E-product Stewardship in Aotearoa New Zealand

TechCollect NZ

Report Two

Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY

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Table of contents

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship
scheme for electrical and electronic products in Aotearoa New Zealand   EY │ i

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Waste Minimisation Fund disclaimer

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Report scope and disclaimers

Ernst & Young have completed our engagement to perform professional services for TechCollect New Zealand Limited (TechCollect NZ); specifically:

► Providing secretariat and project management services to organise, oversee, develop, and facilitate the Circular E-stewards Network (CEN), including:

  ► Completion of a range of stakeholder engagement and other management activities, co-facilitation of working group sessions, and the delivery of a series of webinars

  ► Preparation of a Co-design Recommendations Report for a regulated e-product stewardship scheme in Aotearoa New Zealand.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 1

The project was led by TechCollect NZ, in consultation with the CEN. The CEN comprised 16 members representing industry, Māori, local government, and environmental and community perspectives. Officials from the Ministry for the Environment (MfE) in New Zealand were also involved as observers. The CEN's role was advisory in nature. To further understand Ernst & Young's role in this project, please see Appendix B.

TechCollect NZ management is fully and solely responsible for applying independent business judgment with respect to the services and work products provided by Ernst & Young, to make implementation decisions, if any, and to determine further courses of action with respect to any matters addressed in the information provided or other work product or deliverable. The nature and content of any information we provided has necessarily reflected the specific scope and limitations of our engagement and the amount and accuracy of information provided to us.

Glossary

Term	Definition
Advanced stewardship fee (ASF)	A fee applied to liable parties at the time the e-product is placed on the New Zealand market, whether imported or manufactured locally.
AS/NZS	Australian Standard/New Zealand Standard.
CEN	Circular E-Stewards Network, a working group of 16 members representing industry, Māori, local government, environment and community, and observers from the Ministry for the Environment, who played an important advisory role in co-developing the recommendations and preparing this report.
Circular economy / circularity	A circular economy is an alternative to the traditional linear economy in which resources are kept in use for as long as possible, extracting the maximum value from them whilst in use, and then recovering and regenerating products and materials at the end of each service life.
CGA	Consumer Guarantees Act 1993 - New Zealand legislation.
Clearing house	An independent financial body or organisation who manages confidential data reporting and facilitates fee payment activities between liable parties and the scheme manager associated with the e-product stewardship scheme.
Convenience target	A target measuring how convenient the collection service network is to the community. Specifies metrics for what is convenient (e.g., minimum number or location of collection services for all categories of e-products). A convenience model focuses on the availability of convenient collection points/services in the scheme collection network and ensures that 100% of e-products presented to the scheme collection network are accepted and managed.
Declaration of Priority Products	Under section 9 of the WMA, the Minister for the Environment can declare a product to be a priority product. This means a regulated product stewardship scheme must be developed as soon as practicable to manage the environmental impact of these products during their life cycle (including design, manufacture, purchase, use and end-of-life).
Design for environment	The integration of environmental aspects into product design with the aim of improving the environmental performance of the product throughout its whole life cycle.
Eco-modulation	A type of stewardship fee which is modulated for liable parties based on the adherence of their products to a set of environmental design criteria. Eco-modulation seeks to influence improved product design for environment.
EEE	Electrical and electronic equipment.
e-product	Electrical and electronic product.
e-product category	Different categories of e-products as defined in Table 1 in Report One.
e-waste	Waste (i.e., unwanted or end-of-life) e-products.
GIS	Geographic information system.
Guidelines	General Guidelines for Product Stewardship Schemes for Priority Products under the WMA.[1]
ICT	Information and communication technology.
IPR programme	Individual producer responsibility programme - a producer led programme for collecting and managing e-products the producer has sold or collected. These programmes are typically

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[1] https://gazette.govt.nz/notice/id/2020-go3342

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 2

Term	Definition
	managed by a single producer and cover products specified by the producer (usually products that the producer sells and can be brand specific or agnostic) with their own, or externally contracted services for collection, transportation and preparation for reuse/recycling networks and communication and reporting systems.
Liable party	An individual or organisation who must pay a fee under the scheme that covers scheme costs for the priority product they place on the New Zealand market.
IT	Information technology.
Material recovery rate	Relates to the recycling of e-waste and the amount of material recovered through recycling processes. It is equal to the proportion of an e-product (typically a percentage of the product by weight) that is recovered into useable materials resources (i.e., resources that are reused in new e-product manufacture, other product manufacture or market applications).
MBIE	Ministry of Business, Innovation and Employment (New Zealand central government organisation).
MCA	Multi-criteria analysis.
MfE	Ministry for the Environment (New Zealand central government organisation).
NFP	Not-for-profit.
POM	Placed on market.
Priority product	A product declared to be a priority product in accordance with section 9 of the WMA.
Priority product stewardship scheme	A scheme where the responsibility for a priority product's life cycle and end-of-life management is equitably shared across manufacturers, importers, retailers, and users of those priority products, reduces the impact of end-of-life products on communities, Councils, neighbourhoods, and the environment.
PSO	Product stewardship organisation.
Scheme	Refers to product stewardship scheme.
Scheme framing	The structure used to implement the recommendations over a period of time that enables the scheme to gradually move electrical and electronic products up the waste hierarchy.
Scheme manager	The contact person for an accredited scheme.
SDE	Scheme design elements, including scheme framing, scheme product scope, targets and data, liable party determination, fee structure, mandatory standards, governance structure, compliance and monitoring, education and awareness, regulation, and roles/responsibilities.
Seed funding	Advanced funding source to support the initial costs of setting up the product stewardship scheme.
Service providers	The individuals or organisations that provide end-of-life management services to the scheme. These services include collection, transport, recycling, repair and reuse.
Stream(s)	A certain e-product type within an e-product category (e.g., laptops are a stream under Category 6).
TAO	Territorial Authorities' Officers.
Threads of circularity	Product design, repair and reuse, and recovery and recycling.
Volume-based fee (VBF)	A fee applied to liable parties after an e-product has been managed by the product stewardship scheme.
WEEE	Waste electrical and electronic equipment.
WEEE Directive	The Waste from Electronics and Equipment Directive 2012/19/EU from the European Union which sets collection, recycling, and recovery targets for all types of electrical goods.
WMA	Waste Minimisation Act 2008 - New Zealand legislation.
WMF	Waste Minimisation Fund - administered by MfE.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 3

Executive summary

Purpose of the report

In 2020, electrical and electronic products (e-products) were declared a priority product[2] by the New Zealand Government under section 9 of the Waste Minimisation Act 2008 (WMA). This declaration recognised that action should be taken to minimise the environmental harm e-products and e-waste (unwanted and end-of-life e-products) can cause when disposed of improperly. It also signified that greater reduction, reuse, recycling, recovery, and treatment of e-waste can bring social, environmental, economic, and cultural benefits to our communities.

In response, TechCollect NZ Limited (TechCollect NZ) was granted Waste Minimisation Fund (WMF) funding to lead a co-design for a regulated e-product stewardship scheme in Aotearoa New Zealand.

This report summarises:

► Recommendations and further activities required for a regulated e-product stewardship scheme in Aotearoa New Zealand.

► How the recommendations align to the requirements set out in the Waste Management Act 2008 (WMA) and the General Guidelines for Product Stewardship Schemes for Priority Products Notice 2020 (the Guidelines) and addresses potential barriers that may limit the scheme's success.

Key points

The Government's expectations for priority product stewardship schemes

► To support the development of regulated product stewardship schemes in Aotearoa New Zealand, the New Zealand Government published General Guidelines for Product Stewardship Schemes for Priority Products under section 12 of the WMA (the Guidelines).[3]

► Under section 15 (Accreditation) of the WMA, schemes must be consistent with the Guidelines and meet the requirements of section 14 (Requirements for accreditation) of the WMA in order to qualify for accreditation.

► The expected effects of a product stewardship scheme include:

  ► Circular resource use
  ► Internalised end-of-life costs
  ► Public accountability
  ► Collaboration.

► The expected contents of a product stewardship scheme include:

  ► Governance
  ► Scheme operations
  ► Targets.

► Additional detail regarding the expected contents and effects of a product stewardship scheme are outlined throughout section 1 of this report.

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2 Declaration of Priority Products Notice 2020 - 2020-go3343 - New Zealand Gazette
3 https://gazette.govt.nz/notice/id/2020-go3342

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 4

How the scheme could be delivered in practice

► Several practical elements of scheme delivery are outlined throughout section 2 of this report. In particular, it has been important to consider the following aspects in alignment with the Government's expectations for priority product stewardship schemes (per the WMA and associated Guidelines):

  ► Liable fee collection: how the collection of fees from liable parties will work to ensure that the scheme can provide free and convenient collection and management of in-scope e-products and e-waste, including in rural populations

  ► Fee collection and payment by stakeholders: clarification for liable parties, consumers, and scheme service providers regarding any fees they may need to pay or any payments they are eligible to receive

  ► Scheme service providers: how the selection of scheme service providers will utilise an open and transparent tender process, optimising the existing network of collection and processing infrastructure to ensure a convenient and integrated network that can responsibly recover and manage all in-scope e-product categories across Aotearoa New Zealand

  ► Management of legacy and orphaned e-products: how contingency provisions will be put in place to ensure the recovery of legacy and orphaned e-products can be funded entirely by the scheme.

► The scheme's proposed service delivery flow is covered within section 2.5 of this report. Several diagrams with supporting explanatory notes are provided to promote clarity regarding the recommended role(s) of key stakeholders, whether responsibility sits within (or outside) the scope of the accredited scheme, and flows regarding:

  ► E-product/e-waste
  ► Reporting/data/insights
  ► Payment
  ► Monitoring/auditing/compliance
  ► Governance.

► A summary of all scheme service delivery flows is presented on the following page.
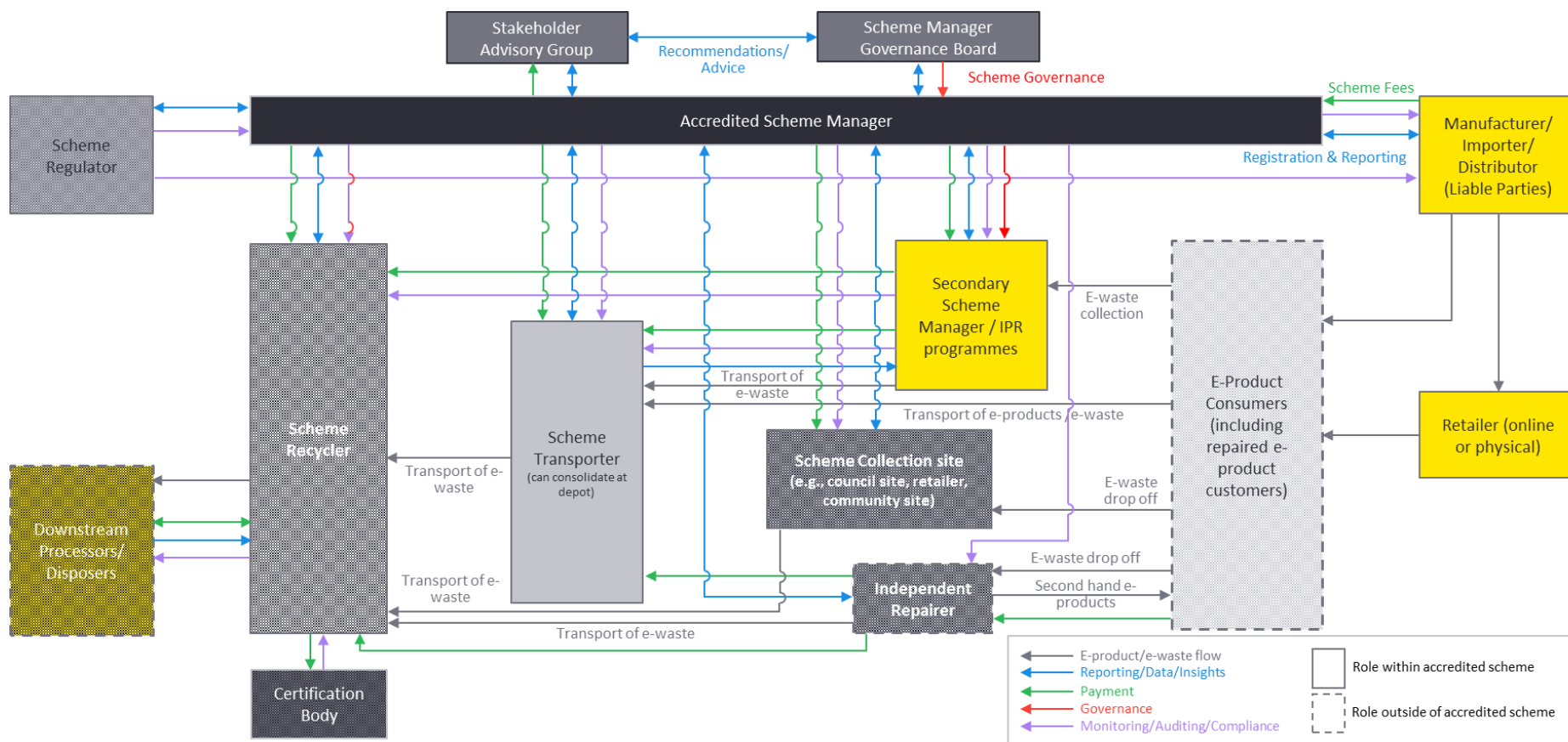
Figure 1 - Summary of all scheme service delivery flows for the proposed scheme

Legend:
- E-product/e-waste flow
- Reporting/Data/Insights
- Payment
- Governance
- Monitoring/Auditing/Compliance
- Role within accredited scheme
- Role outside of accredited scheme

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 6

The recommendations and further activities for each scheme design element

► Recommendations associated with each scheme design element (SDE) are outlined in <u>section 3</u> of this report. These recommendations have been developed with consideration of what the WMA permits as part of a regulated product stewardship scheme. As a result, some SDE options which had favourable responses (as outlined within Report One) were unable to be recommended as they would not be feasible under the WMA.

► In addition to the recommendations, there are further activities proposed in <u>section 3</u> of this report which would need to be part of the overall implementation of the SDE recommendations. In most cases, these activities will be inputs into the regulation that is proposed to be implemented to support the scheme. Therefore, some of these activities will need to be carried out before the commencement of the scheme. The list of further activities proposed is not exhaustive, and additions may be necessary as further preparation for the scheme is undertaken.

► For greater detail regarding the investigation process, including options development, targeted research, and stakeholder engagement, refer to Report One. Explanations of the SDEs and the options considered for each element are also included in Report One.

Next steps

The next steps towards development and implementation of a regulated e-product stewardship scheme should include:

1

Further activities and consideration of scheme framing and design recommendations

Specific aspects of the scheme design which could not be finalised are noted as further activities in <u>section 3</u> of this report, as further research is required.

2

Public consultation on supporting regulations

This report recommends regulations be in place to support the e-product stewardship scheme. This work is to be undertaken by MfE and will include a full public consultation process and central government approval.

3

Apply for scheme accreditation

The scheme manager(s) apply for accreditation by submitting a priority product stewardship application form. The application is assessed by MfE, and if the Minister for the Environment is satisfied that the scheme meets the requirements of the WMA, it will be accredited.

It is noted that scheme accreditation and scheme regulations are not sequential activities and may occur in parallel.

4

Scheme implementation

The earliest possible in-effect start date for the scheme is expected to be in 2025.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 7

1. WMA requirements for a regulated Product Stewardship scheme for Priority Products

Sections 14 and 15 of the WMA state the qualification requirements and the terms and conditions for the Minister for the Environment to accredit a regulated product stewardship scheme for priority products in Aotearoa New Zealand.

Details of each requirement and how they are proposed to be addressed or are expected to be addressed via the product stewardship accreditation application process for priority products, are presented in Table 1 below.

Table 1: WMA Requirements for accreditation

WMA Section 14 Requirements for accreditation To qualify for accreditation, a product stewardship scheme must–	
a. *Identify the scheme manager*	► A suitable scheme manager is expected to be identified via the product stewardship accreditation application process for priority products. ► A single legally registered New Zealand not-for-profit (NFP) entity scheme manager model is recommended for Aotearoa New Zealand's regulated e-product stewardship scheme, with the option of an umbrella product stewardship organisation (PSO) model. ► For more details on scheme governance structure recommendations, and the corresponding further activities proposed, see section 3.7. ► For more details on the recommended accredited scheme manager roles and responsibilities and the corresponding further activities proposed, see section 3.10.
b. *Provide a description of the scope of the scheme, including the product or brand of product to which it applies*	► All e-product categories set out in the Declaration of Priority Products are recommended to be included in the scope of the scheme under a phased-in approach that starts with e-product categories 2 (Screens, monitors and equipment with screens over 100cm2), 5 (Small equipment) and 6 (Telecommunication equipment and small IT equipment), with the remaining e-product categories to be introduced over the scheme's initial seven-year accreditation cycle. ► For more details on scheme product scope recommendations and the corresponding further activities proposed, see section 3.2.

c. *Set-*
i. *Measurable waste minimisation, treatment, or disposal objectives for the product; and*
	► As part of the recommended scheme framing, measurable overarching objectives are proposed for the scheme to achieve, including:
	  ► Preserving, protecting, and improving the quality of the environment
	  ► Protecting human health
	  ► Utilising natural resources responsibly and to their fullest potential, and
	  ► Prioritising the highest available interventions in Aotearoa New Zealand's waste hierarchy wherever possible.
	► For more details on scheme framing recommendations and the corresponding further activities proposed, see section 3.1.

ii. *Time frames for meeting the objectives*	► The overarching scheme objectives are proposed to be achieved across the staggered scheme implementation framing option. ► For more details on scheme framing recommendations and the corresponding further activities proposed, see section 3.1.
d. *List the classes of person involved in the design, manufacture, sale, use, servicing, collection, recovery, recycling, treatment, and disposal of the product*	► The classes of person involved in the design, manufacture, sale, use, servicing, collection, recovery, recycling, treatment, and disposal of e-products and e-waste are listed in section 3.12 of Report One. ► For more details on the classes of person involved in each part of the e-product and e-waste value chain, stakeholder group/scheme participant descriptions, scheme fee and payment information, and stakeholder responsibilities proposed, see Appendix A. ► For more details on scheme service providers, see section 2.3. ► For more details on the liable party determination recommendations and the corresponding further activities proposed, see section 3.4.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 8

WMA Section 14 Requirements for accreditation	
To qualify for accreditation, a product stewardship scheme must—	
e. *List the persons who have agreed to participate in the scheme and assign responsibility to them for meeting the scheme's objectives*	► The persons who have agreed to participate in the scheme are expected to be identified via the product stewardship accreditation application process for priority products. ► The stakeholders expected to participate in the scheme and the corresponding scheme roles and responsibilities (including but not limited to supporting the scheme to achieve the overarching scheme objectives proposed) are listed in section 3.12 of Report One and Appendix A.
f. *Specify the arrangements for-* i. *Making decisions under the scheme*	► Arrangements recommended for making decisions under the scheme are set out in the proposed scheme governance structure. ► The recommended scheme governance structure includes a scheme manager governance board with the right skills to ensure effective and sustainable operation of the scheme. It also includes the establishment of a single stakeholder advisory group that has broad representation from all parts of the e-product and e-waste value chain and provides input into scheme decision making. ► For more details on scheme governance structure recommendations and the corresponding further activities proposed, see section 3.7.
ii. *The control and overall operation of the scheme*	► Arrangements recommended for the control and overall operation of the scheme are set out in the proposed scheme governance structure, providing options for how the scheme could be operated and the governance elements that could or should be included. ► For more details on scheme governance structure recommendations and the corresponding further activities proposed, see section 3.7. ► For an overview of the recommended scheme delivery flow, the relevant stakeholders expected to be involved at various stages of scheme operation and the corresponding roles and responsibilities, see section 2.5.
iii. *Keeping records and making reports under the scheme*	► Arrangements recommended for keeping records and making reports under the scheme are presented in the recommended scheme delivery flow in section 2.5. ► For more details on accredited scheme manager and service provider record keeping and reporting recommendations, and the corresponding further activities proposed, see sections 3.10 and 3.12 and Appendix A.
g. *Specify the scheme's expiry date*	► The scheme's expiry date will be specified in the product stewardship accreditation application for priority products. ► It is recommended that the Minister for the Environment provides accreditation to a suitable scheme manager for the maximum initial accreditation cycle of seven years and ensures ongoing accredited scheme operations beyond this initial term.
h. *Identify the processes for compliance and enforcement of any agreements between participants to the scheme*	► The processes recommended for compliance and enforcement of agreements between participants of the scheme are presented in the recommended scheme delivery flow in section 3.8 and Appendix A.
i. *Provide for assessing the scheme's performance and for reporting on its performance to the Minister*	► Recommendations for assessing scheme performance and reporting on scheme performance to the Minister for the Environment, the public and scheme stakeholders are presented in the recommended scheme delivery flow in section 2.5. ► For more details on regular assessments and reporting on scheme performance led by the accredited scheme manager and the corresponding further activities, see section 3.10.
j. *Set out a strategy for publication of the scheme*	► A strategy for publication of the scheme is expected to be set out via the product stewardship accreditation application process for priority products. ► For more details on scheme education and awareness raising recommendations and the corresponding further activities proposed, see section 3.9.
k. *Set out how information will be provided to purchasers, users, and handlers of the product to which the scheme relates*	► Details on how information will be provided to purchasers, users and handlers of in-scope e-product and e-waste categories are expected to be set out via the product stewardship accreditation application process for priority products. ► For more details on scheme education and awareness raising recommendations and the corresponding further activities proposed, see section 3.9.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 9

WMA Section 14 Requirements for accreditation	
To qualify for accreditation, a product stewardship scheme must—	
I. *Clearly outline how the scheme is to be funded*	► An advanced stewardship fee (ASF) structure is recommended for Aotearoa New Zealand's regulated e-waste and e-product stewardship scheme.
	► The implementation of an ASF fee structure will support the scheme to collect fees from liable parties that is sufficient to cover the full net costs of the in-scope e-products and e-waste collected and managed by the scheme.
	► For more details on scheme fee structure and relevant scheme design element recommendations, and the corresponding further activities proposed, see section 3.5 and Appendix A.

