SUSTAINABLE RECYCLING INDUSTRIES

International e-Waste Management Practice

Country Factsheets from Twelve Jurisdictions

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SRI SUSTAINABLE RECYCLING INDUSTRIES

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Turning waste into resources for development

SRI builds capacity for sustainable recycling in developing countries. The programme is funded by the Swiss State Secretariat of Economic Affairs (SECO) and is implemented by the Institute for Materials Science & Technology (Empa) and the World Resources Forum (WRF). It builds on the success of implementing e-waste recycling systems together with various developing countries since more than ten years.

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Acronyms

AATF:	Approved Authorised Treatment Facility
AEHA:	Association for Electric Home Appliances
ARF:	Advanced Recycling Fee
ATF:	Authorised Treatment Facility
BATRRT:	Best Available Treatment, Recovery and Recycling Techniques
CFCs:	Chloro-Fluoro Carbons
CPCB:	Central Pollution Control Board
DCF:	Designated Collection Facility
DEFRA:	Department for Environment, Food and Rural Affairs
DETEC:	Department of Environment, Transport, Energy and Communications
EEE:	Electrical and Electronic Equipment
EPA:	Environmental Protection Agency
EPR:	Extended Producer's Responsibility
ERP:	European Recycling Platform
ESM:	Environmentally Sound Management
EU:	European Union
FOEN:	Federal Office for the Environment
ICT:	Information and Communications Technology
LWM:	Lists for the Movements of Waste
NEA:	National Environment Agency
NGO:	Non-Government Organisation
OECD:	Organization for Economic Cooperation and Development
OEM:	Original Equipment Manufacturer
ORDEEE:	Ordinance on the Return, Take-Back and Disposal of Electrical and Electronic Equipment
OWM:	Ordinance on Movements of Waste
PCB:	Printed Circuit Board
PCS:	Producer Compliance Schemes
PRO:	Producer Responsibility Organisation
SECO:	State Secretariat of Economic Affairs
SPCB:	State Pollution Control Board
SRI:	Sustainable Recycling Industries
StEP:	Solving the e-Waste Problem Initiative
RoHS:	Restriction of Hazardous Substances
TFS:	Trans-frontier Shipments of Waste Regulations
TSDF:	Treatment, Storage and Disposal Facility
UEEE:	Used Electrical and Electronic Equipment
UK:	United Kingdom
WEEE:	Waste Electrical and Electronic Equipment
WSR:	Waste Shipment Regulations

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Executive summary

This report provides a summary overview, in the form of "*E-waste Factsheets*", of the e-waste management practices and related legal systems for a total of twelve countries from around the globe. As an introduction, and to facilitate the comprehension of the information represented in the factsheets, the key concepts relating to e-waste management are explained. These include Extended Producer Responsibility (EPR), Producer Responsibility Organisation (PRO)/ Compliance Scheme, economic instruments (environmental fee/ eco-fee/ eco-levy/ advance recycling fee), the informal sector, the downstream value chain and product scope and characterisation. The legal roles and responsibilities across the e-waste management value chain is detailed, with the different stages along with the key stakeholders and their roles and responsibilities in an e-waste management system.

The e-waste factsheets have been prepared for the following list of countries:

- Switzerland
- United Kingdom of Great Britain and Northern Ireland
- France
- Japan
- China
- Singapore
- Ghana
- Germany
- India
- Ireland
- Belgium
- Australia

These countries were chosen to showcase examples of different types of e-waste management systems and mechanisms from across the world. The countries were shortlisted based on a range of criteria, which included them having existing e-waste legislation in place, while also maintaining a mix between developing and developed countries.

The review of the e-waste management systems in each of the countries was carried out through desk-based research. The review was focussed on understanding the legislation in place, their legal definition of e-waste, obligations placed on the producers, the products coming under the scope of the legislation, the collection systems, the recycling systems, the financing mechanisms, targets, the reporting systems, the standards/audits to comply with, monitoring systems, regulations with respect to transboundary movement of used EEE, and RoHS considerations.

The gathered information has been summarised in the factsheets. Each of the factsheets also have a dashboard, providing a quick and visual summary of the information to follow.

Keywords

Extended Producer Responsibility, Producer Responsibility Organisation, WEEE, e-waste legislation, e-waste management

1 Introduction

1.1 E-waste management: Key terms, concepts and definitions

This section lays out the key terms, concepts and definitions that are frequently encountered in the e-waste management system.

Extended Producer Responsibility

Extended producer's responsibility (EPR) is the main feature of the E-waste management system worldwide where the producer of electronic equipment has the responsibility of managing such equipment after its "end of life", thus the producer is responsible for their products once the consumer discards them. The EPR principle aims to shift part of the waste management responsibilities (administrative, financial and/or physical) from governments or municipalities (and thus taxpayers) to the entities that produce and sell the products that are destined to become waste. Therefore, the producer is also entrusted with the responsibility to finance and organize a system to meet the costs involved in fulfilling this responsibility. Although in EPR-based financing system, producers ensure the financing of systems, consumers might eventually pay the end-of-life costs via an increase of the product price. Most e-waste models around the world are based on the EPR concept which also motivates the producers to reduce consumption of virgin materials, undertake product design changes to reduce waste generation and ensure closure of material loops to promote resource efficiency and sustainable development.

Producer Responsibility Organisation (PRO)/ Compliance Scheme

Producers can implement EPR either individually or collectively, in which case either through a Producer Responsibility Organisation (PRO) or a Compliance Scheme. A PRO can be for profit (e.g. ERP in Europe, or not-for-profit (e.g. WEEE Forum systems). The PRO takes on the responsibility of the operational aspects such as collection, transportation, environmentally sound recycling and disposal of end-of-life products, on behalf of the producers to meet the EPR obligations. While a PRO is founded by producers collectively, a compliance scheme is similar, except that it is normally a for-profit company that is a service provider to producers.

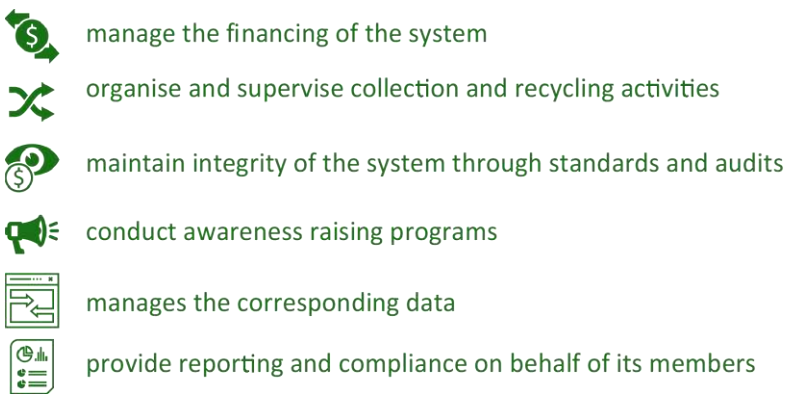

Figure 1: The main services provided by a PRO/Compliance scheme

Economic instruments

Enabling the financing of a system is often a fee that may be designated as “environmental fee”, “eco-fee”, “eco-levy”, “advance recycling fee” etc. depending on the regulation. Figure 2: Economic instruments along product life cycle shows various economic instruments at different points in the product life cycle. The OECD provides a useful criterion for evaluating economic instruments including environmental effectiveness, economic efficiency, administration and compliance costs, revenues, wider economic benefits, soft effects, and dynamic effects.[1]

