

SSROC submission on the regulatory product stewardship scheme for small electrical and electronic equipment and solar photovoltaic (PV) systems.

This submission includes two parts:

1. SSROC summary of key recommendations (this document)
2. Attachment: Completed questionnaire on the proposal to regulate e-products

**Submitted to Australian Government Department of Climate Change, Energy, the Environment and Water
by email: estewardship@dcceew.gov.au**

Introduction

The Southern Sydney Regional Organisation of Councils (SSROC) is an association of 12 councils spanning Sydney's southern suburbs, eastern suburbs, CBD, and inner west and covering a third of the Greater Sydney's population, over 1.8m people. Our Councils manage around 655,000 tonnes of household waste each year, which is about 20% of all NSW household waste.

SSROC provides a forum through which our member councils can interact, exchange ideas and work collaboratively to solve regional issues and contribute to the future sustainability of the region.

We advocate on behalf of our region to ensure that the major issues are addressed by all levels of government. Our current focus includes the environment, transport, procurement, waste, and planning.

This submission contains two parts, part one below contains our key recommendations for the scheme based on the discussion paper *Wired for Change: Regulation for small electrical products and solar photovoltaic (PV) systems*; and part two is the attached completed *Questions on the proposal to regulate e-products response document* issued by the Department of Climate Change, Energy, the Environment and Water.

Key recommendations

SSROC strongly supports the principles of extended producer responsibility and a regulated, national scheme to managing electrical products including solar photovoltaic (PV) systems. We have collected feedback from available staff from our 12 member councils to determine the following key recommendations for the regulated scheme.

The recommendations include:

- 1. Ensure the producers of electrical products (e.g., brands/manufacturers) are required to provide take back collection points** such as instore collections (e.g. for small items similar to the Tread Lightly scheme, where sport stores provide in-store collections for shoes) and larger collections (e.g. larger staffed collection bays such as warehouses) to enable the full range of small and bulkier products included in the scheme to be collected.

Electrical waste (e-waste) should be collected as close as practical to where it was purchased to ensure producers take responsibility for a product's servicing and end of life arrangements, which also enables producers to have greater oversight over product failures. Locating collection points near retail stores also has the benefit of educating consumers on the need to responsibly recycle or dispose of products at the end of their life. There is also an education opportunity for brands to showcase their sustainability credentials through take back initiatives and report back to customers their repaired or recycled tonnages.

Councils have unfairly carried the burden of collecting household electrical products in NSW through community recycling centres and through drop off events, with the volumes and costs at some locations becoming unsustainable. Only a small number of producers provide take-back options for customers such as Officeworks in store recycling collections and the Winning Group's collection scheme (when customers buy certain new appliances through one of the Winning Group's partners, they have the option to get their old appliance collected for decommissioning and recycling). Online purchases of electrical items in the scheme provide opportunities for companies to offer a take back collection of old appliances covered in the scheme at the point of sale. The proposed scheme needs to ensure that in-store collections and take-back programs become the norm rather than the exception and cover most household electrical items for sale in Australia.

- 2. Consult with councils to define their role in the scheme (if any). Ensure councils are not relied upon to host collection points. If a council can provide a collection point, they should be provided with adequate funding for the collection and processing for the e-waste, and a suite of education and promotional assets. Neither councils nor Network Operators should be required to take volumes or in-scheme items they cannot safely and reasonably manage.**

The discussion paper does not outline councils' role in the scheme. Councils can choose to have a role in educating residents about the scheme as many already educate residents on where to take different end of life products. Councils welcome a national regulated scheme if the new scheme does not rely on existing council education and collection systems; these currently do not have a reliable funding source and are not equipped to deal with large increases in e-waste volumes, or for separation of in-scheme and out-of-scheme e-waste items.

Existing council systems also do not have the coverage needed to facilitate a scheme in NSW. It is suggested that the Scheme Administrator and Network Operators **calculate a recommended frequency of drop-off options for residents** (such as 1 per 500 households in metro areas, and similar to the NSW Container Deposit Scheme's geospatial placement of reverse vending machines) and ensure it is adjusted for rural and regional areas with large distances.

Councils should not be relied on to host and run collection points in the scheme, but there may be some locations in Sydney where a community recycling centre (CRC) or a council drop off event could assist with collecting scheme-eligible items. Previously, some councils used the non-contestable NSW Environment Protection Authority's *Better Waste and Recycling Fund* to fund monthly, quarterly, or twice a year community e-waste drop off events as many of our councils do not host a community recycle centre. That funding scheme has now finished with most of our councils having to fund e-waste drop off events through the domestic waste management charge (DWMC) imposed on household ratepayers for council household waste services.