Section 15 (Accreditation) of the WMA outlines accreditation for non-priority and priority product stewardship schemes in Aotearoa New Zealand, as below:

1. The Minister must accredit a product stewardship scheme if he or she is satisfied that the scheme-

    a. *Meets the requirements of section 14, and*

    b. *Is likely to meet the scheme's objectives within the time frames set in the scheme, and*

    c. *Is likely to promote waste minimisation or reduce the environmental harm from disposing of the product to which the scheme relates without, in either case, causing greater environmental harm over the life cycle of the product, and*

    d. *Is consistent with New Zealand's international obligations, and*

    e. *If the scheme relates to a priority product, is consistent with any guidelines published under section 12.*

2. Despite subsection (1)-(e), the Minister may accredit a product stewardship scheme that is not consistent with any guidelines published under section 12 if, before accrediting the scheme, he or she has obtained and considered the advice of the Waste Advisory Board.

3. Before deciding whether to accredit a product stewardship scheme, the Minister may seek further information from-

    a. *The scheme manager, or*

    b. *Any other person who, in the Minister's opinion, is likely to be significantly affected by the scheme.*

As soon as practicable after deciding whether to accredit a product stewardship scheme, the Minister must provide to the scheme manager written notice of the decision and the reasons for the decision.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 10

2. Scheme implementation and delivery recommendations

This section provides recommendations for scheme design and implementation. A set of scheme delivery mechanisms outline how operational elements of the scheme should be set up to support implementation of each recommendation. This section also includes discussion of several barriers that have been noted by the CEN and wider stakeholders which may limit the success of the scheme.

This section outlines:

► The operational elements that will support the scheme
► How the recommendations should be implemented across the recommended scheme framing
► How the recommendations align to the Guidelines and sections 14 and 15 of the WMA
► How the further activities required should be prioritised and by whom
► The barriers that may limit the scheme's overall success.

2.1 Liable party fee collection

2.1.1 Fee setting

Under section 23(1)(d) of the WMA, the Minister for the Environment can recommend regulations to Cabinet (New Zealand Government) for decision that set the fees payable for the management of priority products for the class(es) of person who must pay the fee, the stages in the life cycle of the priority products where the fee must be paid, and the purposes to which the fee must be applied. This applies to the recommended e-product stewardship scheme framing and design, as follows:

Table 2 - Application of WMA section 23 (1)(d) of the scheme

WMA requirement		Application to the e-product stewardship scheme
s.23(1)(d)	"Setting fees payable for the management of a product"	► The product will be the e-product categories outlined in section 3.2 of Report One. Refer to section 3.2 of this report for recommendations relating to scheme product scope.
		► The fees are to cover the "management" of the e-products by the scheme through an ASF structure. The fees will not directly fund infrastructure (e.g., collection and recycling equipment), assets (e.g., trucks and manufacturing equipment) or research and market development.
		► The fee amount (e.g., in $/kg of e-product and/or $/per unit) will need to be set up front, as well as the associated fee formula (i.e., how the fee amount published is used to calculate and determine the total fee for each liable party).
s.23(1)(d)(i)	"Specifying the class or classes of person who must pay the fee"	► The person who must pay the fee will be determined as per the recommendations in section 3.4 of this report (liable parties with financial obligations under the WMA i.e., manufacturers, importers and distributors of in-scope e-products placed on the market in Aotearoa New Zealand for the first time).
s.23(1)(d)(ii)	"Specifying the stages in the life of the product where the fee must be paid"	► The use of the ASF structure determines that the fee is paid when the in-scope e-product is placed on the market in Aotearoa New Zealand for the first time.
s.23(1)(d)(iii)	"Specifying the purposes to which the fee must be applied"	► This will depend on the final scope of activities to be undertaken by the accredited scheme. Expected activities include liable party registration and reporting, collection services, transport services, preparation and/or diversion for repair or reuse, recycling, monitoring, and auditing, communications, reporting systems, education and awareness, and accredited scheme manager overheads.

The fee amount will need to be stated up front in the regulations. The regulations will be able to be reviewed to adjust the fee and MfE has advised that an adjustment on a three-year basis is feasible (noting the time taken and process to amend regulations). Despite this, it is recommended that the fee be reviewed and updated (if required/possible) on an annual basis, taking into account market changes year to year (e.g., large variations in e-products placed on the market, commodity price changes, supply chain issues including those caused by COVID-19, and efficiencies realised in collection and recycling networks), and accounting for e-products placed on the market with fees collected; however, may not yet be presented to the scheme for any reason.

Modelling will be necessary to determine upfront fees that balance cost recovery while ensuring fees are not excessive or build up large fee reserves (in accordance with chapter 17 of the Legislation Design and Advisory Committee "Legislation Guidelines: 2018 edition"). To ensure adequate funding, it would be financially prudent to use the higher end of the modelled estimates.

The basis for setting the fee (under the ASF model) is recommended as follows:

► The projected net costs (for the accredited scheme manager) of operating the e-product stewardship scheme in a given year divided by the projected total weight or total number of e-products (imported and manufactured in-country) and placed on the market in Aotearoa New Zealand in a given year (note: any exports of new/unused e-products are to be deducted from the liability).

The result is a $/kg or $/unit fee rate for each e-product/e-waste category which would be published in the regulations.

It could be feasible to set different fee rates for different e-product classes based on the maturity of the collection, preparation for reuse, and recycling networks for each e-product category. There is also the possibility that a hybrid model for fees could be used with some e-product categories using a $/kg or $/unit fee rate depending on what is most suitable for that category. Ultimately, the most appropriate approach to fee setting will not be able to be determined until the further activities that are essential for the scheme to be implemented have been carried out, and once scheme framing and foundational SDEs have been determined.

Scheme service providers could seek funding from external sources for projects that would improve their services, service outcomes, or add value to the scheme (such as collection infrastructure upgrades, research and development, or implementation of new technology).

2.1.2 Fee collection

In international jurisdictions, there are examples of scheme fees collected by government departments/agencies, the POS(s), or by a clearing house (usually only applicable where there are multiple product stewardship organisations under a competitive arrangement). During discussions with MfE, it was suggested that it may be feasible for a New Zealand Government agency to collect a product stewardship fee when they are already collecting a fee related to the product (e.g., if the priority product was tyres, the NZ Transport Agency could collect a fee during the motor vehicle registration process). However, there is a broad range of e-products, manufactured both locally and imported, and no identifiable New Zealand Government agency which currently collects fees for any e-products and could, therefore, collect the ASF. As such, it is recommended that the accredited scheme manager collect scheme fees with the support of an independent third-party clearing house provider.

In order for the accredited scheme manager to invoice and collect fees from liable parties, they (with the support of the independent clearing house providers) will need to calculate the total fee for each liable party for the scheme year in question using a formula (under the ASF structure). An example of how this fee calculation formula could be set is provided below:

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship
scheme for electrical and electronic products in Aotearoa New Zealand
EY │ 12

► Total liability fee equals the total weight and/or number of in-scope e-products placed on the market (kg or units) multiplied by the fee rate (per kg or per unit), minus the weight-based or unit-based scaling factors applied to account for e-products placed on the market that may not be presented to the scheme.

In the year prior to the scheme commencing, liable parties will need to report to the accredited scheme manager via a reporting platform (recommended to be operated on behalf of the accredited scheme manager by an independent third-party clearing house provider) the number of units and weight of all in-scope e-products placed on the New Zealand market for the most recent completed financial year. Invoices will be issued by the scheme and payment will be made by liable parties prior to the scheme year commencing.

This liable party self-reporting will then need to be cross checked and validated with supporting evidence (e.g., Customs declarations) by the scheme regulator to ensure accuracy. As POM figures may vary from scheme e-product recovery rates, the accredited scheme manager may need to make adjustments in the following scheme year (or another suitable invoicing period) for individual liable parties (e.g., a credit for surplus fees paid or an invoice for deficit fees issued).

2.2   Summary of fee collection and payment by stakeholder

2.2.1 Stakeholder payment

The below table summarises who is responsible for paying scheme fees and who has the potential to be paid for their services by the scheme. A comprehensive table with these fee recommendations, stakeholder definitions and their corresponding roles and responsibilities can be found in Appendix A.

Table 3- Fee collection and payment by stakeholder

Stakeholder group/scheme participants	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?
E-product consumers/owners	**NO** - Scheme costs are covered by ASFs collected by the scheme when the in-scope e-product was placed on the New Zealand market for the first time.	**NO** - You are not paid for disposing of in-scope e-products at a designated scheme collection service.
E-product manufacturers	**YES** - As a financially liable party, in-scope e-product manufacturers will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF fee that will be collected in the following financial year that the in-scope e-product was placed on the New Zealand market.	**NO**
E-product importers	**YES** - As a financially liable party, in-scope e-product importers will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF that will be collected in the following financial year that the in-scope e-product was placed on the New Zealand market.	**NO**
E-product distributors	**YES** - As a financially liable party, in-scope e-product distributors will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF that will be collected in the following financial year that the in-scope e-product is placed on the New Zealand market.	**NO**
E-product retailers	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**NO**
E-product repairers and refurbishment providers	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**NO**

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 13

Stakeholder group/scheme participants	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?
E-product/e-waste collectors and sorters	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**YES** - If you are contracted by the accredited scheme manager to perform scheme collection, consolidation, and/or preparation for transport services.
E-product/e-waste transporters	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**YES** - If you are contracted by the accredited scheme manager to perform scheme transport services.
E-waste recyclers	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**YES** - If you are certified to the mandatory standard and contracted by the accredited scheme manager to perform scheme recycling services.

2.3 Scheme service providers

2.3.1 Responsibility and selection of scheme service providers

Scheme service providers are the organisations who will be contracted by the accredited scheme manager to perform scheme management services, specifically:

► E-product collectors and sorters (note: can be e-product retailers, repair and refurbishment providers, or recyclers)

► E-product transporters

► E-product recyclers (note: can be e-product collectors and sorters, or repair and refurbishment providers).

The selection of scheme transport and recycling service providers by the accredited scheme manager will need to utilise a competitive tender process. This was seen by members of the CEN as necessary to ensure that service providers would not be decided solely on a cost basis, but also on the benefits certain service providers might bring to the local communities and economies in which they operate. It was also seen as a way to support the existing recycling networks to become service providers to the scheme, due to the social benefits these networks already provide.

The competitive tender process should be an open and transparent process whereby any organisation that has the capabilities and can meet minimum requirements to provide services to the scheme should be able to apply. As it is a competitive process, applicants will need to be assessed against their ability to meet the requirements of the scheme whilst providing an affordable service that benefits the community and the environment.

A separate process will need to be coordinated by the accredited scheme manager to establish the scheme's collection network, for example, establish collection service or site licence agreements with collection partners. This approach is required for those organisations that do not or cannot respond to requests for tender, for example, potential Territorial Authority scheme collection partner sites.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 14

There is the potential that certain geographical areas may lack an appropriate number of tender applicants to provide sufficient scheme coverage in those areas. In these situations, the accredited scheme manager would need to work with existing service providers and support them to expand their services to those areas. Additionally, initial government support may be required, such as WMF grants[4] for the development of the initial infrastructure. This approach would need to be documented in the application for accreditation.

To become a scheme service provider, successful tender applicants will need to enter into a contractual agreement with the accredited scheme manager. This contract will need to contain the requirements that the service provider will need to meet, in order to remain scheme accredited/approved, including:

► Processing e-products in line with scheme expectations and minimum requirements such as diverting applicable e-products for reuse where possible and scheme targets

► Obtaining and maintaining a current certification to mandatory standards (where applicable)

► Obtaining and maintaining the correct permits for all necessary processing activities in Aotearoa New Zealand and any potential export of e-products or their components and materials overseas

► Maintaining a record of e-products managed through their operations and submitting them through the scheme's data collection system(s)

► Agreeing to periodic audits of their operations by the accredited scheme manager, to ensure all contractual requirements are being met.

By meeting these requirements and providing services to the scheme, service providers will need to be paid the rate(s) established in their contract with the accredited scheme manager. It is likely that this process will require the service provider to provide an invoice on a regular basis (e.g., monthly, or quarterly), which includes the number/weight of e-products they have managed for the scheme and a breakdown of the costs for these services. The accredited scheme manager would then pay the service provider for their services.

The duty of care for e-products should rest with the stakeholder who is in possession of it. Once an e-product is presented to the scheme, the collector that received it will have responsibility for the item. Once the e-product has been collected for transport, the duty of care is transferred to the e-product transporter until it reaches the recycler/repairer where responsibility is then transferred. Once the e-product has been broken down for material recovery and recycling, the recycler will be the duty holder for the various materials until these have been sent to downstream recyclers or processors.

2.3.2   Interaction between service providers

The accredited scheme manager will need to be responsible for organising the interactions between various scheme service providers and gathering operational data to report on scheme performance. This will ensure e-products are collected and sent to service providers that are capable of delivering the applicable end-of-life management activity for all e-products covered by the scheme.

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[4] New Zealand Government grant programmes such as the WMF are contestable, and funding is not guaranteed under any circumstance.

2.4 Management of legacy and orphaned e-products

2.4.1 Recommendations regarding management of legacy and orphaned e-products

MfE defines "legacy product" as "product that entered the market before being covered by a product stewardship scheme and has an owner or producer" and "orphan product" as "a product that entered the market before being covered by a product stewardship scheme and has been abandoned by an owner or producer"[5].

Some legacy or orphaned e-products are old and at risk of breaking down, contain materials that pose an environmental risk, or don't have an identifiable or active manufacturer in today's market. They are likely to be presented to the scheme once it begins operating. The Guidelines require any accredited scheme to collect and manage all legacy and orphaned priority products using fees collected by the scheme. These products will not have had fees collected for them from liable parties, nor will it be possible to gather fees once the scheme has commenced operation.

With an ASF structure, the management of legacy and orphaned e-products will see fees collected for new e-products placed on the market, funding the recovery and management of in-scope legacy and orphaned e-products that are presented to the scheme. If the flow of new e-products placed on the market largely matches the flow of legacy and orphaned e-products presented to the scheme in any given year, the scheme will likely have the funds necessary to cover the costs of legacy and orphaned e-product management. However, should this balance not be realised, and the flow of new e-products is less than the flow of legacy or orphaned e-products presented to the scheme, the accredited scheme manager may find itself with a low reserve of funds. To address this, the initial ASF pricing schedule should include a contingency amount that ensures the accredited scheme manager has sufficient reserves to manage all legacy and orphaned e-products in-scope.

These contingency provisions could be removed in subsequent pricing schedules after sufficient reserves have been established and/or once the majority of legacy and orphaned e-products have been recovered. This rate of recovery will vary across e-product categories, due to the differing lifespans of e-products, and the availability and costs of services in different regions to recover the e-product category prior to the scheme's commencement. Therefore, it is likely that any contingency would be adjusted on an e-product category basis. Ultimately, legacy and orphaned e-products will need to be a consideration for the accredited scheme manager in the first years of the scheme's operation, regardless of fee type, and will reduce in significance as time goes on.

2.5 Recommended scheme service delivery flow diagrams

The recommended scheme service delivery flow diagrams are provided in figures 2-7 and the key services and flows are described below:

1. When an in-scope e-product is imported into Aotearoa New Zealand (either as a whole unit or contained within another e-product) or is manufactured in Aotearoa New Zealand and placed on the New Zealand market for sale, POM data is recorded by the New Zealand Customs Service and other agencies, such as the Ministry of Business, Innovation and Employment (MBIE), or Stats NZ.

2. Liable parties placing in-scope e-products on the New Zealand market, whether imported or manufactured locally, are required to register with an independent clearing house provider engaged by the accredited scheme manager and self-report POM data via a registration process. This data is then cross-checked by the scheme regulator against information recorded by the New Zealand Customs Service and other agencies, such as MBIE and Stats NZ.

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[5] Ministry for the Environment. 2022. Product stewardship accreditation guide for applicants: Voluntary products. Wellington: Ministry for the Environment.

3. Once the POM data has been verified between the independent clearing house provider and the scheme regulator, the independent clearing house provider calculates and assigns scheme fees to all liable parties (based on the total costs of scheme operational overheads for that period distributed proportionally across all liable parties, and recovery and treatment costs for each liable party for each e-product category in that period). The accredited scheme manager then invoices each liable party periodically (e.g., quarterly/annually) and manages scheme funds (e.g., provides payment to scheme service providers for services rendered in line with their contractual arrangements established with the accredited scheme manager).

4. In-scope e-product manufactures, importers, distributors, or retailers then sell the in-scope e-products to New Zealand consumers and these go through typical use cycles (noting there may be multiple e-product owners and use cycles) until an e-product is broken, unwanted, or reaches its end-of-life.

5. If an in-scope e-product is broken, or is not fully functional for its intended purpose, the e-product owner can decide to engage an independent repairer (not contracted to perform services for the scheme) directly or dispose of the e-product at a designated scheme collection site or service.