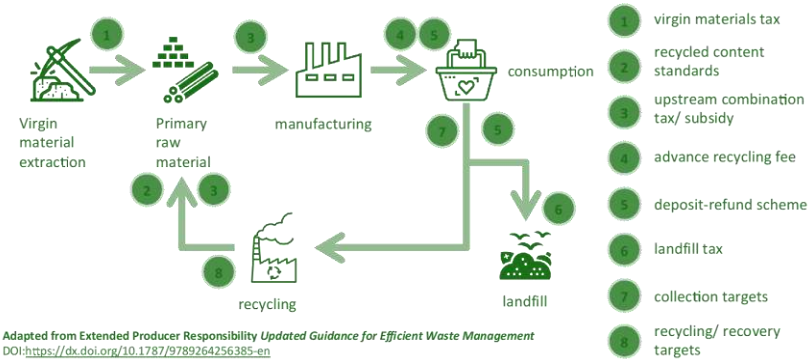

Figure 2: Economic instruments along product life cycle

Informal sector

The Guidance Principles for the Sustainable Management of Secondary Metals (ISO IWA:19, 2017) categorised informal actors as those in economic subsistence activities or unofficial economic activities. The former category includes recyclers who subsist thanks to their recycling activities, while the latter category includes those who have profitable or even lucrative businesses that deliberately evade compliance with pertinent regulations.

Downstream value chain

The WEEE downstream value chain is basically the post-consumer e-waste management value chain, and consists of stakeholders such as dealers/ retailers, collectors, dismantler, refurbishers and recycler/ material recovery operations for metal and plastics mainly.

Product scope and characterisation

The types of products included under national legal frameworks for WEEE and EPR-based regulation may be very specific, including only certain products (e.g. India, Taiwan, California) or broadly defined based on their characterisations (e.g. EU - 6 product categories as shown in Figure 3).

It is important to also clearly identify and define waste and non-waste.[2]

Figure 3: EEE/WEEE product categories, EU

1.2 Legal Roles and Responsibilities

E-waste management value chain

One of the differences between e-waste compared to other waste streams is the range of players involved in the entire value chain, particularly when considering the downstream players that are active after the first dismantling phase. The three broad stages in the e-waste value chain are:

- waste generation
- waste collection and aggregation
- treatment, recovery and disposal

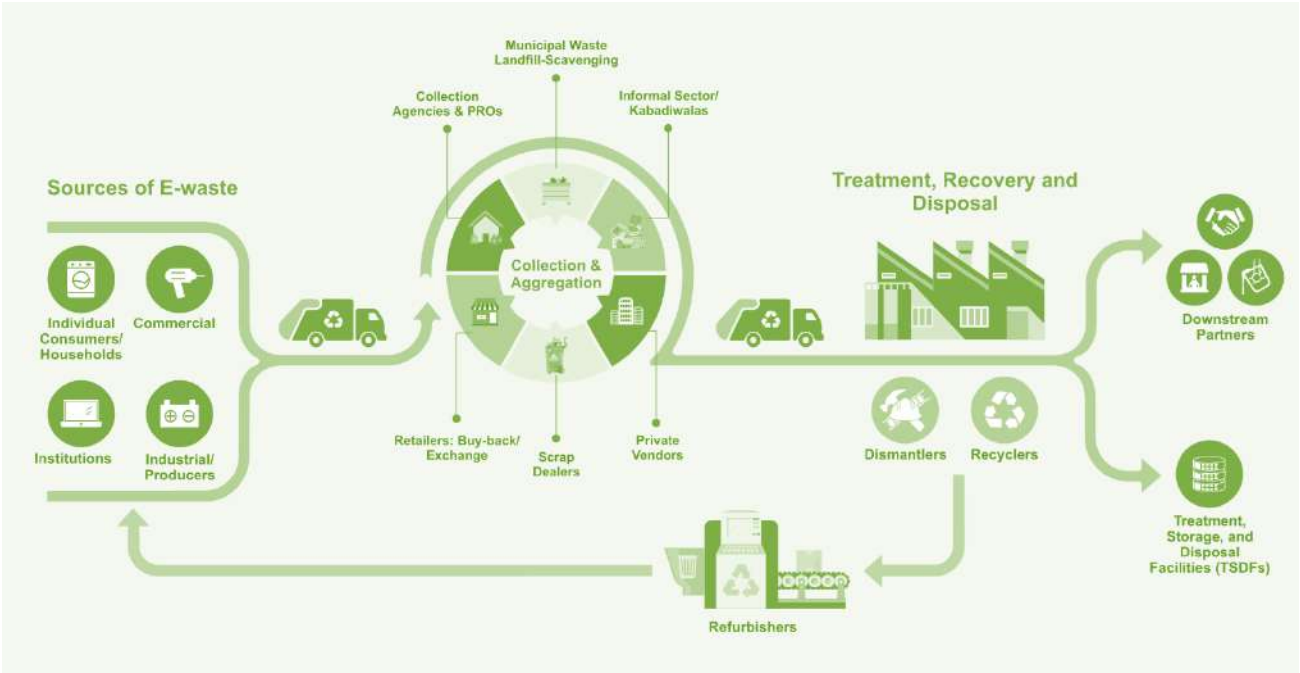

Figure 4: E-waste management value chain[3]

Key stakeholders, roles and responsibilities in an e-waste management system

The e-waste management value chain consists of a range of actors responsible for the functioning of different stages of the system. While many current e-waste regulations are built around the EPR-concept and thus focus more on the responsibilities of producers, other stakeholders such as governments, municipalities, consumers, retailers, treatment partners, etc. also have important roles to play in a successful system. These stakeholders may play slightly different roles and different capacities based on country-specific cultural, societal, economic and further conditions. The main stakeholders are[4]:

Stakeholder		Roles/Responsibilities
	Government: national and regional	Regulatory authorities lay the e-waste management regulatory framework for countries/regions. They may choose to play additional roles: in its implementation (e.g., China), or choose to use voluntary mechanisms over legislative measures (e.g., Singapore).
	Municipalities	Municipalities carry out overall waste management at the local level – including e-waste. May choose to have specific systems in place to handle e-waste.
	Producers, Manufacturers	Under EPR-based legislation, they organize, finance and operate e-waste take-back system, either individually or collectively, through PROs.
	Producer Responsibility Organisations	Operate e-waste take-back systems on behalf of producers/OEMs and ensure collected e-waste is transported to appropriate treatment centres and properly treated.
	Retailers	As the consumer touch-point for producers, retailers are often also their collection centres or take-back points. However, this varies by country and product–where they might offer take-back for some products, but not for others.
	Waste collectors and aggregators	Responsible for collection; in many Asian and African countries, this is done largely by small and medium collectors (door-to-door, municipal dumpsite), with small informal collectors dominating the collection.
	Consumers	Household and business consumers are the often considered the weakest link in the chain, as convenience is often the determining factor in their e-waste disposal behaviour - the main determining factor in the fate and route of e-waste management. Disposal behaviour is widely dependent on level of awareness and availability of infrastructure and systems to the consumers – factors that vary greatly across countries.
	E-waste processors	Material recovery, recycling or disposal; second-hand markets, scrap dealers, dismantlers, processors, recyclers and downstream partners are all responsible for proper management of e-waste - material recovery or disposal, and thus play an important role for a sound waste management.
	Recyclers	Recycling and recovery of fractions; Industrial Recyclers are often capital intensive, operating mechanized shredding and sorting or largescale material recovery facilities. The number and capacity of facilities varies by country, linked to the volume of e-waste generated, as well as the legislative landscape and the presence of an informal recycling sector. Informal Recyclers: play a dominant role in e-waste management systems, specifically in developing countries. They carry out pre-processing and first material recycling. However, at times, due to unsound treatment practices, they also contribute to the adverse effect in human health and the environment.
	Non-governmental organizations (NGOs)	NGOs, both international and local, play an important role in bringing awareness about the e-waste issue. Knowledge-transfer, stakeholder interaction, funding: To tackle the overall e-waste problem, rather than follow a one-pronged approach, international organisations have launched various programs and initiatives to encourage the various key stakeholders, particularly governments, regulators, producers and recyclers, to identify and address the gaps in e-waste management systems.

