

Management of waste electrical and electronic equipment in Latin America: Current situation and outlook



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PROYECTO RESIDUOS ELECTRÓNICOS
AMÉRICA LATINA-PREAL
ONUDI - FMAM



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Additional information and material related to this report are available at www.itu.int/climate. If you would like to provide any information, please get in touch with us at environmentalstandards@itu.int.

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Abbreviations and acronyms

ADAME	French Agency for Ecological Transition (French acronym)
BFR	Brominated flame retardants
CONATEL	National Telecommunications Commission of Paraguay
COP	Conference of the Parties to the Stockholm Convention
CU	Compliance unit (Costa Rica)
DCTO	Decree (Argentina)
DM	Ministerial Guideline (Costa Rica)
EEE	Electrical and Electronic Equipment
EPR	Extended Producer Responsibility
EU	European Union
GEF	Global Environment Facility
INDOTEL	Dominican Telecommunications Institute
ITU	International Telecommunication Union
MAATE	Ministry of Environment, Water, and Ecological Transition of Ecuador
MADES	Ministry of Environment and Sustainable Development of Paraguay
MARENA	Ministry of Environment and Natural Resources of Nicaragua Ministry of Environment and Natural Resources of the Dominican Republic
MARN	Ministry of Environment and Natural Resources of Guatemala Ministry of Environment and Natural Resources of El Salvador
MINAM	Ministry of Environment of Peru
MINSAL	Ministry of Health of Chile
MOOC	Massive open online courses
NTON	Mandatory Nicaraguan Technical Standard
PGI	Integral Waste Management Programme in Ecuador
POP	Persistent organic pollutant
POM	Put on the market
PREAL	E-Waste Project in Latin America
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WEEE	Waste electrical and electronic equipment

Glossary

Electrical and electronic equipment (EEE)	Equipment which is dependent on electric currents or electromagnetic fields to work properly, and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage not exceeding 1000 V for alternating current and 1500 V for direct current. (ITU-T L.1030)
Harmonized System tariff codes (HS)	International nomenclature established by the World Customs Organization, based on a classification of goods according to a six-digit code system accepted by all participating countries. These countries may establish their own subclassifications of more than six digits for tariff or other purposes. (World Trade Organization, s.f.)
Waste requiring specialised handling	Waste that, due to its composition and physicochemical or biological characteristics, requires special technical and organizational measures that differ from other waste streams. (Platform RELAC, 2011)
e-Waste (WEEE)	Electrical or electronic equipment that is waste, including all components, sub-assemblies and consumables that are part of the equipment at the time the equipment becomes waste. (ITU-T L.1031)
Extended producer responsibility (EPR)	A policy principle to promote total life cycle environmental improvements of product systems by extending the responsibility of the manufacturers of the product to various parts of the entire life cycle of the product, and especially to the take-back, recycling, and final disposal of the product. (ITU-T. L.1021)
Hazardous Waste	Waste that, due to its chemical reactivity or characteristics such as toxicity, explosiveness, corrosiveness, etc., is likely to pose a hazard to health or the environment. This includes waste that causes a hazard in combination with other waste but excludes radioactive waste. (United Nations, s.f.) (UN Environment Programme (UNEP), 1992)
Collection system ¹	It is a legally constituted operational structure comprising EEE producers, established to implement the principle of extended producer responsibility (EPR) and ensure compliance with the country's collection targets. These systems are responsible for the environmentally safe management of WEEE throughout the entire management chain and can consist of either a single producer (an individual recovery system) or a group of producers (a collective recovery system). (Sustainable Recycling Industries, 2017; ITU-T L.1021)

¹ It may adopt a different name depending on the country. For example, in Costa Rica it is known as compliance units, while in other countries in the region it is known as post-consumer systems or management systems.

Executive Summary

This document is the result of collaboration between the United Nations Industrial Development Organization (UNIDO) and the International Telecommunication Union (ITU), conducted within the framework of the PREAL Project, *“Strengthening of National Initiatives and Enhancement of Regional Cooperation for the Environmentally Sound Management of POPs in Waste of Electronic or Electrical Equipment (WEEE)”*. Financed by the Global Environment Facility (GEF) and implemented by UNIDO, the project ran from 2019 to 2024. The project's primary goal was to provide technical and financial support to 13 Latin American countries to enhance the management of WEEE. This support included developing policies and regulations, promoting environmentally sound management technologies and business models, building national capacity, and raising awareness among users of electrical and electronic equipment (EEE). The countries participating in the project were: Argentina, the Plurinational State of Bolivia, Chile, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Peru, Uruguay, and the Bolivarian Republic of Venezuela.

At the regional level, the project aimed to harmonize key policies on waste electrical and electronic equipment, strengthen regional cooperation and encourage the sharing of knowledge. It promoted policies that enable the use of materials, optimal recycling, and the creation of decent jobs. This approach contributes to protecting health and the environment, recovering raw materials, and extending the useful life of EEE in line with the principles of the circular economy and the Sustainable Development Goals

This document summarizes the progress made in WEEE management by the 13 participating countries in the form of fact sheets, focusing on key aspects of legal and regulatory frameworks and collection systems. It also presents the current situation in Brazil, Colombia and Mexico as examples of other Latin American countries that have also developed legal frameworks for the comprehensive management of WEEE and have made considerable progress in establishing management systems. For illustrative purposes, fact sheets on the current state of WEEE management in other regions of the world are also presented, taking France and Japan as examples.

Introduction

Electrical and electronic equipment (EEE) is now present in almost every area of human activity, making daily life easier and more comfortable, and improving health and safety. Technological innovations are constant and frequent, leading to this type of equipment being replaced more often. According to Juchneski and Antunes (2022), EEE manufacturers are adopting circular production chains in order to create more efficient, longer-lasting devices. However, years ago, competitive pressures and access to new markets resulted in the production of cheaper but less durable, less repairable, and less valuable devices; these devices are still in use or can be found in the inventories of waste electrical and electronic equipment (WEEE) awaiting management.

According to the Global E-Waste Monitor (Baldé *et al.*, 2024), EEE contains all the materials found on Earth, including metals, polymers and ceramics. These materials include critical metals and minerals such as copper, lithium, nickel, cobalt, manganese and rare earth elements. These resources are non-renewable, and demand for them has grown significantly due to the development of clean energy applications, according to the International Energy Agency (2025). However, the supply of these raw materials also poses risks: investment in minerals grew by only 5 per cent in 2023, compared with previous years, financing for start-ups slowed, and exploration for new deposits stagnated in 2024, leading to market concentration rather than the diversification required for security of supply (International Energy Agency, 2025).

The high consumption of EEE, technological obsolescence and shorter product lifecycles has led to an increase in WEEE generation at a rate similar to that of EEE consumption. However, the global rate of e-waste collection and recycling is not keeping pace with this increase; collection and recycling are insufficient, particularly in developing countries. According to the Global E-waste Monitor (2024), 62 million tonnes of electronic waste were generated in 2022 (an average of 7.8 kg per capita), but only 13.8 million tonnes were collected and recycled in an environmentally documented manner through official systems. 16.0 million tonnes were collected by informal systems in high- and upper-middle-income countries, while 18.0 million tonnes were processed by the informal sector in low- and lower-middle-income countries with poor management infrastructure. The remaining 14.0 million tonnes were deposited in landfills or dumps or leaked into other types of inadequate disposal sites.

The Global E-Waste Monitor (Baldé *et al.*, 2024) also indicates that at the end of 2024, only 82 countries (42%) worldwide had regulations, legislation, or rules related to the integral management of WEEE. Of the 82 countries, 67 have legally binding extended producer responsibility (EPR) schemes.

In 2022, the Americas produced 14 million kg of WEEE, equivalent to 14.1 kg per person. However, only 30 per cent of this waste was collected and recycled. Of the 36 countries analysed in this region, 12 have WEEE legislation, nine incorporate Extended Producer Responsibility (EPR), and four have collection targets for this waste. The countries with the highest WEEE generation rates on the continent were the United States (7.2 billion kg), Brazil (2.4 billion kg), and Mexico (1.5 billion kg). The United States and Aruba had the highest per capita generation rates (21 kg per person), followed by Canada and Puerto Rico (20 kg per person). (Baldé *et al.*, 2024)

Latin America faces the same challenges as the rest of the world. To address these challenges, the Electronic Waste Project in Latin America (PREAL) has set out three specific objectives to improve national WEEE management systems:

- a. Strengthen national initiatives for WEEE management.
- b. Involve WEEE dismantling facilities in the environmentally sound management and final disposal of BFR plastics (POPs).
- c. Improve regional cooperation for WEEE management.

The PREAL project promoted the adoption of the Extended Producer Responsibility (EPR) principle in the regulations of its 13 participating countries (Argentina, Bolivia, Chile, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Peru, Uruguay and Venezuela), while also seeking to harmonize key aspects of these regulations at a regional level. Significant efforts were also made to train public officials involved in WEEE management and strengthen national capacities.

Chapter 1 – Current situation of WEEE management in Latin American countries

The management of waste electrical and electronic equipment (WEEE) varies considerably across Latin America. While some countries have made significant progress in developing national WEEE management systems, others are still in the initial stages of development. To provide context for the fact sheets developed, this document explains the main elements that comprise a national WEEE management system. The document *Guidelines for Implementing National Systems for the Integral Management of Waste Electrical and Electronic Equipment (WEEE) in Latin American Countries* explores this topic in depth.

1.1 National systems for integral management of WEEE

A WEEE management system is understood to be the set of regulatory, administrative, operational and financial elements necessary to ensure that this waste is collected, transported, disassembled, re-used, treated and disposed of in an environmentally safe manner. The objective of a national WEEE management system is to minimize risks to health and the environment by encouraging the re-use of EEE and promoting the collection and recovery of parts and materials obtained from disassembly. The system also aims to treat non-recyclable hazardous fractions or components to reduce or eliminate their hazardousness, and to dispose of non-recyclable waste generated at the various stages of the recovery process safely. Figure 1 illustrates the fundamental components of a management system grounded in the concept of extended producer responsibility (EPR).

Figure 1: Outline of the basic elements that constitute an integral national WEEE management system



Source: Adapted from (Ministry of Environment and Sustainable Development of Colombia, 2023) and (United Nations University, 2018).

The situation assessment is the initial phase of a national system for WEEE management, which will enable the scale of the problem in the country to be gauged in terms of the types and quantities of EEE placed on the market, estimates of WEEE generation, collection and treatment infrastructure, and current regulations, among other aspects. Once this information is available, work can begin on developing and consolidating the elements presented in Figure 1.

To develop and consolidate a national management system, it is crucial to establish public policies and legislative frameworks that enshrine EPR as a guiding principle. These frameworks must have clear objectives and incorporate key definitions to ensure a shared understanding among stakeholders. They must also explicitly state which categories of EEE and WEEE the legislation applies. Incorporating the relevant stakeholders, their roles and their responsibilities into the legislation is essential for the successful implementation of EPR. Although the specific key actors and their roles and responsibilities vary by country, they must be clearly defined in the legislation United Nations University, 2018. Figure 2 presents a list of key players, drawn from the experience of countries participating in the PREAL Project.