6. Once an in-scope e-product has been disposed of at a scheme access point, the collector contracted by the accredited scheme manager accepts the e-product and reports all items received in line with the confirmed scheme categories to the accredited scheme manager. If applicable, collectors may claim for payment of contracted services delivered with the accredited scheme manager. Note: a collector may also undertake preliminary e-product quality assessments (e.g., test and tag) or be an independent repairer, reuse agent, and/or recycler.

7. The collection site then arranges with the accredited scheme manager to transport the collection units to a recycler contracted to provide scheme services.

8. The recycler contracted by the accredited scheme manager reports all in-scope e-products received for treatment in line with the confirmed scheme e-product scope categories, along with material recovery rates achieved, residual materials management, and next stage treatment pathways to the accredited scheme manager. E-products are recycled or handled in accordance with the applicable mandatory standard(s) and minimum requirements set by the accredited scheme manager in contractual arrangements. Note: a recycler may also undertake preliminary e-product quality assessments (e.g., test and tag) or be an independent repairer.

9. Although independent repairers operate outside of the scheme, the accredited scheme manager could maintain a publicly accessible database of "endorsed" independent repairers that promotes available repair services for various in-scope e-product categories; ensuring they follow best practice approaches, and any residual e-product materials and components are recycled in line with scheme requirements.

10. The accredited scheme manager may also engage other PSO to manage a specific type or category of e-products. The accredited scheme manager would be responsible for identifying liable parties, collecting fees, performance reporting and meeting the other requirements of the accredited scheme, including the coordination of a national education and awareness campaign. PSOs managing a product-specific programme would be responsible for managing the collection, repair and recycling network for the category or type of e-product they are responsible for and would receive payment from the accredited scheme manager as per their corresponding contractual arrangements. The service providers for these PSOs would still be required to meet the same requirements as all other service providers (e.g., meet mandatory standards).

11. The accredited scheme manager provides annual public reports on scheme performance (measurement of progressing scheme objectives, achieving scheme targets, financial performance and scheme cost-effectiveness, environmental performance, and agreements in place with scheme service providers), and participates in scheme regulator audits and/or independent audits coordinated by the scheme regulator.
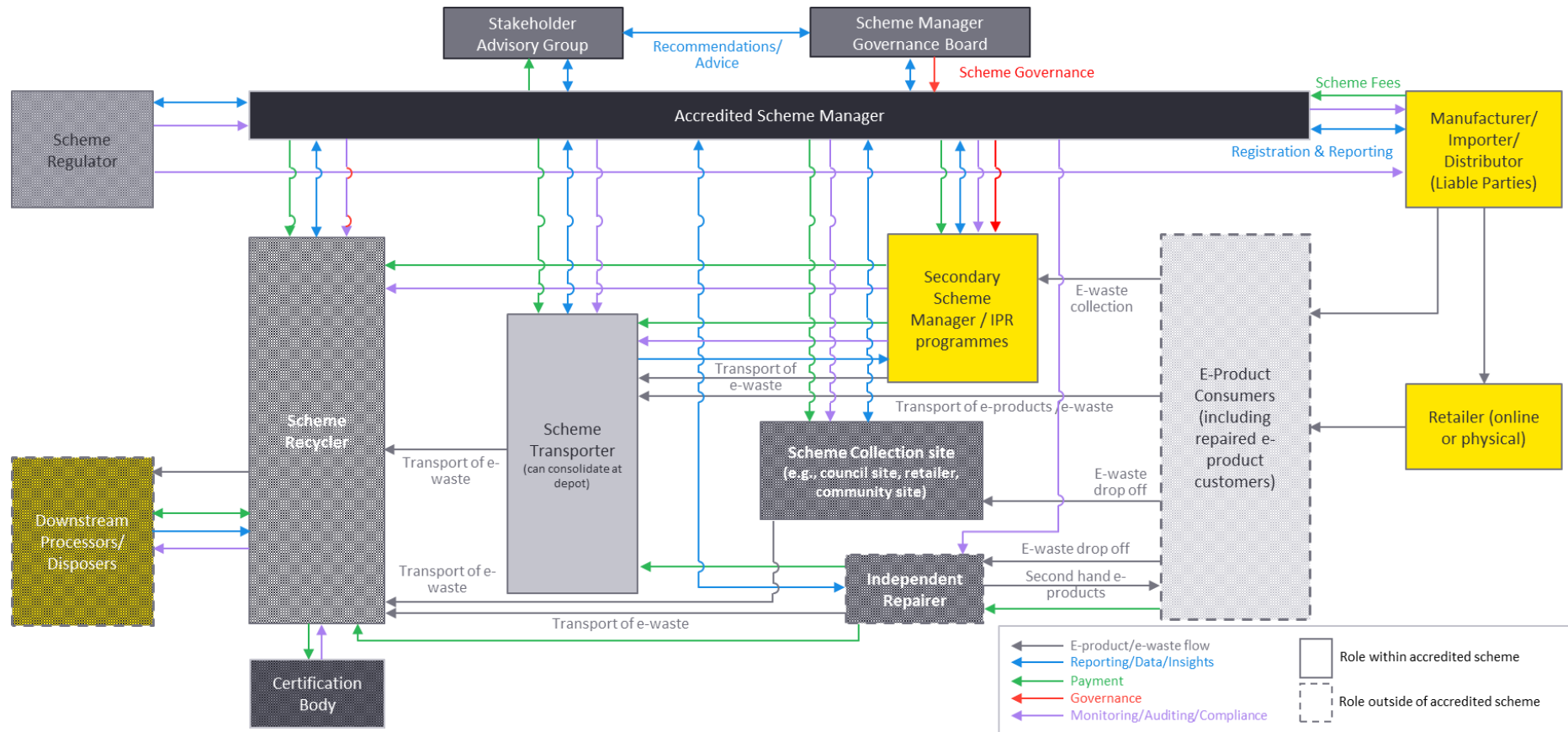
TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 18

2.5.1 All flows

Figure 2 - Scheme service delivery flow diagram - all flows

2.5.2 E-waste/e-product flow

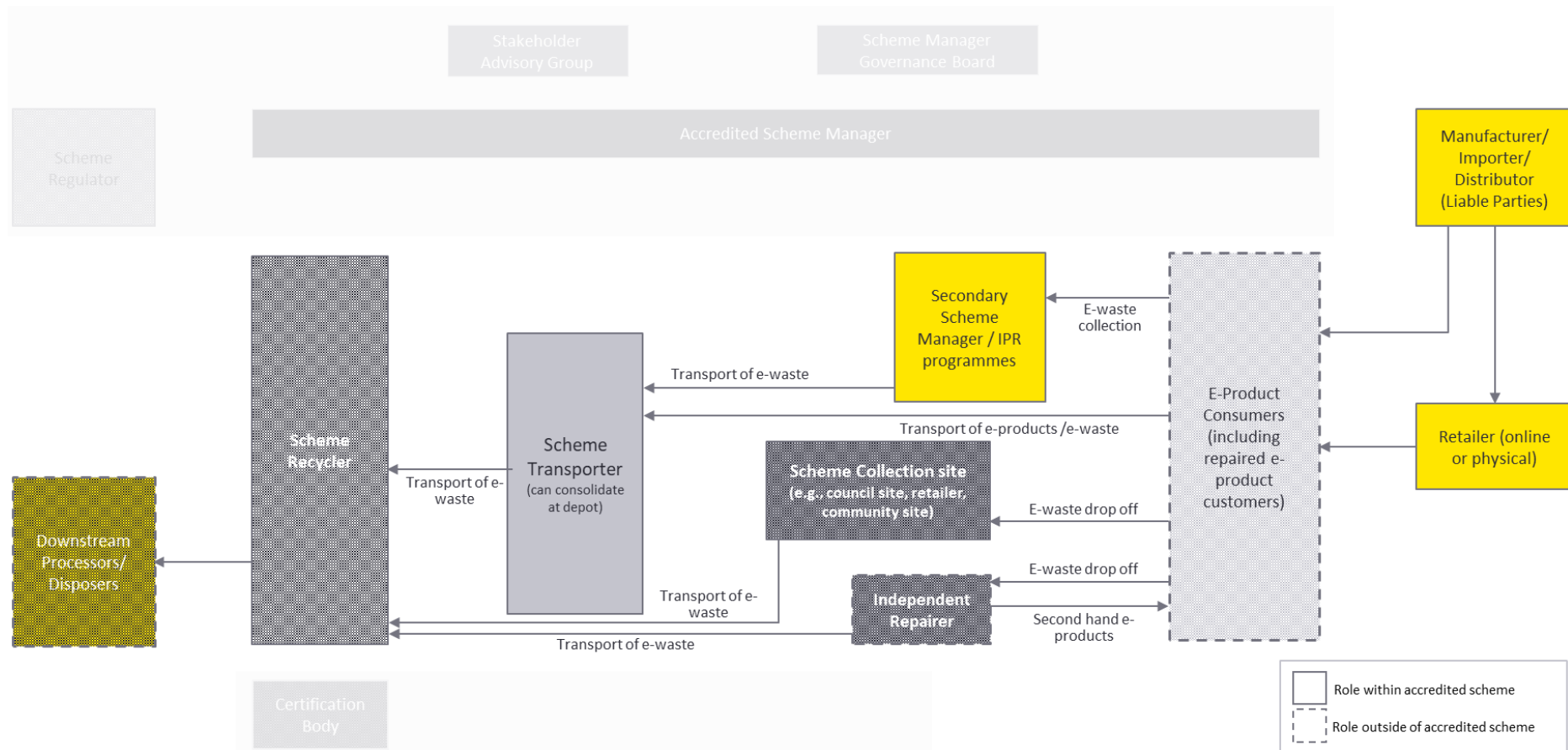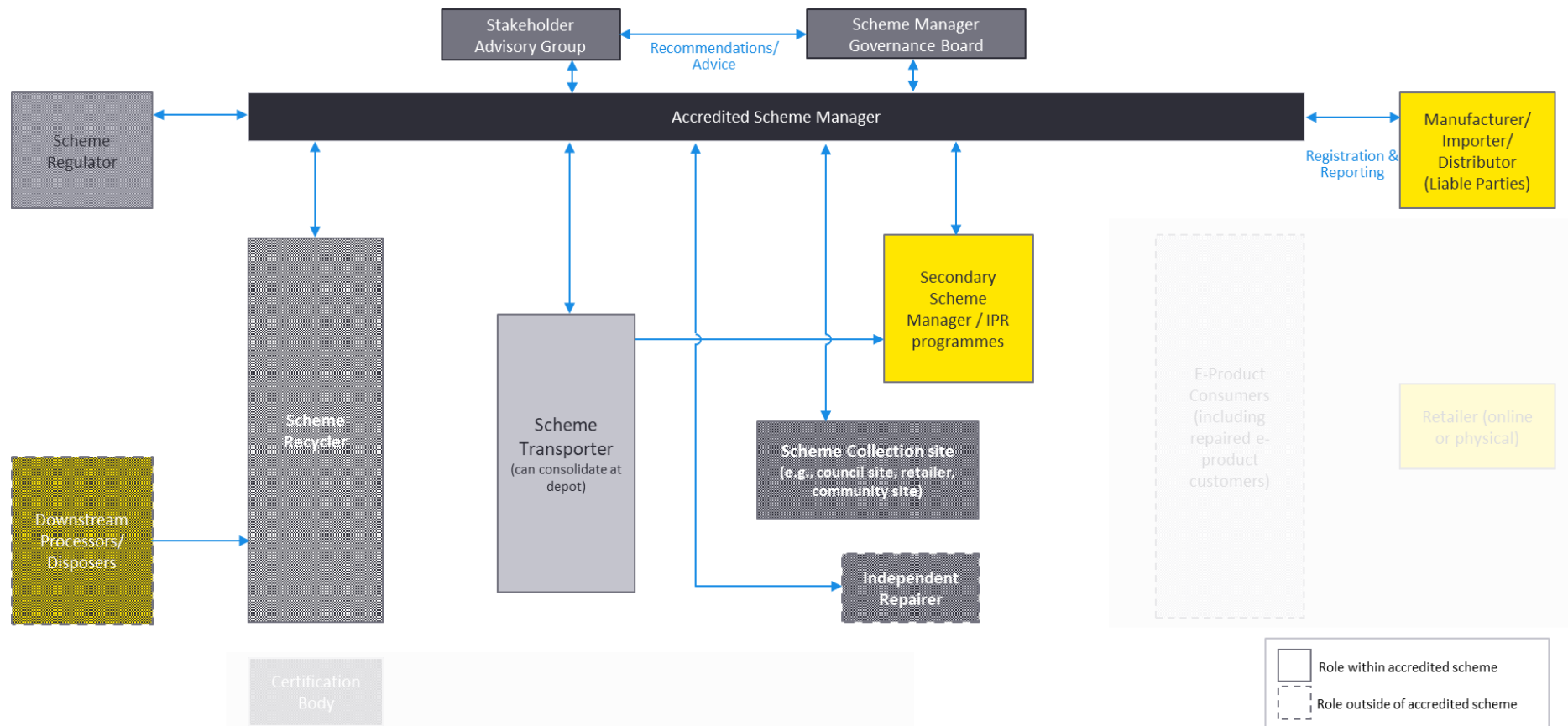Figure 3 - Scheme service delivery flow diagram - e-waste/e-product flow

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in
Aotearoa New Zealand

EY | 20

2.5.3 Reporting/data/insights flow

Figure 4 – Scheme service delivery flow diagram – reporting/data/insights flow

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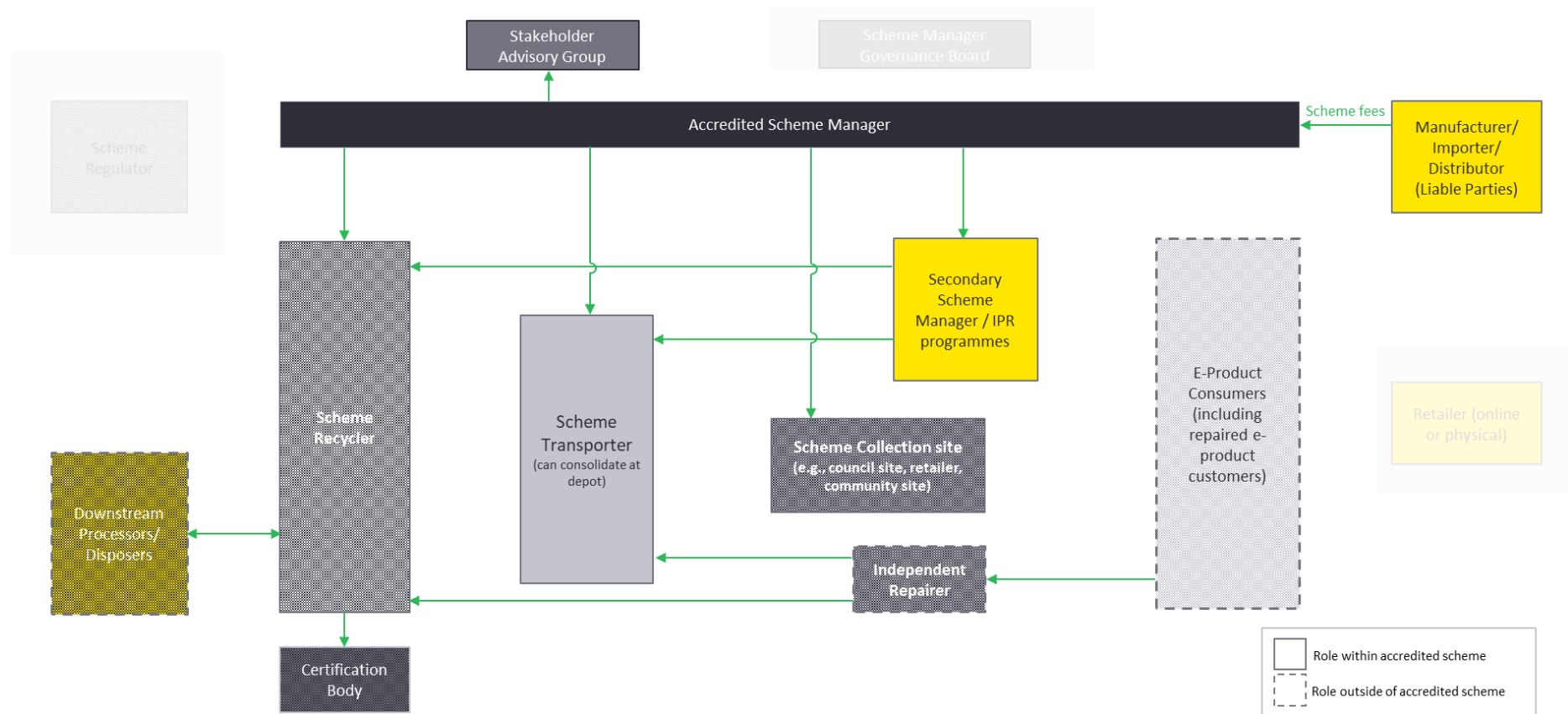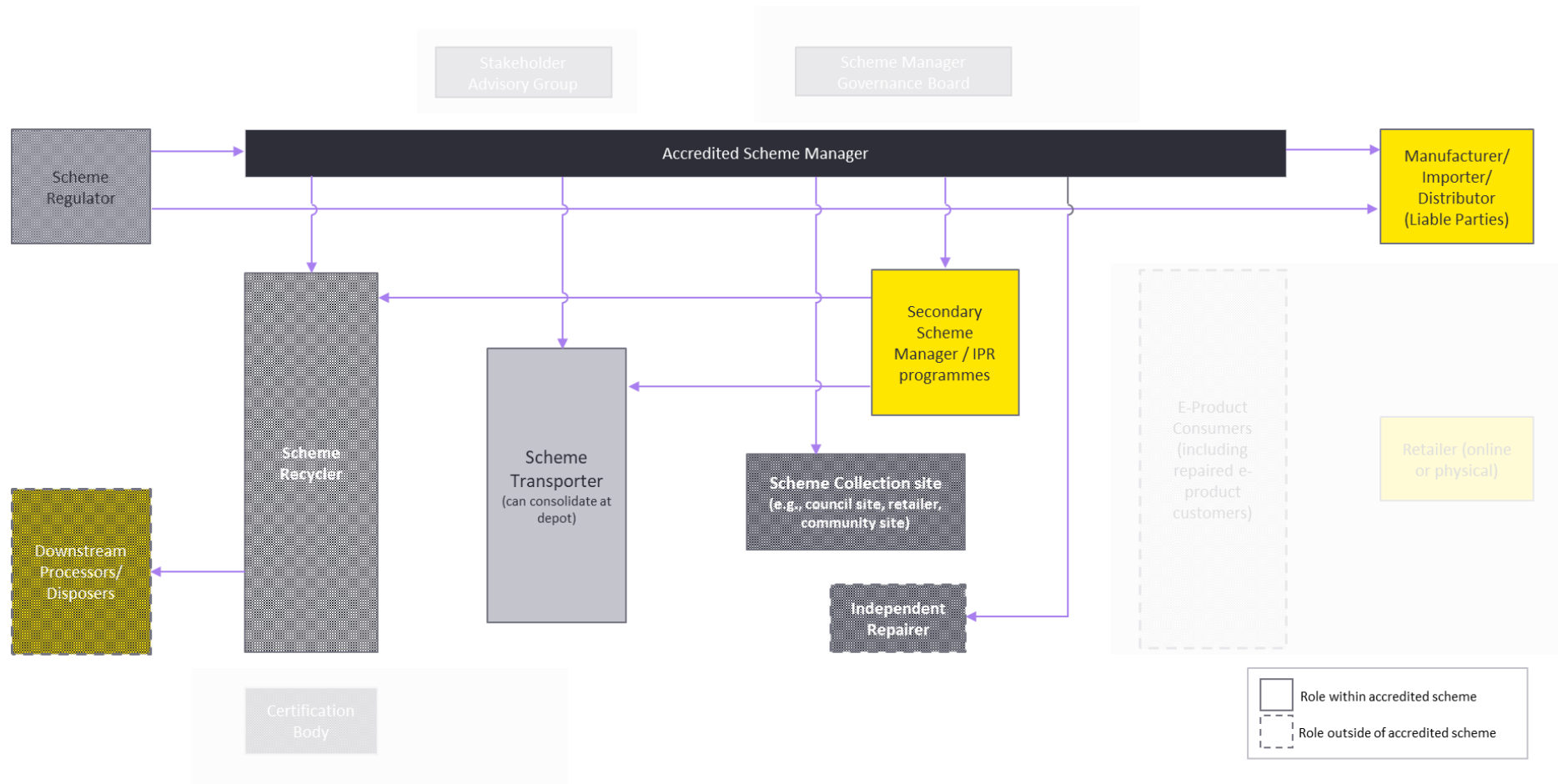Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 21

2.5.4 Payment flow

Figure 5 - Scheme service delivery flow diagram - payment flow

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 22

2.5.5 Monitoring/auditing/compliance flow

Figure 6 - Scheme service delivery flow diagram - monitoring/auditing/governance flow

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in
Aotearoa New Zealand

EY | 23

3. Scheme design element recommendations and further activities

Scheme design element recommendations

To support the implementation of the proposed scheme design, the recommendations for each scheme design element are positioned within the recommended scheme framing timeframes.

