



The Hon Trevor Evans MP  
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2 March 2022

Dear Minister Evans

**Re: Stewardship for Consumer and Other Electrical and Electronic Products**

Thank you for the opportunity to provide feedback on the federal government's Stewardship for Consumer and Other Electrical and Electronic Products discussion paper. The federal government is to be commended for the significant work undertaken to-date to explore the need for, and viability of, product stewardship schemes for electrical and electronic products.

The Waste Management and Resource Recovery Association of Australia (WMRR) is the national peak body representing all stakeholders in Australia's \$15.5 billion waste and resource recovery (WARR) industry. Our more than 2,000 members from over 500 entities nationwide span the breadth and depth of the sector and operate across the three (3) levels of government, private sector, universities, and NGOs. WMRR's purpose is to lead the success of the WARR industry, which will drive the creation of local jobs and economies, while ensuring that the environment and community are protected through safe and responsible resource recovery.

WARR is a shared responsibility and it requires a multi-pronged approach that tackles product design, waste generation and reduction, design for re-use and repair – and if not, the inclusion of Australian recycled materials - as well as efficient processing and recycling of materials. All of these must be backed by robust regulations and policies, alongside other assistance such as the appropriate placement of financial responsibility and incentives (such as taxation), and genuine commitment and funding of research and development. The government's consideration of how to maximise product stewardship for consumer and other electrical and electronic products is a positive step towards building this multi-pronged approach.

While WMRR's full submission can be found below, our overarching point is that even though the WARR sector is capable of safely storing, disposing, and/or reprocessing and recycling end-of-life materials, the current disproportionate emphasis on solving at end-of-pipe only seeks to perpetuate linear thinking. For Australia to move towards a circular economy, and not one that simply creates a closed loop or down-cycles, we require regulatory and policy settings that require a product's creation and lifecycle to design out waste and pollution to enable every part of the supply chain to play a clear role in material management, which ideally includes systems for re-use and repair, does not rely wholly on recycling, but at least provides the opportunity to do so by minimising (or taking

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responsibility for) the inclusion of hazardous materials. To that end, WMRR strongly supports the adoption of the polluter-pays principle (through mandated extended producer responsibility schemes), which is a commonly accepted policy globally that can fund and drive this as it stipulates that those who produce the pollution bears the cost – all, if not part of it – of managing the material at all stages including end-of-life, and in so doing, prevents damage to human health and the environment.

This principle is not only logical and proven globally, it is also a powerful one because it provides moral, legal, and financial imperatives for product manufacturers to take responsibility for the products they create. This policy approach has the potential to drive a paradigm shift in the creation of products at first instance, with greater thought and emphasis given to material selection and product design to minimise the costs associated with total lifecycle management. To be blunt, in the absence of this financial obligation, we will not see shifts in design or material selection, as there is no incentive to do so for generators when they can continue to externalise this cost in Australia.

In Australia, this principle is in action to some extent across products such as TVs and computers (through the NTCRS), paint and oil nationally, and across state/territory-based container deposit/refund schemes. WMRR supports the expansion of these schemes, specifically the use of mandated EPR, to capture more electrical and electronic products, particularly as the federal government already has the legislative tools to do so under the Commonwealth *Recycling and Waste Reduction Act 2020*. The reasons why WMRR is advocating for mandated EPR, and the opportunities and benefits to be had in doing so, can be found throughout the submission below.

Further, it is important to stress that while Australia is an island, we do not operate in a vacuum but as part of a global economy and already, we are seeing the impacts of both domestic and international policies and regulations on ever-increasing volumes of e-waste that now have no final destination overseas. The WARR industry supports the intent of the federal *Recycling and Waste Reduction Act 2020* and policy changes, given the aim to drive improved environmental outcomes, greater reuse and recycling, and encourage a step-change in product design; all of which would potentially, drive the growth of domestic processing and remanufacturing industries. However, there remain significant challenges as the intent has not been fully enforced or implemented. There has also not been sufficient headway made in developing capacity, infrastructure, and market demand for recycled products, for example, there is still no real leadership in purchasing recycled materials federally.

WMRR looks forward to continued engagement as the government finalises its product stewardship models and processes for electrical and electronic products. Please do not hesitate to contact the undersigned if you would like to further discuss WMRR's feedback.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Gayle Sloan', written over a light blue circular graphic element.

Gayle Sloan  
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**SUBMISSION**

Question	WMRR's response
<p><i>Introduction</i></p> <p>Q1.1 What market and regulatory failures make it challenging for you to safely reduce the accumulation of e-waste in Australia?</p> <p>Q1.2 Under what circumstances is voluntary product stewardship more appropriate and why? What are the advantages and disadvantages of voluntary product stewardship?</p> <p>Q1.3 Under what circumstances is co-regulatory product stewardship more appropriate and why? What are the advantages and disadvantages of co-regulatory product stewardship?</p> <p>Q1.4 Under what circumstances is mandatory product stewardship more appropriate and why? What are the advantages and disadvantages of mandatory product stewardship?</p>	<p>As noted above, WMRR is advocating for an appropriate mandatory extended producer (EPR) scheme for e-waste particularly as there are already international EPR schemes in place to manage these products, as well as international conventions that Australia must abide with related to the transboundary transportation of hazardous materials. WMRR also highlights that product stewardship schemes and EPR models as an extension, are a solution for when we are not efficiently and effectively managing a product at end-of-life as best as we could, and we don't have a home for it. As noted in the paper, not only will the world's e-waste grow to 75 million tonnes in 2030 from 54 million tonnes in 2019, less than a fifth of this volume is presently being collected through formal and existing recycling systems, making e-waste a good candidate for mandated EPR.</p> <p>WMRR strongly believes that at present, Australia's product stewardship framework does not go far enough; while voluntary and co-regulatory schemes are well-intended, there are numerous challenges with these that we have seen to-date, including the prevalence of free-riders (as evidenced in the voluntary battery stewardship scheme that has taken years to develop due to these and other factors), as well as the lack of funding for a viable and effective collection network and infrastructure required these products. The container deposit/refund scheme is one good example of a mandatory EPR that has had, despite its teething problems, proven success in meeting its intent, including increasing collection of clean streams of products, improving recycling outcomes, holding polluters (i.e., the manufacturers of products who are the generators of waste) to account, and raising community awareness and engagement about lifecycle management of materials.</p> <p>What is currently lacking in Australia are mandatory schemes that will place obligations on generators to manage end-of-life, including the costs of managing materials at this stage. While WMRR acknowledges that at least a portion of these costs will be passed to the consumer, the reality is that at present, these costs are often managed through council rates and disposal costs; the shift through EPR is that these costs would be placed</p>



transparently at the point of purchase, and clearly enable these funds to be utilised for design, collection and reprocessing (as per the CDS).

