor of Longer Lasting Products (Routledge, 2010). More information about Professor Cooper's research and publications can be found here: https://www.ntu.ac.uk/staff-profiles/architecture-design-built-environment/tim-cooper

How does planned obsolescence affect repairers, consumers and the broader community in Australia?

The impacts and issues resulting from planned obsolescence are diverse, and affect different stakeholders in different way across different product classes. The impacts can be both positive and negative, however waste to landfill, e-waste contamination and the need for consumers to continually upgrade or replace products could be seen by many in the community as outweighing the advantages and benefits of constantly purchasing new products.

NSROC acknowledges the wider economic and social benefits associated with the development, commercialisation and uptake of new technologies, products and services, however community and consumer expectations are demanding meaningful attention to product-related environmental performance and corporate social and environmental responsibility.

[5] Built To Fail: 7 Examples Of Planned Obsolescence on Durability Matters website. Updated January 2021, https://durabilitymatters.com/planned-obsolescence/
[6] Media coverage related to planned obsolescence: https://www.sbs.com.au/news/apple-faces-lawsuits-over-slow-iphones https://www.be.unsw.edu.au/news/truth-behind-planned-obsolescence-product-design
[7] Phoebus Cartel 2.0 Gets DOE to Roll Back Lightbulb Efficiency Standards. February 2021, https://www.treehugger.com/phoebus-cartel-gets-doe-rollback-lightbulb-efficiency-standards-4854924

NSROC believes that economic, social and environmental outcomes can be collectively achieved without the need to elevate any single element to a priority. Decoupling of economic growth and environmental degradation should be pursued despite the complexity of doing do. Manufacturers, brands and retailers can do much more to enable the production and consumption of more durable and reparable products, without compromising business success.

What measures do governments currently use to prevent planned obsolescence or mitigate its effects (in Australia and overseas)? How effective are these measures?

Most State Governments in Australia have developed or are implementing circular economy policies and programs that call-out greater attention to repair, reuse and product durability.

The recently enacted Commonwealth Recycling and Waste Reduction Act 2020 features the relevance of repair, reuse and design for durability in its objects and subclauses. Local government needs to be part of the conversation about the Right to Repair given its key role in managing waste and post-consumer products; and that repair and reuse feature at the top of the waste management hierarchy.

At a Federal level, the Australian Government's response to the *Review of the Product Stewardship Act 2011* (July 2020), made specific recommendations with the aim/intent of continuing to apply product stewardship as an essential policy tool for transitioning to a circular economy (recommendation #1). Additional noteworthy recommendations accepted in the *Review of the Product Stewardship Act 2011* with implications for durability and reparability include the following:

- Recommendation #8 - Broaden the objects of the Act to include product design improvements related to durability, reparability, re-usability and recyclability.
- Recommendation #16 - Consider options to broaden the focus of the NTCRS to address the full product life cycle in line with the objectives of the Product Stewardship Act.
- Recommendation #24 - Develop a policy position for the NTCRS on re-use before the next review.

Other government measures to help address planned obsolescence include the following:

- Ecodesign Package of Measures – European Union[8]
- Reparability Index – France[9]
- Reduced VAT on 'small repair services for bikes, clothes and shoes – Austria[10]
- Repair Bonus funding 50% of repair cost – Austria[11]
- Tax breaks for appliance repairs by technicians in their home – Sweden.[12]

[8] EU Ecodesign Package of Measures, https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889
[9] French Reparability Index, https://repair.eu/news/french-repairability-index-what-to-expect-in-january/
[10] Austria makes repair more affordable, https://repair.eu/news/austria-makes-repair-more-affordable/
[11] Austria makes repair more affordable, https://repair.eu/news/austria-makes-repair-more-affordable/
[12] Right to Repair is blossoming all over Europe, https://repair.eu/news/right-to-repair-is-blossoming-all-over-europe/

What are the benefits, costs and risks of Australia adopting measures similar to those currently used overseas, such as product design standards and reparability ratings?

Benefits may include:

- Reduced waste to landfill through reduced disposal of reparable items.
- Product life extension and reuse through increased repair activity.
- Better informed decision making through increased consumer and user awareness.
- Consumer empowerment through community based repair cafes and tool libraries.
- Increased producer and retailer responsibility for products placed on the market.
- Increased producer and retailer accountability for difficult-to-repair products.
- Contribute to achieving a circular economy by prolonging the life of products, components and materials.