2 Country E-waste Factsheets

2.1 Introduction

The "*E-waste Factsheets*", in the following sections provide an overview of the e-waste management practices and related legal systems for a total of twelve countries from around the globe.

The e-waste factsheets have been prepared for the following list of countries:

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The gathered information has been summarised in the factsheets. Each of the factsheets also have a dashboard, providing a quick and visual summary of the information to follow.

Switzerland

Switzerland		
WEEE Dashboard **E-waste generated** 201 kt (2019)[5] 23.4 kg per capita **E-waste documented to be collected and recycled** 123 kt (2017) [6]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✗ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	Ordinance on the Return, Take-Back and Disposal of Electrical and Electronic Equipment (ORDEE)[7] Ordinance on Movements of Waste (OWM)[8]
	Legal definition of e-waste	"All electronic and electrical appliances that runs on electricity – direct or battery". Under the DETEC Ordinance on Lists for the Movements of Waste (LMW)[9], different WEEE components either fall under "hazardous or special waste marked "S" and other controlled waste marked "akb" and "ak", based on their specific properties. The different categories of WEEE are classified with a 6-digit code.
	Producer Obligations	Based on the principle of Extended Producer Responsibility (EPR). The financing of collection, utilisation and disposal is carried out by charging advanced contributions from customers when buying EEE, the so-called advanced recycling fee (ARF). The fee is included in the purchase price. Producers/importers can join a PRO that collects and manages the charges, but it is also possible to have an individual take-back system. PRO takes on the collection, take-back logistics and reporting obligations for member companies; PRO members must report volumes put-on-market based on which fees are calculated; Fixed flat fee per product – list updated annually by technical committee; PRO fixes treatment standards for recyclers and awards contracts to recyclers in a competitive process; Treatment providers/ recyclers are paid based on an index-system which ensures fairness and stability of the system.
	Product Scope	Covers all electronic and electrical appliances that runs on electricity – direct or battery.
	Collection System	Retailer and municipal collection points offer free drop-off and take-back of like-for-like. PROs have additional collection points as well (e.g. at train stations); Commercial consumers can request for paid pick-up.
	Recycling System	Swiss PROs have 9 direct contracted recycling and 83 dismantling companies (as on 31/12/2018).
	Financing Mechanism	Manufacturer and importers pay for collection, treatment, recovery and environmentally sound disposal of WEEE at the point the product is put-on-market. The ARF is similar to a pension system where the money collected

		from products sold today, pays for the products sold in the past, coming for recycling in the present. Latest ARF is published online[10] and range from lowest ARF of CHF 0.0 to highest of CHF 26.0. Most products are between CHF 0.09 to CHF 5.57. Only 10 products are over CHF 10.
	Targets	The ORDEE does not stipulate any specific collection, recycling or recovery targets for the WEEE recycler, instead allowing the industry to decide the best practices that ensure a reasonably feasible system that balances economic and environmental efficiency.
	Reporting System	Producers members report to PRO and PRO reports on behalf of all producer members to the Federal Office for the Environment (FOEN). Free-riders and non-compliant companies are actively encouraged to join PROs, provide proof of individual take-back or face penalties.
	Standards/ Audits	The PRO ensures that the contracted recyclers meet quality procedures and standards for recycling. Technical audits are conducted by external auditors to ensure greater transparency regarding quality of recycling. Technical standards set by a commission; Annual audits of recyclers by external third party, paid for by PROs.
	Monitoring System	The FOEN does overall environmental monitoring; Licensing of industrial facilities is done at the Cantonal level; Monitoring of technical processing and mass-balance is done by external audit by PRO.
	Transboundary movement of Used EEE	Export of UEEE is allowed with authorisation and follows the notification procedures of the Basel and OECD decisions. The Ordinance on the Movement of Waste classifies UEEE as “subject to control”. Differentiating between UEEE and Controlled waste may be carried out using the criteria of functionality testing published by the FOEN.
	RoHS Considerations	Importing new EEE: The restrictions on hazardous substances in EEE are identical to those specified in **Directive 2011/65/EU (RoHS2)** Exporting UEEE: UEEE may only be exported, if they do not contain any substances that are banned by the chemicals' legislation (e.g. asbestos, PCBs or mercury etc.); and are built to be operated without CFCs (FOEN).

United Kingdom of Great Britain and Northern Ireland

United Kingdom of Great Britain and Northern Ireland

WEEE Dashboard

E-waste generated
1598 kt (2019)[5]
23.9 kg per capita

E-waste documented to be collected and recycled
123 kt (2017) [11]

Legislation in force	✓
Product scope	**Full**
Targets present	✓
WEEE management principle	**EPR**
Ratified Basel Convention	✓

Legislation	The Waste Electrical and Electronic Equipment Regulations 2013 (S.I. 2013 No. 3113) from December 10, 2013 The Waste Electrical and Electronic Equipment (Amendment) Regulations 2015 from December 3, 2015
Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment which is waste within the meaning of Article 3(1) of the Waste Directive including all components, subassemblies and consumables which are part of the product at the time of discarding.[12]
Producer Obligations	Register with relevant environmental regulator (either directly if below yearly put-on-market threshold of 5 tonnes of EEE, or via producer compliance scheme). Finance the collection, treatment, recovery and environmentally sound disposal Labelling of EEE, including display of WEEE and register number within distribution chain. Reporting obligations and record keeping. Information for recyclers and treatment facilities on reuse and environmentally sound treatment of products and components.
Product Scope	Open scope, which means that any product that requires electricity to function. Previously divided into 14 categories (Large household appliances; Small household appliances; IT and telecommunications equipment; Consumer equipment; Lighting equipment; Electrical and electronic tools; Toys, leisure and sports equipment; Medical devices; Monitoring and control instruments; Automatic dispensers; Display equipment; Cooling appliances containing refrigerants; Lamps; and Photovoltaic panels).
Collection System	Designated Collection Facilities (DCFs) and Producer Compliance Schemes (PCSs) set up collection of WEEE through various channels, including civic amenity sites run by local authorities, retail collection points and direct collection (specially for non-household WEEE).
Recycling System	An authorised treatment facility (ATF) is a permitted site carrying out treatment on e-waste. Only operators of approved ATFs (AATFs) can issue evidence notes for the treatment, recovery or recycling of WEEE that takes place in the UK.
Financing Mechanism	Manufacturer and importers pay for collection, treatment, recovery and environmentally sound disposal of EEE, typically through collective compliance schemes. There are currently 14 approved producer compliance schemes in the UK.

