Electrical and electronic products stewardship

Airconditioning and Refrigeration Equipment Manufacturers Association of Australia Meeting
9 December 2021

Key Drivers

- Rising e-waste in Australia
  - 521,000 tonnes in 2019 in 2019 to 674,000 tonnes in 2030
  - collect around half for recycling, recover less than a fifth of its total value
  - landfilling and sending overseas around $680 million worth of materials every year
- Review of repealed Product Stewardship Act
  - Expand the National Television and Computer Recycling Scheme
  - Include reuse and repair (Productivity Commission)
- NTCRS is now 10 years old – lessons learned
- International Conventions and new domestic policies
- Critical mineral supply

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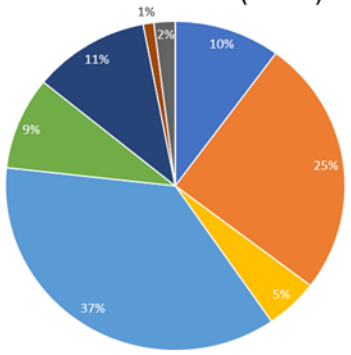
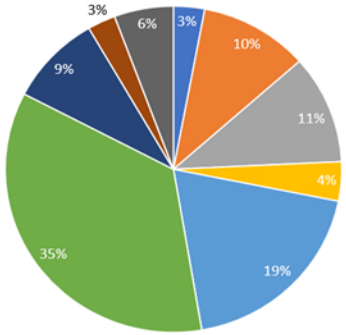
Consultation to date

Bilaterals (>75)



Roundtables (332)



"If you can get it here, you can get it back"

- Commonwealth
- State Gov
- Local Gov
- LGA
- NGO
- Industry
- Consultancy
- Co-Regs
- Researcher

Make

Product Designers

Key Question: Can we create products that can be easily repaired and fully recycled and/or recovered?

Sell

Importers/Retailers

Key Question: What responsibility do sellers and retailers have to make sure their products can be repaired and recycled/recovered?

Use

Consumers (Households + Businesses)

Key Question: How can we make it convenient and cost-effective for consumers to repair, reuse or send their end-of-life goods for

Recover

Recyclers/Refurbers

Key Question: How can recycling be made more cost-effective? What new technologies or business models can be implemented?

Research

Researchers

Key Questions: How can we innovate to reduce e-waste (i.e. what's in the R&D pipeline)? What could disrupt existing recycling models?

Regulate

Governments

Key Questions: How can different levels of government work together to reduce e-waste? What lessons can we learn from overseas?

Re-think

NGOs

Key Questions: What non-government programs work? How can we reduce e-waste without government intervention?

Reconnect

Other Policies/Programs

Key Questions: How does e-waste fit into broader recycling and waste policies and programs? Broader government priorities?

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Discussion Paper - Temperature exchange equipment

Large Appliances

Examples: Dishwashers, ovens, washing machines, dryers.

Televisions & Computers

Examples: Televisions and computers.

Small Equipment

Examples: Clocks, toasters, grills, kettles, hair dryers and household tools.

Temperature Exchange

Examples: Fridges, freezers, heating and ventilation, air conditioners.

Lighting

Examples: Lamps (and household and professional luminaires.

Other Large Equipment

Examples: Exercise and sports equipment, professional tools and medical.

Power & Storage

Examples: Solar panels.

Mobile Phones

Examples: Mobile phones.

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Discussion Paper - The data

Metric	2019	2030
Tonnes	122,000	204,300
Percentage of total e-waste	24	30

Table 13: Waste volumes for temperature exchange equipment.

Plastics	Glass	Other	Metals	*Ferrous*	*Non-ferrous*	*Precious*	*Specialty*
15%	**4%**	**10%**	**72%**	67%	4.7%	0.0021%	0.0013%

Table 14: Materials in temperature exchange equipment (2019)

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Discussion Paper - The data

Metric	High-efficiency recycling	Low-efficiency recycling	Landfill
Tonnes	0	110,000	12,000
Percentage	0	90	10

Table 15: Fate of temperature exchange equipment waste (2019)

Metric	Recovered value	Lost value
Value in Australian dollars	40 million	183 million
Percentage of total value	18	82

Table 16: Value of recovered materials in temperature exchange equipment (2019)

Discussion Paper – Opportunities and challenges

- Existing product stewardship scheme for a lot of temperature exchange equipment
- High levels of polyurethane and polystyrene plastic
- Collections systems are already in place
- Relatively few product types
- These products are also long-lasting so may appeal to consumers based on their durability, repairability and sustainability

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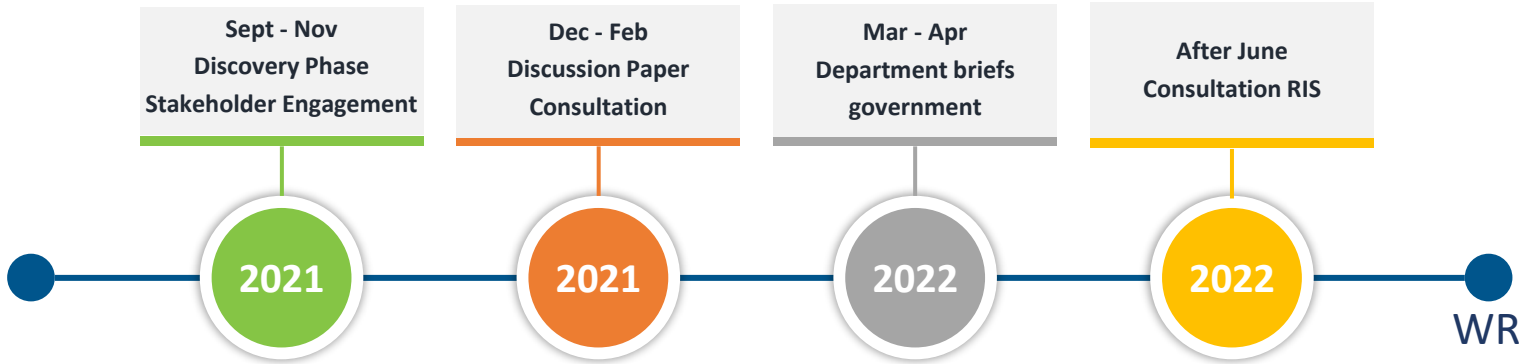
Discussion Paper - Questions

Q2.13: 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 increasing high-efficiency recycling of temperature exchange equipment?

Q2.14: 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?

Q2.15: What are the opportunities and challenges in recycling and recovering polyurethane and polystyrene plastics from fridges, freezers, and other equipment?



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This is only the beginning of our conversation…

If you would like to continue the discussion offline or gain further information, please contact us at

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