Costs may include:

- Developing and administering measures and associated policies, programs, regulations and standards, including consumer and industry education and information campaigns.
- Establishing government departments/divisions/commission to undertake technical assessment work to scale/rate products prior to sale.
- Monitoring, auditing and enforcement activities to manage compliance with measures.
- Education of consumers on how best to arrange/undertake repairs.

Do consumers have access to good information about durability and reparability when making purchases? If not, how could access to information be improved?

While some information exists, it is limited and typically only available to paying subscribers. As one of Australia's major consumer advocacy organisations, CHOICE provides various surveys, reviews and articles about durability, reparability and reliability. Online reviews published by CHOICE are available to subscribers and can provide useful information ahead of making purchases.

Existing consumer information and labelling for energy and water efficiency are well established in Australia and provide a framework and platform for also addressing reparability and durability. Administered by the Australian Government, both the Water Efficiency Labelling and Standards Scheme, and the Energy Rating Label could be expanded as a very practical consumer-friendly measure to communicate information about reparability and/or durability, similar to the French Reparability Index.

NSROC would strongly encourage the Productivity Commission to examine the Australian energy and water efficiency labelling schemes with a view to including a reparability metric. The benefit of building on existing initiatives provides cost savings, expertise and a rapid pathway to policy reform in a very practical way. Pre-existing industry knowledge of the schemes by manufacturers, brands and retailers, is also a benefit because systems and standards would be more readily understood. However, while the metric helps the decision to buy reparable items, it needs to be supported by information readily available when a repair is required.

More detailed information about both these schemes and how they operate can be found here:
Energy Rating Label: https://www.energyrating.gov.au/label
Water Efficiency Labelling: https://www.waterrating.gov.au/

From a local government perspective, the guidance and information from State Government agencies and departments responsible for waste management, also needs expansion and improvement. While there is extensive community education, information and funding opportunities for recycling post-consumer materials, there is little if any practical information for consumers about the top half of the waste management hierarchy and what consumers and businesses can and should do to extend product life through repair. Ensuring that repair and reuse initiatives are given a much higher funding priority through State Government grant programs would be a straightforward yet productive step.

Information request 7
What data are available on the amount of e-waste generated in Australia?

The most detailed and current information about the amount of e-waste generated in Australia is associated with post-consumer televisions, computer equipment, IT accessories, mobile phones, batteries and photovoltaic systems. These are the product classes that have received the most attention in Australia in terms of recycling end-of-life materials.

The Productivity Commission should review the following sources of more detailed information which feature market studies and annual reports on performance including volumes of product collected and materials recycled:

- NTCRS: https://www.environment.gov.au/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme/coreg-arrangements
- MobileMuster: https://www.environment.gov.au/protection/waste/product-stewardship/products-schemes/mobilemuster
- Batteries: https://batteryrecycling.org.au/resources/study-into-market-share-and-stocks-and-flows-of-handheld-batteries-in-australia/
- Photovoltaic systems: https://www.sustainability.vic.gov.au/About-us/Research/Solar-energy-system-lifecycles

Data on other categories of e-waste such as small appliances, major appliances and whitegoods, power tools, scientific and medical equipment, toys and hobby equipment and various consumer electronics devices other than televisions, is either very limited or non-existent. Import data exists on new products, however this is held by relevant industry associations and market research firms such as IBIS and Infomark.

From a local government perspective, some of NSROC's member councils operate Community Recycling Centres which accept domestic quantities of NTCRS e-waste. While some data is available on volume, these figures are more effectively described and communicated via the NTCRS annual reports[13] from each of the co-regulatory arrangements. Some of our member councils also collect small/portable e-waste items and small electrical items not covered by the NTCRS.

As a snapshot one of our member councils provided the following data:

- *In the FY19-20 one council collected 505kg of mobile phones through its Mobile Muster program.*
- *477 tonnes of e-waste between 2017-2020 with approximate breakdowns as follows:*

Item	***%***
Desktops/PCs	*14%*
Stereo/Hifi	*5%*
Laptop	*2%*
VCRs/DVD players	*5%*
Laser printers	*9%*
CRT monitors	*25%*
Small household items	*3%*
Flatscreen monitors	*37%*

[13] NTCRS Annual Reports, https://www.environment.gov.au/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme

How does hazardous e-waste compare to hazardous general waste in its prevalence and risks? Is there merit in distinguishing between hazardous e-waste and non-hazardous e-waste? And if so, how could this be done in practice?