If councils are hosting drop-off of scheme-eligible items, the DWMC cannot be used for collecting e-waste from small businesses or any commercial organisations. The DWMC is primarily for essential household waste services and most of our councils would not be able to expand or increase their e-waste collections. Therefore, the Scheme should have a pool of funds to reimburse councils for handling, collection and processing e-waste items covered in the schemes; and councils can report these tonnages to the Network Operator.

Some councils have chosen to manage volume and financial constraints by limiting collection and acceptance services to ratepayers within their local government areas. Councils in metropolitan areas and elsewhere are limited in terms of available sites to receive e-waste. It is important for the Scheme to recognize and prepare for the eventuality that funding provided to councils for handling, collection, storage and processing will not cover the cost of land used for these purposes. Land use planning must compete with other (or higher order) value community services or revenue potential.

- 3. Improve proposed scheme model with a category approach to household electrical products based on their collection and processing requirements and including two additional categories.**

The proposed scheme currently bundles very different categories of products into one scheme by including small household electrical products under 20kg - such as consumer items that can be transported easily in a car, with bulkier items well over 20kg such as solar PV systems. Most bulkier items require a business to business (B2B) solution such as the supplier/distributor to provide a home collection to dismantle, decommission and transport for recycling. Household Solar PV systems and hot water systems are in a very different category, as they aren't regularly

purchased or replaced, usually require a qualified tradesperson to dismantle, and at the end of life should be treated as construction and demolition waste rather than household waste.

The proposed scheme presents an excellent opportunity to consider a category approach for dealing with majority of household electrical waste as done internationally by [Waste from Electrical and Electrical Equipment \(WEEE\)](#). The proposed Australian scheme could benefit from reviewing the category definitions from the WEEE directive which were revised in 2019 to include [6 main categories](#) grouped by their collection and processing needs:

- Temperature exchange equipment (e.g. fridges, freezers, air cons, de-humidifiers, radiators, heat pumps)
- Screens, monitors, and equipment containing screens having a surface greater than 100 cm²
- Lamps
- Large equipment (any external dimension more than 50 cm) including, but not limited to household appliances; IT and telecommunication equipment; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents. This category does not include equipment included in categories 1 to 3.
- Small equipment (no external dimension more than 50 cm) including, but not limited to: household appliances; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents. This category does not include equipment included in categories 1 to 3 and 6.
- Small IT and telecommunication equipment (no external dimension more than 50 cm).

Whilst we support having the dedicated small electrical items under 20kg, the proposed Australian scheme appears to disregard many out-of-scope items with that limitation. It is potentially confusing from a consumer perspective to accept a microwave, an oil heater and even a large electric hot water tank or solar panel but not a fridge or dishwasher. Not including household whitegoods above 20kg means consumers, electrical products manufacturers, and government must navigate potentially two schemes in the future and wait for a solution to occur for larger household electrical products. An additional scheme for large electrical products from households could take another decade to develop, and meanwhile those products are landfilled or at best recycled for scrap.

Both new and old fridges/freezers collected through the kerbside bulky clean up collection can present a safety and amenity risk when left on the kerb by residents (suffocation has occurred in Australia when kids hide in them). Like solar PV systems, refrigerators and freezers would be best managed by require a dedicated collection from private property that should be funded through this product stewardship scheme, with consistent and commercial subsidies provided through extended producer responsibility or product stewardship, instead of the cost and logistical burden being placed on councils. SSROC has investigated the value opportunity and logistics chain needed to collect, aggregate and recover unwanted whitegoods. It is a complicated and costly material stream due to the refrigerants and metals commodities, composite materials used in design, and the time they're left on the kerb.

It is inequitable for brands producing fridges, freezers and other temperature-controlled appliances to avoid paying the end-of-life costs. The current Refrigerant Reclaim Australia scheme only focuses on dealing with the refrigerant gas once it is removed from an appliance, not the costs or logistics on collecting the fridge, getting it degassed, and recycling metal components. The Scheme should include fridges/freezers and other temperature-controlled equipment to ensure a national environmental standard for their handling and material recovery.

4. We suggest further research and discussions with industry to see if the categories used in the WEEE directive should be used in Australia to align with European Union norms.

SSROC proposes at minimum a simplification to the following three categories related to the proposed model in the discussion paper:

- i. **Small electrical products category under 20kg** – mainly collected through in store collections and drop off collection points because most items can be easily transported in a passenger vehicle. For items under 20kg but are bulky like vacuum cleaners, large screen TVs etc., a measurement guide may be needed as seen in the WEEE categorisation that uses 50cm or less as a guide.
- ii. **Solar PV systems** and their components as proposed in the scheme – no public drop off, requires PV distributors to collect, aggregate and transport to recycler. Hot water systems are also too bulky to transport easily and may also need separate collection from distributors. Further research is needed on which category electric hot water systems should fit in.
- iii. **Electrical products over 20kgs from households** e.g. washing machines, dishwashers, dryers, ovens, large heavy TVs or computers etc. No public drop off, these items require brands to provide a take back system preferably collected from people's homes.