	Targets	Originally, at the time the WEEE Directive was introduced, the collection target was based in WEEE collected per capita, and set at an initial value of 4 kg of WEEE per inhabitant per year. In the revised WEEE Directive, the basis of the target was changed, introducing a more granular approach a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. The new collection targets indicate that roughly 20 kg per capita will be collected separately from 2019 onwards. The Department for Environment, Food and Rural Affairs (Defra) has set an overall UK collection target of 550,577 tonnes for 2019.
	Reporting System	Compliance schemes report to the WEEE Register operated by the DEFRA. Reporting to WEEE collective compliance schemes depend on selected scheme and contractual agreements.
	Standards/ Audits	Producers must make a provision or accrual under rules within International Accounting Standard (IAS 37) to ensure financing the costs of collecting and treating WEEE are accounted for. It exists a code of practice for designated collection facilities and Best Available Treatment, Recovery and Recycling Techniques (BATRRT).
	Monitoring System	DEFRA sets annual targets for the collection of WEEE across a range of categories. Compliance schemes pay a one-time fee, as well as annual charges for provision of monitoring and enforcement.
	Transboundary movement of Used EEE	Allowed in accordance with the Waste Shipment Regulations (WSR) and UK Transfrontier Shipments of Waste Regulations (TFS)[13] If UEEE which is hazardous or has hazardous properties, it must be carried out with notification controls and according to the regulations of the importing country. All export of UEEE must be carried out by an approved exporter, authorised by the relevant authority under the WEEE Regulations.
	RoHS Considerations	Anyone who imports EEE into the UK and places it on the market must be able to show that the EEE complies with the requirements of the **RoHS regulations**. They must ensure that the manufacturer has a register of non-conforming EEE and product recalls, carried out a conformity assessment procedure, drawn up technical documentation, affixed the CE mark, and marked the EEE with the required information. Importers should also check that any documentation required is present, and mark the EEE with the importer's name, tradename or trademark, and a contact postal address.[14]

France

France		
WEEE Dashboard **E-waste generated** 1362 kt (2019)[5] 21kg per capita **E-waste documented to be collected and recycled** 742 kt (2017) [11]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✓ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	The European Directive (2012/19/EU) was transposed into French law by decree no. 2014-928 from 19 August 2014 on Waste Electrical and Electronic Equipment and Used Electrical and Electronic Equipment. Order on implementation of conditions and obligations of distributors of used electronic equipment. Order on the conditions to be met by representatives within the meaning of Section 10 of Chapter III of Title IV of Book V of the Environmental Code Order on the composition of electrical and electronic equipment and disposal of waste derived. Order on the registration procedure and reporting to the national registry for electrical and electronic equipment provided for in Article R. 543-202 of the Environmental Code. Order of provisions on the transit, consolidation, sorting and treatment of waste electrical and electronic equipment.
	Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment which is waste within the meaning of Article 3(1) of the Waste Directive including all components, subassemblies and consumables which are part of the product at the time of discarding.[12]
	Producer Obligations	Registration with the French WEEE Register "Registre DEEE". Reporting obligations, such as market sales data. Ensuring the collection and environmentally sound treatment and disposal of WEEE either individually or by joining a collective scheme. Financing of the management of WEEE. Labelling obligations (marking to identify producer, crossed-out wheeled bin on household EEE). Information obligations towards end-users and treatment facilities.
	Product Scope	6 categories of WEEE (from 15 August 2018): Temperature exchange equipment; Screens, monitors and equipment containing screens having a surface greater than 100 cm^2; Lamps; Large equipment (any external dimension more than 50cm); Small equipment (no external dimension more than 50 cm); Small IT and telecommunication equipment.
	Collection System	Producer arranges collection privately or through municipalities. The household WEEE Authorized Coordinator Agency (OCAD3E) aims to connect local authorities with producer responsibility organizations for household WEEE collection. The last user of the product can pay to send WEEE products to the company's appointed recycler.
	Recycling System	Producers should provide the EEE product user with recycling information. Producer responsibility organisations remove, sort, decontaminate and recycle collected WEEE.

	Financing Mechanism	Manufacturer and importers pay for collection, treatment, recovery and environmentally sound disposal of EEE.
	Targets	Originally, at the time the WEEE Directive was introduced, the collection target was based in WEEE collected per capita, and set at an initial value of 4 kg of WEEE per inhabitant per year. In the revised WEEE Directive, the basis of the target was changed, introducing a more granular approach a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. The new collection targets indicate that roughly 20 kg per capita, will be collected separately from 2019 onwards.
	Reporting System	Annual and quarterly reporting to ADEME (French Ministry).
	Standards/ Audits	Third party audits contracted by the PROs to audit recyclers and collection points.
	Monitoring System	French Ministry ADEME does the monitoring of the overall system.
	Transboundary movement of Used EEE	Export of hazardous/ hazardous characteristics WEEE or UEEE is not allowed to countries outside of OECD. And is allowed with notification within OECD countries. UEEE export may be allowed if it is characterised as non-hazardous as per Basel and OECD and the proper notifications/ permissions are obtained as per the EU Waste Shipment Regulations (WSR) and the national legislation of the importing non-OECD countries.
	RoHS Considerations	Anyone who imports new EEE into the EU and places it on the market must show that the EEE complies with the requirements of the **RoHS-Directive** and has the **CE mark.** The RoHS directive does not independently contain any legal grounds for applying export restrictions on used EEE. In general, it is not recommended to export equipment that are not RoHS-compliant out of OECD.

Japan

Japan		
WEEE Dashboard **E-waste generated** 2569 kt (2019)[5] 20.4 kg per capita **E-waste documented to be collected and recycled** 570 kt (2017) [6]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✓ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	The Home Appliance Recycling Law (2001). Covered 4 main products – TVs, Refrigerators & Freezers, ACs and Washing Machines & Dryers Small Home Appliances Recycling Law (2013). Additional products in scope such as mobile phones, IT and other small electrical and electronic equipment
	Legal definition of e-waste	Information not found.
	Producer Obligations	Establishment of a recovery and recycling system for used products. Collection of used products. Manufacturers obligated to finance the recycling of their own products.
	Product Scope	Initially started with 4 large appliances only, now extended to cover all small and large appliances.
	Collection System	Home Appliance Recycling Law imposes an “old for new” requirement on retailers. This is, every time a product is sold, the retailer must take back from the consumer either a similar used product or some other product sold in the past. Manufacturers can contract with other organisations, such as the Association for Electric Home Appliances (AEHA), to provide collection services on their behalf. In rural areas, collection is provided by local government or the AEHA if the retailer cannot cover.
	Recycling System	Manufacturers and importers recycle their own products which relies on fees to finance the system via an end-of-life fee financing system. Designated legal entities can assist in rural areas or castaway products (i.e. those which outlast their manufacturer). Local governments and other actors may conduct recycling but should achieve the same recycling rate and treatment requirements as those for producers.
	Financing Mechanism	Consumer pays for the collection, transport, and recycling of targeted products. Manufacturers, importers and designated legal entities must announce the cost for collection, take-back and recovery in advance. Schemes have been considered to ensure smooth transfer of recycling fee. Such a scheme includes the utilisation of stickers issued by manufacturers and importers.
	Targets	Differentiated recovery requirements for each product (50-60%) by weight. Recovery = reuse of components + material recovery + energy recovery.

		Recycling rate targets are: Air conditioners (60 %); Refrigerators (50 %); Televisions (55 %); and Washing machines (50 %).
	Reporting System	Collection reporting from retailers and designated legal entities. Recycling reporting from manufactures, importers and designated legal entities.
	Standards/ Audits	Government can inspect the recycling facility if deemed necessary.
	Monitoring System	Manifest system (special receipt should be provided to end users from retailers, and end users can trace afterwards how the collected products are treated). Administrators may require manufacturers, importers and retailers to report on the state of implementation required by the Law.
	Transboundary movement of Used EEE	Information not found.
	RoHS Considerations	Japan RoHS law combines the Japanese Recycling Law with the JIS C 0950 standard (marking for presence of the specific chemical substances for EEE) and is referred to as J-MOSS. Japan RoHS restricts the same six substances in the same concentration limits as EU RoHS 2, however it is limited to 7 product categories: Personal computers; Unit-type air conditioners; Television sets; Refrigerators; Washing machines; Clothes dryers; and Microwaves. All products in the above listed categories are marked with either an orange "R" (for products containing substances above RoHS limits) or a green "G" (for products that pass RoHS compliance for all materials).