State EPAs and the Commonwealth Department of Agriculture, Water and the Environment are the most appropriate sources of information on hazardous waste, its presence in specific product classes and the relevant regulatory instruments applied.

It is important to note that many categories of e-waste can contain hazardous and/or toxic substances that may harm human health and the environment. The presence of heavy metals, persistent organic pollutants and dioxins has been well documented in the literature and by key research groups and agencies working on e-waste related issues and impacts.[14]

The recently published Global E-Waste Monitor 2020 provides a global perspective with regional statistics. It describes "quantities, flows and the circular economy potential", and includes relevant data on hazardous substances in e-waste.[15]

From a local government/NSROC perspective, domestic e-waste is not typically treated as hazardous because the substances remain contained inside the equipment during the collection process. The exception may be if the collection occurred as part of a Council's kerbside clean up during wet weather depending on the susceptibility of the material to leaching in that situation.

As a general rule, all e-waste should be considered as a problematic waste stream that may contain hazardous substances. Establishing which types of e-waste are hazardous or non-hazardous is a major exercise requiring considerable resources from government and industry to identify and categorise prevalence and risks at any given point in time. It is also a misdirected method given the growing importance of applying a strong product stewardship approach across all products classes.

Most importantly, NSROC believes that all electrical and electronic products placed on the market should be accompanied by a consumer-friendly stewardship program that does not leave the economic burden of managing e-waste with local government and the general community. The focus on 'tonnes or toxics' is increasingly outdated and does not reflect a progressive or truly sustainable approach to managing the complete life-cycle of manufactured goods, including electrical and electronic products, which should consider designing out waste, increased reusability and a broader range of disposal options.

What estimates are available on the costs of e-waste disposal on the environment, human health and social amenity, in Australia and internationally? How do the impacts differ by disposal type, or by the type of product or hazardous material?

NSROC encourages the Productivity Commission to consider the recently published Global E-Waste Monitor 2020 which provides a global perspective with regional statistics. It describes "quantities, flows and the circular economy potential", and includes relevant data on hazardous substances in e-waste.[16]. The Commission should also consider the research and advocacy activities conducted by the Basel Action Network and the Silicon Valley Toxics Coalition. More details here:

- Basel Action network: https://www.ban.org/
- Silicon Valley Toxics Coalition: https://svtc.org/

[14] E-waste: A Global Hazard. By Devin N. Perkins, Marie-Noel Brune Drisse, Tapiwa Nxele, Peter D. Sly in Annals of Global Health, November 2014, https://doi.org/10.1016/j.aogh.2014.10.001
[15] Global E-waste Monitor 2020, http://e-wastee-wastemonitor.info/
[16] Global E-waste Monitor 2020, http://e-wastee-wastemonitor.info/

How much of Australia's e-waste is shipped overseas for recycling? Is there evidence of circumstances where this creates problems for recipient countries?

NSROC suggests that the Productivity Commission review the research and advocacy activities conducted by the Basel Action Network and the Silicon Valley Toxics Coalition (contact details above). The Basel Action Network has conducted several projects related to the transboundary movement of e-waste, some of which have included GPS tracking of e-waste exported from Australia. Also relevant is that in Australia, there is currently a lack of well-developed end-markets for materials liberated from e-waste with most of the high value components such as printed circuit boards being exported overseas for more elaborate processing to extract precious metals and other materials/substances.

Logistics associated with the collection, aggregation and transport of e-waste is another major cost item in Australia which enables (and incentivises) landfilling and illegal dumping of e-waste. It also results in reduced activity further up the waste management hierarchy for electrical and electronic equipment that might be repaired and reused. The SMART Centre at the UNSW has developed a micro-factory to dismantle some types of e-waste which could be transported to regional centres where e-waste has been aggregated.[17]

What are Australia's current policy settings for managing the potential environmental and health effects of e-waste (such as landfill bans, the National Television and Computer Recycling Scheme or Mobile Muster)? Are these policy settings broadly right — that is, are they proportional to the impacts of e-waste on the community?

At a Federal level, the Australian Government's response to the *Review of the Product Stewardship Act 2011* (July 2020), made specific recommendations with the aim/intent of continuing to apply product stewardship as an essential policy tool for transitioning to a circular economy (recommendation #1). Additional noteworthy recommendations accepted in the *Review of the Product Stewardship Act 2011* with implications for durability and reparability include the following:

- Recommendation # 6 - Improve community support for, awareness of and engagement in product stewardship schemes.
- Recommendation #8 - Broaden the objects of the Act to include product design improvements related to durability, reparability, re-usability and recyclability.
- Recommendation #15 - Assess the feasibility of expanding the NTCRS to include electronic and electrical equipment products.
- Recommendation #16 - Consider options to broaden the focus of the NTCRS to address the full product life cycle in line with the objectives of the Product Stewardship Act.
- Recommendation #24 - Develop a policy position for the NTCRS on re-use before the next review.