Temperature exchange equipment requires special handling, collection and processing. In WEEE these are defined as electrical and electronic equipment (“EEE”) with internal circuits where substances other than water – e.g. gas, oil, refrigerant or a secondary fluid is used to heat or cool, such as fridges, freezers, oil heaters, air conditioning units, fridges, freezers, air cons, de-humidifiers, radiators and heat pumps. Collection from private property would reduce the risk of fridges/freezers being improperly degassed which is occurring due to scavenging of fridge motors when left on the kerbside, or accidentally when collected or transported. Including fridges/freezers and other temperature exchange equipment in the Scheme through a funded collection model would significantly reduce carbon emissions from improper degassing and ensure we don't have multiple schemes for household electrical products. It should be noted that the current Refrigerant Reclaim Australia scheme only looks at proper treatment and disposal of refrigerant gas but completely neglects funding the collection and processing of fridges, freezers and air conditioning units.

5. Proposed scheme to include incentives for designing out waste in electrical products and increasing repair and reuse of electrical products.

The discussion paper references several international examples to design waste out of electrical products however, it lacks detail on what elements would be included in the proposed scheme other than the concept of eco modulation. Incentives should be frequent, significant, and promoted to design out electronic waste such as:

- A framework like the European Commission's proposed *Ecodesign for Sustainable Products regulation* that would include assessing a product's durability, carbon footprint, efficient resource use and recoverability and including this information for consumers in a digital product passport.
- Reduced fees from liable parties that meet environmental performance criteria (eco-modulated fees) as outlined in the discussion paper. However, as noted international examples show these need to be significant enough to motivate brands or liable parties to provide the evidence required to get reduced fees. A tiered approach could be investigated,

a lower tier may require providing a targeted number of instore collections where the evidence gathering is minimal e.g., listing stores where this service is available and reporting tonnages collected and processed, a higher tier may be providing evidence of low-cost repair services and initiatives to design out waste.

- In a regulatory scheme, penalties as well as incentives are important to ensure liable parties meet the minimum requirements. SSROC suggests reviewing the evaluation of the National Television and Computer Recycling scheme to see what penalties are appropriate and what resourcing would be needed to enable the Scheme Administrator to enforce them.
- Incentives for consumers to repair certain higher value electrical products such as Sweden's tax rebate for individuals for the repair of whitegoods, similar incentives could be applied to other resource intensive and difficult to recycle electrical products like large TVs, computer equipment, and solar panels.
- Financial incentives could also be considered for consumers getting smaller electrical appliances repaired. France has recently introduced a consumer bonus scheme where consumers can get a discount on repairing shoes and clothing from between 6-25 euros per person. A similar incentive could work in Australia for repairs to small electrical items that could be focused on products where spare parts are easily available and simple repairs can be easily achieved.
- Support for brands to provide second hand electrical products provided data scrubbing and privacy concerns are addressed.

Similar to the proposed clothing product stewardship scheme, the proposed scheme needs to set aside significant funding generated from the scheme to invest in research and development to support circular design of electrical products, this may include providing technical support to liable parties to transition to more circular business models, providing affordable repair, and incentives to use recycled materials.

6. Proposed scheme to incorporate re-use obligations and support social enterprise

According to the latest Australian Digital Inclusion Index Data (ADII), 9.4% of the Australian population is highly digitally excluded, and 14.2% is digitally excluded. 10.5% of Australians are mobile-only users, with specific cohorts significantly over-represented when it comes to mobile-only use, including people in very remote areas (32.6%), First Nations people (21.3%), and those on the lowest incomes (20.7%). Digital exclusion in modern Australia has an increasingly negative impact, resulting in increased social exclusion. Students' educational outcomes are negatively impacted, job seekers find it increasingly difficult to find meaningful employment, access to essential services such as telehealth and government functions are restricted, and seniors can face increased isolation.

While digital inclusion is complex and can result as a lack of access to reliable connectivity or digital skills, the lack of an appropriate and affordable device does have an important role.

From a device perspective, SSROC is aware of social enterprise operations such as WorkVentures that have been addressing digital inclusion through the responsible refurbishment of end-of-life corporate technology for several decades. In doing so, they have been able to support over 100,000 digitally excluded individuals and households. Anecdotal evidence suggests that 60-70% of laptops, mobiles and PC's refreshed by corporates and governments can be reused digital inclusion programs.