China

China		
WEEE Dashboard **E-waste generated** 10129 kt (2019)[5] 7.2 kg per capita **E-waste documented to be collected and recycled** 1546 kt (2018) [15]		**Legislation in force** ✓ **Product scope** Partial **Targets present** ✗ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	Technical Policy on Pollution Prevention and Control of WEEE (2006; SEPA No.115). Ordinance on Management of Prevention and Control of Pollution from Electronic and Information Products (China RoHS) (2007; MIIT No. 39). Administrative Measures on Pollution Prevention of WEEE (2008; SEPA N. 40). Technical Specifications of Pollution Control for Processing WEEE (2008). Regulation on Management of the Recycling and Disposal of WEEE (2011; State Council No. 551).
	Legal definition of e-waste	Information not found.
	Producer Obligations	Producers and importers of EEE must pay a fee for the treatment of each unit they produce or import, except exported products. Household appliance producers are responsible for adopting “green” product design which is favourable to recycling and reuse, selecting non-hazardous materials and substances favourable to recycling and reuse, and providing information in instruction manuals.
	Product Scope	Batch 1 covered 5 WEEE items: Televisions; Refrigerators; Washing machines; Air conditioners; and Personal computers. Batch 2 covered 9 additional items including mobile phones, printers and copiers, etc.
	Collection System	E-waste is collected by manufacturers, retailers, and waste collection enterprises.
	Recycling System	Manufacturers and certified recyclers are responsible for WEEE recycling. Treatment license required and compliance with national treatment standards. Treatment facilities have to establish an environmental quality monitoring system, an information management system for treated e-waste, and a reporting procedure to the local Environmental Protection Agency.
	Financing Mechanism	State-PRO; Producer/importer pays for the end of life e-waste management and[1] follows a producers-pays-government disburses model.

	Targets	The regulations do not explicitly define specific collection or recycling targets.
	Reporting System	Producers and importers provide production or import data. Recyclers should build and connect their monitoring systems to the government's monitoring system.
	Standards/ Audits	*Municipal environmental protection departments* are responsible for approving qualifications of enterprises based on the WEEE Treatment Facility Qualification. Criteria that qualify certified recyclers include: i) Sufficient capacity and infrastructure; ii) Central monitoring systems and facilities to deal with emergencies; iii) Compliance with environmental management regulations; and iv) Sufficient number of technicians with appropriate qualifications (health, safety, quality control and environmental protection).
	Monitoring System	Quarterly reporting to *province-level environmental authorities* by producers and recyclers of quantity and types of e-waste recycled and disposed. *Ministry of Finance* responsible for an online administrative information system to monitor production, sale, recycling and disposal of EEE/WEEE. The *tax and custom authorities* are responsible for monitoring and inspection to ensure funds are collected from producers and importers. The province-level environmental protection authorities should check data from recyclers with data from the information system to verify information accuracy. The *National Audit Office* supervises the collection and utilization of the fund.
	Transboundary movement of Used EEE	Information not found.
	RoHS Considerations	The *Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products* (China RoHS 2) were published on Jan 21, 2016, coming into effect on July 1, 2016. China RoHS 2 restricts the same six substances as EU RoHS 2; however, it restricts substance concentrations in each homogenous material in the product, rather than in the product or component and unlike EU RoHS, there currently are no exemptions. Products and parts that contain restricted substances exceeding limits are allowed to be sold in China but need to be marked appropriately.[16]

Singapore

Singapore		
WEEE Dashboard **E-waste generated** 113 kt (2019)[5] 19.3 kg per capita **E-waste documented to be collected and recycled** NA		**Legislation in force** ✓ **(Partial)** **Product scope** **Partial** **Targets present** ✓ **WEEE management principle** **EPR** **Ratified Basel Convention** ✓
	Legislation	Resource Sustainability Act 2019 (No. 29 of 2019) Resource Sustainability (Composition of Offences) Regulations 2019, Resource Sustainability (Exemption for Incidentally Supplied Batteries) Order 2019, Resource Sustainability (Prescribed Regulated Products) Regulations 2019[17]
	Legal definition of e-waste	"E-waste" means any class or type of electrical or electronic product (including an electrical or electronic product supplied as a component of another product) that is prescribed to be a "regulated product and that is intended for disposal and not for re-use". "Regulated products" are defined in Schedule I & II of the Resource Sustainability Regulations 2019
	Producer Obligations	From 1 January 2020, all producers must be registered with the National Environment Agency (NEA) and maintain complete and accurate records of the weight and number of all regulated products supplied. From 2021, producers of regulated consumer products are to be members of the licensed Producer Responsibility Scheme (PRS) and finance the PRS (unless under the prescribed threshold); whereas producers of regulated non-consumer products are to ensure collection/take-back of unwanted regulated non-consumer products and must submit complete records of their supply, collection, management and disposal through licensed waste collectors or licensed e-waste recyclers. Small producers and retailers that supply less than a specified threshold amount of regulated products to the local market will be exempt from the PRS.
	Product Scope	The five product classes regulated are: Solar photovoltaic panels; Information and Communications Technology (ICT) equipment; Large appliances; Batteries; and Lamps.
	Collection System	Regulated consumer products are collected by the PRS Operator. Regulated non-consumer products are collected by the producers of these items at no extra fee. Retailers of regulated consumer products are to provide 1-for-1 take-back of products or (for larger stores >300 sq.m floor area) provide in-store collection of e-waste.
	Recycling System	Licensed waste collectors and licensed e-waste recyclers are responsible for disposal of e-waste. The list of licensed e-waste recyclers and licensed waste collectors is available on the NEA website.
	Financing Mechanism	Producers of regulated consumer products pay for e-waste management by financing the PRS. Producers of regulated non-consumer products pay directly for the collection and recycling of the e-waste generated from their products.

	Targets	The PRS operator is responsible for meeting e-waste collection targets set by NEA. NEA has set the target for large household appliances at 60 per cent of the put-to-market weight, and for the rest of the covered consumer products at 20 per cent.
	Reporting System	Annual reporting, in the first quarter of every year, to the NEA.
	Standards/ Audits	The annual report submitted by licensee must be audited. It is the duty of a licensed e-waste recycler to meet recycling and material recovery standards.
	Monitoring System	Annual reporting to NEA by producers of quantity and types of e-waste collected, recycled and disposed. Authorised officer may require producers, PRS operators, waste collectors, and recyclers to provide information and produce documents or also search the premises for anything that may relate to compliance with the Resource Sustainability Act.
	Transboundary movement of Used EEE	Information not found.
	RoHS Considerations	Information not found.