In a successful mandatory EPR scheme, where producers have genuine responsibility for the full lifecycle of their products, medium- to long-term planning will then come into play in managing these costs, for example, by designing for disaggregation and reuse of a producer's own parts to create a demand for recycled products and reducing reliance on virgin materials.

As noted above, there are regulatory frameworks in place globally to manage e-waste and WMRR points to the EU waste electrical and electronic equipment (WEEE), which is also highlighted in the paper, as a good example of regulatory best practice for the management of e-waste that Australia could align to. WMRR also points to the European Ecodesign initiative as a potential long-term complementary solution for a host of materials as this not only removes the need to manage the full cost at end-of-life, but it also has other far-reaching benefits such as increased product durability and reduced reliance on virgin materials. This program establishes a framework that sets mandatory ecological requirements for all products sold in the EU. The aim of this initiative is to ensure that manufacturers will, at the design stage, be obliged to reduce energy consumption and other negative environmental impacts of products (noting that 70% of carbon emissions are related to material management), while enforcing considerations such as recyclability, polluting emissions, waste, and water use. Building local industries and job creation are other economic benefits that should be considered (not just cost, which can be managed).

Further, there are potentially long-term cost savings for households and businesses through first and foremost, landfill diversion, as well as greater resource efficiency and value preservation.

Any foreseeable cost challenges for product manufacturers, retailers, and the like, could be managed through appropriate tax incentives for manufacturers that promote repairability and sustainable product design to offset the cost difference between repair, recycling at end-of-life, use of recycled materials, and manufacturing costs, including the use of virgin materials.



*Product categories - general*

Q2.1

How can the data be improved?

- a) Is there data on local manufacturing?
- b) Is it reasonable to keep using the international parameters for product lifetimes?
- c) How can repair, reuse and resale be measured?
- d) Is there data on recycling outside the NTCRS and MobileMuster?
- e) What can be done to measure the type and amounts of hazardous substances?
- f) Are there better estimates on the type and amounts of 'unknown' materials?
- g) Are the eight product categories suitable for the Australian context?

Generally, Australia has a significant issue with the quality and availability of data to support waste management and resource recovery (WARR). As a first step, the government should amend monitoring arrangements for the NTCRS so that GPS trackers can be used to determine the end-of-life location of materials collected for recycling as part of the scheme, to provide certainty on where these materials are going and to enable policies to drive on-shore processing, which would create local jobs and economies as well as drive domestic market development. These arrangements should then be replicated across all electrical and electronic waste EPR models.

WMRR also suggests that when it comes to local manufacturing, where it may be easier to measure and capture data around repair, reuse, resale, recycling, and use of recycled content, that the government considers the Ellen MacArthur Foundation's models and technological platforms, e.g., Circulytics, a digital measuring tool that gives businesses a comprehensive picture of their circularity across all operations, allowing them to make informed decisions based on data and metrics.

There is a significant role that the federal government has commenced playing in actively collaborating with jurisdictions to develop meaningful data specifically in the areas of production, manufacturing, and distribution. Without this data, it is impossible to make true assessments and plans. The federal government, in currently drawing all stakeholders to the table, has the opportunity to mandate the acquisition and development of data through the use of a national tool to capture inputs, outputs, and material flows throughout the lifecycle of a product, including the design, production and remanufacturing, and distribution stages.

WMRR also believes that there is an opportunity for Australia to better capture the products that are imported and placed on the market, potentially through regulation similar to those in the EU that require member states to collect and report annually information, including substantiated estimates on the quantities and categories of EEE placed on their markets, collected through all routes, prepared for re-use, recycled and recovered within the member state.



	<p>On hazardous substances, the EU has minimum requirements for WEEE, including the testing and evaluation of hazardous substances. The results must then be recorded. There is no reason that Australia cannot follow suit nor is there any reason that the federal government cannot use its powers to stipulate to suppliers a list of hazardous substances that may not be included in products to be distributed in Australia.</p> <p>WMRR agrees with the eight (8) product categories and the taskforce’s broad definition of electrical and electronic products and e-waste. However, for abundance of clarity for all stakeholders, there may be a need to further define these products, e.g., setting clear minimum and maximum voltage parameters for products captured by all e-waste-related product stewardship schemes.</p>
<p><i>Product categories – small equipment</i></p> <p>Q2.2</p> <p>Can and, if so, how should product stewardship be implemented for small equipment?</p> <p>Q2.3</p> <p>Would an approach similar to a container deposit scheme be a feasible option to safely reduce the volume and rate of small appliances becoming e-waste? Why, or why not?</p> <p>Q2.4</p> <p>Would providing households with an easily identifiable bag to place small appliances into before placing in kerbside bins be a feasible option for safely reducing the volume and rate of small appliances to e-waste? Why, or why not?</p>	<p>Product stewardship can be implemented for small equipment and an approach similar to the CDS scheme would be a feasible option. The existing network of collection and recycling infrastructure that has been developed in each state should be considered to see how it can be maximised to extend to the collection of small appliances; e.g., as most jurisdictions have or will soon have a CDS, depots as well as other collection points could be used to also collect small appliances. Further, in NSW, a potential solution would be to include small appliances within the scope of household problem waste so that these may be sent to the state’s existing network of community recycling centres (CRCs).</p> <p>WMRR unequivocally opposes any proposal to provide households with an “easily identifiable bag” to put small appliances into before placing in kerbside bins. What is needed instead are specific pathways and options for the collection of these materials, funded by producers, including clear, standardised labelling that articulates how these products should be disposed of/collected, and not additional costs and hazards placed on council residents and collection operators. Firstly, WMRR highlights that these products are generally combustible materials, and as soon as they are compacted, will present a fire/explosion risk.</p> <p>Secondly, what is not needed is an increased risk of contamination of materials in the kerbside yellow bin. Material recovery facilities globally use similar technology to separate material streams into bales, specifically aluminium, steel, paper and cardboard, and plastics (some separate higher value PET and HDPE with the remainder placed in a mixed</p>