As the progression through the short-, medium-, and long-term timeframes will vary based on the e-product category, some of the following recommendations will be implemented once the previous term focus area(s) have been achieved. The actual implementation of recommendations will be dependent on the final scheme design and the requirements of the scheme manager's accreditation. As such, this guidance acts as a suggestion regarding how the recommendations could be implemented.

Scheme design element further activity recommendations

The co-design process has highlighted areas in which further activities are required to support implementation of the recommendations. As some of these further activities are more critical to the scheme's implementation than others, suggestions have been provided for when each of the further activities could or should be carried out and by whom. As with the implementation of the recommendations, the final set of further activities will be dependent on the final scheme design. As a result, these suggestions act only as a guide for how the further activities could be carried out.

Further activities are outlined in the following sections, for each relevant SDE.

3.1 Scheme framing

The scheme's framing provides the contextual framework to support the scheme's implementation. This is largely provided through a time-based allocation of the scheme's recommendations in order to gradually introduce the number of necessary activities.

Due to the ambitious approach this scheme is taking to achieve product stewardship through the inclusion of repair, reuse, and e-product design for environment activities, the scheme framing is a critical element for delivery. For more information on the scheme framing design options explored and considered during the co-design process (including stakeholder feedback), see section 3.1 of Report One.

3.1.1 Scheme framing recommendations

Reference	Description	Time period

Recommendation 1.1	Adopt the staggered scheme implementation framing option of the scheme framing:
	a. Timeframes for the short-, medium-, and long-term should be set on an e-product category basis that considers their current position with respect to recyclability, repairability, and reusability
	b. The progression of each in-scope e-product category through the three timeframes should occur based on each category's ability to:
	   i. Meet the primary focus objectives of the timeframe
	   ii. Be assessed as sufficiently mature in respect to recyclability, repairability, or product design for environment to move to the next timeframe
	c. This approach means that certain e-product categories may enter the medium-term timeframe soon after the commencement of the scheme. For example, telecommunication equipment and small IT equipment are likely to have sufficient maturity in regard to their repair and reuse activities to move to the medium-term period once the primary focus of the short-term timeframe (i.e., recovery and recycling) has been completed
		N/A

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 24

Reference	Description	Time period
	d. The focus of each phase should not preclude e-product design for environment interventions being explored, pursued or implemented earlier than the start of the long-term period, should feasible options become available for all or certain e-product categories	
	e. To ensure base level recovery and recycling activities are established for all e-product categories in a timely manner, the accredited scheme manager should be required to meet the primary focus objectives of the short-term period for all in-scope e-product categories within two to three years of the scheme's commencement and/or following their introduction to the scheme's product scope.	
Recommendation 1.2	Adopt the following overarching scheme objectives for the scheme to achieve across the staggered scheme implementation framing option: a. Preserving, protecting, and improving the quality of the environment b. Protecting human health c. Utilising natural resources responsibly and to their fullest potential d. Prioritising the highest available interventions in Aotearoa New Zealand's waste hierarchy wherever possible.	N/A

Recommendation 1.1 proposes that the scheme adopts the staggered implementation framing option (shown below).
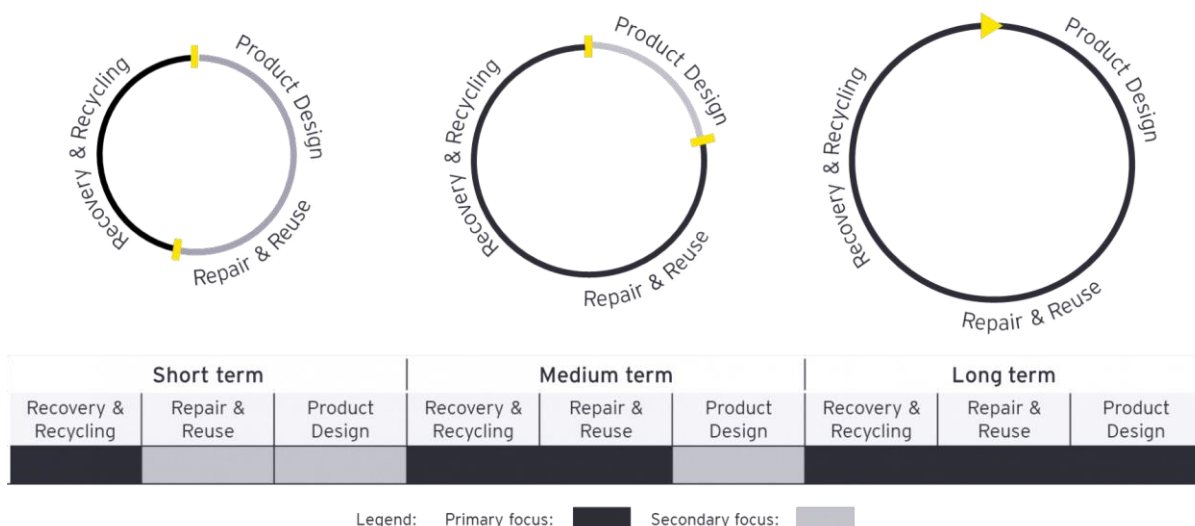

	Short term			Medium term			Long term		
	Recovery & Recycling	Repair & Reuse	Product Design	Recovery & Recycling	Repair & Reuse	Product Design	Recovery & Recycling	Repair & Reuse	Product Design

Legend: Primary focus: ■   Secondary focus: ▢

Figure 7 – Staggered scheme implementation framing option

3.1.1.1 Defining the short-, medium-, and long-term focus

Short-term:

The scheme's recommended short-term focus is to strengthen and expand the existing recovery and recycling network for each individual e-product category, to ensure there are sufficient collection and recycling services available for that category. To strengthen and expand the recovery and recycling network in Aotearoa New Zealand, the accredited scheme manager should:

► Engage with the existing e-product recovery and recycling service providers to ensure they can support a greater volume of e-products being managed by their services in line with all scheme requirements (e.g., obtaining and maintaining certification to mandatory standards for performing scheme recycling activities)

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 25

► Work with existing service providers to fill any gaps in the national recovery and recycling network to meet the recommended scheme convenience target metrics and ensure these services are widely available throughout Aotearoa New Zealand, for the e-product categories in-scope.

Once an e-product category meets the primary focus objective of the short-term and is assessed as being sufficiently mature in regard to repair and reuse, it should progress to the medium-term timeframe.

While in the process of meeting the progression requirements, the recommended secondary focus of the short-term is to promote the repair and reuse activities available to e-product types within each category. This includes the development of a consumer-facing, online portal containing all existing and available repair and reuse services for the in-scope e-product categories. The secondary focus should also monitor research and developments in effective design for environment interventions for in-scope e-product categories, and look to support these through the scheme, where possible.

Medium-term:

In the medium-term, the recommended primary focus is to expand the repair and reuse network for all applicable e-product categories. E-product categories in the medium-term timeframe should prioritise repair and reuse over recycling, where possible. As with recovery and recycling, the repair and reuse network should be strengthened and expanded by the accredited scheme manager through:

► Working with existing service providers to improve the breadth of services and e-product categories that these services are offered for

► Working with existing service providers to fill in any gaps in the existing national repair and reuse network so that these services are available to a greater number of New Zealanders

► Ensuring the primary focus objectives of the short-term are being maintained.

Once an e-product category meets the primary focus objectives of the medium-term and is assessed as being sufficiently mature in regard to e-product design for environment, it should shift to the long-term timeframe.

For those e-product categories which are still in the process of meeting the progression requirements, the secondary focus of the medium-term should be to support e-product design interventions for individual e-product types within that category. This may include the implementation of an eco-modulated fee structure (if pursued for all or specific e-product categories) before the entire category shifts to the long-term timeframe.

Long-term:

In the long-term, the recommended primary focus of the scheme is to expand to incorporate design for environment interventions for all in-scope e-product categories. One possible approach to support this is the introduction of an eco-modulation fee structure that will modulate scheme fees for liable parties based on alignment to a set of environmental criteria. If an eco-modulated fee structure is not taken forward, the accredited scheme manager should look to pursue and establish alternative interventions for influencing e-product design elements, in coordination with the stakeholder advisory group, the scheme regulator and any future right-to-repair and design for environment or eco-design regulations.

With the long-term focus being firstly on design for environment, followed by repair and reuse, and then recovery and recycling, the staggered timeframe approach will support the delivery of a circular economy for e-products. In the long-term, the scheme should continue to expand and enhance the recovery, recycling, repair, and reuse network as required to ensure the short- and medium-term timeframe primary focus objectives are being maintained or further enhanced.

3.1.1.2 Overarching scheme objectives

Recommendation 1.2 proposes that the scheme adopts the following overarching scheme objectives, and corresponding baseline indicators and performance measures as an effective way to track progress in meeting or exceeding scheme objectives across the staggered scheme implementation framing option:

a. Preserving, protecting, and improving the quality of the environment.

    i. Baseline indicator(s): Annual landfill compositional data and in-scope e-waste illegal dumping reporting captured by Territorial Authorities and New Zealand Government agencies for the preceding year.

    ii. Performance measure(s): Annual in-scope e-waste diversion from landfill and illegal dumping in Aotearoa New Zealand for each year of scheme operation.

b. Protecting human health.

    i. Baseline indicator(s): The number of Aotearoa New Zealand e-waste recycling service providers with recommended mandatory standards (or equivalent) in place and certification achieved prior to scheme commencement and for every year of scheme operation thereafter.

    ii. Performance measure(s): The number of workers in Aotearoa New Zealand's e-waste recycling sector following best practice approaches in line with mandatory scheme standards (i.e., AS/NZS 5377/R2) for each year of scheme operation.

c. Utilising natural resources responsibly and to their fullest potential.

    i. Baseline indicator(s): Estimated material recovery outcomes for in-scope e-products and e-waste pre-scheme commencement and material recovery outcomes achieved for the following year thereafter for each year of scheme operation.

    ii. Performance measure(s): Amount (volume/units) of in-scope e-product and e-waste items managed by the scheme for each year of operation and the associated material recovery outcomes achieved.

d. Prioritising the highest available interventions in Aotearoa New Zealand's waste hierarchy wherever possible.

    i. Baseline indicator(s): Data on in-scope e-product diversion from recycling for reuse or repair for each year of scheme operation using the preceding year's corresponding data and reporting.

    ii. Performance measure(s): The number of in-scope e-products collected by the scheme and diverted for reuse or repair ahead of recycling annually.

3.1.2 Scheme framing further activity recommendations

Activity 1.1 - Assess the maturity of each e-product category in Aotearoa New Zealand with respect to recyclability, repairability, and product design.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 27

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short-term	► Confirming if each e-product category can be recycled safely in Aotearoa New Zealand at present and the corresponding material recovery outcomes that can be achieved. ► Researching if international recyclers commonly recycle each e-product category overseas and the material recovery outcomes being achieved. ► Understanding if each e-product category is currently collected across all regions of Aotearoa New Zealand and if service accessibility meets the scheme's convenience target metrics. ► Documenting existing product stewardship/take back schemes in place for each e-product category and identified limitations (if any). ► Gathering data and stakeholder advice to confirm if each e-product category is commonly repaired or reused in Aotearoa New Zealand at present and the current market drivers/demand. ► Confirming if the cost to repair each e-product category for reuse (where applicable) is significantly lower than the cost of a brand-new e-product and if spare parts are readily available. ► Understanding if there is sufficient repair capacity in Aotearoa New Zealand to repair each e-product category safely at high volumes. ► Understanding if product design for environment interventions for specific e-product categories currently support repair, reuse, and/or recyclability, and how material use may affect recyclability. ► Researching if regulations or other policy instruments are needed or required to support greater repair and reuse in Aotearoa New Zealand. ► Conducting stakeholder consultation to understand if the design of each e-product category is currently influenced by any e-product design for environment standards or legislation either in Aotearoa New Zealand or internationally. ► Understanding it the cost of recycling each e-product category may see a material change if its design was altered. ► Identifying opportunities for each e-product category to include recycled content in manufacturing processes.

Activity 1.2 - Following the maturity assessment (Activity 1.1), determine the key activities required to progress the maturity of each e-product category and establish the short-, medium-, and long-term timeframes associated with these activities. Also, confirm how and when the remaining e-product categories will be introduced to the scheme. Roles and responsibilities, in particular for the accredited scheme manager, should be assigned and updated as necessary.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short-term	► The key activities required to progress the maturity of each e-product category and establish the short-, medium-, and long-term timeframes associated with these activities. ► Confirm all scheme stakeholder and accredited scheme manager roles and responsibilities.

Activity 1.3 - Provide ongoing government grant funding support for vocational training in Aotearoa New Zealand's e-product repair and refurbishment sectors to ensure a sufficient number of local repair technicians are available to enable the expansion of e-product reuse and repair focus under the scheme as soon as possible.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 28

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
New Zealand Government	Short-, medium- and long-term	► Provide government grant funding support for vocational training for repair technicians. ► Work with producers, importers, and distributors to ensure training is carried out to a sufficient standard. ► Work with the existing repair service providers to provide potential roads to employment for new repair technicians.

3.2   Scheme product scope

The scheme product scope determines which e-products are included and managed by the e-product stewardship scheme.

For more information on the scheme product scope design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.2 of Report One.

3.2.1 Product scope recommendations

Reference	Description	Time period
Recommendation 2.1	Adopt a phased in scope approach that starts with e-product categories 2 (Screens, monitors and equipment with screens over 100cm^2), 5 (Small equipment) and 6 (Telecommunication equipment and small IT equipment), with the remaining e-product categories to be introduced over the scheme's initial seven-year accreditation cycle (as per Recommendation 2.2). a. The accredited scheme manager should develop a record of liable parties for all e-product categories prior to scheme commencement. b. There should be regular review of this list by the scheme regulator and the accredited scheme manager to ensure that all liable parties are being captured and have been made aware of their mandatory obligations.	Before scheme commencement
Recommendation 2.2	Introduce the remaining e-product scope categories into the scheme. a. Following Activity 1.2 (refer to section 3.2.2), the accredited scheme manager should set initial material recovery targets and scheme fees for the remaining e-product scope categories to be introduced to the scheme. To support accurate advanced fee setting for the remaining e-product scope categories to be introduced to the scheme, the accredited scheme manager should also carry out research and consultation to indicate local e-waste arising projections in Aotearoa New Zealand and assess local and accessible offshore market costs (e.g., per kilogram/ per unit) for managing each additional e-product category as part of scheme operations. b. The accredited scheme manager should develop a record of parties who will become liable prior to the additional product scope category or categories being introduced into the scheme. c. There should be regular review of this list by the scheme regulator and the accredited scheme manager to ensure that all liable parties are being captured.	Medium-term and/or Long-term

3.2.1.1 Product scope phasing

Recommendation 2.2 proposes to introduce the remaining e-product categories into the scope of the scheme within the accredited scheme manager's initial seven-year accreditation cycle (i.e., e-product categories 1 (temperature exchange equipment), 3 (lamps), 4 (large equipment), and 7 (batteries)) over the medium- to long-term timeframes.

Introducing additional categories into the scheme's scope should be informed by maturity assessments that are recommended to be carried out by the accredited scheme manager in the scheme's short-term timeframe with respect to recyclability, repairability, and product design for each e-product category (Activity 1.1). It is also proposed that the accredited scheme manager works with the scheme regulator and stakeholder advisory group to support targeted research and consultation for bringing additional e-product categories into the scheme's scope over the scheme's medium- to long-term periods. The accredited scheme manager may also seek to establish e-product category working groups in conjunction with the scheme regulator and stakeholder advisory group to provide input and support these efforts.

This targeted research and consultation should include the development of a schedule to prioritise additional e-product categories for introduction based on the outcomes the e-product category maturity assessments (Activity 1.1) and consider any significant risks that certain e-product categories may pose over others. For example, Aotearoa New Zealand's recycling sector could be characterised as "underdeveloped" when it comes to available services and treatment infrastructure for batteries. Batteries (especially rechargeable batteries such as lithium-ion chemistries) have a heightened risk of causing fires that can spread to other combustible materials and create substantial negative impacts on the environment and human health. As such, introducing batteries into the scheme's product scope, which will also be present and embedded within certain e-products under categories 5 and 6, should be a major focus as soon as possible.

An approach that prioritises the introduction of batteries into the scheme's product scope as soon as practicable is expected to be supported by many different scheme stakeholder groups. This includes e-waste recyclers, noting a surge of e-products with embedded batteries in recent years, as well as ongoing technological advances that create more battery powered e-products that may increase the risk of fires at e-waste recycling facilities. Also, Territorial Authorities who manage and fund battery collection and recycling programmes to varying degrees across Aotearoa New Zealand and deal with the impacts and clean-up of battery fires at council depots (e.g., waste transfer stations or resource recovery centres) and within rubbish and recycling recovery vehicles. The introduction of batteries into the scheme's scope will also be a welcome development to battery consumers who are likely to dispose of small handheld batteries in general waste bins at present and/or must pay to have batteries safely and responsibly managed at end-of-life.

3.2.2 Product scope further activity recommendations

Activity 2.1 - Provide ongoing government grant funding support for research, development, and infrastructure funding for Aotearoa New Zealand's e-product and e-waste management sector.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
New Zealand Government	Short-, medium- and long-term	► Non-regulatory funding support for e-product/e-waste market research, development, demonstration, and infrastructure funding (collection and processing).

3.3   Targets and data

Targets are critical for setting the scheme's direction and focus. Targets directly influence the behaviour of the accredited scheme manager, liable parties, and scheme service providers by influencing other SDEs such as the fee structure and scheme stakeholder roles and responsibilities. They also provide the basis on which the scheme's success can be assessed by both the New Zealand Government and the wider public.

Data is vital to tracking the performance of the scheme against its targets and monitoring the improved outcomes over time. Capturing this data would require a well-designed system and processes that are easy to use by scheme service providers and can be analysed efficiently by the accredited scheme manager.

For more information on the scheme targets and data scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.3 of Report One.