At present, the existing NCTRS disincentives the reuse of devices to address digital inclusion, effectively reducing the pool of laptops, PC's and monitors available. While undoubtedly delivering significant results when it comes to recycling e-waste, it contradicts circular economy principles of prioritising reuse and the repurposing of goods before recycling. While it is difficult to ascertain data to validate this, it has been suggested that devices which could have been re-used for digital inclusion purposes have instead been recycled in order to meet NCTRS targets.

While we acknowledge and support the increased focus upon reuse in the discussion paper, we believe it does not go far enough in incorporating circular economy at the forefront of the proposed scheme's design and misses an opportunity to use electronic repair and reuse to address digital inclusion in Australia. This scheme needs to explore mechanisms such as device donation incentives and incentivising reuse as a higher order of preference over recycling – particularly when used to address social issues such as digital inclusion. We would also strongly encourage further consultation with the social enterprise sector that have been active in the electronics repair and refurbishment sector for many decades.

7. Consider facilitating collection points in high density apartments, retirement villages and mixed commercial/residential high-rise developments.

Several high-rise developments in Sydney have successfully set up source separated collection points in the basements of high-rise buildings for collecting e-waste, amongst other streams such as used clothing, polystyrene, and bulky cardboard. Network Operators should consider models for collection hubs for e-waste in or close to residential high rise and mixed-use high rises where there are enough tenants and sufficient volumes to justify a collection of small electrical products.

Retirement villages may also be suitable locations for a collection point if there is a secure, maintained space undercover that may help address collection barriers for people with limited mobility. However, the Network Operator must be required to engage with councils and building managers early and often to build strategies for optimum placement of receptacles, seamless alignment with existing waste collection systems, and Work Health and Safety requirements.

8. Consider what planning approvals and considerations will be needed to roll out collection points across Australia.

To set up collection points, the scheme should consider what planning considerations need to be addressed to set up the different types of collection points needed. For instance, would new collection points meet exempt development requirements in different local government areas (LGAs). What type of zoning would collection sites need to have? How will this differ between states and LGAs. The various container deposit schemes across Australia have grappled with these issues and may provide some insights that could be considered in the Scheme design.

In conclusion, we support a national, regulated scheme for small electrical products and solar PV systems provided it:

- Supports retail brands/manufacturers to host in store collection and large collection of e-waste to enable adequate coverage across Australia. That it does not rely on councils hosting collection sites and having to organise processing.
- Provides scheme funding support for councils in a position to continue to offer e-waste drop off events and collect e-waste at community recycling centres; yet as mentioned above majority of the collection points should be industry led.
- Considers what planning approvals are needed for collection sites and carefully considers the best collection mix for highly urbanised environments.
- Is designed to deal with the different collection and processing needs of the different categories of small electrical items most of which could be facilitated through drop off collection and solar PV systems which should be collected via a B2B solution.
- Aligns with international PS schemes for electrical products (such as the WEEE Directive) and expands to include at least one additional category of temperature-controlled equipment from households provided these categories are collected through a B2B solution, similar to solar PV systems.
- Has clear financial incentives for device donation, reuse, repair and the use of recycled materials and supports producers to design out waste of electrical products.

SSROC is grateful for the extension of one week to the deadline for submissions, which has enabled us to consult with officers of our member councils. However, please note that this submission has not yet been endorsed at a formal meeting of SSROC delegates. I will contact you should any issues arise as a result.

Thank you for this opportunity to contribute to the discussion. For any enquiries, please contact me or David Kuhn, Senior Coordinator, Circular Economy by email: ssroc@ssroc.nsw.gov.au, or 02 8396 3800.

Yours sincerely



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28 July 2023

Questions on the Proposal to regulate e-products

Your answers to the following questions will help us develop a fit-for-purpose regulatory product stewardship scheme.

There are 44 questions. You can use this document to submit an organisation-wide response with input from multiple people. When you have completed this document register your details at the [Have Your Say consultation page](#) and upload your submission by Sunday 23 July 2023.

Introduction

1. I am a(n): **[Check up to 3 boxes below]**

- | | |
|--|--|
| <input type="checkbox"/> Consumer | <input type="checkbox"/> Recycler |
| <input type="checkbox"/> Manufacturer or distributor | <input type="checkbox"/> Industry body |
| <input type="checkbox"/> Retailer | <input type="checkbox"/> Academic |
| <input type="checkbox"/> Recycling scheme | <input type="checkbox"/> Commercial power generator |
| <input type="checkbox"/> Installer | <input checked="" type="checkbox"/> Other [Explain in the text box below] |

Regional Organisation of Councils: The Southern Sydney Regional Organisation of Councils (SSROC) is an association of 12 councils spanning Sydney's southern suburbs, eastern suburbs, CBD, and inner west and covering a third of the Greater Sydney's population, over 1.8m people. Our Councils manage around 655,000 tonnes of household waste each year; which is about 20% of all NSW household waste.