<p>Q2.5 What are the other opportunities and challenges for improving the stewardship of small equipment in Australia?</p>	<p>plastics bale). MRFs do not separate composite materials, which small appliances will likely fall under; instead, these products should be separated at source to limit the risk of contamination.</p>
<p><i>Product categories – televisions and computers</i></p> <p>Q2.6 Aside from lifting NTCRS targets, does anything else need to be in place to drive increased recycling and recovery rates for televisions and computers?</p> <p>Q2.7 Would collection targets based on convenience rather than volume improve the environmental, social, and economic outcomes of the NTCRS?</p> <p>Q2.8 Is the payment of levies by importers and manufacturers to co-regulators an effective and efficient way to fund high-efficiency recycling activities? Why or why not?</p> <p>Q2.9 Is there a role for the Australian Government in setting a levy that importers and manufacturers pay to co-regulators? Why or why not?</p> <p>Q2.10</p>	<p>At present, local government is facing cost challenges related to the NTCRS, which comes at a price that is usually externalised. These challenges have impacted the environmental, social, and economic outcomes of the scheme but instead of focusing on changing what the targets are based on – and WMRR believes these should still be based on volume – systemic changes are needed on how to manage these costs.</p> <p>Thus, WMRR believes that there is absolutely a need and a place for levies to be imposed on importers and manufacturers of e-waste and that the true cost of recycling, which little consideration has so far been given, leading to the significant challenges that Australia continues to face (including a race to the bottom in resource management), must be factored into these levies.</p> <p>To reiterate, WMRR strongly supports the use of mandatory EPR to ensure that the management of these products are appropriately resourced and funded by producers who supply these materials into our environment and economy. WMRR’s position is that EPR returns moral and financial responsibility for potential hazards or harm to those who create it, and while these costs are able to be externalised, continuing to do so means we will not see the necessary change we require towards resource management or design. As such, it is the producers’ responsibility to fund the collection, recycling and re-use of costs of these materials and the federal government can enable these requirements. Further, EPR is not a novel idea but is already used globally where many of these products are developed and manufactured, and the global companies that do so are accustomed to complying with such schemes.</p> <p>WMRR does not agree that recycling, refurbishment, and repair that occur overseas should contribute to material recovery targets in Australia. WMRR supports the goal to manage our end-of-life materials as close as possible to where they were generated – this is responsible management for one, and importantly, doing so will create jobs in local areas.</p>