Figure 2: Key players in national WEEE management systems, based on the experience of countries participating in the PREAL Project



Source: Own elaboration (2025)

A key element to be designed is the collection system, which must be efficient and must cover all the stages of management shown in Figure 3. A collection system is a legally constituted operational structure that enables EPR to be implemented, thereby ensuring the environmentally safe collection and management of WEEE throughout the management chain. The legal framework must cover all aspects related to the formation, operation, evaluation, monitoring and control of the system. (Ministry of Environment and Sustainable Development of Colombia, 2023)

Figure 3: Operational stages for WEEE management



Source: (United Nations University, 2018)

Consumers are directly responsible for preventing and reducing waste, as well as for managing waste flows properly within the national WEEE management system. In this context, it is essential to implement communication and awareness-raising strategies that promote informed and responsible consumption, as well as the proper management of WEEE.

Another element of the management system is traceability information. In order to monitor and trace WEEE flows, it is essential to have information that allows for this, so countries must develop a system that enables the collection of such information.

National regulatory bodies must monitor and control the management system to assess the effectiveness of the proposed measures, make decisions to refine the system based on continuous improvement, and audit the activities of collection systems and management companies, among other things. This information is also useful for estimating performance indicators.

Based on this, files were created that compile relevant information on the WEEE management systems of each of the countries participating in the PREAL project, as well as five additional reference countries: three in Latin America, one in Asia, and one in Europe.

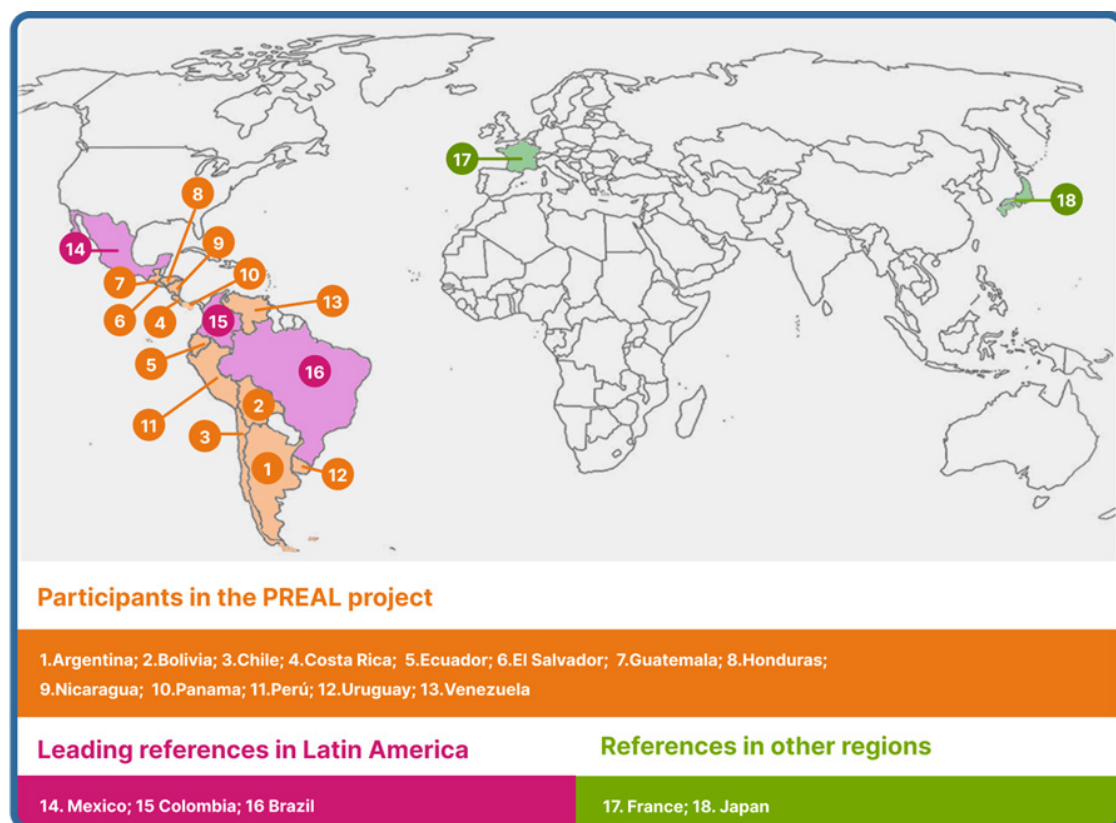
1.2 Sources of information used for data collection

Information on the countries participating in the PREAL project was obtained from reports submitted to UNIDO in 2024, and through consultations with technical staff in each country. This information was updated in August 2025. Information on the other countries was compiled by contacting key personnel from the national WEEE management entities. Additionally, the relevant legislation and bibliography, available in the Bibliography section, were reviewed. Similarly, the information contained in the fact sheets was validated with representatives from each country. The information on Guatemala and Nicaragua was reported at the end of the project in December 2024. Information on Japan was obtained from publicly available sources and the Global E-Waste Monitor 2024. (Baldé *et al.*, 2024)

1.3 Information on national management of electrical and electronic waste (WEEE): country fact sheets

The information presented below is organized into fact sheets containing the most relevant data on WEEE management in each of the countries considered. Figure 4 shows a map indicating the locations of the countries covered by this document.

Figure 4: Location of the countries covered in this document

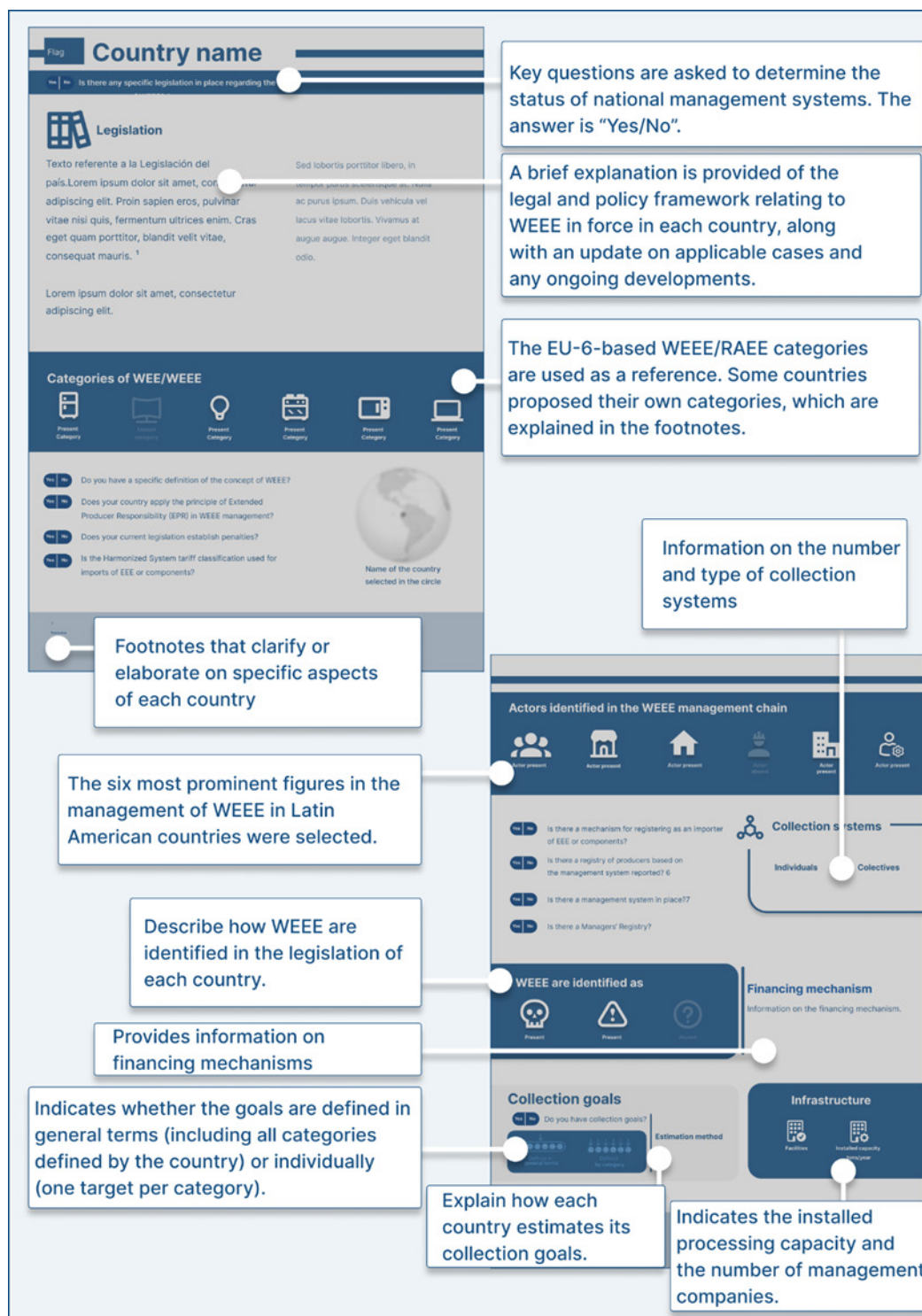


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Source: Own elaboration, 2025.

For a better understanding of the fact sheets, Figure 5 shows the content presented in each section. The fact sheets were organized into three blocks, using the colours of the map presented in Figure 4.

Figure 5: Format of the fact sheet and content of each section



Source: Own elaboration, 2025.



Argentina

☐ No

Do you have specific legislation on WEEE management?



Legislation

According to Decree 779/2022 DCTO-2022-779-APN-PTE, WEEE is considered special household waste at the national level under the Regulation of Law Nr. 25,916. It is managed by the Ministry of Environment and Sustainable Development. Several provinces, including Buenos Aires, Chaco, San Juan and the Autonomous City of Buenos Aires, have specific WEEE legislation. Other jurisdictions, such as Chubut, La Rioja and Santa Fe, have also implemented regulations and programmes for its management, despite not yet having formal legislation in place. In 2020, the Ministry of Environment and Sustainable Development published the Manual of Integral WEEE Management as part of the implementation of the PREAL project. The entity is currently developing specific WEEE management legislation that will include EPR, management categories, targets and other issues.

Categories of EEE / WEEE ¹

					
Temperature exchange devices	Monitors and screens > 100 cm ²	Lamps	Large appliances > 50 cm	Small appliances < 50 cm	ICT equipment < 50 cm

☒ Si

Do you have a specific definition of the concept of WEEE?

☐ No

Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

☐ No

Does current legislation establish penalties? ²

☒ Si

Is the Harmonized System tariff classification used for imports of EEE or components?



Argentina

1. Although there is no specific EPR for the management of WEEE, categories of WEEE have been identified in Argentina to help organise this waste management process, in line with the guidelines set out in European Directive 2012/19/EU.

2. There is no specific rule yet.





Bolivia

☒ No

Do you have specific legislation on WEEE management?



Legislation

Ministerial Resolution MMAyA Nr. 334/2024, dated April 23, 2024 is in place and aims to approve the 'General Regulations on Extended Producer Responsibility', along with its annexes, which detail the management of WEEE and the relevant legislation: Law Nr. 755 of 28 October 2015 on the integral management of waste; Supreme Decree Nr. 2954 of 19 October 2016, which regulates Law Nr. 755 on the integral management of waste; the Guide for the Disposal of Waste Electrical and Electronic Equipment in Public and Private Institutions, published by the Ministry of the Environment and Water in 2018; Bolivian Standard NB 69019 (2012), issued by IBNORCA, which establishes the requirements for the environmentally safe management of waste electrical and electronic equipment (WEEE) in Bolivia; and Ministerial Resolution MMAyA Nr. 388, which approves the Technical Standard for the Registration and Authorisation of Waste Operators.

