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Opportunities in the circular economy Inquiry

Productivity Commission
Locked Bag 2, Collins St East
Melbourne Vic 8003
circular.economy@pc.gov.au

OPPORTUNITIES IN THE CIRCULAR ECONOMY

Australia and New Zealand Recycling Platform Limited (ANZRP) welcomes the opportunity to make a submission to the Productivity Commission in response to the discussion paper looking at opportunities in Australia's circular economy.

ABOUT ANZRP

ANZRP is a member-based, not-for-profit organisation and an approved Co-regulatory Arrangement (co-reg) established under the National Television and Computer Recycling Scheme (NCRS). ANZRP was formed by a group of global IT companies to manage, support and deliver a premium product stewardship program to meet their liable party requirements under the NCRS. Since inception, ANZRP has become a market leader for the safe and responsible collection and recycling of e-waste in Australia. ANZRP's origins lie in e-waste management, however, we are now dedicated to creating circular economy solutions for e-waste on a broad scale.

If you have any further questions regarding this submission, please contact Carla Vasconi, Acting Chief Executive Officer

RESPONSES TO TERMS OF REFERENCE

INFORMATION REQUEST 1 - CIRCULAR ECONOMY SUCCESS STORIES AND MEASURES OF SUCCESS

ANZRP was established in 2011 following the enactment of the then *Product Stewardship Act 2011 (Cth)* (now the *Recycling and Waste Reduction Act 2020 (Cth)*) to enable our members to fulfill their obligations as liable parties under the NTCRS. The *Recycling and Waste Reduction Act* is underpinned by rules that articulate the key outcomes co-regs such as ANZRP are required to achieve. Amongst these is a material recovery target requiring co-regs to ensure that at least 90% of the weight of material recycled is processed into useable materials (and not disposed of to landfill, incinerated or used in waste to energy).

ANZRP consistently achieved this target prior to the introduction of the *Waste Reduction (Export - Waste Plastic) Rules 2021 (Cth)* (Plastic Rules) in 2021. Following the introduction of the Plastic Rules, plastics recovered from e-waste could no longer be shipped offshore without at least undergoing some level value-adding processing to the material in Australia. Approximately 25% of the material used to make televisions, computer equipment and printers is plastic, meaning that under the Plastic Rules ANZRP and other co-regs and e-waste recyclers were no longer able to export e-plastic for recycling. Given there wasn't sufficient domestic recycling capability, an unintended consequence of this new legislation (designed to address the issue of dumping waste in the third world) was that thousands of tonnes of e-plastics was landfilled in Australia. It also meant that ANZRP could not meet the 90% material recovery target.

In response ANZRP established a joint venture with CRDC Circular Solutions (CRDC) to build a plastics recycling plant in Tottenham, Melbourne with funding from members and further supported by a grant from Sustainability Victoria. The purpose of CRDC is to create value from hard to recycle plastic waste covering resins 1 to 7 and in both soft and rigid forms. The plant then recycles this material into RESIN8™ - a high performing and versatile mineral polymer that can be used in a variety of concrete and asphalt applications in the built environment, and in doing so delivers numerous economic and environmental benefits.

Benefits of RESIN8™ include:

- provides 2.7 times the level of thermal insulation when compared to conventional alternatives
- improves overall acoustics

- is 3.6 times lighter than alternatives, which makes it more economical to transport and reduces manual handling hazards for workers
- lowers water absorption
- maintains strength during the product life span
- is fire resistant

When used in asphalt applications RESIN8™ also:

- increases the hot-mix stiffness without jeopardising its fatigue strength; and
- improves the mechanical properties of the mix.

RESIN8™ is a carbon negative material which assists the building industry to reduce the embodied carbon in construction and infrastructure projects.

The Melbourne facility is the fourth of its kind globally and the first in the Asia-Pacific region. Aside from tackling e-waste plastics the facility is also playing a valuable role in processing soft plastics.

The CRDC Victoria plant has created jobs and has capacity to process 7,000 tonnes per year, with potential to scale this further as offtake markets for RESIN8™ expand.

INFORMATION REQUEST 2 - PRIORITY OPPORTUNITIES TO PROGRESS THE CIRCULAR ECONOMY

There are numerous opportunities that we believe policy makers should prioritise to progress and strengthen Australia's circular economy. To date much of the efforts from Federal and State jurisdictions have focussed on building capacity and capability to manage and transform "end-of-pipe" wastes. Going forward we believe there needs to be a greater emphasis on building circular business models and rewarding and incentivising those industries and organisations that seek to lead the way, including looking at practices and models that sit higher up the waste hierarchy.

Some specific initiatives could include:

- **Fostering design for circularity** – at present it is evident that products are still being put on the Australian market where little or no consideration has been given to what these products (and their embedded materials) will become in their next reincarnation or whether Australia even has the capabilities to manage these at end-of-use / end-of-life. Effort is therefore required to shift the culture and embed this discipline within the product design fraternity whilst also

undertaking the necessary capacity building to support this transition. Policies and programs should be developed to fast track and incentivise these ends.