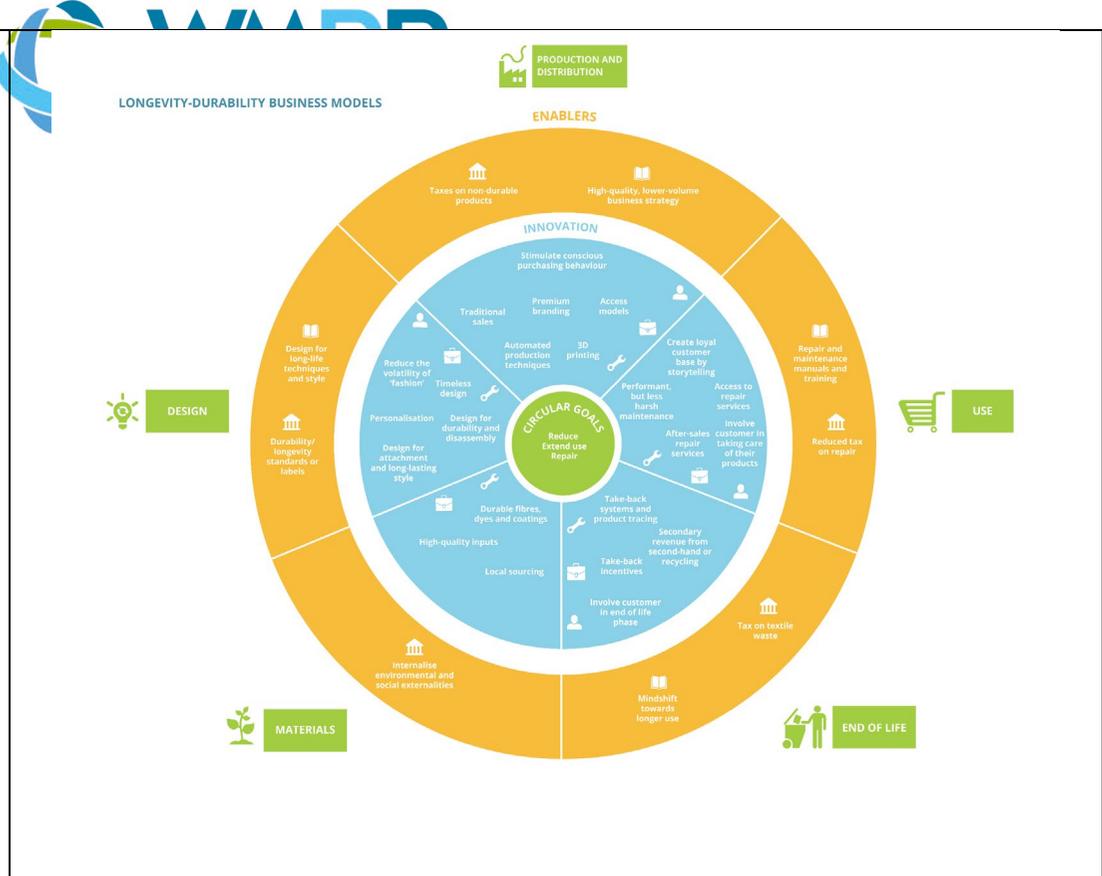


<p>Should the true cost of recycling be a consideration in setting a levy for importers and manufacturers? What outcomes would be realised by considering this?</p> <p>Q2.11</p> <p>Should recycling (or refurbishment and repair if counted) that occurs overseas contribute to material recovery targets in Australia?</p>	<p>To allow for overseas recycling/refurbishment/repair to contribute to material recovery targets provides an “easy” way out on where resources can continue to be exported with continued lack of action and consideration around building local processing and remanufacturing infrastructure and market demand.</p>
<p><i>Product categories – large appliances</i></p> <p>Q2.12</p> <p>What feasible interventions need to be made so that Australia can shift from 90 per cent low-efficiency recycling of large appliances to a greater proportion of high-efficiency recycling? Would it be a short-, medium- or long-term intervention?</p> <p>Q2.13</p> <p>What are the opportunities for better data-collection at the point of recycling and recovery?</p>	<p>Due to the relatively few product types for larger appliances, as noted in the paper, WMRR believes that there is an opportunity to roll out some light-touch initiatives that will foster EPR and encourage sustainable design of products. These are equipment that not only generally last longer, consumers also have an expectation that they do. Further, there is a level of success related to the collection of end-of-life large appliances where these products are typically dissembled to recover materials, or in some instances (particularly on a community level), repaired/exchanged.</p> <p>In this instance, WMRR supports interventions that will encourage the extension of product life through reuse, repair, and resale. As a start, the federal government could:</p> <ul style="list-style-type: none"> <li>• Require manufacturers of larger appliances to provide spare parts and repair manuals for a minimum legislated timeframe, including the warranty period.</li> <li>• Introduce economic incentives to encourage sustainable design that will minimise waste avoidance, e.g., through tax incentives and/or grants.</li> <li>• Develop standards and certification systems for reused, repaired, and remanufactured goods to build consumer confidence and promote sustainable design.</li> </ul>
<p><i>Product categories – temperature exchange equipment</i></p> <p>Q2.14</p> <p>Would extending the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 to include equipment as well as ozone depleting substances and synthetic greenhouse gases be a feasible option for</p>	<p>WMRR supports the extension of the <i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989</i> to include equipment as well as ozone depleting substances and synthetic greenhouse gases as doing so would have a long-term benefit of driving positive change in product design, whereby these types of ozone depleting substances and synthetic greenhouse gases are designed out of products in the first instance, as opposed to managed at end-of-life.</p>



<p>increasing high-efficiency recycling of temperature exchange equipment?</p> <p>Q2.15 What other feasible interventions need to be made so that Australia can shift from 90 per cent low-efficiency recycling of temperature exchange equipment to a greater proportion of high-efficiency recycling? Would it be a short-, medium- or long-term intervention?</p> <p>Q2.16 What are the opportunities and challenges in recycling and recovering polyurethane and polystyrene plastics from fridges, freezers, and other equipment?</p>	
<p><i>Product categories – other large equipment</i></p> <p>Q2.17 Would strengthening commercial leasing arrangements to include high-efficiency recycling for end-of-life management of other large equipment improve environmental and social outcomes? How could this be done, and would it be a short-, medium- or long-term intervention?</p> <p>Q2.18 Could leasing options for consumer products in this category be promoted? How could this be done, and would it be a short-, medium- or long-term intervention?</p> <p>Q2.19 What other feasible interventions need to be made so that Australia can shift from 90 per cent low-efficiency</p>	<p>Focus needs to first be given to how to increase the lifespan through repair and refurbishment of these larger equipment. That said, WMRR also supports the use of access-based, product-as-a-service models to drive commercial and consumer leasing, and/or take-back schemes, where products remain the property of a company.</p> <p>On a commercial level, moving from sales to leasing requires innovation and change in business models, alongside social innovation to drive new ways of business interaction and connectivity. These changes do require federal government intervention in areas such as policies that support innovation and access-based models (based on renting, leasing, or sharing); beyond legislative measures, there is also a need for economic incentives and financial support, as well as behaviour change and education for all stakeholders and consumers. The EU has developed the model below for textiles, which can be considered and replicated where appropriate for large equipment.</p>

recycling of other large appliances to a greater proportion of high-efficiency recycling? Would it be a short-, medium- or long-term intervention?



*Product categories – solar PV and battery storage*

Q2.20

Should product stewardship aim to promote repair and reuse of second-hand solar panels (including in overseas markets)? What state and territory electrical safety laws and regulations, and other energy market

WMRR supports the use of a mandated EPR to manage solar panels, and this scheme should promote repair and reuse of second-hand panels, though only domestically.

Jurisdictions have already made some headway with regards to solar PV; WMRR understands that Sustainability Victoria is leading the development of a solar PV product stewardship scheme in Victoria and the NSW EPA recently awarded grant funding for recycling initiatives. On a national level, it is understood that work is progressing on the co-design of a national stewardship scheme for solar PV, led by the Product Stewardship Centre of Excellence; we would urge the federal government to encourage the