Ghana

Ghana		
WEEE Dashboard **E-waste generated** 53 kt (2019)[5] 1.8 kg per capita **E-waste documented to be collected and recycled** NA		**Legislation in force** ✓ **Product scope** Full **Targets present** ✓ **WEEE management principle** Taxation **Ratified Basel Convention** ✓
	Legislation	Hazardous and Electronic Waste Control and Management, Law, (Act 917) (2016) Hazardous, Electronic and Other Wastes (Classification) Control and Management Regulations (2016) (L.I. 2250) Prohibition on Manufacture, Sale and Import of Incandescent Lamps and Sale and Import of Used Refrigerators, Freezers and Air Conditioners, Regulations, LI 1932 (2008)
	Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment that is waste, including all components, subassemblies and consumables which are part of the equipment at the time the equipment becomes waste.[18]
	Producer Obligations	Obtain an environmental permit from the Agency, maintain records and file annual returns with the Agency Ensuring the collection and ESM of WEEE either individually or by joining a collective scheme. Organising and financing of the management of WEEE. Awareness raising and information obligations towards end-users. Labelling obligations (legible and indelible symbol to prevent the disposal of WEEE into garbage).
	Product Scope	13 categories, including: Large household appliances; Small household appliances; IT equipment and telecommunications equipment; Consumer equipment; Lighting equipment; Electrical and electronic tools; Toys, leisure and sports equipment; Medical devices (with the exception of all implanted and infected products); Monitoring and control instruments; Automatic dispensers; Batteries; Security and military equipment; and Florescent tubes.
	Collection System	E-waste is collected currently only through informal channels. The legislation specifies that collection must be carried out by authorised e-waste collection agencies or centres.
	Recycling System	Producers and treatment facilities (dismantlers & recyclers) are to ensure that: A system is put in place to provide for the treatment of the WEEE using the best available technology and best available practice; and WEEE is i) treated at a treatment facility, or ii) exported by an approved exporter for treatment outside the country.

	Financing Mechanism	Producers and importers of EEE must pay an advance “eco-levy” to ensure collection, treatment, recovery and environmentally sound disposal of EEE.
	Targets	The targets are set based on the specific category within the schedule that the WEEE falls under, and range from 50 – 85%
	Reporting System	Producers, refurbishers and repairers, collection centres, institutional consumers, dismantlers and recyclers all have to maintain records and submit annual returns to the Agency.
	Standards/ Audits	The Agency will determine the standards to be applied during the disposal of WEEE. Technical Guidelines on E-Waste ESM for Collectors, Collection Centres, Transporters, Treatment Facilities and Final Disposal in Ghana (2018)
	Monitoring System	The Agency shall, in collaboration with relevant stakeholders, maintain a database of WEEE. The purpose of the database is to aid the calculation of producer responsibility market share of each producer. The Agency shall record the following in the database: (a) The receipt and determination of an application for registration; (b) The issue of a permit and a permit number; (c) The tonnage of WEEE collected and processed by the authorised treatment facility; (d) The total tonnage and category of electrical and WEEE that the producer places on the market; and (e) The status of compliance based on the percentage of obligations that have been fulfilled.
	Transboundary movement of Used EEE	Most UEEE import is allowed with permit. Used incandescent lamps, refrigerators, freezers and air conditioners containing Ozone Depleting Substances (ODS), are completely banned from importation.
	RoHS Considerations	Under national regulations, Ghana restricts the same six substances at the same thresholds as EU RoHS, but with differences in product categories and products that are in scope and that are exempted. In addition, it states a reduction in the use of hazardous substances in imported EEE shall be achieved within a period of two years from the coming into force of these regulations.

Germany

Germany		
WEEE Dashboard **E-waste generated** 1607 kt (2019)[5] 19.4 kg per capita **E-waste documented to be collected and recycled** 837 kt (2017) [11]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✓ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	The European Directive (2012/19/EU) was transposed into German law by the Act Governing the Sale, Return and Environmentally Sound Disposal of Electrical and Electronic Equipment (Electrical and Electronic Equipment Act – ElektroG) Ordinance on WEEE materials (ElektroStoffV) and Cost Ordinance on the EEE Act (ElektroGKostV)
	Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment which is waste within the meaning of Article 3(1) of the Waste Directive including all components, subassemblies and consumables which are part of the product at the time of discarding.[12]
	Producer Obligations	The ElektroG requires manufacturers to: Register electronic products and apply for a WEEE number before market launch; Ensure disassembly-friendly production design; Regularly report to the German WEEE authority; Collection and take-back of WEEE; Appointment of an authorised representative for organisations without German subsidiary; provisioning of a so-called insolvency save guarantee for producers of B2C products.
	Product Scope	6 categories of WEEE (from 15 August 2018): Temperature exchange equipment; Screens, monitors and equipment containing screens having a surface greater than 100 cm^2; Lamps; Large equipment (any external dimension more than 50cm); Small equipment (no external dimension more than 50 cm); Small IT and telecommunication equipment.
	Collection System	Public waste management authorities, retailers and producers are responsible. Public waste management authorities shall set up collection points in their districts to which final holders and distributors may return WEEE from private households. Producers are responsible for providing separate containers for each category of WEEE to the collection points. Producers may also set up and operate individual or collective take-back systems for WEEE from private households. Retailers (including online and mail-order) that have a sales or storage area of at least 400 m^2 for electronic products are obliged to take back WEEE.
	Recycling System	Producers must pick up their containers from the municipal collection facilities once they are full and to dispose contents professionally through expert-certified treatment facilities. Treatment facilities must be certified, i.e. its compliance with the provisions of this act has been verified and documented in monitoring certification.
	Financing Mechanism	Each manufacturer or their authorized representative is obliged to provide the competent authority with a bankruptcy-proof guarantee for the financing of

		the return and disposal of the electrical and electronic equipment which is placed on the market after 13 August 2005 and which is suited to use in private households. Institutional B2B consumers are responsible for financing their WEEE management.
	Targets	For categories 1&4 targets are: a) Share of recovery is at least 85 % and b) of preparation for reuse and recycling is 80%. For category 2 WEEE: a) Share of recovery is 80 % and b) of preparation for reuse and recycling is 70%. For categories 5&6 WEEE: a) Share of recovery is 75% and b) of preparation for reuse and recycling is 55%. For category 3 WEEE, the proportion of recycling is 80%.
	Reporting System	Producers must report to the Clearing House (EAR) on a monthly basis the EEE put on market, and on an annual basis the WEEE collected, reused, recycled, recovered and exported.
	Standards/ Audits	Treatment facilities must be audited and certified by accredited auditors and organisations.
	Monitoring System	The Federal Environmental Agency (UBA) acts as the Competent Authority. The Clearing House collates and reports annual figures to the UBA on quantities and types of EEE placed on the market by all producers, and quantities per category collected, reused, recycled, recovered and exported.
	Transboundary movement of Used EEE	Export of hazardous/ hazardous characteristics WEEE or UEEE is not allowed to countries outside of OECD. And is allowed with notification within OECD countries. UEEE export may be allowed if it is characterised as non-hazardous as per Basel and OECD and the proper notifications/ permissions are obtained as per the EU Waste Shipment Regulations (WSR) and the national legislation of the importing non-OECD countries.
	RoHS Considerations	Anyone who imports new EEE into the EU and places it on the market must show that the EEE complies with the requirements of the **RoHS-Directive** and has the **CE mark.** The RoHS directive does not independently contain any legal grounds for applying export restrictions on used EEE. In general, it is not recommended to export equipment that are not RoHS-compliant out of OECD.