Depending on how these recommendations are pursued, developed and implemented, they have direct and indirect implications for local government in its role as a manager of Municipal Solid Waste, as opportunities, enablers, and/or ongoing barriers.

How can a right to repair policy further reduce the net costs of e-waste in Australia, and would such an approach be an effective and efficient means of addressing the costs of e-waste to the community?

A Right to Repair policy in Australia would contribute to a more effective and efficient means of addressing the costs of e-waste to the community in various ways. Repair and reuse for electrical and

[17] https://newsroom.unsw.edu.au/world-first-e-waste-microfactory-launches-unsw

electronic equipment represents a preventative measure to dealing with e-waste as opposed to being a downstream ameliorative measure such as materials recycling.

Design for durability, repair and reuse can be seen as the 'first responders' when considering solutions and preventative measures that can avoid and reduce e-waste. Indeed design for durability and reparability are explicit 'preventative' measures that aim to design-out waste from the outset and therefore underscore one of the key principles of what constitutes a circular economy, and the significant impact that design can have on keeping products going longer, and materials circulating in the economy.

There are potentially more jobs associated with repair and reuse than recycling; there are costs savings to consumers; there are new business opportunities for the repair industry and social enterprise; there is a more equitable and appropriate allocation of environmental responsibility to those who produce and consume electrical and electronic equipment; there is a cost saving to local government in not having to carry as much of the economic burden of managing e-waste; and there is an opportunity for manufacturers and brands to develop new business models and products that are designed for durability and reparability.

The relevance of repair to local government talks directly to the waste management hierarchy and the opportunities that exist in the top half of the hierarchy (avoidance and reduction through reuse and repair), as opposed to the bottom half and its focus on collecting and processing end-of-life products for materials recovery, as well as safe treatment and disposal. These outcomes represent a more effective and efficient means of managing electrical and electronic equipment from a life-cycle perspective.

The increasing number of community-based Repair Cafés nationwide is also testament to the growing appetite for repair and reuse by households. The Bower Reuse and Repair Centre further highlights this appetite and its relevance at a local government level. In short, parts of the community are eager to keep their products going longer and maintain control over this process in a very practical way, be it for waste avoidance/reduction reasons, cost savings or lifestyle considerations.

Information request 8

What policy reforms or suite of policies (if any) are necessary to facilitate a 'right to repair' in Australia?

The Commission could investigate the following suite of reforms, programs and measures:

- Ecodesign Package of Measures – European Union[18]
- Reparability Index – France[19]
- Reduced VAT on 'small repair services for bikes, clothes and shoes – Austria[20]
- Repair Bonus funding 50% of repair cost – Austria[21]
- Tax breaks for appliance repairs by technicians in their home – Sweden[22]

The Commonwealth Recycling and Waste Reduction Act 2020 also has the ability to enable, encourage and require greater attention to a right to repair.

[18] EU Ecodesign Package of Measures, https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889
[19] French Reparability Index, https://repair.eu/news/french-repairability-index-what-to-expect-in-january/
[20] Austria makes repair more affordable, https://repair.eu/news/austria-makes-repair-more-affordable/
[21] Austria makes repair more affordable, https://repair.eu/news/austria-makes-repair-more-affordable/
[22] Right to Repair is blossoming all over Europe, https://repair.eu/news/right-to-repair-is-blossoming-all-over-europe/

Are there any other barriers to repair and/or policy responses that the Commission should consider?

A range of barriers to repair and/or policy responses should be considered by the Commission, including:

- The potency and impact of advertising and marketing campaigns that encourage consumers to purchase, upgrade, trade-in and acquire new products, even when existing products remain functional and fit-for-purpose. The prevalence of cheaper (possibly mass produced) items can make repairs seem expensive.
- Resistance from manufacturers, brands and retailers to promote or encourage higher levels of repair, on the basis that this might affect overall throughput of new product.
- Resistance from manufacturers, brands and retailers to promote or encourage higher levels of repair, on the basis that product safety and liability may be impacted from unsafe self-repair or poor quality professional repair services.
- Resistance from manufacturers, brands and retailers to promote or encourage higher levels of repair, on the basis of IP theft and related commercial sensitivities.
- Resistance from some policy-makers concerned about safety issues associated with self-repair and/or quality of repair industry services.