<p>considerations, are relevant to promoting a second-hand PV panel market?</p>	<p>prioritisation of a mandated national scheme for solar PV panels, particularly as research has shown that the rapidly accelerating uptake of solar PV as an electricity source in Australia has the potential to create a problematic waste stream in the future. A study commissioned by the Victorian government found that it is highly unlikely that appropriate end-of-life management for solar PV systems – and panels in particular – will happen in the absence of a product stewardship scheme<sup>1</sup>.</p>
<p>Q2.21 How can existing measures promoting and regulating domestic and utility PV systems be leveraged to accelerate solar panel stewardship in Australia?</p>	<p>A study commissioned by the Victorian government found that it is highly unlikely that appropriate end-of-life management for solar PV systems – and panels in particular – will happen in the absence of a product stewardship scheme<sup>1</sup>.</p>
<p>Q2.22 Who should be responsible for paying the costs of transporting solar panel waste for processing and recycling, and what are measures could be implemented to promote equitable and efficient transport and logistics for solar panel waste?</p>	<p>WMRR has also previously nominated solar PV panels for inclusion on the Minister’s product stewardship priority list, and we stress that without a mandated scheme, the rapidly growing uptake of solar and pursuit of emissions reductions risk undermining Australia’s National Waste Targets. If adopted, a regulated national EPR scheme for solar panels will ensure that Australia’s carbon abatement outcomes are achieved without coming at the cost of the National Waste Targets. Improved recovery of the valuable components and materials that solar panels are comprised of can, moreover, enhance carbon abatement by reducing the need for emissions-intensive exploration and extraction of virgin materials required for the manufacture of new panels.</p>
<p>Q2.23 What measures can be adopted to cover the cost of managing waste from legacy/orphan panels, and what measures can be implemented to assure the integrity of a stewardship scheme from ‘phoenixing’, risks arising from export of second-hand panels and dumping?</p>	<p>The costs of transportation, processing, and recycling should be equitably allocated and funded for under a functioning EPR.</p>
<p>Q2.24 How do recycling processes and e-waste recovery options differ between panel technology sub-types and what different technology is required to manage for these differences?</p>	<p>The costs of transportation, processing, and recycling should be equitably allocated and funded for under a functioning EPR.</p>
<p><i>Product categories – lighting</i></p>	<p>Similar to the issues faced in collecting small appliances, WMRR believes there is an opportunity for all jurisdictions look to their existing network of collection and recycling</p>

<sup>1</sup> Equilibrium PV Systems Stewardship Options Assessment Second Phase (for Sustainability Victoria), 2019, p. 35.

<p>Q2.25</p> <p>What needs to be in place to divert the 82 per cent of lighting from landfill? Why and would it be a short-, medium-, or long-term intervention?</p> <p>Q2.26</p> <p>Would an approach similar to container deposit schemes be a feasible option for safely reducing the volume and rate of lighting to e-waste? Why and would it be a short-, medium-, or long-term intervention?</p> <p>Q2.27</p> <p>Would providing households with an easily identifiable bag to place small appliances into before placing in kerbside bins be a feasible option for safely reducing the volume and rate of lighting to e-waste? Why and would it be a short-, medium-, or long-term intervention?</p> <p>Q2.28</p> <p>What other feasible options for safely reducing the volume and rate of small appliances to e-waste are available? Would it be a short-, medium-, or long-term intervention?</p>	<p>infrastructure and consider how it can maximise this to extend to the collection of lighting, including potentially extending the CDS/CRS collection network capacity, and/or allowing for these materials to come under the problem household waste category and collected/deposited according to each state's policy, e.g., in CRCs across NSW.</p> <p>WMRR does not at all support any proposal to provide households with an “easily identifiable bag” to put small appliances into before placing in kerbside bins for the reasons highlighted earlier in the submission. While we must focus on design and material selection as a start, in the absence of this, any composite/problematic/hard-to-recycle product – beyond those that can be collected and baled at a MRF - must have an effective product stewardship scheme developed for it, where the costs to fund infrastructure should be implemented with the costs of the scheme, and the costs of managing the product lifecycle is borne by the generator and producer of these products, not placed on local councils.</p>
<p><i>Product categories – mobile phones</i></p> <p>Q2.29</p> <p>What needs to be in place to divert the 96 per cent of mobiles from people's drawers? Why and would it be a short-, medium-, or long-term intervention?</p>	<p>Ease of access to co-located return points or a free and accessible system are key to improving the return of mobile phones. The most obvious solution is co-location with successful CRS/ CDS schemes that have frequent pedestrian traffic and can enable multiple, accessible, and safe drop offs. The integration of schemes that are effectively driving the same behaviour (source separated disposal) will enable adoption of this behaviour when the community recognises this. Another possibility is to provide a financial incentive for consumers to return, as we have seen that doing so has had success in the CDS.</p>



<p><i>Key issues</i></p> <p>Q3.1 How can compliance be lifted across the supply chain and across jurisdictions, or for a particular program or compliance issue?</p> <p>Q3.2 What approaches are the most efficient and effective to ensure compliance is properly resourced?</p> <p>Q3.3 What steps can be taken to improve confidence in the electrical and electronic product and recycling industry?</p> <p>Q3.4 Are there international standards that could be adopted and/or more widespread to promote Australia's circular economy?</p>	<p>As highlighted throughout this submission, WMRR supports mandated EPR for electrical and electronic products, which has numerous benefits including the added advantage of lifting and managing compliance across the supply chain.</p> <p>It is vital that any mandated EPR is underpinned by a nationally harmonised regulatory framework that includes targets and requirements for these materials to manage free-rider issues, provide the incentive to rethink product design and end-of-life material management and use, allow for better collection and analysis of data (there should be national parameters set for data collection), and sets penalties (and enforces these) for non-compliance. Only a mandated EPR, not voluntary, will be able to harmonise state/territory obligations, making it easier for stakeholders to comply and for enforcement of non-compliance to occur. A key feature of the WEEE directive is that of “producer compliance”, where product manufacturers take on a level of responsibility to prepare for the eventuality of disposal, recycling, and reuse.</p> <p>As noted above, a move to a mandated EPR scheme in Australia mirrors other global EPR initiatives, which may alleviate operational complexity given the rules and regulations, while not identical, are similar in concept and ideology in developed countries; this will assist with driving compliance since we import many of these electrical and electronic products from places where such rules and regulations are already in place.</p> <p>The other positive impacts of a mandatory EPR are that it sets the framework for continued environmental performance and encourages domestic recycling and reuse of end-of-life materials, which in turn will build confidence in, and of, the industry as a whole.</p>
<p><i>Key issues – design and manufacture</i></p> <p>Q3.5 What are the most efficient and effective methods for influencing electrical and electronic product design to increase sustainability? Why and would it be a short-, medium-, or long-term intervention?</p>	<p>For any EPR scheme to genuinely and positively influence circularity, it must include mandated percentages of Australian recycled content in the product, alongside the introduction of a label - ‘Made with Australian Recycled Content’ to allow consumers to preference goods made from the recycled materials collected from them and give the public choice and ability to assist with growing Australian remanufacturing and jobs. This may be more challenging in the space of electrical and electronic products given a significant proportion of products are imported, but the right government levers and regulatory framework developed in the short-term could provide long-term opportunities to grow a domestic remanufacturing sector.</p>