India

India		
WEEE Dashboard **E-waste generated** 3230 kt (2019)[5] 2.4 kg per capita **E-waste documented to be collected and recycled** 30 kt (2016)[19]		**Legislation in force** ✓ **Product scope** Partial **Targets present** ✓ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	E- Waste (Management) Amendment Rules (2018)
	Legal definition of e-waste	'E-waste' means electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment and repair processes.[20] E-waste under the Rules is limited to 21 categories (listed in Schedule 1 of the Rules).
	Producer Obligations	Obtaining EPR – Authorisation. Organising and financing of the management of WEEE to ensure collection and channelization of WEEE, individually or collectively through authorised agency, as per approved EPR plan. Awareness raising and relevant helplines and other information obligations towards consumers and bulk consumers, such as mechanisms available for return of WEEE including the details of Deposit Refund Scheme, if applicable labelling obligations (legible and indelible symbol to prevent the disposal of WEEE into garbage). For lamps, where recyclers are not available, channelization may be to TSDF with initial necessary pre-treatment steps.
	Product Scope	21 categories of WEEE, including all peripherals. 16 categories of IT EEE and 5 categories of Consumer EEE.
	Collection System	The producer may opt to implement EPR individually or collectively. Collection of WEEE is the responsibility of the producer and may be carried out, such as through dealer, collection centres, Producer Responsibility Organisation, through buy-back arrangement, exchange scheme, Deposit Refund System, etc. either directly or through any authorised agency.
	Recycling System	Producers and authorised recyclers are responsible for WEEE recycling. Recyclers must be authorised and ensure that the facility and recycling processes are in accordance with the standards or guidelines prescribed by the Central Pollution Control Board (CPCB). They must maintain record of e-waste collected, dismantled, recycled and sent to authorised downstream facilities.
	Financing Mechanism	"Producers" (which include dealers, retailer, e-retailer, manufacturers, and importers) pay for collection, treatment, recovery and environmentally sound disposal of EEE under EPR.

	Targets	For existing producers: 10% of the quantity of waste generated to be collected during 2017-2018, with a 10% increase every year until the year 2023. After 2023, the E-Waste collection target has been fixed at 70% of the quantity of waste generation. For new producers (number of years of sales operations is less than average life of their products): 5% to be collected during 2018-2019 and 2019-2020, with a 5% increase every 2 years until the year 2025, when it is as 20%.
	Reporting System	Manufacturers, producers, dealers, refurbishers, collection centres, bulk consumers, dismantlers and recyclers all have to maintain records and submit annual returns to the state pollution control boards (SPCBs). The SPCB provides consolidated state-wise reports to the CPCB.
	Standards/ Audits	SPCBs are responsible for granting of authorisation to dismantler or recycler based on compliance with standards. Producers, collection centres, dismantlers, recyclers, must all ensure that they meet specific guidelines and standards as set by the concerned SPCB and may be audited for the same. While there is a provision for it under the rules, there is currently no specific standard set by the CPCB or an auditing regime. Most audits carried out currently are on a voluntary basis.
	Monitoring System	The SPCBs and CPCB are responsible for monitoring of EPR compliance.
	Transboundary movement of Used EEE	Import allowed against authorisation (as per National Import Policy). All imported EEE and UEEE must be registered with the Bureau of Indian Standards and conform to the Specified Standard and comply with its labelling requirements as provided in the Electronics and Information Technology Goods (Requirement of Compulsory Registration) Order, 2012, on such goods after having obtained registration from the Bureau.
	RoHS Considerations	Under the E-waste Rules, India restricts the same six substances at the same thresholds as EU RoHS, but with differences in product categories and products that are in scope and that are exempted. India requires all importers of EEE to submit a self-declaration form: Self-Declaration for Compliance of Reduction in the use of Hazardous Substances (RoHS) (As per E-Waste (Management) Rules, 2016), and to ensure that RoHS Information is provided in the product information booklet. The technical documents as an evidence that the RoHS provisions are complied with by the product are based on standard EN 50581 of EU, and this information must be made available upon request from authorities.

Ireland

Ireland		
WEEE Dashboard **E-waste generated** 93 kt (2019)[5] 18.7 kg per capita **E-waste documented to be collected and recycled** 52 kt (2017) [11]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✗ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
	Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment which is waste within the meaning of Article 3(1) of the Waste Directive including all components, subassemblies and consumables which are part of the product at the time of discarding.[12]
	Producer Obligations	Register and renew registration with the registration body. Declare the quantities of EEE that are placed on the market to the WEEE Blackbox. Finance the environmentally sound management of WEEE by joining either one of the compliance schemes: WEEE Ireland or European Recycling Platform (ERP) Ireland, or by self-compliance. Ensure EEE placed on the market is in compliance with the Restriction of Hazardous Substances (RoHS) legislation. Awareness raising and Information obligations towards end-users. Ensure private household users are aware that WEEE recycling is free and are aware of the options for return of WEEE and collection points available. Labelling obligations (legible and indelible symbol to prevent the disposal of WEEE into garbage)
	Product Scope	6 categories of WEEE (from 15 August 2018): Temperature exchange equipment; Screens, monitors and equipment containing screens having a surface greater than 100 cm^2; Lamps; Large equipment (any external dimension more than 50cm); Small equipment (no external dimension more than 50 cm); Small IT and telecommunication equipment.
	Collection System	Producers may provide through third parties or municipal authorities collection points or WEEE takeback facilities. A producer or authorised representative shall within 5 working days of being requested so to do by a local authority or a third party acting on its behalf, collect, or arrange for the collection of, from any collection point operated on its behalf. Distributor must accept WEEE from private household consumers through exchange or in the case of a larger store provide for collection point facilities.
	Recycling System	Producers, distributors and users other than private households are responsible for ensuring WEEE is delivered to authorised recovery/treatment facilities which are responsible obtaining permits and ensuring proper treatment of WEEE.

	Financing Mechanism	Producers must ensure that they finance, directly or through a third party, the ESM of WEEE from private households (B2C) as well as any B2B WEEE arising from EEE placed on the market prior to 13 August 2005. For all other B2B WEEE (from EEE placed on market post 13 August 2005) the final user is responsible for financing its ESM. Producers and B2B EEE users may choose to come together and arrange an alternate financing agreement bilaterally.
	Targets	For category 1 or 4 WEEE: 85 % shall be recovered and 80 % shall be prepared for re-use and recycled; For category 2 WEEE: 80 % shall be recovered and 70 % shall be prepared for re-use and recycled; For category 5 or 6 WEEE: 75 % shall be recovered and 55 % shall be prepared for re-use and recycled; For category 3 WEEE: 80 % shall be recycled.
	Reporting System	Producers must report to the Registration body on an annual basis the EEE put on market, the weight of WEEE collected, reused, recycled, recovered, and vouched details, including copy invoices, of the cost incurred for their ESM of WEEE arising from private households and from other users. Self-complying producers are required to report to the EPA.
	Standards/ Audits	WEEELABEX normative requirements and any other equivalent EN treatment standards are to be followed during WEEE treatment.
	Monitoring System	The Agency and local authorities have the power to ensure compliance with the regulations. The WEEE Register Society Ltd. and WEEE Ireland and European Recycling Platform (ERP) also monitor, keep records, and submit reports to the authorities.
	Transboundary movement of Used EEE	Export of hazardous/ hazardous characteristics WEEE or UEEE is not allowed to countries outside of OECD. And is allowed with notification within OECD countries. UEEE export may be allowed if it is characterised as non-hazardous as per Basel and OECD and the proper notifications/ permissions are obtained as per the EU Waste Shipment Regulations (WSR) and the national legislation of the importing non-OECD countries.
	RoHS Considerations	Anyone who imports new EEE into the EU and places it on the market must show that the EEE complies with the requirements of the **RoHS-Directive** and has the **CE mark.** The RoHS directive does not independently contain any legal grounds for applying export restrictions on used EEE. In general, it is not recommended to export equipment that are not RoHS-compliant out of OECD.