3.3.1 Targets and data recommendations

Reference	Description	Time period
Recommendation 3.1	Adopt a material recovery target for each category of e-product to be accepted for recycling by the scheme. a. The material recovery target for each category should be set by the accredited scheme manager and approved by the Minister for the Environment through the scheme accreditation process. This process should also define what are considered acceptable recycling methods to be used by scheme service providers. b. The target should be based on the capacity and capability of recycling networks in Aotearoa New Zealand and available processing services overseas. c. Service providers should be required to meet these targets through regulation/service agreements and report to the accredited scheme manager.	Before scheme commencement
Recommendation 3.2	Adopt a convenience target that: a. Defines what is "convenient" e.g., number of collection services and requires the accredited scheme manager to meet a minimum level of "convenience" for consumers seeking to access the scheme's collection network, either through drop off locations or collection services b. Requires the scheme to ensure that 100% of all in-scope e-products that are presented to the scheme through its network are accepted and managed by the scheme. The convenience level (e.g., maximum distance travelled, maximum drive time and population coverage) should be set by the scheme manager applicant(s) and approved by the Minister for the Environment through the scheme accreditation process.	Before scheme commencement

Recommendation 3.3	Establish a design/repair/reuse measurement methodology and collect data on repair, reuse, and e-product design activities.
	
	a. The methodology should measure variables that would signal changes in repair, reuse, and e-product design activities for each e-product category, such as:
	
	   i. The amount of hazardous materials (e.g., mercury, lead, cadmium, chromium, nickel, antimony and brominated flame retardants) being collected as a percentage of the overall reclamation for each e-product category
	
	   ii. The number of e-products on the New Zealand market which meet existing product design standards used in other jurisdictions, including but not limited to Europe
	
	   iii. Prevalence of repair facilities and repair technicians
	
	   iv. Availability of spare parts (and cost)
	
	   v. The number of e-products collected by the scheme that were able to be diverted for repair, refurbishment or reuse.
	
	b. Data collected by the accredited scheme manager should be used to set e-product design, repair, and reuse targets for the scheme in the future, as legislation and regulations improve to support these activities in Aotearoa New Zealand.
		Short-term

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 31

3.3.1.1 Initial material recovery target settings

Regarding Recommendation 3.1, part of the additional activities delivered by TechCollect NZ to address feedback received from MfE on the Final Draft Recommendations Report was to propose suitable material recovery targets for the recommended initial scheme e-product scope, i.e., e-product categories 2 (screens, monitors and equipment with screens over 100cm²), 5 (small equipment), and 6 (telecommunication equipment and small IT equipment).

TechCollect NZ drew upon relevant information and insights gathered throughout the co-design process and conducted further research and consultation to understand e-product category material recovery targets set for well-established e-product stewardship and extended producer responsibility schemes offshore. Following this, material fraction recovery analysis was performed to estimate the likely material recovery outcomes to be achieved by local recyclers in Aotearoa New Zealand for e-product categories 2, 5 and 6 overall. This analysis was based on the known and expected capabilities of e-waste service providers serving the New Zealand market, with market intelligence gathered by TechCollect NZ through a New Zealand e-waste recycler assessment that was carried out as part of the co-design process.

By assessing average e-product category material recovery targets across different international schemes and material fraction recovery assumptions in parallel, TechCollect NZ has recommended material recovery targets for e-product categories 2, 5 and 6 (i.e., the scheme's product scope from commencement).

Recommended e-product "recycling" definition[6]

For the purposes of the minimum material recovery targets proposed, e-product "recycling" is recommended to be defined as:

> *"Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material[7] but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations".*

Recommended material recovery settings (e-product categories 2, 5 and 6)

Initial material recovery target recommendations for e-product categories 2, 5 and are presented below:

► Category 2 (screens, monitors and equipment with screens over 100cm²): Scheme e-product "recycling" activities and operations to achieve at least 70% material recovery and recirculation (by weight).

Of the international jurisdictions assessed, average material recovery targets related to e-product category 2 were 76% (by weight) with material recovery rate assumptions from the material fraction analysis suggesting material outcomes of approximately 70% (by weight) are likely to be achievable for e-waste recyclers in Aotearoa New Zealand. These conservative material recovery assumptions indicate that e-waste recyclers servicing the New Zealand market will be able to achieve high resource recovery outcomes for glass and metal fractions, while low recovery outcomes are anticipated for plastic and other fractions.

► Category 5 (small equipment): Scheme e-product "recycling" activities and operations to achieve at least 55% material recovery and recirculation (by weight).

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[6] The recommended definition of e-product "recycling" has been derived from the definition of "recycling" as per sections 1.4.14 and 1.4.19 of AS/NZS 5377:2013.

[7] Organic electronics is a field of materials science concerning the design, synthesis, characterisation, and application of organic molecules or polymers that show desirable electronic properties such as conductivity. Organic electronic materials are constructed from organic (carbon-based) molecules or polymers using synthetic strategies developed in the context of organic and polymer chemistry.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 32

Although conservative material recovery assumptions for e-product category 5 suggest higher material recovery outcomes may be achievable by local e-waste recyclers in the New Zealand market (i.e., approximately 67%), the high variability of small e-products, devices and equipment that fall under the broad umbrella of category 5 means that more detailed assessments are required to understand the specific material recovery outcomes that are achievable for all e-products within this category. There are 112 individual e-products and corresponding HS Codes that are captured by category 5 alone.

► Category 6 (telecommunication equipment and small IT equipment): E-product "recycling" activities and operations to achieve at least 75% material recovery and recirculation (by weight).

The average jurisdictional material recovery targets and material recovery assumptions analysed for e-product category 6 are between 67% and 69%; however, there are several local e-waste recycling service providers within the New Zealand market able to achieve material recovery rates in excess of 90% (by weight). For example, the pilot programme for information and communication technology equipment managed by TechCollect NZ achieves a material recovery rate of 95% (by weight).

The reasoning for not recommending a higher initial target than 75% (by weight), is that some recycling service providers in Aotearoa New Zealand may not be able to achieve this target without further development of their processes.

Tracking, measuring, and reporting on target performance

The accredited scheme manager should coordinate regular reporting with service providers engaged to undertake scheme recycling activities to confirm material recovery rates achieved in line with the category specific targets for all in-scope e-products.

Scheme recycler reporting activities should include providing certificates of destruction and batch reports for each scheme consignment managed that confirms the overall weight of e-products received and recycled, the material fraction composition post treatment, and the material recovery or recirculation rates achieved by downstream processors. These arrangements should be verified at least annually via mandatory audits that trace product and material/commodity flows to the point of final disposition.

The accredited scheme manager should regularly report to the scheme regulator on meeting material recovery targets including in annual reporting on scheme performance.

Target compliance and enforcement

The WMA is the primary legal instrument to address waste and the transition to a circular economy in Aotearoa New Zealand. MfE is the main regulator under the WMA, holding both system stewardship and direct regulatory responsibilities. In this role, MfE undertakes a wide range of activities, with multiple regulated communities.

The Regulatory Performance Monitoring Framework[8] tracks the implementation of the compliance functions of the WMA to drive continuous improvement of process and outcomes, and to communicate findings and outcomes to our internal and external stakeholders.

It is recommended that no enforcement action should be taken by the scheme regulator for not meeting material recovery targets until after the formal scheme review and once material recovery targets have been reviewed using operational scheme data gathered over the first three years of operation.

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[8] https://environment.govt.nz/publications/waste-minimisation-act-2008-regulatory-performance-monitoring-framework-report-20212022/

After this period the scheme regulator should carry out enforcement action where appropriate, to address non-compliance issues. This approach will enable the accredited scheme manager to work with different e-waste recyclers providing scheme services in the first years of scheme operation and confirm what can be achieved before target enforcement action is recommended to be carried out by the scheme regulator. It is also recommended that the accredited scheme manager review and adjust material recovery targets (if required) at the official scheme review point as appropriate.

Stakeholder roles and responsibility recommendations

E-waste recyclers engaged by the accredited scheme manager to provide scheme services are critical stakeholders for material recovery targets being achieved. However, the material outcomes or yields that can be achieved will be dependent on the processes applied and techniques used (e.g., manual or mechanical processing) by different service providers which can vary significantly.

The accredited scheme manager's core roles should include clearly communicating material recovery targets for individual e-product categories and including them in the terms and conditions of contracts with scheme recycling service providers, monitoring and validating compliance reporting, and providing regular performance reporting to the scheme regulator. The accredited scheme manager's roles should also include working closely with scheme service providers to identify potential issues or impacts for material recovery targets not being achieved and recommending supporting activities or initiatives to improve material recovery and recirculation outcomes.

There are different roles and responsibilities recommended for the scheme regulator that vary based on the period, i.e., pre and post the official scheme review point. As noted above, it is recommended that there is a transition period in relation to target enforcement activities that would be led by the scheme regulator. This transition period will provide sufficient time for all scheme stakeholders to understand new target requirements introduced by the scheme and update their processes (and in some cases infrastructure) to meet all requirements.

Clear roles and responsibilities should be created for all relevant stakeholders and commence all target enforcement action led by the scheme regulator after the official scheme review point. At this time, the material recovery targets should also be reviewed by the accredited scheme manager and scheme regulator to ensure they are set appropriately and should be adjusted as necessary.

A summary of the principal scheme stakeholder roles and responsibilities in conjunction with material recovery target recommendations are presented in Table 4 below.

Table 4 - Stakeholder roles and responsibilities for material recovery targets

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
E-product owners / scheme users	N/A - There are no roles or responsibilities for scheme users in relation to the proposed material recovery targets.	
E-product manufacturers	N/A - There are no roles or responsibilities for e-product manufacturers, importers, distributors, or retailers party to the scheme, or providing scheme services in relation to the proposed material recovery targets.	
E-product importers		
E-product distributors	Note: Scheme fees paid by liable parties are used to fund scheme operations and make the achievement of recommended material recovery targets possible.	
E-product retailers		
E-product repairers/ refurbishment providers	N/A - There are no roles or responsibilities for e-product and e-waste repairers, refurbishment providers, collectors and sorters or transporters providing scheme services in relation to the proposed material recovery targets.	
E-product/ e-waste collectors and sorters		
E-product/ e-waste transporters		

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 34

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
E-waste recyclers	**Mandatory standard certification:** ▶ Obtain certification of the mandatory standard(s) required to provide scheme services and transparently demonstrate downstream recycling activities, refinement processes, and tracking of e-products and material streams through to the point of final disposition; both to the independently accredited standards certification body and the accredited scheme manager. **Reporting and advice:** ▶ Provide regular, verifiable material recovery target reports to the accredited scheme manager including certificates of destruction and batch reports for each scheme consignment managed to confirm the overall weight of e-products received and recycled, the material fraction composition post treatment, and the material recovery or recirculation rates achieved based on downstream refinement and/or market uptake arrangements. ▶ Work with the accredited scheme manager to communicate current, potential or expected issues or impacts for material recovery target achievement and recommend supporting activities or initiatives to improve material recovery and recirculation outcomes.	
Accredited scheme manager	**Service agreements and advice:** ▶ Communicate minimum e-product category specific material recovery targets and include them in terms and conditions of contracts with e-waste recyclers engaged to provide scheme services. **Monitoring and validation:** ▶ Work with scheme recycling service providers to monitor and validate regular material recovery target reporting. **Guidance and support:** ▶ Work with scheme e-waste recycling service providers to identify potential issues or impacts for material recovery target achievement and recommend supporting activities or initiatives to improve material recovery and recirculation outcomes. **Reporting:** ▶ Provide publicly accessible information on material recovery target settings for each in-scope e-product category. ▶ Provide regular reports to the scheme regulator on progress tracking towards achieving category specific material recovery targets, including in annual reporting on scheme performance. ▶ Report issues that could be addressed or opportunities that could be progressed to improve scheme material recovery and recirculation outcomes to the accredited scheme manager governance board, stakeholder advisory group and scheme regulator. **Reviewing material recovery target settings:** ▶ Regularly review material recovery target reporting and engage e-waste recyclers providing scheme services (and potential scheme recycling services providers) to understand material recovery rates being achieved. ▶ Work with the scheme regulator to consider if material recovery targets should be adjusted (increased or decreased) ahead of the first official scheme review period and subsequent official reviews thereafter. ▶ Propose material recovery target adjustments to the scheme regulator as appropriate.	
Scheme regulator	**Monitoring:** ▶ Regularly review the accredited scheme manager's performance in achieving material recovery targets for each in-scope e-product category. **Reviewing material recovery targets:** ▶ Work with the accredited scheme manager to consider if material recovery targets should be adjusted (increased or decreased) ahead of the first official scheme review period and subsequent official reviews thereafter ▶ Enact material recovery target adjustments as appropriate. **Guidance and support:** ▶ Work with the accredited scheme manager and relevant scheme service providers to identify where government support could be provided to enhance material recovery outcomes.	**Monitoring:** ▶ Regularly review the accredited scheme manager's performance in achieving material recovery rates each year of scheme operation.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 35

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
	Enforcement: ► N/A - No enforcement activities are recommended to be led by the scheme regulator in the first three years of scheme operation.	**Enforcement:** ► Carry out enforcement activity for the accredited scheme manager and scheme service providers not achieving material recovery targets in accordance with the WMA regulatory performance monitoring framework.

3.3.1.2 Initial convenience target settings

With respect to Recommendation 3.2, TechCollect NZ also carried out additional research and consultation with informed advisors to assess examples of minimum or reasonable access measures to other product stewardship scheme/programme and government services in Aotearoa New Zealand, including community, emergency, healthcare and waste and resource recovery services.

This research and subsequent analysis identified that national services are provided to New Zealanders in a number of ways, and these vary significantly depending on where a person or business is physically located and the service(s) they are seeking access to. In most cases, national product stewardship schemes and government services do not have minimum requirements in relation to accessing related services, or how far or long a New Zealander must travel to access them. However, where examples were available for services provided or coordinated by government, they were not easily transferrable to a regulated priority product stewardship context, and it is expected that the people of Aotearoa are likely to prioritise access to healthcare and emergency services over access to waste and resource recovery system services.

With a lack of fit-for-purpose examples or existing precedent appropriate for a regulated e-product stewardship in Aotearoa New Zealand, TechCollect NZ's methodology for determining population access to available e-waste services as part of the national assessment is recommended as the best framework to ensure wide and convenient access to a regulated e-product stewardship scheme in Aotearoa New Zealand.

A regional convenience model is recommended as the most appropriate framework to ensure equitable access to scheme services. This approach includes specific scheme convenience target metrics for the accredited scheme manager to achieve in metropolitan, regional, rural, and remote areas of Aotearoa New Zealand as below.

The recommended definition[9] of "convenience" for a regulated e-product stewardship in Aotearoa New Zealand is:

"Access to scheme collection/drop-off services for in-scope product categories is considered "convenient" if scheme access is provided in accordance with, or to exceed, the following convenience target metrics for each year of scheme operation."

For each year of scheme operation (from the scheme commencement date) the accredited scheme manager must ensure the following region-specific targets are met:

1. **Metropolitan scheme convenience target** (urban areas i.e., cities, towns, or human settlements with >100,000 residents*): at least 90% of the Aotearoa New Zealand population located in metropolitan areas are within a 20-minute drive time to access scheme collection/drop-off services; not including post-back or bespoke collection services.

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[9] The recommended definition of 'convenience' has been informed by the definition of 'reasonable access' for Australia's NTCRS as per section 9 of Australia's Recycling and Waste Reduction (Product Stewardship – Televisions and Computers) Rules 2021.

2. **Regional scheme convenience target** (urban areas i.e., cities, towns, or human settlements with 10,000 - 99,999 residents*): at least 90% of the Aotearoa New Zealand population located in regional areas are within a 30-minute drive time to access scheme collection/drop-off services; not including post-back or bespoke collection services.

3. **Rural or remote scheme convenience target** (urban areas i.e., cities, towns, or human settlements with 200 - 9,999 residents*): at least 80% of the Aotearoa New Zealand population located in rural or remote areas are with a 30-minute drive time to access scheme services; not including post-back or bespoke collection services.

*There is no international definition for urban or rural areas. Urban usually refers to a human settlement with high population density and infrastructure of built environment. Stats NZ defines "rural" as spaces that have human presence/settlement, but at comparatively low density[10].

Regional target metrics are recommended to ensure equitable scheme access for all New Zealanders and have been developed using the methodology and assessment scope developed by TechCollect NZ. The assessment scope includes the following stages:

► Stage 1: Desktop audit of available e-product and e-waste management services nationally
► Stage 2: Geographic information system (GIS) drive time and population mapping
► Stage 3: Data analysis and development of summary report capturing all key findings.

This assessment identified 95.8% of the Aotearoa New Zealand population is within a 30-minute drive to all collection services mapped. However, these access percentage rates apply to all e-product categories (not specifically for the initial in-scope categories 2, 5 and 6) and average drive times are expected to increase outside of metropolitan areas.

Figure 8 - National map of available collection sites for e-products (all e-product categories)

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[10] https://www.stats.govt.nz/consultations/review-of-2018-statistical-geographies/#:~:text=Urban%20areas%20are%20further%20classified,(1%2C000%E2%80%939%2C999%20residents).

Further, not all available e-waste collection services in Aotearoa New Zealand were mapped as part of this desktop assessment. This includes new sites added to TechCollect NZ's pilot programme as the network has expanded and collection sites and services made available by the New Zealand Telecommunications Forum's RE:mobile programme. Adding these additional e-waste management services to the spatial analysis of all e-waste collection services available nationally would increase access percentages for e-product categories 2 (screens, monitors, and equipment with screens over 100cm²), and 6 (telecommunication equipment and small IT equipment), as will new scheme collection points established by the accredited scheme manager for all in-scope categories in the scheme's establishment phase.

Table 5 - Collection sites and accepted e-product categories (by collection site type) with drive time and population coverage analysis

Collection site type	# of sites	E-product categories							Drive time population coverage %		
		1	2	3	4	5	6	7	10 min	20 min	30 min
Community recycling centre	4	1	1	3	1	1	1	3	0.5	2	4
Community resource recovery	21	10	15	5	14	12	17	12	22.9	44.1	49.2
Council office	1	0	0	0	0	0	1	0	0.2	0.4	0.6
IT services	2	0	0	0	0	2	2	2	1.9	3.3	3.7
Landfill	5	4	4	2	4	4	2	3	1.1	5.3	7.9
Opportunity shop	39	15	0	0	21	39	3	0	33.9	57.2	64.6
Private business	31	4	4	3	7	5	10	22	20.3	47.2	59.4
Recycler	92	43	38	9	86	47	72	45	53.9	77.7	85.6
Repair agent	4	2	0	0	2	3	1	0	1.2	1.6	1.7
Resource recovery centre	18	14	11	6	8	12	8	14	3.5	8.5	14
Retailer	6	1	1	0	2	1	1	4	6.6	9	11.1
Telecommunication company	8	0	0	0	0	0	8	0	7.2	23.4	35.6
Transfer station	125	113	61	28	110	105	50	76	29.7	60.5	79.7
Waste company	3	0	0	3	0	0	0	3	2.8	8.8	13.4
Totals	359	207	135	59	255	231	176	184	79	92.7	95.8

Tracking, measuring, and reporting on target performance

The accredited scheme manager should carry out periodic (annual/bi-annual) GIS mapping and spatial analysis of service availability to determine population access for each year of scheme operation that covers each of the defined areas for the regional scheme convenience target.

The accredited scheme manager should provide regular reporting to the scheme regulator on achieving, or not meeting, the regional scheme convenience targets, including annual reporting on scheme performance.

Where convenience target measures are not achieved, the accredited scheme manager should work with existing operators in the New Zealand market providing e-product life-cycle management services to achieve equitable scheme access nationally, including rural populations. This may include running periodic e-product collection events to increase scheme access, and where this takes place, the accredited scheme manager should work with Territorial Authorities and community groups to appropriately promote the available scheme service.