	<p>In the short- to medium-term, there still needs to be emphasis on the mandated use of recycled content by product manufacturers prior to exporting these materials into Australia. Such a mandate will also place necessary emphasis on the design of products – in the hope that there will be a paradigm shift in the way products are created; e.g., recyclable, not made of complex materials, and use of recycled content - waste avoidance, repair and reuse. The government must also enforce this mandate and require annual reporting, as well as detail a process of actions to be taken if the recycled content target is not met.</p>
<p><i>Key issues – exporting e-waste</i></p> <p>Q3.6</p> <p>How do international conventions impact the electrical and electronic products supply chain?</p> <p>Q3.7</p> <p>Should product stewardship aim to achieve the outcomes of international conventions and why?</p> <p>Q3.8</p> <p>Does Australia have sufficient recycling capacity to manage the expected 674,000 tonnes each year of e-waste in 2030 without exporting some e-waste?</p> <p>Q3.9</p> <p>If Australia was to destroy all materials containing POPs, how would industry approach this and what impact would it have on industry?</p>	<p>WMRR supports the intent of international conventions that serve to drive better environmental and health outcomes in the way we manage our end-of-life materials. According to the Basel Convention, e-waste is categorised as hazardous waste and rightly so, due to the presence of toxic materials such as mercury, lead, and bromide flame retardants. At the same time, e-waste contains precious materials including gold, copper, and rare materials, making a strong case for domestic reprocessing of these materials as opposed to export.</p> <p>However, Australia has neither sufficient recycling capacity as yet, nor sufficient market demand for recycled e-waste. These are issues that the federal government could intervene and assist with through the use of incentives to grow domestic capacity, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• Tax incentives for existing local manufacturers that use recycled content instead of virgin materials.</li> <li>• Taxes on imports that do not stipulate and meet mandated recycled content targets.</li> <li>• Grants and funding that drive the repair sector.</li> <li>• Grants, funding, and a robust planning framework cascaded down to jurisdictions to improve planning and development processes and timeframes for infrastructure required.</li> <li>• Development of a national e-waste inventory, policies, and national certification schemes that would assist with the implementation of the Basel (and other international) Convention. This could include programs that help manufacturers/importers report on hazardous chemicals, e.g., the EU’s REACH</li> </ul>



<p>Q3.10 What interventions are required to encourage manufacturers/importers to disclose the hazardous chemicals composition of products to help recyclers and others meet international convention requirements?</p>	<p>(Register, Authorisation and Restriction of Chemicals) program as well as the Classification, Labelling and Packaging (CLP) initiative, which requires identification of the material to allow consumers to make an informed choice. WMRR is aware that Australian governments have commenced working on new regulations for chemicals using an Industrial Chemical Environmental Management Standard and this work should be encouraged.</p>
<p><i>Key issues – landfill bans</i></p> <p>Q3.11 What is your experience of the impacts of e-waste landfill bans and/or mandatory recycling in Australia?</p> <p>Q3.12 Do you expect e-waste landfill bans (or otherwise highly restrictive levies and other policies) to be implemented in other jurisdictions?</p> <p>Q3.13 What are the potential benefits and perverse outcomes of developing a common approach to e-waste landfill bans across Australia?</p> <p>Q3.14 Do other complementary measures need to be in place before or concurrently implemented with landfills and, if so, what are they?</p>	<p>The paper notes the various schemes across jurisdictions, including e-waste landfill bans introduced, or to be introduced in WA, SA, and Victoria. WMRR cautions against the use of these landfill bans as a priority, independent of an integrated WARR system that has the processes, infrastructure, and pathways to collect and recycle/reprocess banned materials, and importantly, the end markets to consume recycled materials.</p> <p>Simply imposing a landfill ban without established end-to-end processes and end markets will have the unintended consequence of stockpiling these materials that have no home, and worse, illegal dumping. As noted in the paper, local governments are already grappling with the increasingly difficult to manage electronic and electrical products with plastics and other hazardous substances, which often have little to no market value.</p> <p>Continuing to think of materials at end-of-life and only looking to end-of-pipe solutions will go no further than perpetuating our business as usual, linear approach. Time, resources, and efforts should not be focused on landfill bans but on how to ensure that the entire supply chain shares in the WARR responsibility, and importantly, the missing piece to-date – how do we enact a change in the way products are designed and consumed to drive recycling, reusability, repairability, reprocessing, and remanufacturing.</p>
<p><i>Key issues – overseas schemes</i></p> <p>Q3.15 How would the introduction of legislation aligning restrictions the concentration of chemicals of concern</p>	<p>As a significant proportion of electrical and electronic products are manufactured overseas and imported into Australia, and given there are existing restrictions and legislation globally, WMRR supports the adoption or adaptation of overseas schemes and restrictions in Australia – this point is discussed throughout the submission.</p>



impact on imports of electrical and electronic products? For example, a Restriction on Hazardous Substances, similar to both the European Union and the Republic of Korea.

Q3.16

Would the adoption (and likely adaptation) of other overseas schemes be beneficial for Australia's management of electrical and electronic products across the product cycle?

*Key issues – product labelling*

Q3.17

Can product labels help consumers make their decisions on what electrical and electronic products to purchase? Do consumers want this information? Are there particular electrical and electronic products for which consumer labels would be more effective than others?