A Right to Repair is essentially an option not an obligation for a consumer. If data, case studies and demand exists to show that the greater community good is obtained by repair rather than replacement, that evidence should be presented and promoted.

Are there other international policy measures or proposals that the Commission should consider as part of this inquiry?

See list above and below but also refer to responses under other questions.

- EU Ecodesign measures https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889
- USE OF ECONOMIC INSTRUMENTS AND WASTE MANAGEMENT PERFORMANCES Final Report 10 April 2012 Contract ENV.G.4/FRA/2008/0112 https://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf
- European Commission. 2012. Life cycle indicators framework: development of life cycle based macro-level monitoring indicators for resources, products and waste for the EU-27. European Commission, Joint Research Centre, Institute for Environment and Sustainability https://eplca.jrc.ec.europa.eu/uploads/LCindicators-framework.pdf
- COOLPRODUCTS DON'T COST THE EARTH https://mk0eeborgicuypctuf7e.kinstacdn.com/wp-content/uploads/2019/09/Coolproducts-briefing.pdf
- France Indice de réparabilité pour les produits électriques et électroniques (French) http://www.consultations-publiques.developpement-durable.gouv.fr/indice-de-reparabilite-pour-les-produits-a2178.html
- Austrian Draft Budgetary Plan 2021 (p.15) https://ec.europa.eu/info/sites/info/files/economy-finance/2021_dbp_at_en.pdf

Conclusion

NSROC sees repair as an important activity with diverse social, economic and environmental benefits, when carried out in compliance with relevant safety standards, policies and regulations. While a consumer's choice to repair is outside local government's direct sphere of influence, having the opportunity for such repairs can keep resources productive for longer and reduce the amount of municipal waste generated.

There are potentially more jobs associated with repair and reuse than recycling; there are costs savings to consumers; there are new business opportunities for the repair industry and social enterprise; there is a more equitable and appropriate allocation of environmental responsibility to those who produce and consume electrical and electronic equipment; there is a cost saving to local government in not having to carry as much of the economic burden of managing e-waste; and there is an opportunity for manufacturers and brands to develop new business models and products that are designed for durability and reparability.

We congratulate the Productivity Commission on providing the Issues Paper and trust that you will find our suggestions for further consideration and investigation helpful in developing your future recommendations to government.

ATTACHMENT A – Aggregated summary of input from NSROC member councils

Demand, Barriers, Services

Do you think there is demand for repair services in your LGA? If so, do you have data on the types of products residents want repaired?

- Data across Local Government Areas suggests an increase in demand for repair cafes since 2017. In the majority of cases, the cafes involve in-person workshops, however, one Council experienced a surge in popularity when the workshops moved online during Covid 19
- Key items residents bring to repair cafes include shoes, furniture, cutlery, jewellery and small electronic items such as: CD players, Jaffle makers, hand mixers, blenders, TV, lamps, shavers; electric carving knife.
- Limited data on the repair and related issues held by member councils.
- Some member councils cited the presence of clothing alterations stores, independent mechanics, and Men's Sheds as helping to address demand for repair services.
- Delivery of repair/DIY workshops as part of our workshops (sustainability education series) – with the Men's Shed and The Bower Reuse and Repair Centre.
- Statistics for Repair Café visitors for four years 2016 – 2019 show growth at one member council with increased number of visitors and growth in the number of items presented for repair.
- **Visitor numbers:**
  - 2016/500 visitors over 24 cafes, average 20 visitors each café
  - 2017/619 visitors over 24 cafes, average 26 per café
  - 2018/748 visitors *over 24* cafes, average 31 per café
  - 2019/1051 visitors over 24 cafes, average 44 per café
- **Numbers of items presented for repair:**
  - 2016/473 items (average 20 repairs per session)
  - 2017/941 items (average 40 repairs per session)
  - 2018/1258 items (average 52 repairs)
  - 2019/1560 items (average 65 repairs)

What do you think are the key barriers preventing the uptake of repair services in your LGA?