1

Categories of EEE / WEEE


Temperature exchange devices


Monitors and screens > 100 cm²


Lamps


Large appliances > 50 cm


Small appliances < 50 cm


ICT equipment < 50 cm

☒ No

Do you have a specific definition of the concept of WEEE?

☒ No

Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

☒ No

Does current legislation establish penalties? ²

☒ Yes

Is the Harmonized System tariff classification used for imports of EEE or components?



Bolivia

1. A manual has been produced for the management of brominated flame retardants (BFRs) and a guide for the co-processing of WEEE plastics in cement kilns.

2. The general regulations on WEEE EPR is currently being developed and will establish the corresponding penalties.

3. All actors within the WEEE management framework have been identified, and their role will be established in the WEEE EPR regulations that is currently being developed. They include "collectors and recyclers" and "registered and authorised operators."

Actors identified in the WEEE management chain ³



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector



Is there a mechanism for registering as an importer of EEE or components? ⁴



Is there a register of producers by management system reported? ⁵



Is there a management system in place?



Do you have a Manager's Registry? ⁶



Collecting systems

It is under definition

WEEE are identified as



Hazardous



Special handling
required



Not specified

Financing mechanism

Pending the publication of the general regulations on WEEE EPR.

Collection goals ⁷



Do you have collection goals?

Estimation method

The general regulation on WEEE EPR is currently being developed.

Defined in
general terms

Defined
by category

Infrastructure

6
Facilities

2000
Installed capacity
tons/year

4. Management systems have not yet been defined.
It is pending the publication of the regulation on WEEE EPR, which is currently being drafted.

6. This is known preliminarily from the records kept by the Ministry of Environment and Water.

7. A regulatory proposal is also in the preliminary stage of approval and publication: Proposed regulations on the integral environmental management of waste electrical and electronic equipment (WEEE).

5. It is managed by Customs.



Chile

☒ Yes
 ☐ No
 Do you have specific legislation on WEEE management?



Legislation

In 2016, the Framework Law for Waste Management, Extended Producer Responsibility, and Recycling Promotion was enacted. This introduced the EPR scheme for six products, including WEEE. This law is administered by the Chilean Ministry of the Environment.

In May 2025, Exempt Resolution Nr. 03413/2025 was issued to establish collection and recovery targets, as well as other obligations for batteries, temperature exchange devices, photovoltaic panels, and other electrical and electronic equipment.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

☒ No
 Do you have a specific definition of the concept of WEEE? ²

☒ Yes
 Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management? ³

☒ Yes
 Does current legislation establish penalties?

☒ Yes
 Is the Harmonized System tariff classification used for imports of EEE or components?



Chile

1. The decree that will formalize the Exempt Resolution will establish other management categories for Chile, but these will group together the categories presented in the fact sheet. The aim is to show a comparison with other countries.

2. Law 20.920 establishes the EPR principle for WEEE management; however, the details of its application will be specified in the Exempt Resolution when it is published.

3. However, a specific decree is still pending for the management of WEEE.

4. Law 20.920 establishes penalties for the management of WEEE.

Actors identified in the WEEE management chain ⁵



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

☒ Yes Is there a mechanism for registering as an importer of EEE or components? ⁶

☒ Yes Is there a register of producers by management system reported? ⁷

☒ No Is there a management system in place?

☒ SI Do you have a Manager's Registry? ⁸



Collecting systems

It is under definition

WEEE are identified as ⁹



Hazardous



Special handling
required



Not specified

Financing mechanism

Management systems will be financed by producers. In the case of groups, they will do so in proportion to the weight of EEE placed on the domestic market by each producer.

Collection goals ¹⁰

☒ Yes Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

Based on the tons of waste recovered in the Management System vs. the total tons of EEE placed on the market.

Infrastructure ¹¹

11 Facilities

7000 Installed capacity
tons/year

5. The governments responsible for WEEE management at the local level are the municipalities that support management within their jurisdiction.

6. Customs handles the details of import data and the importer.

7. The Pollutant Release and Transfer Register (RETC, abbreviation in Spanish) has been implemented, which comprises the sectoral EPR system and keeps a register of producers and managers.

8. It has established the RETC system as a reporting system, where managers are registered.

9. This classification is not addressed in the REP decree; it is analyzed by MINSAL.

10. Once the Exempt Resolution decree has been published, the targets will come into effect two years after their publication and will be progressive by category.

11. Source: E-Waste LATAM 2022



Costa Rica

☒ Do you have specific legislation on WEEE management?



Legislation ¹

In May 2010, Decree No. 35993-S, Regulations for the Integral Management of Electronic Waste in Costa Rica, was issued under the authority of the Ministry of Health and with the support of the Ministry of Environment, Energy, and Telecommunications. As part of the PREAL project, the Ministry of Health, together with other state entities, drafted an updated version of the decree. The document underwent public consultation and is currently awaiting approval.

In 2016, Ministerial Directive DM-CB-8016-2016 was issued, formalizing the Technical Guide for the Integral Management of Electronic and Electrical Waste, which was also updated as part of the PREAL project.

Categories of EEE / WEEE ²



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

☒ Do you have a specific definition of the concept of WEEE?

☒ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

☒ Does current legislation establish penalties? ³

☒ Is the Harmonized System tariff classification used for imports of EEE or components?



Costa Rica

1. The regulations are currently being updated. It is currently under review by the Legal Department of the Ministry of Health.

2. As the Decree was issued in 2010, it did not yet adopt the provisions of DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT, published in 2012, so WEEE is not classified into the six categories, but rather a list of 16 types of equipment and appliances to which the EPR applies has been identified. It is expected that the categories will be modified in the update of the regulations.

3. If the provisions of the Regulations are not complied with, the penalties set out in the General Health Law will be applied as appropriate.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

SI ☒ Is there a mechanism for registering as an importer of EEE or components? ⁴

SI ☒ Is there a register of producers by management system reported? ⁵

SI ☒ Is there a management system in place?

SI ☒ Do you have a Manager's Registry?



Collecting systems

262

Individuals

18

Collectives

WEEE are identified as ⁶



Hazardous



Special handling
required



Not specified

Financing mechanism

Producers or Compliance Units shall define the appropriate mechanism for financing the WEEE management system.

Collection goals ⁷

SI ☒ Do you have collection goals?

Estimation method

Put on Market (POM)
UNU tool.



Defined in
general terms



Defined
by category

Infrastructure

133

Facilities

3614.3

Installed capacity
tons/year

4. It is managed by Customs.

5. Records are kept of compliance units (CUs), which represent established management systems, and the producers that comprise them, importers and marketers, are registered.

6. According to the applicable legislation, WEEE require special handling, even if their components or parts contain hazardous substances or compounds, which must be managed accordingly.

7. At present, the targets are voluntary and set by the producer. In the draft regulation, they have already been established as mandatory for all and defined by category.



Ecuador

SI ☒ Do you have specific legislation on WEEE management?



Legislation

The National Policy for the Management of WEEE was issued in 2013 and is currently being updated in accordance with the new environmental regulatory framework. On August 1, 2022, the Ministry of Environment, Water and Ecological Transition (MAATE) issued the Ministerial Agreement 067; Instructions for applying extended producer responsibility to the management of WEEE from domestic sources. MAATE also issued the Ministerial Agreement 097, which provides instructions for applying EPR to the integral management of waste from discarded discharge lamps and/or LED lamps. This is because mercury-containing lamps were regulated by a different regulatory instrument based on the Minamata Convention.

Categories of EEE / WEEE ¹

					
Temperature exchange devices	Monitors and screens > 100 cm ²	Lamps	Large appliances > 50 cm	Small appliances < 50 cm	ICT equipment < 50 cm

Yes ☒ Do you have a specific definition of the concept of WEEE?

Yes ☒ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

Yes ☒ Does current legislation establish penalties? ²

Yes ☒ Is the Harmonized System tariff classification used for imports of EEE or components?



Ecuador

¹. Ministerial Agreement 067 does not classify lamps within the six categories; however, they are covered by an exclusive agreement for their management and application of EPR. Ministerial Agreement 067 recognizes another category representing photovoltaic panels as another stream of waste within WEEE.

². If producers fail to submit the Integral Management Program, the authority will evaluate the appropriateness of initiating an administrative process that may result in financial penalties or even the withdrawal of the corresponding environmental permits.

³. It is managed by Customs.

⁴. From the regulatory unit of the Ministry of the Environment.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

☒ Yes Is there a mechanism for registering as an importer of EEE or components? ³

☒ Yes Is there a register of producers by management system reported? ⁴

☒ Yes Is there a management system in place?

☒ Yes Do you have a Manager's Registry?



Collecting systems

25

Individuals

3

Collectives

WEEE are identified as ⁵



Hazardous



Special handling
required



Not specified

Financing mechanism

Producers must submit to the Integral Waste Management Program (PGI) whether they outsource or internalize the financing mechanism for their management system.

Collection goals ⁶

☒ Yes Do you have collection goals?

Estimation method
Put on Market (POM)
UNU tool.

Defined in
general terms

Defined
by category

Infrastructure

13

Facilities

3000

Installed capacity
tons/year

5. They are classified in both ways: Special handling, especially during the collection, transport, and storage phases, as long as they remain unopened; and hazardous, once they have been opened from their original form/package.

6. At present, legislation sets a general target of 0.5% for the categories listed in AM 067, with the exception of cell phones, which have a target of 3%, which was established in 2013 when this was the first EPR policy issued for an electrical/electronic device.

7. Installed capacity has not increased, as most managers redirect WEEE flows to five companies specializing in disassembly, recovery, and export.



El Salvador



Do you have specific legislation on WEEE management?



Legislation

Until December 2024, the Ministry of Environment and Natural Resources (MARN) was responsible for all solid waste, including WEEE. However, the publication of the new Special Law on Waste Collection, Use, and Final Disposal changed this. This law established the National Solid Waste Authority (ANDRES, Autoridad Nacional de Residuos Sólidos), which is now responsible for the overall management of WEEE in the country. During the PREAL project, a draft regulatory framework was developed to replace the previous legislation. ANDRES is adopting this document, which will take the form of 'Special Regulations'. Having already passed all the filters required by the Regulatory Improvement Agency, it is expected to be finalised and published this year (2025).

Categories of EEE / WEEE



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm



Do you have a specific definition of the concept of WEEE?



Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management? ¹



Does current legislation establish penalties? ²



Is the Harmonized System tariff classification used for imports of EEE or components?



El Salvador

1. This concept is included in the new law and the regulatory framework that will be approved as the Special Regulations for the management of WEEE in El Salvador. For this reason, it is not yet being applied, but it is reflected throughout the regulations.

2. According to the Integral Waste Management and Recycling Promotion Act, waste managers who fail to comply with the provisions will be subject to the applicable penalties according to the severity of the violation.

3. There is a mechanism for those who import lamps and temperature exchange devices. Meanwhile, other importers do not have to register. Note: This is managed by Customs.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector



Is there a mechanism for registering as an importer of EEE or components? ³



Is there a register of producers by management system reported?



Is there a management system in place?



Do you have a Manager's Registry?



Collecting systems

It is under definition

WEEE are identified as ⁴



Hazardous



Special handling
required



Not specified

Financing mechanism

There is no specific regulations governing their establishment yet.