Where a permanent site cannot be established in a specific area, at least four one-day collection events should be held for each year of scheme operation to ensure nearby communities can access scheme services. Scheme post-back options for small in-scope items or bespoke collection services, for example, business to consumer services, would complement the national scheme network and provide wider access to the scheme; however, they would not be counted towards the recommended scheme convenience target.

Target compliance and enforcement

As noted in section 3.3.1.1, MfE is the main regulator under the WMA, holding both system stewardship and direct regulatory responsibilities.

Acknowledging there will be an establishment phase for the accredited scheme manager to develop a national scheme network and they cannot be expected to meet the regional scheme convenience target metrics from commencement, or even after the first year of operation, it is recommended that scheme regulator enforcement activities related to the convenience target commence after the official review of the scheme (i.e., approximately after three years of scheme commencement).

Stakeholder roles and responsibility recommendations

The accredited scheme manager and scheme regulator are both central to the convenience target being achieved in line with the regional scheme convenience targets. The accredited scheme manager should be responsible for ensuring that there is equitable scheme service nationally and the regional scheme convenience targets are achieved for each year of scheme operation. To achieve its roles and responsibilities, the accredited scheme manager requires input from various stakeholders providing scheme services, and this input must be managed in line with all relevant mandatory scheme requirements, and contractual terms and conditions with scheme service providers.

There are different roles and responsibilities recommended for certain scheme stakeholder groups that would vary pre and post the official scheme review (i.e., at approximately three years after scheme commencement). As noted above, it is recommended that there is a transition period in relation to target enforcement activities that would be led by the scheme regulator.

Considering Recommendation 7.4 (i.e., undertake a formal review of the scheme), it is proposed to create clear roles and responsibilities for all relevant stakeholders pre and post scheme review and commence target enforcement action after the official scheme review point. At this time, the convenience targets should also be reviewed by the accredited scheme manager and scheme regulator to ensure they are set appropriately and should be adjusted as necessary.

A summary of the principal scheme stakeholder roles and responsibilities in conjunction with the regional scheme convenience target approach are presented in Table 6 below.

Table 6 - Stakeholder roles and responsibilities for regional scheme convenience targets

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
E-product owners / scheme users	N/A - There are no roles or responsibilities for scheme users in relation to the proposed regional scheme convenience targets.	
E-product manufacturers	N/A - There are no roles or responsibilities for e-product manufacturers, importers, distributors, or retailers in relation to the proposed regional scheme convenience targets.	
E-product importers	Note: Some stakeholders in this group may also provide scheme services e.g., e-product retailers providing collection services via the national scheme network in conjunction with the accredited scheme manager.	
E-product distributors		
E-product retailers	Note: Scheme fees paid by liable parties are used to fund scheme operations and make achievement of the recommended convenience targets possible.	

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
E-product repairers / refurbishment providers	N/A - There are no roles or responsibilities for e-product repairers and refurbishment providers providing scheme services in relation to the proposed regional scheme convenience targets. Note: E-product repairers and refurbishment providers may also provide scheme services e.g., e-product repairers providing collection services via the national scheme network in conjunction with the accredited scheme manager.	
E-product / e-waste collectors and sorters	**Network establishment:** ► Meet all minimum requirements set by the accredited scheme manager for providing scheme collection services e.g., minimum open hours, free disposal, minimising health, safety, and environmental risks, providing signage and information, preventing theft and unauthorised access of data stored on e-products etc. ► Work with the accredited scheme manager to establish a scheme access point ensuring that the proposed site is safe and suitable for e-product and e-waste collection and sorting activities; and all scheme service operations can be carried out in accordance with all mandatory scheme requirements and applicable laws.	**Network maintenance:** ► Meet all mandatory scheme requirements, minimum requirements set by the accredited scheme manager and ensure all staff providing scheme services follow the safe work method statements and guidance materials provided by the accredited scheme manager.
	Reporting: ► Report all health and safety incidents to the accredited scheme manager in relation to scheme services provided.	
	Reporting: ► Inform the accredited scheme manager with as much advanced notice as possible of any issues or plans that may impact or cease scheme services.	
E-product/ e-waste transporters	N/A - There are no roles or responsibilities for transporters providing scheme service in relation to the proposed regional scheme convenience targets.	
E-waste recyclers	N/A - There are no roles or responsibilities for e-waste recyclers providing scheme services in relation to the proposed regional scheme convenience targets. Note: E-waste recyclers may also provide scheme services e.g., e-waste recyclers providing collection services via the national scheme network in conjunction with the accredited scheme manager.	
Accredited scheme manager	**Network establishment:** ► Work with various government, community, and industry stakeholders to establish a national scheme network in line with, or to exceed, the minimum regional convenience targets and all mandatory scheme requirements. ► Develop and set appropriate minimum safety, and operational requirements for collectors and sorters providing scheme services e.g., minimum open hours, free disposal, minimising health, safety and environmental risks, providing signage and information, preventing theft and unauthorised access of data stored on e-products etc.	**Network maintenance:** ► Ensure the national scheme network is maintained in line with, or to exceed, the minimum regional convenience targets and all mandatory scheme requirements. ► Ensure all stakeholders providing scheme collection services are following all minimum safety and operational requirements set.
	Monitoring: ► Regularly review and monitor scheme collection points in the national network to ensure they are safe and suitable for scheme operations and are supported with all necessary signage, health and safety personal protection equipment and guidance for collectors to undertake their role in line with best-practice health and safety measures and all mandatory scheme requirements. ► Carry out periodic (annual/bi-annual) GIS mapping and spatial analysis of service availability to determine population access for each year of scheme operation in line with the regional scheme convenience targets.	

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 40

Stakeholder group	Roles and responsibilities (Scheme implementation period)	Roles and responsibilities (Post official scheme review)
	Reporting: ► Provide publicly accessible information on where scheme collection points are located, how to access them and any site-specific information scheme users may need to be aware of e.g., open hours etc. ► Provide regular reporting to the scheme regulator on progress tracking towards achieving the regional scheme convenience targets; including annual reporting on scheme performance.	
Scheme regulator	**Monitoring:** ► Regularly review the accredited scheme managers reporting on the scheme's regional convenience targets, including progress tracking towards achieving the regional scheme convenience target metrics.	**Monitoring:** ► Regularly review the accredited scheme managers reporting on the regional scheme convenience targets to ensure minimum target metrics are being achieved for each year of scheme operation.
	Guidance and support: ► Provide support, guidance, and advice for the accredited scheme manager to fill scheme service gaps where suitable service partnerships cannot be established.	
		Enforcement: ► Carry out enforcement activity for the accredited scheme manager not achieving the national scheme convenience target in accordance with the WMA regulatory performance monitoring framework.

3.3.2 Targets and data further activity recommendations

Activity 3.1 - Carry out periodic (annual/bi-annual) GIS mapping and spatial analysis of service availability to determine population access for each year of scheme operation for each of the defined areas (i.e., metropolitan, regional, remote, and rural) for the regional scheme convenience targets.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short-, medium- and long-term	► GIS mapping and spatial analysis of scheme access points and national population coverage with drive time assessments in line with regional scheme convenience target metrics for the accredited scheme manager to achieve in metropolitan, regional, rural, and remote areas of Aotearoa New Zealand. ► Assessment outcomes should be reported to the scheme regulator on achieving, or not meeting, the regional scheme convenience targets, including annual reporting on scheme performance.

Activity 3.2 - Work with the scheme regulator to review material recovery target settings at the scheme's first official review point to ensure all e-product category specific targets are set appropriately and/or confirm if target settings should be adjusted.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work i.e., what this further activity should include
Accredited scheme manager	Short-term	► Review of scheme operational data and the latest available market intelligence regarding material recovery outcomes being achieved for all in-scope e-product categories.

3.4 Liable party determination

This SDE is critical for assigning the responsibility for determining who is a liable party under the scheme. This process enables the scheme to assign liability and collect fees which ultimately fund the scheme's management of e-products and e-waste.

For more information on the liable party determination scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.4 of Report One.

3.4.1 Liable party determination recommendations

Reference	Description	Time period to carry out
Recommendation 4.1	Adopt an accredited scheme manager-led process to identify who all liable parties are, with cross-checking and validation support from the scheme regulator to verify liable party self-reporting. The determination process should be managed by a third-party provider on behalf of the accredited scheme manager, using a clearing house model to collect self-reported data from liable parties and cross-checking data from the scheme regulator (e.g., using data provided by New Zealand Customs Service and other New Zealand Government agencies for e-products manufactured locally) to verify POM data self-reported by liable parties.	Before scheme commencement

3.4.2 Liable party determination further activity recommendations

Activity 4.1 - Identify applicable tariff and HS codes for the remaining e-product categories to support the introduction of additional e-product categories to be included within the scheme's product scope over the accredited scheme manager's initial seven-year accreditation cycle.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short-term	► Confirm additional in-scope e-product categories being assessed and identify associated UNU-KEYS, HS Codes and the corresponding liable parties.

3.5 Fee structure

The fee structure is central for determining how the scheme interacts with liable parties and service providers. Scheme fees fund all scheme operations as well as basic scheme administration functions of the accredited scheme manager who operates the scheme. The fee structure is therefore critical for ensuring the long-term financial sustainability of the scheme.

The requirement to pay a fee under the scheme is determined firstly by whether the definition of sale of a priority product has been met. This occurs when:

► A priority product is offered for sale

► A priority product is distributed or delivered, whether or not for valuable consideration (including delivery to an agent for sale on consignment).

The definition of "sale" under section 5 of the WMA[11] means that a sale is whenever a product is sold or changes hands, regardless of whether this exchange included an exchange of value, for

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[11] sale includes—
(a) an offer for sale; and
(b) distribution or delivery, whether or not for valuable consideration (including delivery to an agent for sale on consignment)

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 42

example, money or swap/trade-in. This means that gifted or freebie products given away to consumers as part of a competition or alongside the purchase of a product would still be treated as a sale and must act in accordance with an accredited scheme if regulation under section 22(1)(a) of the WMA is enacted.

If a fee is included in regulation under section 23 of the WMA, once the requirement to act in accordance with an accredited scheme is enacted, any such fee must be paid. The purpose of Part 2 of the WMA (Product stewardship) is to encourage (and in some circumstances require) the people and organisations involved in the life of a product to share responsibility for a) ensuring there is effective reduction, reuse, recycling, or recovery of the products, and b) managing any environmental harm arising from the product when it becomes waste i.e., end-of-life product management. End-of-life e-product management activities are likely to include the collection, transportation, sorting, and recycling of e-waste. Those with agreements to perform these end-of-life activities may be eligible for payment. The fee would also cover the core administration costs of the accredited scheme manager incurred in meeting their roles and responsibilities (detailed in the section relating to accredited scheme manager roles and responsibilities).

For more information on the fee structure scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.5 of Report One.

3.5.1 Fee structure recommendations

Reference	Description	Time period to carry out
Recommendation 5.1	Adopt an Advanced Stewardship Fee (ASF) structure to fund the scheme: a. Fees charged to liable parties should be based upon forecast scheme management costs (e.g., collection, transport, end-of-life management, scheme administration, education, and awareness), and informed by in-scope e-product POM data for the most recent completed financial year b. Fees collected from liable parties should be used to manage any legacy or orphaned in-scope e-products which are recovered by the scheme c. Liability for fees should be determined by self-reporting of POM data by liable parties, with this data being cross-checked and validated by the scheme regulator using New Zealand Customs Service's import data and POM data for in-scope e-products manufactured in Aotearoa New Zealand d. POM data should be collected using a clearing house model to ensure commercially sensitive data is handled appropriately. The ASF should be set at the e-product category or UNU-Key[12] level and reflect the full costs of managing the items (including scheme management and administration).	Before scheme commencement
Recommendation 5.2	Implement eco-modulation fee criteria in the long-term for appropriate e-product categories, provided further research into eco-modulation supports it as an effective tool for influencing better e-product design, durability and repairability, and increases material recovery. Further consultation with e-product stakeholders, including producers, would be required to determine the appropriate e-product categories that eco-modulation could be applied to and to develop corresponding fee eco-modulation criteria.	Long-term

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[12] E-waste classification defined by the United Nations University. UNU-KEYS group e-products into homogeneous groups of average weight, market behaviour, and environmental relevance.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 43

3.5.2 Fee structure further activity recommendations

Activity 5.1 - Develop the initial pricing schedule for each in-scope e-product category to support the ASF structure.

Recommended activity lead/funding parties	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Analysis of current and historical market recycling prices to calculate the cost of recovery and end-of-life management. Some initial information on collection pricing can be found in Appendix G of Report One.

Activity 5.2 - Determine how seed funding can be provided to the accredited scheme manager and service providers if required, to cover the initial administration and start-up costs of setting up the scheme, and further activities required to introduce additional e-product categories into the scheme's product scope; as well as the amount of seed funding required.

Recommended activity lead/funding parties	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Confirm seed funding required to support scheme establishment and corresponding activities. ► Perform additional consultation with all relevant scheme stakeholders. ► Review government funding support available to assist with scheme implementation.

Activity 5.3 - Monitor and actively participate in research and ongoing investigations into the effectiveness of eco-modulation on e-product design for environment characteristics.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short- and medium-term	► Consult with the accredited scheme manager's counterparts, government agencies, and international focused working groups. ► Perform desktop research and consult with all liable parties, especially those placing in-scope e-product categories on the European market.

Activity 5.4 - In the event of a review of the WMA, consider the benefits of volume-based fee (VBF) structures for priority product stewardship schemes in Aotearoa New Zealand and whether the WMA should be amended to allow this fee model in future.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
New Zealand Government	During WMA review consultation	► Consult with all liable parties, scheme service providers and the accredited scheme manager.

3.6 Mandatory standards

Mandatory standards seek to set minimum requirements for social and environmental outcomes from end-of-life management activities occurring under the scheme.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 44

The use of mandatory standards by the scheme is designed to strike the right balance between ensuring quality social and environmental outcomes from activities occurring under the scheme, without creating undue requirements or roadblocks for service providers to engage with and participate in the scheme.

There are already several industry standards in place for some service providers which means additional mandatory standards are not necessary to ensure quality outcomes. For example, e-waste transporters are already required to transport this waste in line with the *Land Transport Rule: Dangerous Goods 2005*. Requiring additional standards to be met by transporters would not lead to a balanced outcome and could reduce the number of transporters available to provide scheme services.

For more information on the mandatory standards scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.6 of Report One.

3.6.1 Mandatory standards recommendations

Reference	Description	Time period to carry out
Recommendation 6.1	Adopt AS/NZS 5377:2013 and R2 as mandatory standard requirements for e-waste recyclers who provide services to the scheme.	Before scheme commencement
Recommendation 6.2	Set minimum requirements for collectors who provide services to the scheme. a. Requirements are to include minimising health, safety, and environmental risks, providing signage and information, preventing theft and unauthorised access of data stored on e-products. b. The accredited scheme manager is to include minimum requirements for collectors in service agreement terms and conditions. c. If accredited scheme manager assessments reveal that certain collectors need additional time to meet minimum requirements for collection sites due to financial or site restraints, additional lead-in time could be considered as long as risks are still managed in an acceptable manner.	Before scheme commencement
Recommendation 6.3	To support mandatory standard(s) certification for recycling operations, funding support should be made available through government grants e.g., the WMF, to enable these service providers to adjust their practices in line with mandatory standard requirements.	Before scheme commencement
Recommendation 6.4	Require certification bodies issuing certifications to mandatory standards to be independently accredited to demonstrate competence, consistency, and impartiality in assessing a scheme service provider organisation's ability to meet the requirements of mandatory standards.	Before scheme commencement

3.6.2 Mandatory standards further activity recommendations

Activity 6.1 - Assess and determine if there are enough sufficiently qualified and independently certified New Zealand-based auditors to enable mandatory standards to be audited effectively.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Confirm the number of, and regional access to, independently accredited certifying bodies for scheme recycler mandatory standards (i.e., AS/NZS 5377:2013 and R2). ► Develop a set of evaluation criteria which individuals/organisations need to meet, to conduct audits as part of the scheme and obtain certification.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 45

Activity 6.2 - As part of the scheme's collection network establishment phase, carry out assessments of collectors who may provide scheme services to understand conformance, or gaps in conformance, with minimum collection site requirements and any non-regulatory funding support that may be necessary to support collection network operations in line with minimum requirements.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
New Zealand Government	Commence as soon as possible	► Assess the current state of Aotearoa New Zealand's e-product and e-waste collection networks. ► Collect data and develop a site assessment tool/database. ► Categorise e-products and assess collection for these categories. ► Analyse GIS mapping and population drive times to available services. ► Conduct a conformity assessment with appropriate standard requirements for collection and storage (e.g., AS/NZS 5377:2013). ► Recommend funding support required to meet minimum requirements and where funding should be prioritised.

3.7 Governance structure

The governance structure provides options for how the scheme could be run and the kinds of governance elements that could be included. Governance is a key requirement for ensuring effective oversight and efficient management of the scheme and the e-products it is responsible for. The governance structure also considers the requirements of the WMA and the setup of the New Zealand market.

For more information on the governance structure scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.7 of Report One.

3.7.1 Governance structure recommendations

Reference	Description	Time period to carry out
Recommendation 7.1	Provide accreditation to a single NFP PSO as the scheme manager, with the option for them to utilise an umbrella PSO model. a. The accredited scheme manager should be governed by a governance board of directors appointed via a fair, open and transparent election process, ensuring all directors have an appropriate skill set and experience to ensure effective and sustainable delivery of all accredited scheme manager roles and responsibilities, and represent the interests of all major scheme stakeholder groups. b. The board should adhere to the Commerce Commission guidelines on collaborative activities between competitors (including but not limited to considering the option of applying for collaborative activity clearance from the Commission for the scheme) and implement best practice governance guidelines, for example, the Institute of Directors of New Zealand Code of Practice for Directors, including for the identification and management of conflicts of interest. c. The accredited scheme manager should be made responsible for meeting the objectives of the scheme, including meeting targets, regularly reporting on scheme performance and establishing the scheme's operations to a sufficient capacity. d. The accredited scheme manager should be permitted to delegate its responsibilities for certain product categories or streams to other PSOs in situations where the accredited scheme manager deems it to be an effective approach to achieving the scheme's objectives for that e-product category or stream and provides a convenient collection network.	Before scheme commencement

Reference	Description	Time period to carry out
	e. In situations where the accredited scheme manager chooses to delegate its responsibilities, it should do so through contractual agreements, in which the same requirements as those of the accredited scheme manager are included. However, ultimate responsibility for meeting the requirements of the accreditation agreement remains with the accredited scheme manager. f. The accredited scheme manager should not have any conflicts of interest with any liable party, scheme service provider, or special interest group from scheme commencement (financial or otherwise), to help avoid the ability for any vested interests to manipulate the scheme. Checks and balances should also be implemented as part of scheme accreditation, to ensure that the scheme is operated in the best interests of Aotearoa New Zealand and not favouring select entities or sectors over others.	
Recommendation 7.2	Establish and coordinate a single stakeholder advisory group made up of relevant stakeholders in the e-product and e-waste value-chain. This group should provide advice to the accredited scheme manager and the accredited scheme manager's governance group on how best to implement or improve various aspects of the scheme, for example, any fee changes or mandatory standards required. It should also provide insight into the current position of e-products and e-waste in relation to recyclability, repairability, and reusability to support the progression of each e-product category through the recommended scheme framing. It is recommended that the following groups, preferably by their relevant industry associations, be included as part of the scheme's stakeholder advisory group: ▶ E-product producers/importers ▶ E-product retailers/distributors ▶ Consumer groups ▶ Tangata whenua/Māori organisations ▶ E-product repair agents ▶ Resellers of used e-products ▶ E-waste collectors ▶ E-waste recyclers ▶ Environmental, community and charitable organisations ▶ Local councils/Territorial Authorities (if providing services to the scheme). Liable party groups (producers, importers, and distributors) and scheme service providers (recyclers, transporters, and collectors) should have a higher level of representation in the stakeholder advisory group to reflect their direct involvement in the scheme. Representation of these groups may be best served by peak industry bodies rather than individuals representing a single organisation or entity. The number of representatives on this advisory group and the categories of stakeholders that are required to be part of this group should be included in the scheme manager(s) accreditation proposal and be endorsed by the Minister for the Environment through the accreditation process. Members of the scheme stakeholder advisory group should be paid for their involvement to ensure that representation is not limited to those that can afford to volunteer their time, with costs to be covered by the scheme.	Before scheme commencement
Recommendation 7.3	Allow individual producer responsibility (IPR) programmes to operate through contractual agreements between the accredited scheme manager, applicable liable parties, and other relevant scheme participants. a. Any scheme activities occurring as part of an IPR programme should still be required to meet all the requirements included as part of the accredited scheme, including adherence to mandatory standards, compliance and monitoring requirements, and scheme targets. b. When engaging potential IPR programme managers or PSOs, the accredited scheme manager should consider any potential impacts to scheme convenience and complexity for scheme users and other scheme service providers.	Before scheme commencement

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 47

Reference	Description	Time period to carry out
Recommendation 7.4	Undertake a formal review of the scheme. a. This formal review should be led by the scheme regulator (or an independent party appointed by the scheme regulator) with support from the accredited scheme manager and take place approximately halfway through the accredited scheme manager's seven-year accreditation cycle i.e., at least three and a half years post scheme commencement. b. The review should consider the need to adjust the scheme's framing, design elements and operational settings, and include public consultation.	Short-term

3.7.2 Governance structure further activity recommendations

Activity 7.1 - Establish or confirm the scheme manager applicant(s) governance board, as well as the constitutional structure and a nomination, election, and appointment process for board directors.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	▶ Develop the scheme manager applicant(s) governance board constitutional structure and a nomination, election, and appointment process for board directors. ▶ If the scheme manager applicant(s) already has a governance board in place, information on the above aspects (constitutional structure, nomination, election, and appointment process for board directors) should be specified during the application and accreditation process.