Q3.18

Can product labels and other technologies help consumers and recyclers lift the efficiency and recovery rates in recycling end-of-life electrical and electronic products?

Q3.19

For both consumer and end-of-life product labels, are the regulatory and financial costs likely to outweigh the

Product labelling is especially important for Australia as we do not have adequate design guidelines or restrictions on the material composition of products, including chemical composition.

Thus, appropriate product labelling based on national labelling standards that details the longevity, materials used, recyclability and repairability, and use of recycled content in electrical and electronic products is supported by WMRR. As highlighted above, clear, concise, nationally consistent, and accurate labelling assists consumers with making informed decisions about their purchases, and in using their purchasing power, can influence areas such as sustainable product design and growth of market demand for recycled content as inputs in manufacturing, as well as discourage premature product replacement.

Labelling standards could be complemented by the development of certification standards as proposed above, which would seek to further drive more sustainable consumption as well as provide greater confidence in recycled products.

<p>benefits? Would alignment with international schemes (now and into the future) reduce the costs?</p>	
<p><i>Key issues – regional and remote Australia</i></p> <p>Q3.20 How could reasonable access in regional and remote Australia be improved? How would this work?</p> <p>Q3.21 Should regional and remote communities have individualised collection targets? If so, how would this work and what perverse outcomes might be realised? If you do not think regional and remote communities should have individualised collection targets, please explain why?</p>	<p>As more jurisdictions roll out container deposit/refund schemes, WMRR has been at pains to highlight that the two (2) significant features of a best practice scheme that will drive greater return of containers are the ease of access to redemption/deposit sites and facilities, as well as community engagement.</p> <p>To ensure reasonable access in regional and remote Australia with respect to electrical and electronic waste, WMRR suggests that the same CRS/CDS principles to access are adopted, that being:</p> <ul style="list-style-type: none"> <li>• The federal government needs to determine and assign roles and responsibilities for all stakeholders involved in the manufacturer, distribution, collection, and recycling of e-waste as part of all national EPR schemes.</li> <li>• A two (2)-tier model could be considered, where governance of any scheme is the responsibility of the electrical and electronic products sector, and the network is developed and rolled out by the recycling industry. This way, the risk of conflict between keeping costs down and increasing recycling is mitigated.</li> <li>• State/territory governments must consider and articulate population and coverage areas, and then map out collection/access points to ensure adequate and reasonable access across jurisdictions.</li> <li>• The state/territory government should set state-based, not community-based, scheme targets and KPIs in line with national targets, which must be clarified as part of any scheme design and included in the tender process so that proponents are aware of their obligations and penalties for failing to meet these KPIs.</li> </ul>
<p><i>Key issues – reuse and repair</i></p> <p>Q3.22 How could repair and reuse be included into the National Television and Computer Recycling Scheme, or any other product stewardship scheme? How could any identified perverse incentives be addressed?</p> <p>Q3.23</p>	<p>Right to Repair should be part of all EPR schemes in Australia, including the NTCRS, and could complement the Commonwealth’s product stewardship framework within the <i>Recycling and Waste Reduction Act 2020</i>; Right to Repair regulations (and requirements for producers) could be introduced within the framework of this Act.</p> <p>WMRR recommends developing consumer legislation, just as the EU and US have done, to regulate the right of consumers to have products repaired within the legal guarantee period and requiring product manufacturers to design products that minimise waste, are</p>



<p>What other ways can the Australian Government and others foster reuse and repair in electrical and electronic products in Australia?</p>	<p>easier to repair, and meet the principles of a circular economy. Spare parts must also be readily available for the lifespan of the product.</p> <p>To ensure that a robust regulatory framework is in place, the government must develop regulations that seek to:</p> <ul style="list-style-type: none"> <li>• Make it mandatory for manufacturers of new products to provide both spare parts and repair manuals for a minimum mandated time (including the warranty period) – this has already been legislated in France and introduced across other European jurisdictions through the ten (10) ecodesign measures.</li> <li>• Rolling out tax incentives for repairs, such as those legislated in Sweden. The aim is to financially incentivise repair and reuse, and disincentivise single-use/throw away products and behaviours. Tax systems can play a pivotal role in the way we manage our natural resources and there is an opportunity to review how tax reform, e.g., a tax on the use of virgin materials, single-use, etc., can provide incentives to extend product lifespan, encourage more efficient resource use, and ultimately, drive circular design.</li> <li>• Establish national standards for reusability and repairability to build consumer confidence and promote sustainable design.</li> </ul>
<p><i>Key issues - roles and responsibilities</i></p> <p>Q3.24 What other roles and responsibilities do different levels of government and the supply chain have in properly managing electrical and electronic products?</p> <p>Q3.25 How can these various roles and responsibilities be made clear and understood across these groups and the broader community?</p>	<p>WMRR agrees to an extent with the department’s general description of the roles and responsibilities across each stakeholder group, namely the federal, state, and local governments, designers and manufacturers, importers and retailers, consumers, and recyclers. However, these roles and responsibilities need to be further expanded and clarified, and include other areas, e.g., governance, to provide stakeholders with certainty of their obligations, and give schemes the best chance at success.</p> <p>WMRR proposes the following additional responsibilities within these roles:</p> <ul style="list-style-type: none"> <li>• Federal government: <ul style="list-style-type: none"> <li>➢ Setting up and managing national registers for manufacturers and recyclers.</li> <li>➢ National labelling and design/manufacturing standards (as discussed above).</li> <li>➢ Mandating and enforcing use of recycled content by manufacturers.</li> </ul> </li> </ul>



**WARR**  
WASTE MANAGEMENT & RESOURCE  
RECOVERY AUSTRALIA

- Use of government levers and tools, e.g., remanufacturing grants, federal tax incentives/disincentives, etc. to drive circularity and development of end markets.
- Development of nationally consistent education campaigns.
- State and territory governments
  - Mapping out collection/access points and ensuring availability and accessibility.
  - Oversight of scheme across the jurisdiction, ensuring compliance of manufacturers, distributors and retailers, annual reporting to the federal government, and enforcement of regulations, targets and KPIs.
- Local governments:
  - Delivery/expansion of community collection services, e.g., CRCs, pick-ups, recycling days, etc.
  - Development of local initiatives that promote repair and reuse, e.g., men sheds and tool libraries.
- Designers and manufacturers:
  - Registering distribution and sales information with the federal government.
  - Reporting on electrical and electronic equipment sold.
  - Financing of end-of-life management of product (collection, treatment, recycling, recovery).
- Importers and retailers:
  - Providing collection points at retail shops if size (limits could be set) permits.