2. How concerned are you about solar PV system waste? **[Check 1 box below]**

- Very concerned
- Concerned
- Neutral
- Unconcerned
- Very unconcerned

3. How concerned are you about waste from electrical and electronic equipment?
[Check 1 box below]

Very Concerned

Concerned

Neutral

Unconcerned

Very unconcerned

4. Do you think government intervention (such as regulation) is needed for Australia to better manage small electrical products waste?

[Select **Yes**, **No** or **Maybe** from the **Choose an item** drop down below]

yes

[Type a response in the text box below if you answered **Yes** or **Maybe** at question 4]

We strongly support a national regulatory scheme given the growing volumes of ewaste, the hazardous nature of some of the materials used and the large number of businesses supplying electrical products and solar PV systems to the market. The NTCRS did not cover enough products commonly used by households leaving councils and other organisations with large volumes of out of scope items that were costly to collect and process. NTCRS was also flawed in its design, preferencing target volumes over access and continuity, which led to unintended outcomes where recycling service providers stopped processing once targets were met. This created an out-sized community expectation for drop-off, but shifted costs, site safety and logistics to councils. Councils cannot afford to discontinue a popular service it doesn't control.

For decades producers have not shared the responsibility for the vast amount of difficult to recover electrical products placed on the market. The proposed national scheme is urgently needed to help fund and manage growing volumes of ewaste however, it needs to include robust and achievable ways to incentivise repair and reuse of electrical products and ensure that producers provide collection points.

5. Do you think government intervention (such as regulation) is needed for Australia to better manage solar photovoltaic system waste?

[Select **Yes**, **No** or **Maybe** from the **Choose an item** drop down below]

yes

[Type a response in the text box below if you answered **Yes** or **Maybe** at question 5]

We are supportive of including solar PV systems as the amount of end of life solar panels in Australia are likely to be in the millions over the next decade and they contain hazardous materials that need responsible recycling and disposal. However, they are a very different category of product in terms of collection and processing, and require a business to business (B2B) solution such as the supplier/distributor to provide a home collection to dismantle and transport for recycling.

6. Do you think there is sufficient information available to consumers on how their choices can reduce e-waste and how to safely manage e-waste?

[Select **Yes**, **No** or **Maybe** from the **Choose an item** drop down below]

no

[Answer question 7 below if you selected **No** at question 6]

7. What additional information do you think should be made available to consumers?

[Check any or all the boxes below]

- Information on the difference my purchase and disposal choice can have on human health and the environment.
- Accessible information on how I can easily dispose of my unwanted e-waste.
- Easily understood information on the impacts if my e-waste goes to landfill.
- Information on the rules relevant to me in my state/territory and what I should do to comply with these rules.
- Other. **Type a response in the text box below to explain.**

Information on how durable or repairable the product being purchased is at or before point of sale and whether it can be recycled at the end of its life so consumers can make more informed choices. The development of a repairability star rating to inform consumers of a how easily a product can be repaired and availability of spare parts (similar label to the energy rating on appliances) is needed and could be a deliverable of the scheme.

8. Select one or more of the following objectives you think the scheme should focus on.

[Check any or all the boxes below]

- Reduce waste to landfill.
- Increase the recovery of reusable materials.
- Provide convenient access to e-stewardship services across Australia.
- Support Australia's transition to a more circular economy.
- Foster shared responsibility across the lifecycle of covered products.

9. What objectives should be included or excluded? **Type your response in the text box below.**

Providing one scheme for most household electrical products that makes it easier for consumers to understand what to do with end-of-life electrical products.

Rather than promotion of circular economy, perhaps emphasis should be placed on the 'ReMade Australia' campaign about how Australia re-purposes or purchases recyclable and recycled content materials, or State or Federal procurement strategies preferencing recycled products. This may be a more coherent message for the general public.

Scheme administration

10. Explain any concerns about the scheme model proposed in the discussion paper?

Type your response in the text box below.

The scheme model provides only a high level overview of how it might operate, it needs to provide some definitions on what constitutes a 'small business', would a chain of small businesses be included for example? It is unclear what the role of councils would be in the scheme, is it just education or collection as well?

Please reference SSROC's submission; we outline the importance of ensuring producers provide enough take back collection options to ensure they share the cost of collection and processing. Collection and processing needs to be industry led and not reliant on existing council household waste services. Councils do not have reliable funding to expand or increase ewaste collection and ewaste drop off events. Some councils currently fund a small amount of ewaste collection events through the domestic waste management charge which can only be spent on processing household waste, it cannot be spent on processing waste from small businesses. See part one summary for more details.