Activity 7.2 - Establish the size of the stakeholder advisory group and the weightings given to each stakeholder group that is included.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	▶ Mapping of potential advisory group representatives. ▶ Development of a scheme stakeholder advisory group nomination and election process and selection criteria/weightings for each stakeholder group recommended to be represented.

Activity 7.3 - Establish which e-product categories already have potential PSOs or IPR programmes available that could be engaged by the scheme manager applicant(s) to manage services for certain e-product categories or streams.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process and/or post scheme commencement	▶ Mapping of potential PSOs for different e-product categories or streams. ▶ Carry out additional consultation with all potential PSOs. ▶ Provide confirmation of the proposed umbrella governance structure(s) in the scheme manager(s) application(s) for scheme accreditation, including corresponding roles and responsibilities.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 48

3.8 Compliance and monitoring

The implementation of compliance and monitoring elements is designed to provide confidence to the accredited scheme manager, the scheme regulator and the wider public, that the scheme's requirements are being met. This scheme design element also exists to support the accredited scheme manager to proactively manage the scheme's capacity over time.

Compliance elements refer to activities that ensure alignment to the scheme's various standards and requirements. Monitoring elements refer to activities that provide transparency over both the activities occurring under the scheme and the e-product situation in Aotearoa New Zealand.

For more information on the compliance and monitoring scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.8 of Report One.

3.8.1 Compliance and monitoring recommendations

Reference	Description	Time period to carry out
Recommendation 8.1	Develop a tracking system to track the initial scheme e-product scope categories and flows in the New Zealand market. a. The tracking system should be developed, administered, and owned by the accredited scheme manager. b. The tracking system should use POM data collected from liable parties as part of the liable party determination and scheme fee invoicing process, as well as recovery and treatment data obtained from service providers, including the type of end-of-life management activity (recycling, repair, reuse) or service that was carried out. c. The tracking system should also collect data from scheme recyclers, on downstream e-product and material flows to support the monitoring and reporting of material recovery rate targets. d. The tracking system should also collect data on the proportion of e-products diverted from recycling for repair, refurbishment and/or reuse, whether locally or offshore; this data will support the monitoring of repair and reuse outcomes from the scheme. e. In the short-term, the accredited scheme manager should prioritise the tracking of e-product and e-waste flows to ensure that all in-scope e-products collected by the scheme is being managed appropriately and to align with the scheme's short-term primary focus.	Before scheme commencement/ Short-term
Recommendation 8.2	Adopt auditing requirements for recyclers providing scheme services to ensure that they are meeting all scheme requirements and service agreement terms and conditions with the accredited scheme manager, including being certified to mandatory standards by an independently accredited certifying body. Auditing for recyclers providing scheme services should be carried out by the accredited scheme manager, to check that all scheme recyclers hold a current certification to the required mandatory standard(s), and that they are meeting the requirements of their contractual arrangements with the accredited scheme manager, including meeting scheme material recovery rate targets and reporting requirements.	Short-term
Recommendation 8.3	Adopt auditing requirements for scheme collectors to ensure that they are meeting all scheme requirements, including minimum collection site requirements set by the accredited scheme manager. Auditing scheme collectors should be carried out by the accredited scheme manager, who should check that the collector is meeting the requirements of their contractual arrangements with the accredited scheme manager, including meeting minimum collection service and reporting requirements.	Short-term
Recommendation 8.4	Adopt auditing requirements for scheme liable parties. a. Auditing of liable parties' registration to the scheme should be carried out by the scheme regulator, which includes cross-checking import data received from the New Zealand Customs Service (and similar data for locally manufactured e-products) against the liable party registration list and liable party self-reported POM data.	Short-term

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 49

Reference	Description	Time period to carry out
	b. If a non-compliant liable party is discovered as part of these audit processes, the scheme regulator should carry out corrective and/or enforcement activities against the liable party.	
	c. This auditing should commence no later than one year following the commencement of the scheme, with the frequency being determined by MfE, the Minister for the Environment and scheme manager applicant(s) during the scheme accreditation process.	
Recommendation 8.5	Adopt auditing requirements for the accredited scheme manager. a. Mandatory auditing of the accredited scheme manager should be carried out or coordinated by the scheme regulator annually, to assess whether the accredited scheme manager is adhering to the terms of accreditation, including whether they are meeting scheme targets, delivering all accredited scheme manager roles and responsibilities effectively and making progress on the scheme's objectives.	Short-term

3.8.2 Compliance and monitoring further activity recommendations

Activity 8.1 - Establish a schedule of auditing frequency for each auditing recommendation.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► For scheme service providers, it is recommended the frequency be developed based on the operational risk that respective scheme service activities pose to the environment, workers, and society. ► A higher risk should denote a higher auditing frequency.

3.9   Education and awareness

Education and awareness are critical for ensuring e-product users are aware of the scheme and how to interact with it.

The delivery of education and awareness programmes ensures that the e-products sold by liable parties are correctly managed once the e-product reaches the end of its life.

For more information on the education and awareness scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.9 of Report One.

3.9.1 Education and awareness recommendations

Reference	Description	Time period to carry out
Rec 9.1	Implement a national education and awareness programme for the scheme across Aotearoa New Zealand. a. This programme should include campaigns that provide clear and consistent information to e-product consumers on how the scheme works, how it is funded, and how e-product users can access the scheme's services, including point-of-sale scheme promotions. Other programme and campaign focus areas could include, but are not limited to, circular consumption behaviours (e.g., product as a service), responsibly managing e-products, managing personal data securely, the benefits of environmentally sound e-waste management, product circularity ratings, available repair and refurbishment service providers for different e-product categories, and health and safety guidance for e-product and e-waste management activities.	Before scheme commencement

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 50

Reference	Description	Time period to carry out
	b. Point-of-sale scheme promotions should inform consumers that all in-scope e-products are covered by the scheme, provide promotional information on repair services available for respective e-product categories, cover both physical and online points-of-sale to ensure fairness across the retail sector, and be aligned to support the aims of the overall education and awareness programme. c. The programme should be developed and administered by the accredited scheme manager and funded through scheme fees collected from liable parties. d. To support transparency, the education and awareness programme or campaigns should seek to inform e-product users of ASFs applied to each e-product category and the accredited scheme manager should maintain a publicly accessible database of ASFs applied to individual e-product categories. e. The accredited scheme manager should work collaboratively with MfE and other priority product stewardship scheme managers to ensure consistent messaging of key areas that may overlap with product stewardship schemes that are in place (e.g., messaging and terminology around a circular economy, resource recovery etc.). f. The accredited scheme manager should report on the performance of the scheme's education and awareness programme through annual reporting to the scheme regulator on scheme performance.	EY

3.9.2 Education and awareness further activity recommendations

Activity 9.1 - Develop a marketing strategy (including outcomes and objectives) for the delivery of a national scheme education and awareness programme, including scheme awareness level baseline information to assess scheme impacts to improve awareness levels.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Identification of the outcomes and objectives for the education and awareness programme that the accredited scheme manager will be responsible for delivering. ► Development of a marketing strategy, including education and awareness focus areas for each scheme participant and confirmation of scheme funds required to deliver national campaigns targeted at household and business consumers.

3.10 Accredited scheme manager roles and responsibilities

The roles and responsibilities of the accredited scheme manager lay out possible requirements for any future operator which is accredited to run the scheme. These roles and responsibilities also directly influence the amount of administration costs incurred as part of running the scheme.

Due to the potential limitations on what administration costs are eligible to be covered by the fee collected from liable parties, the roles and responsibilities have been broken up into those that are critical to the scheme's function and those which are supplementary.

For more information on the accredited scheme manager roles and responsibilities design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.10 of Report One.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 51

3.10.1 Accredited scheme manager roles and responsibilities recommendations

Reference	Description	Time period
Recommendation 10.1	If the scheme framing and design elements recommended in this report are adopted, implement the following accredited scheme manager roles and responsibilities before scheme commencement: a. Meet applicable requirements under the WMA and supporting regulations b. Establish and maintain a registry/database of scheme service provider details c. Establish and maintain a publicly accessible database of ASFs applied to individual e-product categories d. Run a transparent tender process to select preferred scheme service providers and execute contracts for the scheme's transport, preparation for reuse, and recycling network e. Establish collection service agreements with scheme collection service providers f. Set minimum service requirements the service providers need to meet (via terms and conditions in scheme service provider contracts or service agreements) g. Set targets for convenience (collection) and material recovery rates (recycling) that are approved by the Minister for the Environment (as part of scheme accreditation) and establish periodic review processes h. Develop a system for registering and promoting available repair and refurbishment services (including service providers outside of the scheme) for different e-product categories and streams.	Before scheme commencement
Recommendation 10.2	If the scheme framing and design elements recommended in this report are adopted, implement the following accredited scheme manager roles and responsibilities once the scheme commences: a. Establish and maintain a registry/database of liable parties and use a third-party clearing house model, to collect POM data from liable parties for the determination of fees, fee invoicing, and payment b. Manage funds from liable party fees paid and their distribution to relevant scheme service providers c. Manage and/or oversee scheme operations (i.e., collections, transport, recycling, and preparation for reuse) d. Perform monitoring, data collection, and regular public reporting on scheme performance e. Monitor and enforce minimum requirements and mandatory standards for scheme service providers and implement reporting and auditing processes f. Identify instances of non-compliance and facilitate the process of corrective and/or enforcement actions with the scheme regulator g. Participate in audits conducted by the scheme regulator h. Implement an education and awareness-raising programme for participants with roles and responsibilities under the scheme i. Set up and maintain a publicly accessible website that shows the location of collection sites and registered repairers.	Short-term

3.10.2 Accredited scheme manager roles and responsibilities further activity recommendations

Activity 10.1 - As part of the accreditation process, propose the accredited scheme manager roles and responsibilities.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Confirmation and approval of all accredited scheme manager roles and responsibilities for scheme delivery via accreditation.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 52

3.11   Regulation

Regulation provides the legal authority for the scheme to carry out the activities necessary to manage e-products in Aotearoa New Zealand.

The set of regulations available to the scheme are provided as part of the WMA and determine how several scheme functions such as fee and data collection and standards are carried out.

Any regulation related to the scheme will need to be sent out for public consultation and approved by New Zealand Government before it can be brought into effect.

For more information on the regulation scheme design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.11 of Report One.

3.11.1 Regulation recommendations

Reference	Description	Time period to carry out
Recommendation 11.1	Seek implementation of the following WMA regulations to support the proposed scheme design: <table><tr><td>**WMA Reference**</td><td>**Description**</td></tr><tr><td>22 (1) (a)</td><td>Prohibiting the sale of a priority product, except in accordance with an accredited scheme.</td></tr><tr><td>23 (1) (c)</td><td>Requiring specified classes of person to provide a take-back service for products, and prescribing requirements for: ▶ The take-back service, and ▶ The reuse, recycling, recovery, treatment, or disposal of products taken back.</td></tr><tr><td>23 (1) (d)</td><td>Setting fees payable for the management of a product and specifying: ▶ The class or classes of person who must pay the fee, and ▶ The stages in the life of the product where the fee must be paid, and ▶ The purposes to which the fee must be applied.</td></tr><tr><td>23 (1) (g) and (h)</td><td>▶ For any product or material that has become waste, prescribing standards to be met when reusing, recycling, or recovering the product or material. ▶ Requiring specified persons or specified classes of person to ensure that the standards prescribed under paragraph (g) are met.</td></tr><tr><td>23 (1) (i)</td><td>Requiring specified persons or specified classes of person to collect, and provide to the Secretary, information about any requirements imposed in regulations made under paragraph (a), (b), (c), (d), or (e). Refers to Section 23 (1) of the WMA.[13]</td></tr></table>	Before scheme commencement
Recommendation 11.2	Seek the implementation of WMA regulation 23 (1) (a) - Controlling or prohibiting the disposal, or anything done for the purpose of disposing of products or waste. This should be implemented to prevent product categories from being disposed of in landfill once a suitable and accessible recycling, repair, and/or reuse option is made available to the public.	Medium-term
Recommendation 11.3	Seek the implementation of the WMA regulation 23 (1) (b) - Controlling or prohibiting the manufacture or sale of products that contain specified materials. This should be implemented when product design interventions become a scheme focus.	Long-term

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[13] https://www.legislation.govt.nz/act/public/2008/0089/latest/whole.html#DLM1154587

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 53

3.11.2 Regulation further activity recommendations

Activity 11.1 - Investigate how regulations under the WMA could be utilised or amended to enable certain requirements to only be mandated in certain situations, for example, once the network has reached a point where a ban on e-waste in landfill is possible, when product design interventions become a scheme focus.

Recommended activity lead/funding parties	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include

Accredited scheme manager	Post scheme commencement	► Conduct further consultation with MfE on available tools and processes under the WMA to enable the phasing in of scheme mandates under certain situations. This includes any additional tools or processes that could be developed through the New Zealand's Waste Strategy and future updates to the WMA and/or superseding legislation.
		► Examples of when this phasing in of regulations could be used include:
		  a. Once the network has reached a point where a ban on e-waste in landfill is possible
		  b. When product design interventions become a scheme focus.

Activity 11.2 - Investigate how other regulations could be modified or improved to better support the scheme, for example, amendments to the CGA, development of design for environment legislation, Copyright Act amended to ensure repair activities can be carried out without the repairer being sued for intellectual property infringement.

Recommended activity lead/funding parties	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Post scheme commencement	► Conduct further consultation with MfE, other relevant New Zealand government agencies, and stakeholder groups, on how other regulations could be modified or improved to better support the scheme, particularly regarding medium- and long-term primary and secondary focus areas around reuse, repair, and product design for environment.

3.12 Scheme stakeholder roles and responsibilities

The roles and responsibilities of scheme stakeholders lay out possible requirements for any future liable party, e-product consumer or service provider associated with the scheme.

Most of these roles and responsibilities are designed to support the accredited scheme manager to make decisions and run the scheme effectively. This includes the collection of data, charging of fees and the payment of scheme service providers.

Some roles and responsibilities will need to be included in the regulations, while others can be implemented through contracts between service providers and the accredited scheme manager.

For more information on the scheme stakeholder roles and responsibilities design options explored and considered during the co-design process (including relevant stakeholder feedback), see section 3.12 of Report One.

3.12.1 Scheme stakeholder roles and responsibilities recommendations

Reference	Description	Time period to carry out
Recommendation 12.1	Implement a set of "general shared responsibility principles" which apply to all stakeholders from scheme commencement. These principles should include: a. Taking all reasonable steps to eliminate or reduce the risk to human health and the environment from e-products and e-waste b. Preventing breakage or spoilage of e-products and e-waste that might limit its suitability for reuse, repair, refurbishment, or recycling.	Before scheme commencement
Recommendation 12.2	If the scheme framing and design elements recommended in this report are adopted, the roles and responsibilities for all scheme stakeholder groups presented in Appendix A should also be adopted. Should the proposed scheme design be modified, the roles and responsibilities for all scheme stakeholder groups as put forward in Appendix A should also be modified, in line with the final scheme design as per scheme accreditation.	Before scheme commencement

3.12.2 Scheme stakeholder roles and responsibilities further activity recommendations

Activity 12.1 - Finalise scheme stakeholder roles and responsibilities as part of the scheme and scheme manager accreditation process.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Scheme manager applicant(s)	During the scheme application and accreditation process	► Finalise scheme stakeholder roles and responsibilities in line with final scheme framing and design elements which may include further stakeholder consultation.

Activity 12.2 - Investigate the prevalence of consumer-direct imports of e-products into Aotearoa New Zealand to better understand the size of this potential issue and corresponding scheme impacts.

Recommended activity lead/funding party	Recommended activity timing	Recommended scope of work, i.e., what this further activity should include
Accredited scheme manager	Short-term	► Investigate the prevalence of consumer-direct import of e-products, to provide a better understanding of the size of this potential issue. ► This should include buying from an overseas retailer that uses a ".co.nz" web address, and from sellers that use TradeMe and other online auction sites. ► Consideration should be given to how international jurisdictions currently manage this issue, to support the development of suitable solutions and scheme driven interventions for Aotearoa New Zealand.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 55

Appendices

Appendix A   Summary of stakeholder definitions, fee collection/payment and roles and responsibilities

Table 7 - Stakeholder definitions and roles and responsibilities

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities
E-product consumers/owners	Simple description - You have purchased and own (or have leased, loaned or share) e-products in Aotearoa New Zealand. Technical definition - An individual, group, organisation, or entity who purchases and owns (or leases, loans, or shares) in-scope e-products for use in the home, at school or work, or for recreational or personal use, and not for manufacturing or resale.	NO - Scheme costs are covered by ASFs collected by the scheme when the in-scope e-product was placed on the New Zealand market for the first time.	NO - You are not paid for disposing of in-scope e-products at a designated scheme collection service.	▶ You can dispose of in-scope e-products or e-waste through designated scheme collection services (note: you can also recycle/reuse/repair the e-product via channels outside of the scheme). ▶ It is your responsibility to manage any personal or sensitive data securely. The accredited scheme manager(s) will maintain publicly accessible information on methods to support and guide secure data deletion. ▶ Before accessing a scheme drop off point you should consider what options may be available to direct in-scope e-products in good working order, ensuring all e-products are safe and suitable, for direct reuse, or repair/refurbishment and subsequent reuse.