Collection goals ⁵



Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

Put on Market (POM) UNU tool. Information from the Central Reserve Bank and Customs is used.

Infrastructure



3
Facilities



400
Installed capacity
tons/year

4. WEEE are classified as special handling waste (RME, Residuos de Manejo Especial), characterised by its large volume, difficult handling, size and composition, and therefore require management that differs from the conventional methods used in municipal collection services.

5. The proposed special regulations will set out the goals. Currently, they are not being enforced as they have not yet been approved.



Guatemala



Do you have specific legislation on WEEE management?



Legislation

The Ministry of Environment and Natural Resources (MARN) drafted a proposal for mandatory regulation throughout the country.

These regulations apply to all individuals and legal entities, in both the public and private sectors, that own, use, or manage the disposal of EEE.

This includes companies involved in any stage of reverse production process for this waste.

The proposed regulations promotes the EPR principle in WEEE management, focusing on producers and the creation of management systems. It defines requirements and responsibilities for producers, managers, and end users.

Categories of EEE / WEEE ¹

					
Temperature exchange devices	Monitors and screens > 100 cm ²	Lamps	Large appliances > 50 cm	Small appliances < 50 cm	ICT equipment < 50 cm



Do you have a specific definition of the concept of WEEE?



Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?



Does current legislation establish penalties? ²



Is the Harmonized System tariff classification used for imports of EEE or components?



Guatemala

1. Although the categories were used to manage WEEE during the implementation of PREAL, they will be officially presented once the specific Regulation on WEEE EPR is published.

2. These penalties are pending the publication of specific regulations.

Actors identified in the WEEE management chain ³



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector



Is there a mechanism for registering as an importer of EEE or components? ⁴



Is there a register of producers by management system reported?



Is there a management system in place?



Do you have a Manager's Registry?



Collecting systems

It is under definition

WEEE are identified as ⁵



Hazardous



Special handling
required



Not specified

Financing mechanism

Pending publication of specific regulations.

Collection goals



Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

It has not been
defined yet

Infrastructure

2

Facilities

1000

Installed capacity
tons/year

3. All stakeholders within WEEE management have been identified, and their role will be established in the WEEE EPR regulations that is currently being developed.

4. It is managed by Customs

5. WEEE are classified as special handling waste (RME, Residuos de Manejo Especial), due to large volume, difficult handling, size and composition, and therefore require management that differs from the conventional methods used in municipal collection services.



Honduras



Do you have specific legislation on WEEE management?



Legislation

Work is currently underway on a nationwide proposal with a scope aimed at individuals and legal entities involved in the production and management of EEE, both in the public and private sectors, as well as those who generate and manage WEEE. The proposal provides for differentiated collection, treatment, and final disposal procedures, in order to facilitate recovery and ensure efficient final treatment of this waste. The proposed regulations covers EPR, including post-consumer waste, and considers the entire product lifecycle. The regulations establishes that manufacturers, importers, or brand owners must cover the full cost of waste management associated with their products. Specific responsibilities are assigned to distributors, marketers, and managers, who must submit a management plan incorporating new collection and recycling capacities.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm



Do you have a specific definition of the concept of WEEE?



Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?



Does current legislation establish penalties?



Is the Harmonized System tariff classification used for imports of EEE or components?



Honduras

¹ Photovoltaic panels are also considered as another category.





Nicaragua

Yes 

Do you have specific legislation on WEEE management?



Legislation

In April 2024, Nicaraguan Mandatory Technical Standard NTON 05002:2022 Environmental Management, Waste Electrical and Electronic Equipment, Waste Generators and Managers was issued to regulate the management of waste electrical and electronic equipment in Nicaragua.

This standard establishes the provisions and technical specifications aimed at protecting the environment by preventing and reducing the environmental impact of the generation and management of WEEE. It applies to WEEE generators and managers.

Categories of EEE / WEEE

 Temperature exchange devices	 Monitors and screens > 100 cm ²	 Lamps	 Large appliances > 50 cm	 Small appliances < 50 cm	 ICT equipment < 50 cm
---	--	--	--	--	---

Yes 

Do you have a specific definition of the concept of WEEE?

Yes 

Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

Yes 

Does current legislation establish penalties? ¹

Yes 

Is the Harmonized System tariff classification used for imports of EEE or components?



Nicaragua

1. Penalties will be imposed in accordance with the provisions of Law Nr. 217, General Law on the Environment and Natural Resources, published in Official Gazette Nr. 105 of 1996.





Panama

☒ No Do you have specific legislation on WEEE management?



Legislation

A draft of the specific standard for the implementation of Extended Producer Responsibility (EPR) in the management of Waste Electrical and Electronic Equipment (WEEE) is currently being prepared under the leadership of the Ministry of Health.

Participatory processes have been developed to disseminate the draft standard at an intersectoral level, involving stakeholders from the various stages of the WEEE process in Panama.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

☒ Yes Do you have a specific definition of the concept of WEEE?

☒ No Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

☒ No Does current legislation establish penalties?

☒ No Is the Harmonized System tariff classification used for imports of EEE or components?



Panama

1. It also has two additional categories (photovoltaic panels; batteries and rechargeable batteries).

Actors identified in the WEEE management chain ²



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

☒ Yes Is there a mechanism for registering as an importer of EEE or components? ³

☒ No Is there a register of producers by management system reported? ⁴

☒ No Is there a management system in place?

☒ Yes Do you have a Manager's Registry?



Collecting systems

It is under definition

WEEE are identified as



Hazardous



Special handling
required



Not specified

Financing mechanism

Pending publication of the specific
decree on the EPR for WEEE.

Collection goals

☒ No Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

It has not been
defined yet

Infrastructure



Facilities



2000
Installed capacity
tons/year

2. The specific regulation on WEEE will include all the actors listed in this document, including the Central Government or Government Institutions.

3. It is managed by Customs

4. Pending the publication of the specific decree for EPR of WEEE, which will subsequently enable the development of this registry.



☒ Do you have specific legislation on WEEE management?



Legislation

In November 2019, the Peruvian Ministry of the Environment (MINAM) enacted Supreme Decree Nr. 009-2019-MINAM, establishing the Special Regime for the Management and Handling of Waste Electrical and Electronic Equipment (WEEE), setting out Extended Producer Responsibility (EPR) and collection goals for certain categories of WEEE. Additionally, Decree Nr. 035-2021-MINAM establishes collection targets for other categories of EEE. Furthermore, Board Resolution Nr. 00013-2021-OEFA/CD sets out penalties and administrative offences for those who fail to comply with WEEE management obligations. Directorial Resolution Nr. 008-2021-EF/54.01 establishes procedures for managing WEEE belonging to state-owned movable property. A new regulation is being drafted to replace Supreme Decree Nr. 009-2019-MINAM.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

- ☒ Do you have a specific definition of the concept of WEEE?
- ☒ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?
- ☒ Does current legislation establish penalties? ²
- ☒ Is the Harmonized System tariff classification used for imports of EEE or components?



Peru

¹ Peru based its classification on the categories initially listed by the European Union in 2012, covering a total of 11 categories, including photovoltaic panels. However, the new EU classification into six categories brings together all the categories listed into more closely related groups.

² The classification of infractions and the scale of penalties approved by the Environmental Oversight Agency (OEFA), which is applicable to other Environmental Oversight Entities, is in accordance with the provisions of the National Environmental Assessment and Oversight System Act.

Actors identified in the WEEE management chain ³



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector



Is there a mechanism for registering as an importer of EEE or components?



Is there a register of producers by management system reported?



Is there a management system in place?



Do you have a Manager's Registry?



Collecting systems

45

Individuals

20

Collectives

WEEE are identified as ⁴



Hazardous



Special handling
required



Not specified

Financing mechanism

Producers must submit the Waste Electrical and Electronic Equipment Management Plan, as applicable, indicating the budget and financing method for its implementation.

Collection goals ⁵



Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

The baseline is the annual average weight of EEEE manufactured or imported into the country over the last three years, with a correction factor of 10% less per package applied.

Infrastructure

11

Facilities

+30 000

Installed capacity
tons/year

3. National government entities such as MINAM, SENACE, and OEFA are part of the management process. Most importantly, so are the waste generators.

4. The Supreme Decree establishes a special regime for the management and handling of WEEE, which are considered special waste given that it contains hazardous components that must be treated according to the relevant protocols, as well as highly valuable non-hazardous components that can be reincorporated into other production or manufacturing processes.

5. Although 11 categories have been identified in Peru, targets have only been set for six of them; the remaining categories have voluntary goals.

**Uruguay**

Yes 

Do you have specific legislation on WEEE management?

**Legislation**

In November 2024, Uruguay's Ministry of the Environment enacted the Waste Electrical and Electronic Equipment (WEEE) Regulations.

The regulations applies to WEEE manufactured or imported in any form or under any regime in areas under the national jurisdiction, as well as to its waste.

Categories of EEE / WEEE ¹


Temperature exchange devices


Monitors and screens
> 100 cm²


Lamps


Large appliances
> 50 cm


Small appliances
< 50 cm


ICT equipment
< 50 cm

Yes 

Do you have a specific definition of the concept of WEEE?

Yes 

Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

Si 

Does current legislation establish penalties? ²

Yes 

Is the Harmonized System tariff classification used for imports of EEE or components?


Uruguay

1. The categories are grouped into nine general-purpose categories (the first six of which are listed in the box) and seven non-general-purpose categories.

2. The Ministry of the Environment shall impose penalties for non-compliance with the provisions of the regulations, in accordance with the powers conferred upon it by the relevant legislation.





Venezuela



Do you have specific legislation on WEEE management?



Legislation

In May 2024, Resolution 022 on Standards for the Integral Management of Waste Electrical and Electronic Equipment was issued, appointing the Ministry of Popular Power for Ecosocialism as the body responsible for implementation.

The standard applies to all individuals managing WEEE within the national territory. It covers the categories of WEEE listed in the annexes, except for WEEE that does not pose a hazard in accordance with current legal regulations.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm



Do you have a specific definition of the concept of WEEE?



Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?



Does current legislation establish penalties? ²



Is the Harmonized System tariff classification used for imports of EEE or components?



Venezuela

1. Although the categories listed in Resolution 022 differ from those established by the EU, they are aligned with them and include items such as laboratory equipment, certain non-ionising radiation medical devices, batteries and rechargeable batteries.

2. The standard clearly states that any party involved in the WEEE management system which fails to comply with the instructions will be subject to administrative, civil or criminal penalties. These penalties are primarily governed by the Hazardous Substances, Materials and Waste Law, and the Environmental Criminal Law, both of which predate the WEEE Regulation.





Brazil

Yes ☒ Do you have specific legislation on WEEE management?



Legislation

Decree Nr. 10,240, issued on February 12, 2020, regulates the implementation of the mandatory reverse logistics system for household electronic appliances and their components.

Current legislation establishes the actors and responsibilities of each party to ensure the proper management of WEEE, setting out the reverse logistics system and the principle of Shared Responsibility throughout the product life cycle.

Starting in 2025, the importation of waste will be regulated, including waste from which strategic and critical minerals can be recovered, according to Law Nr. 15,088 and Decree Nr. 12,451.

Categories of EEE / WEEE ¹

					
Temperature exchange devices	Monitors and screens > 100 cm ²	Lamps	Large appliances > 50 cm	Small appliances < 50 cm	ICT equipment < 50 cm

Yes ☒ Do you have a specific definition of the concept of WEEE?