Attention should be paid to ensuring illegal markets are not created, such as importing household electrical items from overseas that do not comply or contribute to the Scheme.

11. What do you think are the key benefits from the scheme model proposed in the discussion paper? Type your response in the text box below.

Regulation limits free riders, ensures that producers share the costs of the lifecycle of the products they place on the market and that the scheme is funded adequately. A national scheme that includes most household electrical products is less confusing for consumers and easier for collectors to facilitate. The proposed scheme if designed well could ensure there is convenient collection points for ewaste across the country.

12. Is there a different scheme model you believe would be more effective?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

If you answered **Yes** at question 12, type your response in the text box below to describe the model and its benefits.

See part one of the submission for a more detailed response to this question. In summary, improve proposed scheme model with a category approach to household electrical products based on their collection and processing requirements and including two additional categories. Proposed scheme model should review the WEEE product categories to align with tested international schemes given that many liable parties will be global and having to navigate different national schemes.

1. **Small electrical products category** – this is mainly collected through in store collections and through drop off collection points because most items can be easily transported in a passenger vehicle. Agree with proposed scheme in scope items that are under 20kg but some consideration is needed for bulky items that are under 20kg but take up a large volumes like microwaves, vaccum cleaners, large screen TVs, a measurement guide may be needed as seen in the WEEE categorisation that uses 50cm or less as a guide. Electric toothbrushes also need to be added to inscope items.
2. **Solar PV systems** and their components as proposed in the scheme – no public drop off, requires PV distributors to collect, aggregate and transport to recycler. Hot water systems are also too bulky to transport easily and may also need separate collection from distributors and further research is needed on which category electric hot water systems should fit in.
3. **Temperature exchange equipment** – no public drop off as these require special handling, collection and processing. In WEEE these are defined as electrical and electronic equipment (“EEE”) with internal circuits where substances other than water – e.g. gas, oil, refrigerant or a secondary fluid is used to heat or cool, such as fridges, freezers, oil heaters, air conditioning units, fridges, freezers, air cons, de-humidifiers, radiators and heat pumps. Collection from private property would reduce the risk of fridges/freezers being improperly degassed which is occurring due to scavenging of fridge motors when left on the kerbside, or accidentally when collected or transported. Including fridge/freezers and other temperature exchange equipment in the scheme through a funded collection model would significantly reduce carbon emissions from improper degassing and ensure we don’t have multiple schemes for household electrical products. It should be noted that the current Refrigerant Reclaim Australian scheme only looks at proper treatment and disposal of refrigerant gas but completely neglects funding the collecting and processing of fridges, freezers and air conditioning units to retrieve the gas.
4. **Electrical products from households over 20kg** e.g. washing machines, dishwashers, dryers, ovens, large heavy TVs or computers etc. No public drop off, these items require brands to provide a take back system preferably collected from people’s homes.

LIABLE parties’ responsibilities

13. Do you agree that only first importers and producers should be liable parties?

[Select **Yes** or **No** from the **Choose an item** drop down below]

Choose an item.

[Answer question 14 below if you answered **No** at question 13]

[Answer question 15 below if you answered **Yes** at question 13]

14. What other participants in the supply chain should be considered liable parties, and why?

Type your response in the text box below.

Not sure.

15. The Scheme administrator is responsible for setting fees paid in advance by liable parties. If any, describe what role government should have in setting fees?

Type your response in the text box below.

Overseeing auditing and regular evaluation of scheme.

16. How could eco-modulated fees be incorporated into the proposed scheme?

Type your response in the text box below.

We support having financial incentives for producers of electrical products and solar PV systems to design out waste in products, repair items and reuse components. Perhaps there can be different tiers of criteria that producers can reach to be eligible for discounted fees with enough of a reduction to motivate them to collect the evidence (noting the discussion paper's concern about it not being successful overseas if it was too burdensome). A lower tier may require providing a targeted number of instore collections where the evidence gathering is minimal e.g. listing stores where this service is available and reporting tonnages collected and processed, a higher tier may be providing evidence of low-cost repair services and initiatives to design out waste.

17. Financial reserves will accumulate from the fees collected from liable parties for solar photovoltaic (PV) systems because there may be decades between when the products are placed on market and when they become waste. If any, describe what role government should take in managing these funds.

Type your response in the text box below.

Scope

18. Are there any small electrical and electronic equipment products you believe should not be covered under the scheme?

[Select **Yes** or **No** from the **Choose an item** drop down below]

no

[Answer question 19 below if you answered **Yes** at question 18]

19. Which products and why? **Type your response in the text box below.**

Not specifically but there are certainly some challenging items that may require special arrangements. Hot water systems won't be able to be transported easily so require a distributor/supplier to collect and large TVs are very bulky and over 20kgs so will also be difficult to drop off and take up lots of volume in storage.