There are certain tasks that should be completed by the federal government to ensure national consistency that would provide for greater understanding of the various roles and responsibilities, and certainty and confidence amongst all stakeholders. These include:

- Developing a national stakeholder map/flow chart that clearly articulates the roles and responsibilities of each stakeholder group.
- Developing a sustained national communications campaign to be used across jurisdictions that stipulate how the schemes work – end-to-end – and what each player must do to drive success.



	<ul style="list-style-type: none"> <li>Setting up national registers to ensure consistent data reporting and compliance, and releasing annual national reports on scheme progress.</li> </ul>
<p><i>Key issues - social enterprises and charities</i></p> <p>Q3.26 What feasible interventions need to be made so that product stewardship can better support social enterprises? Would it be a short-, medium-, or long-term intervention?</p> <p>Q3.27 What can be done to ensure that quality, working electrical and electronic products are donated to charitable organisations to support social outcomes while promoting reuse?</p> <p>Q3.28 What solutions would make it more convenient for consumers to take e-waste to recycling collection points and not illegally dump them on charities?</p> <p>Q3.29 Is there a role for government when designing and implementing product stewardship for electrical and electronic products to assist in closing the digital divide?</p>	<p>Social enterprises may participate in schemes in a number of ways, from being part of the collections network to providing repair services that provide employment opportunities to communities. Social enterprises should be supported with operational parameters, training, and financial support for capital technology. In terms of operating collection points (i.e., participating as a business rather than just receiving donated e-waste), being incorporated into a functioning, professional/commercial network could assist with providing infrastructure and support to the enterprise, leading to improved outcomes for social enterprises.</p> <p>Scheme accessibility, as highlighted above, is key to ensuring consumers take e-waste to collection points and not dump them illegally.</p> <p>While there is no sure-fire way to prevent non-working products from being donated to charitable organisations, these organisations could be given a nationally consistent, broad checklist – to be determined following consultation with manufacturers – on what they should or should not accept at their sites. Further, there could be a stipulation that all electrical and electronic products must be handed to charities/social enterprises in-person and not placed in charity boxes (e.g., clothing bins).</p>
<p><i>Key issues – urban mining</i></p> <p>Q3.30 How can governments help develop sustainable urban mining?</p> <p>Q3.31</p>	<p>The best solution is not to put this material into landfill at first instance; however, in order to ‘urban mine’, landfill levy regimes and appropriate licences that enable the recovery of these materials from landfill, and the exemptions to be claimed would assist at first instance – not all jurisdictions have this in place and some that do are time limited.</p> <p>Further, given the obvious struggle (materials components, hazardous materials, lack of market, etc.) with materials that have not been buried, these issues are amplified once</p>



<p>What are the key challenges in infrastructure and technology that could benefit from greater investment?</p> <p>Q3.32 What are the barriers and challenges in commercialising and deploying urban mining technologies following the research and development stage?</p>	<p>landfilled for a period of time due to degradation, leachate, etc. It would be a very costly and time consuming exercise that would require consistent regulatory pathways (end of life or recovery orders depending on jurisdiction), licences that enable this mining to occur, products to be developed from this waste materials, and significant financing.</p>
<p><i>Key issues – waste to energy</i></p> <p>Q3.33 Does waste to energy have a role in the management of end-of-life electrical and electronic products in Australia?</p> <ul style="list-style-type: none"> <li>a) If yes, why is waste-to-energy a better option and what is driving community concerns?</li> <li>b) If no, what are the alternative options for electrical and electronic products (and in particularly their plastics) that cannot be safely recycled?</li> </ul> <p>Q3.34 Should the amount of e-waste sent to waste to energy facilities be limited to avoid building a reliance on incineration? Why?</p> <p>Q3.35 Is it feasible for waste to energy to be seen as a last resort once all other waste management options further up the waste hierarchy have been exhausted? Why?</p>	<p>WMRR continues to strongly advocate for a systems-based approach to managing materials. This must be underpinned by the adopted waste management hierarchy as we move Australia towards a genuine circular economy that emphasises design, EPR, and sustainable natural material management.</p> <p>Energy from waste (EfW) can form a vital part of a sustainable waste management chain, where there are in place, complementary policies and initiatives that first and foremost, focus on avoidance and waste reduction, reuse, and recycling – all driven by policies that promote EPR, source separation, consumption behaviours, etc. These are the leading priorities of the hierarchy where energy recovery is in fact preferable to landfill disposal. Based on the adopted hierarchy, and in an integrated WARR system, there is absolutely a role for EfW in the management of <u>residual</u> and/or hazardous waste regardless of material stream (including electrical and electronic waste) and it is an essential cog in the WARR machine that will assist Australia with meeting its national landfill diversion targets.</p> <p>Further, the policies and instruments linked to EPR and product stewardship will set targets and pathways for higher order uses of e-waste, meaning it is unlikely that there will be an over-reliance on EfW.</p> <p>WMRR appreciates and supports the fact that there must be a strong social licence for EfW facilities (like all WARR facilities), and facilities must work well within the communities in which they operate. Often time, politics and misinformation drive community concerns, exacerbated by technical information on proven technologies that may not be well understood by the community.</p>



To that end, WMRR believes that other complementary actions are required, including education and communication on the technology, sharing of unequivocally proven scientific facts on both the impacts and benefits of EfW, developing a robust stakeholder engagement plan, having clear state/territory policy and guidance to build community and industry confidence, and collaboration with state/territory governments who must identify and articulate the need for EfW to communities.