Yes ☒ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management? ²

Yes ☒ Does current legislation establish penalties? ³

Yes ☒ Is the Harmonized System tariff classification used for imports of EEE or components?



Brazil

1. Decree No. 10.240 does not define categories of WEEE; instead, it provides a list of 215 specific electronic products subject to reverse logistics requirements. This list is dynamic and may be updated as needed. Lamps are excluded from this decree, as they are governed by a separate reverse logistics system.

2. The theoretical principle is EPR, but it is defined as shared responsibility among manufacturers, importers, distributors, and retailers of EEE.

3. According to the provisions of Decree 10.240, in the event of non-compliance with the decree, the offender shall be subject to the applicable administrative, civil, and criminal penalties.

4. An import declaration must be made to the competent authority as a requirement for obtaining an EEE import license.





Colombia

Yes ☒ Do you have specific legislation on WEEE management?



Legislation

In 2010, Colombia introduced the first regulations concerning the selective collection and environmental management systems for waste batteries and accumulators, fluorescent light bulbs, and computers and peripherals, which came into effect in 2012. In 2013, the Congress of the Republic enacted Law 1672, establishing the general framework for applying EPR to the integral management of all WEEE generated in the country. The national government, led by the Ministry of Environment and Sustainable Development, has developed this law and established regulations through Decree 284 of 2018 and Resolution 851 of 2022, establishing the obligations of producers, marketers, users of EEE, and WEEE managers, and regulating the operation of WEEE collection and management systems. Additionally, the National Policy for the Integral Management of WEEE was enacted in 2017, defining the actions to be taken until 2032 to prevent and minimize generation, promote integral management, and encourage the environmentally safe and economically viable use of WEEE.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

Yes ☒ Do you have a specific definition of the concept of WEEE?

Yes ☒ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management? ²

Yes ☒ Does current legislation establish penalties? ³

Yes ☒ Is the Harmonized System tariff classification used for imports of EEE or components?



Colombia

1. Resolution 851 of 2022 established the list of EEE and related waste classified into 3 categories and 33 subcategories.

2. It was established as a guiding policy principle and adopted as a legal instrument through Law 1672 of 2013.

3. Decree 284 of 2018 established the penalty regime for non-compliance with Law 1672 of 2013, based on Law 1333 of 2009, which establishes the environmental penalty procedure and other norms.

4. Law 1672 of 2013 established the Registry of EEE producers and marketers, which was implemented and regulated by Resolution 480 of 2020 issued by the Ministry of Commerce, Industry, and Tourism.

5. Law 1672 of 2013 established a registry of WEEE managers, which has been initially implemented together with hazardous waste managers by IDEAM to report on licensed facilities, their location, and WEEE authorized to be managed.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

- ☒ Yes Is there a mechanism for registering as an importer of EEE or components? ⁴
- ☒ Yes Is there a register of producers by management system reported?
- ☒ Yes Is there a management system in place?
- ☒ Yes Do you have a Manager's Registry? ⁵



Collecting systems

49

Individuals

15

Collectives

WEEE are identified as ⁶



Hazardous



Special handling
required



Not specified

Financing mechanism

Through the EPR, producers internalize the costs of collection, management, and overall operation of the system.

Collection goals ⁷

- ☒ Yes Do you have collection goals?

Defined in
general terms

Defined
by category

Estimation method ⁸
Varying

Infrastructure

96

Facilities

100.000

Installed capacity
tons/year

<http://rua-respel.ideam.gov.co/respelpr2009/mapa.php>

6. Under Law 1672/2013, WEEE must be handled separately and cannot be disposed of with ordinary solid waste. WEEE containing hazardous substances must be treated as hazardous waste.

7. Minimum annual collection and management goals were established for mass-market WEEE (17 subcategories). The performance of the collection systems is monitored and evaluated using a set of indicators, one of which is collection and management, which accounts for 60% of the total.

8. The calculation is based on the average amount of the EEE placed on the market in the three years prior to the year in which the obligation came into effect. The collection percentage was established for three groups of EEE according to their lifetime (short, medium, and long), applying the Weibull probability distribution with the percentage gradually reaching 65% after 10, 15, and 21 years, respectively.



Mexico

☒ No

Do you have specific legislation on WEEE management?



Legislation

The Mexican General Law for the Prevention and Comprehensive Management of Waste (LGPGIR) classifies special waste requiring specific management (RAE) in Article 19 and refers to specific technical standards. In the case of WEEE, it may be considered hazardous waste (HW) or special handling waste (SHW) depending on its components and specific characteristics. If it is classified as HW, the applicable standard for its regulation is NOM-052-SEMARNAT-2005. If it is considered Special Handling Waste, the applicable standard is NOM-161-SEMARNAT-2011, which establishes the criteria for classifying SHW and determining which waste is subject to a Handling Plan, the list of SHW, and the procedure for inclusion or exclusion from the list.

Categories of EEE / WEEE ¹



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

☒ No

Do you have a specific definition of the concept of WEEE? ²

☒ No

Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management? ³

☒ Yes

Does current legislation establish penalties?

☒ Yes

Is the Harmonized System tariff classification used for imports of EEE or components?



Mexico

1. Article 19 of the LGPGIR (in Section VIII) classifies certain types of WEEE, which are categorised in NOM-161-SEMARNAT-2011. However, SEMARNAT established a baseline inventory with the support of UNDP, which corresponds to the categories shown in the box on this fact sheet (except lamps) and is what is considered in this information.

2. Currently, there is no specific definition for WEEE. However, both the LGPGIR and the NOM-161-SEMARNAT-2011 include WEEE within the definition of "special handling waste", which is described as "products that are discarded at the end of their lifetime".

3. However, the EPR principle can be implemented according to the relevant state. For example, Mexico City has implemented it.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector



Is there a mechanism for registering as an importer of EEE or components? ⁴



Is there a register of producers by management system reported? ⁵



Is there a management system in place?



Do you have a Manager's Registry?



Collecting systems

It is under definition⁶

WEEE are identified as



Hazardous



Special handling
required



Not specified

Financing mechanism

Currently, there is no established any financing mechanism.

Collection goals



Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

There are no collection goals at the national level.

Infrastructure

26

Facilities

52600

Installed capacity
tons/year

4. It is managed by the Tax Administration Service (SAT) through registration in national records and a permit granted by the Ministry of Economy (SE). Finally, the next step will be the customs clearance process (CUSTOMS).

5. Producers are required to register their "special handling waste" plans with the Environmental Secretariat of the relevant federal entity. However, there is no public registry consolidating information on producers according to their management system (individual or collective) to which they belong.

6. While there are no national regulations defining collection systems, each state establishes collection systems through state government programs, collection points, retail take-back programs, and other similar initiatives.

7. Information was taken from the Global E-waste Monitor.



Yes ✓ Do you have specific legislation on WEEE management? ¹



Legislation

In August 2014, Decree No. 2014-928 incorporated the European Directive 2012/19/EU into French legislation. This decree covers the management of waste electrical and electronic equipment (WEEE) and used electrical and electronic equipment. The French Ministry for the Ecological Transition (ADEME) is responsible for overseeing the system's overall management.

France also has the following regulatory instruments: Provisions on the application of conditions and obligations for distributors of used electronic equipment, and provisions on the conditions to be met by representatives, as set out in Article 10 of Chapter III, Title IV, Book V of the Environmental Code. There are also provisions on the composition of electrical and electronic equipment and the disposal of waste derived therefrom.

Categories of EEE / WEEE ²



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

Yes ✓ Do you have a specific definition of the concept of WEEE? ³

Yes ✓ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

Yes ✓ Does current legislation establish penalties? ⁴

Yes ✓ Is the Harmonized System tariff classification used for imports of EEE or components?



France

1. Higher recovery and recycling/reuse targets have been set for several categories of EEE. The aim is to encourage repair and reuse, including reuse that prevents waste generation.

2. Eight categories of WEEE (since August 15, 2018).

3. As defined by the WEEE Directive.

4. Failure to meet the targets could result in France facing sanctions from the European Commission.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

Yes ✓ Is there a mechanism for registering as an importer of EEE or components? ⁵

Yes ✓ Is there a register of producers by management system reported? ⁶

Yes ✓ Is there a management system in place? ⁷

Yes ✓ Do you have a Manager's Registry?



Collecting systems

5

Individuals

3

Collectives

WEEE are identified as



Hazardous



Special handling
required



Not specified

Financing mechanism

Manufacturers and importers pay for the collection, treatment, recovery, and environmentally sound disposal of WEEE.

Collection goals

Yes ✓ Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method
Put on Market (POM)
UNU Tool

Infrastructure

9

Facilities

5100

Installed capacity
tons/year

5. According to imports.

6. Alternatively, the producer may apply to the Ministry of Ecological Transition for authorisation as an individual system..

7. The SYDEREP tool is used as part of the annual report to record all producers who have marketed an EEE product.



Japan¹

Yes ✓ Do you have specific legislation on WEEE management?



Legislation

The most relevant regulations include the following laws: the Basic Environment Law, the Basic Act on Establishing a Sound Material-Cycle Society (basic framework Law), the Home Appliance Recycling Law, and the Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment.

Current legislation states that manufacturers and importers are responsible for collecting and recycling WEEE, while consumers must sort their waste for proper disposal for proper disposal.

Categories of EEE / WEEE²



Temperature exchange devices



Monitors and screens
> 100 cm²



Lamps



Large appliances
> 50 cm



Small appliances
< 50 cm



ICT equipment
< 50 cm

Yes ✓ Do you have a specific definition of the concept of WEEE?³

Yes ✓ Does the country apply the principle of Extended Producer Responsibility (EPR) in WEEE management?

Yes ✓ Does current legislation establish penalties?⁴

Yes ✓ Is the Harmonized System tariff classification used for imports of EEE or components?



Japan

1. The information in this fact sheet was taken from the International Observatory on Electronic Waste, 2024 UNITAR, ITU (Global E-Waste Monitor).

2. Not all the appliances included on the EU list are identified in the Japanese legislation. In these cases, waste is managed in accordance with the provisions of the two main regulatory laws mentioned above.

3. The concept of "electronic waste" covers a range of electrical and electronic equipment that are discarded and subject to specific regulations for recycling or proper disposal in Japan.

4. In accordance with the provisions, financial penalties will be imposed on those who submit inaccurate or false reports on waste management within their systems or facilities. Similarly, penalties will be imposed on those who do not allow the relevant authority to inspect or monitor their WEEE management systems or facilities.

Actors identified in the WEEE management chain



Producers



Marketers



Consumers /
end users



WEEE
managers



Local
governments



Informal
sector

undefined Is there a mechanism for registering as an importer of EEE or components?

Yes ✓ Is there a register of producers by management system reported? ⁵

Yes ✓ Is there a management system in place?

Yes ✓ Do you have a Manager's Registry?



Collecting systems

2

Collectives ⁶

WEEE are identified as



Hazardous



Special handling
required



Not specified

Financing mechanism

The financing mechanism is implemented by operators/ manufacturers.

Collection goals ⁷

Yes ✓ Do you have collection goals?



Defined in
general terms



Defined
by category

Estimation method

The generation and projection of the use of equipment referred to in the two main regulatory legislation relating to WEEE have been evaluated.