20. Are there small electrical and electronic equipment products that you would like to see added to the list of included products in the discussion paper?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

[Answer question 21 below if you answered **Yes** at question 20]

21. Which products and why? **Type your response in the text box below.**

Temperature exchange equipment – Fridges, freezers, oil heaters, air conditioning units, air cons, dehumidifiers, radiators and heat pumps; but no public drop off as these require special handling, collection and processing. Collection from private property would reduce the risk of fridges/freezers being improperly degassed which is occurring due to scavenging of fridge motors when left on the kerbside, or accidentally when collected or transported. They are too difficult for councils to manage and present a safety risk when left on the kerb by residents (suffocation if kids hide in them which unfortunately has occurred in Australia). Like solar PV systems they require a dedicated collection from private property that should be funded through a product stewardship scheme instead of the cost and logistical burden being placed on councils and ratepayers. We have been looking at ways to improve degassing and one of the important ways to do this is by minimising the time fridges are left at the kerb (during a council clean up collection), and instead use a specialised contractor to collect them from private property who are trained to ensure fridges are collected, transported, degassed and recycled. It is inequitable for brands producing fridges and freezers to not be paying towards the end of life costs. Including fridge/freezers and other temperature exchange equipment in the scheme through a funded collection model would significantly reduce carbon emissions from improper degassing and ensure we don't have multiple schemes for household electrical products. It should be noted that the current Refrigerant Reclaim Australian scheme only looks at proper treatment and disposal of refrigerant gas but completely neglects funding the collection and processing of fridges, freezers and air conditioning units. Inclusion of these items would also better align with international schemes for ewaste.

Electrical products over 20kg from households e.g. washing machines, dishwashers, dryers, ovens, large heavy TVs or computers etc. No public drop off, these items require brands to provide a take back system preferably collected from people's homes.

Household electrical toothbrushes should be included in the list of inscope items in Appendix B – councils regularly get them at ewaste events yet not all processors will take them despite being able to easily remove the head toothbrush part for hygiene reasons.

22. Can you suggest a better method than Harmonised System (Import) codes for defining in-scope products? **Type your response in the text box below.**

23. Should the scheme cover all parts of a solar PV system?

[Select Yes or No from the Choose an item drop down below]

yes

Please explain. **Type your response in the text box below.**

Even if all parts of product can't be recycled it is important that they are at least responsibly disposed of and that government and scheme administrators has ways to measure the volume and impact of non-recyclable parts in products.

24. Are there any products, or specific solar PV products, that should not be covered?

Type your response in the text box below to explain which products and why?

25. What do you think are the pros and cons of including, within the scheme, large format energy storage batteries which are attached to solar PV systems?

Type your response in the text box below.

Given how hazardous and flammable batteries are it is important to include them. A potential con is likely to be they are heavy and costly to collect and process.

26. It is proposed the scheme will cover batteries that are embedded in small electrical and electronic equipment but not loose batteries (e.g. AAA batteries). Do you have any concerns regarding the scheme approach to waste containing embedded batteries?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

[Type your response in the text box below if you answered **Yes** at question 26.]

We support including embedded batteries but given the number of fires caused by batteries it will require extra safety considerations for anyone involved in collecting or processing these items for the scheme.

Targets and obligations

27. Do you believe that the set of targets and obligations detailed in the discussion paper are appropriate for a product stewardship scheme which covers small electrical and electronic equipment?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

[Answer question 28 below if you answered **No** to question 27]

28. What changes would you suggest to the proposed targets and obligations?

[Type your response in the text box below.]

The obligation for a minimum level of accessible drop-off services available to households and small businesses – is an important target, we recommend ensuring there is scheme funding to set up drop off sites on private land and to enable temporary drop off sites where permanent ones aren't available. It was very difficult to find sites on public land for vending machines for the NSW Container deposit scheme, sites that were established had large impacts on traffic and noise levels for local residents, highlighting how important it is to adequately plan traffic flows and resourcing for collection sites. Producers will need incentives to lease or buy additional space to set up drop off services near their stores where it is being purchased, if there isn't adequate funding or financial incentives to do then this target will be difficult to reach.

Expand the *obligation to encourage maximising the re-use of products* to include *and provide affordable repair of products*.

29. Do you think the set of targets and obligations detailed in the discussion paper are appropriate for a product stewardship scheme which covers solar PV?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

[Answer question 30 below if you answered **No** at question 29]

30. What changes would you suggest to the proposed targets and obligations?

[Type your response in the text box below.]

NA

Transitional arrangements for legacy waste from large-scale PV systems

31. Do you agree it is appropriate that owners be responsible for covering the cost of managing all legacy waste from large-scale commercial solar PV systems (100kW and above?)