- **Establishing and mandating (minimum) design standards** – building on the above, consideration should be given to mandating design standards in line with international best practice for consumer and industrial products where appropriate. These standards should take into consideration aspects such as product durability, repairability, use of recyclable parts and materials, use of by-products and recycled content, use of renewable materials, avoidance of toxic or hazardous materials and use of traceable components.
- **Sustainable procurement** – The Federal government has recently launched its Environmentally Sustainable Procurement Policy and supporting framework. This is a welcome step forward. The opportunity now exists for the Australian Public Service to place sufficient weighting on the sustainability criteria to drive the desired outcomes. It is also recommended that the Federal government seeks to ensure that where it provides funding to the States, that these policies are also picked up and flow through to state government procurements.
- **Expanding product stewardship solutions** – greater effort and urgency should be applied to expanding and enhancing product stewardship solutions. Effective product stewardship initiatives create a clear pathway for businesses and governments to operationalise circular economy objectives by designing out waste and pollution, keeping products and materials circulating and restoring the environment. These schemes need to be underpinned by appropriate regulation which is robustly enforced as required to mitigate the adverse impacts of free riders or sub optimal outcomes. To facilitate this, agencies such as the Department of Climate Change, Energy, the Environment and Water (DCCEEW) need to be adequately resourced to fulfil this role. Specific measures in the short term should be the following:
- **Expansion of the National Television and Recycling Scheme (NTCRS)** – proposed expansion of the NTCRS should be prioritised with the inclusion of small electrical and electronic equipment (SEEE) and an amendment which allows for reused e-waste to be counted in scheme targets. ANZRP has made numerous submissions and long called for these enhancements. DCCEEW has identified that a number of these changes simply require ministerial approval, however that it lacked the regulatory drafting resources to bring these to life. Further specific recommendations are outlined in the attached ANZRP Position Statement.
- **Strengthen and accelerate the battery stewardship program** – urgent action is needed to future proof the financial viability of Australia’s battery stewardship scheme, address the risk profile and ensure it serves in a complimentary manner to existing e-stewardship schemes such as NTCRS.
- **Reform packaging regulation** – ANZRP acknowledges that this process is now in progress following the release of the consultation paper. Large steps need to be

taken to support the transition to, and maintenance of, a circular economy for packaging in Australia. The federal government must provide strong leadership and establish an appropriate regulatory platform for the future scheme.

INFORMATION REQUEST 3 - HURDLES AND BARRIERS TO A CIRCULAR ECONOMY

In response to Information Request 2 above, ANZRP have noted more emphasis needs to be placed on fostering product stewardship solutions as a way of advancing the circular economy. At present the Federal government appears hesitant to act in a timely and proactive manner, leading to a sluggish response from numerous industry sectors. This includes sectors such as packaging, solar photovoltaic systems, batteries, tyres and clothing and textiles amongst others. If government sets a clear expectation that generators must take responsibility for the entire lifecycle of the products that they place on the market, we believe this will lead to a marked improvement in circularity.

The Australian government should also actively engage in the discussion at the Basel Convention allowing the Transboundary Movement of Used Electrical and Electronic Equipment (UEEE) for Repair, Reuse, and Refurbishment. Establishing a repair operation in Australia is notably expensive, which necessitates a strategic approach to sourcing products or parts. By advocating for a framework that allows the movement of these materials to non-OECD countries—such as China, Singapore, and Malaysia, where many of our Original Design Manufacturers (ODM) and Original Equipment Manufacturers (OEM) are based—we can optimise our operations. This would enable us to send refurbished units back to Australia for replacement or resale, thereby promoting sustainability while reducing operational costs.

Beyond this ANZRP notes that there are still significant hurdles and barriers to overcome with respect to building offtake markets for recyclate produced locally. Whilst there has been a significant investment in processing and recycling infrastructure over the past four years, including through the Recycling Modernisation Fund (RMF), markets for recyclate in many cases remain limited with a slow uptake. This is particularly the case for materials that are destined for the building and construction sector – which is a common avenue at present for many of the recyclate streams produced from our waste. The construction sector has often proven to be highly risk averse, conservative and cautious when incorporating new materials and product in building projects.

INFORMATION REQUEST 4 - GOVERNMENTS' ROLE IN THE CIRCULAR ECONOMY

It is our view that governments at all levels, but particularly the federal government, has a central role to play in building the circular economy. In particular, as we have stated in our responses above, there is a strong need for leadership and a willingness to regulate when market failures are evident.

We recommend that whilst the Federal government should continue to stimulate investment in infrastructure through the RMF, it could also closely examine opportunities through its procurement to provide an upfront market for the outputs generated, or provide ongoing small grants/payments to help with cashflow during startup phase or facilitate collaboration in the industry to increase the uptake of circular products.

The federal government's role should also focus on the following:

- Development of policy/legislation (that doesn't have unintended consequences for existing product stewardship schemes), fine tuning policy settings within reasonable timeframes, establishing agreed targets and forming action plans with clear accountability.
- Building and strengthening offtake markets for locally produced recycle through implementation of its procurement policy and by working with State and local government to adopt effective procurement frameworks that drive true and measurable change.
- Stimulating innovation – through increased funding for research and development and supporting the build and commissioning of new circular economy technology.
- Waste sorting and separation – build responsibility and capability within the local government and waste management sector to effectively sort and separate incoming waste streams and minimise contamination to reduce the cost impost for materials recyclers and processors.
- Facilitate access to global circular economy market opportunities – a lot of product manufacture including computers and printers takes place overseas which makes it difficult to close the loop on products whose end of life is in Australia. However, recycle from these end of life products could be sent to offshore manufacturing centres. The government should remove barriers that prevent or inhibit these resources from being managed offshore such as providing quick and efficient export permitting and incentivising industry to work with their offshore supply chains to develop, test and trial new circular products.

Attached: ANZRP Position Statement