Infrastructure

47

Facilities

613400

Installed capacity
tons/year

5. According to operators/ manufacturers and marketers.

6. This is derived from the Home Appliance Recycling Law (HARL) —Group A and Group B —which cover all of Japan and are adhered to by all manufacturers/importers of the four regulated appliances. Other smaller electronic waste is managed separately, usually through voluntary or municipal programs.

7. The Home Appliances Recycling Law has been setting progressive collection and management targets for each appliance identified in the relevant legislation, with the aim of recycling between 70% and 80% of the listed equipment by 2025.

1.4 Progress made by other countries in Latin America

Considerable progress is being made by Paraguay and the Dominican Republic in developing their national WEEE management systems. The following summary outlines this progress.



Paraguay

Paraguay has passed Law No. 3956/2009 on the Integrated Management of Solid Waste, as well as the related Decree No. 7391/2017. The country has also approved Resolutions 355 and 356 of 2020. However, there is still no comprehensive Extended Producer Responsibility (EPR) system in place for electronic waste to date.

The ITU supports the Ministry of Environment and Sustainable Development (MADES) and the National Telecommunications Commission (CONATEL) in developing a specific legal framework that establishes a post-consumer management system for EEE and the principle of EPR.

The *Development and Implementation of Electronic Waste Policies and Regulations for a Circular Economy* project, sponsored by the Communications, Space and Technology Commission of the Kingdom of Saudi Arabia, will be carried out between July 2023 and July 2026.

The expected impact of the project is as follows:

- Development and implementation of a national policy or regulation on WEEE, which could include amendments or supplements to existing frameworks.
- Participation of EEE producers in a session on extended producer responsibility and the polluter pays principle.
- Conceptualisation and/or implementation of three private sector institutional frameworks for sustainable e-waste management (EPR guidelines).
- Preparation of a financing report and/or institutional mechanism for the sustainable financing of e-waste management in Paraguay (financing study).



Dominican Republic

Between September 2021 and December 2022, the project "Implementation of the EPR Concept in Policies and Regulations for the Rational Management of E-Waste - Circular Economy for Electronics, Part 4" was implemented by the ITU with UNEP as a cooperating agency.

Both organizations supported the Dominican Institute of Telecommunications (INDOTEL) and the Ministry of Environment and Natural Resources (MARENA) in developing a specific regulation on e-waste management and final disposal (Decree 253-23).

In 2021, a series of national consultations were held, involving public and private stakeholders, to define the roles, duties, and responsibilities of national stakeholders involved in the WEEE management chain.

A draft WEEE regulation was developed based on the comments received during the consultations and was presented and discussed with the country's main EEE producers.

The draft regulation was finalized and validated in May 2022 during a workshop organized by INDOTEL in Santo Domingo.

Decree 253-23 was approved at the ministerial level in 2023, and the next steps include a national awareness campaign to raise consumer awareness about WEEE and the legal framework for sound WEEE management in the Dominican Republic.



Dominican Republic

Chapter 2 – Contributions of the PREAL Project to strengthening national systems for WEEE management

The PREAL Project contributed to the implementation of other essential components of WEEE management systems for integral management such as education and links with academia, training for public officials and managers, links with producers and public awareness through numerous collection and communication campaigns. Procedures, technical documents, and support tools were also developed to guide managers and competent authorities in the environmentally safe management of WEEE. Finally, capacities were built in the countries to achieve the environmentally safe management of plastics containing brominated flame retardants.

2.1 Education and Academia

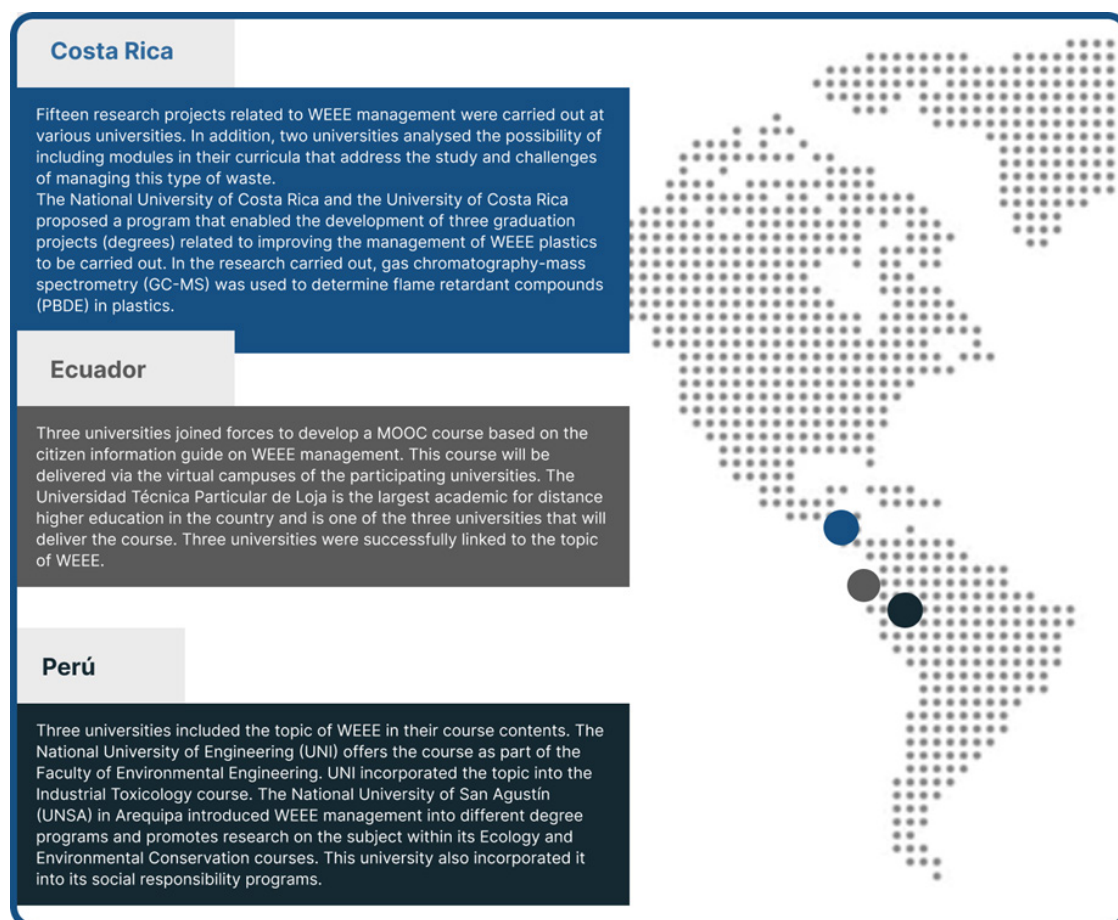


Academia plays a significant role in the development of countries, as it is the main driver of knowledge generation and the training of highly skilled professionals. Through research, the academic community contributes to innovation and scientific progress in countries and regions, so enabling progress in various areas of knowledge.

An important aspect is the collaboration between the private sector and government in building strategic alliances that promote technological, scientific, economic and social development. To ensure the environmentally safe management of WEEE in the region, technical professionals from various disciplines must be trained, and innovation and technology transfer must be enabled to generate national capacity in the recycling, recovery and treatment of WEEE, its components and hazardous fractions.

As part of the PREAL Project, each participating country established partnerships with academic institutions to incorporate integral WEEE management into university curricula and research projects. As a result, links were established with 51 universities, with notable achievements being made in Venezuela, Peru, Costa Rica and Ecuador. Figure 6 illustrates the key accomplishments in Peru, Costa Rica, and Ecuador in this area.

Figure 6: Main achievements of Costa Rica, Ecuador, and Peru related to links with Academia



Source: PREAL Project Report, 2024.

2.2 Training for public officials and managers



Public officials responsible for monitoring and follow-up must have the necessary skills for, and knowledge about, WEEE management. This includes understanding the health and environmental risks posed by the inappropriate handling of WEEE, as well as knowledge of the technical aspects of EEE and WEEE, and applicable national and international regulations. Similarly, operational staff at management companies must be trained in handling, dismantling, recovering and recycling WEEE, as well as in managing its hazardous components and fractions. This training reduces exposure to occupational hazards and optimizes waste management.

In this context, most participating countries implemented training programmes for public officials from governing bodies and operational staff from WEEE management entities. The activities focused on amendments and updates to national regulations and other related documents. Training was also provided to key stakeholders from other sectors, including officials from the Ministry of Education and university representatives. Figure 7 illustrates the training provided

to public officials and managers. As can be seen, balanced participation was achieved among those involved in WEEE management, either directly or indirectly.

Figure 7: Training for public officials and managers



Source: PREAL Project Report, 2024.

2.3 Communication and awareness-raising for specific groups of people



Effective communication is essential for integral waste management, as it increases community awareness of the importance of separating and disposing of waste correctly. Informational and educational campaigns can increase the public awareness of the environmental and economic benefits of waste recovery. Furthermore, effective communication enables coordination and collaboration between various stakeholders, including governments, businesses, and citizens, thereby encouraging their participation in waste management.

The PREAL project initially focused on training social communicators and journalists in the proper management of WEEE, and the associated environmental and health risks of inadequate handling. The project also ran awareness campaigns and events for specific target groups, including recyclers, WEEE managers, academics, and researchers. The project also collaborated with high school and university students, whose communication skills within their families were highly valued.

One example of these efforts is Chile, which developed a *Guide for Communicators and Journalists on Waste Electrical and Electronic Equipment (WEEE)* (Figure 8). This informative guide aims to provide the media with information, guidance and simple guidelines on environmental issues, particularly WEEE. The document provides communicators with content to help them disseminate information on this topic.

Figure 8: Cover of the Information Guide for Chile 2020



Source: <https://residuoselectronicosal.org/wp-content/uploads/2020/11/guia-para-comunicadores-y-periodistas-residuos-aparatos-electricos-y-electronicos.pdf>

All those participating developed awareness campaigns targeting the public and specific groups such as children. These campaigns were conducted with the support of state institutions, private companies and recyclers. Strategies included dissemination on social media, text messaging and participation in municipal events.

Figure 9: Symbol designed to identify efforts in Costa Rica related to WEEE and Bolsa de Cuido, which uses this symbol



Costa Rica is an example of a country that developed several dissemination and communication strategies to reach and integrate different groups of people. One such strategy involved designing a butterfly symbol to represent WEEE management, thereby enabling citizens to identify it. The symbol is a butterfly called *Raeelus-Ticus* (Figure 9), which is associated with Costa Rica's efforts to improve collaboration and indicators in WEEE recovery and the circular economy.

Sources: <https://www.ministeriodesalud.go.cr/>
<https://circuito-raee-1.my.canva.site/octubre-2023-nota-1>

Another strategy employed by some countries was to organize WEEE collection days. Many of these activities were supported by the country's environmental regulatory agency or the PREAL project implementer. Research centres and the academia also provided support and contributions. Collection days were held in Chile, Costa Rica, Ecuador, El Salvador, Panama, Peru and Venezuela.

2.4 Technical guides and procedures for WEEE managers

Like other regions, Latin American countries need to strengthen their capacity for the environmentally sound management of WEEE. In most countries, WEEE management has developed empirically. The PREAL Project aimed to develop or update technical guides and procedures to provide companies engaged in WEEE management with documents covering disassembly, recovery, recycling, treatment and decontamination phases.