[Select **Yes** or **No** from the **Choose an item** drop down below]

no

[Answer question 32 below if you answered **No** at question 31]

32. What alternative do you suggest? **Type your response in the text box below.**

We have answered no because this may lead to unfairly penalising early adopters of solar power. Councils along with other community driven businesses were early adopters of solar power and many councils installed solar panels on community facilities. Many of these systems will need recycling over the next decade. Perhaps instead a distinction can be made that legacy waste from large scale PV systems installed on community facilities by a government or not for profit organisation could be accepted in the scheme.

33. Do you think it is appropriate to impose a mandatory requirement on owners of large-scale solar PV systems (over 100kW), built before the scheme commenced, to provide information about how they are managing waste?

[Select **Yes** or **No** from the **Choose an item** drop down below]

yes

[Answer question 34 below if you answered **Yes** at question 33]

34. What information should owners of large-scale solar PV systems, built before the scheme commenced, be required to provide to the Scheme Administrator?

[Check any or all boxes below]

- Serial Numbers of deinstalled solar panels, inverters, and batteries.
- Information on the organisation/s that are responsible for the decommissioning of these systems.
- Information on the organisations that are recycling the waste from these systems.
- Information on reuse or export of products.
- Information on the disposal of these systems in landfill.
- Other. **Type your response in the text box below.**

[Answer question 35 below if you answered **No** at question 33]

35. Explain why not. **Type your response in the text box below.**

Scheme arrangements for solar PV

36. The paper suggests less than 100 kW capacity as the definition of small-scale solar PV systems eligible for free services (where they were installed prior to the scheme commencing).
What definition do you suggest from the list below? **[Check 1 box below]**

- 0-15 kW (predominantly households)
- 0-50kW (mostly households and small business)
- Agree with the less than 100kW proposed (households and businesses)

37. How can the Scheme make collecting and transporting waste from PV systems convenient, efficient and cost-effective for electricians and PV system installers?

Type your response in the text box below.

Similar to other electrical products, producers (solar panel suppliers) need to facilitate collection from households, any necessary aggregation and transportation to recyclers as these items are too difficult for households to transport to drop off sites or for councils to collect.

38. What are the minimum requirements that should be set for a collection site to accept PV systems? **Type your response in the text box below.**

Under cover, secure area, a way of stacking panels without breaking the glass, consideration of battery fire risk is batteries for solar systems are included, accessibility for trucks, a large enough space, impacts on traffic etc.

39. Should requirements differ between types of hosts? (For example, for those hosted by local government and those hosted by PV distributors). **Type your response in the text box below.**

It is highly unlikely that Sydney metro councils would be able to host an aggregation or collection site for solar PV systems due to the space required and the competing needs of other household waste streams for that limited space. PV distributors should be responsible for collecting and aggregating especially because of the need for a qualified electrician to decommission panels (as noted in the discussion paper) and if they don't have space in metro areas then they may need to work with commercial transfer stations or drop off commercial waste facilities such to aggregate panels before they are transported to a PV recycler.

40. How could the Scheme provide incentives for recyclers to recover more valuable material over time and ensure safe management of hazardous material from solar PV systems?

Type your response in the text box below.

41. The Scheme could allow liable parties, that have imported or produced solar PV systems and components, other options to manage their liability. This could apply when components are used

in a large-scale solar project, such as solar farms. These options involve either the liable party or the owner of the large-scale project providing a decommissioning plan and bond, which would allow the financial liability to be met over a longer time frame.

Do you think this approach is appropriate?

[Select **Yes**, **No** or **Not sure** from the **Choose an item** drop down below]

not sure

[Answer question 42 below if you answered **Yes** or **Not Sure** at question 41]

[Answer question 43 below if you answered **No** at question 41]

42. If the owner chooses other options to manage their liability the liable party could be exempt from paying upfront fees to the Scheme Administrator for some components. Which of the following requirements should apply for the Scheme Administrator to provide an exemption?

[Check any or all the boxes below]

- The products or components where an exemption is being sought, must solely be used in a large-scale solar PV system project, such as a solar farm.
- A decommissioning plan that details how the system will be decommissioned, in-scope products will be recycled, and residual and hazardous waste will be managed must be provided to the Scheme Administrator.
- A plan of how requirements of the scheme that would otherwise apply would be met. For example, obligations under the scheme.
- A plan on how the commitments of the decommissioning plan will be transferred if the system is sold before decommissioning.
- The owner provides an appropriate bond, surety or guarantee for the commitments made in the decommissioning plan.
- Other (please specify)

43. Explain why not. **Type your response in the text box below.**

44. Are there any other comments you would like to make in response to the paper?

Type your response in the text box below.

<END>