E-product manufacturers	Simple description - You make e-products and sell (or lease) them in Aotearoa New Zealand.
	
	Technical definition - An individual, group, organisation, or entity who:
	a. Manufactures an in-scope e-product and sells or leases it in Aotearoa New Zealand under the person's own brand, or
	b. Is the owner or licence holder of a trademark under which an in-scope e-product is sold or leased in Aotearoa New Zealand, or
	c. Manufactures in-scope e-products for use in trade by the person or the person's agent.
		YES - As a financially liable party, in-scope e-product manufacturers will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF fee that will be collected in the following financial year that the in-scope e-product was placed on the New Zealand market.	NO	▶ All e-product manufacturers will be required to:
				  a. Register with the accredited scheme manager(s)
				  b. Pay scheme fees
				  c. Report e-product POM data
				  d. Participate in independent audit processes and provide information as required, and
				  e. Align with future scheme aspects around product design for environment.
				▶ Manufacturers of leased products only - ensure all e-products returned at the end of their lease period are correctly handled in line with scheme requirements.
				▶ If you retain/regain product ownership during and/or after use cycles, you should consider, before recycling, what options may be available to direct in-scope e-products in good working order for reuse. You should ensure that all e-products are safe and suitable for direct reuse, or repair/refurbishment and subsequent reuse.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 57

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities

E-product importers	Simple description - You import e-products for sale (or lease) in Aotearoa New Zealand.
	
	Technical definition - An individual, group, organisation, or entity who, irrespective of the selling or leasing technique used, is established in the New Zealand market, and places on the market in-scope e-products from a foreign country.
		YES - As a financially liable party, in-scope e-product importers will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF that will be collected in the following financial year that the in-scope e-product was placed on the New Zealand market.	NO	► All e-product importers will be required to:
				  a. Register with the accredited scheme manager(s)
				  b. Pay scheme fees
				  c. Report e-product POM data
				  d. Participate in independent audit processes and provide information as required, and
				  e. Only import e-product brands which are participating in the regulated e-product stewardship scheme and notify in-scope e-product manufacturers not participating in the scheme of their mandatory obligations, and report scheme participation status to the accredited scheme manager(s)/scheme regulator.
				► *Importers of leased products only* - ensure all e-products returned at the end of their lease period are correctly handled in line with scheme requirements.
				► If you retain/regain product ownership during and/or after use cycles, you should consider, before recycling, what options may be available to direct in-scope e-products in good working order for reuse. You should ensure that all e-products are safe and suitable for direct reuse, or repair/refurbishment and subsequent reuse.

E-product distributors	Simple description - You distribute e-products for sale (or lease) in Aotearoa New Zealand.
	
	Technical definition - An individual, group, organisation, or entity in the supply chain, who makes in-scope e-products available on the New Zealand market.
		YES - As a financially liable party, in-scope e-product distributors will be required to pay scheme fees if they are the party responsible for placing the e-product on the New Zealand market for the first time. This fee will cover all scheme costs via an ASF that will be collected in the following financial year that the in-scope e-product is placed on the New Zealand market.	NO	► All e-product distributors will be required to:
				  a. Register with the accredited scheme manager(s)
				  b. Pay scheme fees
				  c. Report e-product POM data
				  d. Participate in independent audit processes and provide information as required
				  e. Only distribute in-scope e-product brands which are participating in the regulated e-product stewardship scheme, and
				  f. Advise scheme liable party non-participation status to the accredited scheme manager(s)/scheme regulator if identified.
				► *Distributors of leased products only* - ensure all e-products returned at the end of their lease period are correctly handled in line with scheme requirements.
				► If you retain/regain product ownership during and/or after use, you should consider, before recycling, what options may be available to donate in-scope e-products in good working order for reuse. You should ensure that all e-products are safe and suitable for direct reuse, or repair/refurbishment and subsequent reuse.

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities

E-product retailers	Simple description - You sell (or lease) e-products in Aotearoa New Zealand.
	
	Technical definition - An individual, group, organisation, or entity who:
	
	a. Sells or leases in-scope e-products directly to Aotearoa New Zealand consumers, or
	
	b. Sells or leases in-scope e-products under a separate producer's name or licenced trademark by means of distance communication directly to Aotearoa New Zealand consumers, either established in Aotearoa New Zealand or in a foreign country.
		NO - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	NO	► All e-product retailers (including online retailers) will be required to:
				
				  a. Only sell in-scope e-product brands which are participating in the regulated e-product stewardship scheme
				
				  b. Advise scheme liable party non-participation status to the accredited scheme manager(s)/scheme regulator if identified
				
				  c. If providing scheme collection services, divert customer-returned e-products received in good working order for direct reuse or repair/refurbishment, and subsequent reuse where possible
				
				  d. If providing scheme collection services, divert customer-returned e-products that are not suitable for repair or reuse to an accredited service provider for recycling, and
				
				  e. Provide point of sale information to consumers about the scheme, including its existence, how to interact with the scheme, and any repair services available for the e-product, should it malfunction after the retailer's responsibility (under the CGA) for remedying issues with the e-product has lapsed.
				
				► Brick and mortar e-product retailers will be encouraged to provide collection services for the e-products they sell in their stores.
				
				► E-product retailers contracted to provide scheme services such as in-scope e-product/e-waste collection, consolidation, and preparation for transport services will be required to meet the requirements of an e-product/e-waste collector as listed below.

E-product repairers and refurbishment providers	Simple description - You fix or modify e-products in Aotearoa New Zealand.
	
	Technical definition - An individual, group, organisation, or entity who:
	
	a. Fixes a specified fault in used, in-scope e-products that are waste and/or replaces defective components, in order to make the product a fully functional product to be used for its originally intended purpose, or
	
	b. Modifies used, in-scope e-products to increase or restore its performance and/or functionality, or to meet applicable treatment standards, with the result of making it a fully functioning product to be used for a purpose that was originally intended.
		NO - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	NO	► Independent e-product repairers/refurbishment providers receiving e-products from the scheme that have been diverted from recycling will be required to:
				
				  a. Hold all necessary permits to operate legally in Aotearoa New Zealand, as well as any export permits for e-products or e-waste sent overseas
				
				  b. Divert in-scope e-products and components that cannot be repaired, refurbished, or reused to certified recyclers formally participating in the scheme
				
				  c. Maintain verifiable records for all e-products received in line with the confirmed scheme categories and a chain of custody for in-scope e-products storing data e.g., where it has come from, what repair or refurbishment activity has been taken, and safety/quality guarantees for resale markets
				
				  d. Follow accredited scheme manager(s) procedures to book in the receiving of loads of consolidated e-products/e-waste

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY | 59

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities
	This includes activities such as cleaning and data sanitisation.			e. Report required information to the accredited scheme manager(s) f. Only send residual e-product materials to a legal landfill if no other market is available for it and/or the e-product is not able to be recycled by the scheme or reused, and g. Communicate opportunities for in-scope e-product design improvements to the accredited scheme manager(s) that will support extended e-product life cycles and increased resource recovery. ▶ Repairers/refurbishment providers operate outside of the scheme, do not receive scheme payments, and are proposed to be engaged directly be scheme collectors contracted by the accredited scheme manager(s) to divert e-products that are reusable or repairable from scheme recycling operations. However, they should have the opportunity to be "endorsed" by the scheme resulting in their services being included in scheme awareness communications. They would be required to report information about their services and data to the accredited scheme manager(s).
E-product/e-waste collectors and sorters	Simple description - You collect and sort e-products/e-waste in Aotearoa New Zealand. Technical definition - An individual, group, organisation, or entity who temporarily or permanently receives in-scope waste/used/unwanted e-products in order to sort, aggregate or transport that equipment to e-product repairers, e-product reuse organisations, storage facilities, or e-waste recyclers.	NO - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	YES - If you are contracted by the accredited scheme manager to perform scheme collection, consolidation, and/or preparation for transport services.	▶ Collectors and sorters contracted by the scheme manager to provide collection, sorting, and consolidation services will be required to: a. Maintain verifiable records on all e-products/e-waste received in line with the confirmed scheme categories and report these records to the accredited scheme manager(s) as required b. Follow accredited scheme manager(s) procedures to send consolidated e-product/e-waste loads to accredited scheme manager(s) approved recyclers and repairers/refurbishment providers c. Meet the accredited scheme manager(s) minimum requirements for collection sites d. Hold all necessary permits to operate legally in Aotearoa New Zealand e. Promote scheme access availability and maintain scheme information on company websites e.g., by promoting the scheme managers website f. Participate in audits organised by the accredited scheme manager(s), and g. Maintain health and safety protocols and procedures for in-scope e-product/e-waste collection and sorting activities meeting legal requirements.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 60

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities
E-product/e-waste transporters	Simple description - You transport e-products/e-waste in Aotearoa New Zealand. Technical definition - An individual, group, organisation, or entity, who provides in-scope e-product/e-waste transport services, for example, from e-product/e-waste collectors/sorters to e-product repairers, e-product reuse facilities, and/or e-waste recyclers, or from e-waste recyclers to downstream recyclers.	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**YES** - If you are contracted by the accredited scheme manager to perform scheme transport services.	► All e-product/e-waste transporters contracted by the accredited scheme manager(s) will be required to follow their procedures to book in the transport of loads of consolidated e-products/e-waste, report required information, and participate in audits organised by the accredited scheme manager(s).
E-waste recyclers	Simple description - You break down or recycle e-waste in Aotearoa New Zealand. Technical definition - An organisation or entity that undertakes operations by which in-scope waste/used/unwanted e-products and materials are processed for the purpose of recovering usable materials. This includes disassembling, shredding, or granulating the product into its components and materials, including (but not limited to) metals, plastic, glass, printed circuit boards, batteries and wires. Note, recycling operations in some cases can be performed by a third party, e.g., e-products or e-waste are sent offshore for processing (in accordance with Basel Convention requirements), or components are sent to a New Zealand-based recycler for processing.	**NO** - If you do not directly manufacture, import, or distribute in-scope e-products placed on the New Zealand market, you are not a financially liable party.	**YES** - If you are certified to the mandatory standard and contracted by the accredited scheme manager to perform scheme recycling services.	► All e-waste recyclers contracted by the accredited scheme manager(s) will be required to: a. Obtain and hold certification to the mandatory standard for recycling b. Hold all necessary permits to operate legally in Aotearoa New Zealand, as well as any export permits for e-products or e-waste sent overseas as per Basel Convention requirements c. Maintain verifiable records on all e-products/e-waste received in line with the confirmed scheme categories, along with material recovery rates, residual materials management, and next stage treatment pathways; these records should be reported to the accredited scheme manager(s) as required d. Follow accredited scheme manager(s) procedures to book in the receiving of loads of consolidated e-products/e-waste e. Regularly report all required information to the accredited scheme manager(s) f. Participate in audits organised by the accredited scheme manager(s), and g. Only send residual e-product/e-waste materials to a legal landfill if no other market is available for it and/or the material is not able to be recycled or reused.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 61

Stakeholder group/scheme participants	What does this mean and who does this include?	Do I have to pay the scheme fee?	Is there the potential to get paid by the scheme manager?	Roles and responsibilities
				► All e-waste recyclers are encouraged to: a. Divert all e-products received in good working order for direct reuse or repair/refurbishment and subsequent reuse where possible, and only using appropriately certified repair and refurbishment providers, and b. Communicate opportunities for in-scope e-product design improvements to the accredited scheme manager(s) that will support extended e-product life cycles and increased resource recovery.

TechCollect NZ
Report Two: Recommendations and further activities required for a regulated product stewardship scheme for electrical and electronic products in Aotearoa New Zealand

EY │ 62

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Appendix B   Ernst & Young Transmittal Letter

Michael Dudley
Senior Policy Manager
TechCollect New Zealand
Quay Street, Auckland 1010

10 May 2023

Dear Michael

We have completed our engagement to perform professional services for TechCollect New Zealand Limited (TechCollect NZ); specifically:

► Providing secretariat and project management services to organise, oversee, develop and facilitate the Circular E-stewards Network (CEN), including:

  ► Completion of a range of stakeholder engagement and other management activities, co-facilitation of working group sessions, and the delivery of a series of webinars

  ► Preparation of a Co-design Recommendations Report for a regulated e-product and e-waste stewardship scheme in New Zealand.

► Completion of a summary report, outlining the logistics of current e-waste services in New Zealand.

► Analysis of legislation and regulations relevant to e-waste and the development of a report outlining these findings.

Our engagement was performed in accordance with our Statement of Work (SOW) dated 3 September 2020 and addenda dated 9 December 2020 and 30 September 2021. Under our Agreement, our procedures were limited to those described in the SOW.

Background

In July 2020, the Associate Minister for the Environment declared e-products a priority product class under section 9 of the Waste Minimisation Act 2008 (WMA). This declaration recognised that action should be taken to minimise the environmental harm e-products and e-waste (unwanted and end-of-life e-products) can cause when disposed of improperly. It also signified that greater reduction, reuse, recycling, recovery, and treatment of e-waste can bring social, environmental, economic, and cultural benefits to our communities.

The declaration triggered a process to develop a regulated product stewardship scheme for e-products under the WMA. To support the development of regulated product stewardship schemes, the New Zealand Government published General Guidelines for Product Stewardship Schemes for Priority Products under the WMA (Guidelines). The Guidelines indicate that the expected effects of a regulated product stewardship scheme should:

► Result in a greater level of circular resource use

- ► Better share and internalise the full end-of-life costs of a priority product across manufacturers, importers, retailers, and users, reducing the impact of that waste on communities, Councils, neighbourhoods, and the environment

- ► Offer an open, transparent, and publicly accountable process to managing e-products and e-waste through the provisioning of clear information to consumers and businesses about the scheme and regular reporting of the scheme's activities and outcomes

- ► Support collaboration in co-design and the optimal use of the existing e-waste collection and processing infrastructure network in New Zealand.

The purpose of this project was to capture a broad range of stakeholders' perspectives, research, and learnt experiences from other jurisdictions, to recommend co-design options for a regulated product stewardship scheme for e-products and e-waste in Aotearoa New Zealand, in line with the Guidelines.

The project was led by TechCollect NZ, in consultation with the CEN. The CEN comprised 16 members representing industry, Māori, local government, and environmental and community perspectives. Officials from the Ministry for the Environment (MfE) in New Zealand were also involved as observers. The CEN's role was advisory in nature.

Scope of our work

TechCollect NZ engaged EY to provide secretariat and project management services in relation to the CEN (as noted above).

EY did not have "voting rights" as the secretariat and project management service provider (i.e., findings within the Co-design Recommendations Reports were factual and outlined with reference to CEN working group discussions and research and consultation activities).

Following feedback from MfE received in February 2022, further activities were completed by TechCollect NZ without EY or formal CEN involvement. These activities included, but were not limited to, amendment of the Co-design Recommendations Report to revise key elements (e.g., scheme product scoping) through additional research and co-design activities. Following completion of these activities, EY separated the report into two versions (targeted to different audience types). TechCollect NZ subsequently approved these reports, which were shared with MfE.

A summary of the project activities and stakeholder engagement, including EY's specific involvement as agreed with TechCollect NZ, is provided in the figure below:
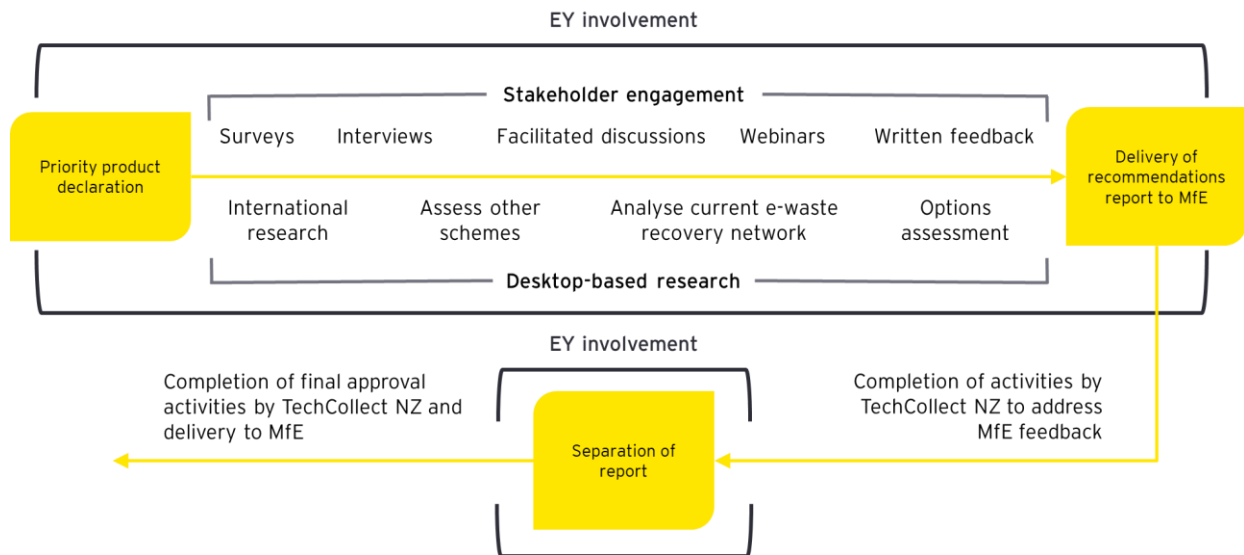
Following acceptance of the final reports by MfE, TechCollect NZ will make the Co-design Recommendations Reports publicly available. The next steps include (but not necessarily in this order):

► Consideration of regulations recommended to support the proposed scheme framing and design (by MfE)

► Application for accreditation (by product stewardship organisation (PSO))

► Assessment of the application for accreditation against WMA sections 14-15 requirements and advice given to Minister (by MfE)

► Decision on accreditation (by Minister)

► Public consultation on regulations relating to the scheme (by MfE)

► Decisions on regulations (by Cabinet)

► Implementation of the scheme (by PSO).

In relation to the above, it is noted that:

► MfE will assess applications for scheme accreditation from eligible applicants against the requirements of the WMA s14-15, which for priority products includes the expected scheme contents and effects set out in the Guidelines

► The co-design recommendations, per the accepted Co-design Recommendations Reports, will also be used to inform public consultation by MfE on regulations to support the scheme's operation.

Work products

Based on EY's procedures performed during the period 3 September 2020 to 10 May 2023, we prepared the following work product(s) for your use:

► Co-design Recommendations Reports for a regulated product stewardship scheme of E-Waste ("Co-design Recommendations Reports")

► Summary report, outlining the logistical aspects of current e-waste services in New Zealand ("Logistics Summary Report")

► Report outlining the analysis of legislation and regulations relevant to e-waste ("Legal Analysis Report").

As outlined above, management of TechCollect NZ reviewed these documents for final approval. Decisions regarding any recommendations outlined within these reports are the responsibility of MfE.

Disclaimers

TechCollect NZ management is fully and solely responsible for applying independent business judgment with respect to the services and work products provided by us, to make implementation decisions, if any, and to determine further courses of action with respect to any matters addressed in the information provided or other work product or deliverable. The nature and content of any information we provided has necessarily reflected the specific scope and limitations of our engagement and the amount and accuracy of information provided to us.

We have not performed audit or review procedures. Our engagement was not intended to be an assurance engagement, and we are unable to and do not express an opinion or make a statement about the underlying supporting data. Interpretation of the data involves the exercise of professional judgement. Accordingly, the facts, circumstances, assumptions and conclusions described in the reports may be viewed differently by others.

We appreciate the cooperation and assistance provided to us during the course of our work.

Kind regards

Pip Best
Partner, Climate Change and Sustainability Services, EY

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