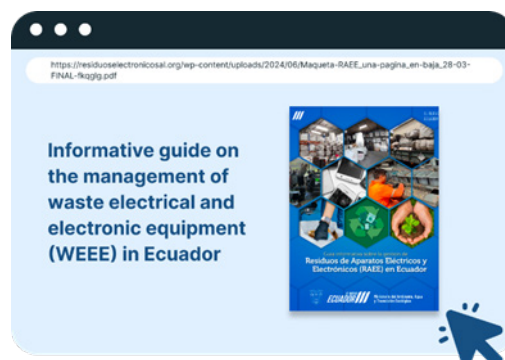


Participating countries developed or updated guides or technical procedures. Additionally, informative guidelines were developed for the public.

An example of this is Ecuador, which developed a general information guide for the Ecuadorian population (Figure 10) that can be consulted at: [Informative Guide on the Management of Waste Electrical and Electronic Equipment \(WEEE\) in Ecuador](https://residuoselectronicosal.org/wp-content/uploads/2024/06/Maqueta-RAEE_una-pagina_en-baja_28-03-FINAL-fkqglg.pdf).

A guide for managers has also been developed to outline the key principles and procedures for establishing and operating a WEEE management company, along with guidelines for handling the primary types of waste that have been categorized as a priority. The guide can be used as a reference by those already operating in this area or by those wishing to start up. It is due to be published for a general audience.

Figure 10: Cover of the Information Guide on the Management of Waste Electrical and Electronic Equipment (WEEE) in Ecuador



Source: https://residuoselectronicosal.org/wp-content/uploads/2024/06/Maqueta-RAEE_una-pagina_en-baja_28-03-FINAL-fkqglg.pdf

Peru was another country that developed several guides and guidelines identifying all actors in the value chain, including generators, producers, distributors, marketers and WEEE operators, as well as their respective roles and interactions. In Figure 11, the main published guides and their corresponding consultation link are listed.

Figure 11: Cover of the various guides produced by Peru



Source: <https://www.gob.pe/institucion/minam/colecciones/2523-proyecto-cop-raee>

- Guide for the management and handling of electronic and electrical equipment waste.
<https://www.gob.pe/institucion/minam/informes-publicaciones/1718603-4-guia>
- Guide to developing a waste electrical and electronic equipment (WEEE) management plan.
<https://www.gob.pe/institucion/minam/informes-publicaciones/1718603-4-guia>
- Technical guide for the management and handling of WEEE, Category 3: IT and Telecommunications Equipment.
<https://www.gob.pe/institucion/minam/informes-publicaciones/5973424-guia-tecnica-para-la-gestion-y-manejo-de-raee>
- Guide and management of waste electrical and electronic equipment (WEEE), Producers of electrical and electronic equipment.
<https://www.gob.pe/institucion/minam/informes-publicaciones/5945182-5-guias>
- Guide and management of waste electrical and electronic equipment (WEEE), Generation of WEEE in private entities.
<https://www.gob.pe/institucion/minam/informes-publicaciones/5945182-5-guias>
- Management and handling of waste electrical and electronic equipment - WEEE: Household generators.
<https://www.gob.pe/institucion/minam/informes-publicaciones/5945182-5-guias>

In the case of El Salvador, a technical guide for managers was developed to establish the appropriate technical guidelines for managing WEEE and developing each phase of waste management. It can be found at [Technical guide for integral management of waste electrical and electronic equipment in El Salvador](#).

A guide was also developed for generators of large-volume of WEEE, such as municipalities, educational institutions, hospitals, public institutions and private companies, among others (Figure 12). The document aims to provide these generators with technical guidelines so that they can fulfil their role in WEEE management safely, thereby preventing and reducing the actual and potential environmental impacts associated with handling WEEE.

Figure 12: Technical guide for integral management of waste electrical and electronic equipment in El Salvador



Source: <https://bibliotecaambiental.ambiente.gob.sv/documentos/guia-tecnica-para-la-gestion-integral-de-los-residuos-de-aparatos-electricos-y-electronicos-en-el-salvador-2/>

2.5 Handling of plastics containing brominated flame retardants

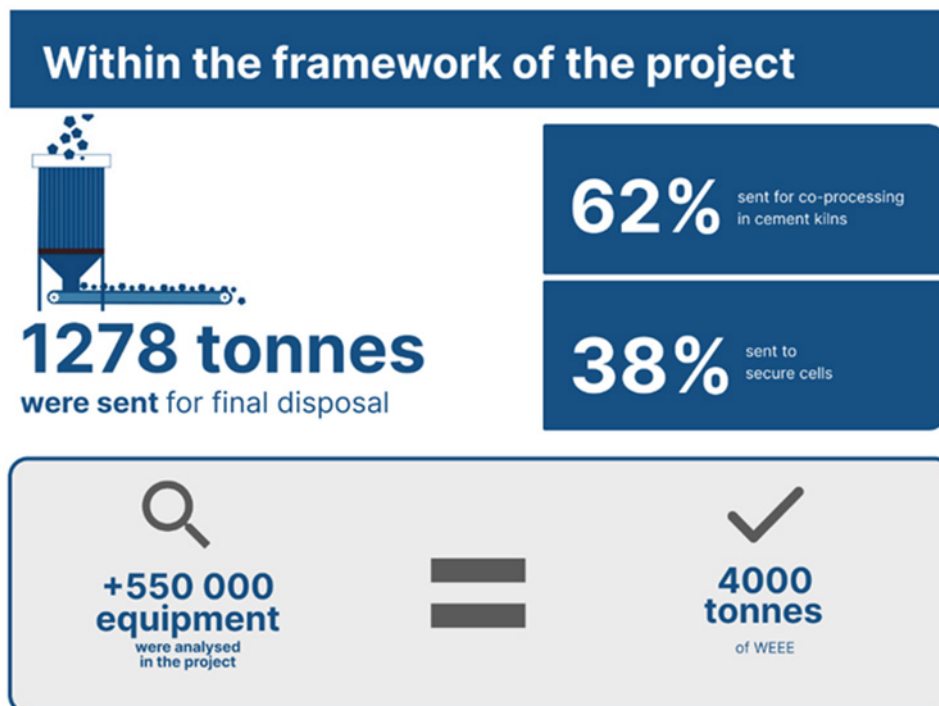


Brominated flame retardants (BFRs) are chemical compounds used to reduce the flammability of plastic materials used in electrical and electronic equipment. Some of these plastics have been identified as persistent organic pollutants by the Conference of the Parties (COP) to the Stockholm Convention on Persistent Organic Pollutants (POPs), owing to their ability to accumulate in the environment and in living organisms. If these plastics are not disposed of safely, they can release toxic substances into the environment, affecting human health and biodiversity.

These plastics are present in much electrical and electronic equipment (EEE), due to their fire-retardant properties. The environmentally safe disposal of WEEE is crucial in preventing the release of these compounds and reducing their environmental impact.

The PREAL project aimed to help countries in the region identify this type of plastic and its safely disposal. To this end, a regional technical guide was developed to cover the identification and separation of plastics containing brominated flame retardants. Priority was given to co-processing for final disposal. Figure 13 shows data on the management of plastics containing brominated flame retardants during the project period.

Figure 13: Plastic processing data within the framework of the PREAL Project



Source: PREAL Project Report, 2024.

Chapter 3 – Challenges and recommendations for improving the management of waste electrical and electronic equipment (WEEE) in Latin America

Within the framework of the PREAL project, 13 Latin American countries strengthened their legislation and public policies, making significant advances in the regulatory, technical, institutional and social aspects related to the sustainable management of WEEE. The following advances stand out in particular:

- Strengthening regulatory frameworks.
- Developing technical tools.
- Building institutional capacity.
- Promoting education and awareness.

This represents remarkable progress compared with the initial situation in 2019. The gradual adoption of the Extended Producer Responsibility (EPR) principle is one of the most significant achievements, although its implementation still faces challenges in terms of operability, enforcement and financial sustainability.

In Latin America, Brazil, Colombia and Mexico are consolidating their positions as regional leaders. Although Brazil faces challenges in terms of enforcement and national scope, it has developed a national waste policy with sectoral WEEE agreements and a growing reverse logistics system. Colombia stands out thanks to its robust legal and regulatory framework, its online WEEE traceability and monitoring system, its experienced EPR-based collection and management systems, and its well-developed management companies. Mexico has had regulations in place since 2003, and is making progress on state management plans, with a robust technical approach. These countries have served as an inspiration for the rest of the region, in terms of regulations and operational schemes.

In another context, Japan has a robust system comprising specific laws for household appliances and small devices, a clear distribution of responsibilities, and an efficient logistics system in which consumers cover the costs of the entire management system, as is the case in most countries that have implemented WEEE management. France, for its part, has a national circular economy strategy that incorporates mandatory EPR, and well-structured collective systems with high coverage, collection efficiency and WEEE traceability. Both countries systematically incorporate eco-design, data digitization, and prevention policies.

The PREAL Project encouraged Latin American countries to adopt the best practices for managing WEEE, and for raising the issue to the forefront of their national environmental agendas. However, to establish systems comparable with those in Japan or France, institutional synergies must be strengthened to increase collection rates and regulatory compliance, improve infrastructure technology to maximize the use of recoverable materials, and treat hazardous

materials. There must also be a greater focus on preventing WEEE generation and promoting policies aimed at eco-design and circular economy. Regional and international cooperation, together with continuous learning, will be essential in closing the existing gaps and moving towards sustainable WEEE management.

The project also succeeded in establishing a support network among the governing institutions of the participating countries, which has enabled the exchange of experience and information on the best available practices in each country. This network should be strengthened to continue developing regional synergies that allow these issues to be addressed jointly. The collaborative platform established through the PREAL project should also continue to organize regional and international training and awareness-raising events.

Based on this progress, the next step is to turn the accumulated experience into concrete actions. Below is a list of recommendations for Latin American countries aimed at strengthening the national WEEE management systems and moving them towards a more sustainable and circular model.

- **Policies and regulations:**
 1. Continue developing, strengthening and periodically reviewing public policies and national regulations.
 2. Promote the sustainable consumption of EEE to reduce the generation of WEEE.
 3. Promote the circular economy in the manufacture of EEE, as well as in repair and reconditioning.
 4. Control the imports of EEE with regulations such as the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS).
 5. Strengthen and implement EPR schemes, from incorporating them into national legislation to ensuring their effective implementation.
- **Technical standards:**
 1. Develop and implement national, regional, and international standards that promote the circular economy in the region.
 2. Establish national technical standards to protect health and the environment and to ensure the occupational safety of those involved in the management of WEEE at various stages.
- **Data and indicators:**
 1. Consolidate systems for collecting and systematizing data.
 2. Establish control mechanisms for EEE imports, using globally harmonized codes.
 3. Generate key performance indicators that enable the integral management of WEEE to be self-assessed.
- **Value chain**
 1. Expand the scope of national WEEE management systems to include the entire value chain: producers, distributors, marketers, consumers and end users, with clearly defined roles and responsibilities.
- **Academia:**
 1. Recognize academia as a key player in the formation of human capital, research, innovation, and development.

2. Promote the coordination of actions that strengthen the capabilities of technical and professional personnel in key actors.
 3. Promote academic participation in international platforms, bringing the perspective of countries and, in some cases, supplementing the limited personnel of governments.
 4. Increase its presence within organizations that develop international standards such as the International Telecommunication Union (ITU).
- **Communication and awareness:**
 1. Work with producers, distributors, WEEE managers, academia, local governments, NGOs and international organizations to develop awareness campaigns.
 2. Strengthen the circular and sustainable culture is necessary for responsible WEEE management.