- Data from repair cafes suggests that sharpening, sewing and jewellery items have a high rate of success at the Repair Cafes, while shoes and gadgets have the lowest. For gadgets (electronic goods), reasons identified as the lack of parts that can be replaced on the spot, or else broken parts can't be repaired.
- The lack of resources and availability of skills required to repair a diversity of products.
- Consumer pays extended warranty add ons are a barrier to repair as the cost of extended warranty as a proportion of the cost of the goods outweighs the perceived risk of failure and replacement cost.
- Often End User License Agreements restrict access to third party repairers by voiding any warranty/guarantee.
- Safety and liability issues associated with the correct collection, handling and storage of items for repair, particularly electronic items
- Costly repair options are a common barrier.
- The reliability of the repair centre and any guarantees on workmanship.
- The cost of repair in comparison to buying a new item at a similar cost.
- The ability for people to get the item to the centre for repairs.
- Residents are time poor and therefore not all are willing to spend time fixing things up if it is easy to just replace.

- Covid has meant that the community were not able to attend workshops.

Are there different types of repair services needed? If so, what are they?

- Based on Community Recycling centre figures, Councils have reported that electronic goods are most often discarded. One council collected 477 tonnes of e-waste (computers TVs and computer peripherals) between 2017-2020. Flat screen TV and laptop computers were heavily represented.
- Reasons identified for premature discarding of electronic items more broadly, such as shavers and electronic toothbrushes, is imbedded battery failure, rather than instrument failure.
- One council reported collecting 505kg of mobile phones through its Mobile Muster program in one year.
- Sharpening, Sewing and Jewellery have a high rate of success; Shoes and Gadgets have the lowest.
- For Gadgets, parts are not easily replaced on the spot, or else broken parts can't be repaired, and many visitors note on their repair records "advice given". Shoes and Sharpening have the highest rates of visitors using the materials and equipment provided to do their own repairs.
- There would be demand for repair services and workshops with a focus on furniture, bicycles, small kitchen appliances.

Government action and challenges

What types of action do you think the Governments could take to help improve access to repair services?

- Grants or subsidies for repair service providers, particularly for ongoing operational costs.
- Encouraging manufacturers to enable batteries to be easily replaced, and to accept used batteries at end of life for recycling, would significantly reduce the need for replacement items, given that many electronic items are discarded due to battery failure.
- A product lifespan indicator (similar to energy/water consumption indicator) could provide information on product life expectancy with normal domestic use to consumers on a label.
- Labelling to inform consumers of embedded software requiring regular upgrades to prevent planned obsolescence.
- Low-cost items which are readily discarded due to poor quality and early failure (such as low-cost power tools, fans etc) should attract a higher levy due to their short lifespan, low replacement cost and lack of repair options/spare parts available.
- Increasing the cost to the consumer in the form of an advance disposal fee may ensure that the burden of disposal doesn't lie with the 'last owner' or with local government.
- To increase the lifespan of appliances, several 'ecodesign' measures could be mandated to facilitate a products repair, including ensuring that:
    - spare parts are available for a long period of time after product purchase;
    - the manufacturer ensures the delivery of the spare parts within a rapid timeframe;
    - parts can be replaced with the use of commonly available tools and without permanent damage to the appliance;
    - manufacturers ensure the availability of repair and professional maintenance information for professional repairers.
- Extended producer responsibility (EPR) should cover the whole product lifecycle (including packaging) via new business models, guidance on take-back and support for repair services. EPR should be designed such that the responsibility for products is covered at the time of purchase to

avoid 'orphan' products becoming the burden of consumers or local government in the case of a manufacturer or importer company disappearing.

- To encourage the repair of small consumer items and whitegoods an incentive could be provided for repair services, such as lower (or zero) GST and repair grants (e.g. 50% of total repair cost up to $150)
- Encouraging products and services that are intrinsically less waste-intensive than close substitutes, and the provision of services that can replace the purchase of products with reuse models (e.g. Tool library/hire).
- Given the popularity of online repair cafes during Covid-19, government sponsorship of increased numbers of these events would support repair literacy and practice.
- Using policy to remove unnecessary barriers to IP (wiring diagrams, diagnostic software etc) will enable a more competitive repair market.
- Enforcing quality of products that are built to last so that repairs are not as necessary
- Grants for organisations to set-up repair centres

What are the key challenges that waste electrical and electronic products pose for your Council?

- Safety and Liability issues for the facility but not councils, assuming they are not directly operating these facilities.
- There are no real places for residents to take small electrical products not covered by the NTCRS, even though some councils provide a booked kerbside collection of televisions and NTCRS e-waste, and some Community Recycling Centres accept small electrical items.