Belgium

Belgium		
WEEE Dashboard **E-waste generated** 234 kt (2019)[5] 20.4 kg per capita **E-waste documented to be collected and recycled** 128 kt (2016) [11]		**Legislation in force** ✓ **Product scope** Full **Targets present** ✗ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	The European Directive (2012/19/EU) is the basis for WEEE legislation in Belgium and implemented by the following regulations in each Administrative Region: in the Flanders (Flemish) Region, by amendments to the Waste Prevention and Management Ordinance (VLAREA); in the Wallonia Region, by an amendment to the Producer Responsibility Decree; and in the Brussels Capital Region, by an amendment to the Producer Responsibility Decree.
	Legal definition of e-waste	"Waste electrical and electronic equipment" means electrical or electronic equipment which is waste within the meaning of Article 3(1) of the Waste Directive including all components, subassemblies and consumables which are part of the product at the time of discarding.[12]
	Producer Obligations	Registration with regional authorities: Wallonia-DGRNE (OWD), Flanders-OVAM, or Brussels-IBGE. Ensuring the collection and environmentally sound treatment and disposal of WEEE either collectively or individually. Reporting obligations, such as market sales data, collection and treatment on the BEWEEE Platform. Financing of the management of WEEE. Labelling obligations (marking to identify producer, crossed-out wheeled bin on household EEE). Information obligations towards end-users and treatment facilities.
	Product Scope	6 categories of WEEE (from 15 August, 2018): Temperature exchange equipment; Screens, monitors and equipment containing screens having a surface greater than 100 cm^2; Lamps; Large equipment (any external dimension more than 50cm); Small equipment (no external dimension more than 50 cm); Small IT and telecommunication equipment.
	Collection System	Producer arranges household WEEE collection privately or collectively through management body (Recupel). Management bodies may set up regional transfer stations (ROS), possibly in cooperation with the municipalities. Distributors of EEE must take back WEEE free of charge when purchasing a new similar appliance. Producers may collect professional WEEE directly from their customers or through authorised collectors.
	Recycling System	Producers should provide the EEE product user with recycling information. All WEEE collected by or on behalf of producers shall be separable into reusable and non-reusable equipment. Management bodies or individual producers are responsible for ensuring removal, sorting, decontamination and recycling of collected WEEE.

	Financing Mechanism	Producers pay for collection, treatment, recovery and environmentally sound disposal of household EEE. For professional WEEE, producers must pay an environmental contribution per appliance to the management bodies to cover the general running costs, whereas, the costs of collection and treatment of the WEEE may be borne by end-user or producer or based on an agreement.
	Targets	In the revised WEEE Directive, the basis of the target was changed (from 4 kg of WEEE per inhabitant per year), introducing a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. The new collection targets indicate that roughly 20 kg per capita, will be collected separately from 2019 onwards. Walloon requires 2% of (WEEE) to be 'prepared for re-use' from January 2020.
	Reporting System	Annual reporting by Recupel or Individual Producers to regional governments, using BeWeee - a computerised system. A separate annual report shall be drawn up for household WEEE and professional WEEE.
	Standards/ Audits	Independent inspection authority, accredited on the basis of ISO 17020, contracted by the management bodies or regional authorities to audit recyclers and collection points. Regional authorities evaluate the results of the annual reports.
	Monitoring System	The regional authorities: Wallonia - DGRNE (OWD), Flanders - OVAM, or Brussels – IBGE do the monitoring of the overall system. Coordination between the regions and the federal government handled by the Waste Steering Group and the Sustainable Production and Consumption Steering Group of the Coordinating Committee for International Environmental Policy (CCIEP)
	Transboundary movement of Used EEE	Export of hazardous/ hazardous characteristics WEEE or UEEE is not allowed to countries outside of OECD. And is allowed with notification within OECD countries. UEEE export may be allowed if it is characterised as non-hazardous as per Basel and OECD and the proper notifications/ permissions are obtained as per the EU Waste Shipment Regulations (WSR) and the national legislation of the importing non-OECD countries.
	RoHS Considerations	Anyone who imports new EEE into the EU and places it on the market must show that the EEE complies with the requirements of the **RoHS-Directive** and has the **CE mark.** The RoHS directive does not independently contain any legal grounds for applying export restrictions on used EEE. In general, it is not recommended to export equipment that are not RoHS-compliant out of OECD.

Australia

Australia		
WEEE Dashboard **E-waste generated** 554 kt (2019)[5] 21.7 kg per capita **E-waste documented to be collected and recycled** 58 kt (2017) [21]		**Legislation in force** ✓ **Product scope** Partial **Targets present** ✗ **WEEE management principle** EPR **Ratified Basel Convention** ✓
	Legislation	The National Television and Computer Recycling Scheme and the Product Stewardship (Televisions and Computers) Regulations 2011, under the Australian Government's Product Stewardship Act 2011.
	Legal definition of e-waste	Information not found.
	Producer Obligations	Constitutional corporations that import in-scope EEE or manufacture it in Australia (over the prescribed exemption threshold value) must: Become a member of an approved co-regulatory arrangement. Financing of the management of WEEE. Information obligations towards consumers.
	Product Scope	Televisions, computers, printers and computer products (parts and peripherals).
	Collection System	Households and small businesses can drop-off end-of-life products at industry-provided collection services for free and may be provided by councils, retailers, or other providers. The co-regulatory arrangement is responsible for organising and delivering collection and logistics on behalf of producers. They may choose to contract out collection and logistics services to third party providers or take care of the same themselves.
	Recycling System	Co-regulatory arrangements are responsible for organising and delivering recycling services on behalf of producers. They may choose to contract out recycling services to certified third party recycling service providers or take care of the same themselves.
	Financing Mechanism	Producers pay the co-regulatory arrangement for the ESM of in-scope WEEE. It is a market driven competitive scheme, and the Australian Government is not involved in contracting or fee setting.
	Targets	The recycling target starts at 30 per cent of waste arising in 2012-13 and will rise to 80 per cent of waste arising in 2021-22. The Regulations include a material recovery target of 90 per cent, to come into effect in the 2014-15 financial year.
	Reporting System	Producers must give the Minister a report with details of: Number of products manufactured, products imported or manufactured by related bodies corporate and any other requested information.

		The administrator of a co-regulatory arrangement must submit an annual report detailing: Details about membership; Details about collection and storage of products; Details about recycling of products; Details about exporting products; Details about contracted service providers; and Details about environmental and OH&S incidents or breaches.
	Standards/ Audits	Administrators need to apply for approval from the Minister to run co-regulatory arrangements. Along with the annual report, the administrator of a co-regulatory arrangement must also submit an annual Audit Report prepared by: (a) a person that is a registered company auditor under section 1280 of the Corporations Act 2001; or (b) a company that is an authorised audit company under section 1299C of the Corporations Act 2001. Co-regulatory arrangements may only contract with recycling service providers that are certified to AS 5377: the Australian Standard for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment.
	Monitoring System	Information not found.
	Transboundary movement of Used EEE	Import/Export allowed as per Basel, OECD and Waigani conventions. A permit is required if it is considered as hazardous in nature. UEEE may be imported or exported without a permit if it is not hazardous/contain hazardous components (Annex A of Hazardous Waste (Regulation of Exports and Imports) Act 1989) and has been provided an evidentiary certificate by the Minister as to "not be a waste".
	RoHS Considerations	Information not found.

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