The PREAL Project also involved several international organizations supporting specific activities such as: the Regional Centers of the Basel Convention in Argentina, Panama, and Uruguay; the International Labor Organization (ILO); the World Health Organization (WHO); the Pan American Health Organization (PAHO); the International Telecommunication Union (ITU); the United Nations Institute for Training and Research (UNITAR); the WEEE Forum; the Swiss Federal Laboratories for Materials Science and Technology (EMPA); the University of Natural Resources and Life Sciences (BOKU University); the United States Environmental Protection Agency (EPA); the United Nations University (UNU-VIE SCYCLE); and the RELAC Platform. This collaboration must continue and, indeed, expand in order to facilitate the exchange of best practices and ensure that the voices of countries in the region are heard at the international level.

Closing the existing gaps in WEEE management requires regional and international cooperation, as well as continuous learning. However, much remains to be done. As technology advances, so does the generation of EEE and, consequently, WEEE. Strengthening the foundations of WEEE management enables us to reduce our environmental footprint, so making a valuable contribution to the transition to a circular economy and the achievement of global sustainability goals.

ANNEXES

Annex 1: Specific contributions from other PREAL project partners

During the PREAL project, the implementing agency UNIDO managed to involve several organisations, including UNITAR, UNU, ILO, ITU and PAHO/WHO, in activities and initiatives that contributed to WEEE management in Latin America. The activities conducted with the different project partners are detailed below.

United Nations Institute for Training and Research (UNITAR)

In 2019, 2021, and 2022, the E-waste Academy for Managers (EWAM) was developed in collaboration with UNITAR. This event was created to disseminate knowledge and progress in WEEE management, with the collaboration of different speakers and experts in the field, providing an opportunity to expand knowledge on this type of waste. Part of this initiative can be found at:

<https://www.scycle.info/academia-de-residuos-electronicos-ewam/>

In addition, the E-waste Academy for Scientists (EWAS), an event that originated with the aim of bringing together postgraduate research and doctoral students to share with their peers and expand their knowledge on issues related to the environmentally sound management of WEEE, was developed in 2022. Information about this event is available at: <https://unitar.org/about/news-stories/featuredarticles/2022-e-waste-academy-scientist-edition-ewas>

Furthermore, the first WEEE Monitor (E-waste monitor) for Latin America was conducted, for the countries participating in the PREAL Project, which reported on the current situation of WEEE management in the participating countries. The published document can be consulted at: <https://ewastemonitor.info/regional-e-waste-monitor-for-latin-america-2022/>

International Labor Organization (ILO)

Two pilot projects were developed with the ILO in Argentina and Peru, addressing two relevant issues: the first project on the inclusion of decent work in WEEE management and the second one on the study of the value chain with a focus on working conditions, health, and occupational safety. The information can be found at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_dialogue/@sector/documents/publication/wcms_673666.pdf and <https://www.ilo.org/es/publications/investigacion-accion-para-el-desarrollo-de-la-cadena-de-valor-de-los>

Pan American Health Organization (PAHO) and World Health Organization (WHO)

Pilot studies were conducted with PAHO/WHO to improve the management of WEEE with a particular focus on health protection in Bolivia and Panama. More information is available at: https://www.who.int/es/publications/i/item/ewaste_latinamerica and <https://www.paho.org/es/noticias/29-10-2021-mujeres-ninos-que-trabajan-reciclaje-informal-basura-electronica-bolivia-estan>

A virtual course entitled “Exposure to electronic waste and children’s health” was also developed and is available at: https://campus.paho.org/es/curso/basureros-digitales_saludInfantil-RAEE

International Telecommunication Union (ITU)

As part of the PREAL project, the ITU collaborated with Argentina and Costa Rica in implementing its recommendations Recommendation ITU-T L.1031 “Guideline on implementing the e-waste reduction target of the Connect 2030 Agenda” and Recommendation ITU-T L.1032 “Guidelines and certification schemes for e-waste recyclers”, that enable progress in the sustainable management of waste electrical and electronic equipment (WEEE), promoting the circular economy in Latin America. The Costa Rica use case is available at: <https://www.itu.int/en/publications/Documents/tsb/2021-Economia-Circular-Costa-Rica/index.html#p=1>

And the Argentina use case is available at: https://bcrc-argentina.net.ar/wp-content/uploads/2024/03/2400117_Circular-Economy-Argentina-S_compressed.pdf .

Regional Platform for Electronic Waste in Latin America and the Caribbean (RELAC)

With the support of RELAC, a digital platform was maintained during the implementation of the project that allowed for the exchange of information, becoming a source of reference and consolidating the information generated at the national level by each participating country, as well as relevant information at the global level.

Annex 2: Links of interest for the products mentioned in the text



Argentina

- **Office of the President, Legislation, and Official Notices**

<https://www.boletinoficial.gob.ar/detalleAviso/primera/276572/20221128>

- **Manual for integral management of WEEE:**

<https://www.argentina.gob.ar/interior/ambiente/control/manual-raee>

- **Technical guide for the management of plastics from WEEE:**

https://bcrc-argentina.net.ar/wp-content/uploads/2025/03/2025-Guia_plasticos_RAEE_final2-1.pdf



Bolivia

- **Law Nr 755 and Supreme Decree 2954, on Integral Management of Waste:**

[http://www.gacetaoficialdebolivia.gob.bo/normas/
buscar/2954#:~:text=El%20Decreto%20Supremo%202954%20fue%20publicado%20en,forma%20parte%20integrante%20del%20decreto%20en%20Anexo.](http://www.gacetaoficialdebolivia.gob.bo/normas/buscar/2954#:~:text=El%20Decreto%20Supremo%202954%20fue%20publicado%20en,forma%20parte%20integrante%20del%20decreto%20en%20Anexo.)

- **IBNORCA (2012) Bolivian Standard (NB) 69019, measures for the environmentally safe management of waste electrical and electronic equipment (WEEE):**

<https://www.ibnorca.org/tienda/catalogo/detalle-norma/nb-69019:2012-nid=2779-6#:~:text=Alcance,la%20salud%20y%20el%20ambiente.>

- **General Regulations on Extended Producer Responsibility – RM 334/2024:**

<https://www.mmaya.gob.bo/marco-legal/resoluciones-ministeriales/>



Brazil

- **Decree 10.240 on reverse logistics for EEE:**

<https://www2.camara.leg.br/legin/fed/decret/2020/decreto-10240-12-fevereiro-2020-789763-normaatuizada-pe.pdf>

- **Law 15.088 that modifies Law No. 12.305 on Solid Waste:**

<https://www2.camara.leg.br/legin/fed/lei/2025/lei-15088-6-janeiro-2025-796854-publicacaooriginal-174014-pl.html>

- **Decree 12,451 on the regulation of exceptions to the prohibition on the importation of solid waste:**

https://www.planalto.gov.br/ccivil_03/_Ato2023-2026/2025/Decreto/D12451.htm [JP1]



Chile

- **Framework Law 20.920 on waste management (WEEE):**

<https://economiacircular.mma.gob.cl/ley-rep/>

- **Exempt Resolution 03413/2025 on collection and recovery targets and other obligations associated with batteries, rechargeable batteries, and EEE:**

https://economiacircular.mma.gob.cl/wp-content/uploads/2025/06/Res.-Ex.-3413_2025_Aprueba-Ppta-Decreto-Metas-Pilas-y-Aparatos-Elctricos-y-Electronicos.pdf



Colombia

- **Exempt Resolution 03413/2025 on collection and recovery targets and other obligations associated with batteries, rechargeable batteries, and EEE:**

<https://www.minambiente.gov.co/wp-content/uploads/2021/06/ley-1672-2013.pdf>

- **National Policy for Integral Management of WEEE:**

https://www.minambiente.gov.co/wp-content/uploads/2021/10/Politica_RAEE.pdf

- **Colombian Technical Guide for Integral Management of WEEE:**

<https://quimicos.minambiente.gov.co/wp-content/uploads/2024/07/Guia-tecnica-para-la-gestion-integral-de-los-RAEE-2023-MinAmbiente-comprimida.pdf>



Costa Rica

- **Regulation for the Integral Management of Electronic Waste Nr. 35933-S:**

https://pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=67850&nValor3=80550&strTipM=TC

- **Technical Guide for the Integral Management of WEEE:**

<https://www.ministeriodesalud.go.cr/index.php/biblioteca-de-archivos-left/documentos-ministerio-de-salud/ministerio-de-salud/legislacion-sanitaria/gestion-integral-de-residuos/6079-guia-tecnica-para-la-gestion-integral-de-residuos-electronicos-y-electricos/file>



- <https://sustanciasyresiduos.ambiente.gob.ec/producto/acuerdo-ministerial-maate-2022-067/>

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- <https://rcc.marn.qob.sv/handle/123456789/195>



Mexico

- **General law for the prevention and integral management of waste:**

<https://www.diputados.gob.mx/LeyesBiblio/pdf/LGPGIR.pdf>



Nicaragua

- **NTON 05002:2022: Mandatory Technical Standard for the Management of Waste Electrical and Electronic Equipment (WEEE):**

[http://legislacion.asamblea.gob.ni/Normaweb.nsf/\(All\)/525394A99E8D36F706258AFD006C1FD9?OpenDocument](http://legislacion.asamblea.gob.ni/Normaweb.nsf/(All)/525394A99E8D36F706258AFD006C1FD9?OpenDocument)



Peru

- **Supreme Decree 009-2019, Special Regime for the Management and Handling of Waste Electrical and Electronic Equipment:**

<https://www.gob.pe/institucion/minsa/normas-legales/275925-009-2019-sa>

- **Supplementary Provisions to Supreme Decree Nr. 009-2019-MINAM, EEE collection targets, and other provisions:**

<https://www.gob.pe/institucion/minam/normas-legales/2399619-035-2021-minam>

- **Directorate Resolution Nr. 008-2021-EF/54.01, procedures for the management of state assets, including WEEE:**

<https://www.gob.pe/institucion/mef/normas-legales/1923817-0008-2021-ef-54-01>

- **Technical guide for the management and handling of WEEE:**

<https://www.gob.pe/institucion/minam/informes-publicaciones/5973424-guia-tecnica-para-la-gestion-y-manejo-de-raee>

- **Various guides on WEEE management:**

<https://www.gob.pe/institucion/minam/colecciones/2523-proyecto-cop-raee>



European Union

- **Directive 2012/19/EU of the European Parliament and of the Council of July 4, 2012, on waste electrical and electronic equipment (WEEE):**

<https://eur-lex.europa.eu/legal-content/ES/ALL/?uri=CELEX:32012L0019>



Uruguay

- **Decree Nor. 292/024, Regulations for the Integral Management of WEEE:**

<https://www.impo.com.uy/bases/decretos-originales/292-2024>

- **Guide for the classification of Electrical and Electronic Equipment (EEE):**

<https://www.gub.uy/ministerio-ambiente/comunicacion/publicaciones/guia-para-clasificacion-aparatos-electricos-electronicos-ae>



Venezuela

- **Resolution Nr. 022, Official Gazette Nr. 42,871, that establishes the regulations for the integral and environmentally safe management of WEEE:**

<https://accesoalajusticia.org/normas-para-la-gestion-integral-de-los-residuos-de-aparatos-electricos-y-electronicos-raee/>

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